

1 10 20 30 40  
QUERY A T F G R A T H V V V R A L P E S L A Q Q A L R R S R Q G D E V D F A R A E R R Q H  
UniRef90\_V9KTM6 S D F G T C T H A I V R R G L P D S L V K Q R A L R R S R Q P E V D L A K A H R R Q H  
UniRef90\_G3NUU76 S G F G H Y T H A V V P A S L A K A A L R R S Q C Q A E V D D L A E A R R R E F H  
UniRef90\_G6NUUW4 S S F G K Y T H A I V R R G L P S S F G T A E T S K D S G A E P V D L A K A H R R Q Y  
UniRef90\_H9GP78 S E Y D T L K E Q V I L C C E P K Q N M I N E T Q K K H F Y K K N E G I H I E L A M E K Q H  
UniRef90\_UPI00047BF7A4 S E Y G V L K Q D V I V R G L P K H N M I N E T Q K K H F Y K K N E G I H I E L A M E K Q H  
UniRef90\_Q9KBZ5 A A Y G R Y H T A V V R R G L P K S V R Y Q A L T Q A F K D Y V D V E K A R Q E H  
UniRef90\_C3YTM2 U N I R E F 9 0 \_ U P I 0 0 0 4 7 B F 7 A 4 S E Y D T L K E Q V I L C C E P K Q N M I N E T Q K K H F Y K K N E G I H I E L A M E K Q H  
UniRef90\_W4QFA5 S E Y A P L H T V V L C C E P K Q R D V I N E T Q K K H F F E D E G I H I E L A M R Q H  
UniRef90\_UPI000409C913 S E Y D P L K K V V L C C E P E H D V I N E T Q K K H F F E D E G I H I K T A M D Q H  
UniRef90\_U5LCT1 S E Y D R L K K V V L C C E P E H D V I N E T Q K K H F F E D E G I D I D K A L E Q H  
UniRef90\_M1KLC3 S E Y D A L Q T V I L C C C R Q P H D V I N E T Q K K H F F K N D G I N L P V A L K Q H  
UniRef90\_E6U057 S E Y D T L H R V V L C C C Q P K H D V I N E T Q K K V F K N D G I D N E L A L K Q H  
UniRef90\_UPI00047DAE6E S E Y D P L K K V V L C C P P D Y M I N E T Q K K Q F L K E N I D T E L A K K Q H  
UniRef90\_F2F8N4 S E Y G T L K Q V I L C C C E P E K E H D V I N D V Q K K H F E D D N I D Q E L A V K Q H  
UniRef90\_Q34497 S E Y G T L Q Q V I L C C K P K H D V I N E T Q K K H F F K N D G I H V K T A N D Q H  
UniRef90\_W9AEF0 S E Y D E L Q K V V V V P P E H M I N E T Q K K H F F L K E N I D Q S R A L R Q H  
UniRef90\_M5P3L3 S E Y D V L K K V V L C C R P Q Q D V I N E T Q K K Y F H K E N I D R T I T V R Q H  
UniRef90\_UPI0003FE58A8 S E Y D V L R K V I V C C E P Q Q D V I N D V Q K K Y I N D N I N L D R A L T Q H  
UniRef90\_F5SFJ6 S E Y A P L K Q V I L C C P P R F E I N N R T Q K K H F A D E N I D R E K A Q Q H  
UniRef90\_UPI0001E899EF E E F G E L K K V I L C C S P P T H E V I N E T Q K K H F L E E D N I D E T L A T K Q H  
UniRef90\_R0P5G2 S E Y D V L Q K V V L C C C P P T H D I V I N E T Q K K H F E H D N I N V S I A K K Q H  
UniRef90\_UPI000362C529 E Y D E L Q K V I L C C E P Q R E V I N E T Q E H F K N E N I N V G R A M K Q H  
UniRef90\_F6QH68 K T V I M R G L A S T L A G D A L R M N D V E P V D M K K A M E Q H  
UniRef90\_R6E4W6 K F N H V I V R R R P C S R A M V D G I T S A P E L G K P D Y E L A L K E H  
UniRef90\_E9UW68 R K A L V R R R P S P R L A D D G L V T H I E R S P V D V L A A E Q W  
UniRef90\_G2P8E9 R K A L V R R R P S P R L A D D G L V T H I E R S P V D A A L A L R Q W  
UniRef90\_C7N177 K F N H V I V R R R P G K S L C D G L T S A P E L G K P V I Y E K A I V Q H  
UniRef90\_UPI000410CE6B E Y G R L K E V L M C P P E R M K N N T Q E Q Y K K E N I D K N K A V K Q H  
UniRef90\_C3Z3R2 F P R Y T Q A I V R E I P N S L R L Q S E G G K D Y T K V Y Y K R A R E E H  
UniRef90\_A5PN62 Y G C F T H A I V R R G L P E S F G K L A E G G D G F Q T D I A K A K R Q M  
UniRef90\_UPI0002881B1B F T N A I V R T P G R S V E G L S N S K T L G L P N Y K Q A I I Q H  
UniRef90\_R9BZ80 E Y D P L K A V V L V S P E Y M I N D L Q K K H A K K N I D R K V A E K Q H  
UniRef90\_W5USN1 Y G R F T H A V V R G I P Q S P S V G G V E V E V A K L Q R Q Y  
UniRef90\_O95865 G L G R C S H A L I R G V P Q S L A S G E G A G A G L P A L D L A K A Q R E H  
UniRef90\_M3EB15 K K A L V R R R P A P C L A E G L V T H I V I E R S E V D V D L A V R Q W  
UniRef90\_L0J4S7 H A K K A L V R R R P A P R R L A E G L V T H I E R S P V D P D L A M K Q H  
UniRef90\_UPI0003C29367 S F G R Y T H A V V R R L P G S L G E A V E G L G E P V D L A K A Q R Q H  
UniRef90\_UPI00037235A5 K V A L V R I P A G N L A E G L V T H I D R E P V D A E R A D A Q W  
UniRef90\_D7WR48 F K N V I V K N P G N S F V N G L T T S D L G K P I L E K L F E Q H  
UniRef90\_UPI000379EBF4 R H A L V R R R P G P R L A D G L V T H I E R R P V D A A R A L R Q W  
UniRef90\_UPI00035CC32A F Q N A I V R T P A S S L I H G L T T S S T L G T P D Y G K A L I Q H  
UniRef90\_C4WTJ6 R Y T H A V V R T P R S L T D R Q P T L D Y D R A K R Q H  
UniRef90\_A0A024QEM8 E Y D A L Q E V I L V P P T E E V I N E T Q E H Y L K D N I N R D K A L Q Q H  
UniRef90\_Q8ESN7 E Y D S L H K V I T V P P K H E L I N E T Q L H Y A D D N I D I Q K A M T Q H  
UniRef90\_W7ZG79 E F D P L K E V L V C E P E K E P I N E T Q R K Y M N E N I D Q A L A C K Q H  
UniRef90\_U3P4Q6 S S F G S G R K A L V R I P A A T L A G G L V T H L I E R E A V D T A K A D E Q W  
UniRef90\_U2UBF1 F T H A I V R K P S R S V I D G L T G S P E L G K P P D Y K L A L E Q H  
UniRef90\_T2MIH5 K Y L K A L C R K I P Q S I I D F G L R Q R K P S F N Y E L A V K Q H  
UniRef90\_Q9YVF0 M S P K Y T H A I V A R I S D A L L E N G K F D V Q L A K Q Q H  
UniRef90\_W6JSU7 R R A L V R R P G P R L A H G L L T H I E R D P V D G E L A I G Q W  
UniRef90\_UPI00026C76F4 Y Q Q A I V R T P S P N L I H G L T S T P E F G P P D Y A K A L E Q H  
UniRef90\_N9V342 K F K N V I V K V P A S S M V D G I T S A P E L G K P P T Y D L A L I Q H  
UniRef90\_UPI0003ABB683 A A F G R A T H A V V R A L P E S L G Q H A L R S A K G E E V D V A R A E R Q H  
UniRef90\_UPI000363E94B F S H A I V R T C P N L I A G I S T A S L G Q P D Y Q L A L Q Q H  
UniRef90\_T1KF75 F G R Y N Y A L V S R I P D S F S S A I G L S E S V N L A E A R R E H  
UniRef90\_B3RNY6 K C K Y A L V C E P T D S Y A S Q S L R S R E N D N I D I D L A R R Q H  
UniRef90\_Q5WEV2 E Y G L L K E V V C E P T E A I N R T O R K Y M N E N I N R D I A S R Q H  
UniRef90\_UPI0002D84D9B E F G I L K K L I I C P P K Y A I N Q T N K R Y R S E T I N V N I A M E Q Y  
UniRef90\_UPI0003608092 H F K N V I V R I P G H G I S E G I T S N P E L G K P I Y E K A L V I Q H  
UniRef90\_C8XFT7 R R A L V R A P S P R L A Q G L L T H L D R V P V D A E L A V R Q W  
UniRef90\_C7LWM4 F S H A I T R I P G P D Y P K G L T T S T L P A P D L E L A L A D T Q W  
UniRef90\_UPI000288EB87 A L V R A P S S R L A E G E L T H L D R V P V D A D L A D T Q W  
UniRef90\_UPI0003790A17 R K A L V R R P G P R L A E G L V T H V G R T P V D T G L A A R Q W  
UniRef90\_UPI000262AF04 A L V R K P S P R L D D G L V D H I E K V T V D L E R A L E E W  
UniRef90\_UPI000457150B F S H A L V R V P C E N F A S G L T T S S R L G A P D H G L M L R Q H  
UniRef90\_S7T1K2 R R F I L M C P P E H F A V I T Y A I N P W M D P A D R A R A L A Q W  
UniRef90\_D1AD36 Y K N V I V K K P G K S Y V N G L T T S D L G K P D Y G R L E E Q H  
UniRef90\_W3A807 S W F K Y N Y A L V R Q I P N S L E T E A V R M N N S E A V D F K Q A R Q E Y  
UniRef90\_V3ZP34 A L V R R P S P L L N D G L T D N I E K V P V D L D K A Y L I Q W  
UniRef90\_UPI00047B7131 R L K R T Y A M T P P V H F T V S Y A I N P W M D T P V D T D R A L S Q W  
UniRef90\_K6X1B2 S E F A A L K S V I L C Q P T K D A I N D I Q A H Y E Q E N I D K E L A L V I E H  
UniRef90\_UPI00047756B2 T R R Y L M C P P R Y F A V I D Y V I N P W M D P V D T D L A V A Q W  
UniRef90\_M1YJ88 A L V R P P A A T F L Q A L S R H K K Q V P I D F P L S L R Q H  
UniRef90\_E8NC17 M S R L V R R P S P L L A E G E L T H L D R V P V D A D L A L A Q W  
UniRef90\_W9GIB2 A L V R R P S P R L A Q G L V T H I E R S D V D A D L A L R Q W  
UniRef90\_S2JHE2 Y A I V R N L P S S F A S V T S D N N D S P I N I E L A Q K Q H  
UniRef90\_UPI0004403226 A A F G R A T H V V V R R G L P E S L G Q H A L R S H T K G D E V D F A R A E R Q H  
UniRef90\_UPI000472DE5E S F V F R F T H A I T R K P S R S I A N G L R A E D C G N P D P N L F M E H H  
UniRef90\_Q0BAE8 Q F T Q A I V R R P A P S C G A G L T A T L G A P D Y D K T L T Q F  
UniRef90\_B1L4Q4 F N A A L V R P P S R E F P R C V S T H P L K D T V D L S L A L K Q H  
UniRef90\_UPI0003821DDE R H F L M C R P D Y F T V E Y A I N P W M H P E A D R D V A I R Q W  
UniRef90\_R5V6D6 G K L K Q V L M S Y P Q Y L I N V I S K H F K D H Q L D K K K I D E E F  
UniRef90\_A3TM87 K A A L I V R R P G P R L A D G L V T H I E R S S I L D L N D L A V E Q W  
UniRef90\_X1A972 F T R G I V R K P S K N F Q D G L T N S D L G K P D Y N K A L K Q H  
UniRef90\_L7MEL8 F G R Y T H A I V C R P V N S I K C A S G V I G D I N V E L A R K E H  
UniRef90\_L1KV81 R L R N Y V M C R P E H S F E V T Y S I N P W M N P T D K A L A I A Q W  
UniRef90\_UPI0003733E13 R H Y L M C R P T Y F T V E Y V I N P W M D P V D N A A T I T Q W  
UniRef90\_S0G6Y1 F T S A M V K S C P N L V H G I R N T D L G T P D F A R A C R Q H  
UniRef90\_D8QPQ2 A L V R G V P H T F S S C I T M E K S E A I D V E L A R K Q H  
UniRef90\_UPI0003B502F4 A L V R I P A S N L D E A E L T H L I E R R P V D Q S L A D E Q W

QUERY UniRef90\_V9KTM6 UniRef90\_G3NUU76 UniRef90\_Q6NUUW4 UniRef90\_H9GP78 UniRef90\_UPI00047BF7A4 UniRef90\_Q9KBZ5 UniRef90\_C3YTM2 UniRef90\_W4QFA5 UniRef90\_UPI000409C913 UniRef90\_U5LCT1 UniRef90\_M1KLC3 UniRef90\_E6U057 UniRef90\_UPI00047DAE6E UniRef90\_F2F8N4 UniRef90\_Q34497 UniRef90\_W9AEF0 UniRef90\_M5P3L3 UniRef90\_UPI0003FE58A8 UniRef90\_F5SFJ6 UniRef90\_UPI0001E899EF UniRef90\_R0P5G2 UniRef90\_UPI000362C529 UniRef90\_F6QH68 UniRef90\_R6E4W6 UniRef90\_E9UW68 UniRef90\_G2P8E9 UniRef90\_C7N177 UniRef90\_UPI000410CE6B UniRef90\_C3Z3R2 UniRef90\_A5PN62 UniRef90\_UPI0002881B1B UniRef90\_R9BZ80 UniRef90\_W5USN1 UniRef90\_O95865 UniRef90\_M3EB15 UniRef90\_L0J4S7 UniRef90\_UPI0003C29367 UniRef90\_UPI00037235A5 UniRef90\_D7WR48 UniRef90\_UPI000379EBF4 UniRef90\_UPI00035CC32A UniRef90\_C4WTJ6 UniRef90\_A0A024QEM8 UniRef90\_Q8ESN7 UniRef90\_W7ZG79 UniRef90\_U3P4Q6 UniRef90\_U2UBF1 UniRef90\_T2MIH5 UniRef90\_Q9VYF0 UniRef90\_W6JSU7 UniRef90\_UPI00026C76F4 UniRef90\_N9V342 UniRef90\_UPI0003ABB683 UniRef90\_UPI000363E94B UniRef90\_T1KF75 UniRef90\_B3RNY6 UniRef90\_Q5WEV2 UniRef90\_UPI0002D84D9B UniRef90\_UPI0003608092 UniRef90\_C8XFT7 UniRef90\_C7LWM4 UniRef90\_UPI000288EB87 UniRef90\_UPI0003790A17 UniRef90\_UPI000262AF04 UniRef90\_UPI000457150B UniRef90\_S7T1K2 UniRef90\_D1AD36 UniRef90\_W3A807 UniRef90\_V3ZP34 UniRef90\_UPI00047B7131 UniRef90\_K6X1B2 UniRef90\_J8QCQ1 UniRef90\_UPI00047756B2 UniRef90\_M1YJ88 UniRef90\_E8NC17 UniRef90\_W9GIB2 UniRef90\_S2JHE2 UniRef90\_UPI0004403226 UniRef90\_UPI000472DE5E UniRef90\_Q0BAE8 UniRef90\_B1L4Q4 UniRef90\_UPI0003821DDE UniRef90\_R5V6D6 UniRef90\_A3TM87 UniRef90\_X1A972 UniRef90\_L7MEL8 UniRef90\_L1KV81 UniRef90\_UPI0003733E13 UniRef90\_S0G6Y1 UniRef90\_D8QPQ2 UniRef90\_UPI0003B502F4

50 60 70 80

Q L Y V G V L G S K R L G L Q V V V Q L P A D E E S L P D C C V F V E D V A V V V C E E T T  
E E Y V S V L R G T R R L G L Q V V V Q L P A D E E S L P D C C V F V E D V A V V V C E E T T  
E E Y V S V L R G T R R L G L Q V V V Q L P A D E E S L P D C C V F V E D V A V V V C E E T T  
D H Y V S V L R G T R R L G L Q V V V Q L P A D E E S L P D C C V F V E D V A V V V C E E T T  
G V Y T G L L R R Q K L G L Q V V V Q L P A D E E S L P D C C V F V E D V A V V V C E E T T  
G R F V S A L R R N Q K G V N D V V L L P P V L N E K K Y P E E Q Q V F T T R D I I A G F T L G G E Q T  
H E F V R V L R Q K H G V N D V V L L P P V L N E K K Y P E E Q Q V F T T R D I I A G F T L G G E Q T  
E V Y V Q T L R D L G L N R I V E I P A D E E H P D C C P F V E D V A V V C N G T  
K E F V K Q L K K R E Q Q G I E V V L L P P S V H L F Y P E E Q Q V F T T R D I I G F T L G G E H  
R Q F T E A L R R E E Y Q G I E V V L L P P S S R G K Y P E E Q Q V F T T R D I I G F T L G G E T  
R N F V K T L R R E E Y Q G I E V V L L P P S S R G K Y P E E Q Q V F T T R D I I G F T L G G E T  
S E F I D L R S S E H Q G I E V V L L P P A D P A L P E E Q Q V F T T R D I I G F T L G G E T  
N N F I E A L R S S E G V I H V E L L P P A D P A L P E E Q Q V F T T R D I I G F T L G G E T  
Q E L V Q T L R D L G I E V H L L L T P P H K D F P E E Q Q V F T T R D I I G F T L G G E Q  
R N F E Q A L R S N A G I E V I T K L P P V R S R D G H P E E Q Q V F T T R D I I G F T L G G E H  
S R L V E A L R S H A G N V E V I T L L P P V R S R D G H P E E Q Q V F T T R D I I G F T L G G E K  
Q Q F V N V L K K A G I E V I S L H P S S Q D L N E Q Q V F T T R D I I G F T L G G E T  
E T L I N E L E K R G V E V F L L L P A S A S Q F F P E E Q Q V F T T R D I I G F T L G G E T  
H D F V A K M R S H A G N V E V I T L L P P V R S R D G H P E E Q Q V F T T R D I I G F T L G G E N  
Q H L V D L L G K L G V E V I T L L H P D P R F S P E E Q Q V F T T R D I I G F T L G G E P  
R N F V Q A M M A N S Q N I E V V L L P P S S E Q Y P E E Q Q V F T T R D I I G F T L G G E T  
N H L I E A L R S S E G V I H V E L L P P A D P A L P E E Q Q V F T T R D I I G F T L G G E T  
G Q F S Q L L S D H G V E V I K L P S F Q S H Y P E E Q Q V F T T R D I I G F T L G G E T  
E T Y Y K L F K N Q Q L Q L N V I T L L D A D A D E R Y P D S C V F V E D V A V V P A V V T R E C  
D A Y I E A L R R S A G W T T H E V D P A D D C P D S V F V E D V A V V F G D L  
E A Y V A A M R S A G W T T H E V D P A D D C P D S V F V E D V A V V F G D L  
E V Y V A L R A H G V E V I T L L P P L E E Y P D S G V F V E D V A V V H R N V  
D A Y I E A L R K Q C G V E V T V L P P A L E E Y P D S G V F V E D V A V V T R K G  
Q N L Q N V L K E N G V R V H L L T P E E E G L P D S Q V F T T R D I I G F A S D Q G  
A E Y A Q T L R D L G L G L D V T V L P A D E E S L P D S C V F V E D V A V V Q G D T  
G V L T G A L R Q K G L G L Q L T I E I Q V D S D L P E S W R I E A V I V Q G D T  
Q S Y I D A L T K C G L D V H V L E P C E E Y P D S T F V E D V A L I T P N C  
E M F I E K L Q E N G V E T I L L P P V E K Y H E Q V F T T R D I I G F T L G G D Q  
G V L V G T L R Q K V L G L Q L L E L P A D T H L P E S W R I E A V I V Q G D T  
G V L G G K L R Q R V L G L Q L L E L P A E E S L P L G P L L G D T A V I V Q G D T  
E A Y T E A L R A H G W E T V E V E A P A D D C P D S V F V E D V A V V M F R N V  
E G Y L R A F V D A G W R V T E V E A P A D D C P D S V F V E D V A V V Y G D L  
G V L V G V L R Q K L G L Q T V E L P P D E A L P R S A L L E D A A V V V Q G D T  
D A Y V A A L S K E A G W T T V E V T S A D E L A D S V F V E D V A V V F G D T  
H Y V E A L K C G G V E V T Q L P A N E A F P D A S T F V E D T A V L T P E F  
E A Y V Q A L R D H G W R T T E V P A A D D C P D A V F V E D T M V L F R N V  
Q H Y I D A L T R C G L E V T V L P A L E N Y P D S C V F V E D V S L L T S K F  
E N Y V Q A L R D L G L D V I E M P A D E D T P W C A F V D D T A F V C N G T  
H D F K L F L E S E G T H V S E L P T K E E L N E Q Q V Y T T R D I I G F V I E D T Q  
H D F I N A L K K T G S E V T Q L K A D S N L N E Q Q V F T T R D I I G F V I E D Q  
Q T L V D T M R E E G L I D V K V L P P N E A F P E Q I F M R D S G F T I E G N K  
D A Y V A A L A G E G W Q T V E V A S A D D L A D S V F V E D T A V V F G D V  
D N Y T E A L K K A A G I K V T T V L E S D E E V P D S V F V E D L A V I T P K G T  
E Q Y I N A L R N A A G I K V T T V L E S D E E V P D S V F V E D L A V I T P K G T  
E Q Y C T L L R T I G L D V I E L P P D D Q L P E G V F V E D N S A V I C N G V  
E A Y A H A L R E A G W E T L E V P P A D D C P D A V F V E D P V V V H E D K I  
R H Y I D A L V N C G L E V T V L P P S D A F P D S C C F V E D T A V L T G E T  
D K Y I E A L K S C G L E V T V L P K S E A F P D S C C F V E D T A V L T G E T  
Q L Y V G V L G S K L G L Q V V E L P A D E S L P D S C V F V E D V A V V C E E T  
Q R Y I E A L R S Q C G L A V T V L P A D E S L P D S C V F V E D A A L C T P N C  
L D L T K I L R S L G V D V I E L P A D E S L P D S P Y I E D T A A V Y N G T  
A E Y I K L L K D L V E N I Y T I P C H E N Y P E Q V F V E D T A V V T D G T  
Q A L V T A M E K E G I R V I T V P A H D H L P E Q Q V F M R D S G F V I G T S  
Q D F V R V L I S H G V E V F E L F A E E K L N D Q V F T T R D I I G F C V G E Q  
E H Y T S A L T K C G V K V N I L P Q A N D D F P D S C V F M E D T A L C T D K C  
S D Y T R A L T E S A G W T V E V P A A P E C P D A V F V E D T V V M I G G T  
D A Y V R C L R E S L G L T V E V L P A A P G F P D A C F V E D T A V V V R E T  
E A Y V E A L R A N G F E T V E V A A A D D L A D S V F I E D T A V V V F G E V  
E G Y V A A L H A H G W E T V E V A A A D D C P D S V F V E D A V V V F R G V  
H G Y V A A L R A H G W E T V E V E A A D D C P D S V F V E D T V V M F R N V

D A Y V E A L R G L G L T V I T L P P E D A F P D A H F V E D V A V V T P E V  
E R L H E A Y L E L G H Q V E L I P P V E E G L P D M V F A A N G L V V D G R  
V A Y V E A L K A C G G V E V T Q L P E S E E F P D S T F V E D A A V V T P E F  
Q N Y K T V L E K C G V E V T V E V P E S E E F P D S T F V E D A A V V T P E F  
D A Y V I L N E A G W E T V E V A P A D D C P D S V F V E D T A V V Y K N V  
H T L R A A Y E S L G H T V H L V D P A P G L P D M Q V Y A A N G G L S V G E T  
R Q L T K V L E D H E L T V K F I P A D K K C P E Q Q V F T T R D I I G F V I E D T  
T E L R D T Y R R L G H T V E E I E P Q P G L P D M V F A A N S G T V I D G R  
R F Y V E T L V S L G W K V D V L E P L D A F P D S T F I E D N A I V L D D M  
R G Y V D V F R S R L G V D V I E L A P A D D C P D D G V F V E D A V V V F G D L  
E E Y V A A L R R R G W D V V E A P V D D C P D D G V F V E D Q V V V H G D V  
D D Y V N V I K E H V K Q V V E V P A D E S L P D C C V F V E D N A I V V Q E D K  
Q L Y V G V L G S K V L G L Q V V Q L P A D E S L P D S C V F V E D V A V V C E E T  
E E Y V R A L T T A G A Q V I T L D P L E E F P D S V F V E D T A L C L P E E G  
H A Y C D A L R G E L G V E L T E L P P L D G A F P D A H F V E D V A V V T P E F  
E D Y V S A L R E E G I D V K K L P S L D G F P D S V F V E D V A L A L N R F K  
E G L K A A Y E E L G H R V D L I D P L D G L P D M V F A A N G A L V G G R  
N L L V I Q T Y Q S N L G I E V F F L P S S E T Y P D S V F A R D F G A C L K D G  
D A Y A A C L R S A G W E T V E V P A D D C P D A V F I E D A V V V C G S V  
S S Y I N A L K C G V E I T L K A D E N F P D S T F V E D T A V V N K D L  
U N I R E F 9 0 \_ L 7 M E L 8 E E F C K T L R S L D L D V V E L T Q A D E S T P D C A F V D T A I I C N G A  
E N L R T V F A E L G H Y V Q T I T P A P G L P D M V F A A N G A L V D D K  
E K L R E T Y Q S L G H T V E F I D P L P G M P D M V F A A N G A T V I D G K  
A H Y I D A L T G C G L S V T V L E P D D A F P D S T F I E D T C L V T E K C  
S D Y V N I L R G S L L V H V E V P D M D A F P D S C P F I E D T A V V I G S K  
D N Y C A A I L V A E G W E T V E V D A A P E L A D S V F V E D T V V M F D D L

QUERY UniRef90\_V9KTM6 UniRef90\_G3NUU76 UniRef90\_Q6NUUW4 UniRef90\_H9GP78 UniRef90\_UPI00047BF7A4 UniRef90\_Q9KBZ5 UniRef90\_C3YTM2 UniRef90\_W4QFA5 UniRef90\_UPI000409C913 UniRef90\_U5LCT1 UniRef90\_M1KLC3 UniRef90\_E6U057 UniRef90\_UPI00047DAE6E UniRef90\_F2F8N4 UniRef90\_Q34497 UniRef90\_W9AEF0 UniRef90\_M5P3L3 UniRef90\_UPI0003FE58A8 UniRef90\_F5SFJ6 UniRef90\_UPI0001E899EF UniRef90\_R0P5G2 UniRef90\_UPI000362C529 UniRef90\_F6QH68 UniRef90\_R6E4W6 UniRef90\_E9UW68 UniRef90\_G2P8E9 UniRef90\_C7N177 UniRef90\_UPI000410CE6B UniRef90\_C3Z3R2 UniRef90\_A5PN62 UniRef90\_UPI0002881B1B UniRef90\_R9BZ80 UniRef90\_W5USN1 UniRef90\_O95865 UniRef90\_M3EB15 UniRef90\_L0J4S7 UniRef90\_UPI0003C29367 UniRef90\_UPI00037235A5 UniRef90\_D7WR48 UniRef90\_UPI000379EBF4 UniRef90\_UPI00035CC32A UniRef90\_C4WTJ6 UniRef90\_A0A024QEM8 UniRef90\_Q8ESN7 UniRef90\_W7ZG79 UniRef90\_U3P4Q6 UniRef90\_U2UBF1 UniRef90\_T2MIH5 UniRef90\_Q9VYF0 UniRef90\_W6JSU7 UniRef90\_UPI00026C76F4 UniRef90\_N9V342 UniRef90\_UPI0003ABB683 UniRef90\_UPI000363E94B UniRef90\_T1KF75 UniRef90\_B3RNY6 UniRef90\_Q5WEV2 UniRef90\_UPI0002D84D9B UniRef90\_UPI0003608092 UniRef90\_C8XFT7 UniRef90\_C7LWM4 UniRef90\_UPI000288EB87 UniRef90\_UPI0003790A17 UniRef90\_UPI000262AF04 UniRef90\_UPI000457150B UniRef90\_S7T1K2 UniRef90\_D1AD36 UniRef90\_W3A807 UniRef90\_V3ZP34 UniRef90\_UPI00047B7131 UniRef90\_K6X1B2 UniRef90\_J8QCQ1 UniRef90\_UPI00047756B2 UniRef90\_M1YJ88 UniRef90\_E8NC17 UniRef90\_W9GIB2 UniRef90\_S2JHE2 UniRef90\_UPI0004403226 UniRef90\_UPI000472DE5E UniRef90\_Q0BAE8 UniRef90\_B1L4Q4 UniRef90\_UPI0003821DDE UniRef90\_R5V6D6 UniRef90\_A3TM87 UniRef90\_X1A972 UniRef90\_L7MEL8 UniRef90\_L1KX81 UniRef90\_UPI0003733E13 UniRef90\_S0G6Y1 UniRef90\_D8QPQ2 UniRef90\_UPI0003B502F4

90 100 110 120

A L I T R P G A P S R R R K E A D M M K E A L L K L Q L N L V E M K D E N A T L D D  
A L L T R R P G A P S S R R R R K E E T E A M M K V A L L A K E L L N L N I H T V E M T D D E N A T T L D D  
A L I T T R P G A P S S R R R R S E E T E A M M K S A L L K E E L L N L N I V E M T D D E S K A T T L D D  
A L I T T R P W I P S S R R R Q D E I C S V K K V L L E E L L K L R V V E V T D D E S G A T T L D E  
V Y V A D M A A D V R R K G E E E N T V L K Q W L E Q Q Q V P F Y N L T G S D E R I E E  
T F V A D M A H D V R R K G E E E N T L K E W L E L K G I S Y Y N L V S D E A T M D  
A L V T R P G H P S R R R Q G E E E V H A V K K V L L D D L G L E V V H M V S E D E A T M D  
V F V A E M A H N I R T Q G E E E D L L K S W L H Q D Q K I S Y Y N L L G D M R I E E  
V F V A E M A S R I R Q Q G E E E D V F K E W L E K E R I S Y F N L L T G G E K I E E  
V F V A E M A S R I R Q Q G E E E D V F K E W L E K E R I S Y F N L L T G G E K I E E  
A F I S N M A A S V R V R K G E E E S I L Q Q H W L D D Q K Q N M K Y K T L L S K E N K I E E  
V H V S H M A R N V R K G E E E S I L Q Q H W L D D Q K Q N M K Y K T L L S K E N K I E E  
V F V A D M A H D L R V G E E E K E F I T Y L E N N S N Q G I A Y K N L L G D M S L H S I E E  
L F I S S M A N E P I R Q Q G E E A V I L A Q W L H S N N Q G I S Y T R M L D S L H S I E E  
A F L V S S M T E P I R Q Q G E E A V I L A Q W L H S N N Q G I S Y T R M L D S L H S I E E  
L Y V S K M E E A L R K P E K K V L I N W L E S T N Q Y S Y K D F S D G G Y N I E E  
V F T S R L S A S D I R Q Q G E E E N V L Q E W L S K E N I A Y R S F N G G Y N I E E  
T F V I S N M A S D I R Q Q G E E E T V L Q E W L S D T H H V P F Q K L T A G Q N H I E E  
V F V I S R M E K P I R Q Q G E E E S L L T R W L Q K E R I V P F S R L T A G S I E E  
V F V I S N M A S D I R Q Q G E E E T V L Q E W L D E Q H L S Y T P F S G Y S I E E  
V F I S N Q M A A D V I R Q Q G E E E N V L T E L L H K H S V P F T P I K E N A N H S I E E  
I F T A E M A A D V R Q Q G E E E N E L Q K W L K T E H I S F L N L S E H S I E E  
A L V T T P G A P S R R R K E C D A I L K T F K D I D L K I M K H I I D P A A N L D E  
A I I T N P G A P S R R N G E K F E L V D A V R A R G Y R I A H I I K A P G T L D E  
A I I S R P G A L E S R R P E T I A A A E D A V R A R G Y R I A H I I K A P G T L D E  
A V I A R P G A S R R R P E T V T T E E A V R G L G C S L L N R L R E P P G T L D E  
A I M D N P G A G S R N G E A K E M E P T I R K F F D D H I K H I V A P G T L D E  
L I I G Q M N M S L R E P E T A Y V K Q W F D H N Q W E Y Q E M T S G A A L L E E  
A L M T R P P C K A R R K E V D A V E K C L K S L L G L K T H R M F D K E K A L L E E  
A L I T R P F K Q A R C C A E A V R R V L N E L N M T V V E M G E E A G G T L D E  
A I I T R P G A P S R R G E E V Y D I E F V L K Q R F N N I E V I D A P G T L D E  
I F V A E M A R D V R R R Q E A E A V R R V L T E L N L M V E M E D D G N M I L D E  
A L V T Q P L N Q E R R Q E A E A V R R V L T E L N L M V E M E D D G N M I L D E  
A L I T R P W S P A R R P E V D G V R K A L Q D L G L R I V E T G D E N A T T L D D  
A L I A R S G A E S R R A E T L G V E E A V A S E F G Y R I A H I I V W V E A P G V L D D  
A V I A R S G A E S R R A E T D G A E K A V A S E F G Y R I A H I I V W V E A P G V L D D  
A L L T R P W E P A R R A E I S G T R K V L E E L K L R V V E V A D D G A T T L D D  
A V I T L P G A E S R R A E V V I G T E A A L R A Q G M H L E R I E A G S G T T L D D  
A I I S N P G A A A R N R E I E E P A V K Q F Y E K I Y Y I E A G S G T T L D D  
A L L A R S G A D A R R P E L P A A R E A A E A L G C S L L N A V R A P A G T T L D E  
A L L T R P G A P T R A K G E V R E I R A T T H F F R D H I S R I T A S G A K I E E  
A I I T K P A E P E R A K E V E A R A V L K K I G L P I V E V S D T A S A K I E E  
L F I S L M K E E V R H P E T A V L R D W L Q Q N N L Q Y N A T I S S A I E E  
F F V S Q M Q R S I R E K E S V V L Q N W L S T E G L P F T P I K T A S I E E  
L Y V G R M E S A V I R Q G E E S K V L K S F L S Q S I G R P F Y S L H E G S I E E  
A V L A R P G A D E R Q D P E V A G T E A A L R T Q G L R L E R I E E P G G T L D E  
V V S D L P G T T R H D E A K L M L P T L R S E D D I E T V H I M K A S A G T L D E  
A L I T H P G A H S T K L E T N E V L K H F V S D D I E T V H I M K A S A G T L D E  
A L I G R S E H P K R Q L E A E S M A I L K K L D I P V I E I E D P N A Q L D D  
A V I A N P G A A Q R R G E T L G V E Q T M R Q T F Y R G R I C K I E A P G T L D D  
A I L T R P G A L S R R Q G E V D L V E P C I Q D T F Y R G R I C K I E A P G T L D D  
A I L S N P G A A S R N G E K H E M L P Y L E K F F D D H L F K I E A P G T L D D  
A L I T R P G A P S R R K E V D M M K E A L E K L Q L N I V E M K D E N A T T L D D  
A I I T N P G A A S R Q G E V V D M A R H I P S F Y Q A I E T M L E A P G T V L D D  
A L I C R P G H P A R A R E T D T I K A I I K K L D L P V I Q I A D P K A T T L D D  
A L I C R P G A E S R R R G E E R D A V R Q K L A E L K L R I V E V E A P G T V E  
L Y V A S L D R E I R K G E E R D V L G E Y L T K I L G K P F A K A S A G T V E  
L F V S A M G S E K R K G E E V G A L M G K L K Q E N I P F K K L V Q S P I E E  
A I I S R P G A A T R Q N E T K L F R E L L R S S E Y T N I H E I E A P G T V E  
A V I T S P G A D E R K P E T M G T S V T V R A L G Y P T A T L D A G P T T L D D  
A V I T R P G A P S R T G E T V H I E A A L A P H R P L J A R I K A P G T T L D D  
A V L T S P G A E S R R R P E T I D A V R E S V T S L A L L E V H E T V I R E P P G T L D D  
A L L A R S G A V S R R R P E T A G A E D A V T A L G L P I A E I R E P P G T T L D D  
A V I S R P G A D S R K P E T A G T R A L E E L G L P I A E I R E P P G T T L D D  
A V I S R P G A K K L R E I L V E A M K V A L A E L N L H T V E M T D E S A T T L D D  
A V I T N P G A P A R N G E Q T S V A P V L G R Y K P L A R I E S P G F M D  
V Y G A R F R H P Q R R P E G P A Y L E W F R R N G F T E L L E P A H V N E  
A I I T N P G A E S R R G E E E V V L K Q F Y S K F H Y L N S P G T L D D  
A F M T R Q G H P S R R G E V I L M P D N V N K L D L N I V D M C N S K P D T I D D  
A V I S R P G A D S R K P E P A G T R E T V R G L G M S I N E M K A P G T T L D D  
V V A S F A F P E R A A E G S D L Y A E W F A R N G F G T V H R T T G I G T E G E  
L Y V G N L K R E I R K R E S E C L I N F L R E N G E K L P Y T K V I Q T E G E  
V L G S R F R A P Q R A A E A E H F R R W F T E H G Y R D L T M P T K T N E A E  
A L L T S M S A T S R R G E T L Q L K A A M E R H Y K V E I L E P P V F V D D  
A V L C R S G A A S R R G E A E S V R A G V L A S G I D L A E I V E P G T T L D D  
A V L C R S G A P E R R A E R V G L R E V L E P L G Y R T V I E A P G T T L D D  
A I I N Y L G A E S R R K E V S G M V E N A L K E V P V D I V H M I D P E A T T L D D  
A I I T R P G A P S R R K E E V D M G E A L E K L Q L N I V E M K D E P E A T T L D D  
A I V M R P G A P S R L G E A A A T K P T L L S Q F S T V M E I E N G F I L D E  
A V I T R P G A P A R R G E E T V H I E A A L G A H R D L L P M Q A G R L L E  
A L I S R F G E P S R R G E E A S V R E F L G E L G F T A V N V E A P A T T L D D  
V Y G A R F T F P Q R G P E G P A Y L R W F A E R G Y P V L E P A H V N E  
Y I L G R F K H E Y R K P E R K A Y E K K M Q E L L N I P Q L F K I H E G Y F E  
A V L T N P G A E Y R K P E V A G A V E S V V R D L G Y R V V R I E D P G T L D D  
A V I T N L G A P S R R G E E R E J I K N V L E K Y F D I I E S I K N P G T L D D  
A L I C R P A S G Q K E L D I L R A T I K K L G L A V M E I R D P K A T T L D D  
V L I S R F R H P E R Q A E A D I L W A D W F R D H G Y R E V V Q A F T S E  
V L G A Q F R N V Q R A D E G P A Y S A W F E D K G Y P V M Q A P K H V N E  
V V I T R P G H L S R R G E E T R A V A H A M Q P F N R P V M E I T S P G T L D D  
A L I T R P G A S L R R G E E T R A V A H A M Q P F N R P V M E I T S P G T L D D  
A V L T R P G A E S R R A E V E A V E R A V R S I P R L S V A G I E E P G T L D D



QUERY UniRef90\_V9KTM6 UniRef90\_G3NUU76 UniRef90\_Q6NUUW4 UniRef90\_H9GP78 UniRef90\_UPI00047BF7A4 UniRef90\_Q9KBZ5 UniRef90\_C3YTM2 UniRef90\_W4QFA5 UniRef90\_UPI000409C913 UniRef90\_U5LCT1 UniRef90\_M1KLC3 UniRef90\_E6U057 UniRef90\_UPI00047DAE6E UniRef90\_F2F8N4 UniRef90\_O34497 UniRef90\_W9AEF0 UniRef90\_M5P3L3 UniRef90\_UPI0003FE58A8 UniRef90\_F5SFJ6 UniRef90\_UPI0001E899EF UniRef90\_R0P5G2 UniRef90\_UPI000362C529 UniRef90\_F6QH68 UniRef90\_R6E4W6 UniRef90\_E9UW68 UniRef90\_G2P8E9 UniRef90\_C7N177 UniRef90\_UPI000410CE6B UniRef90\_C3Z3R2 UniRef90\_A5PN62 UniRef90\_UPI0002881B1B UniRef90\_R9BZ80 UniRef90\_W5USN1 UniRef90\_O95865 UniRef90\_M3EB15 UniRef90\_L0J4S7 UniRef90\_UPI0003C29367 UniRef90\_UPI00037235A5 UniRef90\_D7WR48 UniRef90\_UPI000379EBF4 UniRef90\_UPI00035CC32A UniRef90\_C4WTJ6 UniRef90\_A0A024QEM8 UniRef90\_Q8ESN7 UniRef90\_W7ZG79 UniRef90\_U3P4Q6 UniRef90\_U2UBF1 UniRef90\_T2MIH5 UniRef90\_Q9VYF0 UniRef90\_W6JSU7 UniRef90\_UPI00026C76F4 UniRef90\_N9V342 UniRef90\_UPI0003ABB683 UniRef90\_UPI000363E94B UniRef90\_T1KF75 UniRef90\_B3RNY6 UniRef90\_Q5WEV2 UniRef90\_UPI0002D84D9B UniRef90\_UPI0003608092 UniRef90\_C8XFT7 UniRef90\_C7LWM4 UniRef90\_UPI000288EB87 UniRef90\_UPI0003790A17 UniRef90\_UPI000262AF04 UniRef90\_UPI000457150B UniRef90\_S7T1K2 UniRef90\_D1AD36 UniRef90\_W3A807 UniRef90\_V3ZP34 UniRef90\_UPI00047B7131 UniRef90\_K6X1B2 UniRef90\_J8QCQ1 UniRef90\_UPI00047756B2 UniRef90\_M1YJ88 UniRef90\_E8NC17 UniRef90\_W9GIB2 UniRef90\_S2JHE2 UniRef90\_UPI0004403226 UniRef90\_UPI000472DE5E UniRef90\_Q0BAE8 UniRef90\_B1L4Q4 UniRef90\_UPI0003821DDE UniRef90\_R5V6D6 UniRef90\_A3TM87 UniRef90\_X1A972 UniRef90\_L7MEL8 UniRef90\_L1KLV81 UniRef90\_UPI0003733E13 UniRef90\_S0G6Y1 UniRef90\_D8QPQ2 UniRef90\_UPI0003B502F4

170 180 190 200

V V D A L H L K S F C S M A G G P N L T A I G S S E S A Q K A L K I M Q Q M S D H  
V T G S L H L K S F C S M A G G P N L T A I G S S E S A Q K A L K I M Q Q M S D H  
V L E E G L H L K S F C S M A G G P N L T A I G S S E S A Q K A L K I M Q Q M S D H  
V L E E G L H L K S F C S M A G G P N L T A I G S S E S A Q K A L K I M Q Q M S D H  
V S G T L H L R S F C S M A G G P N L T A I G S S E S A Q K A L K I M Q Q M S D H  
F T D T Y H L D C C V F N I L V S P E E A L I Y P G G V M N R K E E I H G E K V K M L I E S  
F P K Y L H L D C C V F N I L V S P E E A L I Y P G G V M N R K E E I H G E K V K M L I E S  
V A R G L H L K C C F C T M A S P D V M A V G E G P E A Q K T W Q E I R E R G E H  
F T E Y L H L D C C V F N I L V S P T E E A L I Y P P N A F S K K E Y D F L L S Q S  
F T D T Y H L D C C V F N I L V S P T E E A L I Y P P G E I D P K A L E Y I K S Q L L A S  
L E D F L H L D C C V F N M I S E T E A L I Y C K N G L R Q K E I D N E L E L L A E  
F N E Y L H L D C C V F N I L V S E R E A L I Y P P A A F D K N E L E L L A E  
F T D Y L H L D C C V F N I L V S P N E A L I Y P P G E M S E E K H Q L L L A S S  
F P K Y L H L D C C V F N I L V S S E S E A L I Y P P E A F E P K I V N L L L A S S  
L H E F L H L D C C V F N I L V S S E S E A L I Y S Q A I E P D A A D M L L L A K  
L D D L H L D C C V L N I V S P D T A L I Y P S K A V D S I S R K R L R K  
F E E T Y H L D C C V F N I L L S P Q T E A L I Y P P K A L G E K E Y E F L L K K S  
F P K Y L H L D C C V F N I L L S P T E A L I Y P P K A L E V R T V K E V L K K S  
F P E Y L H L D C C V F N P L L S S R E A L I Y P P H A F A D S D L R R L L A S K  
L D K S Y H L D C C V F N V I S P T E A L I Y F S P A L R Q K E E L L N F L S K A  
M K E F L H L D C C V F N I L S P E K E A L V Y P P A L R Q K E L L D L L S A S  
F N E Y L H L D C C V F N I L L S P N E A L I F P E A I D H N T V K M L L L S S  
I Q G S L H L K S V C T L G G R R R K L I G S G D E T S T D V K T Q I E K K S S V  
L E K V L H L K S A V T A L P D G T V I G H E P L V D D P S V W G A R F L D F E  
V S K V L H L K S A V T A L P D G T V I G Y P P L V D D P S V W G A R F L D F E  
L E L V L H L K T G V N Y L E N N M L V S G E F F I T K P D A F E  
L R K Y L H L D C V F N I L S P G T A L L P P A L P V K T V R E I G M  
V E E P F H L K G M L C M A A P G T L V V P R N K W G K T A W E A V C E K S E Y  
V C G S R L H L K N I L C M G G P D T I I S N S D G S K K T L R V M E Q L S D H  
L K K V L H L K T G L S Y L E K N N L V V C G E F I N D S C F E  
F T D S Y H L D C V F N V L S P T E G L I F P G E F H K E K E R M L R D  
V S A G T R L H L K N I C S M G G P E T T I F S S E G A R Q T L R V M E Q L T D H  
V S G P S H L R G L C G M G G P R T V V A G S S D A Q K A V R A M A Q L T D H  
V A K V L H L K S A V T A L P D G T V V G H I P H M D A P S L F P A F  
L K K A L H L K S A V T A L P D G T V I G Y E P V V D D P S V F P A F  
V L G S S H L K S F C S M A G P D T I A I G S S E A A R K A M K  
I T K A L H L K T A V T A L P D G T V I G Y E P I V D E P R V F E R F  
L K E F F H L K T G I A Y V L E G N R M V L A G E F V D H P A F E S Y  
V S R V L H L K S A V T A L P D G T V V G Y P P L V E D P S V F P H F R D L G Q L  
L N E F L H L K T G V S Y L E G Y A L V V S G S D S T K N V L K R L E R E A T Y  
V T E N K H L K T I V S M A G P D L M Y V G S S D S T K N V L K R L E R E A T Y  
L R D I L H L D C V L T I I G E H T A L V Y P A G I D K A A Y Q Y L K T W  
L R D I L H L D C C I V F N V L E D G Y A L I Y K D G M D S Q S Y Q T M K Q  
F K F L H L D C C V F Q P V S D H E A L L Y P D A I E P S F L K K I T D  
V T K A L H L K T A V T A L P D G T L I G Y E P I V D D A R V F E R F  
V E H L L H L K T G G T Y V E D G N L L V S G E F K T A S A Y R R G Q F K  
I S E K V H L K S F S M V G E N G I V F G K S E I S Q R V K K E L I S K A T E  
V N G T K R L K Y Y V T M A G P E V L C V S S S P T C Q E I V K R M E R E A I C  
V E R A L H L K S A V T A L P D G T V I G W D P V V D D K E A F P A Y E  
L K K A L H L K T G V S Y L G N G C V L V N G E L V E H P A F N S F R K L  
M T E M L H L K T G V N Y L E H N N L L I S G E F L H Y P T F K D F  
V A D G L H L K S F C S M A G P N L I A I G S S E S A Q K A L K V Y E K L K D H  
L S E V L H L K T G L G Y L E N N L L A C G S F L T K P E F Q Y T L L E  
V P N K L H L K S C M S M A G P D L L C I S S T P E A R E I L K L M E R E A T F  
I K G S L H L K S I L T M V D S E T L V V V I G N E Y G K K V I E N M Q N N C N Y  
L P D Y L H L D C C V F Q P V S T Q A L I Y R E A L S K K A V D M L A Q  
I E K I L H L D C A F N I I D E K L A L V Y P A A F S T T D L N L I K E  
L N E V L H L K T G V N Y L E D N N L L I S G E F I D N P L F A K F  
T T K V L H L K S A V T A L P D G T V I G Y E P L V D D P G F W P H F R  
V A A G L H L K S S L N F V G E D T M L V T A D F A G H P A I A D F  
V E K V L H L K S G V T A L P D G T V I G Y A D L V D N V D L  
V G K V L H L K S A V T A L P D G T V I G C P R L V D D P S V F R R F  
V T K V L H L K T A V T A L P D G T V I G Y P E F V D N A D L  
V T G S L H L K S F C S M A G P E L I V I G S S E S A Q K T L K F M Q Q M S E H  
V E K G L H F K S G V N H V I G G K T L V T P D F A G L D V L A G Y  
L V D F Y H L D T A L F P L G D D N I A Y Y P G A F S P G S R A V L Q R L F P D  
L Q E F F H L K T G I A Y L G E N N T L A A A G E F L N H P D F D  
V H S V L H L K S I A T M F G E D I M A V G S F L A A K S M F Q S I K E K A K F  
V N K V L H L K T A V T A L P D G T L I G Y E P F V D N I H I F P S F  
L P R F Y H L D T A L G V L D D A T I A Y Y P A A F S E R S R R L L D D  
F D D F L H L D C V F N P I S E N E A L I Y P K A I S A E S L D V L N K  
L T D P Y H L D T A L F V L A P A A I A Y Y P D A F S P G S R R V L A R M F P D  
V N G A L H L K S A V S C L T G E L L L I D P E K L D P A P F E D H  
V T K V L H L K S G V T A L P D G T V I G F P E L V D D P A L F P V F Q G  
V S R V L H L K S A V T A L P D G S V I G Y P L V D D P E V W E R F V G  
S H D S L H F K C I V S M L D P H T L I T D H K A G H D V I Q E E I N Q F T N N  
V V D T L H L K S F C S M A G P N L I A I G S S E S A Q K A  
V P E V L H F K T D C G L L D A K T I L A T E R L A S S G C F N D Y  
V A A G L H L K S V V N A L V G D D T L L V T E A L A A H P A F A D Y  
T E R V F H L L S A V N Y L G G N R K V I V P E L V D S K Y F S G F  
L V D F Y H L D T A L F P L D G R N V A Y Y P E A F S P G S Q E V L R R M F P D  
D P E F L H L D M C F N L I D E H L A L I C K E A F D I S F L Q E L Q K R  
V E R A L H L K S A V T A L P D G T V I G W D P V V D W P G A F P I Y E G  
L T N F F H L K T G V A Y L G D N N L V V S G E L I G N S I F K D Y  
L P K R N H L K E L L S M A G P D D V I C L S D S P E S Q A V K R Q V E R E A T F  
L P R F Y H L D T A L A A D D D E I V Y Y P G A F D T E S L R V L E T L F P N  
L P R Y Y H L D T A L F V L E G D Q I C Y Y P G A F S P G S Q A V L A R L F P E  
L T S V L H L K T G V S Y L E N N C L L A W E F T K Q P E F S D F  
V A E T L H L K S V L S P L G R N S F L A E E T F H A K Q M L E I R K A S M D  
M S K A L H L K S A A T A L P D G T V V G D P A L L D V T S L F

QUERY UniRef90\_V9KTM6 UniRef90\_G3NUU76 UniRef90\_Q6NUUW4 UniRef90\_H9GP78 UniRef90\_UPI00047BF7A4 UniRef90\_Q9KBZ5 UniRef90\_C3YTM2 UniRef90\_W4QFA5 UniRef90\_UPI000409C913 UniRef90\_U5LCT1 UniRef90\_M1KLC3 UniRef90\_E6U057 UniRef90\_UPI00047DAE6E UniRef90\_F2F8N4 UniRef90\_O34497 UniRef90\_W9AEF0 UniRef90\_M5P3L3 UniRef90\_UPI0003FE58A8 UniRef90\_F5SFJ6 UniRef90\_UPI0001E899EF UniRef90\_R0P5G2 UniRef90\_UPI000362C529 UniRef90\_F6QH68 UniRef90\_R6E4W6 UniRef90\_E9UW68 UniRef90\_G2P8E9 UniRef90\_C7N177 UniRef90\_UPI000410CE6B UniRef90\_C3Z3R2 UniRef90\_A5PN62 UniRef90\_UPI0002881B1B UniRef90\_R9BZ80 UniRef90\_W5USN1 UniRef90\_O95865 UniRef90\_M3EB15 UniRef90\_L0J4S7 UniRef90\_UPI0003C29367 UniRef90\_UPI00037235A5 UniRef90\_D7WR48 UniRef90\_UPI000379EBF4 UniRef90\_UPI00035CC32A UniRef90\_C4WTJ6 UniRef90\_A0A024QEM8 UniRef90\_Q8ESN7 UniRef90\_W7ZG79 UniRef90\_U3P4Q6 UniRef90\_U2UBF1 UniRef90\_T2MIH5 UniRef90\_Q9VYF0 UniRef90\_W6JSU7 UniRef90\_UPI00026C76F4 UniRef90\_N9V342 UniRef90\_UPI0003ABB683 UniRef90\_UPI000363E94B UniRef90\_T1KF75 UniRef90\_B3RNY6 UniRef90\_Q5WEV2 UniRef90\_UPI0002D84D9B UniRef90\_UPI0003608092 UniRef90\_C8XFT7 UniRef90\_C7LWM4 UniRef90\_UPI000288EB87 UniRef90\_UPI0003790A17 UniRef90\_UPI000262AF04 UniRef90\_UPI000457150B UniRef90\_S7T1K2 UniRef90\_D1AD36 UniRef90\_W3A807 UniRef90\_V3ZP34 UniRef90\_UPI00047B7131 UniRef90\_K6X1B2 UniRef90\_J8QCQ1 UniRef90\_UPI00047756B2 UniRef90\_M1YJ88 UniRef90\_E8NC17 UniRef90\_W9GIB2 UniRef90\_S2JHE2 UniRef90\_UPI0004403226 UniRef90\_UPI000472DE5E UniRef90\_Q0BAE8 UniRef90\_B1L4Q4 UniRef90\_UPI0003821DDE UniRef90\_R5V6D6 UniRef90\_A3TM87 UniRef90\_X1A972 UniRef90\_L7MEL8 UniRef90\_L1KV81 UniRef90\_UPI0003733E13 UniRef90\_S0G6Y1 UniRef90\_D8QPQ2 UniRef90\_UPI0003B502F4

R Y D K L T V P D D D T A A N C C I Y L N I P S K G H V L L H R T P E E E Y P E S A K  
R Y D K L T V P D D D T A A N C C I Y L N I P S K G H V L L H R T P E E E Y P E S A K  
R Y D K L T V P D D D D R A A N C C V I Y M N L P P N K G H V L L H H P T A E E Q Y F P E S A K  
K Y E K L T V P D D D P A A N C C V I Y A R L L G Q K S S V L L H H R S T E E Y F P N S V Q  
H Y E T L T V P D D D P A A N C C V I Y A R L L G Q K S S V L L H H R S T E E Y F P N S V Q  
R Y D L I K V P D D E E E Q F T L L G T N V L S I G N K K R V I F S L P V I N K N V N K E Q  
UniRef90\_Q9KBZ5 R Y D L I E V S T E E E Q F T L L G T N V L S I G N K K R V I F S L P V I N K N V N K E Q  
UniRef90\_C3YTM2 K Y S L L N I P D D D G A A N C M F V N G T M I H A A A E Q F P K S A K  
UniRef90\_W4QFA5 R Y D L I E V S E E E E Q F T L L G T N V L S I G R K T I F S L P V I N Q N V N Q K  
UniRef90\_UPI000409C913 R Y D L I E V S E E E E Q F T L L G T N V L S I G R K T I F S L P V I N Q N V N Q K  
UniRef90\_U5LCT1 R Y H L I E V S T E E E E Q F S L L G T N V L S I G D K K I F S L T V I N E N V N  
UniRef90\_M1KLC3 R F E M I E V P E E E E Q F T L L G T N V L S I G N Q T I I S L P Q H R H T N R E  
UniRef90\_E6U057 K Y D V I E V G E E E E Q F T L L G T N V L S I G N K R I I S L P I N H S G V N K K  
UniRef90\_UPI00047DAE6E R Y D L I E V S E E E E Q A T L L G T N V L S I G N K R I I S L P I N H S G V N K K  
UniRef90\_F2F8N4 M Y H L I E V S E E E E Q F S M G T N V L S I G G K R I I S L P I N R R H V N Y Q Q  
UniRef90\_O34497 R Y D L I E V S P E D E E Q F T L L G T N V L S I G G K K T I I S L P G N R H V N Y Q Q  
UniRef90\_W9AEF0 K Y H L I E V S D E E E Q F N M G P N V L S I G R N Q V I I S L P E N R Q V N K Q Q  
UniRef90\_M5P3L3 R Y D M I E V P E E E E Q F T L L G T N V L S I G N Q T V I S L P P D N K S Q V N R E  
UniRef90\_UPI0003FE58A8 R Y Q L I K V P S K E E E Q F T M G T N V L S I G N K K V I F S L P V I N P E N K V N E K  
UniRef90\_F5SFJ6 R Y S L I E V S E E E E Q F L L G T N V L S V G Y R T V I S Q P V I N P E N K V N E K  
UniRef90\_UPI0001E899EF R Y E L I E V S D E E E Q F T M G T N V L S I G N K K I F S L P Q N H H V N N O E  
UniRef90\_R0P5G2 R F D L I E V P D D E E Q F T L L G T N V L S I G R K K V I F S L M G N H H V N N O E  
UniRef90\_UPI000362C529 R F D L I E V T E K E Q F T L L G T N V L S I G R K K V I F S L M G N H H V N N O E  
UniRef90\_F6QH68 K Y E F L E V K D P C Y A N S V I W L E I D G K P T I L H P S T P E G Y P A V L A  
UniRef90\_R6E4W6 K Y N K V E I P E E E Y A A N C I W V N D D D T L L M A A S A P L S R A  
UniRef90\_E9UW68 Q N D R F L P V P E E E S G A H V V L L G G G K L L M A P E G Y P R S A E  
UniRef90\_G2P8E9 F Q Y N K V I V P E E E A A N C I W V N G G K V L V P E G Y P T V E Q  
UniRef90\_C7N177 H Y R T I T I N E W E Q F Q L A A N V L S I G S N T I I S M P Q N K S V N E K  
UniRef90\_UPI000410CE6B T Y K P L W V P N H Y G V N C I H I I R G P A K V D Y L L H P T A E E C S D S I A  
UniRef90\_C3Z3R2 H Y E L S V S E E V A A N C I Y I R G P A K V D Y L L H P T A E E C S D S I A  
UniRef90\_A5PN62 K Y N Q I E I P E S Y A A N C I W V N E S V I I P L G Y P T V K  
UniRef90\_UPI0002881B1B R Y D L I H V N A K E Q E T L G T N L S I G N K K V I S L P M N E G V N K E  
UniRef90\_R9BZ80 H Y D V L S P E D A A A N C V I Y R G A G G A D Y L P T Q M E C P N S V S  
UniRef90\_W5USN1 P Y A S L T L P D D A A A D C L F L G L P G V P P F L L H R G G G D L P N S Q E  
UniRef90\_O95865 P R F L P V P E P S G A H V V C L L L G D G K L L M S A A P E T A  
UniRef90\_M3EB15 L A V P E E P G A H V V V L L G T G G A A L V H R S P E E C P G G L Q  
UniRef90\_UPI0003C29367 E K I V I P V K E D E Y S A N C I Q V N D Y I I I V L S D D T V L M S S A P A G Y P E T N R  
UniRef90\_UPI00037235A5 K Q I I V P A Q E M Y A A N C I V I N G T V L L H R S A K E I P L S F N  
UniRef90\_D7WR48 S Y Q I L T L P E D E A A N V M Y I N G T L L H R S A K E I P L S F N  
UniRef90\_UPI000379EBF4 Y T V I E V T E E E Q F A M G P N V L T I G N N T I V S L P E N R A L N R K E  
UniRef90\_UPI00035CC32A K Y T L I E V T E E E Q F H M A P N V L S I G N K K I I S L P E N N R V N K E  
UniRef90\_C4WTJ6 R Y D C I E V S K E E Q F Y L S V N V L S I G K K R V I A L P Q N K K T N E A  
UniRef90\_A0A024QEM8 N I F E V P D E E A Y G A D C V R I N D K E V L I H R S A D E F P E S V E  
UniRef90\_Q8ESN7 K Y D I Y D V P E D Y A A N A I Y A N E V L I H R S A D E F P E S V E  
UniRef90\_W7ZG79 T Y Q K L T L P E E S A A N M L Y I N G T I V H R S P T E I P E A Y K  
UniRef90\_U3P4Q6 A M P E E G G A H V V I L L G E D Q L L M A A S A P R S A E  
UniRef90\_U2UBF1 N Q I V V D K S E G Y A A N C I R V N N S V I V P E G Y P N V L K  
UniRef90\_T2MIH5 N Q I V V D K S E G Y A A N C I R V N N S V I V P E G Y P N V L K  
UniRef90\_Q9VYF0 M L I P V D P S E S Y A A N S V W V N D T V L V P A G Y P K T Q Q  
UniRef90\_UPI00026C76F4 R Y A T L T V P D N G A A N V T F V N G T D T V L V P A G Y P K T Q Q  
UniRef90\_UPI0003ABB683 I Y Q K I T V P E G G A S N C L H V N D N I I H G S P S E I E D V E K  
UniRef90\_UPI000363E94B R F S L I D V P K E E Q F H L G V N V L S I G N K R V I A L P M N E T N  
UniRef90\_T1KF75 H F D I I E V T D D E Q L T S G T N V L S I G N K K I I S M P Q N E R V N L E  
UniRef90\_B3RNY6 N K I V V D P D E A Y A A N C I W V N G K V I V P A G Y P K V I Q K  
UniRef90\_Q5WEV2 K Q I V C P A D E E Y A A N T V L V N G T L I M P T G Y P R T R A  
UniRef90\_UPI000288EB87 Y D R F L A V P E A E G A A V V V L S D D A V L M S S A P R T A A  
UniRef90\_UPI0003790A17 F D R F L P V P E P H G T A V V C L S E S E L I I S A S A A S A P K T A E  
UniRef90\_UPI000262AF04 R Y D K L T V P D D D T A A N C V Y L P N K G H V L L H R S P E E F P E S A K  
UniRef90\_UPI000457150B D L L V T P Q G E E Y A A N T L L V N D A L I T P T G F P G V R A  
UniRef90\_S7T1K2 A L V A E E A D A A V L G L N A V C D G R H V V I N A E A T G L I A Q  
UniRef90\_D1AD36 T Y E K V E I E L M N D Q S N G L F I N D H V I I P K G F D E T K R  
UniRef90\_W3A807 K Y Q Y I E I L M N D Q S N G L F I N D H V I I P K G F D E T K R  
UniRef90\_V3ZP34 V S V P E A H G A A V V V L S E T H V L I S A S A P K T A A  
UniRef90\_UPI00047B7131 L F P D A L I A T D A D A E V L G L N V S D G L N V V M T D R A P H L E  
UniRef90\_K6X1B2 Q F D L I E V T T R E Q F T L L A V N V L S I G Q K K V I A L P K N R E  
UniRef90\_J8QCQ1 A V L A D E A D A A W L G L N G V S D G R N V V L P V E A V R L A  
UniRef90\_UPI00047756B2 S W I E V A H G E S N A A N C I T I N G T V L M P S G Y P E T R A  
UniRef90\_M1YJ88 V P E E A G A H V V L L V L D E G T V L M S S D A P E T A A  
UniRef90\_E8NC17 H Y E F I R V P E Q V P S N I L S L D G G K F I I Y Q Q P E S E K V I L E  
UniRef90\_W9GIB2 H Y E F I R V P E Q V P S N I L S L D G G K F I I Y Q Q P E S E K V I L E  
UniRef90\_S2JHE2 H Y E F I R V P E Q V P S N I L S L D G G K F I I Y Q Q P E S E K V I L E  
UniRef90\_UPI0004403226 K V I L T A K G E E A A N A V R F N D V V L L P A G F S Q T A S  
UniRef90\_UPI000472DE5E R R I A I S A A D E Y A A N T L R V N G T L I T P A G Y P R V H D  
UniRef90\_Q0BAE8 R Q I N V P L E E A Y A A N T L R L G E N R I L M P Q G Y P R T A E  
UniRef90\_B1L4Q4 A V L A G A E D A E V L G L N A V S D G R N V V I N A E A S S L Q  
UniRef90\_UPI0003821DDE K I E L I E V S K E D I F R H G L N V Q A L G D K K V L A L K K N H D I N L Q  
UniRef90\_R5V6D6 M P E E P G A H V V L L D D N L L M A A S A P R T A E  
UniRef90\_A3TM87 N L I K V E E D E S Y A S N C I K V N N Y V L I H R H A E G F D K L R N  
UniRef90\_X1A972 Q Y Q T V T L P E E R A A G C L Y I N G R L L H R H E F P A A N Q  
UniRef90\_L7MEL8 A V L A D E E D A L G L F L N L V S D G C N V I L R P A T A  
UniRef90\_L1KV81 A L L A T A D A E A F G L N S V S D G L N V I V P P Q A T H L I G A  
UniRef90\_UPI0003733E13 T L L P V D D S E A Y A A N S V W I N G R V L V P A G F E K T R S  
UniRef90\_S0G6Y1 S C D C V F T P H Q G A A N L L W V G N T L V Y P S A Y P C G S D L A  
UniRef90\_D8QPQ2 P R F L P V P E R E G V A V V A L S T T S L L M S A S A P Q T A A  
UniRef90\_UPI0003B502F4 P R F L P V P E R E G V A V V A L S T T S L L M S A S A P Q T A A

QUERY	V	Y	E	K	L	K	D	H	M	L	I	P	V	S	N	S	E	L	E	K	V	D	G	L	L	T	M	S	S	V	L	L	I	N	K	K		
UniRef90_V9KTM6	V	F	E	K	L	K	E	H	M	L	I	P	V	S	N	S	E	L	E	K	V	D	G	L	L	T	M	S	S	V	L	L	I	N	K	K		
UniRef90_G3NUU76	V	F	E	K	L	K	D	S	H	M	L	I	P	V	S	N	S	E	L	E	K	V	D	G	L	L	T	M	S	S	V	L	L	I	N	K	K	
UniRef90_Q6NUW4	V	F	F	E	R	L	K	S	H	M	L	I	P	V	S	N	S	E	L	E	K	V	D	G	L	L	T	M	S	S	V	L	L	I	N	K	K	
UniRef90_H9GP78	P	F	Q	K	L	P	D	Y	T	L	I	P	A	A	C	A	E	V	A	K	H	G	G	T	L	S	C	C	S	L	L	I	N	K	K			
UniRef90_UPI00047BF7A4	L	R	A	R	R	G	F	D	V	I	E	V	D	I	I	T	E	I	I	K	S	G	G	A	F	R	R	C	C	C	C	T	M	P	L	R	R	
UniRef90_Q9KBZ5	L	R	A	R	R	G	F	D	V	I	E	V	D	I	I	T	E	I	I	K	S	G	G	A	F	R	R	C	C	C	C	T	M	P	L	R	R	
UniRef90_C3YTM2	T	F	T	A	A	H	E	Y	P	R	V	Q	V	S	N	K	E	L	A	K	V	D	G	S	L	T	C	C	C	S	L	L	I	N	K	K		
UniRef90_W4QFA5	L	R	D	R	G	Y	T	V	I	E	V	D	I	I	T	E	I	I	K	S	G	G	A	F	R	R	C	C	C	C	T	M	P	L	R	R		
UniRef90_UPI000409C913	L	R	D	R	G	Y	T	V	I	E	V	D	I	I	T	E	I	I	K	S	G	G	A	F	R	R	C	C	C	C	T	M	P	L	R	R		
UniRef90_U5LCT1	S	Q	L	K	E	R	G	F	E	V	I	E	V	D	I	I	T	E	I	I	K	S	G	G	A	F	R	R	C	C	C	C	T	L	P	V	L	R
UniRef90_M1KLC3	L	R	K	R	G	Y	T	V	I	E	E	T	E	F	F	S	E	I	I	K	S	G	G	S	F	R	R	C	C	C	C	S	M	P	L	L	R	
UniRef90_E6U057	L	N	K	R	G	Y	R	I	E	V	I	E	V	D	I	I	T	E	I	I	K	S	G	G	S	F	R	R	C	C	C	C	S	M	P	L	L	R
UniRef90_UPI00047DAE6E	L	R	E	R	G	Y	E	I	E	V	D	I	I	T	E	I	I	K	S	G	G	A	F	R	R	C	C	C	C	T	L	P	L	L	R	R	Q	
UniRef90_F2F8N4	M	K	H	G	E	V	L	E	I	D	D	L	S	E	I	I	K	S	G	G	S	F	R	R	C	C	C	C	T	M	P	L	L	R	R			
UniRef90_O34497	L	S	K	R	G	Y	H	I	E	I	D	L	S	E	I	I	K	S	G	G	S	F	R	R	C	C	C	C	T	M	P	L	L	R	R			
UniRef90_W9AEF0	L	R	S	R	A	G	F	K	V	H	E	V	P	F	S	E	I	I	K	S	G	G	S	F	R	R	C	C	C	T	L	P	L	L	K	R	K	
UniRef90_M5P3L3	L	R	S	R	R	G	Y	T	V	I	E	I	D	L	S	E	I	I	K	S	G	G	S	F	R	R	C	C	C	C	T	M	P	L	L	R	R	
UniRef90_UPI0003FE58A8	L	R	R	R	G	Y	T	V	I	E	V	D	I	I	T	E	I	I	K	S	G	G	A	F	R	R	C	C	C	C	T	L	P	L	L	R	R	
UniRef90_F5SFJ6	L	R	R	R	G	Y	T	V	I	E	V	D	I	I	T	E	I	I	K	S	G	G	A	F	R	R	C	C	C	C	T	L	P	L	L	R	R	
UniRef90_UPI0001E899EF	E	Q	L	R	N	R	G	F	D	V	V	E	V	D	I	I	T	E	I	I	K	S	G	G	A	F	R	R	C	C	C	C	T	L	P	L	L	R
UniRef90_R0P5G2	L	A	A	R	G	F	H	V	I	K	V	E	L	S	E	I	I	K	S	G	G	S	F	R	R	C	C	C	C	T	M	P	L	L	L	R	R	
UniRef90_UPI000362C529	L	T	E	A	R	G	Y	D	V	I	E	V	D	I	I	T	E	I	I	K	S	G	G	S	F	R	R	C	C	C	C	T	L	P	L	L	R	
UniRef90_F6QH68	V	Y	K	D	L	Q	N	K	R	K	I	L	C	D	L	S	E	L	S	K	V	D	G	L	T	C	C	S	S	L	L	L	L	L	L			
UniRef90_R6E4W6	A	V	Q	S	L	R	G	Y	K	T	L	V	D	I	T	S	E	Y	R	K	L	D	G	L	S	C	C	L	S	L	L	R	F					
UniRef90_E9UW68	M	F	E	E	R	G	Y	T	V	V	A	V	D	I	I	T	S	E	F	E	K	L	E	G	V	T	C	C	L	S	V	R	L	R	R			
UniRef90_G2P8E9	L	V	A	A	L	G	Y	E	P	V	P	V	D	I	I	T	S	E	F	E	K	M	E	G	C	L	S	C	C	L	S	V	R	L	R	E		
UniRef90_C7N177	A	V	R	D	L	G	Y	E	V	I	V	T	D	T	S	E	Y	R	K	I	D	G	G	L	S	C	C	L	S	L	R	F	W					
UniRef90_UPI000410CE6B	M	R	A	W	F	H	V	I	E	V	E	L	S	E	I	I	K	S	G	G	A	F	R	R	C	C	C	C	T	F	P	L	V	K				
UniRef90_C3Z3R2	V	Q	A	D	L	E	T	V	L	L	I	Q	R	S	I	G	E	L	G	K	V	D	A	G	L	S	S	C	L	L	F							
UniRef90_A5PN62	A	F	Q	R	L	T	V	T	L	L	I	P	T	A	C	S	E	A	S	K	L	G	G	A	L	S	S	F	C	L	L	I	N	K	K			
UniRef90_UPI0002881B1B	Q	R	I	M	N	A	G	Y	T	V	I	E	T	D	V	S	E	F	E	K	L	D	G	G	L	S	C	C	L	S	L	R						
UniRef90_R9BZ80	L	Q	K	R	G	Y	D	V	I	E	V	D	I	I	T	S	E	I	I	K	S	G	G	A	F	R	R	C	C	C	C	T	M	P	L	L	R	
UniRef90_W5USN1	T	F	Q	R	F	P	S	Y	N	L	L	P	T	A	C	S	E	A	S	K	L	G	G	A	L	S	S	F	C	L	L	I	N	R	K			
UniRef90_O95865	A	L	Q	K	L	S	D	V	T	L	V	P	V	S	C	S	E	L	E	K	A	G	A	G	L	S	S	L	C	L	V	L						
UniRef90_M3EB15	L	F	A	D	L	G	Y	E	P	V	P	V	D	I	I	T	S	E	F	E	K	L	E	G	C	C	L	S	V	R	L	R	D					
UniRef90_L0J4S7	A	L	L	R	A	R	G	Y	E	P	V	L	V	D	I	I	T	S	E	F	E	K	L	E	G	C	V	T	C	L	S	V	R	L	R			
UniRef90_UPI0003C29367	P	F	Q	K	L	L	D	C	T	L	I	P	A	A	C	A	E	V	A	K	L	E	G	T	L	S	C	C	A	L	L	I	N	K	K			
UniRef90_UPI00037235A5	L	V	E	D	L	G	Y	T	V	I	Q	V	D	I	I	T	S	E	F	E	K	L	E	G	C	L	S	C	L	S	L	R	L	R				
UniRef90_D7WR48	K	L	L	D	L	G	Y	Q	T	I	E	L	D	M	S	E	F	R	K	H	D	G	G	L	S	C	C	L	S	L	R	F						
UniRef90_UPI000379EBF4	L	F	T	R	L	G	Y	R	P	V	P	V	D	I	I	T	S	E	F	E	K	R	E	G	C	V	T	C	L	S	V	R	L	R	E			
UniRef90_UPI00035CC32A	E	I	S	A	R	G	F	P	V	L	I	D	V	I	S	E	F	E	K	K	I	D	G	G	L	S	C	C	L	S	L	R	F					
UniRef90_C4WTJ6	V	L	E	K	I	T	D	F	T	V	L	Q	S	V	D	I	S	E	L	L	K	C	E	G	A	L	N	S	C	C	C	L	V	R	R			
UniRef90_A0A024QEM8	M	E	Q	A	G	F	K	V	A	E	I	A	F	S	E	I	I	K	S	G	G	S	F	R	R	C	C	C	C	T	L	P	L	K	R	R		
UniRef90_Q8ESN7	L	A	R	A	G	F	D	I	M	E	V	D	I	I	T	S	E	I	I	K	S	G	G	S	F	R	R	C	C	C	C	T	L	P	L	R		
UniRef90_W7ZG79	L	R	A	R	A	R	G	T	I	E	I	D	F	S	E	I	I	K	S	G	G	S	F	R	R	C	C	C	C	T	L	P	V	L	R	K		
UniRef90_U3P4Q6	L	I	Q	D	L	G	Y	R	V	V	T	V	D	I	I	T	S	E	F	E	K	L	E	G	R	V	T	C	C	L	S	V	R	L	R			
UniRef90_U2UBF1	A	Q	L	K	A	W	Y	D	L	I	A	V	E	M	S	E	F	R	K	I	D	G	S	I	T	C	C	L	S	L	R							
UniRef90_T2MIH5	L	F	N	K	L	P	I	K	N	K	L	S	L	C	S	E	L	M	K	I	D	G	A	L	S	C	C	S	I	L								
UniRef90_Q9VYF0	T	L	K	E	K	I	D	I	P	T	R	N	I	N	I	S	E	F	S	Q	Y	S	S	G	L	T	S	C	L	L	L	R	R					
UniRef90_W6JSU7	L	L	R	A	R	G	Y	A	V	I	T	T	V	D	I	S	E	F	E	K	L	E	G	C	V	T	C	L	S	V	R	L	R					
UniRef90_UPI00026C76F4	M	V	R	G	A	G	F	Q	V	I	T	I	D	V	G	E	F	R	K	V	D	G	G	L	S	C	C	L	S	L	R	F						
UniRef90_N9V342	A	V	Q	D	L	G	I	Y	R	V	I	T	C	D	T	S	E	Y	K	K	L	D	G	G	L	S	C	C	L	S	L	R	F					
UniRef90_UPI0003ABB683	L	I	E	D	Q	G	Y	K	T	L	A	V	D	V	S	E	L	E	K	V	D	G	L	L	T	C	C	S	V	L	L	I	N	K	K			
UniRef90_UPI000363E94B	L	I	E	K	R	D	F	P	K	L	P	I	K	L	W	E	L	S	K	A	Q	G	T	L	S	S	L	A	L	L	V	N	K					
UniRef90_T1KF75	F	F	E	T	M	N	K	P	T	Y	H	V	E	N	S	E	F	N	K	A	D	G	C	L	T	C	C	R	S	V	L	F						
UniRef90_Q5WEV2	A	Q	L	Q	A	H	G	F	T	I	E	V	D	F	S	E	I	I	K	S	G	G	S	F	R	R	C	C	C	C	T	L	P	L	V	R		
UniRef90_UPI0002D84D9B	M	S	N	R	G	Y	E	I	E	V	K	Y	S	E	I	I	K	S	N	G	S	F	R	R	C	C	C	S	L	P	L	L	R					
UniRef90_UPI0003608092	A	V	E	H	L	G	Y	E	V	L	V	D	T	S	E	Y	C	K	I	D	G	G	L	S	C	C	L	S	L	R	F							
UniRef90_C8XFT7	L	I	A	D	L	G	F	T	P	V	V	D	I	I	T	S	E	F	E	K	L	E	G	C	V	T	C	L	S	V	R	V	R					
UniRef90_C7LWM4	L	I	E	N	L	N	L	P	T																													

1 10 20 30 40  
UniRef90\_E6VZ16 FT H A I I T R R P S A E M A N G I T T A D L G T P D Y H L A L A Q H  
UniRef90\_C3YTM3 F G Q Y T S A L V C R V P E S T A S Q P S S G S T K G H V N V E Q A R G E W  
UniRef90\_X1TG17 P E L G K P D Y E K A L T Q H  
UniRef90\_QOACF2 M S K A V L M C P P E H F I E Y E I N P W M D D P V C R E L A R S Q W  
UniRef90\_I0S0A9 P V D T E R A M R Q W  
UniRef90\_A1UBL7 V M T P P T F F A V E Y A I N P W M D P V D T H R A L D Q W  
UniRef90\_Q02T2 R M L T A I T R A V S P S M D K C E L S F I A R Q A I D I A R A K E Q H  
UniRef90\_UPI0002D51338 R H Y L M C E P R F F T V S Y E I N P W M D R P T D A S L A V R Q W  
UniRef90\_A0A024YQV5 A R V A T R R R L L M C R P R Y F D V T Y S I N P W M N P A T D N A L A V S Q W  
UniRef90\_N0D385 R A R R Y L M C R P T Y F D V T Y S I N P W M D P P V D T P L A I A Q W  
UniRef90\_W7SMM8 R R Y L M C R P E Y F T V E Y S I N P W M D P P V D T R V A V E Q W  
UniRef90\_UPI000373B44E M C P P R H F A T Y A I N P W M D P P V D T D R A V A Q W  
UniRef90\_K6YVU5 F T R A I V R K P C L A M L S G L T E A N M G L P D Y N L A C A Q H  
UniRef90\_K9S8X8 I L M C P P D H Y V D Y V I N P W M E G N I H R D R A V L Q W  
UniRef90\_UPI00036ADB0 R H Y L M C R P T V A Y A I N P W M H P D D E A V D T E R A L A Q W  
UniRef90\_D0L7Q1 D P G V P V D T V R A V A Q W  
UniRef90\_UPI00047BA0F3 R H Y L M C R P E H F A V T Y A I N P W M D P G A S A E L A V T Q W  
UniRef90\_H5THU5 S H Y T V S Y T I N P W M D P V D T A R A M A Q W  
UniRef90\_UPI0004722E68 E Y D T L R R V V L C E P K K D I N D V Q K K Y K D E N I D R K A M Q Q H  
UniRef90\_A0A024YR87 R H Y L M C R P T H F E V S Y A I N P W M N P P M D A A L A L A Q W  
UniRef90\_UPI0004760358 R R A I L T R S Y P R Y F A V E Y A I N P W M D P V D P Q R A V N Q W  
UniRef90\_UPI0002E4687C S R V A R R R Y L V C E P R Y F A V R Y A I N P W M H P V D V L L A Q R Q W  
UniRef90\_UPI0003637D1B M R H Y L M V S P A Y F A V E Y S I N P W M G K P T D T K L A I T Q W  
UniRef90\_E3CZQ4 S E V G R L R A C L V R R P G K E I V K N P A D W R W G D V M D P Q K A R D Q H  
UniRef90\_UPI00034641C8 A L T R R P S P E M E R G I L T H V P R S S V D P V L A M R Q H  
UniRef90\_F5HMJ7 R Y T H A I T A R I P L S L R T R G E I D L E E A K L I Q H  
UniRef90\_X0N1U2 R R E L M C P P R H F I N P W M D P G K P V D V G A L A L A Q W  
UniRef90\_UPI000378B3BE H Y N F A I L C R V P N S L K N R S V G S D N Y P N V D V E K A R Q E Y  
UniRef90\_C3XPC8 H D R E D P I N L R R A R R Q H  
UniRef90\_F8A615 R H Y L M C E P V H Y T V S Y E I N P W M D K T T D A E L A V R Q W  
UniRef90\_F3NTN6 S R V P R P R R Y L V C E P T Y F A V R Y A I N P W M H P P V D T G L A L L Q W  
UniRef90\_A8M0K2 L M C S P D H F T V T Y S I N P W M D P P T D T A L A V A Q W  
UniRef90\_I4FGS3 R F L M C S P D H Y D V D Y V I N P W M E G N I H K E K A R Q Q W  
UniRef90\_UPI0003A94974 V M C P P E Y F T V E Y S I N D P D T P V D T E L A M S Q W  
UniRef90\_Q09359 L K R V L M V P K H F T V E Y T I N P W M G G V D K Q K A H Q Q W  
UniRef90\_D7CBB1 R R Y L M C P A H F R V T Y S I N P W M D P V D L P L A L A Q W  
UniRef90\_UPI0003B55EC7 A L V R I P A T N L A D G I V T N I E R T P V D P A K A D E Q W  
UniRef90\_UPI000479D7F5 M C R P E H F E V S Y A I N P W M D V T V D R D L A L R Q W  
UniRef90\_B1XMU4 T R I L M C A P D H Y E V D Y V I N P W M E G N I H K A Q A I E Q W  
UniRef90\_UPI00034D61E8 R H F L M C P P A H F A V E Y A I N P W M D P G V D R D R A L R Q W  
UniRef90\_UPI000375CDFE P V D P A L A L L Q W  
UniRef90\_J4TJC8 M T P P A F F A V E Y A I N P W M D P V D A G L A L A Q W  
UniRef90\_UPI00047B2D43 M M C P P A H F V S Y A I N P W M D P P V S R E R A L D Q W  
UniRef90\_B1WSB4 R I L M C A P D H Y D V D Y V I N P W M E G N I H R D R S V E Q W  
UniRef90\_L8ENA5 R H Y L M C R P T H F D V T Y A I N P W M D P N I D T G L A V A Q W  
UniRef90\_B6B847 F T R A I T R R P A S T I A Q G L R A E D T G N P N L E T M L K A H  
UniRef90\_I7F2M1 F T R A I T R R P A S S I T D G L R A E D I G T P D L D K M L A A H  
UniRef90\_I0HHJ4 R R Y L M C R P T H F A V T Y R I N P W M D P P Y D N A L A V S Q W  
UniRef90\_W8ALU8 M C R P E H F D V T Y A I N P W M D D P V N R A L A L A Q W  
UniRef90\_X5L7Y6 R R Y A M T A P T H F T V E Y A I N P W M D N P V D N H R A M A Q W  
UniRef90\_A4T1S1 V D T D R A I T Q W  
UniRef90\_D3Q188 A E T A R E R Q Y L L A T P T H F T V A Y A I N P W M D E P V D T A R A I E Q W  
UniRef90\_UPI00039CCABC V P R A R R Y L V C E P R Y F D V Q Y A I N P W E D S P V D R A L A R T Q W  
UniRef90\_S0EUM4 Q V L M C P T A Y V C Y E I N P W M H L E N P D R S L A A K Q W  
UniRef90\_W8U295 H F T Q A I A R L P A D T C A H G Q T T A Q L G A P D I A A T G Q Q F  
UniRef90\_X5R749 F N S A I V R E P S T S V V N G L R A D G R D G P T Y E G V K A E H  
UniRef90\_L7EGS6 G I L K K V L L C S P D N V I A E K W I K E N N G L N I E K C I K E H  
UniRef90\_A0LS17 R R Y L V C C P P R Y F A V Q Y T I N P W M H P E V D T D R A C R Q W  
UniRef90\_C1B054 J M C P P T Y F I L N D W M R P G E P V D R D R A M S Q W  
UniRef90\_UPI00037560B1 S E Y K K M E R V V I K T I S E E L K K E W A H N Y L S K P D L T R A K E E Y  
UniRef90\_A0A023CWE7 K L K K V L V C P P T Y L I N E I S K K Y A D Q P L D Q T R L A A E F  
UniRef90\_D6KC27 R R Y L M C S P A H F T V R Y S I N P W M D P V D T P L A Q A Q W  
UniRef90\_F8K236 R R Y L M C P T H Y R V S Y S I N P W M D P P V D T A L A V A Q W  
UniRef90\_F8B360 R H Y L M V R P T Y F D V E Y S I N P W M D P P T F T E V A V A Q W  
UniRef90\_UPI0003F8A4A3 A I T R A V S P E S H L E R C E L T H L E R R A I D V E L A R T Q H  
UniRef90\_W6N7N8 G I L K K V L L C P P E S H L K D I N K N Y D I K I D R K R C N E E H  
UniRef90\_A5N689 G V L K K V L L C P P D H I K L Y S I N V I S E E K L N I E R C I K E H  
UniRef90\_UPI000478319A M C R P E H F A I H Y E I N P W M D L P V C T V A A T R Q W  
UniRef90\_U5QEY1 R Y L M C A P S H Y E V D Y V I N P W M E G N I H R E Q A E R Q W  
UniRef90\_UPI00034AF0E0 A L M R R P G P R L A D G I V T H I A R T P V D P V L A A R Q Y  
UniRef90\_UPI00047955C8 S M H K K L G H V I V K H P K E H L S K E W K K F N Y L E E P D Y F T K A Q Q E Y  
UniRef90\_UPI0003FAD50D F N Q I I V R T P S R S V N G L R A E D R G S P T Y E G V K A E H  
UniRef90\_UPI00036991A4 R V L M R R P G A S L A S D P V K W H Y G P T F D G E K A V R Q Y  
UniRef90\_UPI00036CCF66 A F V R R P P S Y N R A I S A N P K D Q P I D L K R A C L Q H  
UniRef90\_UPI0004560476 L V R R P P N L A S G Q I T H I A P S S I S H T L A L A Q W  
UniRef90\_UPI0002063B79 R Y T H A V L C R I P L S L R T R G E I D L E A R T Q H  
UniRef90\_S7XIN7 K T V L M C R P D Y F T V S Y R I N P W M N D P T D T S L A V K Q W  
UniRef90\_B5HKH4 L V C E P R Y F D V K Y A I N P W M N S E V D D Q D L A R S Q W  
UniRef90\_UPI0004786328 S E V G K L R A V L R R P G K E I E N D P A A W R W G A V M D S E R A R A Q H  
UniRef90\_R3U5N9 L K E V I V C S P K Y Y I N E I T K S W K G E T E H N E Q M V S E W  
UniRef90\_W2BZU4 S E V D T L R D V I M R R P G K E I D N D W Q T A R F K S A I D P E K F R A Q H  
UniRef90\_A5V1U9 S M I A P L R R V L V R R P D E S F G E D P Q R W H Y T A R P D L K R A Q D E H  
UniRef90\_UPI00034AA3AE I L M C P P H H Y V D Y V I N P W M E G N I H R D R A E T Q W  
UniRef90\_E5WMMW9 S Y E T V K D Y L L S L P D E L V K K V M S G V V K S D I D Q D K K I H L H  
UniRef90\_UPI00035FF51E L L R F L M C S P R H Y D V D Y V I N P W M E G N I H R D R A N E Q W  
UniRef90\_U1NJT8 L K R V L M V P P K H F T V E Y S I N P W M G G V D K A K A F E Q W  
UniRef90\_E6WKT5 F T Q I A R L P A D N C A A G L T T A S L G A P D A E L T R R Q F  
UniRef90\_J3HYT2 L M C A P T H F E V S Y V I N P W M A G N V D P Q L A A R Q W  
UniRef90\_A9TJKO A I V R G V P D T F C D A L S M V H P L V P V D L E V A R L Q H  
UniRef90\_A0A021YYF1 R R Y L M C R P E H Y T V S Y E I N P W M D V T D R D L A V Q Q W  
UniRef90\_UPI00047ACE08 E P G R R T Y L M C R P A Y A V E Y A I N P W M D T P V D A A R A C A Q W



UniRef90\_E6VZ16 K A Y C L T L R A V L G L D V T V L D A E P G Y P D C C F V E D T A V V C H H V 80  
UniRef90\_C3YTM3 E K F T G T L R R K L G G A G V L E L S E A E E E C P D Q G P F V S D D C A V V C E G T F  
UniRef90\_X1TG17 N E Y L Q R A L K K L G G W D V C L V L E D D A I E E K Y P D D M V F T A N G G L V I V R G D T  
UniRef90\_QOACF2 Q G L Y Q L Y T Q T L G G V R V H L V L D P V V A G L L P D D M V Y A A N G G L V I V R G D T  
UniRef90\_I0S0A9 E T L R Q T Y L T D L G G H T V D L V V D P V V A G L L P D D M V Y A A N G G L V I V R G D T  
UniRef90\_A1UBL7 U L R R T Y K E L L G G H T V E L V L D P V V A G L L P D D M V Y A A N G G L V I V R G D T  
UniRef90\_Q02T7 A A Y E V C L W E L L G G H T V I S L P S E A E Y P D D M V F A A N G A T V V D D G V  
UniRef90\_UPI0002D51338 Q R L R D T Y R D L G G H T V D E I E P I D G G L P D D M V F A A N G A T V V D D G V  
UniRef90\_A0A024YQV5 E G L R D L Y L S L L G G H T V D E I E P L E G G M P D D M V F A A N G A T V V D D G K  
UniRef90\_N0D385 E R L R E V Y L L E L L G G H T V D E I E P L R G G L P D D M V F A A N G A T V V D D G R  
UniRef90\_W7SMM8 T A L M E T Y Q A L L G G H K V E L I E P E P G G L P D D M V F A A N S G T V I D D G V  
UniRef90\_UPI000373B44E T A L R D T Y V R L L G G H S V S E I E P A Q P G L P D D M V F A A N S G T V I D D G V  
UniRef90\_K6YVU5 H D Y I R A L K E C G L G L Q V T E L P A I E D Y P D D S C F V E D V A L L T R K C  
UniRef90\_K9S8X8 Q Q L Y H T L K D H A T V D L L E P Q P G W P D D M V F T A N A G L V L G N S  
UniRef90\_UPI00036ADB0 E A L R R T Y L D L G G H D V S L I E P A P G G L P D D M V Y A A N G L V V N G R  
UniRef90\_D0L7Q1 N T L R R A T Y E R L L G H H R V H L V E P A P G G L P D D M V Y A A N G L V V N G R  
UniRef90\_UPI00047BA0F3 E M L R S A Y L A L L G G H E V S L I V D P L P G G M P D D M V Y A A N G A L V V G G R  
UniRef90\_H5THU5 E S L R A L Y E S L L G G H S V S L V P A Q S E R D L P D D M V Y A A N G G F V V D G K  
UniRef90\_UPI0004722E68 E E F E A K L K E H N G H E V T I K L P S S E R Y P E Q V F T R D I G F T L V D G R  
UniRef90\_A0A024YR87 E R V R D L F L G L L G H E V S Y I D P V P G L P D D M V F S A N G A T V V D G K  
UniRef90\_UPI0004760358 D A L R R T Y L D L G G H A V D L V E P P R P G L P D D M V Y A A N G A T V V G D A  
UniRef90\_UPI0002E4687C R T L V D A Y R D H L G G H T V E T V E P E P G L P D D M V F A A N A A V I V E G R  
UniRef90\_UPI0003637D1B E W L R D L Y V J E L L G G H R V D L L D P V P G L P D D M V Y A A N G A T V V N G R  
UniRef90\_E3CZQ4 D A F T Q V Y R D H G G W D V F Y V D E E Q A E D R P N A S I F M R D N L G T P E G  
UniRef90\_UPI00034641C8 V I Y Q E A L A S A G W D V V E V D P A P G H P D S V F V E D T V V V C G D L  
UniRef90\_F5HMJ7 E S Y V K M L R D L G L D V I E L P P D E N L P E C P F V E D C A V V C N G I  
UniRef90\_X0N1U2 T R L A E L Y R T L L G G H T V E V I E P L P G L P D D M V F A A N G A T V V D G R  
UniRef90\_UPI000378B3BE R T L I D T Y R E H L G G H T V D T V P P A P G L P D D M V F A A N S A T V V D G R  
UniRef90\_UPI000359995D E T I R E V L K N C D I N I T E L V E D E S Y P D C C F V D D T A V V I G N T  
UniRef90\_C3XPC8 A R Y V R T L R D L G L D V E T V L P A D E S T P D C C P F V E D T C V V V G N R  
UniRef90\_F8A615 R T L R D T Y L D L G G H R V E T I D P I P G L P D D M V Y A A N G A T V V D G T  
UniRef90\_F3NTN6 R D L V R T Y R E Y G H T V E N V E P V P G L P D D M V F A A N S A L V V L G G R  
UniRef90\_A8M0K2 E R L R R L V L G L L G H R V D L I E P Q K L L P D D M V F A A N G A T V V A G R  
UniRef90\_I4FGS3 Q Q L Y H V L K D R A L V D L V P E P K G W P D D M V F T A N A G L V L E K T  
UniRef90\_UPI0003A94974 Q R L R D I Y L R L G G H T V D V V P A Q G L P D D M V F A A N S G T V I G G K  
UniRef90\_Q09359 N S L K S A I E N A G A V P V L T M E Q T E G L P D D Q V F V C A N S G L V Y D D Q  
UniRef90\_UPI00037CBB1 E D L R D R Y R S L L G G H T V E E L E P R P D L P D D M V Y A A N G A T V V D G R  
UniRef90\_UPI0003B55EC7 D S Y V J A A L A E N G W D T V E V G S A E V L P D S V F V E D T A V V I G N R  
UniRef90\_UPI000479D7F5 E T L R Q T Y L N L G G H Q V D E V I T S E P G L P D D M V F A A N G L V L E G R  
UniRef90\_B1XMU4 Q A L H Q I I K E Y A V V D L V P P A G G W P D D M V F T A N A G L V L E G Q K  
UniRef90\_UPI00034D61E8 R G L R D L Y R Y L G H R V S E I D P I E G L P D D M V F A A N G A L V V E G R  
UniRef90\_UPI000375CDFE E D L R D R Y R A L L G G H T V E I L Q P L P G L P D D M V Y A A N G A T V V E G R  
UniRef90\_J4TJC8 E R L R E T Y V R L L G G H T V E I L P V P G L P D D M V Y A A N G A T V V A H D V  
UniRef90\_UPI00047B2D43 H A L R R V Y E G L G H R V E V I D P V E G L P D D M V F A A N S G T V V G G R  
UniRef90\_B1W5B4 N Q L Y H A I K E R A L L G H T V E L V E P Q K G W P D D M V Y A A N G A L V L G D N  
UniRef90\_L8ENSA E S L R D L Y L S L L G H T V E F I E P V P G L P D D M V Y A A N G A T V V D G K  
UniRef90\_B6B847 A A Y V S A L R S T G A E V T E L E P L E A Y P D A Q F V E D T A L C L P Q G  
UniRef90\_I7F2M1 A D Y V S A L K S T G A E V T E L P L L E A F P D A Q F V E D T A L C L P K G  
UniRef90\_I0HHJ4 E N L R Q T F L D L G G H T V E L I D P L P G L P D D M V F A A N G G T V V D G R  
UniRef90\_W8ALU8 D T L R A V Y E A H L G G H R V E V I D P V A G L P D D M V F A A N G G L V L G D R  
UniRef90\_X5L7Y6 E A L R Q T Y L D L L G G H R V D L V S P R A G L P D D M V Y A A N G G F V I G A T  
UniRef90\_A4T1S1 E T L R Q T Y L D L L G G H S V D L I S D P V P G L P D D M V Y A A N G G T V L N G R  
UniRef90\_D3Q188 Q G L V T A L T D R L G G H R V H V L D P E P G L P D D M V Y A A N G A F S V G G V  
UniRef90\_UPI00039CCABC E T L V N T Y R D L G G H T V E H A R P E P G L P D D M V F A A N C A L V L E G G R  
UniRef90\_S0EUM4 D A L Y Q V L A T K I L G L T V H L I P R Q P P E C P D D M V F T A N A G L V Y E G K  
UniRef90\_W8U295 L A Y V D T L L R L L G L K V T I L P A A S D F P D A H F V E D T A V I M P E L  
UniRef90\_X5R749 E T L Y I S A L R N A G V A V T V L P L L E A F P D S T F V E D F A L V F T D G  
UniRef90\_L7EGS6 K D I K A Y E E N G V E V V L M E P E E N L T N E V F A R D F G A C I R E G  
UniRef90\_A0LS17 Q V L V A T Y R R L L G H Q V D V T E P L P D L P D M V F A A N A A V T V A R G R  
UniRef90\_C1B054 S A L A D T Y R R L G G H E V L T L D P V E G L P D D M V F V T D S G L V D H G V  
UniRef90\_UPI00037560B1 E E F K N L Y V R K V G H I S C T P E S E S V T I D S I Y C A R D A S I A T D G  
UniRef90\_A0A023CWE7 E Q L J E A Y H Q T G V E V E C Q K A A P D M T N A V F A R D F G G C V K E G  
UniRef90\_D6KC27 E Q L R E V Y R S L L G H T V A E L A P V P G L P D D M V F T A N G A T V A D G R  
UniRef90\_F8K236 E Q L R D R Y L A L L G H T V E E L E P V P G L P D D M V F A A N G A T V V D G R  
UniRef90\_F8B360 E W L R N L Y L E L L G H R V E Q L Q P R S G L P D D M V F A A N G A T V V N G Q  
UniRef90\_UPI0003F8A4A3 A A Y E R A L R E V G C E V R Q L A E Q N P A L A D S V F V E D T A V L D E V  
UniRef90\_W6N7N8 S E L V D A Y R S N G V E V E L M I P D N Q L Y D Q V F S R D F G A C I K E G  
UniRef90\_A5N689 E E L J Q A Y K E N G V E V V L M E P D V K L T N E V F A R D F G A C I R E G  
UniRef90\_UPI000478319A E A L Y H L Y T E T L G W E V H L V E P V P G L P D D M V F T A N G A L V V D D K  
UniRef90\_U5QEY1 Q G L Y Q L L T S L A Q V Q L V E P A P G W P D D M V F T A N A G L V L D R N  
UniRef90\_UPI00034AF0E0 T I Y Q E T V A S A G W R V H E I D P A P E H P D S V F V E D P L V V C E D L  
UniRef90\_UPI00047955C8 E K F Y S L N N Q H V E Q L D F L P T S E S V G L P D S L Y A H D P V K F T K N G  
UniRef90\_UPI0003FAD50D E A Y V Q A M H E A G V K V T V L P A L E A F P D S L F V E D P A L V F T E G  
UniRef90\_UPI00036991A4 H E F A S L V I E K S G A E I L W L E D K D G L A D A M F T H D P S L M S D H G  
UniRef90\_UPI00036CCF66 E L Y I S A L E A G V Q V I V L P A I N E Y P D G P F V E D T V T V E D H I  
UniRef90\_UPI000456047E Q A Y I S L F A T P W Q I I E V P A P T C A D S V F V E D I L V S L P G T  
UniRef90\_UPI0002063B79 L A L A Q L L R E L D I D V V E M P P D E N S P L C V F V E D I A V V C N G I  
UniRef90\_S7XIN7 Q S L Y D T Y L E L G F D V H L T D P I D G L P D D M V Y A A N G G F V I D G K  
UniRef90\_B5HKH4 N A L T D A Y R A L L G H K V E S V E P H A E L P D D M V F A A N C A L V L D G K  
UniRef90\_UPI0004786328 D A F A E I Y R K A G A E V F Y V I E Q E D R P N A L F M R D N V L G T P E G  
UniRef90\_R3U5N9 E T L V Q A Y R D N G V V V H E V E A K K Q L Q V Q T F A R D F G C M V K E G  
UniRef90\_W2BZU4 D N L A Q I Y R D H G V R V H Y V E E Q R D K P N A L F H C R D L L M T P E G  
UniRef90\_A5V1U9 D A L V A I L H S A G V E V L Y H D P L P G R A D S I F V F D P A I V T H A G  
UniRef90\_UPI00034AA3AE E G L Y N I L K D R A I V D L V E P E K G W P D D M V F T A N A G L V L G T N  
UniRef90\_E5WMW9 E L M P D L H Y F Y L D P M P N L Y F T R D P A A V I G E G  
UniRef90\_UPI00035FF51E D K L Y H L I K D H A I V D L V D P V Q G W P D M V F T A N A G L V L G D K  
UniRef90\_U1NJT8 N L L K S A L E K E V K P K V L T L E Q A Q G L P D M V F V C A N S G L V L N D K  
UniRef90\_E6WKT5 W D Y L N A M L T L R L K V T L L P A E T D F P D A H F V E D T A V V L P E L  
UniRef90\_J3HYT2 Q A L R D A L G E L A E V R E M P G V P G V P D M V F T A N A A L V L G D T  
UniRef90\_A9TJKO E T Y V E V L A G L V K E V R L P A D N K Y P D C P F E D T A V V I G N R  
UniRef90\_UPI00021YYF1 E T L Y R T Y L D W G H T V D L I D P L P G L P D D M V Y A A N G A T V V D G V  
UniRef90\_UPI00047ACE08 E T L A D V Y T D L G H E V L R I E P E P G L P D D M V Y A A N G A F V V D G L

UniRef90\_E6VZ16  
UniRef90\_C3YTM3  
UniRef90\_X1TG17  
UniRef90\_QOACF2  
UniRef90\_I0SOA9  
UniRef90\_A1UBL7  
UniRef90\_Q02T7  
UniRef90\_UPI0002D51338  
UniRef90\_A0A024YQV5  
UniRef90\_N0D385  
UniRef90\_W7SMM8  
UniRef90\_UPI000373B44E  
UniRef90\_K6YVU5  
UniRef90\_K9S8X8  
UniRef90\_UPI00036ADB0  
UniRef90\_D0L7Q1  
UniRef90\_UPI00047BA0F3  
UniRef90\_H5THU5  
UniRef90\_UPI0004722E68  
UniRef90\_A0A024YR87  
UniRef90\_UPI0004760358  
UniRef90\_UPI0002E4687C  
UniRef90\_UPI0003637D1B  
UniRef90\_E3CZQ4  
UniRef90\_UPI00034641C8  
UniRef90\_F5HMJ7  
UniRef90\_X0N1U2  
UniRef90\_UPI000378B3BE  
UniRef90\_UPI000359995D  
UniRef90\_C3XPC8  
UniRef90\_F8A615  
UniRef90\_F3NTN6  
UniRef90\_A8M0K2  
UniRef90\_I4FGS3  
UniRef90\_UPI0003A94974  
UniRef90\_Q09359  
UniRef90\_D7CBB1  
UniRef90\_UPI0003B55EC7  
UniRef90\_UPI000479D7F5  
UniRef90\_B1XMU4  
UniRef90\_UPI00034D61E8  
UniRef90\_UPI000375CDFE  
UniRef90\_J4TJC8  
UniRef90\_UPI00047B2D43  
UniRef90\_B1WSB4  
UniRef90\_L8ENA5  
UniRef90\_B6B847  
UniRef90\_I7F2M1  
UniRef90\_I0HHJ4  
UniRef90\_W8ALU8  
UniRef90\_X5L7Y6  
UniRef90\_A4T1S1  
UniRef90\_D3Q188  
UniRef90\_UPI00039CCABC  
UniRef90\_S0EUM4  
UniRef90\_W8U295  
UniRef90\_X5R749  
UniRef90\_L7EGS6  
UniRef90\_A0LS17  
UniRef90\_C1B054  
UniRef90\_UPI00037560B1  
UniRef90\_A0A023CWE7  
UniRef90\_D6KC27  
UniRef90\_F8K236  
UniRef90\_F8B360  
UniRef90\_UPI0003F8A4A3  
UniRef90\_W6N7N8  
UniRef90\_A5N689  
UniRef90\_UPI000478319A  
UniRef90\_U5QEY1  
UniRef90\_UPI00034AF0E0  
UniRef90\_UPI00047955C8  
UniRef90\_UPI0003FAD50D  
UniRef90\_UPI00036991A4  
UniRef90\_UPI00036CCF66  
UniRef90\_UPI0004560476  
UniRef90\_UPI0002063B79  
UniRef90\_S7XIN7  
UniRef90\_B5HKH4  
UniRef90\_UPI0004786328  
UniRef90\_R3U5N9  
UniRef90\_W2BZU4  
UniRef90\_A5V1U9  
UniRef90\_UPI00034AA3AE  
UniRef90\_E5WMM9  
UniRef90\_UPI00035FF51E  
UniRef90\_U1NJT8  
UniRef90\_E6WKT5  
UniRef90\_J3HYT2  
UniRef90\_A9TJK0  
UniRef90\_A0A021YYF1  
UniRef90\_UPI00047ACE08

90 100 110 120  
A A L A P L G A P S R Q G E E T S I E P V L J A R F R P V V R V R P P A L F E  
A L V T R P G G D S R R K G E E V I R K V L E Q D L K L D I V Q M L D D N A T L H  
A M I A K P G G S R R K G E E T K E F I K V I K R R Y H D L E Y I K E P G T L F E  
V A L P R F R Q P S R R K G E E T E F F E Q W F R R R Y G Y R T L C L P R H D F E E  
A V V A R F A F P Q R T A A E A D A Y A D W M R R R H G F R P V V R T R H V N E E  
A V V A R F A F P Q R T A A E A D A Y A E W M T R H G Y D P V V R T G Y A N  
A V M T R P G A E S R R R E A A S J A R V L E G Y R E L R W M R E P A T L D  
V Y S A R F R H P E R T A E E G P A Y Q K W F A D R G Y V T H T A A R T N E  
V Y G A R F R H A E R T A E E G P A Y L R W L E G R N G Y T D T L W P A E Y V N E  
A L V A R F R D A E R T A E E G P A Y H D W L R A N G F P D L R T A S V V N E  
V L G S R F R A E Q R A A E A D H F R R W F L R N G Y R D V T M P T S V N E A E E  
V L G A R F R S A E R A A E A D H F R R W F V E N G F R D V T M P A E T N E A E E  
A I L T H P G A L S R R G E E V S H H E D A I K L F Y P N I E R I N L T G H V E  
V V L S R F F H P E R Q G E E P F F R A W F E A Q G Y T V H E L P K D L P F E G  
A F G S R F T H L I P E A D V R Y L A W F K A H G V E V R D A Y L P L G E A E  
A J A R R F T P E R A A A E A D H Y A A W F S R A G F G P V R R T D G L G E G E  
A Y G A R F T F E R A A A E G P A Y S A W L R A N G F A D V R T D P E H T N E G E  
A V A A R F L H P E R A P E G E H Y T A W F H T G V D A V H E T V G S V Q E G E  
L F L A D M A S D I R K G E E A A L Q N W L L Q E N I P F R V V S E S R V E  
V L I A K F R H Q E R A A E A D A Y R A W F E E H G Y T D I K V P D R V N E G E  
A V V A K F A Y P Q R A A E A D A Y A D W M T S R G L T P V V R T G S H T N E  
V F G S L F L A P E R R P E S V P Y E A W F K A E G Y E H H P G S V C  
A L V A R F R H R R R P E S A A H L K W F T E H G Y P D V V Q Q A K W D N E  
A I V C R Q A T E R F R R G E E A A V T R A V A K I L G C P V V R T I S G H G Y F E  
A V L T R P G A T E R R R G E E V E G V E A S V R S L L G L D L P L A E I A D E A P N A R L D  
A L I C R P G D P H R L Q E V E A V R A V L K K L D L P L A E I A D E A P N A R L D  
V F G A R F R H V P E R T A E E G P A Y L S W F V A Q G Y T D V Y W P E H T N E G E  
V F G S L F H A P E R R P E S D H Y D M W F K A A G Y D V Y R P E S V S E G  
A L I A R P G H S S R R Q G E E V G E I R K V L K D L R M N V V I E I G N A K A T L D E  
A L V T R P E G M A R R K E L N S L E T C L R S L G L E V H R L R A N M G A T L E  
V Y S A S F R G M A R R Q P E G P A Y Q K W F A D R G Y V T H T A A R T N E G E  
V F G S L F H A P E R R P E S A A Y T A W F K A A G H D V Y R P A E S V C N E G E  
V L A A R F R H P Q R A A E A P A Y A S W F R A H G Y Q V H E A T H V N E  
V V L S R F L H K E R Q A E E P Y F K W F E D N G F T V H E L P K D L P F E G E  
V L G A R F R T D E R A P E A E H F R R W F S T N G Y R D L V M P S S V N E A E E  
V Y L S R F R H K E R T S G E Q A L Y L E W F K A N I K T I G E G E Y E I L F E G E  
V L G A R F A H P E R T G E A A H L E W F R A H G Y A Q V V I G R E P E H V N E G E  
A V I A R S G A E S R R G E T P G T E A V L T N L G L R V D R I Q E P G T L D  
A L G A R F T H A E R R A E E G P A Y L S W L A G A G K D V T Q E P V H V N E G E  
A I L S R F Y H A E R Q A E E P Y F K W F A E N G F Q V Y E L P Q D L P F E G E  
V Y G A R F A S A E R T P E G P A Y I D W F R K S G Y T E T L E P K Y V N E G E  
V F G A R F A N P E R A A E A P A H R E W F L N R G Y G E V H D P H H A N E G E  
A I V A R F R F A E R A G E S R A Y A R W M A S L G Y R P V H T R H V N E  
V L G A R F R S A E R A D E A A H Y R R W F E A N G Y A D V T M P V H V N E A E E  
A I V S R F Y H K E R Q A G E E P Y F K W F A A N G F N V Y E L P K D L P F E G E  
V L G A R F R N A E R A A E G P A Y L D W F R D R G F E V H D P A H I N E  
A I L M R P G A P S R L G E V A E M A P T L R V C Y D D V R E I T G P G C I E  
A V L M R P G A P S R L G E V A E M A P T L R Q C Y D E V R E I K P G G F I E  
V L G V Q F R D A E R A D E A P A Y A S W F R D R G F E V H E P K H T N E  
A L S A R F A N P E R A Q E G P A Y H D W M A A R G F A A V T A A R E T N E  
A V V A R F A Y P Q R T A A E A Y A D W M A A Q G F T T V T T E H V N E  
A V V A R F A H P E R A R E A V A Y A D W M T A N G Y D A F E T R H V N E  
V F G A K F R Y P Q R A A E A A A H E K W Y R E R G W R F V A P A E V N E G E  
V F G S R F H A P Q R R G E E A A F E A W F K N A G Y V V H R P E S V C N E G E  
A L L S Q F R Y P Q R R P E V A Y F R T W F E Q Q G Y Q V I T P P S N C H F E G  
A V I T H P G A P S R Q G E E V D T I A P L L T D R P V F R M N Q H G H L D  
A I L L R P G T P S R V N E T A E L A P L L R E R F E T V L E L P A P G Q A D  
Y L L G N F K K P P R Y G E T E A Y K K K M K E L G V P C V A K V S K G Y F E  
A Y G A K F R F P Q R A A E A P A Y Q A R L T E L G F T V I P P T Y V N E  
A L G A R Y R T A E R S M E P A E H V F R F F R D N G L V R P T L P R Y V N E  
M I I C N G R K Q A R S M E P A K A Q K E F F Q A S D I P V L G T I K P P G T L E  
Y L L G R F K K E L R F P E R K A Y E K K M K E L G I P K I A E I K R G Y F E  
V F G A R F A H P E R E G E A Q A H L E W F A A H G Y G H L H L P V H I N E G E  
V F G A K F A N A E R R G E A P A H L A W F R A H G Y P A I H E P E H I N E G E  
A L V A R F R H T H R C P E S A A Y L R W F R E H G Y R N V R Q A R W I N E  
A V L T R P G A E S R R G E E V S M G E A L A P L R E L R R I E A P G T L D  
Y I L G N F R I D I R K G E T A D Y E Q K M N E L G I P C I A E R C N G Y F E  
Y I L G N F K E K I R T G E T A A Y R N K M K E L G I P C V A E V S K G F F E  
V V L P T F R H P E R Q G E E P W F F S W L R D Q G F T K L Y Q P R H D F E  
V V L S R F F H P E R Q G E E P Y F R S W F E K Q G Y V V C E L P E K I A F E G  
A V L T R S G A E A R R G E I E G V I E A A V R T L G L R V A R I E K P G T L D  
A I I L K P G S K K L R Q P E A G E V Y K E F L Q E K G I P I T G E L T G D A V C  
A I L L R P G A A T R V K V E E I J A P T L H D M F E T V L E L P A G Y A D  
A I L L R M G K P L R E K E T A L H E A A Y K K A G I P I L L G R I E S P G T V E  
A L A C P N K T K S R R G E G T S I H K E T K R Y R T I K T L P H F V T L D  
L L V T S P G A E S R R P E L D S I E F L R A H D V K R V R I L E G E A R L D  
A L I A R P N E P S R L K E L I E T I R A V L K K L E I P L I E I A D K N A R L D  
A Y G A R F T Y D E R K A E G P A Y M E W F G A H G F E V A D P K N I N E  
V F G S R F H A P Q R R L E E E A Y A A W F K V A G F D V H R P E S V C N E G E  
A I L C R Q A T R F R R G E E R A V A A A L G R I G C P I V R T V S G R G V F E  
A I I G K F R H P A R Q K E T E L Y A E K L K E L G V P I V A R V N A G C M E  
A I V T R P A M E A R R G E E R Y M A K A L A D L G V P I I R T N G A D A I F E  
A I I L R M G K D L R R G E E E A M A Q R F V Q L D I P I L A R L D G A A L A E  
V V L S R F Y H P E R Q G E E P H F K R W F E K N G F T V H E L P K D L P F E G E  
I T I N R M H P A R R R G E E F M D Y I F N K H E I P A Y F K R D D L Y S L F E  
V V L S R F L H K E R Q G E E P H F K Q W F E D N G Y K V F E L P A D D L P F E G  
V Y L S R F R H K E R T G E Q K Y L E W F K A H G F S P L G E D Y P D F F E G E  
A V I T H P G A A A R A G E E V S M K A V L K D F R P L K L M S D Q G T L E  
A V L S R F R H A E R Q A E E P H F A R W L A D Q G L R V L R M P D E T A F E G  
A L I T H P G A T S R A E E V V R E A L T Q L G L D I L S E V E C P G T I D  
V Y S A Q F R Y A E R A P E G P A Y E Q W F A D A G F T T H T A R E V N  
A Y G A R F R H P Q R T P E A D A H E K W H R A A G R T F V I E P E H T N E

UniRef90\_E6VZ16  
UniRef90\_C3YTM3  
UniRef90\_X1TG17  
UniRef90\_QOACF2  
UniRef90\_I0S0A9  
UniRef90\_A1UBL7  
UniRef90\_QD27T2  
UniRef90\_UPI0002D51338  
UniRef90\_A0A024YQV5  
UniRef90\_N0D385  
UniRef90\_W7SMM8  
UniRef90\_UPI000373B44E  
UniRef90\_K6YVU5  
UniRef90\_K9S8X8  
UniRef90\_UPI00036ADB0D  
UniRef90\_D0L7Q1  
UniRef90\_UPI00047BA0F3  
UniRef90\_H5THU5  
UniRef90\_UPI0004722E68  
UniRef90\_A0A024YR87  
UniRef90\_UPI0004760358  
UniRef90\_UPI0002E4687C  
UniRef90\_UPI0003637D1B  
UniRef90\_E3CZQ4  
UniRef90\_UPI00034641C8  
UniRef90\_F5HMJ7  
UniRef90\_X0N1U2  
UniRef90\_UPI000378B3BE  
UniRef90\_UPI000359995D  
UniRef90\_C3XPC8  
UniRef90\_F8A615  
UniRef90\_F3NTN6  
UniRef90\_A8M0K2  
UniRef90\_I4FGS3  
UniRef90\_UPI0003A94974  
UniRef90\_Q09359  
UniRef90\_D7CBB1  
UniRef90\_UPI0003B55EC7  
UniRef90\_UPI000479D7F5  
UniRef90\_B1XMU4  
UniRef90\_UPI00034D61E8  
UniRef90\_UPI000375CDFE  
UniRef90\_J4TJC8  
UniRef90\_UPI00047B2D43  
UniRef90\_B1WSB4  
UniRef90\_L8ENA5  
UniRef90\_B6B847  
UniRef90\_I7F2M1  
UniRef90\_I0HHJ4  
UniRef90\_W8ALU8  
UniRef90\_X5L7Y6  
UniRef90\_A4T1S1  
UniRef90\_D3Q188  
UniRef90\_UPI00039CCABC  
UniRef90\_S0EUM4  
UniRef90\_W8U295  
UniRef90\_X5R749  
UniRef90\_L7EGS6  
UniRef90\_A0LS17  
UniRef90\_C1B054  
UniRef90\_UPI00037560B1  
UniRef90\_A0A023CWE7  
UniRef90\_D6KC27  
UniRef90\_F8K236  
UniRef90\_F8B360  
UniRef90\_UPI0003F8A4A3  
UniRef90\_W6N7N8  
UniRef90\_A5N689  
UniRef90\_UPI000478319A  
UniRef90\_U5QEY1  
UniRef90\_UPI00034AF0E0  
UniRef90\_UPI00047955C8  
UniRef90\_UPI0003FAD50D  
UniRef90\_UPI00036991A4  
UniRef90\_UPI00036CCF66  
UniRef90\_UPI000456047E  
UniRef90\_UPI0002063B79  
UniRef90\_S7XIN7  
UniRef90\_B5HKH4  
UniRef90\_UPI0004786328  
UniRef90\_R3U5N9  
UniRef90\_W2BZU4  
UniRef90\_A5V1U9  
UniRef90\_UPI00034AA3AE  
UniRef90\_E5WMW9  
UniRef90\_UPI00035FF51E  
UniRef90\_U1NJT8  
UniRef90\_E6WKT5  
UniRef90\_J3HYT2  
UniRef90\_A9TJK0  
UniRef90\_A0A021YYF1  
UniRef90\_UPI00047ACE08

130 140 150 160  
G G D V L Q V D D T F F I G L S E R T N M A G A K A L G N T L A R H G W H A M E  
G G D V L F T G K E F F V G L S T W R T N Q R E G A G A R E A L A N D A F P D Y R G V S I N E  
G G D V L M M V K D H F Y I L G L S T W R T N R N R E A G A R E A L A K A L G G K Y G M S I V E Q  
G G D A L L W N D T R I L F A G Y P W R S D N R K P A H R E I L A E F F F G K Y G M S I V E Q  
G G D L L V V G P R L L F A G Y G F R T N R R A R A H D E I L A R L V T G G R P V V V S L E R  
G G D V L V A G P R L L F A G Y G F R T S A A A H R I L A G A A V F G G M D V V R A M A  
UniRef90\_QD27T2 G G D V M L A E R T L L Y V G N S G R T S A A A G I G Q L A G A E V F F G G R P V I S L E T  
UniRef90\_UPI0002D51338 G G D L L V V G D V V L A G T G F R T D P A A H A E A Q E E L A Q E F F F G G R P V I S L E T  
UniRef90\_A0A024YQV5 G G D L L T V G R R L L A G T G F R T D P P R S H H A E A Q E F F F G G R P V I S L E T  
UniRef90\_N0D385 G G D Y L L V G D V L L A G T G F R S D P P R S H H A E A Q E F F F G G R P V I S L E T  
UniRef90\_W7SMM8 G D F A W T G T V L L A G T G F R T D P P G A H A E A A Q E V L G V P F V S L R  
UniRef90\_UPI000373B44E G D F A W T G R V L L A G T G F R T D P P R A H A E A A Q E V L G V P F V S L R  
UniRef90\_K6YVU5 A G D I M M V D D H F Y I L G L S A R T N V E G A T Q M I R L L V K H N L S M V R R  
UniRef90\_K9S8X8 A G D A L L D G R W L W A G Y G F R S E L D S H P Y L A K W L D D R E V V S L R  
UniRef90\_UPI00036ADB0D G G D F L T T S T R I L L A G T G F R T P G A H R E I L E A E Y V D D R E V V S L R  
UniRef90\_D0L7Q1 G D L L V V G D R I L L A G S G F R T H R D T H R A E I L E A A I T G G V V V T L E R  
UniRef90\_UPI00047BA0F3 G G D F L T L D R L I L A G T G F R T D L A A H Q E I L A S Q E F L G L R P V V V T L R E E  
UniRef90\_H5THU5 G D F L L V G R R I L L A G T G F R T H P D T H V I E V L A S Q S L T T G L R P V V V T L R E E  
UniRef90\_UPI0004722E68 G G D V L V D R N R V F V G I S S R T S E P P R S H H A E A Q E F F F G G R P V I S L E T  
UniRef90\_A0A024YR87 G D F A P A G R R I L L A G A G S F R S D P G A F E E L V R A F T F G L P V V V A L T E T  
UniRef90\_UPI0004760358 G G D F L L V G S T L L A G W G F R T T R E D A H R E E V Q A T T F G G L S V V S L E T  
UniRef90\_UPI0002E4687C G G D L V P A G R W I L L A G T G F R T T R E A H R E V Q E F F F G G R P V I S L E T  
UniRef90\_UPI0003637D1B G G D F L V A G S R I L L A G S G F R T D P R A H A E A A E F F F G G V P V V V G L A  
UniRef90\_E3CZQ4 G A C A M W D R R T I V L G T G V R A N A E G A D Q V L E E V L R F G M G V E T V E  
UniRef90\_UPI00034641C8 G G D V L Q V G T V Y V G V G G R N A N A E G A D Q V L A R A A A F P E Y P V I K  
UniRef90\_F5HMJ7 G G D V L F T G R E F F V G L S K W T N E A G A R A E A Q E F F F G V P V I S L E T  
UniRef90\_X0N1U2 G D Y L V V G R K V L L A G T G F R T P R A H A E A Q E F F F G V P V I S L E T  
UniRef90\_UPI000378B3BE G D L I P T G R Y L L A G T G F R T T R A H R E V V Q E A F F F G V P V I S L E T  
UniRef90\_UPI000359995D G G D V L F T G K E I L F V G V G K R T N E A G A Q A V L A A A F P E Y P V I S K V N  
UniRef90\_C3XPC8 G G D V V F T G T E F F V G D S T Q S N W L G H R L L A A T F P E Y P V H A I P  
UniRef90\_F8A615 E G D L L V V G S V I L A G T G F R T D R A H A E A Q E F F F G G R P V V S L E R  
UniRef90\_F3NTN6 E G D L I P A G R Y V L A G T G F R T T P K A H R E A Q E F F F G G V P V V S L E R  
UniRef90\_A8M0K2 G G D Y L V T G T R I L L A G S G F R T D P A A H A E A Q R A L G G R P V V S L E R  
UniRef90\_I4FGS3 A G D A L L D G R W L W A G Y G F R T D L D S H P L I A K W L D D I E V V S L R  
UniRef90\_UPI0003A94974 G D F A W T G S L L L A G S G F R T D P G A H P E A Q E V L G V P V V S L R  
UniRef90\_Q09359 G G D A V F D R K L L W A G Y G E R S S K S V Y E K I A K A L G T F D I V L M T  
UniRef90\_D7CBB1 G D F A V I T A S W L L A G R G F R S S P L S H P E A Q E F F G G R P V L G L M T  
UniRef90\_UPI0003B55EC7 G G D V L R V G T T L Y V G R S S R T N P E G V R Q L R A T A E F G Y A V V L G V P  
UniRef90\_UPI000479D7F5 G G D F L V V G R E M V L A G T G F R T D P G A H A E V L Q E L F G V P V I S L Q R  
UniRef90\_B1XMU4 A G D A L F D R D A L W A G Y G F R S E L D S H A Y I L A Q W L D V E V I S L R  
UniRef90\_UPI00034D61E8 G G D F I T L D R L V L A A T G F R T S A A H Q E A E R F L G R P V V T L Q E  
UniRef90\_UPI000375CDFE G D F A V T E S W L L A G K G F R S T P L S H S E L L S A A L F F G R P V I S L E R  
UniRef90\_J4TJC8 G G D L L K V G D I V L A G W G F R T D R R A H A E A Q E F F F G R P V I S L E R  
UniRef90\_UPI00047B2D43 G D L T W T G R L L L A G T G F R T E L A A H A E A Q E A L G A V P V V S L R  
UniRef90\_B1WSB4 A G D A L F D G R W L W A G Y G F R S E L D S H P Y I A Q W L D T E V V S L R  
UniRef90\_L8ENA5 G G D F L V T G R Y V L A G H G F R S S R D G H A E A Q E F F F G R P V I S L E  
UniRef90\_B6B847 G G D I L V T G K E I L V G R S D R T D A A G V A E L A E I A A E W G H T L R E  
UniRef90\_I7F2M1 G G D I L V T G R E I L V G R S A R T D A A G V A E L A E I V A D W H S L R  
UniRef90\_I0HHJ4 G G D L L L A G D V L L A G T G F R T A H A S V A E T Q E V L R R P V I S L Q  
UniRef90\_W8ALU8 G G D F A I A G D R I L L A G T G F R S A R G A H E E V A E F F G L P V V S L D E  
UniRef90\_X5L7Y6 G G D L L L V G R T V L L A G W G F R T E R R A H D E I V A A S T G L P V V S L E E  
UniRef90\_A4T1S1 G G D L L T V G G V L L A G F G F R T E R R A H D E I V A A S H I T G L P V V S L E  
UniRef90\_D3Q188 E G D F A Y V P G L A L A G Y G F R T E P R A H A E A A E A L K R P V I S L K  
UniRef90\_UPI00039CCABC E G D L V P V G D F V L A G H G F R T P D A H R E A Q E F F F G T P V V S L E  
UniRef90\_S0EUM4 E G D A L F V G D V L A A G Y L K R S D I C S H R W L A D T L L P V L S L E  
UniRef90\_W8U295 G G D V L F V D K Q F F I G L T S R T D A E G I R Q F T A A V G G R Y G V T A I E  
UniRef90\_X5R749 G G D L M Y T P K G V L I G L S A R T D R I G A E A L I E R L G G K A Q V A E T  
UniRef90\_L7EGS6 G G D F W F L D D T L A I G V I A R T D E T A I G E I L R D Q I G K F G Y N I P  
UniRef90\_A0LS17 G G D F L V V G R F I L A G H G F R T D H R A H R E A E N V L G L P V I S L E N  
UniRef90\_C1B054 G G D F L V V G D V I L A G T G F R S D P R S H A E A S A H L A G R P V V T L N  
UniRef90\_UPI00037560B1 G G D V A W L N K T I A A G H T Y R T N L S G I E L K E L L A P Y H I E V L G  
UniRef90\_A0A023CWE7 G G D F A F L T E K V I V G I I D R T N E E G F E E L K T K L E P L G Y E V Y P  
UniRef90\_D6KC27 G D L A V T D S L L L A G R G F R S N P L A H R E A Q E F F F G R P V I G L E  
UniRef90\_F8K236 G D F A V I T A S W L L A G T G F R S P A A R G E A Q E F F F G R P V I G L E  
UniRef90\_F8B360 G G D Y L L A G P R L L A G S G F R T N T E A H L E S Q E F F F G M P V V G L T  
UniRef90\_UPI0003F8A4A3 G G D V L R L D R V I H V G A S A R S N A E G I G Q E I L R Q L V F F G Y R V E A V S  
UniRef90\_W6N7N8 G G D F M L D D K T I A I G I L E R S D Q K G I D E I R S Q I E K Y G Y E I M S  
UniRef90\_A5N689 G G D F W F L D D T L A I G V I D R T N E T A I G E I K E Q I N K F E Y N I I P  
UniRef90\_UPI000478319A G G D A L T W N D V L F A G Y P W R S D Q A S H A E L A S F L D M E V V S L Q  
UniRef90\_U5QEY1 A G D A L F D G R W L W A G Y G F R S S L E S H P Y L A K Y L D S E V V S L R  
UniRef90\_UPI00034AF0E0 G G D V L Q V G E T V Y V G V G T R T N E D G A D Q L E Q L L A G R K V H R V A  
UniRef90\_UPI00047955C8 G G D I V W L N D T L V G R G S R T N D E A R Q L K E I T K D L G F L V S Q  
UniRef90\_UPI0003FAD50D G G D V L T T R S V M I G L S A R T D R A G A E A L Q G C L A K L R K S E I  
UniRef90\_UPI00036991A4 G G D C I W L D E T L V G R G V R T N E E G I A Q L S E M L E P H G I T V L G  
UniRef90\_UPI00036CCF66 G G D V L N T E E K I F V G I S S R T N F E A V N A L A K F T K K P I P I V Q  
UniRef90\_UPI000456047E G G D L L K V G R T V Y V G R S R T N D L G R A Q L R A L T K D M D L V E V P  
UniRef90\_UPI0002063B79 G G D V L F T G R E F F V G L S H Y T N E A G A R A V A A A F P E Y P C V P I K  
UniRef90\_S7XIN7 G G D F L L V G D N I L L A G M G F R T S V E S H T E L A E I S G R N V V S L N  
UniRef90\_B5HKH4 E G D L V P V G H I L A G T G F R T T T E A H R E V E F F G R P V I S L Q  
UniRef90\_UPI0004786328 G A C G M W V D R T I I L G T G V R S N E E G V R Q V E E T L R Y M G V T D I I  
UniRef90\_R3U5N9 G G D F M L D E H T L A F G L V D R T D E A G L H N L R E Q L A K F G Y T V V G  
UniRef90\_W2BZU4 G A M G L W I D R H T I V A S G V R T N R S G Y E M V E Y L K R M G V T D I L  
UniRef90\_A5V1U9 G G D L L W L D E T L A V G I G F R T N A E G F R Q L T A A L T P P G I R T L P  
UniRef90\_UPI00034AA3AE A G D A L L D G R W L W A G Y G F R T S A Q G I E K L A K W L D D E V L S L Q  
UniRef90\_E5WMW9 G G D E L I L S D E V V I G V S A R T S A Q G I E K L A R E L F T H A V E I P K  
UniRef90\_UPI00035FF51E A G D A L L D G R W L W A G Y G F R T E L D S H P L I A E W L D I E V S L R  
UniRef90\_U1NJT8 G G D A C F T Y D K T L W A G F G P R S S K D V Y E H V K K L G K F D V V E L T  
UniRef90\_E6WKT5 G G D V M L I D K A F Y I G L T T R T N E A G I R E F A S L V F G G Y S V T A V E  
UniRef90\_J3HYT2 A G D A L L D R H G L W M G Y G H R T D V R A A P M V A G W L D V E V Q S L K  
UniRef90\_A9TJK0 G G D V L Y A S G M L F V G K S R T N A A G I E F L Q K A F P D V K V H I R  
UniRef90\_A0A021YYF1 G G D L L L V G D V L L A G H G F R T D R S H E L L A S L V G R E V V S L R  
UniRef90\_UPI00047ACE08 G G D F T Y I L P G R I L A G W G F R T D A R A H A E A A D V F G R Q V V S L R

UniRef90\_E6VZ16 M G E T L H F K T D V S F I G D N T L L V S P F F E T A P E L A R F 170 180 190 200  
UniRef90\_C3YTM3 V P E V E H L G D L C G V A G P N L L A V S K S F A A K M V L K E M E L M G E F  
UniRef90\_X1TG17 I T S E M L H L K S G L A Y L G E D E D N Q T V A L Y P D A F T A E G L E A V H R L E F K  
UniRef90\_QOACF2 L T D F Y H L D T A L T V L D D E D S T V A Y Y P P A F T D A A R A R V T E L F P T  
UniRef90\_I0S0A9 L V D F Y H L D T A L T V L D D D T T V A F H P P A F D P A S V D C L R A L F P D  
UniRef90\_A1UBL7 V Q G C L H L K S A C S Y L L G D G M V L A Y P P A F S P G S R R V L E Q L F P D  
UniRef90\_Q027T2 L V D F Y H L D T A L A P L T A D N V A Y Y P P A F S P G S R R V L E Q L F P D  
UniRef90\_UPI0002D51338 L P D Y Y H L D T A L S V L S D E K T V A Y Y P P A F S P G S R R V L R R A M F P D  
UniRef90\_A0A024YQV5 D P D Y Y H L D T A L T V L S D E K T V A Y Y P P A F S P G S R R V L R R A M F P D  
UniRef90\_N0D385 L V D P Y H L D T A L F V L D D R E T I C Y Y P P A F S P G S R R V L R R A M F P D  
UniRef90\_W7SMM8 L T D P Y H L D T A L F V L A E A N T V A Y Y P P A F S P G S R R T L E R M F P D  
UniRef90\_UPI000373B44E M S E L L H L K T G L S Y L L A E K N N L T F G E M N T H P D F T Q D  
UniRef90\_K6YVU5 L M D F Y H L D T C F C P L V D G Y L L Y Y P P A F D A Y S N H L I E R R V P A  
UniRef90\_K9S8X8 L V D P Y H L D T A L A V L D G E E T I A Y Y P P A F A S A E S Q R L L A T E  
UniRef90\_UPI00036ADB0 L V D F Y H L D T A L G V L D G E H T I A Y Y P P A F A S A E S Q R L L A T E  
UniRef90\_D0L7Q1 L V D F Y H L D T A L F P L D D G E N V A Y Y P G A F S P G S R A V L L E R L F P D  
UniRef90\_UPI00047BA0F3 L V D F Y H L D T A L G V L D D D T L A Y Y P P M A F S A A S R A V L L E R L F P D  
UniRef90\_H5THU5 L V D F Y H L D T A L G V L D D D T L A Y Y P P M A F S A A S R A V L L E R L F P D  
UniRef90\_UPI0004722E68 F N e Y L H L D C V F N V I S P E I G L Y F P E A F D V I E T R K N L E S M  
UniRef90\_A0A024YR87 D P R F Y H L D T A L C V L D D D T I A Y Y P P A F S D E S R A V L R E L F P D  
UniRef90\_UPI0004760358 L V D F Y H L D T A L A V L D D N T I A Y Y P P A F T D A G R E C R I T E L F P D  
UniRef90\_UPI0002E4687C L V D F Y H L D T A L F V L D D E N I A Y Y P P A F S P G S R R V L R R L F P D  
UniRef90\_UPI0003637D1B L T D P Y H L D T A L T V L D D D M I M Y F P D A F T E G S R R R L K E L L  
UniRef90\_E3CZQ4 P Y G H A H L D G L M N P V L D R R K L I G L P D W Q T P Y D V I D P P I K R M G F E  
UniRef90\_UPI00034641C8 F K A V L H L K S A V T A L P D D G S L I G L P D L V D I A T A L P P I R R  
UniRef90\_F5HMJ7 V T E H H H L K Y Y V S M G G P D V L C V S R S K E S Q E I L K R I E R E A T F  
UniRef90\_X0N1U2 N P E F Y H L D T A L F V L D D D E N I M Y Y P P E A F T P G S Q A V L R E L F P D  
UniRef90\_UPI000378B3BE L V D F Y H L D T A L F V L D D E N I C Y Y P P E A F S P G S R E V L R L F P D  
UniRef90\_UPI000359995D F C E A L H L K D V F N M A G R N V M A V A G P D V Q A V L Q Q M Q D V A N Y  
UniRef90\_C3XPC8 L P P E F H L K G V A C C A A P G V I A L A Q N S A G R L A W D V I T R R K G V S  
UniRef90\_UPI000378B3BE L P H Y Y H L D T A L A V L S D A A N P Q V A Y F P A F S P A F S E A S R A V L E  
UniRef90\_F3NTN6 L V D F Y H L D T A L F V L D D G D E I M Y Y P P A F S P G S R E V L R L F P D  
UniRef90\_A8M0K2 L V D F Y H L D T A L F V L D D G D E I M Y Y P P A F S P G S R E V L R L F P D  
UniRef90\_I4FGS3 L V D F Y H L D T A L F V L D D G D E I M Y Y P P A F S P G S R E V L R L F P D  
UniRef90\_UPI0003A94974 L V D P Y H L D T A L F V L N K G E V A Y Y P P A F S A G S Q Q V L R R L F P D  
UniRef90\_Q09359 L P N F Y H L D T C F A P V D E T S A L I M Y Y P P A F S E A T N K E I L R R L P  
UniRef90\_UPI000378B3BE L V D P Y H L D T A L C V L D D D T T I M Y Y P G A F S P G S R A V L R L F P D  
UniRef90\_UPI0003B55EC7 V A G A L H L K S A V T A L P D G T V I G N P A N V D T S V I D R F  
UniRef90\_UPI000479D7F5 L V D F Y H L D T A L A V L D D D T V A Y F P P A F S P G S R G V L Q R R L F P D  
UniRef90\_B1XMU4 L P R F Y H L D T C F C P L S G G Y L L Y Y P P A F D T Y S N A L I E R R L F P D  
UniRef90\_UPI00034D61E8 L V D F Y H L D T A L F A L P G D N V A Y Y P G A F S P G S R V L R L F P D  
UniRef90\_UPI000375CDFE L P H F Y H L D T A L C V L S G D E I M Y Y P P A F S P G S R A V L R R L F P D  
UniRef90\_J4TJC8 L V D F Y H L D T A L A V L D D D T I A F Y P P A F S P A D A Q E Q L G A L F P D  
UniRef90\_UPI00047B2D43 L V D P Y H L D T A L F V L D D D Q L I A Y Y P P A F S P G S R Q V L E R L F P D  
UniRef90\_B1WSB4 L T D F Y H L D T C F C P L T D G G V L Y Y P P A F D A Y S N R L I E L R L F P D  
UniRef90\_UPI000375CDFE L V D P Y H L D T A L A V L D D D E V M Y N P A A F A P G S R A V L R L F P D  
UniRef90\_L8ENA5 V E G V L H F K T D C S L M D A E T I L S T K R L D A A T K R L D A S G C F E G Y  
UniRef90\_B6B847 V E G V L H F K T D C S L M D A E T I L S T K R L D A A T K R L D A S G C F E G Y  
UniRef90\_I7F2M1 L V D P Y H L D T A L C V L D D E T N I A Y L P Q A F S P G S Q A V L Q Q L F P H  
UniRef90\_UPI000375CDFE L V D F Y H L D T A L M V L G D T I A Y Y P P A F S P G S Q A V L Q Q L F P H  
UniRef90\_W8ALU8 L V D F Y H L D T A L A V L D D D T I A Y Y P P A F S P G S R Q R L H E L F P D  
UniRef90\_X5L7Y6 L V D F Y H L D T A L A V L D D D T I A Y Y P P A F S P G S R Q R L H E L F P D  
UniRef90\_A4T1S1 L V D C Y H L D T A L A V L D D D A T V A Y Y P P A F S Q D S R A T L A R M F P D  
UniRef90\_D3Q188 L V D F Y H L D T A L T V L D D D T I A Y Y P Q A F S A A S Q E I L R R L F P D  
UniRef90\_UPI00039CCABC L V D F Y H L D T A L F V L D D D G N V C Y Y P D A F S P G S R E V L K R M F P D  
UniRef90\_UPI00039CCABC L V D W Y H L D T C F L P L E A H L V A Y Y P E A F D Y A R T V I E N  
UniRef90\_W8U295 V S A G L H L K S I V N Y V G H N T L L L T E D Y Q H H P A F A A F  
UniRef90\_X5R749 P K G V L H F K T A S S L L D D E T V I S T A A L A G A A A F E E  
UniRef90\_L7EGS6 I E E N L H L D M C F N I V D D E K I A V A C K S A L P D S T A A L A G A A F E E  
UniRef90\_A0LS17 L V D P Y H L D T A I A V L D E T T I A Y Y P P A L S R P S R A I L R L F P D  
UniRef90\_C1B054 L P R Y Y H L N T A L G V L D D S T I A Y L P A A F S R D S P S R A I L R L F P D  
UniRef90\_UPI00037560B1 P S D V F H L M S I L S P V L D K D L A V V Y S P L M P I S F R N K L E R  
UniRef90\_UPI00037560B1 V P R Y L H L D M C F N I V E D H L A V A Y K E G L P A S F L I E L L N T L  
UniRef90\_UPI00037560B1 L V D F Y H L D T A L A V L D D G E V A Y Y P P A F S P G S R E V L R R L F P H  
UniRef90\_D6KC27 L V D P Y H L D T A L A V L D D G D E V M Y Y P P A F S P G S R A V L R L F P D  
UniRef90\_F8K236 L V D P Y H L D T A L T V L D H D T V M Y Y P K A F S A S S R R L L E E  
UniRef90\_F8B360 M R G C L H L K S A V T R V A P D L L L V N P D W V D A R H F A G Y  
UniRef90\_UPI0003F8A4A3 V E K C L H L D M C F N I V A E K I A V I C K E V L P D E F L H L L K N K  
UniRef90\_W6N7N8 V E D N L H L D M C F N I V E E K V A V V C R E A L P N S F I K T L E G K  
UniRef90\_A5N689 L T D F Y H L D T A F T V V A D G S V A L Y P P A F T T E S L A A V R H  
UniRef90\_UPI000478319A L V D F Y H L D T C F C P L A D G Y L L Y Y P P A F D E I S N R L I E S R V H  
UniRef90\_U5QEY1 L G E V L H L K S A V T A L P D G S F V G L P E L V I E T A S L P P I R R  
UniRef90\_UPI00034AF0E0 L P E C L H L M S F I S L V D E D L A V Y S R L M P V F L R Q M L I E R  
UniRef90\_UPI00034AF0E0 V A G V L H F K T D C S L L D D E T I L S T N R L A R S G V F E N F R Q M  
UniRef90\_UPI00036991A4 Y E A C L H L M S V M S P L S R D L A L V F A P L L P A S F Y Q L L K E W  
UniRef90\_UPI00036CCF66 I L R G L H L K T S V S Y L G N D L L V L D P S S V E T S P L H E F  
UniRef90\_UPI0004560476 V T K A L H L K S A V T A L P D G T V I G Y E P I V D D P S I F P S F  
UniRef90\_UPI0002063B79 V A E S K R L K G L V T M A G P D I I C V G A G K E S Q E V L K R I E R E A T Y  
UniRef90\_S7XIN7 L P S F Y H V D T A I A K L D E T N I A Y L E S A F D E P S L E K L R A L  
UniRef90\_B5HKH4 L V D F Y H L D T A L F V L D D D G N L A Y F P P A F S P G S L A V L R R M F P D  
UniRef90\_UPI0004786328 P W G H A H L D G L M N M V D R K K A L I F W Q T P Y D V I K P L V D R G F S  
UniRef90\_R3U5N9 V P A N L H L D M V E N I V A G P T C L A A T D E L P H N F L Q M L K R R  
UniRef90\_W2BZU4 H M Q I P H I D G L I N M A S H D V A M I H A S Q V P Y D V C D A L K K K  
UniRef90\_A5V1U9 V E A C L H L L S L I S I V D E R L A V V Y P P L I S V P F Y Q E L H R R  
UniRef90\_UPI00034AA3AE L V D F Y H L D T C F C P L A N G Y L L Y Y P P A F D F Y S N R L I E M R V P A  
UniRef90\_E5WMMW9 I R A F M H L D T V F T M I D H D K F T Y H P A L E D R D S M K I Y I L E Q E  
UniRef90\_UPI00035FF51E L T D F Y H L D T C F C P L T G G Y L L Y Y P P A F D A Y S N L I E R R V P A  
UniRef90\_U1NJT8 H P E F Y H L D T C F T P V D E K C A L W Y P A A F Q Q A T K D E I M K R M P E  
UniRef90\_UPI00036991A4 V D e G L H L K S A I N Y V G K N T L I S T E K F A R L P Q F S Q Y  
UniRef90\_J3HYT2 L A D F Y H L D T C F C P L E G G Y L M Y Y P G A F D L A S Q Q V I A R R V P A  
UniRef90\_A9TJKO L V D G L H L K S V I S E I A P Q T L A V E D S V A A A M F D E L Q E Q T N G E  
UniRef90\_UPI00037560B1 L V D P Y H L D T A L A V L D G D L V A Y F P P A F S E E S R R V L E R  
UniRef90\_UPI00047ACE08 L V D P Y H L D T A L A P L D G E R I A Y Y P D A F S P G S R L L L E R

UniRef90\_E6VZ16 R R I L V V D E N E 210 A Y A R N C L F I N 220 G T V I V 230 P A G F P R T L A 240  
UniRef90\_C3YTM3 D Y E L L S L P D D L A T D C L Y I N N G T I L L H C T K E E F P D S Y K  
UniRef90\_X1TG17 K F N K I M I D E E Y S A N C V G L R V N D Y I L V L P V G Y P K T K E  
UniRef90\_QOACF2 R V P R V I E A E E E A D A V G Y G L N A V S D G R H I V L S D R A T G R G L A  
UniRef90\_I0SOA9 A I E V V T A S S A D A Y V L G L N A V S D G Y H V V L P S A A T G F A  
UniRef90\_A1UBL7 A I E V V T A S S A D A H V L G L N A V S D G R N V V L P T A A E G F A  
UniRef90\_Q027T2 G L K V I E A P D A E A V N V L R V G D T V L V L P T A A A G F P R T V E  
UniRef90\_UPI0002D51338 Y P E A V I A S E R D A E A L G L N A V S D G T H V V L H A P D A V D L A  
UniRef90\_A0A024YQV5 A I L L A S A E D A A V F G L N A V S D G R N V V L P A A A T G L L H  
UniRef90\_N0D385 A V L L A T A A D A E C L G L N G V S D G H N V V L P A E A T A L G S R L A  
UniRef90\_W7SMM8 A V L A G A D D D A A C L G L N A V S D G R N V V L P V E A R E L A  
UniRef90\_UPI000373B44E N A I K I D K D E D Y A A N S V W I N G T V L V P K G F P K A L H  
UniRef90\_K6YVU5 E K R I A V S E T D A V N F A C N S V N V D R T V V M N Q A S P E L R D  
UniRef90\_K9S8X8 L Y P D A I H A S E E D A M V L G L N A V S D G R N V V L P V Q A A G L A  
UniRef90\_UPI00036ADB0 L Y P G A I I A T R E D A E V L G L N A V S D G A H V V M T D R A P H L E S Q  
UniRef90\_D0L7Q1 A V I A T E E D A E V L G L N A V S D G R N V V N A E A T G L I R T  
UniRef90\_UPI00047BA0F3 L Y P D A I I A T E E D A E V L G L N A V S D G R N V V M T D A A P D L A  
UniRef90\_H5THU5 L Y P D A I I A T E E D A E V L G L N A V S D G R H V V M T D A A P D L A  
UniRef90\_UPI0004722E68 Y N L I E V N K E E Q F T M G T N V L S I G G R L F S L P Q N P Q V N E A  
UniRef90\_A0A024YR87 Y P D A I L A T R E D A E A F G L N A V S D G L N V V L T E T A T G L I D E  
UniRef90\_UPI0004760358 A I E V T T A D A N A V L G L N V S D G R H V V M P S T A T G F A  
UniRef90\_UPI0002E4687C Y P D A V V A T R E D A A A F G L N A V S D G R H V V I L P Q A A T G V I A Q  
UniRef90\_UPI0003637D1B Y P D A V V A S A T D A A A F G L N A V S D G R H V V I L P Q A A T G V I A Q  
UniRef90\_E3CZQ4 L I E A P D V D E V K H G S S I N L V A L A P G L V V M P A G N P K T Q R  
UniRef90\_UPI00034641C8 N I K I D K D E D Y A A N S V W I N G T V L V P K G F P K A L H  
UniRef90\_F5HMJ7 T Y H T L T L Q E E T A A N V L Y I N G T L V T R S V D E A T I P V S T Q  
UniRef90\_X0N1U2 A I R A T A E D A A V F G L N A L S D G R H V V L P D A A V H L K  
UniRef90\_UPI000378B3BE A V L A T R E D A M T F G L N A V S D G L H V F I L A P Q A E A L A A R L  
UniRef90\_UPI000359995D P Y H V M Q M D S R L A T D M L Y V N G H L I H H V R Q E M G N K S Y G  
UniRef90\_C3XPC8 S Y Q P L W L P D C H A V D C I Y V N G T L L H C A Q T E G H W N C E  
UniRef90\_UPI000378A615 M F P D A V L A T E R D A V A L G L N A V S D G E N V V V A P G A V D L T A A  
UniRef90\_F3NTN6 A V I A T E E D A R A V L G L N A V S D G R H V F M P P Q A T A L A  
UniRef90\_A8M0K2 L Y P D A V T A T E E D A L V F G L N A V S D G R H V V M S A Q A V G L A  
UniRef90\_I4FGS3 E Y K R I V E E A D A V N F A C N A V N I G Q I I V M N K I S D D L A Q  
UniRef90\_UPI0003A94974 A V I A D A S D A E C L G L N G V S D G R N V V L P R E A T G L A  
UniRef90\_Q09359 N S I A V S E A E A N A F V C N A I T I R D T V I S P I G V S Q A T K  
UniRef90\_UPI000378B3BE A I I A T E A D A S S L G L N A V S D D G R H V V L P Q A A A  
UniRef90\_UPI0003B55EC7 I L A V P E P A G V A V V V L A P D A V L L S A A A P A T A A L L A  
UniRef90\_UPI000479D7F5 E I L A T E A D A V V L G L N A V S D G R H V V L P S A A V D L A  
UniRef90\_B1XMU4 A E K R I V P E P D A V N F A C N A V N V D D V I I M N K I S P E L E T A I  
UniRef90\_UPI00034D61E8 A L L A T E H D A A A L G L N S V C T G D D V V M A E A T D L A  
UniRef90\_UPI000375CDFE D A L T A T R Q D A A F G L N C V S D G H V V L P S G A T G L L R  
UniRef90\_J4TJC8 A I I A D T D A Y V L G L N V S D G L H V V L P S A A T G F A  
UniRef90\_UPI00047B2D43 A V I A D D T D A R C L G L N G V S D G R H V V L P L E A T N L A  
UniRef90\_B1WSB4 D K R I V V E E P D A V K F A C N A V N I N H T I I M N Q I S D S L A  
UniRef90\_L8ENA5 A V L A T P R D A A V F G L N A V S D G Y H V V L P E A A T G L A  
UniRef90\_B6B847 R V L H V A D G E E A A N A I R F N N L V L M A A G F P R T A E  
UniRef90\_I7F2M1 G Y R V L H V A E G E E A A A N A I R Y N N L V L M A A D F P R T A E  
UniRef90\_I0HHJ4 A I I A T P Q D A A V L G L N A V S D G R T V V L P V Q A T D L T A S  
UniRef90\_W8ALU8 L Y P D A V I A T D E D A N V L G L N G V C D G Y H V F L T E K A T A L A  
UniRef90\_X5L7Y6 A L E V G S A D A F V L G L N V S D G R H V V L P A A A T G F A  
UniRef90\_A4T1S1 A I K V A S A D A Y V L G L N A V S D G L N A V L P D A A T G F A  
UniRef90\_D3Q188 F P T A V I A D E A D A L A F G L N L V S D D K H V F I I N A E A T G M A D K  
UniRef90\_UPI00039CCABC A V I T A T R E D A M A F G L N S V S D G R H V I V A P Q A T A L S  
UniRef90\_S0EUM4 N F E T I P V C E E E A L R F A C N A V V I G H Q V V L P T G C P Q L T D  
UniRef90\_W8U295 N T I V I A Q A E E S Y A G N T L W I N D T L I T P Q G Y P A T L A  
UniRef90\_X5R749 G F R R I V V P E E P A A N V L R V N D V V F A S A H Y P R T L E  
UniRef90\_L7EGS6 E F E L I D I P Q E G V F E H H C N L Q A L G N R R V I S L K S N T K V N K K  
UniRef90\_A0LS17 A I V A D D A D A E V F G L N A V S D G Y H V V L P V Q A H R L A  
UniRef90\_C1B054 R F P D A V I A T E T D T D W L G L N L V S D G A N V V L P V Q A S H L A  
UniRef90\_UPI00037560B1 G S L V E V P E Q E F E S M G L N V L A I A P R E C I M V A G N P L T E Y  
UniRef90\_A0A023CWE7 K I E I I P V P E E A I F K H G C N L E S L G A K R V L S L K Q N T A V N D A  
UniRef90\_D6KC27 A L L V A E E D A L A F G L N A V S D G R H V V L P Q A A A G L F G P  
UniRef90\_F8K236 A L L A G E E D A A A L G L N A V S D G R H V V L P Q N A I G  
UniRef90\_F8B360 L Y P D A I T A S D D D A A A F G L N A V S D G R H V V L P Q A A T G L V G Q  
UniRef90\_UPI000378A4A3 R T L A V D P A E P F A A N A I L T I G G T V L Y S A S F P A T A E  
UniRef90\_W6N7N8 N Y E L I E V D K S N L L E C Y C N L Q A L G N G R V V S F K N N K K  
UniRef90\_A5N689 G V Y L I D I S Q E D V F K H Y G N L Q S L G N G R V I S L K S N K K V N E Q  
UniRef90\_UPI000478319A R V P N I V I A D E T D A L A Y G L N A V S D G E R I V L S D R A L T L A  
UniRef90\_U5QEY1 P D K R I V V G E A D A V N F A C N A V N V G R T V I V N Q V T A G L A  
UniRef90\_UPI00034AF0E0 A P E E P G A H V L P L G G R D V L V S A A A S E T I H  
UniRef90\_UPI00047955C8 G I Q L I E V P D D E Y L R L G C N V L A L A P R V C M I A S E N P S T K Q  
UniRef90\_UPI0003FAD50D I I P I P E G E P A A N A L R V N D V V M V G S D F P R T E  
UniRef90\_UPI00036991A4 G I T L I Q A P A D E A S N G L S L N V L P V R P N E V I M V A G F P K T K A  
UniRef90\_UPI00036CCF66 K W I E T D S S S H R A A N C L A I E N K V L M S K E S N Q I A D R I H  
UniRef90\_UPI0004560476 L A V P E E H A G V A V V V L S P S H L V M S S D A P R T T Q  
UniRef90\_UPI0002063B79 S Y Q T L A V P E D A A N V L Y V N G T L I H R S E D E I P Q S S K  
UniRef90\_S7XIN7 Y P D A I L A T E E D A A V L G L N S Y S D G R N V V I A A R A K D F E  
UniRef90\_B5HKH4 A V I A T R E D A M A F G L N S V S D G R H V V I A P Q A E A L V G Q  
UniRef90\_UPI0004786328 I I E A P S I E E V K R G A A V N L V A L E P G V V L P S G N P E T R K  
UniRef90\_R3U5N9 N F K T I H V P S E L V F K H G C N V Q A L G N G K V L G I E N N Q S V N E A  
UniRef90\_W2BZU4 G I K L L E C P S R E A K E T F A I N F V A L E P G T I V M P E G N P R S Q E  
UniRef90\_A5V1U9 G F R L V E V P D E F P T M G P N V L A L A P G Q C L M L E N N P L T K Q  
UniRef90\_UPI00034AA3AE E K R I A I D E P D A V N F A C N A V N V N D V V M N Q T S D D L K  
UniRef90\_E5WMW9 N S D L L K I T E K N S L K V T L K E V L N L D E V L I P C G G C P I A S A  
UniRef90\_UPI00035FF51E D K R I A I A P D A V N F A C N A V N I H Q V V I L N K A S E D L K  
UniRef90\_U1NJT8 S N I A I S E S E A K A F V C N A I L T V R N T V I S P I G V S Q E T K  
UniRef90\_E6WKT5 N H L V I P D D E I Y A G N T L L I N G T L I T P S G V P A T L A  
UniRef90\_J3HYT2 R R I A V E L D D A L A F A C N T V N A G R H V L L N R A S T G L A  
UniRef90\_A9TJKO H F K L V K T D G A G A A N T V L V G D T V I C S A T L G L P A D L A  
UniRef90\_UPI00047955C8 M Y P D A I I A T E R D A V A L G L N A V S D G R R V V L A P G A T D L A  
UniRef90\_UPI00047ACE08 L F P D A V I A D A D D A A A F G L N F V S D G T H V V V N A E A T G M V R K

UniRef90\_E6VZ16 A I K G L T G R P T I E L D M S E F R K L D G G L T C L S L R F  
UniRef90\_C3YTM3 V F E T V T D Y H R V I A V D A N T S E E L R K K V D G G A L L S R L L L L F  
UniRef90\_X1TG17 K L K T A G F K V I V V D I T S E E Y R K K V N G G A L L S C C C C L L L R F  
UniRef90\_QOACF2 A T Y R E M G F L Q V H V P M P I T S E E F Q K K S G G G G M K C C C C L T L L E L L R D  
UniRef90\_I0S0A9 D Q L R D A A G F F A P V P V D L S E E L L K G G G G S I K C C C C T L L E V L Y R  
UniRef90\_A1UBL7 E Q L R A A G F D P V G V D L S E E L L K K G G G A L V K T C C C C C S L L E V F  
UniRef90\_Q027T2 T I S R L G L R D V R A L V D L D N S E E L L R K K A E G G A L T C C C C C S L L F K  
UniRef90\_UPI0002D51338 A Q L R E R G F F E T I A V L N T S E E L L K G G G G A K C C C C T L L E I R E D R  
UniRef90\_A0A024YQV5 A K L R R A R G F F E P I G V V E L L S E E L L K A G G G S V K C C C C T L L E L R D R  
UniRef90\_N0D385 E Q L R D R R G F F R P I G V D L S E E L L K A G G G S V K C C C C T L L E L R D K  
UniRef90\_W7SMM8 L A A R G F Y E P V Y V D I L S E E L R K K S G G G G P K C C C C T M E L L R D K  
UniRef90\_UPI000373B44E E R L A V R G F F E P V P L D I L S E E L R K K S G G G G P K C C C C T L L E L R K  
UniRef90\_K6YVU5 A I Q Q L R G Y K T R E V A M S E F Q K K L D G G G L S C C C C S L L R F  
UniRef90\_K9S8X8 R L R E L G F Q V L E T P L T T E F L K A G G G A A K C C C C L T L R L T T E  
UniRef90\_UPI00036ADB0 R Q L E A R G F F E A V P V D L S E E F R K K S G G G G P K C C C C T L L E I R R  
UniRef90\_D0L7Q1 L L R A Q A G F F E L I V L D L S E E L L K G G G G I K C C C C C T L L E L R R  
UniRef90\_UPI00047BA0F3 L A E H G F F E P V P V D L T S E E L R K A G G G G P K C C C C T L L E L R R  
UniRef90\_H5THU5 A R L H E A G F V P I T V D L S E E L L K K S G G G S I K C C C C S M P V V R  
UniRef90\_UPI0004722E68 M R S K G F D V I E I D F S E E I I K S G G G S F R C C C C C Q E I R  
UniRef90\_A0A024YR87 L R A R G F F E P H G V D M S E E L L K A G G G A V K C C C C S Q E I R  
UniRef90\_UPI0004760358 E Q L R S A G F F E P I G V D L S E E L L K G G G G I K C C C C T L L E L R  
UniRef90\_UPI0002E4687C S R L A D R G F Y V P I G V D L S E E F H K A G G G G I K C C C C T Q E I R  
UniRef90\_UPI0003637D1B L R E R G F E P V I G A D L S E E L L K G G G S V K C C C C T L L E L R  
UniRef90\_E3CZQ4 T A E K A G V E V I P V D V S E L L M K M Y G G L H C C C C M T A F L E R E R  
UniRef90\_UPI00034641C8 T A E H W R V L P V D V S E F E K M E G C V T C L S V L V P D R  
UniRef90\_F5HMJ7 I L S K K I D A P R Q M L Y M S E E L G K F S N G L T A C C C S I L V K R R  
UniRef90\_X0N1U2 Q E L S A R G F L P I G V D L T S E E L L K A G G G I V K C C C C T L L E L R R  
UniRef90\_UPI000378B3BE A E R G Y V P V P V D L S E E F H K A G G G I K C C C C T Q E I R  
UniRef90\_UPI000359995D T L D E K I L W P R H H V Q L T S E E L A K V G G S I G S Q A T L L T R  
UniRef90\_C3XPC8 V F D K L P D C A R Y E V D L T S E E L G K V Q A A L S C C C C S V L F  
UniRef90\_F8A615 L R E R G Y T P I G V D L S E E L L K G G G G A K C C C C T L L E I R R  
UniRef90\_F3NTN6 G R L A A R G Y V P V P V D L S E E F L K A G G G G I K C C C C T Q E I R R D R  
UniRef90\_A8M0K2 A R L A A R D Y V P I D I L S E E L L K S G G G A K C C C C T L L E V  
UniRef90\_I4FGS3 Y N L A A K D Y F V Q T P L T E E L L K A G G A A K C C C C T L R  
UniRef90\_UPI0003A94974 R S L E K R G Y E P V L T D V S E E L R K S G G G P K C C C C T M E L  
UniRef90\_Q09359 D Y L S A R G K R V E V D M S E E F M K S G G G A C Q C C C C L V L R L  
UniRef90\_D7CBB1 G L L R E R G Y E V I A M D L S E E L L K G G G S V K C C C C T Q E L R D  
UniRef90\_UPI0003B55EC7 D L I G Y R V V T V D I L S E E F E K L E G C V T C C C C S L L V  
UniRef90\_UPI000479D7F5 T Q L R E R G F V P L R Q T S L T E E L L K A G G G A V K C C C C T M E L  
UniRef90\_B1XMU4 A T K G F Q V R Q T S L T E E F L K A G G G A A K C C C C T L L  
UniRef90\_UPI00034D61E8 E R L R E R G H T V H P V H L D E E L R K A G G G A A K C C C C T L L E L R D  
UniRef90\_UPI000375CDFE R L R R E R G Y E P V P V D M S E E L H K A G G G S V K C C C C T M E L R D  
UniRef90\_J4TJC8 A Q L R R A R G F E P I G V D L S E E L L K G G G S V K C C C C T L L E V  
UniRef90\_UPI00047B2D43 A R V A L R G F D P V L V D L S E E L R K A G G G P K C C C C T M E L R D E  
UniRef90\_B1WSB4 Q R L N E V G F D P V L Q T P L S E E F L K A G G G A A K C C C C T L R V N E  
UniRef90\_L8ENA5 G Q L R A R G F H P I V G A G L T E E L L K G G G S V K C C C C T L L E V R  
UniRef90\_B6B847 M L D K A G F E I A E I D N T D C A K L D G G G M S C C C C S L L R F  
UniRef90\_I7F2M1 M L D R E G F E V V Q I S N T E C A K L D G G G M S C C C C S L L R F  
UniRef90\_I0HHJ4 L T K A G Y Q T I G V D L S E E L R K A G G G P K C C C C T L L E V R  
UniRef90\_W8ALU8 G Q L R E R G Y E P V G I D L S E E L L K A G G G S V K C C C C T L L E L H R  
UniRef90\_X5L7Y6 A Q L R A A G F E P V G V D L S E E L L K G G G S V K C C C C T L L E V  
UniRef90\_A4T1S1 E Q L R A A G F Y R P V G V D L S E E L L K G G G S V K C C C C T L L E V  
UniRef90\_D3Q188 L A A R G Y E P V V V D L S E E L K K G G G S V K C C C C I A E L R D  
UniRef90\_UPI00039CCABC D R L Q A E H G Y D P V P V D L S E E F H K A G G G I K C C C C T Q E I R  
UniRef90\_S0EUM4 A L Q Q R G F D P C Y A V E M S E F L K A G G G A A K C C C C T L L L R  
UniRef90\_W8U295 Q I E Q L G M P T V Q L D T S E F K K M D G G L T C C C C S L L R F  
UniRef90\_X5R749 I L D T E G Y K V V P L K T V I E K I D A G L S C C C C M S L R W Y R  
UniRef90\_L7EGS6 L K D C G F K V I E L E L E E L L K S G G G P H C C C C T L L R K R  
UniRef90\_A0LS17 R Q L A A R G F Q P V S V D V S E F R K A G G G P K C C C C T L L E L R  
UniRef90\_C1B054 G Q L S D R G Y E P V P V D Y S E F L K S G G G I K C C C C S T L L E L R  
UniRef90\_UPI00037560B1 A L R K A G C I V Y T Y K G R E I S K G G G P T C C C C T R P I Y R  
UniRef90\_A0A023CWE7 L R V H G M D V I E L D I S E E T L K A G G G P H C C C C M T F P L Q R  
UniRef90\_D6KC27 L R E R G F E P V G V D V S E E L H R A G G G S V K C C C C T L L E L R D  
UniRef90\_F8K236 L F E R E R G F E P I G M D L S E E L G K A G G G S V K C C C C M E L R D  
UniRef90\_F8B360 L R E R G F E P I G A D L S E E L L K A G G S V K C C C C T L L E L R  
UniRef90\_UPI0003F8A4A3 R L R R A G I E V R L V D M S E E T E K A E G G A M T C C C C S V I L E  
UniRef90\_W6N7N8 V N S A L R G L D V I E V D I T E M F K H G G G I H C C C C M T F P L N R  
UniRef90\_A5N689 L K S Y G L S V I D L D I S E E L L K S G G G P H C C C C M T F P L V R  
UniRef90\_UPI000478319A N E Y C R R G M D V H R M A I D E F Q K S G G G M K C C C C L T L D L K T E  
UniRef90\_U5QEY1 A R L D S C G F A V R Q T P L T E F L K A G G A A K C C C C L T L R L T E  
UniRef90\_UPI00034AF0E0 Q L T A D H W R V L P V D I S E F E K L E A C V T C C C C S L V L I P D R  
UniRef90\_UPI00047955C8 Q L L D A G A T V Y E Y E G N E I S Y L D A G G G P T C C C C L T C P V V R  
UniRef90\_UPI0003FAD50D M L D K A G Y K V P L K T T D I G K I D A G L S C C C C M S L R  
UniRef90\_UPI00036991A4 A M E A A G C K V E T F E A D A L I A C E G G P T C C C C T R P V L R R  
UniRef90\_UPI00036CCF66 K E G F K T L E L D I S E F E K A D G G L T C C C C S L S I M L K K  
UniRef90\_UPI0004560476 I L R Q R G Y R V E T V D I L S Q F E A L E G C V T C C C C S V R I R  
UniRef90\_UPI0002063B79 V F A E K I E F P T R S L R M S E L A K V S S G L T S C C C L L V R R R  
UniRef90\_S7XIN7 R Q L K E R G Y N P I G V D L S E E L L L G G G G V K C C C C T L L E L R R  
UniRef90\_B5HKH4 L A A H G Y E P V P V D M S E E F H K A G G G I K C C C C T Q E I R R  
UniRef90\_UPI0004786328 A L E K G G V I E T D V T E I L K G Y G S L H C C C C M S A F L D R R  
UniRef90\_R3U5N9 M E A E G L E V I K L P L E Q I L K A G G G P H C C C C M T Y P V R R R  
UniRef90\_W2BZU4 L L E K N G L N V I P V D Y S E V M K G Y G A M H C C C C T A F L K R  
UniRef90\_A5V1U9 R L E A A G C E V L T Y C G N E I S K A E G G A T C C C C T R P L L R  
UniRef90\_UPI00034AA3AE A R L A E V G F T V I E T P L N S E F L K A G G G A A K C C C C L T L R  
UniRef90\_E5WMM9 R I L R Q N G V E V I E L S E E L S R G G G P R C C C C M S M P I I R E E  
UniRef90\_UPI00035FF51E Q R L G Q V G Y T V M E T P L T S E F L K A G G A S K C C C C L T L P V R E E  
UniRef90\_U1NJT8 D Q L A K R G F S V T E I D M S E E F M K S G G G A C Q C C C C L V L K L  
UniRef90\_E6WKT5 Q L R T L D M P V Q L D T S E E I R K M D G G L T C C C C L T L S L R F  
UniRef90\_J3HYT2 Q Q L E G R G F T V H E L P L S E E F R M R A G G A A K C C C C L T L K L  
UniRef90\_A9TJK0 A H F K Q H A K H V I P V N I S E F H K S  
UniRef90\_A0A021YF1 E A L R D R G F E P A V D T S E L L K G G G A K C C C C T L E I R D  
UniRef90\_UPI00047ACE08 L R D A G Y E P V P V D L S E L L K K G G G S V K C C C C T A E L R

1 10 20 30 40

UniRef90\_A9D0R3 MT P A L K R V L M R R P G D S L I S A A E D W H Y G P G F D G A K A V A Q F

UniRef90\_L8EUX3 M C P P T H F K V S Y S I N D P D K P V D L P L A L A Q W

UniRef90\_UPI0004756D35 M M C P P A H F I N P W M N P G K P T D Q S L A M S Q W

UniRef90\_E4N5U6 C P P E H F A T Y A I N P W M D P P V D R A A A L R Q W

UniRef90\_K7FHR6

UniRef90\_D9VLF6 G R P R R Y V M C E P R Y F D V R Y A I N P W M L T P V D V P L A R E Q W

UniRef90\_S3ZLE2 G Y G T F T T A I V R E I P G S L A G E A D P P A E G E E V D L Q K A R D E W

UniRef90\_C3YTM0 R A R R Y L M C R P E H F T V S Y E I N P W M D R P T D T A R A V Q Q W

UniRef90\_D1BC1 S R T A T P R H Y L M C R P E H F T V A Y R I N P W M D P A V D T S L A V R Q W

UniRef90\_UPI0003B2F4EB K F V Q A V T L T P A L S A I N G L R S E D R G A V D I D V M I K Q H

UniRef90\_G6A1G2 E T G K L K T V V L G Q P I S N G A T P T L E E S Y D A K S Y H S I A Q T E M

UniRef90\_K1MAJ2 S E V G K L R S V L M R R P G S E I E E N V S R Y R W K A P M N P D Q A R A Q Q

UniRef90\_V6MD72 T L K R V L T C P P T F L K K A I S K L H P E P L N S E L L A S E Y

UniRef90\_G2SLX7 P P E N F A V E Y E I N P W M D E V D A R L A V K Q W

UniRef90\_UPI00039F385B V G P I R S V L M H R P G E E V L Q S L S K G R G Q D P P D L G L L Q A Q H

UniRef90\_UPI0003818342 R H Y L M C R P A H F T V D Y S I N P W M D P P T D T G T A L A Q W

UniRef90\_H6NRG5 A L T R R P S P E L D R G V R T H L D Y A P V D P V L A A R Q Y

UniRef90\_E4N8S0

UniRef90\_UPI000344C0DB

UniRef90\_W5K9T6

UniRef90\_W6NEV9 S E Y L P L C S V F I K T P P K H F V E Y N I N P W M G G V V D K A K A Y T Q W

UniRef90\_UPI00047C751E R A R R Y V M C R P T A F A V R Y A I N P W M D T A V D R A R A L A Q W

UniRef90\_E2SG67

UniRef90\_F9S1J2

UniRef90\_UPI0003B2E281 F L M C P P D Y Y I A Y E I N P W M R R N V N R S L A R T Q W

UniRef90\_W6NED5 G V L K K V L L C S P K Y F E F E P I N V I K G E K S N K E A C L R E H

UniRef90\_UPI00047979EA P R A I S V L M C E P R Y F E V S Y A I N P W M D P S T S S E L A V E Q W

UniRef90\_E2N3L3 P K S A E H I K A G T Y P I E K D M V A E M

UniRef90\_J3A5P6 S M V K K M N T V I I K H P H Q A F I S Q W K T F N Y T D R P D W D R A L H E Y

UniRef90\_D6AY39 R R Y L M C R P Q Y F T V A Y A I N P W M N P V D V P L A V A Q W

UniRef90\_F4F496 M C S P E Y F A V E Y A I N P W M D P V D P L A V K Q W

UniRef90\_W9FSH7 P S L R R Y L M C E P R Y F E V A Y A I N P W M G T P V D L P L A R D Q W

UniRef90\_E4TBZ1 E M

UniRef90\_DOMJM8 R R V L M V S P D H F D V E Y V I N P H M E G Q V D R A L A R R Q W

UniRef90\_UPI00047E0E77 S Y E T V K E Y L L S L P A D E L V K K V M A G V V K S D I E Q E K K V H L H

UniRef90\_A6TWW2 P E S L V E I A I S G L H K E D F P K M E R E F

UniRef90\_T1W5Q6 A R V A T P R H Y L M C R P D H F T V A Y R I N P W M D P A V D T S L A V A Q W

UniRef90\_B4H4I7 M S P K Y T H A I V A R I S E A L L E S G P F D L K L A K R Q H

UniRef90\_A5CNL8 K R V L M C R P D H F D V V Y K I N P W M D P A V D T S L A V R Q W

UniRef90\_V6KZF2 L A T G H L R A A F D A L P T Q E L A Q A T K

UniRef90\_C3YEF1

UniRef90\_C4RHF0 V P R K R T Y L M C S P E H F A V E Y A I N P W M D T P V D A E L A V K Q W

UniRef90\_H0A5X0 S E T G L L K E V L V C P P T N S I A R H T L A G D R Q A P A H L A A Q H

UniRef90\_X6CVL2 S M A G P L K R V L M R S A A S A M R H A A Q E W H Y G P G F D P Q K A A A Q H

UniRef90\_E6U4F5 D E G N Q V D V Q A C L R E H

UniRef90\_H2BYB3 E D M V L E M

UniRef90\_UPI0004162462 S E T S R L R A V V L G T A R S I G P I P T L E E A Y D P P T E E D M V A E M

UniRef90\_UPI00047B0B08 K E Y L M S L S P R E L I H Q V M K G M L K A E V N P A K A L D L H

UniRef90\_M7N7H7 P K S L E H I K A G T Y P V E A D M V K E M

UniRef90\_S0G075 S E W K P L K T V L V H R P G P E L S D Q A N A Q L A E P L D V Q K A G Q E H

UniRef90\_C1L717 M A F Q Y E Y A I V S Q I P K S F E E F L T S P D K G D K F N Y E E A C N E R

UniRef90\_K2PPJ9 P K S I E H I K A G T Y P K E S D M I K E M

UniRef90\_R7RMW6 L L S M P T R E M V D K I M A G I R K E E V E V K E V

UniRef90\_UPI00034B3E1E A V H N G P T S L E E A Y L E H I K A G T Y P I E K M I V I E M

UniRef90\_R6E2G6 S E V D T L K A V L M R R P G K E I E D A Q A V R F S D E P I D V E I R K Q H

UniRef90\_M0E770 S E Y G S L E Q A L V H E P G D E F V V D P D A W N W D G L P R Q E K A A K E H

UniRef90\_UPI0003729750 V G R L R V V L M H R P G D E L K G D T E T G W Y R E L P D I A T Q Q A Q H

UniRef90\_A0R969 E E L I Q K I M G G V R K N E I E T S K K T H

UniRef90\_I2MXG9 P V D L P L A M T Q W

UniRef90\_UPI000225AE85 K K V L M C P P T Y F D I E Y S I N P W M N K V D K A K A K K Q W

UniRef90\_I3VT24 V A E I A I S G L E K G D I D I P K G L A E F

UniRef90\_J7QVQ2 L M C A P D H F G V D Y I N P W M E N Q I G L P R A Q A Q W

UniRef90\_UPI0003B65B2B E W Q N L K S V L V H R P G K E M E I P K Q Q V N E L E A L D L G K A R E E H

UniRef90\_UPI000429005B S M V G K L E S V L L K H P K N A F I N H L R K H W E S C P D Y D K A L E E Y

UniRef90\_UPI0003B42066 L M C R P E H F T V S Y R I N P W M H D P T D T N L A V R Q W

UniRef90\_B7VLP9 P K S L Q H V L A G T Y P K E K D M V L E M

UniRef90\_UPI00035C26A1

UniRef90\_Q38YQ6

UniRef90\_H8L948

UniRef90\_V6KQ94

UniRef90\_S7VRY6 M I K E M

UniRef90\_V9W5W2

UniRef90\_UPI00035DD35F V R G Y L Q T L S D E E L A Q I L L G G L S Y I D F P L Q S

UniRef90\_E5SQU9 F E E V L M C R P D Y F K V T Y K I N P W M S G N V D E E L A M E Q W

UniRef90\_UPI000474E410 N I L M C N P Q H Y G I F Y E I N P W M H V P V V D N T R A Q I Q W

UniRef90\_U6PAN8 M G G A I D E N R A F E Q W

UniRef90\_H5UUE7 S M V S R R V L M R R P E P G L G E A V V S L I D R E P V V I F E R A L A T W

UniRef90\_D9UIS5 R H Y L M C P P E H F E V R Y A I N P W M G T P V D R A R A L A Q W

UniRef90\_D4M713 S E Y A R L R A V L H R P G K E V E G D P G A V R F R E A V D P E K F R S Q H

UniRef90\_M9R573 F S H A L C R L P A T S V T D G L R A S D H G D P D P I A F A A E H

UniRef90\_O86131 Y D R L K E F L L T F D A D S M V E Q V M S G L R K N E L E R E K K

UniRef90\_U2EFE3 E Y D R L E Y V M V A Y P R N F R I D E I I N K M Q K G I L D Q E I A S Q Q F

UniRef90\_D5QFR2 S E S G D L A D V L L C R P E P S N D I A I Q T L A R G Q R T N H A D M L S Q F

UniRef90\_A0A023VMG9 R R L A E F L I G G V S G S D L P G S E G

UniRef90\_T1CSJ0 E M

UniRef90\_I4AIE6 P K S K E H I T A G T Y P K E A D M V T E I

UniRef90\_G8NSV4 L M C R P L Q Y E V N Y V I N P W M S G N M S R V L A T E Q W

UniRef90\_C1KV84

UniRef90\_R7M7S7

UniRef90\_UPI0003A9E24B

UniRef90\_UPI000374D1BB M C P P E H F V E Y A I N P W M D T P V D A A L A V K Q W

UniRef90\_E1V381 V R A W L E S L P P R Q I A E F L T I G G V S G D L A G T H G

UniRef90\_A9D0R3 G[V]F A D H[V]A A S 50 G A E I I W L E 60 D N D G L A D A M F T H D P S L M T D K G 80  
UniRef90\_L8EUX3 E V L R D R Y R A S L G H T V E E L R P R P D L P D M V F A A N G A T V V D G R  
UniRef90\_UPI0004756D35 Q R I H D Q L V E L G H T V D L L P P L P G L P D M V F A A N G A T V Y G N Q  
UniRef90\_E4N5U6 R E L A A V L R G L G H R V D L L G P E P G L P D M V F A A N G A T V V A G R  
UniRef90\_K7FHR6  
UniRef90\_D9VLF6 R A L V E A Y R A H G H T V E T V A P V V G L P D M V F A A N G A L V S G G R  
UniRef90\_S3ZL2 E D L R D R Y R S L G H T V E E L R P H P D L P D M V Y A A N G A T V V D G R  
UniRef90\_C3YTM0 T T Y V D T L R T L G L R V T T I P A D E E C P G C A C V A D T A T V V D G T  
UniRef90\_D1BC11 E R L R D V Y L D L G H T V D L V E P V A G L P D M V Y A A N G A T V V D G V  
UniRef90\_UPI0003B2F4EB Q T L Y D T Y R E L G H T V Q L I D Q V E G L P D M V Y T A N G A G F V I G N V  
UniRef90\_G6A1G2 R D Y I N A L K H A G A E V T E L E A L T E F P D A Q F V E D T A L C L P G L  
UniRef90\_K1MAJ2 E G F K E V L L K H G V E V L R P E V T Q D Y N Q V F S R D V A F V I E D K  
UniRef90\_V6MD72 D A L V Q I L Y Q E H G I E V H Y V E N M R G D P N A L Y L R D L V A M T P E G  
UniRef90\_G2SLX7 Q R V L D A Y E E A G V K V E K L T P D A S M T N S I F A R D F G G C V K E G  
UniRef90\_UPI00039F385B E A L K D A L I S K G H T V H T L V P E K G L P D M V Y A A N G A F T V D G V  
UniRef90\_UPI0003818342 N V L R E T Y V Q L G H S V S E V P V P G L P D M V Y A A N G G L V G G V  
UniRef90\_H6NRG5 D G I A E A L R K A G A E V L M L D Q P E S W P D R M F T R D L G M V L P G G  
UniRef90\_E4N8S0 D Q L H A L F Q R L G H T V E L I E P L P G L P D M V F A A N G A T T V D G R  
UniRef90\_UPI000344C0DB L V Y Q E A L A S A G W R V R E V A A D P G R P D S V F V E D T L V V C E D L  
UniRef90\_W5K9T6  
UniRef90\_W6NEW9 K A L K S A I E K E G V E V L T M E Q A P D L S P D Q V I F V C N S G L V Y N E D K  
UniRef90\_UPI00047C751E E I F L N I L K G K G V E I I Y S P M D T N L P M D T N L P D M V F A A N G A S I A T N E G  
UniRef90\_E2SG67 E A L V R T Y R S H G H T V E L T I E P L A D H P D M V F A A N G A S V A G D R  
UniRef90\_F9S1J2  
UniRef90\_UPI0003B2E281 D L L Y K L L T D Q I G V Q V E L I Y P V K G L P D M V F T A S A G M V W N H T  
UniRef90\_W6NED5 S E L V Q A Y K E N G V E V E I M D P D I N L P Y E V F A R D F G G C I S E G  
UniRef90\_UPI00047979EA R T L V D V Y R T L G N F D V D L R P E I P G L P D M V Y A A N G A F T L D G I  
UniRef90\_E2N3L3 D A F R A V L E K Y N G K V Y R P E I L T D C N Q I F T R D L G F V I E D I  
UniRef90\_J3A5P6 A K F E S I L R E H V E N V L H L P Q S D K T G L D S I Y A H D P V K F T S K G  
UniRef90\_D6AY39 E D L R D R Y R A C G H T V E E L E P H P A L P D M V Y A A N G A T V V D G R  
UniRef90\_F4F496 D R L R E T L V G L G H T V E L L A P E P G L P D M V Y A A N G A F S V D G T  
UniRef90\_W9FSH7 L T L V E A Y R S H G H T V E T I A P V A G L P D M V F A A N A A L V M D G K  
UniRef90\_E4TBZ1 N A F E S V L K K Y D V E V F R P E I T Q D Y N Q V F A R D V A F V I E D R  
UniRef90\_D0MJM8 E A L R D T Y R T L G F E V H V L D G V P G L P D M V F C A N Q T L P F G R G  
UniRef90\_UPI00047E0E77 E M M P D H Y P F Y L D P M P N L Y F T R D P A A V I G E G G  
UniRef90\_A6TWW2 H L V D Y V K Y D Y P F Y I N V E L I P N L Y F T R D P G A V I G D G  
UniRef90\_T1W5Q6 T T L Y E T Y L S D I G H T V E L I D Q I P G L P D M V Y T A N G G F I I N G V  
UniRef90\_B4H4I7 E Q Y C T L L R D I G L D V T E L P D D M L P P E G V F V E N C A V I C N G V  
UniRef90\_A5CNL8 Q T L Y D A Y V I G L G F Q V D L D G I A G L P D M V Y A A N G G F T L D G I  
UniRef90\_V6KZF2 R E F L D Q H P E P T S V R F H V M P D D D P L N H I F T R D T S A W V Y D G  
UniRef90\_C3YEF1 D R L R E T L L G L G H T V H L L A P E A G L P D M V Y A A N G A F V V D G T  
UniRef90\_C4RHF0 A E L V A A M E Q A G H V T V H R L T P E H L P M V Y T R D S N G V V T H R G  
UniRef90\_H0A5X0 E Q L S G M V A A S G A E I E W L D A D D A L A D S V F T H D P S L M T D H G  
UniRef90\_X6CVL2 Q E F V D A Y R E N G V E V H L A P T R R D L T N Q V F T R D F G A C I A E G K  
UniRef90\_E6U4F5 E A V A V L E K Y N V Q V F R P N L I E D Y N Q I F T R D I A F V I E D K  
UniRef90\_H2BYB3 E A V A V L E K Y D V Q V F R P K I I E D Y N Q I F T R D I A F V I D D K  
UniRef90\_UPI0004162462 A E Y P F C L D P M P N L Y F T R D P A A V I G N G  
UniRef90\_UPI00047B0B08 E A V A K V F E K Y N I K V Y R P E L I K D C N Q I F T R D I A F V I D D V  
UniRef90\_M7N7H7 D R M V K I Y R E N Q V E V Q M L T P A P V L P N Q L Y C A D L V A M T P Q G  
UniRef90\_S0G075 E K F V E A L R Q N G V D V L E M E A D E R H P E C V K V D D T A V I I N G T  
UniRef90\_C1L717 E A F N A V F E K Y N V K V H R P E I L K D C N Q I F S R D I A F V I D D Y  
UniRef90\_K2PPJ9 S S L A D L M M D D Y P F Y L D P M P N L Y F T R D P G A S I G N G  
UniRef90\_R7RMW6 D A F N A V F Q K Y D V K V Y R P E M I L E S Y N Q I F A R D I G F V I D D T  
UniRef90\_UPI00034B3E1E D A V A K I Y T D F G A K V Y Y R V E E Q E D R P N A I F C A R D L V F M T P E G  
UniRef90\_R6E2G6 R S L V E E L E S N G V E V L T L E G V E S L A E S L F V R D V G F A I G G G  
UniRef90\_M0E770 D A L V A A L R E E G V E V F L D R C A P G K M K S V Y T R D Q V I A V D G G  
UniRef90\_UPI0003729750 L Y E L M E D H Y P F Y L D P M P N L Y F T R D P A A S V G D G  
UniRef90\_A0R969 E D L R D R Y L A L G H T V E L L A P R P G L P D M V F A A N G A T V I D G R  
UniRef90\_I2MXG9 D Y V Y N I L T D L N I E I E Y I L E P A P G L P D M T F T G D A G M V H N K K  
UniRef90\_UPI000225AE85 I Y E E F Y I K P V P N M Y F T R D P G A M I D G G  
UniRef90\_I3VT24 E N L R G K L A A H S D I V F V A P T P G L P D M V F A A N A G L A I G D T  
UniRef90\_J7QVQ2 E G M V N A Y Q K N G V K V H F L E P N P S M P N Q I F C A D L F A M T P E G  
UniRef90\_UPI0003B65B2B E K F E R L L K E H V P N H Y L P S D E A G L D S I Y A H D S V K L T K Q G  
UniRef90\_UPI000429005B N T L Y E T F V I G L G H D V H L I D P I A G L P D M V Y T A N G G F A I D G V  
UniRef90\_UPI0003B42066 I E P L P N H L F T R D T S C W V Y G G  
UniRef90\_B7VLP9 L I T Q D Y N Q I F S R D I A F V I E D K  
UniRef90\_UPI00035C26A1 E A L A K V F E K Y D V K V F R P K I T Q D Y N Q I F S R D I A F V I E D K  
UniRef90\_Q38YQ6 D P M P N L Y F T R D P A A S M G D G  
UniRef90\_H8L948 D P M P N L Y F T R D P S A S M G N G  
UniRef90\_V6KQ94 R E F L Q A H A E P T S V R F H V M D L D D P L P N H L F T R D T S A W I Y D G  
UniRef90\_S7VRY6 D A V A E I F E K Y D V T V Y R P E V I K D Y N Q I F S R D I A F V I D D K  
UniRef90\_V9W5W2 H Y P F Y L D P M P N L Y F T R D P A A A I G D G  
UniRef90\_UPI00035DD35F P S M M Q A M H E R T D F I T D P L P N H L F T R D T S C W V Y G G  
UniRef90\_E5SQU9 Q C L R S V I Q E C G K A V S V I E Q S P E L P D M V F S C N S G I V V N E N  
UniRef90\_UPI000474E410 Q A L Y E T L L K L N V N V K L L K P I N G L P D M V F T A N A G F I Y R N Q  
UniRef90\_U6PAN8 K S L K S A I E K E G V E V L T M D Q V P G L S D Q V F V C H S G L I L N N R  
UniRef90\_H5UUE7 E A L R A L L E G A G W E V V V V T P D Q P C P D G V F V I G D A V T S V R G R  
UniRef90\_D9UIS5 E G L V A C Y R A L G H T V D V L D P E P G L A D M V Y A A N G A T V V G G R  
UniRef90\_D4M713 D A L A Q Y R D H G V Q V F Y T P G V E D R P N A V F C R D K L F M T P E G  
UniRef90\_M9R573 A A Y I S A L R L A G C V V N V L P A D E S F P D S V F T E D P A L V L N G T  
UniRef90\_O86131 S H L H E L M E D H Y P F Y L D P M P N L Y F T R D P A A A I G S G  
UniRef90\_U2EFE3 H N F T N L L I E H G V K V Q F L D L V D S P E Q V F T R D I G F T L D D I  
UniRef90\_D5QFR2 E E L V D A L R M A D V N C H F L T P Q P G M P Y E V Y T R D S S Q T T P F G  
UniRef90\_UPI000374D1BB G E I V R M F R D Y L G H S S F I L P L P L P N T L F T R D T T C W Y G G  
UniRef90\_T1CSJ0 Q A V L E I L N K Y Q V E V L R P S L E D Y N Q V F A R D V A F T I D D T  
UniRef90\_I4AIE6 T A F E T V L K K Y G V K V Y R P E I T V D Y N Q I F A R D I G F A I E D K  
UniRef90\_G8NSV4 N R L Q D I L S Q L A P L V L I D P L V P G W P D M V F T A N A G L A H E G T  
UniRef90\_C1KV84 L D P L P N L Y F T R D P A A V I G N G  
UniRef90\_R7M7S7 A D P M P N L V F T R D P F A S I G N G  
UniRef90\_UPI0003A9E24B P L P L P N H L F T R D T S C W Y N G  
UniRef90\_UPI000374D1BB D L L R T T L V D L G H T V H V L D P V A G L P D M V Y A A N G A F S V D G R  
UniRef90\_E1V381 G E I S R M F R E Y L G H S S F I L P P L P N T L F T R D T S C W I Y G G



	90	100	110	120
UniRef90_A9D0R3	A V I L L R M G K P	G R M K E P	D L H E A A Y Q	V A G I P I L G K I S A P G S V E
UniRef90_L8EUX3	V L G A R F A F E E	R R G E A A V H A A	W F R D H G F A E V R E	P Q N V N E A E E
UniRef90_UPI0004756D35	A L V A R F R F P	Q R D A E S	A G Y L D W F A A Q G L S V	R A Q A T R E N E
UniRef90_E4N5U6	V L V A R F R H P	Q R A G E S	A A H R R W F A A A R F G R V S	T A A E V N E G E
UniRef90_K7FHR6			I K K V L L E E L K L R V V E V	T D D G A T L D
UniRef90_D9VLF6	V F G S S F H A A E	R R P E	S A E Y E A W F K A A N G Y E V H	R S E A V C E G E
UniRef90_S3ZE2	V L G A S F H M P	R R Q K E	P E A A A H L E A W F R A A N G F T E V H E	P T H I N E G E
UniRef90_C3YTM0	A F V T R P T N P	D R R K E L K A A V K E	V L E E Q A G N V A E L R D I E A T L D	
UniRef90_D1BC11	V Y S A R F T H P	Q R Q P E	A D V Y L R W F A E N G F E V H S A R E	R N
UniRef90_UPI0003B2F4EB	A Y G A K F T P	Q R Q P E	G P A F M E W F R E Q G F E V V I E	P K N V N E E
UniRef90_G6A1G2	A V M M R P G A K	S R R G E V A P M R G V L S E	K F D N I E D I S E G	F I N E
UniRef90_K1MAJ2	M I L S N L I P	D R A D E Q E A A Y S K I L F E	R V P W R N I N L P E S A H V E	
UniRef90_V6MD72	A I V C R P A I E	A R R G E E R Y V A E Q L A	K L G V P I K T I N G D G F F D	
UniRef90_G2SLX7	Y L L G R F K K E L	R F P E R K A Y E D K M K E L	G L I P K I A E V N D G Y F F E	
UniRef90_UPI00039F385B	A Y G A K F K Y P	Q R S D E A K A H R E F Y E	S R D W T F R A G I L T N E	
UniRef90_UPI0003818342	A I A A A F R H P	Q R Q P E	G A A Y A A W M N S A G L G V S	T I N E G E
UniRef90_H6NRG5	V I L S R F A L Y L	R Q G E T R I A Q E T L G R	I G V P I L G A I H G Q G F M E	
UniRef90_E4N8S0	V L G A R F R H P	E R A A E G P A Y A D W F R E	R G W R V A R R D A E R V N E	
UniRef90_UPI000344C0DB	A V L T R P G E H	S R R E E V R G A E K A V R E	L G L R V A R I E E P G H L E	
UniRef90_W5K9T6				
UniRef90_W6NEW9	V Y L L S K F R H K	E R T G E Q K H Y L Q W F K A	D N G Y Q T L G E D Y P P F F E G	
UniRef90_UPI00047C751E	I I I C T M G K Q	K E R A L E E P E A Q R K S F L	D N G I P I L G T Q E D P E Y T F E G	
UniRef90_E2SG67	A Y G S R F R Y T	E R E A E A P A H A T W L T A	H D F A V I Q P A G H P S E G	
UniRef90_F9S1J2	V S L N P M M M P	A R Q R E T N H L R A I Y H W H Y	F G D E D L P K Y D N A N I E E	
UniRef90_UPI0003B2E281	F I R S N F R H K	Q R Q P E A A F F E S W F Q E N	H Y D V I T L P K V L C F E G E	
UniRef90_W6NED5	F I L M G K F R E P	V R Q Q G E T A K Y E N K M R E	L G I P C V A R C T S G A Y F E E	
UniRef90_UPI00047979EA	A Y G A S F T H P	Q R Q P E A A Y L R R L E E L	G F D C C R E P H F V N E	
UniRef90_E2N3L3	F I K A N I L P	D R Q Q A E F Q A I E Y L V A	Q I L P P E K V I T P A D V H I E	
UniRef90_J3A5P6	A I I L K S G K E	L R Q G E A E V Y K A F L K E	N N I P I L G Q L T G D A L S D	
UniRef90_D6AY39	V L G A R F A H P	E R E A A A H A A W F R A H G	F G E P V E P L H V N E	
UniRef90_F4F496	V Y G A R F K H H	Q R T A E A A A H R A F Y E	S Q G W R F I A P N E T N E	
UniRef90_W9FSH7	V F G S S F H A P	E R Q P E A A A Y A Q W F K E	A G Y E V H P S R S V C E G	
UniRef90_E4TBZ1	M I L S N V I P	D R A D E Q E A Y R K I F E	K V E W R K I I N L P D T A H I E	
UniRef90_DOMJM8	V V L S R M H A P	R R D E E V H L A R F F E	Q Q G Y A L V S I P D E P G S F E	
UniRef90_UPI00047E0E77	I T L N R M H E P	A R R R E T S I F M D Y I F R	Q H D I P T Y Y K R D D I Y S L E	
UniRef90_A6TWW2	L S V N K M K T P	A R D R E T M F L S Y L Y R H H	G T S L W Y D Y Q E H Y P M E	
UniRef90_T1W5Q6	A Y G A L F T H P	E R Q P E G P A F M E W F R E	H G Y E V A E P A N T N E	
UniRef90_B4H4I7	A L I C R S N N P	K R R R E A		
UniRef90_A5CNL8	A Y G A A F Q H P	E R Q P E G P A Y M D W F R E	A G F D V R V P E Q V N E	
UniRef90_V6KZF2	V S V N D M R W E	A R R R E T V H F E A I Y H H H	P D D F H F W S D G P S T I E E	
UniRef90_C3YEF1	A L I T R P K Y E	S R R R E T V V I A E T M R N	L G L K V H V V E S D T A T I E E	
UniRef90_C4RHF0	V Y G A R F K H E	R Q R A E A A A H R A F Y E	R G W H F I A P N E T N E	
UniRef90_H0A5X0	P V L C Q L E R P	Q R R G E Y A G L I D F H A A H	G S R F W K K S S A G T L E E	
UniRef90_X6CVL2	A I I L S M G K A	L R Q A E P G L H E A A Y E R M G	I P I L G R L E S P G Q V E E	
UniRef90_E6U4F5	Y I M G K F R E P	L R F G E S E V F E N E L K K L	G I P C A V R C T E G V I E E	
UniRef90_H2BYB3	F I K A N I L P	D R D Q E I E A I N E H V I D	K I D P E K V I T L P E D A H I E E	
UniRef90_UPI0004162462	F I K S N I L P	D R D Q E I E A I E H V M K Q I	D P A K I I T L P E E A H I E E	
UniRef90_UPI00047B0B08	I S I N R M D R T	A R Q R E T L F M D Y I T N H H	D I P K V W F N R P D R E E H S L E	
UniRef90_M7N7H7	F V K A N I L P	N R E E L D A I Q Y V I D Q I	D P K K V V R P P D E E V H I E	
UniRef90_S0G075	A I L A R P A S T	V R A G E E R W V A R T L G M L	G I P V L K T L T G T A T F E E	
UniRef90_C1L717	A L M C N P Y R C	H R Q G E E V N L I R Y H T L	L K G I K I V E L N T E N A Q V E E	
UniRef90_K2PPJ9	F F K S N I L P	D R E K E L D A I Q Y I I D Q M	D P S K V I R P P G E V H I E E	
UniRef90_R7RMW6	I T L N R M Q T D	A R R R E T L F L K Y I H K Y H	N V P L W Y D R T M P F S I E E	
UniRef90_UPI00034B3E1E	F V K S N I L P	D R E R E L D A I Q Y V I D Q M	N P L K V I R P P E E V H I E E	
UniRef90_R6E2G6	A I L A R P G M A	A R R G E E R Y V A Q T L A K I	G V P I V A T V T G D G V I E E	
UniRef90_M0E770	I V V G K M V E E	T R H G E E R R L S E R M T E L	G A P I Y H T V H G D G G F F E	
UniRef90_UPI0003729750	A I V C R M G A P	I R R R E E A P A T A T L A R L	G M P I L R T I H G T G I M E	
UniRef90_A0R969	L T I L N K M R E	P A R R R E S L F M E Y I L F S	H N V P I W L D R D R Y K F I E E	
UniRef90_I2MXG9	V L G A R F A H R	E R E A E A A V H R D W F G A	A G F T E V H E A A H V N E E	
UniRef90_UPI000225AE85	F L A T N F R H A	R E R Q G E E V E H Y I K W M K E	N D Y P V Y E V P K E Y F F E G	
UniRef90_I3VT24	F M I S S M K S A	A A R K P E T L I M K Y I Y K N	H N I P C W Y D N T Y F H S L E	
UniRef90_J7QVQ2	A V V S R F N A K	E R R P E E R L F C E W F Q A	Q G Y S I A R W P E N I P F F E G	
UniRef90_UPI0003B65B2B	A I L L A R P A S T	V R A G E E R W V A Q T L A N L	G I P I L K T L T G T A T F E E	
UniRef90_UPI000429005B	A L L L K P G K W	L R Q G E P G A T E A Y F S K I	L G I P I L G A I T G E G R V E E	
UniRef90_UPI0003B42066	A Y G A L F T Y P	Q R A P E G P A F M R W F A E	H D F R V V E P E R V N E E	
UniRef90_B7VLP9	V S I N P M A K P	A R Q R E T N H V R A I Y R W H	G E D F I N L N Y D N S T I E E	
UniRef90_UPI00035C26A1	L T V K A N I L P	D R E K E Y L A I Q H V L E Q I	N P E N L I Q L P Q E C H L E E	
UniRef90_Q38YQ6	L T I N K M T F E	A R R R E S M F M E V I M Q H H	G A Q V W R D R D H I D R M E E	
UniRef90_H8L948	M T V N K M T F E	A R R R E S M F T E Y I L K H H	G I E V W L D R E N P S T I E E	
UniRef90_V6KQ94	V A I N A M R L P	A R R Q R E S M F T E A I Y R H H	P L F R H E T F D H P S T I E E	
UniRef90_S7VRY6	F I K A N I L P	D R E R E Y E A I H H V I E K I	G D E N T I L P E E F C H V E E	
UniRef90_V9W5W2	L S I N K M R E P	A R R R E S L F M Q Y I F K D H	H D V P V W L D R D Y E F P I E E	
UniRef90_UPI00035DD35F	V S L N P M A K P	A R R Q R E T N H L R A I Y R W H	L G E E Q R D Y D N A M V E E	
UniRef90_E5SQU9	V Y L S N F R H S	E R Q G E R Q H F K N W F L K E	G Y E V F S D D E Y F F E E	
UniRef90_UPI000474E410	V W Y S A F K S H	E R Q P E S E H F K D W F S Q E	G F E I V N I E Q P P A F F E G	
UniRef90_U6PAN8	V Y L S R F R H R	E R C D E E P H Y R K W F K S	L G L H V F G D D Y P P F F E G	
UniRef90_H5UUE7	V L L A R S S V E	S R R P E R A A I R R T L A A R	H V R A V P V R R P G T L E E	
UniRef90_D9UIS5	V L G A R F A F A	E R E G E A V A H R A W F T A	R G W A D V G V P V I Q V N E G E	
UniRef90_D4M713	A V I C R L G M A	E R R G E E R Y V A Q A C A D L	G I P I V K T I A G D V N I E E	
UniRef90_M9R573	A I I L R P G A A	S R L G E A A A L R P A L L E	N M N D V I D L S T D G Y V D	
UniRef90_O86131	L T I N K M K E P	A R R R E S L F M R Y I L N H H	P I P V W L D R D F K F N I E E	
UniRef90_U2EFE3	L F V S N M A R D	I R Q E E P S N L V D Y F K D E	T I N I H K M S H N A E	
UniRef90_D5QFR2	T V I T R L A R P	E R R A E E G P V R Q F H A S	G E V W K T C T Q G H I E E	
UniRef90_A0A023VMG9	V S L N P M H W T	A R R Q R E T L A T A A I Y R F	H W Y G D P E L D H G L A T L E E	
UniRef90_T1CSJ0	L F V A N L I A	A R R S R E T E A F T D I F S	Q V N G D H L E L L P A P I R V E E	
UniRef90_I4AIE6	F I K P T I L K	D R K E E I K G I Q Y I L D K I	N P Q Q I I S V P E D A R I E E	
UniRef90_G8NSV4	V A L S S F S H V	E R Q G E S Q Y F R E F F S A A	G Y R V V D L P R D R P F F E G	
UniRef90_C1KV84	V T I N R M F Q P	A R R R E S M F I E L I L K H H	P I P V W S G R G E P F S L E E	
UniRef90_R7M7S7	I S L N K M Y S V	T R N R E T I Y A E Y I F E Y H	G T K K Y Y D R Y N D N H I E E	
UniRef90_UPI0003A9E24B	V S I L N P M A K S	A R R Q R E T N N L R A I Y R W H	G D F I K Y F G D E D C H T L E E	
UniRef90_UPI000374D1BB	V Y G A R F R Y P	Q R A R E A A A H R D F Y A W N F	V A P E H V N E E	
UniRef90_E1V381	V S L N P M F W P	A R R Q E T L L T A A I Y R F	H W Y G D P D K D H G A A T L E E	

UniRef90\_A9D0R3 G G D C L W V D K T L A V G R G V R T 140 N Q A G E Q L S K L L A P L G V V S V L G
UniRef90\_L8EUX3 G G D F A V T A S W L L A G R G F R S D P L S H A E A Q E E Y F G R A P V I G L D
UniRef90\_UPI0004756D35 G G D Y L A A G P R W L L A A G N G F R T D D R R A H V E T A E E Y Q V L G L P V V S L T E
UniRef90\_E4N5U6 G G D L L V A G R W L L A A S G F R T T P A A H R E A E E Q V L G L P V V S L T E
UniRef90\_K7FHR6 G S D V L F T G R E F F V G I S K W T N H R G A E M V A D A F R D F A V V S T V L P
UniRef90\_D9VLF6 E G D L V P A G R F V L A G T G F R T E R A A H R E V A Q E F L G R P P V I G L E D
UniRef90\_S3ZE2 G G D F A V T S S Y V L A G R G F R A S P L S H G E A Q E V F G R P P V I G L E D
UniRef90\_C3YTM0 G R D V L F T G R E F F V R V T E S N N D A G A R L L A R V F P D F Q V V T S L Y E
UniRef90\_D1BC1 G G D L L T V G P L T L A G T G F R S D T A A H A E V A A G L W G R E V V T L E
UniRef90\_UPI0003B2F4EB G G D F L L V G E R T L L A G T G F R S A T D S H R E V A D L F G R E V V S T L V
UniRef90\_G6A1G2 A G D I L T T P K E I L V G L S S R T N V E G A E Q L K N L L Q R Y G F I L V R V
UniRef90\_K1MAJ2 G G D V I V W N D F I F I G T C F R T N E Y A G A Q V L K E Y F P K K R I I T V P
UniRef90\_V6MD72 G A C L M W V D R T V I I G T G A R N E A G A A Q V L K E A E L R N G V I R F P
UniRef90\_G2SLX7 G G D F A F L R E N V I V G M L D R T D E K G F E T I K N A L E G Y E V H P V P
UniRef90\_UPI00039F385B G G D F A Y A N G L I L A G Y G F R T D V T A H A E A Q E A L Q R P V V S L K E
UniRef90\_UPI0003818342 G G D F L L V G D R L L A G T G F R T D Q Q T H R Q V A Q L L T G L G R V V S L E
UniRef90\_H6NRG5 G G S F L L D S R T A A V G R S E R V N D A G E Q L R Q L L R I Q E V V E L T T
UniRef90\_E4N8S0 G G D L L V A G E R I L A G T G F R T D A G A H A E A A E F L G R E V V T L R A
UniRef90\_UPI000344C0DB G G D V L Q V G T T V Y V G L G G R T D A G G A E Q L E R L L A G R E V V C T V A
UniRef90\_W5K9T6 L L S V G R E F F V G L S K R T N R R G A E Q L A D T F Q D Y A V V S T V P
UniRef90\_W6NEW9 G G D A V F D Q K T L W A G F G Y R S A E E V Y E K V R E L L G H P Q D V V T L
UniRef90\_UPI00047C751E G G D V A W L N N T L A V G L T Y R S A N L D G L E Q L R T L L N P F Q G V S V I G
UniRef90\_E2SG67 E G D F L V L A H A V L A G S G F R T D L A A H V E A A A V L D R P V V S L E
UniRef90\_F9S1J2 G G D V L V I G K G V L G M S E R T T A Q G V E N L A A Q L F R E H N V I V V E
UniRef90\_UPI0003B2E281 E S D A F V A G N Y L F C G Y H F R S D L Q A H H L V A E L V K E M L S V A L T
UniRef90\_W6NED5 G G D F W F L D E T L A Q G V I A R T D F D G A E N I K R Q V S E L G Y N M I M
UniRef90\_UPI00047979EA G G D L V V D D V L L A G H G T A R T D P R A H Q E I L R D Q I F G R E V V S L R
UniRef90\_E2N3L3 G G D V M P W N D H I F I G V T A R T N M A G V A F I Q Q L F P H K K V K E F D
UniRef90\_J3A5P6 G G D L V W L D K T L A I G L G F R T N E A A I A Q A Q I T E M V K D F E I I V V Q
UniRef90\_D6AY39 G G D F A V T R N W L L A G R G F R T S P L A H A Q A Q E V L R R P V I G L D R
UniRef90\_F4F496 G G D F A Y L P E A I L A G Y G F R T E L A A H A E A Q E A L G R P V I G L R D
UniRef90\_W9FSH7 E G D L V P A G R Y V L A G T G F R T H S S A H R E A Q E F F G R P V I G L D P
UniRef90\_E4TBZ1 G G D V I V W N D F I F I G T C F R T N E Y A G A Q V L K E Y F P K K R I L R V L
UniRef90\_DOMJM8 G G D A L W H P H I W G Y G F R T D Q A V Y A W L A R E L G V R V V A L H
UniRef90\_UPI00047E0E77 G G D E L V L S E E V A I G V S A R T S A Q G I E K L A R E M F S R A V E I P K
UniRef90\_A6TWW2 G G D L L V L S D E V V A G C S E R T T A R G L E L L A Q R L F A K G V I Q I L
UniRef90\_T1W5Q6 G G D F L L V G D V I L A G T G F R S T A S N S H E I L G A L Y G R E V V T L N
UniRef90\_B4H4I7 G G D F L L V G D V I L A G T G F R S D S T S H A E V A R A R L F G R E V V T L R D
UniRef90\_A5CNL8 G G D V L V I G N T V L L V G M S E R T T P Q A V E T L A R G L F D A G I V A L D
UniRef90\_V6KZF2 G G D V M F T G K E I F C G D S M R S N T E G F Q V L Q E T F P D F P C H Q I K
UniRef90\_C3YEF1 G G D F A Y L P D A V L A G H G F R T E L P A H A E A Q E A L G R P V V S L R
UniRef90\_C4RHF0 G G D F H I L R P G L V I G H S G R T D E A G A E Q L A G W L E G W E V R L E P
UniRef90\_H0A5X0 G G D C V W V D T T L A V G R G V R T N Q D G E Q L A N L L S P K G L S V F G
UniRef90\_X6CVL2 G G D F W F D N K T L A I G N V A R T D E A G F E S L R R G L E P N K G Y T L M R S
UniRef90\_E6U4F5 G G D V M P Y K D Y I L V G I T A R T N M K A V E A L Q E L F P N K K V I S V A
UniRef90\_H2BYB3 G G D V M P M G D H I F V G I T A R T N Q A V A L V K L F P N K K V I S V A
UniRef90\_UPI0004162462 G G D I L V L N D V V A I G I S D R T S R K A I E E I A R S L F S S R Q V V A I E
UniRef90\_UPI00047B0B08 G G D V M L W N V H I F I G I T A R T N M E G V Q Y I K D L F P H K I V K E F D
UniRef90\_M7N7H7 G A D L M W L D P T A V I G R G L R T N Q A A L D Q I T S L L S E M D L T T L A
UniRef90\_S0G075 G S D V L E T G Q E I V G I T A R T N M A G A H A V A R A F P E Y A T S E V K
UniRef90\_C1L717 G G D L M L W G E H I F I G I T A R T N M Q G V N Y I K E M F P G K I V K E F D
UniRef90\_K2PPJ9 G G D E L V L S D K V V I G C S E R T S P E A I E L V A K N L F E L V F E I P K
UniRef90\_R7RMW6 G G D V M L W N D H V F I G I T A R T N M H G V E Y L R K Y M F P N K G V K E F D
UniRef90\_UPI00034B3E1E G A C G M W V D R H T A I S T G S R C N A S G Y A Q V V Q L E R M G V E V Y H
UniRef90\_R6E2G6 A G M V W I D R D T V A I G R S Q T T N A A G R Q V R T V L E T F G V E V I E
UniRef90\_M0E770 G G S F F I T P K V A I V G I S R V N S A G A D Q V E A V L R V Q G V E L L R
UniRef90\_UPI0003729750 G G D E L I L N E T I A I G V S A R T S A K A E R L A K N L F S R A I E I P K
UniRef90\_A0R969 G G D F A V T A S Y V L A G R G F R S S P L S H G E A Q E F F G R P V I G L D
UniRef90\_I2MXG9 L G D V L Y F D E D I I E G Y G P R S S P E A I D Y R K E T Y P E L K L K G I K
UniRef90\_UPI000225AE85 G G D V L V S D K V I V G C G E R T T P Q A I E R L A R N L F E G N V Q I P
UniRef90\_I3VT24 A G D A L L D H G I V W C G Y G W R S G E E A P E H L Q K I F A L R A V L K L V
UniRef90\_J7QVQ2 G A D L M W D P E T A V I G R G L R T N S A G I D Q I S S L L N E L G I T T L A
UniRef90\_UPI0003B65B2B G G D V V W L D R T L A V G R G Y R T N D E G L R Q L R E I V D E F I V V Q L P
UniRef90\_UPI000429005B G G D I L L V G S R I L A G T G F R S S I E S H D E L R R V F D R E V V S L T
UniRef90\_UPI0003B42066 G G D V L V L G R G V L I G M S E R T T A Q G V E H L A S S L F K H G V I A M Q
UniRef90\_B7VLP9 G G D V M P W N D H I F I G I T A R T N M A V I A I Q E L F P H K T V K A F E
UniRef90\_UPI00035C26A1 G G D E L T L S D K V L I G I S Q R T S A Q S I E E L A K V L F A L A I K I P H
UniRef90\_Q38YQ6 G G D E L L I L S D K V V V G I S Q R T N A K A L E K L A R H L F A K N V L A I K
UniRef90\_H8L948 G G D V L V I G N G V V V G M S E R T T P Q A V E M L A H K L F A R T I V A L D
UniRef90\_S6KQ94 G G D V M P W N D F V F I G I T A R T N M D A V I A I Q E L F P H K T V K A F E
UniRef90\_V7VRY6 G G D E L L L N D E V I I G V S V R T S A K A I E R L A K N L F S R A I E I P K
UniRef90\_V9W5W2 G G D V L V I G N G V V V G M S E R T T P Q G V E L A R S L F K H G V I A I N
UniRef90\_UPI00035DD35F G G D A S F S S K D L W A G Y G F R S E K A V Y D N V C K L G D F R K V L E L V
UniRef90\_E5SQU9 A G D T L V F N N Y L A A G Y G F R S D I S V Y E H P F E K Q L N L V E L V
UniRef90\_UPI000474E410 G C D A V F D S K T L W A G Y P R S D R V Y E K L R V L G G F D I V E L V
UniRef90\_U6PAN8 G G D L V L V D D T L Y V G V G S R T N R A G F A Q V V R F P A L R V V P V P
UniRef90\_H5UUE7 G A N A M W D R R C V I S L S V R A N R S G Y D Q M A S E L T R Q G V T D V I
UniRef90\_D4M713 G G D I L C T D D R V L L S A R T N L Q G A Q D L R P I V E G L G Y K L V V
UniRef90\_M9R573 G G D E L V L N E T V A I G V S E R T T A Q A G I E R L V R N L F Q R A V E I P K
UniRef90\_O86131 G G D V F V H Q D K V F V G V S K R T N M N G I N E L Q D V L E D Q V I P V K
UniRef90\_U2EFE3 G G D I H F I R P G L L V G V S G R T D E V G A R Q F T D W F E G W T C R L I R
UniRef90\_D5QFR2 G G D V M P L G K G V L I G M G E R S R Q A I G Q L A Q S L F R H G V I V A G
UniRef90\_A0A023VWMG9 G G D V L L Y D D L F V G T T A R T N R Y A V D F L R D R F P H K T I V P I V
UniRef90\_T1CSJ0 G G D V M P W K N H I F V G Y S E R T N K A G L D F L A K E F P S K I V K G F Q
UniRef90\_I4AIE6 E G D A L F D G T R L W V G F G R T A Q A S H S V L A D L W D E V E G L H
UniRef90\_G8NSV4 G G D E L V L N E T V L V G V S E R T D A R A V E R L A E S L F S R R V L A V E
UniRef90\_C1KV84 G G D I L I L S D H V I I G I S Q R T Q A E S I E L I A K N I F R L A F N I P N
UniRef90\_R7M7S7 G G D V L V I G R G V L I G M S E R T T P Q G V E F L A R A L F H H R V I A L E
UniRef90\_UPI0003A9E24B G G D F A Y L G G V I L A G H G F R T E P A A H A E A Q E A L G R P V V S L R
UniRef90\_UPI000374D1BB G G D V M P I G N G V L I G M G E R S S R Q A T G Q L A Q N L F E S G V E R I I
UniRef90\_E1V381

UniRef90\_A9D0R3 Y E A C L H L M S V M S P L D E K L A L V F A P M L P V G F W Q L L K D R  
UniRef90\_L8EUX3 L V D P Y H L D T A L C V L D D T T V M Y Y P G A F T S A G S Q R A V L A R L F P D  
UniRef90\_UPI0004756D35 L V D F Y H L D T A L A A L D D E R T T V M Y Y P G A F T P P G S Q A I L R E L F P D  
UniRef90\_E4N5U6 L T D P Y H L D T A L A V L D D S R V M Y H P D E A F A P P T R R I L L R R L  
UniRef90\_K7FHR6 M V G S S H L K S F C S M A G P D T V A I G S S E A A K K A M R T M E Q L T D H  
UniRef90\_D9VLF6 L V D F Y H L D T A L F F L G E E E G V G G A A A G G N V A Y P A A F S P G D  
UniRef90\_S3ZLE2 L V D P Y H L D T A L A V L D D D D V M Y Y P G A A F S P G S Q A A L R R L F P D  
UniRef90\_C3YTM0 I Q G D R P L Q S Y L S M A G P D T I A A G E G E D A Q R V I E Q I I E K A E Y  
UniRef90\_D1BC1 L V D F Y H L D T A L T V L E P G V V A Y Y P S A F D S A E S R A R L S D L F P D  
UniRef90\_UPI0003B2F4EB N P N F Y H L D T A I S V L D P L T I A Y L P S A F D A S R R T L E R L Y P G  
UniRef90\_G6A1G2 F P E V L H F K T D C S L I D D H C L L S T K R L A A S G C F E D Y  
UniRef90\_K1MAJ2 F E G L L H L D C T F N P L G K D K C I I Y K D G F V D E S D Y R L I L D F F T  
UniRef90\_V6MD72 I P G H A H I D G L L N I A D K R T V V L F P W Q V P Y D V V N P L L D K D F T  
UniRef90\_G2SLX7 D P R Y L H L D M C F N L V D E N L A V A Y L D G L P D D F K A L L K R L E  
UniRef90\_UPI00039F385B L V D F Y H L D T A L A A L D D D D N I T Y Y P Q A F S E A S Q R V L R Q L F P D  
UniRef90\_UPI0003818342 L V D P Y H L D T A L G A L D D D D T I T Y F P D A F S A D A Q R V L F A D  
UniRef90\_H6NRG5 I S D K I H L D E A F L M L D T D K A L V N P R L L P H W F L K A L H E R  
UniRef90\_E4N8S0 L V D P Y H L D T A L A V L S D T E I M Y H P P A F D D A S R A V L E R L  
UniRef90\_UPI000344C0DB L G R V L H L K S A V T A L A D G T L V G L P E L V E T A A L P A V R  
UniRef90\_W5K9T6 V L D T L H L K S F C S M A G P G L I A I G S S E A A Q K A L K T M Q Q M S D H  
UniRef90\_W6NEW9 H P N F Y H L D T C F A P V D Q T T A L W Y P P A F S E D T K H E L L R R M P D  
UniRef90\_UPI00047C751E V E D V F H L M S I F S P V D K D L A V V Y S P L M P I R F R N L D L E M  
UniRef90\_E2SG67 L V D F Y H L D T A L A V L D D G H G E A P P D Y F P G A F S R H S R R T L R E D  
UniRef90\_F9S1J2 L P K C M H L D T V M T H M D I D T F S M Y P E V M R K D L N T W V L T P E G D  
UniRef90\_UPI0003B2E281 D E R F Y H L D T C F C P L S D K T A L Y Y G K G F N E H D E R N L R K H  
UniRef90\_W6NED5 V P Q N L H L D M C F N I V A E K V A V V C K E A L P Y N F L K M L E K R  
UniRef90\_UPI00047979EA L V D P Y H L D T A M S V A H S V A J L P D A F D R G P S Q A E I R R R F  
UniRef90\_E2N3L3 L D N A L H L D C C F Q P V G K D K G I Y K G G F R S E A D Y Q Y L V D L F G  
UniRef90\_J3A5P6 L P E C L H L M S I T S M V D H D L A V V Y S K L M P V F F R Q L L I D R  
UniRef90\_D6AY39 L V D P Y H L D T A L A V L D D D D E I M Y Y P D A F S P G S R A V L R R L F P D  
UniRef90\_F4F496 L V D F Y H L D V A L A S I D D G N I V Y Y P G A F S A A G S Q K V L A Q L F P D  
UniRef90\_W9FSH7 L V D F Y H L D T A L F D L D A G N I A Y Y P A A F S A A G S R E V L R Y L  
UniRef90\_E4TBZ1 Y Q G L H L D T C T F N P V L G K D K C I I Y K D G F V D E S D Y H L I L D I F G  
UniRef90\_DOMJM8 L P D F Y H L D T C L S L D A G T A L Y V P A A F D E A G R A L H R L I F  
UniRef90\_UPI00047E0E77 I R A F M H L D T V F T M I D Y D K F T Y H P A I E D R D G S M K I Y I L E Q T  
UniRef90\_A6TWW2 F T R A M H L D T V F T M V D H D K F T I Y P G E N A V R V Y E L T Q G V T T P  
UniRef90\_T1W5Q6 L V D F Y H L D T A I S V L D P D T S A N I A Y L P S A F D T A S R L E L E K R  
UniRef90\_B4H4I7 V N G S K R L K Y Y V T M A G P D V L C V S K S A P C Q E I V K R M E R E A S F  
UniRef90\_A5CNL8 L P S F Y H L D T A L A V L D D D T I L A Y L P S A F D A D S L D E I E R R F P  
UniRef90\_V6KZF2 M P K F M H L D T V M T M V D H T F T Q Y E G L G M L R S Y T I E P G G Q D  
UniRef90\_C3YEF1 I R P P P H L L G T C G Y A A P G V I A V F D G D D G M F T W D Y I S E V A H Q  
UniRef90\_C4RHF0 L V D F Y H L D V A L A S I D D G N I A Y Y P G A F S A A S Q R V L A Q L F P D  
UniRef90\_H0A5X0 F D E F L H L D V L F C M A A P G L A V A C T D V L E P D F L A W L K A H  
UniRef90\_X6CVL2 F E A C L H L M S V I S P L A D D L A L V Y A P L L P A A F Y Q M L R A R R  
UniRef90\_E6U4F5 V P A N L H L D M C F N I A A E R V A V V C K D A L L P E E F F L Q E L R R R  
UniRef90\_H2BYB3 L R K S L H L D C C F Q P V G K D K A I I Y K G G F L I E E E Y N W L V N Y F G  
UniRef90\_UPI0004162462 K D N A L H L D C C F Q P V G K N K A I I Y K G G F L I E E E Y N W L V N Y F G  
UniRef90\_UPI00047B0B08 I P K F M H L D T V F T M V D H D K F T I H P G I Q K P R E D G K M D I Y I E P E  
UniRef90\_M7N7H7 L V K A L H L D C C F Q P V G K N K G I I Y K S G F R E E S D Y M Y L V D L F G  
UniRef90\_S0G075 F D G T M H F M G M L R I V D K D L A F V W P R R T P Y A L V T A L K D R  
UniRef90\_C1L717 L H T A F R L K D A V G V A G I N V L A V G E S E A A K Q L L K E I G R V T S H  
UniRef90\_K2PPL9 L Q K A L H L D C C F Q P V G K D K A I I H K E G F R D L K D Y S Y L V N I F G  
UniRef90\_R7RMW6 C R A F M H L D T V F T M V D Y D K F T I H P A I Q G P L S V Y E V T K G A N N  
UniRef90\_UPI00034B3E1E L V K A L H L D C C F Q P V G K D K G I I Y K R G F R E E A D Y L Y L V N L F G  
UniRef90\_R6E2G6 M Q Q P Y H L D G L M N A I S D D M V L V H A Q V P Y D I D M L K K K  
UniRef90\_M0E770 V P Q Q T H L A L V F S M V A P D L A L V Y S E A V P P E F L D M L H D R  
UniRef90\_UPI0003729750 V H L T M H L D G A F V M I D V D T A L I N P V Q L P F W F L E K L K E M  
UniRef90\_A0R969 C R A F M H L D T V F T M V D Y D K F T I H P A I Q G P K G N M N I Y I L E K E M  
UniRef90\_I2MXG9 L P R Y Y H L D T A L C V L D D D E I M Y Y P D A F S P G S R A V L A R L F P D  
UniRef90\_UPI000225AE85 D E S L Y H L G L A I S Y I D K D T L L Y Y P D A F T E E S L K F L R D N  
UniRef90\_I3VT24 V N R S M H L D T V F T M V D K E R F V F Y P G I K K D L R V F S I I K D D K  
UniRef90\_J7QVQ2 D P R F Y H L D T C F C P L S G G W L M Y Y P A A F D I A S Q E A I T R A V A P V  
UniRef90\_UPI0003B65B2B F D G T M H F M G M L R M V K K D L A F V W P R R T P H G L V L A L R E R  
UniRef90\_UPI000429005B H D E C L H L M S I S L V D R D L A V V Y S E L M P V S F R E L L M E R  
UniRef90\_UPI0003B42066 L V D P Y H L D T A L A V L D P A N I A Y V P A A F D E K S R R T L E R L Y P  
UniRef90\_B7VLP9 L P K C M H L D T V M T H M D E D T F S V Y P E V V S K D V Q C W N L K V K E E  
UniRef90\_UPI00035C26A1 L R K S L H L D C C F Q P V I G K D K A I L H K N G F L I E S E Y W L N F F G  
UniRef90\_Q38YQ6 N H A M M H L D T V F T M I D Y D K F T I H P G I Q G A G M V D T Y I L E P G  
UniRef90\_H8L948 I P N N M H L D T V F T M V D H D K F T I H P A I Q S K D G K M D V F T I E P D  
UniRef90\_S6KQ94 M P K F M H L D T V M T M V D G D T F T Q Y A G L G M L R S Y T I E P G V G E K  
UniRef90\_S7VRY6 L R K A L H L D C C F Q P I G K D K A I L H K N G F L I E R E Y E W L N F F G  
UniRef90\_V9W5W2 C R A F M H L D T V F T M V D Y G K F T I H P A I Q R P K G M N I F L E K G  
UniRef90\_UPI00035DD35F L P K C M H L D T V M T H M D I D T F S V Y P E V M R K D L Q C W R L A D A G K  
UniRef90\_E5SQU9 N E R F Y H M D V C F C A L S S D L A L W Y P K A F S E E T Q K R M K E  
UniRef90\_UPI000474E410 N P Y F Y H L D T C F C P L S S S A L A L W Y P D A F S Q S Q R V M R K M G  
UniRef90\_U6PAN8 H P N F Y H L D T C F C P L S S Q T A A I W Y P A F S E R S K R K I M R R L P H  
UniRef90\_H5UUE7 L H K S V Q L D S G V S A L P C G T V L G Y P P L V D D P S V F A  
UniRef90\_D9UIS5 D P R F Y H L D T A L A V L S R E E V V Y F P G A F S P G S R A V L A A L F P D  
UniRef90\_D4M713 P M G H C H L D G L L N I A S E D T V L H A M Q V P Y E V V D R L K K G F K  
UniRef90\_M9R573 L P E T L H F K T E S S L I D A Q T V L A T P A L A T S G A F N G L  
UniRef90\_O86131 S R A F M H L D T V F T M V D R D Q F T I H P A I Q G P E G D M R L F V L E R G  
UniRef90\_U2EFE3 F V E Q L H L D C V F N L D Q D T C I I T D Y V Y N P E V I E Q H  
UniRef90\_D5QFR2 F P H F L H L D V I F T M I N D D T A I A V T D V L P D A D L A W L R A Q  
UniRef90\_A0A023VMG9 L P R A M H L D T V F S F C D R D L V T I F P E V V H G I T A F S L R P D E C  
UniRef90\_T1CSJ0 L K K V L H L D C C F Q P V I G T G K A I Y Y P K G F A D Q E S K G V I E E I F G  
UniRef90\_I4AIE6 L N K S L H L D C C F Q P I G Q N Q A I I Y K E G F K F E E D Y N Y L K D Y F G  
UniRef90\_G8NSV4 L V D F Y H L D T C F A P L E D G S L L Y Y P A A F D A A S L R K I H E F Y S P  
UniRef90\_C1KV84 I P E F M H L D T V F T M V N F A Q F T I H P A I Q N Q G E L N I Y I L E D F  
UniRef90\_R7M7S7 S R A F M H L D T V F T Q I D N D K F T Y H P G I M D T L Q V F E I T E G S N N  
UniRef90\_UPI0003A9E24B L P K C M H L D T V M T H I D V D T F S V Y P E I V S K E T Q C W T L D D G H  
UniRef90\_UPI000374D1BB L V D F Y H L D T A L A A L D D H N I T Y Y P G A F S Q S Q R V L A Q L F P D  
UniRef90\_E1V381 V A G A M H L D T V F S F C D Y D L V T I Y P E V V Q S I V P F S L R P D E S

UniRef90\_A9D0R3 G Y T L V E A P R D E A S N G L N L N V L A P G N V L M V 230 E G F P K T R A 240  
UniRef90\_L8EUX3 A L I A T S R A D A E A F G L N A V S D G R H V L L P Q A A A S N L T V G  
UniRef90\_UPI0004756D35 A L I A T S E D A E A F G L N A V S D G R H V L L M P E G A A S P A A S R N L T A  
UniRef90\_E4N5U6 Y P D A L I A D P A D A E A F G L N A V S D G R H V L L P A A A S R N L T A  
UniRef90\_K7FHR6 H Y D T L T V P D D P A G N C I Y V L R L G P K G S A L L H R S P E E F P N S L L Q  
UniRef90\_D9VLF6 S R E V L V I A T E E P D A L A F G L N S V S D G R N V F V A P Q A P A A V G L F E P  
UniRef90\_S3ZE2 A L I A E E P D A V A L G L N A V S D G H V L L P Q A A V G L F E P  
UniRef90\_C3YTM0 K Y K V L C L P E D S A V D C V F L V N G S L V L H R T Q E E I P K S T E  
UniRef90\_D1BC1 A V H A V I E S Q D A T V L G L N A V S D G L H V L L N P A A T R L Q  
UniRef90\_UPI0003B2F4EB A V I I V S E E Q D S V L G L N S I S D G L N V V I A S R A K G F E  
UniRef90\_G6A1G2 T V L L T P E G E E E A A N M I R Y N D H I I M A E G F D K T E S  
UniRef90\_K1MAJ2 E E N C F H V D N E E M F A M F P N I F S I S P E I I V S D K A G F T R M N N  
UniRef90\_V6MD72 V I E A T D P Y E V K E T F C T N F V A L E P G K I V L P A G N P Q T K E  
UniRef90\_G2SLX7 I E V I E V P E D A I F H H G C N L E S L G D H R V L S L K Q N E E V N Q K  
UniRef90\_UPI00039F385B A L I A D E E D A E A F G L N L V S D G L N V F L N T E S V I G M A T K V  
UniRef90\_UPI0003818342 L Y P T A I R A N D A D A V A L G L N V S D G L N V V M T D A A P H L A  
UniRef90\_H6NRG5 N I T M L A V D P E D P P L T I N A L A V A P G K V L F S S E G C P T A  
UniRef90\_E4N8S0 Y P D A L L A D A D D A R V F G L N A V S D G A N V V L P E A A V H L A  
UniRef90\_UPI000344C0DB P V A E E A G A H V L P L G G S E V L V S A A A H E T V H  
UniRef90\_W5K9T6 K Y D K L T V P D D L A A N C I Y M N L P D K G H V L I H C T P E Q F P E S A K  
UniRef90\_W6NEW9 S I A I S D A E A N A F M C N A I T V R D T V L S P I G M E Q A T R  
UniRef90\_UPI00047C751E D Y K L V E V P E E E F D S M G C N V L A I A P R K C V M V A G N P K T R Q  
UniRef90\_E2SG67 L F P D A L L C S E A E A L S F G L N A V G D G R H V F L P A D A T E L A  
UniRef90\_F9S1J2 G Q V H V E T A T D L M S D A L G L N S I K I T T V K P G V V I G Y E R N V Y  
UniRef90\_UPI0003B2E281 I P N S I L V R I D E A L Q D A L C N A I V V G N K V I T P A K G C P Q T T E  
UniRef90\_W6NED5 K F T L I D V P Q E G V F R H Y C N L Q S L G N D R V I T F N D N K N  
UniRef90\_UPI00047979EA P D A I E V G A D E A G V L G L N S F G D G S S I T D R A P T R F A A  
UniRef90\_E2N3L3 K E N L I E V E R E E M Y N M C S N V F S I S P E V V V S E K N F T R L N  
UniRef90\_J3A5P6 G T I Q L I E V P D H E Y D N L G S N V L A L A P R V C M V V I S G N P I T K Q  
UniRef90\_D6AY39 A L I A R E R D A A V L G L N A V S D G A R V F L P Q A A Q G L F G P  
UniRef90\_F4F496 A V I A E A E D V L A F G L N V S D G A N V V L N S E A T R L A  
UniRef90\_W9FSH7 Y P D A V I A T E E D A L A F G L N S L S D G R H V F V A P Q A Q G  
UniRef90\_E4TBZ1 K E N C F E V T P E E M F A M L P N I F S I S P E V V V S D K A G F T R M N N  
UniRef90\_DOMJM8 N L I E V P E R E A R E L L A C N A H C P D G R H V L I Q R G C T E T V A  
UniRef90\_UPI00047E0E77 G S D H L Q I T E E T L K E V L N L D I P C G G G C P I A S A R E Q W N D G S N  
UniRef90\_A6TWW2 K V T P K E S L I E K A L M E V L H L P A V S G G G D E I T A A R E Q W N D S T N  
UniRef90\_T1W5Q6 F P D A I L V S E E D G A L L G L N S I S D G Y N V V I A N R A L G F E  
UniRef90\_B4H417 T Y Q K L T L P E E T A A N M L Y I N G T I V H R S P T E I P D A Y K  
UniRef90\_A5CNL8 D A V E V S E Q D A S A L G L N S Y S D G V N V V I A E K A V G F E  
UniRef90\_V6KZF2 L K V T D H P P E H A I A A L G L N S I R D G C N V L A V E P G E R N V T N  
UniRef90\_C3YEF1 K Y K P L W L P D H F A N N C M Y I N G T I L H C T K E T K P E S Y E  
UniRef90\_C4RHF0 A V I V A D S D A L A F G L N L V S D G A N V V L N S E A S R L A  
UniRef90\_H0A5X0 G I R C V P V S Y R D V M A L G L N I L A L G A G R V V S A R G S T A L N A A  
UniRef90\_X6CVL2 G V K L V E A G E F F A S N G L S L N V L P T A P R Q V I A V A G F P R T A A  
UniRef90\_E6U4F5 K F E L I N V A Q E E V F L H H C N L E C L G S G R V M S F H S N A E V N A K  
UniRef90\_H2BYB3 K E N I F E I T R D E M Y H M N S N I F S I S E D V V I S E K N F T R L N  
UniRef90\_UPI0004162462 K K N V Y E I T R D E M Y H M N S N I F S I S E D V V I S E K G F T R L N  
UniRef90\_UPI00047B0B08 E E G D I R I T H R D D L F G V L K D V L H L K D L V L I P C G G G D P I A A A  
UniRef90\_M7N7H7 K E N L F H I T R E E M Y H M N S N V F S I A E D V V S E K N F T R L N  
UniRef90\_S0G075 G F Q V R S L P E A E A L S R M A F N F V V L G P K K I M L P A G N P K T V A  
UniRef90\_C1L717 T Y K V I T L P E D H A A N V L Y I N P H L L H L S S Q M I P K S I G L  
UniRef90\_K2PPJ9 K E N L F H I D K D E M Y H M N S N I F S I A P D V V S S E K N F T R L N  
UniRef90\_R7RMW6 K F K H N T S P E E I L K D A L N L D S V N D G S N T L A I A P G T Y E R N Y V  
UniRef90\_UPI00034B3E1E K E N L I E I E R D E M Y N M F S N V F S I D D N V V S E K N F T R L N  
UniRef90\_R6E2G6 G Y K L L E A P S R E V R E T F G I N F V T L E P G H I V M P A G N P R T Q E  
UniRef90\_M0E770 G I E T I S V P M R E Q R N A T S T I V V D P G T V L L P S G N H R V R A  
UniRef90\_UPI0003729750 R L R T I E V H P E D P V W T I N C L A V A P G R V L M A D A V S P Y T A E  
UniRef90\_A0R969 P D E E L K I V H E A L K E V L G L S I P C G G D V I A S A R E Q W N D V S N  
UniRef90\_I2MXG9 A L I V A E K D A A A L G L N A V S D G R H V L L P Q A A D N C T E E L E  
UniRef90\_UPI000225AE85 F E R I Q E C S E K D A K E Y F V C N N I P I G N N I L M S A R E Q W N D S T N  
UniRef90\_I3VT24 F G S I Q E K D L Q D A L K S A L N I P T G G F N A I T S A R E Q W N D S T N  
UniRef90\_J7QVQ2 E K R I E V G E K D A L S F A C N A V E V A G R V F L N A C S D D L R S R  
UniRef90\_UPI0003B65B2B G V E V L P L P D E A V A N M A F N F V L G P G R I M L G D K N P K S I A  
UniRef90\_UPI000429005B G I K L I E V P K E A Y D T L G S N V L A L A P R K C L M L T G N R E T K  
UniRef90\_UPI0003B42066 D A I I V S E E D A G I L G L N S I S D G Y N I V I A K R A V G F E  
UniRef90\_B7VLP9 G Y F V T A I E K A L G V D K L N L I T T G G D N T V K P G V V I G Y E G N T Y  
UniRef90\_UPI00035C26A1 K E N V F E I T K D E M Y H M N S N V F S I S E D V V I S E K S F T R L N  
UniRef90\_Q38YQ6 N N D E I K I T H Q T D L E K L T L I P C G G G D A V V A P R E Q T Y D R N Y V  
UniRef90\_H8L948 G D D I T H S D E T M K A A L G L D D L N D G S N T L A I A P G T Y N R N Y V  
UniRef90\_V6KQ94 E L K V T D H P P E H M A A A L G L G W D D G C N V L A V E P G E R N S T N  
UniRef90\_S7VRY6 K E N V F E I T K E E M Y S M N S N I F S I S E D V I S E K N F T R L N  
UniRef90\_V9W5W2 A D E E S A L K E A L S L D E L T L I P C G G G D A I A S A R E Q W N D G S N  
UniRef90\_UPI00035DD35F G D V K V T E V D E K A L N I P Q L N I T T G G T A R P G V V I G Y E G N V Y  
UniRef90\_E5SQU9 E I E L I E V S D A D A N N F A C N A L A V D K T I I L P T N C T D T R K  
UniRef90\_UPI000474E410 Q L I D V P E D E A R R F A C N A V V I G Q H V L P S D C P V T Y R  
UniRef90\_U6PAN8 S V A V S E V E A N A F V C N S I A I R N T V L A P I G V T K V T R  
UniRef90\_H5UUE7 E F V P V P D R T G A Q V F S L G D G R V L V S A T A P G S A E T V A  
UniRef90\_D9UIS5 A L L A S E A D A L V L G L N A V S D G R H V V L P R E A R G L F  
UniRef90\_D4M713 V L E T P S L T E T K Y G Y A T N F V A I D N G H V V T S N Q A P Q A V E  
UniRef90\_M9R573 N V I E T A V G E D A A A N A I R V N A D V F L S A G Y P K T A D  
UniRef90\_O86131 K T D E I H T T E E H D V N L I A F C N D G S N T L A I A P G V V V T Y D R N Y I  
UniRef90\_U2EFE3 F K N V V R F K G E D V D Y L A T N Y V H I G D G R M V C T N R M A E  
UniRef90\_D5QFR2 G I R L L S V T Y K E A M E G M G C N V L A L G K G R V I S P H H S T R I N  
UniRef90\_A0A023VMG9 K P D G I D V R R E Q A A E A L G L P A L R D G N N V V A L E P G G Y D R L N N  
UniRef90\_T1CSJ0 K S N L F A V T E E A Y M N T N I F S I S P S V I S E Q R F S R L N N  
UniRef90\_I4AIE6 E E N L I H I S R D E M Y E M N S N V F S I S P K I V V V E N N F T R L I A  
UniRef90\_G8NSV4 G Q R I A V D E M D A L Q F A C N A V N I G R T L V L H R V S N H L E  
UniRef90\_C1KV84 Q R V I A E V L D E P E I L D F I P C G G W N D G A N T L A I A P G E Y D R N Q N  
UniRef90\_R7M7S7 K I N V K E I N E N Y L D R A V T L I P C G G G D K I I S E R E Q W Y D R N N V  
UniRef90\_UPI0003A9E24B G G I I T T G G D Q F E A E R E Q W N D A N V L T I R P G V V I G Y E R N I W  
UniRef90\_UPI000374D1BB A V I L A D R A D A E A F G L N V S D G R N V L N T E A T A M A H K V  
UniRef90\_E1V381 K P G G I D L R H E P G A E A L G L E I L R D G N N V V A L K P G D R N V S T N

UniRef90\_A9D0R3 L M E Q A G C K V T S F A A D A L T P C E G G P T C L T R P V WR  
UniRef90\_L8EUX3 L F E R E R G Y E P I G M D L V S E L L K G G G V K C C C T Q E L L R D Q  
UniRef90\_UPI0004756D35 A Q L R A A G F F E P I G M D L V S E L L R A G G G V K C C C C T L E L L R H D Q  
UniRef90\_E4N5U6 E Q V R A A G F V P V G V A L S E L L K A G G G P K C C C V L E L L R L R  
UniRef90\_K7FHR6 P F Q K L P D L T L I P A A C L T E V A K L G G G A L S C C S L L I R N K K  
UniRef90\_D9VLF6 D R L A D R G Y E P I G M D L V S E F R K A G G G S V K C C C C T L E L L R R D K  
UniRef90\_S3ZE2 L R E R R G Y E P I G M D L V S E L L K G G G S V K C C C C T Q E L L R  
UniRef90\_C3YTM0 V I E K L A D L K K V T V S N S E L L A K V G V T L S A L T V F I R  
UniRef90\_D1BC1 G Q L V E R R G Y E P I G V D L T S E L L L G G G G A K C C C C T L E L L R  
UniRef90\_UPI0003B2F4EB G Q L R E R R G Y N P I G V D L S E L L L G G G G V K C C C C T L E L L R  
UniRef90\_G6A1G2 M L R E N G F N V L T V A N S E C A K I D G G M S C C L S L R F  
UniRef90\_K1MAJ2 H L R D E W G F T V E E I P Y R E I S K M G G L L R C C S T M P L V R E  
UniRef90\_V6MD72 K M E Q A G L T V I E T P V D E I M K G W G A L H C C M T V F L R R  
UniRef90\_G2SLX7 L R E H G M D V I E L D V V I E T L K K A G G G P H C C M T F P L R R  
UniRef90\_UPI00039F385B M L D R G Y V P V L T D L S E L L K K G G G S V K C C C I A E L R R  
UniRef90\_UPI0003818342 A L L T A A G F N P I E V D L S E L L K G G G G V K C C C C T L E L L R R  
UniRef90\_H6NRG5 E L L Q K N G I E V I P V E V S E I Y K M G G G I H C C V T L P L V R E  
UniRef90\_E4N8S0 E R L R E R G F T P I G V D L S E L L R A G G A V K C C C C T L E L L R R  
UniRef90\_UPI000344C0DB R L T A D H W R V L P V D L S E F E K L E G C A V T C L S V L V  
UniRef90\_W5K9T6 V F E K L K D H M L I P V P N D E K R K V D G C C L T C S V L I N K  
UniRef90\_W6NEW9 N A L A Q R K K A V T D L D M S E F M K S G G A C Q C L V L R L R  
UniRef90\_UPI00047C751E A L E K V G C E V L V Y S G K E I S K G G G G P T C C L T R P I K R R  
UniRef90\_E2SG67 G R L A A R G Y A P V P V D L D E F L K A G G G S V K C C C T M E L H R E  
UniRef90\_F9S1J2 T N E K K A G L T V L P I P G N E L G R G R G G A R C M S C P I E R E  
UniRef90\_UPI0003B2E281 M L R L L G Y Q V I P V D L S E F T K A G G N A K C L V L T L E R R  
UniRef90\_W6NED5 V N E K L E G I K T I K L D L V I E L K G G G G P H C C M T F P L R R  
UniRef90\_UPI00047979EA A L L E A A G H T V V G V A L P E I L K K G G G S V K C C C C T L E L L R  
UniRef90\_E2N3L3 Q W L R S Q G T V V E I P Y S E I A K Q E G L L R C C S T L P L C R R  
UniRef90\_J3A5P6 R L L D A G A T V Y E Y E G Q E I S K G T G G P T C C L T S P V R R  
UniRef90\_D6AY39 L R E R G F E P V G L D L S E L L K K G G G S V K C C C C T Q E L L R  
UniRef90\_F4F496 G R L K A A G Y T P V P V E L A E L K K G T G G S V K C C C C I A E L R R  
UniRef90\_W9FSH7 L I D D L R G Y V P V P V D L S E F H K A G G G I K C C C C T Q E I R  
UniRef90\_E4TBZ1 H L R D E W G L T V E E I P Y R E I S K M G G L L R C C S T M P L V R E  
UniRef90\_DOMJM8 R L R A A G F E P I E L D T G E F L K S G G S V F C C C M K L  
UniRef90\_UPI00047E0E77 T L L R Q N G V E V I E I F S S E L S R G R G G P R C C M S M P I L R E  
UniRef90\_A6TWW2 T L L R K H G L E V I E I E G S E L V R G R G G P R C C M S M P L L R E  
UniRef90\_T1W5Q6 K Q L R E R R G Y N P I K V D L S E L L L G G G G V K C C C C T L E L L R  
UniRef90\_B4H417 T L K E K I D I P T R N I N I S E F S Q Y S S G L T S S C L L L R R  
UniRef90\_A5CNL8 A S L R E R G Y N P I G V D L S E L L L G G G G V K C C C C T L E L L R  
UniRef90\_V6KZF2 T F L R K Q G I E V E I P G S E L G R G R G G P R C C C C T P V E R  
UniRef90\_C3YEF1 I F E E M A D Y D I A V S T K E V G K A D A A L T C Q S L L F  
UniRef90\_C4RHF0 G K L K A A G Y T P V P V E L T S L V R K G G G S V K C C C I A E L R  
UniRef90\_H0A5X0 L R A E G L E V L P D L S L F T L G G G G P H C C L T C P L V R E  
UniRef90\_X6CVL2 A M Q A A G C V V S T F E A D A L I A C E G G P T C C L T R P V L R Q  
UniRef90\_E6U4F5 M R A L G L T V I D V E L R E I S K M G G G P H C C M T F P L I R E  
UniRef90\_H2BYB3 T W L R Q Q G I K V E E V P Y A E I S K Q E G L L R C C S T L P L I R E  
UniRef90\_UPI0004162462 T W L R E Q Q G I K V E E V P Y A E I S K Q E G L L R C C S T L P L I R E  
UniRef90\_UPI00047B0B08 R E Q R S N G L E V I E I P S S E L A R G R G G L P R C C M S M P L Y R E  
UniRef90\_UPI00047M7N7H7 A W L R S N G F T V E E I P Y A E I A K Q E G L L R C C S T L P L I R E  
UniRef90\_S0G075 G Y E N Q G I H C I P V P V D E L Q K A N G A V G C M T G I L H R E  
UniRef90\_C1L717 I F E N K I N Y Y R S Q V H I P E L F N A G  
UniRef90\_UPI00047K2PPJ9 Q W L R S N G I T V E I P Y A E I A K Q E G L L R C C S T M P L I R Q  
UniRef90\_R7RMW6 T N E D K K G I K V L T I P S S E L S R G R G G P R C C M S M P L Y R E  
UniRef90\_UPI00034B3E1E N W L R A N G F L V E E I P Y A E I A K Q E G L L R C C S T L P L I R  
UniRef90\_R6E2G6 L L E K N G V K V E T P D I S E I M K G R G A L H C C I T A Y L K R  
UniRef90\_M0E770 A L T D R G F H V I E L S L R E I R K A G G G P K G L V L P S S R  
UniRef90\_UPI0003729750 A L D K A G T S V R L V P Y S A V Y Q G G G G I H C C S T A P L V R  
UniRef90\_A0R969 T L L R E H G L E V I E V L S S E L S R G R G G P R C C M S M P L V R K  
UniRef90\_I2MXG9 L F E R D R G F E P L G M D L G E L L K G G G S V K C C C T Q E I R  
UniRef90\_UPI000225AE85 A E F T K W G Y K V I K T D M S E F K K S G G S V R C C L I L S I  
UniRef90\_I3VT24 T L A R K E G I E V I E I D M S E L S R G R G G P R C C M S M P L L R  
UniRef90\_J7QVQ2 L L L D A G F T P V V T P L S E F M K A G G A A K C C L T L Q L  
UniRef90\_UPI0003B65B2B G Y E A L G I E C T A L S V D E L R K A N G A M G C M T G I L E R K  
UniRef90\_UPI000429005B S M L E A E G A E V I E Y E G E I S K G T G G P T C C L T S P L Y R  
UniRef90\_UPI0003B42066 K Q L R E R R G Y N P I G V D L S E L L L G G G G V K C C C T L E L L R R  
UniRef90\_B7VLP9 T N E K K A G L T V L P I P G D E L G R G R G G A R C M S C P I E R  
UniRef90\_UPI00035C26A1 T W L R E K G F T V E E I P Y A E I A K Q E G L L R C C S T M P L I R  
UniRef90\_Q38YQ6 S N E N L R G I K V I E V P S S E L S R G R G G P R C C M S M P L V R E  
UniRef90\_H8L948 S N E L L R G I K V L E I N S S E L S R G R G G P R C C M S Q P L V R E  
UniRef90\_V6KQ94 T H L R K Q G L E V I E I P G S E L G R G R G G P R C C M S C P V E R  
UniRef90\_S7VRY6 T W L R E N G F T V E E V P Y A E I A K Q E G L L R C C S T L P L I R E  
UniRef90\_V9W5W2 A L L R E H G L E V I E V P S S E L S R G R G G P R C C M S M P L V R K  
UniRef90\_UPI00035DD35F T N E K K A G L E V L P I P G D E L G R G R G G A R C M S C P I E R E  
UniRef90\_E5SQU9 V L I E N Y G Y Q V K E V D M S E F M K S G G A V Q C L V L K L Y K  
UniRef90\_UPI000474E410 L L E S H G F L V H P C D M G E F I K S G G A C K C C L T L Q L  
UniRef90\_U6PAN8 E A L A L R Q L N V T E I D M S E F I K G G G A C C Q S L V L L R  
UniRef90\_H5UUE7 S L L R G Y D P L V D I T E F E K R E G T I P C C L L A P F  
UniRef90\_D9UIS5 G P L R E R G F D P V G A E L G E L V K G G G S V K C C C T Q E L L R  
UniRef90\_D4M713 L L E R N G I K V D V L D L S E L N K G R G G S V K H C C M T A F L R R  
UniRef90\_M9R573 M L L E S A G Y S V R I L N T R Q A A L V D G G L S C M S L R Y S R R  
UniRef90\_O86131 S N E C L R G I K V I E I P S G E L S R G R G G P R C C M S M P L Y R E  
UniRef90\_U2EFE3 T L K E L G Y D P I L I E Y D E F I K S G G S V R C C S T L P I V R  
UniRef90\_D5QFR2 Q M M R A E G M E V L T P H L D Q F S R G G G S V H C C M T M P L R R  
UniRef90\_A0A023VMG9 T L L R K A G V I E T I S A S E L G R G R G G H C C M T C P I V R  
UniRef90\_T1CSJ0 H L Q E E W G L Q V E P V Y F E I S K M G G L L R C C S T M P I V R E  
UniRef90\_I4AIE6 I L L E E K G F T V E K V P Y S E I S K M E G L L R C C S T L P L E R E  
UniRef90\_G8NSV4 A E L R A R G F E V I Q T D L S E F L K A G G A A K C C L V M K L P T P E  
UniRef90\_C1KV84 D L L R S A G I K V I E V I S S E L S R G R G G P R C C M T M P L V R E  
UniRef90\_R7M7S7 T N D V L R G I K V L E M P G S E L S R G R G G P R C C M S M P L E R E  
UniRef90\_UPI0003A9E24B T N E K K A G L T V L P I P G D E L G R G R G G A R C M S C P L E R  
UniRef90\_UPI000374D1BB R A A G Y E P V I E L T E L K R G G G S V K C C A V A E L R  
UniRef90\_E1V381 T L L R K A G V I E V I T I S A S E L G R G R G G H C C M T C P I V R

UniRef90\_M3C577 1 E Y G P L A T G P L R A A F E R M P A P E L T S W L V G M T K R E F L E R H 40  
UniRef90\_UPI00047ECEB6 R F T R A I L R E P A P S V V S G L R A E D R G D P S F D S F L S E H  
UniRef90\_UPI0002FF5616 S M Y K K L N T V L I K H P Q E H L S K E W K K F N Y L E E P N F E L A Q K E Y  
UniRef90\_D1BRN8 F L M C P P T Y F V V Y T I N P W M D V P V D T A R A V E Q W  
UniRef90\_Q5WC47 S P V G P I Q K V L I H R P G N E L R Q L D N K S Y E T D P I D V A L L H R Q H  
UniRef90\_A0A011UV73 H H R R Y L M C R P E H F T V R Y S I N P W M E P P T D T A K A V R Q W  
UniRef90\_UPI000467DB3A S E T G V L R D V L V G S I D H F S G N A T S R R H M R D G V D T A V A K A Q Y  
UniRef90\_H7F721 K V V V L G L P D S L A T S Y Q S V L K G I Y P S D E S I K K E M  
UniRef90\_UPI000472389A K H L R E A P C N V Q I A Q A Q H  
UniRef90\_E8TMQ1  
UniRef90\_A6D4E6  
UniRef90\_A0A043KMP1  
UniRef90\_UPI00035D4E73 S M V G K I T D I L L K S P K D A F I S Q E E A F N Y I G C P N Y E K T L K E Y  
UniRef90\_Q8CMW1 Q A L I N K I M A G V R K E E I Q L E S T H  
UniRef90\_P13981 P R K L A E Y L I G G V A A D D L P A S E G  
UniRef90\_K2JME8 V G Q L R K V L M H R P G E M D V E G Q T W Y W R G D V I P S L A Q A Q H  
UniRef90\_K1QT97 Y N Y A I L V S R I P N S F K Y S G Q K Y E K E S E I D V E K A R E E H  
UniRef90\_R4PMZ7  
UniRef90\_R1AVM2  
UniRef90\_UPI0003B6CE21  
UniRef90\_UPI0004793269 S E W R T L K A V L V H C P G N E L I D N P E E A L M L E P L N I S L A A E Q H  
UniRef90\_S6GBU0 L R R V I V S P P E K E Y V E N L E E H N I M E R A N V N E A R E Q H  
UniRef90\_B5IF13 E F S R L R A V V L N G P T P S L N D K S A H H I K N G T P E V K D M M K E M  
UniRef90\_UPI00035D9C58 P P R R I A E F L I G G V S G A D L A R W R N  
UniRef90\_F0P1F6 E I  
UniRef90\_B2JH41  
UniRef90\_G7VRR9 I R N L F E D L V Q K I M S G V R K N E I E T G K S M Q  
UniRef90\_B9DKE3 P P R Q L A E Y L L G G V S A R D V P E S L G  
UniRef90\_U2E517 D A L I D D A E Q W Y F R D D P D L V K M Q D E F  
UniRef90\_UPI00047859D9  
UniRef90\_V6QA50 R R L G A E L A D V L R S H L S G S D P T L A E V L T S G  
UniRef90\_E8XVN8 L M C P P E H F V E Y A I N P W M D T K V D A G R A L T Q W  
UniRef90\_UPI00046624E9 P K S K E H I I A G T Y P E E S D M V R E M  
UniRef90\_I0HJT9 S E Y G V L R D V L I G P V D N F A S A R R A E R L G M Q F D H K V A E A Q H  
UniRef90\_C0BMC6 Q E L I D K I M A G V R K E E I E L K T T H  
UniRef90\_UPI00035D36EA  
UniRef90\_Q4L9J9 G E L K K Y L L N M L P K E M I D V I M A G V R K E D I  
UniRef90\_UPI00028847BF I E H I K A G T Y P T E A D M I K E L  
UniRef90\_UPI000368E6D3 R Y T H A I V V R I P N S V K M E K K M K I D L S L A E K Q L  
UniRef90\_A0A044SF33  
UniRef90\_UPI000464701A S E T G E L A D V L L C P P D H Y A I A I Q S M A G G A I L D R T A L K A Q F  
UniRef90\_F3S5N5 E D L I E K V M A G V R K E E V R Q D H  
UniRef90\_U7PES3 R L A E F L I G G L S T R D L P A D L G K  
UniRef90\_G4HX26 V V C R A V S S A L E K Q T L T C I E R Q T I S L E A V R K Q H  
UniRef90\_C9NZW2  
UniRef90\_E9AG92  
UniRef90\_C8WIH3  
UniRef90\_UPI000422E6C  
UniRef90\_A0A014PX33  
UniRef90\_A5F8P7 V G P L R T V L L H R P G E E L I D D E E Q W Y F R S D P D L G A M Q R E H  
UniRef90\_E3CWG1  
UniRef90\_D5GY38 T R A F L D S L A P R E L A E F L I G G L S T A D L P D E F  
UniRef90\_UPI0004675E20  
UniRef90\_W6AJL9 R R L G D T L R A R V A D H A Y L D P V D V L T A G L A H  
UniRef90\_I0LDF8 H G T H T R A A V K E F M D S F V E K C I A G I R K N E I D L P D R S N  
UniRef90\_F1T6A1 R R L G A H L A E D L A K H L R G L P H V L T A G M T F  
UniRef90\_M3UTG4 K E L V L K T M E G I K L E E I S R A K R D V E  
UniRef90\_R7P2G3 Y D G L T E Y L T S M S T K D M V E K I Y A G V R K N E L D I K R  
UniRef90\_P58013  
UniRef90\_E1T8P8 D K L K S C L L C Y P V N F K I T K K N S P F Y N K I N N E L M F S Q Y  
UniRef90\_UPI0004022E6C K Y T T A L V I Q P S E A F G N D Y E K A K A E H  
UniRef90\_U6HPC1 G R A T K K A I R Q L L L S I D D N R E L I D K T M A G I Q K  
UniRef90\_UPI00037BE784 T R H L M C S P D H F T V A Y V I N P W M E G N V H D T V A M Q Q W  
UniRef90\_UPI00037E6E78 V R T Y L E S L S S R Q L A E Y L I G G L A Y D I P K D S S  
UniRef90\_K8GHE9 R A M A S F  
UniRef90\_Q1LQV5 R E L A E T L I G G L S T F E F P D S V G G E Q  
UniRef90\_G6XYU9  
UniRef90\_W5SUU7  
UniRef90\_UPI000377841E M V S S L K K I L M K K P Q K F M S K D S Q K W N Y I K P L D Q N L I N K N Y  
UniRef90\_A8IYC0 T H C V C R D L P T S F E S A L A L E P P P E P I D V K I A T L Q H  
UniRef90\_UPI000367F0C07  
UniRef90\_UPI000379DC70 L T K P N F E E S L K E Y  
UniRef90\_U2QSJ9  
UniRef90\_UPI000289D639 L M S K T T K E M V D T L M A G V R K E D I E I K T R  
UniRef90\_F6CAM9  
UniRef90\_D5WLP1 R K L A E T L I G G L S T H D F P E A H G G K A L  
UniRef90\_U1QAC1  
UniRef90\_D6BCE3 E I G T F I M C Y P S N F K L L H F S L L K K L N R N K M F K Q Y  
UniRef90\_N9Y5E9 R E L A E T L I G G L S T L E F P D A I G G E T L R  
UniRef90\_UPI000414E84C R R Y L M C P T Y F R V S Y S I N P W M D P V D L A L A H A Q W  
UniRef90\_UPI000374C8BD E A L T E Y F L R L S N K D M I D K M M A G V R K  
UniRef90\_D8GPT6 A F T R E V P R T I A E C E L T H V A R E P I D V A A A R A E H  
UniRef90\_W0RAW8  
UniRef90\_UPI000367E64E  
UniRef90\_K1Z8F1  
UniRef90\_W8GFF7  
UniRef90\_W0Z9T1 M C R P D H F T V S Y S I N P W M E P P T N T E T A L R Q W  
UniRef90\_R5LLS8  
UniRef90\_D6PK28  
UniRef90\_UPI00040743E4 H A A V R R L G G D L A D A L R S F L S T A K P D L D L A K N Q W  
UniRef90\_UPI000479E76D A F V E K M M S G V R K E E L P E Q R R Q H

UniRef90\_M3C577 A E P V S V R F H V M D L D D F L I N P L P N H L F T R D T S A W I Y D G G  
UniRef90\_UPI00047ECE6B L A Y R A A L E A A G L S V H V E P A L P E L P D S V F V E D P A F V L P E G G  
UniRef90\_UPI0002FF5616 E H F L S L Y N R H I E K L E F L P F S E N V G L D S I Y A H D P V K F T S K G R  
UniRef90\_D1BRN8 E A L R R T Y R H I G H T V H V V D P Q P G L P D M V Y A A N G G I V V G G R  
UniRef90\_Q5WC47 D Q L R Q A L L D S G A E V T D L D F V P N H P K S I Y V H D L G L V V P G G R  
UniRef90\_A0A011UV73 Q T L Y D T Y L A L G H E V E L I D P L P G L P D M V Y T A N G S G F V V D G R  
UniRef90\_UPI000467DB3A Q E M L D V Y R Q A D V N V H I L P A Q A D Q P Y S I Y A R D S S V M T P W G  
UniRef90\_H7F721 P L P N L Y F T R D P A A V I G H G  
UniRef90\_UPI000472389A D A L H S L L L K H N V R V L R P D L Q D Y N Q I F A R D V A F T L E D K  
UniRef90\_E8TMQ1 K D L V A A Y E H F G V N I H W H E P T P E L P M Q V Y S R D S S V M T P Y G G  
UniRef90\_A6D4E6 I E P L P N H L F T R D T S C W V Y G G  
UniRef90\_A0A043KMP1 I E S G L P D M V Y T A N G S G F I A H D I  
UniRef90\_UPI00035D4E73 E I F E G I I K K N V E N V Y Y L P K D D R T G L D S I Y A H D S L K V I T K K G  
UniRef90\_Q8CMW1 L V E Y M D D K Y P F Y L D P M P N L Y F T R D P Q A S I G R G G  
UniRef90\_P13981 A N I L K M Y R E Y L G H S S F L L P L P N T Q F T R D T T C W I Y G G G  
UniRef90\_K2JME8 D A L A D T L R K E G V E V V Y L K R C A P G R H K S I Y T R D S V I G V K G G  
UniRef90\_K1QT97 R Q L I E T L K K E V R V I E L Q E E D Y P E C C F V D D C A V V I G A T  
UniRef90\_R4PMZ7 P M P N L Y F T R D P A A A I G D G  
UniRef90\_R1AVM2 D P M P N L Y F T R D P F A T I G D G  
UniRef90\_UPI0003B6CE21 P L P N H L F T R D T S C W I Y S G G  
UniRef90\_UPI0004793269 T G A D S L V L S T M E D D L L L T P L P N H L F T R D T S C W I Y G G  
UniRef90\_S6GBU0 R G M C E A Y H S Q G I E I H H V N P K A N A Q P N Q M F C A D Q M V M T P Q G  
UniRef90\_B5IF13 K K L R E I M R I A G A E V T E V K E L E G H P N S V F T M D T A L S L G D S  
UniRef90\_A6ERK6 A A V K A F N D K Y D V V Y R P S E I K N Y N Q L F A R D I G F V I D D K  
UniRef90\_UPI00035D9C58 S E T V K M V N A Y L G E A S F I L P L P N T Q F T R D T T C W I Y G G  
UniRef90\_F0P1F6 A E F E A V L K K H D V E V L R K D L V G V N Q V F A R D I A F V I E N K  
UniRef90\_B2JH41 K M Y R Q Y L G Y S G F V L P L P N T L F T R D T T C W I Y G G  
UniRef90\_G7VRR9 L H E F M Q D H S P F Y L V P M P N L Y F T R D P A A V I G D G  
UniRef90\_B9DKE3 S H L T E Y M R H P Y P F Y M D P L P N L Y F T R D P Q A F I G N G  
UniRef90\_U2E517 S S L V R M F G E Y L G Y A S F I V P P L P N A L F T R D T T C W I Y N G  
UniRef90\_UPI00047859D9 A A L V R V L E T H G V E I V T V G G A P R D P N A M F V R D C G M V V K G G  
UniRef90\_V6QA50 I D P M P N L Y F T R D P F A T I G H G  
UniRef90\_E8XVNB I K P L P N H L F T R D T S C W I Y N G  
UniRef90\_UPI00046624E9 M T F E E L P A S E G G S L V R R M H A V D P L P N L L F T R D S S V W I G D R  
UniRef90\_I0HJT9 E M L R T I L T G L G H Q V H V L D A R P G L P D M V Y S A N G A F S V D G T  
UniRef90\_C0BMC6 E G F E A V L Y K H G V K V Y R P T V I P N C N Q I F S R D I A F V I E D I  
UniRef90\_UPI00035D36EA A E M L D A Y R H A G V N T H L I P A D R S L P Y Q I Y G R D S S V M T P W G  
UniRef90\_Q4LJ9 L V E Y M D D R Y P F Y L D P M P N L Y F T R D P Q A S V G R G G  
UniRef90\_UPI000379C888 K M F R E Y L G H S S F V L P L P N T L F T R D T T C W I Y G G  
UniRef90\_UPI00028847BF L L K E S K S E Y P F L L E P M P N L Y F T R D P F A C I G S G  
UniRef90\_UPI000368E6D3 D A V D E V F K K Y G V K V F R P E V I Q D C N Q I F A R D I A F V I D D I  
UniRef90\_A0A044SF33 E E L C E T L R E A G V D I I E L S P E E H L Q H S L F T R D A A C I N G T  
UniRef90\_UPI000464701A E P L P N H L F T R D T S C W I Y N G  
UniRef90\_F3S5N5 D G L V A L L R A E R V S C H F L T P Q P G M P Y E V Y T R D S S Q T T P F G  
UniRef90\_U7PES3 A H L V E Y V D D S Y P F Y M N P M P N L Y F T R D P Q A S V G N G  
UniRef90\_G4HX26 G Y R A L A R E H A G I T E Y L M P P L P N T L Y T R D T T C W I Y S G  
UniRef90\_C9NZW2 I E P L P N H L F T R D T S C W V Y G G  
UniRef90\_E9AG92 K A Y V Q V F K E M Y D I E L I E L P A L N E P L P D S M F V E D V S M I Y N T C  
UniRef90\_C8WIH3 P M P N L Y F T R D P F A S I G N G  
UniRef90\_A0A014PX33 P L P N H L F T R D T S C W I Y N G  
UniRef90\_A5F8P7 I E P L P N H L F T R D T S C W I Y G G  
UniRef90\_E3CWG1 D A F A E V L R G C G T E V V Y L E G G P R D P N A M F V R D N G I V V K G G  
UniRef90\_D5GY38 L D P M P N V Y F T R D Q Q A A I G S G  
UniRef90\_UPI0004675E20 R G Y V S L A R E G V G A R E Y L M P P L P N T L Y T R D T T C W I Y G G  
UniRef90\_W6AJL9 A D P L P N V L F Q R D P F A S V G N K  
UniRef90\_I0LDF8 E E L R I S S E R P G G L V Y T L M D I D P L P N L L F T R D S S L W I G D R  
UniRef90\_F1T6A1 N L L V D M V N M N Q G S D S D L L I D P M P N T Y F T R D P F A L V G K G  
UniRef90\_M3UTG4 D E L P S A Q R S S L V R R M H H G P A I E P L P N L L F T R D S S F W I G S R  
UniRef90\_R7P2G3 K S L V D L V S E E S D F L A D P M P N L Y F T R D P F A S A G N G  
UniRef90\_P58013 T A L S D M A G S D A E N Y F Y L N P L P N A Y F T R D P Q A S M G V G  
UniRef90\_E1T8P8 P L P N T L F T R D S S C W I N D G  
UniRef90\_UPI0004022E6C N N F V N S L S N N G V K V S F I D I N K N L Y H Q V F T Q D V G F V V N D I  
UniRef90\_U6HPC1 D R F V D A L R Q K E V N I L E Y G P E E R R P N A H K V G D I A I I I N G T  
UniRef90\_UPI00037BE784 S E L P E V P A D E K G V E S N Y F A I D P M P N L Y F T R D P F A T I G N G  
UniRef90\_UPI00037E6E78 S A L R T I V S Q F T E V A L L P P V P G L P D L V F T A N A A V L R G R T  
UniRef90\_K8GHE9 G N F L R I A Q E S S S V T G Y L L P L P N T I F T R D T T C W I Y G G  
UniRef90\_Q1LQV5 D A L R E A L G T A G F Q V E V M E G A P G Q P D M V F A N A A V V L D G K  
UniRef90\_G6XYU9 L A L I R D A A G V N E Y L L P L P N T L Y T R D T T C W I Y G G  
UniRef90\_W5SUU7 D P M P N L F T R D P F A S V G H G  
UniRef90\_UPI000377841E N D F Y K I I K N S G A E I F E L D E N E E L C D C I F T H D P S L V L N E R  
UniRef90\_A8IYC0 Q A Y A S L M R Q L L G H G V I E L S A D E A C P D C V F I E D C S L V I N E R  
UniRef90\_UPI000367C0F L P L P N H I F T R D T T C W I Y G G  
UniRef90\_UPI000379DC70 H A F Q L F F T N K N I E T C F F P A D Q K T S I D S I Y C R D A S I A T D F G  
UniRef90\_U2QSJ9 L D P M P N L Y F T R D P F A S I G N G  
UniRef90\_UPI000289D639 R S L R E L M E D K Y P F Y L D P M P N L Y F T R D P A A S V G N G  
UniRef90\_F6CAM9 L D P M P N V Y F M R D Q A A I G N G  
UniRef90\_D5WLP1 E V A K E A A G G T E Y L L P L P N T L Y T R D T T C W I Y G G  
UniRef90\_U1QAC1 L P L P N H L F T R D T S C W I Y G G  
UniRef90\_D6BCE3 R E Y L A L H P E P L S V R F H V M E Q D D P L P N H L F T R D T S A W I Y D G  
UniRef90\_N9Y5E9 N D F I N L L I N Q G S K V Q F L I E P I Y G A N Q V F T R D I G F V I D D I  
UniRef90\_UPI000414E84C L I R E A A G V A E Y L L P L P N T L Y T R D T T C W I Y G G  
UniRef90\_UPI000374C8BD E D L R D R Y R A L G H T V E E L P A H P A F P D M V F A N G A T V V D G R  
UniRef90\_D8GPT6 E E L K D Y K R F S L Y D Q V N D S Y P C D P M P N L Y F T R D P F A T I G N G  
UniRef90\_W0RAW8 A A Y E R A L A D A R C E V R R L A D D D D H P D A V F V E D T A V V L D E L  
UniRef90\_UPI000367E64E I P I P N T L F Q R D P S C W I Y N G  
UniRef90\_K1Z8F1 P L P N L Y F T R D P G A A L G C G  
UniRef90\_W8GFF7 L D P M P N L Y F T R D P F A S L G N G  
UniRef90\_W0Z9T1 Q T L Y D T Y I A L G H E V E L I D P L P V G L P D M V Y T A N G G F L I D G V  
UniRef90\_R5LLS8 A D P M P N L Y F T R D P F A S V G E G  
UniRef90\_D6PK28 N N L K S T I E E A G A E V K V V P S E A Y P D L V F T A N S G I I N D Q E  
UniRef90\_UPI00040743E4 L T F E E L P A S E G G S L V R R M H A V D P L P N L L F T R D S S V W I A D R  
UniRef90\_UPI000479E76D L Y E L M T K H Y P F Y L A P M P N L Y F T R D P A A V I G H G

UniRef90\_M3C577 V[C]I N A M R W P A R W H E T V H Y E 100 A V Y R H H P M F A A D D F H Y P S T I V 120  
UniRef90\_UPI00047ECE6B G V L L R M S A K P S R E E E T D E F A D A L K A E F V E L T E L Q Q G Y V D  
UniRef90\_UPI0002FF5616 A I I L R K S G K A K V R Q Q A E A E P V F S K Q F L K E D K S I P I L G E L T E L Q Q G Y V D  
UniRef90\_D1BRN8 A L A P R F T H A E R Q A E G P V F S R W F D D L G P D G V S E V L G Q A D E A V L N E  
UniRef90\_Q5WC47 V I L P R L J A L G E R Q Q G E E Q A A Y R T F A K L G M P V L A T I Q Q G N G F I E  
UniRef90\_A0A011UV73 A L G V R F R V P E R R A E S R A F M D R F A A K A G F E V I E P V E V Q F E G  
UniRef90\_UPI000467DB3A P I I S Q M Y S P W R R A E W I S V L N F Y R A E K E I P I F D V V S A G T F E  
UniRef90\_H7F721 L A I N H M F Q P A R K K R E S F F M K F I A T H H P D P I W F D R N S P Y T L E  
UniRef90\_UPI000472389A L F I V S N M I E D R K K E T E A F A P I F H A V Q S D A L V H L P E A G L H I  
UniRef90\_E8TMQ1 A F I T A M A N W W R R K G E N Y A A I R T Y E K L G I P I L Y D M V T A G T F E  
UniRef90\_A6D4E6 V S L N P M M K P A R Q R E T N H L R A I Y R W H Y F G D E D L H Y D N A N I E  
UniRef90\_A0A043KMP1 A V V A R F R F P E R A G E S R A Y A S W M S S H G Y R P V T T R E A P H V N E  
UniRef90\_UPI00035D4E73 A I Y F P M G K N L R S K E S L V T E E F L K S H G V P T L G R I E A P G K M E  
UniRef90\_Q8CMW1 M T V N R M F W R A R R R E S I F I S Y I L K H H N I P L W V D R D C P F N I E  
UniRef90\_P13981 V T L N P M Y W P A R R Q E T L L T T A I L Y K F H W Y G D P D K D H G S T L E  
UniRef90\_K2JME8 A I V T R L G P L V R R G E E A P A T E T L A A S I G M P I L R T V H G T S G L M E  
UniRef90\_K1QT97 A L I T R L G Q T T R Q G E E V A E I R K V L K D L K F R I V E I V D P D A L V E  
UniRef90\_R4PMZ7 I T L N H M R F P A R R R E S L F M R Y I V S H H G V K V W Y D R E Q K T S L V E  
UniRef90\_R1AVM2 V S I N S M R K E A R R R E T Y T Y H P N F T E Y G P K I L G L E A G S A T V E  
UniRef90\_UPI0003B6CE21 V S I N S M M M E A R R Q E T H Y E A I Y R W H G S D V P L W S E G P A T V E  
UniRef90\_UPI0004793269 A I L G R P A M G L I R A G E E V A V A R R L A D I G V P I L K T L T G T A T F E  
UniRef90\_S6GBU0 Y I L K L R M G L P A R R G E E E W M G K I L E N F G L E R E G E V K A P G T A E  
UniRef90\_B5IF13 F F K A N I L P D R E E F T A T E H V W S Q V P K E N R I K D F E A A H V N E  
UniRef90\_A6ERK6 V T L N P M Y W P A R R Q E T L L A A A I Y R F H D F P I L W D Q D H G A A T L E  
UniRef90\_UPI00035D9C58 F F V S N I P D R L P E L E A I D F I E K N I S A D Q Y I K I P E D V Y V L E  
UniRef90\_F0P1F6 V S L N P M Y W P A R R Q E T L L T T A I Y R F H W Y G D P D R D H G E M A T L E  
UniRef90\_B2JH41 L T I N K M R E T A R R R E S S M F M E Y V F T S H H N V P I W L D R N Y E F P I E  
UniRef90\_G7VRR9 V S V N Q M H W S A R R R E T L F I D Y I L K H H D I P I W Y D R H M P Y Q M E  
UniRef90\_B9DKE3 V T L N P M Y W E V R R G E E L L T A A I L Y K F H D F M P I W Y V I G H G M A T L E  
UniRef90\_U2E517 A I I S R M G P T G R R G E E R F V L Q K L A E I G M P I L R T I A G D G L E  
UniRef90\_UPI00047859D9 V S I N H M Y A E T R N R E T I Y A Q Y I F E Y H D I P K V Y N R D E S T R I L E  
UniRef90\_V6QA50 V S V N P M A K E A R K R E T N N L R A I Y R W H Y F G D D E F N Y D H A T L E  
UniRef90\_E8XVNB V A V S L A M P A R R R E T D L V Y A Y H P R F T G A V R A Y G A H S A P V E  
UniRef90\_UPI00046624E9 V Y G A R F K Y P Q R A A E A A H Q A F Y T S S F A W R Y V E P Q Q V N E  
UniRef90\_I0HJT9 L T K A N I L P D R E E Y Q A I K Y L T D Q I D P A K V V Y P P Q E V H V E  
UniRef90\_C0BMC6 P I V T N Q M Y S P W R R G E E W V P L V K K Y A Q L E I P I Y D V I T A G S I L E  
UniRef90\_UPI00035D36EA M T I N R M Y W R A R R R E S L F M T Y I L K Y H D V P V W L D R N S P F N I E  
UniRef90\_Q4LJ9 V S L N P M Y W P A R R Q E T L L A A A I Y R F H W Y G D P D R D H G F A T L E  
UniRef90\_UPI000379C888 I S L N S M R K V A R K R E T L F Y H P W F K D T N V N I Y Y D M D N P S C I  
UniRef90\_UPI00028847BF L T E A N I L P H R E E E V E A I D Y I W N Q V A E N K R I I L P E N C H I V E  
UniRef90\_UPI000368E6D3 A L I T R P K K N G S R L N E I S N L L N Q L A W Q V E T P Q A S E H L E  
UniRef90\_A0A044SF33 V S I N P M A K Q A R R E T N N L R A I Y R W H Y F G D E D I N Y Q Q A T L E  
UniRef90\_UPI000464701A T V V T N L A R P E R R A E T G P V R A F Y A G D E I W K T C T R G H I E  
UniRef90\_F3S5N5 M T V N R M F W P A R R R E S I E L T Y I L K H H D I P V W L D R N S P H N I E  
UniRef90\_U7PES3 V T L N P L F W P A R H D E T L L M K A I Y E F H W W G D P E K S W G M A T I E  
UniRef90\_G4HX26 V S L N P M M K P A R Q R E T N H L R A I Y R W H Y F G D D D L H Y D N A N I E  
UniRef90\_C9NZW2 A V I T R P G A P S R R P E V D P L L D T V T A L R Q E N Y R L C E P G T V D  
UniRef90\_E9AG92 V S I N R M Y S V T R N R E T I Y A E Y I F G N H H D V P E Y Y S R Y N D E T T L E  
UniRef90\_C8WIH3 V S I N P M A K T A R Q R E T N N L R A I Y R W H P D D F F I H Y F N D E T T L E  
UniRef90\_A0A014PX33 V S L N P M M K P A R R Q E T N H L R A I Y R W H P I F I D D L H Y D N A N I E  
UniRef90\_A5F8P7 A V V G R M G P T G R R G E E A F S R K L A E L G M P I L H T V H G A G L L E  
UniRef90\_E3CWG1 M T I N R M T F R A R R R E S L F M E T I L K N H P I P V W R D R Y H H G R L E  
UniRef90\_D5GY38 V T L N P L Y W P A R H G E T L L M K A V Y A F H W W G D P E Q D W G Q A T F E  
UniRef90\_UPI0004675E20 V T I H K M W S E T R N R E T I F P D F V F D N H H N V E K V Y Q R E Y I E  
UniRef90\_W6AJL9 V G V T S L A M P A R R R E T D A I Y R H H P R F A G T E F V Y R P N L E H L E  
UniRef90\_I0LDF8 V A I T S R M F S V T R R E T L F G K Y I F R D H P D P L W Y R R S D A A Y H T E  
UniRef90\_F1T6A1 F A I T S L A L P A R A R E T D L I Y A H H P R F T G V R R A Y E S Q V I A P V E  
UniRef90\_M3UTG4 V I L N R M Y S V T R N R E T I Y A E Y I F N Y H P I D K Y Y D R Y L P Y H I E  
UniRef90\_R7P2G3 M T I N K M T F P A R Q E E S L I T E A Y V M A N H H D T P L W R D R N H T T R I E  
UniRef90\_P58013 L V L G S M Y W P A R R E T L L C A I Y R F H W W G D P D V D H G G A T L E  
UniRef90\_UPI0004022E6C L F L C N M M K L D E R K S E I I Y L K K Y I K D H N L K Y Y C L E N T I E  
UniRef90\_U6HPC1 A L M C R P F G S D R Q G E E V S V Y R Q T L K K I G L T I A E L N N D Q A Q L E  
UniRef90\_UPI00037BE784 V S L N H M Y A D T R N R E T I Y G K Y I F T Y H V P I L V Y D R D E T T R I E  
UniRef90\_UPI00037E6E78 A I L S S F L H P E R Q A E E P R F R T W L A Q D G F E V H Q L P R T V P F E G  
UniRef90\_K8GHE9 V T L N P L Y W P A R H E E T V L V T A V Y K F H W W G D P T Q H W G S A T F E  
UniRef90\_Q1LQV5 A V L A R F R Y P Q R R G E E A P F A I F E D L R L D S V E T L P E G C Y Q E  
UniRef90\_G6XYU9 V T L N S L Y W P A R H E E T I L T T A I Y K F H P D F A G K V N V W W T L E  
UniRef90\_W5SUU7 V T I N R M K T K V R R R E T I F A E Y I F K Y H P I P I W Y T R Y E D T T L E  
UniRef90\_UPI000377841E A I I L N M G K Q L R K K E A F A H K N Y Y D S I L I P L I G K I J N E G T V E  
UniRef90\_A8IYC0 V I I T R P G A P S R Q P E T G P V E A A L R G L G F D R V D R L E A P A T L D  
UniRef90\_UPI000367C0F V T V N P M H W P A R R L E T L N V A A I Y R F H G F P I W W Q D H G P A T V E  
UniRef90\_UPI000379DC70 M I I C N M D K K G R I Q E P K A Q L E T Y R Q N T V K I L G E I T F P G T L E  
UniRef90\_U2QSJ9 V S M N R M Y S V T R N R E T I Y A D Y I F K Y H N D P Y F Y E R D N K F H I E  
UniRef90\_UPI000289D639 I T I N T M K T S A R R R E T L F M K Y I H K I P L W Y D R G F S C S A E  
UniRef90\_F6CAM9 M T I N R M T F R A R R R E S L F M E S V L Q N H H P I P V W R D R Y T H G R L E  
UniRef90\_D5WLP1 V T L N A L Y W P A R H E E T I L T T A I Y R F H P D F A G K V N V W W T L E  
UniRef90\_U1QAC1 A S V N A M R K P A R R Q E E A I N N E T V Y S F H P L W S D G L A G S A T I E  
UniRef90\_D6BCE3 V S V N A M R W P A R R Q R E T V H F E A V Y R H H P L P F H T W S E G P S T I E  
UniRef90\_N9Y5E9 L F I S K I A N K N R A K E T L A L I E E Y I K G K H K K I Y K M K N P I E  
UniRef90\_UPI000414E84C V T L N P L Y W P A R H E E T L L A S A I Y R F H W W G D P T Q D W G L A T L E  
UniRef90\_UPI000374C8BD V L G A R F A F A E R Y G E A A V H A E W Y R G H G F D A V R E P R H V N E  
UniRef90\_D8GPT6 I T L N H M R T E T R N R E T I F A K Y I F R C H N I P L W F D R D E N T S I E  
UniRef90\_W0RAW8 A V L A R P G A A S R R G E I D T V A D A L G T L R P L A R I D A P A T L D  
UniRef90\_UPI000367E64E V T C N P M F W P A R Q P E T L I Q R A V Y K F H D F K I W W G D S D E D F I E  
UniRef90\_K1Z8F1 I N I H H M R K K A R R A E T L F L K Y I H K Y H G V P L W Y N R D I G Y P I E  
UniRef90\_W8GFF7 V T L H K M T F V T R R R E T K F A E Y I F K Y H P D P L Y Y N R R S T S I E  
UniRef90\_W0Z9T1 Y T G P K F H F E R A P E A A H F N A W F A N G F E L A E A V E V N E  
UniRef90\_R5LLS8 I S L N K M Y S V T R N R E T I Y A E Y I F K Y H P D R L Y Y D R Y N P Y H I E  
UniRef90\_D6PK28 V L I A N F K Y E E R R G E E L Y S N W F N E N G Y S V G R I P S E Y K F E G E  
UniRef90\_UPI00040743E4 V A V S S L A M P A R R R E T D L V Y A Y H P R F G A V R A Y G A H S A P V E  
UniRef90\_UPI000479E76D I S L N P M S Q E A R K R E S M F M E C I L L E E Q H V P R W M T R D H P F P V E



UniRef90\_M3C577 G G D V L V I G Q G V L L I G M S E R T T D E E A Q A V E M L A H R L F A R T I V A L D  
UniRef90\_UPI00047ECEB6 G G D L L F T G R E V I A G L S R R T T D E E A Q A V E M L A H R L F A R T I V A L D  
UniRef90\_UPI0002FF5616 A G D L V W L A N D T L L L A G R G T S R R T T D E E A Q A V E M L A H R L F A R T I V A L D  
UniRef90\_D1BRN8 G G D L L L A G D T L L L A G R G T S R R T T D E E A Q A V E M L A H R L F A R T I V A L D  
UniRef90\_Q5WC47 G G S F M L D E R S A V V G R T S V R V N Q A G S D Q L R T T L R Q E M E L I V V D  
UniRef90\_A0A011UV73 E G D F L L V G E D T I L A G G G F R S T S G A G A H R E V V K G W F E G W E V V S L R  
UniRef90\_UPI000467DB3A G G D F M L I E P G V L L C G C G S E R T S L A G A G A H R E V V K G W F E G W E V V S L R  
UniRef90\_H7F721 G G D I I I L S E K V L I G I S E R T D P R A I Q F L A T N L F Q E K I I A I E  
UniRef90\_UPI000472389A G G D V L L Y G E Y L F I G K T A R T N K E E G A L E Y F T R L F P D K K K V I A I F L K  
UniRef90\_E8TMQ1 G G D F N V I E D G V L I G C G A R T Q K E E G A R Q V Q A W F D K E G W I A F I  
UniRef90\_A6D4E6 G G D V L V I G K G V L I G I S E R T T P Q Q A V E N L A A N L F K G S G V I A I D  
UniRef90\_A0A043KMP1 G G D L L M V G E R V L L A G Y G F R T N K E E G A H A E F A A V L F G L P V V S L E  
UniRef90\_UPI00035D4E73 G G D I V W L D R T V A I G L G Y R T N Q K E G I E Q F A K K L T K D F F E Y I I V P  
UniRef90\_Q8CMW1 G G D E L V L S K D V L I G L S E R T S A Q A I E R Q V A R R I F F K D P V V A I E  
UniRef90\_P13981 G G D V M P I G N G V L I G M G S E R T S R E R A T G R Q V E E Q S L F A K Q G V I V A G  
UniRef90\_K2JME8 G G S F A W L K P G L A V I G M G S N R V N E R E G T R Q V E E V L K A K G C E L L R  
UniRef90\_K1QT97 G G D V L F T G K E I F V G L G Q R T N E R E G A S A V V D A F P E Y N V I T P V R  
UniRef90\_R4PMZ7 G G D E L V L S K D R V M I G M S E R T S P A A S V I E M L A R E N I F D R G V E I P D  
UniRef90\_R1AVM2 G G D E L L I N K T I A I G L S E R T S A A S I E K F A K N I L N L A F D I P K  
UniRef90\_UPI0003B6CE21 G G D V L V I G N T V L I G M S E R T C P Q Q V I E R L A S R L F S T R V I A L E  
UniRef90\_UPI0004793269 G G D V Q L I G N G V L V G V S E R T T A Q A G I E R L A S R L F R E G G I I A V E  
UniRef90\_S6GBU0 G A D L L W D N K T A M V G R G H R T N Q A A I D Q I A K I V E E L G Y E A I K  
UniRef90\_B5IF13 G G N L I P A Y P I F F I G R S T R T N K E G A A Q I A K I V E E L G Y E A I K  
UniRef90\_A6ERK6 G G D V M P H G D Y I F V G I T A R T N Q A A V D F L Q E V F P K K K V D K S F N  
UniRef90\_UPI00035D9C58 G G D V M P I G N T V L I G M G E R T S H A A V G L A K R L F E A G V D K S V V  
UniRef90\_F0P1F6 G G D V L L W N D Y I F V G T T A R T N M Q A V E F L R N H F P N K K V V A F D  
UniRef90\_B2JH41 G G D V M P I G K G L L I G M G S A R T S A K A I E R L A Q N L F F A S R R V L A I E  
UniRef90\_G7VRR9 G G D E L V L S K E V L I G V S E R T S A P A V I E R L A R K I F F E Q P V I A I E  
UniRef90\_B9DKE3 G G D Q L V L S K E V L I G V S E R T S A P A V I E R L A R K I F F E Q P V I A I E  
UniRef90\_U2E517 G G D V M P I G N G V L I G M G E R T S H A A V G L A K R L F D H G V I V A G  
UniRef90\_UPI00047859D9 G G S F C P L D K H A A I G L S F R S N P S G A E Q L R H V L Q Y Q E V E L I Q  
UniRef90\_V6QA50 G G D E L V L S K D V L I G L S Q R T D A A S I E K I A K N I F N N N I H I L A Q  
UniRef90\_E8XVNB G G D V L L I G R G V L I G L S E R T T P P A G A E S L L A R S V F A H K V I V L P  
UniRef90\_UPI00046624E9 G G D V L L A P G V V L V G V G E R T T P P A G A E S L L A R S V F A H K V I V L P  
UniRef90\_I0HJT9 G G D F A Y L P G A V L A G Y G F R T D P A A H A E A Q E V L F G R P V I S L K  
UniRef90\_C0BMC6 G G D V M P W N D Y I F V G I T A R T N K K A V D F L T T L F P N K R V V K A F E  
UniRef90\_UPI00035D36EA G G D F M V L E P G L L C G Y S E R T S R K A G V E Q M Q R W V E N G W E V K G Y Q  
UniRef90\_Q4L9J9 G G D E L L I S K E A L I G I S E R T S A Q A I E R L A R N I F F K K K V I A I E  
UniRef90\_UPI000379C888 G G D V M P I G N G V L I G M G E R T S R K E A I G L A Q S N I F A K G V E R I T  
UniRef90\_UPI00028847BF G G D Q L V L S K E V L I G C S E R T D K E A I L K L A S N I F K S G F N I P K  
UniRef90\_UPI000368E6D3 G G D V M P W Y D H I F I G I T A R T N I H A V K A I Q D I F P H K K V K S F E  
UniRef90\_A0A044SF33 G S D V L Y T G K E V F V G I R K N T N M E G A L V V A R T E S D H L A V I P I T E  
UniRef90\_UPI000464701A G G D V L V L G R T V L I G L S E R T T P Q G L E F L A A S L F D H K V I A V E  
UniRef90\_F3S5N5 G G D I H I R P G L L V G V S S G R T D E G G A A E F I S W F E G W T C R M I R E  
UniRef90\_U7PES3 G G D E L V L S E E V I G I S E R T S A Q A I E K L A R A T I F A A N P V V A I E  
UniRef90\_G4HX26 G G D V L V P G N G V L I G M S E R T S R Q A I T Q V A A T L F A K G A V E P K  
UniRef90\_C9NZW2 G G D V L V I G K G V L V G M S E R T T A Q Q V E N L A A N L F K K E V I A I D  
UniRef90\_E9AG92 G G D V L Y V A K Y V F V G K S R T S A Q Q G Y E Q M K E Y L G K G L E C V Q  
UniRef90\_C8WIH3 G G D I L N I N D K V L I G I S Q R T E P D A I D A I K N I F F E D E T S P V E  
UniRef90\_A0A014PX33 G G D V L V L G N G V M I G M S E R T T S C G I E F L A R S L F Q H R V I A I E  
UniRef90\_A5F8P7 G G D V L V I G K G V L I G M S E R T S P Q Q G V N L A A A L F K H G V I A I N E  
UniRef90\_E3CWG1 G G S F T F L N R T A V V I G T S S R Q N A A G V D Q L R C V L R H Q D T E L L E  
UniRef90\_D5GY38 G G D E L V L N N H V L V G I S Q R T S A T A I T D L A H N L F G H A I K I P H  
UniRef90\_UPI0004675E20 G G D I M P V G N G V L M G M S E R T S R Q A I T Q V A Q A L F D N G V I V A G  
UniRef90\_W6AJL9 G G D I L V L N H T L I I G V S Q R T S H E A I D R L A K N L F K N K I I V L D  
UniRef90\_I0LDF8 G G D V L L A P G V L V G V G E R T T P A G A E R L A R Q V F A A G V V P I A  
UniRef90\_F1T6A1 G G D V L N L A H T I A I G I S E R T Q A S A G A D C L A Q H M F W Y A F N I P V  
UniRef90\_M3UTG4 G G D V L L L A P G V V V G V G E R T T P A G A E A L A R S L F D H T V L A V P  
UniRef90\_R7P2G3 G G D V L N L A H T L A V G I S Q R T E A A A I D E L A K N C F K L A F N I P V  
UniRef90\_P58013 G G D E L L N K T V A I G V S E R T S S K T I Q N L A K E L F A N P V I E L P H  
UniRef90\_E1T8P8 G G D V M P L R D T V V L I G M G E R S P Q Q G V A Q L A R A L F A R E V I A A Q  
UniRef90\_UPI0004022E6C G G D V I H Y D G V L F V G I S T R T T I D A C R E L E K V L N D M K V I P I Y  
UniRef90\_U6HPC1 G S D V L F T G Q E I T V G I S T H T N E A G A Q S V A R A F P E Y P T T I V A  
UniRef90\_UPI00037BE784 G G D E L V L S K D V L V G I S Q R T D A A S I E K L K E N L G F K K V L L A F E  
UniRef90\_UPI00037E6E78 A G D A L F D R P L L W F G H G V R S R S D A I P Y L E Q L L F G T A V I Q P L E  
UniRef90\_K8GHE9 G G D V M P I G K G V L V G M S E R T S R Q A L T Q V A A A L F A K G V I V P K  
UniRef90\_Q1LQV5 G G D C I W D R G H F W A G F G P R S R E A A D A M A R H F A Q E V V A L E  
UniRef90\_G6XYU9 G G D V M P I G K G V L I G M S E R T S R Q A T S Q V A A A L F E K G V I V P K  
UniRef90\_W5SUU7 G G D E L L L S R D V L I G V S E R T D A K S V E K V A H K L F Q L A F Q I P Q  
UniRef90\_UPI000377841E G G D C L W I N K T L L V G E T Y R T N A E A G L H E I L K F L N I K L I H  
UniRef90\_A8IYC0 G G D V Q I T M P W G V L V G T S R R T N D E A V A Q L R K L L G G P P V F A F S  
UniRef90\_UPI000367C0F G G D V M P I G N T V L I G M G E R T T P Q A V G Q I A R R L F A G G V I A C Q  
UniRef90\_UPI000379DC70 G G D V A W L D K T L A V I G M T Y R T N D Q G I C G I K A L K F G I E V I V E  
UniRef90\_U2QSJ9 G G D I L N L N D K V L I G I S Q R T E S A A I D K I A K N V F A L A F R I P S  
UniRef90\_UPI000289D639 G G D E L V L S D K I I I G C S E R T S P E A I E V I A K N L F D N N F E I P S  
UniRef90\_F6CAM9 G G D E L V L N K H V L I G I S Q R T S A A A I T D L A H S L F G H A I K I P H  
UniRef90\_D5WLP1 G G D V M P I G K G V L I G M S E R T S R Q A I S Q L A A T L F Q K G V I V A A  
UniRef90\_U1QAC1 G G D V L V L G R S I L V G L S E R T S P Q Q G I E R L A S R L F A E R T V A L S  
UniRef90\_D6BCE3 G G D V L V L G N G V L I G M S E R T T P Q A V E M L A R R L F A R T I V A L D  
UniRef90\_N9Y5E9 G G D V L I Y N D Y I F V G M S N R T S M S G A L E L G N Y L K N Y T I I P I N  
UniRef90\_UPI000414E84C G G D V M P I G K G V L I G M S E R T S R Q A L S Q L A A R L F A E G V I V P K  
UniRef90\_UPI000374C8BD G G D F A V T A S W L A G R G F R S P L S H A E A Q E Y F A R P V I G L D  
UniRef90\_D8GPT6 G G D E L L L N K T L A I G I S Q R T D S A S I E K V C R K L F C K G F Q I P V  
UniRef90\_W0RAW8 G G D V L R V G R R I W V G V G G R T S A E G A A Q L R A H A A G Y D V R A V A  
UniRef90\_UPI000367E64E G G D V M P I G N T V L I G M G E R T T Y A G A V G V A R A L F K N K A V T P K  
UniRef90\_K1Z8F1 G G D I L V L S K V V A V G Y S E R T S A K G I E V F A K N F D K I L V V A I P  
UniRef90\_W8GFF7 G G D I M I L S E T I A V G I S Q R T N G D S L E K L A H N L F E W G I S I P K  
UniRef90\_W0Z9T1 G G D F L L V G E T I L A G T G F R S T P D S H R E V G D V F G R E V V S L T  
UniRef90\_R5LLS8 G G D V L N I N D H V L I G I S Q R T T A E A T D Q I A K N L F K L A F N I P E  
UniRef90\_D6PK28 R G D A F V H A K Y L V G S Y G I R S D K P A G A L L Y I A E K F N E P A I V E L A  
UniRef90\_UPI00040743E4 G G D V L S L A P G V L V G V G I E R T T P A G A E L A R V F A D D L V H T I V L  
UniRef90\_UPI000479E76D G G D Q L V L D W T V A I G V S E R T S A R A V I E D L A A S L F A Q R V V V E

UniRef90\_M3C577 M P K V M H L D T V M T M V D G D T F T Q Y A G L G M L R S Y T E P G V G E R  
UniRef90\_UPI00047ECE6B M P E G L H L K T G C A L L D E E T V L A V P L L A S R S G V F S R  
UniRef90\_UPI0002FF5616 L P E C L H L M S F I S I V L A S N G L L A V I H S R L M P V F L T R Q L L I K R  
UniRef90\_D1BRN8 L V D P Y H L D T A L T V L V A S N G L L V A Y L P E A F S R E S L D T L R D L F P D  
UniRef90\_Q5WC47 L P D R I H L D E L F M L V D T K T A L V E P K R L P Y W F L K E L R S R E  
UniRef90\_A0A011UV73 L P R F Y H L D T A I C V V L D P G V D A A N I A Y L P S A F D E A S L R L L E K  
UniRef90\_UPI000467DB3A F P H F L H M D V Q C V M V A D K L A A V C S A V L P D D V L A W S L L K Q K  
UniRef90\_H7F721 L P K F M H L D T V F T M V S K N Q F T I H P S V I S S D L N F F T M E W E K L  
UniRef90\_UPI000472389A L K K V L H L D C A F Q P I A S K G R A V V Y P N A F V D P Q E Y Q I E D I F G  
UniRef90\_E8TMQ1 D E Y Y V H L D L M V V P I A E K L T A V C Y L A C T E P G I V D W L K F G  
UniRef90\_A6D4E6 L P K C M H L D T V M T H M D V D T F S V Y P E I I N D K L D T W R L T A D S K  
UniRef90\_A0A043KMP1 L V D F Y H L D T A L A V L D D H T I A Y Y P P A F S T A A Q E Q L S A L F P D  
UniRef90\_UPI00035D4E73 M P E C L H L M S V I S L V D D D L A V V Y S K F M P V F F R E Y L I K R  
UniRef90\_Q8CMW1 I P T F M H L D T V C T M L D Y D K F T T H S A I L K S E G N M N I F I E D D  
UniRef90\_P13981 L P K A M H L D T V F S F C D R D L V T V F P E V V D P S S P Y G M N L R R E E  
UniRef90\_K2JME8 V D L T L H I D G N L V M I D V D T A I I N P T Q L P F W G L E K L K E L  
UniRef90\_K1QT97 I D G Q V Q L K S L V S M A G K D I A V G N S Q N A N R V M Q Q I R Q V A K Q Y  
UniRef90\_R4PMZ7 S R A F M H L D T V F T M V D P N S F S I H P E R A G S N A M K L Y V M K K R G  
UniRef90\_R1AVM2 K R A F M H L D T V F T M V D Y D K F T I H P Q I E G P L T V Y S I T K S K E K  
UniRef90\_UPI0003B6CE21 M P K S M H L D T V M T M A D V D T F V K Y P G L G M L R S Q T I R P G N T L K  
UniRef90\_UPI0004793269 M S K N M H L D T V M T M V D K G T F T V Y G D L G T L P T L T L R P G D A E G R  
UniRef90\_S6GBU0 V D G T M H F M G M L R I A D K D L A I C W P R R T P L A T V L A L K D R  
UniRef90\_B5IF13 V P D H L H L G G A M T L I G E D K I L A C N Y I P R N L L K G F  
UniRef90\_A6ERK6 L R K A L H L D T C F Q P I G K G K C I H E N G F L D K E E F N W L V N Y F G  
UniRef90\_UPI00035D9C58 V A G T M H L D T V F S F C D R D L V T I F P E V A H R I V P F N W L R P D E S  
UniRef90\_F0P1F6 L H G I L H L D T C T F P V G K D K A I I Y K D G F R K E D E Y Q Y L V I E L F G  
UniRef90\_B2JH41 V A G A M H L D T V F T F C D R D L V T V F P E V V N E I V A F S L R P G D S  
UniRef90\_G7VRR9 I P K F M H L D T V F T M V D Y D K F T I H P A I Q G P Q G N M N I Y V L E K G  
UniRef90\_B9DKE3 I P N F M H L D T V F T M I D Y D K F T I H S A I Q E M S D Q F S I F I E P D  
UniRef90\_U2E517 L P K A M H L D T V F S F C D R D L V T I Y P E A V N A I T P F S V R P D D S K  
UniRef90\_UPI00047859D9 V P Y A M H L D G G I V M V D H D K A L L N V E R L P Y W F L D T L D E L  
UniRef90\_V6QA50 F R K F M H L D T V F T M V D Y D K F S I H P E I E G D L V V Y S S E S A D N  
UniRef90\_E8XVN8 L P K C M H L D T V M T H I G D A T F S V Y P E V V R D T T L C W T L D T D N  
UniRef90\_UPI00046624E9 I R A T M H L D T V C T M V G P D A V V M Y P L A Q D S L I A Y T L P D D E K  
UniRef90\_I0HJT9 L V D F Y H L D T A L A A L D D R H V T Y Y P D A F S P A S Q R V L A Q L F P D  
UniRef90\_C0BMC6 L K K A L H L D T C C F Q P V G K N M A L I H K A G F L T E T E Y W L R D F F G R  
UniRef90\_UPI00035D36EA F P F F L H I D V M V A M L A E K L A J A I C V D A V E P E L V Q W F K S R  
UniRef90\_Q4L9J9 I P N F M H L D T V F T M I D Y D K F T V H S A I F K E E N M N F T I E Y D E  
UniRef90\_UPI000379C888 V A G A M H L D T V F T F C D R D L V T V F P E R P D D S T A M K L N L R R E D  
UniRef90\_UPI00028847BF I R A F M H L D T V F T M V D R D Y D K F T I H P E I E D T L R V I E I S Y D K T  
UniRef90\_UPI000368E6D3 L R K A L H L D C C F N P L G K G K A I I H K N G F L I E D E Y Q W L V D F F G  
UniRef90\_A0A044SF33 L P G I Q S L R H Y V S L I S T D T F T V G S S K E A K Q V I Q R M E R Q A T F  
UniRef90\_UPI000464701A L P K C M H L D T V M T H I H L D T F S V Y P D V V H P D V T C W M T P D A H  
UniRef90\_F3S5N5 F P E F L H L D V I F T M V A A D L A I A V V D V L D E A D L D W L R A Q  
UniRef90\_U7PES3 I R A F M H L D T V F T M I D Y D K F T I H S A I E K K G E D M N I F T L E E P T  
UniRef90\_G4HX26 L R A A M H L D T V F T F A D R D V V T I Y P E I V D N Q A F T L V P S D S A P  
UniRef90\_C9NZW2 L P K C M H L D T V M T H M D I D T F S V Y P E I M R K D L D T W R L T P K G D  
UniRef90\_E9AG92 V K N C L H L K C A V T F L S E S T L L L S P K W V D P E I L F T S R  
UniRef90\_C8WIH3 N R A M M H L D T V F T Q I D V D K F T I H P G I M G P L T V F E I T A E G D G  
UniRef90\_A0A014PX33 L P R C M H L D T V M T Q L D H D I F S V Y P Q V I D R N T R S W H L R L I T T  
UniRef90\_A5F8P7 L P K C M H L D T V M T H M D V D T F S V Y P E V M R K D L P T W R L T P K D Y  
UniRef90\_E3CWG1 V P Y S M H I D G A L M V I N D R D K A L V Q V E R L P F W F L E K L A E L  
UniRef90\_D5GY38 N H A M M H L D T V F T M I N Y D Q F T V H P F I L D K A G K I D I Y V L Q P D  
UniRef90\_UPI0004675E20 M P K A M H L D T V F T F A D R D V T L V P A I M D A V H T F S L R P G D  
UniRef90\_W6AJL9 L P K T M H L D T V F T N I D F D K F I V H P L I F D A I S E F K I F E V T K E  
UniRef90\_I0LDF8 Q R A T M H L D T V C T M V D A D A V L M Y P N I A S T L S A Y T V I A G A D G  
UniRef90\_F1T6A1 S R A F M H L D T V F T Q I D V D K F T I H P G I L G T L Q V F K L T A G S V P  
UniRef90\_M3UTG4 I R A F M H L D T V C T M I D T D A V V M Y P N I R E H M T A F T L T H D V D T  
UniRef90\_R7P2G3 S R A F M H L D T V F T Q I D Y D K F T Y H P G I M D F E I T E G D I P D S D E  
UniRef90\_P58013 N H A M M H L D T V F T M I N H D Q F T V H P G I M D G A G N I N V F L G R P G  
UniRef90\_E1T8P8 L P G A M H L D T V F T F C D R D L V T I F P E V V D A I R C T S L R P G R L P  
UniRef90\_UPI0004022E6C F D N S I H L D C V F N T L D K G S G V V S P Y V F D R K V I E E Y  
UniRef90\_U6HPC1 V P S P L C L K D A V C M A G I N V M A I G N S E A A R K V F K S I V G E V A S S  
UniRef90\_UPI00037BE784 R F K F M H L D T V F T M V D Y D K F T I H P N E I E G D L R V Y S V T Y E N A  
UniRef90\_UPI00037E6E78 L A H F Y H L D T C F C P L E G G F L L Y Y P A A F H T S S L Q A I E C I V P A  
UniRef90\_K8GHE9 L R A A M H L D T V F T F C D R D L V S L Y P D I L M D H V T T F S L R P S D K K  
UniRef90\_Q1LQV5 L A Q S Y H L D V C F C P L A G G E V L Y Y P P A F S P A A L R E I R A R V P A  
UniRef90\_G6XYU9 L R A A M H L D T V F T F A D R D C V L L Y P D I V N G I E A F S F R P D G N G  
UniRef90\_W5SUU7 S R S Y M H L D T V F T Q I D Y D T F T S F T S D D M K F T I Y A L T Y N L D S  
UniRef90\_UPI000377841E I D S C Y H L M S A I S M L D H D L A I G C E R L L P S E L K N L K K N  
UniRef90\_A8IYC0 V S Q T L H F K S V L S A L D P H T L L V A D T P L G R A L A D Q I A A A V I P S  
UniRef90\_UPI000367C0F F P K S M H L D T V E T F C D R D L V T V F A E V T D A I R C T S L R P G E G G  
UniRef90\_UPI000379DC70 L P D V F H L M S I L S P V D R K N L A V V Y S P L M P I K F R N K L E R  
UniRef90\_U2QSJ9 S R A F M H L D T V F T Q I D Y D K F T I H P N I M G P L E V Y E L T K N G D K  
UniRef90\_UPI000289D639 R R A F M H L D T V F T M V D Y D K F T I H P G I E G P L N E F E I T K G K N G  
UniRef90\_F6CAM9 N H A M M H L D T V F T M I N Y D Q F T V H P F I L D K A G E I E I V L Q L G  
UniRef90\_D5WLP1 M P K A M H L D T V F T F A D R D C V L V A P D F M A K T R T Y S Y R P S S H P  
UniRef90\_U1QAC1 L P K T M H L D T V M T M A D E G T F L K Y G G L G M L R S L T I R P G D G P D  
UniRef90\_D6BCE3 L P K F M H L D T V M T M A V A P E V F T Q Y A G L G M L R S Y T I E P G V G T H  
UniRef90\_N9Y5E9 F N K M L H L D C V F N I L D D N H A V I S N Y V Y D K A T I Q K I K N L Y Y  
UniRef90\_UPI000414E84C L R A A M H L D T L E T F A D R D C V L L Y P D I V N A I L S A F S Y R P G S K P  
UniRef90\_UPI000374C8BD L V D P Y H L D T A L C V L D G A E V M Y P G A F S A G S R A V L A R L F P D  
UniRef90\_D8GPT6 S R A F M H L D T V F T M V D Y D K F T V H P E I E G P L V V Y E I T K D K D S  
UniRef90\_W0RAW8 T R G C L H L K S A V T A V A D R D L L V N P D W V D A D V F G L  
UniRef90\_UPI000367E64E S R A A M H L D T V F S F C D R D V V T L F A E V V D Q L R C Y S M V Q T D D D  
UniRef90\_K1Z8F1 T R S F M H L D T V F T M I D H D K F T V H P E A S E H M S V Y E L T L R S D G  
UniRef90\_W8GFF7 G R S W M H L D T V F T Q I D I N K F A L F S N Y T S E K M S D Q L M S K I F  
UniRef90\_W0Z9T1 L P R F Y H L D T A I A V L D P V Q G A E R G G P D H A T I A Y L P Q A F D A E  
UniRef90\_R5LLS8 S R A F M H L D T V F T Q V D Y D K F T Y H P G I M G T Q V F E I T E G D P N  
UniRef90\_D6PK28 E E K F Y H L D T C F Q Q E P T G D A I F Y P E A F R D S S L S E F E S L  
UniRef90\_UPI00040743E4 V V P I M H L D T V C T M V G P D S V V M Y P P A V A Y T V R P D D R G G P G D  
UniRef90\_UPI000479E76D I P K S M H L D T V F T M V D T D Q F T T H A E V I D K D G Q M N I F L L E R G

UniRef90\_M3C577 E L K V T D H P P A H M A A A L G L D S L R D G C N V L A I E P G E R N A T T N 210 220 230 240  
UniRef90\_UPI00047ECE6B G Y R V V E T P E G E E A A A N A L R L N A V M L I A S G Y R E T A E  
UniRef90\_UPI0002FF5616 G F E L V E V P E K E Y H A N L G L C N V L A L A P R V V C V N M L I E G N P S T K Q  
UniRef90\_D1BRN8 A I L A A D P D D A A A L L G L N A V S D D G R H V Y L N A A A T G M H  
UniRef90\_Q5WC47 G Y R L I P N D P D R A A A N C L T L N A P G H V L I A S E Y P G T I K  
UniRef90\_A0A011UV73 R Y P D A L L V S D E D G A V F G L N A A S D G R H V F L S P R A T G F D  
UniRef90\_UPI000467DB3A N I D F I D V P Y K D A M E L G C N I V S L G N E R V L L P A E S K T L K  
UniRef90\_H7F721 G N E V R I T A E N D I K A A L F T N A W N D G A N T L A I K P G E Y N R N Q N  
UniRef90\_UPI000472389A T E N L F K V T D Q E A R A L T T N F V S L N P E T V I T E E S R F E R L N S  
UniRef90\_E8TMQ1 G H E L I D V P F Q D T M A L G C N F M S L G K D R V I A P T S S Q S L I G Q  
UniRef90\_A6D4E6 G Q M Q V E K A L E S A L N V D Q L K I T T G G T V K P G V V I G Y E R N V Y  
UniRef90\_A0A043KMP1 A I T V V D S A D A F V F G L N A V S D G L N V V L P V A A M G F A  
UniRef90\_UPI00035D4E73 G L K L L E V V N D S A D A F V L G S N V L A L D K R K C L I I E G V P E I Q K  
UniRef90\_Q8CMW1 K A E D I K I E E V L D V D E I T L N D G S N T L C I R P G V V V T Y D R N Y N  
UniRef90\_P13981 K T F L E V V A E S L G L K K L R V E Q W D D G N N V V C L E P G G Y D R N T N  
UniRef90\_K2JME8 G I R T I E V S P D D P S G A V N C I A V R P G R V V M E A N L S P R T A D  
UniRef90\_K1QT97 S Y R L K L D N D K A A N M L Y V N G R L T H R T R E E I D R S Y S  
UniRef90\_R4PMZ7 E H G D M A I S E E S D L T K V L C D T L G L D G V Q L I E C G A G E Y D R N T V  
UniRef90\_R1AVM2 E D E L K I V K E E A C A N G N N I D A W N D G S N T L A I A P G G Y S R N Y V  
UniRef90\_UPI0003B6CE21 E L D I T V N A P D A M A D A L G L D S L R D G S N V L A I S P G T Y E R N T A  
UniRef90\_UPI0004793269 I E I T R N A P E E M Y A K A L G L D K L N D G S N T L A I A P G D R N V N T N  
UniRef90\_S6GBU0 G Y N V V C P P E D D A E S Y R A M N F V T L G P R K I L A V A G L P K F E P  
UniRef90\_B5IF13 D V I W L N C S S F I S G N V I Y L G N E K V I V E R R N D E A R  
UniRef90\_A6ERK6 K E N C F E I D K Q E M Y H M N S N L F S I S E D V I I S E K N F T R L N  
UniRef90\_UPI00035D9C58 K P G G I D V R R E D V A D C L G L K K L R D G N N V V A L E P G G Y D R N T N  
UniRef90\_F0P1F6 E E N L F H V T E E E M Y W M T P N V F S I S P T V V V S E K N F T R L N T N  
UniRef90\_B2JH41 E A D R I H I R R E D V A D A L G L A K L R D G N N V V C V E P G G Y D R N T N  
UniRef90\_G7VR99 S D D L V L I P D A I A S A R E Q W N D G S N T L A I A P G V V V T Y D R N Y N  
UniRef90\_B9DKE3 G D D I L K E T L E E A L H I E N V N D G S N T L T I R P G V V V T Y D R N S N  
UniRef90\_U2E517 P A G L D V I R E D K S A E S L N L K Q L R D G N N V V A V E P G G Y D R N T N  
UniRef90\_UPI00047859D9 G I Q K I P A D Y R E G S M A V N C L T L S P G K V I M D D R A V Y T A E R L A  
UniRef90\_V6QA50 S D L N I T K E E D T L E H I L Y L N I R C G G G N L T A A A R E Q W N D I T N  
UniRef90\_E8XV8 H G G L R R T E E A P Q G K A L G I N D A N N V L T V R P G V V I G Y E R N T R  
UniRef90\_UPI00046624E9 G V R V A T P F L E A A D A M G I D R L D D G N N T L A L A P G G Y E R N V E  
UniRef90\_I0HJT9 A L R H V F E I L A D R E D A E A F G L N L V S D G R H V I L N T E A T G M A  
UniRef90\_C0BMC6 N D G I D I P F P Q V L E L G V N V V A L G N D R V M L P K A N T G L A E K  
UniRef90\_UPI00035D36EA A K D D I K I T R E T L A D V L G V N D G S N T L C I R P G V V V T Y D R N Y N  
UniRef90\_Q4L9J9 K P F V E V V G E E T G G N S F A A E Q W D D G N N L V C L E P G G Y D R N T N  
UniRef90\_UPI00028847BF Q N V L A K E C E S L E S I L S W N D G S N T L A I S P G K V I T Y D R N Y V  
UniRef90\_UPI000368E6D3 K E N I F E I T K D E M Y Q M C S N V F S I S E D V I I S E R N F T R L N S  
UniRef90\_A0A044SF33 R Y K T L T V K H D E A V N C L N V N D Y V I Y R Q D T P E T K F  
UniRef90\_UPI000464701A G L K R T E A R H A I G D A L D L V G S V N D A N N V L A V R P G G Y E R N T W  
UniRef90\_F3S5N5 G I R V L P V S Y R E A M R D M G C N V L S L G C E R V V S P R H C T R I N Q  
UniRef90\_U7PES3 E D K D I T I T R E T L K A D A L N L N D G S N T L T I R P G V V V T Y D R N Y N  
UniRef90\_G4HX26 G L D V I E T K E V V A A A L G V G A L R V G N N L V A V E P G A Y D R N T H  
UniRef90\_C9NZW2 S E D T H A I E E A L G V D Y L K I T T G G D N T V K P G V V I G Y E R N V Y  
UniRef90\_E9AG92 G F K V V E V D L E P A G A N V L S F S A E K N G K P L T I V T A A E F P G T A S  
UniRef90\_C8WIH3 I K K L E I D L E K Y V G N V L E I L P C G G G D R I A A E R E Q E R N D V T N  
UniRef90\_A0A014PX33 G G D R F E A E R E Q W N D A N N V L T V R P G V V I G Y E R N I W  
UniRef90\_A5F8P7 L K I T T T G G N S Y E A E R E Q W N D A N N V L T V K P G V V I G Y E R N V Y  
UniRef90\_E3CWG1 G I E A I P V D R D G G A A I N C L A V A P G K V I L D A S A V W T A  
UniRef90\_D5GY38 D H N G V K I T E N D L V Q V L K E N L W N D G S N T L A I A P G E Y D R N Y N  
UniRef90\_UPI0004675E20 K A P G V E I T D E I F V D V V A K G L G L P G L R V I P G V V I T Y D R N T Q  
UniRef90\_W6AJL9 G K K E I K D E D E I A A G R E Q W N D G T N V I T L A P G K V I A Y E R N W V  
UniRef90\_I0LDF8 E D P R V D G P A P A A D A M D L D Q L R D G N N T L A L A P V G Y E R N T E  
UniRef90\_F1T6A1 G E V K I E E M N D T L E H I L S K A L G L D H V T L I Q C G N G D P R N T V  
UniRef90\_M3UTG4 D T I V E S D E A A E A M G I E K L R D G N N T L A L A P G S Y N R T V E  
UniRef90\_R7P2G3 D L N V V E V N E K Y L G R K I T L I P C A G G E K I S A E R E Q W N D G T N N  
UniRef90\_P58013 K D D E V E I T D L K A A L K K V L N L W N D G S N T L A I A P G E Y D R N Y V  
UniRef90\_E1T8P8 G Q L D V R P E K E V V A K A L G I A A L R D G N N V I A L A P A Y N R N T N  
UniRef90\_UPI0004022E6C I P N L I E I S K D D A D D L G T N Y V Y L G D K K L L S S N K N V S  
UniRef90\_U6HPC1 N Y K V L H L A E P I A A S V L Y V N G C L M H Y D Q T M I P E T C Q  
UniRef90\_UPI00037BE784 L H I V E E L A E L L A A N L G V E I R C G G D N T V A A G R E Q W N D T N  
UniRef90\_UPI00037E6E78 D R R L A V S S D D A L D F A C A I N I G Q H L I L N R A S D D L Q N  
UniRef90\_K8GHE9 P G Y E I T K E S A S F V D V V A L S L G L K K L R V V E S Q G N A Y A R Q R Q  
UniRef90\_Q1LQV5 A Q R I E A T E D D L R H F S V N A V N R G D T V V M T H T P H L R T E  
UniRef90\_G6XYU9 G V E L H T V R D S L G L K K M R V V E T G G G A N L V C A S P G D R N T Y T N  
UniRef90\_W5SUU7 D S I K V K C E K A K L E D I L S F Y L G C K G G N L I H G A R E Q W N D G A N  
UniRef90\_UPI000377841E G V E L L C I P E D A S S T L A V N I A L S L S P R N L V T I Q G Y P K T L E  
UniRef90\_A8IYC0 Q P D Q T A I K P D Q A P D T I A A N V L S L N E H V V T Q A G H P A S Q A  
UniRef90\_UPI000367C0F A I A V E V E T P F L A A A M G L K K L R D A N N L C L E P G G Y E R N T N  
UniRef90\_UPI000379DC70 G F Q L I E V P D E E F E S M G C N V L A V A P R D C L M V D G N P I T K K  
UniRef90\_U2QSJ9 V E I K L L T D D R I A A E R E Q W N D G S N T L C I A P G V I V V Y E R N S N  
UniRef90\_UPI000289D639 R L D I T T A L N L P A V D L T R C G N W N D G S N T L A I S P G T Y E R N Y V  
UniRef90\_F6CAM9 K N G N I T I T D S I A A S R E Q W N D G S N T L A I A P G E V V T Y D R N Y N  
UniRef90\_D5WLP1 S G V E L H A E N D V A E A L G L K Q L R V G A N L V C A S P G D R N T Y T N  
UniRef90\_U1QAC1 E F D V T A N P H D A I A Q V L G L D S L R D G S N V L A V A P G E R N V T T N  
UniRef90\_D6BCE3 D L K V T D H P P E H M V H A A E R E Q W D D G C N V L A V E P G E R N A T T N  
UniRef90\_N9Y5E9 L D D K T T C E L I G T N F I N L G K K R I V T S H K K V K K L L E  
UniRef90\_UPI000414E84C G T V D L H K D E E T V A R D A L G L T Q W D S G A N L V C A S P G D R N T Y A N  
UniRef90\_UPI000374C8BD A L I A G P A D A A A F G L N A V S D G R H V L L P Q A A V G  
UniRef90\_D8GPT6 N I E L E E V L I E K Y L G R K I T L I R C G G D K I H A A R E Q W N D G S N N  
UniRef90\_W0RAW8 R T L A V D P A E P F A A N A L L V S G R V L H G A H F A R T R R  
UniRef90\_UPI000367E64E G N F D I H P E T E P M A K A L G V G K L R D G N N V V A L E P G G Y D R N T N  
UniRef90\_K1Z8F1 E L N I I L A K L N L P A V K L F M C G D G D T I I S E R E Q W N D G T N N  
UniRef90\_W8GFF7 N L K K V T L T H C G G Q D P I H S E Q W N D G S N V L A I A P N E Y D R N H V  
UniRef90\_W0Z9T1 R Y P D A I R V S E A D G D V F G L N S A S D G L N V L I S P R A T G F E  
UniRef90\_R5LLS8 S D E D L T V T E I N A A E R E Q W N D G S N T L C I A P G V V V V Y D R N N L  
UniRef90\_D6PK28 F N L I P V S E H D A N Q L A C A N A V I N N T V I F P S E N I E A I K  
UniRef90\_UPI00040743E4 G G L R V E G P E P A A A E A M G I D R L D D G N N T L A L R P G G Y E R N V E  
UniRef90\_UPI000479E76D D P L T I T R W S S L S A E V L G L S I P C G G G D K I A S A R E Q W N D G S N

UniRef90\_M3C577 T F L R K H G L L E V I T L P G S E L G R G R G G P R C M S C P V E R  
UniRef90\_UPI00047ECE6B M L L S V M G Y E V L T T P V T Q A E L L D G G L S C M S T R F  
UniRef90\_UPI0002FF5616 Q L L L N V M G A T V F E Y K L G R E I L S Y L G G G S V T C C L T C P V V R K  
UniRef90\_D1BRN8 A R L R E R G F E V F G I E L D E I L K G G G S V K C C C T L T L R  
UniRef90\_Q5WC47 Q L L Q Q A G I R T K T I E D T D E I L K I G G G S I H C C A A L P L V R  
UniRef90\_A0A011UV73 A Q L R D R G G Y T V F V P V D L S E L L L G G G G V I K C C C L E L R R  
UniRef90\_UPI000467DB3A E Q C L A H G L T V F D P D I N M I T K G G G G V H V C C M C Q P L R R R  
UniRef90\_H7F721 E L L K Q H G L K V F H E I T S S E L S R G R G G G P R C C M T M P L W R R  
UniRef90\_UPI000472389A F L A N E W K M Q V E R V P Y H E I S S K E G G G L L R C C S T C P L K R E E  
UniRef90\_E8TMQ1 T L L K A R G F E V A A V D M S E E L L S R G R G G G L L R C C M A Q A L K R E  
UniRef90\_A6D4E6 T N E K K A G I Q L V T I P G N E L L G R G R G G G A R C C M S C P I E R  
UniRef90\_A0A043KMP1 A Q L R A A G F E V G V D L S E L L K G G G S V K C C C T L E I C R K  
UniRef90\_UPI00035D4E73 K L E D E G C T V Y T Y P G K S E L L S R G T G G G P T C C L T H P L C R K  
UniRef90\_Q8CMW1 Q L L R E H G T K V I E I P G S E L L V R G R G G G P R C C M S Q P L I R E E  
UniRef90\_P13981 T L L R R K A G V E V I T I S A S E L L G R G R G G G H C C M T C P L V R  
UniRef90\_K2JME8 K L D R L G L E I V D V K Y D K I W L G G G G G H C C S T S P L V R  
UniRef90\_K1QT97 V L L Q R L L E D G V I P I S Q R V L S E A G G T I Q N C C L L  
UniRef90\_R4PMZ7 T N R A L R G I K I E V P S S G E L L S R G R G G G P R C C M S M P L V R  
UniRef90\_R1AVM2 T N L E E N G I K I H V E M P S S E L L S R G R G G G P R C C M S M P L V R E E  
UniRef90\_UPI0003B6CE21 T F L E D N G I E V A I P G N E L L G R G R G G G P R C C M S C P L V R E E  
UniRef90\_UPI0004793269 Q F L T D H G I E V L A V P G A E L L S R G R G G G P H C C M S C P T L R E E  
UniRef90\_S6GBU0 F F D S L G L E S L K V Q T D E I L S K A A G N V G C C L T A V L G R E E  
UniRef90\_B5IF13 K K L E K E G Y E T F T L D L S E F V K G S G G P S C C L I L S L E R E  
UniRef90\_A6ERK6 T W L R S Q G F T V E E V P Y F E I S K Q E G L L R C C S T L P L Q R  
UniRef90\_UPI00035D9C58 T L L R K A G V E V I T I S A S E L L G R G R G G G H C C M T C P I I R  
UniRef90\_F0P1F6 H L L R E K W G I E V E I I N A S R E V S K M G G G L L R C C S T L P L Y R  
UniRef90\_B2JH41 T L L R K A G V E V I T I S A S E L L G R G R G G G H C C M T C P I V R  
UniRef90\_G7VRR9 A L L R E H G I E V I E I L S S E L L S R G R G G G P R C C M S M P I V R K  
UniRef90\_B9DKE3 Q L L R D K G I K V L E I K G S E L L V R G R G G G P R C C M S Q P I Y R E  
UniRef90\_U2E517 T L L R K A G V E V I T I D A S E L L G R G R G G G H C C M T C P L A R  
UniRef90\_UPI00047859D9 S F G M E T L I P W E E I S K H G G G L H C C S T L P L V R E  
UniRef90\_V6QA50 K L L E E A G T K L N Y L P G S E L L V R G R G G G P R C C M S M P L E R E  
UniRef90\_E8XVN8 T N E K K A G I T V L P I P G D E L L G R G R G G G A R C C M S C P L E R  
UniRef90\_UPI00046624E9 T N T R L E G L E V V R I A G S E L L G S G R G G G P R C C M S C P V I R E  
UniRef90\_I0HJT9 R K V S A A G Y L P M P V D L S E L K R G G G S V K C C A V A E L R  
UniRef90\_C0BMC6 T W L T S K G I T V E A I E Y K E I A K Q E G L L R C C S T L P L I R  
UniRef90\_UPI00035D36EA C R A H G L E V I D P D I S M T P G G G G V H C C M C Q P L R R  
UniRef90\_Q4L9J9 Q L L R D K G I K V L E I T D S E L L V R G R G G G P R C C M S Q P L F R E  
UniRef90\_UPI000379C888 T L L R K A G V E V I T I T A S E L L G R G R G G G H C C M T C P L V R  
UniRef90\_UPI00028847BF T N E D K H N L E V Y A I K S S E L L S R G R G G G P R C C M S M P F V R E  
UniRef90\_UPI000368E6D3 W L R K Q G F T V E E V P Y A E I G K Q E G L L R C C T T M P L I R  
UniRef90\_A0A044SF33 Q L L H E P I Q M V G I T A D E L V K I G N P I S R L V L L  
UniRef90\_UPI000464701A T N E K K A G I T V L P I P G D E L L G R G R G G G A R C C M S C P L E R  
UniRef90\_F3S5N5 M L L R A E G L H V L E P E L D Q F S Q G G G S I H C C M T M P L R R K  
UniRef90\_U7PES3 Q L L R D K G I K V I E V T G S E L L V R G R G G G P R C C M S Q P L Y R E  
UniRef90\_G4HX26 T L L R K A G V E V I A I V G A E L L G R G R G G G H C C M T C P I V R  
UniRef90\_C9NZW2 T N E K K A G L E V L T I P G N E L L G R G R G G G A R C C M S C P I E R  
UniRef90\_E9AG92 R I E A F A A E E T V V L E A D E I A K A E G S L T C C S L L  
UniRef90\_C8WIH3 A L L K E K G L K V L E M P S A E L L S R G R G G G P R C C M S M P L V R E  
UniRef90\_A0A014PX33 T N E K K A G I K V L A I P G N E L L G R G R G G G A R C C M S C P L E R  
UniRef90\_A5F8P7 T N E K K A G I K V L T I P G N E L L G R G R G G G A R C C M S C P I E R  
UniRef90\_E3CWG1 E L L T K R G C T V L T T P Y E E C R K H G G G L H C C S S L P L L R  
UniRef90\_D5GY38 D L L R K H G T I V H E I R S S E L S R G R G G G P R C C M S C P L V R E  
UniRef90\_UPI0004675E20 T L L R K A G V E V I T I V G A E L L G R G R G G G H C C M T C P L I R  
UniRef90\_W6AJL9 T L L R K A G V E V I T T P S E L L S R G R G G G P R C C M T M P L I R E  
UniRef90\_I0LDF8 T N A Q L A G I E V I P I A G S E L L S G R G G G P R C C M S C P L V R E  
UniRef90\_F1T6A1 T N D A L A G L E L L V V P S A E L L S R G R G G G P R C C M S M P F V R E  
UniRef90\_M3UTG4 T N R R L R G I E V I E I P G R E L L S G R G G G P R C C M S C P L A R  
UniRef90\_R7P2G3 N I L R E H G L K V I E V S S A E L L S R G R G G G P R C C M S M P L V R E  
UniRef90\_P58013 T L L K E H G I K V I H E I L S S E L L G R G R G G G A R C C M S Q P L W R E  
UniRef90\_E1T8P8 T L L R K A G V E V I T I P S A E L L G R G R G G G H C C M T C P I E R  
UniRef90\_UPI0004022E6C E I L V K E G Y E V S Y I D Y S E I I K G D G S L G C S V L Y L L R E  
UniRef90\_U6HPC1 I F E N K I D Y L R Y P L D L P V L Q S H G A S L H K L A L L  
UniRef90\_UPI00037BE784 A I L E S K G I L R L I K L G G S E L L V R G R G G G P R C C M S M P F V R E  
UniRef90\_UPI00037E6E78 W L D E R G F S V H Q T P T T E F L K A G G S A K C C L S L S L N E  
UniRef90\_K8GHE9 Q W L R K Q G I R V V T I A S S E L L G R G R G G G H C C M T C P I I R  
UniRef90\_Q1LQV5 L G S R G G E V L E V D L S P Y M M S G G G A Y C C M T L R L D R  
UniRef90\_G6XYU9 T L L R K E G I E V I T I T G A E L L G R G R G G G H C C M T C P I V R  
UniRef90\_W5SUU7 T L L E E C G I K V Y A I P S S E L L S R G R G G G P R C C M S M P L I R E  
UniRef90\_UPI000377841E L L L K S K C K I N L F S G N E L I K A E G G P T C C L T R P L W R  
UniRef90\_A8IYC0 R I A E L R G L T L H T L G M A E L A K A D G A L T P C  
UniRef90\_UPI00036F7C0F T L L R K A G V E V I T I P G S E L L G R G R G G G S H C C M T C P L I R  
UniRef90\_UPI000379DC70 L L E Q A G C Q V V A Y K G N E I L S K G G G S P T C C L T R P L K R  
UniRef90\_U2QSJ9 A L L R E A G L K V L E M P S A E L L S R G R G G G P R C C M S M P L V R E  
UniRef90\_UPI000289D639 T N E L L R G V D V I T M P S A E L L S R G R G G G P R C C M S M P L N R  
UniRef90\_F6CAM9 D L L R K H G I L V H E I R S S E L L S R G R G G G P R C C M S C P L V R E  
UniRef90\_D5WLP1 T L L R K Q G I E V I T I V G A E L L G R G R G G G H C C M T C P I I R  
UniRef90\_U1QAC1 D Y L E A N G V E V L T I P G S E L L G R G R G G G P R C C M S C P T R R  
UniRef90\_D6BCE3 T Y L R D E G L E V I E I E G S E L L G R G R G G G P R C C M S C P V E R  
UniRef90\_N9Y5E9 K L L R K G Y K V F Y L D Y S E I L K A G G G F A C S T L P V F R K  
UniRef90\_UPI000414E84C T L L R K Q G I E V I T I L S G A E L L G R G R G G G H C C M T C P I V R  
UniRef90\_UPI000374C8BD L F E R E R G Y E P I G M D T E L L K G G G S V K C C C V T G E L R  
UniRef90\_D8GPT6 K L L E E Y G V K L N I M P S S E L L S R G R G G G P R C C M S M P L W R E  
UniRef90\_W0RAW8 R L E A A G V R V P V P A S E L L A K A E G G V T C G S L V  
UniRef90\_UPI000367E64E T L L R K A G I E V I T V R G S E L L G R G R G G G H C C M T C P I W R  
UniRef90\_K1Z8F1 E L L E K N G I K T I V I P S A E L L S R G R G G G P R C C M T M P L N R  
UniRef90\_W8GFF7 T N D R K H G V I V H E I P S Y E L L S R G R G G G P R C C M S M P L R E E  
UniRef90\_W0Z9T1 A Q L R E R G Y N P I L I D L S E L L L G G G I K C C C T L E L R  
UniRef90\_R5LLS8 T N A V L R G L K V I E I H G A E L L S R G R G G G P R C C M S M P L V R E  
UniRef90\_D6PK28 T V E G L G L N S A V A D V S E F L K S G G A C Q C C L V T A L N  
UniRef90\_UPI00040743E4 T N A R L A G I E V R I E G S E L L G S G R G G G P R C C M S C P I S R  
UniRef90\_UPI000479E76D T L A R R N G L Q V L E V P S S E L L V R G R G G P R C C M S M P L V R

1 10 20 30 40

UniRef90\_X8K222  
UniRef90\_U2DSZ6  
UniRef90\_T0NBS1  
UniRef90\_N9XVN6  
UniRef90\_H3NC65  
UniRef90\_D7UUZ7  
UniRef90\_D4VCP3  
UniRef90\_L1KUA0  
UniRef90\_Q47NE3  
UniRef90\_I0H3B7  
UniRef90\_S3DKU3  
UniRef90\_M2X496  
UniRef90\_Q7MXG2  
UniRef90\_L0A9M4  
UniRef90\_UPI00034D306E  
UniRef90\_D7A1P6  
UniRef90\_J3FB14  
UniRef90\_B2UWQ0  
UniRef90\_UPI000372B103  
UniRef90\_UPI000287C78D  
UniRef90\_B6W6V5  
UniRef90\_F3YAM1  
UniRef90\_R5SU48  
UniRef90\_D5CBB4  
UniRef90\_R5FQF0  
UniRef90\_H6N0E2  
UniRef90\_H4F4J7  
UniRef90\_Q65ZT1  
UniRef90\_UPI000395D95B  
UniRef90\_UPI00046759DE  
UniRef90\_S6A2A1  
UniRef90\_F4AW98  
UniRef90\_UPI000370A925  
UniRef90\_L0IT89  
UniRef90\_S9VLX1  
UniRef90\_D4FVM1  
UniRef90\_C7N124  
UniRef90\_U1QFT3  
UniRef90\_UPI00040888CA  
UniRef90\_UPI00046AFDAA  
UniRef90\_M3B3V3  
UniRef90\_UPI0003691082  
UniRef90\_K4RFW1  
UniRef90\_S0KNS1  
UniRef90\_B8D2J5  
UniRef90\_UPI0004003DCP  
UniRef90\_A1WMR7  
UniRef90\_UPI00037CCEE2  
UniRef90\_UPI00047B2FBC  
UniRef90\_A6VWS0  
UniRef90\_K6W4E7  
UniRef90\_I0HJS5  
UniRef90\_C1DD83  
UniRef90\_UPI0003EACC3D  
UniRef90\_UPI00047758E9  
UniRef90\_L7F5S5  
UniRef90\_Q88P52  
UniRef90\_Q0BSW3  
UniRef90\_UPI00047DA298  
UniRef90\_UPI0001B59E89  
UniRef90\_H6R0I3  
UniRef90\_UPI000375E78B  
UniRef90\_W8A2H8  
UniRef90\_J6GUW1  
UniRef90\_S2D7F4  
UniRef90\_F9UD10  
UniRef90\_I0S4D5  
UniRef90\_UPI0003697385  
UniRef90\_R2Q1A7  
UniRef90\_Q03DS2  
UniRef90\_U1EWG7  
UniRef90\_G8AGS7  
UniRef90\_UPI0004786F84  
UniRef90\_UPI00037208CB  
UniRef90\_K1L0G8  
UniRef90\_D2Q2G6  
UniRef90\_G9PKK4  
UniRef90\_G4HUF0  
UniRef90\_UPI000470EFD9  
UniRef90\_G9WG60  
UniRef90\_I0JQA4  
UniRef90\_C7QYH4  
UniRef90\_C6WDR2  
UniRef90\_R2QYK3  
UniRef90\_UPI00047EEC83  
UniRef90\_E9UPV7  
UniRef90\_U1Z1Q6  
UniRef90\_A8AYL1  
UniRef90\_W9AMP0  
UniRef90\_A5I261  
UniRef90\_DOWNH0  
UniRef90\_S6CL26

E M V L K T M E G F R K E E V D Y E E V  
P Q T M L E K I T A G V R R E E V P G R K K E M  
D A M D P G E L R R F L T G G I T K R E I L Q R I  
R D L A E F L I G G L A T S D L P A D F R  
E S V L R G T Y P S D E D I K I E M  
S E V G K L R E I M M H V P G K E L E N N Y R S Y L F S S V V D P N E F K K E I  
S A F V E R V F R G L R R R E V D L P K A S A Q  
G R A T K K A I R E L L K E L I E K T M A G V Q K S E I A D R L S G E E  
Y N K L K E V I L C Y P V N Y K V E K K E I N K E I M F K Q Y  
E M V L K T M E G F K K S E L D A D A L N T  
R L A E F M I G G L S T Y D L L N R H R G D K E E  
E T S R L K A V V L N G P T P S L E D A Y A L H I K E G T Y P L E K M V P E M  
T V V I V R E T S P A I D K Q T L T C I E R Q P I S F E R V K K Q H  
P K A M V E K T M E G V T L N E L N V D R S  
R R L A E Y L I G G L A A A D L P E D L R P  
M T R F L M C P P F H Y E V S Y S I N P W M N V T V D V D L A K S Q W  
E A L M K F F L N F D N K D M V D K M M A G V R K  
S D Y G L L R D V L L G P A E S L S K K S L R T G L R F D A D V A C R Q H  
V R N A L D A M S P A E L T S F L I G G I T K R E L L E R A  
S P Y G R F T H A V V R G I P E S F G Q E G G A A P A A V D L A K A Q R Q L  
S E Y G A L R H V A L R D V H P V L A R Q K T T S S W R P Y D P A T V R A Q Q  
P R H L A E F L I G G V A G Q D L P Q S E G  
P E D L A H T L V A G L A H E E L K T A  
R R Y A M T R P S F F A V D Y A I N P W M D T P V D A G R A Q A Q W  
R R L G H S L A D E L A A H L R G V P A  
T R A F L E S L E Y Q R L A E Y L T G G L S T V D L P D Q L  
R R L G H V L A D E L A A H L R R V P A P E L A Q M T F  
R A V V L G L P D S L A K S Y E A V S R G V F P S E A D V R H E M  
T R A F L E S L E P R I L A D F L I G G V S V V D V P D E Y  
V E G V E V N L E L A K D Q W  
L T E A V L R R L G D T L R A G V G R Y L A D Q D P R R L A D V L M  
R R Y L M V R P D H F R I D Y V I N P Y M S D Q P D P A L T R R Q W  
D R M V S K L I E G V R K N E L D V K A  
E Y D E L K T V V V C S P S V L E I P D Q Q T A E N L E P F D P A K I V H Q F  
P P Q H L A E H L I G G L S I D D V P A E F  
G R Q T K V A I R E L L Q G I K D N Q E L V E K T M A G V Q K  
E A L T E Y L L N M S T R E M V D T L M A V K E A  
V R N Y A E S L P D A E L A E L L I A G V T K A E L L D R A

UniRef90\_X8K222  
UniRef90\_U2DSZ6  
UniRef90\_T0NBS1  
UniRef90\_N9XVN6  
UniRef90\_H3NC65  
UniRef90\_D7UJZ7  
UniRef90\_D4VCP3  
UniRef90\_L1KUA0  
UniRef90\_Q47NE3  
UniRef90\_I0H3B7  
UniRef90\_S3DKU3  
UniRef90\_M2X496  
UniRef90\_Q7MXG2  
UniRef90\_L0A9M4  
UniRef90\_UPI00034D306E  
UniRef90\_D7A1P6  
UniRef90\_J3FB14  
UniRef90\_B2UWQ0  
UniRef90\_UPI000372B103  
UniRef90\_UPI000287C78D  
UniRef90\_B6W6V5  
UniRef90\_F3YAM1  
UniRef90\_R5SU48  
UniRef90\_D5CBB4  
UniRef90\_R5FQF0  
UniRef90\_H6N0E2  
UniRef90\_H4F4J7  
UniRef90\_Q65ZT1  
UniRef90\_UPI000395D95B  
UniRef90\_UPI00046759DE  
UniRef90\_S6A2A1  
UniRef90\_F4AW98  
UniRef90\_UPI000370A925  
UniRef90\_L0IT89  
UniRef90\_S9VLX1  
UniRef90\_D4FVM1  
UniRef90\_C7N124  
UniRef90\_U1QFT3  
UniRef90\_UPI00040888CA  
UniRef90\_UPI00046AFDAA  
UniRef90\_M3B3V3  
UniRef90\_UPI0003691082  
UniRef90\_K4RFW1  
UniRef90\_S0KNS1  
UniRef90\_B8D2J5  
UniRef90\_UPI0004003DCP  
UniRef90\_A1WMR7  
UniRef90\_UPI00037CCEE2  
UniRef90\_UPI00047B2FBC  
UniRef90\_A6VWS0  
UniRef90\_K6W4E7  
UniRef90\_I0HJS5  
UniRef90\_C1DD83  
UniRef90\_UPI0003EACC3D  
UniRef90\_UPI00047758E9  
UniRef90\_L7F5S5  
UniRef90\_Q88P52  
UniRef90\_Q0BSW3  
UniRef90\_UPI00047DA298  
UniRef90\_UPI0001B59E89  
UniRef90\_H6R0I3  
UniRef90\_UPI000375E78B  
UniRef90\_W8A2H8  
UniRef90\_J6GUW1  
UniRef90\_S2D7F4  
UniRef90\_F9UD10  
UniRef90\_I0S4D5  
UniRef90\_UPI0003697385  
UniRef90\_R2Q1A7  
UniRef90\_Q03DS2  
UniRef90\_U1EWG7  
UniRef90\_G8AGS7  
UniRef90\_UPI0004786F84  
UniRef90\_UPI00037208CB  
UniRef90\_K1L0G8  
UniRef90\_D2Q2G6  
UniRef90\_G9PKK4  
UniRef90\_G4HUF0  
UniRef90\_UPI000470EFD9  
UniRef90\_G9WG60  
UniRef90\_I0JQA4  
UniRef90\_C7QYH4  
UniRef90\_C6WDR2  
UniRef90\_R2QYK3  
UniRef90\_UPI00047EEC83  
UniRef90\_E9UPV7  
UniRef90\_U1Z1Q6  
UniRef90\_A8AYL1  
UniRef90\_W9AMP0  
UniRef90\_A5I261  
UniRef90\_D0WNH0  
UniRef90\_S6CL26

50 60 70 80

S I T D R L E S D Y P F L I  
K Q L S D M L T D P Y P F L I N P M P  
R C F E S V L L K Y G V Q V Y R P W T L E N C N L Q V F A R D V G F V I D D K  
Q V I V A A H L T A G R K V E Y V P S A P E C P D M V F T A N A A V V R G D R  
S E P K S V W F H A L D L D A F V L P P L P N L I F T R D T S S W I G N G  
S G Y V A L A R E A T G A R E Y L M P P L P N T L Y T R D T T C W L Y G G  
D A V L D V L V R H G I E V L R P E P I L P L P N H M F I R D T S C W L Y G G  
T D L I D L Y K K E G V K I N L V Q D L E D K P N G V Y A R D P F L M T P K G  
T L V E M A E A G G D A D S L I D P L P S S Y F T R D A F A L V G N G  
K G L T D L V E S D Y P F A I L D P M P N L Y F T R D P F A A I G N G  
N N F L N R L S Q E G I V T Y F L D P K Y G I S Q V Y T R D I A F A L D D I  
S L A D M L E S D Y P F L V D P M P N L Y F T R D P F A T M A N G  
A I N P M P N L Y F T R D P F T S I G N G  
I D P M P N L Y F T R D P F A M I G G G  
A E P I P N L Y F T R D P F A S I G D G  
L E L V G R A T G L R E Y L L P P L P N T L Y T R D T T S W I Y N G  
D P M P N L Y F T R D P F A I G N G  
P L P N H L F Q R D N S A W I Y A G  
I D P M P N V L F T R D P F A S I G N G  
I E P L P N H L F T R D T S C W V Y G G  
L P L P N H L F T R D T T C W I Y G G  
D P M P N L Y F T R D P F A C I G N G  
E A V A T I F K K Y D V E V Y R P K L I K D M N Q I F T R D I G F V I D D K  
P P L P N F L F Q R D P S C W I F G G  
Y R A L A R E S T G V T E Y L M P P L P N T L Y T R D T T C W I Y G G  
D A Y C A A I A E G Y N I E R I N L P P L N D L P D S M F V E D V A M I Y N D V  
N A L V D L V S S A T E M V V N P M P N L Y F T R D P F A N V G N G  
L E P L V N H L F T R D T S C W I Y N G  
D P M P N A Y F T R D P A A S I G D G  
D P M P N H L F T R D T S C W V Y D G  
F R L F G A I D A C G G S V E L T D P V E G L P D M V F V A N G G L T D G G V  
Y L A L A R E S T G V R E Y L M P P L P N T L Y T R D T T C W I Y G G  
D P M P N L Y F T R D P S A S I G N G  
D P M P N L Y F T R D P F A T I G T G  
E E L K E Y H R D S L Y D L V T Y P F V C D P M P N L Y F T R D P F A T I G H G  
A E M V D A Y R S A G V T V H F H A A D P E L P Y Q I F A R D S S V M T P Y G  
P A P A S V A F A A L G P D A F L L Q P L P N H L F T R D T S C W I Y D G  
A D P M P N L Y F T R D P F A T I G E G  
I P L P N T Q F P R D N S S W I Y N G  
P L P N H L F T R D T S C W V Y G G  
I D P L P N L L F T R D S S L W V G D R  
I P N S L F Q R D P S C W I Y E G  
G V L T G A L R Q K V G L Q V L E V P A D P R L P E S W R L E D L A V V Q G N D  
K K H L Y E F V T D Y D P T D P M P N L Y F T R D P A A V I G N G  
D T L I D L L R S R G T E V T L L D A A P G C P V Q H Y P R D I A F V I D H V  
A D V V K M Y N D Y L G H S S F I L P P L P N T Q F T R D T T C W I Y G G  
D R L V E H L R A C G A S L E I I P G A P G L P D M V F P A N A G T V L D G R  
H G L V Y R L M D E L D F T V D P L P G L P G L F T R D S S A W V G D R  
E A L R R T Y L R L G H R V D E L I E P V A G L P D M V Y A N G G F I A G D V  
R E L A E I L M A G M T F D V I P V I D P L P N L Y F T R D S S F V W G P R  
R G Y V A L A R E S A G V P C Y L M P P L P N T L Y T R D T T C W L Y G G  
D E L T S L V R R M H H G H D F V L D P L P N L L F T R D S S F W V G P R  
Q C V L D V L D R Y G V R T L R P A P L T D Y N Q V F A R D V A F T I D D T  
I P P S P N L Y F Q R D P M A I T P G G  
I D P L P N T L Y T R D T T C W I Y G G  
S G L K S T I E K C G A E V K V I P G N T V Y P D L V F T A N S G I I K D K S  
P L P S L Y F P R D I L A C I G T G  
D P M P N A Y F T R D P Q A S I G D G  
D P L P N L L F T R D S S V W I G E Y  
I P P I P N T L F Q R D P S C W I Y N G  
I P P S P N L L F T R D S S V W V R D R  
I P P S P N L Y F Q R D P M A I T P G G  
P D S P D M V Y A M N L G L A T D G R  
P L P N T L F T R D N S A W I Y D G  
I E P L P N L L F T R D S S F W I G P R  
P L P N H L F T R D T S C W I Y Q G  
D D L V S A V D D P H Y P F Y I D P L P S M Y F T R D P Q A S I G E G  
E T L V H S M K Q E G V Q V T I Y L S P E D R Y F N Q T I F V R D L A C A F G R G  
R P P T M L L R G S A D A R D Y L M P P L P N T L Y T R D T T C W I Y G G  
A V D P L P N L L F T R D S S V W V G D R  
I D P M P N L Y F T R D P F L T I G S S  
I D P L P N L L F T R D S S V W I G D R  
I D P L P N L L F T R D S S V W I R D R  
Y V N L A R E S T G G F E Y L L P P L P N T L Y T R D T T C W I Y G G  
A E L P E I P E A A K G V E S D Y P F A I D P M P N L Y F T R D P F A T I G N A  
I D P L P N L M F T R D S S F W I G P R  
T S L V D L M Q D D Y P F Y L D P M P N L Y F T R D P A A S I G S G  
D V Q E S L T L R T L G A D D C L L A P L P N H L F T R D T S S W I Y G G  
P M P N L Y F T R D P F N M I G N G

UniRef90\_X8K222  
UniRef90\_U2DSZ6  
UniRef90\_T0NBS1  
UniRef90\_N9XVNB  
UniRef90\_H3NC65  
UniRef90\_D7U0Z7  
UniRef90\_D4VCP3  
UniRef90\_L1KUA0  
UniRef90\_Q47NE3  
UniRef90\_I0H3B7  
UniRef90\_S3DKU3  
UniRef90\_M2X496  
UniRef90\_Q7MXG2  
UniRef90\_L0A9M4  
UniRef90\_UPI00034D306E  
UniRef90\_D7A1P6  
UniRef90\_J3FB14  
UniRef90\_B2UWQ0  
UniRef90\_UPI000372B103  
UniRef90\_UPI000287C78D  
UniRef90\_B6W6V5  
UniRef90\_F3YAM1  
UniRef90\_R5SU48  
UniRef90\_D5CBB4  
UniRef90\_R5FQF0  
UniRef90\_H6N0E2  
UniRef90\_H4F4J7  
UniRef90\_Q65ZT1  
UniRef90\_UPI000395D95B  
UniRef90\_UPI00046759DE  
UniRef90\_S6A2A1  
UniRef90\_F4AW98  
UniRef90\_UPI000370A925  
UniRef90\_L0IT89  
UniRef90\_S9VLX1  
UniRef90\_D4FVM1  
UniRef90\_C7N124  
UniRef90\_U1QFT3  
UniRef90\_UPI00040888CA  
UniRef90\_UPI00046AFDAA  
UniRef90\_M3B3V3  
UniRef90\_UPI0003691082  
UniRef90\_K4RFW1  
UniRef90\_S0KNS1  
UniRef90\_B8D2J5  
UniRef90\_UPI0004003DCF  
UniRef90\_A1WMR7  
UniRef90\_UPI00037CCEE2  
UniRef90\_UPI00047B2FBC  
UniRef90\_A6VWS0  
UniRef90\_K6W4E7  
UniRef90\_I0HJ55  
UniRef90\_C1DD83  
UniRef90\_UPI0003EACC3D  
UniRef90\_UPI00047758E9  
UniRef90\_L7F5S5  
UniRef90\_Q88P52  
UniRef90\_Q0BSW3  
UniRef90\_UPI00047DA298  
UniRef90\_UPI0001B59E89  
UniRef90\_H6R0I3  
UniRef90\_UPI000375E78B  
UniRef90\_W8A2H8  
UniRef90\_J6GUW1  
UniRef90\_S2D7F4  
UniRef90\_F9UD10  
UniRef90\_I0S4D5  
UniRef90\_UPI0003697385  
UniRef90\_R2Q1A7  
UniRef90\_Q03DS2  
UniRef90\_U1EWG7  
UniRef90\_G8AGS7  
UniRef90\_UPI0004786F84  
UniRef90\_UPI00037208CB  
UniRef90\_K1L0G8  
UniRef90\_D2Q2G6  
UniRef90\_G9PKK4  
UniRef90\_G4HUF0  
UniRef90\_UPI000470EFD9  
UniRef90\_G9WG60  
UniRef90\_I0JQA4  
UniRef90\_C7QYH4  
UniRef90\_C6WDR2  
UniRef90\_R2QYK3  
UniRef90\_UPI00047EEC83  
UniRef90\_E9UPV7  
UniRef90\_U1Z1Q6  
UniRef90\_A8AYL1  
UniRef90\_W9AMP0  
UniRef90\_A5I261  
UniRef90\_D0WNH0  
UniRef90\_S6CL26

90 100 110 120  
L S L H H M S T G T R R R R E E A L L L K Y M Y Q H N E D R L W Y D Y H D Y A I  
I S S M N K M F T E T R R R R E E T L Y S D I F K H H N E K R Y Y N R Y D D L M S T I E  
V S L N S M R T N T N T R R R R E E T I F A G K Y I F N K H H G T K L W Y N D R Y D D L M S T I E  
I T L N H M R T N T R R R R E E T L Y S D I F K H H G T K L W Y N D R Y D D L M S T I E  
V S L N K M Y A D T R N R R E E T L Y F G K Y I F K Y H H P V P L Y Y N R N R E E S T F S I E  
I T I V S N K H Q P A R R E E T S V F M E Y I M R Y H H P L P L I W L N L N E S F S I E  
L I V S N K I P A R R E D E K E A Y E V V Y N Q L A Y N K I F N L P N E K A H V E I E  
A V L G C P P P E R K A R E V P Y F Q E W L J A G R G F E V I E A P Y A F S G  
V S I N V M R N P A R M R E T T L L M K A I Y Q F W H H D F V W N V S W A P A T T I E  
V T L N P L Y W P A R R H D E T L L M K A I Y Q F W H H D F V W N V S W A P A T T I E  
V S L N P M M K S S R K R E T N H L R A I Y R W H Y F F D E N T N Y D N V H I E  
V S I N P M A K P A R R R E S L H T R A I Y R H H G F P T Y Y G D D P A T T I E  
L F V S N L I A D R A R E S E A F S P L W D C V G E S H L V R L S E D I H A E I E  
A I I A N F K Y D V R R R G R E E K V Y E E Y L N K L N V P I V K K M Q N N E I F E  
V T N M S R M Y H Y N R R R E T L L G D T A I F T Y H H D V P R W Y D R G N A F H T E  
V T T N P M Y W P A R R R P E T L L L V T A I Y K F H H G D F K V W W G D P E Q D W G L A T F E  
V S L N H M F S E T R N R R E T L Y G K Y I F T Y H H P V P L V Y N R S E S T R I E  
L T I N G K M K A K S R N R E T K A L J E E F F N K E K K L K V K K I N N T F I E  
V T I N H M Y S D T R N R R E T L Y G H Y I F N Y H H P V E R Y Y E R T E D L S G C I E  
V T L N P M Y W P A R Q Q E T L L Y S A I Y K F H H W M D D T E E D L S G C I E  
L V E N K M Y S M T R R R E T I Y C D Y I F R Y H H N V P I F Y G R D N D Y H I E  
V S L N R M Y S E T R R R R E T L Y G K Y I F D H H P I N H L Y R R D Y P F S I E  
V S L N K M Y S V T R N R E T L Y A E Y I F N Y H H P V T K Y Y D R T N P F S I E  
V T L N P L Y W Q A R R E T L L T T A I Y K F H H P D F T R Q T I N T W T S I E  
V S L N K M K Y T T R S R E T I Y G K Y I F K Y H H P L N L F Y N R L N D Y K W T S I E  
V N L N P M A K P A R R Q R E T I N S R L I Y N F H H P M F T A E M R H T P A T T I E  
V A I N P M Y W P A R R P E T L L T T A I Y K F H H W G G P T E E H G L E S A S I E  
I T I N K M S N K A V R H R E T L F A E Y I F K Y H H P I P L W F N R W E L E S I E  
V S L N P M A K S A R Q R E T N H L R A I Y R W H Y L G D E V R D Y D N A T I E  
V T L N P M R W N A R K R E T V N L T A V Y R F H H W W G D P D K D H G T A T I E  
V S L H K M F S L A T R C K R E T I Y G E Y I F N Y H H K D E K F Y D R Y T A D N I E  
F F K A N I L P D R E E I E A T E H V I K Q V A P T H V F R L P E E A H I E  
V T I N P M T K P A R M R E T M I M E A I Y R F H H N F P I W D E N W G R C H T F E  
L T L N P L F W P A R H D E T L L M K A I Y E F H H P D F V P E K H W G L A T F E  
A V L T R P G A P S R P E V D P I V D T V K A I R P K N Y R I E Q P G I A V I D  
V M I N S R M Y S V T R N R R E T I Y G E Y I Y K Y H G T P Q Y Y S R Y N A F H I E  
V S I N S M R L Q A R R R E T V N Y Q A I Y R W H H P L F A N E E F P V F N F I E  
V T L N P L Y W P A R R H D E T L L M K A V Y R F H H W W G D P E V D W G Q A T F E  
L S I N H M T F A A R R Q R E S M F M E T I J A H H G L H V W R N D R D H T H R I E  
V S V N A M K K R A R R R E T V H F E A I Y A H H P L F E A G Q A D H P S T I E  
F L P S S M R H P Q R Q G E T T Y L C D W F A E R G W K V L E S P V D Q T E F E  
L T L N P L Y W P A R R H D E T L L M K A V Y T F H H W W G D P E L D W G Q A T F E  
M T V N K M T F E A R R R E S L F T E Y I L K H H P V D V W L D R E A E G H I E  
I T L N H M R T E T R N R R E T L F A E Y I F S Y H H P I P F W F D R N E T T S I E  
I T L N H M R T E T R N R R E T L F A E Y I F S Y H H P I P F W F D R N E T T S I E  
A V I T N M A Q W W R R G E N F R A I E T Y Q R L G I P I Y D Y V T A G T F E  
V S I N A M R K K A R S R E T V H M E A I Y R W H H G Y G R P D A P D G F E Y T I E  
V S L N K M Y S V T R N R R E T L Y A D Y I F K Y H H K D E R F Y D R D R F E Y H I E  
V T V N P M F W P A R R P E T L L V T A V Y R F H H W W G D P D L D H G P A T T A E  
V A V N S M R W G A R R R E S M N Y D T L Y R Y H P T L S V C A P P F E R W T M E  
V A V T S L A M P A R R R I T H A I Y R Y H P R F A G T D L L Y E P A L E H V I E  
V T L N P M Y W P A R R Q E T L I L Q A I Y Q F H H W W G D C D K D H G P A T T I E  
A L V T R P F R Q R R G E S A E A V R Q V L S E L K L R V V E V T D E G A T L D E  
I T I N R M R E E A R R R R E T L F M E Y I L K Y H H P I P V W L N R N E R F S I E  
L V M A R L N S V H R L P E A D A L T A L M T E A P H V V H L D E G T I E  
V T L N P M Y W P A R R Q E T L L T T A I Y K F H W Y G D P D K D H G A N A T I E  
M L L A R F L H P A R R Q G E E P Y F T A A F E S L K E D I A F L P E G A V T Q E G  
V A L T S F A M P A R R N E S A L T S L I Y R H H P R F A G I R P S M E H V I E  
A V I A R F R F A Q R A G E S R A Y A E W M R S L G Y R P L L T R H V I N E  
V A I T A L A F A P A R M R E T D L V Y A F H P R F L G V R R A Y E S H T A P I E  
V T L N P L Y W P A R R H D E T L L M K A I Y E F H H W W G D P E R G W G T A T I E  
V A I T S L A L P A R A R E T D L T Y A F H P R F L G V R R A Y E S H Q A P I E  
L F I S N L I P D R E R E T E A F A S S I F P L I D P A H I E S L P E A V H T E  
I I F S S M K M E G R Q R E A N L L R A I F E N H P N F K D H V N Q N P P S I E  
V T L N A M Y W P V R R E T L L T T A I Y K F H H G I Q V W W G D P D K N S F V E  
V A I T S L A Y P A R V R E T S L T D V I Y A H H P R F L G V R R A Y E S V E  
V I S N F K F Q E R Q G E E T I Y E N W F K K N G Y D V A R I P S E H K F E G  
L S I N K M T F E A R K R E S L E V S Y L Y E H H P L P L W F D R D L P G S I E  
P A V T S L T M P A R R R E T Q L I Y T F H P R F A G T Q H A H G W R D E N L I E  
V T C N P M F W P A R K P E T L L Q R A V Y K F H G F T I W W G D S D E D F L E  
V T C N P M F W P A R R A E T L V Q R A V Y K F H G D F N I W W G D A N A T M E  
V A V T S L A M P A R R R E T R A I Y R Y H P R F A G V D L L Y D P T L E H V I E  
L T F S S M K M E G R Q R E A D I L R A V I F E N H H P D F R E H V K D N A P S I E  
A M L S H M R F P R R H E S L T A A E W F T G H G F D R A G G D G V G P H F E  
V E L S R M F W G A R R R E V L L L T A I Y R Y H H W L D T V D K D M G H T F I E  
V A I T S L A L P A R M R E T D L I Y A H H P R F L G V R R A Y E S H T A P I E  
V S I N P M A K L A R Q R E T Y N L R A I Y R W H H Y Y G D E D R H Y D H A T I E  
L T I N R M T F A A R Q R E S M F M E T V F A R G D F S V W R N R D H Q T H I E  
K A G T S M R K P E Y A H S H S V F Q K W W D E R T F P L Q A N N K W S L E  
V T M N P L Y W R A R H D E T L L M K A I Y L F H P D F V P E Q R W G Q A T I E  
V A I T S L A M P A R G R E T D L I Y A Y H P R F A K T G R A Y G A H S A P L E  
I A L N K M Y A E T R R R E T L Y A K Y I F N H H P M N L L Y D R G P D S R L E  
V A I T S L A M T A R R R E T S A I Y R Y H P R F A G V G T V Y G P Q L E D L E  
A T V T S L A M P A R K R E T E L I Y Q F H P R F R S S P R L H G S H L L E H V I E  
L T L N P L Y W P A R Q E E T L L M K A V Y A F H H W W G D P E Q D W G Q A T I E  
V S L N H M Y A D T R N R E T L Y G K Y I F K Y H H N V E L N R R E E D T R I E  
M A I T S L A L P A R S R E T D L I Y A H H P R F L G V R R A Y E S R S A P I E  
M T I N T M R T E A R R R E T L F L T Y A I H K Y H H K N S L W Y N R T L P A I E  
V S I N P M C R P A R V R E S V N E A I Y L H H P R F A D A N D S G F A S V I E  
V G I N R M Y S Q T R N R E T I Y G D Y I F N Y H H D V P Q Y Y S R E N T F H I E

UniRef90\_X8K222 G G D V L V L N K T V I A V G L S S Q R T T A A A I E R F A R N L L G K R V I V F D  
UniRef90\_U2DSZ6 G G D L L V L N E T V I L I G V S S Q R T H P A A S I E F T L A K N V F Y K E Y G F D I P K  
UniRef90\_T0NBS1 G G D E L V L S K D D L I V G I S S Q R T D D A E S I F T L A K R N L F F K K T V L V F D  
UniRef90\_N9XVW6 G G D E L L I L S K D D I V G I S S Q R T D A K S I E K L A K R R L F F K K T V L A F K  
UniRef90\_H3NC65 G G D E L V L S E D V L V G I S S Q R T A A K S I E K L A K R R L F F K K E V L A F A  
UniRef90\_D7UUZ7 G G D E L V L S E K V L V G I S S Q R T D A R A F E N L A R L R G K H A V E I P T  
UniRef90\_U4VCP3 G G D V V L Y N N I V F V G L T A R T N R Y A F E N L K E I C P G K I F I P L E S  
UniRef90\_L1KUA0 Q G D A L A C G D L L L A A Y G Q R T D E R M L E V L A R E L F E Y E V V P L S  
UniRef90\_Q47NE3 G G D V M P V G N G V L V G M S E R T R R P Q A V I T L L A A A L F A R G V I Q M P K  
UniRef90\_I0H3B7 G G D V M P V G N G V L V G M S E R T T P Q Q V E S L A A F A L F F K R E L I A V N E  
UniRef90\_S3DKU3 G G D I L V I G K G V L V G I S S E R T T P Q Q V E S L A A F A L F F K R E L I A V N E  
UniRef90\_M2X496 G G D V H V L G E G V L I G M T A R T T P M A V V D F F R E F F P H K T I I P I P  
UniRef90\_Q7MXG2 G G D L L L Y D D L F I G T T A R T N A R A V V E S F S L L R D M G F N N I F  
UniRef90\_L0A9M4 G G N A L L L R K D V L V G I S G E R T N N K A S G V V E S F S L L R D M G F N N I F  
UniRef90\_UPI000372B103 G G D V L F S R H T V L A I G L S E R T E A A A A V D G Q M A E A L C E E I K E I L A F K  
UniRef90\_UPI000372B103 G G D V M P V G N T V F I G M G E R T T P A A A V D G Q M A E A L C E E I K E I L A F K  
UniRef90\_J3FB14 G G D E L V L S K D V L V G I S S Q R T D A A S I E K L K E N L G F K K V L A F E R  
UniRef90\_B2UWQ0 G G D V V L H S K D V L V G I S S Q R T D A S I E K L K E N L G F K K V L A F E R  
UniRef90\_UPI000372B103 G G D E L V L S K D V L V G I S S Q R T D A R S I E K V A R R V D L A F V I D N  
UniRef90\_UPI000287C78D G G D V M P I G K T V L V G M G E R T S Q Q A I T R L A K T L F D H I T V A P N  
UniRef90\_B6W6V5 G G D V L N N D H T L L L I G I S S Q R T D F E A S I K L L A E F F G D Y E L K L P H  
UniRef90\_F3YAM1 G G D E L V L S D K V L V G I S S Q R T D V A S I D L L A H N V F F E Y E L L A F N  
UniRef90\_R5SU48 G G D I L N L N E H V L V G I S S Q R T S A E A I D M L A K N L F F R L A F K I P E  
UniRef90\_D5CBB4 G G D V M P I G K T V L I G M S E R T S Y Q A I A Q L A S A L F F S N P F S H V K  
UniRef90\_R5FQF0 G G D I L V L N K K I C V G I S S E R T H P S S I E V L A E N L F K S G V I V E  
UniRef90\_H6N0E2 G G D I L V L N G R T V M I G M S E R T A P Q G I E V L A E N L F K S G V I V E  
UniRef90\_H4F4J7 G G D V M P V G R T V L V G M G E R T S A E S I E G Q L A Q A L F A R G V I P K  
UniRef90\_Q65ZT1 G G D E F V L S K D I L I G M S E R T E A E S V E G K L A S L S L F K L A F K I P K  
UniRef90\_UPI000395D95B G G D V L V I G R G V L I G M S E R T T P Q G V E Q L A R S L Q A K E V I A V Q  
UniRef90\_UPI00046759DE G G D V M P I G K G V L V G M G E R T T P H A V E G Q L A R A L F F R K G V I A C K  
UniRef90\_S6A2A1 G G D I L N L N K K V L I G I S S Q R T T A S A I E V L A H N V F F R K R V L A F K  
UniRef90\_F4AW98 G G D V M L A D D H I F I G I T A R T N M L A V G M I Q E L F P N K K V M S F D  
UniRef90\_UPI000370A925 G G D V Q P I G N T V M I G M G E R T S R Q A V W I A R S L F S E R A G V L A V H  
UniRef90\_L0IT89 G G D V L V I P I G N G V I G M S E R T S R Q A I T Q V A R S L F S E R A G V L A V H  
UniRef90\_S9VLX1 G G D V L Y V R D Y V F V G K S S R T N D D A F E Q M K K F L A G L E C V Q C P  
UniRef90\_D4FVM1 G G D V I I D D L V Y V G I S S Q R T V I S A I G D Q L E E A L P E Y T V P V K  
UniRef90\_C7N124 G G D V L I N E H T L A I G I S S Q R T E P D A I G D E L A K K V I F Y D E T S S I D  
UniRef90\_U1QFT3 G G D V L I I G N G V L I G L S G E R T S T T Q G V E I L A S K L F F A S G I V A L D  
UniRef90\_UPI00040888CA G G D L M P V G G G V L M G M S E R T S R H A I Q V A R A L F F E Q G V I P K  
UniRef90\_UPI00046AFDAA G G D E L V L S N H V L I G V S S Q R T S A T A I T Q D I A R N L F K I A I S I P H  
UniRef90\_M3B3V3 G G D V L V I G N G V L V G M S E R T T P Q A V E A I A L R M F A A G V V A L E  
UniRef90\_UPI0003691082 A G D A L V F N G R L A G G H G M R T S R R Q A Y T P A I A Q T G W D M R L R L I  
UniRef90\_K4RFW1 G G D I M P V G K G V L M G M S E R T S R R Q A I T Q V A K T L F E A G V V A P R  
UniRef90\_S0KNS1 G G D E L V L S H E V L V G I S S Q R T S A K T L E K L A R N M F A K N V L A I K  
UniRef90\_B8D2J5 G G D E L I L S D K V L M G I S S Q R T D A A S V E K V A R N I F T L A F K I P E  
UniRef90\_UPI0004003DCF G G D E L I L S D T L A V G I S S Q R T D S A S V E K V A R L F N K T V L A F Q  
UniRef90\_A1WMR7 G G D F I I E P D C V L I G V E G R S Q E Q G A L Q L K R W F E G W E V R L C G  
UniRef90\_UPI00037CCEE2 G G D V L V I G D G V L V G M S E R T R P Q A V E M L A R S L F F A G G I V A L R  
UniRef90\_UPI00047B2FBC G G D I L L T I E K T L A I G I S S Q R T P Q A D A I E H I A K I F F K L A F N I P N  
UniRef90\_A6VWS0 G G D V M A W G N G V L I G M G E R T S P Q A V I G Q I A K R L F F E Q G V I A C Q  
UniRef90\_K6W4E7 G G D V H V L G H G V M I G I S E R T S P Q G L E R L A G R L F A K K V I G I P  
UniRef90\_I0HJ55 G G D V L L A P G V L I G V G E R T T P A G A E R L A R R V L A H T V L A V P  
UniRef90\_C1DD83 G G D V M P I G N G V L I G M G E R T S P Q A V V Q T A K S V L L G Q G V V A C Q  
UniRef90\_UPI0003EACC3D G S D V L F T G R E F F V G I S S H T N A K G A E A V A D T F E R  
UniRef90\_UPI00047758E9 G G D E L V L R D T V A I G V S S R T S A K A I E N L A V Q L F R R T V V A V E  
UniRef90\_L7F5S5 G G D V I L H T D T V L V G L S G E R T S P K G V I E N L A Q Q A L F S H H G V V R F A  
UniRef90\_Q88P52 G G D V M P I G N G I L I G M G E R T S R Q A I G A L A Q N L F A K G V K E I P  
UniRef90\_Q0BSW3 A G D A I W D R R F F W T G F G Q R S N R E G V E A V A R Y F S Q D V I T E L A  
UniRef90\_UPI00047DA298 G G D I M L L S P G V V V G T G E R T T P A G V E R L A R Q L F D H T V L A V P  
UniRef90\_UPI0001B59E89 G G D L L K V G D L V L A G W G E R T D R A H P E I S A A L R A P V V S L E  
UniRef90\_H6R0I3 G G D V L L L A P G V L V G V G E R T S R A G A E A L A R S L F D H T V L V V P  
UniRef90\_UPI000375E78B G G D V M P V G N G V L V G M S E R T S R Q A I T Q L A A A L F F E A R V I I P K  
UniRef90\_W8A2H8 G G D V L L L A P G V V V G V G E R T T A A G A E A L A R S L F F E H T V L V V P  
UniRef90\_J6GUW1 G G D V L L Y D D L F V G A T A R T N S Y A I D F F R E R F P H K R V V P I E  
UniRef90\_S2D7F4 G G D I I L L S K K V A I G N S E R T D E K A I Y Q V A K A L R V Y E V H L P H  
UniRef90\_F9UD10 G G D V M P I G N G V L I G M S E R T S R Q G L G Q V A A S L F A N G V I V P K  
UniRef90\_I0S4D5 G G D V L L L A P G V V V G V G E R T T P A G A E R L A R S L F D H T V L A V P  
UniRef90\_UPI0003697385 R G D A F V Y G E Y L I G S Y G V R S D K E A L I Y I A E Q F E L K P I V K L V  
UniRef90\_R2Q1A7 G G D L V L A E V V A V G I S S Q R T K P Q A I E L L A Q R L F A Q G I K I P P  
UniRef90\_Q03DS2 G G D E L V L N D H V L I G I S S Q R T T A N A I E L I A R N L F K I A I S I P H  
UniRef90\_U1EWG7 G G D V M H L A P G V M V G V G E R T S S A G A E R I A R T A L K L G V L A V P  
UniRef90\_G8AGS7 G G D V M P I G K G V L I G M G E R T N R Q A V G Q V T R A L F R N R V I A C L  
UniRef90\_UPI0004786F84 G G D V M P I G N T V L V G M G E R T T Y Q A V G Q V A Q A L F R N G C L M P K  
UniRef90\_UPI00037208CB G G D V L V L A P Q V L I G V G E R T T P A G A E R L A R R V F G E G V V P I A  
UniRef90\_K1L0G8 G G D V I V L S K A V A I G N S E R T D E K A I Y Q V A K A L L G R Y E V H L P K  
UniRef90\_D2Q2G6 S G D A F V F G D S L V V G Y G P R T E A L A Y H L A E W N L R V R G L R I A  
UniRef90\_G9PKK4 G G D I M P I G K G I L V G M G E R T T F Q A V S Q I A K S L F D A G V I A A R  
UniRef90\_G4HUFO G G D V L L L A P G V V V G V G E R T T P A G A E A L A R S L F D H T V L A V P  
UniRef90\_UPI000470EFD9 G G D V L V A G R G V L I G L S E R T T A Q G I E A L A S L F R H R V V V M E  
UniRef90\_G9WG60 G G D E L I L S D H V L I G I S S Q R T C A A A I Q D V A K K L F V D T V I A I K  
UniRef90\_I0JQA4 Y G D V I V L S D A V L I N A G L R T S M E S M D D I Q R Q I R R A G F S E I G  
UniRef90\_C7QYH4 G G D V M P V G D G V L I G M S E R T S R Q A I T Q V A D T L F Q R G V I V P K  
UniRef90\_C6WDR2 G G D V L L L A P G V L I G V G E R T T P A G A E S F A R A L A D H T V L A V P  
UniRef90\_R2QYK3 G G D V L V L S S K V L V G I S G E R T D M E S K K L A A R I F E A E V L A F N  
UniRef90\_UPI00047EEC83 G G D V L L L A P G V V V G T G E R T T P A G V E R L A R N I L E H T V L A V P  
UniRef90\_E9UPV7 G G D V L L L A P G V V V G V G E R T T P A G A E R L A R Q V F A H T V L A V P  
UniRef90\_U1Z1Q6 G G D V M P V G N G V L V G M S E R T S R Q A I S Q L A K A L F D A G V V A P R  
UniRef90\_A8AYL1 G G D E L V L S K D V L V G I S S Q R T D A S A I E L K K N L F G K K V L A F E  
UniRef90\_W9AMP0 G G D V L L L R P G V V V G V G E R T T P A G A E A L A R S L F E H T V L A V P  
UniRef90\_A5I261 G G D E L V L S D K V I G L S A R T S A E G I E V A K S L F E A K N F D I P N  
UniRef90\_D0WNH0 G G D V L V M G R S V L V G L S E R T S P Q G V E R L A Q L F E A G V V A V E  
UniRef90\_S6CL26 G G D V L N I N E H V L I G I S S Q R T E P D A I D Q L A H N V F S D E T S T I D



		170	180	190	200
UniRef90_X8K222	L P K F M H L	D T V F T M V D	Y D K F T I H P	E L E A P L Q L F E M E L D R D G	
UniRef90_U2DSZ6	S R A F M H L	D T V F T T Q I	D Y D K F T I H	N S I D Q P F K V Y E L T K H P	S K Q
UniRef90_T0NBS1	I P K F M H L	D T V F T T Q I	D Y D K F T T V	H P E I E A P L K V Y T A L T Y D E N D	K
UniRef90_N9XVN6	I P A F M H L	D T V F T T Q V	D Y N K F T T V	H P E I V G P L N V Y T A L T Y D E N D	K
UniRef90_H3NC65	I R K F M H L	D T V F T T M V	S D Y D K F T I	H P E I E G E L K V F S I T K G E D D	
UniRef90_D7UUZ7	T R A F M H L	D T V F T T M V	S V N D K F V I	H P G L T K N K Q L H I Y E T J E L T K	
UniRef90_D4VCP3	L A G L M H L	D C T F M P V V	S G K G H A I I Y K	D G F M Y P Q D Y H T L D L E L F G	
UniRef90_L1KUA0	T A G W Y D L	D L A V G V I T P	D T L A Y C P E	A L D A R S L R T L R G L	
UniRef90_Q47NE3	A R A L M H L	D T V M T N V D	H G V E T K Y A	G L G M L P S Y T I E P G D S D K	
UniRef90_I0H3B7	L R A A M H L	D T V F T F A D	R D L V T L Y P	N I M D G V H T F S L Y P G S G K	
UniRef90_S3DKU3	L P K C M H L	D T V M T H V S	I D T F S I Y P	K V M H R D L D T W S F T P T L N	
UniRef90_M2X496	L T H S M H L	D T V M S M V D	R A T F V V Y P	Y F D R D A R S W T N R N L W H T	
UniRef90_Q7MXG2	M R S V L H L	D C A F Q P V V	G R S R A I V Y R	Q G F L H S E S F G L I T E I F T G	
UniRef90_L0A9M4	V J Q T I H I	D E Y V S Q I N	E D T I I T I R	Q M F P W D V A N E L K N L	
UniRef90_UPI00034D306E	L P K F M H L	D T V F T T Q I	D V D T F T V H	N I L Q G N L V V Y R L T P G A K P	
UniRef90_D7A1P6	M P K S M H L	D T V F T M C D	D R D L A N V F	L D V C Q Q I T C Y S L R T P G D N E	
UniRef90_J3FB14	F R K F M H L	D T V F T T M V	D Y D K F T I H	P E I E G D L R V Y S V T Y E D N N	
UniRef90_B2UWQ0	F N E M L H L	D C V F T N V I	S Q D S C V V S	D Y I Y D L D I E K S F K K C Y Y	
UniRef90_UPI000372B103	N R K F M H L	D T V F T M I D	Y D K F T I H P	E I E A G L R V I S L K P G S G K	
UniRef90_UPI000287C78D	Q R S A M H L	D T V F T F C D	I D L V N V F P	A V T D H I T T F H I R P D E S	
UniRef90_B6W6V5	N R S F M H L	D T V F T Q V V	L D A F T Y H P	E I K K M E V K L L S K D S L K	
UniRef90_F3YAM1	I R K F M H L	D T V F T M V G	V D K F T I H P	E I R G E L T V Y S I T K E K E	
UniRef90_R5SU48	C R A F M H L	D T V F T Q L D	Y D K F T Y H P	E I M N T L E V F E I T K G D N E	
UniRef90_D5CBB4	L R A A M H L	D T V F T F C D	R D L V T L Y P	A I V D Q K I E V F S L I K D D S P	
UniRef90_R5FQF0	L P K F M H L	D T V F T Q V D	R D N K F T V H	S H C T N F K V F D L T K N K T E E	
UniRef90_H6N0E2	L P A F M H L	D T A M T Q V D	R D A F S V Y P	Y L P D T L R S Y T L V P R N D Q	
UniRef90_H4F4J7	S R A A M H L	D T I F T Q C G	G D V V T T F K	E S D A D E L V C Y D I R P H D P	
UniRef90_Q65ZT1	N R A Y M H L	D T V F T Q L D	Y S V F T S F T	S D D M Y F S I Y A L T Y N S S S	
UniRef90_UPI000395D95B	L P K C M H L	D T V M T H M D	I H T F S V Y P	T V M R P D L P C W R L T R K D	
UniRef90_UPI00046759DE	L P A S M H L	D T V F T F C D	R D L V T L F A	D V V D G I T A Y S L R P G A K D	
UniRef90_S6A2A1	I P A F M H L	D T V F T Q I D	Y D K F T I H P	E I L G L G P L E V F E I T R G A K D	
UniRef90_F4AW98	L R K A L H L	D C C F Q P V G	N G K A L L H K	N G F L Q E K E Y N W L L N H Y G	
UniRef90_UPI000370A925	L P K S M H L	D T V I T M C D	R D L V T L F P	Q V V N G A R T W A L R P S D N S A	
UniRef90_L0IT89	V A G A M H L	D T I F T F A D	R D V V T I Y P	E I D A L Q T F T L H P S D N I	
UniRef90_S9VLX1	T T G C L H L	K C A V T F L N	E K T I L I N P	Q A L E P D A A D M L J A K	
UniRef90_D4FVM1	L H E F L H L	D C V F N I V S	E A L I Y P Q A	L E P D A A D M L J A K	
UniRef90_C7N124	T R A F M H L	D T V F T Q I D	Y D K F T I H P	E I M G P L T V F E I T P T G N G	
UniRef90_U1QFT3	M P K V M H L	D T V M T M L N	Q G T F T K Y A	G L G M R P S L V I T P G P D P K	
UniRef90_UPI00040888CA	L R A A M H L	D T V F T F A D	R E T V T L Y P	R I M A D S E A V P G L H L T D H	
UniRef90_UPI00046AFDAA	N H A M M H L	D T V F T M I N	T D Q F T V H P	E I L G E G G K I D T W T I H P G	
UniRef90_M3B3V3	M P K F M H L	D T V M T M V S	G D T F T Q Y A	G L G A L P S V T V E P G G D G E	
UniRef90_UPI0003691082	D P R F Y H L	D T A F F C P L	N N D S A L I V P	A A F D A A S L T V L R E L V P	
UniRef90_K4RFW1	L R S A M H L	D T V F T F A D	R D L V T L Y P	A I M D G V H T F S L R P S D R	
UniRef90_S0KNS1	I P N N M H L	D T V F T M V D	Y D K F T I H P	E I Q D A D G K I D C F I L E P N	
UniRef90_B8D2J5	K R A F M H L	D T V F T M V D	Y D K F T I H A	E I E G P L K V Y S I T K G D N D	
UniRef90_UPI0004003DC	I P A F M H L	D T V F T Q V D	Y D K F T V H P	E I V G D P E N P M L K T T K E	
UniRef90_A1WMR7	I D P Y Y H I	D L M V V M L A	P K L A A V C L	E T I D P G V V D W L Q G K	
UniRef90_UPI00037CCEE2	M P E F M H L	D T V M T M V D	H G V F T R Y A	G M G D L P S F T V R P G D T A K	
UniRef90_UPI00047B2FBC	N R A M M H L	D T V F T Q I D	V D K F T I H P	E I Q G P L Q V F E I T K G N V E	
UniRef90_A6VWS0	M P R A M H L	D T V F S H C D	R D V V T A F T	D V C D E I Q C Y T L R P G D H A	
UniRef90_K6W4E7	L P A T M H L	D T V M S M V D	H S F T K F A G	L G M L P S F T L E P G D G D D	
UniRef90_I0HJS5	L R A T M H L	D T V C T M V D	V D A V V M Y P	N V A G S L V A W T I T A G L G E	
UniRef90_C1DD83	M P K A M H L	D T V F S F L D	V D L V S V F P	D V V D D I T C Y S I Y A G D K E	
UniRef90_UPI0003EACC3D	I P K F M H L	D T V F T M V D	H D K F T I H P	G P D E K M R I Y L L E K S A G D	
UniRef90_UPI00047758E9	V D G I V H L	D D H F T I V A	P D T A L I H R	A V F P P A E L R W F E Q	
UniRef90_L7F5S5	V A G A M H L	D T V F S F C S	R D L V T V F P	E V V K E I V P F I L T R P D E S K	
UniRef90_Q88P52	T P Q F Y H L	D T C F C P L S	G D V L Y Y P P	A F T P A S L S A I E A H V A P	
UniRef90_Q0BSW3	I R A T M H L	D T V C T M V D	V D T V V M Y P	P A Y S L E A F T V T A S N G D L	
UniRef90_UPI00047DA298	L V D F Y H L	D T A L A V L D	D R T I A F Y P	P A F S D T A R R Q L G A L F P D	
UniRef90_UPI0001B59E89	I R A T M H L	D T V C T M V D	D T A V V M Y P	S A V R E T L A A F T I Q R G D D Y	
UniRef90_H6R0I3	L R A A M H L	D T I F T F A D	R D L V T V Y P	N I V D G I H T F T L R	
UniRef90_UPI000375E78B	I R A T M H L	D T V C T M V D	V D A V V M Y P	A I Q D E L C A F T I R K E E H	
UniRef90_W8A2H8	L R A T M H L	D T V C T M V D	V D A V V M Y P	A I Q D E L C A F T I R K E E H	
UniRef90_J6GUW1	L R K V L H L	D C A F Q P V V	S R G R A L I Y R	E G F L H E R D V A L V E E F G	
UniRef90_S2D7F4	R R N Y M H L	D T V F T I L D	E N L V L T Y P	D A L N S V L I Q T S L Y T I K E I	
UniRef90_F9UD10	L R A A M H L	D T V F T F A D	R D L V T L Y P	A I M D Q V H A V I S L R P G D K P	
UniRef90_I0S4D5	I R A Q M H L	D T V C T M V D	V D A V V M Y P	N V V D S L S A F T I H R D G S G	
UniRef90_UPI0003697385	D E K F Y H L	D T C F Q N L S	T N N A I F Y P	E A F E D S S L K E F S D I L	
UniRef90_R2Q1A7	Q R A M M H L	D T V F T M V D	V D K F T I H P	E I L S T S G H L D I Y V L E P Q	
UniRef90_U03DS2	N H A M M H L	D T V F T M I N	T D Q F T V H P	E I L T G D G K V D N W V L H P G	
UniRef90_Q1EWG7	I H Q T M H L	D T V C T M V D	T D A V V M Y P	Q V A D E L Q A L P M T A D G D E	
UniRef90_G8AGS7	M P K A M H L	D T V F S F C C	R D L V T V F A	R E V V D Q I R C Y S A Y P A D D E	
UniRef90_UPI0004786F84	S R A A M H L	D T V F S F C C	R D L V T V F A	R E V V D Q I R C Y S A Y P A D D E	
UniRef90_UPI00037208CB	K R Q Y M H L	D T V C T M V D	V D A V V I Y P	N A A D S L R A Y T V T A D A D G	
UniRef90_K1L0G8	H E G M Y H L	D L P F C P V V	D S T H A L V Y P	P A F D A A S Q A T S L Y T L A K E I	
UniRef90_D2Q2G6	M P K A M H L	D T V F T V C S	E D V V N V Y P	V V A M D T F S L R P D E T E R	
UniRef90_G9PKK4	I R A Q M H L	D T V C T M V D	V D A V V M Y P	A I S D S L S A F T I K R T P D G K	
UniRef90_G4HUFO	L P K C M H L	D T V M T H L D	I D T F S V Y P	Q I I N T G M P C W I L T P D G K	
UniRef90_UPI000470EFD9	I P E N M H L	D T V L T M V N	F D Q F T V H P	E I L D A G G K I D T W T M H P D	
UniRef90_G9WG60	V P D T L H L	D M N C N V A	G E R L L L Y F P	I E V L D R Y C M F H E F I E R H	
UniRef90_I0JQA4	L R A A M H L	D T V F T F A D	R D L V T V Y P	R I V D S L H T F T L R P D G	
UniRef90_C7QYH4	I R A T M H L	D T V C T M V D	R D A V V M Y P	A V R D N L F A Y P V R Q D G S G	
UniRef90_C6WDR2	I R K F M H L	D A V F T M V D	H D K F T I H P	E I E G D L V V Y S L I K A N	
UniRef90_R2QYK3	I R A T M H L	D T V C T M V D	E D S V V M Y P	N V A D E L T A V I T L R W I D G D	
UniRef90_UPI00047EEC83	I R A T M H L	D T I A T L V N	T D K M V I Y P	N A V D S L V A Y A V T P S G E S	
UniRef90_E9UPV7	L R A A M H L	D T V F T F A D	R D L V T V H P	E I V D G I H T F T L R P S D	
UniRef90_U1Z1Q6	F R K F M H L	D T V F T M V D	Y D K F T I H P	E I Q G N L R V F S V T Y E N E Q	
UniRef90_A8AYL1	I R A Q M H L	D T V C T M V D	T D A V V M Y P	N I V D S L S A F T M H R T L D G	
UniRef90_W9AMP0	C R A F M H L	D T V F T M V D	Y D K F T I H P	E I Q G P L S V Y H T R P L E K I	
UniRef90_A5I261	M P K A M H L	D T V M T M A D	E G T F V K Y A	G L G M L R S Y T I R P G D A K	
UniRef90_D0WNH0	T R A F M H L	D T V F T Q I D	Y D K F T I H P	E I M G P L T V F E I T P D G N G	
UniRef90_S6CL26					

UniRef90\_X8K222  
UniRef90\_U2DSZ6  
UniRef90\_T0NBS1  
UniRef90\_N9XVW6  
UniRef90\_H3NC65  
UniRef90\_D7UUZ7  
UniRef90\_D4VCP3  
UniRef90\_L1KUA0  
UniRef90\_Q47NE3  
UniRef90\_I0H3B7  
UniRef90\_S3DKU3  
UniRef90\_M2X496  
UniRef90\_Q7MXG2  
UniRef90\_L0A9M4  
UniRef90\_UPI00034D306E  
UniRef90\_D7A1P6  
UniRef90\_J3FB14  
UniRef90\_B2UWQ0  
UniRef90\_UPI000372B103  
UniRef90\_UPI000287C78D  
UniRef90\_B6W6V5  
UniRef90\_F3YAM1  
UniRef90\_R5SU48  
UniRef90\_D5CBB4  
UniRef90\_R5FQF0  
UniRef90\_H6N0E2  
UniRef90\_H4F4J7  
UniRef90\_Q65ZT1  
UniRef90\_UPI000395D95B  
UniRef90\_UPI00046759DE  
UniRef90\_S6A2A1  
UniRef90\_F4AW98  
UniRef90\_UPI000370A925  
UniRef90\_L0IT89  
UniRef90\_S9VLX1  
UniRef90\_D4FVM1  
UniRef90\_C7N124  
UniRef90\_U1QFT3  
UniRef90\_UPI00040888CA  
UniRef90\_UPI00046AFDAA  
UniRef90\_M3B3V3  
UniRef90\_UPI0003691082  
UniRef90\_K4RFW1  
UniRef90\_S0KNS1  
UniRef90\_B8D2J5  
UniRef90\_UPI0004003DCF  
UniRef90\_A1WMR7  
UniRef90\_UPI00037CCEE2  
UniRef90\_UPI00047B2FBC  
UniRef90\_A6VWS0  
UniRef90\_K6W4E7  
UniRef90\_I0HJ55  
UniRef90\_C1DD83  
UniRef90\_UPI0003EACC3D  
UniRef90\_UPI00047758E9  
UniRef90\_L7F5S5  
UniRef90\_Q88P52  
UniRef90\_Q0BSW3  
UniRef90\_UPI00047DA298  
UniRef90\_UPI0001B59E89  
UniRef90\_H6R0I3  
UniRef90\_UPI000375E78B  
UniRef90\_W8A2H8  
UniRef90\_J6GUW1  
UniRef90\_S2D7F4  
UniRef90\_F9UD10  
UniRef90\_I0S4D5  
UniRef90\_UPI0003697385  
UniRef90\_R2Q1A7  
UniRef90\_Q03DS2  
UniRef90\_U1EWG7  
UniRef90\_G8AGS7  
UniRef90\_UPI0004786F84  
UniRef90\_UPI00037208CB  
UniRef90\_K1L0G8  
UniRef90\_D2Q2G6  
UniRef90\_G9PKK4  
UniRef90\_G4HUF0  
UniRef90\_UPI000470EFD9  
UniRef90\_G9WGG6  
UniRef90\_I0JQA4  
UniRef90\_C7QYH4  
UniRef90\_C6WDR2  
UniRef90\_R2QYK3  
UniRef90\_UPI00047EEC83  
UniRef90\_E9UPV7  
UniRef90\_U1Z1Q6  
UniRef90\_A8AYL1  
UniRef90\_W9AMP0  
UniRef90\_A5I261  
UniRef90\_D0WNH0  
UniRef90\_S6CL26

210 220 230 240  
E V R Y S S V D D K M A A Q R E Q W N D G S N T L C I A P G T V V T Y E R N Y V  
G E V K V T L L E H Y L N H P V M L I P C G G G D R L I S F R E Q W Y S R N H V  
K E L T I A K E E E G E L E A V L L I R C G G G D R L I S G R E Q T Y S R N Y I  
K T R L K T T Q E D T L E N L L Y L N Q W N D G S N T L A I A P G E Y S R N Y V  
K L D L V D S L E N V L A D A L G L E S V C G G G S L V A A A R E Q E Y E R N T V  
D G E D L Q I T E R H D D F K A V L K R V L N D G A N T L A I A P G E Y D R N V N  
R E N V F E I T R E E M Y Y M N T N V F S I S P E V V V S E K N F R L N T  
G V D L I E V S V D E A A R F A L N L V S D G T T V T M T Q G A P R L A A  
E L K I T D H A P E S D M A A A S V G V D D W D G C N L L A L A P G E R N V S S N  
G P E V V D V A E L G L K S A L R V I E T G G N N A V A V E P G D R N T T N  
G E V K I K K A E N Y I Y A A L G L N D A N N V L T V K P G L V I S Y E H N I Y  
L A E V L K V E P E D E D S R A A E R E Q W D D G T N Y L A V A P G G Y E R N V A  
G R D N L F E I T P E E A Y M M N T N I F S I S P D T V I S E Q N F V R N L N  
G F N T I T V E S D I S T N L L C L N T V A L E P N K I L I G E G C D P I R K  
G E V H L E E I D D T G L D A V K L I E C G G G D P V L A A R E Q W Y D R N V V  
E D V D Y T V E D R P A A E A L G L Q H L R D G N N V V A L A P G G Y E R N S Y  
L H I Q E E K G D E L L A E N L G V E I R C G G N N L V A A G R E Q Y E R N T N  
I K D E E A K N L A A N F I T I G N N T V I S S S K K L C  
G I K L E E K D E E V L A E A L G V N D G S N T L T I A P G V V V V Y D R N T N  
K P H G I D V R E E A A R V D K L R V V E D G N N V L A L E P G S Y D R N T N  
N E L K I E K A D Q L L A N A L A I K I P C G G G D P I A A E R E Q W N D G S N  
G K L K I V E E K D K L E N L L Y L G L P N D G N N V L T I A P G E Y D R N V I  
E E V K V K I L L E E Y L H K D I T L I P C A G G D K I A S E R E Q W Y N R N N I  
G G M R L E H Y S E P L T E V V A L N L R S L G N N V V A M S P G A Y D R N T K  
N K L I V R E I N D T I S N L L S N Y L G N D V L I K C G G E Y D R N T N  
G H F T V T V A E A L G V D T L R V A Q W D D G N N F L T V S P G E R N V T T N  
R P I F D L V A E V L G Y G K L Q I E Q W N D G N N V L A L R P G G Y D R N D D  
S K I H V K E E K A R L R D V L S F Y L W N D G A N L L A I A P G E Y S R N H V  
G E D S L N V E A E K A L D V G P L N I T T G G D S Y A A E R E Q W N D A N N  
G E I D V R K E D G H L T N V L G L R K L R D G N N V L A L E P G G Y D R N T Y  
G E L H V E F I Q D E L K N I L A W N D G S N T L C I K P G T V I V Y D R N D I  
K E N V F E I S S Q E M F N M N S N I F S I S P E V V I S E R N F T R L N  
S D L V T E E Q N E L M A K A L G V D K W D D G N N V V A L E P G A Y E R N T G  
V D V V E E K E L V A A L G L G K L R V G N N A V A V E P G D R N T H T N  
G F D L V E I D E A E S A N V L N F V A E K D D L S V I F T S A T Y P K T A A  
R Y D L E I V P E D E Q F T L G T N V L S I E K K T I S L P G N R H V R N Q Q  
K I H A T E I G D R I A A E R E Q W N D G S N T L C V R P G T V V V Y E R N D V  
H P A T V S H P A E D M H H V T A I E V L T T P Q D S L A A A R E E R N V A T N  
G S E R F T D V V A A A L G L R G L R V I E T G G D L Y A S E R Q Q Y D R N T Q  
K D G D L T M E H N Q D L K A T Q W N D G S N T L A I A P G V V V T Y D R N Y V  
K L H L T D H T R H A T A D A L G L N V H S D G C N V L A V E P G E R N V T T N  
S D P I E L T E A Q E G L A F S A N S V V G D S V I M S A C S E R L R  
S G L E L V D E P A A K A L G L P K L R V G N N A V A L E P G T Y D R N T Q  
G D D I I P T G D G D A A P R E Q W N D G S N T L A I A P G V V V T Y N R N Y V  
E L K I D E E K E D T L K K Y L G L D E V N D G S N T L A I A P G E R N H T T N  
V D T L E H I L S K Y L R E V T L I K C G G G D E I A A R E Q W Y S R N Y V  
G T E I V A V P F K D T M M L G C N V V A L G S D R V L P N S S H F L K  
E L R L I E H P A A E M R V I A A A L W D D G S N V L A V E P G E R N T T T N  
G E L K I E E L N A K L E D V L A L I Q C G G G D K V I A D R E Q W Y S R N Y I  
G Q I D F R K E K H A A D C L G I K K L N D G N N V I A L E P G D R N T Y T N  
D L K V T H A P E D A I A A A L G V D T I R D G C N V L A V R P G E R N V T S N  
E L A V R A P P E A A A M G L D H L R I I D T G L D P V T A E Y E R N T V  
G E V R F E R H E E V V R E S L G L S S V E D G N N V V A R V V V A Y D R N T Y  
G H I V I R E R N H L A A E V L H L N D G S N T L T I A P G V V V T Y D R N Y V  
H F D L I D V H D D E A A N V L A L A P G T V I I A V G S D R I A  
P Y F I E V V G E E T G G S F A E Q W D D G N N V V A L E P G G Y D R N T N  
E H R L V A D Q E D A D R F C V N A V N I G Q T V I M A Q A A A R L R G R  
N V I S G P R L F L D A A E A M G L D R L K V I D T G L D P V T A E Y E R N V E  
A L L V V G P A D A H V L G L N V S D G L H V V L P S A A T C F A T Q  
G T V T M R G V D P A A A D A M G I L G K L R V I D T G L D G V T A E Y E R N E V  
P G D P I E V T E D K L A G A L N L N A L R V G N N L V A V E P G D R N T Y T N  
G V S I S G P P E A A E A M G L G K L R D G N D T L A L A P G E R N E N T N  
R D N L F G V T P E A A Y M S T N V V S L S P D A L I S D R H F T R L N A  
Q E D K V H I K R Q V L K E S L G A N V F A I G P R R V I S Y N R N K H  
G G I D T T L E K P F A D V V A L N F W D S G N N L V A L S P G A Y D R N T W  
G V R I D E A R P E A A D A M G I E R L R D G N N T L A L A P G A Y E R N T E  
F N L I P V S E N D A N K L A C N S V V I N E S V I F P S D D I D I E  
G E N L K I T R E E D L R K V L L T L I P T G G G D R I A A A R E Q W N D G S N  
K D G E I T M E H E D T I K E V L K K A L N K S E I D L I P T G N G D P I V A N  
Q P F L V A A A E A M G I D R L R V I D T G L D P V L A P R V V V A Y N R N V E  
G R F E V V A D A L G Y S R L R I E Q W D D G N N V V A L E P G D R N T Y T N  
G N F E V R A E R P M A E A L G I Q K L R D G N N V A L E P G D R N T H T N  
E P H A G P S R P E A A A A M G I D R L R D G N N T L A I A P V A Y E R N V E  
T E E K V H I K R Q V L N E S L H L E V L S D G A N V E P R R V I S Y N G N L H  
V P E P I V L T D V E A S A F S G N S V V V G E T I L M P A C S P R L R E  
G G I K V T Y D E G Y F V D V V S C E Q W N D G N N V V A L S P G D R N Y S I N  
V K I L D E A P D I E Q L R V I D T G L W D D G N N T L A L A P G A Y E R N A E  
G G D R F E A E R E Q W N D A N N V L T L R P G V V V S Y E R N L R  
N A Q G L T I S Y S Q D L K S V L K N A L G V S E L D L I P T G A G D L I T A N  
G F T V I W T D K V G N N V P I N F L T L N P E T I L V S K Q L N R K L I H  
R P G R S H V T D H Q G N N V V A Q A M G L D G L R V I P G V V V Y T Y D R N T K  
G V R V P S P F L E A A A E A M G I D R L R V I D T G L D A V T A E Y E R N V E  
Q K V T I S E E K D T L E N I L Y L D L P C G G N D I T A A A R E Q W N D G A N  
I V V D D D Q A P E A A A M G I D A L R T I E T G L D P V T A E Y E R N I E  
D Q V D I A A P R E V A A A M G I D K L D D G N N T L A L A P G G Y E R N T Q  
R A P G V E I T D E G D A R A L G L P A L R V G N N A V A L E P G T Y D R N T L  
G V E K V T L T P C G D G N A V A W N D G S N T L I A P G V V V V Y D R N T V  
G V Q I D D E R P R A A A D A M E I D T L R V I D T G L D P V T A E Y E R N T E  
L A S A L E A P S V E L I Q C G G W N D G S N T L A I A P G T V T Y E R N Y N  
S P L H V E A N A P E R M H A V I A E A L G L D S V R V L T P Q D Y E R N T V  
G T K I R E R D E D I L A E R E Q W N D G S N T L C V R P G T V V V Y Q R N N V

UniRef90\_X8K222 T N E D K K G V K V L A I P G A S E L S R G R G G G P R C M S M P L I N R  
UniRef90\_U2DSZ6 T N K T L H G I K V I H T I P S S E L L S R R G R G G G P R R C M S M P L I R E E  
UniRef90\_T0NBS1 T N E D K H N I K V I Q M P S S E L L S R R G R G G G P R R C M S M P L V R R E E  
UniRef90\_N9XVN6 T N E E K N G I K V I H V I P S S E L L S R R G R G G G P R R C M S M P L V R R E E  
UniRef90\_H3NC65 T N A K L A G I K V I H K I V R G S S E L L V R G R G R G G G P R R C M S M P L Y R R E E  
UniRef90\_D7UJZ7 K A L R E H G L V V N E R V P S S E L L S R R G R G G G P R R C M S T L P L I L R E  
UniRef90\_D4VCP3 F M E V W G M T V E E R V P Y Y E L S S K M G G L L R R C M S T L P L I L R E  
UniRef90\_L1KUA0 M L R D R G L E V E L V T T E L A K G G G G G L R R C T A L T L L  
UniRef90\_Q47NE3 A Y L Q A N G I V T T I V G A E L L G R G R G R G G G P H C L T C P L L E R  
UniRef90\_I0H3B7 T L L R R A G V I E V I T T I P G A E L L G R G R G R G G G P H C M T C P L I R  
UniRef90\_S3DKU3 T N E K K A G I K V L T T I P G A E L L G R G R G R G G G T R R C M S C P I E R  
UniRef90\_M2X496 T N L R K H G L E V V E I A G S E L L S R G R G R G G G P R R C M S T C P L D R  
UniRef90\_Q7MXG2 H L R E A W G M T V E E V P Y A E I S K Q G G L L R R C M S T M P L V R E  
UniRef90\_L0A9M4 V L E E N A V D V L E I K I D E I V K G G G G G L H C V T G Q L K R E  
UniRef90\_UPI00034D306E T N D L L R G I K L L T T V P G A E L L S R G R G R G G G P R R C M S M P F W R E  
UniRef90\_D7A1P6 T N T K L R N G I K V I T T I E G D E L L G R G R G R G G G P R R C M S M P L I R  
UniRef90\_J3FB14 A T L E S K G L R L I K I E G T E L V R G R G R G G G P R R C M S M P F E R E  
UniRef90\_B2UWQ0 K I L A K D G I N A I Y I D Y S E L I K G R G G A F T C T T L P L I L R E  
UniRef90\_UPI000372B103 Q L L E E H G I E V I T T I K V K G S E L V R G R G R G G G P R R C M S M P L I R E  
UniRef90\_UPI000287C78D T L L R K Q G I E V L T T I P S S E L L G R G R G R G G G H C M T C P I L I R  
UniRef90\_B6W6V5 T L L R K A G I E V L L E L D A S N L T V G R G R G G G P R R C M S M P L E R  
UniRef90\_F3YAM1 T N K K L A G V L E L N Y L P C S E L V R G R G R G G G P R R C M S M P V V R E E  
UniRef90\_R5SU48 T N E R E H G I K V Y E M Q S A E L S R G R G R G G G P R R C M S M P L I R E  
UniRef90\_D5CBB4 T N D R L R N G V I E I V G S E L L S R G R G R G G G P H C M T C P L I R  
UniRef90\_R5FQF0 T L L K E N N V D D V I P L I V G S E L L S R G R G R G G G P R R C M C P L Y R K  
UniRef90\_H6N0E2 K Y L G D N G I Q V I A M S G S E L L S R G R G R G G G P R R C M S C P L E R E  
UniRef90\_H4F4J7 T N L K S A G I E V L T T I P S G A E L L S R G R G R G G G P H C M S C P T I R  
UniRef90\_Q65ZT1 T N K E E N G I K V Y R I P S S E L L S R G R G R G G G P R R C M S M P L V R E  
UniRef90\_UPI000395D95B V L T D K A G I K V L S I P G D Q L G R G R G R G G G A R R C M S C P L E R  
UniRef90\_UPI00046759DE T N L R K A G V I E V T T I P G A E L L S R G R G R G G G P H C M T C P L I R  
UniRef90\_S6A2A1 T N E L L K G I K V V E I P S A E I S R G R G R G G G P R R C M S M P L F R E  
UniRef90\_F4AW98 T W L R D Q N I T V E E V A Y A E I A K Q E G L L R C S T L P L I R  
UniRef90\_UPI000370A925 T N L R K A G I E V I T T I E G F A E L G R G R G R G G S H C M T C P L I R  
UniRef90\_L0IT89 T L L R R A G L E V I T T I V G A E L L G R G R G R G G G H C M T C P L I R  
UniRef90\_S9VLX1 I V K K F V I E K E Q V M I E A D E I A K A E G A L T C C S L I S Y R  
UniRef90\_D4FVM1 L S K R G Y H I I E I D L S E I L K S G G S F R R C C T M P L I R  
UniRef90\_C7N124 T N A V L K G Y R I I Q I P S A E I S R G R G R G G G P R R C M S M P A W R E  
UniRef90\_U1QFT3 T Y L Q S R G L E V L T T V P G S E L L G R G R G R G G G P R R C M S C P T L R Q  
UniRef90\_UPI00040888CA T L L R R A G I E V L T T I V G A E L L S R G R G R G G G P H C M T C P T V R  
UniRef90\_UPI00046AFDAA S N E M L R G L K V L E T I P S S E L L S R G R G R G G G P R R C M S M P L V R E  
UniRef90\_M3B3V3 T H L R R N G L E V I T T I R G S E L L G R G R G R G G G P R R C M S C P V E R  
UniRef90\_UPI0003691082 H L L R Q R G F D V L L C D M S E F V K A G G G G C R R C L T L A L  
UniRef90\_K4RFW1 T L L R R A G V I E V I T T I V G A E L L G R G R G R G G G H C M T C P I V R  
UniRef90\_S0KNS1 S N E I L R G I K V L E I H S G E L L S R G R G R G G G P R R C M S Q P L V R E E  
UniRef90\_B8D2J5 R L L E E H G I K L H V I P S S E L L S R G R G R G G G P R R C M S M P L V R E E  
UniRef90\_UPI0004003DCF T N K I L E G I K L H V I P S S E L L S R G R G R G G G P R R C M S M P L I R E  
UniRef90\_A1WMR7 E R L K A L G L Q V Y D P E I D M I A N G G G G G V H C M C Q P L R R  
UniRef90\_UPI00037CCEE2 A H L E R H G I E V L T T I R G S E L L G R G R G R G G G P R R C M S C P L E R  
UniRef90\_UPI00047B2FBC T N K L L N G I K I H V I P S S E L L S R G R G R G G G P R R C M S M P L V R E  
UniRef90\_A6VWS0 T L L R K A G V E V I T T V S G A E L L G R G R G R G G G H C M T C P V W R  
UniRef90\_K6W4E7 Q F L E E N G I E V H T I A G S E L L G S G R G R G G G P R R C M S C P I T R E  
UniRef90\_I0HJS5 T N A Q L A G I E V I R I S G S E L L G S G R G R G G G P R R C M S C P I R  
UniRef90\_C1DD83 T N K R D R G V E V I E I P A S E L L G R G R G R G G G H C M T C P L I R  
UniRef90\_UPI0003EACC3D S N E M L R G I E V I E V L S S E L S R G R G R G G P R R C M S M P L A R  
UniRef90\_UPI00047758E9 A Q L A G R G L E V L A V D Y S E V T R I P G S L R C T T L P L T R  
UniRef90\_L7F5S5 T L L R K A G I E V I T T I S A G E L G R G R G R G G G H C M T C P I V R  
UniRef90\_Q88P52 T L L S E R G Y V R E T S D T P Y I M S G G G A Y C M T L R L D R  
UniRef90\_Q0BSW3 T N A Q L A G I E V I R I T G S E L G T G R G G P R R C M S C P L L R  
UniRef90\_UPI00047DA298 T N A R L A G I E V I R I T G S E L G T G R G G P R R C M S C P L L R  
UniRef90\_UPI0001B59E89 T L R R A G F E P I  
UniRef90\_H6R0I3 T N A R L A G I E V L P I P G S E L G S G R G R G G G P R R C L S C P L S R  
UniRef90\_UPI000375E78B S L L R E E G I E V I T T I V G A E L L G R G R G R G G G H C M T C P L I R  
UniRef90\_W8A2H8 A R L E D A G L E V L R I P G S E L L S R G R G R G G G P R R C L S C P L S R  
UniRef90\_J6GUW1 H L R E A W G M T V E E V P Y Q E I S K M G G L L R R C M S T M P L I R  
UniRef90\_S2D7F4 T N A A L R G V E V L E I P S S E L L S R G L G G G P R R C M T M P I S R  
UniRef90\_F9UD10 T N L R K A G V E V I T T I V G A E L L G R G R G R G G G P H C M T C P L I R  
UniRef90\_I0S4D5 T N A R L A G I E V I T T I F E A S E L L G T G R G R G G P R R C M S C P A A R  
UniRef90\_UPI0003697385 T V I A D L G C N I E I S D V S E F L K S G G A C Q C L  
UniRef90\_R2Q1A7 T L L R E A G V Q V L E I A S G E L S R G R G R G G G P R R C M S Q P F W R E E  
UniRef90\_Q03DS2 D L L R Q H G I L V H E V R S S E L L S R G R G R G G G P R R C M S C P I V R E E  
UniRef90\_U1EWG7 T N R R L A G V D V L T I P G S E L L G S G R G R G G G P R R C M S C P I L R E E  
UniRef90\_G8AGS7 T L L R K A G V E V I T T V R G A E L L G S G R G R G G G H C M T C P I W R E E  
UniRef90\_UPI0004786F84 T L L R K A G I E V I T T I R G A E L L G R G R G R G G G H C M T C P I W R E E  
UniRef90\_UPI00037208CB T N A Q L A G I E V V R I S G S E L L S R G R G R G G G P R R C M S C P I E R  
UniRef90\_K1L0G8 T N R A L R G V E V L E I P S S E L L S R G L G G G P R R C M T M P L S R  
UniRef90\_D2Q2G6 I L T G L G L R V V L D L S E F H K G G G S A R C L T N P L  
UniRef90\_G9PKK4 A N L R A A G I E V L E I P S S E L L G R G R G R G G G H C M T C P I D R  
UniRef90\_G4HUF0 T N A R L Q G I E V L P I A A S E L L G T G R G R G G G P R R C M S C P V L R  
UniRef90\_UPI000470EFD9 T N E K Q A G I T V L P L A G D E L L G R G R G R G G A R R C M S C P L I R  
UniRef90\_G9WG60 A L L Q H H G L K V I E T V S S E L L S R G R G R G G G P R R C M T M P L I R  
UniRef90\_I0JQA4 Q F P D L R K K N L I E I E I S E L L K G G G G L R R C M T L P L E R R  
UniRef90\_C7QYH4 T N D L L A G I E V L P I V G A E L L G R G R G R G G G H C M T C P L V R  
UniRef90\_C6WDR2 T N A R L A G V E V L R I S G S E L L G S G R G R G G G P R R C M S C P I D R  
UniRef90\_R2QYK3 T L L K E A G V K I N T I P G S E L L V R G R G R G G G P R R C M S M P F V R E E  
UniRef90\_UPI00047EEC83 T N A R L A G I E V I R I A G S E L L S R G R G R G G G P R R C M S C P L R R  
UniRef90\_E9UPV7 T N E A L A G I E V I A I A G S E L L G S G R G R G G G P R R C M S C P I A R  
UniRef90\_U1Z1Q6 T N A A L R G V E V I T T I V G A E L L G S G R G R G G G H C M T C P L A R  
UniRef90\_A8AYL1 T N K K L E G L R I K I R G S E L L V R G R G R G G G P R R C M S M P F E R E  
UniRef90\_W9AMP0 T N A R L A G I E V L T L A A S E L L G S G R G R G G G P R R C M S C P A A R  
UniRef90\_A5I261 E L L A K K G I N V L T M P S A E L L S R G R G R G G G P R R C M S M P T H R  
UniRef90\_D0VNH0 T N E Y L Q G I E V L P I P G N E L L G S G R G R G G G P R R C M S C P T V R  
UniRef90\_S6CL26 T N D V L N G I N C L V M P S A E L L S R G R G R G G G P R R C M S M P A W R E

1

10

20

30

40

UniRef90\_UPI0002E67C10  
 UniRef90\_C7RFP9  
 UniRef90\_R7D4M5  
 UniRef90\_C4RHD5  
 UniRef90\_R7QSK0  
 UniRef90\_UPI00035C3E24  
 UniRef90\_A0A023D1P7  
 UniRef90\_U5E3L7  
 UniRef90\_A6TSY2  
 UniRef90\_E4KMJ8  
 UniRef90\_Q6AA78  
 UniRef90\_R7ZT42  
 UniRef90\_P63552  
 UniRef90\_C8ZYS8  
 UniRef90\_K0Z0T4  
 UniRef90\_UPI000474A6D1  
 UniRef90\_UPI00047AAECD  
 UniRef90\_D6KD05  
 UniRef90\_E3I0W7  
 UniRef90\_I2BY10  
 UniRef90\_W7IPQ8  
 UniRef90\_UPI000373F05F  
 UniRef90\_I3Y8T2  
 UniRef90\_U2VG90  
 UniRef90\_A4FEM8  
 UniRef90\_R6HJK6  
 UniRef90\_U7KYY3  
 UniRef90\_UPI0003676A76  
 UniRef90\_UPI000365E7A9  
 UniRef90\_V6UHD1  
 UniRef90\_H3NK77  
 UniRef90\_UPI0003B642E7  
 UniRef90\_UPI0003FAC6DA  
 UniRef90\_UPI000379867F  
 UniRef90\_E8X2L4  
 UniRef90\_G0IXF4  
 UniRef90\_R5ZFT4  
 UniRef90\_A0A021VR98  
 UniRef90\_F0GVJ4  
 UniRef90\_F7NE08  
 UniRef90\_D2MN73  
 UniRef90\_UPI00036A6E1A  
 UniRef90\_UPI00035C8B52  
 UniRef90\_Q46BV7  
 UniRef90\_C3PEE7  
 UniRef90\_F2UK99  
 UniRef90\_X2GR67  
 UniRef90\_A6CV54  
 UniRef90\_I4BVN7  
 UniRef90\_A3SJA0  
 UniRef90\_UPI0003B466D1  
 UniRef90\_UPI0003B77648  
 UniRef90\_W9EHS3  
 UniRef90\_C7N4L7  
 UniRef90\_D0CPF2  
 UniRef90\_W4E2P5  
 UniRef90\_UPI000347344C  
 UniRef90\_D3R1E3  
 UniRef90\_F2NBQ3  
 UniRef90\_UPI00047AF117  
 UniRef90\_I4DON5  
 UniRef90\_D2ASF5  
 UniRef90\_A3W7Z0  
 UniRef90\_D0KUA2  
 UniRef90\_UPI0003C7F472  
 UniRef90\_H6RH75  
 UniRef90\_E1REL5  
 UniRef90\_H6RL76  
 UniRef90\_D7WY51  
 UniRef90\_I0A1N7  
 UniRef90\_L5ND67  
 UniRef90\_B1ZPF9  
 UniRef90\_UPI00046283B9  
 UniRef90\_A0A058ZGC2  
 UniRef90\_N9U082  
 UniRef90\_S2ZPF8  
 UniRef90\_UPI0004793785  
 UniRef90\_D4XV8  
 UniRef90\_A9UJH0  
 UniRef90\_UPI0003757A47  
 UniRef90\_I4JF82  
 UniRef90\_U3I6G0  
 UniRef90\_A0A024HWI3  
 UniRef90\_D8UCF4  
 UniRef90\_K8C6U1  
 UniRef90\_Q4SHT1  
 UniRef90\_G7WFW9  
 UniRef90\_R5BEM8  
 UniRef90\_UPI00042BCD21  
 UniRef90\_C4GEP2  
 UniRef90\_W0IU6  
 UniRef90\_UPI000315DD30

P A A L A D V L T I A G L A H E E L R L S R E R P  
 A I V G T V P S T F A F G I L S P D L P T D I S L K K A I Q Q H  
 P G T R L A E H L L G G L T V D E V P F E  
 H F L L V D P S H Y V V S Y A I N P W M E P G V N R E R A W A G F  
 T R A Y L T S L D D R T L A T Y L I G G L A T A D L P A D F  
  
 P S D T L A E Y L I G G V A Y G E V P A D R R K H V L  
  
 E W R R D E V N R A E A R H A A  
  
 E L G D A L A A H L S T V D A K G L A D V L M G G M T F  
 E V A D T L R S H L S S V D N R T L T R T L V A G M T F  
 T R A F L E S L D P R A L A E F L I G G L S V I D V P D E F  
  
 P D T A L A V A E H  
  
 R R L S D H L I G G L A I A D L P E E F R  
 E A F V D E W L S E T G L E A S S A S Q A V R E Y  
 S E H D V L E T V L V C A P S M V S I P D I K T A E E S A P V N Y K K A H E N F  
 V D F D R A W R Q W  
 P T R D A S F A Q W  
  
 E F L E K Y L K E A N I S D E L A Y R E S  
  
 G N V D K L Q A Q N E W  
 E F G R L K S V L I H T P G E E L S S N Y K H W L Y D T V P E I S R Y I K E H  
 L T R R V P R S F T E A L Q H Y A E A L R I D V D R A V T E H  
 S E H G E L T A V M L C A P S K L D V P D L K T A E N S A A V S H T Q A M E N F  
 S E Y G R L K E V I V G R T P K F L K P E T V T F L K E N P N S Y E K L V S Q V  
 S E Y G V L S D V L L G P V E H M D N S A F S S I Y R D T A D H A T A V T Q Y  
 R F G P T L A P E L R R H L D A Q P P A E L A E Q T M  
  
 R Q V G V G M A D E L R G W M D E V P A P D L A R H L L  
 S E H E E L E V V L L C S P S K L E V P K L K T A E Y V G S V N H A K A Q Q N F  
 S E H E E L K A V I L C R P A E V S I S E P K V L D E S G A V H V K K A V E E F  
  
 E F V K K T M A G L T R A E I D I P L R S S  
 G R L K K V L L H S P I E S L E D N Y K Y H L F N F V P E I D Q Y L K E Y  
 G E K L A E H L I G G L T K E E V T A T Q A G R E G  
  
 P R S L Y H I K N N S F P N E T D L V K N V  
 G R L K D A L M E E E P E I L A G Y L T G G L A V D E M  
 S E H G E L K V V M L C A P S T D L T I A E Q V G W S D A V N H Q K A M D N F  
 E F R G D E E D V K M A K D E F  
 E F D R L K T V I V C T P S C L D I P D Q K T A D Y E K P V Q S D K A R A S F  
 A F L R E P G P Q F G V R D F R A P I D L K L L R K Q H  
  
 N F N K A L A L Q Q Y  
 R G L H V L T R Q V S P S F A Q A L Q A Q P A R L D V Q A C M E E H  
  
 H V K K A I A E I  
 S T H F H V T H A L T R G L A R T F E D A L A L E P P A E P I D V K V A Y N Q H  
 E Y G R L K K V L L H N P V E S L P S V T E G H L F N N V P K V D Q Y I M E H  
  
 H L K K A I A E I  
 V F F R E V G S L L E T E A S R P S S R R P F K I E R C Q K Q H

UniRef90\_UPI0002E67C10 E E L K H I K P K A L G D M V K K P Y 60 L D P I P N M Y F Q R D P F A S I I G S G  
UniRef90\_C7RFP9 I K N D H V L F D Y K Y T A L I N P M P N L Y F T R D D P F S T I I G K G  
UniRef90\_R7D4M5 D P L P N L Y F T R D S P F S I I G Q G  
UniRef90\_C4RHD5 G G L V Y A L M D R H D F V I I D P L P N L Y F T R D S S L V I W R D R  
UniRef90\_R7QSK0 A E Y C H A L S K P A I S G L Y Q S P S N P A F P D G V F V E D P L V I I S K T  
UniRef90\_UPI00035C3E24 L T G L F G S Y L G H G F L L P P L P N A L F T T A N G S A W I Y D G  
UniRef90\_A0A023D1P7 E A L A S G L A R A G A K V T I E P G R P G V P D M V F T R D S S L V I V D G R  
UniRef90\_U5E3L7 R G Y L A L A R E Q T G V R E Y L M P P L P N T L Y T R D T T C W L Y G G  
UniRef90\_A6TSY2 D D L S D I K P K S L G D M V K N P Y P L D P P N L Y F Q R D P F A T L G S G  
UniRef90\_E4KMJ8 G A L I K A H S E N E F L I P P L P N T Q F T R D T A W I F G G  
UniRef90\_Q6AA78 I P P L P N L Y F Q R D T A S L C P G P R  
UniRef90\_R7ZT42 I E P L P N L Y F T R D S S L V I G P R  
UniRef90\_P63552 V L R M H H G G D F V I D P M P N L Y F T R D P F A I I G H S  
UniRef90\_C8ZYS8 I D P M P N L Y F T R D P F A I I G H S  
UniRef90\_K0Z0T4 I D P M P N L Y F T R D S S W I G G S R  
UniRef90\_UPI000474A6D1 A I A P L P N L L F T R D S S W I G G S R  
UniRef90\_UPI00047AAECD E I T K K S L G D M I K N P Y P L D P I P N M Y F Q R D P F S S I G R G  
UniRef90\_D6KD05 A L T P L P N H L F P R D N S C W L Y D R A  
UniRef90\_E3I0W7 A S L A E A L R Q T G A R V V H I D G A P G L P D M V F T R D S A A V V L D R R  
UniRef90\_I2BY10 A S L A E A L R Q T G A R V V H I D G A P G L P D M V F T R D S A A V V L D R R  
UniRef90\_W7IPQ8 E E L P H A E G A S L V R R M H H P H A I D V D P L P N L Y F T R D S S W I G D R  
UniRef90\_UPI000373F05F E E L P A A E G Q S L V R R M H H P H A I D V D P L P N L Y F T R D S S W I G D R  
UniRef90\_I3Y8T2 A D Y L S L V R E A H G V T E Y L L P P L P N T L Y T R D T T C W I Y G G  
UniRef90\_U2VFG90 I D P M P N T Y F T R D P F A I V G K G  
UniRef90\_A4FEM8 K A L L E A H L N A G R F L E H V P S E P E C P D M V V V A N S A L V C G G R  
UniRef90\_R6HJK6 P P L P N L Y F T R D P F A C I G R G  
UniRef90\_U7KYY3 A L R P L P N S Q F S R D N S A W I Y G G  
UniRef90\_UPI0003676A76 A L P P L P N T L Y T R D T T C W L Y G G  
UniRef90\_UPI000365E7A9 A V D P L P N L L F T R D S S W I G D R  
UniRef90\_V6UHD1 S A Y V G L A R E G T G A R E Y L M P P L P N T L Y T R D T T C W L Y S G  
UniRef90\_H3NK77 D T Y E M V L K T M E G F K K S E L K V E D P M P N L Y F T R D P F A T M A N G  
UniRef90\_UPI0003B642E7 I P P L P N T Q F T R D T A W I F G G  
UniRef90\_UPI0003FAC6DA L E L K A A L Q N A G V Q V I D Y S A S D Q L I N R F F V R D L A C V F G N T  
UniRef90\_UPI000379867F D D L V C T L K A A D T E V E T V P A A Q G L P D M V F T A N S G I V D G A T  
UniRef90\_E8X2L4 R G L Y E A L G R I A D V K L L H P R Q G S P D M V F V G H T A L V H H G V  
UniRef90\_G0IXF4 I P P C P N L Y F Q R D A A I L P G G  
UniRef90\_R5ZFT4 I D P M P N L Y F T R D P F A V V G E G  
UniRef90\_A0A021VR98 A V D P L P N L L F T R D S S W V G D R  
UniRef90\_F0GVJ4 K K L L E V L K T M S G I T L K E L T A I N P M P N L Y F T R D P F S S I A E G  
UniRef90\_F7NE08 D P M P N L Y F T R D P F A T I G O G  
UniRef90\_D2MN73 D P M P N L Y F T R D P F A S V G N G  
UniRef90\_UPI00036A6E1A E H L K S A Y E E L G L Y V H V E E G R R G F P D M V F C A N Q S L I T K E G  
UniRef90\_UPI00035C8B52 D Y V J A L A R E S T G V R E Y L M P P L P N T L Y T R D T T C W I Y G G  
UniRef90\_Q46BV7 R D Y Q E L L E S N G V R V Y E L E D I K K M P N L T F L H I A V I S E K G  
UniRef90\_C3PEE7 I D A M R E V Y G P S A F A L R P L P N T Q Y A R D N S A W I Y G G  
UniRef90\_F2UK99 A A Y V E Q L R L N P H V R V V E L D A D E R F P D C M F I E D T A V V A N G T  
UniRef90\_X2GR67 I E L K E T L Q Q A G V H V I D Y A T H E Q L L N R Y F V R D L A C V F G N R  
UniRef90\_A6CV54 E G F V S A L E Q Q G V K V I R P K A I E G K N D Q I W P R D V F C T V G N N  
UniRef90\_I4BVN7 I K P I P N L L F Q R D P F S V K D G  
UniRef90\_A3SJA0 N E M L S A Y A D G G V T V H T L P A D E H L K Y G V Y A R D S S F M T P W G  
UniRef90\_UPI0003B466D1 E E F G S P A T D S L L W Q I R D P H G L P P L P N T L F P R D S S A W A Y Q G  
UniRef90\_UPI0003B77648 M V I D L V V D P M P N L Y F T R D P F A S V G N G  
UniRef90\_W9EHS3 L D P L P N A Y F T R D P Q A M M G T G  
UniRef90\_C7N4L7 D P M P N C Y F T R D S S V N V A D S  
UniRef90\_D0CPF2 G G L A S L F G A Y L G Q H G F V L P P L P N A L F T R D N S A W I Y G G  
UniRef90\_W4E2P5 M E F K Y T L E N R G I K V I D Y S E E D Q L L N R Y F V R D L A C V F G D I  
UniRef90\_UPI000347344C E I M K Q A L E V A G V E V I E Y S S Y L S E N D Q V F V R D L A C V F G T I  
UniRef90\_D3R1E3 K P M P N L Y F T R D P F F F I G N G  
UniRef90\_F2NBQ3 D P M P N L Y F T R D P F A S V G S G  
UniRef90\_UPI00047AF117 P L P L P N L L F T R D S S V W V G D E  
UniRef90\_I4DON5 E Q Y A Q I L R E H D V Q V L F V D L L P L P N L P Y L H D T A V I T S K G  
UniRef90\_D2ASF5 F D A R S L V T A M A K T G S F I L P P L P N S L Y Q R D P S A W L Y G G  
UniRef90\_A3W7Z0 G M F G S Y L G P H G F V L P P L P N F L F T R D N S A W V Y G G  
UniRef90\_D0KUA2 L E V K L T D P L S N L Y F M R D Q Q I T T D K G  
UniRef90\_UPI0003C7F472 I D P L P N L L F T R D S S V W L P D R  
UniRef90\_H6RH75 D S F Y N K L L K H N V D V I R P E N I S D C N Q I F T R D L G F V I S N I  
UniRef90\_E1REL5 E K S R S L V A A A A G P D S Y L L P P L P N T L F S R D P S S W I F G G  
UniRef90\_H6RL76 P P L P N L L F T R D S S W I G D E  
UniRef90\_D7WVY51 M A F K T T F E N A G V H V L D Y A R E E Q L L N R Y F V R D L A C V I G N R  
UniRef90\_I0A1N7 S R Y K D I Y D S E F F N L I L L S P R E P L G N L Y F M R D Q A Q A V T D K G  
UniRef90\_L5ND67 E G M V D A M K T E G V E V I Y L S K E D Q L I N R Y F T R D L A C S F G S I  
UniRef90\_B1ZPF9 S Q L V A I L K E L G A Q V K L I P A S P D Q P D G V S V D H A A V V L P E V  
UniRef90\_UPI00046283B9 I T A S V T P E G  
UniRef90\_A0A058ZGC2 L V S V M A S G R D T N V L A S F S L Q P L T N L V F T R D Q Q I V T Q R G  
UniRef90\_N9U082 D P M P N L Y F T R D P F A S V G N G  
UniRef90\_S2ZPF8 D P M P N L Y F T R D P F G S I G S G  
UniRef90\_UPI0004793785 N H L L N V L I Q E D I K F N F L D L I N S P S Q V Y T R D I G F P I D G L  
UniRef90\_D4XVN8 D P M P N L Y F T R D P F A S V G N G  
UniRef90\_A9UJH0 E Q Y L D L M R A V P D V E V L E V H A D A D C P D C V F I E D I V V H C Q G T  
UniRef90\_UPI000375A47 R E F L E R A E E P A S V R F H V M D L D D P L P N H L F T R D T S A W V Y D G  
UniRef90\_I4JF82 G L F G N H L G P Y G F V L P P L P N F L F T R D N S A W I Y G G  
UniRef90\_U316G0 E E M C N I L K Q E G V I V K R P D P I D T G M Y A M P R D I L L V G N E  
UniRef90\_A0A024HWI3 D P M P N I C F A R D T F A S I G D G  
UniRef90\_D8UCF4 E K Y N E L L K S I I P N V L E I P A D D S C P D C V F I E D T A L V I S E H  
UniRef90\_K8C6U1  
UniRef90\_Q4SHT1 E E M C N I L R H E G V T V R R P E P I D T G M Y A A M P R D I L L V V G N E  
UniRef90\_G7WFW9 E Q Y A Q L L R A H G V Q V L E V D L L S K L P N L A Y L H D V A V V T S K G  
UniRef90\_R5BEM8 R I A L D V T N V Y P F I L D P M P N L Y F T R D T S M C I G G G  
UniRef90\_UPI00042BCD21 E E M C N I L K M E G V I V K R P E P I D T G M Y A A M P R D I L L V V G N E  
UniRef90\_C4GEP2 S D A A D L V R A A Y G S A G F V L P P L P N T Q F T R D N T S W V Y G G  
UniRef90\_W0IUUV6 A A L Q K A V R D L G H E V E L I P P A P E S P T G V F V S D E A L L L S E V  
UniRef90\_UPI000315DD30

UniRef90\_UPI0002E67C10  
UniRef90\_C7RFP9  
UniRef90\_R7D4M5  
UniRef90\_C4RHD5  
UniRef90\_R7QSK0  
UniRef90\_UPI00035C3E24  
UniRef90\_A0A023D1P7  
UniRef90\_U5E3L7  
UniRef90\_A6TSY2  
UniRef90\_E4KMJ8  
UniRef90\_Q6AA78  
UniRef90\_R7ZT42  
UniRef90\_P63552  
UniRef90\_C8ZYS8  
UniRef90\_K0Z0T4  
UniRef90\_UPI000474A6D1  
UniRef90\_UPI00047AAECD  
UniRef90\_D6KD05  
UniRef90\_E3I0W7  
UniRef90\_I2BY10  
UniRef90\_W7IPQ8  
UniRef90\_UPI000373F05F  
UniRef90\_I3Y8T2  
UniRef90\_U2VG90  
UniRef90\_A4FEM8  
UniRef90\_R6HJK6  
UniRef90\_U7KYY3  
UniRef90\_UPI0003676A76  
UniRef90\_UPI000365E7A9  
UniRef90\_V6UHD1  
UniRef90\_H3NK77  
UniRef90\_UPI0003B642E7  
UniRef90\_UPI0003FAC6DA  
UniRef90\_UPI000379867F  
UniRef90\_E8X2L4  
UniRef90\_G0IXF4  
UniRef90\_R5ZFT4  
UniRef90\_A0A021VR98  
UniRef90\_F0GJ4  
UniRef90\_F7NE08  
UniRef90\_D2MN73  
UniRef90\_UPI00036A6E1A  
UniRef90\_UPI00035C8B52  
UniRef90\_Q46BV7  
UniRef90\_C3PEE7  
UniRef90\_F2UK99  
UniRef90\_X2GR67  
UniRef90\_A6CV54  
UniRef90\_I4BVN7  
UniRef90\_A3SJA0  
UniRef90\_UPI0003B466D1  
UniRef90\_UPI0003B77648  
UniRef90\_W9EHS3  
UniRef90\_C7N4L7  
UniRef90\_D0CPF2  
UniRef90\_W4E2P5  
UniRef90\_UPI000347344C  
UniRef90\_D3R1E3  
UniRef90\_F2NBQ3  
UniRef90\_UPI00047AF117  
UniRef90\_I4DON5  
UniRef90\_D2ASF5  
UniRef90\_A3W7Z0  
UniRef90\_D0KUA2  
UniRef90\_UPI0003C7F472  
UniRef90\_H6RH75  
UniRef90\_E1REL5  
UniRef90\_H6RL76  
UniRef90\_D7WY51  
UniRef90\_I0A1N7  
UniRef90\_L5ND67  
UniRef90\_B1ZPF9  
UniRef90\_UPI00046283B9  
UniRef90\_A0A058ZGC2  
UniRef90\_N9U082  
UniRef90\_S2ZPF8  
UniRef90\_UPI0004793785  
UniRef90\_D4XV8  
UniRef90\_A9UUH0  
UniRef90\_UPI000375A47  
UniRef90\_I4JF82  
UniRef90\_U3I6G0  
UniRef90\_A0A024HWI3  
UniRef90\_D8UCF4  
UniRef90\_K8C6U1  
UniRef90\_Q4SHT1  
UniRef90\_G7WFW9  
UniRef90\_R5BEM8  
UniRef90\_UPI00042BCD21  
UniRef90\_C4GEP2  
UniRef90\_W0IU6  
UniRef90\_UPI000315DD30

90 100 110 120  
I S L N V M A N E T R N R R E T I F A K Y I F N Y H N V P R W Y N R D K T H P I  
V S L N T M Y S V T R N R R E T L I Y A D Q Y I F N H H G T K N V Y Y G R G K K Y H I E  
V S L N T S M W S V T R N R R E T P L F G Q D V F K H H G A P V V W H E P H G G H E A C I E  
V G V N T S L A M P A R R R R E T S L I T D A I Y R F H H H P R F V F V Y Y H P G H G L E H L E  
A F M A T A G H K S R D G E R A A L T S V L K R I G V V V R R A W D I R L D E  
V T L V N P R M Y W A A R Q P E E L I N T A I Y R Y H H W G D P T R E H G L J A T H L E  
V L P A R F L F D E R K D E E P F F R A I F E R L V G E I V D L P E G M Q L Q E G E  
V T L N P L Y W P A R H D E T L L M S A V Y T F H W W G D P E Q D D W E G L A T F F E E  
V T L N V M D S E T R N R R E T L F P K Y I F D H H N I P R W Y N R R E D K S A T H P I E  
V T L N H M Y S E T R N R R E T L Y G K Y I F D H H H P V D R F Y N R R E D K S A T R I E  
V T F N P M R W P A R Q Q R E T V L A S A I Y T H H W Y G A E A D H G M S T L E E E  
M L F S S M R N E E R Q R E A D L V R V V F E N H P I H R V Y P R E S D N R T A P C I E  
V V I P S L A L R A R V R E A D L L Y A H H P R F T G V R R A Y P R S R T A P V E E E  
I S L N R M F S E T R R R E T L Y G Q Y I F K H H P V N F L Y D R E E P A R T I E E E  
V A I L S S M R K Q A R R R E T Y R L H P R F A D L N I P F W G T L S D G G H A T I E E E  
V A I P N L A L K P A R R R E T D L I Y A F H P Q F L H V R R A Y E G S Q T A P V E E E  
V T L N V M H S V T R N R R E T L F A K Y L F D H H N V P R W Y N R S D K T A H S L E E E  
L S V N P M A K P A R R R E T L H A E A V Y R F H P M P R P L L D S T A G T H L E E E  
V M A A R F R Y P A R R Q G E E R H F L E A F A R L F D V S Q M P K D Y A W Q E G E  
V T L N P M Y W P A R R Q R E T L L T S A I Y K F H W Y G D P D Q E H G A A T L E E E  
V A I A S L A M P A R A R E T D L I Y A Y H P R F R A A G R A Y G A H Y A P V E E E  
V A V T S L A L P A R D R E T D L I Y A Y H P R F A Q S A R A Y G A H S A P V E E E  
V T L N P L Y W P V R R R E T L L T T A I Y K F H G I Q V W W G D P D Q A N T L E E E  
V N L N R M Y S V T R N R R E T L F G K Y I F R D H H P E P L W F R R D S A A H T S G E  
A V L G S L P A A R R P E T R H H K R W F E R L G L E V I D A P P F A F S G E  
V S L N H M F T A T R N R R E T L Y G D Y V L R H H P D P L Y Y T P D Q Y F C I E E E  
V S L N P M R L P A R H G E T M L T R A I Y E E F W Y G D T D E D P G L A A I E E E  
V T L N P L I W P A R H G E T L L T M K A V Y L F H P D F V P R E A Y G A H S A P V E E E  
V G I T S L T M P A R R R E T D L I Y A F H P R F T R A R R A Y G A H S A P V E E E  
V T L N P L Y W P A R H D E T L L M K A I Y T F H H W W G D P E K D R E A W G R A T F E E E  
V S L N H M Y S D T R N R R E T L Y G K Y I F D H H P D P K F Y Q R E E S T R I E E E  
V T L N P M H W P T R R Q E T L L T S A I Y K F H P K F T N E D F H V W Y S L E E E  
I L P G E A G T S M R R P E Y V Q A H V L M D K W F P N S F R M H E N N Y P Q E E E  
V T P A R M R A P E R A P E V E H V C S R F E L G W T I E Q P A A P Q E G E  
A A V S S F A H A E R Q P E E R H L R R W L Q E A G F L L W D T P R E T H C F E G E  
I V F S S M R L A E R Q R E A N M V R K I F E N H S L F K N K H Q H N H S I E E E  
V N L N R M Y S V T R N R R E T L Y G K Y V F K Y H D V S L Y F R R A D C Q F H T E E  
V A L T S L A M P A R M R E S D L I Y A H H P R F A G T P R A Y A A H S A P L E E E  
V S I N S M Y S V T R N R R E T I Y A D Y I F N Y H H G T K N F Y G R G K A T H I E E E  
L T L N H M R T L T R N R R E T L F A Q Y I F Q Y H D I P L W F D R E E A T A L E E E  
A I I N R M Y S V T R N R R E T I Y A D Y I F R F H N V P D L Y G R K N P F H I E E E  
V V M S V M N A D E R K G E T P F L Q K V Y E D S S Y D I V H L D W G S R F H F E E E  
V T L N P L Y W P A R H D E T L L M K A V Y G F H W W G D P E A D W G Q A T L E E E  
A I L S R M R P P A R E K E E V V V K E A L N N L G I P I L S E F N W G G Q G F F E E E  
V S L N P M R M P A R H Q E T L L T R A I Y F K F W Y G N T D E E R P G L A A L E E E  
C V I T N P G A D S R K G E E A A T L A A V T K H T I H V M R E R W P D A T C D E E E  
M L G S S I R R P E Y G H A H T L L Q K W F P Q H F M P A K E S S H V L E E E  
V I V S S L R M S F K R R K Q Q Y A F T D I F D N D A I A N E R A N S E N I C L D E E  
V I I S V M R F D A R R K E P L Y A K Y I F D H H G L K I I Y G E E N P Y F I E E E  
A V I T Q M A N P R R R G E Y S A A L R F Y L E K G I P I Y D M V S A G N F E E E  
V N V N V M A K P A R V P E T V N A R V I Y N H H P L F A A T E I E R Y N V I E E E  
I T L H N M K Y P T R K R E T I F A Q W I F N K H H P P Q F I S K R I D G K E T I E E E  
L T L N R M S F A A R Q P E S L I S Q Y I I Q Y H P V D L W Q G R T G D A R T I E E E  
V L S N H M T K E F R R R Y E T H T Y S D L F R D D P T Q D D L Y N M D E P Y G I E E E  
V S V N P M F W P A R R P E T L L T T A I Y T F H H P G D P T L D H G L A T V E E E  
I L P G S M R R P E Y V I Q A H S L M E K W F P K T F L L H E N D N V R A L E E E  
M I G T F M R K P E Y M Q S H I L F Q D W F P D S F Q L R E N N L K A L E E E  
V S L N C M W S Q T R R R E T L F H H P M F K D N Q I P F W Y D R D L H P S I E E E  
V S L N R M Y S R T R N R R E T L Y G E T I F R Y H D V P R Y F D R D A S F H I E E E  
V A V T S L A M P A R H R T A A V Y T H H P R F A G A E Q L Y G A H L E H L E E E  
A I L S K M C P G S R A G E E Q V V K E A L T N I G I P I F H F H K T H E K F E E E  
V S L N P L Y Y H A R R L E T Y H F H P M F A G D G F A Y W Y P P M G D D S L E E E  
V S L N P M H F A A R R P E T L L M K A V Y R F Y W F G D P T R E F G T A T V E E E  
I I M G R M A T H A R E K E T D V M K L F W E A A L N M E Y K E I G R G K L E E E  
V A V T S L A M P A R V R E T Q L V Y T H H E R F A G V E L A H G P H L E H V E E E  
F F M S N L V P A R H D E T I Q G I E N I K K F D V G V I K L P E F M H I E E E  
V T I N P M Y W H V R R R N V S A I Y R Y H P E F S K S S F E C W H P K N T L E E E  
V A V T S L A M P A R H R I T A A I Y T H H P R F A G A E Q L Y A S S L E H L E E E  
L L L G N A G S S L R K P E Y P L A H S L L E K W F P Q Q W Q T N Q K L E S F E E E  
I L L S R M S K P Q R R R E T Q V T K F L W K L M G E E I V H E I L K E P G T F E E E  
F I P G E A G T S L R R P E Y R L A H P L F E K W T S P D V D W N D P L H A L E E E  
A V I T Q P R G L S R E S E V E T A T A L A N H R P I V R I V A P A C L D E E E  
A I I C R L A G A S R A G E E I K T A S R L A E L S V P I L F T V H G H G T F E E E  
V V L A R L S S E Q R Q K E I E I M E F C F Q K L G I P I V G R I P D E G R L E E E  
I T I H Y M R Y K V R R E T L Y S R F I F A N H N T P I Y Y H P S L K L S I E E E  
I S L N K M R F P T R N R R E T I Y A D Y I F K Y H G T P L Y T K R T A F F N I E E E  
F F I S N L T S D D R S L E I R P L I D Y S V Q N N L D F Y I M K E K V E E E  
I S L H N M K Y Q T R K R E T I F A Q F I F K Y N K D P H W F D R F D H G S I E E E  
T I V T N P G S R R R P E A V S F L D W L T L Q P A E L R A N D D D G A T L D E E E  
V S I N A M R W P A R Q R E T V H F E A I Y R H H P R F A A A D F H Y P S T L E E E  
V T L N P M Y W A R K P E T L L T A A I Y R F H P W G D P L K D H A L A T L E E E  
I I E A P M A W A R F F E Y R A Y R I K D Y P I R S V E D R H K E P C F D E E E  
V S I H N M K Y P T R K R E A L L T E F V F K N H N F K Y Y D N K D A K G T I E E E  
A V I T R P G A P S Q R E P D P V V E A L Q S L G I S H I D R L C D P A T L D E E E  
N I N Y N D H A T L E E E  
I I E A P M A W R S R F F E Y R A Y R P M I K E Y F R K G A K W T E H E L C F D E E E  
A I L S E M C P G T R A G E E E V V K E V L T N L G I P I F H F E F E D H Q D N F E E E  
M V I S S M S M P G S R S R E T L F T R Y I H D Y H P V P L W Y D N E Q R Y N M E E E  
I I E A P M A W A R F F E Y R A Y R P V I K D Y F H R G A K W T T A P C F D E E E  
V T L N P M Y W P A R Q R E T L L T A I Y K F H W W G N P D Q R I S G A A T L E E E  
A V V P R S E Q P R A D L D S I S R V L A Q H R P V I Q R I S G E T F S E E E  
M N R M W S V T R N R R E T I F P D L V F K H H N P Y Y Y E R D W K E E T I E E E

UniRef90\_UPI0002E67C10 G G D I L V L S K V V A I G I S D R T 140 P M A V I E R L A H K L L Y S E V L A F D  
UniRef90\_C7RFP9 G G D I L N I N E K L M I G I S Q R T D Q L A S G A I K D L A A N L L F D E E I I A I N  
UniRef90\_R7D4M5 G G D I L L L G P G T I G I G I S E R T T D A S A G A I K D L A A R T L R V A L A F S I P I H  
UniRef90\_C4RHD5 G G D V L L L A P G V V L V G I V G S E R T T P A G A E S L A R S M F A G V V P I A  
UniRef90\_R7QSK0 G G D V L K V P G F V V V G I S E R T S P A S A V E A L Q A A L D D E A A V P V A  
UniRef90\_UPI00035C3E24 G G D V M P V G D T V L V G M G S E R T S P Q A S V R Q L A V S L F A L A F K L P R  
UniRef90\_A0A023D1P7 A G D C L W D R R L A W V G F M G Q R S D E A S V R V I A E T F G I D V E P L R  
UniRef90\_U5E3L7 G G D V M P V G N G V L V G M S E R T S R Q A I I T Q V A A S L F A A R V I V A G  
UniRef90\_A6TSY2 G G D Q L V L S D K V V I G L S Q R T D A V A I I E R V A R N L F K L A F D I P K E  
UniRef90\_E4KMJ8 G G D E L V L S K D V V L G I S Q R T D A R S I I E K L A R L F K E T G F K R I E  
UniRef90\_Q6AA78 G G D I M P V G N T V L I G M S E R T S W Q A I I T Q V A R S L F R R M V V A A M  
UniRef90\_R7ZT42 G G D L I L L S K A I A V G D S E R T D E R A G A I Y H L A K Q L R V D Y K V Q L A V P  
UniRef90\_P63552 G G D V L L L A P G V V V G V G E R T T P A G A E S L A R S L F H T V L A V P K  
UniRef90\_C8ZYS8 G G D Q L V L S Q H V L I G I S Q R T E V H S I E K I A E N I F S M E I L A F D  
UniRef90\_K0Z0T4 G G D I I N A G D T L I I G A S E R T T A Q G A I E L A R R L F A G E V S T V T  
UniRef90\_UPI000474A6D1 G G D V L L L A P G V V V G V G E R T T P A Q A G A E A L A R S A F D H T V L A V P  
UniRef90\_UPI00047AAECD G G D E L V L S D K V I I G V S E R T D A S I E T V A K N I L N L A F D I P K  
UniRef90\_D6KD05 G G D V H V L G N G V M V G M G E R T T P F E A V E N L A A R L F A D G L I A V R E  
UniRef90\_E3I0W7 A G D A I F D A N F W T G F G P R S S H Q A A D V L R D F F N V P V K P L E  
UniRef90\_I2BY10 G G D V M P I G N G V L I G M G E R S S H Q A A G Q L A R L F Q N K A V E R V I  
UniRef90\_W7IPQ8 G G D V L L L A P G V L I G V G E R T T P A G A E S L A R S M F A G V V A V P  
UniRef90\_UPI000373F05F G G D V L L L A P G V V V G V G E R T T P A G A E S L A R S M F A G V V A V P  
UniRef90\_I3Y8T2 G G D V M P V G N G V L I G M S E R T S R Q Q I S Q A A A A L F A R R V I V A A  
UniRef90\_U2VG90 G G D V L T N A H T L A V G I S E R T Q A A A A D T M A Q N M F W Y A F D I P S  
UniRef90\_A4FEM8 Q G D A L P C G G L F A G S G W R T D P R M H G F L R R R L G Y E V V S L R  
UniRef90\_R6HJK6 G G D I L N L S R R V L V G I S Q R T Q P E A T I E Q L A A T I F A D E A S E I D  
UniRef90\_U7KYY3 G G D I M P V G N G V L V G M G E R T S W Q G V I E R L A A N L F F A G V I A A  
UniRef90\_UPI0003676A76 G G D V M P V G N T V L V G M S E R T S R Q A I V Q V A Q V L F D A G V V A A  
UniRef90\_UPI000365E7A9 G G D V L L L A P G V L I G V G E R T T P A G A E S L A R S V L A H T V L A V P  
UniRef90\_V6UHD1 G G D I M P V G N G V L M G M S E R T S R Q A I T Q V A A A L F E H V I V A P K  
UniRef90\_H3NK77 G G D E L V L S D K V I V G I S Q R T S R K S I V K L A T A L F A H A F S I D N  
UniRef90\_UPI0003B642E7 G G D I M P V G N G V L I G M S E R S N W Q A I S Q V A K L F A E N A A E K V I  
UniRef90\_UPI0003FAC6DA Y G D V L L N D A V W I N V G M P R S I E S V A Q E A A G F S E G I T S L P  
UniRef90\_UPI000379867F A G D A V A F A G G L V A G Y G P R S S A S A Y A G L R A R H G W A V T A L E  
UniRef90\_E8X2L4 E G D A L F D G R H L W A A H G A R T C K Y S H G H V A E A W H V Q V V T S L H  
UniRef90\_G0IXF4 G G D V I L S D K A A I G C G S E R T D E K A A V I H V A K S L R V D Y E V H L P K  
UniRef90\_R5ZFT4 G G D V L I N E K T L A V G I S Q R T Q A A A I D V M A Q N I F D S K V E R I L  
UniRef90\_A0A021VR98 G G D V L L L A P G V V V G V G E R T T P A G A E S F A R S L F A R A V L A V P  
UniRef90\_F0GVJ4 G G D I L N I N K N L M I G I S Q R T E L S D A I R V L A K N V L E I G V N I P N  
UniRef90\_F7NE08 G G D E L V L S D N Q V L I G I S Q R T D S G S V E R V C R R L F E L A F H I P Q  
UniRef90\_D2MN73 G G D V L N V N E K L F I G M S Q R T Q P D A I Q Q L A K M F Y L A F N I P V  
UniRef90\_UPI00036A6E1A G G D A I W H F K R L W G G Y G E R T S K D V Y E I I S E T F D T P V I A L E  
UniRef90\_UPI00035C8B52 G G D V M P V G N G V L I G M S E R T S R H A I T Q A A A L F A G A A T P K  
UniRef90\_Q46BV7 E G C L L L S K E T V F V A D T E R H T Y P F I R E F S A N I L K E F E V I Y V R  
UniRef90\_C3PEE7 G G D I M P I G N G L L V G M G E R T T W Q G V S Q L A R L F E E G A A T K V I  
UniRef90\_F2UK99 G G D V L T T D N A M Y V G V S T R T N E L G H R A L Q A A F E E R F R V V P I H  
UniRef90\_X2GR67 F G D V M V L N D A V L I N I G V R T T R Q G V E Q I K D S I F Q A G F S E I G  
UniRef90\_A6CV54 G G D F F V D S G K N I Y L G I G E G S T N M N G Y E W L E S M Y G D Y T I T P L M  
UniRef90\_I4BVN7 G G D I L V L S D N V A I G I S Q R T T A G A I Q K L A R E L G I K V L A V D  
UniRef90\_A3SJA0 G G D F H I I E P G V L I G Y G M R C E E V S A R Q I G A W V E G W E V H Y A Y  
UniRef90\_UPI0003B466D1 G G D I H L L G H T V L I G M G E R S T P M A A I E T R I A Q A L F R T G V I T V P  
UniRef90\_UPI0003B77648 G G D V I Y T K D V L A I G V S E R T N M E A I L R I A K N C E F F K I V A I N  
UniRef90\_W9EHS3 G G D E L V L S D H V L I G V S Q R T S T R S I E K L A R E L F F T N P V E I P H  
UniRef90\_C7N4L7 G G D V I V L S D K V A I G C S E R T S P Q G A V H V A K L F A Q G Y E A V Y  
UniRef90\_D0CPF2 G G D I M P V G N T V L V G M G E R T S P Q G V G Q L A K A L F A Q A G V L A F A  
UniRef90\_W4EZP5 F G D V L T L N D A V L I N I G M R T S K E S V E K I K G K I F S A G F S E I G  
UniRef90\_UPI000347344C F G D V M V L N K A V L I N A G M R T S L D S V D Q I K Q T I F S S G F S E I A  
UniRef90\_D3R1E3 G G D I A V L S D K V V V G V S Q R S K P R A I E L A K N L S D C G Y E T V Q  
UniRef90\_F2NBQ3 G G D V L I N E K T V A I G I S Q R T Q A A A V D V I A Q L S W D L A F N I P V  
UniRef90\_UPI00047AF117 G G D V L L L A P A G V V I G V G E R T T P G G A E R L A R R L F A R G V L V P  
UniRef90\_I4DON5 G G C L M L S P A A L I V N T E R S N P G T I E F F S K A L E L F E V E A P Q  
UniRef90\_D2ASF5 G G D M M P I G N G V V I G V S E R T S P I M I E H L A R E L F A L A V N I P P  
UniRef90\_A3W7Z0 G G D I M P I G H G V M V G M G E R S T P Q A V G Q L A E A L F E G G V I C W  
UniRef90\_D0KUA2 G G D F F P M G D F N L V G V G V R S D L E G V S E L F N F L R E V G I V A Q N  
UniRef90\_UPI0003C7F472 G G D V L L L A P G V I I G V G E R T T P A G A E R F A R H V L I T A G V L A V P  
UniRef90\_H6RH75 G G D V V L H N D K L F V G I T A R T N I S V I E Y L K K M I S N I E L I P I I  
UniRef90\_E1REL5 G G D I M P L K K G V L A G I I S E R T N S G M I E N L A S L F A N G E A E R I V  
UniRef90\_H6RL76 G G D V L L L A P G V V V G V G E R T T P G G A E R L A R S L F A R G V L V V P  
UniRef90\_D7WYS1 C G D L L L L N D A V L I N L G M R T S I E A I E S L K E S I F Q E G F S E I A  
UniRef90\_I0A1N7 G G D F I P M K D F A L I G T G D R T N Q E G I E Q I L K H F D E V A V V H Q P  
UniRef90\_L5ND67 F G D V L L L R D A V F I N V G L R S S H E S A R L L K D R F S E V G I I D L P  
UniRef90\_B1ZPF9 G R D V V R I G R T L F A G I L S R H T S A E G V A E E F A G T I E G Y E V R T V E  
UniRef90\_UPI00046283B9 G P D L L F F G R R A F V A N S I R S N A E G V K Q I A E R F Q Q I E V V V A V E  
UniRef90\_A0A058ZGC2 G G D F F M A G P D L L V G I G L R S N I Q A I N Y I L M D N D L L G V S S L A  
UniRef90\_N9U082 G G D V E I Y N D T L V V G V S E R T S L E T I T L L A K E C E F K R I V A I N  
UniRef90\_S2ZPF8 G G D I L N L N D K V L V G V S Q R T S P E A L E A L I N L F A D R T V L A F A  
UniRef90\_UPI0004793785 G G D V F V H N Q K I F I G T G G R T T Q L A V E E I N N K L K D F E I I Q V L  
UniRef90\_D4XVN8 G G D V E V T K D T L V I G I S E R T T K E A V L N I A K K I K A V A I N V P P  
UniRef90\_A9UUH0 G G D V L Q I E D H V F V G Q S A R S N V G G L E F L Q A A I P G M V V P V K V  
UniRef90\_UPI0003757A47 G G D V L V I G N G V L I G M S E R T T P Q A V E M L A R G L F R M G I V A L D  
UniRef90\_I4JF82 G G D I M P V G D T V L V G M G E R S S P Q A I G Q M A N A L F E R G V V A C Q  
UniRef90\_U3I6G0 A D F I R A G R D I V L V Q R S Q V I T N Y M G I E W M R H L P D Y R V H V I  
UniRef90\_A0A024HWI3 G G D I F V Y N K T L V I G N S E R T N M D A I K T I A K S I K S H A I N V P P  
UniRef90\_D8UCF4 G G D V L V L P W A V L V G T S R R T N K E A V A Q L E A S L K A A R G G P L Y E  
UniRef90\_K8C6U1 G G D V L V I G R G V L I G M S E R T T P Q Q V E F L A S A L F K H R V I A V E  
UniRef90\_Q4SHT1 A A D F I R A G K D I F A Q R S H I V T N L L G I E W M R R H L P D Y N V I T I S  
UniRef90\_G7WFW9 G C L V L S P D T L I I V D T E R L N P D T I E F F E K A L E I F K L K A P Q  
UniRef90\_R5BEM8 G G D V L L S D K L I I G C G E R T N I A A V E M F A N R V F A E G F E R I L  
UniRef90\_UPI00042BCD21 A A D F I R A G R D I F V Q R S Q V I T N N S G I E W M R R H L P E Y R V I H T L S  
UniRef90\_C4GEP2 G G D V E P I G K V L V G M G E R S S A Q A I T Q M A Q A L F K Q G V A E P K  
UniRef90\_W0IUV6 G G D V L P I G H T L Y A T L S P R T N A E G I A L L R E I T F K Y G D V K T V E  
UniRef90\_UPI000315DD30 G G D I L V L N K T L I I G V T Q R T T L K A I E K F S E R L F N D P V I A L D

UniRef90\_UPI0002E67C10 I P K T M H L D T V F T M V D Y D K F T L F P G I E A P L D V Y S L T K G K D N  
UniRef90\_C7RFP9 I P N Y M H L D T V F T Q L D Y D F T Y H P G I I S T F H A I K F S K K D D K  
UniRef90\_R7D4M5 K R A S C M H L D T V F T Q L D V D A V L V M Y H P G I L G S T L K V Y F E L T R G A S A  
UniRef90\_C4RHD5 Q R A T M H L D T I C T M V D V D A V L M Y A N V A S T L V A Y T V V A G P D G  
UniRef90\_R7QSK0 V I D G L H L K S L V T W V D H G F L V A P D D E R G K Q C L K R I Q E A T G V  
UniRef90\_UPI00035C3E24 S R A S M H L D T L F T L C P G G D V V T T F K E V A D E L V C Y A D I R P G A G D  
UniRef90\_A0A023D1P7 L P R F Y H L D T C F H V L L C P R G E V L F Y P P A F A P E T T V A R L E A I V P  
UniRef90\_U5E3L7 M P K A M H L D T V F T F A D R D L V T V Y P D I V Y G I H P F S L R P S D  
UniRef90\_A6TSY2 T R A Y M H L D T V F T M V D H D Q F T I Y P G I E G E S P L D V Y S L S K G  
UniRef90\_E4KMJ8 N R K F M H L D T V F T M V D Y D K F T I H P E I E G G L K V W D L T P N E D G  
UniRef90\_Q6AA78 A P D S M H L D T V F S F C D V D L V T L Y K P V V D T I T P L V L E P S S E A R  
UniRef90\_R7ZT42 K R N F M H L D T V F T L L D E N L I L T Y P D A L E A V V Q T S V Y T L K S R  
UniRef90\_P63552 I R A Q M H L D T V C T M V D T D T M V M Y A N V V D T E A F T L Q R T P D G V  
UniRef90\_C8ZYS8 I R K F M H L D T V F T M I D R D K F T I H P E I E G E L T L F S I T K Q G Q E  
UniRef90\_K0Z0T4 V R A Q M H L D T I F T M L D E A T F T A Y A G L G K V R T Q V I R P G A G E D  
UniRef90\_UPI000474A6D1 L R A S M H L D T V C T M V D V D A V V M Y P A I E M P L D V F S I H R G K N N  
UniRef90\_UPI00047AAECD T R A Y M H L D T V F T M V D H D Q F T I Y P G I E M P L D V F S I H R G K N N  
UniRef90\_D6KD05 L P A S M H L D T V L T M L S D R D A F A V Y P Q A D S L R S W T L R P S E T R A  
UniRef90\_E3I0W7 L V R F Y H L D T C F V P L S G G E V L Y Y P Q A F S K A S L S V I R D H V A  
UniRef90\_I2BY10 V A G A M H L D T V F S F C D R D L V T V F P E V V N Q I V P F T L R P D E S K  
UniRef90\_W7IPQ8 I R A T M H L D T V C T M V D R D A V V M Y P A I R D T L Q A Y T L R P S E D G  
UniRef90\_UPI000373F05F I T Q S M H L D T V C T M V D R D A V V M Y P A I Q D T L T A Y V L R P S E G D G  
UniRef90\_I3Y8T2 M P K A M H L D T V F T F A D R D L V T L F P I M D Q V H A I T L R P G D R E  
UniRef90\_U2VG90 S R A F M H L D T V F T Q L D V D K F T I H P A I M G T L R V F K L T K G A A E  
UniRef90\_A4FEM8 T V H W Y D I D L A V A V L D Q R T V A Y C P Q V L D E P S R R R I R G L  
UniRef90\_R6HJK6 T V A F M H L D T V F T Q V L D K F T V H P G I V L G T L R I F E L T G R G Q G  
UniRef90\_U7KYY3 M R A S M H L D T V F T F A D A D K A T A Y P R V V D T I R P L T L H P S E D H  
UniRef90\_UPI0003676A76 I R A S M H L D T V M T F A D V D K A T V Y P R I V D G V R A F T L R P G G D A  
UniRef90\_UPI000365E7A9 I R A W M H L D T L C T M V D T D A V V L Y P A V Q D S L T A F P I T T R S D G  
UniRef90\_V6UHD1 L R S A M H L D T V F T M A D R D L V T L Y P R I M D A V H T F S L R P S E  
UniRef90\_H3NK77 N R K F M H L D T V F T M I D Y D K F T I H P E I E G S L K V F N D Q V K V E  
UniRef90\_UPI0003B642E7 V A G S M H L D T V F T F C D R D I V T A Y E P V T D T I I P F T I R P E D N A  
UniRef90\_UPI0003FAC6DA R R D T L H L D M N C N V A S K D V V V S K S F V R H F P L H V W T E R L N R H  
UniRef90\_UPI000379867F L T D P Y H V D L G F C P L S G D R A A M V V P E A F T A A G R A A L A E L V E D  
UniRef90\_E8X2L4 L V D P Y H L D T C F A P L S G G R V L Y Y P G A F D A M S L A L I E A A Y P A  
UniRef90\_G0IXF4 K R N F M H L D T V F T L L D K N R V L T Y P D A L Q A V Q H L I S V Y T R K E D  
UniRef90\_R5ZFT4 A F D F M H L D T V F T Q I D V D K F T I H P A I M G T L R V Y E L T A G K N P  
UniRef90\_A0A021VR98 I E Q S M H L D T V C T M V D R D A V V M Y P A V R D T L S A Y T L T P D D D G  
UniRef90\_F0GVJ4 E R A Y M H L D T V F T Q I D Y D T F T Y H P A I I E G S T F H A V K F S R L K  
UniRef90\_F7NE08 S R A F M H L D T V F T M V D H D K F T I H P A I E G P L T V Y E I T G S R D R  
UniRef90\_D2MN73 S R A F M H L D T V F T Q I D K D A F T I H P A I M G T L Q V F A I T A D R A N  
UniRef90\_UPI00036A6E1A L P K F Y H L D T C F C V L D E D H S A L I Y P E A F T D E G L E L I H S I F T  
UniRef90\_UPI00035C8B52 L R A A M H L D T V F T F A D R D I V T L Y P I M D A V H T F T L V P E D A A P  
UniRef90\_Q46BV7 V P K A M H L P D T V F N R I R E D L A L T Y L P A F S R E K I D F K A F M S E K  
UniRef90\_C3PEE7 I R A S M H L D T V L T F L D A D K V T A Y P K V V D T I R P L V L H P A S T S T  
UniRef90\_F2UK99 L A N S L H L K S V T W V D G P D L F V A A D T D D G R S A W A S I T A S L J E E  
UniRef90\_X2GR67 I S D T L H L D M N C N I A N N D V I A K S F M S G T R F D M T E Q F F N R H  
UniRef90\_A6CV54 L D E A L H L D C A L S N L S P N L A L I C R D W I K S D L P E S L A  
UniRef90\_I4BVN7 I P K Y M H L D T V F T M V D R S C F V V Y P G I R K N V R I W E I A Y E D E D G  
UniRef90\_A3SJA0 I D P Y Y H I D L M V C M I A P K C A A V C L E T T P D H V V E W L K S K  
UniRef90\_UPI0003B466D1 L P K S M H L D T L M T M L D E R T F I L S P S L D R E R L S A H L I T P S D D  
UniRef90\_UPI0003B77648 V P M M H L D T V L T M L D K D L F L Y S G N I K S A L K V W E I D L T K P I  
UniRef90\_W9EHS3 N H A M M H L D T V F T M V N Y D Q F T V Y P G I M N E A G E L N I N L E P G  
UniRef90\_C7N4L7 A F D A M H L D G M L T M I G Y D T F L Y N P L I E G K V S V F K L T P A A N D  
UniRef90\_D0CPF2 M P K A M H L D T V F T L C G G D V V T T F K E V A E E L T C Y D I R P H D P  
UniRef90\_W4E2P5 I S D T L H L D M N C N V A N E D L L I A K S N V L T E N S R F E M P E Q F L  
UniRef90\_UPI000347344C V S D T M H L D M N G N V A G K D V F L H F P V H V S M E A N T R Y E M L E R L  
UniRef90\_D3R1E3 S H A F M H L D T V F T M V D Y D K F T L H P E V D H T L Q V F S M R F L T R K  
UniRef90\_F2NBQ3 S R A F M H L D T V F T Q I D V D K F T I H P A I M G T L Q V F E L S A G D R P  
UniRef90\_UPI00047AF117 I R A T M H L D T I A T M V D A D A M V M Y P A V A D T L V A W D T A E L A V T  
UniRef90\_I4DON5 A R R F M H A D M I F S R I S E D L A L Y F P P A F K R M E I D F K S Y L E K K  
UniRef90\_D2ASF5 H R S Y M H L D T V F T L L D V D K A T G Y P P V V E N A A V Y S L R P G D K E  
UniRef90\_A3W7Z0 M P A A M H L D T V F T H C G G D V V T T F K E V A D A I T C Y D L R P R R D A  
UniRef90\_D0KUA2 R E E F I H L D T F F N M E E S R V V V Y Y D G K I V R E T L Y D Y V V K E K  
UniRef90\_UPI0003C7F472 I R A T M H L D T I V T M V D V I G A V V V Y P A M A D G L V A T T L V L T E D G  
UniRef90\_H6RH75 F E N T L H L D C C F Q T I G R D K A L I C P D G F K N K E D Y E F L L K F F G  
UniRef90\_E1REL5 A C D I M H L D T V F T M I N E D T A T A Y P G V L E K S R T W S L F P G D V E  
UniRef90\_H6RL76 I R A T M H L D T I A T M V D V D A M V M Y P A V A D D G S P T H P A D D T D T  
UniRef90\_D7WYS1 V N D T L H L D M N C N V V N A N L V V H Y P Q V L T V Q S Y R F D M V E S F L  
UniRef90\_I0A1N7 A H P N M H L D T Y F N V P S N V V I G C D T L L K R A K I D V Y I K E S E G  
UniRef90\_L5ND67 R Q G A M H L D M N C A I T G A T S I L C K S Y E D G A S Y M M T G P F L E R H  
UniRef90\_B1ZPF9 I H G C A H L K F A C T E V P K H F L V A N T S W V D G N T F G D L  
UniRef90\_UPI00046283B9 T I G C G H L D G V V S L V D K D L A I I Y P K H A S Y K L Y E T L G G A  
UniRef90\_A0A058ZGC2 V V D R M H L D C V F N I L D K K L V L L R S D I A I E D S P I P R M F L K G R  
UniRef90\_N9U082 V P K W M H L D T W L T M L D K D K F L Y S P I A N D V E K F W D Y D L V N G G  
UniRef90\_S2ZPF8 I P A F M H L D T V F T A I D Y D K Y T V H P E I V G P L Q V F E I T P G T N G  
UniRef90\_UPI0004793785 F D S K I H L D C V F N I L D E S T C I I T N G V F N P I D I T K H  
UniRef90\_D4XVN8 M P N L M H L D S W I T M V D H D K F L Y S P N M M K S L K F W L D L S  
UniRef90\_A9UUH0 P S S T L H L K S L I T A T T N G L V A H Q S E A G E E V A R E V S H V I P  
UniRef90\_UPI000375A47 M P K S M H L D T V M T M V D T D T F T K Y A G L G M L R S Y T I E P G E G G Q  
UniRef90\_I4JF82 I P K A M H L D T V F T F C G G N V V T A F K E V A D Q M I C Y D L R P G T G G  
UniRef90\_U3I6G0 F P N P M H I D A T F N I G P G N L V L S N P D R P C Y Q I D L F K K A G W T V  
UniRef90\_A0A024HWI3 M P N L M H L D T W L T M V D Y D K F L Y S N I L I Q S L K F W M L K S I I G K  
UniRef90\_D8UCF4 V  
UniRef90\_K8C6U1 L P K C M H L D T V M T H I D I D T F S V Y P E V V R P D V K C W T L T P D  
UniRef90\_Q4SHT1 F K D V M H I D G T F N I I G P G L V L S N P D R P C Q Q Q I E M F E K A G W T  
UniRef90\_G7WFW9 A R R F M H G D M I C F N R I S E N L G V Y F P P A F R R E E I D M R K F L E S K  
UniRef90\_R5BEM8 V R K F M H L D V L C T M V D Y D K F I T H P C L Y E K Q E F D V R E T L T G K P G  
UniRef90\_UPI00042BCD21 F P N P M H I D A T L N I I G P G L V L S N P D R P C H Q I E F F K K A G W T V  
UniRef90\_C4GEP2 T R A A M H L D T V F T F C P D R D L V N T H P A V V G G L T A F S L R P D S S  
UniRef90\_W0IU6 V R G E V S L R E A C S F I P P R F L L I N A E W I D P D A F E D L  
UniRef90\_UPI000315DD30 L P K F M H L D T V F T N I D Y D K F I A H P L I F D K I Y E V S K Q G T K E V



UniRef90\_UPI0002E67C10 L L N I T V L K E H L G L P A I E L I R C G D G D P L A A S R E Q W Y N R N Y I 210 220 230 240  
UniRef90\_C7RFP9 I V E D I I E K D D L L K D S L K L D Q W T D G S N T L A T A P G K Y K R N T V  
UniRef90\_R7D4M5 G S T A I R S F L R G M P A L E S V L A D A D I G V D F V R I Y E C G G G D P L A A A  
UniRef90\_C4RHD5 E P Q V P A P F L E R A A A D A M D I D A Q L R D G N T L A I A P V G Y E R N T G  
UniRef90\_R7QSK0 S W D V L Q V P E E E A A N M L F I G S V A P G A V L V Q R S C P I S V K  
UniRef90\_UPI00035C3E24 K P L D F I V A E V L G Y K R L R I E Q W N D G N N V L A L R P G G Y D R N D D  
UniRef90\_A0A023D1P7 P D K R I V A T E R D A R H F S V R N A I A F E D Q V V M A H P P Q E L A  
UniRef90\_U5E3L7 R S P G I E V T E E S A A E S L N L P K L R V G N N L V A V I E P G A Y D R N T H  
UniRef90\_A6TSY2 K K E D L T M S Y E P G L N L P A V N L I R C G D G D L I A A G R E Y D R N Y V  
UniRef90\_E4KMJ8 T V N I V E R E D Q L D V D A L G V N D G S N T L T I A P G V V V V Y D R N T V  
UniRef90\_Q6AA78 A G F S V R V D D R H F T D V L G L D G L R D G N N V V A L E P G G Y D R N T A  
UniRef90\_R7ZT42 D N D Q V H I K K E S L A D I L Q L E I P H D G A N V L P R R V I S Y S R N K H  
UniRef90\_P63552 T I G D A A P F A E A A K A M G I D K L R V I H T G M D P V V A Y E R N V Q  
UniRef90\_C8ZYS8 I K V V E E K D T L D H I L C R Y L D L P N D G S N T L A I A P G E Y D R N T N  
UniRef90\_K0Z0T4 L D I T V H E A D E Y D V L A A G L G F D S D G S N L L A L E P G S Y E R N T V  
UniRef90\_UPI000474A6D1 G T V Q I S G P R E A A A D A M G I E K L R V I D T G L D S V V A Y E R N V E  
UniRef90\_UPI00047AAECD G L E I T Y E A A K P A V N L T R C G D W N D G S N T L A V S P G C Y N R N H V  
UniRef90\_D6KD05 T G F D V T V N S D L A A E A L D L N D K V R D G S N F L A L A P G E R N V T N  
UniRef90\_E3I0W7 A D K R I E A S D E D A A R F A V N A V N I G R D I V M A E P T A H L A  
UniRef90\_I2BY10 P H G I D I Q R E E T V A A A L N L K A L R D G N N V V A V I E P G G Y D R N T N  
UniRef90\_W7IPQ8 V V V D G P A P L E A A A A M S I D R L R V T H T G L D P V T A E Y E R N V E  
UniRef90\_UPI000373F05F L K V T G P E P A A A A M E L E R L R D G N N L D A V A P G T Y E R N V E  
UniRef90\_I3Y8T2 G V V D A T L E K D V V A E A L N F K A L R I G N N L V A L A P G A Y D R N T W  
UniRef90\_U2VG90 G E I K I E E M N D L E H I L A M A M G L D A V K L P C G G G D Y Q R N S V  
UniRef90\_A4FEM8 G L D L I E V P V A E A E R F A L N L V S D G A S V T M A C G G A P E F A S G  
UniRef90\_R6HJK6 N V T T R E V S D R V L A G Y L G L N D G S N T L C I A P G V V V V Y D R N Y V  
UniRef90\_U7KYY3 T K L E L E S P D K H F A T V V E L H I V E T G G N S Y A A A R E Q Y D R N K H  
UniRef90\_UPI000367A76 A G A P V H V T D E G G T P F L D V V A R S M G L P H L R V I E T G G D R T N  
UniRef90\_UPI000365E7A9 T L R I P T P F L T A A A E S M G I E R L R D G N N T L A L A P G A Y E R N V E  
UniRef90\_V6UHD1 R A P G I E I T D E G A A R A L G L P Q L R V G N N A V A L E P G T Y D R N T Q  
UniRef90\_H3NK77 K D G T L A E I L A D A L E V E R V T L W N D G A N T L A V A P G E Y N R N T I  
UniRef90\_UPI0003B642E7 A G I S V T R E N D V V A D A L N L D K L R D A N N V V A L E P G G Y E R N M H  
UniRef90\_UPI0003FAC6DA G F E V V W L E E Y N T I P L A N F L N L N P E T I L I S K Q A H K Q R L R  
UniRef90\_UPI000379867F P V V L T P E E G A A F C A N A V V A G R T V V M P H C K T P R L G R  
UniRef90\_E8X2L4 E R R I M A T E S E A A Q F G C N V I N I G R D V L M H K A S G R L A  
UniRef90\_G0IXF4 K S E V V N I K I E D N L E I I T G T D K V N D G A N V F T G P G Q Y N R N K H  
UniRef90\_R5ZFT4 G D V N I R L I E D T L E H I V L G V D I P C G G D P I A A S R E Q W N D G S N  
UniRef90\_A0A021VR98 G T P G V R V A L E A A G A A M G T R L W D D G N N T L A L A P G A Y E R N A E  
UniRef90\_F0GJ4 D Y E M I E E Y I L E K S L D D L K D A L K L E K I N L L P C G G D P I A A N  
UniRef90\_F7NE08 S G D A I H A P R E D G A N T L A I A P G E V V V Y S R A P G E V V V Y S R N H V T N  
UniRef90\_D2MN73 H D I H I E E H E E I L A H F M G L N D G S N T L T I A P G K I V V Y K R N Y V  
UniRef90\_UPI00036A6E1A N V I E A S K Y A E K L F A C N A T C P D G K N V I T Q Q G C V D V N H K  
UniRef90\_UPI00035C8B52 G L R V I D H G D R A F V D V A E A L G L P R L H V I E T A G D N Y N T A T N  
UniRef90\_Q46BV7 G M E I S V S D S E Q S R L A C S F V P L I E S G T I F H Y D T A L D Q K T R K  
UniRef90\_C3PEE7 A P F D V L E L P T E S V A K A L G I G A F E D A N N V V A L E P G A Y D R N K H  
UniRef90\_F2UK99 R G L A V P P V V F T A L N A N L R I G D C L Y H T Q R G D D S L S R L  
UniRef90\_X2GR67 G F E L Y W L E K Y N T I P I N F L N L N P E T L L V S K K A T K Q H F K  
UniRef90\_A6CV54 H Y T F I D V N E E A S W L A A N G L P I S P D T C I M D K A H Q R V T N E  
UniRef90\_I4BVN7 T V A S I E E S N D L A A A R E Q W N D G T N T F A I A P G V V V T Y R R N T I  
UniRef90\_A3SJA0 K I E T V P V G F K D T M A L G C N V M S F G N D R V L A P A A S K D L I G K  
UniRef90\_UPI0003B466D1 P D H L V T Q E D P R A A A R E Q W D A N N F L S I A P G V V I G Y D R N V A  
UniRef90\_UPI0003B77648 T P K S P K L S T A K L A D I L A K I V G K D G T N Y L A I A P G G Y H R N R K  
UniRef90\_W9EHS3 A H G E L R L L H R T D L A A T L K E V L D L S E I D V M E T G N G D P V V A A  
UniRef90\_C7N4L7 G I T T V A A S D D E A L H V P A V N M G S N V L T I R P G E V V Y G D R A V V  
UniRef90\_D0CPF2 R P I F D I V A E V D L G Y K K L Q I E Q W N D G N N V L A L R P G A Y D R N D D  
UniRef90\_W4EZP5 K R H G F E V N W L D K Y N T I P I N F L N I D P E T L L I S K Q A H K Q M I K  
UniRef90\_UPI000347344C K R H G F D I H W L H Q Y D S L P I N Y L N L N P E T I L I S K A A H T Q R L K  
UniRef90\_D3R1E3 E V H L I R E G N G T V M D A I R E Q W N D G Y N T L A I A P R E Y D R N T L  
UniRef90\_F2NBQ3 R E V R I R E I N D T L E H I L E N A T G V D Q I K L I P C G G N D P I A A D  
UniRef90\_UPI00047AF117 G P Q F V V A A A A M G I D R L R V I D T G L D P V T A E R Q W D D G N N  
UniRef90\_I4DON5 S I E L I P L S D E E Q R N W G C S F V P L E P K K F I H Y D L A L D V Q T K K  
UniRef90\_D2ASF5 G V V E V H R E P N L A A D A L G I T G K L D I G S N F V A L I E P G G Y H K N E F  
UniRef90\_A3W7Z0 R H I F E I T A E L G H K K L H L E Q W N D G N N V L A L R P G G Y D R N D D  
UniRef90\_D0KUA2 G F N L I E V S V D E A K N Y V T N F L T I D D G K L V S P R K N S A  
UniRef90\_UPI0003C7F472 D L S V G P L R P A A A A E A M G L D E L D D G N N T L A I A P V A Y E R N E H  
UniRef90\_H6RH75 K K N V F L A N S R E S F M L S S N V F V V S P E V I I S H S M F K R L N K  
UniRef90\_E1REL5 G T F R I A L E D A L G L D A L N I I P T G D G N N V L A V R P G A Y R R N A R  
UniRef90\_H6RL76 T D L A V T G P Q P A A A A M G I D Q L R V I D T G L D P V T A E Y E R N T V  
UniRef90\_D7WY51 K H H G L D V Y W L D S Y K T P I N F I N L N P E T I I T S K Q A K P Q Q L L  
UniRef90\_I0A1N7 N Y R K I T T L E Q M S Y A S N F L T I K D G T I L A I E T E R N L K R T L A  
UniRef90\_L5ND67 G Y S P V W T D D H T V A D I N F L N L D P E T L L I S T K A N K K I L K E D  
UniRef90\_B1ZPF9 V L I P V D E G E P F A A N T L T V A G T T L V S E A F P K T E  
UniRef90\_UPI00046283B9 D Y E I I Q L P D E E A R N G M P I N M V A L G P R R V L I P M G N P R T I D  
UniRef90\_A0A058ZGC2 G F E I I E V T P E Q Q A A Y G C N V L N M G K G N I L A V H E K V A R N I A  
UniRef90\_N9U082 K P I L I P I G G D S A S H F D G T N Y L A I R P G V V I G Y S R N V K  
UniRef90\_S2ZPF8 H R L N V R E V D A L H D V L C K Y T E K D D V D L I T C V V Y E R N D V T N  
UniRef90\_UPI0004793785 F K R V I E V P A K E V A S L A N I V N L G N N K I L C S N E N F S N  
UniRef90\_D4XVN8 K E I K M V F E L E S L S N M L G K N A S Q L D I T I A P G V V V G Y S R N K Q  
UniRef90\_A9UJH0 H L P V Y F T P S L A S A N V V Q L G S S L L V N P M T P E D Y H  
UniRef90\_UPI000375A47 E L K V T D H P P E Q M H Q A I G C N V L A I E P G V V I A Y D R N T T T N  
UniRef90\_I4JF82 K H L T F S Q D P R P M F D V V A E V L W N D G N N V L A L S P G A Y D R N D D  
UniRef90\_U316G0 I H P P V P I P D D H P S K W L S M N V L M L D E K R V M V D A N E T S I Q K  
UniRef90\_A0A024HWI3 E P I L L I P V G G E H A T H F D A T N Y L T I A P G V V V G Y D R N T E  
UniRef90\_D8UCF4 G R G G I A R T E A A L E Q A L G I N D A N N V L T V R P G V V I G Y E R N T W  
UniRef90\_K8C6U1 I V K P P T I P D D H P M N W L S M N V L M L D E E R V M V E A N E T T T Q K  
UniRef90\_Q4SHT1 N M E L I E L S D V I E Q Q N W G C S F V P L E P N V I H Y D I S L S N Q T K  
UniRef90\_G7WFW9 K L S I S C T T D V I F A R C L G L N M G S N S L T L S P G N I A V Y D R N E V  
UniRef90\_R5BEM8 I H P P L P I P D D H P S K W L S M N V L M L D E K R V M V D A H E T P I Q K  
UniRef90\_UPI00042BCD21 K P N G L D I R K E S E S F V L G L S K L R D A N N V F A L E P G G Y D R N K Y  
UniRef90\_C4GEP2 S V I H V A P D E P A G A P T L T L A D T T L V S A S F P E T E K  
UniRef90\_W0IUU6 S K T L I E L L S D A V G R E V Q I R C G G N D V V G A S R E Q W N D G T N V  
UniRef90\_UPI000315DD30

UniRef90\_UPI0002E67C10 T N E A L R K G I E V L E F D S Y E L S R G R G G P R C M S M P L V R E  
UniRef90\_C7RFP9 T N Q E L N G L E V I K V L D S S S E T L T V G R G G G P R C M S M P L V R E  
UniRef90\_R7D4M5 R L L Y K S A G F D V I E V P S S E L L S R G R G G G P R C M S M A F E R E  
UniRef90\_C4RHD5 T N A Q L A G I E V L P I A G S S E L L G S G R G G G P R C M S C P L V R  
UniRef90\_R7QSK0 L L K E K E D I I D V V A I V D M S E E M A K A N G A G L T C M S V I I  
UniRef90\_UPI00035C3E24 T N L K A A G V E V L A I P G A E L L G R G R G G G A H C M S C P T A R  
UniRef90\_A0A023D1P7 A R L S E R G Y H V T G V F I L L S G R G G G G A Y C M S M T L R L  
UniRef90\_U5E3L7 T N A A L R G V E V I T I V G A E L G R G R G G G G H C M T C P L V R  
UniRef90\_A6TSY2 T N E A L R G V E V I K F E S Y E L L S R G R G G G P R C M S M P L H R E  
UniRef90\_E4KMJ8 T N K V L E G L K L I E F R G S E L L V R G R G G G P R C M S M P L Y R E  
UniRef90\_Q6AA78 T L L A K A G V E V V E I K A A E L L G R G R G G G G H C M T C P I T R  
UniRef90\_R7ZT42 T N R A L R G V E V L T I P S S E L L S R G R G G G L G P R C M T M P L S R  
UniRef90\_P63552 T N A R L A G I E V L T I A G S S E L L G T G R G G G P R C M S M P A A R  
UniRef90\_C8ZYS8 Q L L A E A G L K L H Q I P G S E L L V R G R G G G P R C M S M P F I R  
UniRef90\_K0Z0T4 S N D S D Q G F E V I T I L P G S E L L G R G R G G G A H C M T C P I V R  
UniRef90\_UPI000474A6D1 T N T R L E G V E V L R I A G S S E L L G S G R G G G G A H C M T C C P L A R  
UniRef90\_UPI00047AAECD T N E A L R N I E V L E F D S F E L L S R G R G G G P R C M S M P L L R  
UniRef90\_D6KD05 T Y L R K R G V V V T I A G A E L L G R G R G G G A Y C M S C P I E R  
UniRef90\_E3I0W7 D E L R E R G Y S V V P L R L R P F I M S G G G G A Y C M S M T L R L  
UniRef90\_I2BY10 T L L R K A G V E V I T I S A G E L L G R G R G G G G H C M T C P I I R  
UniRef90\_W7IPQ8 T N A R L A G I E V L R I S G S E L L G T G R G G G P R C M S C P I T R  
UniRef90\_UPI000373F05F T N A R L A G I E V L R I S G S E L L G S G R G G G P R C M S S P I R R  
UniRef90\_I3Y8T2 T N T E L R G V E V I T I V G A E L L S R G R G G G G H C M T C P L I R  
UniRef90\_U2VG90 T N D V L E G L D L V A P S A E L L S R G R G G G P R C M S M P F V R E  
UniRef90\_A4FEM8 E L R A R G F T V F E L D I T E L A K G G G G V R C M S T S L T L  
UniRef90\_R6HJK6 T N Q L L E G I R V L K M P S A E L L S R G R G G G P R C M S M P L W R  
UniRef90\_U7KYY3 T N A K L R G V E V I E I A G S A E L L G R G R G G G G H C M T C P I V R  
UniRef90\_UPI0003676A76 A L L R R A G V E V L E I A G S A E L L G R G R G G G G H C M T C C P L V R  
UniRef90\_UPI000365E7A9 T N A R L E G I E V L R I S G S A E L L G S G R G G G P R C M S C C P L V R  
UniRef90\_V6UHD1 T L L R R A G V E V I T I V G A E L L G R G R G G G G H C M T C C P L V R  
UniRef90\_H3NK77 T N K L L A G V K I H Q I E G T E L V R G R G G G P R C M S M P F I R E  
UniRef90\_UPI0003B642E7 T N K R L A G L E V V S I S S A E L L G R G R G G G G H C M T C P I T R  
UniRef90\_UPI0003FAC6DA S H P K L R G R K N I E I E V T E F K A G A G G G L R C M T L P L Q R K  
UniRef90\_UPI000379867F E L E R R G F D P A V C D V S E F F G K A G G G C R C M T L T L A L N  
UniRef90\_E8X2L4 E R L R A A G Y A V T E L P L G E F L K G G G S A K S L A L R L  
UniRef90\_G0IXF4 T N Q A L R G G I E V E M P S S A E L L S R G R G G G P R C M S M P L A R  
UniRef90\_R5ZFT4 T L L Y K E G L D L V V P S A E L L S R G R G G G P R C M S M P F W R E  
UniRef90\_A0A021VR98 T N A R L A G I E V L A I A G S E L L G S G R G G G P R C M S C P V A R E  
UniRef90\_F0GVJ4 Q M L E L N D I E L K L P S S T L T V G R G G G P R C M S M P L I R E  
UniRef90\_F7NE08 Q L L E S H G L K L H V I P S S E L L S R G R G G G P R C M S M P L Y R  
UniRef90\_D2MN73 T N E K K N G F N V L E L E A S N L C V G R G G G P R C M S M P L V R E  
UniRef90\_UPI00036A6E1A A L L K D A G F V K V H E F S T Y E F L K S G G G S V F C M K M L W  
UniRef90\_UPI00035C8B52 A L L R D A G V E V I P I V G A E L G R G R G G G H C M T C P I I R  
UniRef90\_Q46BV7 E L L E N E G I E V I S F H P D A L L A G G G S L R C M H T L R L C R R E  
UniRef90\_C3PEE7 T N A K L R G V E V I E I G S A E L L G R G R G G G G H C M T C C P I V R E  
UniRef90\_F2UK99 C K G P S G E V R P I F V E N F E A Q K A D G A L T C C S I V I  
UniRef90\_X2GR67 A H P K L Q K K N I V E I D V T E L E K G G G G I L R C M T L P L V R K  
UniRef90\_A6CV54 V R K H G H N V I E V E F D M P S M L G G G A L R C M S Q P I Y R E  
UniRef90\_I4BVN7 T N Q E L R G I K V Y E L K G A E L G R G R G G G P R C M S M P L L R  
UniRef90\_A3SJA0 L R A N G F T V Y D P D M S M F T M M G G G G I H C M A Q S L R R  
UniRef90\_UPI0003B466D1 T N L R K H G I E V I T I G G S E L L G R G R G G S A R C M S C P I Q R  
UniRef90\_UPI0003B77648 T Q K A L A G V K L A F G G N Q L S L G M G S A R C M S M P L V R E  
UniRef90\_W9EHS3 R L M R Q H G L Q V Y E I H S S E L L S R G R G G G A R C M S Q P I R R  
UniRef90\_C7N4L7 T L L D K A G I T V T F T G A E L L S R G R G G G A R C M S M P L V R  
UniRef90\_D0CPF2 T N A A L R G L D V R V I P G A E L L G R G R G G G H C M S C P T I R  
UniRef90\_W4EZP5 N H P K L Q K K K I E I E V T E L E K G G G G I L R C M T L P L R R K  
UniRef90\_UPI000347344C Q H S Q V D K L N F I E V E V S S E L L S K A G G G G I L R C M T L P L V R K  
UniRef90\_D3R1E3 T N A E L T K Y K L H V I R S G E L L S R G R G G G P R C M S M P L Y R E  
UniRef90\_F2NBQ3 R L L D R E G L D L I T I P S A E L L S R G R G G G P R C M S M P L W R E  
UniRef90\_UPI00047AF117 T L L E A A G I V I A I A G S E L L G S G R G G G P R C M S C P I S R  
UniRef90\_I4DON5 A L L N E R G V Q I H E F R P S K A L L A G G G S L R C M L T L R L W R  
UniRef90\_D2ASF5 T N R K L R G V D V V E I E G F E L L G K G R G G G G H C M T C P L L R  
UniRef90\_A3W7Z0 T N L K E A G L E V L A I P G A E L L G R G R G G G S H C M S C P T I R  
UniRef90\_D0KUA2 N R R L E K E Y D V I E V E V S N L A G G A G G G L H C M T A V I R R  
UniRef90\_UPI0003C7F472 T N A R L A G I E V I A I S G S E L L S G R G G G P R C M S C P V L R  
UniRef90\_H6RH75 W L L E E K G I L V I E K V D Y S N V S K M S G L F R C S T L P L Y R E  
UniRef90\_E1REL5 T N K E K E G I D V I E I E G C E L L S R G R G G G T H C M T C P V T R  
UniRef90\_H6RL76 T N A A L A G L E V V R I A G S E L L S G R G G G P R C M S C P V S R  
UniRef90\_D7WYS1 A H P L L K N K N L E V D L T E L E K G G G G I L R C M T L P L V R  
UniRef90\_I0A1N7 N L E A K N G I D V Y T V D L T N L T G G Y G G A H C M T C S L R R  
UniRef90\_L5ND67 V F R K K R L I E I D V D E L E K G G G G I L R C M T L P V T R E  
UniRef90\_B1ZPF9 Q R L R D A G I V T R G V Q V S E F H K A E A G A V T G L C L I L E P R E  
UniRef90\_UPI00046283B9 M L G R H G V D C I E V D L S E I M K A G G A V H C V T G I L R R E  
UniRef90\_A0A058ZGC2 S H R S F R G T V Q C M D F S A I T S M Y G A V H C A S Q V V R R R K  
UniRef90\_N9U082 T N A A L A G I K V I P F H G N Q L S L G M G N A R C M S M P L S R K  
UniRef90\_S2ZPF8 R I L E E H D V H V L S I P S A E L L S R G R G G G P R C M S M P L I R  
UniRef90\_UPI0004793785 L L I K H D Y D V T F I D F S E V I K L K G G L G C C V L P I M R  
UniRef90\_D4XVN8 K A L E D A G V K V L S F D H N Q L S L G M G S A R C M S M P L V R E  
UniRef90\_A9UUH0 V L S E L A E G L R T L D T P E V N K A D G A L T C C S V I I  
UniRef90\_UPI0003757A47 T Y L L R R G V E V I E I P G G E L L G R G R G G G P R C M S C P V E R  
UniRef90\_I4JF82 T N A A L A G I E V L K V P G A E L L G R G R G G G R C M S C P T I R  
UniRef90\_U3I6G0 M F E K L G I S T I K V S I R H A N S L G G G F H C W T C D I R R R  
UniRef90\_A0A024HWI3 A A L K K A G V R V L S F S G N Q L S L A M G S A R C L S M P L V R E  
UniRef90\_D8UCF4 T N E K K A G I T V L P I P G D E L G R G R G G A R C M S C P L E R  
UniRef90\_K8C6U1 M F E R L G I E T I K V N I R H A N S L G G G F H C W T T D V L R R R  
UniRef90\_Q4SHT1 K Q L Q Q R G V Q I L E F H P Q A L L A G G G S L L C M L T L R L W R  
UniRef90\_G7WFW9 T N E L L A G I K I N L V P A G E L L V R G R G G G P R C M S M P I N R  
UniRef90\_R5BEM8 M F E N I G I S T I K V N I R H A N S L G G G F H C W T C D I R R R  
UniRef90\_UPI00042BCD21 T N A R L R G V E V V S I A S S E L L G R G R G G G R C M T C P I V R  
UniRef90\_C4GEP2 R L R A A G I A T R K V D I S E L L K A G G H L A R L A L  
UniRef90\_W0IUU6 V L L R K A G V E V L T I A S S E L L S R G R G D P R C M T M P L W R E  
UniRef90\_UPI000315DD30

1

UniRef90\_J7QFM6  
UniRef90\_D2AV26  
UniRef90\_UPI000366926E  
UniRef90\_D3PHA2  
UniRef90\_UPI0003B3F07C  
UniRef90\_A0A043BZM5  
UniRef90\_C7MBX2  
UniRef90\_F4B550  
UniRef90\_UPI00034A524F  
UniRef90\_UPI000381AEF0  
UniRef90\_A1SJE4  
UniRef90\_E4PKS8  
UniRef90\_UPI000262792F  
UniRef90\_U6IUT7  
UniRef90\_E4XEE9  
UniRef90\_UPI0001CB993D  
UniRef90\_UPI00026C74AA  
UniRef90\_S9YWU7  
UniRef90\_Q13H07  
UniRef90\_M1V8V9  
UniRef90\_F6ZA35  
UniRef90\_D3VF11  
UniRef90\_UPI0002F8DAED  
UniRef90\_C1DD78  
UniRef90\_UPI00029B31FB  
UniRef90\_A1T4X5  
UniRef90\_W9B7R4  
UniRef90\_Q5DBC6  
UniRef90\_F6FWY8  
UniRef90\_Q7N9Z3  
UniRef90\_K1YIA0  
UniRef90\_E5L3W1  
UniRef90\_UPI0003F5ABF8  
UniRef90\_I4WBT8  
UniRef90\_K6X8M8  
UniRef90\_UPI0003AA9CCC  
UniRef90\_R3W3K5  
UniRef90\_M3TEL3  
UniRef90\_UPI0004574DA4  
UniRef90\_K2CLC3  
UniRef90\_UPI0003694C82  
UniRef90\_UPI000463CC20  
UniRef90\_D2V884  
UniRef90\_UPI000368880F  
UniRef90\_D0LWK4  
UniRef90\_I4W243  
UniRef90\_DOMFB1  
UniRef90\_UPI00029B0BE7  
UniRef90\_H8YXA0  
UniRef90\_H6R840  
UniRef90\_F9V9J6  
UniRef90\_E4TVZ8  
UniRef90\_A5EQJ1  
UniRef90\_W8A8U1  
UniRef90\_K3XBD5  
UniRef90\_H3BFH4  
UniRef90\_J2MAA5  
UniRef90\_S9VGZ5  
UniRef90\_Q11GH5  
UniRef90\_W5KLS1  
UniRef90\_R7TEA5  
UniRef90\_U2S8W8  
UniRef90\_A4YF44  
UniRef90\_UPI0003805D05  
UniRef90\_UPI000470963A  
UniRef90\_UPI0001CB9F3A  
UniRef90\_UPI000475BCBD  
UniRef90\_UPI000426FC70  
UniRef90\_K8E1U1  
UniRef90\_H5XCU8  
UniRef90\_UPI000477052D  
UniRef90\_F4C3U2  
UniRef90\_UPI0003798102  
UniRef90\_H7F2U5  
UniRef90\_M4NKE5  
UniRef90\_W0F186  
UniRef90\_UPI0003F4EF3A  
UniRef90\_T7SI66  
UniRef90\_UPI0003FB4D69  
UniRef90\_E0MPA9  
UniRef90\_UPI00040085D2  
UniRef90\_V7NQN8  
UniRef90\_A2D9C2  
UniRef90\_T0MB19  
UniRef90\_UPI00016C3E35  
UniRef90\_B5GVM5  
UniRef90\_T0LP03  
UniRef90\_Q26D53  
UniRef90\_B3EYG2  
UniRef90\_R7QHH1  
UniRef90\_UPI00016A96D3  
UniRef90\_UPI0002EAA9D4

10 20 30 40  
[V]V[T]C[N]I[P]A A R A Q S L A A G F R F P K F M I E P A Q E E L  
T R E Y L E S L P E H E L A R Y L I G G L A V A D V P E L P  
Y T H A I I S R V P H V F A K E K K T D L V S A R D E Q  
P G E Q L J A E Y L I G G L E V G D L P F D P  
M T P P A F F A V A Y A L I N P W M D P V D V Q V A Q A Q W  
L R A A L D G M G D E E L R R F L I G G I T K A E L L E R S  
[V]V[T]C[N]I[P]P W A A Q G L A A G F G Y P R R L T D P A R E E L  
P A E K L J A E F L I G G V A F G D V P D D M A G P F L  
H L K K A V A E I  
H I E K A K Q E V  
I D A A S K E L  
Q G L A A G F R Y P R F L I E R A Q E E L  
P S E T L A Q F L I G G V G Y T E L P T G L G K Q V  
I D A A S R E L  
Q E L V N K I M A G V R K E E I Q L E T T H  
V D A A R A E L  
M A A T A R S A F L V A P A D F T L A A E S A R D N R Q A V D P L R A L A Q H  
E L A D A L I D G L S K T E A R A R L D G S S G D A D L  
H V K K A I A E I  
T R S F L D G L A P R A L A E V L I G G L S T T E L A K E H  
R S T T R K P T N P R A A G R E W  
A V D P L K A L A Q H  
T P G R S L A E Q R R W E A E R E E L A A V L R R H  
D A A A Q E L  
K A A N E F  
S H P D V Q R A E A E R  
L A A V L R R H  
D A A A Q E L  
L K A V I P Q R T Q Q F F I D N S G K R F D K E H V T R A R K E V  
R A V H V F V R A P H Y K S I P T A S P N G T V I N R D M L V H Q F  
K Y G G Q T F P E E H L K K A I A E I  
W L Q E N G G K P H D P E K A S A Q I  
S E S G Q L D C V A V F R P A A T S A E E A A A V G F N R P V T R S E A E D A F  
P D L Q K Q W E Q E  
E A A R R E L  
K A Q Q E F  
V E A A R R E L  
K E F R P D L Q T A W E K E K I E F R R L L E K H  
V D P L R A L A Q H  
E K A Q Q E F  
E E S V Q A A H E Q L  
L K A A E E E L  
A Q E E F  
L A H K E L

UniRef90\_J7QFM6 D N F I K V L E S L G V T V T R P E P S R G F C N S C P R D S M L V F G D E  
UniRef90\_D2AV26 L P P L P N S L Y Q R D D P A A W L Y G G G  
UniRef90\_UPI000366926E P G F R A L A D L S P D A R E Y L M P P L P N T L F T R D D T C W I Y G G G  
UniRef90\_D3PHA2 K S L I D A V R N L G V D V L E L M P P L P E E C S S N S I Y V R D L A I V L N G V I  
UniRef90\_UPI0003B3F07C V S L F G N H L G R Y G F V L P P L P N F L F T R D N S A W I Y G G  
UniRef90\_A0A043BZM5 E H L H Q T Y L R L G H S V D L I E P I S G L P D M V Y T A N G G F L A H D I  
UniRef90\_C7MBX2 L D P L P N H L F T R D S S A W V G D V  
UniRef90\_F4B550 V T R I L N E E P L A N L Y F T R D Q A I T T D K G  
UniRef90\_UPI00034A524F A D P S S L W L H S L G P D D F V L D P L P N H L F T R D T C W L Y G G E  
UniRef90\_UPI000381AEF0 D Q F V A L L R S L G I T V T R P D P L D G F A N S C P R D S M L V I Y G D E  
UniRef90\_A1SJE4 R A F R D A E V Q Q F V L P P L P N T T F A R D N S A W V Y Q G G  
UniRef90\_E4PKS8 V G L F G N H L G R F G F V L P P L P N F L F T R D N S A W V Y G G G  
UniRef90\_UPI000262792F P L P N H L F T R D N S C W I Y G G  
UniRef90\_U6IUT7 I L L E Y G P D S R R P N A H K V G D I A V I I N G T  
UniRef90\_E4XEE9  
UniRef90\_UPI0001CB993D P R D F L L V I G D E  
UniRef90\_UPI00026C74AA L D P L P N H L F T R D T S A W I G D V  
UniRef90\_S9YWU7 E E M C N I L K M E G V T V R R P D P I D T G L Y G A M P R D I L I V V G N E  
UniRef90\_Q13H07 P L V N L M F Q R D P S A W I Y G G  
UniRef90\_M1V8V9 K P L T N L M F T R D Q Q V T T R R G E  
UniRef90\_F6ZA35 E E M C N V L R H E G V L V R R P D S S P V G L Y S A M P R D I L I V I G N E  
UniRef90\_U3VFI1 E E F V H I L E S E G V K V R R P D I O D Q T Q V F P R D V L L V I G D N  
UniRef90\_UPI0002F8DAED D G F I A L L E S L G V T V T R P E A V D G F C N T C P R D C L L V I G D E  
UniRef90\_C1DD78 L R P P V P N S Q F Q R D P S C W I Y G G  
UniRef90\_UPI00029B31FB A L R P L H N F F T R D A S V T V Y N Q  
UniRef90\_A1T4X5 P L P N T Q F M R D N S S W I F G G  
UniRef90\_W9B7R4 G Q L L A A L R E R D P A G F V L R P L P N T Q F M R D N S S W I F N G  
UniRef90\_Q5DBC6 E D F V K I L E L E G I K V V R P V P I D H G F Y A A M P R D F L L I V G D E  
UniRef90\_F6FWY8 P L P N T L F T R D T C W L Y G G  
UniRef90\_Q7N9Z3 E E F V H I L E G E G V T V R R P E P Q D Q S Q V F P R D V L L V I G N D  
UniRef90\_K1YIA0 P L Y N F Y F T R D A A V S I G S R  
UniRef90\_E5L3W1 L V E Y M D D R Y P F Y L D M P N L Y F T R D P Q A S I G R G  
UniRef90\_UPI0003F5ABF8 D G F A A L L E G E G V T V R R P D P V D G G S H T F P R D I A L V A G D Q  
UniRef90\_I4WBT8 Q S L A Q A L R E D V P V I V F P G D P A T P D A V F P N N V F G T A P G T  
UniRef90\_K6X8M8 D S L V I L A T Q A G E E F V L S P L P N H L F T R D T S C W V Y G G  
UniRef90\_UPI0003AA9CCC E E L A K I F I S G T G N D L E M L F P P V P N F L F T R D I G I V I K D H  
UniRef90\_R3W3K5 F S R D P F F T I G S F  
UniRef90\_M3TEL3 Y L S L A R E S G G V N E Y L M P P L P N T L Y T R D T T C W I Y G G  
UniRef90\_UPI0004574DA4 E G M C D I L R A E G V T V Q R P D I V D T G M Y A S M P R D I L L V V G N E  
UniRef90\_K2CLC3 I N P P L P L G N S I Y S R D Q M N V I L G T  
UniRef90\_UPI0003694C82 E E L K L I R E A V G I T E Y L L P P L P N T L Y T R D T T C W I Y G G  
UniRef90\_UPI000463CC20 P L L N L I F T R D D Q Q V I N Y G G  
UniRef90\_D2V884 P L P N H L F P R D N S C W I Y G G  
UniRef90\_UPI000368880F L A L A D A I E R A G A R V A V M P P E P L T G M V Y T A N A G A L F P D G  
UniRef90\_D0LWK4 G A L A Q A L R A D V P V I T F P G D P A T P D A V F P N N V F A T A P G R  
UniRef90\_I4W243 P L P N L L F T R D L A A V V N D H  
UniRef90\_D0MFB1 P I P N L I F T R D V G T T I N N H  
UniRef90\_UPI00029B0BE7 P L M N L Y F L R D Q M I T T E K G  
UniRef90\_H8YXA0 V R V L R P R L C T E A E K A A A G E R G Y A N F F V R D P W F T I G E H  
UniRef90\_H6R840 F V R D P F F T I G H S  
UniRef90\_F9V9J6 D H F V E M L R S K I N V I V V E D T P E P S T P D S I F P N N W S F H E D G K  
UniRef90\_E4TVZ8 E A L A V V L R R H Q V E V L R P R K R G Y A N F F T R D P F F T I G P F  
UniRef90\_A5EQJ1 G V E V L R P R L F T P A E K A A A G A G A Y A N F F V R D P W F T V G E H  
UniRef90\_W8A8U1 D Y L A E V L E G E G I T V R R P E A R D D Y F N A A M P R D I L I V F G N E  
UniRef90\_K3XBD5 P G M Y A A M P R D I L L V V G N E  
UniRef90\_H3BFH4 D G L A S L L E G L G I T V K R P N E H D H F Y S A M P R D G M F A L G N K  
UniRef90\_J2MAA5 R D Y Y K C L Q H S Q L V D S I H L M G E R S G T D S M K V A D I A V Q V N S T  
UniRef90\_S9VGZ5 F A R D P F F T I G G F  
UniRef90\_Q11GH5 E E M C N I L R H E G V T V Q R P E P I D T G M Y A A M P R D I L M V V G N E  
UniRef90\_W5KLS1 E E L C N V L R G E G V T V Q R P E P I D G G L M N A C P R D G L M V V G D E  
UniRef90\_R7TEA5 G R L R D A L V R Q G C Q A I D L W E L L P T T V N R V F V R D T A A V L G R Q  
UniRef90\_U2S8W8 K E M G A N V L I P E N E E P L V N I M F T R D P G M V L G G T  
UniRef90\_A4YF44 P L H N F F T R D A S M S M Y N E  
UniRef90\_UPI0003805D05 A L R P L H N F L F T R D A S M T V Y D E  
UniRef90\_UPI000470963A P R D I L L V I G D E  
UniRef90\_UPI0001CB9F3A P L P N L I F T R D I G I V I N D H  
UniRef90\_UPI000475BCBD P I P N F I F T R D L G I T I K D H  
UniRef90\_UPI000426FC70 K N E M N R L L V S Y G I E V V R P R L L T D Y E D G Y F S R D P F F T V G N L  
UniRef90\_K8E1U1 D E F A H I L E S E G V T V R R P E P I P Q G M Y A A M P R D A L L V V G D E  
UniRef90\_H5XCU8 D A F V A V L R A K I E V I V V E D T P D P D T P D S I F P N N W S F H S N G T  
UniRef90\_UPI000477052D P L P N L I F T R D L G I V I N R F  
UniRef90\_F4C3U2 A E F V R I L T G E G V V V R R P E P I P Q G M Y A A M P R D V L L V V G D E  
UniRef90\_UPI0003798102 G V E V L R P R L L T K E E E I N K A A G Y A N F C R D P F F V V G D K  
UniRef90\_H7F2U5 G A L A Q A L R A D V P V I T F P G D P A T P D A V F P N N V F A T A P G R  
UniRef90\_M4NKE5 D R F V E V L R Q D I N V L V I Q D Q P L P Y T P D A I F P N N W S L H S D G Q  
UniRef90\_W0F186 P L P N L I F M R D I G I V I N D H  
UniRef90\_UPI0003F4EF3A P I P N L L F M R D P A S V I G D G  
UniRef90\_T7SI66 D N F A K I L Q S R G V R V D R P T P N P S S F G C M P P R D V I L T V G K E  
UniRef90\_UPI00040085D2 P I P N F I F T R D I G I T I N D H  
UniRef90\_V7NQN8 P V S P L S N M L F T R D Q Q I A T A N G  
UniRef90\_A2D9C2 P L A N L Y F M R D Q Q A I S S G  
UniRef90\_T0MB19 E E L V G V L R G E G V T V R R P D P F P H N V N T A N P R D L F L V V G D E  
UniRef90\_UPI00016C3E35 E G L V A V L E G H G I T V V R P D A V D G G L Y A G M P R D L L M V V G D A  
UniRef90\_B5GV M5 P L A N L Y F M R D Q Q A V I S S N G  
UniRef90\_T0LP03 D A F T T A L K N K G I N V I V I S D D E D T P D S I F P N N W I S T H S Q N G  
UniRef90\_Q26D53 N E F I H I L E A E G V K V R R V K P V D S G F C A A N P R D V F L V I G N E  
UniRef90\_B3EYG2 D P L S N I M F V R D Q Q I T T R K G  
UniRef90\_R7QHH1  
UniRef90\_UPI00016A96D3 P I P N F I F T R D V G T V I N Q H  
UniRef90\_UPI0002EAA9D4

UniRef90\_J7QFM6 I L E T P M A W P C R Y F E T H S Y R P I L K D Y F K R G A R W T S A P P V F D  
UniRef90\_D2AV26 V S L N P M F W H A R L L E T M N Q S T I Y H N H P M D F D E E D F G K A A L E  
UniRef90\_UPI000366926E L T L N P L Y W Q A S R R D E T L L L M K A I Y T F H P D F V P E T T H G E A T F E  
UniRef90\_D3PHA2 A L M C R P S R D S R R D V E L K T I K S V L R K E L D I L V E M K S F K G A T L L N  
UniRef90\_UPI0003B3F07C V T L N P M Y W N A R K P E T L L T A G V Y K F H P K F A G K V E V L W T L L E  
UniRef90\_A0A043BZM5 A V V S A R F R F P E R A G E S R A Y A S W M S S V G Y R F V T T R D H V N E  
UniRef90\_C7MBX2 V A L S P M R H P A R R R E S L H L E M I Y R H H P R F V G R D T D G A G A A T V L E  
UniRef90\_F4B550 V V I G R M S K R I R M R E T E I I K L I F Q A L Y E K P L K E I S E P A T V L E  
UniRef90\_UPI00034A524F V S I L N P M A W K K A R R E T V H Y E A V Y Q W H G F E V W N R V H A P A T I E  
UniRef90\_UPI000381AEF0 I I E T P M A W P C R Y F E T H A Y R G I V K D Y F P M R Y I L T E F E P V F D  
UniRef90\_A1SJE4 V T L N R M Y W G A R R Q E T L L T T A I Y R F H D P D Q Q P R D R G N A T I E  
UniRef90\_E4PKS8 V T L N P M Y W P A R K P E T L L M A A I Y R F H H W G D P L E D H G L A T V E  
UniRef90\_UPI000262792F V S V N S M A K P A R R R E T L H A Q A L Y R Y H G F P V Y D V A H F P A T V E  
UniRef90\_U6IUT7 A L M C R P Y G S D R Q S E V S V V R Q T L K K M G L T I A E L N N D Q A Q L V E  
UniRef90\_E4XEE9 M R K A L E Q A G V E I L S D M T E E F P D H V F D  
UniRef90\_UPI0001CB993D I I E A P M A W R A R F F E Y R A Y R P I L Y D H D Y P I L F V T T E F E P C F D  
UniRef90\_UPI00026C74AA V S V G A M R R S A R R F R E S L H L E M V Y R H H G P R R L L G R D G A G S V E  
UniRef90\_S9YWU7 I I E A P M A W R A R F F E Y R A Y R A I L K D Y F R R G A K W T A P K P T  
UniRef90\_Q13H07 V T L H P M F W P A R R K E T A A Y A F H P R F A G K V R T W T G P D T L E  
UniRef90\_M1V8V9 I V M A R L R S E Q R R R E V D V M Q F C F E K L K L K I T G R I P E N A F L E  
UniRef90\_F6ZA35 I M E A P M A W R S R F F E Y R A Y R S L L K E Y P L E S I A E D R H F R E P C F D  
UniRef90\_D3VF11 I I E C P L A W R S R Y F E T S A Y K T L L K E Y N K V S L A I T E F E P T F D  
UniRef90\_UPI0002F8DAED I I E A P M A W P C R Y F E T H S Y R P L L K D W G E P I R H I L T E E P V F D  
UniRef90\_C1DD78 V T L N P M Y W P A R R R Q E S L E E Q A V Y Q F S W W G D S D K D H G S A T L E  
UniRef90\_UPI00029B31FB V M I S K M A N K V R R E S I I M D A I F N F S P H F K T T T I N P E T F I E  
UniRef90\_A1T4X5 V T L N P M Y W P A R R Q E T L L T T A V Y K F H P A F A E E E H G S A T L E  
UniRef90\_W9B7R4 V T L N A M Y W P A R Q Q E T L L T A A V Y N F H A D L D Q V A R D H G S A T L E  
UniRef90\_Q5DBC6 M I E A T M T W R S R Y F E F L A Y R W R H G A K W T I A P K P E S A T P C F D  
UniRef90\_F6FWY8 L T L N P L Y W P A R R D E T L L M K A I Y E F H P D F V P E H D H G R A T F E  
UniRef90\_Q7N9Z3 I T E C P L A W R S R Y F E T A A Y K T L L K D Y F K K P L A I T E F P T F D  
UniRef90\_K1YIA0 A L I C K M A S K V R M R E S L I T E A I F R N P D F F E C E M I N D E I F M E  
UniRef90\_E5L3W1 M T I N R M Y W R A R R R E S I F M T Y I L K H H D V P V W L D R N S P F N I E  
UniRef90\_UPI0003F5ABF8 I V E A T M G W R S Y F A T H P F R T L F K D Y P P E T S V T T E F E P T V D  
UniRef90\_I4WBT8 L V I G R M R H P V Y Q R E A Q F F G E M L D Y D E V D L S G C D E L V A E L T  
UniRef90\_K6X8M8 V S V N Q M R M L A R V R E S V N Y E A I Y R W H N W W G G L G T G L A T M E  
UniRef90\_UPI0003AA9CCC I L L N K P A K K A R L R E A L L M K Y L F F N H H P L F K V D A D E Y N V T L E  
UniRef90\_R3W3K5 I I E G N L F M H R R K I R P A L N K W I E Q H D G I Y L A A P Q E G P F I E  
UniRef90\_M3TEL3 V T L N P L Y W P A R H D E T L L M K A V Y E F H P D F I P E K H W G G A T I E  
UniRef90\_UPI0004574DA4 I T E A P M A W R A R R A Y R S L T K D Y F Y D L D Y P I V V T T E F E P C F D  
UniRef90\_K2CLC3 R F S A S M A E P I R Q R E V P F Y E T L Y E K L G L P R G I E M P D G E T F D  
UniRef90\_UPI0003694C82 Y R P D Y L S E K I G I E K R L K W T A E K F F V T T E E E P L F D  
UniRef90\_UPI000463CC20 V T L N P L Y W P A R H E E T L A I Y K F H P D F G E A N V N V W W G D P T L E  
UniRef90\_D2V884 L V I C R M G S L Q R H Q E T K I L K F C F E K L G Y E I L G E I K E P G I E  
UniRef90\_UPI000368880F V S V N P M A K P A R Q R E T L H A R A V Y R Y H Y F G D D D A E Y F P A T V E  
UniRef90\_D0LWK4 F L V S R M W A S H R D T E A E H V S A A M E A L G V P V R Q A E H V W E  
UniRef90\_I4W243 L I V G R M R H P Q R E A E R A D I R A F F G D L G Y D E I D L D L V A E L T  
UniRef90\_D0MFB1 L I V S H P A T A A R A R E S L I L R V I L E H H P G E R I I Y L P E G V T F E  
UniRef90\_UPI00029B0BE7 I L L N K P A K K A R V R E T L L M R Y I F F N H H P L N V L E I P D V T M H F E  
UniRef90\_H8YXA0 V V I S K M N S Q Q R A A E T R V I K F A L S K L G V T P I L E I S G E G R L E  
UniRef90\_H6R840 V I E G S L R F P H R R D Q V M P A R A R Y V S I P I P E L D G A G V G P F L E  
UniRef90\_F9V9J6 V I E G S M R F P H R R N E V L P V R N M L M E N V Y S S D E K D E S G P F L E  
UniRef90\_E4TVZ8 V G L Y P M Y A P N R R R R P D I L E K L Q T K E G L K I S E I D E D R F L E  
UniRef90\_A5EQJ1 L T I E G S L R F V Y R R I E V D L I F D W A M R T G C L Y V A V P Q P G P F L E  
UniRef90\_W8A8U1 V V E G V L Q F P H R R L E V L P S R D L L I E R V I P G L G R P G P P F L E  
UniRef90\_K3XBD5 I L E A P M A W R S R Y F E F R P Y R K L I K E Y F Q E G A K W T E F E P T F D  
UniRef90\_H3BFH4 I I E A P M A W R A R A Y R P L I K E Y F H D Y P I R S V I E D R H K E P C F D  
UniRef90\_J2MAA5 I I E T P M A W R S R Y F E T F P R D I L N D Y F K R G A H I E H E P C F D  
UniRef90\_S9VGZ5 L L S V P L T G L E H R A T E F R M Q Y I R S A G G P T S M G M D N E G C R I H  
UniRef90\_Q11GH5 V I E G S L R F P H R R D E V L P I R S V I Y E I C D P D D K R L G P G P F L E  
UniRef90\_W5KLS1 I I E A P M A W R A R F E Y R A Y R P L I K E Y H V E I Y K Y R H A L S T F C  
UniRef90\_R7TEA5 I I E A P M A W R S R V F E Y Y A Y K M F A E Y F K R D F V L T E A E P T F D  
UniRef90\_U2S8W8 L V T G T A A F P V R L A E F D V A H R A L S Q L Q P P R P D D E P A S S R I E  
UniRef90\_A4YF44 Y V S G K M R W E S R R R E P E I F T A I L K P K N V L K V I E K G F F E  
UniRef90\_UPI0003805D05 V L I G R M A N A V R D R E A V I M Q S I F D T L N L N T T N D P T R K L T V E  
UniRef90\_UPI000470963A V L I G K M A S L V R D R E A L I M E A I F K D H P I P I K N I P S S P H T I E  
UniRef90\_UPI0001CB93FA I I E A P M A W R S R F F E Y R A Y R P L I K E Y F Q K G A R W T A P P C F D  
UniRef90\_UPI000475BCBD I L L N K P A K A A R T R F V F F Y H P M F T H I R G N L I E I T P E N E C T L E  
UniRef90\_UPI000426FC70 V L L N K P A K K A R T R E A L L A K Y I F F N H P L K I I E I L S D S H H T L E  
UniRef90\_K8E1U1 I I E G C L R F P H R R E I E L A M R N L L P Q P D I S D G E T S E A G P F L E  
UniRef90\_H5XCU8 I I E C P M A W R S R Y E S L A Y R P L L K E Y F G P K P E L T D E E P T F D  
UniRef90\_UPI000477052D V V I Y P M F A E N R R K E R R E T K G F L I E N I V D Y T S A E E E G L F L E  
UniRef90\_F4C3U2 I L L N K P A K K A R G R E S M I M R Y I F F N H P I T L E I T P D P I Q H F E  
UniRef90\_UPI0003798102 L I E C P T A W R S R Y E T L A Y R P L L K E Y G P A R L V I T E F E P T F D  
UniRef90\_H7F2U5 M I E A N M K L T H R I N E I F P I Q A L L Q Q E A Y Q Y V G L P T E G P F L E  
UniRef90\_M4NKE5 L I V G R M R H P V R Q R E R A D I R A F F G D L G Y D E I D L S G S R G E L T  
UniRef90\_W0F186 M V L Y P M F A P N R R S E R G K G V T D K L K E Q F T V Y S T I D E N R L E  
UniRef90\_UPI0003F4EF3A I L L N K P A K N A R T R E S I L A Q F I F F Y H P M R I I E I P E H R C T L E  
UniRef90\_T7S166 Y S V N S M A T W A R E R E P L I L S Y V F R H H P R L R H H T E H D K W F M E  
UniRef90\_UPI0003FB4D69 M I L E A T M S Y R A R F F E Y L C Y R P L L Q K Y F E D F V T T E E E P M F D  
UniRef90\_E0MPA9 L L L N K P A K L A R T R E A L L M Q Y V F F H H E I K I I E I P D N E H H F E  
UniRef90\_V7NQ8  
UniRef90\_A2D9C2 V V M G R F N A P Q R T T E I A L M N Q V M P L L G V Q P I G A I G D P G H L E  
UniRef90\_T0MB19 V L I G N M K M Q Q R R K E T D I L T S F V F Q E L G I K T K K I I R G F F E  
UniRef90\_UPI00016C3E35 I I E C A S P M R H R H F E P L A Y R R L F T D Y F P R R Y P I T E L E P V W E  
UniRef90\_B5GV5M I I E A P M S W R C R H H E V D A F R S L I K S Y G A D G W A V T E F E P V F D  
UniRef90\_T0LP03 L I I G N M R M S Q R A R R E T E L T E F I F N K F G R N N I K K I S G A S K E  
UniRef90\_Q26D53 D I A L Y P M F A R R R R E T E V L D T L E K E G F S I E N I I D E G F F L E  
UniRef90\_B3EYG2 I I E A P M A D R N R Y F E T W A Y R E M L K E Y F P R F V V T E F E P T F D  
UniRef90\_R7QHH1 I V M A R L S S K Q R Q K E V D I M E F C F K K L G L N V I G R I P C P G R M E  
UniRef90\_UPI00016A96D3 L V I G R M A N A V R D R E A V I M Q S I F D T L N L N T T N D P T R K L T V E  
UniRef90\_UPI0002EAA9D4 I L L N K P A K K A R A R E S L L A K Y V F Y N H S F N I I E L P D Y R N T L E

UniRef90\_J7QFM6 A A D F F R C G R D I F V I T R S N V T 140 N A M G I D W L R R H L E G Y R I H E I 160  
UniRef90\_D2AV26 G G D M M P I G N T V V I G I S E R S T P Q A M I E H I A L A T F F A A G V V I A V N  
UniRef90\_UPI000366926E G G D I M P I G N T V V I G I S E R S T S R E G A L T Q V A A N S L F F A A G V V I A V N  
UniRef90\_D3PHA2 G G S D V L F T G K E F F V G M T T E G S T N T E G A L Q V A A N T W P F E Y P C T A I K  
UniRef90\_UPI0003B3F07C G G D I M P V G H T V L V G M G E R S S P Q A V G Q L A R A L F A K G V V A C Q  
UniRef90\_A0A043BZM5 G G D L M M V G S E R V L A G Y M S E R T S D Q R A H A E I A A A V L G L P V V S L E A  
UniRef90\_C7MBX2 G G D V L M L S P R V R A V G M S E R T S A V G V E R L A A A D L L J A D G V I A I E A  
UniRef90\_F4B550 G G D Y M P F K D F A I F G T G D R T S I S G I V M Q A I D F T N F N E I V I A Y  
UniRef90\_UPI00034A524F G G D V M P I G N A V L V G M G E R T Q P Q A V E L L A R E M F F A R G R I R M P H  
UniRef90\_UPI000381AEF0 A A D F V R A G R D I L F V T R S N V T N R M G I E D W L R R E H L P F A R Y R I H E L R  
UniRef90\_A1SJE4 G G D V M P I G N G V V I G M G E R T S Q Q A I T Q V A R S L F F A A G V V I A P R Q  
UniRef90\_E4PKS8 G G D I M P L G R T V L V G M G E R T S P A T G I E G L A S K A L F F D G G V I A C Q  
UniRef90\_UPI000262792F G G D V H V V G N G V L V G M G E R T S A T G V E A L A R A L F F G H T V V A V C  
UniRef90\_U6IUT7 G S D V L F T G Q E I I V G I S S H T N E A G A Q S V A R A F P E Y P T T V A  
UniRef90\_E4XEE9 G G D V L F T G S E I F I G D S S Q R S N K A G A D F L R K S F G D Y N V H Q I  
UniRef90\_UPI0001CB993D A A D F I R A G R D I F A Q R S Q R V T N Y F G I E W V R R R H L G D Y N V H V I S  
UniRef90\_UPI00026C74AA G G D V M M L P R T V A I G M S E R T S A V G V I E A L L A D D A V D R V I A I A S  
UniRef90\_S9YWU7 M A D E L Y D Q V T N Y M G I E W M R K H L P F A Y R V I H I I S  
UniRef90\_Q13H07 G G D V M P I G N G V L I G M G E R S P Q A V I T Q V A R R R H L P F A R R I H E L C Q  
UniRef90\_M1V8V9 G G D F F P A G D D I L F I G I G L R S N L E A V H Y M L E H F G T R R V V A V V K  
UniRef90\_F6ZA35 A A D F I R A G R D I I F A Q R S Q V T N H L G I E W L R R R H L P E Y R I H E L T  
UniRef90\_D3VF11 A A D F Y R C G R D I I A Q K S H V T N D F G I E W L R R R H L G D Y R I H V I S  
UniRef90\_UPI0002F8DAED A A D F V R A G R D L F V T R S N V T N R T G V V E W L R R R H L P G G Y R V H E I R  
UniRef90\_C1DD78 G G D V M P I G R D I L I G M G E R T S P Q A V I D Q V A R N A L G Q K P I A C Q  
UniRef90\_UPI00029B31FB G G D V L I A R K D I L I G M G T R T S T Q G I V D Q L A E Q I K K K H I V V Q Q  
UniRef90\_A1T4X5 G G D V M P L G R G I V I G M G E R S S H Q A I T Q V A R N L F A A G V I V A S G  
UniRef90\_W9B7R4 G G D V M P V G N G V I V I G M G E R S S H Q A I T Q V A R N L F A A G V I V A G  
UniRef90\_Q5DBC6 A A D F I R A G R D I F A Q R S Q V T N L S G I E W V R R H L E P A R G I K T V T  
UniRef90\_F6FWY8 G G D I M P V G D G V L M G M S E R T S R Q A I T Q V A S A L F E R G V A M P R E  
UniRef90\_Q7N9Z3 A A D F I R C G R D I I A Q K S H V T N E S F G I E W L R R R H L G K Y R I H V I S  
UniRef90\_K1YIA0 G G D L L I A R E D I L I G N G M R T S S K G I D L V N R L E G D Q H V I V Q Q  
UniRef90\_E5L3W1 G G D E L V L S K D V L I G I S E R T S A Q A I E K L A R N I F K K K I V A I E  
UniRef90\_UPI0003F5ABF8 A G D F M R F G R D I L V G R S H V T N A F G I E W V R R L G D F R V H E V A  
UniRef90\_I4WBT8 G S L I I D R A R G I Y C G L S E R C D M A G A E A M H K A F G L R L T F C F E  
UniRef90\_K6X8M8 G G D V H V L G H G V L V G M S E R T T A Q A V E R L A Q Q L F A V G V A M P R Q  
UniRef90\_UPI0003AA9CCC G G D V M V V S N H V I G I S E R T S M A A A H Q V A T T L F K K N L V I P Q  
UniRef90\_R3W3K5 G G D V L V L D N K T V F V G Y S G A S N T A G I Q W L R R L E P F G Y E L V P  
UniRef90\_M3TEL3 G G D V L V P G D G V L I G M S E R T S R Q A I T Q V A Q Q L F A A G V I T K V I  
UniRef90\_UPI0004574DA4 A A D F L R A G K D I F V Q R S Q V T N L M G I E W M R R H L P T Y R I H T I S  
UniRef90\_K2CLC3 G G D A Y V H N G I V Y V G V G V R T T K G A A H Q L K E L G F F A I V P D K  
UniRef90\_UPI0003694C82 A A D V L R F G K D L V V Q H G F T T N Q R G I E W L R R H F P E H R V H T V N  
UniRef90\_UPI000463CC20 G G D V M P I G K T V L I G M S E R T S H Q A I R Q L A A A F F H S G V E R V K  
UniRef90\_D2V884 G G D F L V G G I C Y I G E G L R T N P D A I R Q M L D W F G T R R V A V V H  
UniRef90\_UPI000368880F G G D V H V L G G G V L V G M G E R T T P M A V E L L S R A L F D R G V I A A E  
UniRef90\_D0LWK4 G A D I C T L P G N R Y I T Y G V R S V P E S A A E V R A R L P G A R L L E V E  
UniRef90\_I4W243 G S L I I D R S R G V Y C G L S E R C D M A G A Q A M L K A F E L R L M F C F E  
UniRef90\_DOMFB1 G G D L L V A P E V L L G H S E R T S L G G V A H V A R A L F S R T V L V V D  
UniRef90\_UPI00029B0BE7 G G D V M M V N H V I G C S E R T S E H G A N E A K L L F D N D V V V V K  
UniRef90\_H8YXA0 G G D F L P A D G Y A L L G Q G L R T N A E A V R Q L G A I G A K Y F V V A W Q  
UniRef90\_H6R840 G G D V L V D G K N V F V G E S G M S D H T G T R W L A K Y L A G Y T V T P V T  
UniRef90\_F9V9J6 G G D V L V L G K T V F V G I S G M S D H N G Y L W L K A Y L A D Y E V E V K  
UniRef90\_E4TVZ8 G T G S M I L N R L V Y I A I S L R T D E K V L D E F C D K F G Y K A I K  
UniRef90\_A5EQJ1 G G D T L I L G R H V F V G Q S G A S N D A G I R W L A N L L R G Y T V E G V R  
UniRef90\_W8A8U1 G G D V L V L D K E V F V G I S G M T N A L G I A W L S K Y L R P H G F T V I P  
UniRef90\_K3XBD5 A A E F T R M G R D I F V Q R S Q V T N Q F G I A D W L Q R H L G D Y K I H V L D  
UniRef90\_H3BFH4 A A D F I R A G R D I F V Q R S Q V T N Y M G I E W M R R H L P E Y K I H T I S  
UniRef90\_J2MAA5 A A D F L R I G A D I V G Q R S H V T N M L G V Q W L Q R E L E N Y K I H I T Y E  
UniRef90\_S9VGZ5 S G D V V R L P K G I A V G H G P R T N L T A L E L L K D L Y E V F D V I T L E  
UniRef90\_Q11GH5 G G D V L V L G K H V F V G D S G A S N G L G A R W L K K L A G Y E V E V R S  
UniRef90\_W5KLS1 T V F V I F V G I T E F I G Q T D V T N F L G I E W M R R H L P H Y K V H I I S  
UniRef90\_R7TEA5 A A D A L R F G R D I I C L S H G T N R S G V E W L R R H V A H G V H S L S  
UniRef90\_U2S8W8 F G D V F V D G E R I L L V N V G L R S D A K A L S P F L I E L F R E A A V V R I P  
UniRef90\_A4YF44 G G D F F P L D R G I L L M G T R S M E S G E D E A L L V K R L D T P E L P P  
UniRef90\_UPI0003805D05 G G D V L I A R D D I L I G N G V R T S T R G I D A L M Y N F I K R N V Q E L P  
UniRef90\_UPI000470963A G G D V I A R D D I L I G T G V R T S T S Q G I D Y L I E S I K E K K V I Q E L P  
UniRef90\_UPI0001CB93FA A A D F M R A G R D I F A Q R S Q V T N Y S G I E W L K R H L G D Y N V H I C L P  
UniRef90\_UPI000475BCBD G G D V M M V P G H L I G C S E R T S I Y A A Q Q V M K I L F D K N V I L P K  
UniRef90\_UPI000426FC70 G G D I M V S N H I L V G V E R T S S E A A V K I T Q T L F E M G V T I V K  
UniRef90\_K8E1U1 G G D L L V Y G K T I F V G Y S G A S N I V G I K W L E S V L W D Y K V V P V R  
UniRef90\_H5XCU8 A A D F T R C G R D I I A Q K S N V T N Q F G I E W L Q R H L G D Y R I H V V F E  
UniRef90\_UPI000477052D G G S I L M D N Q K V Y C A L S D R A H E E L V T E F C E D F E C T P V I  
UniRef90\_F4C3U2 G G D V M V V S N H V I G C S E R T S P H G A N E A K L F F K H K V H V I K  
UniRef90\_UPI0003798102 A A D F I R C G R D I I A Q K S N V T N E F G I E W L R R H L G D Y T V H V F E  
UniRef90\_H7F2U5 G G D V L V L G K E V F V G N S G A S N H A G I K W L R N L F D G Y T V T E I P  
UniRef90\_M4NKE5 G S L V I R V R G I G Y C G I G E R C N L A G A E A M H Q A F G L R L T Y C F E  
UniRef90\_W0F186 G T G S M V L D R V H Y A C L S P R T D K K V L L D F C A M L D Y K P V H A V D  
UniRef90\_UPI0003F4EF3A G G D V M M V P N H L V I G C S E R T S L Y A A Q Q V M K L L F E K N V V T P K  
UniRef90\_T7S166 G G D I L V L S R K V L V G C S E R T T P Q G I E F L A Q A L F K H R V I A V E  
UniRef90\_UPI0003FB4D69 A A D V L R F G K D L I V Q H G F T T N L K G I D W L R R H Y P D H R V T A V N  
UniRef90\_E0MPA9 G G D V M M V P N H L L I G I S E R T T V F A A K Q V K L F E D K K V K I P K  
UniRef90\_UPI00040085D2 G G D V M M V P N H L L I G I S E R T T V F A A K Q V K L F E D K K V K I P K  
UniRef90\_V7NQ8N M G E R T T P A G A E A L A R S L F E D K T V L A V P  
UniRef90\_A2D9C2 G G D F F P L G D M S M L G V G L R T T A E A A R Q L M R L V G T Q K F V V V R  
UniRef90\_T0MB19 G G D F M P A G D F C L I G T S N R T D E T G A M E A N S V F D F R I V I D  
UniRef90\_UPI00016C3E35 A A D F V R C G R D I L F V I R T S N V A T N A L G I E W V R R H L G G F R V H E I R  
UniRef90\_B5GV5M A A D F L R F G R D L V V Q R S H V T N D F G I D W L R R A L P G F G V T V V E  
UniRef90\_T0LP03 G G D Y I P A G E F G L I G I G P R T N V A G A M D F M N I S S Y D E I L L E  
UniRef90\_Q26D53 G S L L D N K A Y C S I S P R A D E A L F A M D F C E D F E Y T P V I T V E  
UniRef90\_B3EYG2 A A D F V R C G R D I F G Q K S H V T N G L G I E W L Q R H L E D Y R I H I I H  
UniRef90\_R7QHH1 G G D F F P A G E K L I G T G P R S D L T A V K Y L K E D L L G T E R V A I R  
UniRef90\_UPI00016A96D3 A A D I V R F G K D I F V G L S M V T N Q L G Y R W L R D H F P E H R V H A V T  
UniRef90\_UPI0002EAA9D4 G G D V M M V S K H L L I G C S E R T S A L A I S E T I K L L F E K D V V I P N

UniRef90\_J7QFM6 C P N P M H I D T T I L L P L G P G R L L I N P E Y I N P D E L P D I L K  
UniRef90\_D2AV26 V P K Y M H L D T V F T F V L D V D K A S A Y L P F L E T A V T H S L R P G D R D  
UniRef90\_UPI000366926E L R A A M H L D T I M T F V G V D I T V T V Y N P R I L V D R V L P F V L R S P D S  
UniRef90\_D3PHA2 V D T P A H L R D F I C M G V D D L I M V N N N K E S Q C L L K R I E R E S I H  
UniRef90\_UPI0003B3F07C M P K A M H L D T V F T F C G G N L V T A F T E A A D A M Q C Y D L R P D E T G  
UniRef90\_A0A043BZM5 L V D F Y H L D T A L A V L D D E H T L A Y Y P P A F S T A A Q E H  
UniRef90\_C7MBX2 L P H M H L D T V T T V V D D E E S M L R F G L L E P L E T F E I E R P G D R L  
UniRef90\_F4B550 N P E T M H L D M Y L N S P K E E G V V I S N S T I L S K T L A H I I Y E R K E G Y  
UniRef90\_UPI00034A524F A R A V M H L D T V M T N V D R G G V F T A Y A G L G L L P S F T I E P G G D G K  
UniRef90\_UPI000381AEF0 C R M P M H I D T T F L P L A P G K V L V N P E Y V D I D R L P M L N S W D I  
UniRef90\_A1SJE4 M R A A M H I D T V F T F C G D R D V V T A Y G P V V D D S S P S G L D I R H E  
UniRef90\_E4PKS8 L P K A M H L D T V F T F C G D E S T F V T A F K E V A D A V L C Y D L R P G E D S  
UniRef90\_UPI000262792F L P R S M H L D T L M T M V D E S T F V L Y P Y F D P I L R S W T V R P G G R P  
UniRef90\_U6IUT7 V P S P L C L K E A V C M A G T N L M A I A N S D A A R K V F K S I G E V A S S  
UniRef90\_E4XEE9 V D E G L H L K S N C S M L G L N K I T I S N D D K D G K S I A K G L M E A A Q N  
UniRef90\_UPI0001CB993D F P N P M H I D A T F N I I G P G L V L S N P D R P C H Q I E M F K R A G W T V  
UniRef90\_UPI00026C74AA L P H M H L D T V T T V V D E E S M L R F G P L P A L E T F E I E R L G D R L  
UniRef90\_S9YWU7 F P N P M H I D A T F N I I G P G L V L S N P D R P C H Q I E M F K R A G W T V  
UniRef90\_Q13H07 L P K A M H L D T V F S F L D V D F V S V Y P D V A D D I R C T S L Y P G D D L  
UniRef90\_M1V8V9 D Q D R M H L D C V F N I I G R K T V L M L A D I I G S Q S P T R R M V D E D Q  
UniRef90\_F6ZA35 F H D P M H I D A T F N I I G P G L V I A N P D V A D D I R C T S L Y P G D D L  
UniRef90\_D3VF11 F P H M H I D A T F V P I S P G K L L I N P D K V S R I P E L F K M W D L H  
UniRef90\_UPI0002F8DAED C R T P M H I D T T F M P L A P G K V L I N P E Y V D P D R L P D A L A  
UniRef90\_C1DD78 M R G A M H L D T V F S F L D Y D F V S V F P D V V D E I V C T S L R A G D K P  
UniRef90\_UPI00029B31FB L P E F H L D M I F T L L D Y D K D T C M I Y E P L L R Q E N S F A T I M T I E  
UniRef90\_A1T4X5 L P K S M H L D T V F T F C D H D L V T A Y A P V V D G T V P F S L R P D D R  
UniRef90\_W9B7R4 L P K A M H L D T V F T F C D Y D V T A Y T P V V D G V V P F T L R P D D T  
UniRef90\_Q5DBC6 D P R P M H I D A T F T L V K P G V I A I Q N P E R P C H Q A D I L R K A  
UniRef90\_F6FWY8 L R A A M H L D T I M T F V D V D T V T V Y P R I V G S V H A F T L R P G G G D  
UniRef90\_Q7N9Z3 F N D P M H I D A T F V P L M A P G K L L I H P E K V L K I P E L F R N W D V L H  
UniRef90\_K1YIA0 L P D F H L D M V F T L D V D G K A M V F E P L I L N D N Q Y Q T V H M T I E  
UniRef90\_E5L3W1 L P N F M H L D T V L T M I D Y D K F T V H A A I F K E E N M N I F T I E N D  
UniRef90\_UPI0003F5ABF8 F D H P M H I N A T F V P L R P G R V L I N P E R V R E L P E M F A D W D T V V  
UniRef90\_I4WBT8 L T E S Y H T N V V F A L L A G R A A L A A D G F R D P A V P Q A I A S A Y G  
UniRef90\_K6X8M8 T R A M M H L D T V M S M V D E R S F T K Y A G L G M L P T Y S L T P A D N Q A  
UniRef90\_UPI0003AA9CCC K R E Y M H I D T L E T Q V K K D T W V M L G A F S K K R A K K E M L R A I E D  
UniRef90\_R3W3K5 V P H L H L D C A L S L V R E G L M I V C P E A F L D G L P D Q L A  
UniRef90\_M3TEL3 V A G A M H L D T V F T F A D R D L M T V Y P K I V D A I P F T I V P A D N E V  
UniRef90\_UPI0004574DA4 F Q D P M H I D A T F N I I G P G L V L S N P D R P C H Q I D F F K K A G W T L  
UniRef90\_K2CLC3 L Q Q F M H L D T F S N I T S R T E M V V C D T E A R N R R V K I L T E N V H G  
UniRef90\_UPI0003694C82 F P G P I H I D A T F T P L R P G L I L N N P Q R R L P E E Q R K M F Y K N D W  
UniRef90\_UPI000463CC20 L R A A M H L D T V F T F C D R D V V T L Y P A I V N G  
UniRef90\_D2V884 D Q Q R M H L D T F F N I C S H N C C V M L E T V M G E N S P E F S K Y I K E E  
UniRef90\_UPI000368880F L P R S M H L D T L M T M V D E A T F V L Y P Y F D R R L R S W T L T A G A E P  
UniRef90\_D0LWK4 I R E P Y H G D T C M T P K G P V L L L C H E A I L V S P S L D E I A A F A E G V  
UniRef90\_I4W243 L A G E Y H T N V V L T L A S R A A I A A D G F R D P A A Q A I A D A C G  
UniRef90\_D0MFB1 L P K S M H L D T V F T F V S A D E C V V F P I L H Q E G N V L H L M A G D T  
UniRef90\_UPI00029B0BE7 L P D Y M H L D T V F T Q V K R N T W V I N S I A H S P K Y N P Y E P I N F L  
UniRef90\_H8YXA0 D Q E Q M H L D T F F N I I D S D L A V N A K E G D E R F L T V D V D K K D G  
UniRef90\_H6R840 L P H V L H L D C A L G L V R E G L M I V C P D R L P D G V P T P L R E  
UniRef90\_F9V9J6 L P D V L H L D C A L S L V R D G L M I V C E E A F L T G L P E Q L K  
UniRef90\_E4TVZ8 F T P I Y H T N V M M C I A N D F A I L C A K S I D D K E R K T V I E S L H N S  
UniRef90\_A5EQJ1 L P D V L H L D C A L S L V R P G V M V V C E D A F L D G V P S A L A  
UniRef90\_W8A8U1 V R H V L H L D C A L S L V R E G L L I A C P A R L P D G L P H R L R  
UniRef90\_K3XBD5 F Q D A M H I D G T F V P L P G K L L A N P Y R P C D K E Y E Y C L P E M F K  
UniRef90\_H3BFH4 F P N P M H I D A T F N I I G P G L V L S N P D R P C H Q I E M F K K A  
UniRef90\_J2MAA5 F D D P M H I D T T I M P L S P G R V L V N K A W V S K L P E F F K D W E L V  
UniRef90\_S9VGZ5 Q E D A P P L G D Y F G F A G D D I L I A W K D E H G L L A V D D Q Y Q S A G E  
UniRef90\_Q11GH5 L P D V L H L D C A L G L V R E G L M V V C P S A F V S G I P E K L R S  
UniRef90\_W5KLS1 F P N P M H I D A T F N I I G P G L V L S N P D R P C R Q I E M F K K A G W T V  
UniRef90\_R7TEA5 F K G N C H A D A T F I P L P G V L V T C P D R P C D I P T D G W E W S K R  
UniRef90\_U2S8W8 E S G T I H L D L A F N V L G P H A V V A R A F L R H T P I Q V F Q Q G R A P H  
UniRef90\_A4YF44 N K G L G H L D T V M G I P A Q D V I V Y Y K S L L D K S S V Y I Y K G K E I V  
UniRef90\_UPI0003805D05 H S P F I H L D M V F T F L D K D V C M V Y E P L I M S P G N Y Q T V H I K I Q  
UniRef90\_UPI000470963A H T P F I H L D M T F T F L N K D E V M V Y A P L I L G N K Y Q T V H I T I D  
UniRef90\_UPI0001CB9F3A F E N P M H I D A T L F I A P G V V L S N P E R T C H Q I D M F K K A G W T V  
UniRef90\_UPI000475BCBD K R D Y M H I D T I F T Q V K K D V W V F A P A D A N K E F M L Q F E K G K  
UniRef90\_UPI000426FC70 I P D Y M H I D T V F T Q V K R N V W V M L G N F S R K A V K H Q F H R N K P E  
UniRef90\_K8E1U1 L H D L H L D C A L S L V K E G L M I C C E E A F L D G L P K E L K S W  
UniRef90\_H5XCU8 F Q D P M H I D A T L V P M A P G K L L I N P E R V S K V P S L F K G W D V M A  
UniRef90\_UPI000477052D F T P I Y H T N V M M C M G E D Y A V I C N S I D D M K E R K N V L A H L K G D  
UniRef90\_F4C3U2 I P D F M H I D T L E T Q V K R N V W A V L A S V A K P T P S K D E E P L D F  
UniRef90\_UPI0003798102 F P H P M H I D A T L V P L A P G K L L V N P E R V T R V P N L F K S W D V M Y  
UniRef90\_H7F2U5 L P H I L H L D C A L S F V N E Q L L I L C E E A F L D G V P E R F K  
UniRef90\_M4NKE5 L A A S Y H T N V V L A L L A S R A A I A A D G F R D P A A A Q A I A Q A C G  
UniRef90\_W0F186 K R D A P I Y H T N V M M C I A N D F A I I A D E D P A E R A S V L Q M L K E A  
UniRef90\_UPI0003F4EF3A K R D Y M H I D T I F T Q V K K N V W V L L G S L A P Q D T N K E F R L Q F I  
UniRef90\_T7S166 L P K C M H L D T V M T H L D D T F S V Y P E V V R P D V N C W T L T P D G H  
UniRef90\_UPI0003FB4D69 K R S A M H L D T I F T R T S E D E C L V Y P Y F V E G S R E L L N V T S I D  
UniRef90\_E0MPA9 F P G P I H I D A T F T P I R P G L I I N N P E R R L P D D Q R E F F H R N D W  
UniRef90\_UPI00040085D2 K R D Y M H I D T V F T Q V K R N L W V L L G S L A S E E L K I I Q F R R E S K  
UniRef90\_V7NQ88 I R A Q M H L D T V C M V D T D T V V M Y A N V D A L S A F T I Q R T P S G  
UniRef90\_A2D9C2 N P T R A H L D T V F N V I D E K T C I C L D A I A D D A P D F M R T A R V I V  
UniRef90\_T0MB19 I M V N M H L D T Y F N I P A K G L A I T N G D Y S L E S T T L Y N F M K G E  
UniRef90\_UPI00016C3E35 C A T P L H I D T T F V P L A P G K V L V N P D W I N V A E L P E C L R K W D Y  
UniRef90\_B5GV5M T P H A M H I D A T L A P L A P G K L L V H P E R Y V P H E V F A G W E V R P A  
UniRef90\_T0LP03 N P V N M H L D T Y F N I A S D S V A I G S Y E E G R K T L Y D Y M R E K H F  
UniRef90\_Q26D53 D D R L P I Y H T N V M M L G E N Y A V I C L D C I D E R K N V I K H L K E D  
UniRef90\_B3EYG2 C P E A L H I D T L M P L A P G K I L V N P E F V D V N K L P K I L K S W  
UniRef90\_R7QHH1 R Q E R M H L D T V F N L L S N D C C V M L E E M L G E K S P T R R Q Y M Q D R  
UniRef90\_UPI00016A96D3 F D N F Y H I D A T L V L R P G L A L H C G E M R A D P M V E Y F R L N D W  
UniRef90\_UPI0002EAA9D4 K R D Y M H M D T V F T Q V K K N M W V I L E S I A K A D K R G S G F E P I D H

UniRef90\_J7QFM6 K W D V L V A P E P D P I N W L S M N I L M I D E K R V I V D P H H T N M M R Q  
UniRef90\_D2AV26 R T L D V R P E R D A V E D A L A I S R L D I I P T L E P G V V V G Y H K N Q F  
UniRef90\_UPI000366926E G P I G V S V T D A G A S F L R L R V I E T G G D V Y E S E R Q Q W N T T T N  
UniRef90\_D3PHA2 K Y S V L S L P D T P A D C L Y L I N  
UniRef90\_UPI0003B3F07C K S H V F R H D P R H L F D V V A E V L W N D G N N V L L A L S P G G Y D R N D D  
UniRef90\_A0A043BZM5  
UniRef90\_C7MBX2 V S R A R P A D E M D E V L A R G L G V W D D G C N V L A V A P G E R P A A T N  
UniRef90\_F4B550 R T L E I S L A E Q L S Y A T N F L T I E N G R N N L L N E V K E D Y N R H I T  
UniRef90\_UPI00034A524F E L K V T D H P P E D M Y R V T G C N V F A L E P G V V V A Y E R N M T S N  
UniRef90\_UPI000381AEF0 L I A P E P N I D E C G K W L S M N V L M I D D K R V I A E R H A T N M L R A  
UniRef90\_A1SJE4 G K H F V D V S D A L G T P M R V I E Q W D D G N N V L A I E P G G Y D R N T H  
UniRef90\_E4PKS8 R H L F E V V A E L L G Y P A L J E V E Q W N D G N N V L A L S P G G Y D R N D D  
UniRef90\_UPI000262792F G E L D V R V P E D E D V R A A E R E Q W D D G N N Y L A V A P G G Y D R N I A  
UniRef90\_U6IU7 R Y K V L H L A E P I A V G V L Y V N G C L M H Y D P S M I P E T C Q  
UniRef90\_E4XEE9 P Y T F V F V P N I K A S N V S M N K T V F I P A G Y P D S R K  
UniRef90\_UPI0001CB993D V H P P L P L P D T H P S K W L S M N V L M L D S K R V I C D A N E V P T M K  
UniRef90\_UPI00026C74AA V S R A R P A D E M D A V L A R G L G V P S D G C N V L A L A P G A Y Q R A A E  
UniRef90\_S9YWU7 G W T V T I P D D H P S K W L S M N V L M L D E K R V M V D A N E V P I Q K  
UniRef90\_Q13H07 G Q I R Y E R H E D K F L A V L G V G S L R D G N N V L A R V V L A Y D R N T Y  
UniRef90\_M1V8V9 G F E T I P L S L A D Q M A Y G C N V L N L G A S H I V S V C S S A A R K I V  
UniRef90\_F6ZA35 G W K L V Q A P K P T L S D W L S M N V L M L D E D R V L C S K V E K P I I K  
UniRef90\_D3VF11 A P K P I I P D E H P L Y M W I N M N I L M L D E N R I V E K Q D E P M I T A  
UniRef90\_UPI0002F8DAED S W D V L T A P E P D P G K W L S M N V L V I D G E R V I A D R H H T G M L R  
UniRef90\_C1DD78 G E V I F E R H D D V V A E S L G S K L D D G N N V V V V V A Y D R N T Y T N  
UniRef90\_UPI00029B31FB N G V V K E I S R Q A G L K S L G M D V P C G G T D L W Q Q E R E G Y A R N V H  
UniRef90\_A1T4X5 T P S G L D I R R E P K A D A L G V T F V D D G N N V V A L E P G G Y D R N I N  
UniRef90\_W9B7R4 A P S G L D V R R E A A G D I Y G V E Q W D D A N N V V A L S P G G Y D R N T N  
UniRef90\_Q5DBC6 G W K I I D A P E P L A G S N W L S M N V L M L D P N R V I V E S E E T G M Q  
UniRef90\_F6FWY8 G G V A V T D E G D T P A R A M G L D R L Q V G N N A V A V E P G D R N T T T N  
UniRef90\_Q7N9Z3 A P K P V I P D D H P S K W L N M N I L M L D E Q R V I V E K Q D E P M I A A  
UniRef90\_K1YIA0 G G R V T K I A D E Y A R N V H T L N E L D K M N F E I I P A W D V V N G K  
UniRef90\_E5L3W1 G K E D I K I T  
UniRef90\_UPI0003F5ABF8 C P E P A I P A D Q T M Y F C L A M N T L M L D Q D R L F V E A Q E T E L L  
UniRef90\_I4WBT8 D R A L W L T P A Q K Q A Y A A N A I T L V D D R V W M S A V A A A S L R D E Q  
UniRef90\_K6X8M8 G F R V A S H A P E A M A D A L G V S L R D G C N V L A V R P G E R N R A T N  
UniRef90\_UPI0003AA9CCC Q K P E M A V S E D L L T D I S R N D L K V K G K V T I I G V V V G Y D R N D K  
UniRef90\_R3W3K5 G W D K I V T L E E A S Y L L A N G L S V N E K V Y I T D V A F T E L I P K  
UniRef90\_M3TEL3 G L D V I E E S E H F  
UniRef90\_UPI0004574DA4 V Q P P T P I V A D D H P S K W L S M N V L M L D E K R V M V D S N E T T I Q K  
UniRef90\_K2CLC3 E I E E V H V A E D A Q Q E F A C N V L A I D N Q T V L V A D T G K P E S A R  
UniRef90\_UPI0003694C82 E I I D A A Q P A H Y S S V W L S M N V L V L D P K T V C V E K S E V Y Q A E Q  
UniRef90\_UPI000463CC20  
UniRef90\_D2V884 G Y H I I S V T E K Q Q E M Y G I N F L N I G G G I N I T M D E S T S R K  
UniRef90\_UPI000368880F G A L A V R Q N D D A L A R P L G V E Q V D D G N N Y L A V A P G G Y D R N V A  
UniRef90\_D0LWK4 E V L R V S E A D T L A Y A C N A L A V G T H W L A P R G L S E D C K  
UniRef90\_I4W243 G R A L W I S P A Q K Q A F A G N A I A L S D E R V W M A C A A A S L T E T Q L  
UniRef90\_D0MFB1 P E Q F V T E M P P D L K T A L L T F I P C G G D N P V H Q K R E G Y E R N H Y  
UniRef90\_UPI00029B0BE7 K P E K L E A T T E A L L N D I S Q N D L N D S C N L L A T K E G G Y D R N D K  
UniRef90\_H8YXA0 E Y V K I K A D A P F V K F V I R E T L G M K L I P V T S E D Q L R Y G V  
UniRef90\_H6R840 W E R L E V S E A E A A A M A T N G L P I D A E T Y I T D P I F E R L I G K  
UniRef90\_F9V9J6 N W D R I N V S F E D I A K L A I N G L P I N E E V Y I L D S E F K Y I G  
UniRef90\_E4TVZ8 G K E V I E V S E H F A G N M L Q V N G T D G K P Y L V M S A A A H Q S L N E E  
UniRef90\_A5EQJ1 N W T R I A V G L D E V A Q L A V N G L P V T S D I Y I T D P A F A A V G E A  
UniRef90\_W8A8U1 D W D R I E V T E D E A A A M A T N G L P I N P E T Y V T D P E F E H V G A K  
UniRef90\_K3XBD5 G W E R V F V A P E P E L S A S H P L F F T S P T C N V L V V R P E A H E K K A Q  
UniRef90\_H3BFH4 G W T I V S I P D D H P S K W L S M N V L M L D E K R V M V D A N E E T I Q K  
UniRef90\_J2MAA5 P P P S T I P D S H P L Y M L H T N V L S L D D R T V I V E R Q E A D F I A A  
UniRef90\_S9VGZ5 N M Q V V Y V E P D S H P L G C H F F S F Y G V D T N E I L V Q R G F D R S M D  
UniRef90\_Q11GH5 W N R I E V T E D E A R Q L A T N G L P L S P D V Y V T D P E F R H L G D R  
UniRef90\_W5KLS1 V K P P T P I P D D H P S K W L S M N V L M L D E K R V M V D A N E S T I Q K  
UniRef90\_R7TEA5 G W E V H E V P E H Y V S K W V H M N V L S I D E E R V V M Q K E E P L K  
UniRef90\_U2S8W8 R G R R V T P F E P S G A Q G F L S N F I Y V G P D L I L A S E S A A P G L R  
UniRef90\_A4YF44 R D N R V I E V M K D Y L G H D L R N I T V V G K N K I A Y E H N R L T N  
UniRef90\_UPI0003805D05 H G R L S I R R E H A L K K L G M D V Y C G F C V A P G K V I G Y A R N N Y  
UniRef90\_UPI000470963A N G E V T S I K L H E A M K E V G M D M K P I Q C S I A P G K V I G Y E R N S Y  
UniRef90\_UPI0001CB9F3A V Y P P Y P V P L W M S S K W L S M N V L M L D T K R V I C D V D E I P T V K  
UniRef90\_UPI000475BCBD E Q Q P I E I E D L L T A I S R K D L G V K G P V L R D G V V I G Y D R N D K  
UniRef90\_UPI000426FC70 E P I A F E S L I E D L L I D I S K V D L Q C K E D V Q T I G V V L G Y D R N D K  
UniRef90\_K8E1U1 L S L K I S L K E A S L L M A N G L P I N E S V Y I T D S S F T R I I K  
UniRef90\_H5XCU8 A P K P V I P D S H P L Y M I N M N I L M L D E D R V I V E R Q D E P M I Q A  
UniRef90\_UPI000477052D G K E I D I T E E F A G N M L Q V A G R S E E R Y L I M S S A A Y K S L R S D  
UniRef90\_F4C3U2 K P R R F S S L E E L G N N V F P F D A W T D S C N L L A L K E G G Y D R N D K  
UniRef90\_UPI0003798102 A P A M I P D A H P L Y M I N M N I L M L D E E R V V E R Q D E P M I S  
UniRef90\_H7F2U5 S F E K I N V T L H E A Q K L I T N G L P I N E S T Y V V D P A F I K L G K Q  
UniRef90\_M4NKE5 G R A I W L S P A Q K Q A F A G N A I T L S D E R V W M S A G A A A L L T D A  
UniRef90\_W0F186 G K E I I P L S E Q F A G N A L Q V K N N S G E P F L I M S D S A Y A S L T P E  
UniRef90\_UPI0003F4EF3A Q G Q E H S P T E D L L T S I S V N D L G D S C N L L A L V V V G Y D R N D K  
UniRef90\_T7S166 G R L T T G G D A F E A E R E Q W D A N N V L T L R P G V V V G Y E R N I W  
UniRef90\_UPI0003FB4D69 L R H P E L R M S T H P S L L R A K G V I D F C L A P G V I T S Y G R N L A  
UniRef90\_E0MPA9 E I V D A A R P A H Y S S V W L S M N V L M V D E K T V C C E A S E I N Q M E  
UniRef90\_UPI00040085D2 E P R T I E Y L E D A L D G C M P L E V W T D S C N L L A L V V I G Y D R N D K  
UniRef90\_V7NQ8 V E I S E A P F L E A A T A M G I D K L R D G N N T L A L S P G A Y E R N A Q  
UniRef90\_A2D9C2 K H D S H Y V E E K M P F G K F L N F I N L G K D S H G K A R I L I N N T L Q  
UniRef90\_T0MB19 G Y E F I D I S E Q L S Y S S N F L T L S D G K I A M R K G K M F P E S D A  
UniRef90\_UPI00016C3E35 D P E S P M A S P Q F S S W L S M N V L S L D H E R V V V D A Q Q H K L I R K  
UniRef90\_B5GV5M P P P T L P R E W P M Y F C V S M N V L S L D P E T V V V E R Q E Q P L I E A  
UniRef90\_T0LP03 E F I D L S I S E Q I S S N F L T L C I D S K L V M E K L I E N N F I D K  
UniRef90\_Q26D53 G K E L L A I S E D F A G N M M Q V H N Q S G N R L V M S D Q A Y Q S L T V E  
UniRef90\_B3EYG2 D I L V A P Y P N H I P Q N Q L R L V S E W A G L N V L M L D E E R V E K N Q E  
UniRef90\_R7QHH1 G Y K I L P I S G E E Q L K Y G C N V L N L G E G S I S I E K S T A R I A  
UniRef90\_UPI00016A96D3 Q I V S A K P A R F E C S K W L S M N L S L D E R T V F V E A S E F A Q Q E  
UniRef90\_UPI0002EAA9D4 P V D K V E V T E E L L A D V S T I D L K S D S C N L L A I V V I G Y D R N D V





	1	10	20	30	40
UniRef90_C3RCB0				V	N
UniRef90_I2MW92	G	W	D	P	L
UniRef90_W6VQT4					
UniRef90_X0Y7L3					
UniRef90_UPI00036A1733					
UniRef90_R4RK43					
UniRef90_T0DWX6					
UniRef90_I0KBT5					
UniRef90_UPI0004781CBC					
UniRef90_R9GR84					
UniRef90_T0M1K1					
UniRef90_A7BS88					
UniRef90_D2PCQ3					
UniRef90_S0AN98					
UniRef90_UPI00047B32B3					
UniRef90_F4ZC13	G	R	L	T	E
UniRef90_C0BMC7					
UniRef90_UPI0003A5D17E					
UniRef90_X4QP86					
UniRef90_X5K8Z6					
UniRef90_K6VMT0					
UniRef90_K4DL73	K	A	L	H	A
UniRef90_UPI00039D2A7D					
UniRef90_T1AET6					
UniRef90_W4GL71					
UniRef90_UPI0002D70627	E	Y	V	H	S
UniRef90_UPI0003F8AA99					
UniRef90_UPI000378A8F8					
UniRef90_UPI000426EA62					
UniRef90_E2XUR2					
UniRef90_K3VIL2					
UniRef90_UPI00047CE429					
UniRef90_UPI000479A99B					
UniRef90_V6S8W5					
UniRef90_F4KYZ8					
UniRef90_UPI0003FD6411					
UniRef90_T1AB92					
UniRef90_S0ATK6					
UniRef90_UPI00047B1540					
UniRef90_UPI000409FF06					
UniRef90_H1HBW0					
UniRef90_UPI0003666F86					
UniRef90_UPI00047BBB9A					
UniRef90_UPI0003774B11					
UniRef90_L7UIH2					
UniRef90_A4FHT0					
UniRef90_M4UA78					
UniRef90_H2BYB2					
UniRef90_M5NBR1					
UniRef90_D8LS91					
UniRef90_UPI00046A7034					
UniRef90_W5WE80					
UniRef90_D0FMQ6					
UniRef90_W6L0R0					
UniRef90_UPI00004C26A9					
UniRef90_K4JFB7					
UniRef90_J9Y6Y3					
UniRef90_H8KQX5					
UniRef90_UPI0004076813					
UniRef90_H0UJK1					
UniRef90_UPI0001A6320F	M	A	F	Q	Y
UniRef90_S6IVS3					
UniRef90_UPI000409AA05					
UniRef90_D7C400					
UniRef90_Q1ICB4					
UniRef90_B5WK13					
UniRef90_J0V5P5					
UniRef90_H1Y1R1					
UniRef90_W7Y9N9					
UniRef90_UPI00035D95FC					
UniRef90_E9E3G2					
UniRef90_R118L4					
UniRef90_UPI00035D06FA					
UniRef90_UPI0003A696EA					
UniRef90_C5P7J7					
UniRef90_S4XS45					
UniRef90_UPI00034BFBB0					
UniRef90_I2GD18					
UniRef90_M1W0W7					
UniRef90_S3BDB5					
UniRef90_W2EDX4					
UniRef90_UPI0002891602					
UniRef90_UPI00036C82B1					
UniRef90_E4RSA8					
UniRef90_UPI0003FA70D0					
UniRef90_M1WBG7					
UniRef90_K1LCA9					
UniRef90_D2VB85					
UniRef90_A6CWV2					
UniRef90_UPI00036C1678					
UniRef90_UPI0004181763					
UniRef90_A4H647					

UniRef90\_C3RCB0 WEVY S F L S S 50 Q G F V Y L L P T P 60 D D C R L Q D L V F V A N N G I V L E H T 80  
UniRef90\_I2MW92 D N F A D M L R R R G I R V D R P T P Q E T M S G C M P P R D L L L T V G S E  
UniRef90\_W6VQT4 D G Y V A V L R E Q G V E V L V A Q A S P H T P D S I F P N N W W S S H A D G  
UniRef90\_X0Y7L3  
UniRef90\_UPI00036A1733 D G Y V A T L R E H V R V L V H E D G A A D P L P N F I F T R D I A V T V N D H  
UniRef90\_R4RK43 D P M P N L Y F T R D P F A S I G S G  
UniRef90\_T0DWX6 P L P N F I F T R D I G I V I N D H  
UniRef90\_I0KBT5 P L P N L I F T R D I G I T I N N F  
UniRef90\_UPI0004781CBC N E F V Y I L E A E G V K V R R P E P L N G G N A Q S C P R D V L V V I G N E  
UniRef90\_R9GR84 P P I P N L I F T R D I G I T I N N F  
UniRef90\_T0M1K1 P L A N L Y F M R D Q Q A V V P G G  
UniRef90\_A7BS88 T E F I H I L K A E G V N V R H I Q P V S S G F C A A N P R D P F M V I G N E  
UniRef90\_D2PCQ3 K E N I D L Y D M N H F I D I L L M R P E D P L S N L Y F M R D Q Q A T T D R G  
UniRef90\_S0AN98 D A F V E K L R K V G V N V L V V E D D P D T P D S I F P N N W S F H E N G D  
UniRef90\_UPI00047B32B3 E E L A T A F E N N G I K V H W V D P Y G P L M G H V F L S W G S I W E R G D  
UniRef90\_F4ZC13 D A Y V S V L R E K V Q V S V Q D T L D P D T P D A L F P N N W S F H Q D A T  
UniRef90\_C0BMC7 D A M V Q R L R S G M D I M V Y E D S P E P H T P D S I F P N N W S F H A S G T  
UniRef90\_UPI0003A5D17E  
UniRef90\_X4QP86 N A F V D K L R S K G V N V I T V K D D P H T P D S I F P N N W S F H Q D G T  
UniRef90\_X5K8Z6 P L M N Q Y F R E D P E F K W P R P  
UniRef90\_K6VMT0 R D F Y K T L Q H S S L V D K V H L M S E R P S V E A L R V A D Q M A S I G A T  
UniRef90\_UPI00039D2A7D P L P N F I F T R D I G I V I N D H  
UniRef90\_T1AET6 P L P N L Y F M R D Q Q V T T D K G  
UniRef90\_W4GL71 P R D V L I V V G N E  
UniRef90\_UPI0002D70627 N G M V E L L R R H G V N V T V M N Y E D E T P D A V F P N N W F S T S P T G  
UniRef90\_UPI0003F8AA99 D G F V A L L R D Q G V K V L V L E D L P T K T D A V F P N N W F S T H R D G  
UniRef90\_UPI000378A8F8 D N M V Q Q L R S Y V N V I V H E D T A E P H T P D S I F P N N W S F H F S G T  
UniRef90\_UPI000426EA62 P L P N F I F T R D I G I T I K D H  
UniRef90\_E2XUR2 D G Y V D T L R R H V E I L V Y Q D T P A P H T P D S I F P N N W S S H A D G  
UniRef90\_K3VIL2 D Q F A T I L K N E G I K V Y R P L D I N W Q K I S G Y T R D G L I S V G N T  
UniRef90\_UPI00047CE429 D A F V S L L K S N G V N V I V V E D E P D T P D S I F P N N W S F H S N G T  
UniRef90\_UPI000479A99B D D F V A V L R R Q K G V N V I V V D D N D S P D S I F P N N W S F H K S G T  
UniRef90\_V6S8W5 D T F V T K L R N V G V N V I V D D N P D T P D S I F P N N W S F H E N G D  
UniRef90\_F4KYZ8 D A F V A K L R S N V G V N V I V V E S D P L T P D A V F P N N W V T F H Q D G  
UniRef90\_UPI0003FD6411 D H F T N L L L D N I E L T I V H D T P E P H T P D S V F P N N W S F H S N G T  
UniRef90\_T1AB92 V L R R H P G T R V I L I E L D G P L A N L Y F M R D Q Q A L S A K G  
UniRef90\_S0ATK6 P L A N L Y F M R D Q Q A V I S S G  
UniRef90\_UPI00047B1540 E Y F I E I L K A N I D V T V V E D T P V P Y T P D S V F P N N W S F H E D G S  
UniRef90\_UPI000409FF06 D K F V A L L R A K I Q V L V I D D T Q A P E K P D A I F P N N W T M H Q N G T  
UniRef90\_H1HBW0 D A F V E K L R A V G V N V I V V E D E P D T P D S I F P N N W S F H E S G E  
UniRef90\_UPI000366F86 E E L A R F L T A R S V R V H R P R Y D G G F S M Q T F V R D P M I V I G D R  
UniRef90\_UPI00047BBB9A D A F V F K L K S F H V T V I S D T D E H D T P D S I F P N N W S F H A D G T  
UniRef90\_UPI0003774B11 D D Y V K L E S H G V H V I V I S D I E D T P D A I F P N N W S F H E N G T  
UniRef90\_L7UIH2 L A L A R A I E A R G G T V V A L P S P S E L L T G M P Y A A E C G Q V A V A R V  
UniRef90\_A4FHT0 D G L A D A I E R Q G V V V R R R P E V D H H F H S A M P R D S L F A I D D L  
UniRef90\_M4UA78 L A Y V D L L R E Y F E S D L I E Q A P R R L A D E S F R M D Y V A A Y E F L  
UniRef90\_H2BYB2 D A F V E K L E T V G V N V I V V N D K K E L P D S I F P N N W S F H N D G R  
UniRef90\_M5NBR1 N A M V S G L R Q A G V E V V V F D A S S E T P D A V F P N N W S F T E A G  
UniRef90\_D8LS91 D N F S Q V L E M E G V T V R R P E V R P G D F D A A M P R D V L I T I G N E  
UniRef90\_UPI00046A7034 D A F V D L L R K N V D V T V D D T L D P E T P D S I F P N N W S F H E D G S  
UniRef90\_W5WE80 D N F A K V M R D R G I T V H R P T E V K Q N A S A C P R D V L L V V G D Q  
UniRef90\_D0FMQ6 D R L A D L R S E G V R V R R P E E V N H H F Y S A M P R D C L L A I G K K  
UniRef90\_W6L0R0 R D F Y R T L Q H S T L V D K V H L M S E R P N I E S L R V A D V M A C V G P T  
UniRef90\_UPI00004C26A9  
UniRef90\_K4JFB7  
UniRef90\_J9Y6Y3 D E M V R T L R M N H L T V E V I F E T E R K N T P D A V F P N N W L S T H P N G  
UniRef90\_H8KQX5 D N F V N L L K E N L D V T V I E D T T E P H T P D S I F P N N W S F H N D G T  
UniRef90\_UPI0004076813 D T F V Q K L K V G V D V T V V D D T K N P D T P D S I F P N N W S F H E N G D  
UniRef90\_HOUJK1 P M T N V L Y S R D P A I T I M G D L  
UniRef90\_UPI0001A6320F E K F V E A L R Q N G V D V L E M E A D E R H P E C V K V D D T A V I N G T  
UniRef90\_S6IVS3 D G Y V A A L R E G V E V M V H D D A E A P H T P D S I F P N N C W S S H P D G  
UniRef90\_UPI000409AA05 D T F V E K L Q S K G V N V V T K D V P D T P D A L F P N N W V S F H E S G  
UniRef90\_D7C400 A G L A A L D S Q G I T V R R P E V P E N Q Y C A V C P R D V M I T M G N E  
UniRef90\_Q1ICB4 D G Y V E T L R R H V E V L V V Q D T P E P H T P D S I F P N N W S S H A D G  
UniRef90\_B5WK13 D E F V R L L E G E G V T V R R P A V V N H R A R F P R D G Y L V I G D E  
UniRef90\_J0V5P5 K N A V T E L R N L G V E V I T I P E N A G T P D S V F P N N W F S T H A E G  
UniRef90\_H1Y1R1 D A F A D K L R D N L D V I V V D D T V I E P H T P D S I F P N N W S F H S D G S  
UniRef90\_W7Y9N9 D T F A N R L K D K V N V M V I Q D T D T P I K P D A I F P N N W G F H A D G T  
UniRef90\_UPI00035D95FC D H M V Q T L K A N I K V A V I F D S K E P E K P D A L F P N N W V F Q E D G T  
UniRef90\_E9E3G2 D N L A S V L Q Q H G V K V Y R P D E V D W L K V I G G Y T R D T L M T V G N T  
UniRef90\_R18L4 Y G M V E L L R S H G V D V T V M P A Q G E T P D A V F P N N W F S T A D G  
UniRef90\_UPI00035D06FA L V E Y M D D K Y P F Y L D P M P N L Y F T R D P Q A S I G R G  
UniRef90\_UPI0003A696EA D A M V Q Q L R A G L D I L V Y E D S P E P H T P D S I F P N N W S F H A S G T  
UniRef90\_C5P7J7 D N F A S I L E R E G I R V Y R P K E V N W L K I G G Y T R D S L M T V G N T  
UniRef90\_S4XS45 E S E Y Y F Q Y C P R D V L L A I G D T  
UniRef90\_UPI00034BFBB0 F E Y E P Y R P L V Y G Y W E S D P W T V A P K P  
UniRef90\_I2GD18 E E M V R Q L R A L G V D V I E Y E D E P Y T P D S I F P N N W S F H A S G T  
UniRef90\_M1W0W7 D N F A S V L Q Q H G V K V Y R P N E V D W L N V I G G Y T R D A L M T V I G N T  
UniRef90\_S3BDB5 D A F V D V L K A E G I S V I R P D P A E H G R Y A G M P R D L L M I V G D A  
UniRef90\_W2EDX4 G V E V L R P R L L T E K E K D R K E V G Y T N F F A R D P F F T I G P F  
UniRef90\_UPI0002891602 D R F V T M L K K N V N V E V I Q D P Q F P V N P D A V F P N N W S F H H P D F  
UniRef90\_UPI00036C82B1 P P I P N F I F T R D I A V V V N D H  
UniRef90\_E4RSA8 P P V P N L I F T R D I G V V V N D H  
UniRef90\_UPI0003FA70D0 D E M V D Q L Q K F G V N V I V V E D E P Y T P D S I F P N N W I S F H N N G  
UniRef90\_M1WBG7 D N F A S V L Q Q H G V K V Y R P N E V D W L K V I G G Y T R D A L M T V G N T  
UniRef90\_K1LCA9 D E F V K L L S K H I K V L V I E D T L E P K K T D A V F P N N W S F S H E D G T  
UniRef90\_D2VB85 D K S V S A L R E A G V Q V L V L E G S K K C P D A V F P N N W S S S D S D G  
UniRef90\_A6CWV2 E D W V K L L E T R G I K V H E L L Y K E S G V G S L F V K D P L S V V G N I  
UniRef90\_UPI00036C1678 N E M V N R L R D E H I E V L L V Q E L P E L P D A V F P N N W S F S T S D G  
UniRef90\_UPI0004181763 D D F V I K L R A V G V K V I L V N D K P D T P D S I F P N N W S F H E N G  
UniRef90\_A4H647 K S F F E V L R Q S Q L I E R F Y E M K S C P Y Y E C L F T N D L F F Q H Y D L

UniRef90\_C3RCB0 Y I A S N F R V S N R R G E E I V A S K F F E Q M G F K V I P C P Y L F F 120  
UniRef90\_I2MW92 V L E A T M S Y R S R W Y E Y L C Y R P L L L Q D L F K A D P R M R W E E P L F F D  
UniRef90\_W6VQT4 T L V L Y P M Q G Q N R R L E R L L L Q D Y S I E H L L D F T E L E Q Q E L F L E E  
UniRef90\_X0Y7L3  
UniRef90\_UPI00036A1733 I I I T K A A K E A R Y R R E N F I T R F I I Y A H P I K I D E F P P E S V S I L E E  
UniRef90\_R4RK43 T L V L Y P M Q G R N R R E T E H L H E Q Y Q V N R T L D L D L T S L E E Q E E L F L E E  
UniRef90\_T0DWX6 V S L N K M Y S V T R N R R E T I Y A D Y I F K Y H K D E R F Y D R D Q E K Y H I L E E  
UniRef90\_I0KBT5 I L L N K P A K Q A R T R E A L L T Q Y I F F N H R D K I I E I P D N E H T L E E  
UniRef90\_UPI0004781CBC I I E A P M S W R S R Y F E F L P Y R K L T K E Y G Y Q R Y V T T E F E K A T L E D  
UniRef90\_R9GR84 I L L S K P A K K A R G R E A L L S R Y I F Y N H P L K I L E F P E E K A T L E E  
UniRef90\_T0M1K1 V I F G K M K R L Q R M K E P E I T Q F V I S R L R E K N S I T I S E N G V F E E  
UniRef90\_A7BS88 I L E T P M A D R G R Y F E A W A Y R E L F K E Y F H K R F M V T E F E P V F E D  
UniRef90\_D2PCQ3 I I I G R M A T H Q R E K E L E I M K L F W E A L G V K Y K E I L K G K L E E  
UniRef90\_S0AN98 I F M S R M S K P Q R R H E P E V T K L V W K A M N L P I A G E G K G N A T I L E E  
UniRef90\_UPI00047B32B3 V T L Y P M F A E N R R A E R E L L D I L W E D K G F V I N E I M D D G F F L E E  
UniRef90\_F4ZC13 S V I S R F G F L P G M V S E Y L A K W A W N T L N I P L V A I T E G A M E P  
UniRef90\_C0BMC7 V A L Y P M F A E N R R E R E A V L E I L E E D G F D Y T A A E D S G I F L E E  
UniRef90\_UPI0003A5D17E V V L Y P M Q A E N R R L E R R L A E R F H V S R V I D L T H F E Q E G K F L E E  
UniRef90\_X4QP86  
UniRef90\_X5K8Z6 V I L Y P M F A E N R R E R R S D I L D Q L S G K G L S I A A I K D E N K F L E E  
UniRef90\_K6VMT0 R L T D K S Y K H N Y R D E R I E L E E R L I R T A N K D F V T T E E E P M W D  
UniRef90\_K4DL73 F L G M P L T G M E Y H R A T E F E M M R Y V R G A G P S T L A Q D T E E S C R C H  
UniRef90\_UPI00039D2A7D I L L N K P A K L A R T R Y I F F Y H P L F A D Y Q D K I I E I P D N E Y T L E E  
UniRef90\_T1AET6 I F M S R M S S S K R R R E F Y V T K L F W D A L G I P L I T D M A R A P A T I L E E  
UniRef90\_W4GL71 I I E A P M A W R S R Y F E F P Y E D W E H S S G D F N S V V T E F E P T F D  
UniRef90\_UPI0002D70627 V Y L F P M A C E N R R R R T R H L V S S L V A Q G F N V L N V Q E P Q S F L E E  
UniRef90\_UPI0003F8AA99 V I L Y P M F S E N R R R R K E I F E S L M Q Q G F R I N E I L D L S F F E E  
UniRef90\_UPI000378A8F8 V V L Y P M Q A E N R R R R E I F E S L M Q Q G F R I N E I L D L S F F E E  
UniRef90\_UPI000426EA62 L L L N K P A K K A R T R E A L L A K Y I F F H H P F N I I E L D D R K M T L E E  
UniRef90\_E2XUR2 S L V L Y P M E G Q N R R L E R L E Q R F M V K N T I D L S H L E Q H I F L E E  
UniRef90\_K3VIL2 I I E A C F A W S C R I A F T P I L E Q L S L D P R A N I V R R P D S S F A F D  
UniRef90\_UPI00047CE429 L G V Y P M F A E N R R N E R R E I L E T L E E N G F K I K D V I D E G L F L E E  
UniRef90\_UPI000479A99B V A I Y P M F A E N R R K E R R E I E D I L E E K G Y V I N D V D D E G L F L E E  
UniRef90\_V6S8W5 V A L Y P M F A E N R R E R R E D I L L E E H G F V I E Q L V D D G L F L E E  
UniRef90\_F4KYZ8 L I T Y P M F A H K R R L E R L G E E F T I T N H V R M E G H E A Q E K Y L E E  
UniRef90\_UPI0003FD6411 I C L Y P M F A V N R R R K Q Q V L D R I N Q Q K I D L T G Y E N N G L F L E E  
UniRef90\_T1AB92 F I L G R M A K P Q R R N E P L T G A L L G S A G M T I A G R V R A P G T F E E  
UniRef90\_S0ATK6 V I L G K M K M Q Q R R K E T D I T S F V F S E I L G A K T K K I I T A G Y F E E  
UniRef90\_UPI00047B1540 I C L Y P M F A Q N R R M E T A I A E K F R I D Q T H D F T N N E T S N L F L E E  
UniRef90\_UPI000409FF06 I A L Y P M H A P N R R M E R R Q D I L D L K Q H Y Q V N H L I D E D K F L E E  
UniRef90\_H1HBW0 V V L Y P M F A E N R R E R R E D I F D I L E K E G F V I D D D I W D Y T S A E E  
UniRef90\_UPI0003666F86 V I E A A L R L P A R F R R E F G L R P V I E E P V P V V D L P T A V G P F L E E  
UniRef90\_UPI00047BB9A V G I Y P M F A E N R R R E R E D I L V E F L I E N T V D Y T A A E E S L F L E E  
UniRef90\_UPI0003774B11 V A L Y P M F A E N R R F E R R E D K G F V I K N T I D Y S S A E Q D N V F L E E  
UniRef90\_L7UIH2 E V L P R M M S A H R Q A E R E H W E A L A R R M G F E V V G P D V G I W E A H  
UniRef90\_A4FHT0 V V E T P M A W R S R Y F E T F A F R P I L R D Y F E R G A R W T E D E P L F D  
UniRef90\_M4UA78 S D K E T M E R S L R K E Y S W P L E K R H E E M H S F E F C I N Q D E V V F D  
UniRef90\_H2BYB2 V A L Y P M F A E N R R K R R M E F F E V L E S R G F K I D E V V D E E V Y L E E  
UniRef90\_M5NBR1 L F L F P M A C A N R R L E V Q A L V E R L Q Q H G F A V I A F T E Q Q A F L E E  
UniRef90\_D8LS91 I I E A P M A W R S R R P F R S I L K D Y F R Q G G D D L Y V P E D K W V F D  
UniRef90\_UPI00046A7034 V Y L Y P M F S E N R R L E R R E I L D G L K N K F E V N H Y E H Q H A F L E E  
UniRef90\_W5WE80 I I E A T M G Q R V R F F E Y L A Y R E L V K D Y D Y S T I E L P E F A C L E D  
UniRef90\_D0FMQ6 I I E V P M A W R S R Y F E T F S F R E I L N D Y F T R G A E W D E S E P V F D  
UniRef90\_W6L0R0 F L G M P L Y G M E H R A T E F M I P Y V R G A G G P T T Y L Q D N E N C R C H  
UniRef90\_UPI00004C26A9  
UniRef90\_K4JFB7  
UniRef90\_J9Y6Y3 L L V T Y P M Y C E N R R A E Y L Q Q H Y I V Q Q A K D L S F L E D D G D L V E E  
UniRef90\_H8KQX5 I V L Y P M Q A E N R R R R E R S D I P E L L K K G F D F S H Y E S N K F L E E  
UniRef90\_UPI0004076813 V A L Y P M F A E N R R A E R R E I L D L L E D K G F K L N D V D E D E I F L E E  
UniRef90\_HOUJK1 P I F G V M N N P D R H K E V L C Y K A I F T Y H P H F A D W N K A W Y I E E  
UniRef90\_UPI0001A6320F A L M C N P Y R C H R Q G E V N L J R H T L K K L G I K I V E I N T E N A Q V E  
UniRef90\_S6IVS3 T L V L Y P M Q G H N R R L E R L R N A Y Q V E Q L L D L S S L E Q Q E I F L E E  
UniRef90\_UPI000409AA05 M V G V Y P M F A E N R R L E R R V L E L L E E Q N F E I T S V V D E S I F L E E  
UniRef90\_D7C400 I I E A T M S R R R Y F E Y E P Y R K L V Y E Y E F W E P Q D E V V F D  
UniRef90\_Q1ICB4 S L V L Y P M E G H N R R L E R L E E R F A I Q R T V D L S P L E Q Q N L F L E E  
UniRef90\_B5WK13 I I E T P M C W R S R Y F E G D A Y R A L F K E Y F R S G A R W T E F E P V F D  
UniRef90\_J0V5P5 Q L V T Y P M A S S R R N E R H A C Q C G E H V M L E F F E E Q E T P V F L E E  
UniRef90\_H1Y1R1 V Y L Y P M Q A K N R R R R A D V I E N L K K K F T V S K V Y F E N Q Q F L E E  
UniRef90\_W7Y9N9 V I L Y P M A T P N R E K R P D I I E C I K K H F I D F S R Y E E E G F A L E E  
UniRef90\_UPI00035D95FC V V L F P M C A P N R R R R S I L D L I G S Q F E I D L S H Y E E D N I F L E E  
UniRef90\_E9E3G2 L I E S P F A W A C R R R E V E L G Y S S I L R N G S P S W S I N N S R P A M D  
UniRef90\_R18L4 V Y L F P M A C E N R R R E V R P L V D V L R E S G F N P T N L R D S P E A F L E E  
UniRef90\_UPI00035D06FA M T V N R M F W R A R R R E S I F I S Y I L K H H S I P L W V D R D S C P F N I E E  
UniRef90\_UPI0003A696EA V V L Y P M Q A A N R R R R Q D I I D D L S E R F H V S R V H F E E E G K F L E E  
UniRef90\_C5P7J7 V I E A P F A W G C R K Q E V E L L G Y E N C S N G T H T W A I N N T R P S F D  
UniRef90\_S4XS45 I I E S P N P F R S R Y F E S M A Y R D I I V G Y N P E Q P T L R E I P A F D  
UniRef90\_UPI00034BFBB0 T M G P E M Y R E E F W E W P L E E R Y R R M H E S E F C V T Q D Q V V F D  
UniRef90\_I2GD18 V V L Y P M Q A E N R R R R M D I L E D L G Q R F H I D L T G F E Q E G K F L E E  
UniRef90\_M1W0W7 L I E S P F A W A C R R R D E V E L G Y R I C R A P K I L I G K D T I Y D Q S F L D  
UniRef90\_S3BDB5 I V E A P M S W R C R Y H E V D A F R G L I K S Y F Q R G A R W L P A P P V F D  
UniRef90\_W2EDX4 I I E G T M K F E H R K E E V M T V R H I I L E Q E A E K Y L A T P Q A D P F L E E  
UniRef90\_UPI0002891602 V V T Y P M F A L K R R N E R K E I I D D L K F E F H F E K E K M F L E E  
UniRef90\_UPI00036C82B1 I M L T R P A T Q A R S R E A I L T A Y I M F N H K Y D D N E K K Y K N V T I E E  
UniRef90\_E4RSA8 L L L T R P S K L A R T R E S L I A K Y I F F N H P Y F Q E F R H N I T E T L E E  
UniRef90\_UPI0003FA70D0 T V I T Y P M Q A H N R R Q E R L G Q S F Y I N R R I D L S G F E D K N Q F L E E  
UniRef90\_M1WBG7 L I E S P F A W A C R R E E V E L G Y S T I T N H D T F V W S I N N T R P A F D  
UniRef90\_K1LCA9 V I L Y P M F S P N R R E R R K D I L E F L M Q S G F G I N E I L D D E Q Y L E E  
UniRef90\_D2VB85 V F T Y P M F T P N R R A E V R D L D V L A L L D E R I V K M H E E P S S L E E  
UniRef90\_A6CWV2 V I E G A N R F P M R H K D V F T Y R H I L N D A K W V N I P M P E E T D M F L T  
UniRef90\_UPI00036C1678 T L L Y P M K T P N R R A E V R E L T Q L L N R N G Y Q V H K T E H H Q Q L L E E  
UniRef90\_UPI0004181763 A M Y P M F A E N R R A E R R E E L T D Q L E E G F K I E N V D D D G Y F L E E  
UniRef90\_A4H647 I I M P K H G R E H R S A T I R Y M R G W G A T G D V N H V L Q D V K G G R A S

UniRef90\_C3RCB0  
UniRef90\_I2MW92  
UniRef90\_W6VQT4  
UniRef90\_X0Y7L3  
UniRef90\_UPI00036A1733  
UniRef90\_R4RK43  
UniRef90\_TODWX6  
UniRef90\_I0KBT5  
UniRef90\_UPI0004781CBC  
UniRef90\_R9GR84  
UniRef90\_T0M1K1  
UniRef90\_A7BS88  
UniRef90\_D2PCQ3  
UniRef90\_S0AN98  
UniRef90\_UPI00047B32B3  
UniRef90\_F4ZC13  
UniRef90\_C0BMC7  
UniRef90\_UPI0003A5D17E  
UniRef90\_X4QP86  
UniRef90\_X5K8Z6  
UniRef90\_K6VMT0  
UniRef90\_K4DL73  
UniRef90\_UPI00039D2A7D  
UniRef90\_T1AET6  
UniRef90\_W4GL71  
UniRef90\_UPI0002D70627  
UniRef90\_UPI0003F8AA99  
UniRef90\_UPI000378A8F8  
UniRef90\_UPI000426EA62  
UniRef90\_E2XUR2  
UniRef90\_K3VIL2  
UniRef90\_UPI00047CE429  
UniRef90\_UPI000479A99B  
UniRef90\_V6S8W5  
UniRef90\_F4KYZ8  
UniRef90\_UPI0003FD6411  
UniRef90\_T1AB92  
UniRef90\_S0ATK6  
UniRef90\_UPI00047B1540  
UniRef90\_UPI000409FF06  
UniRef90\_H1HBW0  
UniRef90\_UPI000366F86  
UniRef90\_UPI00047BB9A  
UniRef90\_UPI0003774B11  
UniRef90\_L7UIH2  
UniRef90\_A4FHT0  
UniRef90\_M4UA78  
UniRef90\_H2BYB2  
UniRef90\_M5NBR1  
UniRef90\_D8LS91  
UniRef90\_UPI00046A7034  
UniRef90\_W5WE80  
UniRef90\_D0FMQ6  
UniRef90\_W6LOR0  
UniRef90\_UPI00004C26A9  
UniRef90\_K4JFB7  
UniRef90\_J9Y6Y3  
UniRef90\_H8KQX5  
UniRef90\_UPI0004076813  
UniRef90\_HOUJK1  
UniRef90\_UPI0001A6320F  
UniRef90\_S6IVS3  
UniRef90\_UPI000409AA05  
UniRef90\_D7C400  
UniRef90\_Q1ICB4  
UniRef90\_B5WK13  
UniRef90\_J0V5P5  
UniRef90\_H1Y1R1  
UniRef90\_W7Y9N9  
UniRef90\_UPI00035D95FC  
UniRef90\_E9E3G2  
UniRef90\_R18L4  
UniRef90\_UPI00035D06FA  
UniRef90\_UPI0003A696EA  
UniRef90\_C5P7J7  
UniRef90\_S4XS45  
UniRef90\_UPI00034BFBB0  
UniRef90\_I2GD18  
UniRef90\_M1W0W7  
UniRef90\_S3BDB5  
UniRef90\_W2EDX4  
UniRef90\_UPI0002891602  
UniRef90\_UPI00036C82B1  
UniRef90\_E4RSA8  
UniRef90\_UPI0003FA70D0  
UniRef90\_M1WBG7  
UniRef90\_K1LCA9  
UniRef90\_D2VB85  
UniRef90\_A6CWV2  
UniRef90\_UPI00036C1678  
UniRef90\_UPI0004181763  
UniRef90\_A4H647

130 140 150 160  
G A E L K Y L R D N I Y I G Y G I R S E K E S Y D W M A S E F D M N I I P L E  
A A D L A R F G K D L F V Q L S F V T N R S G Y D W L K R H F P D D H R V H A V T  
G T G S M V L D R V C Y A G Y S A R T H V M E D A L K E A V E S L G E Y R A F N A V D  
G T G S M V L D R H T L A I G I G S A R N S T M E G V L K E A E K L L E P Y P R D I K I V L P  
G T G S M M L N D Y L L I G I G S E R T T P Y G I R A L A E S L F E F E K G V I I P N  
G T G S M V L D R T C L Y A G Y S T Q R T H A R A L D Q L I V A H L G Y C A F N A R D  
G G D I L N L N K T L A I G I G S E R T Q R T Q A D A L E Q L K W I L G Y N L A F N I P N  
G G D V M M I G R H L L I G I G S E R T T L Y A A Q Q V M R L V F E K N V V I P K E  
A A D I A R C G K D I F V Q R S H V T N E F G F K W L Q Q H L G F D Y N L H L L E  
G G D V M V I P E H V L I G C S E R T S P S G A N E A I R L L F E H D N V V I P H  
G G D F M P A G K F A L I G T G S R T N L D G A M Q A I R S F D E D A V V N N P  
A A D F V R C G R D I F A Q R S N V S N A L G L E W L Q R H L G D Y R V L H E I H  
G G D F F P M G D F A L I G I G S E R T S D L D G A K N I F G V E N E V G R V V Y E S  
G G D F I P M K D F A L L G N G D R T N D E G V K Q M L E S F D E V A V V H Q P  
G G S L V L D R D K A Y C A L S P R A D E E L F I E F C E F E A Y Q T V N G E  
G A C N M I A D E V L V T C L S P A S Y D Q R G T D Q L V A I L S K E E F H N L Q  
G T G S L I L D R V H Y C A L S S R A D E E L F I E F C E D F E Y T P V I  
G T G S L V L N R V A F A S L S P R T H P D V L A E F S R Q Y T G D Y R V V S F H  
A A D V M R L G K D I F I G H G L T T N R K A M E W F K R Y Y P D H R V H A V N  
G T G S M I L D R E N K I A Y G A I S L R L D E E F R K W C A E F G Y K P V V  
A A D V L R L G K D M F I Q H G L T T N R T A M E W F K R Y Y P D S L R I H A V N  
S G D I V C L P T G I A V G H G P R T N A V A H S T L R Q L F F S K T V T L Q  
G G D V M M I A K H L L I G V S E R T T L Y A A Q Q V M R L V F S K T V T L Q  
G G D F M P M G R D F A L V G T G Y R T N K E G V T Q L M K H F D E D G V V H Q P  
A A E F T R M G R D L F T Q Q S Q V T N K F G I E W M R R H L G D Y R I H V L D  
S T G V M I M D H T I Y A A L S V R C D R E L L Q Q F A H E A G F K D V V F F D  
S G Q F L H D Q K V I Y A C Y S E R T H P V P L D Y Y E G Q L L G H K V I G F E  
G T G S M V L D R M H F A C L S P R T H P D V L N Y E G N R T G Y R T I H A V D  
G G D I M V V S D H V L V G V S E R T S S E A A A R I T D L F E K N V T I K  
G T G S M V L D R Q H Y A C H S G R T H H D A L R Q F A E R L D Y Q V F H A V D  
A A D F M R F G K T I I G Q Y S H V T N Q A G V D Y L A E H I P E R E M I E V N  
G G S I L I D N K K A Y C A L S E R A N E D L F I E F C E D F D F P V I S V D  
G T G S L K D R V H Q Y C A L S Q R A D E E L F I E F C E D F D F P V I S V N  
G T G S L L L D R K A Y C A L S P R A N E E L M I E F C E D F E M N P V I T V N  
G T G S M I L N R L V Y A C L S P R T D P E L L E E F S R I T G Y T P V H A V D  
G T G S M V L D R D H Y A C L S P R T N A I V L D D W C K R F G Y R A V R  
G G D F M P L G S F A L L G T G D R T N A S G V R Q L L A H Q P T H P A I P G D  
G G D F I P C G D F C L I G T G N R T D E T G A M E A I N S I F N F P A I V A I D  
G T G S M V L D R E N Y A C L S P R T H I T V L L E A F C C N K M N Y Q P V I T S V D  
G G S I I L D H E F A Y A C I S P R T D L V L L H I F C C D T F K Y K P I H A Y D  
E D D L F L I E G T G T Y C A L S P R A D E G L V I E F C E D F E T D P V I T V D  
G G D V L P M G R D I L V G T G R T S D A A G A R W L E R L L G Y T R V H Q V P  
G G S I I L D N R K A Y C A L S A R A D E E L F I E F C E D F E Y T P V I T V N  
G G S L L L D N R K A Y C A L S P R A D E D L F I E F C E D F E Y T P V L  
G D V A H F D G A T L V F W G G R T T L D G I D A A S R W F P G E V V R V S Y V  
A A D F V I G G V V V G Q L S H V T N R A G V R W L Q R H L P E Y R V L Q Y V  
A A D V M R L G K D I F I Q H G L T T N L A G I R W L K R K Y E G Y R I H T L S  
G T G S L I L N R K A Y C A L S P R A D E D L L I E F C E D S F E Y T P V V  
S T G V M V I D H T I Y A G L S Q R C D R E V L E V Y A E Q I G Y S R V V S F Q  
A A E F T R M G R D I F V Q R S Q V T N D F G I E W M R R H L G D Y Q I H V L D  
G T G S M V L D R T A Y A C L S V R T D E E V L N N F C M L Y E P V I A F Q A V D  
A A S F S R I G R D I F Y Q P I L V T N D F G A R W A R Q L P E F R I H R A R  
A A D F M K M G K D I I G Q R S H V T N D K G I E W L R R T L G D Y R I H I Y E  
S G D I V C L P T G I A V G H G P R T N A V A H Q I K D L F E H F D V E A L E  
A A D M S R F G R D I L V Q E S M T T N R A G I H W L K R H L E G F R V H P V H  
G T G A M V I D H V A Y A C L S Q R A N K R A V L T S A C K A G L T P I C  
G T G S M V L D R V A Y A C L S P R T E M S V L E D F C Q L N Y D F V A F D  
G T G S L L L D R K A Y C A L S P R A D E E L M I E F C E D F D M G P V I T V D  
G G N V H C Y S S Q L F V G V N D R T R P Q A I E Q L A R R T M D N G V L A L M  
G S D V L F T G N F T H V Q V  
G T G S M V L D R E C Y A G Y S T R T H A R A L D Q L I Q H L G Y C A F S A V D  
G T G S M I L N R K A Y C A L S P R A D E E L F I E F C E D F E Y T P I V  
A A D M S R L G R D I L V Q E S M T T N R A G I R W L R R H L E G F R V H T V H  
G T G S M V L D R E H Y A C H S G R T H E H A L R Q F A E Q L D Y R F H A V D  
A A D F A R C G R D L F V T R S N V T N R A G I E W L R R H L G D Y R H E I R  
G T G S L V L D R V A Y A A V S P R T S L V A L Q L R C K L G F R A V T F E  
G T G S M V L N K V A Y A C L S P R T D E Q V I T G F C R K S G Y Q A V L A V D  
G G S I I F D H L H A Y A G L S P R T N K D L F I K L C D S I H Y K P I S  
G T G S M V L D K A C Y A C I S E R T Y P E L L K E Y C E K F S Y K P V I A L D  
V A D F V R L G K T L V I G Q L S H V T N M K G I E Y L R A Q V P D Y S V E V L R  
S T G V M I M D H T V Y A A L S V R C D R N L L Q Q Y V N R A G F K E V I Y F D  
G G D E L V L S K D V L I G I S E R T S A Q A I E R L A R R I F K D P V A I E  
G T G S L V L N R V A F A S I S P R T H P D V L A E F S R Q T G Y R V V S F H  
T A D F M R F G K V I T G Q L S N V T N M K G V E Y L R S V I P E Y T V E L L D  
A A N V L R L G R D I I V Q L S T G N E L G A Q W L Q S T L P E Y R V H P C R  
A A D M S R L G R D I I V Q E S M T T N R P G I R W L K R H L E G F R V H P V H  
G T G S M V L N R V A F A C L S P R T H P D V L A E F S N R T R Y R V V S F R  
G A D F M R F G K T L V I G Q L S H V T N M K G I E Y L R S Q V P D Y S V E V L H  
A A D F L R F G R D L V V Q R S H V T N A F G I D W V R R A L P E F T V S V I N  
G G D V L V L N K E I F V G T S G A S N H N G I V W L R N L F D Y T V T E V P  
G T G S I V F D R T H Y A C K S I R T N E Y L F N K F C E H F T P D L F D A V D  
G G D V M V A P N H L L I G C S E R T S L H A A S V V I Q K L F S R N V V I P N  
G G D V M M V P N H L L I G I S E R T T L E A A R Q E A M D K L F Q K K V V I P N  
G T G S M V L D R K H Y A C L S P R T H E A V L Q E F Q M N Y E I V K F T A V D  
V A D F M R L G K T L V I G Q L S H V T N M K G I E Y L R A Q V P D Y S I E V L Q  
G T G S L V L D R V N Y A C R S V R T H E V P L A Y F G R L L G Y Q V I A V Q  
G T G C M V F D H V V Y A N I S E R C N A E Q L D A F V K S T E G S K T R A V T  
G G D I F V M G N N V L L G Y G I D S N M K G L Q W A D L L Q G W T V H F V E  
G T G C I V E D H K A Y A A I S E R C D K S L F D N F C E Q R D Y T P V S S V S  
G T G S L L L D R K A Y C A L S P R A D E E L F I E F C E D F D Y A P V I T V D  
G G D F I S T T H G I L M G Y G S R T N R L S M E A A A E Q T R A L C V I E P V E

UniRef90\_C3RCB0  
UniRef90\_I2MW92  
UniRef90\_W6VQT4  
UniRef90\_X0Y7L3  
UniRef90\_UPI00036A1733  
UniRef90\_R4RK43  
UniRef90\_T0DWX6  
UniRef90\_I0KBT5  
UniRef90\_UPI0004781CBC  
UniRef90\_R9GR84  
UniRef90\_T0M1K1  
UniRef90\_A7BS88  
UniRef90\_D2PCQ3  
UniRef90\_S0AN98  
UniRef90\_UPI00047B32B3  
UniRef90\_F4ZC13  
UniRef90\_C0BMC7  
UniRef90\_UPI0003A5D17E  
UniRef90\_X4QP86  
UniRef90\_X5K8Z6  
UniRef90\_K6VMT0  
UniRef90\_K4DL73  
UniRef90\_UPI00039D2A7D  
UniRef90\_T1AET6  
UniRef90\_W4GL71  
UniRef90\_UPI0002D70627  
UniRef90\_UPI0003F8AA99  
UniRef90\_UPI000378A8F8  
UniRef90\_UPI000426EA62  
UniRef90\_E2XUR2  
UniRef90\_K3VIL2  
UniRef90\_UPI00047CE429  
UniRef90\_UPI000479A99B  
UniRef90\_V6S8W5  
UniRef90\_F4KYZ8  
UniRef90\_UPI0003FD6411  
UniRef90\_T1AB92  
UniRef90\_S0ATK6  
UniRef90\_UPI00047B1540  
UniRef90\_UPI000409FF06  
UniRef90\_H1HBW0  
UniRef90\_UPI000366F86  
UniRef90\_UPI00047BBB9A  
UniRef90\_UPI0003774B11  
UniRef90\_L7UIH2  
UniRef90\_A4FHT0  
UniRef90\_M4UA78  
UniRef90\_H2BYB2  
UniRef90\_M5NBR1  
UniRef90\_D8LS91  
UniRef90\_UPI00046A7034  
UniRef90\_W5WE80  
UniRef90\_D0FMQ6  
UniRef90\_W6L0R0  
UniRef90\_UPI00004C26A9  
UniRef90\_K4JFB7  
UniRef90\_J9Y6Y3  
UniRef90\_H8KQX5  
UniRef90\_UPI0004076813  
UniRef90\_HOUJK1  
UniRef90\_UPI0001A6320F  
UniRef90\_S6IVS3  
UniRef90\_UPI000409AA05  
UniRef90\_D7C400  
UniRef90\_Q1ICB4  
UniRef90\_B5WK13  
UniRef90\_J0V5P5  
UniRef90\_H1Y1R1  
UniRef90\_W7Y9N9  
UniRef90\_UPI00035D95FC  
UniRef90\_E9E3G2  
UniRef90\_R18L4  
UniRef90\_UPI00035D06FA  
UniRef90\_UPI0003A696EA  
UniRef90\_C5P7J7  
UniRef90\_S4XS45  
UniRef90\_UPI00034BFBB0  
UniRef90\_I2GD18  
UniRef90\_M1W0W7  
UniRef90\_S3BDB5  
UniRef90\_W2EDX4  
UniRef90\_UPI0002891602  
UniRef90\_UPI00036C82B1  
UniRef90\_E4RSA8  
UniRef90\_UPI0003FA70D0  
UniRef90\_M1WBG7  
UniRef90\_K1LCA9  
UniRef90\_D2VB85  
UniRef90\_A6CWV2  
UniRef90\_UPI00036C1678  
UniRef90\_UPI0004181763  
UniRef90\_A4H647

170 180 190 200

L T D P Y H L D C T I F P L T R E S I V A T E A F T K Q E I K Q L E N V A E L  
N T H P L H I D A T W V P L R T P G L V L H C G E R L A D Q P E L M D F F K L N D W  
R E G V A I Y H T N V M M V G T R L A V A C L E S V R D E R R A L H S R L E D S  
V Q K W N H L D L I F S M V V A P K T I V M L C P E A L P D D F L K Y E L L K R A S  
D R S Y M H I D T I F T Q I N T H D Y V A F K P I I S D G L G S N V Q V F T A K  
R Q G P L Y H T N V M M V G S Q L A V A C L D D A Q E R A A L R Q R L E S S E  
N R A G M H L D T V F T Q I D V D K F T L H P G I Q G M L Q V F E F T R K G D T E  
K R D Y M H I D T V F T Q V K R G T L A R T G D E A K K R D V M H F F A P K D H  
F D D A L H I D A T F V P L A P G K L L I N P D S R P L K Q M P D I F K K A  
K R D Y M H I D T F T Q V N R H T W V V L G S V C A T P D K I K R Q K D R P K  
L Y D F M H L D T Y F N L A G D G V A V G A G E L M G K D T L Y S Y L K K K S F  
N P E A I H I D T T F M P L A P G K V V V S P E Y I D P L L K S W D I L E A P  
R E E F F H L D T T F F N V A S S N L V V Y Y D G K M V K V T N L Y N Y I T K E K  
L H P D M H V D T Y F N V A S S S T V I G S E L L L N N A K V D V Y Y K E E M G  
R K R M Y H T N V M M C I A E T A V I C A D C L D D K Q E R K M V L D N L K A D  
L R P A V H P D I N I N A I D V G K L V V S P A A L D W D A R T W L L Y A D N  
F T P I Y H T N V M M C L A E T F A V I C S D S I D D K K A R K A V L H L K E D  
S A D V Y H T N V M M C M A E T S A J V C L S A I D P D E R L M V R Q E L E K L  
F G P L H I D A T F V P L R P G L I I N N P H R R L P E E Q R K I F E A N D W  
F H S F Y H T N V M M C V G G D Y A V I C L D I D D A T E R E Q V E K A L T E S  
F G P L H I D A T F V P L R P G L I I N N P H R R L P E E Q R K I F E A N D W  
Q E D A P L H I G D Y F G F A G N N V L I T W K D E H G L L A V D Q Y Q Q K P Q  
I P D Y M H I D T I F T Q V K R D V I H F F A P K D V S E D L K I L Q F I K G L  
M P D P M H L D T Y F N V A G S S T V V I G S D M L L R R A M I D I L Y R K E A K G  
F K D A M H L D G T F V P L M E G S K L L A N P Y R P C D K E Y E R L P E M F K  
T Q A V Y H S N V M M A V G E G F A V I C D E I T E E F E R R R V L S S L Q K  
L S P L Y H T N V M M H V G I D L A V V C L D S L V K S D R K Q D S L T Q S  
A D G K E V Y H T N V M V C I G D V F A V V C I P D L D E R L R I R Q E L E N L  
I P D Y M H I D T V F T Q V K R D V W V M L G N F S R K A I R Q Q F H K K Q P H  
R H D A P L Y H S N V M M V G R D L S V V C L Q A L P D E A E R L E R S L R D T  
D P N A M H I D A T I P L R D G L V S V Y N P N K V T E A G L R K H A V L K D W  
G K R L P I Y H T N V M M L A E D F I V V I C T D D D K K E R K N V L D H L K K D  
G K R M P I Y H T N V M M A M A E V I C L N T I D D K K E R K N V V A H L K N D  
G K R K H I Y H T N V M M C L G E T F V C A D C I D D K K E R K M V L C L K S D  
G Q G Q D I Y H T N V M M A L G E T F V V D S I R D A E D K S D L L A Y F D A T  
F T A I Y H T N V M M C V A D V A V I C L E S I A S K E K Q V V Q A L Q S S  
D P D P M H L D T Y F N V P A G A G I A V G S E V L R A R V D V Y R R L R D R  
V M V N M H L D T Y F N I P A K G M A I T S V E L A R V A R A K I Y T R L K G E  
V A G I Y H T N V M M C V A D D Y V I L C L E S A D M N E K E M V T K K I H D T  
Q H S V L I Y H T N V M M C I A E T F A V I C S E A I H D P E E R R L V L D N T  
G E R K H I Y H T N V M M C L A E T F C A D C I D D K Q E R K T V L N S L K S T  
L S E V I H L D D G L S T V R E G L A V V C R E Q F T D K G L P L V A  
N K R V A I Y H T N V M M C V A T I F A V I C I D D K A E R K N V V K H L K E D  
F S A I Y H T N V M M C L A E T F A V I C L A S L D D K E R K N V L K H L K E D  
R E P A F H G N M L P L P A V D R M L V C P E V M S P D D S Y A R L R E R F G E  
F D D P M H I D T T L L P M G E G R V L V N E A W V S R L P D V F A  
F E D P I H I D A T F C P L R P G L M L L N P N R P L F K G Q R E I F E K N D W  
F N A F Y H T N V M M C I A E E A V I C L D C I D D V K E R K N V R K H L K E D  
T R G S P L Y H T N V M M I G E R F C V I C D E A I P E Y E R R F V V K S L A K  
F E D A M H I D G T F I P L G P G K V L V N P K R P C T K E Y A L P D M F K G W  
A T N F P L Y H T N V M M C I G D V I C L D S I K D P E E K L N V S I S L K G S  
F H P Q H I D A T M V P L R P G L V M M N P E R P A V D D T V R L F K D N  
F D D P M H I D T T I L P L A P G R V L V N K A W V S Q I P D I F R  
Q E D A P L G D Y F G F A G N N V L L A W K D E H G L L A Q Y Q Q Q H A N N G  
F R K F M H L D T V F T M V D L K F T I H P E I E G D L R V Y S V T Y D N E  
F P F P S H I D C T F V P V R P G L I L T N P E R P L R E G E E K M F L D N  
F S A F Y H T N V M M C V G S D F A I V A T S M I E E S D K N V L S T L K E T  
A I D I Y H T N V M M C L G T D Y A V I C L D S I P D P E H E V V N S L J A S  
G E R K L I Y H T N V M M C L G E T F V V I C S D D K S E R K Q V L K S L K D D  
F D N P L H V D M F L N M I D H D A F L F Y P Y V E E K I T A L H I T R G A K N

R Q G V A I Y H T N V M M V G T R L A V A C L E S V R D E R R A L H S R L E D S  
F N A N Q L I Y H T N V M M C I G E T F A V I C I D D K K E K K N V L K H L K S D  
F P P S H I D C T F V M P L R P G L V L T N P E R P L R E G E E K M F L A N  
R Q H A P I Y H S N V M M V G R Q L A A V C L D A L P H E R R T L E H S L R D T  
C R Q P M H I D S S L S P L C P G K L V L N P D F I D V G R L P L L K S W  
A Y G P H T N V M M C V G D T A V V A L D V V D E Q D R E K L Y T S L S G S  
E H G K A I Y H T N V L M C I G D Q F V V I C I P D V V I Q R D N L I S L F A N T  
F T E F Y H T N V M M C V S E K F S V I C L E S I H N Q E R N T V I H S L E H T  
E Q D F P I Y H T N V M L S V A D K F V V C L D S V I K N P E E K E N H F K S T  
T T D A M H I D T I L P L R H G L A V Y N P E R V S E A E L R R H A V F A G W  
T R P V Y H T N V M M A V G E G F A V I C D E I T E E F E R R R V L N S L Q K

I P  
S A D V Y H T N V M M C M A E S C A V I C L S A I D P D E R L M V R Q E L E G L  
D P H A M H I D A T I L P L R N K L M V Y H P E R V T E K A L R Q H A V F E N W  
L Y C G S H I D T T L A P I R P G L V L I N P E R V N K A N L P A P L R  
F P F P S H I D C T F V P L A P G L V L T N P E R P I R D G E R R M F T E N  
A S D V Y H T N V L M C I G D S F A V V C L S A I D P D E R L M V R Q E L E R L  
T T D A L H I D T T I L P L R H G L A I Y N P E R V T E K E L M R S H A V F T G W  
D P H A M H I Y A T L A P L A P G K L L V N P E R Y V P H P L F A D W E V L P A  
L P E L L H L D C A L S L V R D G L M I C K E A F L E G I P E S L K  
K K G Q P I Y H T N V M M V G V D F V I C M E S J A S D R K K L E A L F K E T  
K R A F M H I D T T F T Q V K R N L W V I H A P F S K Q G T D Y D T K D L I P E  
K R D F M H I D T V F T P I K R N V V V  
A S G K Q V Y H T N V L M C I G D V I C L D A I P D L D E R L M V R N S L E S S  
T T D A M H L D A T F L P L R L I G L A V F N P D R V T E E E L R S H A V F T D W  
L V D I Y H T N V M M H V G T E L A I V C S I S M A S E R L K V Q E N L E R S  
F K G F Y H T N V M L S I G E F A I V C S A V I V E E D R E R V M S E L R K A  
Y P E V M H L D C C L S L P R E G L A L V C L D A F P H G L P D L I K D W D I  
S N G K P F Y H T N V M M I G E H F V V I C L D S I K D E R K K Q L L D T F A  
G E R K L I Y H T N V M M C L G E T F A V I C S E D K E R K M V L D N L K E D  
M P E S P L L S D V I A F A G Q R T F V I S D T E H G H N A Q Q A V K R I P K

UniRef90\_C3RCB0 UniRef90\_I2MW92 UniRef90\_W6VQT4 UniRef90\_X0Y7L3 UniRef90\_UPI00036A1733 UniRef90\_R4RK43 UniRef90\_T0DWX6 UniRef90\_I0KBT5 UniRef90\_UPI0004781CBC UniRef90\_R9GR84 UniRef90\_T0M1K1 UniRef90\_A7BS88 UniRef90\_D2PCQ3 UniRef90\_S0AN98 UniRef90\_UPI00047B32B3 UniRef90\_F4ZC13 UniRef90\_C0BMC7 UniRef90\_UPI0003A5D17E UniRef90\_X4QP86 UniRef90\_X5K8Z6 UniRef90\_K6VMT0 UniRef90\_K4DL73 UniRef90\_UPI00039D2A7D UniRef90\_T1AET6 UniRef90\_W4GL71 UniRef90\_UPI0002D70627 UniRef90\_UPI0003F8AA99 UniRef90\_UPI000378A8F8 UniRef90\_UPI000426EA62 UniRef90\_E2XUR2 UniRef90\_K3VIL2 UniRef90\_UPI00047CE429 UniRef90\_UPI000479A99B UniRef90\_V6S8W5 UniRef90\_F4KYZ8 UniRef90\_UPI0003FD6411 UniRef90\_T1AB92 UniRef90\_S0ATK6 UniRef90\_UPI00047B1540 UniRef90\_UPI000409FF06 UniRef90\_H1HBW0 UniRef90\_UPI0003666F86 UniRef90\_UPI00047BB9A UniRef90\_UPI0003774B11 UniRef90\_L7UIH2 UniRef90\_A4FHT0 UniRef90\_M4UA78 UniRef90\_H2BYB2 UniRef90\_M5NBR1 UniRef90\_D8LS91 UniRef90\_UPI00046A7034 UniRef90\_W5WE80 UniRef90\_D0FMQ6 UniRef90\_W6LOR0 UniRef90\_UPI00004C26A9 UniRef90\_K4JFB7 UniRef90\_J9Y6Y3 UniRef90\_H8KQX5 UniRef90\_UPI0004076813 UniRef90\_HOUJK1 UniRef90\_UPI0001A6320F UniRef90\_S6IVS3 UniRef90\_UPI000409AA05 UniRef90\_D7C400 UniRef90\_Q1ICB4 UniRef90\_B5WK13 UniRef90\_J0V5P5 UniRef90\_H1Y1R1 UniRef90\_W7Y9N9 UniRef90\_UPI00035D95FC UniRef90\_E9E3G2 UniRef90\_R18L4 UniRef90\_UPI00035D06FA UniRef90\_UPI0003A696EA UniRef90\_C5P7J7 UniRef90\_S4XS45 UniRef90\_UPI00034BFBB0 UniRef90\_I2GD18 UniRef90\_M1WOW7 UniRef90\_S3BDB5 UniRef90\_W2EDX4 UniRef90\_UPI0002891602 UniRef90\_UPI00036C82B1 UniRef90\_E4RSA8 UniRef90\_UPI0003FA70D0 UniRef90\_M1WBG7 UniRef90\_K1LCA9 UniRef90\_D2VB85 UniRef90\_A6CWW2 UniRef90\_UPI00036C1678 UniRef90\_UPI0004181763 UniRef90\_A4H647

T P I S L E Q A H T G L C N S V R V N L N A S D I D F L S K R S E D Y R L E K S  
E I V E A V Q P A S F C S P W L A G N M L N L D A N T L C I E E K E V K L S E Q  
G K E I L A L T E S F A G N M L E V I N N Q K G E P L L V M S R T A W C S L N T E  
K Y E I I T I P G D A V F T G T I H N L L A L G D E K V L S F K E N K L G N E K  
G K E R L I K E I D P K T R I T F A G K W T D G C N L V A L K P D R N P V T E E  
G K Q L L P L T E S F A G N M L E V H N S A G E P L L V M S R S A W R S L D A E  
G K E N I L E V N D S K L E N T I L A K H L G V E K V T L I Q C  
K P L I E I E N L E D L L T D I S R N D L G A T D P I L K D G V V V G Y D R N D K  
G W D L F E A P R T F P K T S H F I N V L M L D E Q R V I V E K N E E Q L L T K A  
K F K S I E I S E K D L G S T G K T N F W T D S C N L L A L R E G G Y D R N D R  
S L V E L S I A E Q L G Y S S N F L T L R D R K I V A V N V A T D L F P N S K A  
Q P L L P E D P L G I L S K W L C I N V L M L D E E R V I V E K R Q E P L I K S  
G F N I L N V S I D E A A Y A T N F L T I D D G K I V A P K N P A N  
N Y K K S G T H T L H D Y I K S K G F N I V S L S T L E Q M S Y S S  
G K D I L V T E D F A G N M L Q V K G K D D K R Y V M S N S A Y Q S L T K A  
N F E L I E A D P E D Q R E F L A C N V L L L E P G K V I A H A D C H K T N Q K  
G K E V I A I S E S F A G N M L Q V L G S N E T P Y L V M S T T A Y E S L Q P D  
G K R V F D I S M E F A G N M L I R T G K G Q K M L V M S T R A Y D S L T S K  
E I V D A A Q P A H Y S V W L C L S M N C L V I D H K T V I V E A S E V Y Q A E  
H K E V I E I S E E F A G N M L E V R N N D G N K F L V M S E C A Y K S L T S R  
E I V D A A Q P A H Y S V W L C L S M N C L V I D H K T V I C E A S E V H Q M E Q  
A E M N V V Y L E P G C H F S L S F Y G V D F T T D V L V Q K G E Y E R S M D  
E H K P I E I E N E D L L T D I S K N D L G D S C N L L A L V V V G Y D R N E K  
Q Y I K I S L T L Q M S Y A T N F L C I G D G K L L I A F K A E K N P K M Y A  
G W E V F P T P E L P T H P L F C N V L V V R P G V V I V E A H E K P A Q  
T K D V V S I T E E F C G N I L Q L R N D K N E K L I V M S M S A Y N A F T K E  
G K K I I P I T P N F A G N M L E V T N G G E K F T V M S Q T A Y D S L T V G  
G K R I I E I S L D F A G N M L Q V V S T R G G Q K L I V M S T R A Y E S L T P K  
H P I T F E S L E D L L T D V S K N D L H S E G E V Q F I G V V L G Y D R N D K  
G K D L L A L D E A F A G N M L E V H D R D G Q P L L V M S A S A G A L Q P T Q  
P K D R T D P P L Y M T S P W L C L N A L V L D G K K V V V E A S D L V T M E  
G K E V I T I T E H F A G N M L Q V L G A D D K R Y M V M S S A A Y H S L R P E  
G K E I I I S E H F A G N M L Q V I G A D E K R F M V M S S A A Y N S L K P E  
G K E I V I T E D F A G N M L Q V R G A N D K R Y L V M S S A H O S L T P A  
G K E V I D L S L E F A G N M L Q V R N S S G Q T F L V M S T Q A Y Q S L T P A  
G K E I I D I S L E F A G N M L Q V H N K Y R Q H F L V M S S Q A F H S L T K E  
K I L A I E V E S Q E V D T V M E G L S L A A R R N P Y R Y R A L W E L V R Q E R  
G Y E F I N I S E Q L S Y S S N F L T L S D R K I V A I D S S G K M F P D S D A  
H K I T I E I S F D F A G N M L Q V H N T S G K F L V M S S Q A Y H A L N N D  
G H E L V E I T L D F A G N M L Q V R H N H E G K H F L I M S E Q A Y K A L N P K  
G K E V I T I T E E F A G N M L Q V K G A N D Q R Y L V M S T Q A Y N S L D A N  
D W E L I D V S L H D A V N L L A G N V L A P G E V L D E R L T G L A E A  
G K Q I I E I T E D F A G N M L Q V R K G E N D E L F L I M S Q T A H D C L T Q S  
G K K V I E I S E E F A G N M L Q V R G A N D E L F L V M S K A A H D S L T Q S  
H R L L V V T E D E Y A T N G L P V Y G R D L L A P S V V P D S I R  
G W E V L V P P P A A H P L Y Y T S Q W I H C N V L M L D E E H V L V E A E  
E I V E A V K P S W Y S S T W L S M N T L I D H K T V C V I E A T E T A Q M E  
G K E I I P I T E F A G N M L Q V R G A N G K K Y L M S D T A H K S L T K G  
D K Q V I S I S I E F C G N I L Q L E T R D G K V I A M S Q S A Y E A F T P A  
D I F V A E S P V L P E S H P L Y C N V L L L D E K R V V C E A S E E P T I R K  
G K E I I E I S L E F A G N M L Q V S N M E G E S L L V M S E Q A Y L S L N A A  
G W E I V T I P R D E V S N W L S M N M F N L D E Q T I I C E E Q E E P M I K  
D W E L L T P P P S T L D N A H P L N V L M L D E K T V V T E K D E V F L Q  
S A D A M Q I A Y L E S G C H F F S F Y G V D Y S P D V M I Q K G Y E Q S M E  
L H I V E L A E L L A A N L G V I E R C G G D N L V A A G R E Q W N D I T N  
D W E L V D V P Q P V L G N W L S M N V L S I S P T K V I C E E Q E K P L T L Q  
G K N V I E I S E E F A G N M L E L L N S N G K R L L L I S D T A F S S M N E E  
G K E I I E I T E F A G N M L E L L K N K G E S L L V M S E Q A Y K S L T A A S  
G K E I I L I T E D F A G N M L Q L K G T D D K S Y L V M S K S A H E S L T P E  
T V R L I K V G G E E A H D V A F A G S G N T V N L E P G R V C I W D R N E V  
G K Q V M A L S E S F A G N M L E V I H T S T G E P L L V M S R T A W Q S D G E Q  
G K E V I A L T E E F A G N M L Q V K G K E G A P L L V M S T S A Y H S L T K E  
G W E V I D A P E P V L G N W L S M N V L S M S P T K V I C E E R E K P L L Q  
G K Q V L T L D E N F A G N M L E V I H D R D G R S L L V M S R S A W R S L A P R  
D V L V A P R P D P V Q G F M T S I N T L M L D E K R V I V D A S Q V S L T K A  
G K E I I K I S K E F A G N M L Q V E N Q G E R L V M S K A A Y E S L T Q Q  
H K E I L V I S Q E F A G N M L E L Q N K A G Q R L L V M S K A A H A S L T A E  
H Q I I D I S L E F A G N M L S L V T R K G E E I L V M S Q S A Y Q V L T K K  
N K E L N I S K S L A G N V I E L E N D K G E N L L V M S E Q A R Q S F R E E  
D L R P Y P I K P K M C S P W L V L N A L S L N E K Q I F V E E Q D V E F A N  
T K D V V S I T E E F C G N I L Q L Q N D K G E R L I A M S L S A Y N A F T L E  
G K R V F D I A L E Q M A N M L L V S S G K G Q K M L V M S T R A Y G A L T L K  
E Y A Y P F T P E Q K D G P P L Y L N A L S L D E N R I M V I E A K D T V F A S W  
G W E V I V A P E M E V V H W L G L N L L M L S P N L A V V D A D Q A R L I R  
G W K L V E A P Q P V L A D W L S M N V L S L S P T T V V C E E R E R P L L Q  
N K R L V D I S L E F A G N M L M V Q N Q K G Q K L L V M S T Q A Y K A L T P K  
D L R P C P I S E P P M Y M C L V L N T L S L D E K K I F I E E Q D V E F A D  
P S P T L P A D W P F C S P W V S M N V L S L D P E T V V V E S H E Q P L I D A  
E W D K I T V P L E D A T N G L P L N  
G K A I I P I S E Q F A G N M I Q L K N K N E E S L L V M S S K A F N S L T Q V  
G K Q I I E I S I E F A G N M L E I K S E K G E K M L V M S D A A F Q S L T P K  
D L R P C P I P M Y M C S P W L V L N A L S L D E K K I F V I E E R D V E F A N  
G K K M I P I T A K F S G N M L E L R N P A G E K F T I M S A A A H A S L N K V  
R K L V I D I T A V E M C A N V I Q L A T K T G K V I V M S D A S A Y N G F T Q E  
V N C T L E E A R I D A C N G L P L G K G Y A M S S E F K H I G D  
K K E V I D I S L E F C G N I L Q L N N S K G D K I V M S D N A Y Q G F T K Q  
G K E I L I T E F A G N M L E V R G A D N A R Y L I M S A A A H O S L T D K  
V P W Q I I K L E P G C C F F S H L A G V N Y V I D V L C D Q D F P L S M E

UniRef90\_C3RCB0 K N I R L E G M E V C Y F N M E E Y L K G G G L L S C T V L 250 260 270  
UniRef90\_I2MW92 L A G Y G F E I V P V P F R A V G P F G G G L H C A T V D I E R E  
UniRef90\_W6VQT4 Q R Q L E R H A K P L P V N I D T I E L I G G G A R C M  
UniRef90\_X0Y7L3 L R A L G L E V F D P P L S Q F L M G G S G P H C L S F E L I R  
UniRef90\_UPI00036A1733 A F E E A G Y R V I T L P S T E L S R A R G G S H C M T C P I E R  
UniRef90\_R4RK43 Q R L I E R H V I Q P V P V N I D T I E R I G G G A R C M  
UniRef90\_T0DWX6 T A Q R E A G F D V V S L P S A E L S R A R G G S H C M S L P L L R  
UniRef90\_I0KBT5 L K D W G F K P I P C A F R H C Y R Y G G S F H C M T C D I R R  
UniRef90\_UPI0004781CBC T I Q K T N G F S V V H V P S G E L S R A R G G F H C M S L P L I R  
UniRef90\_R9GR84 V R D H G I D H V E V K L S E L T G G Y G G A H C M T A A L S R  
UniRef90\_T0M1K1 L K N W G F K P I P C A F E N Y F P F L G S F H C A T L D L R R Q  
UniRef90\_A7BS88  
UniRef90\_D2PCQ3 N F L C I K D G T I L A I D S A R I I K S  
UniRef90\_S0AN98 Q I H K I E Q H E I L H A N L D T E I E A G G G S A R C M M  
UniRef90\_UPI00047B32B3 I R D A G L V E V I E V T G T E I R K A C G G I K C R V M Q I N R E  
UniRef90\_F4ZC13 Q L S K I R K H E I I H A D L S T I E T G G G S A R C M M  
UniRef90\_C0BMC7 Q I S Q L N E Y T L I H F D L S M I E N G G G S A R C M M  
UniRef90\_UPI0003A5D17E Q L D K L G F N V I P V E M R D Y A A F G G G L H C A T A D V Y R E  
UniRef90\_X4QP86 Q I Q T L E A H E I L Y S D L H T I E K G G G S A R C M M  
UniRef90\_X5K8Z6 M D K L G M N V I P V P F R D A Y P F G G A L H C A T A D V Y R E  
UniRef90\_K6VMT0 S I A A A G L N P I P V Q W S E M D K L G V S M R A A V L P L K  
UniRef90\_UPI00039D2A7D T A E R M A G F D V I M L P S A E L S R A R G G S H C M S L P L W R E  
UniRef90\_T1AET6 T L L C K N G I D V V T I D L K N L T G G Y G G A H C M T A A V N R R  
UniRef90\_W4GL71 R L F K E W G F E V I P V P F R N F M P F G G S F H C A T C D V R R  
UniRef90\_UPI0002D70627 Q K D V L R H H Q V I P I D V S T I E T G G G S V R C M  
UniRef90\_UPI0003F8AA99 Q I Q S I E K Y T I I S P N L P L I E K L G G G A R C M M  
UniRef90\_UPI000378A8F8 Q I D T I D D Y R L I S V D L S T I E A G G G S A R C M M  
UniRef90\_UPI000426EA62 T T E R N A G F R L V V V I D E I S R A R G G F H C M S L P L W R E  
UniRef90\_E2XUR2 R Q H V I E R H T R P V V N I D N I E R I G G G A R C M  
UniRef90\_K3VIL2 W F E S L G M E C I P C P F Q H V N S I G G S F H C A T V D L V R E  
UniRef90\_UPI00047CE429 Q V A Q I E N H A T L H S S L H T I E T C G G G A R C M M  
UniRef90\_UPI000479A99B Q L L A I R K H E I I H S S L E T I E A C C G G G A R C M M  
UniRef90\_V6S8W5 Q I A T L E K H E I L S S S L D T I E A C G G G A R C M M  
UniRef90\_F4KYZ8 Q I A Q I E K H T L L H S S P I N T I E T G G G S A R C M M  
UniRef90\_UPI0003FD6411 Q L Q K L E S F N P I H A D I T T I E T G G G S A R C M M  
UniRef90\_T1AB92 E R L R D R G I E V V P L N L R A I T G G Y G G A H C M T C V T Q R  
UniRef90\_S0ATK6 M A K S G I D V I K I D L S E I T G G Y G G A H C M T S A I D R  
UniRef90\_UPI00047B1540 Q I K E I E K F N P I H S D I K T I E T G G G S A R C M M  
UniRef90\_UPI000409FF06 Q I E N I E K Y E L A T P L Y T I E H G G G S A R C M M  
UniRef90\_H1HBW0 Q I K A I E K H C P I H S S L D T I E A G G G S A R C M M  
UniRef90\_UPI0003666F86 L T A R D V T V H T L P Y D A V T P F A G G F R C S H H P L V R K  
UniRef90\_UPI00047BBB9A Q I A K I N N H K I I S S S L E T I E T G G G S A R C M M A E I  
UniRef90\_UPI0003774B11 Q L A Q I G N H K I I S S S L D T I E A C G G G A R C M M  
UniRef90\_L7UIH2 A R V E A L G M K V V S L D M G E L E K G G G S S R C L  
UniRef90\_A4FHT0 A H L R K W G F E V I P L P F K H F Q T F G G S F H C A T L D V R R  
UniRef90\_M4UA78 Q F D K L G F E V L P V A M R D A Y A F G G G L H C A T A D V W R E  
UniRef90\_H2BYB2 Q I N A I E K Y E I L S S N L N T I E T G G G S A R C M M  
UniRef90\_M5NBR1 Q L N Q L A T H K L L P F S V P T I E T G G G S V R C M  
UniRef90\_D8LS91 F K E W G F D V I K V P F R H F L P F G G S F H C A T C D V R R  
UniRef90\_UPI00046A7034 Q I T S L E Q Y R I Y A P L Y T I E K G G G S A R C M M  
UniRef90\_W5WE80 L L E T L G F S V I A L P F R D V Y S F G G S F H C T L D V R R R  
UniRef90\_D0FMQ6 Q A F C Q W G F K T I L C P F K H F Q T F G G S F H C A T L D V K R  
UniRef90\_W6L0R0 S I A A I G L N P I P V Q W S E M A K L G I S M R A A V L P L K  
UniRef90\_UPI00004C26A9 A I L E S K G L K L K I H G S E L V R G R G P R C M S M P F E R E  
UniRef90\_K4JFB7 Q L L D K L G F E V I P I P F R N V F E Y G G S P H C A P R G V R R E  
UniRef90\_J9Y6Y3 Q L A L N D L T L L P I A V I P T I E M G G G S V R C M  
UniRef90\_H8KQX5 Q V E K L S K R L V Y A P I Y T I E A G G G S A R C M M  
UniRef90\_UPI0004076813 Q I E K L E K H T I L S S L D T I E A G G G S A R C M M A E I  
UniRef90\_HOUJK1 T I E A L Q G I N V A V K A D E L V K G G G P R C S T M P L I R  
UniRef90\_UPI0001A6320F  
UniRef90\_S6IVS3 R R L V E R H A R P L P V N I D T I E R I G G G A R C M  
UniRef90\_UPI000409AA05 Q V K K I E R H T F I H T S L E T I E T C G G G A R C M M  
UniRef90\_D7C400 D L L A K L D F E V I T V P E T R H V F E Y G G S L H C A T W D V R R E  
UniRef90\_Q1ICB4 Q R R Q V E Q H H P V V N I D H I E R G G G S A R C M M  
UniRef90\_B5WK13 F R N W G F E N I P C A F L S Y G P F G G A F H C A T L D I R R R  
UniRef90\_J0V5P5 Q L E R M Q A H N N L Y L P I H M I E K A G G G I R O M I A E L F R K  
UniRef90\_H1Y1R1 Q I K I L E K H K I V S A D L D M I E S G G G S A R C M H L P L R  
UniRef90\_W7Y9N9 Q R S A L E N Y E P F P M H I Q T I E K G G G S A R C M M  
UniRef90\_UPI00035D95FC Q L Q I I N K F K I V A V P I P T I E R G G G G T R C M  
UniRef90\_E9E3G2 W L R D E F D M E P I T L P F Q H V N C L G G S F H C A T V D L V R E  
UniRef90\_R18L4 Q K R V L R K H K L V P I D V S T I E T G G G S V R C M  
UniRef90\_UPI00035D06FA  
UniRef90\_UPI0003A696EA Q I D Q L N E Y T L I H F G L F V I E Q S G G S A R C M M T E I  
UniRef90\_C5P7J7 V K E K F G M E P I M C P F Q H V N S I G G S F H C A T V D L V R R R  
UniRef90\_S4XS45 L L E R H R V E V I P L R L R H G R T L G G G F H C V T L D V R R R  
UniRef90\_UPI00034BFBB0 E L L S G M G M E V I T V P F R N V F E Y G G S L H C A T W D I R R R  
UniRef90\_I2GD18 Q I D Q L D D D Y T L I H F D L S M I E N G G G S A R C M M V H L P R K  
UniRef90\_M1W0W7 W L K E E F G M E P I M F P F Q H V N C L G G S F H C A T V D L V R E  
UniRef90\_S3BDB5 L T D W G F R C V P V D F R H V Y S F G G S F H C V T L D T V R  
UniRef90\_W2EDX4  
UniRef90\_UPI0002891602 Q L I E M E N Y K I I H A D L D V I E T G G G A R C M  
UniRef90\_UPI00036C82B1  
UniRef90\_E4RSA8  
UniRef90\_UPI0003FA70D0 Q L Q S L N E Y S I H H F N L S M I E N G G G S A R C M M  
UniRef90\_M1WBG7 W L K E E F E M E P I M L P F Q H V N C L G G S F H C A T V D L V R E  
UniRef90\_K1LCA9 Q L H A I Q R H T S L I V P I P T I E K L G G G V R C M  
UniRef90\_D2VB85 L I E A E H G K A V V F P I S K I I E G G G S A R C M M  
UniRef90\_A6CWV2 Q L E A K G I E V L Y T D M T E T N H A G G G M R C S H A A L V R E  
UniRef90\_UPI00036C1678 Q K A K L E K H K L L P C S L P T I E S G G G S A R C M M  
UniRef90\_UPI0004181763 Q I A Q L E K H A L I S S L D T I E A G G G S A R C M M A E I  
UniRef90\_A4H647 R L G E S G M N P F P V E W S E P R K L G I T M R C M T A R F A R



UniRef90\_A6GZ64  
UniRef90\_B1ZQ27  
UniRef90\_W4LTD9  
UniRef90\_J5XMS1  
UniRef90\_S7JKR3  
UniRef90\_F9MSF2  
UniRef90\_UPI0003799D43  
UniRef90\_S2DY25  
UniRef90\_F4XWI7  
UniRef90\_A0M564  
UniRef90\_I3YT24  
UniRef90\_A0A059KKB3  
UniRef90\_UPI00031F16E4  
UniRef90\_A0A010Z2M2  
UniRef90\_UPI00037750DF  
UniRef90\_UPI00036425B8  
UniRef90\_B1L3J0  
UniRef90\_F4AYJ6  
UniRef90\_V3TTK0  
UniRef90\_D7C288  
UniRef90\_C1E6G5  
UniRef90\_D4CWJ0  
UniRef90\_I5C903  
UniRef90\_UPI0003B5447E  
UniRef90\_F0IEM0  
UniRef90\_UPI00047CBAE1  
UniRef90\_UPI000425BA20  
UniRef90\_UPI0003B737F7  
UniRef90\_I7DF21  
UniRef90\_UPI0002003290  
UniRef90\_C1DBM8  
UniRef90\_U0EKZ5  
UniRef90\_G7LMU7  
UniRef90\_UPI0003B72461  
UniRef90\_H3NQQ1  
UniRef90\_UPI00035E0396  
UniRef90\_R7XZA9  
UniRef90\_UPI000469B736  
UniRef90\_E4RSA9  
UniRef90\_UPI00037285A2  
UniRef90\_F4YA69  
UniRef90\_A0A017H9F8  
UniRef90\_UPI000288E816  
UniRef90\_F6GCZ0  
UniRef90\_UPI00029AAD91  
UniRef90\_UPI0003B4209A  
UniRef90\_F3BIQ2  
UniRef90\_UPI000472B31F  
UniRef90\_A3XB02  
UniRef90\_UPI000454B341  
UniRef90\_U1JYC2  
UniRef90\_UPI00047A67B7  
UniRef90\_UPI000237B510  
UniRef90\_A3U7Q0  
UniRef90\_U1KM00  
UniRef90\_G1DTC4  
UniRef90\_C6WVFN3  
UniRef90\_P29780  
UniRef90\_W8EUW5  
UniRef90\_J4WUI4  
UniRef90\_UPI000238BF0  
UniRef90\_C9ZV18  
UniRef90\_K6XTF8  
UniRef90\_UPI00044ERG0  
UniRef90\_F4ALF4  
UniRef90\_V9Z5X0  
UniRef90\_UPI00036E5BE5  
UniRef90\_W4RW19  
UniRef90\_UPI00038202F6  
UniRef90\_A1ZS16  
UniRef90\_Q8DN30  
UniRef90\_F4H0W3  
UniRef90\_UPI00016A3717  
UniRef90\_UPI0003688480  
UniRef90\_UPI0003B536BB  
UniRef90\_I0A0A2  
UniRef90\_A4RXL6  
UniRef90\_UPI0003818D86  
UniRef90\_C4RL44  
UniRef90\_A0A021XGS4  
UniRef90\_X0THV1  
UniRef90\_F3JJH9  
UniRef90\_Q3ICK0  
UniRef90\_D6GRZ3  
UniRef90\_M4ZVY2  
UniRef90\_W1Z1D5  
UniRef90\_UPI000374B7F2  
UniRef90\_UPI0003F609BA  
UniRef90\_D3B1R6  
UniRef90\_E6WKH2  
UniRef90\_UPI00038302EC

1 10 20 30 40  
A K A Q E E F  
D I Q A A R N Q H  
K A Q E E F  
N C V V M V P P K E F K Y N A E T A K D N E E Q V R A Q A M Q E Y  
V L M V E P S E T A V N N L Y Q H Q D Q K P L D Q K Q A L E E F  
H I L M I R P V R F I S N Q T Q S S N A F Q R T D I T A A M E E F  
A Q E E F  
Q T E I E G D D I N E L A T Q E F  
K A Q A E F  
A R D E F  
E E F V Q E K N A A S V L S K V K D E M E E D F  
S E V G Q A P A A V I M V R P H H F V P N P A T F Q A R S E V P P S R A L A E V  
L A E A A E D L  
A K A Q A E F  
L K A I A D A L K N E G I N V I F Y G G D S V E E M R E  
K N E E I N K K A Q Q E F  
V E E T E E E L  
K V M R E H  
A L I E F  
H P A L T D T V L M I R P A H F G F N P Q T A A D N Q Q P D P E L A R A E F  
A L A E M  
N E K I N Y R A Q E E F  
T N T I L M I R P E N F R M N E Q T A V N N E D I D L K R A Q A E F  
N Y F Q E E L Q L K N E E I N A K A Q N E F  
A R S E V  
A V V M I R P H H F C S N P E T R D D N A D V T S A Q A L A E F  
V M V R P V S F Y F D T E T A A N D E K R D V V Q A K A L I E F  
N C V V M V P P K E F A F N A E T A R D N E E Q V R K Q A M Q E F  
V F M V R P S T A L S N Y F Q K T D Y V S D N I Q Q R A L A A F  
A K A Y Q E V  
S L D N L Y Q N E S E L N D D D I Q L A L N E F  
R V F M V R P C R F L A N P E T L G D E R E T D D A E R A R R E F  
K A L A E M  
N R I L M V R P P E T A A N N A F Q K L T G S P E T V A K A Q K E F  
K K A Q D N F  
N H L L M V R P P T H L D N H F Q A P P E K Q R D I A A A I K E F  
E D L K K D G K F T P N I K K I E K Q F  
R A V V M I R P H H F R P N P Q T A A D N A F Q S L D V A Q A A H  
K R A L E E F  
E L K N A E I N T K A Q E E F  
R A V V M I R P H H F H P N P E T E R D G T R T T A E I A A Q A H  
A A A L A E M  
A V V M V R P H H F T S N P Q T M L D N A P N Q S E Q A Y N E V  
Q Q P L S D E R S P E V I H G M A Q A E F  
R K K A L Q E F  
P P D V R K A V A E I  
R A V V M I R P H H F T S N P Q T M Q D N E K N P N N R A Y V I E V  
Q K P D E A T E I A Q K A L A E A  
A V V M V R P H A F A S N P E T R D D N A A A T S A A A R D E H  
I K N A E I N K K A Q D E F  
M F P Q A P R A V V M I R P H C F S P N E E T R A D N S A P Q F D L A Y E Q V  
I E E A E E D L A A M V K S L  
A R A F E E F  
N E V L M V R P S T S S T N S F Q Q R V D E G G V N E R A Q K E F  
R Y V N A L Y R V P P Q N L I P T H S P I G E E V D T E L F V R Q V  
A V V M I R P H H F Y A N P Q T Q G D N A T V E L R D R L A Y Q Q  
V V M I R P H H F C S N P Q T A S G D P E A V R K A A I A E F  
K Q A Y E Q V  
A V V M V R P H A F T P N P E T A A D R S N P D I E V A R D E V  
S S A I L M V R P A A F G A N P E T A L D N E E I S V S R A L A E F  
A V V M I R P H R F A P N A E T A A D N A A A L A A D A H R E V  
E K A L A E F  
I M M V R P V S F G H N P Q T A E N N D A E V L Q Q A Q A E F  
A V V M I R P H H F Q P N P Q T S A D G G E R D A A A A R D E V  
E F  
V V M I R P H H F D N H F Q T S A G S D P A T I A R A H A E V  
R E R A V A E H  
V V M V R P H N F T V N T E T A A D N R F Q V L A D L A R A A Y  
A V V M V R P H A F T P N P E T A A D N G I A A Q A L A K V A H  
A L A F D E V  
A V V M V R P H H F T S N P Q T M L D N T F Q S T C N S Q N Q F  
N E D I A I K E N A L R E F  
Q T V P K D P T E V P K I A L E E F  
N R V F M V R P G R F L N P E T A S S N A F Q H A D A S L L P A Q F

UniRef90\_A6GZ64 D T F V N K L R M V G V D V T V V D D T L E P T P D S I F P N N W S F H E S G D 50 60 70 80  
UniRef90\_B1ZQ27 A E L A R L L G K L G A K V K F A A G Q A D D P R G A L V E E S I V V L P E M  
UniRef90\_W4LTD9  
UniRef90\_J5XMS1 D A L V S K L R A V G V H V I V V D Y E Q D T P D S I F P N N W L S F H N N K  
UniRef90\_S7JKR3 T D M V A N L R R E G V Q V V E F D S D V E T P D A V F P N N W F S T T A D G  
UniRef90\_F9MSF2 K T Y V Q A L R D R G V Q V H V F K P N P R T P D S I F P N N W F S T H A G G  
UniRef90\_UPI0003799D43 D A Y V A K L R A A M D V T V I D D T P L P H T P D S I F P N N W S F H E N G  
UniRef90\_S2DY25 D G F V K N L E D K G V Q V L V V E E E P K K T D A V F P N N W F S T H E N G  
UniRef90\_F4XW17  
UniRef90\_A0M564 D I F V E K L R S V G V N V V V V N D P E D D T P D S I F P N N W V S F H E D G  
UniRef90\_I3YT24 D A F V R K L R A V G V N V I V E N D D T D T P D S I F P N N W L S F H E N G  
UniRef90\_A0A059KKB3 D A A V H R L E S A G V T V H R F D D D H D T P D A V F P N N W F S T H G G R  
UniRef90\_UPI00031F16E4 Q E M T S V L E R Y G V K V R R P D V I P L D I K C L M P R D C L L V L G D T  
UniRef90\_A0A010Z2M2 T A V A D A L R G V G V G V H L F D D E S G T P D S V F P N N W F S T H P D G  
UniRef90\_UPI00037750DF D G L A A L L E S L G V R V A R P A P M T H D F Y S Y C P R D L A I V I G S T  
UniRef90\_UPI00036425B8 D A F V E K L R A V G V K V I V V D D S P D T P D S V F P N N W S F H E N G D  
UniRef90\_B1L3J0 I G Y N V V K V K L R K E L P K L G Y P R D P S V A W S N S  
UniRef90\_F4AYJ6 D D F V A K L R F V G V N V I V E N D D K E G N D S V F P N N W V S F H E N G  
UniRef90\_V3TTK0 P L Y G L L F P R D H F I N V G G Q  
UniRef90\_D7C288 S R L C A E L T K I G V K V R R P E A R D D G F Y D Y C P R D V F L N V G S T  
UniRef90\_C1E6G5 E N L V D L L G N Q G V H L F D H K E S H G T P D A V F P N N W F S T A P D V  
UniRef90\_D4CWJ0 D K M V E K L K S G I D V K V R R P D V I P L D I K C L M P R D C L L V L G D T  
UniRef90\_I5C903 D A F V Q Q L E A V G V Q V V Q V A D P S P V K T D A V F P N N W F S H T D G R  
UniRef90\_UPI0003B5447E D A L A Q A L R D V G V R V H V F D D D D H R P D S V F P N N W L S T H Q G G  
UniRef90\_F0IEM0 D T L V K K L K A V G V N V I Q V V D Q D T P D S I F P N N W F H N T A D V  
UniRef90\_UPI00047CBAE1 D A F V L V L R E K G V N V I V M K D T K E L P D A V F P N N W S F H E D G T  
UniRef90\_UPI000425BA20 D A F V N K L K A V G V N V V V D D K K E D T P D S I F P N N W S F H Q D G K  
UniRef90\_UPI0003B737F7 D A L V H L K K H H I N V H L F D D E R N T P D S I F L N N W F S T H S G G  
UniRef90\_I7DF21 D A A V A A L R G A G V N V H V F D D I S E T P D S V F P N N W F S T H A G G  
UniRef90\_UPI0002003290  
UniRef90\_C1DBM8 D A M V D L L R S K G I T V H V L Q D V M D T P D S I F P N N W F V S M E G G  
UniRef90\_U0EKZ5 K T M V G Q L R Q V G V Q V V E F D Y D V E T P D A V F P N N W F S T T A D G  
UniRef90\_G7LMU7 D S Y V D E L K A V G V N V I V F E D D E D T P D S I F P N N W T L D S Q G R  
UniRef90\_UPI0003B72461 T E A A D T L R A N G V T V H L F E D E Q R T P D S I F P N N W F S T H A G G  
UniRef90\_H3NQQ1 D N F V N T L L E K G V K V D V V K D D P Y T P D S I F P N N W F S T H N G D  
UniRef90\_UPI00035E0396 D S F V E L L R T H V E V V A E D T P E P H T P D S I F P N N W F L T D D E G  
UniRef90\_R7XZA9 D A L A D A L R D V G V R V H V F D E D H T R P D S I F P N N W S T H A G G S  
UniRef90\_UPI000469B736 D N Y V S L L R D N V D V L V V Q D S P K P H T P D S I F P N N W F S H I T G E  
UniRef90\_E4RSA9 D E L V E Q L R R D I Q V H I F D D T D Y P Y T P D S I F P N N W S T H H S G K  
UniRef90\_UPI00037285A2 D A Y V E T L R S A G L K I V T V M E D Q K G T P D S V F P N N W F S T H E D G  
UniRef90\_F4YA69 F E L Q K T I S S V A S I Y T T P A E K G L Q D L A Y V A N L G M L F P H R  
UniRef90\_A0A017H9F8 D E A T R A A E E A A G I T V H R F E D T T Q T P D S C P N N W F S T H A G G  
UniRef90\_UPI000288E816 D S A V Y L R K N K I H V D V I E D F D D R T P D S I F P N N V F V T F P G K  
UniRef90\_F6GCZ0 D A F V E K L R A V G I N V I V E D D D K D T P D S I F P N N W V S F H E N G  
UniRef90\_UPI00029AAD91 A E V T R A A E E Q V G V K V H L F E D E K E T P D S V F P N N W F S T H A G G  
UniRef90\_UPI0003B4209A D A V A Q A L R D A G V R V H V F D S D H T R P D S V F P N N W L S T H P G G  
UniRef90\_F3BIQ2 T N A V K L L K N E G V K V H L F E D E Q Q T P D S V F P N N W F S T H Q S G  
UniRef90\_UPI000472B31F D L M V A Q L Q M A G V E V S I F P E K E E N P D T V F S N N W V T H Q S G R  
UniRef90\_A3XB02 D K A V E I R S S G V G V H V F D D I T T P D S V F P N N W F S T H S G G  
UniRef90\_UPI000454B341 E E M C D L L K M E G V T V R R P D P V D S G L Y A A M P R D I L I V V G N E  
UniRef90\_U1JYC2 S N A V Q Q A L E L A G V K V H L F E D S T D T P D S V F P N N W F S T H S D G  
UniRef90\_UPI00047A67B7 D L F C Q Q L K E A Q I E V L R Y D D L P E T P D A L F P N N W I V F H R C G  
UniRef90\_UPI000237B510 D K A V E Q L H A A G V T V H V F D D E R D T P D S V F P N N W F S T H P G G  
UniRef90\_A3U7Q0 D A F A E K L R A V G V N V I V E D D E L D T P D S I F P N N W V S F H K N G  
UniRef90\_U1KM00 S R V A E Q L E Q A G V R V H L F E D L T D T P D S V F P N N W F S T H A G G  
UniRef90\_G1DTC4  
UniRef90\_C6WFN3 E D L D I V V R R P D T W P H D E V V S T P F W Y N Y C P R D I F L V L G N Q  
UniRef90\_P29780 D G Y G D L C P R D G L L V G D T  
UniRef90\_W8EUW5 D A M V A R L R A H V Q V L V F E D T A E P H T P D A V F P N N W G T F H P D G  
UniRef90\_J4WU14 H N L K D K I E A K G I Q V T S L K G S K E C P D H I F P N N W F M T F D N K T  
UniRef90\_UPI00023BBF0 D D M V A A L E K E G I K V T K A Q D V T G Y P D S I F P N N W F S T Y G K R  
UniRef90\_C9ZV18 K D L F L A L K Q Q L V D Q V H E M R A C P Y Y D S L F A A D I L F Q H Y D I  
UniRef90\_K6XTF8 V T D A A Y I L E S Y G I D V H I F E D E K D T P D S V F P N N W F S T H S G G  
UniRef90\_UPI00038202F6 D T A V S N L R E A G V T V H I F D D L T A T P D S V F P N N W F S H T G G Q  
UniRef90\_A4ERG0 T N A A K I L T A H G I Q V H I F E D E Q D K P D S V F P N N W F S T H S G G  
UniRef90\_F4ALF4  
UniRef90\_V9Z5X0  
UniRef90\_V9WX50 T Q A A G R L E A E G V R V H L F D D E H N T P D S V F P N N W F S T H P G G  
UniRef90\_UPI00036E5BE5 D Q M V S L L R A K I N V M V V E D T E L P N K P D A I F P N N W F S T H A D G  
UniRef90\_W4RW19 S V A V E R L R T E G V Q V H L F E D E R G T P D S V F P N N W F S T H A D G  
UniRef90\_UPI00038202F6 H S L K S K I E Q R G I K V T A L L G S R D C P D H I F P N N W F I T F D D K T  
UniRef90\_A1ZS16 D G M V A M L R E A G V N V L V F D P H P K P S A L F P N N W V S F H E E G  
UniRef90\_Q8DN30  
UniRef90\_F4H0W3 P L P N M L Y T R D T T S W L Y G G  
UniRef90\_UPI00016A3717 G A A A Q R L A D A G V R V H V F D D E H D T P D S V F P N N W F S T H P G G  
UniRef90\_UPI0003688480 N D F K L E L E S H G I T I S V Y E G S K E C P D H I F P N N W F T F E D K T  
UniRef90\_UPI0003B536BB T R A A A A L T G A G I R V H L F E D E S D T P D S V F P N N W F S T H S G G  
UniRef90\_I0A0A2 K A L Y R G L R A L G I E I N L F T H D E K H P D A C F P N N W H T L R D G K  
UniRef90\_UPI0003818D86 G V R V H L F D D D R D T P D S V F P N N W F S T H P G G  
UniRef90\_C4RL44  
UniRef90\_A0A021XGS4 D E I T R A A Q E S H G I A V H L F E D E V E T P D S V F P N N W F S T H A G G  
UniRef90\_X0THV1  
UniRef90\_F3JJH9 D E V S R A A L E A Q G V R V H L F D D E K N T P D S V F P N N W F S T H P G G  
UniRef90\_Q31CK0 V E V L K Q E G I L V H L F E D D Q H D T P D S V F P N N W F T H Q N G  
UniRef90\_D6GRZ3 G I T V H V L Q D T P A T P D S I F P N N W F S T H E G G  
UniRef90\_M4ZVY2 T A V V D A L R H E G I D V H L F E D A T A T P D S V F P N N W F S T H H G G  
UniRef90\_W1Z1D5 D E V T N A L L Q N E G V T H L F E D E H H T P D S V F P N N W F S T H Q S G  
UniRef90\_UPI000374B7F2 H N L K K E I E N N I L V K S M K G I H E C P D H I F P N N W F I T F D D K T  
UniRef90\_UPI0003F609BA Q A A G V R V H L F E D E R D T P D S V F L N N W F S T H S G G  
UniRef90\_D3B1R6 N S Y Y N A L V E K G V K V T L F K P E D N L P D C I F P N N W F S T H D N T  
UniRef90\_E6WKH2 D R Y V S A L R A A G I E V L V L H P D N N T P D A L F P N N W I T L Q H D G  
UniRef90\_UPI00038302EC

UniRef90\_A6GZ64 V A L Y P M A E N R R R L E R R E E L L D L L E D K G F L V N E I M D D G F F L E 90 100 110 120  
UniRef90\_B1ZQ27 G I L G R T Q D S S Q G A A A E S M V P L L L A Q H R P I Q R I A D P A L L D  
UniRef90\_W4LTD9 N V A F Y P M F A E N R R R E R R A E G F E I E N V Y D Y T E A E N E G L Y F L E  
UniRef90\_J5XMS1 G F F T F P M A C A N R Q Q E V R P Q A L T V R L R D S L V E Y Q E N R A Y L E  
UniRef90\_S7JKR3 H L I Y P M F A K N R Q A E V D K F L P Q L E D L K T D Y R E N G K K S A Y L E  
UniRef90\_F9MSF2 V V L Y P M Q A E N R R R Q D I L A Q L G K R F D V R Q V R F E L D G K Y H E  
UniRef90\_UPI0003799D43 V V L Y P M F S P N R R E R R M D L V Q M L M I K G F K V D E V I D E N Q F L E  
UniRef90\_S2DY25 V V L Y P M F S P N R R E R R M D L V Q M L M I K G F K V D E V I D E N Q F L E  
UniRef90\_F4XW17 K I A L Y P M F A E N R R K E R R L Q Y F L E D A G L K I K E I V D D D V F L E  
UniRef90\_A0M564 D I G L Y P M F A E N R R R R E R R E E G F L I N N V Y D Y T E A E E E G L Y F L E  
UniRef90\_I3YT24 V A L Y P M C S P N R R R E R R A L I E W L K R Y Y V D Y S G H E P D D R F L E  
UniRef90\_A0A059KKB3 L I E V P M P S R N R Y F E N Q S F R S I A R E Y F N N H P Y L A E D D D P F L E  
UniRef90\_UPI00031F16E4 V A I Y P L Y A P N R R A E R R A D I V Q S L R V G F D Y S V L A E D D C L Y L E  
UniRef90\_A0A010Z2M2 I T A A P S P V R A R M F E L A G L R E L F Q Q R G H G R P M L G E T E P V F L E  
UniRef90\_UPI00037750DF V V L Y P M F A E N R R A E R R E L I D L V E D E G F A I N E I M D D G E I F L E  
UniRef90\_UPI00036425B8 P V I M N M T L E H R R G E E D A A D F F S N I G L K P A F R P R F W S R A E  
UniRef90\_B1L3J0 D V A L Y P M F A E N R R R E R R E E G F E I K N V F D Y S E A E E D F F L E  
UniRef90\_F4AYJ6 P V F G R L K R Q D R A R E V E V V K K V V T A H G H R L V E L E  
UniRef90\_V3TTK0 V I E T P M V L R S R F L E P F A Y K N M L L E F G D D M Y D M D A E P G R F D  
UniRef90\_D7C288 L N F Y P M R R K E R R K D L V T Y L D R M S K C T I D Y E E T D P P R F L E  
UniRef90\_C1E6G5 V V L Y P M F A E N R R E R T D G I Y D F D N V D V D Y S L E K E N I F L E  
UniRef90\_D4CWJ0 V I L Y P M L A P T R R L E R R L C I E S L I Q A G F R V E E V I D L S F F E E  
UniRef90\_I5C903 A V Y A S N R R H E R R A D V L E M L K S A Y R V Q I D Y S G L E P D G I F L E  
UniRef90\_UPI0003B5447E A I Y P M F A E N R R R E R R E D I L D I V E D A G F H I E N I F D E G I F L E  
UniRef90\_F0IEM0 V G L Y P F A E N R R R E R R E D V L D V V E E K G F V I R N L I D E G Y F L E  
UniRef90\_UPI00047CBAE1 A A V Y P M F A E N R R R E R R E M E F I V L E S Q Q G F D Y T A E D E K V Y L E  
UniRef90\_UPI000425BA20 H I L Y P M Y S P S R R R E R R E D I I N M L K Q K Y R V K D V I D D N L F L E  
UniRef90\_UPI0003B737F7 H V A V Y P M Y A A N R R K E R R W R D Y R V Q D V I D Y S G L E Q D G L A L E  
UniRef90\_I7DF21 H V A V Y P M Y A A N R R K E R R W R D Y R V Q D V I D Y S G L E Q D G L A L E  
UniRef90\_UPI0002003290 H L M L C P M W A P N R R H E R L L V D L I G H D K L K V S N Y G P A H K F L E  
UniRef90\_C1DBM8 A L Y T F P M A C E N R Q Q E A L R E A L E A A G D S L T D Y L A E N A H L E  
UniRef90\_U0EKZ5 V I I Y P M E A E N R R R E R R N L A G R F D V K Q F Y D I S H F E K Q N K F L E  
UniRef90\_G7LMU7 H I Y S R N R R L E R R S D V L D M L K T E Y R V Q I D Y S G L E P D G L F L E  
UniRef90\_UPI0003B72461 L V I Y P M L T E N R C E E I K K F R D E L I E I Y K P S N I D T E D I V L E  
UniRef90\_H3NQQ1 H L L F K M Y A S R R D A E S H F N R L L E V C Q P K D I W D M R E I G E V L E  
UniRef90\_UPI00035E0396 V A V Y P M Y A S N R R H E R R H D V L E M L K S S Y R V Q S I D D G I F L E  
UniRef90\_R7XZA9 L V L Y P M F A L N R Q Q E R K L L A T V G E L D I N L K S Y E A Q R K Y L E  
UniRef90\_UPI000469B736 V M L Y P M E A P N R R A E E R Q D L D F L K K N F D F H V L L D E G K F L E  
UniRef90\_E4RSA9 L Y V T P M Y W P Q R R V E E L D K D H L I N R T L A L E H W E S E G R F L E  
UniRef90\_UPI00037285A2 L V S N F K S E P R K G E T K V G Y E Y F K K L G F D P I I M P D E P M Y F E  
UniRef90\_F4YA69 H V I Y P M Y S P N R R Q E R R A D V I A L L K H R Y R V Q D V I D D G I F L E  
UniRef90\_UPI000288E816 L F V A Q M Y T E N R N K E L P Q L K K V I D F K D V Q V I N F K N D K K V L E  
UniRef90\_F6GCZ0 N V G L Y P M F A E N R R R E R R E E G F K I N N I D Y T E A E E E H V F L E  
UniRef90\_UPI00029AAD91 H I I Y P M F S P N R R R E R R R G D V I E M L K H E Y R V Q D V I D D G L S L E  
UniRef90\_UPI0003B4209A Y V Y A S N R R H E R R G D I L E M L K A D Y R L Q V D Y S G L E P D G I F L E  
UniRef90\_F3BIQ2 E L L Y P M F V E N R R L E Y R I I D F L T D H Y K D Y A H L A K E N S F L E  
UniRef90\_UPI000472B31F V V L Y P M M A P N R R R R L D I V E Q L K S K Y H I E E S H F E D E G K F L E  
UniRef90\_A3XB02 H I I Y P M H A P N R R R R W D I I E A L K R S Y R I D F S G L E D D G L A L E  
UniRef90\_UPI000454B341 I I E A P M A W R S R F F E Y R A Y R S I I K D Y F H R G A K W T A A P K P T  
UniRef90\_U1JYC2 L I I Y P M Y A S N R R E I R R D I I D F L S A H Y N D Y S H L T A E E I F L E  
UniRef90\_UPI00047A67B7 K I L F P M A A P N R R L E R R L Q N N F F Y Q N I F D Y T S Y E N E N Q F L E  
UniRef90\_UPI000237B510 H V V Y P M F V P S R R R E R R A D R E Y R V Q D V I D Y S G L E H D D L A L E  
UniRef90\_UPI0003U7Q0 D V A L Y P M F A E N R R R E R R R I A R L E S E G F K I N N I E D E A L Y L E  
UniRef90\_U1KM00 L A L Y P M Y A K N R R R E R R T D R E Y R V Q D V I D Y S G L E Y D D L F L E  
UniRef90\_G1DTC4 I I E T P N V I R G R F L E A H S Y R E I L M E Y F K A G A K W R E D E P V F D  
UniRef90\_C6WFN3 V I E A P M A L R A R F L E S L A Y K E L L V E Y G P S G E R L R D L E P V F D  
UniRef90\_P29780 A L L Y P M C A L N R R R R E S D I L L E A L G Q Q F T P R E I G H E Q Q G R F L E  
UniRef90\_W8EUW5 M Q I F S M L A P N R R K E M I E H L S E T Y E L T A D F S Y L E N K E I F L E  
UniRef90\_UPI0003B536BB H L V L Y P M C G A N R R T E R L G E A T K K D F T D D M S Y E K E S K F L E  
UniRef90\_A0A023BBF0 V L M P K Y G R E H R S S E I S E T L R Y L R A C G F N H V L Q D V K G G S A D  
UniRef90\_C9ZV18 H V I Y P M H A Q N R R Q E R R G D I D M L K Q A Y R V Q D I V D D Q L Y L E  
UniRef90\_K6XTF8 L A I Y P M F A P N R R R R W D V I E S L K K N Y R I D Y S G L E Q D D L A L E  
UniRef90\_A4ERG0 H I I Y P M F A E N R R K E R R S D I I D M L K Q K Y R V Q D L E H D G L Y L E  
UniRef90\_F4ALF4 H I I Y P M F A E N R R K E R R S D I I D M L K Q K Y R V Q D L E H D G L Y L E  
UniRef90\_V9Z5X0 H I I Y S M Y S R N R R R E R R A D V I E M L K H E Y R V Q D V I D D E L F L E  
UniRef90\_UPI00036E5BE5 R L I Y Y P M N L R K E R R N D L V D L F F E A G F R V E E I V D L T F F L E  
UniRef90\_W4RW19 R L L Y P M Y S P S R R R E R R D D V I Q L L K D T Y R D R E V D H G Q F L E  
UniRef90\_UPI00038202F6 M Q I F S M M A P N R R E H M I Q H L T E T Y E L T D D M S Y L E D K E I F L E  
UniRef90\_A1ZS16 V V I L Y P L Y A P N R R E E R L E Q Q F D K Q I L L D F S P Y E S S G K Y L E  
UniRef90\_Q8DN30 V I T L N P L Y W P A R H D E T L L M K A V Y L F H W W G D P E T D Q G R A T L E  
UniRef90\_F4H0W3 H V L Y P M T C P N R R R E R R A D V I E M L K T E Y R V Q D V I D D D V F L E  
UniRef90\_UPI00016A3717 M Q I F S M L A P N R R K T P E I I S D L K K E Y K L S D N Y Y E D Q N I F L E  
UniRef90\_UPI0003688480 H V V Y P M Y S Q N R R A E R R Q D V L D M L K H G Y R V Q D I D D D L F L E  
UniRef90\_UPI0003B536BB P I I G N M S L K L R R G E E V L N E I Y Y N L N Y P M A R A R W V K F V M E  
UniRef90\_I0A0A2 L K L F P M K D E N R R R E R R E D I I E F L K H K H P N L V V I E R Q D P K F L E  
UniRef90\_UPI0003818D86 H V L F P M Y A P N R R R E R R A D V I E L L K A R Y R V Q D V I D D G L F L E  
UniRef90\_C4RL44 H V I Y P M K A E S R R E R R P D V I E M L K A R Y R V Q D V I D D G L F L E  
UniRef90\_UPI0001XGS4 H V I Y P M K A E S R R E R R P D V I E M L K A R Y R V Q D V I D D G L F L E  
UniRef90\_X0THV1 E H T W T D E E K T K R L H N W E F Q L S E K E P L W D  
UniRef90\_F3JH9 H I I Y S M Y S P S R R R I E M L K K E Y R V Q E V I D Y S G L E Q D D L F L G  
UniRef90\_Q31CK0 E I L T Y P M Y A Q S R R A E Y R I I D F L T D Q Y K D Y S F L A K E N S F L E  
UniRef90\_D6GRZ3 M V V Y P M F A E N R R Q A E I R A K F R A T V E K I A I D Y S K N R E N Q I L E  
UniRef90\_M4ZVY2 H V A V Y P M C T P N R R L E R R Y D V I D M Q D V I D Y S G L E H D D L F L E  
UniRef90\_W1Z1D5 L V M Y P M Y A E N R R L E Y R K D I I D F L T N H Y K V L S V T D E N A F L E  
UniRef90\_UPI000374B7F2 F Q L F S M N A E N R R E K T T E M I N Y L S Q E Y T D L S E Y E K G E F L E  
UniRef90\_UPI0003F609BA H V A I Y P M Y P R N R R I E M L K A E Y R V Q D V I D Y S G L E N D G L F L E  
UniRef90\_D3B1R6 L V L Y P M L H L N R R L E R R E N I I R F L M S R K D N V K L I D D N I F L E  
UniRef90\_E6WKH2 L T L F P M E A P N R R R E R H I I A A L A Q R F H L D L S G W E Q Q G E Y L E  
UniRef90\_UPI00038302EC L T L F P M E A P N R R R E R H I I A A L A Q R F H L D L S G W E Q Q G E Y L E  
E M M F D

UniRef90\_A6GZ64 UniRef90\_B1ZQ27 UniRef90\_W4LTD9 UniRef90\_J5XMS1 UniRef90\_S7JKR3 UniRef90\_F9MSF2 UniRef90\_UPI0003799D43 UniRef90\_S2DY25 UniRef90\_F4XW17 UniRef90\_A0M564 UniRef90\_I3YT24 UniRef90\_A0A059KKB3 UniRef90\_UPI00031F16E4 UniRef90\_A0A010Z2M2 UniRef90\_UPI00037750DF UniRef90\_UPI00036425B8 UniRef90\_B1L3J0 UniRef90\_F4AYJ6 UniRef90\_V3TTK0 UniRef90\_D7C288 UniRef90\_C1E6G5 UniRef90\_D4CWJ0 UniRef90\_I5C903 UniRef90\_UPI0003B5447E UniRef90\_F0IEM0 UniRef90\_UPI00047CBAE1 UniRef90\_UPI000425BA20 UniRef90\_UPI0003B737F7 UniRef90\_I7DF21 UniRef90\_UPI0002003290 UniRef90\_C1DBM8 UniRef90\_U0EKZ5 UniRef90\_G7LMU7 UniRef90\_UPI0003B72461 UniRef90\_H3NQQ1 UniRef90\_UPI00035E0396 UniRef90\_R7XZA9 UniRef90\_UPI000469B736 UniRef90\_E4RSA9 UniRef90\_UPI00037285A2 UniRef90\_F4YA69 UniRef90\_A0A017H9F8 UniRef90\_UPI000288E816 UniRef90\_F6GCZ0 UniRef90\_UPI00029AAD91 UniRef90\_UPI0003B4209A UniRef90\_F3BIQ2 UniRef90\_UPI000472B31F UniRef90\_A3XB02 UniRef90\_UPI000454B341 UniRef90\_U1JYC2 UniRef90\_UPI00047A67B7 UniRef90\_UPI000237B510 UniRef90\_A3U7Q0 UniRef90\_U1KM00 UniRef90\_G1DTC4 UniRef90\_C6WFN3 UniRef90\_P29780 UniRef90\_W8EUW5 UniRef90\_J4WU14 UniRef90\_A0A023BBF0 UniRef90\_C9ZV18 UniRef90\_K6XTF8 UniRef90\_A4ERG0 UniRef90\_F4ALF4 UniRef90\_V9Z5X0 UniRef90\_V9WX50 UniRef90\_UPI00036E5BE5 UniRef90\_W4RW19 UniRef90\_UPI00038202F6 UniRef90\_A1ZS16 UniRef90\_Q8DN30 UniRef90\_F4H0W3 UniRef90\_UPI00016A3717 UniRef90\_UPI0003688480 UniRef90\_UPI0003B536BB UniRef90\_I0A0A2 UniRef90\_A4RXL6 UniRef90\_UPI0003818D86 UniRef90\_C4RL44 UniRef90\_A0A021XGS4 UniRef90\_X0THV1 UniRef90\_F3JJH9 UniRef90\_Q31CK0 UniRef90\_UPI0003D6GRZ3 UniRef90\_M4ZVY2 UniRef90\_W1Z1D5 UniRef90\_UPI000374B7F2 UniRef90\_UPI0003F609BA UniRef90\_D3B1R6 UniRef90\_UPI0003E6WKH2 UniRef90\_UPI00038302EC

130 140 150 160

G G S I V L D N D K A Y C A L S P R A D E E L F I E F C E D F E Y T P V I T V E  
G R D V L R I G R T L F V A P T A T T N A E G I A D L S A I V F G Y E V V R E V E  
A A D F T R F G R D I L K A Q R S H V I N D L G L I Q W M Q R H L G E D F Y R V H T V V K  
G T G A M V L D R H I R K A Y C A L S A R A S E E L F I E F C E D F E Y T P V I T V E  
S T G V M V M D H T I Y A A L S Q R S D R E V L E D Y A Q R I G Y S R V V T V V L  
G T G S M V L D R V H Y C A L S P R S D R A L F E S F C Q G D F A Y E A V P  
G T G V M V L D H V H Y V C R A S R S H P E V M A A F S A H L G A F W F D A V D D  
G T G S L V L N K I A Y A C R S D R T H P V P L Q Y F C R L M E Y E E V S T I D  
A A D F T R F G R D I L K A Q R S H V I N D L G L I Q W M Q R H L G E D F Y R V H T V V K  
G T G S L I L D R E H Y C A I S P R A D E E L L I E F C E D F E Y L P V I T V D  
G G S L L L D N H K A Y C A L S A R A D E E L L I E F C E D F E Y L P V I T V D  
G T G A M V L D Q V G R L A W V A R S R R A D P V L L E R F C A Q F F G Y E P V L  
A A N I M R C G K D V F F N I S N S G N H T G F E W L N R T F G D F N F H P M S  
G T G S M V L G R V A Y V A R S F R S H D R A V A M V C R D L G Y E P V V S L D R  
A A N I L R C G R D L F Y Q V S P R A D E E L G Y R W L R N A L E G D Y R V H R I  
G T G S L V L N R K A Y C A L S P R A D E E L M I E F C E D F E Y T P V I T V D  
G G N F I V V R G K L F T G I G I R S N R A A I E L I K E Y F S L K G V V P L P  
G G S I L M D N E R A Y C A L S A R A D E E Q L F L E F C E D F E Y T P I V  
G G D Y Q E N E F V S V I N V G F R T E E Q T H F L L A S G L L K T D V V T W R  
A A N M M R C G T D L L Y L V S D S G N E L G W K W L Q S A L G D Y K V H P C R  
G T G S L V L N R V A Y V A I S E R S D K G L A E H W G K L N K Y E V V S F D  
G T G A L V L N K K A Y C S L S K R A D E K L L D I F C E A F H S Y Q T I N D E  
S G Q F L R A A H R I Y A C R S E R T H E V P L R Y L S E L L E G Q R Y P I Y H  
G T G A M V L D R H V S R V A Y A A V S H R A D T N V L E R F C T D F F Y E P M A  
G T G A M V L D R H I R Y C A L S P R A N E E L L I E F C C E D F F E Y T P V I  
A G S V I L D N R K A Y C A L S Q R A D E E L L I E F C C E D F F E Y T P V I  
G T G V L I L N R K A Y C A L S V R A D E E L L I E F C C E E F F E Y S P I L  
G T G A M V L D N I N R V A Y S A K S F R A S E V I L E R F C T H F N F E P M V  
G T G A M V L D H I L G R I A Y T V K S N R A D P V L L E R F C T H F N F E P M V  
G T G A M V L D R K A Y C A L S P R C D E D V F K K F C K E F G F V P V A  
S T G V M V V N R T I Y A A L S Q R C D R E V L E D Y A E R I G Y E R V V S F Q  
G T G S L V L C D H E A Y V C H S S R S S P E V M A E L K I T T G Y Q A V H A Y D  
G T G S M V L D H I D R V A Y T A R S N R A N A I A L E R F C T H F N F E P M A  
G T G A I V F N K K A Y C S L S K R S D R N L F E E V C D K L G Y K A F P F V S  
G T G M I D R P H R V I Y A C R S H R M S E R L L E M V C Q R F G Y T A E V  
G T G A M V L D H V S R V A Y T A R S H R A D S A V L E R F C T D F N Y E P M A  
G T G S M V L N K I A Y C C A S E R S S V E V L D I F K E E L D Y S L V F F H  
G T G S L V L D R M N R I A Y V A R S R T H P D V L K A W Q K V D Y E L V L  
G T G S L V L D R Q N R I A Y S E R A T K E A I G D W C D A M D Y K P F N A F D  
G A D L K W L Y G N V Y V G A G N R T N G A A L D W I A K T F N C E I K  
G T G A M V L D H V A Y A A R S M R T N E V A L E R F C T H F N F E P V I A V Y  
G T G V V V W N S T A Y A S L S K R C D K D E F L K F A D E F K L E K P I F K S K  
G T G S L L L D R K A Y C A L S P R A D E T L F I E F C E D F E Y T P I V T V D  
G T G A M V L D H V S R I A Y S N R T N E V A M E R F C T H F N F E P L V A A D  
G T G A M V L D H I V S R V A Y T A V S H R A D T H V L E R F C S D F N Y E P M P  
G T G S L V L D H Q Y A A K S K R T T Q S V V N T V C N L L A L K P V I D E K  
G T G S M V L D R R Y Y A C L S E R T H P D V L K A F G E A M G Y E L V S F H  
G T G A M V L D H I Y G R I A Y T V T S N R A D P V L L E R F C T H F N Y E P M A  
M A D E L Y D Q D Y P I R S V D D R H R L A A Q G K F V T  
G T G S M V I D R V V Y A V E S K R T N A V L V N Q V A E I E N A Y D K N K V P  
G G S L L I D N R V V Y A A R S E R T Q E A P L L H F C K I L F D A F V E P N S  
G T G A M V L D H V G R I A Y T V R S N R A D P V L L E R F C T H F N Y E P I A  
G T G S L L I D N E K V Y C A L S D R A D E N L V I E F C E D F E L F P V I T V D  
G T G A M V L D H I E R V A Y T A R S K R T D S H V L E R F C S H F N F E P M V  
A A D C S R F G R D I F V Q E S M T T N R A G I R W L K R H L E R F R V H D I H  
A A N V L R F G R D L V Y L I S S T S G N E L G A Q W L Q T L L G D F K V H V C R  
A A N V L R L G T D L L Y L V S D S G N E L G A R W L Q S A L G A Y T V H P C R  
G G S I I F D H L H H Y A C L S A R T E Q A L F A E V C I R L G Y R P V A  
S T S M V V N R L V Y A G I S P R T N A V Q L T I W C R N N D F E L V L  
G T G S M V L D H E C F S A I S P R T D S Q L V A E W C A K M G Y E P I L  
G G D F V S T T H G I L M G Y G P R T N K L C M M A I T D A S R A L N I V P I E  
G T G A M V L D H I E R V A Y S N R T N P L A L E R F C S H F N Y E P F D A F D  
G T G A M V L D H I E R V A Y T V T S N R A E P V L L E R F C T H F N Y E P M A  
G T G A M V L D H I E R V A Y S N R T N P L A L E R F C S H F N Y E P M L  
G A G C M R L G R D V L V N V A N H N H E L A L R W L R D N I R D L R F H R L D  
G T G A M V F D H L S R V A Y T A R S N R A D P I A L E R F S T H F N F E P M V  
G S M V L D R Q H K I Y A C K S D R T H P E P L H Y F Q Q L M G Y K L V E  
G T G A M V L D H P A K V A Y M A R S N R A D A R V L T R F A S D F G F E P L A  
S T S M V V N R L V Y G G I S P R T N A V Q L L W C R N N N Y E L V L  
S G S M I I D R P H I Y A C R S E R T H E Q V L L Q V V A E K L E Y L L F D A V D

N  
G G D V M P V G G G V V L V M S E R T S H H A I T Q L A D A L F E Q V V V A P Q  
G T G A M V L D H V A R V A Y T A R S R R A D P V A L E R F C T H F N F E P I C  
G T G S M V V N N I V Y S G L S P R T D K D L L K S Y C K N N S Y D L V L  
G T G A M V I D H L E R V A Y A A R S K R T S E I L L E R F C T H F N Y E P I V  
G G N F F I I G V A L L T G I G V R S N Y A T F K F L G E L P D V R I I G V P  
G T G S L V D H E A Y V A L S E R A H E E V V A E A E N L T P I T F K A L D  
G T G A M V L D H V A R V A Y V A R S R R A D P V A L E R F C T H F N Y E P M V  
A A N V L R L G R D L F Y Q V S R S G N E F G L R W L E R L L G D I R V H P L R  
G T G A M V L D H V A Y A V R S D R T D P I A L E R F C T H F D G N G V P I Y H  
A A D A M R F G K D I A F H Q G S C V T N K G G M D W L K R M C A S L G L R K P D  
G T G A M V F D H L S R V A Y T A R S N R A N P I A L E R F S T H F N F E P M V  
G T G S L V I D H F A Y A V E S K R T T Q S V V N T V C E Q L K L T P V V A Y D  
G G S I V I D N K F A Y C T L S P R A D K E M F D K W C K E T G H T G V T F V S  
G T G A M V L D H L D R V A Y V A R S H R A D P I L E R F C T N F G F E P I D  
G G S L V I D H P H A Y A V E S K R T K T V V N T V C E Q L K L P V V D E Q  
A T S M V V N R V V Y A A V S P R T N K D L T I K W C K E N D Y E L V L  
G T G A M V L D H M A R V A Y T A R S N R A D P V L L E R F S T H F N F E P I V  
G T G S L V N K Q V A Y M C V S Q R S H K P L A M E W A E L G Y K L I T F T  
G T G S L V C D H Q H R I A W V C R S R S A R V L Q A W Q Q S G Y R V I E  
G A Q C L R I L G R D V I T N V A T R N H E L A C D W L E R H L E G F R I H R V H

UniRef90\_A6GZ64 N E R K L I Y H T N V M M C V A D T F C A D C I D D K K E R K M V L D S L K S D  
UniRef90\_B1ZQ27 L H A C A H L K L A A S F V P H Y L V L N A A W A N P K Q F G D L  
UniRef90\_W4LTD9 F P G P I H M D A T V V P L G E G R V L S C P P R P C L S P D L L E M F E K A R  
UniRef90\_J5XMS1 F K A F Q H A D T N V M M L G E T F A I I C P E D K S E R K N V L H H L K E D  
UniRef90\_S7JKR3 P S G Q P I Y H T N V M M V G E S F C V I C D E V I P E F E R R F V V K S L A K  
UniRef90\_F9MSF2 S Q P I Y H T N I L M S I T S T K A L V C L D A L V P E D R D R V E D K I L A S  
UniRef90\_UPI0003799D43 F T G R P I Y H T N V M M V G R T L A V V C L E S I H D L A Q R Q V E Q K L T D S  
UniRef90\_S2DY25 V S S I Y H T N V M M H V G S E L A V V C S I P L A T E K L K V Q E F L E K T  
UniRef90\_F4XW17 F R D P I H M D A T V V P L G E G R V L S C P D R P C L S P D I L E M F K Q G  
UniRef90\_A0M564 F N P I Y H T N V M M C V A E A V I C L D T I D D K K E R K N V V K H L K M D  
UniRef90\_I3YT24 G K R L P I Y H T N V M M C L A E K F C V I C L D T I D E P K N I V Q H L K K D  
UniRef90\_AOA059KKB3 F R P V I Y H T N V L M C I A T D F V L V G A D L I A S P Q R A E V L R R L H D S  
UniRef90\_UPI00031F16E4 I C S D H V G T T M Q L L R P G L A L I N G S R M A D I P H Q V K H W E L V F  
UniRef90\_AOA010Z2M2 S R G A P I Y H T N V M M S V G S T V A L V S F E H R A E R D A V E R R L A A S  
UniRef90\_UPI00037750DF G V I Y P Y H I D S T I S L L R E G V L L N P D R I H D L A Q L P E P L R S W E  
UniRef90\_UPI00036425B8 G E R K Q I Y H T N V M M C V A E T F A I I C P E D K K E R K M V L D N L R K D  
UniRef90\_B1L3J0 R T G A V H L D V V M M N A G P C V F L M G F Y S F L K F G D N I D F V D A G S  
UniRef90\_F4AYJ6 F T P I Y H T N V M M C L A E E F C V I C L D T I D D K K E R K N V L K H L K A T  
UniRef90\_V3TTK0 N P E Q F H L D H Y V C L L R E D A V I L D T R R A D A D R S T V S I Y R R T P S  
UniRef90\_D7C288 I Y T G T H I D T I V P L R P G L V L L N P E R V N D K N M P D Y L R D W D H  
UniRef90\_C1E6G5 A K D I Y H T N V M M S I G T E A A I L C K D S L S T E D W E K V S S S L T N T  
UniRef90\_D4CWJ0 R K S I Y H T N V M M A M G E N Y A I L C A D S I D N E E R A A V I N E L E K D  
UniRef90\_I5C903 T N V M M H I G K N L A V V A L D T L P S K A E Q H L L L Q Q L Q E A G K A I L  
UniRef90\_UPI0003B5447E F V P V I Y H T N V L A C I I T D V A L V A L G M I P D A Q R R A E V R D R L E V N  
UniRef90\_F0IEM0 F K A F P I Y H T N V M M A L G N T F A I I C P E D K K E R K N V L N H L K E D  
UniRef90\_UPI00047CBAE1 F T P I Y H T N V M M C L A E T F A V I C L D A I D D K K E K K N V S H L K Q D  
UniRef90\_UPI000425BA20 F H A F Y H T N V M M C V A E E A V I C A D C I D D T K Q R K S V L K H L K Q D  
UniRef90\_UPI0003B737F7 F E A I Y H T N V M M C I C S K A L I C S K M I K G Q R R T A V L K R L T E S  
UniRef90\_I7DF21 F R D V Y H T N V L M G I T D Y A L I C L D M I T D P T R R V E V A A R L E E T  
UniRef90\_UPI0002003290 M P D V M H L D T L M T M V S P D T Y L R F P G F T E V I T V A I E P A A A G D  
UniRef90\_C1DBM8 F H G F Q I Y H T N V M M A L G E T V V C L S A I D D L T E R A L V K E L Q G D  
UniRef90\_U0EKZ5 T A G K P I Y H T N V M M I G E H F C V I C D E V I P E F E R R F V L K S L A K  
UniRef90\_G7LMU7 Q C N Q P I Y H T N V M M V G K K Y A V V C L D A D N H E A Q Q V K A S L T A S  
UniRef90\_UPI0003B72461 F V P I Y H T N V L M S I A E R Y V L I G S E L I P Q R R A E V L Q R F E A S  
UniRef90\_H3NQQ1 H Q E I Y H T N V M M S I T S D F A F I A E D L I D E E Y R Q T I I S E L S K  
UniRef90\_UPI00035E0396 F D P I Y H T N V M M A L A E D V A V I C V A S V P E E Q R G R V L T S L R S S  
UniRef90\_R7XZA9 F V P V I Y H T N V I A C V I G T D V A L I A L E M I P D E V R R E Q E R L S V N  
UniRef90\_UPI000469B736 A T D I Y H T N V M M C V A T H Y A V V C L E A I N D N E R E T V I N S L T S T  
UniRef90\_E4RSA9 Q R D N L V I Y H T N V M M S M G D T F C V I C I K D P D Q R L M V K Q K L E K T  
UniRef90\_UPI00037285A2 Q R G G V I Y H T N V M L A I G N E V A L V C L D A V T D P G E K T K F L T G K  
UniRef90\_F4YA69 F P S T I Y H L D C N V F P L G P D T E A C  
UniRef90\_AOA017H9F8 H T N V M C I G T R E A M I G L D T I R A P A R A E V I A Q R L L A E S  
UniRef90\_UPI000288E816 D Q G S V I Y H T N V M M V S E K F T L I A D E L I V E N K G E V L K R L L A E S  
UniRef90\_F6GCZ0 G K R M P I Y H T N V M M C L A E T F A V I C I D D K K E R K N V I K N L Q D D  
UniRef90\_UPI00029AAD91 E V I G R L I Y H T N V L M C V G T S F A M I S L E T L H R Q R E V R K R L T E N  
UniRef90\_UPI0003B4209A F V P V I Y H T N V I A C I G T E V A L V A L D L I A D E R Q R R E V R R L E  
UniRef90\_F3BIQ2 G T A V Y H T N V L M C V A T E F V M V G L N M V P S E E R K A L V T H F L Q S  
UniRef90\_UPI000472B31F A S D I Y H T N V M M N V G D F A V V C L E S I N P D E R Q K V R E L E Q T  
UniRef90\_A3XB02 F R E V I Y H S N V L M G L G T D F A M I C L S M I S D P T R R I A T R L E E T  
UniRef90\_UPI000454B341 T E F E P C F D A A F I R A G R D I F A Q R S Q A Y L D P L V L Q I E L F K K A  
UniRef90\_U1JYC2 V I Y H T N V L M C V A T D F A M I C L D M V P E Y Q R A Q L N R F T Q S  
UniRef90\_UPI00047A67B7 E N R V I Y H T N V L M A L S P K V A V I C L E A I P E G A E K T Q E T L A D T  
UniRef90\_UPI000237B510 F R D V Y H T N V L L G I G T H Y A I L C L D M I S D P E R R A T V R R L E E S  
UniRef90\_A3U7Q0 G E R K A I Y H T N V M M C L A E V I C L D T I D D K K E R K N V L D H L R K D  
UniRef90\_U1KM00 F V P V I Y H T N V L L C V G S D Y A L G G F E M I V E P E R R I K H R L Q L A  
UniRef90\_G1DTC4 F P F P S H I D C T F V P L A P G V V L V N P D R P I K E G E E K L F M D N G W  
UniRef90\_C6WFN3 I D H G S H I D T S V V A L R P G L L L C N P E F D K W E V I Y S P P M V G A D  
UniRef90\_P29780 L Y S S T H I D S T L V P L R P G L V L V N P A R V T D D N L P G V L R T W O R  
UniRef90\_W8EUW5 F H E T I Y H T N V M M C V G T E F A V I C L E S I D A E R T A V V A S L T G T  
UniRef90\_J4WU14 F S P I Y H T N V L M Y V G T D I L G I C F D V I K E E H V D V Y V R E K V N A  
UniRef90\_AOA023BBF0 F T A F Y H T N V L M S V C P E Y A I V C L D V I D P M D R E R V T K A L S A K  
UniRef90\_C9ZV18 M S P A P P L A D V L A F A G K R T L I V Q D T E H G R S A E A A A S A I R K V  
UniRef90\_K6XTF8 E N G V A V I Y H T N V L M C I G T D F V M L G A D M I K N P I R R N E R F E D S  
UniRef90\_A4ERG0 F C D V I Y S N V L M T V G T E F A M I C L A M I D P D R R R E I A S R L E E T  
UniRef90\_F4ALF4 F T A V Y H T N V L M C I G T D F V M L G S D M V S D E T R R N I T R F E A S  
UniRef90\_V9Z5X0 A M A D N H I D S V L V P L R P G L M L L R S P A Y L K Y L P K A M Q  
UniRef90\_V9WX50 F T P I Y H T N V L M C V A T E F A L V G F G T F T N K R A E E V R M R L E S  
UniRef90\_UPI00036E5BE5 F T A V Q Q L K A V M M H I G E K L A V V C L D L A E K L R V K E Q L E Q S G K  
UniRef90\_W4RW19 F Q P I Y H T N V M M C I A T R F A L V G L G S I D P R Q A E A V G A R L R A A  
UniRef90\_UPI00038202F6 F S P I Y H T D V L M Y V G T D I L G I C L D V I K P E H R D F V K Q K V I A  
UniRef90\_A1ZS16 E Q K Q A I Y H T N V M M L G Q D F A V I C L D L A A E R K A V V D K L Q Q T  
UniRef90\_Q8DN30 N R K F M H L D T V F T M V D Y D K F T I H P E I E G D L H V I Y S V T Y E N E K  
UniRef90\_F4H0W3 M R S A M H L D T V M T F V H D V V T A Y P A V V D H V H A F T L R P G T A A  
UniRef90\_UPI00016A3717 F R P I Y H T N V M M S V A T E F A I L G L D I R D P N R R D E I R R R L A E T  
UniRef90\_UPI0003688480 V A P I Y H T D V E M F I G T G V I G I C Y E V I K P E Y R E V I K E K V I G R  
UniRef90\_UPI0003B536BB F D A V I Y H T N V L M C I G T D F A M I G L D A I P D A P R R R E E R L R R G  
UniRef90\_I0A0A2 L A G Y I H L D T A F A I I D P S R V G F Y S A L E Y D R K S G M F R V T E F L  
UniRef90\_A4RXL6 A R G R P I Y H T N V M M V C S S V A I V C A D S I A D P A D R R R V L D A G G  
UniRef90\_UPI0003818D86 F R A V I Y H T N V L M S I A T E F A L V G H G F V D P A R A D E L R T R L R E C  
UniRef90\_C4RL44 I Y G Y T H I D S T I A L L R P G L V L L N P G R I K P D A I P E P L R D W D V  
UniRef90\_AOA021XGS4 T N V L M C I A T G F A M I G A D M M T D S R R R H E V I T R L E R S  
UniRef90\_X0THV1 N H H P W H L D V N L V P L R P G L C M Y N P D W S P R T P E M W D L F K K N  
UniRef90\_F3JJH9 F D A I Y H T N V L M C V A T E F A L V G F D T L T S K A R A E E V R R L M E S  
UniRef90\_Q31CK0 M Q G V I Y H T N V L M C V A T E F A M I G L D M V P N E Q R R Q L V S H L L Q S  
UniRef90\_D6GRZ3 Y Q E I Y H T N V M G I G E K T A L V G L D A I D E K D R A R V R S L E A G  
UniRef90\_M4ZVY2 D S G V P I Y H T N V L M T V G T S F A L I G L D D R R R R D E I V E R L T E S  
UniRef90\_W1Z1D5 G T A V I Y H T N V L M C V A T E F A M I S L N M V P N S Q H K Q L T S H F I Q S  
UniRef90\_UPI000374B7F2 F S S I Y H T D V L M Y V G T Q K V I G I C F E V I L P E Y R D M V R D K V I S R  
UniRef90\_UPI0003F609BA F R P I Y H T N V L M C V A T D F A L L G T Q S L D P R R A Q E V A A R L Q E S  
UniRef90\_D3B1R6 A T D S Y H T N V M M A I C S G V A I C C I D T V E D A V E K Q E L I Q A L S K  
UniRef90\_E6WKH2 F R A I Y H T N V M M S V G I R Y A V V C L E A V V D P E D R L I T S L Q A S  
UniRef90\_UPI00038302EC R L I T D S H I D S W L I A L R P G L L L I R S M D V V D P P E P N M K S F P A Y

UniRef90\_A6GZ64  
UniRef90\_B1ZQ27  
UniRef90\_W4LTD9  
UniRef90\_J5XMS1  
UniRef90\_S7JKR3  
UniRef90\_F9MSF2  
UniRef90\_UPI0003799D43  
UniRef90\_S2DY25  
UniRef90\_F4XW17  
UniRef90\_A0M564  
UniRef90\_I3YT24  
UniRef90\_A0A059KKB3  
UniRef90\_UPI00031F16E4  
UniRef90\_A0A010Z2M2  
UniRef90\_UPI00037750DF  
UniRef90\_UPI00036425B8  
UniRef90\_B1L3J0  
UniRef90\_F4AYJ6  
UniRef90\_V3TTY0  
UniRef90\_D7C288  
UniRef90\_C1E6G5  
UniRef90\_D4CWJ0  
UniRef90\_I5C903  
UniRef90\_UPI0003B5447E  
UniRef90\_F0IEM0  
UniRef90\_UPI00047CBAE1  
UniRef90\_UPI000425BA20  
UniRef90\_UPI0003B737F7  
UniRef90\_I7DF21  
UniRef90\_UPI0002003290  
UniRef90\_C1DBM8  
UniRef90\_U0EKZ5  
UniRef90\_G7LMU7  
UniRef90\_UPI0003B72461  
UniRef90\_H3NQQ1  
UniRef90\_UPI00035E0396  
UniRef90\_R7XZA9  
UniRef90\_UPI000469B736  
UniRef90\_E4RSA9  
UniRef90\_UPI00037285A2  
UniRef90\_F4YA69

210 220 230 240  
G K E I V L T T E D F A G N M L E I Q G A D E R R Y L I M S A S A H K S L T K K E  
V V L G V D E R E P L A A S T L P V N G A D E G T T L V S G S S A Y P K T K E  
R E I L Y P P P P V A D A E N W L S Q M N K L M I D A K Y E R V V E R S E E N P T I Q K  
H K E I I T T I S L E F A G N M L E L Q V L E N A N S G D K L I A M S Q S A Y N A D A F T P Q S  
D K Q V I T T I S L E F A G N M L E L Q V L E N A N S G D K L I A M S Q S A Y N A D A F T P Q S  
G L D L V D I L T T L D Q A G N T L E L V E G Q N K A F L V C S Q R A Y Q S L S R P D E  
G K V I L P I S N A F A G N V M E L V R Q N P A G E A V L A L S T Q R A W D A L S R S D E  
G K K M I P I T T N F A G N M L E L V R C E S G K K Y T V M S A S A Y E D S L S G Q V  
G W E I L Y P P R H M S S R W L S M N L M I D Q E R V V E K S E E P T I K  
N K E I I S I S E E F A G N M L E L Q V L E N A N S G D K Y L I M S A A A H D V L T K E Q  
G K E I I A I S T E E F A G N M L E L Q V L E N A N S G D K Y L I M S A A A H D V L T K E Q  
G R D I T L S E E F A G N M L E L S T S T R E G G R R L A L S A R A A A A L T P A  
F N E P I D I L G Y A F A S V W I S M N V L S I D E K T I I V E K N Q A H K L M E  
G R A V V P L T D E F A G N A L E L R G T G G S Y L L L S A R A Y D S L T S E Q  
H L W C P P M A P A P P G H P L S S E W I G M N L M V R P A G Q V E L T I A  
G K E I V L L T E P F A G N M L E L Q V L E N A N S G D K Y L I M S N A A R E G P L T K D  
V F N E I L G V E V D E G S E I T L V N A L N I G R G K L V V D A Y N E E A S D  
N K E I I A I S T E E F A G N M L E L Q V L E N A N S G D K Y L I M S A A A H D V L T K E Q  
G W R V T E E N D E K M M A A W C A N A F S S G N H I W I N N A A P S R L L  
L W P E M T E T E Y E G K H W V G M N L L V I N E D L V V A D E R Q P A L L R  
G R V I V E I T E C F A C N C L E I V R N W K F P A L V M S T R A Y S V L T R E D E  
K K E I V Y I S E Q F L G N T I E L V N N E G V N I C I M S T A T A Y S V L T D E  
P I K P K Q V Q A F A G N M L E L L A S R S G D T Y T V L S R T A Y K P S Q V R Q  
G R R V V E I T E E E F A G N A V L E L C G R H P D G T Y V M A M S G S A C R S L L Q  
K K E I I T I S N E F V G N M L Q V L K G K D S T Y L V M S K T A Y N Q L T P Q  
G K E L I V I S E A F A G N M L Q V L G M G N R R F L V M S T A A Y R P D Q I A  
G L I I E I T T E E F A G N M L Q V L K G E Y K K Y L V M S T T A H K S L T A S  
G R R V I D L T P E F A G N A L E L T G H S R L L A L S S R A A E V L R A D Q  
S F R V I S P G A S D E A E A L R E L A R D S C N V V A L A P G G Y A H N Q R A  
G K E I I D V I T E D Q I N F A G C N A D A G K R F T I M T K A T Y D C P E Q R A  
D K Q V V S I S L E F A G N M L E L E T V N G D K V I A M S Q S A Y D A F S P A  
G K T I I A I S T H E F A C N M L E L K S V G G V P V E A M S T Q A W D A F S A E  
G R E I I E I L S N D F A A N A L E L E L A T P D K V L A M S A T A Y E A I S P A  
T H E V I A L S G A F S G N V L E L K G E E G K F L T M S T S A Y D A F T K E  
G H E I C D I T M E F A G N M L V R N T A E G K Q F M V M S Q R A L A S L T D E  
G R T V V E I T T L E F A G N M L E L E S D E G K S L I I M S A E A K R S L T F T  
G K N I M E I S L E F A G N M L E L V K N K D K N F L V M S D Q A Y F S L R R E  
R I I G L S Q D D N F G G N A L E V Q T P D G P A W V M S S T A Y N A L D P A

UniRef90\_A0A017H9F8  
UniRef90\_UPI000288E816  
UniRef90\_F6GCZ0  
UniRef90\_UPI00029AAD91  
UniRef90\_UPI0003B4209A  
UniRef90\_F3BIQ2  
UniRef90\_UPI000472B31F  
UniRef90\_A3XB02  
UniRef90\_UPI000454B341  
UniRef90\_U1JYC2  
UniRef90\_UPI00047A67B7  
UniRef90\_UPI000237B510  
UniRef90\_A3U7Q0  
UniRef90\_U1KM00  
UniRef90\_G1DTC4  
UniRef90\_C6WFN3  
UniRef90\_P29780  
UniRef90\_W8EUW5  
UniRef90\_J4WU14  
UniRef90\_A0A023BBF0  
UniRef90\_C9ZV18  
UniRef90\_K6XTF8  
UniRef90\_A4ERG0  
UniRef90\_F4ALF4  
UniRef90\_V9Z5X0  
UniRef90\_V9WX50  
UniRef90\_UPI00036E5BE5  
UniRef90\_W4RW19  
UniRef90\_UPI00038202F6  
UniRef90\_A1ZS16  
UniRef90\_Q8DN30  
UniRef90\_F4H0W3  
UniRef90\_UPI00016A3717  
UniRef90\_UPI0003688480  
UniRef90\_UPI0003B536BB  
UniRef90\_I0A0A2  
UniRef90\_A4RXL6  
UniRef90\_UPI0003818D86  
UniRef90\_C4RL44  
UniRef90\_A0A021XGS4  
UniRef90\_X0THV1  
UniRef90\_F3JJH9  
UniRef90\_Q3ICK0  
UniRef90\_D6GRZ3  
UniRef90\_M4ZVY2  
UniRef90\_W1Z1D5  
UniRef90\_UPI000374B7F2  
UniRef90\_UPI0003F609BA  
UniRef90\_D3B1R6  
UniRef90\_E6WKH2  
UniRef90\_UPI00038302EC

G R E I V D L T T H D F A G N A L S E I E A G R D G P V L L A L V S R R A W A G L R P A Q  
G K E I I S I L T E A F A G N M L E L Q V L E N A N S G D K G N L F V I S K A E G Y P D K I R  
G R E I I D L S N D F A G N A L E L S G S G R V L L A L S R R A L K A L R P E Q  
G R E I V E L S E E F A G N A V E L C G R T P E H I M A M S G R A R R S L T G E  
H H E V I D L S L D F A G N A I E L L Q G N N G R I L A L S Q T A F N A L T T A Q  
N K Y L I E I S L E F A G N M L M V L R N G A Q E K F L V M S T S A Y E A L T P K  
G H E V I D L S L E F A G N V F A L T G T G P L L A L S A R A L Q A L R P D Q  
G W T V V T I P D D H P S K W L S M N V L M L D E K R V M V D A N E I P I Q K  
G H T L I A L S Q A H F C G N A I E L Q G S M G R I L A L S T T A Y Q A P E Q I A  
G K Q V L P I S Q A F A G N L E L F L K N K G K H F W V L S Q E A L Q E T Q K A  
G R T V I D L S H E F A G N A I E L S G N D G L V L A L S S R A L M A L T P A Q  
G K E V I A I S E A F A G N M L Q V L Q G K D A K Y L V M S K A A H D S L N A D Q  
G K K L L E L S E A F C G N A L E L H G D C G R I L A L S Q T A Y D A L N D E Q  
Q F I E A P L P D E M P M F C L A M N V L S I S P K K V I C E E Q E H P L H  
R F D S D Y L A R S I G S S W L D M N L F S V S P E L V V V D R D Q L P L I K  
I E C P A L A G L G Y A G D V M S M L V V R P G L V V V D S R H R E L M R V L E  
G H E I I A I S L E F A G N M L E L R S A A G T P L L A M S Q S A H N A L T P A  
H H D V V E I L S E E F A G N A I E L A K N E A G E L F L I S S R G F N A L N D D  
P R P L I A E I A E D Q A G N T L A L R N S A G S I T T V M S T T A A N A F S T Q  
P W Q I L R I E P N C S I I S H L C G V N S V F D V L V D Q D F P T S M E  
G R E V I M L S S E F C G N A L E L Q S D E Q R L L A L S Q R A Y N A M E T E S Q  
G R E V I D L S M D Q I S N F A G N A F E L T G K T R I F A R A L N D V L T S S Q  
G R E V I T L T A E F C G N A L E L Q S A Q Q R L L A M S Q R A Y D A L T S A Q  
S W D V I Y A P D T D D S N F M D I N L L S I D E N T V V V N S L Y P E L I G  
G R D V I D L S N Q F A G N A I E L S G R D G R L L A L S R K A F D S L T I G E  
V V L P I T I P Q A F A G N M L E L V Q N S Q G K H Y T V L S K T A Y N S L K A G  
G R E P I E L S A E F A G N A I E L G G R D G R L L A L S Q R A C D S L S A A  
N H K V I E L S Q S F A G N A I E L K N D K D E L F L I S S T A Y D A L D Q D  
H K Q I V A L S T E F A G N M L E V Q S T Q G D R L L V M S A R A L K S L T P D  
L K I V E E K G D D E L A Q N L G V E I R C G G G N I V A A A R E Q W N D G S N  
R P V H V T D E D D Y E A E R Q Q V E S G N N A V A L E P G V V V T Y D R T N  
G R T V V A L D A A F A G N A L E L S G R D A R V L A L S R R A F D C L T P R Q  
Y H K V M E I S K E F C G N A L E A K D R D G N L Y L I M S S R A H G A L E K N  
E R D I V E L T H E F A G N A I E L Q G R D G L V L A L S S R A L R S L D A T  
K V K I D E M P R E S Q S P I T M T N A L N L G N G K L A V D S Y N E K A N E  
R R E I T I T D A F C G N V L E L R T A S G E P A L A C S A R A F A F A D D A  
G R E L V E L D S A F A N A M E L S G R G G E R L L A L S R R G L D S L A Q  
L W R S A V G P P T L S E H W I S M N L L M V D E E H A V V D A D Q P E L I A  
G R S I V R L T N E F A G N A L E L Q G R E G R V L A L S M T A L A A L D A N Q  
D W E L I P A R P E G K S W I S M N T F S I D P K T V C V E A H E T A Y C E  
G R D V I D L T N Q F A G N A I E L S G H D S R I L A L S R R A F D S L L P E Q  
Y H E V I E L S G D F C G N A I E L L Q G K G S G R I L A L S A T A F K A L T A A Q  
G N E I I E L T M D Q A G N T L E L K G K D G N F L A L S K M A Y D S L T K E  
G R D V I E L S N E F A G N A F E L T G R H G S I T A M S G R A R R S L T D D Q  
H L E V I L N T N E F C G N A L E L Q G T N G R I L A L S Q T A F N A L T T E Q  
Y H D I F E I N E D F C G N S L E A H N D S N E F F L I M S S Q R A F N A L S D A  
G R E V I D L S P E F A G N A I E L S G R D G R L L A L S Q R A C D S L T A R E  
H H K L I T I N E A F C G N V I E L R H G S E D K K Y L V A S Q T A Y D A F T P E  
G K T L I A I S Q A F C G N I L E L H D G D G H P V I A M S E Q A W D A F T P E  
D N D D L I T S P F I D L N V L S I D P E T V M V N E A G P E L M R

UniRef90\_A6GZ64 Q I A Q L E H I T I L S S S L D T I E A G G G S A R C M M A E I  
UniRef90\_B1ZQ27 R R L R N A G I T T R R V E L S E L H K M E T G L S S L A T I V E P R  
UniRef90\_W4LTD9 F F K E L G L K T I L V D F K D H Y V F G G G L H C A T C D I R R R  
UniRef90\_J5XMS1 I A A I E R H T K I L L Y S D L S T I E C G G G S A R C M  
UniRef90\_S7JKR3 Q R L Q L S G H K L L P F N V K S T I E D G G G S V R C M  
UniRef90\_F9MSF2 Q V Q T L E D L E L L V D I S T I E Y G G G S A R C M  
UniRef90\_UPI0003799D43 Q Q Q L V R Q Y T P V T A D L H T I E T G G G G A R C M  
UniRef90\_S2DY25 Q L N T I K R Y T D I I V P L P T I E K G G G S V R C M M A E I  
UniRef90\_F4XW17 F F K E L G L K P I L V D F K D H Y V F G G G L H C A T C D V R R R  
UniRef90\_A0M564 Q I S R I E K H E I L S S E I Q T I E T C G G G A R C M M  
UniRef90\_I3YT24 V A S I E K H C E I L S S D L T T I E T G G G S A R C M M  
UniRef90\_A0A059KKB3 Q R Q R E R S A P L L P L A V P T I E R A G G S V R C M  
UniRef90\_UPI00031F16E4 I L D H C G L E V I P V S F R H G R T V G G G F H C C S L D V R R Q  
UniRef90\_A0A010Z2M2 R A T L S A H V H L L P V A V P T I E L A G G S V R C M  
UniRef90\_UPI00037750DF T L R R H G L D V A P H K L R H A R T M G G G L H C V T L D L R R E  
UniRef90\_UPI00036425B8 Q V T K I E K H E I L T A N L D T I E A C G G G A R C M M A E I  
UniRef90\_B1L3J0 Y L E R E W G L D V I R V K I P Q V I E A G G G G V R C A S  
UniRef90\_F4AYJ6 Q V K K I E R H K I L S S D L G T I E T G G G S A R C M M  
UniRef90\_V3TTK0 D Q L S A R G Y D I H P L S F S E H Q K Q S G G I H C S T Q L I  
UniRef90\_D7C288 A L E K R G I D V L P M R L T T H A R T L G G S F H C V S L D I R R  
UniRef90\_C1E6G5 Q L E V L R E H G I Y H V D L T T I E D G G G S V R C C  
UniRef90\_D4CWJ0 Q K S L I E K H Y D V I P V D V H T I E K G G G S V R C M  
UniRef90\_I5C903 Q L E K Q S G L L I P E I P T I E R L G G G S V R C M  
UniRef90\_UPI0003B5447E V A E T L E R S C E I V A V D V P T I E L A G G S V R C M  
UniRef90\_F0IEM0 Q I T T L E K H T I L Y S D L S T I E C G G G S A R C M M  
UniRef90\_UPI00047CBAE1 A L E K H C G I V H S S L S T I E T C G G G A R C M M M  
UniRef90\_UPI000425BA20 Q I R A I E K H E I L S A D L N T I E T G G G S A R C M M M  
UniRef90\_UPI0003B73F7F Q I K Q I E K Y E I L S V A I P T I E L A G G S V R C M  
UniRef90\_I7DF21 I A I T E R S A T L L P L S I P T I E T A G G S V R C M  
UniRef90\_UPI0002003290 A N L R K A G I E V V E T P G V E L V R G R G G S H C M T C P V T R  
UniRef90\_C1DBM8 V I E K T S E I I S P D V K T I E T G G G S V R C M  
UniRef90\_U0EKZ5 Q R A Q L S S H K L P F N V Q T I E S G G G S V R C M  
UniRef90\_G7LMU7 Q K A L L A D Y K I V R A P I G L I E T G G G S A R C M  
UniRef90\_UPI0003B72461 Q R K Q I E Q Y K I V A L S V P T I E Q A G G S V R C M  
UniRef90\_H3NQQ1 Q I E K I E K L P I V T V E I D T I E Q G G G S A R C M M A E I F R  
UniRef90\_UPI00035E0396 Q R A M I E K M T I A P S L T T I E L G G G S A R C M M M G E L Y R  
UniRef90\_R7XZA9 V A A I E S C E I V A V D I P T I E L A G G S V R C M  
UniRef90\_UPI000469B736 Q I E N I E K Y K I L A P E L Y T I E T G G G S A R C M  
UniRef90\_E4RSA9 Q L D T M D Y F E I L H T D L N I T I E T G G G S A R C M  
UniRef90\_UPI00037285A2 Q R E A L G A P I I H A P L P V I E K G G G S A R C M  
UniRef90\_F4YA69  
UniRef90\_A0A017H9F8 Q A A L E Y R H A T I L P L A I P T I E L A G G S V R C M  
UniRef90\_UPI000288E816 I I E K D E I L P L D I S R G G G S I R C M  
UniRef90\_F6GCZ0 V K L T I E N H C E I L S S L V K N I S R G G G A R C M M  
UniRef90\_UPI00029AAD91 I R L I E R S A T L L S L D V P T I E L A G G S V R C M M  
UniRef90\_UPI0003B4209A Q L T I E R S C E I V S V D I P T I E L A G G S V R C M M  
UniRef90\_F3BIQ2 I A A I Q K T A K L V P L P I P T I E S A G G S V R C M  
UniRef90\_UPI000472B31F Q R T I L S D Y R I L H T D L K L I E Q G G G S A R C M M  
UniRef90\_A3XB02 I N K L I E S D A T L L P L S I P T I E T A G G S V R C M  
UniRef90\_UPI000454B341 M F E K L G I S T I K V N I R H A N S L G G G F H C W T C D I R R R  
UniRef90\_U1JYC2 V I E K S A K L V A I D I P T I E A A G G S V R C M  
UniRef90\_UPI00047A67B7 T L A Q E G D F L V A I P T I E R I G G G S V R C M  
UniRef90\_UPI000237B510 V A V T I E A S A T P L P L S V P T I E T A G G S V R C M  
UniRef90\_A3U7Q0 I S K I E A H C Q I L S S D L T T I E T G G G S A R C M M  
UniRef90\_U1KM00 I A V L E S C V T L L P L D V T S A I E L A G G S V R C M  
UniRef90\_G1DTC4 E L L D K H G F E V Y P I P F S  
UniRef90\_C6WFN3 R L I E E H G I D V L P L K L R H S R M M G G G F H C A T L D T K R K  
UniRef90\_P29780 R H G V D V L P L K L T H A R M L G G G F H G V T L D I R R  
UniRef90\_W8EUW5 Q R H A L S Q Y E L L P L A I P T I E T G G G S A R C M  
UniRef90\_J4WU14 Q V N K L L K K E L I H S D I P T I E K G G G S A R C M  
UniRef90\_A0A023BBF0 Q K D I L G H I C A V N I P T I E T V I G G G S A R C M  
UniRef90\_C9ZV18 R I G E A G L N P F P V E W T E P R K L G L S M R R V C L  
UniRef90\_K6XTF8 R K I L I E K S V T L L P L E V S A I E T A G G S V R C M  
UniRef90\_A4ERG0 I K T I E N S A T P L P L S I P T I E T A G G S V R C M  
UniRef90\_F4ALF4 R D R L I E K S V A L V P L D V S A I E T A G G S I R C M  
UniRef90\_V9Z5X0 V L E R R G F T V V P V R H R H R R L F G G G F H C F T L D T V R R  
UniRef90\_V9WX50 Q R Q R E R S A R L V P L D V P T I E M A G G S V R C M  
UniRef90\_UPI00036E5BE5 Q K H I L S K Y T L I M P N I P T I E M G G G V R C M M  
UniRef90\_W4RW19 Q K R R I A S A R L L P L A V P S I E L A G G S V R C M  
UniRef90\_UPI00038202F6 Q I D K L L E K E I I H S D I P T I E K G G G S A R C M  
UniRef90\_A1ZS16 Q R N A L E K V K I V A P P L Y T I E D H G G S A R C M M  
UniRef90\_Q8DN30 T L L E E Y G L R L I K I R G S E L V R G R G G P R C M S M P F E R E  
UniRef90\_F4H0W3 R L L R A A G I E T V E I A G G E L G R G R G G A H C L T A P L V R  
UniRef90\_UPI00016A3717 R R L I E R S A Q M L P L D V P T I E L A G G S V R C M  
UniRef90\_UPI0003688480 Q L S M L N N F K T I H S D L P T I E K G G G S A R C M  
UniRef90\_UPI0003B536BB Q R A V L R H V A L L P L D I P T I E H A G G S V R C M  
UniRef90\_I0A0A2 Y I E K T Y G L I E L L R I K I P Q I E A G G G V R C S T R E L W E  
UniRef90\_A4RXL6 Q R A R L R D D R V V A V D F S T I E R G G G V R C M  
UniRef90\_UPI0003818D86 R R L I E R S A R L L P L D I P T I E L A G G S V R C M  
UniRef90\_C4RL44 A L I E G R G I T V L P H R L R H A Q L L G G G F H C V T L D T V R  
UniRef90\_A0A021XGS4 R A M I E S V V I V P L D I P T I E R A G G S V R C M  
UniRef90\_X0THV1 Q L D K L G M E V V P I P Y E K V I P F G G A L H C T T L D V Y R E  
UniRef90\_F3JJH9 R R R I E Q S A R L V P L N V P T I E M A G G S V R C M  
UniRef90\_Q31CK0 I K V I E K S A K L V P L P I P T I E S A G G S V R C M  
UniRef90\_D6GRZ3 Q V E K I E K T P I L V D I N T I E Y G G G S V R C M M  
UniRef90\_M4ZVY2 V A R I E A S S R T V A V D L P T I E L A G G S M R C M  
UniRef90\_W1Z1D5 K A A L Q K T A K L V P L P I P T I E S A G G S V R C M  
UniRef90\_UPI000374B7F2 Q K N Q L S K Y S I H T D L T T I E K G G G S A R C M  
UniRef90\_UPI0003F609BA Q K A R I R S A R L L P L A V P T I E M A G G S V R C M  
UniRef90\_D3B1R6 Q L Q H V D G F I S K P I P T I Q T V G G G G I R C M  
UniRef90\_E6WKH2 Q Q Q M L S A Y R I V R A P I A V I E Q G G G A R C M  
UniRef90\_UPI00038302EC V L I E G H G F T V V P V R H R H R R L F G G G F H C F T L D T V R E















```

UniRef90_D8TIL7      Q R R V M R R H D L V H A P I D T L E R G G G G V R C
UniRef90_L7WRM3     K W L E S Y G Y K P I P M E L C N M N F C G G G F H C T S L D L E R
UniRef90_UPI0004669E48 T L L T T H V K P V I A L D T T E T L G G G G A R C M I L P L R
UniRef90_W1RXT2     K K Q I Q Q S N T L V P L A V P T I E S A G G S V R C M
UniRef90_M5GYI8     V I Q K T A K L V P L P I P T I E S A G G S V R C M
UniRef90_A0A023V0Q4 Q Q A L I G G Y A R L P I D I I E D L G G G G A R C M
UniRef90_D6A5M5     K H R F T V V P V Q H R H R R L F G G G F H C F T L D T V R E
UniRef90_B9JMI3     L T V I K E S A K P V A L D I P T I E K A G G S V R C M
UniRef90_Q5LRK7     V I E R S A Q L L P L A I P T I E T A G G S V R C M
UniRef90_M3KEK8     T L E Q T A K L L P F A V P T I E L A G G S V R C M
UniRef90_I1DST1     K A Q I E Q S A K L L P L D V S S I E S A G G S L R C M
UniRef90_V7EP22     Q I D M I S A R L L P V A I P T V E R A G G S V R C M
UniRef90_D3F7K5     T L E K H G F T V I P V R L R H S R L Y A G G F H C L T L D V R R
UniRef90_F3NRX3     K H A F T V V P V R H R H R R L F G G G F H C F T L D T V R E
UniRef90_A0A058Z102 Q I Q T I E K H G I V A A D L G N L E R I G G G S A R C T
UniRef90_A4IWM6     Q L A L I S K Y T P I A C D I T N I E V G G G S A R C M
UniRef90_UPI00037C7BB0 T L E H E G F T V V P V Q H R H R R L F G G G F H C F T L D T V R E
UniRef90_UPI0002882D32 L I K K L K E Y K T I P V K L R H M Y T Q G G G I H C A T L D T V R E
UniRef90_UPI0003B47EDF N R A R L E G M M P L A L D V P T I E L A G G S V R C M
UniRef90_K2AUU0     Q R E V M L E H T L V H S D I S T I E R G G G G V R C
UniRef90_R7QS18     Q L Q R L
UniRef90_K1U2Y1     V F Q Y I Q K H T V I Q V H V G E I S T M G G A I N C L T
UniRef90_J8GCR6     M F E K L G I S T I R V N I R H A N S L G G G F H C W T C D I R R R
UniRef90_H1A3K5     A V L S R F G I Q T V A V P F D E H H K Q F G S L H R A T V P L R
UniRef90_UPI00036779AA Q L D K L G F E V V
UniRef90_Q2JCW6     P L A L L R G R K V V G V N S L I L A E G G G G I H C I T
UniRef90_X1R347     V L D R I F D R L V V A N F D I I E R G G G G V R C
UniRef90_F4Y2S9
UniRef90_Q018Y7

```

