

1 10 20 30 40  
QUERY F Q G M W E I Y D A M I N G I P E D F L V D E L V C G T T H S V I R S G N G V G G  
UniRef90\_E1REE3 WEI Y D A L L I E G I P D D V I V D G D V V T I G G A E L T Y V Q I D G G G G G  
UniRef90\_A0YTP0 M I N P R E I Y D L L L D S K S A S P E D D L T V L Q E V I I G G L T W T L C K A E S G G M G G  
UniRef90\_Q0AWE1 M W S I Y D L L L D S A S P E D D L T V L Q E V I I G G L T W T L C K A E S G G T G G  
UniRef90\_UPI00031264BE M A N P R Q I Y N L L L D S A S Q T D T A V V K E T I I G G L T W T Y C Q V E G I G G  
UniRef90\_G0A3J5 M W L Y D A L L D A M P S S E A V V D N L M I G L V W T M C K T K D E N L V G G  
UniRef90\_E6U457 M W E I Y D A L L D A A V P P D L E V E D C I V G L N W I L V R S A G G R A T G G  
UniRef90\_Q2RIK1 M P N P W E I Y D A L L D A I P E E V T L T E T V I I G G A Q W T R V N S A G G I G G  
UniRef90\_I6XS56 M I N P K E I Y D L L D Y G Q T N T P I T T E V I I G G L T W T L C K A E S G G I G G  
UniRef90\_B1WSC7 M W E I Y D A L L I E E I P D E I T V D D V V V G G E M T Y V E A N G C I G G  
UniRef90\_I7LK66 M W K I Y D D L I N A I P E D L T V K E C L V S C H W T L V R S E R G L V G G  
UniRef90\_K4LE99 N Y W N L Y D D E I I A G L P Q D L C I D G Y V V S C P W T Y V R A G D L V G  
UniRef90\_F5RMN6 M A N P K R L Y E L L L D Y A C S S D A V V D N L M I G L V W T V C Q S Q G R A G G  
UniRef90\_UPI00037F553C M W K I Y D D E L I A A V P F E L R V T D C M V G L N W I L V R S T E S T G G  
UniRef90\_UPI0003603677 W D L Y D D L L I D A I P R D L L V V S R A A Q N P R W T R V Y T E T S S C G G  
UniRef90\_U7KVQ1 M E N P A R I Y E L L L D Y A G S D T Q V T E L S I G P V W T V C K A Q H T G G  
UniRef90\_G3I251 P R E I Y N L L Q K S S Q T N G L V Q E I I I G L T W T L C C N A E G I G G  
UniRef90\_UPI0002D3C8A0 M I S P R E I Y N L L L D Y G S H T N T K I R E I I I G L T W T L C C N A E G I G G  
UniRef90\_L8M076 M W E I Y D A L L I N G S I P E N L K V D E L V C G K K R T Y L R S G N G A G G  
UniRef90\_H6LFW2 M W E I F D K L I S G I P E D W K A E E I V R G S S F S Y L K S G S G I G G  
UniRef90\_K2BKL5 M I N P R E I Y D L L M L D Y G N K N T Q T K E L I I G L T W T L C L T E G A G G  
UniRef90\_K9KRC1 F L N Y W H L Y D E I L A D I P D D V C I D D Y A V G V P W T F V R T G D F A G G  
UniRef90\_J4U0B5 M W E I Y D A L L I E G I P E E S L V D E F I C G T Y A V L I R S G N G C G G  
UniRef90\_T0IFA0 M A N R I Y E L L L D Y A A D N A R I T E L T V G L V W T A C K G D S V L G G  
UniRef90\_UPI0003725046 M W K I Y D E L L I E S V P R D L M V S D C C V G L H W I L V K S K T T G G  
UniRef90\_R4KRA1 P K E I Y D L L L E Y G N T T P I K K L I G L T W T L C E R S Q D G I G G  
UniRef90\_Q10W14 M W E M Y D R L I D P I P D D V K I E D Y F V G I Q W T S V T V C G Y T G G  
UniRef90\_V5C0V8 M V N P W E I Y D Q L L E Q A A N G E A L V A E V I M G P V W T V C N R T D D G M G G  
UniRef90\_A0A010Z370 Q Q I Y D L L L D H S A N G E A L V Q E V L I G L T W T M C N A E G I G G  
UniRef90\_A0L6V0 T N P W A L Y D C L I A A I P P E H K A D E A I S G E H W S Y V R S G D R V I G G  
UniRef90\_B7K4I5 T P W K L Y N H L I A G V P E D V V V R D Y C L G T H W S Y V E A D S G M G G  
UniRef90\_F5YH73 M W E I Y N N L I S R I P E N I E I K R C L M G V N W F L V E S E G I G G  
UniRef90\_S6CEF0 N R W Y L Y D E L I A G I A T D E T V R E Y S V G P S W T Y V R T E S S I G G  
UniRef90\_D8GUC4 M W E L Y D A L I G G I P E D Y R V D D L V C G Y H T Y V R S G D G S G G  
UniRef90\_W2BS41 M W W D L Y D A L I D G I P S A Y T A D D L F C G A T E A L V R S G E N V G G  
UniRef90\_G7WBV1 M T N P C E I Y D L L Q D Y A G A P V P V G T V V I G L V W T L C E A D A V G G  
UniRef90\_E6U453 M N E L Y D W L L I A S A A Q A R R V E H L C L G L N W L A E V S D G S Q G G  
UniRef90\_Q603H2 M W E I Y D E L I I P K D L V I K D F V A G L N W F L V E S I G T G G  
UniRef90\_M2VQX8 M A N P W T L Y D R L I D P I P E D L T V T A A S V G P K W C R I T S E G G A G G  
UniRef90\_D8GUC3 T P W K L Y N R L I E G I P E D I A V R D Y C L G T H W S Y V E A D C G M G G  
UniRef90\_U1RHL1 M H N R W H L Y D E L I D S V P S K E L V K S F V Y G D H W L M V E S D G V G G  
UniRef90\_C8WP78 M H N P R E I Y D L L L D Q V M P T Y V E E I L I G L T W T L C R T K D A T G G  
UniRef90\_UPI0003B693A9 M Y D W L L E G V T R D D P V E R V C L G L G L S L A E V G D S L G G  
UniRef90\_I3CDK4 W R L Y D A L I E G I I G D D V L V K D Y C L G I G W S Y V E A E S G C G G  
UniRef90\_C1DH12 M D D P R R I Y E M L L D Y C S G G S T V G S L T I G L V W T V C R E S D N A G G  
UniRef90\_J6IGM6 M T H P Q E I Y D L L L D E Y G N T N A Q I R E V L I G L T W T L C Q T E S I G G  
UniRef90\_UPI000367BC45 M T N P W N L Y D S L I D E I P G H I T V A A A Y T G T W C R V T S E R G A G G  
UniRef90\_K9T3P8 M W E L Y D L L I E G I P P E A R V D E A F E G P H W T M V R S G K G L G G  
UniRef90\_D0WM88 P W E I Y D A L L D G L P G D A V V R A A G R G P R W S R V L S A G S G L G G  
UniRef90\_F5YEP1 Y D W L P A Q L T G D M K A D E L L I G L V W S L C R S G S G T G G  
UniRef90\_G9PJZ4 M S N P W E I Y D A L I D S L P G D V L V T A V G Q G P R W T R V L S A G S V G G  
UniRef90\_UPI000360F382 T P W K F Y N H L I G K M P D D L I Y V R D Y C L G T H W T Y M E A D C G M G G  
UniRef90\_UPI0004183308 K I D D L L N T L K Q G G I V K D I R Q G P F Q T A V L T Y N C G G  
UniRef90\_UPI000472913B M T S P W D L Y D E L I D E I P A D L T A T S I N T E G K W R R V S S S D G V G G  
UniRef90\_E6KST0 I L E D L M S V L D F D A V V K D I R Q G V F H T G V L T R N C G G  
UniRef90\_D8F699 W N P W E I Y D R L I D D Q I D P S V K V T A S G R F G K W A F I E S E S G A G G  
UniRef90\_L1PF89 M T S R W D I Y D A L I D D L P E D V T V T V S D R G A R W T R V L S A G G V G G  
UniRef90\_F9EDZ4 K L L D D L I G S L T G D A P A R E V R V I G R F W T A V W S R H C G G  
UniRef90\_Q3IBJ3 L L E D L I D A V K S Q A M V N H L Q I G L T W T S C L V Q I G L G G  
UniRef90\_C5BTD5 M P N P W E I Y D A L I D D L P D D A R V T A V H R G P Q W T R A F N D G G C G G  
UniRef90\_UPI000378E4AD W E L Y D A L I D G I P E G I A V K D F C K G V S W S Y V E A E C G L G G  
UniRef90\_C7N892 L L D D I D S L V G D E V V R D V R V G P F W T G V W S R C C G G  
UniRef90\_K4LRZ8 M R T P W E I Y D R L I E D I D P S V K V I N A I E G S H Y S E I T S E N S I G G  
UniRef90\_C2KS04 N H W N L Y D E I I V G L P N D V R I D D Y A V I G R P W T Y V R V G L V G G  
UniRef90\_J4NNT6 M A T P W D I Y D Q L I D Q I P A D I T V Q S A R A D G K W R I T S E G G A G G  
UniRef90\_U1QUP3 M N N P W Q L Y D D L I D L I P P G T K V R D A R I G N W A C V T S D A G T G G  
UniRef90\_I6WSE7 M W E L Y E R L I G S P I P K D D V V R D E I V I G T S C T M V R A G G A A G G  
UniRef90\_N9XCW8 H I I E E L L S N L P K D V T V R S V M V G V H W T A V C S H C G G  
UniRef90\_Q2FNY1 M T D R W F L Y D A L L D S V P D T A L V K A F T Y G K H W L M L E S D G G I G G  
UniRef90\_B8J0Y4 M T S P W E T Y D A L I E D L P E D V A V A A H R G R R W T R V L S A D G V G G  
UniRef90\_UPI0004275B02 P W Y I Y D T L I E G V P E G I P V T D Y C I G S N W C Y V D A G C G C G G  
UniRef90\_C7MMR4 L L E E L L T R V L D Y D C P V M D I R Q G V F H T A V V T R R C G G  
UniRef90\_E1JSS8 I L E G L L A D L P E K V P V R S V C I G A H W T A V C S T H C G G  
UniRef90\_A2SQA8 W W G P Q R M Y Q D L V Q G V A D A E V R R V T G A K W V L E T G N G L G G  
UniRef90\_D3NUB3 V L E D S L G S D A P L R E V R V C A F W T A V V L D D G C G G  
UniRef90\_X0Y6D2 L G E I L G E E I N L D A Q I K E V R R G L H W T A V V L S R S C G G  
UniRef90\_R4KD41 N G Q Y I L Q A I T D K L N L D A Q I K E V R R G L H W T A V V L S R S C G G  
UniRef90\_H5XVA1 Q T L G Q I Y E E L I G S E I E N L S V E R V F G L F F T G V K L N N G V G G  
UniRef90\_E1YDW5 P W S Y E L I L G Q V E R E N G L R I D Q F V G L T W T C C R I N Q G E A G G  
UniRef90\_A7GZW4 M K D Y Y K I L I D G M D D D T V T G I V R G A A W V G A E L S N G F G G  
UniRef90\_R5D8G1 W W G P E Q L Y R D E L A L G V A D D E V R Q Q I A C G Q R W I M V E S P H G A G G  
UniRef90\_Q6N9Z9 M W Q I Y D E L I A Q I P T G L R V Q Q I G H R G Q R R L Y L K S D T G V G G  
UniRef90\_X0PFJ9 K I I E D I I S T I G E D I L V K E V R I G P F W T G V W S K Y G G L G  
UniRef90\_X1A4M4 K V K D I L G E K I N D D L S I E R A V F G L F F S G V K L S N D G Q G G  
UniRef90\_C8W975 I R N L L G D S L D D L T V D R A V F G L F F S G V K L S T G Q G G  
UniRef90\_Q2RIK6 A D G L E V D V R V I G L G Y T L V E L S N G A G G  
UniRef90\_U2W9L7 E D I T V D R A V F G L F F S G V K L S T G Q G G  
UniRef90\_F2LX44 M M K I I E E L I D R I A T K K Y P E D V R V G V S Y T A V L S K Y C G G  
UniRef90\_E3GXL4 Y D L I D G I S A E I Y V S R I I H T R S W I A A E L S D G Y G  
UniRef90\_R6ID03

QUERY UniRef90\_E1REE3 UniRef90\_A0YTPO UniRef90\_Q0AVE1 UniRef90\_UPI00031264BE UniRef90\_G0A3J5 UniRef90\_E6U457 UniRef90\_Q2RIK1 UniRef90\_I6XS56 UniRef90\_B1WSC7 UniRef90\_I7LK66 UniRef90\_K4LE99 UniRef90\_F5RMN6 UniRef90\_UPI00037F553C UniRef90\_UPI0003603677 UniRef90\_U7KVA1 UniRef90\_G3IZ51 UniRef90\_UPI0002D3C8A0 UniRef90\_L8M076 UniRef90\_H6LFW2 UniRef90\_K2BKL5 UniRef90\_K9RKC1 UniRef90\_J4U0B5 UniRef90\_T0IFA0 UniRef90\_UPI0003725046 UniRef90\_R4KRA1 UniRef90\_Q10W14 UniRef90\_V5C0V8 UniRef90\_A0A010Z370 UniRef90\_A0L6V0 UniRef90\_B7K4I5 UniRef90\_F5YH73 UniRef90\_S6CEF0 UniRef90\_D8GUC4 UniRef90\_W2BS41 UniRef90\_G7WBV1 UniRef90\_E6U453 UniRef90\_Q603H2 UniRef90\_M2VQX8 UniRef90\_D8GUC3 UniRef90\_U1RHL1 UniRef90\_C8WP78 UniRef90\_UPI0003B693A9 UniRef90\_I3CDK4 UniRef90\_C1DH12 UniRef90\_J6IGM6 UniRef90\_UPI000367BC45 UniRef90\_K9T3P8 UniRef90\_D0VM88 UniRef90\_F5YEP1 UniRef90\_G9PJZ4 UniRef90\_UPI000360F382 UniRef90\_UPI0004183308 UniRef90\_K0YW66 UniRef90\_UPI000472913B UniRef90\_E6KST0 UniRef90\_D8F699 UniRef90\_L1PF89 UniRef90\_F9EDZ4 UniRef90\_Q3IBJ3 UniRef90\_C5BTD5 UniRef90\_UPI000378E4AD UniRef90\_C7N892 UniRef90\_K4LRZ8 UniRef90\_K2KS04 UniRef90\_J4NNT6 UniRef90\_U1QUP3 UniRef90\_I6WSE7 UniRef90\_N9XCW8 UniRef90\_Q2FNY1 UniRef90\_B8J0Y4 UniRef90\_UPI0004275B02 UniRef90\_C7MMR4 UniRef90\_E1JSS8 UniRef90\_A2SQA8 UniRef90\_D3NUB3 UniRef90\_X0Y6D2 UniRef90\_R4KD41 UniRef90\_H5XVA1 UniRef90\_E1YDW5 UniRef90\_A7GZW4 UniRef90\_V4JD51 UniRef90\_R5D8G1 UniRef90\_Q6N9Z9 UniRef90\_X0PFJ3 UniRef90\_X1A4M4 UniRef90\_C8W975 UniRef90\_Q2RIK6 UniRef90\_U2W9L7 UniRef90\_F2LX44 UniRef90\_E3GXL4 UniRef90\_R6ID03

50 60 70 80

L G P N R P F E T R M P M L T Q N L L G L P L R V A A G C V K S W N Y V I E A S T V  
V A M Y R P P Y W Q R A P Q Y T G N K I G K P L K E V A A E L V K S W N F I E A S T V  
L C M S P G I G P T Q N T L S W S Y K E L V I N K P L A S K E L T A S A W V K S W N S Y Q A T V  
A A M T V N G I G Q Q R T S L G E Y K E L V I N S M K P L A S K E L T A S A W V K S W N S Y Q A T V  
L C M S P A Q P T R T L P W S G T L V N Q K I N D L L A P W L K S W D S Y Q A A T T  
L A M S P G H A T A R P R I F T R P N L T G K G A D L A A A W I L D W N F Y E E A A S V  
L A M T I H E T A R P R I F T R P N L T G K G A D L A A A W I L D W N F Y E E A A S V  
L V M T P L E G H P R I K L J A G E T K G M P L V R D L A E Y I K S W N N F E E A A L I  
M A W T M N V I K T R T R D I F P G T L D G I Q R A A S A G L I R S W N L A Q A S T V  
L C M S P A I P T R T L S W S G T L V N Q P I L R R A E I A S S W L R S W N D A Y Q A T V  
L T A Y R D Y V I Q R A P M M T G N R I G R P L K E V A A S Y V K S W N F R E A S I V  
A A M T L K G G R A E S E L T G T L V G M P L R K K L A S H V K S W N V Q E A S V I  
V C M T L P A Y S R P R L F R K E S F L G M P L R R E A G E Y V R S W Q G Q E A S I V  
L A M S P G Q S T R T L P W S G T L V G K P L V T D L A A W I T E W E P Y K A T V L  
I A M T M E N G M G A V K D C G A L V G K Q V R R A I A Q E Y V K S W N F S E A S L V  
V A M T M S A T S R P A Q M S A E Y S G V P L R R A I A Q E Y V K S W N F S E A S L V  
L A M S P G L P T R T L S W P G T L A G R T A L A N L A S S W L R Q S W D S Y Q A T V  
L C M S P A I P T R T L P W S G T L V D R P L C N E L W I R S W D N Y Q A T V V  
I A A S R P Y E T R M P L L I K D M I G L P L R E V A G C I K S W N F V I E A A V V  
I A E T K Y D W R M P F S T K R M E G A S I L R E V A E C I K S W N F Y E A S I V  
L C M S P G M L T R P F M F T G T L V N K S P L R S D L A P W L R S W N F Y Q A T I  
V A M T I R S D T R P H M R D E S F I G C S I L R E A A E C V M S W N G H E A S I V  
F S Q L P G D S L P E T M K K S L N M P L K K K L A S C W I K S W N F V I E A S V  
L A M S P U P I O O 3 7 2 5 0 4 6 L P T R T L A W G K T L A G K T L G E L A G W I T D W E P Y K A T V  
L A M T P K E G C G L S S M A G D I V G M S V R E L E L A G Y I K S W N N L E A A V V  
L C M S P G T T R T L P W S G T L V N K P L A K E L A S S W L R S W N F F E A T V  
L A M S P A I P T R T L P W S G T L A G K K I T E L A S S W I S W N P Y E A T V V  
A A A T N P L Q T I R R T E K N I L D M S W K E A A G L I K S W N F T E A S I V  
L A M S P A T A T R T L P W S G T L R G R P I V I E L I E W V K S W N F H E A A V V  
L S M S P G I P T R T L P W S G T L V N Q T I A N I A P W L R S W N S Y Q A T V V  
L A M N L G H E T R P R T L P D S C R G M A L R D L A T A A K S W N I A E A S L L  
V S F T T T G G A R R G Y A G D L R G M S P L R E V A E L S K S W C F F E A S L  
M A M R P D E V Y G K V S I P E H I A G M K V C E I A R Y V K S W N N Y E E A A L  
L A M T Q D S P T R P G V C E K D L V G M P L G E A A E L V K S W H S R E A A F  
V S A G R P Y D R M P M F N K R L L G A P L R R A L A A L V K S W N L M E A A L  
L C Y L T E L D T R P P L F P H R R A S M P L R R A L A A L V K S W N Y A E A S L  
L S M S P G V Q T R T L P W A G T L R G K T L S E L V A W V R E F D P Y R A T V  
F A F S P R Q V P R T L D W S G T L A G Q Q D N A A L P W L L S W N D A E A A L  
M A M T P K E G N S Y L Q I A G N V V G M K V C E V A G F I K S W N S Y E A A L  
M A F S M P A S T R P A L H E G E F V G A R L R D V A Q L A K S W N L A E A G M  
V S F T C K G G S R R A C K G D L R G T G L R T M A E L A K S W C F F E A T L  
M A P T M P G V I Q D P A L S P Y E I V G Q P L R R T M A E R L K S W D F N Q A S I  
L A M S P A V F S R T L G W A G S L A G R S T V D L A Y W I R S W N P H E A V I  
F A F G P R Q V P R T L S W A G T L A G Q G A E R L E Y P W L L S W N G A E A A V  
V S Y T C R G G A R N S E E R D F R G L P L R E M A E L A K S W S F E A T L  
L C M S P G V P T R T L P W A G A L T G K P L R S E L A A G L M S W D P Y Q A C L  
L C M S P G T T R T L P W S G T L V N R S P I A E L A P W L R S W N S Y Q A T V  
M A F A M P V R T R P A S Y E D D L A G L P L R E V A L A K S W N L A E A G L  
L A M T P E D E T R P R I L S P N L A G M A L Q E L A Q V A K S W N F G E A S L I  
S A W T M D V Q S R P T L V E G P L E S R P L R D V A A L V K S W N L A E A S I  
L A M T P Q S Y S R T L P W P G T L A G K P L R E L A D G I G S W E P F E A C V  
S A W T M D V R S R P P L S Q D D P Q G R P L R D I A S L V R S W N L A E A S I  
V S F T C G G G K T H K F D L R G R R L K E V A E L A K S W N F E E A S L  
L A Y S Y H H S D A P V K E A G R L I G K E A L E I A Q M A H S P G L I E A A I  
M A F G M N V Q S R P R S D P A E L I G R P L R D V A A L A K S W N F E D A G I  
L A A T L P K D A L M V K E P G F L S D K D P R E L A R L A Y S R S I L E A S M  
M A F H M P V E S I A R R L P A D P S G M S L R E V A A Y A K S W N F A E A A L  
S A W T M R G V S R P A L S A D P D A G R P V R D V A A L V R S W N L A E A S V  
L A S T H K H G A R F V E H A G S L A G R S A L L E V S L A H S N S L E A G I  
F A M S P G E K T R F L V Q W P G T I A G Q S V S T L S K K L Y S W N F E A T V  
A A Y T I D A R S R P A L S A A P V E G R P L R D A A S L V K S W N L A E A S V  
I A K T V H Q D G A R A Q L Y T G N Y L N L D L K S L A A L A K S W R F S E A S L  
L A F T H E H E G R P V G E A G F L T G K S A R S L C R Y A T S E S L I E A S L  
R G M P F E V E S L P R T M T P E M K D K P L R D V A A L V K S W N F I E A S F  
I C M T I P A Y T R P R L R K E S F L G C P L R R E A G E Y V R F W Q G Q E A S L  
M A F G M N V Q S R P R S V A E D L V G R P L R D A A S L V K S W N F E D A G L  
V A M I Y R G G P R S G F A E R D M V G R D L R D A A S A V K S W D L E L A A L  
A A A N Q R L H E S R P R I L V E E E E R G M T W R Q A A S L L S W N F I E A G I  
L A T T P R H D H T H V I R N V G T L H Q K S A Q E L A Q Y A L S E N T I E A G I  
L A Q H F P L A Q G M A D S C Q D I V G Q P L R R V A E Q V K S W D F N A A S I  
S A W T M D V R S R P A L S A E D D A P R P L R D A A A L L K S W N L A E A S V  
I S H A V R G G R R T F R E D P C S I D L H A A K L A K S W N F E E A T L  
L A A T L P Q E E P L V A E P G F L L E K T A E E L V S L V H S Q S L L E A A I  
L A A T I G E E V V V R D A G H L H E K S A Q E L A G Y A L S K N P L E A G I  
L A A R Q G P A A E D D P G L W T G R S P L A R D L A A M A A I P L E V S V  
L A S T L R G P A P L V P R A G H L L E C S A L I E L A E H A K S E S L L E A S I  
L A S S M H H Q R V P A P D A G K L T E K T A W E L V Q E V N S E S D M M R C I  
I C F T P S S A K A M P S G R L I G T P V M E L L Q G I Y K S N S L R K A I  
L S S T M T G E H C V H E P P A S F T D M T A M E L A Q Y S Y S G D P S K A T L  
V S Y T P P S Q A D K M P L S G R L V G K N V K Y F L Q D I H S D K S L K A T L  
F A Q S P G M A S R V L Q F P G T V A D R S A A E V A A W L K S W D P F A T A  
I A M N T E G E S V Q R K F A S L V G L G A K T A A Q A V M S W S F N E A S E  
L A Y L P R H P R A L Q P R L A S L G Q Q S L R Q L A A L A M S W D P L E A S I  
T A M F Q P W D T L T P W L V G Q D L K T V A A E I K S W D F Q R A S I  
A S T T F T H E P T M P P P A G N L T Q K S V L I E L C N Y A N S D C L L Q A S V  
L C F T P P S S A R A M P L S G R L T K R S L E E T L A D L N S N N L L R K T A  
L C F T P P S S A R A M P A S G E L R G R K A T A F L E G M F A D Q A L R R R A L  
L C F T P P S S A K A M P L S G R L R G R P V R A Y L E D I F C E N I L R R T L  
L S Y S F T K E T S P M K E A G D L V G K P A G Y I L D K I L S Y N L T D S S L  
V A M F N I H G N Y T K D W G K L T E K D T R E L A E Y V K S W N L I E A S I  
I A L H D K L Q S R E R M F P T L E G L T A R K A A E A V R S W N L I E A S E

90 100 110 120

QUERY G L A A I N A Y Y N N P Q V A R E H G V I F S D A N D P F I M S Q N E V I K G K K  
UniRef90\_E1REE3 G N A A I V A W Y N N H P E N A Q K N G V E I P K T P G D P F F I N S Q N E V I R G K K  
UniRef90\_A0YTP0 G M A A V I N S A L I N T D S P L Q L S A K T A K P L S P T R A N A F T H F L P Q D I R K N K  
UniRef90\_Q0AWPE G L A A I N S A L I N T P K Q V S A K V S K D S E R A N A F T C H F L P Q D I R K N K  
UniRef90\_UPI00031264BE G M A A I N S A V I N S S P P L A P L Y P K V S G N L A V F E H F L P Q L I R G K K  
UniRef90\_G0A3J5 A M A A I N S A C I N S R P A Q P E S V I L Q P A A N D G D A V F D H F L P Q L H H K K  
UniRef90\_E6U457 G M A A I N S A Y H N A P A Q A V K N G I A L V T D G D A F F S N I L D A F R G K K  
UniRef90\_Q2RIK1 G L A A I N S V L N T P E Q V E S L C G R P L S S M N A F T C F Q E D Q V V R G K K  
UniRef90\_I6XS56 G Q A A I N S W H S S P E T A E A N G F V P T G Q G I V F D P Y A T D Q L V A Q G K K  
UniRef90\_B1WSC7 A M A A I N S A T I N H N S P L R Q N G I A L P V A T S A F E Y F L P Q L V A Q G K K  
UniRef90\_I7LK66 G Q S A I N S A W Y N H P D T A R R A G I E I A E K K D P F I K S Q N L V K G K K  
UniRef90\_K4LE99 G Q A A I N S A F N V Q S K L D A R K L G S N D D N N A F R Q F L P E Q I K G K K  
UniRef90\_F5RMN6 A T A A I N S A Y Y N Q P S K V Q M Q G F H G E D A L E A F A M Y T E Q I R G K K  
UniRef90\_UPI00037F553C A M A A I N S C I N A P E S V V L D S H D E H A N L A V F E H F L P Q L I Q A K K  
UniRef90\_UPI0003603677 G L A A I N S S A L I N T V A R V E G K S L D C Q E D D N N A F N F F R E A V I A G K K  
UniRef90\_U7KVQ1 G M A A L N S S Y S T P S V A D E H G F A L A D A P W F D P F F R E A V I A G K K  
UniRef90\_G3IZ51 A M A A I N S I L N R Y E L P S G I T L L P A P D V F D H F L P R L I Q G K K  
UniRef90\_UPI0002D3C8A0 G M A A I N A V I N S P L V L K A K P L S P K R S N A N V F E H F L P L I R G K K  
UniRef90\_L8M076 G M A A I N A A I N S P A K A E P I S L P G S S N L A V F E H F L P L I R G Q K  
UniRef90\_H6LFW2 G V A A I V A Y Y N N P Q V A R A N G V E F S D K P D P F I M S Q N Q V V K G K K  
UniRef90\_K2BKL5 G L A A I N S A Y Y N N S L D V A K K A G L P T G S M D P F F I M S Q N E V I R G K K  
UniRef90\_K9KRC1 G M A A I N S V I N S S S N L P D T G T L L S P D S S A F E H F L P Q L I R H K K  
UniRef90\_J4U0B5 A T A A I N S A W I N R P K V A S L R G F H D E D E F E A F A L Y K E R I R G K K  
UniRef90\_T0IFA0 G M A A I N S A W Y N S P A T A V G N T I A L S K S L D P F I A Y Q N V I K G K K  
UniRef90\_UPI0003725046 G M A A I N S C S L N A R E L P A G L T L Q P T P G L G V F F E H F L P Q L I K G K K  
UniRef90\_R4KRA1 A L A A I N S A I N T K E Q V E K C S V T N H Q Q T N A F T Y Y S N L L S G K K  
UniRef90\_Q10W14 G M A T I N S A E I N R R S A V R K E K L P P T Q A E P V F E Y F L P M I R G K K  
UniRef90\_V5C0V8 A M A A I N S A V I N H D N P L L L A S E P I P A N L A V F E W F K P L L N D K K  
UniRef90\_A0A010Z370 G A A A V A Y Y N Q P D L E K E G A I R Q L S K E D A F V A Y R E D I K G K K  
UniRef90\_A0L6V0 G M A A L N S A A L G I P M E A T P L M T P G S S N L A V F D H F R H H L V D K K  
UniRef90\_B7K415 G M S V I N S A A I N S H S P L P E T G L P G S S N L A V F E H F L P Q L I R G K K  
UniRef90\_F5YH73 G V A A I N S A Y W N S P E H K K V R S A L A E E D M S A F E A W K G R V I A G K K  
UniRef90\_S6CEF0 G V A A I N S A W Y S Q R A L L D P L G C T Y D A A M D A F E M Y R P Q I G D A R K  
UniRef90\_D8GUC4 G L A A I N S V I N T V S K L Y P G D L N G Q P N E S S F I S L K E E I I G A K N  
UniRef90\_W2BS41 G M A A I N S A F Y N N P A Q S Q E S R V E T V A D V D S F E L Y R P E L I A G K K  
UniRef90\_G7WBV1 G A A A L N S A Y Y N N P Q V A R A N G V E F S D A R D P F I M S Q N A V I K G K K  
UniRef90\_E6U453 G L A A I N S S Y Y N T P A V A V R N G V E L S E A R D P F I A Y Q Q A I R D K K  
UniRef90\_Q603H2 G M A A V N A G I N R L G R L P D G V T L A E N N L A V F E H F L G E M R G K R  
UniRef90\_M2VQX8 G L A V L N S A S V N T P D G C Q R E A L A L R S A A P V F A H F R A R L A G K K  
UniRef90\_D8GUC3 G L A A I N S V I N T P Y N V E T S G I K I S E N I N D F E Y M K D I K G K K  
UniRef90\_U1RHL1 G M A A V N S W H S L P A R A R A N G F A P C A D N N S F H P Y R E A T R G R K  
UniRef90\_C8WP78 G V A A I N S A Y A R K E L L D P L G A T Y D E P M D A F E L Y R P R I E A K N  
UniRef90\_UPI0003B693A9 G L A A L N S A A N N T L A L R P E S P I Q P G I P G D A F K F L A E A T G K K  
UniRef90\_I3CDK4 G M A A I N S A I S L Y A Q A Q R L E C K N T A N L A V F E H F L P R L K D Q K  
UniRef90\_C1DH12 G L A V V N S A V V N R L R Q A Q P L H G A V P G N L S V F E H F R P R L E G A K  
UniRef90\_J6IGM6 G T A A L N S A W Y G Q R K L L D P L G A E Y E K M D A F E L V R P R I E A Q H  
UniRef90\_UPI000367BC45 A M A A V N C C I N A R T L P E S E P L P G R E N L A V F D Y F L P H L C D K K  
UniRef90\_K9T3P8 A M A A I N S R S P L P A K A Q P L S P Q G T A N L A V F E H F L P L I R G K R  
UniRef90\_D0WM88 G M A A V N S A Y H S L P K R A F G N G F S P C H E N N A F H P Y R E V I A G K K  
UniRef90\_F5YEP1 G L A A I N S A W Y N S P D Q D T V K K C L Q K P D M N A F D A W K E R A R G K K  
UniRef90\_G9PJZ4 G Q A A I N S W Y S R E E T A A A N G F E P T G E G Q V F D P Y R E M I V G K K  
UniRef90\_UPI000360F382 A M A A I N S A S I I P D F S A F E H V V E L P V G G V F D P Y R P R I R G A N  
UniRef90\_UPI0004183308 G Q A A I N S W Y S S P Q A A E D N G F I P T G E G Q V F D P Y R E M I A G K R  
UniRef90\_K0YW66 G V A A L N S A W Y A R P E L L D P E P I E L P D G S D A F E M Y R P R L S A H E  
UniRef90\_UPI000472913B G M A A I N S W L L E G D E H C L N L N A G D L L A E K G K N K K  
UniRef90\_E6KST0 G V A A I N S A Y H C H P D R A L J A H G F T P C A E N N T F H P Y A P L V A D K R  
UniRef90\_D8F699 G M A T I N S L I E K K D S C C I E L N A A E L L K E K G S G K R  
UniRef90\_L1PF89 G M A A L N S W Y A L P S R A E A G F V P C N W Q N L F D P W S A E V A G K R  
UniRef90\_F9EDZ4 G L A A I N S W Y S R P E V A A E H G F V P T G A G E V F D P Y A D A V E G R T  
UniRef90\_Q3IBJ3 G M A A I N S M L E V D E G R C V E R N A G D L L V I E R G N K K  
UniRef90\_C5BTD5 A M A A C N A V I N A P S N A Q P V Q S S T T G N T A V F D Y F K P R L E N K K  
UniRef90\_UPI000378E4AD G L A V I N S W Y S R Q E I A V A N G F E P T G D G E V F D P Y N D R F A G G R  
UniRef90\_C7N892 G V A A M N S A W Y T Q P D K L A A L G A D V D G G E N P F D S M E R Y T G K K  
UniRef90\_K4LRZ8 G I A A I N S L I E P D V E R C Q E I N A G E L L V E R G A G K R  
UniRef90\_C2KS04 G V A A I N S A W W G Q K E R V S A N G F K P M E S R E L F D P Y R N L V A G K K  
UniRef90\_J4NTN6 S A A A I N S A Y Y N Q P S K V Q E Q G F H G G D A L N T E A Y A M Y T E R I R G K K  
UniRef90\_U1QUP3 G M A A I N S A Y H S H T D R A L J A H G F T P L A E N N T F H A Y A D A V A G K R  
UniRef90\_I6WSE7 G V A A I N S F L T T E E R V S A H L T P G E D E R S T F E R H A E T R P D L R  
UniRef90\_N9XCW8 G A A A I N S A Y Y N R E A V A A Y E G V K L L E S C D T F A A P G D A F A G K K  
UniRef90\_Q2FNY1 G I A A I N S L M E Y N E N D A V I E M N A S E V L M E R G A G K N  
UniRef90\_B8J0Y4 G L A A L N S A A N N T L A L V Q Q S P L R A A L D G N A F D F F L S E A N S K K  
UniRef90\_UPI0004275B02 G L A A L N S W Y S R A E V A R S H G F V P T G K G Q V F D P Y N D L V E G R T  
UniRef90\_C7MMR4 G T A A L N S A W Y S R R E A I E E K G V G R A E E S N P F T L L K E S Y T G E K  
UniRef90\_E1JSS8 G M A T I N S L L P V D E S V M V E R N A G D I L L E K G T E K N  
UniRef90\_A2SQA8 G V A A I N S L L E V N E Q N A A E I N A A D L L M E K G A G K T  
UniRef90\_D3NUB3 G V A A L N S H Y N R P D V S G A G G N G L D L F C A V L D G R  
UniRef90\_X0Y6D2 G L A A I N S L M E I D E S R C V I E L N A E Q V I L K E G A G R K  
UniRef90\_R4KD41 A C S A I N S I L E T V D L N R C V E I N A G S V L M K K A G N K K  
UniRef90\_H5XA1 G I A V L N S A L I T Q C W Q F P P Q D Y E V Q S N V D A L D V V E I P E E A Y V  
UniRef90\_E1YDW5 G L A A I N S L I E A D K S K I V S I N A G D I L L K N G V N K N  
UniRef90\_A7GZW4 A I A V I N S A L A Q T C L Q K N P N L H E L E F D A D P F D K L D I K A D S F S  
UniRef90\_V4JD51 G L A A A N S A N P L L H G A Q V L E G S A P F E H F R A Q L F S G K Q  
UniRef90\_R5D8G1 A M A V I N S A F Y N T T E R M E R L H L A D G E K S C T D G M D L E G K T  
UniRef90\_Q6N9Z9 G T A A I N S A H Y N R Y D L R A A A G N G V K T F R H V A Q G R  
UniRef90\_X0PFJ9 G L A A I N S Y L N Q A D L R Q D A R L N V L G O H D V F A D Y Q D Q P A K  
UniRef90\_X1A4M4 G M A A I N S A L I E V D L N K C Q N I N A A E V L Y E K G K N K K  
UniRef90\_C8W975 A T A T L N A L S A S C W N A G E A G Y A L E L D K N T F D E V E I P V I E G K T  
UniRef90\_Q2RIK6 G I A V L N A L S A T C W Q V R P M N Y T L K T G A N A D Q V I I P G E G Q V  
UniRef90\_U2W9L7 G I A V L N A L S T A V W E K S P Q D Y E I L M G R D A F D E L D L S R Y P K T  
UniRef90\_F2LX44 A L A C A N S A L I N K D I K Q N D I D I D L V R G E D K  
UniRef90\_E3GXL4 G V A A I N S T I K P K G K K N I N M L E L L P E I S K N K K  
UniRef90\_R6ID03 A M A V I N S A F Y N T E E R L D K L S A R C G F D K S C T Q G F S T E G K K



QUERY	170	180	190	200
UniRef90_E1REE3	LPEECDFYVY	ITTCASAVVDK	TLPRRLLEEL	LRSENNAREKT
UniRef90_A0YTP0	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_Q0AWE1	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_UPI00031264BE	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_G0A3J5	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_E6U457	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_Q2RIK1	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_I6XSY6	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_B1WSC7	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_I7LK66	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_K4LE99	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_F5RMN6	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_UPI00037F553C	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_UPI0003603677	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_U7KVQ1	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_G3IZ51	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_UPI0002D3C8A0	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_L8M076	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_H6LFW2	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_K2BKL5	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_K9RKC1	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_J4U0B5	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_T0IFA0	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_UPI0003725046	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_R4KRA1	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_Q10W14	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_V5C0V8	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_A0A010Z370	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_A0L6V0	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_B7K4I5	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_F5YH73	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_S6CEF0	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_D8GUC4	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_W2BS41	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_G7WBV1	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_E6U453	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_Q603H2	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_M2VQX8	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_D8GUC3	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_U1RHL1	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_C8WP78	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_UPI0003B693A9	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_I3CDK4	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_C1DH12	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_J6IGM6	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_UPI000367BC45	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_K9T3P8	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_D0VM88	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_F5YEP1	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_G9PJZ4	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_UPI000360F382	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_UPI0004183308	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_K0YW66	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_UPI000472913B	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_E6KST0	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_D8F699	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_L1PF89	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_F9EDZ4	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_Q3IBJ3	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_C5BTD5	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_UPI000378E4AD	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_C7N892	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_K4LRZ8	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_C2KS04	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_J4NNT6	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_U1QUP3	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_I6WSE7	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_N9XCW8	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_Q2FNY1	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_B8J0Y4	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_UPI0004275B02	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_C7MMR4	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_E1JSS8	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_A2SQA8	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_D3NUB3	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_X0Y6D2	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_R4KD41	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_H5XVA1	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_E1YDW5	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_A7GZW4	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_V4JD51	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_R5D8G1	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_Q6N9Z9	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_X0PFJ9	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_X1A4M4	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_C8W975	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_Q2RIK6	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_U2W9L7	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_F2LX44	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_E3GXL4	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT
UniRef90_R6ID03	LPEEQDVFV	ITTCSTANIK	TLPRRLLEEL	LRSENNAREKT

QUERY UniRef90\_E1REE3 UniRef90\_A0YTP0 UniRef90\_Q0AW1E1 UniRef90\_UPI00031264BE UniRef90\_G0A3J5 UniRef90\_E6U457 UniRef90\_Q2RIK1 UniRef90\_I6XS56 UniRef90\_B1WSC7 UniRef90\_I7LK66 UniRef90\_K4LE99 UniRef90\_F5R5MN6 UniRef90\_UPI00037F553C UniRef90\_UPI0003603677 UniRef90\_U7KQV1 UniRef90\_G3IZ51 UniRef90\_UPI0002D3C8A0 UniRef90\_L8M076 UniRef90\_H6LFW2 UniRef90\_K2BKL5 UniRef90\_K9RKC1 UniRef90\_J4U0B5 UniRef90\_T0IFA0 UniRef90\_UPI0003725046 UniRef90\_R4KRA1 UniRef90\_Q10W14 UniRef90\_V5C0V8 UniRef90\_A0A010Z370 UniRef90\_A0L6V0 UniRef90\_B7K415 UniRef90\_F5YH73 UniRef90\_S6CEF0 UniRef90\_D8GUC4 UniRef90\_W2BS41 UniRef90\_G7WBV1 UniRef90\_E6U453 UniRef90\_Q603H2 UniRef90\_M2VQX8 UniRef90\_D8GUC3 UniRef90\_U1RHL1 UniRef90\_C8WP78 UniRef90\_UPI0003B693A9 UniRef90\_I3CDK4 UniRef90\_C1DH12 UniRef90\_J6IGM6 UniRef90\_UPI000367BC45 UniRef90\_K9T3P8 UniRef90\_D0VM88 UniRef90\_F5YEP1 UniRef90\_G9PJZ4 UniRef90\_UPI000360F382 UniRef90\_UPI0004183308 UniRef90\_K0YW66 UniRef90\_UPI000472913B UniRef90\_E6KST0 UniRef90\_D8F699 UniRef90\_L1PF89 UniRef90\_F9EDZ4 UniRef90\_Q3IBJ3 UniRef90\_C5BTD5 UniRef90\_UPI000378E4AD UniRef90\_C7N892 UniRef90\_K4LRZ8 UniRef90\_C2KS04 UniRef90\_J4NNT6 UniRef90\_U1QUP3 UniRef90\_I6WSE7 UniRef90\_N9XCW8 UniRef90\_Q2FNY1 UniRef90\_B8J0Y4 UniRef90\_UPI0004275B02 UniRef90\_C7MMR4 UniRef90\_E1JSS8 UniRef90\_A2SQA8 UniRef90\_D3NUB3 UniRef90\_X0Y6D2 UniRef90\_R4KD41 UniRef90\_H5XVA1 UniRef90\_E1YDW5 UniRef90\_A7GZW4 UniRef90\_V4JD51 UniRef90\_R5D8G1 UniRef90\_Q6N9Z9 UniRef90\_X0PFJ9 UniRef90\_X1A4M4 UniRef90\_C8W975 UniRef90\_Q2RIK6 UniRef90\_U2W9L7 UniRef90\_F2LX44 UniRef90\_E3GXL4 UniRef90\_R6ID03

210 220 230 240

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

QUERY Q K V T I K K  
 UniRef90\_E1REE3 T K V N L  
 UniRef90\_A0YTP0 V Q Y C V Q Q  
 UniRef90\_Q0AWE1 Q M V N I Q R  
 UniRef90\_UPI00031264BE V Q Y R V  
 UniRef90\_G0A3J5 L R Y R I A E  
 UniRef90\_E6U457 Q M V R F V K  
 UniRef90\_Q2RIK1 R M V Q V S R  
 UniRef90\_I6XS6 Y R V H Q H R  
 UniRef90\_B1WSC7 V Q Y H L  
 UniRef90\_I7LK66 M K V  
 UniRef90\_K4LE99 Q M V C I R  
 UniRef90\_F5RMN6 K M A D V  
 UniRef90\_UPI00037F553C L R Y R V A E  
 UniRef90\_UPI0003603677 R M V K I H R  
 UniRef90\_U7KVQ1 H R V S L  
 UniRef90\_G3IZ51 V R Y R I  
 UniRef90\_UPI0002D3C8A0 V Q Y R V  
 UniRef90\_L8M076 I Q Y R V  
 UniRef90\_H6LFW2 Q K V A F K K  
 UniRef90\_K2BKL5 Q K V A F R K  
 UniRef90\_K9RKC1 I Q Y S V  
 UniRef90\_J4U0B5 K M A D L  
 UniRef90\_T0IFA0 Q K V T M K  
 UniRef90\_UPI0003725046 A H Y R I  
 UniRef90\_R4KRA1  
 UniRef90\_Q10W14 V Q Y Q V L K  
 UniRef90\_V5C0V8 A H Y C V  
 UniRef90\_A0A010Z370 L P V R L S K  
 UniRef90\_A0L6V0 A R Y H L  
 UniRef90\_B7K4I5 V E Y R L V Q  
 UniRef90\_F5YH73 K R V G I A R  
 UniRef90\_S6CEF0 T M A A L R  
 UniRef90\_D8GUC4 R R V N I S  
 UniRef90\_W2BS41 T M I N L R R  
 UniRef90\_G7WBV1 Q K V A F K  
 UniRef90\_E6U453 Q K V S L K K  
 UniRef90\_Q603H2 V R Y R I A  
 UniRef90\_M2VQX8 V E Y A L  
 UniRef90\_D8GUC3  
 UniRef90\_U1RHL1 M R V E R A K  
 UniRef90\_C8WVP78 Q M T M I E R  
 UniRef90\_UPI0003B693A9 L K V N L  
 UniRef90\_I3CDK4 A T Y H V  
 UniRef90\_C1DH12 V E Y A L  
 UniRef90\_J6IGM6 L M T R L C R  
 UniRef90\_UPI000367BC45 V H Y R V A E  
 UniRef90\_K9T3P8 V Q Y R V  
 UniRef90\_D0VWM88 M R V  
 UniRef90\_F5YEP1 K R V G L G K  
 UniRef90\_G9PJZ4 R  
 UniRef90\_UPI000360F382 V S Y V V A  
 UniRef90\_UPI0004183308  
 UniRef90\_K0YW66 Q M C T V T R  
 UniRef90\_UPI000472913B R L L T M K R  
 UniRef90\_E6KST0 M R V R L S R  
 UniRef90\_D8F699 K R L T L  
 UniRef90\_L1PF89 R R L E F H  
 UniRef90\_F9EDZ4 A R M H Q H R  
 UniRef90\_Q3IBJ3 R L L T M E R  
 UniRef90\_C5BTD5 V K Y C V A  
 UniRef90\_UPI000378E4AD  
 UniRef90\_C7N892 K K F V  
 UniRef90\_K4LRZ8 R G V R L  
 UniRef90\_C2KS04 T R V I L Q R  
 UniRef90\_J4NTN6  
 UniRef90\_U1QUP3 M R V G L A R  
 UniRef90\_I6WSE7 L R M  
 UniRef90\_N9XCW8 I P V R  
 UniRef90\_Q2FNY1 R L L A F S  
 UniRef90\_B8J0Y4 Q K V N M  
 UniRef90\_UPI0004275B02  
 UniRef90\_C7MMR4 K K  
 UniRef90\_E1JSS8 K R L T I F K  
 UniRef90\_A2SQA8 K L L A F  
 UniRef90\_D3NUB3 R M V T L H R  
 UniRef90\_X0Y6D2 R G V R L  
 UniRef90\_R4KD41 V R L A I K R  
 UniRef90\_H5XVA1 D R T V I R R  
 UniRef90\_E1YDW5 G A I R L  
 UniRef90\_A7GZW4 N K L T I S  
 UniRef90\_V4JD51 V R Y A V A  
 UniRef90\_R5D8G1  
 UniRef90\_Q6N9Z9 R F A H L M R  
 UniRef90\_X0PFJ9  
 UniRef90\_X1A4M4 K L L T I Q K  
 UniRef90\_C8W975 E R L T I K K  
 UniRef90\_Q2RIK6 E M M V L R  
 UniRef90\_U2W9L7 E R T L I R K  
 UniRef90\_F2LX44  
 UniRef90\_E3GXL4  
 UniRef90\_R6ID03

1 10 20 30 40

UniRef90\_Q972J1 K L I E K L I S I L T P E K K V R E L V T G L G W T V V L S K Y A G

UniRef90\_D3S6H9 L L N E K E D D F K V V D F S F A L P Y S Y V V V E S A L G

UniRef90\_F4B4U7 K V I E S L I S Y A K E D D A E I K N A T V G V T W T C V L S K G G V S

UniRef90\_G8AQW7 W W G A H R L Y D D L L H G V E D A E V R A T I G A K W L M V E T D G A I G

UniRef90\_B6YTA1 V D E N D F R V L D F S F G L P Y T Y V L I E G A L G

UniRef90\_A8MB57 R V I E A L I S Y A K E N T E V K N A V I G V S W T C V Y S R Y C G

UniRef90\_UPI000412D269 N P F A L Y D D L I S Q I P L E A V V H E A I C N N T A Y V A A D T G V G

UniRef90\_F0JC37 D D I A V E R V V V G I F F T G V K A L T N G Q G G

UniRef90\_G5HKZ3 E D M T V E R A V F G L F F S G V K L S T G Q G

UniRef90\_J4WAT2 D I V E R A T L G L F F S G I K L S T G G G

UniRef90\_Q2WB19 W W G P G R L Y A D L A N G V E D C A V K R V V V G L N W T M V E T A T G V G

UniRef90\_C6A284 L K Q L K E K A M K K I K E D D F R I V D F S F G L P Y T Y V V L E S T G A I G

UniRef90\_I7L0S0 R I L E E R L G E R M D E V T V E R A V V G I F F T G V K L S T G G G

UniRef90\_H3ZMF7 L K E R A M K A I E E E F K L V D F S F A L P Y T Y V V I E S T G S I G

UniRef90\_F0LJF8 K I K K E A L G R E I D E D D F T I V D F S F A L P Y T Y V E G K R G K S

UniRef90\_M3JB1 T L S Q L Y E N L G R D E I K N L N V Q R V V V G L F F T G V K L S N G C G

UniRef90\_F3Z0J8 W W G P H R L A R E L E L S V D L D A V A G R V V L G R N W T L V E G P D G C G

UniRef90\_W6K9R1 I F N L T I D E A K R T I T D V R I G L G Y T A V L E D G S I G

UniRef90\_UPI0003B66B99 K L I D D L I E A N S A N A P V K D V R V G V G W T C A H G K Y G G

UniRef90\_F6D848 W W G G Q R L Y Q D L I F G V G D G E V Q R V T R G A H W L L V E G P D G C G

UniRef90\_UPI0004787FC0 L Y E D L I E S V K T N E V V K D V R V G V W S A V K S K G V G

UniRef90\_I0GHC3 Q T L K Q I H K R L T G D E A A R L S V E R V V V G L F F T G V K L N N G C G

UniRef90\_B9CXN7 P G A I L E R E T I E T I R D S I T V E R A V I G L F F S G V K L S T G G G

UniRef90\_L0HAE4 I L E E T I E T I R D S I T V E R A V I G L F F S G V K L S T G G G

UniRef90\_E1R863 I I D E L I K V A L E I N K K V A D L R L G L G Y T G V L D D S G C G

UniRef90\_K0AWA0 K L A K E L E L I D F S F G L P Y S Y V L V E G A L G

UniRef90\_W01444 E E L E V K D V R I G L A Y T G V L E N Y G G

UniRef90\_M1PXK6 W W G P E R L Y R D L A L G V A A D E V R Q L V I G P R W L M V E G P A G A G

UniRef90\_S9S364 K I I R E Y F G E R M D E V T V E R A V F G L F F S G V K I N T G G G

UniRef90\_E6LRW7 T L S S G L E L V D F G F A L T W V L V E G G E G R A

UniRef90\_C5A487 D E L E L D F S F A L T W V L V K G E E G K S

UniRef90\_Q9V0X5 I G G G Q L E Q A L A A S I P N S I V V D S V L F G F N W V F V K A G N L C G

UniRef90\_D0Z336 L L S R E E D F K V I D F S F A L P Y S Y V L I E N A L G

UniRef90\_C9RGU7 N P F A L Y D D L J A A I P E D V L V R R A L S A N A A C V E S E A G V G

UniRef90\_K0YVA7 T A G H L R E R L G E T L Y E G L T L E R A V F G L F F T G V K L S D G A G

UniRef90\_E3CZH9 E L A E D L K L V D F S F G L P Y T W V L V E G A L G

UniRef90\_O59175 W W G P D R L Y P D L V H G V I D S E L T V K K V V V G L R Y T C V L S D D S C G

UniRef90\_G8AYQ4 I V E R L I A S I D E D F E I V D F S F A L P Y T Y V L I G N S I G

UniRef90\_I4BWH3 A E I A I K D V R I G L G Y T A V K I E N G G G

UniRef90\_N6VUB0 N P K N I Y E R L L E K A G R Q M I D D V R L G L G Y T A V K I D S G I G

UniRef90\_T0IT71 E I K R K A L T L T R E D F R L I D F S F A L P Y T Y V L I E G S I G

UniRef90\_F8ABQ7 M S E I L D Q T L E R A K E D L K I E R A V V G L F F S G V K L Q G G C G

UniRef90\_B6YVE8 P G S I L E E T L E R E T I T I E R V V I G I F F T G I K L S D G G G

UniRef90\_C8PH28 I I D H I I K K A K D K F K I L D F S F A L P Y S Y V L I E K S L G

UniRef90\_A7IAW7 W E L Y D R L I D E M P K D A S I V R S A C M G A H W S Y V E A D C G T G

UniRef90\_C7P7J8 Q D I L R A I V D I R A D A S I T D V T T G N C L A A V S A R H C G

UniRef90\_S2ZPX3 A G F C L A D V R M G L G Y T A V L L D S G A G

UniRef90\_E1JW05 F A L P Y T W V L V E G P E G L G

UniRef90\_A1AP22 L K E L H D E A K A R S A G A V V E K A C V G V Y M T C V E N S L G M G

UniRef90\_F4HKC7 D V L A S Q A A D S L V S E T R I G L G Y T A V A L E S G A G

UniRef90\_K2B573 Q Q I I S E I V H E A R P D S A V R E L V Q G S Q L L V G V Q A E Q G A G

UniRef90\_A1AQD7 Q V I D H I L L S Q L E P D Q D V T C L T Y G A H I V S V E S S S M G

UniRef90\_UPI0004119422 K L A G D L E L V D F G F A L T W V L A R G S E G K A

UniRef90\_D6SNZ2 I E A K L A G L T V E K V T I G L R Y T C V V L S D G C G

UniRef90\_UPI0003B74AA5 Y E G I L N E V L L E K L S V L D Y V V G L N Y V C V R T E A G C G

UniRef90\_D5E619 R L I D R L G K E Y A D T F P V D E I T L G V Y S G A R I G T H G G

UniRef90\_UPI0003B33B20 I E A L V E S A S G E R I A D V R I G L G Y T A V R L E S T G T G

UniRef90\_N6XSQ7 V L I E R L G D E A G R L A I E R A V L G L F F T G V K L S N G A G

UniRef90\_H6SKY9 W W G P E R L Y D D L S L G V A Q D E V R R L V C G P R W L M I E G P A G V G

UniRef90\_D3P9G5 I F E E V E N K L E N T L L D Y V L G L S Y V A V K T E E G I G

UniRef90\_UPI0003B4B771 D L M T P V S K G L F A A D V R I G L V Y T S V R L D N G T G

UniRef90\_W0JKR9 I H E A I Y E T A R Q E L E I S D I R I G L G Y T C V E L D N R F F G

UniRef90\_UPI0003B6A808 V Y E R L Y E T A K A G R E I V A D V R I G L G Y T A V K L D N G I G

UniRef90\_UPI000382893F D V L D A L G T S A V I E H L R I A R A V L G I F F T G V Q L D N G V G

UniRef90\_E4TJL5 K E I F E E A S D R L K D L K I L D Y L I G L G Y T L V E T E A G A G

UniRef90\_D9PXF2 I L D D I L D E I M P E I R V R D V A L G R S W T A V W S S C G

UniRef90\_F8AJF2 K L S R G L E L A D F S F G L T W V L V R D D S G L G

UniRef90\_S9SFL1 W W G P D R L Y Q D L S L G V A D D E V R A L A C G A R W L M V E G P H G S G

UniRef90\_G0H1T3 I V D D L A D K T L E K L T V L K E Y S I A I P Y A Y V E G E K G V K

UniRef90\_K0B116 K L Y E T L G D E I N S L T V E R I V F G L F F T G V K L S N G K G

UniRef90\_F8AF28 Y T Y V L I E G K H G K A

UniRef90\_Q5JG54 L A N G L E L L D F G F A L P Y T W V L I E G S L G

UniRef90\_F0JCF6 A E G R F L E N L T I G L G Y T A V C T D D G S V G

UniRef90\_D2RDZ3 E L L T E N F K I V D F S F A L P Y T Y V E G K R G K S

UniRef90\_X1U1G7 A E T L K I E E V R I G V G Y S A V K L D N G A G

UniRef90\_Q3A341 P D A P I G D V L T G T C L A A V R S R F C G

UniRef90\_G7Q491

UniRef90\_X0ZK83

UniRef90\_Q0AWB4 M Q L D Q N L Y D L L G E S V Y E L T I E R V V I G V F F T G V K L S N G Q G

UniRef90\_C8X015 L F Q D K A R Q T T I T T L N L G L G Y T A V T S D G G I G

UniRef90\_I4C542 D V M E T T C A D L G V R H V C L G L A Y T A V Q L D D H T G

UniRef90\_W8X8U3 L L E D L I Q E T R D A L T L E R A V A G I F F T G V E L D N G C G

UniRef90\_A8MKV9 E I L N E T I D Q I R A H I T V E R V T V G L F F T G V K L N N G G G

UniRef90\_U2RMJ1 M A D P W E L Y G R L I G V P E G I T V T R A L V N R W T V K L D A G M G

UniRef90\_L0HIH2 L V D L L A D R A K E G L V F E D F A V G L K Y T Y V K G P K G M G

UniRef90\_X0Y435 K I L E D L L S L N S E V S V K D I R Q G L F H T G V L T R N C G

UniRef90\_E1R7T3 E L Y R N L I E A T S E G R F V D T I S I G L G Y T A V T T S D G C G

UniRef90\_F8C2G1 D I Y K N L V E S L A R A K R L K R V C V G L H Y T M V E I E G V G



UniRef90\_Q972J1  
UniRef90\_D3S6H9  
UniRef90\_F4B4U7  
UniRef90\_G8AQW7  
UniRef90\_B6YTA1  
UniRef90\_A8MB57  
UniRef90\_UMPI000412D269  
UniRef90\_F0J3C7  
UniRef90\_G5HKZ3  
UniRef90\_J4WAT2  
UniRef90\_Q2WB19  
UniRef90\_C6A284  
UniRef90\_I7L0S0  
UniRef90\_H3ZMF7  
UniRef90\_F0LJF8  
UniRef90\_M3JB1  
UniRef90\_F3Z0J8  
UniRef90\_W6K9R1  
UniRef90\_UMPI0003B66B99  
UniRef90\_F6D848  
UniRef90\_W9H000  
UniRef90\_UMPI0004787FC0  
UniRef90\_I0GHC3  
UniRef90\_B9CXN7  
UniRef90\_L0HAE4  
UniRef90\_E1R863  
UniRef90\_K0AWA0  
UniRef90\_W01444  
UniRef90\_M1PXK6  
UniRef90\_S9S364  
UniRef90\_E6LRW7  
UniRef90\_C5A487  
UniRef90\_Q9V0X5  
UniRef90\_D0Z336  
UniRef90\_C9RGU7  
UniRef90\_K0YVA7  
UniRef90\_E3CZH9  
UniRef90\_O59175  
UniRef90\_G8AYQ4  
UniRef90\_I4BWH3  
UniRef90\_N6VUB0  
UniRef90\_T0IT71  
UniRef90\_F8ABQ7  
UniRef90\_B6YVE8  
UniRef90\_C8PH28  
UniRef90\_A7IAW7  
UniRef90\_C7P7J8  
UniRef90\_S2ZPX3  
UniRef90\_E1JW05  
UniRef90\_A1AP22  
UniRef90\_F4HKC7  
UniRef90\_K2B573  
UniRef90\_A1AQD7  
UniRef90\_UMPI0004119422  
UniRef90\_D6SNZ2  
UniRef90\_C0Q8X0  
UniRef90\_I3ZVW8  
UniRef90\_D3L1L7  
UniRef90\_UMPI0003B74AA5  
UniRef90\_D5E619  
UniRef90\_UMPI0003B33B20  
UniRef90\_N6XSQ7  
UniRef90\_H6SKY9  
UniRef90\_D3P9G5  
UniRef90\_UMPI0003B4B771  
UniRef90\_W0JKR9  
UniRef90\_UMPI0003B6A808  
UniRef90\_UMPI000382893F  
UniRef90\_E4TJL5  
UniRef90\_D9PXF2  
UniRef90\_F8AJF2  
UniRef90\_S9SFL1  
UniRef90\_G0H1T3  
UniRef90\_K0B116  
UniRef90\_F8AF28  
UniRef90\_Q5JG54  
UniRef90\_F0JCF6  
UniRef90\_D2RDZ3  
UniRef90\_X1U1G7  
UniRef90\_Q3A341  
UniRef90\_G7Q491  
UniRef90\_X0ZK83  
UniRef90\_Q0AWB4  
UniRef90\_C8X015  
UniRef90\_I4C542  
UniRef90\_W8X8U3  
UniRef90\_A8MKV9  
UniRef90\_U2RMJ1  
UniRef90\_L0HHI2  
UniRef90\_X0Y435  
UniRef90\_E1R7T3  
UniRef90\_F8C2G1

50 60 70 80  
M A M T Y K S N E E P R N I E S L H E L D T R K L A E L L K S W N F L E A S T L  
V A M T L L E N E Y R G H G N K K D L I G R D V E D F I N M V D S S F D I V L E A R T L  
M S Y N T R G N E D L D V K G F P A R Y L W E E K R V G E L A E A H A R S W N D L P Q E A A V  
L A A R P Q S A P P P D P A R W A G V G L A E L A A H A R S W N D L P Q E A A V  
V A M T L P E E V Q R Y E P A S I E E E P S L A E A F I E K A D S S L N I T E A R A F  
V S M T Y R T G F N A S P V R G F H L A G E E M S V G R E V A H L A K S W N L L A K A S V  
I A A A L G A F G A S P V P N T L A G I P L P L A G I R E V A H L A K S W N L L A K A S V  
L C F T P P S S A K A M P P N S G N L A G T P A A K I I D H M F S G N A M R R A I  
L C F T P P S S A K A M P P L S G R L K N G R S P V A K E Y L D D D F S G D N I L R R T L  
L C F T P P S S A K A M P P L S G R L K N G R S A K D Y L A D D L S H S N I L R K T L L  
L A Q T P P E R G T N A A P D A G R R G Q A G L K A L A G L V H S A N A F D Q A L L  
L A M T L P E E D I G E Y K T S F K S P S L I K E F I D K T D S S L N I T E R T K L L  
I C A T P P S S A K A M P H S G R L R E R T I R A S I D A D A L G D R P M R K A L L  
L A M T L P E E I G E Y K N T F T E P S L E E F I E K A D S S L N I T E R T L L  
L G V A M T L P E E I Q M Y S N E I E D V D V R K F I E K A D S S L N I T E R T L L  
L V S Y T P P S Q A A L M P K S G N I G K N V K T L L K D I T S D S D S N I L L K K T L  
L C S R A A R H G E P P A V I E L Q T L P S S V K E T A E L L R S S G E P D A A A F  
L A Q T P E S A G R P L R D A G E L T L G G R K L R D L A A W I H S Y N L L D S A A V  
L S Y S F Y S Q C T V L R K E A G E L T G K R A R D F L L E K I F S W N L L D S A A V  
V S K T Y G I P V V H G N Y T G N L T D K T T L E L A E Y S R S W N L V E A A S I  
L A R V P R G A D Q A G R P L E G F A A L G L K G L A A L V Q S R T D L F E A A L  
L A Y T F R N E L G P C G R A G E I F A G I D C T E A I K W S K S R N L V Q S A I  
I S L T Y S N I Y D E V I E D A G N L V G K S V K E L L Q Y M L T F N L T K V I S I  
I S Y T P P S S Q A A V M P H S G K M V G K G I E F F T R D I N S P S P L K K R A F  
L C F T P P S S A R A L P W S G K F R G R P V T T F L D A L F D P G P V K K A F  
I C F T P P S S A R A L P W A G K L A H Q P V S Y Y L D E M D Q N A P L K K A L  
L A Y T F R S E E C S I V F G Q A S K M K E P S A E E E L I L W G R D S E N L A K R S T I  
V A M T L P E E I Q R Y E N S I E E P S L E E F I K K A D S S L N A K R S T I  
V A Y T P L Y E C P A L G F A G F L K G N S A D K V L E F A L S K N P F E A A V  
L A Y L P R N A R D L L G R L P E F R K M S L K K H L A E F S G S W N D P L E M A L  
L C F T P P S S A K A M P P S G L K S G R S V L K S Y L D D L S H A N I L R K T L L  
L G V A M T L P E E I Q R Y T N S I G E P S V E E F I E R V D S L N V I E R T L L  
L G V A M T L P E E V Q R Y T S S I E P S L E E F I R K A D S S L N V I E R T L L  
I A R S P E E G A R T I R Y K E G F A E G K T L A Q L A Q Y F C S F D P L C R A L L  
V A M T L L E E Y K G H G T K K N V I N K N L E D L I N K V D S F D I V E R T L L  
V A A G L G S F D A A P L S G R L R G T P L R E V A A M A K S W D F A R A S A L  
I S F T P P S S A R A M P L S G R L R G T P V A R I V E E S H G G T P L K K A L  
V A M T L P E E V Q R Y T N S I E E P S L E F I D K A D S S L N I T E R T L L  
L A H L S K G G D V L R A R A G V Y R R G L R G L A A L A H G W D P A E R A L L  
L A A T L D E G R C C S K W S G V L A G R P A L D L A R G L M T A D S I A S S I  
V A M T L P E E D I Q F C E S E F D E I D V R T F I E K V D S V N I E R T I  
L A W T P K S S T A S C T H A G T L V G R P V K E V L T M L G D S S L A R A L  
L G Y T I L E E C N I L P P E V I S F A G K P A D V V A K Y F L S A N L I E A G V  
V A M T L P E E V G R Y R T S I E P S L E A F I E K A D S S L N I T E R T L L  
L S Y T P P S S Q A S A M P D S G N I A G K S V R Y L R D L G S A A P L K K A V  
I C F T P P S S A R A M P Y P G K F T G K P A A D F I R D L G A G A P L K K A V  
V A M T L L E E Y K G H S E K R D F G E K T I E D F I T M A N D L D V I N R T L L  
V A S T C R G G D R E R L E D L V A R P L C E I A K L S K S W D F E V A S L  
L A S H I A A G L D P V S P A R E D L P Q S A K E L A L T L A D P N T D N A S L  
V A W T P A S N A P C C T H A G T L I G R P A V I E L L G M L G E R N S L G R T L L  
V A M T M P E E I Q R Y V N S I E E P S L E E F I E K A D S S L N I T E R T L L  
V S Y T P H L C R G I K Y D A G N L R G K A M G E I I D L I D S P S I E R S L L  
V A W T P K S D S H S C T H A G S L A G R P A S V L L T M L C H Q K P L A R A V V  
V C F T P R S D S G S C A H A G A L S E K P V L E L C Q L M G S A H P L E R S V  
I C S R V P L D D V P L D S G H E P Q N Q S L H Q L L P G L Q N Q A T V Q A S F  
I A T W A C G Q H P I S L D S L P E I G H S V K T I A G L L H D K D P M K S S L  
L G V A M T L P E E V Q R Y T S S I S E P S L E A F I E R A D S L N V I E R T L L  
L A A T L D E R Q C C N K W S G P L A G R P A L E L A R G L A T A D P I A S S I  
L G Y V L R E P E S C T L L S D E I E G M P A A D A A R I Y M S E N L D A A V  
V A A T Q S A H C E T L S Y A G T M H N P R A Q V L E M G K S S N S L K R T V  
V A L L D K A G C S I L S A G T L A G R E A R A V P L L R S K S I V E A S V  
L C A T P P S S A K A M P T P G K I A G R P V V Q I L E D L Y R P Q D L R R T L  
L A H L S G A S R D L Q G R L D N L R R S L R Q L A E L Y R S W D P L D M A V  
L A Y T F R N E I G C N I L N R N E L K G E P A K E L A R L F S V D L L S A I  
I A W T L S K G C C H Q T K A G T L A G R P A K E L A N Y L D A D D P L S R T I  
L S Y T F A K E C C N V L D I G E K L I G K K A E L A N G I F S Y N L D S A L  
L A Y T I E G C N V L E P E V T F A G K P A D I V A K Y F L S A N N I E A A V  
L C A T P P S S A R A M P V P G R I A G R S A A E V L R D L Y R P Q D L R R A L  
V A Y T F R D P G G C N A T D D F F V G K N A M E V A K W V F S N G L E S A I  
I A S N N G I R D F E I P E M T H E L L E L S R S W D P F Y S S L  
V A M T L S E E V G R Y E S S L E E I T L P A L I E R A D S S L N A I E R T L L  
L A Y L P R S P K D L L P R L A S L Q R Q G L R R L A D L S R S W D P T E M A L  
M G V S M V L S D S K C H L Y R R D F E E T S L E S L I E C A K S G Y N D T E R T L L  
L S Y T P P S S A Y A M P T S G K M T G K N V R Y F L E N M F S G S P L K K T L  
L G V A M T L P E E I Q Q Y E N S I S E P S I E A F I E K A D S L N V I E R T L L  
V A M T L P E E V Q R Y T N S I S E P S I E A F I E R I D S L N V I E R T L L  
V A Y T P E G G C S V L P P N E E Y E G R P A S E V L E L L S N S A L H R T I  
L G V A M S L V E D V V D Y D V S F K E V S V E E F L K G L E S F N I V E R C

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

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

UniRef90\_Q972J1 UniRef90\_D3S6H9 UniRef90\_F4B4U7 UniRef90\_G8AQW7 UniRef90\_B6YTA1 UniRef90\_A8MB57 UniRef90\_UPI000412D269 UniRef90\_F0JC37 UniRef90\_G5HKZ3 UniRef90\_J4WAT2 UniRef90\_Q2WB19 UniRef90\_C6A284 UniRef90\_I7L0S0 UniRef90\_H3ZMF7 UniRef90\_F0LJF8 UniRef90\_M3JB1 UniRef90\_F3Z0J8 UniRef90\_W6K9R1 UniRef90\_UPI0003B66B99 UniRef90\_F6D848 UniRef90\_W9H000 UniRef90\_UPI0004787FC0 UniRef90\_I0GHC3 UniRef90\_B9CXN7 UniRef90\_UPI0004787FC0 UniRef90\_L0HAE4 UniRef90\_E1R863 UniRef90\_K0AWA0 UniRef90\_W0I444 UniRef90\_M1PXK6 UniRef90\_S9S364 UniRef90\_E6LRW7 UniRef90\_C5A487 UniRef90\_Q9V0X5 UniRef90\_D0Z336 UniRef90\_C9RGU7 UniRef90\_K0YVA7 UniRef90\_E3CZH9 UniRef90\_O59175 UniRef90\_G8AYQ4 UniRef90\_I4BWH3 UniRef90\_N6VUB0 UniRef90\_T0IT71 UniRef90\_F8AB71 UniRef90\_B6YVE8 UniRef90\_C8PH28 UniRef90\_A7IAW7 UniRef90\_C7P7J8 UniRef90\_S2ZPX3 UniRef90\_E1JW05 UniRef90\_A1AP22 UniRef90\_F4HKC7 UniRef90\_K2B573 UniRef90\_A1AQD7 UniRef90\_UPI0004119422 UniRef90\_D6SNZ2 UniRef90\_C0Q8X0 UniRef90\_I3ZVW8 UniRef90\_D3L1L7 UniRef90\_UPI0003B74AA5 UniRef90\_D5E619 UniRef90\_UPI0003B33B20 UniRef90\_N6XSQ7 UniRef90\_H6SKY9 UniRef90\_D3P9G5 UniRef90\_UPI0003B4B771 UniRef90\_W0JKR9 UniRef90\_UPI0003B6A808 UniRef90\_UPI000382893F UniRef90\_E4TJL5 UniRef90\_D9PXF2 UniRef90\_F8AJF2 UniRef90\_S9SFL1 UniRef90\_G0H1T3 UniRef90\_K0B116 UniRef90\_F8AF28 UniRef90\_Q5JG54 UniRef90\_F0JCF6 UniRef90\_D2RDZ3 UniRef90\_X1U1G7 UniRef90\_Q3A341 UniRef90\_G7Q491 UniRef90\_X0ZK83 UniRef90\_Q0AWB4 UniRef90\_C8X015 UniRef90\_I4C542 UniRef90\_W8X8U3 UniRef90\_A8MKV9 UniRef90\_U2RMJ1 UniRef90\_L0HIH2 UniRef90\_X0Y435 UniRef90\_E1R7T3 UniRef90\_F8C2G1

90 100 110 120

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

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

UniRef90\_Q972J1  
UniRef90\_D3S6H9  
UniRef90\_F4B4U7  
UniRef90\_G8AQW7  
UniRef90\_B6YTA1  
UniRef90\_A8MB57  
UniRef90\_UPI000412D269  
UniRef90\_F0JC37  
UniRef90\_G5HKZ3  
UniRef90\_J4WAT2  
UniRef90\_Q2WB19  
UniRef90\_C6A284  
UniRef90\_I7L0S0  
UniRef90\_H3ZMF7  
UniRef90\_F0LJF8  
UniRef90\_M3JB1  
UniRef90\_F3Z0J8  
UniRef90\_W6K9R1  
UniRef90\_UPI0003B66B99  
UniRef90\_F6D848  
UniRef90\_W9H000  
UniRef90\_UPI0004787FC0  
UniRef90\_I0GHC3  
UniRef90\_B9CXN7  
UniRef90\_L0HAE4  
UniRef90\_E1R863  
UniRef90\_K0AWA0  
UniRef90\_W01444  
UniRef90\_M1PXK6  
UniRef90\_S9S364  
UniRef90\_E6LRW7  
UniRef90\_C5A487  
UniRef90\_Q9V0X5  
UniRef90\_D0Z336  
UniRef90\_C9RGU7  
UniRef90\_K0YVA7  
UniRef90\_E3CZH9  
UniRef90\_O59175  
UniRef90\_G8AYQ4  
UniRef90\_I4BWH3  
UniRef90\_N6VUB0  
UniRef90\_T0IT71  
UniRef90\_F8ABQ7  
UniRef90\_B6YVE8  
UniRef90\_C8PH28  
UniRef90\_A7IAW7  
UniRef90\_C7P7J8  
UniRef90\_S2ZPX3  
UniRef90\_E1JW05  
UniRef90\_A1AP22  
UniRef90\_F4HKC7  
UniRef90\_K2B573  
UniRef90\_A1AQD7  
UniRef90\_UPI0004119422  
UniRef90\_D6SNZ2  
UniRef90\_C0Q8X0  
UniRef90\_I3ZW98  
UniRef90\_D3L1L7  
UniRef90\_UPI0003B74AA5  
UniRef90\_D5E619  
UniRef90\_UPI0003B33B20  
UniRef90\_N6XSQ7  
UniRef90\_H6SKY9  
UniRef90\_D3P9G5  
UniRef90\_UPI0003B4B771  
UniRef90\_W0JKR9  
UniRef90\_UPI0003B6A808  
UniRef90\_UPI000382893F  
UniRef90\_E4TJL5  
UniRef90\_D9PXF2  
UniRef90\_F8AJF2  
UniRef90\_S9SFL1  
UniRef90\_G0H1T3  
UniRef90\_K0B116  
UniRef90\_F8AF28  
UniRef90\_Q5JG54  
UniRef90\_F0JCF6  
UniRef90\_D2RDZ3  
UniRef90\_X1U1G7  
UniRef90\_Q3A341  
UniRef90\_G7Q491  
UniRef90\_X0ZK83  
UniRef90\_Q0AWB4  
UniRef90\_C8X015  
UniRef90\_I4C542  
UniRef90\_W8X8U3  
UniRef90\_A8MKV9  
UniRef90\_U2RMJ1  
UniRef90\_L0HIH2  
UniRef90\_X0Y435  
UniRef90\_E1R7T3  
UniRef90\_F8C2G1

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

UniRef90\_Q972J1 I P K S D L V I L 170 A T T T L L N K S I L E R L L Q L S K S A K V Y L V V G P S S 200  
UniRef90\_D3S6H9 L P E M D A V F I T S G T T T L L N K S I L E R L L Q L S K S A K L K I L V V G P S T A Q  
UniRef90\_F4B4U7 I L E D A Q V V L I T A T T T L L N K S I L D R R L L E L S R Q R A A Y V I L V G P P S T P P  
UniRef90\_G8AQW7 L I P G A E G A A L I T A T T T L L N K S I L D R R L L E L S R Q R A A Y V I L V G P P S T P P  
UniRef90\_B6YTA1 L P E V D A V M A S A T S T C L L N K S I L D M L L D R A K R N A R I F I L L T G P P S T G Q  
UniRef90\_A8MB57 L E D S Q V V V I T A T T T L L N K S I L D R R L L E L S R Q R A A Y V I L V G P P S T P P  
UniRef90\_UPI000412D269 M P Q A E A V A L I T A T T T L L N K S I L P R L L Q L S N Q R A R T Y V I L V G P P S L P  
UniRef90\_F0JC37 V A E A D L L I T T G T T L L N D T L E D L L A T A K P S A D V I V V G P P T A S  
UniRef90\_G5HKZ3 V V P E A D L M V I T G V T L L N D T L P G L L K D M A K P G A Q I L V V G P P T A G  
UniRef90\_J4WAT2 L P Q A D L L V I T G V T L L N D T L P D L L K L C K A Q I V V V T G P P T A G  
UniRef90\_Q2WB19 L P A A E A V I I T A S T L L A N R S A P H L L H L A R K F A R V A L V G P T A P  
UniRef90\_C6A284 L P E M D A V I V T S G S A L L N G C L E D M L V E R S K S K A K K V I L T G A T A Q  
UniRef90\_I7L0S0 L V P W A D L L I I T S G T T L L I N G T L E H L L D L A R S K A G A T V V V L G P S V A  
UniRef90\_H3ZMF7 L P E M E A V I V S G S A L L N G C L E D M L E R S K R A K K I I L T G A T A Q  
UniRef90\_F0LJF8 L P E M D A V I V S G S A L L N G T L E D M L E R S K K A K L I V L T G P T A Q  
UniRef90\_M3JB1 I L R A A D N L I T G V T L L N G T L E D I L S L K K S G A E V I V V G P P T V  
UniRef90\_F3Z0J8 L P Q A D V V A M T G T T L L N G S C E R L L R L C R Q P G A F T I M L G P P S T P  
UniRef90\_W6K9R1 L P D G G P A V I I H A S A L V N D R T L P N L L E M I C R Q K P A V L M G P P S T P  
UniRef90\_UPI0003B66B99 L L K D A D I V I L T A T S L I N K S I L E R Y L E L A R H D A Y T I A I M G P P S T S  
UniRef90\_F6D848 F P G S D I V I T G S T L I N K S I L E R Y L E L A R H D A Y T I A I M G P P S T S  
UniRef90\_U9H000 L P G C A A A V I T A T S L I N K S I L P R L L D E L A R G S R V A L A G G P P T P  
UniRef90\_UPI0004787FC0 L P K C D I V V I T A T S S I N K T F D N I L D E Y A C K G A R K V A M V G A T T P  
UniRef90\_I0GHC3 V P D A D L V A I T G S T L S N K S L E S L L S L K R K G I T I V F G P P T P  
UniRef90\_B9CXN7 V P K A D N L I T T G T T L L I N G T L L E E L L S F K K A G A D V V V V G P P T V S  
UniRef90\_L0HAE4 V P Q A D L L V I T G T S L L I N G T L L E E P L L S A S A K A G A H I I I V V G P T A S  
UniRef90\_E1R863 I S K A D W L I I T G T T L L I N D T L E D I L D H C R S D A N I T L V V G P T A S  
UniRef90\_K0AWA0 L P T K C D V V L I T A T S I I N K T I D E V L K K T K K A R E V L I V G P S T S  
UniRef90\_W0I444 L P E V D A V I A S A T C L I N G T I D M I A E R A K K A K I V L T G P T G Q  
UniRef90\_M1PXK6 L P A S D V I I I S A S T L A N R T F D E L L S S R G A A R E V V L L G P P S A P  
UniRef90\_S9S364 L P G C A A A V V A S S L V N R N L P R L L R L A Q G A R I A L V G P P T V  
UniRef90\_E6LRW7 L H A D L N V I T G V T L L N D T L P D L L A M C K P G A D I L V T G P P T A G  
UniRef90\_C5A487 L P E M D A V I A S A S C L V N G T I D M L L E R A K R A K I F V L T G P T G Q  
UniRef90\_Q9V0X5 L P K M D V I I A S A S C L V N G T I D M L L D R A K K A K L I L L T G P T A Q  
UniRef90\_D0Z336 F Q I A Q Q L A I A S A Q T L M N G S L E P I L C S S R N V P H H L L V G P S A P  
UniRef90\_C9RGU7 L P E M D A V F I T S G T S L L N D T L D F I L E R S K N A K L K V L V G A T S Q  
UniRef90\_K0YVA7 L P D A E V A L I T A M T L T N D T L P R L L S L A K R A K T Y V I G P T S L P  
UniRef90\_E3CZH9 I P G A D L V V V I T G T T L V N D T L P E G L L S L V R P A G A R V V L V G P T A S  
UniRef90\_O59175 L P E V D G I I A S A S C L V N G T L D M I L D R A K K A K I V I T G P T A S Q  
UniRef90\_G8AYQ4 L P G C T T A L I T S A A G L V N R N L P R L L S L A C S G Q V A I L T G P P A T P  
UniRef90\_I4BWH3 L P R C D V V F I T S G T A F I L N K T I D H L L D L C S G R V A I I G P P T P  
UniRef90\_N6VUB0 L P N M D A V L I T S G T S L I N D T I D M I L E R S K K A K I K V L V G A T A Q  
UniRef90\_T0IT71 L N S C T I A I I T G T S L I N G T F D E G L N A G L G H E P R A A V L L G P P S T P  
UniRef90\_F8AB7 L P Q A T V A I I T S V T L I N K T I E E E I F E Y L H K P R E V I L L G P P S P  
UniRef90\_B6YVE8 L P E V D A V I A S G S A L I N G T L D M M L D R A K K A E L F V L T G P T A Q  
UniRef90\_C8PH28 V P R A D N V I T A T T L L N D T L D G L L H L K K S G A K L V L V G P P T T A  
UniRef90\_A7IAW7 I R R A D M L V I T G T T L L N N T L E P L L A S A R P G A E I V V V G P P T A S  
UniRef90\_C7P7J8 L P K M D A V L I T S G T S L L N N S L D M I L D R A K N A K L K I L V G P S A Q  
UniRef90\_S2ZPX3 I P E A D F V L I T G M T E T N K T L P R L L E L A S K A D Y T I L G P S A T L  
UniRef90\_E1JW05 L P Q A D V V A V I T G T T L L N G T L A G L L A S C R K D A Y V V M L G P P T P  
UniRef90\_A1AP22 L G E C D V A I I T A T S L I N G T C D D L L A A L G K P R A A V L L G P P T P  
UniRef90\_F4HKC7 L P E M D V V I A S A S C L V N G T I D M L L D R A K R A E L F V L T G P T G Q  
UniRef90\_K2B573 L N E A D A T V I T G T T L I N K S F V E V I G E C K N S F N V M L G P T V P  
UniRef90\_A1AQD7 L A D C S V A I I T A T S L I N G T L D E L V A G L G S P R A A V I L G P P S P  
UniRef90\_UPI0004119422 L K N A D I V I T G S S A A V G G F D A A L D A A T S A R F V G V V G P P S A G  
UniRef90\_D6SNZ2 L P R A Q L V A I T A T T L L N G S T A G I L N L C D T S A G I R V L M G P P S T P  
UniRef90\_C0Q8X0 L P S A D V A I A T A T T L L N G T L A G I L A C C Q P S A V K L I I G P P S T P  
UniRef90\_I3ZW98 L P E M D A V I A S A S C L V N G T I D M L L D R A K K A R L F V L T G P P T G Q  
UniRef90\_D3L1L7 L P R C D A V F I T S G T A F I L N K T I D H L L D L C T G R V A I I G P P S T P  
UniRef90\_UPI0003B74AA5 M P D C D T F I I T G V T L I N K T L H T Y E P Y M N D N A Q K I I I G P P S T P  
UniRef90\_D5E619 I A S S D V A I I T G T T L L N N S L D D P L V A L S Q A S N T I L L G P P T T P  
UniRef90\_UPI0003B33B20 L P K S C D V V I L T A T S L L N G T F D G L L A L S K Q A R E I C V M G P S T P  
UniRef90\_N6XSQ7 V P Q V I E V F I T T G T T L I N G T L D G L L R L L R P G A E A A V I G P P T A T  
UniRef90\_H6SKY9 L P G C A R A V V A S S T L L N R T L P R V L R L A Q G A R V A I I G P P T P  
UniRef90\_D3P9G5 L P A C D V V I I S G T T L V N K T T E D F L C Y C N D S S I K I L M G P P T P  
UniRef90\_UPI0003B4B771 L A V C D V A L I T A T S L V A N T M D E L L S G L G N I R S A V I L G P P S F  
UniRef90\_W0JKR9 L P K N C S D I A I I S A T T L V N K T I D S I L N F S S A R Y N I L G A T C T M  
UniRef90\_UPI0003B6A808 L P Q A S V A I V T A V T L I N K T L E E I L D Y L G N A R E V I L L G G S T P  
UniRef90\_UPI000382893F V A E A D V L I T T G T T L V N G T L D G L L R H L R R G A Q A A V V G P S T A T  
UniRef90\_E4TJL5 I P K S D I V I T S G T T F I N K T T E R F L N F V D D Y K K V I F I G A S T P  
UniRef90\_D9PXF2 L P R V D L L A V T G S T L V N H S T E R Y L A L A E L D A F V A I I G P P T P  
UniRef90\_F8AJF2 L P E M E A I I A S A T S L V N G T F D M L I D R S K N A K T F I L V G P T G G  
UniRef90\_S9SFL1 L P G C G G A V V N S S A L V N R S I P R I L R L A E A A P L A L I G P P S T P  
UniRef90\_G0H1T3 L P E M D A V I I T G T T L V N D T I D V V L E R S K N A K L K I L T G P T A Q  
UniRef90\_K0B116 I P I A D Y V I I T G T T L I N D T L E G L L E L A K P T A K I I V V G P T V S  
UniRef90\_F8AF28 L P E V D A V I A S A T C L V N G T L D M I L D R A K N A G A E L L T G P T A Q  
UniRef90\_Q5JG54 L P E V E A V I V S G S A L V N G T L E M I L D R A K K A G E L V I L T G P T A Q  
UniRef90\_F0JCF6 E S W A E V A I V T S T S I I N N T L D D L L A R M G K D V R V A L M G P P S T P  
UniRef90\_D2RDZ3 L P K F D A V F V S G T A L I N G T L R L I L D R A E N A M F K V L I G P P T A Q  
UniRef90\_X1U1G7 I S Q A D V V G I T G T A F T N H T V E H L K L C H P G A Y I V M L G D T A P  
UniRef90\_Q3A341 L G V C D V A I L T G T S L I T G T L D E L F A S L G R P R S A V L L G P P T A P  
UniRef90\_G7Q491 L P Q A D L V A V I T G T T L L N G T L A G L L S S C R P D A F V V M L G P P T T P  
UniRef90\_X0ZK83 I P Q A D I V G I T G T A F T N H T L E H L L K L C T P R A Y I V I L G D T T P  
UniRef90\_Q0AWB4 L P W A D I I I S T G T T L I N D S L E E L L K A A R P D A E F I V V G P P S A S  
UniRef90\_C8X015 H D W A D V L L L T S T S I L N Q S T E E L L Q A T S D T V R T V I L V G P P S T P  
UniRef90\_I4C542 L A K S T V A L I T S T T I M N S S I D K L G A A M H C R E V M L V G P P T A P  
UniRef90\_W8X8U3 I P W A D V L I S T A T T L T N D S I D A L L S H A R P G T R I A I V G P T A P  
UniRef90\_A8MKV9 L G Q S D L I I T G T T L I N K T L E G L L S M A K E G A E I V V G P P T A S  
UniRef90\_U2RMJ1 L P G R E V V A I T G S A L T N D T L P R L L E L C A G A R V I H L V G P S A P  
UniRef90\_L0HHI2 I P E A D V V I T G A T L V N D S I D A I L S L T E D R K F L V V G P T A G  
UniRef90\_X0Y435 L P E A D V V G I T G A F T N H T V G Q L L E R L R P G A R C A M L G P T T P  
UniRef90\_E1R7T3 E S E A E A L I L T S T S I I N G S T E S I L E R L R P G A R C A M L G P T T P  
UniRef90\_F8C2G1 I K L A L I T S S T L V N K T L H S V L E N L E S V P E T L L I G P T T P

UniRef90\_Q972J1 L T D V L F D Y G I T D V I G G V M V K D E E K L V R A I K N G L H F P F S D Y M  
UniRef90\_D3S6H9 S L P D L F K F F G I T H I A S T K I V D V D K A L L Y L K F A S S S M L F K G A  
UniRef90\_F4B4U7 M L D L M F D F R Y G V D V L A G F V V N R P Y S F I K K I S Q G G C G M  
UniRef90\_G8AQW7 L T P R L F R Y G V A V L A G F V V E D R D A V A E A I A A G G S S Q S F H R H G  
UniRef90\_B6YTA1 V L P E F F K T G V T H I A S M K V V N V E N A I L Q L K L G C F R G F S N E S  
UniRef90\_A8MB57 M L D L M F D F G L D L L A G V R V N N P Y S F M K K I S Q G C G M  
UniRef90\_UPI000412D269 C A P K V F A G K A N V L A G S A V V D A K W I R E Q V K Q G K P V S K L K  
UniRef90\_F0JC37 M L P E F F S R G V N A I G G V M A T D P D R L L E V L G E G G S G Y H F K S A  
UniRef90\_G5HKZ3 M L P D F F S R G V T M L G G I H V T K A D E L L D I I S E G G S G Y H F K Y A  
UniRef90\_J4WAT2 M L P D F F E N K V T I M G G I L V T K P D E V L D L I A E G G S G Y H F K S A  
UniRef90\_Q2WB19 L T E R L L S Y G V E V S S G L I A Q D P D G L A R A V A E G G G A K L K R F S  
UniRef90\_C6A284 V L P E F L K A G G V T H L A S V K V I D V E K A I L N L K M G F R G F G E Q S  
UniRef90\_I7L0S0 L L P D L F A R G V E I V G G N V V T D P N R L L D L L A E G G S G Y H F K G A  
UniRef90\_H3ZMF7 A L P E F F K T G V T H L A S A K V I D I E K A L T N L K L G S F R G F G K Q S  
UniRef90\_F0LJF8 L L P E L L R G G V T H L A S M K V L N I E R A L T K L K L G T F R G F E K E N  
UniRef90\_M3JB1 M S P A L F D R G V S H V G G I Y T T H A D E L L D V I G Q A G S G Y H F K F A  
UniRef90\_F3Z0J8 M S P C L F D W G L Q A L G G T R V S D P E L A V E G I Q E G R T F K Q L R G V  
UniRef90\_W6K9R1 L T P R L K A Y R I G A L A G V V V T D L E R V A Q A V A E G G S L R S L R P F  
UniRef90\_UPI0003B66B99 M S C S I F N R N L Y L M G S I T D L I P K A K E L I S S Q S G G T K L K P A V  
UniRef90\_F6D848 M S E V L F D Y G A D M L A G V E I I D P E T L L Q K I S S Q S G G M  
UniRef90\_U9H000 L T P R L F S Y G V E I L A G F V V D D P D G M A D C V A D D A T P K R F K F  
UniRef90\_UPI0004787FC0 L C T E V F K Y K I D I L A G V L V L N P K L L D L V S A D D G G T K H F D N N  
UniRef90\_I0GHC3 P S S V L F D Y S V D I L G A S I V K N P Q F V L D A I S Q G G K L S N F K K H  
UniRef90\_B9CXN7 M L P A L F F E C G G V K H I G G V Y T T H A D E L L D I I A Q G G S G Y H F K F A  
UniRef90\_L0HAE4 M L P A F F R R G I S V L G G D L V T H P D D L L D L L A E G G S G Y H F K S A  
UniRef90\_E1R863 M L P D F F R R G I S V L G G I V T D P D R L L D T L I E A G G S G Y H F K S A  
UniRef90\_K0AWA0 L C P E F F K Y R I S V L A G A L V R K P L E L L D I I S Q G G G T R A M K G A  
UniRef90\_W01444 V L P E F F K T R I T H V A S M K V V D I E K A I E K L K L G C G F G S K E S  
UniRef90\_M1PXK6 L Y P A F F S R G I T A I M G T R I I D P L K M L T V I S E A G G T K H Q F C G  
UniRef90\_S9S364 L T S R L F K A Y G L D L L G G L L R D P K G L A E A I R A G A L P R E F R F G A  
UniRef90\_E6LRW7 M I P D F F K R G V T V M G G I L V T K P D E L L D I I S E G G S G Y H F K S A  
UniRef90\_C5A487 L L P E F L R T G V T H L A S M K V V D I K K A I L G L K L G S F K G F E K G N  
UniRef90\_Q9V0X5 L L P E F L K T K V T H L A A M K V V D I D R A I L K L K L G S F R G F E E G S  
UniRef90\_D0Z336 L C P L F D Y G I D E I S G L I V K N P T K V M Q F I A E S G A M L M D  
UniRef90\_C9RGU7 L L P D L I K G G L T H I A S T K V I D V D K A L L Y L K F A S S S M L F K G A  
UniRef90\_K0YVA7 A A V Q A F T G R A N V L A P S A V I D P H W V M L Q V L E A G A S V S K L K P G A  
UniRef90\_E3CZH9 Q Y P E F F R R G V S L L G G I R V T G A D D L L D L L A E A G S G Y H F K C A  
UniRef90\_O59175 L L P E F L K T K V T H L A S M K V T N I E K A L V K L K L G S F K G F E S E S  
UniRef90\_G8AYQ4 L T P R L H A Y G V G T L A A G F V T D P D G L A N A I A Q G A K P W A F A P  
UniRef90\_I4BWH3 L W P E L L N G R V A G L F G L R V C D P E L V Y Q L V S E G G S T G S F K G T  
UniRef90\_N6VUB0 A L P E F F K G Y L T H I A S V K I I N I K K V L L N L K L G S S S K L F E Y S  
UniRef90\_T0IT71 L C G D V F D T K I T H V A G S R V L D T D A V L R I V S E G G G T M L M K  
UniRef90\_F8ABQ7 L F P E A F D T P I T L L S G L L V K D E K I L T L V S E A K G T K A F K Y V  
UniRef90\_B6YVE8 L L P E F L K T R V T H L A A M K V I D V D G A L T K L K L G S F R G F E A G S  
UniRef90\_C8PH28 L L P A L F F E R G V D F A G G T V R D A D A V L D I I A Q A G S G Y H F K F A  
UniRef90\_A7IAW7 M L P A F F R R G V T V L G G D V V T D P D R L L D T I A E G G S G Y H F  
UniRef90\_C7P7J8 I L L P E F V K Y G I D Y I A S T H I L G I D K A L Y N L K L G S S F G L F K Y S  
UniRef90\_S2ZPX3 A A P L F L A G V D E I A G S I V G D S E R V K S F I E L G N S P L R S G G  
UniRef90\_E1JW05 F A A S L F D C G I D V L A G C A V P D P Q A L A G I R A G K C F K G L S G V  
UniRef90\_A1AP22 F C P L A F G T P V T H L A G A R V V D A D R V L Q V V S Q G G G T M R M K  
UniRef90\_F4HKC7 L L P E F L K T R V T H L A S M K V H D I S R A L L G L K L G S F K G F E K G N  
UniRef90\_K2B573 P S A V L F K Y G V N A I V A I K A T D N A Q L Y S S I A E G A L V P R F K G S  
UniRef90\_A1AQD7 L C P E A F G T K I T H L A G A R V Q D V D A V Q R I I S E G G G T M L M K  
UniRef90\_UPI0004119422 W L P Q A F R M G V H A V A A T K I T D L S G A R R T I L E G G G T P Q F E Y G  
UniRef90\_D6SNZ2 M A C C L G R M G L D Y L A G S R V L D S R Q V F T G I K N G L C F R S L S G V  
UniRef90\_C0Q8X0 V T P A L F A L G F D Y V A G V V V Q D G D L V K K G I E E G C S F K Q L R G V  
UniRef90\_I3ZW98 L L P E F L R G G V T H L A S M K V V E V E K A L L G L K L G S F R G F E E G N  
UniRef90\_D3L1L7 L W P E L L G K R L V G L F G V R V C D P E L V C Q V V S E G G S T  
UniRef90\_UPI0003B74AA5 V V I Q V L A D R G Y L L G G T K V V D C E R V M K L V S R G Q G T R R F  
UniRef90\_D5E619 L Y P E F F E E G F T A V M G T K I D D A P R T M L R V V S Q A G G T K H L N C G  
UniRef90\_UPI0003B33B20 L I P E V F F E R G V T L L S G R C F T D P D R L M R V V S E A G G T R S F R D S  
UniRef90\_N6XSQ7 L I J A E P F R R G V T V L G G T R V L E A D E L L E R L A E G G S G Y H L K T V  
UniRef90\_H6SKY9 L S P R L H A Y G V E R M G L I V R D A D S K G A G M K  
UniRef90\_D3P9G5 L S N E L A K F A N I A G S F V K S D G I I D A V S K G A G M K  
UniRef90\_UPI0003B4B771 M R P E V F D T P V T H I A G V R V R D A S A V E R I V S E G G G T K T L K  
UniRef90\_W0JKR9 S E Q V F L N T K A T H L C G I S V I D K D K I K T L I S E A A G T R L I S K Y  
UniRef90\_UPI0003B6A808 L F P Q V F D Y P I L G S G L T K N N E I L R V V S E A K G M K A F K F V  
UniRef90\_UPI000382893F L A A P F A R R G V T V V G G T R V H A S A E L L G L L A E G G S G Y H F Q S V  
UniRef90\_E4TJL5 L S T A L S K Y G T L A G S K V I D V N Y T K Y A L S K G G M K L M K K G  
UniRef90\_D9PXF2 M T D V F F E Y G V D M I A G V E I T D P V N I L K K I R F N E G M L H E K D G  
UniRef90\_F8AJF2 L L P E F F D T G V T H V A S M K A V D I N K A L L G L K L G S F K A F E R G C  
UniRef90\_S9SFL1 L T P R L F S Y G I T V L G G L V V H D P K G L A A A I R A G A L P R E F T R F  
UniRef90\_G0H1T3 I N P D F L K S G L T H T A S T R V I N I D K T V T D L K H G S S F G F R N S  
UniRef90\_K0B116 M M P E A F  
UniRef90\_F8AF28 V L P E F L R T G V T H V A A M K V I D I D R A I E K L K L G C F R G S Q K R A  
UniRef90\_Q5JG54 I H Q E L V K T G I T H L A A M K V I D I L E R A L L G L K L G S F R G F E K G N  
UniRef90\_F0JCF6 L L K A P F Q G K V R L L A A G T V P M D S E A T L R A V K Q A K G T P I Q K F S  
UniRef90\_D2RDZ3 I H P K L A E G L T H L A S M R V V D I D K A L T G L K L G S W R I F E S A C  
UniRef90\_X1U1G7 L S P V L F D Y G I D A I S G T K V A N E E L A L R C L L A E G G S G Y H F Q S V  
UniRef90\_Q3A341 L C A E V F D T P L T Q I S G A R V L D C D S V F R V I S E G G G T P L L K  
UniRef90\_G7Q491 F A R A L F D Y G V D V L A G C D V P D P E A A L A G I R A G K C F K G L S G V  
UniRef90\_X0ZK83 L S P L V F D Y G V S G T K V I D P E R A L R C V S  
UniRef90\_Q0AWB4 I L P P L F D R G V S S V G G V L V T D A D Q L D I L G E A G A G Y H F R C A  
UniRef90\_C8X015 M V P D A F A G T P V N L A G T V P L D S K G V L Q V I H G A G T R H F S  
UniRef90\_I4C542 L V P P A F A T P V T R L S G M I A R D A E G L R V I H E G G T R H F S  
UniRef90\_W8X8U3 L L P D P Y R R G I Q V V G G T R A R Q A G P L L D L L A E G A S G Y H L K S V  
UniRef90\_A8MKV9 M L P D F F K R G I K K I D G A V V T K S D R L D L L A E A G S G Y H F K S A  
UniRef90\_U2RMJ1 P A P E A Y P A C V R E I D S A V V D P D R C F R D A M G A  
UniRef90\_L0HIH2 V H P S W L D G K L D L I A G T R I K D I E N T R K I I K M G G G R W D F  
UniRef90\_E1R7T3 I M P E A F R F P V D Y L G G I S V V N P E G V L A A V R H G K G T P A I N R H  
UniRef90\_F8C2G1 L N P E V F R F P I T W L C G S I V R D P E L L F R M V C E G K G T S F F K S G

UniRef90\_Q972J1 R R Q V L E E  
UniRef90\_D3S6H9 R K Y T I E  
UniRef90\_F4B4U7  
UniRef90\_G8AQW7 R F V T L H  
UniRef90\_B6YTA1 K K Y V V E  
UniRef90\_A8MB57  
UniRef90\_UPI000412D269  
UniRef90\_F0JC37 D R V V I N K  
UniRef90\_G5HKZ3 D R T V I V K  
UniRef90\_J4WAT2 E R L V I  
UniRef90\_Q2WB19 R Q A T L R R  
UniRef90\_C6A284 R K Y I I E  
UniRef90\_I7L0S0 D R I A V Q R  
UniRef90\_H3ZMF7 K K Y V I E  
UniRef90\_F0LJF8 K K Y I I E  
UniRef90\_M3JB1 E K F V M S R  
UniRef90\_F3Z0J8 E Q I  
UniRef90\_W6K9R1 L R N V L  
UniRef90\_UPI0003B66B99 K K I S V K  
UniRef90\_F6D848  
UniRef90\_W9H000 R Q V A L R R  
UniRef90\_UPI0004787FC0 V K  
UniRef90\_I0GHC3 L E Y I V L K  
UniRef90\_B9CXN7 N K F A I S  
UniRef90\_L0HAE4 D R I S I R  
UniRef90\_E1R863 E R L V I R R  
UniRef90\_K0AWA0 D Q V N L K  
UniRef90\_W0I444 R K Y V I E  
UniRef90\_M1PXK6 E K V A F Q  
UniRef90\_S9S364 Q Y L H L R R  
UniRef90\_E6LRW7 E R L V I Y R  
UniRef90\_C5A487 R K Y V V E  
UniRef90\_Q9V0X5 R K Y I V K  
UniRef90\_D0Z336  
UniRef90\_C9RGU7 K K Y T I E  
UniRef90\_K0YVA7  
UniRef90\_E3CZH9 D R V T L T R  
UniRef90\_O59175 I K Y V I E  
UniRef90\_G8AYQ4 G R V V H R R  
UniRef90\_I4BWH3 A K A V L  
UniRef90\_N6VUB0 R K Y  
UniRef90\_T0IT71  
UniRef90\_F8ABQ7 E K V N L R  
UniRef90\_B6YVE8 R K Y I I E  
UniRef90\_C8PH28 D K I T I C K  
UniRef90\_A7IAW7  
UniRef90\_C7P7J8 K K Y I V K  
UniRef90\_S2ZPX3 M R V C V  
UniRef90\_E1JW05 R Q  
UniRef90\_A1AP22  
UniRef90\_F4HKC7 Q K Y V I E  
UniRef90\_K2B573 E M V T Y C R  
UniRef90\_A1AQD7  
UniRef90\_UPI0004119422 R K Y T L  
UniRef90\_D6SNZ2 E  
UniRef90\_C0Q8X0 S H V I L Q  
UniRef90\_I3ZW98 R K Y V V E  
UniRef90\_D3L1L7  
UniRef90\_UPI0003B74AA5  
UniRef90\_D5E6I9 T K I S F V Q  
UniRef90\_UPI0003B33B20 V K V N L  
UniRef90\_N6XSQ7 E R V T L R  
UniRef90\_H6SKY9  
UniRef90\_D3P9G5  
UniRef90\_UPI0003B4B771  
UniRef90\_W0JKR9 T K  
UniRef90\_UPI0003B6A808 K K V S L R  
UniRef90\_UPI000382893F E R I C L  
UniRef90\_E4TJL5  
UniRef90\_D9PXF2 V K Y V  
UniRef90\_F8AJF2 G K Y N  
UniRef90\_S9SFL1 S K Y S M K  
UniRef90\_G0H1T3  
UniRef90\_K0B116  
UniRef90\_F8AF28  
UniRef90\_Q5JG54 R K Y V V E  
UniRef90\_F0JCF6 R K  
UniRef90\_D2RDZ3 E K Y T I K  
UniRef90\_X1U1G7 Q K L T M I R  
UniRef90\_Q3A341  
UniRef90\_G7Q491 R Q I A W V R  
UniRef90\_X0ZK83  
UniRef90\_Q0AWB4 D K I T L  
UniRef90\_C8X015 R K A  
UniRef90\_I4C542  
UniRef90\_W8X8U3 D R V N L  
UniRef90\_A8MKV9 N K I V I A E  
UniRef90\_U2RMJ1  
UniRef90\_L0HHH2  
UniRef90\_X0Y435  
UniRef90\_E1R7T3 A K K V L C Q  
UniRef90\_F8C2G1 E K I N I R

UniRef90\_D3AV83  
 UniRef90\_H6LJR4  
 UniRef90\_Q2LWG3  
 UniRef90\_H2J7J9  
 UniRef90\_X1MFV0  
 UniRef90\_S7V998  
 UniRef90\_X1SRI6  
 UniRef90\_B8FM54  
 UniRef90\_C4XUC9  
 UniRef90\_K2BKH7  
 UniRef90\_A0LE70  
 UniRef90\_Q6AIY2  
 UniRef90\_A6LNZ4  
 UniRef90\_Q67RQ3  
 UniRef90\_D5VR29  
 UniRef90\_Q2LX32  
 UniRef90\_B7IEQ1  
 UniRef90\_UPI000372E889  
 UniRef90\_A8MKW3  
 UniRef90\_F4B3P7  
 UniRef90\_E1QQA3  
 UniRef90\_E1R128  
 UniRef90\_A1B171  
 UniRef90\_UPI0003B3AC14  
 UniRef90\_S0FYH4  
 UniRef90\_UPI00046654C5  
 UniRef90\_UPI00047076FA  
 UniRef90\_T0I893  
 UniRef90\_D3RTU9  
 UniRef90\_D9Q105  
 UniRef90\_A9BGZ1  
 UniRef90\_X1QI22  
 UniRef90\_Q2FME8  
 UniRef90\_B5JGM7  
 UniRef90\_Q2LX45  
 UniRef90\_W7KJK3  
 UniRef90\_D7DQZ3  
 UniRef90\_A1S088  
 UniRef90\_Q3A6G7  
 UniRef90\_K2CA45  
 UniRef90\_A4YHX9  
 UniRef90\_Q67RQ4  
 UniRef90\_C5C160  
 UniRef90\_Q2FMG3  
 UniRef90\_C4KA78  
 UniRef90\_V4JG41  
 UniRef90\_X0UIR4  
 UniRef90\_A0A031LRE3  
 UniRef90\_E1QQS8  
 UniRef90\_F4FZS2  
 UniRef90\_X1P0H0  
 UniRef90\_G4RMZ1  
 UniRef90\_M1J1W1  
 UniRef90\_W0EKC2  
 UniRef90\_W7KKB5  
 UniRef90\_Q96YF9  
 UniRef90\_A8ZST2  
 UniRef90\_K0B2U8  
 UniRef90\_H0Q5T4  
 UniRef90\_U5N999  
 UniRef90\_I3XVV7  
 UniRef90\_F5RDH0  
 UniRef90\_I0R7C0  
 UniRef90\_N6YVV7  
 UniRef90\_H2C9I5  
 UniRef90\_N6YBY5  
 UniRef90\_UPI00046553BF  
 UniRef90\_F3B0U9  
 UniRef90\_UPI00046CF05A  
 UniRef90\_S3K3D2  
 UniRef90\_C8PRC0  
 UniRef90\_A4WKC8  
 UniRef90\_J5GHB0  
 UniRef90\_G8QSZ8  
 UniRef90\_UPI000365868B  
 UniRef90\_X1NGG6  
 UniRef90\_UPI000365C59D  
 UniRef90\_H1HS50  
 UniRef90\_H5WUI6  
 UniRef90\_UPI00029ADAAB  
 UniRef90\_B8FSP6  
 UniRef90\_C6A2B2  
 UniRef90\_S9ZL48  
 UniRef90\_UPI00037AB8E7  
 UniRef90\_T2GBJ1  
 UniRef90\_X0YGF2  
 UniRef90\_A0A059KK45  
 UniRef90\_J7KZD6  
 UniRef90\_D1JCT3  
 UniRef90\_L9W1J1  
 UniRef90\_K4LCV1  
 UniRef90\_UPI0004685121

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

UniRef90\_D3AV83  
 UniRef90\_H6LJR4  
 UniRef90\_Q2LWG3  
 UniRef90\_H2J7J9  
 UniRef90\_X1MFV0  
 UniRef90\_S7V998  
 UniRef90\_X1SRI6  
 UniRef90\_B8FM54  
 UniRef90\_C4XUC9  
 UniRef90\_K2BKH7  
 UniRef90\_A0LE70  
 UniRef90\_Q6AIY2  
 UniRef90\_A6LNZ4  
 UniRef90\_Q67RQ3  
 UniRef90\_D5VR29  
 UniRef90\_Q2LX32  
 UniRef90\_B7IEQ1  
 UniRef90\_UPI000372E889  
 UniRef90\_A8MKW3  
 UniRef90\_F4B3P7  
 UniRef90\_E1QQA3  
 UniRef90\_E1R128  
 UniRef90\_A1B171  
 UniRef90\_UPI0003B3AC14  
 UniRef90\_S0FYH4  
 UniRef90\_UPI00046654C5  
 UniRef90\_UPI00047076FA  
 UniRef90\_T0I893  
 UniRef90\_D3RTU9  
 UniRef90\_D9Q105  
 UniRef90\_A9BGZ1  
 UniRef90\_X1QIZ2  
 UniRef90\_Q2FME8  
 UniRef90\_B5JGM7  
 UniRef90\_Q2LX45  
 UniRef90\_W7KJK3  
 UniRef90\_D7DQZ3  
 UniRef90\_A1S088  
 UniRef90\_Q3A6G7  
 UniRef90\_K2CA45  
 UniRef90\_A4YHX9  
 UniRef90\_Q67RQ4  
 UniRef90\_C5C160  
 UniRef90\_Q2FMG3  
 UniRef90\_C4KA78  
 UniRef90\_V4JG41  
 UniRef90\_X0UIR4  
 UniRef90\_A0A031LRE3  
 UniRef90\_E1QQS8  
 UniRef90\_F4FZS2  
 UniRef90\_X1P0H0  
 UniRef90\_G4RMZ1  
 UniRef90\_M1J1W1  
 UniRef90\_W0EKC2  
 UniRef90\_W7KKB5  
 UniRef90\_Q96YF9  
 UniRef90\_A8ZST2  
 UniRef90\_K0B2U8  
 UniRef90\_H0Q5T4  
 UniRef90\_U5N999  
 UniRef90\_I3XVV7  
 UniRef90\_F5RDH0  
 UniRef90\_I0R7C0  
 UniRef90\_N6YV7  
 UniRef90\_H2C9I5  
 UniRef90\_N6YBY5  
 UniRef90\_UPI00046553BF  
 UniRef90\_F3B0U9  
 UniRef90\_UPI00046CF05A  
 UniRef90\_S3K3D2  
 UniRef90\_C8PRC0  
 UniRef90\_A4WKC8  
 UniRef90\_J5GHB0  
 UniRef90\_G8QSZ8  
 UniRef90\_UPI000365868B  
 UniRef90\_X1NGG6  
 UniRef90\_UPI000365C59D  
 UniRef90\_H1HS50  
 UniRef90\_H5WUI6  
 UniRef90\_UPI00029ADAAB  
 UniRef90\_B8FSP6  
 UniRef90\_C6A2B2  
 UniRef90\_S9ZL48  
 UniRef90\_UPI00037AB8E7  
 UniRef90\_T2GBJ1  
 UniRef90\_X0YGF2  
 UniRef90\_A0A059KK45  
 UniRef90\_J7KZD6  
 UniRef90\_D1JCT3  
 UniRef90\_L9W1J1  
 UniRef90\_K4LCV1  
 UniRef90\_UPI0004685121

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



UniRef90\_D3AV83 UniRef90\_H6LJR4 UniRef90\_Q2LWVG3 UniRef90\_H2J7J9 UniRef90\_X1MFV0 UniRef90\_S7V998 UniRef90\_X1SR16 UniRef90\_B8FM54 UniRef90\_C4XUC9 UniRef90\_K2BKH7 UniRef90\_A0LE70 UniRef90\_Q6AIY2 UniRef90\_A6LNZ4 UniRef90\_Q67RQ3 UniRef90\_D5VR29 UniRef90\_Q2LX32 UniRef90\_B7IEQ1 UniRef90\_UPI000372E889 UniRef90\_A8MKW3 UniRef90\_F4B3P7 UniRef90\_E1QAQ3 UniRef90\_E1R128 UniRef90\_A1B171 UniRef90\_UPI0003B3AC14 UniRef90\_S0FYH4 UniRef90\_UPI00046654C5 UniRef90\_UPI00047076FA UniRef90\_T0I893 UniRef90\_D3RTU9 UniRef90\_D9Q105 UniRef90\_A9BGZ1 UniRef90\_X1QI22 UniRef90\_Q2FME8 UniRef90\_B5JGM7 UniRef90\_Q2LX45 UniRef90\_W7KJK3 UniRef90\_D7DQZ3 UniRef90\_A1S088 UniRef90\_Q3A6G7 UniRef90\_K2CA45 UniRef90\_A4YHX9 UniRef90\_Q67RQ4 UniRef90\_C5C160 UniRef90\_Q2FMG3 UniRef90\_C4KA78 UniRef90\_V4JG41 UniRef90\_X0UIR4 UniRef90\_A0A031LRE3 UniRef90\_E1QQS8 UniRef90\_F4FZS2 UniRef90\_X1P0H0 UniRef90\_G4RMZ1 UniRef90\_M1J1W1 UniRef90\_W0EKC2 UniRef90\_W7KKB5 UniRef90\_Q96YF9 UniRef90\_A8ZST2 UniRef90\_K0B2U8 UniRef90\_H0Q5T4 UniRef90\_U5N999 UniRef90\_I3XVW7 UniRef90\_F5RDH0 UniRef90\_I0R7C0 UniRef90\_N6YV77 UniRef90\_H2C9I5 UniRef90\_N6YBY5 UniRef90\_UPI00046553BF UniRef90\_F3B0U9 UniRef90\_UPI00046CF05A UniRef90\_S3K3D2 UniRef90\_C8PRC0 UniRef90\_A4WKC8 UniRef90\_J5GHB0 UniRef90\_G8QSZ8 UniRef90\_UPI000365868B UniRef90\_X1NGG6 UniRef90\_UPI000365C59D UniRef90\_H1HSU0 UniRef90\_H5WUI6 UniRef90\_UPI00029ADAAB UniRef90\_B8FSP6 UniRef90\_C6A2B2 UniRef90\_S9ZL48 UniRef90\_UPI00037AB8E7 UniRef90\_T2GBJ1 UniRef90\_X0YGF2 UniRef90\_A0A059KK45 UniRef90\_J7KZD6 UniRef90\_D1JCT3 UniRef90\_L9W1J1 UniRef90\_K4LCV1 UniRef90\_UPI0004685121

90 100 110 120

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

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

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

UniRef90\_D3AV83 V A T I G H F H Y A E R Y L K T A G E L F V L E R E P R E G D Y P D T A C E Y L  
UniRef90\_H6LJR4 V G V I G H I P V T S K L K G K V A R T L I F E R N L P A S V Y N A D S R F Q P E L  
UniRef90\_Q2LWG3 V A M I G Y F A P I E A G M L K M G A L L E V I D I S K R K I G H Q A D W A F Y D R L  
UniRef90\_H2J7J9 V G M V G E I P V I E L L K P K V W D V L V F D R Q R R D E V L P L P R Q A T E I E M  
UniRef90\_X1MFV0 V A I V G H F P F T S K L R G V V K E L W V I E K N P R E G D F T E A E V E N L  
UniRef90\_S7V998 T G L V G G F P F T S S L K K K R V G T F H L F E E L Q R D V A D A V L P P R H Q A T E R R  
UniRef90\_X1SR16 I A L V G H F P W I P K L K K J A R N L W V I E Q R P R E G E L P P R Q A T E I  
UniRef90\_B8FM54 A G M V G Y I P F V P M L L K R Y R S L T I V D D N P E N G C L I S R N I N D I  
UniRef90\_C4XUC9 V A V V G Y F P F T A S L R E A C C G N L W V L E E R P R P G D L P A E M A G E I  
UniRef90\_K2BKH7 V Y M V G Y F P L V A A I R S R C G N L K I I E E R H G E T T S A I D M G A E W I  
UniRef90\_A0LE70 V A M V G F F P L M K L F R D R G A L V E A L D D F Q G I G D R D S F Y G K L  
UniRef90\_Q6AIY2 V G M V G N F P L V N P I R K S G A E L I T F D E H P P A G I Q S P E A I P Y L  
UniRef90\_A6LNZ4 V G I V G K I P L I E Y L R P I V W D V L V F D R N R N E I L P P E E Q Q P E L L  
UniRef90\_Q67RQ3 V G L I G F I R S I H R R I E R V N R L I V F D R S L E P G I S P E E Q Q P E L L  
UniRef90\_D5VR29 I G M I G Y I K P Y E K L K E K C V V V E D R K F R N D E V I V S D A F E Y L  
UniRef90\_Q2LX32 T C F I G Y F K T A A W R E K G Y P V T I V E L F P R P G D I H W N E A D E V  
UniRef90\_B7IEQ1 V G F I G R I P L T I N L W K P K A W D I L I F D R N R K G S D L P D W A I V D L  
UniRef90\_UPI000372E889 V V L V G A F P Y L R Q L R Q R G Q D F K V L E L D P E E M P Y P A H R A G E L L  
UniRef90\_A8MKW3 V V I I G Y G R L I D Q V Y Y G R G K D L H V M D M R P K H K I H S S E E N G E L L  
UniRef90\_F4B3P7 V C A F G Y Y P Y I S A G N F S S V V L Y D F S T Q P Q N N A K P F S Q F N  
UniRef90\_E1QQA3 A C F V G S I T P V A E A L R G K C S V Y Q L E R N D L R H D S Y P D V D A P L T  
UniRef90\_E1R128 L G I V G K I P M V R R M A P K A A D F F I F E D N S L N E G V S P P E R Q Q  
UniRef90\_A1B171 V V V G A F G P F L K A L R G I G A R H F V L E K D P R P D E M P A E S Y P R I  
UniRef90\_UPI0003B3AC14 I L M V G R F P V L R K L Q G K V K K V W V I E K E E D I R T F P L A  
UniRef90\_S0FYH4 V A V V G A F P L T Q A L K A R G G T W W V I E K N P E P H Y V P A D Q S S G I  
UniRef90\_UPI00046654C5 V A V V G H F P F V E K L R E A F A G F W V L E K R P R A G D R P A E E A G E L  
UniRef90\_UPI00047076FA V G M V G Y F P P I E T L N Q Q Q I K T T V I E L K P Q K G N L T V I T L D P S A  
UniRef90\_T0I893 V G V I G H I P L I F N L Q G K V Q N L L V F E R N L L Q K G V Y P E S K E P E L  
UniRef90\_D3RTU9 V V V I G N M P L I V T G L A E A G V P H V V F E R S P R A G A L P D A Q E W A W  
UniRef90\_D9Q105 V A I V G Y I R P Y V R R L S G T A K V Y V F E L S P S E E D F P W Y E E E M  
UniRef90\_A9BGZ1 V C L I G Y I P Q V A N M F N S G V K N V F I F D R S K K G G I F P E E E Q K G I  
UniRef90\_X1QI22 I A V V G H F P W I P K L R N T A K K L W V I E Q K P Q G E D L P A E A A A E I  
UniRef90\_Q2FME8 T C F V G M Y F K E G A S R W E M G W V D V L E L F P R P G D L H W N D A D E V L  
UniRef90\_B5JGM7 V V V G N M V P V V S R L K E M D V D V A L E R N P R G G A M A D V F A P R I  
UniRef90\_Q2LX45 V C M V G A I P L L K R F K K M G V E I K V I D R K K D S Q I E V E L A C G E F  
UniRef90\_W7KJK3 V G M V G K F P D I G R F K K V A R E F L V L E L N S P A N N I L P S T A A E S V L  
UniRef90\_D7DQZ3 I G F V G N I A P I A K E L Q K G A D Y Y V F D R G S C G S L M D T F E Y R L  
UniRef90\_A1S088 V V L V G Y F P Y V E A L R G R V R R L A V L E F A S G V E V Y P W W A Y A A V  
UniRef90\_Q3A6G7 V G V V G F F P M M D K L I E K A G E V V V V E L D L R E G S H P M T D D P E A  
UniRef90\_K2CA45 V A M V G H F P H T D K I R E V A S T F H I I E K R P Q E G D L N A G E A V K I  
UniRef90\_A4YHX9 L C M F G Y S P Q V K V I E G F T E V V S Y D F S P Q P V P G S R P F S E F R  
UniRef90\_Q67RQ4 V G F V G F G S V V V R V Q A E A A R T I F D R S S Q E D G E Y P E S L Q P E L  
UniRef90\_C5C160 V G F I G D F P L T S K L K D K V K G L I F E R H S G E G Y L P D W A I P W K  
UniRef90\_Q2FMG3 V V V V G A L P V I H R L K L R G A Q Y R L F E L N K R E E E L P P E E Q N V V  
UniRef90\_C4KA78 V G M V G L F P L L K Q V R T A A G A Q L T V I E L N P D Y E D G Y R V I T L D E A A  
UniRef90\_V4JG41 V G L V G Y I R G Y V R R L R E R A E L Y V F E T R P Y E D Y P W Y A E E E L  
UniRef90\_X0UIR4 A V I G A F V P I L L R K L K T R G G R W W V I E Q D P Q D H F I P A D Q Y A E T  
UniRef90\_A0A031LRE3 L C V F G Y S P L I E S I T A N F K E I T I T Y D F S D K P M E K A K A F S S F T  
UniRef90\_E1QQS8 V C V V G L M P L I E E L T A N S K G L E V Y V F E R S P G D N A Y S D V E E E L L  
UniRef90\_F4FZS2 I C I F G Y S P Q R V I E G F A E V V S Y D F S P Q A S K G A I P F S Q F R  
UniRef90\_X1P0H0 V V V I G H F P F V N K L R K L T R K L W V V E R K P Q S G D L P A S E A K R V  
UniRef90\_G4RMZ1 V C L V G N M P L A E S L R R R G R Q V Y V F E K S P R F G A Y S E V E E R I L  
UniRef90\_M1J1W1 L C V F G Y S P G T V T N R F V S V T I Y D F W N P P Q D N V T V K P F S S F T  
UniRef90\_W0EKC2 V G M V G M I G H V A R I S K S V K E L I T F D K S L H G G D H P M E E Q P K L  
UniRef90\_W7KKB5 L C V F G Y Q P Y V N S A G F K E V V A Y D F S N S P N F K P F S Y K  
UniRef90\_Q96YF9 L C V F G Y A P R I D T T K F S S I V Y D F E R N Q G K V V I K P F S T F R  
UniRef90\_A8ZST2 V A M V G A F P L I K V I R K E K A E L S L M D A G K G I G D E Q D F Y E K L  
UniRef90\_K0B2U8 V T V I G Y G G V I N K L Y G K C K E L H V I D M R P K P K D I T F H D E K I  
UniRef90\_H0Q5T4 I G M I G F F P L V P R I V S S G A R L T V A E L D P E G A G Y R V I T L D A S E  
UniRef90\_U5N999 L V M I G N M P V A A G L R E F G I R P M V F E R H A R C G A L N D A Q E W A W  
UniRef90\_I3XVV7 V V I F V G N L P V V A K L K E H G R V P I V F C R K Q E A I L Y S D I F E Y A  
UniRef90\_F5RDH0 I G M I G L F P L V E R I V A A G A D L T V I E L D E R A E G W R V I T D A S A  
UniRef90\_I0R7C0 V G L V G Y G V Y I K F F L N K C K E F H A F D L S P Q Y K D I Y F H L G D E L  
UniRef90\_N6YVV7 V G M V G L F P L L K Q V T A A G A Q L T V I E L N P D Y D G Y R V I T L D A A A  
UniRef90\_H2C9I5 L C V F G Y S P Q V S Y E G F S E V V A Y D F S P Q P V I Q G S R P F S S F N  
UniRef90\_N6YBY5 I G M V G L F P L L K Q V T A A G A R L T V V E L N P Q Y D G Y R V I T L D A A E  
UniRef90\_UPI00046553BF V G I I G Y G L Y N E V F L G M C K E F H A F D R D P K P E N I H W H L G D E I  
UniRef90\_F3B0U9 V G L I G Y G V Y L K F F L N K C K E F H A F D L T P E K Q I L S Y H I S K D V  
UniRef90\_UPI00046CF05A V A L V G A F P V L R R L K R G G T W V V E Q D P R P H Y V P A A D A R D V L  
UniRef90\_S3K3D2 I G L I G F G V Y I S R F L N N C A E F H A F D L R A P E Q I L S Y R F S D L  
UniRef90\_C8PRC0 V G L I G F G V Y I N R F L N R C K E F H V F D L R K P E A I L S Y N A A D F I  
UniRef90\_A4WKC8 I C L V G N M P L A E K L R R E G K E V W V F E R S L R W R A Y S D V E E E L L  
UniRef90\_J5GHB0 V G L I G Y G V Y I R F F L N K C K E F H A F D L P E K Q I L S Y H I S K D V  
UniRef90\_G8QSZ8 V A M V G Y F P I V R Q L G K N G I E V V A Y D I G K K I G S E K E F Y C W A  
UniRef90\_UPI000365868B V G M V G M F P F L L K Y L R N C V E L V I E K N P R L T E H H V I T L D I T E  
UniRef90\_X1NGG6 V A I I G H F P V L P R L R R V N V K L W V I E R H P Q E E D V A E S  
UniRef90\_UPI000365C59D V A L I G V V P L I E A I R D R G G V C L P C D F N L Q W G E V A S D D M T E V  
UniRef90\_H1HS50 V G L I G Y G L Y N Q F V L D K C K E F H A F D L R A P E K G V Y P E G D Y A D V  
UniRef90\_H5WUI6 L G M V G F F P I Q R V L D A G A Q L T V V E L R A R E K D G F R V I T L D A A E  
UniRef90\_UPI00029ADAAB V A L I G V V P L V A A I R E R G G V C L P C D L N L R W G D Q V S D D M T E V  
UniRef90\_B8FSP6 V V L V G Y G A L I K E T L A R G C P V I D I C D M R P G I R F H G A A E N Q T L  
UniRef90\_C6A2B2 V A V V G N M P L A E L R G R G Y E I Y V F E R N A K L W D Y S D A L E Y H L  
UniRef90\_S9ZL48 I G M I G L F T P L L P Q L I E A G A R L T V I E L N P E H D G Y R V I T L D A G E  
UniRef90\_UPI00037AB8E7 I G M I G L F P L I G R I L K S G A E L T V V E L K A E R D G Y R V I T L D P A E  
UniRef90\_T2GBJ1 V T V V G H F P F V R E R M A D E F A S F H V L E R N P R P G D L D N H A A A V  
UniRef90\_X0YGF2 V A L I G H F P F V K R L R Q A V G E L  
UniRef90\_A0A059KK45 L G M V G L F P M V A P L L Q A G L R L T V L E L Q P R R G A L T V T D M P A A  
UniRef90\_J7KZD6 I A L I G V V P L V A A I R E R G G E C L P C D L N L R W G D P V E P D M E K V  
UniRef90\_D1JCT3 V A M V G F T P L C A E I A K E V Q E L S A I D F D T E E K I F T A E K D K E V  
UniRef90\_L9W1J1 I A T V G L F R P A F R K F S D V D V R V I E R K P I G D V S T P D S V I T  
UniRef90\_K4LCV1 V A M V G F T P L C A D I A K E V K E L S V I E L G V R E K I V P A D K S K E I  
UniRef90\_UPI0004685121 I I F I G H Q P V L K A D I A K E K R K N I S V F C R D V E N K I Y N D I Y E Y A

UniRef90\_D3AV83 L P D M D Y I Y I 170 G F T L V N K T L P R L L E L G K N A R V V L V G P S V 200  
UniRef90\_H6LJR4 L P T C Q Q V F V T T S T S L I N G S T T E N L L S D C P N A R D L V M V G S S T P  
UniRef90\_Q2LWVG3 E N W A Q V A F I T T G T S L I N G S T T E D I L R Y H A G K G V K T V I M L G P S S T M  
UniRef90\_H2J7J9 L P K C S A V I T T G T S L V N G S T I D W I L R N Y V N T D R V A I A G P S S T M  
UniRef90\_X1MFV0 L P Q A D V V G I T T G T A F T N H T F E H L L E L C N P K A Y V V I A G D T A P  
UniRef90\_S7V998 L A E L D V L A V T T G T A L L T N R S T M A W F L S R A P Q A K T F V I V I G P T T S P  
UniRef90\_X1SR16 L P Q A D V V G L T T G T A F T N H T T E E L L A L S R A Q G K F T V I V I G P T T S P  
UniRef90\_B8FM54 L S N V D V L I T T G S A A V V G S D F D K I L N A A N S A R F I G I V G P S A G  
UniRef90\_C4XUC9 L P R A D M V A V T T G T S L I N G S T F L A G L I S A C R E D D A V V I M L G P S T P  
UniRef90\_K2BKH7 L K S T A N L I T T G T S L I N G S T F E D I A K K C E R S R V N C L M G P S T P  
UniRef90\_A0LE70 D G W A E V L L L T T S T S L I N H T T F E E I L G R T A P E V K V V M L G P S T P  
UniRef90\_Q6AIY2 L P A C C S V A I I T T G T S L I N G T F D D L L T H V V D C R Y V T V L G P S T P  
UniRef90\_A6LNZ4 L P K C S V V I I T T G A A V I N G T I D W I L K Y V N T D R I A I V L G P S T P  
UniRef90\_Q67RQ3 L P L C D V V F V T T G S A V I N G T I L E A V L P W C R R A R D L V V I G P S T P  
UniRef90\_D5VR29 I L K F D L L L I S G T T L I N G T L E A V L D R A K G E T I L V G P T A Q  
UniRef90\_Q2LX32 L L E K A E L V L M T G L T V V N E T L E A V I R R R T S A R M R L I M G P T V P  
UniRef90\_B7IEQ1 L P K C S V V I T S G S A I V N G S L D W I L N Y V K T D K V A I V G P S T T  
UniRef90\_UPI000372E889 V S K A D V F I T T G A T L V N G S T F L E I L K Y S K V A R V I G M Y G P S A Q  
UniRef90\_A8MKW3 G E T C D V A V I F G S A L V N N T I D K I K N V K A D H L I L T G I S S V  
UniRef90\_F4B3P7 I P N C C S I V I T T G S A M V N T I D Q L L T M R K D G A I T V L S G P S T A  
UniRef90\_E1QQA3 I P K C S V V I C I T T G T S A M V N H T V S T L L T M R K D G A I T V L S G P S T A  
UniRef90\_A1R128 V P Q A D V L I T T G T T L V N D S L P G L I A C A R P E A R V V L V G P T V P  
UniRef90\_A1B171 K D K K L A I I T T G V T L I N K T L E Q V L S A A R P D A D I A V M G P T T A G  
UniRef90\_UPI0003B3AC14 I G Q A D I L V I T T G V T L I N K T L E Q V L S A A R P D A D I A V M G P T T A G  
UniRef90\_UPI00046654C5 L P R A D V V A V T A T T L L N G S T L A G L L A L C R P E A V V I L L G P S T P  
UniRef90\_UPI00047076FA L P R C C K I L L S S T S L I N R H T L E S V L G E Y T K Q A D E V V L I G P S V G  
UniRef90\_T0I893 L P E C Q V I Y V I S S T S L I N R T L E S V L G E Y C T Q A R D V V M V G S S T P  
UniRef90\_D3RTU9 L P R A D G L I L T T G A T L L N H T L A P I L A L A R E A R F K L L V G F S A Q  
UniRef90\_D9Q105 L P Q Q M D L V I A T G V T V V N K T I N R I L A E L S R G S Q L I V V G P T T P  
UniRef90\_A9BGZ1 L P K C E I V F L S G T T V I N H S L E Y L L S L C K N A R E I V L I G A S T P  
UniRef90\_X1QIZ2 L P Q A D V V G I T T S R A Q V V L M S G L T T V V N E S T L A A V I R R T P H A K I R I M M G P T V P  
UniRef90\_Q2FME8 V P E A E A L I I T T G A T L V N D S T I E H L L R L V P K E A A V A V V G P S G  
UniRef90\_B5GM7 L S Q C E T A V F T G A A V A N G S T I E H L L R L V P K E A A V A V V G P S G  
UniRef90\_Q2LX45 I E D A D V I I T A S T I V N K S I D R V L E L S R S A Y T V L V G P S T P  
UniRef90\_W7KJK3 L P E M D A L F I T T G S T M V N D S T I D R A I N S K I N V L T G P T A Q  
UniRef90\_D7DQZ3 L R D A D K L I T T G S S T V N H T I N Y L L T A P T R A E K H L V G P S P  
UniRef90\_A1S088 I L R G C D K I L T A T T V L N D S T I L T V I P H C I D A A F V A M M G P T A G  
UniRef90\_Q3A6G7 L P H A D V V A M T G V T C L N D S T I E G L L A L K K P G A K V I V V G P S V P  
UniRef90\_K2CA45 G E V C T T A V I F G S S L V L N N I E K I K N V K A D H L I M N G A S S V M  
UniRef90\_A4YHX9 L P R C C D L V F I T T G S A L I N R T I E R L L N T Y C T N A R E V V L I G P S T P  
UniRef90\_Q67RQ4 L K E C T A V I V T T G T M M N R T I D S L T S V I N T D R V V V F G P S T P  
UniRef90\_C5C160 L S R A G C V V L T G A T L V T G T L E N L L A R I P Q G I P V I I G G P T V S  
UniRef90\_Q2FMG3 L E D C N K V L S T T L V N K T I V D D M L A H C R N A R R I V L I G P S A G  
UniRef90\_C4KA78 L P R M D L V I A T G V T L V N K T I D R I A D L V R G P L R I L V G P S T P  
UniRef90\_V4JG41 V S A A D V L I V T G V T L V N H T L E P I L K A A R P D A E I A V I G P T A G  
UniRef90\_X0UIR4 R E T C D V A V I F G S S L V L N N I D K I V K N V K A E H L I L E G V S S V  
UniRef90\_A0A031LRE3 I P R C G T V Y I T G M A L L N F T I D R L L D F S R G I N V L I G V S S  
UniRef90\_E1QQS8 S E V C D T A V I F G S S L V L N N V E K I V N N V R A K N L I L N G V S S V  
UniRef90\_F4FZS2 I P Q  
UniRef90\_X1P0H0 L P R C K T V I I T G M T L L N F T I D D V L A A S R G V N I L T G P T A G  
UniRef90\_G4RMZ1 S E T C D S T V I F G S A L V A G N I E K I L A M S I S T D H L I L S G I S S V  
UniRef90\_M1J1W1 L P A C D V V L S G T T T I N N S I L E D P L L A M C G K A R E I L M V G P S T P  
UniRef90\_W0EKC2 G E V C D T A V I F A S S F V L N A T E S I L K G L R A D H I V L T G V S S F  
UniRef90\_W7KKB5 G E V C D S A V I F A S S L V N G S I D F I V K S I S T N N L V L E G I S S V  
UniRef90\_Q96YF9 G T W A D V L I T A T T L I N G T F E A V L G H A G P G V R T V L L G P S T P  
UniRef90\_A8ZST2 T Q N S D L V I M S G C T L I N G T F R E I V E N S K K A K I I G M F G P S G Q  
UniRef90\_K0B2U8 L A S C S K V L S T S T V L L N D T L D A V L A N C R S A R Y F A M I G P G A S  
UniRef90\_H0Q5T4 L P H A D G L I A T G A T L V N H T L A P L V A W T G A A R F R I L V G F S A Q  
UniRef90\_U5N999 I Q T A P I A I T T G A T L I G S T L D A L L A L S P K D S I R I L A G F S A G  
UniRef90\_I3XVV7 L E R C S K V L S T S T L L N D T L D R M L A H C R A A R W F A M V G P S A G  
UniRef90\_F5RDH0 L E S L D I I M S G S T L V N E S Y L D L H A C K N A E I K G I V I G P S S E  
UniRef90\_I0R7C0 L E D C N K V L S T S T L L N H T V D D M L A H C R K A R R I V I G P S A G  
UniRef90\_N6YV77 G E I C T T A T I F G S S L V I N A I D K I V S N I K A Q H L L V G V A S V  
UniRef90\_H2C9I5 L E S C N K V L S T S T I L N N H S V D R M L A H C R N A T R I L A L I G P S A G  
UniRef90\_N6YBY5 L E S L D I V V M T G C T I L V N N S Y Q D I L R T C K N A K I R G I Y G P S A E  
UniRef90\_UPI00046553BF L E N L D I I M T G S T L V N N S Y L D I L N T C K N A K I K G I Y G P S S E  
UniRef90\_F3B0U9 L A R A D V V I T G V T L V N H T L E E I L A V A R P G V E I A V M G P T A S E  
UniRef90\_UPI00046CF05A L K T L D I V I M S G S T V N N S Y T E L K T S K R A E I K G I Y G P S C E  
UniRef90\_S3K3D2 L S T L D I I M S G S T I V N N S Y T A L R Q A G S N A E I V G L Y G P S C E  
UniRef90\_C8PRC0 L P R C R T V I T G M T L N F T L D R V L E L S Q G L N I L T G P T A G  
UniRef90\_A4WKC8 L K D L D V I I M S G S T L V N N S Y L D I L N A C T K A K I K G I Y G P S S E  
UniRef90\_J5GHB0 K N H A E A L I L T A T S V I T N S T E S V F E H L G K E I P T V L M G P S T I  
UniRef90\_G8QSZ8 L K N C N K I L C T S T T L L N D T L D E V L Y C S A A E H I S L L G P T A G  
UniRef90\_UPI000365868B  
UniRef90\_X1NGG6 L E Q A D A V V A T G M T L G N G T F D L I L E H C R D V P L V V Y A Q T G S A  
UniRef90\_UPI000365C59D L K T L D M V I M T G C T I V N D S Y R D I L A C C E K A E V R G L Y G P S N E  
UniRef90\_H1HS50 L R H C N K V I S T S T V L N N Q T L D A V L A H C A G A Q R L A M V G P G A G  
UniRef90\_H5WUI6 L E E A D A V V A T G M T L S N G S F D R I L G H C R D V P L V V Y A Q T G S A  
UniRef90\_UPI00029ADAAB L A D A D V L I S G T L V N G S T Y R D L I R Y A R K A R V I G M F G P S A Q  
UniRef90\_B8FSP6 L P E M D A V I A S A T C L V N G T V N M L D R A K K A K L F V L T G P S Q Q  
UniRef90\_C6A2B2 L G T C N K V L S T S T I L L N H T V D S M L A H C R Q A S H I A L I G P S A G  
UniRef90\_S9ZL48 L A G C G K V L S T S T L L N D T L D H M L G F C R D A R W F A M I G P S A G  
UniRef90\_UPI00037AB8E7 L P E A D V A V I T G T L L N G T L G T L L E L L P A G C T V I L L G P S T P  
UniRef90\_T2GBJ1  
UniRef90\_X0YGF2 L Q D C P R I V V C A T T L I N G S L E A L L P R L R H A R H L I A L A Q S P S A G  
UniRef90\_A0A059KK45 L S E A D A V V A T G M T L I N G S T F E A L L E S C R G T P L V I Y A Q S G A A  
UniRef90\_J7KZD6 L S R A D V V Y I T G E T I V N G T I S K L L E L S K N A R T R I I Y G P T S S  
UniRef90\_D1JCT3 M A D A E V V F I T G E T L I Y G G L E R Y L E T A P E T A T V V L I G A T A S  
UniRef90\_L9W1J1 L S R A D V V Y I T G E T L V N G T I D E I L E F S K N A R T R I I Y G P T S A  
UniRef90\_K4LCV1 L S Q A D L I I T G A T L L G S T I D A L L H F S K N V P I K V I T G F S A G  
UniRef90\_UPI0004685121

UniRef90\_D3AV83 MA P V L F E F G V T R E L A G T L I T D T A K T E R L V R F G S H R A V V R S G 210 220 230 240  
UniRef90\_H6LJR4 L Y P E A F K T G V T T L A G T R S E N K E A I F K A I R Q S A G M K L I K Y G  
UniRef90\_Q2LWQ3 M I G E V F S H P V K H M L A G T Y V P L E N G E K V L K A I R H G F G A G T R I L Q R F S  
UniRef90\_H2J7J9 M V E D V F P V K I L A G S G A Y V E N G D L L F D L I K K G A G T R L F R S G  
UniRef90\_X1MFV0 L S P L L F D Y G V N A I S G T K V I D P E L A L R C V S E G A T F R Q I K G I  
UniRef90\_S7V998 C S A A L F S R Y G D Y L C G S V V T D M E K V A L G I H A G L P F K K I K K N  
UniRef90\_X1SR16 L S P V L F D S R G V D Y I G G T K I V D P E K T I R F I T E G A  
UniRef90\_B8FM54 W L J P A F D K G V H A V G G T K I L N I D G A R R A I L E G G G F P H I K F G  
UniRef90\_C4XUC9 F A P G L M R C G I D V L A G C D V P D P E A A L A G I R A G S C F K G L S G V  
UniRef90\_K2BKH7 L D P E L F K H N I T F L A G L K P L N Y D R I E L V S E G G T K L F K H C  
UniRef90\_A0LE70 M V A D A F R H P V R V L A G T V P V D K E A V L R A V R H G A G T P I H R F S  
UniRef90\_Q6AIY2 L L A D C Y D T P V S C A A G V R V R D R D K V V H T V V E A G G T Q A F G P S  
UniRef90\_A6LNZ4 L V K D I F P V K I L A G V R K L D S K K L F K L I A H G A G T K K I K V V  
UniRef90\_Q67RQ3 L Y P E A F A T G V T V I A G A T P E H H Q A A L A G I G E G  
UniRef90\_D5VR29 L L P N M I D V D Y L A S V K V P E E A L I K Y L K L G S N Y G I F R L G  
UniRef90\_Q2LX32 A S P V L F D Y G I D M L G I T Q I D D V E L M S N Y A L L G G G  
UniRef90\_B7IEQ1 L V P N V F P V K L L A G I N V L N S D K L F K L I S H G A G T K K I K A V  
UniRef90\_UPI000372E889 L L Q P Y A R R S G V T V L G G T R V R D P D A L L D L A E G G S T R H F K S V  
UniRef90\_A8MKW3 L L P D L L N S G L N Y I G S S I V T K P D V L E S L L M D N F S T R L  
UniRef90\_F4B3P7 E A S T L K K Y G F E A I G K I V P V D Q Y R A F R T I C E G G S A K Q L S K Y  
UniRef90\_E1QQA3 A Y P P L H G L G I D V I A G S L V K E P H S V I E L L K L G A G Y R L L D  
UniRef90\_E1R128 L F P E V F D T P V T F L A G S R S D K R E Q L F S L S S Q A A G V H Q L S R L  
UniRef90\_A1B171 M L P D A F D R R G M I L G T V R V A D A E A L H E V L A Q G G S G Y H F K Y A  
UniRef90\_UPI0003B3AC14 L C P E V F R F P I T W L C G A I L V R D V D Q L F L K I C E G K G T Q F F K A N  
UniRef90\_S0FYH4 G L P E L F N R G V R V V G G V E V T H P D K L E L V S L G S G Y H F  
UniRef90\_UPI00046654C5 F A P S L F H C G I D V L A G C E V T D A A A L A G L R A G D C F K K L S G V  
UniRef90\_UPI00047076FA L L P A L F E T G I T A F G G R V L D S E L F I S R W S Q Q G E K W Q K S A  
UniRef90\_T0I893 L Y P Q A F G L G V T M L S G M R P E H R D P I L T G I S Q C A G I R Q L S Y A  
UniRef90\_D3RTU9 A H P A F L A C G A T H V F S L H I R H I D R V R R L L Q V I G H W N S M F E T  
UniRef90\_D9Q105 M L P E A F E G L R G A L G G S T V V D R E Q A Y S M I T M G Y G A G H S K V L  
UniRef90\_A9BGZ1 M F P N A F G T R V S I L A G S W W R E K D K I F R I S L A G G I S H I S  
UniRef90\_X1QIZ2 P S P A L F A C G L D L I G V T L V Q N M E L M A R Y A E L G G G S I A Y S A L  
UniRef90\_Q2FME8 V Y P S D I L E G I T H I A G L K M E N E K V A E I T K I G G G R W D F S K Y  
UniRef90\_B5GM7 F I P D L F R R N G I A L V G T A M V T D I A A L D I I A E G G G A Y F G R C V  
UniRef90\_Q2LX45 M L D G M F D F G I D M L A G T K V N R P Q S F I K K I S Q G C  
UniRef90\_W7KJK3 M H P K L D D T K I T H L G S V M V N D V N D T V M N L K L G S S C G L F Q K G  
UniRef90\_D7DQZ3 L A P E V F R Y G V K T I N T A V V V D P E S C A T I L M E G G G F  
UniRef90\_A1S088 F L P D V F A L G V D A V G F T R V K D L D L F L E R F S S G K W G E A T  
UniRef90\_Q3A6G7 M  
UniRef90\_K2CA45 A L G T L K K Y G F E A V G K L V P V D R N R A F R T I C E G G N A R Q L R F L  
UniRef90\_A4YHX9 L Y P E A F G S G V T V L A G F R V A D P D A A L E Q V A A G A H F K H L K G R  
UniRef90\_Q67RQ4 L V P E V Y P D V V K A I G G A R I V N P E L A M K V A S R A G G T K R L K A A  
UniRef90\_C5C160 M I P D F F S R G V T A I G G D I V T R P D E L L S T V M Q G G S G Y H F K A A  
UniRef90\_Q2FMG3 C L P D L F A R G V T V V G G S W I T D R A G F I D V L R R G E S W S G F  
UniRef90\_C4KA78 L W P E A L G H E G A L G G S L V R D L D A V R M V E L G Y G A E H L  
UniRef90\_V4JG41 M L P A L F E R G A R V V G G V W V K K P D E L L D V L A A G G S G Y H F  
UniRef90\_X0UIR4 E A P L L K K Y G F E A I G K V I P V D K Y K A F R S I C E G G S R K L A K Y I  
UniRef90\_A0A031LRE3 L L P E L V K L G I H Y I E S M K F T D V K T V K K H L R L G G Y V S M  
UniRef90\_E1QQS8 M L N T L R R Y G F T A V G K L V P I D K T R A F R T I C E G G D A R Q G K Y L  
UniRef90\_F4FZS2  
UniRef90\_X1P0H0 V H P D L R G T G V H V V A S M K F N I E P T I R H L K L G  
UniRef90\_G4RMZ1 Y A P L L K K Y G F D Y I G K V I A V D K I K A L R V V C E G G L A K H L S R F  
UniRef90\_M1J1W1 M F P E W R G S G V T R L A G S W W D H K E E I F K S I S L A C G V Y L K K F M  
UniRef90\_W0EKC2 E A P Q L K K Y G F V V V G K V I P T D N Y R V F R I I C E G G A R Q L  
UniRef90\_W7KKK5 F A P K L K N Y G F N M I G K I V A I D K L K A F R I V C E G G  
UniRef90\_Q96YF9 L V K E A F A L P V D F L A G T V P M D A Q G T I Q A I R H G T G T P I Q R F G  
UniRef90\_A8ZST2 I I P E L F D N G I N Y I I S S R V T P E K L F N H L R N P G G M I H E Y M  
UniRef90\_K0B2U8 C L P D L F E R G V T L L G G N W I C D R E G F I D A L K H G G A W G A H A  
UniRef90\_HOQ5T4 T H P A F L A L G L T H V F S V H I V D D V D G I R R R L Q L G H W N A M F E S E  
UniRef90\_U5N999 A H P S W F K T G I T H L T S M K  
UniRef90\_I3XVV7 C L P D L F A R G V T L L G G S W V E D R A A F I D G L T S G D K D R H K G  
UniRef90\_F5RDH0 L S P D L F E C G Y N Y I F S M D A K D S A E Y L K C  
UniRef90\_I0R7C0 C L P E L F A R G V T V V G G S W I T D R A G F I D A L R R G E S W S G F  
UniRef90\_N6YVV7 Y A P V L K R L G F E V V G K I V P T D R A R A F R T V C E G G S A R Q L  
UniRef90\_H2C9I5 C L P D L F A R G V R V V G G S W V S D R A G F V D A L R S G A A W G G F  
UniRef90\_N6YBY5 L C P E L F D L G Y N Y I F S A S V R D K E A F Y  
UniRef90\_UPI00046553BF L S P D L F E A G Y N Y I F S M S A K D S K Q Y L D C  
UniRef90\_F3B0U9 M V P D L F E R G V R V V G G V W V R R T D E L L D V L A A G G S G Y H F  
UniRef90\_UPI00046CF05A L C P D L F D L G F N Y I F S T T L K D K E T Y L K T S L G P D P V Y R F D Y M  
UniRef90\_S3K3D2 L C P D F F E Q G Y N Y M F S T S V R D K E T Y L K T A L G A E Q T Y R F D Y M  
UniRef90\_C8PRC0 V H P A L V K G R V H V L A S M K F I E V A V N H L K R G G  
UniRef90\_A4WKC8 L S P D L F E S G F N Y I F S M N A K D S K T Y L D C  
UniRef90\_J5GHB0 M Q P K I Y D L P I S M L S G T V P V D L P N T L K A I R N R G R G T P L H K Y A  
UniRef90\_G8QSZ8 F F P D L F A G G V H V L G G R F V N D G M L L L Q L L A E G K R W G A A T  
UniRef90\_UPI000365868B  
UniRef90\_X1NGG6  
UniRef90\_UPI000365C59D V A R A F L S S G V T A L S S Q F S A D T T V L Y R Y R S D D S G T K L E E A S  
UniRef90\_H1HS50 L C P A L F D L R G Y N Y I F S A S V R D K E S Y L Q A  
UniRef90\_H5WUI6 C L P D L F A R G L T L L G G S W I D D P A S F K A A L A A G D S W G P F A  
UniRef90\_UPI00029ADAAB V A R A F L S G G V T A L T T S G I T D G D R F Y Q V L S N P Y A G E G E S G T  
UniRef90\_B8FSP6 L T P E F L G G G I N Y I T T S G I T D G D R F Y Q V L S N P Y A G E G E S G T  
UniRef90\_C6A2B2 L L P E F L K T R V T H L A A M K V V D F Q K A I L G L R L G S F R G F  
UniRef90\_S9ZL48 L A Q P L F A R G V S L I G G S W V S D R A G F I D A L R R G E S W G Q F  
UniRef90\_UPI00037AB8E7 C L P D L F A R G V T L V G G S W V H D R E G F V D A L R S G S E R G S F A  
UniRef90\_T2GBJ1 F A P S L L E C G I H V L A G A A V I R P A E T L D A V A R G S C F R  
UniRef90\_X0YGF2  
UniRef90\_A0A059KK45 C L P D L F A R G V T Q L G G R W I T D P A G A I D A V R A G R G L G E V S  
UniRef90\_J7KZD6 V A R R F L G S G V T A L S  
UniRef90\_D1JCT3 F Y P V L F K E G V D I S L P F I F P N T P D F R R Y F V S S R G W W Y F A G G  
UniRef90\_L9W1J1 V L P E V F A A G V T V V A G A S V T D P D Q V R D A I A N A C G T E L H A A G  
UniRef90\_K4LCV1 F Y P V L F A R G V D V S L P M I F P N P D F R R R F V L S R G N W Y F M R D V  
UniRef90\_UPI0004685121 T Y P S W F D S G L T H V A S L Y L K N I

UniRef90\_D3AV83 P V R  
UniRef90\_H6LJR4 Q K L S V K  
UniRef90\_Q2LWG3 R K  
UniRef90\_H2J7J9 R K V N L  
UniRef90\_X1MFV0 R L L T M T R  
UniRef90\_S7V998 G G V I F A Q  
UniRef90\_X1SR16  
UniRef90\_B8FM54 L K Y T F  
UniRef90\_C4XUC9 R Q  
UniRef90\_K2BKH7 E K I V V K  
UniRef90\_A0LE70 R K A  
UniRef90\_Q6AIY2 V K V N V  
UniRef90\_A6LNZ4 E K I V L K E  
UniRef90\_Q67RQ3  
UniRef90\_D5VR29 R K Y V I K  
UniRef90\_Q2LX32  
UniRef90\_B7IEQ1 E K V V L  
UniRef90\_UPI000372E889 D R V T L R  
UniRef90\_A8MKW3  
UniRef90\_F4B3P7 V  
UniRef90\_E1QQA3  
UniRef90\_E1R128 Q K V T I  
UniRef90\_A1B171 P K I V L A Q  
UniRef90\_UPI0003B3AC14 E K I N L R  
UniRef90\_S0FYH4  
UniRef90\_UPI00046654C5 R  
UniRef90\_UPI00047076FA L R Y A L H R  
UniRef90\_T0I893 Q K I S V  
UniRef90\_D3RTU9  
UniRef90\_D9Q105 R K A T V Q  
UniRef90\_A9BGZ1 K F A I K K  
UniRef90\_X1QIZ2  
UniRef90\_Q2FME8 E R V N M V K  
UniRef90\_B5IGM7 A K  
UniRef90\_Q2LX45 K K I N I  
UniRef90\_W7KJK3  
UniRef90\_D7DQZ3 T K Y T I  
UniRef90\_A1S088  
UniRef90\_Q3A6G7 S K I  
UniRef90\_K2CA45  
UniRef90\_A4YHX9 E R V H V  
UniRef90\_Q67RQ4 T S V T L R  
UniRef90\_C5CI60 K K V T L  
UniRef90\_Q2FMG3 D K I L I H  
UniRef90\_C4KA78  
UniRef90\_V4JG41  
UniRef90\_X0UIR4  
UniRef90\_A0A031LRE3 T R M F I K  
UniRef90\_E1QQS8  
UniRef90\_F4FZS2 E R M H V  
UniRef90\_X1P0H0  
UniRef90\_G4RMZ1  
UniRef90\_M1J1W1 T K  
UniRef90\_W0EKC2 Q K K V V  
UniRef90\_W7KKB5  
UniRef90\_Q96YF9  
UniRef90\_A8ZST2 R K V V M A  
UniRef90\_K0B2U8 E S Y A I K  
UniRef90\_H0Q5T4 R K F A L L R  
UniRef90\_U5N999 T P Y  
UniRef90\_I3XVW7  
UniRef90\_F5RDH0 R R A T  
UniRef90\_I0R7C0  
UniRef90\_N6YV7  
UniRef90\_H2C9I5  
UniRef90\_N6YBY5  
UniRef90\_UPI00046553BF  
UniRef90\_F3B0U9  
UniRef90\_UPI00046CF05A  
UniRef90\_S3K3D2 D L Y E L A K  
UniRef90\_C8PRC0 D L Y E L E R  
UniRef90\_A4WKC8  
UniRef90\_J5GHB0  
UniRef90\_G8QSZ8 R T I R L  
UniRef90\_UPI000365868B Q K L C F E  
UniRef90\_X1NGG6  
UniRef90\_UPI000365C59D  
UniRef90\_H1HS50  
UniRef90\_H5WUI6 T K F A L R  
UniRef90\_UPI00029ADAAB  
UniRef90\_B8FSP6 Y K Y T I R  
UniRef90\_C6A2B2  
UniRef90\_S9ZL48  
UniRef90\_UPI00037AB8E7 R K F A I A  
UniRef90\_T2GBJ1  
UniRef90\_X0YGF2  
UniRef90\_A0A059KK45 R K F A F S R  
UniRef90\_J7KZD6  
UniRef90\_D1JCT3 I K  
UniRef90\_L9W1J1 V  
UniRef90\_K4LCV1 K Q L L I R R  
UniRef90\_UPI0004685121

UniRef90\_E3CXP5  
UniRef90\_S4A3F1  
UniRef90\_A3KHY8  
UniRef90\_W9FLF6  
UniRef90\_HOUR15  
UniRef90\_UPI00037EC453  
UniRef90\_UPI00036CA63B  
UniRef90\_C6WPA5  
UniRef90\_F2R201  
UniRef90\_UPI0002626D3C  
UniRef90\_C0QE28  
UniRef90\_A1AP17  
UniRef90\_S4AZD6  
UniRef90\_UPI00037393F0  
UniRef90\_V6K3T7  
UniRef90\_L0AC72  
UniRef90\_UPI00047863D7  
UniRef90\_M0LG59  
UniRef90\_L9W358  
UniRef90\_E1R2K0  
UniRef90\_UPI00037B7AEE  
UniRef90\_Q7MRP2  
UniRef90\_D1JCT5  
UniRef90\_M3C0M1  
UniRef90\_C9XL96  
UniRef90\_D6E941  
UniRef90\_UPI0004641245  
UniRef90\_C7P6P7  
UniRef90\_C3MRA5  
UniRef90\_M1E4T4  
UniRef90\_X1R1T6  
UniRef90\_C8X3V5  
UniRef90\_UPI000360FA15  
UniRef90\_A8A8Y9  
UniRef90\_Q2RIJ0  
UniRef90\_UPI00037F41AF  
UniRef90\_A8ZS07  
UniRef90\_UPI0001FFF1B1  
UniRef90\_UPI0004636F41  
UniRef90\_UPI00036D1E2B  
UniRef90\_K6W4S1  
UniRef90\_I4BZF8  
UniRef90\_A0A021W3Z0  
UniRef90\_Q0AWR5  
UniRef90\_G4KYM5  
UniRef90\_K0NE58  
UniRef90\_UPI00037AB965  
UniRef90\_Q64BP5  
UniRef90\_D1B746  
UniRef90\_D3AGE2  
UniRef90\_G0ED86  
UniRef90\_S7U5P8  
UniRef90\_B5GWB1  
UniRef90\_D7AWR5  
UniRef90\_UPI000349858D  
UniRef90\_M1WVNO  
UniRef90\_T0JX36  
UniRef90\_H6LIB2  
UniRef90\_F0SW04  
UniRef90\_C6BWC4  
UniRef90\_UPI000380B663  
UniRef90\_F3B5A3  
UniRef90\_UPI00036FBAF4  
UniRef90\_I5B7B3  
UniRef90\_D2PQ42  
UniRef90\_F6BAS1  
UniRef90\_E1K0C8  
UniRef90\_X1LZ12  
UniRef90\_C6DXR8  
UniRef90\_D8FAM7  
UniRef90\_K4LEA4  
UniRef90\_T0JVK4  
UniRef90\_V3TX86  
UniRef90\_R4KJR0  
UniRef90\_B2TJH4  
UniRef90\_C7P6E9  
UniRef90\_Q317E2  
UniRef90\_I0GIJ1  
UniRef90\_D8GU09  
UniRef90\_UPI0004643C54  
UniRef90\_B6WRH2  
UniRef90\_F4C0H7  
UniRef90\_D3S6R9  
UniRef90\_V4K9T6  
UniRef90\_UPI0004171680  
UniRef90\_T0I132  
UniRef90\_I3VXI3  
UniRef90\_UPI0004772A88  
UniRef90\_D5UYJ8  
UniRef90\_G5GLN7  
UniRef90\_E1JSS9  
UniRef90\_A2BJR0

1

10

20

30

40

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

UniRef90\_E3CXP5 L S Y S Y R A A A R G E R C M P L L M G L P A E A L L D L S T S E H L G D R A V 80  
UniRef90\_S4A3F1 A C S F E A G E L T P D L C A D L S G H S L D S L L R H P S A V V  
UniRef90\_A3KHY8 G C A F E A G E V D P S D L C H N A S G T P V E D T L L R E A P M P  
UniRef90\_W9FLF6 G C S F E A G E L T P S F L C E N A S G H P L E K L L R H E S A P V  
UniRef90\_HOUR15 L A Y S F S D M V M P E E E A S A L L P V D A E A L G L S S S R C P G D R A V  
UniRef90\_UPI00037EC453 A C S F E A G E L G P D F C E N A S G F T L D T L L R S E I P A V V  
UniRef90\_UPI00036CA63B A C S F E A G D V T A E F C A E N A S G A P V S T L L R D A P G  
UniRef90\_C6WPA5 A C A F E A G E L T P E I C A E L S G Q P L E K L L R D E R L P  
UniRef90\_F2R201 G C A F E A G E L T P S L C H A E Y S G A P L D L L R D A P R P V  
UniRef90\_UPI0002626D3C A C A F E T G Q L T P E V C A E Y S G A P L A E L L R Q E S V P  
UniRef90\_C0QE28 L S Y M L L L P D S K E Q A Y P E N F I G K K P T J E Y A L E F G T T D Q I R Q M I  
UniRef90\_A1AP17 V A Y T P P D V V R N R I L K G N L R G I G V T Q V M A G D V P G P F A G V I  
UniRef90\_S4AZD6 G C A F E A G E I L G P G I C E E A S G S P L A T L L R D A P R P L  
UniRef90\_UPI00037393F0 I A H T V P E G E V P A A G E L L S M K T E D I I S M G P E S P I V R S I  
UniRef90\_V6K3T7 A C A F E A G E V D P G V C R D A S G M P L D V L L R K G P R P L R I A A  
UniRef90\_L0AC72 L A H R P S S A L D A D G W S G D L L E W L V D E I E R P F D A L E P E E R V V  
UniRef90\_UPI00047863D7 I G T V P L P G H E I H S H T E N L R Q S A Q G L A E L L V S P F P Q E  
UniRef90\_M0LG59 V A H R P R G S P R P P A A D R D L E G R D S D A T P A G D E T D P R L D R A V  
UniRef90\_L9W358 R A R T A G L A H R P L G D E P S T A D L D L E T L L E W A T Q P T T L E V A L  
UniRef90\_E1R2K0 A Y G Q A F T D S P S S F E G T L E D V L D L D L T G D S H A R G L  
UniRef90\_UPI00037B7AEE A C A F E S G E I A P D I C R D A S G S P L A K P L R E A P L P  
UniRef90\_Q7MRP2 V A L L P Q G E G E F T P L C A T S C E E V F D Q S L D F D P L H R A L  
UniRef90\_D1JCT5 C A C N E A E R W G I P E F I E E L L N L N V Y D V L D K L E S L N S L R V I S I  
UniRef90\_M3C0M1 G C A F E A G E I E P S I C R D A S G A P L D V L L R D S P R P L  
UniRef90\_C9XL96 Q A F T S T P S T F E G S L K D I L S L D L H D N P H D R S L  
UniRef90\_D6E941 R A F T F N G Q H E Y M R S L Q S L T G V H A D D A V A Q L L D E C S L R R S V  
UniRef90\_UPI0004641245 L G M V P P G E S S R E E H T Q R L L A S T A H D L V S L F A S P Y P Q E  
UniRef90\_C7P6P7 V C A A V Y K G M G E E K I Q N L F G K D A Y S I E F I K K E E L L Y N S I  
UniRef90\_C3MRA5 I S H T I D G E I E G A G E I I G K N A Y N V V I N L D S N L Q R S L  
UniRef90\_M1E4T4 Q A F T S T P S K Y V G H L E E I S R L N E S Q E Q N R A L  
UniRef90\_X1R1T6 Q A F T D M P G N Y S G S L R E T L A M S L D N N F K R A V  
UniRef90\_C8X3V5 Q A F T D R F G D F S G R L D Q T L E M E L Q N N Y R R A V  
UniRef90\_UPI000360FA15 A C A F E E N E L D P R V C E Q W S G A T V E R L L R H A P P  
UniRef90\_A8A8Y9 F A F L P E C E G L T E V V E P K A Y V R K V F S L A W K G E A E T S L  
UniRef90\_Q2RIJ0 A F A G A V G Q A Y T D M P G N Y Q G T L K E V L A L P L R N N Y E R A I  
UniRef90\_UPI00037F41AF V C A V D A G V V D E E I I E L S G T P I A D L L A D H R L P V R V A A  
UniRef90\_A8ZS07 Q A F T D R F G D F K G L R E I L A M P L E N N Y R R A I  
UniRef90\_UPI0001FFF1B1 A A S A R D G E L D P V A C Q D L S G S P L A A L L G D D V P A P V  
UniRef90\_UPI0004636F41 Q A F T S T P S M F E G T L K K I L T L D L N D N P Y N R S L  
UniRef90\_UPI00036D1E2B A C A F E P A E L D P S G I C E R C S G V S L D L L R H A S L P  
UniRef90\_K6W4S1 A C A F E T G Q F T P E I C D L S G S T V E E L L N H P A P A L  
UniRef90\_I4BZF8 L G S V P S A K H L E T L Q T R H L L R L S A Q E L A E L L V S P Y P Q E  
UniRef90\_A0A021W3Z0 G C C V E R D Q L D S V I A E E L L S G R S V A E L L R D E R T P V  
UniRef90\_Q0AWR5 Q A F T D M A G N F K G T L Q Q V L N M P L T N N F D R A L  
UniRef90\_G4KYM5 Q A F T D S P T A F S G T L E A E I L Q M E I A H N S H N C G I  
UniRef90\_K0NE58 Q A F T D H F G N F E G T L K D I L D M P L T N N F Q K A V  
UniRef90\_UPI00037AB965 A C S F E A D E V D P S Y C A D A S G L P L S E L L A N G P L P  
UniRef90\_Q64BP5 Q A F T D M Y G D F E G T L Q Q V L A M E L N N S Y R R A I  
UniRef90\_D1B746 Q A F T E A P V I T F Q G T L H Q V L S L D L A S D P H A R G L  
UniRef90\_D3AGE2 A C S H V P E Q L G I E A G R E F S G K S L K S C V I D P R L P  
UniRef90\_G0ED86 V G L Y Y T H T W E N P G P A A D L E G R A L S Y A W R V L A D P L A T L G S R  
UniRef90\_S7U5P8 I C H N G L S L G R A E T V A S L V G C D A L G A A E S L L T A G P F S R S L  
UniRef90\_B5GWB1 A C A F E P G E L D S A V C R D A S G S P L A E L L A Q G P L P  
UniRef90\_D7AWR5 A C A F E D G Q I A P E L C C R E A S G A P L A E L L A Q G P L P  
UniRef90\_UPI000349858D A C A F E D G Q I D P D V C R S S S G T R V A D L L D E G P L P L R V A A  
UniRef90\_M1WVN0 Q A F T D M P G N Y T G S L R A V S E L P L N N N F N R A I  
UniRef90\_T0JX36 Q A Y S D M S G F S G S L A E I I D K P L E T N F H D M A V  
UniRef90\_H6LIB2 Q A F T D M S N T Y S G K L K E L A T M P L E T N F E R A V  
UniRef90\_F0SW04 Q A F T G D F S N T L R E L A E M D L T N N F R R A I  
UniRef90\_C6BWC4 A C S H T K D Q V G T E A A A E L S G S P L S D A L R D E R L P  
UniRef90\_UPI000380B663 Q A F T L A P A D Y T G N I D N I I N A D I A S N E H A R A L  
UniRef90\_F3B5A3 Q A F T L A G T F S G T L A D V A A L P L T N D L N R A V  
UniRef90\_UPI00036BFAF4 E R A I  
UniRef90\_I5B7B3 A C A F E E G E L D P A Y C A D T S G T A V S E L L T E A P L P  
UniRef90\_D2PQ42 T L K E F I E K I K G D E R D R A I  
UniRef90\_F6BAS1 S L A D V A A M E L T G N F R R A V  
UniRef90\_E1K0C8 D H T G N F S G S L S Q V I N L P M D S N F H R A L  
UniRef90\_X1LZ12 D M P G E F S G T I S E I I N K P I K T N F D M A I  
UniRef90\_C6DXR8 Q A F T D M Y G N Y N G T L E E V L N L P M E N N R Q R A V  
UniRef90\_D8FAM7 T L G E I L S L S T D R N D H R A I  
UniRef90\_K4LEA4 Q A F T D Q P G R W E G T L G N V L N L K L D T N F H R A L  
UniRef90\_T0JVK4 S L Q Q L E L P L E N D Q Q R A D  
UniRef90\_V3TX86 Q A F T D M P G L Y E G T L E N A L T M Q A T N N F R R A V  
UniRef90\_R4KJR0 T L K Q I I E M P L K T N F D T A V  
UniRef90\_B2TJH4 C Y G D A F T D K P V E F M K G T L R E I L D K G N R A E  
UniRef90\_C7P6E9 C F R H A R G Q A F T D S Y G T F S G T L A Q V A A L P L D G N F Q R A V  
UniRef90\_Q317E2 Q A F T D E P G N F K G T V R D L L R F P L T N N K N R A F  
UniRef90\_I0GIJ1 Q A F T D M P N N F H G N L K Q I I E M P L R T N N F D T A V  
UniRef90\_D8GU09 A L A D V A A L P L T N N F Q R A V  
UniRef90\_UPI0004643C54 S L A D V L A L D T A Q D P Q A G G M  
UniRef90\_B6WRH2 T L G D V L A L P L D E N F E R A V  
UniRef90\_F4C0H7 D A F T D K P V E F K G T I R E L L D R G N R P E  
UniRef90\_D3S6R9 L A Y V D W D W V K P F R P Y K E P P G D A E E A V S L A L S Y D P V E A A I  
UniRef90\_V4K9T6 Q A F T I L N T P M V N Y R R A V  
UniRef90\_UPI0004171680 C F G C S F G Q A F T D M P N T F I G K L K D L T T M P L N T N Y E R A V  
UniRef90\_T0I132 S I G E L E L P L K N Y E R A I  
UniRef90\_I3VX13 T L R E I F E M P L L D N N F Q R A I  
UniRef90\_UPI0004772A88 D M P G N Y S G T L R E I F E M P L L D N N F Q R A I  
UniRef90\_D5UYJ8 A C A F E E G E L D S S V A D L S G E P L A A L L E H R S Q P V R I A A  
UniRef90\_G5GLN7 Q A F T D A P A E Y H G R T L A D V A A M P L E N N F R R A V  
UniRef90\_E1JSS9 V A A A P W S G R R H E P L A E A L E D A T P R M L A R L V E K T A N S L A A S  
UniRef90\_A2BJR0

UniRef90\_E3CXP5 A L A V A N G V L 90 P V E G E L S D A M P P V E S G E E  
UniRef90\_S4A3F1 R I A A L D D A Y L A Q S V L P H R R E T A E V R A Q A R D A V A D E L L A V I P E S A G A K  
UniRef90\_A3KHY8 R I A A L D D A Y L A S S V L R P H R R E T A E E A Q R P V T L P A G T P L L L A D I P E E E A G A K  
UniRef90\_W9FLF6 R I A A L D D A Y L A Q S V L R P H R R E T A E E A Q R P V T L P A G T P L L L A D I P E E E A G A K  
UniRef90\_HOUR15 A L A V A N G L L P V E G E L S G A I P R V E E P G A E  
UniRef90\_UPI00037EC453 R V A A L D D A Y L S R V R P H R R E A E E A E P V T L P T V A E G L L D L I E R P P G A R R  
UniRef90\_UPI00036CA63B R I A A L D D A Y L A A T A P H R R E A A H A E P V E L P A I A G L L L D L I P A G A K  
UniRef90\_C6WPA5 R I A A L D D A Y L A A T A P H H R E A A H A E P V E L P A I A G L L L D L I P A G A K  
UniRef90\_F2R201 R I A A L D D A Y L A A H A H P H R E A T P E V R A K A R D A I A G L L L D I A P H G A R  
UniRef90\_UPI0002626D3C R I A A L D D A H L S A A A P H R E A T P E V R A K A R D A I A G L L L D I A P H G A R  
UniRef90\_C0QE28 S L A A I N A V L C Q Q V M R M T C F E V D T T T D S L A G L L S I S K N D R R  
UniRef90\_A1AP17 R L A T L N A L S V P F L E D G R Y R V D E T G D L S G V L Q S L F R R N R G A K  
UniRef90\_S4AZD6 R M A A L D D A Y L A A R R P H R E A P E V R A V A R D A I A G L L L D I E F R R G A K  
UniRef90\_UPI00037393F0 T L S L S S F I D S R S F E R G D P L D V I E P L V A W E N G D P M S L L S P V D G A K  
UniRef90\_V6K3T7 L D A Y L A E V Q P H R S A I R A E A P V P L P A G S P A I A G L L L D S P D G A K  
UniRef90\_L0AC72 G V A I V N A V S F A A A S A A A A L L P P P K E G F P L E T L L R F L P R G G K  
UniRef90\_UPI00047863D7 A I A T L N A L S P A I D W D R G D P M G L L E P S V E R T  
UniRef90\_M0LG59 G V A A V N A L S V P F L E W Q T G D P M A L L L D S D V I D T  
UniRef90\_L9W358 F I A A S L N A V M R S L G R T E G T V H C K D D G G D E F A Q I K A F H A D D R  
UniRef90\_E1R2K0 R I A A L D D A Y L A H A L P H R R G A P E I L R A K A R D A I A G L L L D I A G G A K  
UniRef90\_UPI00037B7AEE G L A L A N A I A R Y R L G S E K I P L K G A R A L L P Q K L L E L T K E G D E  
UniRef90\_Q7MRP2 T S A L S Y R L M N D R N E L E K E E Y E V A S T T A L L E P S R F V Q P L D K  
UniRef90\_D1JCT5 R I A A L D D A Y L S R V R P H R R E A A G A G D A E A V V L A G L L E T D A G A A  
UniRef90\_M3C0M1 F I A S L N A V M K Y L G K T D R T I H C K N N E P E V L C E F I K M E F D A G N P K  
UniRef90\_C9XL96 A L A V A N A L S N A P E A L A E R G F A V S D P F D R S F L R S D D A  
UniRef90\_D6E941 F A A A S A A A A A L L P P E G P S L L P L D T T A G I P A G D D N  
UniRef90\_UPI0004641245 S L A I L N A L L S K D F L E K D G D I N D F T Q G D P I N L Y S G G K  
UniRef90\_C7P67 I V A A I N A T Y R F L G Y L I N N T I H C K D E G A P E L L E H F K D N F S K N L K  
UniRef90\_C3MRA5 F I A T L N A V L R H L L N L S K T V H C R E C A A H L V D Y I K E N F S N P R  
UniRef90\_M1E4T4 F V A T M N A V L H H L G Q V S G G T V H C R E C A A K L A E H L H N E Y G N R P R  
UniRef90\_X1R1T6 R A A A L D D A Y L E R L V L P S G T P E T R A E A R D A I V G S L D I T P G T N K  
UniRef90\_C8X3V5 A L A T M S A L T H K W I D E G G E V D F A S T S L I D V V L D I K K G D K  
UniRef90\_UPI000360FA15 F I A A L N A V M R H L K L V D K T I H C R D Q A A R L V E Y V R E R F G N P R  
UniRef90\_A8A8Y9 L D A Y L G A V S P H R H G L A R A Q R L V L P A G T P A I A D L L E E T Y P G Q R  
UniRef90\_Q2RIJ0 F V A T I N A V M R H L G L A D K T I H C R D K G A L A A F L A E E Y G D I K  
UniRef90\_UPI00037F41AF R T A A L D D A Y L A G V R P F R D D P G A E R V E L P A G T P L L D V P A G A R  
UniRef90\_UPI0004636F41 F I A S L N A V M R Y L N Q T D R T I H C K N N E P E K A F I K S R L D T P K  
UniRef90\_UPI00036D1E2B R I A A L D D A Y L E R V V L P A G S P E S R A E S R D A I A G L L E I S S G A N  
UniRef90\_K6W4S1 R L A A L D D A Y L A C V R P H R E T P D Q R A I A R D A D D P A A P V P T S G S K  
UniRef90\_I4BZF8 F A I A S A A A S A L A S K V P G I L E D F L E S L N S K K  
UniRef90\_A0A021W3Z0 R I A A L D D A Y L S L V R P H R R E T P L Q R A K A R D A I A S L L R I E G M R  
UniRef90\_Q0AWR5 L V S S M N A V C R Y L G L I D R T V H C H D E A A E L V E Q I K R D F G T P R R  
UniRef90\_G4KYM5 F I A T L N A V M N S V G L K C S G T V H C R T D A V D M L A F L R E N Y P H R  
UniRef90\_K0NE58 F I S A L N A V L R F V G K A D K T I H C V A C A V K L V A Y I R E N Y G D V K  
UniRef90\_UPI00037AB965 R I A A L D D A Y L H H L A A T A E E I L P A G T P D A V V G L L E E V Q E G T K  
UniRef90\_Q64BP5 F V A T L N A V M R S L G M I E G S V H C P A E C G L D L L E F L E G Y G V R  
UniRef90\_D1B746 F V A T L N A V M N S Q L G L C D G T I H C R T D A L D M L N H L R T H H P N E R  
UniRef90\_D3AGE2 R L A A M D A Y L G T V Y P H E R Q G G T P A E K A D L I A D I A N I E Q G M R  
UniRef90\_G0ED86 A A A W G M V A A A T T A W I D A S V S P V N P V S D E V E A L F I H S G M S  
UniRef90\_S7U5P8 A A A T L N A L F S D P S L P G R L G V R C S D L L E P W D P A A F V P E K G R  
UniRef90\_B5GWB1 R I A A L D D A F L A E G R P H R E A P D A E A V T L P A G S P E E G P A G G P R  
UniRef90\_D7AWR5 R V A A L D D A H L A H T S P H R E D P R A E P V T L P A G T P L L V P I T E G A R  
UniRef90\_UPI000349858D L D A H L A S V A P H T D R D P R A E P V E L P A G S P A V A D L E V D E G E T  
UniRef90\_M1WVNO F I S T L N A V T R S L N M S D H T I H C R N D G G P K V F E T I R R Q F G R C R  
UniRef90\_T0JX36 F V A T L N A A M R S L G M I E A T I H C K D K A K E L P A Y I E K K Y G R P K  
UniRef90\_H6LIB2 F I A T L N A V L R Y L L G L A E K T I H C K D E A K E L I A F I R E N Y G N P K  
UniRef90\_F0SW04 F I S A L N A V M R E L K M T D R T I H C K D E A G L E L V E M I E K E Y G N P K  
UniRef90\_C6BWC4 F V S A L N A V Q C S L Y N A E R T I H C K D E A P Q L G D Y I A K E Y G N P K  
UniRef90\_UPI000380B663 R I A A M D A Y L G T V Y P H R R Q T P I E K A N L R D P I A D L A A I T P N Q Q  
UniRef90\_F3B5A3 F I A C I N A V M R Y L G L I D H T V H C E D C A K D F I D W L K E N F D N P N  
UniRef90\_UPI00036FBAF4 F I A T L N A V G S A Y D N T N T I H C K E D N A Q Q L R E F I Q Q K Y G K C R  
UniRef90\_I5B7B3 F I A A G L N A V R S L Q L C E K T I H C E P V A C A E N L I E Q P Q F S G K K  
UniRef90\_D2PQ42 R I A A L D D A Y L A S V E P H H E A A G A E E I V L P A G T P L L E V A E G T K  
UniRef90\_F6BAS1 A I A S I N A G M N Y L G L L D R C V H C K D D K R L A L K L R E T G G D A  
UniRef90\_E1K0C8 F V S A L N A T C R S L G L C T G T V H C R D K E P N A F D H I A D T Y G N P R  
UniRef90\_X1LZ12 L I A T T N A V L R K M G V I K K S C H C K D D D P V R C A T H L M D F S P K R  
UniRef90\_C6DXR8 L I S T L N A V C K Y L K R I T D K S I H C E E C A K K L V E Y I K E K Y G H P R  
UniRef90\_D8FAM7 F V A S L N A V Q R Y L L R L I E G S V H C R D E A G K A L V P Y L E K H E G A R  
UniRef90\_K4LEA4 L I A S L N A V M R Y L N R I E K T I H C R D E A E R L V E Y V W T R F G N P R  
UniRef90\_T0JVK4 F V A T L N A L M R S L N Q V E A T I H C K D C A Q K L P E Y L R E K Y G N P K  
UniRef90\_V3TX86 F I A A L N A Y R H L K L C D K A T V H C K N D E I V L C G K Q V D V M A D Q K  
UniRef90\_R4KJR0 I I A S L N A A L R K L G R A S N T I H C R E C S L Q A V Q L V K Q T F G H P K  
UniRef90\_B2TJH4 Y I A T L N A V C R Y L K L I D K T I H C P E L C A E K F A Y Y I K E K Y G D K  
UniRef90\_C7P6E9 I V A A T L N A V M R Y L G L I D K T V H C V G D E P E K L V E Y L K E L N P K R  
UniRef90\_Q317E2 F V S V L N A V L R W Q Q C V T N T V H C K D C A R D L P A H I I R R Y G R C R  
UniRef90\_I0GJ1 F I A S L N A I L R H F G L V E G T K H C K K N E P E L V R Y I S E N F R G N P K  
UniRef90\_D8GU09 Y I A T L N A V C R Y L G M T Y K T V H C E K C A L E L V E Y I S E N Y G N P K  
UniRef90\_UPI0004643C54 F V S A L N A T V R S L G F C D R T I H C P A E C A A L F E H I A A R Y G D V R  
UniRef90\_B6WRH2 L V A T L N A V L R A V L G E I G N T I H C R D D G S P E L A A L V R E R F G T P R  
UniRef90\_F4C0H7 F I A T M N A V L R Y L G K I E K T V H C R D D G S S L A V D W L R D Q E W E M  
UniRef90\_D3S6R9 I V A T L N A V M R Y L G L V D K T A H C V G D E P E L V K Y L K E L K P K K  
UniRef90\_V4K9T6 G V A T I N A L A P R E G L T T A D P L D L V R L R E G A R  
UniRef90\_UPI0004171680 F V A S L N A A L R R L A L T T G T V H C R D Q A R A L A D H I R Y G R G N  
UniRef90\_T0I132 F V S G L N A V L R E L K I A D H T V H C K D D G L E L A D H I E K E Y G K P K  
UniRef90\_I3VX13 F L S L N A I M R H L R L A D H T V H C L E N C A Q K I A Y F I V E K Y G Q R  
UniRef90\_UPI0004772A88 F T A S I N A V L R Y F K F I S K T V H C R E C A H L K D Y I Q E R F D H P R  
UniRef90\_D5UYJ8 A D A L G A R A P H R D D P R A E P D V R A E A R D A A V A E L L I T F P G A R  
UniRef90\_G5GLN7 F L A T L N A V I G A V L C V G T S H C R N D G P E C C A L D E F Y P N V K R  
UniRef90\_E1JSS9 F V A S V N A T V R G L G L C D R T I H C R D K E P N E C A A I S E R F N D V R  
UniRef90\_A2BJR0 L A L A A V N A A T N A W I E C T T E P G I E F G L D A L D L V K S G S G T



	130	140	150	160
UniRef90_E3CXP5	V L L V	G F M P	L A R R	L R E K
UniRef90_S4A3F1	V A L I	G V V P	L V A A	I R R D
UniRef90_A3KHY8	V A L I	G V V P	L V A A	I R R E
UniRef90_W9FLF6	V A L I	G V V P	L V A A	I R R E
UniRef90_HOUR15	V L M V	G R M E	P L E N	K L V A
UniRef90_UPI00037EC453	V A L I	G V V P	L V A A	I R R E
UniRef90_UPI00036CA63B	V A L I	G V V P	L V A A	I R R E
UniRef90_C6WPA5	V A L I	G V V P	L V A A	I R R E
UniRef90_F2R201	V G L I	G V V P	L V A A	I R R E
UniRef90_UPI0002626D3C	V A L I	G V V P	L V A A	I R R E
UniRef90_C0QE28	V G M V	G L F P	L I K T	I Q K T
UniRef90_A1AP17	I C M V	G A I T	P L L K	K L K H
UniRef90_S4AZD6	V A L I	G V V P	L V A A	I R R E
UniRef90_UPI00037393F0	L C V F	G Y S P	S V D P	K K Y S
UniRef90_V6K3T7	V G L T	G V V P	L V A A	I R R E
UniRef90_L0AC72	V V T I	G L F K	P A F R	K F D V
UniRef90_UPI00047863D7	V A L L	G Y A E	L V P L	L R E W
UniRef90_M0LG59	I V T V	G L F R	P A F R	R F S D
UniRef90_L9W358	I A T V	G L F R	P A F R	K F S G
UniRef90_E1R2K0	V A L I	G F Q P	A L L E	H L S P
UniRef90_UPI00037B7AEE	V A L I	G V V P	L V A A	I R R E
UniRef90_Q7MRP2	I V F I	G N L P	V I K A	M R Q R
UniRef90_D1JCT5	V V M V	G F P S	W A I H	L Y A G
UniRef90_M3C0M1	V G L I	G V V P	L V A A	I R R E
UniRef90_C9XL96	V A I I	G Y Q P	A I D N	I K R E
UniRef90_D6E941	V V L V	G A G M	L R E A	A A M C
UniRef90_UPI0004641245	V A V M	G Y R T	L T P F	L R D W
UniRef90_C7P67	V A I V	G F Y P	Y L K D	K I R E
UniRef90_C3MRA5	L C V F	G F S P	Q L S Y	S N F D
UniRef90_M1E4T4	I A F V	G Y Q P	A F V S	T L S K
UniRef90_X1R1T6	I A F I	G M Q P	A T V E	A L S A
UniRef90_C8X3V5	I T Q I	G Y Q P	K M V E	R L Q D
UniRef90_UPI000360FA15	V A L I	G V V P	L V A A	I R R E
UniRef90_A8A8Y9	V I M I	G Y M R	R V D E	I V E R
UniRef90_Q2RIJ0	I A F I	G L I Q	P A M V	A S L A
UniRef90_UPI00037F41AF	V A L I	G V V P	L V A A	I R R E
UniRef90_A8ZS07	I L Q V	G F Q P	A M V E	A L J A
UniRef90_UPI0001FFF1B1	V A L I	G V V P	L V A A	I R R E
UniRef90_UPI0004636F41	U A I V	G Y Q P	A I D N	I K R E
UniRef90_UPI00036D1E2B	V A L I	G V V P	L V A A	I R R E
UniRef90_K6W4S1	V A L I	G V V P	L V Q A	I R E H
UniRef90_I4BZF8	L Y I I	G Y R P	L V L F	R N L N
UniRef90_A0A021W3Z0	V G L I	G V V P	L V D A	I R A H
UniRef90_Q0AWR5	V A L I	G Y Q P	A M L E	K L J A
UniRef90_G4KYM5	I A L I	G Y Q P	L E M L	S G S E
UniRef90_K0NE58	I T Q I	G F Q P	R M A Q	H L V P
UniRef90_UPI00037AB965	V A L I	G V V P	L V D A	I T A R
UniRef90_Q64BP5	I A L V	G F Q P	V H A R	R C S E
UniRef90_D1B746	I A L V	G Y Q P	A I E A	L A N S
UniRef90_D3AGE2	I A L I	G V V P	L I J A	A I R K
UniRef90_G0ED86	V A L I	G F I P	L A R R	L V J E
UniRef90_S7U5P8	V A F V	G Y P P	W V A V	V R E A
UniRef90_B5GWB1	V A V I	G V V P	L M A A	V R A R
UniRef90_D7AWR5	I A L I	G V V P	L V A A	I R R E
UniRef90_UPI000349858D	V A L I	G T V P	L V A A	I R R E
UniRef90_M1WVNO	I T L I	G F Q P	A L A E	A L N A
UniRef90_T0JX36	I A F V	G L Q P	L I E A	L N N A
UniRef90_H6LIB2	I A L I	G F Q P	S F L E	R L A S
UniRef90_F0SW04	I A L F	G L I Q	P A M S	E V L S
UniRef90_C6BWC4	L G L I	G F Q P	A M I K	A L S G
UniRef90_UPI000380B663	V A L I	G V V P	L V E A	I L Q A
UniRef90_F3B5A3	I L Q I	G Y Q P	A L F N	Q L S L
UniRef90_UPI00036FBAF4	I T I I	G F Q P	A M A E	A L Q A
UniRef90_I5B7B3	I L L V	G L I Q	P A M L	E Y L Q
UniRef90_D2PQ42	V A L I	G V V P	L V D A	I T E R
UniRef90_F6BAS1	V A H I	G F Q P	G H I E	A T S K
UniRef90_E1K0C8	I A Q V	G F Q P	K M I E	L T S S
UniRef90_X1LZ12	V G M I	G H Q P	R L L E	E I T R
UniRef90_C6DXR8	I A L I	G L Q P	P A M L	Q R L S
UniRef90_D8FAM7	I A Q F	G F Q P	P R M V	E N L A
UniRef90_K4LEA4	I A F I	G L I Q	P A M V	S A L A
UniRef90_T0JVK4	I A F I	G F Q P	P M I Q	S L N E
UniRef90_V3TX86	I L L I	G L I Q	P R I L	E N L S
UniRef90_R4KJR0	I A V I	G L I Q	P A I V	E Q L A
UniRef90_B2TJH4	I A M I	G Y Q P	P A I L	D N L S
UniRef90_C7P6E9	I G I I	G F Q P	P A F I	K E L V
UniRef90_Q317E2	V T L A	G M Q P	A M I E	S L A G
UniRef90_I0GIJ1	I A F F	G F Q P	A M I S	A F K D
UniRef90_D8GU09	I A L I	G F Q P	P A M L	E N L N
UniRef90_UPI0004643C54	I A Q V	G F Q P	K T I Q	A L S E
UniRef90_B6WRH2	I A L V	G F Q P	P A L L	A R L S
UniRef90_F4C0H7	V G L V	G L I Q	P A I E	A L V K
UniRef90_D3S6R9	I G I I	G F Q P	F V K E	I V N A
UniRef90_V4K9T6	V G L V	G Y I P	R G Y V	R R L R
UniRef90_UPI0004171680	I G I V	G F Q P	P R M V	E T L A
UniRef90_T0I132	I A L F	G L I Q	P A M A	E V L S
UniRef90_I3VXI3	I C F I	G L I Q	P A L V	E T C A
UniRef90_UPI0004772A88	I A F I	G L I Q	P A M I	S A L R
UniRef90_D5UYJ8	V A L I	G V V P	L V A A	I R R E
UniRef90_G5GLN7	I G Q V	G F Q P	P A M V	E M L N
UniRef90_E1JSS9	I T I Q	G F Q P	K I I Q	A L S E
UniRef90_A2BJR0	V I L V	G Y M A	P I A R	L R K M

UniRef90\_E3CXP5 A V R V D R V V L T A S A I A N R T W E R F V E R A K D C W V V G P S T P  
UniRef90\_S4A3F1 L A E A D A V V A T G M T L L G N G S F D H I L D H C R G K E L V V Y A Q S G S S  
UniRef90\_A3KHY8 L D T A D A V V A T G M T L L S N G T F D T L V L E A H C R K G V P L V V Y A Q T G S A  
UniRef90\_W9FLF6 L A E A H A V V A T G M T L L S N G T F D L L L E H C R K V P L V V Y A Q T G S A  
UniRef90\_H0UR15 A S R C D L V V L S A S A I V N G T W E R F V E L A R D D C W V V A G P S A P  
UniRef90\_UPI00037EC453 L E Q A D A V V A T G M T L L G N G S F D L L L E H C R D R D V P L V V Y A Q T G S A  
UniRef90\_UPI00036CA63B L D A A D A V V A T G M T L L G N G S F D A L L E H C R D R R F V V V Y A Q T G S A  
UniRef90\_C6WPA5 L P V A D A V V A T G M T L L G N G S F D V I L A S C R G V P L V V Y A Q T G S A  
UniRef90\_F2R201 L D R A E A V V A T G M T L L S N G S F D T I L A S C R C R D R E I I V V Y A Q T G S A  
UniRef90\_UPI0002626D3C L G V A D A V V A T G M T L L G N G T F D E I V L R R C C R S V P L V V Y A Q T G S A  
UniRef90\_C0QE28 L Q T C N K V L C T G T T I L N N S L D D I L T H C S L N A L I S V I G P T V G  
UniRef90\_A1AP17 L S R C E T A V F T G A A I A N N S L R E L L R G Q V P R H A A I A V A G P T A G  
UniRef90\_S4AZD6 L D A A D A V V A T G M T L L S N G T F D T I L A R C R G V P L I V Y A Q S G S A  
UniRef90\_UPI00037393F0 K E S C T H A V V F G S A I V N G Q I D R I L A N V S A D N L I L A G V S S V  
UniRef90\_V6K3T7 L S E A D A V V A T G M T L L S N G T F D T V L E T A R C R G V P L V V Y A Q T G S A  
UniRef90\_L0AC72 M D G A E V V F V T G S T L I Y G G I D R Y L E T A P P E A T V V L V G A T A S  
UniRef90\_UPI00047863D7 A G S C S W A W I S A E A L R D R Q I L L S L M P T F K S M E G C I L Q G P G I P  
UniRef90\_M0LG59 M E G A D V V F V T G S A F V Y G G A D R Y L R A A P P R S A A A V V I G A T A S  
UniRef90\_L9W358 M A G A E V V F I T G S T F V Y G G L E Q Y L E A A P P E T A T V V V I G A T A S  
UniRef90\_E1R2K0 I E W A D F I L C T G S T L A N G S I L V R F L D L A R P V V V F F G T T I A  
UniRef90\_UPI00037B7AEE L E A A D A V V A T G M T L L S N G T F D T I L S R C R D V P L V I Y A Q T G S A  
UniRef90\_Q7MRP2 L A S K I A V I T G A A I L G S T V D A I S A I S P K D V S V R I A V A G F S A G  
UniRef90\_D1JCT5 L D D A D V V Y I T G E T I V N E T I N E I L D F S K N A R M R I Y A G P S S A  
UniRef90\_M3C0M1 L D R A D A V V A T G M T L L G N S F D V I L E R C R S V P L V V Y A Q T G S A  
UniRef90\_C9XL96 I S W A D L V I C T G S T L C N N S I N F L S L N K P L V Y Y A G T T I A  
UniRef90\_D6E941 V A Q A D V V G I T G C A L E N D S I F D I A R L P R R A R E F V V F G P S A Q  
UniRef90\_UPI0004641245 L P L C K W C W L S G M T L R N R W F T F I Q P Y S Q M K G V F L R G S G L P  
UniRef90\_C7P6P7 L K E A D V V F I T G M T I L N G T L K N I L K N C K N A R F K I I Y G S S C S  
UniRef90\_C3MRA5 H E V C S T A L I F A S S L V N N T I D R I L S Q Q I S A N H L I L T G I S S V  
UniRef90\_M1E4T4 I K K S D V V F M T G S T L V N G S I D E L I G Y S S G K E V I F F G T T C A  
UniRef90\_X1R1T6 L S W A D L V I A T G S T V N D T L T P L I E K P I I F Y G V T I A  
UniRef90\_C8X3V5 R E W A D L L L V T G T T L V N D T I T D F L N G K E V L F Y G T T I A  
UniRef90\_UPI000360FA15 L P E A E A V I A T G M T L L G N G F D V I L D H C R Q R P L V V Y A Q T A S H  
UniRef90\_A8A8Y9 L E D A E V V I A T G A S L L D P R G P Y V L D K V S A K E K V L L G P T A T  
UniRef90\_Q2RIJ0 I E W S D L I L A T G T T A V N D T L P G I V G R K P V V F Y G V T I S  
UniRef90\_UPI00037F41AF V D Q A D S V I A T G M T L L G N S F D R L R E R C S I P L T V I Y A Q T G A A  
UniRef90\_A8ZS07 I K W A D L L L V T G T T V V N G T I E Q F L T D T P V L F Y G T T I A  
UniRef90\_UPI0001FFF1B1 I G S A D A V V A T G M T L A N G T F D P I A A R C R D R P L T V Y A Q T G A A  
UniRef90\_UPI0004636F41 V E W A D V V I C T G S T L C N N S I V D F M Y L D K P R V V Y Y A G T T I A  
UniRef90\_UPI00036D1E2B L H A A E A V V A T G M T L L G N S F D G I V A H C R R R R E L V V Y A Q S G S N  
UniRef90\_K6W4S1 L T Q A D H V I A T G M T M G N G S F D T I R D I C S R R R I T V Y A Q S G S A  
UniRef90\_I4BZF8 L N D A D W L W I T C Q A L R D R Q M L S L E K L T K N T K K V V L L G P G V P  
UniRef90\_A0A021W3Z0 L A Q A D L V I A T G M T L L S N G S F D E I L A R A R N I P L I V Y A Q T G S A  
UniRef90\_Q0AWR5 L E W C D V I A A T G S T V V N S T I T A Y C K Q K P V V F F G T S G A  
UniRef90\_G4KYM5 H S F A D L L C T G S T L C N N S I V D Y M G L P J E V L F F G T T I A  
UniRef90\_K0NE58 I D W C D L L V T G T T V A N G S L E L F L N R K P I L F Y G T T I A  
UniRef90\_UPI00037AB965 I D A A D A V V A T G M T L L S N G S F D V L L D S C Q S K P L A I Y A Q T G S A  
UniRef90\_Q64BP5 L R W C D L A L V T G S T V N G T L E P L R V A G A K A V F F G I S I V  
UniRef90\_D1B746 L E Y A D L L C T G S T V C N G T I V K Y L G L N K P V I F F G T S I S  
UniRef90\_D3AGE2 L D S A D G V I C T G M T L S N G T F D R V V E R V R N I P L T V Y A Q T G S A  
UniRef90\_G0ED86 I E E G D A L I V S G S A L A H G V A A K L A N T A R E A A I R V L L G P S A G  
UniRef90\_S7U5P8 L A E A D T L F I L G D A A V H Q D L R N I L R A A P R A R H K V L F G P S T S  
UniRef90\_B5GWB1 L D R A D A V V A T G M T I G N G T F D T L I G H C R D R A L V V Y A Q T G S A  
UniRef90\_D7AWR5 V D A A D A V V A T G M T L L G N G T F D P L L A R C R G V P L Y V Y A Q S A S A  
UniRef90\_UPI000349858D L E T A D T V V A T G M T L L G N G T F E G I R T R C R G V P L Y V Y A Q S G A A  
UniRef90\_M1WVNO I D W C D V L L V T G T T L A N G T I D M F M T E K P V M F Y G T T I S  
UniRef90\_T0JX36 A R W A D I V L S T G S T V L V N D T Y H E L S Q G K P V I Y Y G V T A A  
UniRef90\_H6LIB2 I D W C D L I F A T G S T V A N G T I T N F T N R D K P I I F Y G T T I A  
UniRef90\_F0SW04 Q T W A D L F L V T G S T L C N K S I V N F L P I K K P V V Y F G T T I A  
UniRef90\_C6BWC4 L D D V N L I V T G S T I V N D T L G N F L R D D K P T I F F G T T V S  
UniRef90\_UPI000380B663 L E R A D S I I C T G M T I S N G S F D R I V T R A R E R A I T V Y A Q T G S A  
UniRef90\_F3B5A3 I A W A D L I L C T G S T I A N G S I V E Y L N Y M E S G K D V R F Y G T T I A  
UniRef90\_UPI00036FBAF4 V Q W A D L L V T G S T L A N N S I D L F L T E K P V I F F G T T I A  
UniRef90\_I5B7B3 L D W C D M I F A T G S T I V N G T I T H F L N C G K P A V F F G V T I S  
UniRef90\_D2PQ42 L D A A D A V V A T G M T L S N G S F D V L V D R C R H K P L A V Y A Q T G S A  
UniRef90\_F6BAS1 I K K S D I A L I T G S T I V N G T F W E L L K T C E K Y D T I I Y G V T V Q  
UniRef90\_E1K0C8 L D W A D L I V S T G S T I A N D S I G D F L T D K P V I F Y G T T V A  
UniRef90\_X1LZ12 K K W A D L I L A T G T T L V N D T I D N F T G D V P V I F Y G T T I S  
UniRef90\_C6DXR8 L K W C D V I M A T G S T V A N N T I R N F L T N E K P V I F F G T T I A  
UniRef90\_D8FAM7 V E W A D L L V T G T T L A N D T I T P L L G K N I V F Y G T T I A  
UniRef90\_K4LEA4 L E W S D V L A T G T T A V N D T L S S I V G S E K P V V F Y G V T I S  
UniRef90\_T0JVK4 A R W A D L V L S T G S T V L V N D T Y H E L Q Q G K P V I Y F G V T V A  
UniRef90\_V3TX86 I D W C D Q I L A T G S T I V N G T I C Q F L Q S Q K P V I Y F G V T V A  
UniRef90\_R4KJR0 E A W S D I V F A T G S T I A N G T I D P F I K M K K P V F F Y G T T I A  
UniRef90\_B2TJH4 L N W C D I V V A T G S T I A N K T I D N F L I D K P T I F F G T T I A  
UniRef90\_C7P6E9 I K N S D V V L A T G S T I V N G T F E G I Y K L S K K R I I F Y G T S I A  
UniRef90\_Q317E2 L A W A D L L L V T G T T L A N N S I G D F L Q H T P Q K P V L F Y G T T I A  
UniRef90\_I0GIJ1 I S W C D L I V A T G S T V A N G T I E K Y I S A G K P V T F Y G V T G A S V  
UniRef90\_D8GU09 L N W C D I V V A T G S T V A N K T I T S V L I D K P T I F F G T T I A  
UniRef90\_UPI0004643C54 L N W A D L L V V T G S T L A N D T V G Q F L I D R P V I F Y G T T I A  
UniRef90\_B6WRH2 R D W A E L I L C T G S T L C N G S F V N F L D I G K P D R R V L F F G T S A  
UniRef90\_F4C0H7 F E Q C Q L I L I T G S T I V N G T I D D L D R A E H D R R V L F F G V T I A  
UniRef90\_D3S6R9 I K N S D V V L A T G S T I A N G T F E E L W E L A K K N K R L I F Y G T T I A  
UniRef90\_V4K9T6 L P K  
UniRef90\_UPI0004171680 I K W A D L L L V T G T T L V N G T L P E F L V E K P V V F Y G T T I A  
UniRef90\_T0I132 E A W A D L F L V T G S T I C N G S I I N F L P I N K P V V Y F G T T V A  
UniRef90\_I3VXI3 I E W C D I A L V T G S V I V N G T I E N I L K V Q K P L I F F G T T A A  
UniRef90\_UPI0004772A88 L S W G D L V L A T G T T V V N N T L T S L I E K P I I F F G V T I A  
UniRef90\_D5UYJ8 I E R A D A V V A T G M T L L G N G T F D E I L A T C R A R D L V Y A Q S G A A  
UniRef90\_G5GLN7 K N Y A D I I F C T G S T L A N G T I V D Y L D V Q P E V H F Y G I T A A G A C  
UniRef90\_E1JSS9 L A R A D L I V V T G S T L A N D T V G A F L D R P I I F Y G T T I A  
UniRef90\_A2BJR0 A A N A D M F V V S G A A L I D P S L F P L L E S A R S A E I V L V G A S S S

UniRef90\_E3CXP5 L C W E V F D T S V S A V M G R S V K H A P E L L K A V S R G A G T R L F D 210 220 230 240

UniRef90\_S4A3F1 V A R A F L G A G V T A L S

UniRef90\_A3KHY8 V A R A F L G L G V T A L S

UniRef90\_W9FLF6 V A R A F L G S G V T A L S

UniRef90\_HOUR15 L C W D V Y K T S V S A V L G R S V K S P Q A L M R I V S R G C G T R F F D

UniRef90\_UPI00037EC453 V A R A F L S S G V T A L S S Q F S A D A T V L Y R Y R A D G S T T K L E E A S

UniRef90\_UPI00036CA63B V A R A F L G A G V T A V S

UniRef90\_C6WPA5 V A R H F L G A G V T A L S

UniRef90\_F2R201 V A R A F L G A G V T A V S

UniRef90\_UPI0002626D3C V A R A F L G D G V S A L S

UniRef90\_C0QE28 F F P D L F A R G V N V V G G R V V K D G D M L I R R L E Q R E R W G E T T

UniRef90\_A1AP17 F V P E L F R R G V A M V G T V V V S D S D R A L D I L A E G G G Y F K E C V

UniRef90\_S4AZD6 V A R A F L G A G V T A L S

UniRef90\_UPI00037393F0 Y A P T L R K Y G F S V I G K V I P I E K V K A L R V A C E G G G

UniRef90\_V6K3T7 V A R A F L G A G V T A L S

UniRef90\_L0AC72 L L P P L F D A G V D I V A G A D V V D L S R A R A A V G R G C G T G L H D N G

UniRef90\_UPI00047863D7 W S P E L V E A G I T H L

UniRef90\_M0LG59 F R P E L F E A G V D V V A G A S V A E P D R V R R A V K A G C G N H L H D A G

UniRef90\_L9W358 M L P E A F T A G V T V V A G A S V T D P S R V R E A I A D A C G T E L H E A G

UniRef90\_E1R2K0 G T A E L F

UniRef90\_UPI00037B7AEE V A R A F L G A G V T A V C

UniRef90\_Q7MRP2 V H P S W L G S G F T H V A S M

UniRef90\_D1JCT5 F Y P K L F E M G I D V

UniRef90\_M3C0M1 V A R A F L G A G V T A L S

UniRef90\_C9XL96 G A

UniRef90\_D6E941 A P M E L F A L G A T R V L A S R I V D A D A L I E G M L E A

UniRef90\_UPI0004641245 W L P H L F K T G V T H L

UniRef90\_C7P67 F Y P K L F N L G I D C I L A M K I P N D Y E T K I N I I E T R G Y Y P F

UniRef90\_C3MRA5 D A P S L K N H G F E A L G K L F P I E K Y R V F R T I C E G G S S R L L S K Y

UniRef90\_M1E4T4 A L A Y E F G F K R L C

UniRef90\_X1R1T6 G V A Y L K R Y

UniRef90\_C8X3V5 G A A L M D W

UniRef90\_UPI000360FA15 T A R A F L G D G V T A L

UniRef90\_A8A8Y9 V H P Y F A K L G A T R V G G S Y V E S Q E K V L S A I K A G Y G

UniRef90\_Q2RIJ0 G I A R L V G Y

UniRef90\_UPI00037F41AF V A R A F L G N G V R A V S

UniRef90\_A8ZS07 G A A E L M G W P R F C A C G T

UniRef90\_UPI0001FFF1B1 V A R A F L G D G V S A L S

UniRef90\_UPI0004636F41 G A A E L L

UniRef90\_UPI00036D1E2B I A R A F L G S G V T A L

UniRef90\_K6W4S1 V A R E F L G A G V T N L S

UniRef90\_I4BZf8 W L P D V L R M G I N F V A Q P R P L Q D K A R E I I A A G G N

UniRef90\_A0A021W3Z0 I V P R F L G D G V A A V S

UniRef90\_Q0AWR5 A A C H L L

UniRef90\_G4KYM5 G S A G L L

UniRef90\_K0NE58 G A A E L M G W

UniRef90\_UPI00037AB965 V A R A F L G S G V T A L S

UniRef90\_Q64BP5 G V A E L L

UniRef90\_D1B746 G A A Q L L

UniRef90\_D3AGE2 V A A R F V G N G I T S L

UniRef90\_G0ED86 I H P I C A K L G F T H V A G S H A E T R E K L V A M V K A G Y G Y R R F K

UniRef90\_S7U5P8 V F P L F D M G V T D L M A M

UniRef90\_B5GWB1 I A R E F L G S G V T A L S

UniRef90\_D7AWR5 V A R A F L G R G V D G V S

UniRef90\_UPI000349858D V A R E L L G S G V T G L S

UniRef90\_M1WVNO G L A K L F D

UniRef90\_T0JX36 G A A S L L G F

UniRef90\_H6LIB2 G T A S L L

UniRef90\_F0SW04 A A A E M M G W

UniRef90\_UPI000380B663 I A A R F V G A G V T A L

UniRef90\_F3B5A3 G A A Y L L

UniRef90\_UPI00036FBAF4 G A

UniRef90\_I5B7B3 V V R A F L G S G V T A V S

UniRef90\_D2PQ42 G V A K L L G M D V

UniRef90\_F6BAS1 G A A A L M G W

UniRef90\_E1K0C8 G A A K L L

UniRef90\_X1LZ12 G T A E L L

UniRef90\_C6DXR8 G A A H L M G W

UniRef90\_D8FAM7 S I A Y L A G

UniRef90\_K4LEA4 G L A A M F

UniRef90\_T0JVK4 P V T F F G V T I S A A A K I L N L D

UniRef90\_V3TX86 G V A D L L

UniRef90\_R4KJR0 G A A S L L

UniRef90\_B2TJH4 G A A S L L

UniRef90\_C7P6E9 G A A Q L M G W

UniRef90\_Q317E2 G T A A L M K

UniRef90\_I0GLJ1 G A A S L M G W

UniRef90\_D8GU09 G A

UniRef90\_UPI0004643C54 G A A Y L

UniRef90\_B6WRH2 G A

UniRef90\_F4C0H7 G A A Y L

UniRef90\_D3S6R9 G A A Y L M G W

UniRef90\_V4K9T6 G A A S L L

UniRef90\_UPI0004171680 G T A K L M G W

UniRef90\_T0I132 G T A K L M G W

UniRef90\_I3VX13 G V A Y L K G Y

UniRef90\_UPI0004772A88 V A R A F L G S G L S A L S

UniRef90\_D5UYJ8 A L L G L K R L C F A H

UniRef90\_G5GLN7 G A A E L M G W

UniRef90\_E1JSS9 F H P R I A R L S A S I V A G I Y I D R T S Y V R R A V A Q G G G P Y M V E R S

UniRef90\_A2BJR0

UniRef90\_E3CXP5  
UniRef90\_S4A3F1  
UniRef90\_A3KHY8  
UniRef90\_W9FLF6  
UniRef90\_HOUR15  
UniRef90\_UPI00037EC453  
UniRef90\_UPI00036CA63B  
UniRef90\_C6WPA5  
UniRef90\_F2R201  
UniRef90\_UPI0002626D3C  
UniRef90\_C0QE28  
UniRef90\_A1AP17  
UniRef90\_S4AZD6  
UniRef90\_UPI00037393F0  
UniRef90\_V6K3T7  
UniRef90\_L0AC72  
UniRef90\_UPI00047863D7  
UniRef90\_M0LG59  
UniRef90\_L9W358  
UniRef90\_E1R2K0  
UniRef90\_UPI00037B7AEE  
UniRef90\_Q7MRP2  
UniRef90\_D1JCT5  
UniRef90\_M3C0M1  
UniRef90\_C9XL96  
UniRef90\_D6E941  
UniRef90\_UPI0004641245  
UniRef90\_C7P6P7  
UniRef90\_C3MRA5  
UniRef90\_M1E4T4  
UniRef90\_X1R1T6  
UniRef90\_C8X3V5  
UniRef90\_UPI000360FA15  
UniRef90\_A8A8Y9  
UniRef90\_Q2RIJ0  
UniRef90\_UPI00037F41AF  
UniRef90\_A8ZS07  
UniRef90\_UPI0001FFF1B1  
UniRef90\_UPI0004636F41  
UniRef90\_UPI00036D1E2B  
UniRef90\_K6W4S1  
UniRef90\_I4BZF8  
UniRef90\_A0A021W3Z0  
UniRef90\_Q0AWR5  
UniRef90\_G4KYM5  
UniRef90\_K0NE58  
UniRef90\_UPI00037AB965  
UniRef90\_Q64BP5  
UniRef90\_D1B746  
UniRef90\_D3AGE2  
UniRef90\_G0ED86  
UniRef90\_S7U5P8  
UniRef90\_B5GWB1  
UniRef90\_D7AWR5  
UniRef90\_UPI000349858D  
UniRef90\_M1WVN0  
UniRef90\_T0JX36  
UniRef90\_H6LIB2  
UniRef90\_F0SW04  
UniRef90\_C6BWC4  
UniRef90\_UPI000380B663  
UniRef90\_F3B5A3  
UniRef90\_UPI00036FBAF4  
UniRef90\_I5B7B3  
UniRef90\_D2PQ42  
UniRef90\_F6BAS1  
UniRef90\_E1K0C8  
UniRef90\_X1LZ12  
UniRef90\_C6DXR8  
UniRef90\_D8FAM7  
UniRef90\_K4LEA4  
UniRef90\_T0JVK4  
UniRef90\_V3TX86  
UniRef90\_R4KJR0  
UniRef90\_B2TJH4  
UniRef90\_C7P6E9  
UniRef90\_Q317E2  
UniRef90\_I0GIJ1  
UniRef90\_D8GU09  
UniRef90\_UPI0004643C54  
UniRef90\_B6WRH2  
UniRef90\_F4C0H7  
UniRef90\_D3S6R9  
UniRef90\_V4K9T6  
UniRef90\_UPI0004171680  
UniRef90\_T0I132  
UniRef90\_I3VX13  
UniRef90\_UPI0004772A88  
UniRef90\_D5UYJ8  
UniRef90\_G5GLN7  
UniRef90\_E1JSS9  
UniRef90\_A2BJR0

E K V C F R K  
R K I N L

V R

L R  
V

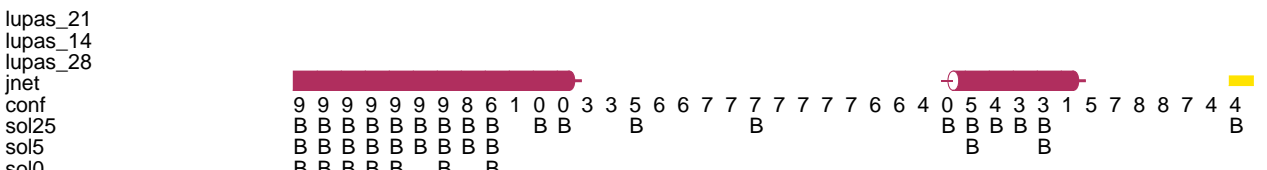
M

W G V R L V K





UniRef90\_J5H5X7 F I A T L N A I M L H F N L T S N T V H C K N E E P E M I A T Y F D Q Y K D K R
UniRef90\_D5VQJ8 L V A V L D A Y F G S Q Y P H N L T D K E Y T E H C K N D E P E E L A K M L K E E N K K R
UniRef90\_N9Y1T9 Q I A S L D A Y F G S Q Y P H N L T D K E Y T E H C K N D E P E E L A K M L K E E N K K R
UniRef90\_F0JH39 F V S T M N A I C R K L G M T R N T V I H C R R E C A R G V F Q Y I L D D Y Y G K G R
UniRef90\_D3L693 F L A T V N A L G R H L G W D D H T V I H C K N E E C A P D A E F V S E T L D P S A K
UniRef90\_A7FSL3 F I A T S N A I L R K Y L G L T S N T V I H C K N E E C A P E L L N Y L I A K R F F G S D S
UniRef90\_UPI0003B563A9 F V A T L N A V L R S A G Q T S N T V I H C H C R E C A A G L S G F I L A K R F Y G S P R
UniRef90\_C0D9G6 F I A A L N A V M K H L G L V S E C T V I H C C R N D A V E A A A Y I L K K V Y G H P K
UniRef90\_C8W6R4 Y I A T L N A V I A C L N Q K V S N T V I H C C R N D D A K K I L M E M F R K K A Y K G N K P N
UniRef90\_UPI00041C2BD8 F I A S L N A V M K H L G K V I E C T V I H C C R N D A V D A A G L I T E A S Y F G T H P R
UniRef90\_G5HIM8 F T A T L N A V T R S L G V V K G T T L H C C R N D A K K I L M E M F R K K A Y K G N K P N
UniRef90\_E1YCL5 F V A T L N A V M R Y L G K V V Q G T D H C C R L C A R Q L P E Y I T Q K H Y G P K
UniRef90\_R4KCJ3 F I A C L N A V M R Y Y G I E N T R H C H C P E E C A G S E I T G Q L Q Q Q P V A K T
UniRef90\_E3GXL5 F I A S L N A V M R Y L K P E L G A T V H C H C P E E C A G S E I T G Q L Q Q Q P V A K T
UniRef90\_Q1K2L9 F R V A A L D A Y L M H A V P H G A P V V A L P A G T S A V V E L L D V L P P G R T R
UniRef90\_UPI000288B69B R I A A L D A F L M H A L P H G P A S G A R S P L A L P A V V G L L D L P P G R T R
UniRef90\_UPI00037E0821 F I A A L N A V M K H L G R A D C S T V H C R D C A M D V V R Y I L S E H Y F G R P A
UniRef90\_R5FCF9 F L S T L N A V T R H H L G R A D C S T V H C R D D Q P P A L A S Y I E R N F G R N R
UniRef90\_I4C4S3 R V A A L D S Y L A H D S R A D T V H V A P G D S L Q A V T G L L D A P R Q G R
UniRef90\_C1ARJ8 L L A T I N A V L R S L A K V A E K T I H C K N E E P E L C A I Y D N L N N D K
UniRef90\_UPI0004767BB7 F I A A L N A V M K H L G K V I E C T V I H C R C D A A D A E Y I S S V Y G Q P R
UniRef90\_C5ER19 R V A A L D A Y L M H A L P H T P A N G A Q P P A G D S L A G L L P V A P G R T R
UniRef90\_L8EW59 R V A A L D A Y L M E V L P H T P A H G A R P W S L P A V L G L L D T P P G T R
UniRef90\_J1RYS9 L V S T I N A V M R Y C G L V E G T V H C A R P R E C A E S L A Q L L R G E R P P G C
UniRef90\_G7WNF3 R I A A L D A Y L M H V L P H T P G H G A R P V S L J A G D S L L D L A P G R T K
UniRef90\_F1DGI9 Y I A T F N A V A S Y T G N T G K T L H C C R N E A G P G V A D F F R Q N F D P K
UniRef90\_F6DVE0 F I A S V N A V L R S L S A A D K T V I H C K N D E A K E M A E W I S N N T D A V Q
UniRef90\_D9QUV9 F I A T L N A V M R H L G V V D K T I H C K N E S P E L C A I I E K Y G A D V R
UniRef90\_C0QGQ3 I L G T V N A L S S A L G C G H T V H C K N D S E L D A D L I E E K L P P G D I
UniRef90\_D2Z8N8 R T A V L D A F L P H A R R A E V V I G R G N S L H H K S V A V V D L V P G K R
UniRef90\_T2RWB8 L I A T L N S L D I T C D T I H C K D D E P E N C G E E I A I A T E Y K V D N K
UniRef90\_L0K6X9 G V A A L D A Y L M H V G P H T P D H G A R P Y T L S A V V D L L P A T G L R R
UniRef90\_D9VRJ9 R V A A L D A Y L M H V G P H T P D H G A L P F P L S A V V E L L D L P P A T
UniRef90\_L1KMJ3 R V A A L D A Y L M H T A P H T R A S G A E S V P L P A V V E L L D L P A G A T
UniRef90\_K4QTN3 R V A A L D A Y L M H A L P H G P G H C P L P E A K T S L E K S R A R E P P A T
UniRef90\_UPI0003004D9C R I A T L N A V M R Y L N L I D K T E H C P E E C A K K L C E Y L I D N Y G E K
UniRef90\_N6VQN3 R V A A L D A Y L L R M L P H T S A S G A R P Q P A E A V T G L L G P P G R T
UniRef90\_D9WHP7 Q I A A L D A Y L T H Q R P H S G E P R A V T V Q L D S G D S L Q D A P P D G R
UniRef90\_A0A059MLD1 R I A A L D A Y L T H P E H A R P Y P L R A G T S L D A V V D L L P V H R L R A
UniRef90\_UPI000380E0BE F V A S L N A V Q R S L G K T D R T I H C R D K A P K M A D Y I M E K Y G Q V R
UniRef90\_Q6AR32 L V V L S N L M F N N V L E L L E K R G I K R T T G L G F D Y D V S N M K
UniRef90\_H1LTK0 F I A S L N A V M K Y L G K T D R T I H C K N E E P E V C E F I K M E F G N P K
UniRef90\_T3JM18 R V A A L D A Y L M H V T P H T P D H G A L P V I T L P A V V E L L D L P A G S T
UniRef90\_L8PPT0 I A T F N A L M R K K G F I D R T V H C T G N A A E L L S D Y L E L L G E Y D R
UniRef90\_D9PXF0 R V A A L D A Y L M H W A V P L P A G T S L E K S R A V V A L L D L P A E A T
UniRef90\_UPI00035D6B5F G V A T I N A L S A P F V D W R T G D P M T L L D P S V I D V
UniRef90\_L9V154 F L A T L N A V V R Y L D G D L K T V I H C R N D E A D Q I T E A I R P A D H T
UniRef90\_Q1JXW8 F T A G L N A V T S H L G L A S G V I H C R D D D G A E M P E L L R R Q R F K V R R
UniRef90\_A1AQF3 R I A A L D A Y L A H V L R P H T P H P Y P L P R A R A V V D L L P D E A P G R P
UniRef90\_A0A024YH67 L I A S I N A V I M Y L G L V D G T V H C K D E E G E D V A E Y I K N H S Q A R N
UniRef90\_B2A7F4 F L A C L N A I M R Y L E P E L G T V I H C P E E C A T E I L G E F V E K L A P S F
UniRef90\_Q3A3S7 F T A G L N A V L R G I E Q A D G T V I H C K D D E G E E F T L Q L H R R F G K R
UniRef90\_Q3A7Z9 R V A V L D A Y L A A L V P H A E H P E S H A V R L P A V A D L V P V P E G G S
UniRef90\_UPI000237AE8D R V A A L D A Y L M R H V A D A A T D V V T V P A G T S L A K L L P A E P G R T
UniRef90\_C4RDJ8 F I S L N S V M K H L G L I S N T V H C K N E E P E L I A N F L N A D L Y K N
UniRef90\_G4D1Q9 L A T L N A V M R H L K I I E K T E H C K N D E P E L L E T Y L L N S V G K K
UniRef90\_A6USN7 R A A L L A A L S E P V L C Y S Q F G L M V E N G V P K S L L S E A Q C A V V
UniRef90\_W4LDK1 R V A A L D A Y L M H V T P H S P A H G A L P V I P A R A V V G L L D L P P G S M
UniRef90\_UPI0004652D85 F V I A M N A V L R S L G V A T G T I H C R D E G P E I A G Q L K A R F G S K R
UniRef90\_X0UFD4 Q I A V M D A L F A K F L G L E G E V R V K S E Q R P I A F V A K L G D A R N K R
UniRef90\_UPI0004685670 R V A A L D A Y L M H V A P H S P A H G A R P A R A R A V V G L L K L P P G A T
UniRef90\_M3E8A4 R V A A L D A Y L P H A E V I A E T T T P A G D S A G T V V D L L A P A A G Q R
UniRef90\_W7IVS1 F V A A A N A I A H A L G L A R Q T I H C R D K A P K L V E Y L R R R H P G R R
UniRef90\_E1QG51 I A T L N A V M R Y L G L T E K T E H C I K N E P E I C A I V S E L G T N I K
UniRef90\_F8AKI9 R V A A L D A Y L M H V R P H T P E H R S R A R A R A V V E L L D L P A G A V V
UniRef90\_M3DMN5 F I S T L N A V T S Y L G R M A T G T R H C R D D G S E I A R G L L K D Y G R A R
UniRef90\_X0WZK6 R V A A L D A Y L M H V A P H V I P Q Y G A R P F P L P A G T S V E K S R A R A R
UniRef90\_X0N1I4 I A A L N S V M K N L K M V E K S E H C I K G E P E V D F L L T E L G K D I K
UniRef90\_A4FZW0 R V A A L D A Y L M H V T P H A P H H G A Q P R A T A V V D L L E V P P G G T V
UniRef90\_M9U8C8 I I A T L N A V M R Y L G Y I E K T E H C T K N E P E I F S E Y L V D E Y G K T
UniRef90\_UPI00037D3366 L A T F N A L M E Y L K K T D K T K H C A E E L A K H L L K T N D Q R E N L K
UniRef90\_D7DTE6 R V A A L D A Y L M H V T P H T P D H G A R P V A L P A G T S L E K S R A R A E
UniRef90\_D9XKV4 R V A A L D A Y L M H L T P H V I P E H G A R T V Q L P S G S S L V K S R A R A K
UniRef90\_L7F7W5 V V A T I N A V L R H L N H C K D E E P S Q C A A E M A E R F Y R R W G K N T T
UniRef90\_UPI0003B35732 F Y A F L N A L F R S L G L V D K T M H C R S Y E P L A S Y I L A K Y G V G K R
UniRef90\_X1LQ23 A A L D A V A S A E N V E P E E I S P R D Y G R A V T L R A K I V A G D E
UniRef90\_A3DPW7 V V A S I N A V L R H L N D M T W G T V H C E E C A E E M M E R F F R E N T T
UniRef90\_Q8TXB0 A L D A F L L A V Q P H E S D P A A E A V R L P A G D S L A R S L A R P E A E R
UniRef90\_UPI00046D0CF4 F Y A F L N A L F R S L G L V D K T V H C R S Y E P L A N H I I A K Y G V G K R
UniRef90\_UPI00037A2A0F
UniRef90\_D7D830












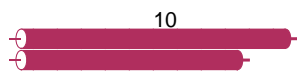
UniRef90\_J5H5X7  
 UniRef90\_D5VQJ8  
 UniRef90\_N9Y1T9  
 UniRef90\_F0JH39  
 UniRef90\_D3L693  
 UniRef90\_A7FSL3  
 UniRef90\_UPI0003B563A9  
 UniRef90\_C0D9G6  
 UniRef90\_C8W6R4  
 UniRef90\_UPI00041C2BD8  
 UniRef90\_G5HIM8  
 UniRef90\_E1YCL5  
 UniRef90\_R4KCU3  
 UniRef90\_E3GXL5  
 UniRef90\_Q1K2L9  
 UniRef90\_UPI000288B69B  
 UniRef90\_UPI00037E0821  
 UniRef90\_R5FCF9  
 UniRef90\_I4C4S3  
 UniRef90\_C1ARJ8  
 UniRef90\_UPI0004767BB7  
 UniRef90\_C5ERI9  
 UniRef90\_L8EW59  
 UniRef90\_J1RYS9  
 UniRef90\_G7WNF3  
 UniRef90\_F1DG19  
 UniRef90\_F6DVE0  
 UniRef90\_D9QUV9  
 UniRef90\_C0QGQ3  
 UniRef90\_D2Z8N8  
 UniRef90\_T2RWB8  
 UniRef90\_L0K6X9  
 UniRef90\_D9VRJ9  
 UniRef90\_L1KMJ3  
 UniRef90\_K4QTN3  
 UniRef90\_UPI0003004D9C  
 UniRef90\_N6VQN3  
 UniRef90\_D9WHP7  
 UniRef90\_A0A059MLD1  
 UniRef90\_UPI000380E0BE  
 UniRef90\_Q6AR32  
 UniRef90\_H1LTK0  
 UniRef90\_T3JMI8  
 UniRef90\_L8PPT0  
 UniRef90\_D9PXF0  
 UniRef90\_UPI00035D6B5F  
 UniRef90\_L9VI54  
 UniRef90\_Q1JXW8  
 UniRef90\_A1AQF3  
 UniRef90\_A0A024YH67  
 UniRef90\_B2A7F4  
 UniRef90\_Q3A3S7  
 UniRef90\_Q3A7Z9  
 UniRef90\_UPI000237AE8D  
 UniRef90\_C4RDJ8  
 UniRef90\_G4D1Q9  
 UniRef90\_A6USN7  
 UniRef90\_W4LDK1  
 UniRef90\_UPI0004652D85  
 UniRef90\_X0UFD4  
 UniRef90\_UPI0004685670  
 UniRef90\_M3E8A4  
 UniRef90\_W7IVS1  
 UniRef90\_E1QG51  
 UniRef90\_F8AKI9  
 UniRef90\_M3DMN5  
 UniRef90\_X0WZK6  
 UniRef90\_X0NII4  
 UniRef90\_A4FZW0  
 UniRef90\_M9U8C8  
 UniRef90\_UPI00037D3366  
 UniRef90\_D7DTE6  
 UniRef90\_D9XKV4  
 UniRef90\_L7F7W5  
 UniRef90\_UPI0003B35732  
 UniRef90\_X1LQ23  
 UniRef90\_A3DPW7  
 UniRef90\_Q8TXB0  
 UniRef90\_UPI00046D0CF4  
 UniRef90\_UPI00037A2A0F  
 UniRef90\_D7D830

VR

lupas\_21  
 lupas\_14  
 lupas\_28  
 jnet  
 conf  
 sol25  
 sol5  
 sol0

  
 3 7 8 8 7 2 8  
 B B B  
 B B

1





50

60



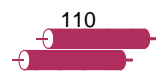
70



80



100



120



