

QUERY 1 10 20 30 40  
UniRef90\_W8U7I6 MEQ F E T M S V A E Q A H H A R L L K S E N K A V L V D I R D D P Q S F Y E A T A G H A V Q A  
UniRef90\_N9VN35 MDQ F A H R I P A E A D A H Q K L S A G G V A R L V D I R D D P Q S F F A S N H A P G S  
UniRef90\_S6IKR9 M T E F K R I P P E Q A Q A H Q L R E R Q G A V L V D I R D D P Q S F F A S T A H A P G N S  
UniRef90\_A5UXH3 N V D V A T V R A L Q E R R D D V L V I D V I R D D P P E E F Y A A G H I P G V  
UniRef90\_L7ZTG9 ME Q F E A I N V E Q Q A Y T R W K G S A A L V D I R D D P Q S F F A A G H T P G G A  
UniRef90\_UPI00034DF244 ME Q F E C A I S V Q Q A E Y Q R L T Q G S A L L V D I R D D P Q S F F A I A H A T P G G A  
UniRef90\_C7PD91 V R S L S V H Q L Q D W L D T E K P Q L I D V I R D D P D E S W E L C S I P Q A  
UniRef90\_Q2NQH2 MD Q F A T I S S M E Q A R E R W R P D T V L V D I R D D P Q S F A A G A L R G G A  
UniRef90\_UPI00040DDFDE ME Q F Q H L S V L D A Q Q L L Q P D T V L V D I R D D P Q S Y R L A C A L P G H  
UniRef90\_W9A4F5 T V Q E T K N K F N D K S N V Q F I D V I R D D P N S F F A K A N H C P P F  
UniRef90\_UPI000405A80C S F K H I S V A Q T K E M L A D Q S E L V I A D I R D D A N S F A Q G H I P P G A  
UniRef90\_U1KB91 N V N T I S T N E L K N M L A D K D K V L I D V I R D D P A E S Y K A Q G H I P R Q F  
UniRef90\_G4QE7 ME Q F A H S I S V Q E D T K A K I L D A G A A K I V D I R D D P Q S F Y Q A G H I P P A A  
UniRef90\_F4FW02 S K I K S I T P S E L K Q L L P N K A P V I L D V I R D D V D E V Q G Q A G H I P P G A  
UniRef90\_G2DPS3 S I P Q L S P A E L K Q W L D E N I T L L L D V I R D D E E E V Q F C S I L P N H  
UniRef90\_C4L3V6 D G I T R I D V K T A V Q N K L E N E E D L M L I D V I R D D S S E Y E G G H I P E G A  
UniRef90\_G0JPG8 I H E V I S V Q Q A A Q L L R D E G A F V L D V I R D D P S E E W N E Y H I P G G A  
UniRef90\_E8N1Y6 K L Q T V D A P T L K Q L L Q Q D T T I T L L D V I R D D P S E Y T G Q I F G G A  
UniRef90\_K9QFC8 M E N I T P A E L A Q W L L Q D G D P T L L L D V I R D D P S E Y T Q T C S I A H S  
UniRef90\_V5PNA0 N G I P Q I T P K E L A Q R L D A G E I F V L D V I R D D P H E Y Q I V N I A G A  
UniRef90\_UPI000478F110 N G I P Q I T P I E A L K L M E N E D F I L D V I R D D P W E F A F G H I P G G A  
UniRef90\_C5D618 M S T K N I T P I E A L K L M E N E D F I L D V I R D D P W E F A F G H I P G G A  
UniRef90\_F6D6F1 M D T F Q H I S V A E V L S K L N T N Q K L V I V D I R D D P Q S F T D A G H I E D S  
UniRef90\_UPI000300B555 Q E I R E V I S V D D D H R L L D A R K S V R L L D V I R D D A D E Y A G G R L P G A  
UniRef90\_UPI0004298A29 M K T T I V E E V H K L V L V A N K E L V L L D V I R D D R N L O O Y C H I L A N S  
UniRef90\_A5UZN6 T E L P E I S P Q E T K Q K L E A D S V L L L D V I R D D R E E Y A E A H I P D S  
UniRef90\_UPI0003B4555C E S I P E I S P H Q L K Q L I A E G D L Q L L D V I R D D S P A E Y C S Q G H I P G G A  
UniRef90\_UPI00041344E5 E V K D L S P E E A K K L Y D Q G T V A F I D V I R D D V E E Y A Q A R I P G A  
UniRef90\_E8PLI4 MD P F Q H I D V I S A Q Q L L E S E G E A T L V D I R D D P Q S F A L A H P R D A  
UniRef90\_C9P0T9 U N I Q L T P E Q F Q Q K L S E G A L L V D I R D D K K L A L L T R D K P G G A  
UniRef90\_D3PPI2 T K F P H V I P E E L A Q K L N Q S E N I T V L V D I R D D P A E Y A F G H I P G G A  
UniRef90\_F5L8L1 M S E F K R I A P P E A A Q Q L R Q S S G A Q V V D I R D D A D E Y A S G H I P D A  
UniRef90\_A0A024HBQ4 Q A L S P A A F E A A V N E V G A L V L D V I R D D R E A A E F A N G F I P N S  
UniRef90\_Q47IG3 V D Q V P Q V T V Q D L H R E I A H V Q V L D V I R D D P G E W E Q G H I A Q N A  
UniRef90\_I0KES3 Q N M E T V S V S D F E S K L K A E N A Q L L D V I R D D T T G E Y T Q G H I A Q N A  
UniRef90\_Q01Q87 S V K E L K E K L D K G D F L L D V I R D D P Q E Y A F S R I K D A  
UniRef90\_V6SIV7 M S S F K H L S V N Q L L Q M T E A Q Q P V Q I V D I R D D G N S F F A N G H I A G A  
UniRef90\_B2V7Z8 S Y R N I G P E E L Y Q A A A Q G A L I V D I R D D P M E F A Q G H I P G G A  
UniRef90\_A4YCC6 S V K P L T Q D E F I A G Y R K A Q L V D I R D D P N E F E G G H I L G S  
UniRef90\_K7QYW5 Q H I V E I D V A K S K Q L L T K E N V V L V D I R D D P E E S E Y A A G H I V D G A  
UniRef90\_UPI0001850F93 H I E I T P K D F A E K I T K T E N A Q I L D V I R D D P E E E Y E F G H I K G A  
UniRef90\_UPI000345B8C8 E V K N I L P D R V F E H L D N P D Y I L L D V I R D D P E E Y E F G H I P S A  
UniRef90\_D9TK00 L E N L K S D Q F K E R V Q Q S V L L L D V I R D D H E Y K A G H I P S A  
UniRef90\_J2H2L4 M S A I Q P L S V H T L Q Q W Q N Q E Q R F I L L D V I R D D D D E Y A G C R L P G S  
UniRef90\_G4CHI6 D R L Q S I D S E T L K Q W L D Q D K I T L I D V I R D D P S E H A G E Y I A G S  
UniRef90\_UPI00041B308F K I Q E I T V Q E L A A L L Q T S Q A R I L D V I R D D P A E F A T G H I P T A  
UniRef90\_F7P1R0 M S P V R N I S T E Q M K A E A K E D S K C T I L D V I R D D R E K V D F F E A E H V P L A  
UniRef90\_UPI000373DAEE M S Q I K E I T P Q Q V E G K L N N E D F T I I D V I R D D E E V A Q G M V P T A  
UniRef90\_A0A024PA45 D Q L K V L S P A D F K Q A I Q D K K K Q L I D V I R D D A S E F Q G G H I K G A  
UniRef90\_Q26BE7 F Q E V G P E E A K A L L K E A F V V D V I R D D P W E Y R E G H V P G G A  
UniRef90\_K7RHP7 ME Q F E A I S I E Q A Y S R W Q E G G V V V D I R D D P Q S F A V A H V P G A  
UniRef90\_D0KBI5 S V D P V A A T E M I N R Q D A L V L D V I R D D P A A D F H K G H I N S  
UniRef90\_G2DF56 S N I T V L S T A D F K T A I T D K K V Q L V D V I R D D R T K A D F D S G H I K K A  
UniRef90\_F4AW33 L K D M K E M D V M T A T S L V Y Q Q D V T L I D V I R D D N S S E W L E G H I P H A  
UniRef90\_U4WI30 S Y Q D V D T E E E F R Y R A L E S G A W V V D V I R D D P Q E F A Q G H I P G A  
UniRef90\_E8PLI1 V K A L T E E E F R Q G Y R K A Q L I D V I R D D P N E F E A G H I P G A  
UniRef90\_I3DX66 K V L T P A G A V Q L M N T E D T L V V D V I R D D P A E F A E G H I E G A  
UniRef90\_Q604K3 S D Y R Q I V E M E E A E K I M E K E D Y I L D V I R D D P E E Y E E G H I P H A  
UniRef90\_C9LCF3 S D Y R Q I V E M E E A E K I M E K E D Y I L D V I R D D P E E Y E E G H I P H A  
UniRef90\_V7I3J8 L D G I E Q V E E T E L A A L N E K E T L V V D V I R D D P E E Y E A G H I P G L  
UniRef90\_Q9K8T2 S K V K N V S H Q E E L T L M V N Q Q D A K L V D V I R D D R G K E E Y F K K H I V D S  
UniRef90\_Q07VW9 D G I K Q V E V E E L K E L V K N K D P V I I D V I R D D I E E Y E E A H I P G L  
UniRef90\_W4PZR2 V K Q V S T T E L K P L L N D R K R F Y L D V I R D D P A E F K G N H I K G F  
UniRef90\_U6B7A2 V N E N I D S E S L S Q R L A D E D V L L V D I R D D P A E A Q G M I P D A  
UniRef90\_D3RBP9 S N I E N I S P R E S V E G K L N D K Q I L L D V I R D D R T K R E Y A Q G H I P K S  
UniRef90\_L0K708 D Q V K E I T P E E L L Q K L E A E E P V V I D V I R D D V D E W N A Q G H I K Q A  
UniRef90\_V6M763 L K T S I T E D Q F K E G Y R K A Q L I D V I R D D P Q E F K R G H I L G A  
UniRef90\_T0KRL1 K F K S I S T D E L Q N E L A K K P T I V D V I R D D P D F E Y R A G H I P T A  
UniRef90\_G9ZND2 Q S V R H I S L V I E H Q A W A S D S P V F V D I R D D P Q S F Q A G H I P N A  
UniRef90\_A3WJ45 S V E E L N G R K L A G D I L L T L D V I R D D P A E W E R G H I V P G A  
UniRef90\_D1YY30 I Q N E E F L K R L D N E G F L L D V I R D D P A E Y A F G H I P G A  
UniRef90\_UPI0003B3326B L E S Y A E I T P L I E A A R Q V E S G E V H V V D V I R D D N L T E W Q E G H I P N A  
UniRef90\_UPI00037AFDB3 M P S F E S I S T S E L E D V L K S E R V T L L D V I R D D P A Q E Y R G G H I R H A  
UniRef90\_D3RRL6 S R I R N L S P L Q A T E M L N H R E A V I I D V I R D D P A A D Y A R G H I I N A  
UniRef90\_D1C1Q2 S R I R N L S P D E V A A E L K R G N V V L V D I R D D P E E R E E G A I P G S  
UniRef90\_UPI00047D93EC V Q G I S P A E A D A R V I R R N G L V L V D V I R D D P P E E R A A A V P V P  
UniRef90\_X1QQ7 V E I I S V E D A H E M I T N P D L I I L D V I R D D R T Q G E Y D A E H I C N A  
UniRef90\_C6ALU8 M T G F I E I T P Q Q A W E M L N D E D A V L A D V I R D D A Q T F S Y A H P K G A  
UniRef90\_UPI0003784A3B L E G V E Q L G P E E F K Q L V D N Q S T I I I D V I R D D A E E Y K E G H I P G V  
UniRef90\_J0V7K5 S A V K V L S A E E F K E K I D N D Q E V V L V D V I R D D P A E F E A G H I E K T  
UniRef90\_G2EDT6 S A V K V L S A E E F K A Q L G K K V Q L A D V I R D D P G E F N S G H I K N A  
UniRef90\_UPI00047C786A M K Q L T E E E F R A G Y R S K A Q L I D V I R D D P N E Y E G G H I L G A  
UniRef90\_I3C5Q4 Q V K N K S I I E F K E V A S E G F V L I D V I R D D P E E Y A Q G H I G G A  
UniRef90\_UPI00037F8C46 K K F T V I S P L L A V N K M N N E D T V I I D V I R D D P L E F T E S H I E N A  
UniRef90\_A0ZBB4 T K L E L V E A S T E V K G W T E T E K V H L I D V I R D D P S E Y A A E H I P G A  
UniRef90\_UPI000428FE3A M K T I Q P E E L Q A K L D A G E T V M I D V I R D D S E V A A G H I P G A  
UniRef90\_UPI00047AD8CE L K T L S E E E F K S G Y R K A Q L I D V I R D D P N E F K G G H I L G A

QUERY UniRef90\_W8U7I6 UniRef90\_N9VN35 UniRef90\_S6IKR9 UniRef90\_A5UXH3 UniRef90\_L7ZTg9 UniRef90\_UPI00034DF244 UniRef90\_C7PD91 UniRef90\_Q2NQH2 UniRef90\_UPI00040DDFDE UniRef90\_W9A4F5 UniRef90\_UPI000405A80C UniRef90\_U1KB91 UniRef90\_UPI0002EE207F UniRef90\_G4QE7 UniRef90\_F4FW02 UniRef90\_G2DPS3 UniRef90\_C4L3V6 UniRef90\_G0JPG8 UniRef90\_E8N1Y6 UniRef90\_K9QFC8 UniRef90\_V5PNA0 UniRef90\_UPI000478F110 UniRef90\_C5D618 UniRef90\_F6D6F1 UniRef90\_UPI000300B555 UniRef90\_Q1D966 UniRef90\_UPI0004298A29 UniRef90\_A5UZN6 UniRef90\_UPI0003B4555C UniRef90\_UPI00041344E5 UniRef90\_E8PLI4 UniRef90\_C9P0T9 UniRef90\_D3PPI2 UniRef90\_F5L8L1 UniRef90\_A0A024HBQ4 UniRef90\_Q47IG3 UniRef90\_I0KES3 UniRef90\_Q01Q87 UniRef90\_V6SIV7 UniRef90\_B2V7Z8 UniRef90\_A4YCC6 UniRef90\_K7QYW5 UniRef90\_UPI0001850F93 UniRef90\_G3I2R5 UniRef90\_UPI000345B8C8 UniRef90\_D9TK00 UniRef90\_J2H2L4 UniRef90\_G4CHI6 UniRef90\_UPI00041B308F UniRef90\_F7P1R0 UniRef90\_UPI000373DAEE UniRef90\_A0A024PA45 UniRef90\_Q26BE7 UniRef90\_K7RHP7 UniRef90\_D0KBI5 UniRef90\_G2DF56 UniRef90\_F4AW33 UniRef90\_U4WI30 UniRef90\_E8PLI1 UniRef90\_I3DX66 UniRef90\_Q604K3 UniRef90\_C9LFCF3 UniRef90\_V7I3J8 UniRef90\_Q9K8T2 UniRef90\_Q07VW9 UniRef90\_W4PZR2 UniRef90\_U6B7A2 UniRef90\_D3RBP9 UniRef90\_L0K708 UniRef90\_V6M763 UniRef90\_T0KRL1 UniRef90\_G9ZND2 UniRef90\_A3WJ45 UniRef90\_D1YY30 UniRef90\_UPI0003B3326B UniRef90\_J2I6J3 UniRef90\_UPI00037AFDB3 UniRef90\_D3RRL6 UniRef90\_D1C1Q2 UniRef90\_UPI00047D93EC UniRef90\_X1IQQ7 UniRef90\_C6ALU8 UniRef90\_UPI0003784A3B UniRef90\_J0V7K5 UniRef90\_G2EDT6 UniRef90\_UPI00047C786A UniRef90\_I3C5Q4 UniRef90\_UPI00037F8C46 UniRef90\_A0ZBB4 UniRef90\_UPI000428FE3A UniRef90\_UPI00047AD8CE

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

	90	100
QUERY	Q G Y D V V Y S I D G G F E A W Q R Q F P A E V A Y G A	
UniRef90_W8U7I6	Q G F E A V Y S I D G G F E A W A K S Y P Q E L A G E	
UniRef90_N9VN35	Q G F E E V Y S L D G G F E A W R R D F P V E A G E	
UniRef90_S6IKR9	Q G F S D V Y S L D G G F E L W R S T F P S E T A Q G G	
UniRef90_A5UXH3	N G F T R V H N M Q G G I L L A W Q R A Y P V E	
UniRef90_L7ZTG9	Q G F D A V Y S I D G G F E A W A R Q Y P Q D V E T S A	
UniRef90_UPI00034DF244	Q G F D Q V Y S V D G G F E A W H A A F P Q Q V E	
UniRef90_C7PD91	A G F P A V Y N V E G G I H A W A A E I D V E M	
UniRef90_Q2NQH2	Q G V E V A Y S V D G G F D A W L K A F P L E T E S	
UniRef90_UPI00040DDFDE	A G F D D L Y N L S G G I D A W A R D I D P E M A R	
UniRef90_W9A4F5	Q G Y E Q V Y S I D G G F E A W R R E	
UniRef90_UPI000405A80C	Q G F E K I Y N V K G G M G A W	
UniRef90_U1KB91	Q G F E E V Y S M D G G F T Q W A Q E L P D S V A	
UniRef90_UPI0002EE207F	L G Y E R V T N V R G G M N A W K N	
UniRef90_G4QE7	Q G F E E V Y S M D G G F E L W R T Q F P S Q T G	
UniRef90_F4FW02	A G Y Q V I N V S G G M L S W Q	
UniRef90_G2DPS3	A G F E S V Y N L Q G G I D A W S D Q I D P T V P R	
UniRef90_C4L3V6	A G Y T E I Y D V S G G M M A W E	
UniRef90_G0JPG8	A G F D K I Y S L K G G I N A W R A G L P V E	
UniRef90_E8N1Y6	A G F T N V T S M S G G I K A W S A A L P T V T G	
UniRef90_K9QFC8	F G F T A V T H L D G G M T A W K A A Y P T T I	
UniRef90_V5PNA0	Q G F T R L F N L A G G I D A W A L Q V D P S M P T	
UniRef90_UPI000478F110	S G F K N V S N L A G G I T A W A N D V D P K	
UniRef90_C5D618	K G F T N V W N V V P G M S K W E G P L D T A Q	
UniRef90_F6D6F1	A G F T E V Y N L I G G Y V G W	
UniRef90_UPI000300B555	Q G F E D V Y S M D G G F E A W R R E	
UniRef90_Q1D966	L G Y E R V A S L A G G Y N R W S A A L P V E	
UniRef90_UPI0004298A29	H G F K N L I N L E G G I N E W A N E I D	
UniRef90_A5UZN6	A G Y S N V L N L R G G I T A W A R A	
UniRef90_UPI0003B4555C	N G F T D A K N L I G G I D Q W A S D I D P	
UniRef90_UPI00041344E5	Q G F T D V Y N V P G S M K A W K A A Y P V E	
UniRef90_E8PLI4	Q G Y G N I Y N L E G G I V R W Y R A G P V E V G Y T A	
UniRef90_C9P0T9	Q G F E Q V Y S I D G G F E A W H A H L P T T T S	
UniRef90_D3PPI2	I G L D R V V G Y I P G L E G Y A Q G V P Q V T A A Q A	
UniRef90_F5L8L1	K G F K Q V F N V V P G M S E W	
UniRef90_A0A024HBQ4	Q G F T D V Y S V D G G F E L W R S V Y P A D T A R	
UniRef90_Q47IG3	Q G F D K L H N L A G G V D A W G A G Y P I K K G S	
UniRef90_I0KES3	V G Y D Q I G Y L D G G F A A W Q A A	
UniRef90_Q01Q87	E G F K N V M N V I G G Y D A W V A G L P V V Q A E P S	
UniRef90_V6SIV7	M G F K T V Y N M D G G Y M K W S E A H P	
UniRef90_B2V7Z8	N G F T R V K N V E G G I L L A W S D E I D P T V P	
UniRef90_A4YCC6	Q G F D D V Y S L D G G Y S A W H E A	
UniRef90_K7QYW5	Q G Y A N L Y N L E G G I L L A I E R A	
UniRef90_UPI0001850F93	K G Y R D I Y H L K G G F R G W S G K V	
UniRef90_G3I2R5	L G Y T N V L S M A G G F E A W K K	
UniRef90_UPI000345B8C8	L G F T T I Y E L E G G I M K W N A E	
UniRef90_D9TK00	N G F D C L N M S G G W T S W R M Y Y P D M V E	
UniRef90_J2H2L4	H G I P Q M A H L Q G G F I T W	
UniRef90_G4CHI6	A G F D E L Y N L S G G I D A W S Q L I D P E	
UniRef90_UPI00041B308F	S G F E Q V S H L Q G G L N T W K Q A Y P T V I N K N A	
UniRef90_F7P1R0	M G F R D L Y S I A G G M Q A W S G G F P V	
UniRef90_UPI000373DAEE	Q G F K D V R V L E G G F M G W K R G V	
UniRef90_A0A024PA45	K G F R N V Q N M E G G M L K W D G E L	
UniRef90_Q26BE7	L G F K E I Y D L R G G Y M S W	
UniRef90_K7RHP7	Q G F E K V Y N L E G G T Y A W S H G L P V E	
UniRef90_D0KBi5	L G F D S V Y S I D G G F E A W Q H R Y P Q D V	
UniRef90_G2DF56	Q G Y E Q V Y N L R G G I L L A W A N L P I	
UniRef90_F4AW33	L G F K Q I F D L K G G F M A W Q	
UniRef90_U4WI30	K G F E N L I N L E G G I L L A W N Q A	
UniRef90_E8PLI1	R G Y T N L F N V E G G V L A I E R A	
UniRef90_I3DX66	K G Y K D L Y H L Q G G F K N W S G K I K T K	
UniRef90_Q604K3	Q G F S R I Y E M R G G M L A W R A H Y P V	
UniRef90_C9LCF3	L G Y S N I V E F G G I I D W K G E I	
UniRef90_V7I3J8	A G F S D V K D M K G G I L M N W R Y E	
UniRef90_Q9K8T2	Q G F R D V K N Y A G G M L E W T G E V	
UniRef90_Q07VW9	Q G F E N V F N L K G G M G E W Q A N L P V	
UniRef90_W4PZR2	Q G F Q N V Q N Y Y G G M L A W D G E V	
UniRef90_U6B7A2	A G Y P N V T E V R G G M N A W R	
UniRef90_D3RBP9	Q G Y G R V L N L R G G I L L A W A R H L P I V A P E G	
UniRef90_L0K708	A G Y E K V K N M P G G M K A W Q G K V	
UniRef90_V6M763	L G F D V A N M V G G M L A W	
UniRef90_T0KR11	K G Y K D I N V L K G G F K K W T G K I	
UniRef90_G9ZND2	A G Y D V I N V R G G M N A W	
UniRef90_A3WJ45	Q G L T Q V S S M D G G F T A W Q T A Y P E A V E Q G	
UniRef90_D1YY30	A G Y T N V Y N V L G G F K A W K N K	
UniRef90_UPI0003B3326B	H G F T N V V N V V P G M S K W S G P V D H E	
UniRef90_J2I6J3	N G F K Q V L N L S G G F V Q W Q K	
UniRef90_UPI00037AFDB3	N G Y Q A I N V R G G M S A Y G G K I	
UniRef90_D3RRL6	A G F E E V Y N L Q G G I M A W S A N L P L	
UniRef90_D1C1Q2	M G Y R R V A H L E G G F T A W R Q G L P V E	
UniRef90_UPI00047D93EC	L G F S N V Y N V E G G I Q A W S E T V D P S I P	
UniRef90_X1IQQ7	N G F T K V Y N M V I G G I S A W K A G Y D V	
UniRef90_C6ALU8	H G Y E K V Y S L Q G G F A W K A K L P L D T G Y	
UniRef90_UPI0003784A3B	H G I E N V R N Y A G G M L A W	
UniRef90_J0V7K5	A G F K N V Y N I G G Y S D L K A A L P I K	
UniRef90_G2EDT6	M G F T E I Y D L K G G Y N N W K	
UniRef90_UPI00047C786A	K G Y H N L H C L K G G F K G W T G K V	
UniRef90_I3C5Q4	L G Y K N I I N L E G G F D A W K E A G N V F V V Q	
UniRef90_UPI00037F8C46	A G F E Q V F V I T G G M A W E G D Y K L P V	
UniRef90_A0ZBB4	A G F S D F A Q L Q G G I T S W K Q N Y P T K L N K D A	
UniRef90_UPI000428FE3A	Q G F D V T N M S G G M L E W R G E V	
UniRef90_UPI00047AD8CE	N G Y Q N L N Q L Q G G F K K W S G K I	

UniRef90\_F5L8K8  
UniRef90\_HOPXZ5  
UniRef90\_C2CY48  
UniRef90\_UPI000380CD93  
UniRef90\_J9Z951  
UniRef90\_UPI000374F833  
UniRef90\_UPI00038180BB  
UniRef90\_X0RJ18  
UniRef90\_F8X295  
UniRef90\_L8DFX4  
UniRef90\_T1CWQ7  
UniRef90\_W8Z2Q3  
UniRef90\_I2GRF6  
UniRef90\_UPI0002EDF095  
UniRef90\_F4CD18  
UniRef90\_G8NRW2  
UniRef90\_A8UHV8  
UniRef90\_HOPT20  
UniRef90\_R7IRB7  
UniRef90\_K9DZB4  
UniRef90\_H8GHA3  
UniRef90\_I0K246  
UniRef90\_UPI000406BE1F  
UniRef90\_UPI00047256C1  
UniRef90\_UPI000287E1CE  
UniRef90\_F4XBD0  
UniRef90\_K2FMD9  
UniRef90\_UPI00036E517D  
UniRef90\_L8LM13  
UniRef90\_H2J2N6  
UniRef90\_V6IVB8  
UniRef90\_K6YV25  
UniRef90\_D5DN39  
UniRef90\_C1A4P6  
UniRef90\_L0H193  
UniRef90\_D7WXH3  
UniRef90\_G9QJN0  
UniRef90\_U9W549  
UniRef90\_R6JZ3  
UniRef90\_Q2SEW5  
UniRef90\_X7EHP3  
UniRef90\_D2QVP5  
UniRef90\_I4EFR9  
UniRef90\_Q01WT3  
UniRef90\_S7VC65  
UniRef90\_UPI0004022ECB  
UniRef90\_R9C2G6  
UniRef90\_B2TM57  
UniRef90\_UPI000309DF75  
UniRef90\_Q0TT60  
UniRef90\_UPI0003B67211  
UniRef90\_L0L1P0  
UniRef90\_E4TLQ8  
UniRef90\_W0CGP7  
UniRef90\_B4WU06  
UniRef90\_B3QU07  
UniRef90\_UPI0003727090  
UniRef90\_UPI000380F218  
UniRef90\_UPI00036E56F7  
UniRef90\_D5CLD9  
UniRef90\_UPI0001E893F8  
UniRef90\_D1KCQ0  
UniRef90\_K0CA59  
UniRef90\_F2F7W9  
UniRef90\_E0U539  
UniRef90\_T4VJ51  
UniRef90\_B8CLD1  
UniRef90\_G2EE99  
UniRef90\_K9DK22  
UniRef90\_I3CG50  
UniRef90\_UPI00037967A4  
UniRef90\_B7KFU7  
UniRef90\_T0NVH5  
UniRef90\_R1IMK0  
UniRef90\_C0BM74  
UniRef90\_UPI00047160A0  
UniRef90\_UPI000376F0A2  
UniRef90\_UPI00037759B3  
UniRef90\_F3B3X5  
UniRef90\_UPI000380704A  
UniRef90\_UPI0003A7D48F  
UniRef90\_L5MV05  
UniRef90\_Q5YQX3  
UniRef90\_A0YVD6  
UniRef90\_H8I4P5  
UniRef90\_UPI0003A4F044  
UniRef90\_L0EJH6  
UniRef90\_K6TNQ4  
UniRef90\_V4RSS3  
UniRef90\_W7ZME7  
UniRef90\_UPI000225B633  
UniRef90\_L1N7D2



UniRef90\_F5L8K8  
UniRef90\_H0PXZ5  
UniRef90\_C2CY48  
UniRef90\_UPI000380CD93  
UniRef90\_J9Z951  
UniRef90\_UPI000374F833  
UniRef90\_UPI00038180BB  
UniRef90\_X0RJ18  
UniRef90\_F8X295  
UniRef90\_L8DFX4  
UniRef90\_T1CWQ7  
UniRef90\_W8Z2Q3  
UniRef90\_I2GRF6  
UniRef90\_UPI0002EDF095  
UniRef90\_F4CD18  
UniRef90\_G8NRW2  
UniRef90\_A8UHV8  
UniRef90\_HOPT20  
UniRef90\_R7IRB7  
UniRef90\_K9DZB4  
UniRef90\_H8GHA3  
UniRef90\_I0K246  
UniRef90\_UPI000406BE1F  
UniRef90\_UPI00047256C1  
UniRef90\_UPI000287E1CE  
UniRef90\_F4XBD0  
UniRef90\_K2FMD9  
UniRef90\_UPI00036E517D  
UniRef90\_L8LM13  
UniRef90\_H2J2N6  
UniRef90\_V6IVB8  
UniRef90\_K6YV25  
UniRef90\_D5DN39  
UniRef90\_C1A4P6  
UniRef90\_L0H193  
UniRef90\_D7WXH3  
UniRef90\_G9QJN0  
UniRef90\_U9W549  
UniRef90\_R6JZ3  
UniRef90\_Q2SEW5  
UniRef90\_X7EHP3  
UniRef90\_D2QVP5  
UniRef90\_I4EFR9  
UniRef90\_Q01WT3  
UniRef90\_S7VC65  
UniRef90\_UPI0004022ECB  
UniRef90\_R9C2G6  
UniRef90\_B2TM57  
UniRef90\_UPI000309DF75  
UniRef90\_Q0TT60  
UniRef90\_UPI0003B67211  
UniRef90\_L0L1P0  
UniRef90\_E4TLQ8  
UniRef90\_W0CGP7  
UniRef90\_B4WU06  
UniRef90\_B3QU07  
UniRef90\_UPI0003727090  
UniRef90\_UPI000380F218  
UniRef90\_UPI00036E56F7  
UniRef90\_D5CLD9  
UniRef90\_UPI0001E893F8  
UniRef90\_D1KCQ0  
UniRef90\_K0CA59  
UniRef90\_F2F7W9  
UniRef90\_E0U539  
UniRef90\_T4VJ51  
UniRef90\_B8CLD1  
UniRef90\_G2EE99  
UniRef90\_K9DK22  
UniRef90\_I3CG50  
UniRef90\_UPI00037967A4  
UniRef90\_B7KFU7  
UniRef90\_T0NVH5  
UniRef90\_R1IMK0  
UniRef90\_C0BM74  
UniRef90\_UPI00047160A0  
UniRef90\_UPI000376F0A2  
UniRef90\_UPI00037759B3  
UniRef90\_F3B3X5  
UniRef90\_UPI000380704A  
UniRef90\_UPI0003A7D48F  
UniRef90\_L5MV05  
UniRef90\_Q5YQX3  
UniRef90\_A0YVD6  
UniRef90\_H8I4P5  
UniRef90\_UPI0003A4F044  
UniRef90\_L0EJH6  
UniRef90\_K6TNQ4  
UniRef90\_V4RSS3  
UniRef90\_W7ZME7  
UniRef90\_UPI000225B633  
UniRef90\_L1N7D2

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

90 100

UniRef90\_F5L8K8 M G Y R K L N N L V G G M M A W K

UniRef90\_HOPXZ5 A G F E K V F N L R G G L M E W E K A

UniRef90\_C2CY48 A G Y D V I N V K G G M N A W

UniRef90\_UPI000380CD93 L G L E G L K N M E G G M L A W S Q

UniRef90\_J9Z951 N G F E K I K N L R G G I D A Y A R V V D R S L P T

UniRef90\_UPI000374F833 K G Y R Q V L Y H L Q G G F K Q W T G K I

UniRef90\_UPI00038180BB S G F R K V Y H L T G G I D A W S Q V V D P K I S R

UniRef90\_XORJ18 N G F N H V H N Y A G G M L A W Q G E T A E G

UniRef90\_F8X295 H G F S D V V S I D G G Y E E W K E

UniRef90\_L8DFX4 Q G F E N V S D L L G G Y N A W A D A H

UniRef90\_T1CWQ7 A G F E K V A N L E G G I D A W S R H V D P K V P R

UniRef90\_W8Z2Q3 A G I K E V V N L K G G F L A W K E E

UniRef90\_I2GRF6 R G F E N V V N I D G G M A A L R K

UniRef90\_UPI0002EDF095 N G Y E G L H Q L K G G F S K W T G K I K V K

UniRef90\_F4CD18 E G Y T N L S N L E G G I L A W R D T F E P D M E

UniRef90\_G8NRW2 N G F T N V S N L A G G I T A W A E K I D

UniRef90\_A8UHV8 A G F E K I Y D L D G G I S K W K H K I K V E V

UniRef90\_HOPT20 Q G F S R V V N L A G G V H A W A E L V D P

UniRef90\_R7IRB7 M G Y T N V Y S L K G G L E

UniRef90\_K9DZB4 A G F E D V H S L E G G L A A W A A G L P V

UniRef90\_H8GHA3 Q G F Q N I A N L T G G I D A W S

UniRef90\_I0K246 L G Y T D V H E L K G G Y L K W S R M M P V E

UniRef90\_UPI000406BE1F M G F T D I I D L K G G Y M A Y K

UniRef90\_UPI00047256C1 E G F T V T N L S G G I L A W T E A

UniRef90\_UPI000287E1CE H G Y T V K N M A G G M L E W N G Q V

UniRef90\_F4XBD0 L G Y T N I Y E F G G I N T W P Y E T E

UniRef90\_K2FMD9 N G Y D K V Y N V V P G M S E W S K E

UniRef90\_UPI00036E517D R G F K N V Y H L E G G I I N Y V N Q V

UniRef90\_L8LM13 A G I K G K N L V I G G I N A W S Q E I D P N V P Q

UniRef90\_H2J2N6 M G Y N V L S V S G G F T A W K R G L P G T T G G G

UniRef90\_V6IVB8 L K F S H L Y H L D G G F K K W

UniRef90\_K6YV25 D G Y Q N L S H L E G D M Q A W K Q G L A V E

UniRef90\_D5DN39 Q G Y K V T N M V I G G M L E W E G K

UniRef90\_C1A4P6 Q G F Q Q L I N I E G G I D A W S H Q V D P D I P R

UniRef90\_L0H193 Q G F D K V L N L R G G I D A W A R Q

UniRef90\_D7VXH3 N G F N V T N M I G G M L A W E G K V

UniRef90\_G9QJN0 L G Y K V E N M I G G M N W K G E L

UniRef90\_U9W549 A G I D R I A H M A G G I N A W K A

UniRef90\_R6LJZ3 L G Y A K I Y D L G A I S S W T Y G L

UniRef90\_Q2SEW5 A D F H R V Y N L S G G I L L A W A D K I D P D M P R

UniRef90\_X7EHP3 A G I S P L A H L E G G F G A W K Q A L P I D M A S G A

UniRef90\_D2QVP5 R G F D N L I D I A G G F A A M Q Q

UniRef90\_I4EFR9 E G Y T G A T N I K G G I I A W H A G L P M Q

UniRef90\_Q01WT3 R G H G N V T N M T G G I D L W S T Q V D P T V P R

UniRef90\_S7VC65 N G F E N V F S Y A G G W Q D W Q K N

UniRef90\_UPI0004022ECB Q G I E P V S S L D G G F T A W V H Q H P E A V E Q

UniRef90\_R9C2G6 L G Y T K V T N V K G G M S G W R

UniRef90\_B2TM57 L G Y T N V Y N I T G S F L G

UniRef90\_UPI000309DF75 K G F T K V Y N V L P G M S A W K G D L

UniRef90\_Q0TT60 L G F D N I Y N V S G G F M G

UniRef90\_UPI0003B67211 A G F E N V A S L A G G V A A W A D I V D P S M A

UniRef90\_L0L1P0 K G F D Q V F N V A G G M R G Y A A A

UniRef90\_E4TLQ8 A G F N N V S N I Y G G I F Q W K N E

UniRef90\_W0CGP7 Q G Y K D F Y Q L Q G G F K T W T G K I

UniRef90\_B4WMU6 A G I E G T N V K G G I L A W S R E V D P S V P E

UniRef90\_B3QU07 A G F E K I Y N V L G G L S R W K A Q

UniRef90\_UPI0003727090 I G Y P P L G W L R G G M S A W R A A K P L E

UniRef90\_UPI000380F218 K G Y T K V L N L E G G I L A W R A G L P L D

UniRef90\_UPI00036E56F7 I G V Q G V V N M E G G M L A W S Q

UniRef90\_D5CLD9 M G F K N V L N M A G G Y T K W V A D G M P E I

UniRef90\_UPI0001E893F8 Q G Y K V R N M V I G G M L E W E G E

UniRef90\_D1KCQ0 N E F E Q V Y N L K G G I Q A W K K A L P I K

UniRef90\_K0CA59 K G F T R A V S L D G G F E H W R Q A Y P D R V E E

UniRef90\_F2F7W9 K G Y S Q L Y Q L Q G G F K T W T G K V

UniRef90\_E0U539 Q G F E Q V Y H L K G G I L K Y L E E L P P E

UniRef90\_T4VJ51 M G F D N I Y N I S G G F M G

UniRef90\_B8CLD1 M G Y S Q V V S V A G G Y K A W E R Q L P L E T

UniRef90\_G2EE99 A G F T K I Y D L Q G G I S K W E

UniRef90\_K9DK22 N G F S N V T N L T G G V H A W A V Q V D P S M P

UniRef90\_I3CG50 K G Y K R I F N L K G G I L V A W A Q G L P V E

UniRef90\_UPI00037967A4 Y G Y N V I N L I G G M L A W E S E

UniRef90\_B7KFU7 K G F E E V Y H L K G G I L K Y L E E I T P E

UniRef90\_T0NVH5 A G I K K I K N Y S G S M K D W K E K

UniRef90\_R1IMK0 M G F N N V S S L K G G I T Q W S A G Y P L V T

UniRef90\_C0BM74 L G Y K R V V N L K G G Y K A Y E K

UniRef90\_UPI00047160A0 K G Y K V Y D L N E G F E G W K K A

UniRef90\_UPI000376F0A2 N G Y E K V K N L S G G Y K T Y

UniRef90\_UPI00037759B3 E G Y D V T N L A G G T G A W T G E L

UniRef90\_F3B3X5 M G Y T N V Y E F G G I K D W T G E

UniRef90\_UPI000380704A K G F P N V K N V V P G M S E W T G P V E

UniRef90\_UPI0003A7D48F A G Y N N V N R L S G G I A G W R A

UniRef90\_L5MV05 K G F S R V K N V V P G M A G W G G P V E

UniRef90\_Q5YQX3 A G F T D A T H V Q G G I V A W A N Q I D P

UniRef90\_A0YVD6 A G I E G I N V K G G I T A W S Q E V D S S V P Q

UniRef90\_H8I4P5 M G F T N V R D Y K G G L L E W K N G F P T E

UniRef90\_UPI0003A4F044 A G F V Q V N N L V S G M S G W S A N L P T

UniRef90\_L0EJH6 M G Y K V V N M Q G G M L E W T G K I

UniRef90\_K6TNQ4 L G F Q D V Y N M V I G G I M E W R R G L P L K

UniRef90\_V4RSS3 T G I S R V A H M E G G F G A W K A A L P Y R T

UniRef90\_W7ZME7 Q G F L N V R N Y E G G M L E W D G E

UniRef90\_UPI000225B633 N G Y N V T N M I G G M L D W E G E

UniRef90\_L1N7D2 M G Y K N I V E I G G I Q D W H G E I

UniRef90\_UPI0003B36E1E 1 KR [K] E V Q P K D [V] Q S S [L] D K E NY Q V I D V R E D [L] D E G R I P 40  
UniRef90\_C8WZ88 [L] T P [H] S V D A E T A R S S [L] Q K A P D A E I I D D V T R E P E E Y D Q G H I P G G A  
UniRef90\_R5C8A6 M P A I T T W R E L A A Q Q K D G N L V L I D D T T R T E E F F A F G G T H I P P G G A  
UniRef90\_X5K305 K K I T V V V J A L E T [L] K H N N I [H] L L I D D V V R E H E E Y A R G G T H I P P G G A  
UniRef90\_M4YYR8 R [P] S I S V E M L V E [L] L K Q D K L Q L V D D V R T E R K E Y Q G G H I P R Q A  
UniRef90\_G5K007 [L] T N M K T I K S T A A F E K S F E K E N K L S I I D D V V R T K Q E Y Q N T H I V P K G A  
UniRef90\_R4W113 E S I S T Q E L E K [L] K E G N V K L I D D V R T K Q E F Q N T H I V K G A  
UniRef90\_J4QAHO F Q R V S S D E A A K M M A E K G Y I V L D D V R T A G E Y A G G S H I P N A  
UniRef90\_K2DFF5 Y Q Q I S I Q D A K K L Q D A T D V I I V D D L R D L E S Y E Q Q S H I K N A  
UniRef90\_UPI00034C29E3 L K A A E V N A M L Q D A P D A L F V D D M R H Y E Y E V G H F D Q A  
UniRef90\_U5F6E0 T M E E V K Q A L D D E Q D M V L I D D V R E E D E Y A L G H L P Q A  
UniRef90\_UPI00037FFE11 MT Q M K [V] T P R Q A K E W I G A G E A V L I D D V R E E P E E Y F R A S G H L P A S A  
UniRef90\_Q607E4 QR [I] R E I G P G E V R T M L G D T L I L D D V R E P E E Y A A S G H L P A S A  
UniRef90\_X5KJL0 DS V E R E I T P E E F A Q R Y T K D A R I I D D V R E K E G E Y A A E H I A E A  
UniRef90\_V9G4V5 MK P V P Q L E T E S E L R S R L Q D N G R [Y] M I D D V R E G D D E V A A T G M L P S G A  
UniRef90\_E3FCX9 K E [R] E V P V E S V K Q M L Q D A R R A F L I D D V R E S A E E F A K G S F L P A N A  
UniRef90\_F0S5K9 L D A E Q F E Q A A N D E T G A L I L D D V R T A M S F Q A G H M K N A  
UniRef90\_R5ZW29 L S P A E V V T Q V I A N D K D A Q L V D D I R T D A M S F Q A G H M K N A  
UniRef90\_R4YKR9 S F [R] I S A N D A K T L I A Q G G S Q I D I D I R T D A M S F Q A G H M K N A  
UniRef90\_R9BYS5 MK Q L T A K E V I E T S L V E G Q P L L I D D V R E V D E V E T G K I P G A  
UniRef90\_R4Q2M6 D E F K Q V A V T Q V R Q L V L A G A F I I D A R E P Q E Y A D G H I K G A  
UniRef90\_Q8CSF5 [V] N E L D Q N F H K G L R K A Q V I D D V R E K V D Y A D G H I N G A  
UniRef90\_A0A023BQ88 D A [T] K I D A L J A F K E A L E K K D L Q L V D D V R T S Y E Y N T E H I D G A  
UniRef90\_QOVN07 S L S V S E L K Q R R M Q D G S N A L I I D D V R D E D E Y L A G H I P G A  
UniRef90\_UPI0003695229 M E E I T A Q E L K Q R L M G R S D L Q L V D D V R E P Q E F E I C N L G G  
UniRef90\_G4SZD4 [V] Q Q I S P T D L N V K L Q S D P P F L L D D V R E S P Y E F A Y A R I A G S  
UniRef90\_G2J8A1 R A L S I A Q A T Q L I N R R N A L V I D D V R S A D E Y S C G H I P P R A  
UniRef90\_E5WVG5 E G F T S V S A D E F A T L I A D P E I Q R L D D V R T V A E Y S E E H I P G S  
UniRef90\_A0A011NH82 S L T P T Q A T L L I A N R E N A Q L I D D L R E P N E Y V S G H L C D S  
UniRef90\_U9W3Z1 I L E P K D W A Q V L A A P D V V V I D D T R N N Y E V D L G S F H G A  
UniRef90\_UPI0003703AD5 S P A D F A A A A K L P S T V L L D D V R P A E F A S G H L V P G A  
UniRef90\_UPI000478FFF6 K T L S P Q E V E E L L D R K A I H L V D D V R E A H E W N E G H I V G A  
UniRef90\_H8GL56 V K P A D W N R L I S D S P E V L L I D D T R N D Y E Y R V G T F K N A  
UniRef90\_G411D2 M T A P A T I D S Q D L R R E R L S S E P P R V L D D V R T P G E F Q T T H I A G A  
UniRef90\_UPI0003B50533 M D A F K R I S V K Q A Q Q L C A E G A V M V D I R D P E S F A S G H P S G A  
UniRef90\_Q465X0 Y E N V T A C A K S I L E D A K G V F L L D D V R T P A S Y S G H I E G A  
UniRef90\_B2IES8 M A T Y R R I D E A R S L M D A E K P V V V I D D V R D P A S Y Q K G H I D G A  
UniRef90\_K9Q844 R I T P A E W N D L T S D P E V T V I D D T R N E Y E V R I G T F Q R A  
UniRef90\_I4D0T9 R I D P P E A K K R L Q D E K D L L L D D V R T E K E Y V E N S I P R S  
UniRef90\_UPI0003D70458 [L] Q D I P P G E L H K K M Q D P E A Q L I D D V R E P E E V A L S S L P G F  
UniRef90\_A0A059MS72 T L D P T A L R E L L D S G N V R V V D D V R T P G E F E S V H I P G A  
UniRef90\_U1LXQ2 M Q N R I H A T E L R E K L E N G E T L I I D D V R E P E E Y D A G H I P H V  
UniRef90\_UPI0004759EFE Q V P R N V T P G D V A D D A Y L L D D V R E P E E W T A G H A P G A  
UniRef90\_UPI0002E0A2CC N N [L] K E I S P Q S L F K R L G V P V L I D D V R N S A E L E K G M I P H A  
UniRef90\_K9PJY5 V N V Q E W N D L I S D P E V T V I D D T R N D Y E V N I G S F P R A  
UniRef90\_K9YA86 [L] E R [E] T T P E E L E K K L E A G E K L M V D D V R E D Y E V A Q G I P G A  
UniRef90\_I3DYJ9 Y R R L S T R E A R E L I A A N R P L L L D I R D A S A Y R S G H I P G A  
UniRef90\_Q060A5 [V] P T M T I A E L K T S L K A N R Q M V L L D D V R T I Q E Y R S G H I R G A  
UniRef90\_S0K57 V K P E D W N A L I S D P D V I V I D D T R N D Y E Y D I G T F K N A  
UniRef90\_C6XA52 K S V T P A E A T R M I N K E S G V V L D D V R T R K E W D T G H I T S A  
UniRef90\_UPI0002559651 H L S A E E F N G K L E S P D T I V V D D V R N H Y E S E I G H F E R A  
UniRef90\_UPI0004256AF1 [V] K G M K Q I T T T Q L K E Q L N D K D K Q Y V D D V R T A G E F K R N S I R G F  
UniRef90\_C4ULC9 E R F E S E T S R E E L L N R L N E G D V T L L D D V R P Y E E F S H G H L P G A  
UniRef90\_B4WH62 S N [L] S E T N V E E L A Q R L A D E T V Q L L I D D V R E P S E L E I A S I P D F  
UniRef90\_B2J937 M N Q I S V E E L A Q R L S S S G D I Q L V D D V R E P E E L A A N I E G F  
UniRef90\_K9R9M5 M N Q I T V E E L A Q R L S S S E V Q L V D D V R E P E E L A A N I E G F  
UniRef90\_A4VJ46 M S D Y Q R I S V E Q A Q R L L A T E N T M L L D D M R D A R A Y C Q G H D P R A  
UniRef90\_UPI0004277A77 D K [V] T R I T P E Q F A K E V K [G] E S T V I D V R K E T E Y K A E H V D E A  
UniRef90\_UPI00037BFFF7 R [L] T E V S L E D A A E Q A L R D A D [V] L I D D V R E A D E F A A G H I P G A  
UniRef90\_C8ZZ02 K [L] E I S E E E F K N G M K K A Q V I D D V R E K N E F D A G H I L G A  
UniRef90\_A0M4S5 M K E L S Q E E W Q K Q I N D K D A V L L D D V R T E E E V E E G Y I P K S  
UniRef90\_I0QQV7 S K [V] K E I T R G E A T R L I R A K E A A V V V D D V R A R E E F R K G H I S T S  
UniRef90\_F8EZ97 K [V] V S W K Q F E E L I R A K G A F V L D D V R T R E E F F E L G A I P G A  
UniRef90\_Q9CHE7 K K [K] S I S P A E V S T E L K K G T Q L I D D V R E A H E F Q N G H I K G A  
UniRef90\_UPI00036801EA V N P E Q W N Q I I S D P D [V] T L I D D T R N D Y E V A I G T F K G A  
UniRef90\_E8U7M0 M N E L T P Q Q A Y E R I S Q A G A L L V D D V R N E Y E Y A D V H A R G A  
UniRef90\_R5R0E9 Y Q R I S A S E A Q K I M D E E N I I I I D D V R T V D E Y K T G H I K N A  
UniRef90\_M7NWD5 V K P K D W N Q L I S D P E V L L V D D T R N D Y E F Q V G S F R N A  
UniRef90\_B4EKF3 E I D P Q W L E D H L P A V Q V V D D V R E P D E F T L G H I P G A  
UniRef90\_UPI0002F5EDB1 M R S I Q M K Q L K E K L G Q V V L I D D V R E E D E Y L K G H V P T A  
UniRef90\_A7ME70 E Y L K A A E V N A M L D D P D A V F I D D M R N H Y E Y E V G H F E N A  
UniRef90\_W9VIL2 R S V T P A E A T R M I N K E S A I V V V D D V R P K K E W D T G H I A G S  
UniRef90\_UPI00046782FB E [L] E A V S P D Q A A A L L E D D G T I F V D L R D P R E V E Q G R I P G A  
UniRef90\_B6WX99 R D I G P D E A R Q V L A Q G P P A V V L I D D I R D P E E F R D G H L P G A  
UniRef90\_L0E229 [L] A T [L] R Q D A Y A R E S V Q R G D A K L V D D V R T P A E Y A E D R H D G A  
UniRef90\_UPI000255AFFA Q A L S P T A F E A A A N E T G A I V L D D V R H Q N E F A K G H I P R S  
UniRef90\_UPI0002FC972D S P F S Q V S V E Q L Q E R L L S G K I Q L I D D V R E P Q E F D A R I D G F  
UniRef90\_UPI0003FD4E3C K N Y E D I P A G P [H] D L A L N K D S V I L D D V R T A G E F A G G K I R G A  
UniRef90\_Q84HF9 S [V] P S L D A H A L Q A L L S K Q P L Q L I D D V R E K N E W D L H I P Q A  
UniRef90\_UPI0003780516 E I T V A R A R E L T D S G D A W L D D V R P F E W E A G H A P G A  
UniRef90\_W0EWP2 T V E E L K R R I D S G E K L I D D V R E P A E Y E E Y N I P G A  
UniRef90\_X5LND3 M T T S P T V D C A E L H E Q M A A E G P R L V D D V R T P G E F E T A H I P G A  
UniRef90\_W9T551 S H [L] Q E V S I A D A G P A I Q A A D [V] L I D D V R A D E Y H E G H I D G A  
UniRef90\_UPI0004186695 S F E R I G V E A A R A L D A G D A L V L D D M R D P G S Y D G G H I D G A  
UniRef90\_UPI000364A671 E [V] Q E I S P T E A S E M L Q N P G T K L L D D V R T A E S R D I A C L E N S  
UniRef90\_U7G3U3 L S P E E W N E V I S D P D T L L I D D T R N D Y E V E V G T F K G A  
UniRef90\_S4RLG2 S Q T N K V S Y E E L K R L L Q N R D V S V F D D V R E P C E T E E G M I P S A  
UniRef90\_UPI00047C68F3 L N P E E W H D F I Q Q D D V I L I D D T R N D Y E Y K A G T F K N A  
UniRef90\_M1FHP1 L N P E Q Q W A E L I S D P E V V L V D D T R N Q Y E V E I G T F K N A  
UniRef90\_H0EA09 E V [V] A Q W L E A L E R D A V T L I D D V R N Q Y E W E A G R I P G A  
UniRef90\_H0J6H7 V T S T E A T Q L I N R E D A V V L D I R E S K D F K A G H I A G A

UniRef90\_UPI0003B36E1E  
UniRef90\_C8WZ88  
UniRef90\_R5C8A6  
UniRef90\_X5K305  
UniRef90\_M4YYR8  
UniRef90\_G5K007  
UniRef90\_R4W113  
UniRef90\_J4QAHO  
UniRef90\_K2DFF5  
UniRef90\_UPI00034C29E3  
UniRef90\_U5F6E0  
UniRef90\_UPI00037FFE11  
UniRef90\_Q607E4  
UniRef90\_X5KJL0  
UniRef90\_V9G4V5  
UniRef90\_E3FCX9  
UniRef90\_F0S5K9  
UniRef90\_R5ZW29  
UniRef90\_R4YKR9  
UniRef90\_R9BYS5  
UniRef90\_R4Q2M6  
UniRef90\_Q8CSF5  
UniRef90\_A0A023BQ88  
UniRef90\_QOVN07  
UniRef90\_UPI0003695229  
UniRef90\_G4SZD4  
UniRef90\_G2J8A1  
UniRef90\_E5WVG5  
UniRef90\_A0A011NH82  
UniRef90\_U9W3Z1  
UniRef90\_UPI0003703AD5  
UniRef90\_UPI000478FFF6  
UniRef90\_H8GL56  
UniRef90\_G411D2  
UniRef90\_UPI0003B50533  
UniRef90\_Q465X0  
UniRef90\_B2IES8  
UniRef90\_K9Q844  
UniRef90\_I4D0T9  
UniRef90\_UPI0003D70458  
UniRef90\_A0A059MS72  
UniRef90\_U1LXQ2  
UniRef90\_UPI0004759EFE  
UniRef90\_UPI0002E0A2CC  
UniRef90\_K9PJY5  
UniRef90\_K9YA86  
UniRef90\_I3DYJ9  
UniRef90\_Q606A5  
UniRef90\_S0KK57  
UniRef90\_C6XA52  
UniRef90\_UPI0002559651  
UniRef90\_V6HUI5  
UniRef90\_UPI0004256AF1  
UniRef90\_C4ULC9  
UniRef90\_B4WH62  
UniRef90\_B2J937  
UniRef90\_K9R9M5  
UniRef90\_A4VJ46  
UniRef90\_UPI0004277A77  
UniRef90\_UPI00037BFFF7  
UniRef90\_C8ZZ02  
UniRef90\_A0M4S5  
UniRef90\_I0QQV7  
UniRef90\_F8E297  
UniRef90\_Q9CHE7  
UniRef90\_UPI00036801EA  
UniRef90\_E8U7M0  
UniRef90\_R5R0E9  
UniRef90\_M7NWD5  
UniRef90\_B4EKF3  
UniRef90\_UPI0002F5EDB1  
UniRef90\_A7ME70  
UniRef90\_W9VIL2  
UniRef90\_UPI00046782FB  
UniRef90\_B6WX99  
UniRef90\_L0E229  
UniRef90\_UPI000255AFFA  
UniRef90\_UPI0002FC972D  
UniRef90\_UPI0003FD4E3C  
UniRef90\_Q84HF9  
UniRef90\_UPI0003780516  
UniRef90\_W0EWP2  
UniRef90\_X5LND3  
UniRef90\_W9T551  
UniRef90\_UPI0004186695  
UniRef90\_UPI000364A671  
UniRef90\_U7G3U3  
UniRef90\_S4RLG2  
UniRef90\_UPI00047C68F3  
UniRef90\_M1FHP1  
UniRef90\_H0EA09  
UniRef90\_H0J6H7

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



UniRef90\_UPI0003B36E1E QGF D V R S M A G G M N E W  
UniRef90\_C8WZ88 QGF A E V M N M K G G F K A W N G H  
UniRef90\_R5C8A6 H G Y T N V R N L I G G Y K T Y S A A V A P V L P T E A  
UniRef90\_X5K305 K G Y K V I N V D G G T E A W R G N L E V  
UniRef90\_M4YYR8 Q G Y Q V V D V K G G M S H W  
UniRef90\_G5K007 K G Y Q V I N V E G G T S A W T K E L  
UniRef90\_R4W113 A G Y S T I N V K G G M S W  
UniRef90\_J4QAH0 M G Y T N I V E M G G I K D W H G D V  
UniRef90\_K2DFF5 Q G F E M V Y S L I G G Y E  
UniRef90\_UPI00034C29E3 N G F E N V Y H I E G G I T E Y A R  
UniRef90\_U5F6E0 A G Y A N A Y N I G G I I H W  
UniRef90\_UPI00037FFE11 Q G S E P V I F N L E G G I T A W K A E G L P V V G T A A  
UniRef90\_Q607E4 L G W R G T V S M A G G F K A W E G G L P V  
UniRef90\_X5KJL0 R G Y R N F T E V E G G F  
UniRef90\_V9G4V5 Q G L N N V I N M K G G M L Q W R E  
UniRef90\_E3FCX9 M G Y T H V S S M A G G Y S R W H A S F P V E  
UniRef90\_F0S5K9 V G Y D T I G Y L K G G F A T W L A  
UniRef90\_R5ZW29 K G F S D V Y V L E G G L V A W Q A A  
UniRef90\_R4YKR9 E G F K E V Y S L D G G Y E E W K V L H P E D C E S  
UniRef90\_R9BYS5 H G F K V T N M T G G M L A W E G E  
UniRef90\_R4Q2M6 R G Y T N V V N I A G S Y A E  
UniRef90\_Q8CSF5 N G Y K N I Y M L K G G Y K K W T G K I  
UniRef90\_A0A023BQ88 I G F K N I V D L K G G Y I A W K K  
UniRef90\_Q0VN07 A G F K N V K L L Q G N Y P G W E S A  
UniRef90\_UPI0003695229 L G Y D N L L N L K G G I H A W A T Q I D P T M A  
UniRef90\_G4SZD4 H S F R K L L N L R G G I D A W S C E C D A S V S R  
UniRef90\_G2J8A1 M G Y T E V F G L Q G G L A A W Q A A  
UniRef90\_E5WVG5 K G Y T V Y E L D K G F T G W K Q A  
UniRef90\_A0A011NH82 L G F S K V H S L E G G T V A W E A G L P L K K G T  
UniRef90\_U9W3Z1 Q G F E Q V Y H L K G G I L K Y L E E V P A E  
UniRef90\_UPI0003703AD5 V G F T H V Y D L A G G I T A W Q  
UniRef90\_UPI000478FFF6 A G H A V D G H M G G G I T A W R Q G L P V  
UniRef90\_H8GL56 Q G F E E V Y H L Q G G I L K Y L E A V P A E  
UniRef90\_G411D2 T G L D N V H I L D G G I T A W Q A K  
UniRef90\_UPI0003B50533 Q D F S D L Y S M D G G F E E W R H V L P E L V E R  
UniRef90\_Q465X0 A G Y K R V Y N I Q G G L T A W N A G C P V V V V T D S  
UniRef90\_B2IES8 A D F A D V F S M D G G Y E E W R K A  
UniRef90\_K9Q844 Q G F T E V Y H L K G G I L K Y L A E I P  
UniRef90\_I4D0T9 L G Y S N L Y N L G G I L R W P Y K T V S G  
UniRef90\_UPI0003D70458 Q G F R R V F N V S G G I H A Y A T K V D P S I P T  
UniRef90\_A0A059MS72 A G L F N V H I L E G G M M G W E A K  
UniRef90\_U1LXQ2 E G Y K V V N V E G G M L A W  
UniRef90\_UPI0004759EFE N G W D N V R N L D G G M Q V W A A  
UniRef90\_UPI0002E0A2CC M G F T N V S S L E G G M N Q W V T A L P V T E Y N S  
UniRef90\_K9PJY5 Q G F A E V Y H L K G G I L K Y L E E V P  
UniRef90\_K9YA86 L G Y D N V L G Y P A S V K G W K A A  
UniRef90\_I3DYJ9 Q G F K V R N M V I G G M I E W T G E L  
UniRef90\_Q606A5 L G F G E V Y S L D G G F E A W H A  
UniRef90\_S0KK57 Q G Y Q V K N I R G G L N R W  
UniRef90\_C6XA52 Q G F E N V Y H L Q G G I L K Y L E N V P K E  
UniRef90\_UPI0002559651 A G F E Q V V R L S G G M T E W K N Q  
UniRef90\_V6HUI5 H G F R N V Y Q L H G I S Y A S E I  
UniRef90\_UPI0004256AF1 L G F T S V T N V K G G M N T W R  
UniRef90\_C4ULC9 H G Y N V R C L E D G F P E W K A A  
UniRef90\_B4WH62 Q G F T N V K N L S G G I D A Y S R R I D Q S V A  
UniRef90\_B2J937 Q G F T N V Q N I S G G I D A Y S  
UniRef90\_K9R9M5 Q G F T N V K N I T G G I D A Y S M L V D P S V P Q  
UniRef90\_A4VJ46 F G F I N C Y S L D G G Y E A W K  
UniRef90\_UPI0004277A77 R G Y R N F T E V S G G F N E  
UniRef90\_UPI00037BFFF7 M G Y V H V K S I A G G F D A W A A A  
UniRef90\_C8ZZ02 E G F K E I Y I L K E G Y E G W S G K  
UniRef90\_A0M4S5 M D F A E T Y N L I G G F S E W E G E  
UniRef90\_I0QQV7 A G F E R V Y S L K E G I A G W S G E  
UniRef90\_F8EZ97 N G W T D L Y N L T G G Y K T W S A A V E K Q D N P G A  
UniRef90\_Q9CHE7 A N Y D V T N V N G G M R A W R G K I  
UniRef90\_UPI00036801EA Q G F K E V Y H L K G G I L K Y L E N V P  
UniRef90\_E8U7M0 Q G Y G N V S N L T G G T L A W M A G L P T  
UniRef90\_R5R0E9 L G Y E N V I D F G G I I D W D G E V  
UniRef90\_M7NWD5 Q G F E E V F H L E G G I L K Y L E E V P  
UniRef90\_B4EKF3 A G F D A V A N L G G G M L R W R A E G R V V M  
UniRef90\_UPI0002F5EDB1 Q G I E V T N V T G G T L A W G E E L  
UniRef90\_A7ME70 N G F Q K V W H L E G G I L E Y A R K  
UniRef90\_W9VIL2 A G F T N I S R M S G G I T E W K A Q H  
UniRef90\_UPI00046782FB M G L A P V K H I L I G G F T A W K A G L P V E L A E  
UniRef90\_B6WX99 W G R D D V L H L A D G F R A W R A A L P E E  
UniRef90\_L0E229 L G H Q R V T N V V I G G M A W N A A  
UniRef90\_UPI000255AFFA V G F D N L G Y L K G G F E A W K K A  
UniRef90\_UPI0002FC972D Q G F K N V K N V T G G I A A Y S S L V D P S I P Q  
UniRef90\_UPI0003FD4E3C M G F K N L K N L A G G I M R W  
UniRef90\_Q84HF9 Q G L R N V R S L E G G V L A W A A A Y  
UniRef90\_UPI0003780516 A N Y P V A N V A G G M S A W H A E  
UniRef90\_W0EWP2 M G F K N T V N V E G G V L A W L E A F  
UniRef90\_X5LND3 V G L T N I R I L A G G M T A W Q K G F D V  
UniRef90\_W9T551 M G Y L Q V K S I A G G F D A W E A G L P V  
UniRef90\_UPI0004186695 F R F T K V Y S L D G G Y E G W A Q  
UniRef90\_UPI000364A671 Q G F Q Q V Y H V F D G I D G W S I N F D P S V P R  
UniRef90\_U7G3U3 Q G F E E V Y H L K G G I L K Y L E E M P R E  
UniRef90\_S4RLG2 L G Y T K S R N Y T G G Y T E W K S K  
UniRef90\_UPI00047C68F3 Q G F K E V Y H L K G G I L N Y L E Q I P A E  
UniRef90\_M1FHP1 Q G F D E V Y H L K G G I L K Y L E E M P E E  
UniRef90\_H0EA09 A G F D A W S L R G G L L D W A A G Q P L V P E G  
UniRef90\_H0J6H7 A G F E R A T K L K G G M A Q W Q A G L P V

UniRef90\_F2KV41  
UniRef90\_UPI0003FD5468  
UniRef90\_A4ST22  
UniRef90\_E9FGH7  
UniRef90\_UPI000471DB54  
UniRef90\_E8SJA2  
UniRef90\_R7ZQ59  
UniRef90\_Z4IFF6  
UniRef90\_Q0RV06  
UniRef90\_K9Y7B1  
UniRef90\_L0GWH4  
UniRef90\_B7KD58  
UniRef90\_UPI00036B0CD0  
UniRef90\_S6A585  
UniRef90\_H2BZQ0  
UniRef90\_UPI00036A6AE9  
UniRef90\_A1VR58  
UniRef90\_UPI00038086EB  
UniRef90\_UPI00046449C7  
UniRef90\_M1WJN2  
UniRef90\_S6EY10  
UniRef90\_UPI0003652721  
UniRef90\_I1GQZ4  
UniRef90\_C7NIY2  
UniRef90\_G6FPV3  
UniRef90\_R7XVR1  
UniRef90\_B3WF02  
UniRef90\_UPI00037D17DC  
UniRef90\_Q72LA7  
UniRef90\_UPI0003B547D4  
UniRef90\_UPI0003AB136F  
UniRef90\_A4X6N6  
UniRef90\_E5WEV7  
UniRef90\_D7VPV2  
UniRef90\_Q04QD0  
UniRef90\_J0MWU4  
UniRef90\_S7V9X2  
UniRef90\_UPI0003652F91  
UniRef90\_G1USA7  
UniRef90\_UPI00040D4EB4  
UniRef90\_R6KD47  
UniRef90\_A1T619  
UniRef90\_K9W5R7  
UniRef90\_R5UFH9  
UniRef90\_W4BFW9  
UniRef90\_A9WC91  
UniRef90\_W4RLW7  
UniRef90\_UPI000479A434  
UniRef90\_W8QDC9  
UniRef90\_V6Z3N9  
UniRef90\_J4V2X4  
UniRef90\_E3E2E5  
UniRef90\_F6GCK4  
UniRef90\_S7YK13  
UniRef90\_UPI0004700B22  
UniRef90\_A1HRN3  
UniRef90\_G8NZB6  
UniRef90\_Q7UFS5  
UniRef90\_A4AT86  
UniRef90\_U2UYR8  
UniRef90\_J8Q9H8  
UniRef90\_F3PX41  
UniRef90\_B8FXL4  
UniRef90\_MOL3M9  
UniRef90\_C2Z3L4  
UniRef90\_C7LY70  
UniRef90\_UPI0003FFFFAF  
UniRef90\_UPI000367770F  
UniRef90\_I3K986  
UniRef90\_C5C438  
UniRef90\_F9TPV9  
UniRef90\_UPI00035FB623  
UniRef90\_UPI0001746127  
UniRef90\_UPI0003786C63  
UniRef90\_UPI00035CCF95  
UniRef90\_Q2K443  
UniRef90\_R5NWI5  
UniRef90\_G2EDT5  
UniRef90\_UPI00034614DC  
UniRef90\_K9SQB6  
UniRef90\_W8F117  
UniRef90\_G9EZA6  
UniRef90\_L0FYF7  
UniRef90\_W4TCL4  
UniRef90\_D2R3B9  
UniRef90\_S3IHZ0  
UniRef90\_K9YEW2  
UniRef90\_Z5XEW3  
UniRef90\_UPI0003FF6868  
UniRef90\_R7AIU4  
UniRef90\_J3A092  
UniRef90\_E1WZC3

UniRef90\_F2KV41  
UniRef90\_UPI0003FD5468  
UniRef90\_A4ST22  
UniRef90\_E9FGH7  
UniRef90\_UPI000471DB54  
UniRef90\_E8SJA2  
UniRef90\_R7ZQ59  
UniRef90\_Z4IFF6  
UniRef90\_QORV06  
UniRef90\_K9Y7B1  
UniRef90\_L0GWH4  
UniRef90\_B7KD58  
UniRef90\_UPI00036B0CD0  
UniRef90\_S6A585  
UniRef90\_H2BZQ0  
UniRef90\_UPI00036A6AE9  
UniRef90\_A1VR58  
UniRef90\_UPI00038086EB  
UniRef90\_UPI00046449C7  
UniRef90\_M1WJN2  
UniRef90\_S6EY10  
UniRef90\_UPI0003652721  
UniRef90\_I1GQZ4  
UniRef90\_C7NIY2  
UniRef90\_G6FPV3  
UniRef90\_R7XVR1  
UniRef90\_B3WF02  
UniRef90\_UPI00037D17DC  
UniRef90\_Q72LA7  
UniRef90\_UPI0003B547D4  
UniRef90\_UPI0003AB136F  
UniRef90\_A4X6N6  
UniRef90\_E5WEV7  
UniRef90\_D7VPV2  
UniRef90\_Q04QD0  
UniRef90\_J0MWU4  
UniRef90\_S7V9X2  
UniRef90\_UPI0003652F91  
UniRef90\_G1USA7  
UniRef90\_UPI00040D4EB4  
UniRef90\_R6KD47  
UniRef90\_A1T619  
UniRef90\_K9W5R7  
UniRef90\_R5UFH9  
UniRef90\_W4BFW9  
UniRef90\_A9WC91  
UniRef90\_W4RLW7  
UniRef90\_UPI000479A434  
UniRef90\_W8QDC9  
UniRef90\_V6Z3N9  
UniRef90\_J4V2X4  
UniRef90\_E3E2E5  
UniRef90\_F6GCK4  
UniRef90\_S7YK13  
UniRef90\_UPI0004700B22  
UniRef90\_A1HRN3  
UniRef90\_G8NZB6  
UniRef90\_Q7UFS5  
UniRef90\_A4AT86  
UniRef90\_U2UYR8  
UniRef90\_J8Q9H8  
UniRef90\_F3PX41  
UniRef90\_B8FXL4  
UniRef90\_MOL3M9  
UniRef90\_C2Z3L4  
UniRef90\_C7LY70  
UniRef90\_UPI0003FFFFAF  
UniRef90\_UPI000367770F  
UniRef90\_I3K986  
UniRef90\_C5C438  
UniRef90\_F9TPV9  
UniRef90\_UPI00035FB623  
UniRef90\_UPI0001746127  
UniRef90\_UPI0003786C63  
UniRef90\_UPI00035CCF95  
UniRef90\_Q2K443  
UniRef90\_R5NWI5  
UniRef90\_G2EDT5  
UniRef90\_UPI00034614DC  
UniRef90\_K9SQB6  
UniRef90\_W8F117  
UniRef90\_G9EZA6  
UniRef90\_L0FYF7  
UniRef90\_W4TCL4  
UniRef90\_D2R3B9  
UniRef90\_S3IHZ0  
UniRef90\_K9YEW2  
UniRef90\_Z5XEW3  
UniRef90\_UPI0003FF6868  
UniRef90\_R7AIU4  
UniRef90\_J3A092  
UniRef90\_E1WZC3

50 60 70 80  
VNI DSAFLTAAALSRLLDKERPCAVYCRSGKRRAALAAASLLAK  
ENI FVGTGLPENLNDKLSKDKKVTIHCQESGDMRTATLGYSLLLAK  
QHL LLSQQLADENNVDKHKDDAPLILVVVCCESGMRTAGGARGRQLLAK  
UNIFRQLLSSQLEIDYDQDLDDKDLHLHYVILCCESGMRTAGGARGRQLLAK  
INILPLEELEARKEDELDKDRQSTLVLISSERGGRRAYLAFVVKLLKQ  
EHIPMNDYIPDQHVHMAEDVSKDKDTTYIIVCCAGGVRRSAKVVAFLLND  
ENILPMDYIIPDQHVHMAEDVSKDKDTTYIIVCCAGGVRRSAKVVAFLLND  
ILHPLVDEIEESFNKEEKNKTYYVVCAGGVRRSMLFVNSLAK  
IPVPLSAQLRSYRAHEELPTGKPIVVVHCAGGVRRSMLFVNSLAK  
INLPLSAQYEWAWAHEELPTGKPIVVVHCAGGVRRSMLFVNSLAK  
VLLPLMHQIPHLRLEELDDPQRETVVVHCAGGVRRSMLFVNSLAK  
HQVTPNTQIEQVVEIKADKTDKPIVVVHCAGGVRRSMLFVNSLAK  
LHMPKDEISLHAKLIAADKTHPIYLVHHCAGGVRRSMLFVNSLAK  
INILPSSQFRERVKELPKDKPVYLVHHCAGGVRRSMLFVNSLAK  
TNLIDLHKGFEFLDKDLKSKNYFVYCCAGGVRRSMLFVNSLAK  
UNIFRQYEFQNRMNELSPAKPVVVFVCCAGGVRRSMLFVNSLAK  
VHISRGMLEFKPALQSPRDLKIVLVYCCAGGVRRSMLFVNSLAK  
LGLGYDTMNGVVKNVDDKSRKIVLVYCCAGGVRRSMLFVNSLAK  
LDPETETFRFEPQYVQRYKVAAMFTGGVRRSMLFVNSLAK  
VNI DFEDEFNEKINMLDKTKPYFIYCCAGGVRRSMLFVNSLAK  
INLPLPSDYIKKQKLEQHKNTPVVVVHCAGGVRRSMLFVNSLAK  
KNVPLDPIYINENMDEVDKRNKTYIIVHCAGGVRRSMLFVNSLAK  
KVLPLRQFGTWTGVPVMTDEFNTYVVLCCAGGVRRSMLFVNSLAK  
VHILPLADYFARVVPDPSSTDRGLPLPVVHCAGGVRRSMLFVNSLAK  
VNLPLSGFAEWGNEIHTRLDPLDVLVHCAGGVRRSMLFVNSLAK  
VNIPLMGQLTARLGEELIDRDLVHVVHCAGGVRRSMLFVNSLAK  
RDLIPYTGELRLRERMGEMLDQDLPEVYLVHCAGGVRRSMLFVNSLAK  
UNIFRPLGQLFRMDELDQDEVEVYLVHCAGGVRRSMLFVNSLAK  
VNIPIRDLPLPKRVGELPKGKPIIVVYCCAGGVRRSMLFVNSLAK  
RLIPLDDELPLPERELDDQKEREVVVHCAGGVRRSMLFVNSLAK  
RNVQVSSQFDPENKDPVKKERPVAVVYCCAGGVRRSMLFVNSLAK  
YNVPLNKEHRTELRGLHLLDEDVVLVHCAGGVRRSMLFVNSLAK  
VSLIPFGELEFERMGEELNKKDKKIVVYCCAGGVRRSMLFVNSLAK  
ILLNKWFSDSTAEFGQIKKRNRPVYLVYCCAGGVRRSMLFVNSLAK  
ILPLQSDTFR EE LQTLLELHKILMYCCAGGVRRSMLFVNSLAK  
TLIVDSSQISAEKFLPLDGDIPILFVYCCAGGVRRSMLFVNSLAK  
VHFPTAMLEGRKFPDLGKDAVVVAQCCAGGVRRSMLFVNSLAK  
INILPQDIDRIVGESLIDKDDIPVIVVHCAGGVRRSMLFVNSLAK  
RNLDFGRHFLDVAALPSTDRPVLVYCCAGGVRRSMLFVNSLAK  
IHASLPLGVFKERVKELSTSKPILAVHHCAGGVRRSMLFVNSLAK  
INILPDDDLRERMLEVPTDKPLVLFVHCAGGVRRSMLFVNSLAK  
ELIPKGAFFEALSKLKVDRTPVVFVHCAGGVRRSMLFVNSLAK  
ISPPQFPEYVQQLNDPNKKHKVAMFCCAGGVRRSMLFVNSLAK  
INMDDSFASMA DSSLQKDKPVAVVYCCAGGVRRSMLFVNSLAK  
VSLIPLGELEDQRRLSELNRQDFIYVYCCAGGVRRSMLFVNSLAK  
TLIPLGELLEQRRLSELNRQDKTIVVCCAGGVRRSMLFVNSLAK  
KSIPLGELLEQRFNELDPEEDVYIIVHCAGGVRRSMLFVNSLAK  
IHILPMEQPLPARLDELDDPDDLDLHVHCAGGVRRSMLFVNSLAK  
QHILPKGPKTAEEETRFGKHANLVVHCAGGVRRSMLFVNSLAK  
INQPLSQLDQFKGDKTKHYLILVHCAGGVRRSMLFVNSLAK  
INPETKTFRFEPKWKKKSMKVAMYCCAGGVRRSMLFVNSLAK  
VHILRMGDPEKMDAFAFKKEMKEYVVFHCAGGVRRSMLFVNSLAK  
IFIKGGFAVWVGALIAADINQPLLVVDEGSEEEAIVTRLSSR  
KNLPLSLTLEQDYDKELNPNRTYHVHCAGGVRRSMLFVNSLAK  
TNILEVSDSIRDNLDRIIPKDKKILYIYCCAGGVRRSMLFVNSLAK  
ILLPYEELAEERLDEIIPRNYIYIIVHCAGGVRRSMLFVNSLAK  
TLMLPMNEVPSRAFHQDEDEEQHILVLCAGGVRRSMLFVNSLAK  
INPHTEVSRFPFKFPKHPKVAMFCCAGGVRRSMLFVNSLAK  
INILDIQGFLQELDKDKTKNYVYCCAGGVRRSMLFVNSLAK  
VNIPLGLDLKDRLELPWKDKTILYIYCCAGGVRRSMLFVNSLAK  
VNIPLGLLFRLEHEDDKTKKEYIIVHCAGGVRRSMLFVNSLAK  
VNIPLKFEASVADSLQKDKPVAVVYCCAGGVRRSMLFVNSLAK  
LMLPLMSLKAQAKPKDYDNKDEILVYCCAGGVRRSMLFVNSLAK  
LNIPLMSELPAARIDEYDWDGDDVVVAAPILGQSSIAQAARLIED  
QNIPLNELASKANQLDKNKKEVIVVHCAGGVRRSMLFVNSLAK  
VSIPLRGNLEVJESKLEPDKDSTPIVVVYCCAGGVRRSMLFVNSLAK  
ISIPLGELEDTRMDELDKQEDSIIYVHCAGGVRRSMLFVNSLAK  
ISVPLIDELDQHLLQLSLPRDIEIAAYCCAGGVRRSMLFVNSLAK  
VNVPLDRQLFEVKADPTKADDNIVVHCAGGVRRSMLFVNSLAK  
RNVPLRLELPQRIDEIPADAVVVCAGGVRRSMLFVNSLAK  
VHILDKNGSIA SLEKHKSNPIVVVHCAGGVRRSMLFVNSLAK  
QNLNPTDRFVLEVDKDLDRGHYFIYCCAGGVRRSMLFVNSLAK  
KNLIDLKNA DFEVQTKLDKSKSYLVHCAGGVRRSMLFVNSLAK  
IHILPASDLIDNHLTEKYKAKPIIVVHCAGGVRRSMLFVNSLAK  
RNVALDSDLTRQLJEGPKDKAPMVFCCAGGVRRSMLFVNSLAK  
TRFEMFDWVRNRTGLHNKPKVAMYCCAGGVRRSMLFVNSLAK  
VNIIDMDFKQKSKAVLPKGTILALYCCAGGVRRSMLFVNSLAK  
SLTSLDFLNSHQVSEFPPTKEHFIYVHCAGGVRRSMLFVNSLAK  
VLVPLNGKAIHQVQSELVNKHKLIAHHCAGGVRRSMLFVNSLAK  
INPNFPQYVEEQHLNQNPHQKLIAMFCCAGGVRRSMLFVNSLAK  
VLIPLGELAKRAEELIDPDRPTVLCAGGVRRSMLFVNSLAK  
LNIPLMDSFKANTMKNLIDKNTKIILYCCAGGVRRSMLFVNSLAK  
LRLDIDNFRDFPEKHLLKKNKVLTYCCAGGVRRSMLFVNSLAK  
YNRPLDASISSEWARTIDDSHEFLHCAGGVRRSMLFVNSLAK  
EHFLGLGRLFRELTILARDKPLVTQCCAGGVRRSMLFVNSLAK  
LNVLLPTEIKSGNF EKHKAKKPIVVVHCAGGVRRSMLFVNSLAK  
ISPQTNLSFRQFPFKKHKKPIAMFCCAGGVRRSMLFVNSLAK  
IHVRLGSLDARFTFETAAPIVAVVHCAGGVRRSMLFVNSLAK  
LRLPDPPEWVRKNLDQYKDKKIITYCCAGGVRRSMLFVNSLAK  
KNVPLQSLDKVKTYSFVNQDTPVVFVYCCAGGVRRSMLFVNSLAK  
INILPFAELNEKYSRSLIDDKKPIVVVHCAGGVRRSMLFVNSLAK  
KFIPLSQFPYANE LKDKSANLILQCCAGGVRRSMLFVNSLAK

UniRef90\_F2KV41 R G F A V T N L L G G I V A W T E A 90 100  
UniRef90\_UPI0003FD5468 N G Y T N V L N F S G S I N E W V N A G E P V V S  
UniRef90\_A4ST22 A G F K Q V Y V L S G G M A Q W R A N L P V  
UniRef90\_E9FGH7 Q G Y E V I N V Q G G M T A F E N  
UniRef90\_UPI000471DB54 L G F E R L R V L D G G L  
UniRef90\_E8SJA2 H G I D A V N V E G G M R A W G E E  
UniRef90\_R7ZQ59 R G Y E N L V D V R G G F D A K A  
UniRef90\_Z4IFF6 Q G Y N V I N L D G G Y K A Y E E E  
UniRef90\_QORV06 R G I E Q V S D L V G G Y N A W A A Q  
UniRef90\_K9Y7B1 Q G F S R V K N I J G G I D A Y S L A I D S S P R  
UniRef90\_L0GWH4 Q G F R R V I N L Q G G V A A W A R D V D A T M P T  
UniRef90\_B7KD58 A G Y P N V Y N L N G S I F E W A N E  
UniRef90\_UPI00036B0CD0 I G Y E T V Y S V D G G I V E W A Y G Y P V E  
UniRef90\_S6A585 L G Y R N V Y N I M G S F L G  
UniRef90\_H2BZQ0 Q G I E N A Y N L M G G I T E W E G E I  
UniRef90\_UPI00036A6AE9 Q G F K N V S N L K G G M A W  
UniRef90\_A1VR58 M G Y L N V Q S L A G G F D A W V A A G K P V V  
UniRef90\_UPI00038086EB A G F S K V Y N L Y G S L Y A W K A G F P L E D A N G  
UniRef90\_UPI00046449C7 Q G F D E V Y H L Q G G I L K Y L E E V P E E  
UniRef90\_M1WJN2 N G F V E I H N L T Q G I N A W T K G Y P L  
UniRef90\_S6EY10 Q G F T D V Y T L R E G I A G W R A N L P L  
UniRef90\_UPI0003652721 R G Y D N L V D I K G G F K A  
UniRef90\_I1GQZ4 Q G F R K I Y N V A G G I H A Y S V K A D S S P T  
UniRef90\_C7N1Y2 Q G Y E V V N V D G G M K A W S A A  
UniRef90\_G6FPV3 Q G F T N V K N I S G G I D A Y S M L V D P S P  
UniRef90\_R7XVR1 N G F E A I N V A G G T S A W R S G L P I E  
UniRef90\_B3WF02 N G F E K I S W L K G G Y D N W S G K  
UniRef90\_UPI00037D17DC N G F T N V R N L V G G I L E Y R K  
UniRef90\_Q72LA7 Q G Y N V Q S I S G G L D G W K A G L P V  
UniRef90\_UPI0003B547D4 H G F D A K N L A G G T L A W S E E I D D S V P T  
UniRef90\_UPI0003AB136F A G F K Q V F W L G G G L A A W R E A L P V  
UniRef90\_A4X6N6 I G V P N V K V L T G G M V A W R A A G P I T E G T  
UniRef90\_E5WEV7 K G F T R I N V V P G M S G W N G P T E T  
UniRef90\_D7VPV2 L G F K E V I N L S G G I K A W E K  
UniRef90\_Q04QD0 H G F K D V N Q L H G G I T S Y A H E I  
UniRef90\_J0MWU4 M G Y T Q I Y D F G G I I D W P Y E T V S G S  
UniRef90\_S7V9X2 A G F S H V R S L A G G F F A W R A G L P V  
UniRef90\_UPI0003652F91 Q S F D E V Y N L G S F M A W  
UniRef90\_G1USA7 A G I R N I L H M N Q G I E A W K A G L P L E  
UniRef90\_UPI00040D4EB4 E G F E V I N I R G G M L Q W K N E  
UniRef90\_R6KD47 N G Y K N V R N L S G G Y K L Y S A A V P V P V P S I A  
UniRef90\_A1T619 A G F S D A M H V Q G G I V A W G K Q L E P D M  
UniRef90\_K9W5R7 Q G F Q E V Y H L Q G G I L K Y L E E V P T E  
UniRef90\_R5UFH9 K G Y K V F E L D K G F N S W Q E A  
UniRef90\_W4BFV9 S G F T S V L N V V P G M S G W S G A  
UniRef90\_A9WC91 R G Y Q A I N V T G G M N E W K A A Y P T V F G Q  
UniRef90\_W4RLW7 K G F K K T I N V V S G M K D W T G P T E T S  
UniRef90\_UPI000479A434 N G Y T A V N V N G G M G A W L E A A K P M V S  
UniRef90\_W8QDC9 R G F S H V R N L D G G V L A W V R D V E P  
UniRef90\_V6Z3N9 Q G Y Q A I N V K D G M N A W  
UniRef90\_J4V2X4 S G F E N V Y H L K G G I L K Y F E E I D  
UniRef90\_E3E2E5 Q G Y K T V N V E G G M L D W E G E  
UniRef90\_F6GCK4 V G F D N L G Y L K G S F K A W E A  
UniRef90\_S7YK13 Q G L S V T N V E G G M S A W P G Q V  
UniRef90\_UPI0004700B22 K G F N E V Y N L S G G L K  
UniRef90\_A1HRN3 Y G Y I N L Y N V V I G G I H C W E G P L E  
UniRef90\_G8NZB6 Q G F D K A Q S V A G G I N A W S R S I D P T V P  
UniRef90\_Q7UFS5 R G F E E V Y H L R G G I L N Y L E K M P E E  
UniRef90\_A4AT86 I G F E N T Y N L E G G M M A W Q G E V  
UniRef90\_U2UYR8 N G F K D V I N A D G  
UniRef90\_J8Q9H8 H G F H A T N M V I G G M M N W E G N V  
UniRef90\_F3PX41 K G F K V Y D L D R G L A G W Q E A  
UniRef90\_B8FXL4 L G Y V K V K N I G G I L H W  
UniRef90\_MOL3M9 A D S D A V A S M E G G Y R E W E Y E L E T G T E S  
UniRef90\_C2Z3L4 L G F Q H V I N V S G G M N A  
UniRef90\_C7LY70 L G Y E R V V S M A G G F N R W K D E  
UniRef90\_UPI0003FFFFAF N G F K D V V N V L P G M S E W P G E I  
UniRef90\_UPI000367770F E G F I A Y R L E E G V H E W R Q  
UniRef90\_I3K986 L G F S K A R H F K G G Y S E W  
UniRef90\_C5C438 A G R S R V S H L A G G I D A W S R T V D P G V  
UniRef90\_F9TPV9 A G F E K V Y L L K N G L T A W N E A  
UniRef90\_UPI00035FB623 M G F K N T Y N L L G G I V E W K G K  
UniRef90\_UPI0001746127 L G F H S I Y H L N D G I M G W E E A  
UniRef90\_UPI0003786C63 L G F E N V V R L S G G M T E W K A Q L P V  
UniRef90\_UPI00035CCF95 L G Y T N V L S I A G G L R A Y Q K A N D T  
UniRef90\_Q2K443 E G F D E V Y H L K G G I L K Y L E E V P Q E  
UniRef90\_R5NWI5 L H Y K M L E L D G G Y L E W T K A  
UniRef90\_G2EDT5 R G I H N L V D V A G G F S A K A G I P V  
UniRef90\_UPI00034614DC H G I T G T N V K G G I T A W S R E V D A T V P E  
UniRef90\_K9SQB6 Q G F S E V Y H L R G G I L K Y L E E I E P E  
UniRef90\_W8F117 H E L T N L N L R G G I H A W S T Q V D P S V A  
UniRef90\_G9EZA6 L G F T N V Y V L D R L N S W T Y P L E  
UniRef90\_L0FYF7 Q G F E D V Y Q L H G G I I K Y  
UniRef90\_W4TCL4 H G I R N F T E L E G G F N G K K  
UniRef90\_D2R3B9 E G F S V I N M Q G G I R A W Q Q A  
UniRef90\_S3IHZ0 A G F E Q V S L L K E G I A G W S G E  
UniRef90\_K9YEW2 Q G F E E V Y Q L N G G I L N Y L E T V S S E  
UniRef90\_Z5XEW3 A G L T V Y N L V G G M G A W Q R  
UniRef90\_UPI0003FF6868 E G F K D V G Q L H G G I V S Y G K D P E V  
UniRef90\_R7AIU4 M G Y T N I K N I G G I A A Y A G K V  
UniRef90\_J3A092 N G Y K D V A N L D G G M A K W T G Q V  
UniRef90\_E1WZC3 E D F E N L T N L E D G I L G W Q N N



UniRef90\_Q5WF33 UniRef90\_M5TA95 UniRef90\_Q8YPZ7 UniRef90\_Q2JN30 UniRef90\_H0TEI2 UniRef90\_D6XW33 UniRef90\_B5ESP1 UniRef90\_I0LDF3 UniRef90\_M7XBC6 UniRef90\_U7GAV7 UniRef90\_H1H246 UniRef90\_A3YW88 UniRef90\_W1NBB6 UniRef90\_S7X857 UniRef90\_W4L3Y1 UniRef90\_U2YZB0 UniRef90\_UPI0003499A0C UniRef90\_I5C1N2 UniRef90\_UPI000464537C UniRef90\_UPI0004678954 UniRef90\_A0Q7P7 UniRef90\_Q21V84 UniRef90\_R5CSL7 UniRef90\_F9DU08 UniRef90\_K4QW77 UniRef90\_Z5XA45 UniRef90\_F0G1L1 UniRef90\_I4AQ72 UniRef90\_A0A021VME8 UniRef90\_UPI00036B7D9D UniRef90\_A5G4J8 UniRef90\_E1ZKE6 UniRef90\_W1JMA2 UniRef90\_R2NUZ4 UniRef90\_K1JZW0 UniRef90\_E6SDY8 UniRef90\_A7JZC3 UniRef90\_E2S8W3 UniRef90\_A3U809 UniRef90\_UPI0004004670 UniRef90\_UPI0003B51894 UniRef90\_UPI00036C6BD9 UniRef90\_M4SAB1 UniRef90\_F4AUN9 UniRef90\_A1T026 UniRef90\_G5JWH3 UniRef90\_A0A024FIZ5 UniRef90\_N9VT18 UniRef90\_UPI000365C6B5 UniRef90\_R6HML8 UniRef90\_E3YMS8 UniRef90\_UPI00035E5B32 UniRef90\_UPI0003784FA8 UniRef90\_UPI0002E12F54 UniRef90\_I3D9W0 UniRef90\_B1HRH4 UniRef90\_D4H0U8 UniRef90\_G6CGR0 UniRef90\_T2IFY8 UniRef90\_C5BUG0 UniRef90\_V9HK32 UniRef90\_UPI000366EC55 UniRef90\_U2W8Z4 UniRef90\_UPI000377BB52 UniRef90\_UPI00040F3102 UniRef90\_R6VV12 UniRef90\_L0RBE7 UniRef90\_S0S867 UniRef90\_UPI00037A1C3C UniRef90\_Q2N974 UniRef90\_UPI000346C813 UniRef90\_UPI0003691D13 UniRef90\_UPI0003623D6B UniRef90\_D9S750 UniRef90\_K7SLZ9 UniRef90\_A4FLQ7 UniRef90\_U5MRV2 UniRef90\_F4GV40 UniRef90\_B2IJP7 UniRef90\_V5U4R2 UniRef90\_M1VHN6 UniRef90\_A3W9K8 UniRef90\_Q1Z4M6 UniRef90\_F8CCV5 UniRef90\_F5WR10 UniRef90\_UPI0003755C89 UniRef90\_UPI0003B75E54 UniRef90\_UPI00045E95B5 UniRef90\_G8X9R1 UniRef90\_S0ARD2 UniRef90\_G7RZU9 UniRef90\_R2TGK3

1 10 20 30 40

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

UniRef90\_Q5WF33  
UniRef90\_M5TA95  
UniRef90\_Q8YPZ7  
UniRef90\_Q2JN30  
UniRef90\_HOTEI2  
UniRef90\_D6XW33  
UniRef90\_B5ESP1  
UniRef90\_I0LDF3  
UniRef90\_M7XBC6  
UniRef90\_U7GAV7  
UniRef90\_H1H246  
UniRef90\_A3YW88  
UniRef90\_W1NB66  
UniRef90\_S7X857  
UniRef90\_W4L3Y1  
UniRef90\_U2YZB0  
UniRef90\_UPI0003499A0C  
UniRef90\_I5C1N2  
UniRef90\_UPI000464537C  
UniRef90\_UPI0004678954  
UniRef90\_A0Q7P7  
UniRef90\_Q21V84  
UniRef90\_R5CSL7  
UniRef90\_F9DU08  
UniRef90\_K4QW77  
UniRef90\_Z5XA45  
UniRef90\_F0G1L1  
UniRef90\_I4AQ72  
UniRef90\_A0A021VME8  
UniRef90\_UPI00036B7D9D  
UniRef90\_A5G4J8  
UniRef90\_E1ZKE6  
UniRef90\_W1JMA2  
UniRef90\_R2NUZ4  
UniRef90\_K1JZW0  
UniRef90\_E6SDY8  
UniRef90\_A7JZC3  
UniRef90\_E2S8W3  
UniRef90\_A3U809  
UniRef90\_UPI0004004670  
UniRef90\_UPI0003B51894  
UniRef90\_UPI00036C6BD9  
UniRef90\_M4SAB1  
UniRef90\_F4AUN9  
UniRef90\_A1T026  
UniRef90\_G5JWH3  
UniRef90\_A0A024FIZ5  
UniRef90\_N9VT18  
UniRef90\_UPI000365C6B5  
UniRef90\_R6HML8  
UniRef90\_E3YMS8  
UniRef90\_UPI00035E5B32  
UniRef90\_UPI0003784FA8  
UniRef90\_UPI0002E12F54  
UniRef90\_I3D9W0  
UniRef90\_B1HRH4  
UniRef90\_D4H0U8  
UniRef90\_G6CGR0  
UniRef90\_T2IFY8  
UniRef90\_C5BUG0  
UniRef90\_V9HK32  
UniRef90\_UPI000366EC55  
UniRef90\_U2W8Z4  
UniRef90\_UPI000377BB52  
UniRef90\_UPI00040F3102  
UniRef90\_R6VWV12  
UniRef90\_L0RBE7  
UniRef90\_S0S867  
UniRef90\_UPI00037A1C3C  
UniRef90\_Q2N974  
UniRef90\_UPI000346C813  
UniRef90\_UPI0003691D13  
UniRef90\_UPI0003623D6B  
UniRef90\_D9S750  
UniRef90\_K7SLZ9  
UniRef90\_A4FLQ7  
UniRef90\_U5MRV2  
UniRef90\_F4GV40  
UniRef90\_B2IJP7  
UniRef90\_V5U4R2  
UniRef90\_M1VHN6  
UniRef90\_A3W9K8  
UniRef90\_Q1Z4M6  
UniRef90\_F8CCV5  
UniRef90\_F5WR10  
UniRef90\_UPI0003755C89  
UniRef90\_UPI0003B75E54  
UniRef90\_UPI00045E95B5  
UniRef90\_G8X9R1  
UniRef90\_S0ARD2  
UniRef90\_G7RZU9  
UniRef90\_R2TGK3

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

UniRef90\_Q5WF33 K G V Q D I S Y L K G G F R N W T G K V 90 100  
UniRef90\_M5TA95 V G F T Q V Q N M A G G I D Q W S L K V D P S I P R  
UniRef90\_Q8YPZ7 Q G F T Q V K N I A G G I A A Y S L L V D S S I P Q  
UniRef90\_Q2JN30 N G F T Q V H N I S G G I H A W A C E V D P S L P T  
UniRef90\_H0TEI2 A G R Q D V C H Y A G G M S G W R A  
UniRef90\_D6XW33 K G V E E M Y T L K G G F K K W T G K V  
UniRef90\_B5ESP1 M G F K E V Y N G G G L V E M Q S T K P T P  
UniRef90\_I0LDF3 N G W E Q V R N A D G G M R Q W A A G R P V V D A N G  
UniRef90\_M7XBC6 V G Y D C I G Y L K G G F A A W K A  
UniRef90\_U7GAV7 N G F E E V Y H L E G G I L N Y L E K V P  
UniRef90\_H1H246 N G F K N V Y Q L E G G I I E Y T R Q V K A E  
UniRef90\_A3YW88 L G F T H V A N L E G G F V A W K E A G L P W L E H H A  
UniRef90\_W1NB66 Q G F D E V Y H L K G G I L K Y L E S V P  
UniRef90\_S7X857 Q G F D A V N V E G G T S A W R N  
UniRef90\_W4L3Y1 H G I L Q V A D L V I G G F T A W E A  
UniRef90\_U2YZB0 A G F S R L Q V L Q G G L K A W A R D I D P D M P  
UniRef90\_UPI0003499A0C N G F A H V S N L T G G V H A W A V I Q V D  
UniRef90\_I5C1N2 R G Y D N L I D V Q G G F K A I Q E  
UniRef90\_UPI000464537C A G F E R V F V L K E G V A G W S G E  
UniRef90\_UPI0004678954 A G Y I N V Y N L Y G G I F E W K K G L P I  
UniRef90\_A0Q7P7 L N A K K V Y L D G G I N A W K Q H  
UniRef90\_Q21V84 R G F K H V A N I A G G I N A W S A E V D P S I P R  
UniRef90\_R5CSL7 N G Y E D V H N L I G G F K T Y K A A  
UniRef90\_F9DU08 E G F D V T N M A G G M L A W E G Q  
UniRef90\_K4QW77 K G R T D V S D L L G G Y G A W L A Q  
UniRef90\_Z5XA45 R G F D D V S D L L G G Y T A W  
UniRef90\_F0G1L1 L G Y T D V R L L D G G L A G W L A A  
UniRef90\_I4AQ72 K E Y S Q L Y N L K G G I I E W E R Q  
UniRef90\_A0A021VME8 A G Y R A T S L S G G L A A W R T A G G P V T  
UniRef90\_UPI00036B7D9D F G F K D V Y S L E G G Y S G W K E N H  
UniRef90\_A5G4J8 L A Y P T I Y Q T I F T E W K E A L P V E  
UniRef90\_E1ZKE6 A G Y S S V L C M P G G M K A W E A R G L P T T A E  
UniRef90\_W1JMA2 M G Y E N V Y N V G G G F K D W S G A V  
UniRef90\_R2NUZ4 Q S Y N V I N V L G G T A A W P G E L  
UniRef90\_K1JZW0 S G Y R H V Y N F L G  
UniRef90\_E6SDY8 R G F T D V S D V V G G Y N A W A  
UniRef90\_A7JZC3 Q G F T N L H N A G G L E E L Q D A  
UniRef90\_E2S8W3 Q G H D V V N L D G G M D A W E A A  
UniRef90\_A3U809 M G I E N T Y N L K T G F S E W D G E  
UniRef90\_UPI0004004670 Q G F G N T I D L V G G F N A W E K C C P G N V V S  
UniRef90\_UPI0003B51894 A G W T A L N L T G G M N A W E A G L P V  
UniRef90\_UPI00036C6BD9 R G F D N L V D I Q G G F K A I K E S G Q V K T T  
UniRef90\_M4SAB1 A Q S V I D T H L A G G I G A W K A G M P V  
UniRef90\_F4AUN9 A G Y K G V R N L L G G M K A W K A G F P T K  
UniRef90\_A1T026 Q G F D E V Y H L E G G V L K Y L E E V P Q E  
UniRef90\_G5JWH3 Q G F K V V N I E D G G F A W R  
UniRef90\_A0A024FIZ5 L G F D S A F N L E G G F N E W E G E V  
UniRef90\_N9VT18 L G Y K N I T D I G G I K D W P Y E T V S G  
UniRef90\_UPI000365C6B5 R G F D N L A D I N G G F K A I K E N G Q I K T T  
UniRef90\_R6HML8 M G Y T N I E H I G G I M D W  
UniRef90\_E3YMS8 E G F D V T N V M G G M G A  
UniRef90\_UPI00035E5B32 A G F T A R R L A D G L P E W R Q A L P T R V G E T A  
UniRef90\_UPI0003784FA8 V G F D N V I Y L N G S F N S W I K E  
UniRef90\_UPI0002E12F54 A G L D L S E H Y R G G F K D W L S G G P V E V  
UniRef90\_I3D9W0 Q G F S H V Y T L N E G I S G W R A E  
UniRef90\_B1HRH4 Q G F D V T N L E G G M L A Y D G E L  
UniRef90\_D4H0U8 L G F K K I Y N L K G G I H A W M E G Y P I  
UniRef90\_G6CGR0 L G F K S V Y N L S G G F K N Y Q  
UniRef90\_T2IFY8 M G Y T K V F N L K G S L F F W S E N R P V  
UniRef90\_C5BUG0 M G Y Q Q V K S I A G G Y D A W L A A G N E T V A  
UniRef90\_V9HK32 M G Y T N V K N L G G Y D L K N T Y P A Q  
UniRef90\_UPI000366EC55 K G R S N V S V L D G G L G A W E S A G G D T E G G A  
UniRef90\_U2W8Z4 E G F E N V F H L K G G I L K Y L E T I P  
UniRef90\_UPI000377BB52 V G Y D N I G Y L N G G F A A W V A  
UniRef90\_UPI00040F3102 A G Y A D V A H L G G G I A A W A R V E T T M P R  
UniRef90\_R6VV12 N G Y A E V R N L I G G L K T Y R A A  
UniRef90\_L0RBE7 N G Y T Q V C S L A G G T L A L E R  
UniRef90\_S0S867 Q G Y K V I N V L G G T A A W P G E L  
UniRef90\_UPI00037A1C3C L G Y T R V H L L A G G L Q G W K D A  
UniRef90\_Q2N974 E G I E D V Y H L K G G I L K Y L E A V P E E  
UniRef90\_UPI000346C813 A G W D A V N V A G G M Q D W A S Q R P M E S G S G  
UniRef90\_UPI0003691D13 L G F K H I I H M D D G I L G W K K  
UniRef90\_UPI0003623D6B L G M E D V I N V E G G T Q A W V R  
UniRef90\_D9S750 A G Y T P L Y N L K G G I D A M K  
UniRef90\_K7SLZ9 N G F T P L N M K G G I S Q W K N E  
UniRef90\_A4FLQ7 N G F Q R L T V L S G G V G G W Q E Q G P V E R G T G  
UniRef90\_U5MRV2 L G F S N V Y N I T G S F L A  
UniRef90\_F4GV40 M G L P R V S H I E G G F K A W K E A L P V  
UniRef90\_B21JP7 R G Y L V R R L E D G Y P E W K A A L P I E T S  
UniRef90\_V5U4R2 A G F E Q V Y V L K E G V A G W S G E  
UniRef90\_M1VHN6 Q G F S N V L N L L G G I D A Y A A E I D  
UniRef90\_A3W9K8 R G F S N L D I Y L G S M G A W K A A  
UniRef90\_Q1Z4M6 L G Y N N I Y N  
UniRef90\_F8CCV5 N G F P D V F D L K  
UniRef90\_F5WR10 L G F D N V I N I S G S Y L G  
UniRef90\_UPI0003755C89 A G F K D V R N L S G G Y K T W S  
UniRef90\_UPI0003B75E54 M G F N S V T N V H G G F S S W S Q A  
UniRef90\_UPI00045E95B5 M G Y T T V C S I A G G F D D W A A G L P V E K P A P A  
UniRef90\_G8X9R1 M G F K E I H N M T G G I M K W N A E  
UniRef90\_S0ARD2 N G I T N V Y N L Y N G L Y G W E  
UniRef90\_G7RZU9 K G F K A N D I A G G M D A W  
UniRef90\_R2TGK3 K G I N A I N V K G G M S A W R G E V

UniRef90\_F6D5Z4  
UniRef90\_R6IBT6  
UniRef90\_UPI000476EDEA  
UniRef90\_UPI00031FB6D7  
UniRef90\_UPI0003B36B7F  
UniRef90\_UPI0004745692  
UniRef90\_UPI000346000C  
UniRef90\_R4VCN8  
UniRef90\_UPI0003604B85  
UniRef90\_K0HZ29  
UniRef90\_UPI000248A461  
UniRef90\_UPI00037C766B  
UniRef90\_UPI00029B39A7  
UniRef90\_F6B819  
UniRef90\_E8K588  
UniRef90\_A31E6  
UniRef90\_UPI00037A2C73  
UniRef90\_UPI0003796ADC  
UniRef90\_W9GL92  
UniRef90\_UPI00039584A9  
UniRef90\_UPI0003B2FF45  
UniRef90\_UPI0003682B10  
UniRef90\_R8ALS6  
UniRef90\_G2G2P2  
UniRef90\_B3QZT5  
UniRef90\_UPI0003B700CE  
UniRef90\_K9YAH9  
UniRef90\_E0I4E2  
UniRef90\_B8HT12  
UniRef90\_A0YA27  
UniRef90\_A0A031MHK6  
UniRef90\_UPI0004655658  
UniRef90\_I7DKR4  
UniRef90\_I2JKR3  
UniRef90\_B8D9F0  
UniRef90\_B0KTW7  
UniRef90\_V6MKJ1  
UniRef90\_S1RKY5  
UniRef90\_UPI00045E857E  
UniRef90\_M2PAY5  
UniRef90\_W4QIW3  
UniRef90\_W9AJ35  
UniRef90\_W8EZE2  
UniRef90\_L1LZ41  
UniRef90\_W1KCE3  
UniRef90\_UPI0004115DD3  
UniRef90\_C0BL43  
UniRef90\_V7KWV8  
UniRef90\_R9LRN7  
UniRef90\_E0Y0I7  
UniRef90\_G4L2I4  
UniRef90\_S3GKK1  
UniRef90\_A2WEN6  
UniRef90\_A0A011RLE4  
UniRef90\_A8TRC2  
UniRef90\_B9DVH2  
UniRef90\_L1M2W2  
UniRef90\_B1ZF59  
UniRef90\_D2QY80  
UniRef90\_Q1J321  
UniRef90\_H1H2P4  
UniRef90\_K1LKD3  
UniRef90\_D7VGI3  
UniRef90\_W4M3F4  
UniRef90\_K6GIY3  
UniRef90\_UPI000473F1A6  
UniRef90\_I8AIH9  
UniRef90\_K4BIZ8  
UniRef90\_E7QZ88  
UniRef90\_R6R4V8  
UniRef90\_UPI0002F12BD6  
UniRef90\_D5BH16  
UniRef90\_W2LPL6  
UniRef90\_I4JJA0  
UniRef90\_G2IR82  
UniRef90\_UPI00022B1123  
UniRef90\_UPI0004063079  
UniRef90\_UPI00030B2AEC  
UniRef90\_UPI00035DD2D  
UniRef90\_V2WR19  
UniRef90\_UPI00047DF39B  
UniRef90\_UPI000316EDCA  
UniRef90\_A0A037Z4E5  
UniRef90\_G1WKR8  
UniRef90\_B4MBZ8  
UniRef90\_T0M7V7  
UniRef90\_Q2L0A7  
UniRef90\_E0I621  
UniRef90\_I3X0V1  
UniRef90\_UPI00035C122F  
UniRef90\_R7H1U8  
UniRef90\_UPI0003FA0307



UniRef90\_F6D5Z4  
UniRef90\_R6IBT6  
UniRef90\_UPI000476EDEA  
UniRef90\_UPI00031FB6D7  
UniRef90\_UPI0003B36B7F  
UniRef90\_UPI0004745692  
UniRef90\_UPI000346000C  
UniRef90\_R4VCN8  
UniRef90\_UPI0003604B85  
UniRef90\_K0HZ29  
UniRef90\_UPI000248A461  
UniRef90\_UPI00037C766B  
UniRef90\_UPI00029B39A7  
UniRef90\_F6B819  
UniRef90\_E8K588  
UniRef90\_A31E6  
UniRef90\_UPI00037A2C73  
UniRef90\_UPI0003796ADC  
UniRef90\_W9GL92  
UniRef90\_UPI00039584A9  
UniRef90\_UPI0003B2FF45  
UniRef90\_UPI0003682B10  
UniRef90\_R8ALS6  
UniRef90\_G2G2P2  
UniRef90\_B3QZT5  
UniRef90\_UPI0003B700CE  
UniRef90\_K9YAH9  
UniRef90\_E0I4E2  
UniRef90\_B8HT12  
UniRef90\_A0YA27  
UniRef90\_A0A031MHK6  
UniRef90\_UPI0004655658  
UniRef90\_I7DKR4  
UniRef90\_I2JKR3  
UniRef90\_B8D9F0  
UniRef90\_B0KTW7  
UniRef90\_V6MKJ1  
UniRef90\_S1RKY5  
UniRef90\_UPI00045E857E  
UniRef90\_M2PAY5  
UniRef90\_W4QIW3  
UniRef90\_W9AJ35  
UniRef90\_W8EZE2  
UniRef90\_L1LZ41  
UniRef90\_W1KCE3  
UniRef90\_UPI0004115DD3  
UniRef90\_C0BL43  
UniRef90\_V7KXW8  
UniRef90\_R9LN7  
UniRef90\_E0Y017  
UniRef90\_G4L2I4  
UniRef90\_S3GKK1  
UniRef90\_A2WEN6  
UniRef90\_A0A011RLE4  
UniRef90\_A8TRC2  
UniRef90\_B9DVH2  
UniRef90\_L1M2W2  
UniRef90\_B1ZF59  
UniRef90\_D2QY80  
UniRef90\_Q1J321  
UniRef90\_H1H2P4  
UniRef90\_K1LKD3  
UniRef90\_D7VG13  
UniRef90\_W4M3F4  
UniRef90\_K6GIY3  
UniRef90\_UPI000473F1A6  
UniRef90\_I8AIH9  
UniRef90\_K4BIZ8  
UniRef90\_E7QZ88  
UniRef90\_R6R4V8  
UniRef90\_UPI0002F12BD6  
UniRef90\_D5BH16  
UniRef90\_W2ULP6  
UniRef90\_I4JJA0  
UniRef90\_G2IR82  
UniRef90\_UPI00022B1123  
UniRef90\_UPI0004063079  
UniRef90\_UPI00030B2AEC  
UniRef90\_UPI00035DD2D  
UniRef90\_V2WR19  
UniRef90\_UPI00047DF39B  
UniRef90\_UPI000316EDCA  
UniRef90\_A0A037Z4E5  
UniRef90\_G1WKR8  
UniRef90\_B4MBZ8  
UniRef90\_T0M7V7  
UniRef90\_Q2L0A7  
UniRef90\_E0I621  
UniRef90\_I3X0V1  
UniRef90\_UPI00035C122F  
UniRef90\_R7H1U8  
UniRef90\_UPI0003FA0307

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

UniRef90\_F6D5Z4 M G F M E V Y N I L G G F A G W K T K L P V 90 100  
UniRef90\_R6IBT6 Q G Y K N V Q S L E G S M S A W  
UniRef90\_UPI000476EDEA E G F R A L R L E D G V A E W R A G L P V E T G E  
UniRef90\_UPI00031FB6D7 A G F T E A A V L S G G I G S Y A Q A G G D V V R R G  
UniRef90\_UPI0003B36B7F M G Y K N V F E F G G I V D W T G E V V T E  
UniRef90\_UPI0004745692 H G L E A V S L E G G L R A W Q A G L P L  
UniRef90\_UPI000346000C S G V P A V N V A G G M T A W E Q S G A E V V R G A  
UniRef90\_R4VCN8 L G W P E V H Q L R G G L N A W R E A  
UniRef90\_UPI0003604B85 V G L D N S Y Y L E G G M F E W K N G L P  
UniRef90\_K0HZ29 M G Y L Q V Y Q S I A G G F D A W V A A G K P V A A P A S  
UniRef90\_UPI000248A461 E G L D E V Y H L K G G I L R Y L E T V P V E  
UniRef90\_UPI00037C766B H G L R V K N L T G G Y K T Y L M S H P V P  
UniRef90\_UPI00029B39A7 R G A D A V D V E G G M N A W A A Y P V V D E R G  
UniRef90\_F6B8I9 M G F T N V S L D G G I S A Y  
UniRef90\_E8K588 Q G Y D V T N V Q G G M D A F E  
UniRef90\_A31E6 R G Y D N L I D V D G G F K A I K E S G E F E V S  
UniRef90\_UPI00037A2C73 M G L D S V A H L G G G F T A W R E A F P V E P V S  
UniRef90\_UPI0003796ADC M G F T N V K S M A C G F G G W Q Q E  
UniRef90\_W9GL92 Q G F D V A N V E G G M K A W E A G K P L H S E H G S  
UniRef90\_UPI00039584A9 Q G Y S Q L S N L T G G I D L W T A E R D P S V P R  
UniRef90\_UPI0003B2FF45 A G F T T S V L T G G I D A W Q R  
UniRef90\_UPI0003682B10 Q G Y T A I N V S G G M D Q W L E  
UniRef90\_R8ALS6 Q G F A Q V H V L R E G I A G W S G A H  
UniRef90\_G2G2P2 N G F K V R N I D G G Y K  
UniRef90\_B3QZT5 K G F D E T Y Q L K G G I T Y G S A  
UniRef90\_UPI0003B700CE N G W E D V V F V R G G I D A W V R D I E P  
UniRef90\_K9YAH9 L G Y N Q V W N L E G S I F Q W A N E  
UniRef90\_E0I4E2 Q G Y Q V I N V A G G M L N W Q G K V A V  
UniRef90\_B8HT12 N G F V N V A E L Q G G L S A W K A  
UniRef90\_A0YA27 D G F Q Q V S R L S G G I T E W Q Q Q L P L V T  
UniRef90\_A0A031MHK6 A G Y T H V H R L A Q G M G W R  
UniRef90\_UPI0004655658 K G S D V R S V A G G M T A W R A G L P  
UniRef90\_I7DKR4 Q G I E D V Y H L K G G I L R Y L E E M P K E  
UniRef90\_I2JKR3 E G F D E V Y H L E G G I L K Y L E E V D  
UniRef90\_B8D9F0 N G F K H V Y H L E G G I I G Y K N G L P V  
UniRef90\_B0KTW7 E G F D A V Y H L K G G I L K Y F E E V P Q E  
UniRef90\_V6MKJ1 Q G F E N V Y Q L H G G I V T Y G K D P E V  
UniRef90\_S1RKY5 N G Y N N I F I L K D G F E G W  
UniRef90\_UPI00045E857E L G Y R N L F N L E G G A K A W R K A  
UniRef90\_M2PAY5 K G Y S H I K N I G G I Q F Y Q E T V  
UniRef90\_W4QIW3 H G V E S L Y H L K G G F  
UniRef90\_W9AJ35 A G F T N A Y S L E G G M K A W S E H L P V K I G  
UniRef90\_W8EZE2 H G F D H V R N L L G G M Q G Y Q Q A  
UniRef90\_L1LZ41 L T R K P V F L L E G G T G R W A E G R P L E  
UniRef90\_W1KCE3 A G F H V I Q N L D G A F A L Y R A V R P N E L V Y  
UniRef90\_UPI0004115DD3 T G R D Y I E Y V R G G M A A W A G G L P L A T  
UniRef90\_C0BL43 K G F K N V F Q L E G G I T E Y T R Q V  
UniRef90\_V7KWV8 A G F S D A V H L Q G G I V A W A Q Q M Q P D M  
UniRef90\_R9LRN7 R G F E N L F N I S G S F L G  
UniRef90\_E0Y0I7 E G V K D V Y H L K G G I L K Y L E E I P  
UniRef90\_G4L2I4 N G Y K D I Y L K E G F N G W E G K  
UniRef90\_S3GKK1 R G Y T E I Y D V S G G M I A W E Q K  
UniRef90\_A2WEN6 M G W D V R V V K  
UniRef90\_A0A011RLE4 K G F E N L Y L L K D G Y S K W  
UniRef90\_A8TRC2 N G R R D L Y R L E G G I A W Q S G L P V E P G G N S  
UniRef90\_B9DVH2 A G F R V Q N L D G A Y A L Y K T V Y P E R I T H  
UniRef90\_L1M2W2 L G L D K V R N L D G G V L A W V R D V E P A L P T  
UniRef90\_B1ZF59 M G L R S V A H V A G G F S A L E K A  
UniRef90\_D2QY80 H G F D V V N V S G G Y K T Y L L H F P  
UniRef90\_Q1J321 Q G K T G L M N L S G G T A A W L R E  
UniRef90\_H1H2P4 Y G I T N L V D V L G G Y N A I S K E  
UniRef90\_K1LKD3 A N Y S D V Y I L Q G G M E G W  
UniRef90\_D7VGI3 K G I H N I L N V E G G Y K A  
UniRef90\_W4M3F4 A G L D N I R Q L E G G N M S A W R Q E L P I E K A  
UniRef90\_K6GIY3 L G F K N V K N L E G G F R G W K E  
UniRef90\_UPI000473F1A6 K G Y K N I Y H L Q G G I L Q Y L D D I P K E  
UniRef90\_I8AIH9 H G Y T V K N M T G G M L A Y N E A  
UniRef90\_K4BIZ8 K G F D E V Y H L E G G I L R Y L E E V P  
UniRef90\_E7QZ88 D G F E N V L T V E G G M E S W S M L Y D V  
UniRef90\_R6R4V8 L G Y T N I I E F G G I N D W  
UniRef90\_UPI0002F12BD6 A G F D N I Y S V T G G M K A W S E H L P V K I G  
UniRef90\_D5BH16 D G F E E V Y E L E G G I E N W  
UniRef90\_W2ULP6 V G Y D N L G Y L K G G M D Q W K K  
UniRef90\_I4JJA0 E G F A E V Y H L K G G I L K Y L E E V P  
UniRef90\_G2IR82 R G F D E V Y H L E G G I L A Y L A E I E E E  
UniRef90\_UPI00022B1123 L G Y V T A R N Y T G G Y S E W S K K  
UniRef90\_UPI0004063079 L G Y D N T F N V S G S F L G  
UniRef90\_UPI00030B2AEC K G F D E V Y H L K G G I L K Y L E E V P Q E  
UniRef90\_UPI00035DD2D Q G F E Q V A N I T G G I D A W S H E C D P S V P R  
UniRef90\_V2WR19 G V K P V K D V I G G L R A W S R D I D P  
UniRef90\_UPI00047DF39B K G F Q N V Y Q L H G G I T K Y  
UniRef90\_UPI000316EDCA L G Y T R I A S V H G G T A A W R A G L P L  
UniRef90\_A0A037Z4E5 N N Y S K I Y H M N E G I S R W K Y D L  
UniRef90\_G1WKR8 M G Y T T V T N M G G I N R W S  
UniRef90\_B4MBZ8 L G F K N V K N Y E G S W L D W A E H  
UniRef90\_T0M7V7 N G I S N V G H L K G G M R A W  
UniRef90\_Q2L0A7 L G L T D V R T L Q G G M R A W A N L P V  
UniRef90\_E0I621 E G F T N V F Q L D G G I V T Y G K D P E V  
UniRef90\_I3XOV1 M G Y T A V F N I G G F K E L A E A I D T E P A  
UniRef90\_UPI00035C122F L G F K N V F N I G G F G E W  
UniRef90\_R7H1U8 N G Y R D V R N L I G G L K T Y R A A  
UniRef90\_UPI0003FA0307 K G F D Q V N H L E G G I I T Y G K

UniRef90\_Q1WTD0  
UniRef90\_R0GGC2  
UniRef90\_U3AM24  
UniRef90\_UPI000365CD96  
UniRef90\_S2ZVU7  
UniRef90\_R2S0U8  
UniRef90\_N6VBW6  
UniRef90\_Q16CK7  
UniRef90\_M0GTD4  
UniRef90\_UPI0002DBBF95  
UniRef90\_A1KJ90  
UniRef90\_F3L9P8  
UniRef90\_C6WZN1  
UniRef90\_R5JBZ9  
UniRef90\_UPI0003663D58  
UniRef90\_A0A059IN54  
UniRef90\_UPI00047E5E9A  
UniRef90\_I3UKM2  
UniRef90\_A3TJC7  
UniRef90\_T1Z3G1  
UniRef90\_I4VKJ6  
UniRef90\_G2MI51  
UniRef90\_U1IU42  
UniRef90\_I0V4K6  
UniRef90\_UPI000262C9CD  
UniRef90\_UPI0003F97390  
UniRef90\_K0AYJ2  
UniRef90\_C5BT53  
UniRef90\_C0BJ76  
UniRef90\_UPI000400969A  
UniRef90\_E7RGU3  
UniRef90\_J1ZVG9  
UniRef90\_UPI000373386E  
UniRef90\_J4TW86  
UniRef90\_R7ZVV4  
UniRef90\_UPI0004101551  
UniRef90\_X1FS05  
UniRef90\_M1YZU1  
UniRef90\_D7A6A6  
UniRef90\_C1BLW1  
UniRef90\_G0L7Y8  
UniRef90\_UPI000248E735  
UniRef90\_M9REW0  
UniRef90\_L7TYD7  
UniRef90\_UPI000366B7F6  
UniRef90\_F8CAQ7  
UniRef90\_UPI0003B3D81B  
UniRef90\_UPI000365722B  
UniRef90\_A6TT55  
UniRef90\_A4CV16  
UniRef90\_J9YUS6  
UniRef90\_F4MM97  
UniRef90\_J9NMB0  
UniRef90\_D4KMA2  
UniRef90\_UPI000304B9DB  
UniRef90\_J0N551  
UniRef90\_E7GIU6  
UniRef90\_A1S7N7  
UniRef90\_W9GHC8  
UniRef90\_W4BGZ0  
UniRef90\_B2IK38  
UniRef90\_Q0BZH0  
UniRef90\_A0A017RV15  
UniRef90\_R7ZVX0  
UniRef90\_D5CLT0  
UniRef90\_U5BP25  
UniRef90\_UPI0002555E7A  
UniRef90\_K2CGK7  
UniRef90\_UPI000429A8C0  
UniRef90\_Q9RVC9  
UniRef90\_R9JNU6  
UniRef90\_L5N461  
UniRef90\_F0KEC9  
UniRef90\_V8BTH6  
UniRef90\_U2FFR0  
UniRef90\_L0F1Q0  
UniRef90\_E6LGX9  
UniRef90\_UPI00036B5300  
UniRef90\_Q129E1  
UniRef90\_UPI00035D924B  
UniRef90\_UPI0003B3ABE7  
UniRef90\_W7CYS6  
UniRef90\_M7R7S8  
UniRef90\_I6AD38  
UniRef90\_M7MJZ8  
UniRef90\_A3SL04  
UniRef90\_UPI0004294142  
UniRef90\_G2G2H4  
UniRef90\_A0A021VLR3  
UniRef90\_M4NLM5  
UniRef90\_A3JMA2  
UniRef90\_C4U002

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

UniRef90\_Q1WTD0  
UniRef90\_R0GGC2  
UniRef90\_U3AM24  
UniRef90\_UPI000365CD96  
UniRef90\_S2ZVU7  
UniRef90\_R2S0U8  
UniRef90\_N6VBW6  
UniRef90\_Q16CK7  
UniRef90\_M0GTD4  
UniRef90\_UPI0002DBBF95  
UniRef90\_A1KJ90  
UniRef90\_F3L9P8  
UniRef90\_C6WZN1  
UniRef90\_R5JBZ9  
UniRef90\_UPI0003663D58  
UniRef90\_A0A059IN54  
UniRef90\_UPI00047E5E9A  
UniRef90\_I3UKM2  
UniRef90\_A3TJC7  
UniRef90\_T1Z3G1  
UniRef90\_I4VKJ6  
UniRef90\_G2MI51  
UniRef90\_U1IU42  
UniRef90\_I0V4K6  
UniRef90\_UPI000262C9CD  
UniRef90\_UPI0003F97390  
UniRef90\_K0AYJ2  
UniRef90\_C5BT53  
UniRef90\_C0BJ76  
UniRef90\_UPI000400969A  
UniRef90\_E7RGU3  
UniRef90\_J1ZVG9  
UniRef90\_UPI000373386E  
UniRef90\_J4TW86  
UniRef90\_R7ZVV4  
UniRef90\_UPI0004101551  
UniRef90\_X1FS05  
UniRef90\_M1YZU1  
UniRef90\_D7A6A6  
UniRef90\_C1BLW1  
UniRef90\_G0L7Y8  
UniRef90\_UPI000248E735  
UniRef90\_M9REW0  
UniRef90\_L7TYD7  
UniRef90\_UPI000366B7F6  
UniRef90\_F8CAQ7  
UniRef90\_UPI0003B3D81B  
UniRef90\_UPI000365722B  
UniRef90\_A6TT55  
UniRef90\_A4CV16  
UniRef90\_J9YUS6  
UniRef90\_F4MM97  
UniRef90\_J9NMB0  
UniRef90\_D4KMA2  
UniRef90\_UPI000304B9DB  
UniRef90\_J0N551  
UniRef90\_E7GIU6  
UniRef90\_A1S7N7  
UniRef90\_W9GHC8  
UniRef90\_W4BGZ0  
UniRef90\_B2IK38  
UniRef90\_Q0BZH0  
UniRef90\_A0A017RV15  
UniRef90\_R7ZVX0  
UniRef90\_D5CLT0  
UniRef90\_U5BP25  
UniRef90\_UPI0002555E7A  
UniRef90\_K2CGK7  
UniRef90\_UPI000429A8C0  
UniRef90\_Q9RVC9  
UniRef90\_R9JNU6  
UniRef90\_L5N461  
UniRef90\_F0KEC9  
UniRef90\_V8BTH6  
UniRef90\_U2FFR0  
UniRef90\_L0F1Q0  
UniRef90\_E6LGX9  
UniRef90\_UPI00036B5300  
UniRef90\_Q129E1  
UniRef90\_UPI00035D924B  
UniRef90\_UPI0003B3ABE7  
UniRef90\_W7CY56  
UniRef90\_M7R7S8  
UniRef90\_I6AD38  
UniRef90\_M7MJZ8  
UniRef90\_A3SL04  
UniRef90\_UPI0004294142  
UniRef90\_G2G2H4  
UniRef90\_A0A021VLR3  
UniRef90\_M4NLM5  
UniRef90\_A3JMA2  
UniRef90\_C4U002

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



UniRef90\_Q1WTD0 K G Y K A L N V K G G L N S W T G K L 90 100  
UniRef90\_R0GGC2 Q G Y N A K S V R G G M N Q W  
UniRef90\_U3AM24 R G L N A R R L D G G L P E W R K G R P V V T A  
UniRef90\_UPI000365CD96 Q G F A E V Y H L K G G I L K Y L E E T P  
UniRef90\_S2ZVU7 M G Y T S V R N I G G I R G Y T G P V E  
UniRef90\_R2S0U8 Q G Y Q D I Y L K S G F A E W  
UniRef90\_N6VBW6 L G Y D Q V Y H L K G G I L R Y L E T I P K E  
UniRef90\_Q16CK7 Q G V E D V F H L K G G I L Q Y L E D I P Q D Q S T  
UniRef90\_MOGTD4 N V E A D V S S L R G G F D G W D G E V E Q G  
UniRef90\_UPI0002DBBF95 H D I D A V N I E G G M N E W  
UniRef90\_A1KJ90 N G F S A R R L D G G F S E W L A A L P V  
UniRef90\_F3L9P8 K G Y H V V N V E G G M V T W  
UniRef90\_C6WZN1 R G I R N F T E I D G G F N K I K E  
UniRef90\_R5JBZ9 H G Y D K V R N L S G G L K I Y K A A  
UniRef90\_UPI0003663D58 H G F S V K N L D G G W K T Y S Y A Y  
UniRef90\_A0A059IN54 Q G V E E V F H L R G G I L K Y L E D V P E E  
UniRef90\_UPI00047E5E9A A G F T A S T M T G G M I A W Q R A  
UniRef90\_I3UKM2 L G F K D V Y Y I A G H Y S  
UniRef90\_A3TJC7 Q G Y D V A N L D G G M R A W H A A G K M E T A D G S  
UniRef90\_T1Z3G1 K G Y D V V N V Q G G M S A W T G K V  
UniRef90\_I4VKJ6 L G F V R V R P L A G G L E A W R S H L P V E T T S  
UniRef90\_G2MI51 H G Y A D V E V V T G G M E E W S E A V P I E T T  
UniRef90\_U1IU42 M G L K P V A H M G G G F A A W R E A  
UniRef90\_I0V4K6 H G R R A R R L T E G M L E W R A E L P V E T  
UniRef90\_UPI000262C9CD Q G F E E V Y H L K G G V L N Y F E Q V P  
UniRef90\_UPI0003F97390 E G F E D V A Q L H G G I V T Y G K D P E V  
UniRef90\_K0AYJ2 N G F E N I S V V L P G M K S W E  
UniRef90\_C5BT53 H G F S K V Y V L R E G M V G W T R D I D T S M P  
UniRef90\_C0BJ76 H G M S S C F N L L G G I M E W Q G E  
UniRef90\_UPI000400969A K G F S K A R N V L G G I M A Y R E  
UniRef90\_E7RGU3 E G Y E F V N V A Q G M S S W E G D V  
UniRef90\_J1ZVG9 H G F G D V C D V V I G Y E A  
UniRef90\_UPI000373386E M G F D K I I R L D G  
UniRef90\_J4TW86 R G F K D V R N L S G G Y K T Y Q  
UniRef90\_R7ZVV4 K G F T N L Y N L K G G I E D  
UniRef90\_UPI0004101551 E G F D N V A Q L H G G V A T Y S K D P V A K G  
UniRef90\_X1FS05 L A F R E V Y K I S G G I N A W K A E L P T I Q E T P A  
UniRef90\_M1YZU1 R G F T N V Q G I E G G I D A W A E K V N T R M A  
UniRef90\_D7A6A6 A G V D L H R H M A G G I L A W K A G F P T D  
UniRef90\_C1BLW1 L G Y T D V R H Y P G G W Q E W A E  
UniRef90\_G0L7Y8 I Y A K A H N V E G G M N  
UniRef90\_UPI000248E735 L G F D T Y N L E G G F M N W  
UniRef90\_M9REW0 Q G V E D V Y H L K G G I L K Y L E D V P A D Q S T  
UniRef90\_L7TYD7 L G F S R V M N L R G G M L A W E E A L P V  
UniRef90\_UPI000366B7F6 N G F R N V S V L A G G T S F Y K  
UniRef90\_F8CAQ7 H G F Q Q V S N V L G G M K A W T R E L P V  
UniRef90\_UPI0003B3D81B K G F N I V E L N G D F G S W A A A  
UniRef90\_UPI000365722B R G F L A L R F N E G F P Q W K A A  
UniRef90\_A6TT55 M G Y K N V H D L G G I N K W P Y E T  
UniRef90\_A4CV16 N G F P E I H H L Q G G I L S Y L E Q I P  
UniRef90\_J9YUS6 M G F E K V S H I D G G F A A L K Q  
UniRef90\_F4MM97 R G F E K V Y Q L D G G I I E Y A R Q  
UniRef90\_J9NMB0 G G F D V A N L D G G F K  
UniRef90\_D4KMA2 Y G Y E V Y T V V I G G M Q A L R R  
UniRef90\_UPI000304B9DB E G F E E V F H L K G G I L N Y L E K V P  
UniRef90\_J0N551 H G F S C Y N L S G G Y R L Y S  
UniRef90\_E7GIU6 N G F G Q V R V V E G G I N F Y K S Q H  
UniRef90\_A1S7N7 M G Y T K V A S L V G G Y K A W A R Q L P L V T  
UniRef90\_W9GHC8 A G Y T D V A N V E G G I I A W I E Q I D P  
UniRef90\_W4BGZ0 H G F R V K N L D G G W K T Y A S V Y  
UniRef90\_B2IK38 A G R D D I K H Y P G G F Q A W A Q A  
UniRef90\_Q0BZH0 E T G A E A A H M A G G I G A W K A G L P  
UniRef90\_A0A017RV15 N G F I D I Y H L Y K G F S S W P Y E V  
UniRef90\_R7ZVX0 R F P N I R H L H G G L A E W R H E  
UniRef90\_D5CLT0 M G F A K V V S L K T G V R G W S  
UniRef90\_U5BP25 V G Y D H L G Y L K G G I E A W R A E  
UniRef90\_UPI0002555E7A A G Y K A C Y N L K D G L N T W A R D V D  
UniRef90\_K2CGK7 K G F D N V Y Q L D G G I L N Y  
UniRef90\_UPI000429A8C0 V G F D N V L Y L K G G F N A W K D A  
UniRef90\_Q9RVC9 K G F Q D V Y H L K G G I L K Y L E D V P  
UniRef90\_R9JNU6 H G Y N A Y N F S G G F R F Y D A V M N D R C M T G A  
UniRef90\_L5N461 K G Y E V I N V T G G F H Q W K K E L P V  
UniRef90\_F0KEC9 K G Y N V N I S G G T S A Y  
UniRef90\_V8BTH6 N G Y D A Y N F S G G F R F Y E A  
UniRef90\_U2FFR0 K G F N K L S N A E G  
UniRef90\_L0F1Q0 K D Y K D V R F L E G G M S T W E A  
UniRef90\_E6LGX9 K G Y Q N I Y I L K D G Y D S W  
UniRef90\_UPI00036B5300 Q G F R D V R N L Y G G I F Q W  
UniRef90\_Q129E1 K G F D E V Y H L E G G I L K Y L E T V P  
UniRef90\_UPI00035D924B V G F D N V L Y L K G G F E A W K N A  
UniRef90\_UPI0003B3ABE7 N G Y S D I E L L K S G F A A W D G K V K G E  
UniRef90\_W7CYS6 Q G Y T V Y N L D G A Y H L Y A Q  
UniRef90\_M7R7S8 L T R T P V Y V L A G G T A R W A A G L P L E  
UniRef90\_I6AD38 A G L P N V A A L R N G T I G W  
UniRef90\_M7MJZ8 A G Y T N V Y N V Y G G I F E W  
UniRef90\_A3SL04 Q G V E E V Y H L K G G I L K Y L E E V P  
UniRef90\_UPI0004294142 N G W D A F N V D T G M K G W A A T G N P M V S E R A  
UniRef90\_G2G2H4 H G F T R V K N L S G G W V T Y  
UniRef90\_A0A021VLR3 A G W A D V A H L E G G V L A W V E H V D P T Q A R  
UniRef90\_M4NLM5 H G F S N L H N V E G G M D A W A G E I D P G V P R  
UniRef90\_A3JMA2 Q G V E D V F H L K G G I L K Y L E E V P E E  
UniRef90\_C4U002 A G Y Q R L L N L K D G I N A W A R D V D

UniRef90\_C5B5R6  
UniRef90\_C2CY47  
UniRef90\_V4NF17  
UniRef90\_UPI00040DBBD2  
UniRef90\_UPI00036CBDD0  
UniRef90\_UPI00042956B1  
UniRef90\_D3FA22  
UniRef90\_H8L231  
UniRef90\_UPI00032AB4B5  
UniRef90\_C2EW50  
UniRef90\_S8LM86  
UniRef90\_UPI00032ABD8E  
UniRef90\_E8U1A3  
UniRef90\_Q0W0F4  
UniRef90\_UPI00036DBB0A  
UniRef90\_G2LPL7  
UniRef90\_J7Q6X3  
UniRef90\_UPI0002886A46  
UniRef90\_G2Z7C3  
UniRef90\_Q10215  
UniRef90\_A8MEW3  
UniRef90\_E3F218  
UniRef90\_A3D6A6  
UniRef90\_C1D274  
UniRef90\_C6J4Y6  
UniRef90\_UPI0004097E62  
UniRef90\_W2DFX7  
UniRef90\_K2B996  
UniRef90\_UPI000470554F  
UniRef90\_UPI0004796CE0  
UniRef90\_UPI0001BF5F96  
UniRef90\_B7A5J9  
UniRef90\_UPI0004653D13  
UniRef90\_F4GSS6  
UniRef90\_R7PD92  
UniRef90\_W7DB06  
UniRef90\_F5SLK8  
UniRef90\_G2S7G4  
UniRef90\_W5T6V0  
UniRef90\_R5V521  
UniRef90\_K9Q308  
UniRef90\_A0K1P1  
UniRef90\_I3C1Y4  
UniRef90\_K9UJB6  
UniRef90\_H7FS70  
UniRef90\_I0R2N3  
UniRef90\_H5TQZ6  
UniRef90\_UPI0003757502  
UniRef90\_G4HQH9  
UniRef90\_UPI000366FCF4  
UniRef90\_K2H8U3  
UniRef90\_I5CAI6  
UniRef90\_A5CVJ0  
UniRef90\_R5VNP6  
UniRef90\_D5QEB2  
UniRef90\_I7KPK8  
UniRef90\_L0MMT2  
UniRef90\_UPI000225E704  
UniRef90\_H9I216  
UniRef90\_F3YYP5  
UniRef90\_A0A022PX75  
UniRef90\_R7XVM1  
UniRef90\_UPI0004054803  
UniRef90\_I0K946  
UniRef90\_UPI0003645A03  
UniRef90\_D3EPX2  
UniRef90\_E8RRE6  
UniRef90\_J9S149  
UniRef90\_E6ZP07  
UniRef90\_UPI0002EC3986  
UniRef90\_D0R5A5  
UniRef90\_V6T7C1  
UniRef90\_F8LQ69  
UniRef90\_C4Y5U6  
UniRef90\_I4BSP2  
UniRef90\_M3UFQ6  
UniRef90\_D3KZR7  
UniRef90\_S5UYPP9  
UniRef90\_J3JEK5  
UniRef90\_B3E3F5  
UniRef90\_M0P1F3  
UniRef90\_UPI00046FCAE1  
UniRef90\_UPI000380B803  
UniRef90\_UPI0003454178  
UniRef90\_W7D0D2  
UniRef90\_T2J4E8  
UniRef90\_I2FP00  
UniRef90\_K0Z8L4  
UniRef90\_UPI0004793C77  
UniRef90\_UPI0004757F0E  
UniRef90\_UPI000411A2A8  
UniRef90\_UPI00038291D2

	50	60	70	80
UniRef90_C5B5R6	LHV	PL	RGV	LLE
UniRef90_C2CY47	VNI	PL	DD	LRR
UniRef90_V4NF17	VNQ	PL	ST	FHP
UniRef90_UPI00040DBBD2	R	C	A	M
UniRef90_UPI00036CBDD0	T	N	I	P
UniRef90_UPI00042956B1	V	D	P	G
UniRef90_D3FA22	K	H	V	P
UniRef90_H8L231	R	H	V	A
UniRef90_UPI00032AB4B5	V	N	H	S
UniRef90_C2EW50	R	N	L	P
UniRef90_S8LM86	L	H	L	P
UniRef90_UPI00032ABD8E	F	N	T	P
UniRef90_E8U1A3	R	N	L	P
UniRef90_Q0W0F4	C	S	L	F
UniRef90_UPI00036DBB0A	I	H	I	P
UniRef90_G2LPL7	I	E	I	K
UniRef90_J7Q6X3	V	N	I	P
UniRef90_UPI0002886A46	H	N	I	P
UniRef90_G2Z7C3	I	N	V	P
UniRef90_Q10215	Y	N	L	P
UniRef90_A8MEW3	I	H	L	P
UniRef90_E3F218	I	D	P	K
UniRef90_A3D6A6	K	H	L	S
UniRef90_C1D274	L	N	I	P
UniRef90_C6J4Y6	L	L	I	P
UniRef90_UPI0004097E62	V	H	I	P
UniRef90_W2DFX7	V	N	L	P
UniRef90_K2B996	M	D	L	H
UniRef90_UPI000470554F	I	R	P	D
UniRef90_UPI0004796CE0	K	L	I	P
UniRef90_UPI0001BF5F96	R	D	F	P
UniRef90_B7A5J9	V	H	I	P
UniRef90_UPI0004653D13	K	A	I	P
UniRef90_F4GSS6	L	P	F	T
UniRef90_R7PD92	V	N	I	P
UniRef90_W7DB06	I	R	P	D
UniRef90_F5SLK8	I	R	P	D
UniRef90_G2S7G4	C	S	V	P
UniRef90_W5T6V0	L	H	L	P
UniRef90_R5V521	L	V	S	Y
UniRef90_K9Q308	L	S	Q	F
UniRef90_A0K1P1	L	H	L	P
UniRef90_I3C1Y4	N	N	T	S
UniRef90_K9UJB6	M	S	M	P
UniRef90_H7FS70	I	P	V	G
UniRef90_I0R2N3	K	H	V	A
UniRef90_H5TQZ6	L	H	I	P
UniRef90_UPI000375702	I	N	I	P
UniRef90_G4HQH9	L	H	L	P
UniRef90_UPI000366FCF4	W	W	A	L
UniRef90_K2H8U3	L	N	V	S
UniRef90_I5CAI6	K	N	I	P
UniRef90_A5CVJ0	I	H	V	P
UniRef90_R5VNP6	L	N	I	P
UniRef90_D5QE82	L	Q	F	S
UniRef90_I7KPK8	I	H	I	P
UniRef90_L0MMT2	I	N	L	T
UniRef90_UPI000225E704	E	N	R	P
UniRef90_H9I216	I	N	I	P
UniRef90_F3YYP5	R	H	L	P
UniRef90_A0A022PX75	V	D	P	C
UniRef90_R7XVM1	R	S	L	P
UniRef90_UPI0004054803	I	D	P	N
UniRef90_I0K946	V	T	F	D
UniRef90_UPI0003645A03	T	H	I	A
UniRef90_D3EPX2	V	L	V	P
UniRef90_E8RRE6	I	N	L	P
UniRef90_J9S149	V	H	I	P
UniRef90_E6ZP07	V	N	V	P
UniRef90_UPI0002EC3986	L	S	A	P
UniRef90_D0R5A5	R	N	I	P
UniRef90_V6T7C1	K	N	I	P
UniRef90_F8LQ69	L	L	I	P
UniRef90_C4Y5U6	I	N	I	P
UniRef90_I4BSP2	S	T	J	A
UniRef90_M3UFQ6	T	L	I	P
UniRef90_D3KZR7	V	N	L	D
UniRef90_S5UYPP9	V	H	L	P
UniRef90_J3JEK5	V	N	Y	P
UniRef90_B3E3F5	I	H	I	P
UniRef90_M0P1F3	I	N	V	P
UniRef90_UPI00046FCAE1	I	D	P	Q
UniRef90_UPI000380B803	V	H	V	P
UniRef90_UPI0003454178	V	L	I	P
UniRef90_W7D0D2	R	N	I	P
UniRef90_T2J4E8	T	S	F	P
UniRef90_I2FP00	V	N	L	P
UniRef90_K0Z8L4	V	N	L	P
UniRef90_UPI0004793C77	I	R	P	S
UniRef90_UPI0004757F0E	V	H	L	P
UniRef90_UPI000411A2A8	H	Q	L	S
UniRef90_UPI00038291D2	V	D	P	Q

UniRef90\_C5B5R6 MGME TVVHV 90 GG F P A L K E A G G S V T A 100  
UniRef90\_C2CY47 D G F K V K N L D G A F L I Y S A A Y P Q R I Q H  
UniRef90\_V4NF17 F G I E A D A H L A P G I R G W A E G L P V J E  
UniRef90\_UPI00040DBBD2 Q G F E Q V V N I T G G I D A W S R E R D P R V P R  
UniRef90\_UPI00036CBDD0 H G V D V A N L D G G Y L T W S T A  
UniRef90\_UPI00042956B1 R G F A E V Y H L K G G I L K Y L E E V P  
UniRef90\_D3FA22 S G W D A R N M T G G I V G W  
UniRef90\_H8L231 A G F S Q V Y V L D G G L L S W Q A Q L P L  
UniRef90\_UPI00032AB4B5 Q G F K E V Y H L E G G I L K Y L E E V P  
UniRef90\_C2EW50 H G Y H Q L Y I L K G G Y N G W K G K  
UniRef90\_S8LM86 H G F S V K N L D G A Y S L Y K M A L P  
UniRef90\_UPI00032ABD8E E G F K D V Y N M G G G Y L E W K K E F P V K L  
UniRef90\_E8U1A3 L G Y D R A Q A L A G G L S A W R E A M P V E K A  
UniRef90\_Q0W0F4 L G F K N V T V L K G G L Q E W A N  
UniRef90\_UPI00036DBB0A M N I D R L Y N I E D G T G A W D N N Y P T E K G  
UniRef90\_G2LPL7 N G F K N I Y H I D G G I L G Y K K G L P I  
UniRef90\_J7Q6X3 R G F K A R C L E D G L P E W R A A L P V V A G T  
UniRef90\_UPI0002886A46 S G F T N V K N V A G S F L G  
UniRef90\_G2Z7C3 R G W D N F S D V I G G F A A L K E  
UniRef90\_Q10215 L G Y K N I G N Y T G S W L E W S D K I  
UniRef90\_A8MEW3 N G F K V K N L D G G F K T Y  
UniRef90\_E3F218 E G V A D V Y H L Q G G I L K Y L E D V P V D  
UniRef90\_A3D6A6 M G Y T R V A S L I G G Y K G W Q R Q L P V  
UniRef90\_C1D274 L G F D A G V L E G G Y P A W K D A  
UniRef90\_C6J4Y6 K G Y K V R N L T G G Y K L Y Q  
UniRef90\_UPI0004097E62 A G F E L V Y S L R G G M A D W R S N L P V  
UniRef90\_W2DFX7 L G Y S R V H V L D G G A E G W Q A A  
UniRef90\_K2B996 K G F K N V Y Q L N G G I L N Y  
UniRef90\_UPI000470554F E G F E D V A Q L H G G I V T Y G N D P E V  
UniRef90\_UPI0004796CE0 Q G F T Q V R N L L E G I L G Y R K  
UniRef90\_UPI0001BF5F96 E G V D A V Y H L D G G I L K Y L E E V P A D  
UniRef90\_B7A5J9 L G Y K N A K N I A H G F K G W L A G L P V I E V E  
UniRef90\_UPI0004653D13 A G Y T E I Y S L K G G I T S W A N D L D Y T M A R  
UniRef90\_F4GSS6 K G Y G R V R P L S G G I E A W K A G Y T I E I E T  
UniRef90\_R7PD92 R G Y R N V W N I S G S Y L G  
UniRef90\_W7DB06 A G F D D V S Q L H G G I A T Y G K D D E T V K G  
UniRef90\_F5SLK8 E G F R D V A Q L E G G I V T Y G K D P E V  
UniRef90\_G2S7G4 A S S A Q A Y V V E G G I Q G W K Q A  
UniRef90\_W5T6V0 V G F E V Y Q V V I G G M V A W Q Q A  
UniRef90\_R5V521 Q G Y H V A S V V I G G Y E A M K K  
UniRef90\_K9Q308 N G F T N V I N I M G G I D A Y S  
UniRef90\_A0K1P1 A G F S A D T M T G G M I A W S R A  
UniRef90\_I3C1Y4 R G I H N L I D V Q G G Y K A I K E A G V E T T  
UniRef90\_K9UJB6 A G F K A V T H I M G G L D A W H E G G P T E  
UniRef90\_H7FS70 S G Y K N V Y N L Y G G I F E Y K N N  
UniRef90\_I0R2N3 Q G Y K V V S V A G G T G A W Q A G K D V S I E  
UniRef90\_H5TQZ6 V G V D G S C V R G G M L A W E N E K P V I Q T G S G  
UniRef90\_UPI0003757502 Q G Y K N T L N A G G Y R  
UniRef90\_G4HQH9 L G Y T R V R E L I G G F E Y W A R E  
UniRef90\_UPI000366FCF4 L T G K P V Y L L E G G T T A W A G L P T E S G E  
UniRef90\_K2H8U3 M G Y T D V S S M G G F K D Y A E A  
UniRef90\_I5CAI6 Q G F T Q V R N V L G G I L A Y R A  
UniRef90\_A5CVJ0 M G F N K V R S L K M G I K G W  
UniRef90\_R5VNP6 N G F D V F N L T G G W R T Y E A  
UniRef90\_D5QEB2 L G Y S Q V Y N L R G G L H A W R  
UniRef90\_I7KPK8 K G F N H I V N V R E G Y Q A F S E S V  
UniRef90\_L0MMT2 A G F A N V S T L K D G V A G W S  
UniRef90\_UPI000225E704 C H P G E A F L L E G G L E A W R K A L P V E  
UniRef90\_H9I216 L G F K N T K N Y Q G S W T E W A S K  
UniRef90\_F3YYP5 H G F E R V E D N L G S M A A  
UniRef90\_A0A022PX75 K G F K E V Y H L K G G I L K Y L E E V P  
UniRef90\_R7XVM1 E G I H A R R L E D G M L E W R H A L P V I E V G  
UniRef90\_UPI0004054803 E G I D A V Y H L K G G I L K Y L E T V P E E  
UniRef90\_I0K946 Q G F E N V Y Q L H G G I K Y  
UniRef90\_UPI0003645A03 A G Y T A Y T V P G G M L D W A A G F P V  
UniRef90\_D3EPX2 F G I V G T N L K G G I N A W S Q Q I D V S I P Q  
UniRef90\_E8RE6 F G A Q V D H H L Q G G L N A W K A A  
UniRef90\_J9S149 V G Y D G T C V R G G M L A W Q E H G P V E  
UniRef90\_E6ZP07 N G W W N V R N Y E G S W L D W V Q Q  
UniRef90\_UPI0002EC3986 M A W E V Y V V D G A T A A  
UniRef90\_D0R5A5 K G Y E K I Y W L K D G F E K W D G Q  
UniRef90\_V6T7C1 N G F K V K N L T G G Y K T Y S  
UniRef90\_F8LQ69 R G Y T K V T N L G G L D M E A  
UniRef90\_C4Y5U6 L G F K K V K D I K G G M Y K W S C D V D P  
UniRef90\_I4BSP2 H G F A D V S D I L G G Y G A W S A  
UniRef90\_M3UFQ6 E G F A D A V H L G G G I A S W A T V D P T M P  
UniRef90\_D3KZR7 Y G H K N I K L L N G D I A W E S A  
UniRef90\_S5UYPP9 R G A D A V D V I G G M R E W A A A L P V V D G R G  
UniRef90\_J3JEK5 N G F E D V T V V D D G M E G W S A V Y D V E I P T D S  
UniRef90\_B3E3F5 K G F T N L K A L  
UniRef90\_M0P1F3 E G V E E V A S M A G G Y E E W D F D L E T G A D A  
UniRef90\_UPI00046FCAE1 E G I E D V F H L Q G G I L K Y L E T V P  
UniRef90\_UPI000380B803 Q G V E A V N V S G G M L A W E A A G R P L V A E G  
UniRef90\_UPI0003454178 A G F S D A V H L G G G V L A W V H Q V D P S L P T  
UniRef90\_W7D0D2 R G F Q C E N V V I G G M N A W L E K  
UniRef90\_T2J4E8 A G Y E N V A Q L V I G G L K A W K A A Y P V E  
UniRef90\_I2FP00 Q G W W N V R N Y E G S W L D W V Q Q  
UniRef90\_K0Z8L4 H G L A C S N L S G G Y R F Y A  
UniRef90\_UPI0004793C77 E G Y E D V N Q L E G G I H T Y G R D P E T  
UniRef90\_UPI0004757F0E N G I P N V V N M T G G M L A W T G E L K P K  
UniRef90\_UPI000411A2A8 A G Y D V V E L D G S Y A A W A T R Q P L  
UniRef90\_UPI00038291D2 L G I D D V F H L K G G I L R Y L E D V P A E



UniRef90\_X0RKf9  
UniRef90\_F6EX75  
UniRef90\_UPI00028A19FB  
UniRef90\_V6JG17  
UniRef90\_V6SEa8  
UniRef90\_K2DBL5  
UniRef90\_U8BIM3  
UniRef90\_HODJG5  
UniRef90\_D7B8Y6  
UniRef90\_UPI000288A63E  
UniRef90\_UPI0002002ABA  
UniRef90\_T1A176  
UniRef90\_UPI0003623605  
UniRef90\_I7LBP1  
UniRef90\_S1NM81  
UniRef90\_Q26BE9  
UniRef90\_A0A022LK40  
UniRef90\_E8ND53  
UniRef90\_UPI0003632B52  
UniRef90\_I1HPN0  
UniRef90\_UPI00036D3369  
UniRef90\_UPI00046DA4A7  
UniRef90\_W8YPZ2  
UniRef90\_C3X2I9  
UniRef90\_I0YV93  
UniRef90\_B8GCF8  
UniRef90\_A3UC49  
UniRef90\_V4RI41  
UniRef90\_C5WIW1  
UniRef90\_I9BSB4  
UniRef90\_A7T2D3  
UniRef90\_I4N2J9  
UniRef90\_J3AN11  
UniRef90\_J7ITS0  
UniRef90\_W1P8E4  
UniRef90\_UPI0001FFDF73  
UniRef90\_M4VEL2  
UniRef90\_D9YA96  
UniRef90\_D8P3K6  
UniRef90\_C6SXE2  
UniRef90\_C8N9S4  
UniRef90\_A0A059KTB1  
UniRef90\_S3AWI8  
UniRef90\_K0HZB2  
UniRef90\_I3RJk8  
UniRef90\_K3W445  
UniRef90\_E8NG19  
UniRef90\_B3DZD5  
UniRef90\_I7KH71  
UniRef90\_B4S959  
UniRef90\_K1RQZ3  
UniRef90\_T0I376  
UniRef90\_UPI0002FD2477  
UniRef90\_W9TSR6  
UniRef90\_D5BQ46  
UniRef90\_C7HTS1  
UniRef90\_F3J243  
UniRef90\_K9PB48  
UniRef90\_G0AD52  
UniRef90\_J3I8B7  
UniRef90\_L5MU18  
UniRef90\_Q3YSP9  
UniRef90\_H2CIA8  
UniRef90\_A0Z8E3  
UniRef90\_B0KRP7  
UniRef90\_F7ZMG5  
UniRef90\_UPI00047BE349  
UniRef90\_Q21NH0  
UniRef90\_H1GWL4  
UniRef90\_K2ESL4  
UniRef90\_I4B9X2  
UniRef90\_UPI00041F23F3  
UniRef90\_W0MS60  
UniRef90\_A0A023WU45  
UniRef90\_S2YI48  
UniRef90\_E4TG27  
UniRef90\_UPI00020028FC  
UniRef90\_UPI0003743C7A  
UniRef90\_C5NUL2  
UniRef90\_A6VDP8  
UniRef90\_E4TMK1  
UniRef90\_K5XJ80  
UniRef90\_R9PLT8  
UniRef90\_K9EK17  
UniRef90\_A3I0Z5  
UniRef90\_K2AXP3  
UniRef90\_A0A010NP92  
UniRef90\_Q2CDS2  
UniRef90\_A0A022LT49  
UniRef90\_T5HZY2  
UniRef90\_R9BYH6  
UniRef90\_UPI000416A79D

1 10 20 30 40

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

UniRef90\_X0RKF9  
UniRef90\_F6EX75  
UniRef90\_UPI00028A19FB  
UniRef90\_V6JG17  
UniRef90\_V6SEAE8  
UniRef90\_K2DBL5  
UniRef90\_U8BIM3  
UniRef90\_HODJG5  
UniRef90\_D7B8Y6  
UniRef90\_UPI000288A63E  
UniRef90\_UPI0002002ABA  
UniRef90\_T1A176  
UniRef90\_UPI0003623605  
UniRef90\_I7LBP1  
UniRef90\_S1NM81  
UniRef90\_Q26BE9  
UniRef90\_A0A022LK40  
UniRef90\_E8ND53  
UniRef90\_UPI0003632B52  
UniRef90\_I1HPNO  
UniRef90\_UPI00036D3369  
UniRef90\_UPI00046DA4A7  
UniRef90\_W8YPZ2  
UniRef90\_C3X219  
UniRef90\_I0YV93  
UniRef90\_B8GCF8  
UniRef90\_A3UC49  
UniRef90\_V4RI41  
UniRef90\_C5WIW1  
UniRef90\_I9BSB4  
UniRef90\_A7T2D3  
UniRef90\_I4N2J9  
UniRef90\_J3AN11  
UniRef90\_J7ITS0  
UniRef90\_W1P8E4  
UniRef90\_UPI0001FFDF73  
UniRef90\_M4VEL2  
UniRef90\_D9YA96  
UniRef90\_D8P3K6  
UniRef90\_C6SXE2  
UniRef90\_C8N9S4  
UniRef90\_A0A059KTB1  
UniRef90\_S3AWI8  
UniRef90\_K0HZB2  
UniRef90\_I3RJK8  
UniRef90\_K3W445  
UniRef90\_E8NG19  
UniRef90\_B3DZD5  
UniRef90\_I7KH71  
UniRef90\_B4S959  
UniRef90\_K1RQZ3  
UniRef90\_T0I376  
UniRef90\_UPI0002FD2477  
UniRef90\_W9TSR6  
UniRef90\_D5BQ46  
UniRef90\_C7HTS1  
UniRef90\_F3J243  
UniRef90\_K9PB48  
UniRef90\_G0AD52  
UniRef90\_J3I8B7  
UniRef90\_L5MU18  
UniRef90\_Q3YSP9  
UniRef90\_H2CIA8  
UniRef90\_A0Z8E3  
UniRef90\_B0KRP7  
UniRef90\_F7ZMG5  
UniRef90\_UPI00047BE349  
UniRef90\_Q21NH0  
UniRef90\_H1GWL4  
UniRef90\_K2ESL4  
UniRef90\_I4B9X2  
UniRef90\_UPI00041F23F3  
UniRef90\_W0MS60  
UniRef90\_A0A023WU45  
UniRef90\_S2YI48  
UniRef90\_E4TG27  
UniRef90\_UPI00020028FC  
UniRef90\_UPI0003743C7A  
UniRef90\_C5NUL2  
UniRef90\_A6VDP8  
UniRef90\_E4TMK1  
UniRef90\_K5XJ80  
UniRef90\_R9PLT8  
UniRef90\_K9EK17  
UniRef90\_A3I0Z5  
UniRef90\_K2AXP3  
UniRef90\_A0A010NP92  
UniRef90\_Q2CDS2  
UniRef90\_A0A022LT49  
UniRef90\_T5HZY2  
UniRef90\_R9BYH6  
UniRef90\_UPI000416A79D

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

UniRef90\_X0RKf9 MGY T N V T D V Q G G M N A W K A A  
UniRef90\_F6EX75 R G F D E V Y H L R G G I L R Y L E E M P  
UniRef90\_UPI00028A19FB A G F K D V S Q L D G G I V Q Y G K  
UniRef90\_V6JG17 R G R R A I R L N D G M L E W R A E L P V D A A E  
UniRef90\_V6SEA8 H G Y E N V V N M Q Y G I I R W V Q K  
UniRef90\_K2DBL5 N G F K D V Y Q L F G G I V T Y M E K Y P N E  
UniRef90\_U8BIM3 C A A C D A Y V L E G G L D A W K K A G L P V V A D A S  
UniRef90\_H0DJG5 E G F E D V G Q L E G G I A T Y G K D P E T  
UniRef90\_D7B8Y6 A G W D A V N V S G G M Q A W Q H A G R D M A A E G  
UniRef90\_UPI000288A63E N G Y T D V S N L Y G G I F E W  
UniRef90\_UPI0002002ABA H G I E G L N V A G G I D A W S Q E V D S S V P R  
UniRef90\_T1A176 K G L E A Y R L E A G Y P E W K A A L P I E  
UniRef90\_UPI0003623605 A G T D R A G V L R D G L S G W R E H G P V E H G S G  
UniRef90\_I7LBP1 N G F T T T K W L K G G F E R W  
UniRef90\_S1NM81 R G F K A V H V T G G M R D L K E  
UniRef90\_Q26BE9 R G I H N L I D V Q G G F N A L K E T D I E V T  
UniRef90\_A0A022LK40 A G F A G V R S L E G G I E A W T R D V D P  
UniRef90\_E8ND53 L G H D V R N L D G G Y R T W V A G  
UniRef90\_UPI0003632B52 Q G F E Q V F H L R G G I L N Y L K T V P  
UniRef90\_I1HPN0 K G F K E V Y H L E G G I L K Y L E E I P  
UniRef90\_UPI00036D3369 Q G M D A V N V A G G M E A W A A A G R P V V  
UniRef90\_UPI00046DA4A7 A G F K Q V N N M G G Y R A W L E H F P V T K P E D A  
UniRef90\_W8YPZ2 K G F S V R N L T G G Y K S Y Q  
UniRef90\_C3X2I9 R G Y R V S K I S D G V A E W H A A L P L E  
UniRef90\_I0YV93 K G F Q D V Y Q L E G G I Q R Y M E A F P L  
UniRef90\_B8GCF8 R T P P P Q V L E G G M L A W E A A  
UniRef90\_A3UC49 A G A D V T A H M A G G M G A W K A A Y R V E P S T G  
UniRef90\_V4RI41 M G W E V Y V L D G G F D  
UniRef90\_C5WIW1 N G F D V V N L D G A Y A L Y Q S I Y P E R I S H  
UniRef90\_I9BSB4 L G Y S T V A A L E G G T A A W K A G Y T L E T A T  
UniRef90\_A7T2D3 L G F K G T H N Y T G G W V E W Q E A M M K D T E S  
UniRef90\_I4N2J9 L G W E V Q V L D G G T S A F S E T G P W K P A V P A  
UniRef90\_J3AN11 E G I E E V Y H L K G G I L R Y L E T V P  
UniRef90\_J7ITS0 N G Y N V L N I T G G Y K  
UniRef90\_W1P8E4 N G F Q E V Y H L E G G I L K Y L E E I P  
UniRef90\_UPI0001FFDF73 N G F D A V N M T R G L I G W R A A  
UniRef90\_M4VEL2 K I S Q P I F S L S G G Y D A W L K  
UniRef90\_D9YA96 A A I P N V V A L K G T M N W Q L A G F E L E Y G S  
UniRef90\_D8P3K6 L G L P N V Y A L E N G T Q G W Q  
UniRef90\_C6SXE2 A G F T G L T D M A G G Y A A W Q N G L P T E  
UniRef90\_C8N9S4 G G F E A I Y I L D G G I N G W L A E L P V  
UniRef90\_A0A059KTB1 L G L K N V Y A L E N G T Q G W  
UniRef90\_S3AWI8 Q G I D A V N V D G G M L A W E S A G R P L V G  
UniRef90\_K0HZB2 A G F A D V R M Y F G S W N E W S R D D K L P L E S G  
UniRef90\_I3RJ88 G G Y T N L T E Y R G S W L D W A  
UniRef90\_K3W445 N G W D A T N V D G G M Q V W A A A G R P L V G E  
UniRef90\_E8NG19 R G H D A T N V E G G T G E W A A G Y D V E V  
UniRef90\_B3DZD5 A G Y W Q V C Y L E G S I F K W A N E  
UniRef90\_I7KH71 E G F K D V G Q L H G G I A T Y G K D P E V  
UniRef90\_B4S959 M G Y A D V V S L K T G L R G W N D Y D E P F E D G S  
UniRef90\_K1RQZ3 N G Y E T Y N F S G G F R F Y D A  
UniRef90\_T0I376 R G F D E V Y H L R G G I L R Y L E E M P  
UniRef90\_UPI0002FD2477 A G F V N V S E I I G G L S A W Q A G G P V E  
UniRef90\_W9TSR6 L G Y R Q V I N A G G Y E  
UniRef90\_D5BQ46 M G L S P V V N L A G G V G A W K K A G G V  
UniRef90\_C7HTS1 A G F K N V W N A Q G  
UniRef90\_F3J243 L G W D V S V I D  
UniRef90\_K9PB48 Q G F G E V W N L Q G G I D A W S R E V D P R V P R  
UniRef90\_G0AD52 R G Y K K V R P L S G G I D A W I A A  
UniRef90\_J3I8B7 T Q R T Q A R W L D G G L D A W R T A  
UniRef90\_L5MU18 A G L R D V Y Y L Q G G M K E W S E H L P V K V G  
UniRef90\_Q3YSP9 L G F N K V Y H L K G G I L E Y  
UniRef90\_H2CIA8 K G F T K V W Q L K G G I Q D Y F D Q Y P  
UniRef90\_A0Z8E3 A G F S R A Q K M S G G M M E W N A K L P V  
UniRef90\_B0KRP7 M G W Q V G V L D G  
UniRef90\_F7ZMG5 S G A K R L A H L E G G F G A W K D A V A A D M A S G A  
UniRef90\_UPI00047BE349 A G W L A K N V A G G M Q A W A A A  
UniRef90\_Q21NH0 A G W N A S R L A G G M A W Q A Q L P V  
UniRef90\_H1GWL4 L G F E E T H N L L G G I T E W E  
UniRef90\_K2ESL4 M G K K V S T L E G G I N  
UniRef90\_I4B9X2 H G F K A S R L S E G L P Q W Q K G L P I Q V A  
UniRef90\_UPI00041F23F3 V G F D N L G Y L E G G L K A W K E A  
UniRef90\_W0MS60 L T D K P V F L L E G G T A S W K A G L P L E  
UniRef90\_A0A023WU45 L G Y S Q V I N A G S Y D  
UniRef90\_S2YI48 E G Y E D V G Q L H G G I H T Y G N D P E V  
UniRef90\_E4TG27 L G Y K N V K I Y A G G F P D W  
UniRef90\_UPI00020028FC A G F D R V A N L R G G L R W S E G Y P L  
UniRef90\_UPI0003743C7A S G Y H N L I D V A G G F K A  
UniRef90\_C5NUL2 L G Y T N V Y N  
UniRef90\_A6VDP8 A G F N A A K L S G G I G S W R  
UniRef90\_E4TMK1 K G Y E K V Y N G G A W  
UniRef90\_K5XJ80 N G F T N I L N Y K G S W L E W T E K  
UniRef90\_R9PLT8 M G Y Q Q V V N G G G L K E  
UniRef90\_K9EK17 V G F H N V S E L T G G L A A W K A A  
UniRef90\_A3I0Z5 N G F K K V F N L Y G G I I Q W S N  
UniRef90\_K2AXP3 A G H T E V Y Q L E G G I L N Y F A K V  
UniRef90\_A0A010NP92 Q G Y S A V F V A E G M G G W E A G R P M E S S T G  
UniRef90\_Q2CDS2 M G L P G V A H V G G G F T A W R E A  
UniRef90\_A0A022LT49 S G V P A V N L S G G M L A W E Q A G P V E  
UniRef90\_T5HZY2 A G R T A H N L T G G M K A W H Q D G R P V V  
UniRef90\_R9BYH6 L G Y E A Y R M E E G V H E W K Q  
UniRef90\_UPI000416A79D R G I H N F I N V E K G I S G I R N A

1 10 20 30 40  
UniRef90\_UPI000466B52C L S K V K I V T N G Q A L Q L I N N E N A I V V D V R S N D D F K R G H I T D S S  
UniRef90\_UPI0003604B7E L S V E E F K N K I D R D A V I L D V R T K S S E E F T T G Q F I P G S S  
UniRef90\_H1YA05 L L A E I A Q G K A Y L V D V R T P A E E V D K K G H L P K Y A  
UniRef90\_UPI000379F396 E L K D E L A K G K V L L D D V R T A A E E V A A G H L P K Y A  
UniRef90\_U11R58 D V R E T A E E Y A A G H L P A G F  
UniRef90\_I4ECC6 D E F E P I D A P S L R R L T D E N L V L D D A R E P S A E E Y A A G H L P A G F  
UniRef90\_C8PMB4 L T K V A N V R G K Q M Q A L V N T D E N Y S V V D D A R E P S A E E Y A A G H L P K G A  
UniRef90\_J2ZE33 V K T V T A A K V E Q W A T D R S L F L C D D V R T A E E F A A G S L P G A  
UniRef90\_F4FVS3 D E F Q K G M R K A Q V I D D L R E A Q K E F K D S H V L G A  
UniRef90\_F2I670 I D Q A D F Q V T M H Q A Q I I D D L R E A Q K E F R S S H V L G A  
UniRef90\_R7R0R4 M S E N Y E I S L K D W K E M E Q A S C L L L D D V R D N M A F Q Y G H I G D A  
UniRef90\_UPI00047B4F88 N N F N T I S V H D L A D G K L G S I N L I D D V R R E S G Y E F A G G H V P T A  
UniRef90\_A5CVM0 F N S F S S N D A C Q L L A N G A Q L V D D V R S S N E F A Q G A L P N A  
UniRef90\_R5X809 V N T I S A N Q V Q M L A R N Q F L I I D D L R D Y Y D Y T R G H L P N A  
UniRef90\_UPI0002002C71 M S T P T P I R A Q E L Q Q R L E A G E L Q L V D D L R E K M E L E J A K I H L P  
UniRef90\_UPI000464D78C P V I T Y E Q L K P K T E S P D A F L I D D V R E P D E V I Q G M I P S A  
UniRef90\_V2XXE3 E V D L N A L D T A A G E P L I D D V R E T D E F A Q V E R V P G A  
UniRef90\_T1VLQ5 L D G L N T M T A T D L E A Q T E Q G D V Q Y I D D V R E T D E F D E E S I P G F  
UniRef90\_D6XWP5 I T A Q A L H E R M R Q G E V A V V D D L R A G M K Y R A G H I A G A  
UniRef90\_A9BQW7 R S V P V R V A Y E L Q Q A G H R Y L D D V R T E G E F S A G H P E G A  
UniRef90\_C5Z1Z3 A D F K T L L E N G A L L L D D V R T K E E Y K Q G A V A N S  
UniRef90\_U6RHR4 S V S Y Q Q L R D L L E S K A V Q L I D D V R E K W E I A E G K I P G S  
UniRef90\_V8PJE8 K I P T S V I R V R V A R E L A Q A G Y R Y L D D V R P D E F S I G H P T R A  
UniRef90\_Q38853 I T R T E L L R R R D A G E V T L V D D V R P R E E Y Y A G H I P G A  
UniRef90\_X7Z7Q6 I E P K N W N D V I D D D N T I L I D D T R N D Y E C S I G T F K N A  
UniRef90\_UPI0003608F7E L S V A D L K K W L A N E D N L L D D T R S A G E F T K G F V P G S  
UniRef90\_UPI0003D7754B D V A S V G V D T A K D L L S S G H R F L D D V R S A T E E F N E S H V H G A  
UniRef90\_UPI000273FBEE S S V P T V S L P E L R L L L A S G R V R L F D D V R S R E E A A A G T I P G A  
UniRef90\_R7JHK1 T L G P L E L K N L L D E N K V K L V D D V R R A E D Y E I A H I P G A  
UniRef90\_E4T7H9 A D F A E L V S Q G A V I L D D V R S K E E Y A G G H I K G S  
UniRef90\_V6M337 M D K N T I N C Q E L Q K L L E N K D L I L L D D V R D E E K F L A G T F Q A N  
UniRef90\_D3PP16 M Q D V F P N E L S L W Q K R G A V L L D D V R S P E E F A S G H I P G S  
UniRef90\_F3KLN7 I T S T E L N S I L N D P N I I A D D T R S P K E Y S E G H I P G A  
UniRef90\_W7T469 E A V L L D D V R E D D E W A A G H A P Q A  
UniRef90\_A8ZYG1 I P L D E A V V L Y D R R E A V F V D A R L P A E E F A A G H I P G A  
UniRef90\_UPI00029A4550 E H L E A I S R E E L L E R L Q D R H S V T L L D D V R P A E E F A Q G H I P G A  
UniRef90\_T2J4F8 E Y I D P E N W D N F I S R S D V Y T I D D T R N K I E Y A I S H L K E A  
UniRef90\_Q5FFG3 E I S S W L E S Q G A L V V D D V R T P Q E F A V E H Y P G A  
UniRef90\_S3W5U6 D A H V L K S R L E W G E P T I L D D V R D R Q T Y N E G H I M G S  
UniRef90\_K9QHU7 S R I A G L T P T A L Q Q L I D S G G P R V L D D V R T P G E F R K T V H I P G S  
UniRef90\_B4V8M1 H L T V P E L Q K K L D S K G T T I L V D D V R S K E E Y K K G H I P E A  
UniRef90\_N1W126 R E V T Q E A F A A W A D G P L T V D D V R E A E E Y A T G H I P G A  
UniRef90\_K4QUS4 Q E V R T L H P N E L V G H T S E W Q I I D D V R A E N Y T Q S N I P S S  
UniRef90\_B8M1G8 E G V K T I S L D Q A F R N K E D S L L I D D V R P V D E Y E A G H A E G A  
UniRef90\_J0MGN8 S M T A E E L G T L I D D V R T P E E F A Q G H L E G A  
UniRef90\_UPI0003B4B5DB T R L S P M E F H N L V Q Q D V I V V D D M R N S Y E S E V I G H F E S A  
UniRef90\_UPI00029A3BBD I S V E E F K E I L V I Q N E A L V I D D V R T R N E F E T R V P N A  
UniRef90\_UPI000471C8D2 V P A T E W N A L I A D P D T I L I D D T R N D Y E V A V I G T F K G A  
UniRef90\_C7NCG9 K I R P I T E L Q A Y E M V K N K E T L I I D D L R P D E F N S S H I E N A  
UniRef90\_E3GGX5 M S E L K N I E P D E L E A L L N D G N T V L L D D L R D K M E I E F E D Q E C V  
UniRef90\_T2GKS7 S H L E A L P L Q D F R E L M G E G A Q V V D D V R N P T S F C G G H I P G S  
UniRef90\_K9XC54 M E V K P L I S P Q E L A N L L D Q K S V V V I D D T R A P E E Y D L S H I P Q A  
UniRef90\_MON5R8 F G T I T A R D L A A R L D R G D Y V L I D D T R P A E S Y D S W R V T G A  
UniRef90\_F0W0A2 T H L D P Q E F K N W M D K K D M L V F D D T R N D Y E V R L G S F H D A  
UniRef90\_UPI00037FDF5B T L T V A Q A A A R L Q D D F T V I D D V R T P A E Y A T G H I P G A  
UniRef90\_J1FM36 K N Y E N L D G N T F K T K F Q S P K A E L L D D V R T A G E F A S G T I K G A  
UniRef90\_UPI0002002F20 M P S P A S I S A T E L K R R L D A G E A Q L V D D V R E A M E L D L A R I H L P  
UniRef90\_UPI00030AAC61 V P E I D Q Q R F A E A H A A G A L V V D D V R N R G E Y R A G H V P G A  
UniRef90\_UPI000348C232 R E E V Q L I D D V R E D D E W R A G R A P G A  
UniRef90\_G6CGS9 E G V Y L L D D V R E E S E L A N G R F K E A  
UniRef90\_UPI0003774194 P H I Q W H E L T D E L A K G K I L L D D V R E E S E L A N G R F K E A  
UniRef90\_J0V103 Y E E L D I S E A V E L Q K E G A I F V D D V R G P S E F H T G H G L I G H  
UniRef90\_UPI00047BE373 A S A L K R Q M D F E V P V I V D D V R E R D E F E E G H I E G A  
UniRef90\_UPI00035F59AB H D A V L L D D V R E L H E W Q A G H A P R A  
UniRef90\_G2NJY1 M T S P A T L S P A Q A A A R L E E F T V I D D V R G P G E Y A S G H V P G A  
UniRef90\_L8N617 P Q I S V E E L A S K L R S V V L I D D V R S P E E Y Q E D R I G N S  
UniRef90\_D9PXW2 I R S M S V H E L R E L E G D I F L L D D V R K I T D R E R F H I E G S  
UniRef90\_K8PHH9 A V K L I G D P N V V F V D D V R E A D E R R K G V L K G S  
UniRef90\_D1AA19 T R I S A F D L R A L I E D E T T Q I L D D L R S P L R R D K G I A A T  
UniRef90\_UPI0003B36016 S Y D E I S A E Y A K K L M T K D E A I F I D D A R P S R K R F K G S T I P G S  
UniRef90\_A0DUQ2 V S Q V S A I T A T E Q L G I T D Q S E F L L D D L R D P D E F E L Y H I K E A  
UniRef90\_UPI0003745389 T L G A E Q A R T R M D E L T V I D D V R P A E Y A S G H I L G A  
UniRef90\_UPI000421F1EE D V R S I T G K E L L K M K E E N L I L I D D V R P A D E Y A Q S H I P N A  
UniRef90\_H2VHJ1 L E K S D R V D V E E Y R E I R K I K K P V L L D D T R P P V I E F E I A H L P E A  
UniRef90\_U1WR51 E R M E P I E L E K L V E R M E K G E V L L L D D V R P R E E Y E M A H I P G A  
UniRef90\_U618C2 D S K T V K T E H N N C P Y L L L D D V R D K E F D S C H I I K A  
UniRef90\_C7Z6K1 E R I S A K E Y Q E K A E K E E H L L L D D V R E K E H F D L C N I A G S  
UniRef90\_Q8FUG5 N I T T V E P E V L R Q W I D N E D L V L L D D V R S A A E F E S V H I R G S  
UniRef90\_L1J272 K D F S Q E E A K K A I D G G G L L D D V R R I D E F Y T G H A K I A  
UniRef90\_UPI00042AFD2E K K V R S V D A K E A F R L Q K E N N F M I L D D V R P E A E F K E A H P P G A  
UniRef90\_UPI00047C6CDE R M A R I T V T D E L K R A I D E G G P V L V D D V R S P A S R D T R V I P G A  
UniRef90\_W5Y322 M R E V T V T E V P E N A Q L I D D V R E V D E F A A V R A R G A  
UniRef90\_Q4JMY0 K K Y K S I N C N D L V Q K I N E E S I T I L D D T R E R A D F K K G H I S H A  
UniRef90\_A4VG37 Q R L V R E G A L L V D D V R T E V A A F G D V P A L  
UniRef90\_J6IX11 V P K I S P D E A R G L M A G G D V L V V D D V R D A P E V A S G K V K G A  
UniRef90\_D4F7T3 E Y Q L L T V Q E L K Q W M D E K K P L L I D D T M P A D S Y K K Q H I P G A  
UniRef90\_K9QL02 D A Q E L K L R L E Q P G F T I V D D V R D R H A Y N Q G H I T G A  
UniRef90\_W6SCN6 T I K A D D L D K L I D K I N L I D D I R E D Y E Y D E G H V K G A  
UniRef90\_A6TNQ8 L S N A T T I K I Q E A L E W V E K N N S L I L D D L R G G L A F K T S H I P N S



UniRef90\_UPI000466B52C Y N I | D I | Q N G S 50 K A | E K F K D N P | I V V T D | G A A | L R S G D K L | T 80  
UniRef90\_UPI0003604B7E I S I | G L E G K F A D W A N G T | L P F D K P L I L V T | E N G K E K T V T S L | S E T  
UniRef90\_H1YA05 Q N I | N I | R D S P D F R Q V L A E K L D K N K E Y | Y L Y C H S G L N R S Y G L A A D R S L | L Q T  
UniRef90\_UPI000379F396 V T L | N L | R D S L R S R L A E L D A D A D K E Y | Y I V S C H S G L N R S Y G L A A D R S L | L Q T  
UniRef90\_U11R58 R H Y | A G G Q L V Q E I | D E M P V R G A R E I | V L S D D R S I | R A D M T A S W L | A Q  
UniRef90\_I4ECC6 R S I | P I | D E L J A E A R L | P G R L S P D K E I | V A Y C C R G C V N F A F A V E | L L A A  
UniRef90\_C8PMB4 L S G N A D T V A E I L L | P R E L S P D K E P | V L T Y C Y S G N R S G N R S F A V A E K L | L A A  
UniRef90\_J2ZE33 Q H T | P G G Q Q S T D L Y | I G V R Q A R L V L L I | D S D G V R A P I | V A S W L R Q  
UniRef90\_F4FVS3 R N M | P Y S E T V K N F Y S | Q L R P D L P Q V Y M Y D Q G K T | I A S K R M A S L F | S K  
UniRef90\_F2I670 R N I | P Y S E T V R Q K A | P G L N R S S Q K I | Y L Y D N G V N I | A T R M A S V L | K Q  
UniRef90\_R7R0R4 I N L | P L E E L K E Q | K K N K Q N K K I | V Y C K R G E A S A E A T A L | L R E D  
UniRef90\_UPI00047B4F88 K N I | P M G R I L A D P E | K Y I D R N K N E Y | H I T C C Q S G S R S E R T C | Y L S D  
UniRef90\_A5CVM0 I N L | P L Q S I M T A D R E | I D R N K A V I L Y C C V I T G I | R S S T A K N Y L | L I Q  
UniRef90\_R5X809 I N I | P T N Q I L D R I N E I | Q P Y R N I L L Y C C Q Y G V Q S V S | V G K V L M I  
UniRef90\_UPI0002002C71 L S S | S E Y Q W L G S L H E | H L D R S P E R D V V V L C H A G V R S W Q G C | W L M E A  
UniRef90\_UPI000464D78C R N I | P Y S T F K A Y | H E L L D R S D L P V Y L Y D Q G K A L S | T R A A L L L A K  
UniRef90\_V2XXE3 V N L | P L S E A K H G F | P K P D Y G Q E L T F Y C C R S G K R S S T A S D I | A Y R  
UniRef90\_T1VLQ5 A L I | P L S E F V S R V | G E I P D A E T V Y I T C C A V G G R S L Q A A E Y L | L Q A  
UniRef90\_D6XWP5 E N M | P M A L V M D N P S | L L N E E D V V I L C N T Q N R S K E V A E A L | I D  
UniRef90\_A9BQW7 R W | S I R P C L A S D L A G E T | R Q I V L V A D E P G M A Q W A A L E | L Q S  
UniRef90\_C5Z1Z3 V N I | P Y M N K T G S G M T K N | H F P I I V G C C Q S G K R S L M A A T E L | C S  
UniRef90\_U6RHR4 I N I | P L D S L N N N Q S K K | K D K P I I A V C C A S G M R S R S A V A I L | R A S  
UniRef90\_V8PJE8 I N V | P Y M Y R V G S G M H | F R K H D E I I G C C E S G Q M S F M A S T D L | L T  
UniRef90\_Q38853 I N I | P V A E L A D R L A E | P A D R D E V V A Y C C R G C V M A P D A V R I A | H S  
UniRef90\_X7Z7Q6 I N P | K T V K F R D F P E | W V K N Q N F I A M F C C T G G I R C E K A S S F | M L R  
UniRef90\_UPI0003608F7E I S I | G L E G R F A E W A G S | P F D K P I I V L V T D E S G M E R E S V V R | L A R  
UniRef90\_UPI0003D7754B L N V | P Y L F I T Q E W A G V | S K E D H I I V G C C S G I R S L C A C C V D L L N  
UniRef90\_UPI000273FBEE L N I | P V S E L E S A L Q M E | P D D E N V V F F C C Q I G K R G F Q A T Q L A R S E  
UniRef90\_R7JHK1 I S I | P K D E D N T E K L S K | D E I T V I Y S Y N Q Q C H L G A Q A C L I L A T S  
UniRef90\_E4T7H9 I N I | P V D Q L S G N N K L K | D K N K V I I T C C A S G M R S A S A K G I L L R E  
UniRef90\_V6M337 H N R | P Y L I M K E T Q E | Q S W K D K P I I T F C C T S G N K A G K A A T L L R E Y  
UniRef90\_D3PPI6 R N L | L E Q L L E A | L D T D K S P V V T C C A T G S R A G L A A E V L L G Y  
UniRef90\_F3KLN7 V N L | D L F A F H W | D T K Q G I E N I F Y D S V S G M L A R G V W L L H Y  
UniRef90\_W7T469 I H I | P L G E L A E R T E V | P Q D S G E V Y V V C R M G G R S A R A T M Y L N Q  
UniRef90\_A8ZYG1 L N V | P W E Q F F T T V L | P D P E T I V L V Y C D G E A C A L S E D L A R M L I D  
UniRef90\_UPI00029A4550 I N I | P F A E L Q Q R V L G E L | P V S Q E V V A Y C C R G C V F S R D A V T A L K A  
UniRef90\_T2J4F8 S L I | P Y D S P D K S L V Q | C S N T P I I T Y C C S V G Y R S A I L L A Q R L Q K  
UniRef90\_Q5FFG3 I N P | E T N C F R D F L D W A | L S W P I A M Y C C T G G I R C E K S T A F M K D  
UniRef90\_S3W5U6 I N I | P N D L H S H F G E L G | P K Q G K I L L Y C C G S G R S A R A K A L L K E  
UniRef90\_K9QHU7 M P M | P I D E L A D R A V P S | D K S R D I Y V Y G G N D E E S A Q A A Q V L R S E  
UniRef90\_B4V8M1 V N V | P L D T L R E H R V E T | H L D E D V V L V C C R S G A R A A Q A E Q A L A E  
UniRef90\_N1W126 V N I | P Y N E L T T H K V F | P K N K E V I V Y C C R G P L C L S V N A V N L L K S  
UniRef90\_K4QUS4 R L M | P L R T V P A R L G E L | P T D R P V Y V I C C A S G N R S K T A A D W M T S  
UniRef90\_B8M1G8 R N I | P L D K L R E N L D N I | D K E T P V L V Y S R V G Y H G Y I A H R I L L K Q  
UniRef90\_J0MGN8 L N I | P L D T L R E N L D K L | P K D K T L I V Y C C R G C G R S N Q A T H D L N E  
UniRef90\_UPI0003B4B5DB I N I | D F N D F Q E Q I T Q L | D P N G T Y T L Y C C R S G N R A G Q A L E L M K N  
UniRef90\_UPI00029A3BBD L C P | E V R T F R E E Q L Q G | D Q K D R K I L L Y C C T G G V R C E K A S A W F M R H  
UniRef90\_W6A6V1 N N N | D L Q M N Y K N Y L G | Q D K N R L I V T V C C N A G N R S G E A A R F L R E  
UniRef90\_UPI000471C8D2 I D P | D I Q S F R E F P E W F | R R K P K I A M F C C T G G I R C E K S T A F A L S  
UniRef90\_C7NCG9 I N I | P M K N L J E E N L K K | P K N K E I I V Y C C R S G R N C A Y L A S K F L N D  
UniRef90\_E3GGX5 V N I | P L K P S Q M E M L T | P F K D K T L V L V C C R S G M R A S R A Q K L L E Q  
UniRef90\_T2GKS7 L N I | W Q D G F A A F A G Y | F L N Y E D P I L L V D D G R G V D S V R R S L I R  
UniRef90\_K9XC54 V N L | R E I F T Y L A T S T | P H I I T Y E D A L N T G Y G Q S C R G Y F L L K Y  
UniRef90\_MON5R8 E N V | P F D D Q R D R I T E L | A D G D E V L T L C G K G A T S T R L A S E L D A  
UniRef90\_F0W0A2 F R S | F P A S A K I W L K S V | P K E K P I V M Y C C T G G V R C E K A S C V L L K  
UniRef90\_UPI00037FDF5B V N V | P L D Q Q V K R A L P E I | R Q R G G L L V V C C A S G A R S E K A S G A L A A  
UniRef90\_J1FM36 K N L | D T G Q V F Q N A L G S | L D K D K E Y F V F C C R S G A R S G S A C E L M S A  
UniRef90\_UPI0002002F20 L S Q | S E T W I E Q I S S L I | N R D Q P V V V L C C H A G I R S W Q F A S W L M E  
UniRef90\_UPI00030AAC61 L S A | P L N L P L A E L A K I | P R D R P V H V I C C Q S G G R S A Q A T S L L R D  
UniRef90\_W7TMS8 L N I | P L S Q F A W R P A K | D I D K N K T V V L C C H H G G R S M Q F A S F L T Q  
UniRef90\_UPI000348C232 V H I | P L G D L G E R A G E V | P K D Q K V V V C C R A G G R S A Q A T M A L N Q  
UniRef90\_G6CGS9 I N I | P L N D L R C R V S E L | D P T K E Y I S C C H S G L R S Y I G E R T L K Q  
UniRef90\_UPI0003774194 I C C | P N G E L S Y R L H D | P D E T T P I V I N C A G R T R S I I G A Q T L I N  
UniRef90\_J0V103 V N I | P V F Y E T Y T P K | P L K V R Q N I I V L C C H S G Q R S A F S A E I L A K  
UniRef90\_UPI00047BE373 K N Y | P L S E A T T W I | D T L D P A E Y V L C C R S G A R S T Q A T W Q M E A  
UniRef90\_UPI00035F59AB V H L | P L S A A G A P L P | D A R G A P L I V I C C R S G N R S R Q A A A L L A E  
UniRef90\_G2NJY1 L N V | P L D R L P E A V P A | L K S R G S L L V V C C A S G V R S T R A C E I L L A D  
UniRef90\_L8N617 S L L | P K A I L Q T Y E K T | H Q E K P M V I L Y C C T S G M R S I K A N K Q L R D  
UniRef90\_D9PXW2 E H L | W V G D L P D N V | D M P E K D V V I Y C C D S G Y K S T I L A A S L L E S  
UniRef90\_K8PHH9 V H A | S R G F L E F H A D | P D S P T H R V V L Y C C A S G N R S A S A K T L K S  
UniRef90\_D1AA19 S N I | P Y Q E L E P R I G | R A V P H R N I P I V L A S P E L D A R G A Q I L Q R  
UniRef90\_UPI0003B36016 I N I | P D T H F D K M K D P | A D K N P F C G G Y H C V K S H N V A K I D L L K  
UniRef90\_A0DUQ2 V N F | P A P N Q Q I H R F | K N Q K D K H I T I Y H F D E K N G I P S A T L F A E  
UniRef90\_UPI0003745389 L N I | P L D H I R A L P E I | R H R G D V L V V C C A S G A R S E N A C R L L V E  
UniRef90\_UPI000421F1EE V S V | P F E O G H Y L K T | L N K S E V K I L V A Y C C R G K Y C S K A V D Y I O K  
UniRef90\_H2VHJ1 I N V | T L D D C R N F K V N S | A N N S E A Y V I C C H R G N D S Q R A V L L R E  
UniRef90\_U1WR51 I S L | P Y E E L E K H L A S | L P T N K E I V A Y C C R G P Y M S A Q A V E I M R T  
UniRef90\_U6I8C2 I N Y | P T M L S R C M N F K | P G H I I C Y D E D E T L S P L V A T V L V E  
UniRef90\_C7Z6K1 V N I | P I S R F M N W P T | D L P P S A P I Y I V C C R V G N D S Q I A A K K L K D  
UniRef90\_Q8FUG5 Y N V | P L G L V S E H K T | D Q E R L F G G R A V V L V C C Q S G V R A E Q A R Q R L G A  
UniRef90\_L1J272 V N I | P H E N E V H K L T | Q N D F Q K A I V V H C C R S G A R S A V A K R I L E E  
UniRef90\_UPI00042AFD2E I N V | Q I Y R L I K E W T A | W D I A R R I I V A C C T S G G R S L I A A Y L L V L  
UniRef90\_UPI00047C6CDE L L A | D V A G E I D R V V H | E V L D A E L V I Y C C S P N S A A V A A K N L M Q  
UniRef90\_W5Y322 K N I | P L S E F V S R V G E | I D D E Q D I Y V I C C A G G R S A K A C E Y L A T  
UniRef90\_Q4JMY0 T N Y | E I S Q N K K L E Y T | E V V V Y D K D E M A S A N S A E K I S K  
UniRef90\_A4VG37 V N I | P L F E M E Q R W G E | L P K D R E L V L V C C E S G E R S L K A T Y Y L Q F  
UniRef90\_J6IX11 V H V | S R G M L E F R A D P | E S P F H D V I V Y C C A S G G R S A L G K V L K D  
UniRef90\_D4F7T3 V N M | A F P M S D M N V W D | K A T M G V F Y C G F V K C A R S H N A A L W A K K  
UniRef90\_K9QL02 L Q I | P V D E L A Q K A N T A | L H K G R I Y V Y G D N E E Q S A R A V Y I L R A  
UniRef90\_W6SCN6 K N I | P M N D L I Q E P E | Y D I N E K Y Y I I C H S G R S D F T C R I L R D  
UniRef90\_A6TNQ8 I N I | V D D Y F E D S G M | P F A N N M T V L L V C C P V G E K S K K F V A L M K K

UniRef90\_UPI000466B52C A G F S H V Y T L T D G L T G W S E N L P L 90 100  
UniRef90\_UPI0003604B7E A G F A Q I A Y L R G G F E S W K Q  
UniRef90\_H1YA05 L G Y T R G Y N I  
UniRef90\_UPI000379F396 K G F K V A N L D G A Y S L Y N T V R P E E I I H  
UniRef90\_U11R58 M G W E V Y V L E G G Y D G  
UniRef90\_I4ECC6 H G Y R A Q R F T H G F P D W Q A G L P V E  
UniRef90\_C8PMB4 A G Y T V I N S L D G  
UniRef90\_J2ZE33 L G Y E A Y V L E G G V S  
UniRef90\_F4FVS3 K G Y K D L Y I L K S G Y Q G W  
UniRef90\_F2I670 E G Y E D I Y I L K G G F N E W E G K  
UniRef90\_R7R0R4 Q G C D A Y N L T G G Y M A W  
UniRef90\_UPI00047B4F88 E G Y K V V N I S G G  
UniRef90\_A5CVM0 M G Y K N V N D L G S F K N Y  
UniRef90\_R5X809 N G F R R V Y S L N G G L D Y Y  
UniRef90\_UPI0002002C71 Q G F P K V W N L Q G G L D A W S V E V D S S V P R  
UniRef90\_UPI000464D78C E G Y D Q I F I L K S G Y A R W Q G K  
UniRef90\_V2XXE3 Q G Y K S I L N Y K G S W L E W  
UniRef90\_T1VLQ5 R G I N A V S V A G G T M A W Y Q S G R Q V E T G A  
UniRef90\_D6XWP5 A G F D H V I V V E G G I S D Y  
UniRef90\_A9BQW7 A A P L L L E G G L A A W Q Q A L P V Q  
UniRef90\_C5Z1Z3 A G F T A V T D L A G G F S T W R E E L P T T I  
UniRef90\_U6RHR4 E G F Q E V Y N G G  
UniRef90\_V8PJE8 L G F S R V Q H F P G G F S E W L E  
UniRef90\_Q38853 A G F T A I T D I A G G Y V A W E N E L P V E  
UniRef90\_X7Z7Q6 A G R A V K R L D D G M L E W R A G L P I D E G A  
UniRef90\_UPI0003608F7E D G F E D V N H L K G G V L K Y F E D V P E E  
UniRef90\_G8TIP7 V G F S Q I N Y L A G G V E A W R N A L D V E V  
UniRef90\_UPI0003D7754B A G Y E H V T S M E G G Y S A W  
UniRef90\_UPI000273FBEE L G Y T G A R H Y A G A Y R E W L E K E D T Q T  
UniRef90\_R7JHK1 Y D Y P V M L L E G G F K T W T E D F  
UniRef90\_E4T7H9 N G F T N V Y N G G G W Q  
UniRef90\_V6M337 H G F H A V S L E G G L T A W K A  
UniRef90\_D3PPI6 E G L E V G K L V G G I Q G Y A A Q Y P L E  
UniRef90\_F3KLN7 F S H Q N V S M L D G G F T K W K E L P I E T  
UniRef90\_W7T469 S G W D A V N V A G G M Q V W Q G G F P L V A A E G  
UniRef90\_A8ZYG1 M G Y V H V K V L A D G W G Q W T R H Y P V E  
UniRef90\_UPI00029A4550 R G L R A R H F L Q G I E L W  
UniRef90\_T2J4F8 M G Y K K V F N L Q G S L F L W  
UniRef90\_Q5FFG3 L G F S K V Y H L K G G I L E Y  
UniRef90\_S3W5U6 E G F T E V K D A G G I R  
UniRef90\_K9QHU7 A G F E H I S Q L I G G L G A W K A G G P T E  
UniRef90\_B4V8M1 A G L P N L R V L D G G M M A W E A A  
UniRef90\_N1W126 R E V N V S R F D P G Y S G W S E G  
UniRef90\_K4QUS4 Q G I D A Y S V A G G T G A W A R G G R P V A A  
UniRef90\_B8M1G8 L G Y E V A N L D G G W K L W  
UniRef90\_J0MGN8 R G F D A F S L N S S Y Q E W R A  
UniRef90\_UPI0003B4B5DB Q G F N Q V T N I G G V E E A A A T T G L E I V T  
UniRef90\_UPI00029A3BB D H G F L D V N Q L H G G V T A Y T H E I  
UniRef90\_W6A6V1 Q G Y N A R T L I G S Y A Y K R K Y  
UniRef90\_UPI000471C8D2 E G V E D V Y H L K G G I L K Y L E E V P  
UniRef90\_C7NCG9 N G F H A Y S L N Q S Y Y D W Q K  
UniRef90\_E3GGX5 E G F T D L R V L R G G V V H W E R  
UniRef90\_T2GKS7 L G Y D N A G Y L A G G F P P W  
UniRef90\_K9XC54 F G C P Q V S V L H G G Y Q A W L A A  
UniRef90\_MON5R8 D G F S D V S V V T G G M R A W N E L Y E T A T V E T A  
UniRef90\_F0W0A2 E G F T K V Y Q L D G G I L K Y F E K V  
UniRef90\_UPI00037FDF5B E G V P A A S L A G G T N A W A A E  
UniRef90\_J1FM36 Q G F K C Y N L A G G I G A W  
UniRef90\_UPI0002002F20 A G Y E Q V L N L Q G G I D A W S V S A D P M V P R  
UniRef90\_UPI00030AAC61 L G Y D A H G V S G G T A V W I D A G R P T A T G  
UniRef90\_UPI000348C232 A G F T E V Y N L S G G I H M Y A Q L V D S R I P T G  
UniRef90\_G6CGS9 A G W D A V N V A G G M Q A W E Q A  
UniRef90\_UPI0003774194 A G F K V E N L D G A F S L Y K A  
UniRef90\_J0V103 L G V K N V Y A L E N G T Q G W F L A D L Q L E H G S  
UniRef90\_UPI00047BE373 K G F E N V Y N L E G G F L Q W R E K L P L S V  
UniRef90\_UPI00035F59AB R G A D A V D V T G G M R D W A A G L P V V D A H G  
UniRef90\_G2NJY1 A D I E A T T L A G G T S A W E S G H G L D R P E G A  
UniRef90\_L8N617 R G Y Q A L T L T G G I T A W R K Q F  
UniRef90\_D9PXW2 H G F S T I T V L G G I G A W R A G Y P V  
UniRef90\_K8PHH9 I G I A N V S H V T G G F S A M Q K A G G E T E S A A  
UniRef90\_D1AA19 L G Y R D V R V L D G G I A A W R R A  
UniRef90\_UPI0003B36016 L G Y K K V V V Y A G G L P E W K K  
UniRef90\_A0DUQ2 K G F E N V Y L L S G G I E K F L Q H Y P  
UniRef90\_UPI0003745389 Q G I A A A T L A G G I G A W A A  
UniRef90\_UPI000421F1EE Q G F T A Y R I E E G I R D W  
UniRef90\_H2VHJ1 A G F N F K D I V G G Y D A W A Q K I D  
UniRef90\_U1WR51 K G I K A S R L E E G V H E W  
UniRef90\_U6I8C2 R G Y E N V F L L S G G L K A W K  
UniRef90\_C7Z6K1 L G L G N I G D I Q G G M R S W K A N V D P S V P  
UniRef90\_Q8FUG5 A G V E T A H V L A G G V N A F A D A G G D V V R G A  
UniRef90\_L1J272 N G Y K N V L N L G G I S D  
UniRef90\_UPI00042AFD2E N G Y K N V F H L E G G L S T W K E G L P S E  
UniRef90\_UPI00047C6CDE Q G Y R R V R P L I G G L D A W E A A L P A E G A E G  
UniRef90\_W5Y322 R D I D A I N V A G G T D G W A A G L P T E  
UniRef90\_Q4JMY0 N N N T K V I Y L E G G I Q S W E N N L P L  
UniRef90\_A4VG37 Q G F T R V S N M E G G L L K W M R K  
UniRef90\_J6IX11 L G Y E K V L N L G A F K D W V A A  
UniRef90\_D4F7T3 L G Y Q H V Y R L P G G I T A W K E A Y P L E K G G T A  
UniRef90\_K9QL02 A G F I D A F E I K G G F H A W K  
UniRef90\_W6SCN6 A G Y N V V D V L Y G T E G Y P G D L E I E  
UniRef90\_A6TNQ8 R G F E A Y S L E G G M V A W R A G Y P M E

UniRef90\_UPI00047B2EFA 1 N[V]P Y V T A Q T V R A W A Q D A G L F L C D V R T S A E F H A K S L P G A 40

UniRef90\_UPI000363D5E2 K N Y E N L D G T T F R T R Y Q S A K A E L L D V R T A Y A D F E K A H V P G A

UniRef90\_UPI000479FA20 K Y K E L T P A G L T L L T I N R E S P L L I D L S A Y A D F E K A H V P G A

UniRef90\_R9BX74 K L I T P K E L T E R I E K G E A Q V I D T R A P K Q H N V S K V E S A

UniRef90\_UPI00047A31E4 R S I Q W H E L A D A M A A G E A V I D V R T E G E F A G A I P G A

UniRef90\_D3F7J0 S L R R I D V A T L H A E L D G M Q V L D V R E R A D W E A G H V P G A

UniRef90\_UPI000479621D S L R R I D V A T L H A E L D P S E G L V L L D V R E P D E W A A G H A P E A

UniRef90\_V4UHV7 R I S S K E Y K E K V V N G E A I L V D V R P A H H F R I V S L P N S

UniRef90\_UPI000346A752 M S H T S V D V H A V R T L T E D P D T L L V D V R T P A E Y E S A R I P G A

UniRef90\_UPI0003B4439C T L N D V T P H D V R R L L L R H E L A L I D L V R T E A A F A T G H P L F A

UniRef90\_UPI00037134EC E T V A P E E L A E A D Y E L L L L D V R N K S E Y L R G T I P G A

UniRef90\_A3YZB0 L S G V P E I S V A E W L S R P R G Q S A V L V D V R P E E Q R V S M L P G A

UniRef90\_E2B1T2 N V D Y K Q L L E A Q K D E N I L I V D V R E H A E I E T G K L P G S

UniRef90\_UPI000361C2CE V D A L D L E E L A A K Y A R D E V H V I D V R T R Y E Y D T L R I D G A

UniRef90\_B7X2U6 M T Q F A N A S T L K S W L H D S N I A V L D V R E H G Q Y G E A H L F Y G

UniRef90\_W7TFF7 P E E W H K S V L D D S N V L V L D V R C R N E F E S E V G R F V T A

UniRef90\_D5VGR0 V R R V D A Q G L A D L A K D I D R T L F D V R T P D E Y V A G H I P G F

UniRef90\_B5YL75 K V I K V N E M K K I Y D A K S A L L I D V R P A G R Y N E G H I P G A

UniRef90\_A2SLJ6 V S E V D P E T V K E Q L E T D E I Q I I D I R S Q T Q F E Q G H L P E A

UniRef90\_U1NEK7 M T T H E L I E R E Q A G E I L T I D V R N K K D R D R G F I E G S

UniRef90\_E6U3W4 R I T S K E F K E I L E K K E H V L L D V R P A H H Y K I V S L P D S

UniRef90\_M4F3A6 N I D T K T L K E K M N D V K I I D T R E K D E Y D G G H I P K S

UniRef90\_T4VZ57 D P R V A W D K L D A G A T V I D V R T A E E F A A G H L D N A

UniRef90\_A9DDR7 M A G I D T I S A Q Q L D E Y Y R Q D V V F I I D L R S P K E Y L E C H Y F G A

UniRef90\_R6VIA2 E L E M V Q W H E I D E L V K A G G L L I D V R E P M E R E F G F I E G S

UniRef90\_UPI00046930D7 S L S P S A I E Q A I K D G A L I V D V R T P A E F A S G H Y P G A

UniRef90\_UPI00037BE811 V P K I S P E R A R E L I A A G A L V V D V R S G P E L I E Q G R V A G A

UniRef90\_I0RCJ8 P Q L S V Q Q A Q E L L G E G R A I V F D V D S R P A F E K Q H I A G A

UniRef90\_A9C0U0 E Y I Q A N E W S F I L R P D C I V I D T R N N Y E T N I G A F K N A

UniRef90\_B3CUU9 M S P Q D V K R K L E A G E I R L V D I R E P D E V E S L R I E G A

UniRef90\_B6WTX8 V Q E W I Q S G A V V V D V R T K S E F A E G H F P G S

UniRef90\_B0SDP8 D G A F V L D V R E P H E Y V T G H V P G A

UniRef90\_UPI00045E80DF I E Q G Q F I N P K Q W D D F I K Q E D V E I I D T R N D Y E F K V I G H F Q N A

UniRef90\_J9YX35 M A Q E H D L S L E Q M K K M S P E E Y V L V D V R D Q T A Y N H G F I P G A

UniRef90\_A0A011AZI7 N I Q W Y D L P A E L A A G K Q L L D V R D A D E L A D G R F K N A

UniRef90\_W6TBH6 F A E V M N S G A V I I D V R T K K E F Q E G H I I K S

UniRef90\_G0J5B2 T T I N K Q Q L E L I K D G S Y V L I D V R N T P A E V D Q Q G V I K S A

UniRef90\_F4PRH3 R Y L S P K E Q L E E M Q D E N T V V L D V R N T Y E Y D V G H F R G A

UniRef90\_F2F7X8 I N S D S L K E N L D D F V I L D A R T P Q E F M G G H L P N S

UniRef90\_F3KM92 R V A H E G L A Q L I A E A G T Y L L D V R S P A E F A D G R L P G F

UniRef90\_UPI00036ADAF7 I D A K A L A R A Q D D V V I L D A R S P L R Y E E G H L P N A

UniRef90\_H5SNH7 P T V A A A Q V E Q W A A R R S L F L C D V R T A E E F V A G T L P G A

UniRef90\_J2MQA6 N V D Y N E L K A Q N D S S V L I D V R E K E E I D E G K L P G S

UniRef90\_UPI00022C8A2F Q N V S S G E F F S I L D T S N A V V L D V R I Y E E F V K D R I P G A

UniRef90\_UPI000237C864 P N L A P E T L K K W L N E Q E V V L D T R N T F E V Q C G S F E K S

UniRef90\_UPI00029AE54E I S S L E M K K L D S E S P F I I D V R T P D E Y N M M R I E T L

UniRef90\_Q3A484 T Y S A I S A N D L N K K I S K D F V L L D I R P F E A Y I A E H I M D S

UniRef90\_K1ZBA1 T V D A A T L D A W R A E R D L A I L D V R T I E E F E A S R I A D S

UniRef90\_A8TKP6 K D V T Y R E L K T L L N S K N I M L I D V R D T W E I E H G K I P G S

UniRef90\_UPI00042AB7FE I D A P E L A R W Q Q P S T Y L F D V R S P E E Y A A G H L P H S

UniRef90\_L8BH76 L E P E E W R R V T E E D H V M I D V R N N Y E S K I G H F K G A

UniRef90\_UPI000362CF38 Q V D Q P A L E A L Q R T D S V L I D V R T E Q E F A E G A L P G A

UniRef90\_UPI00031A633C M S S F A S I S P D K L S R L I G T P Q A I I D V R T D E D F A A D P I P G A

UniRef90\_A5EKJ8 M S E S P L I S V K E L E A K L S D D N L L I L D V R D P A E Y E A G H I P G A

UniRef90\_R7BY74 E L D G D L V S L L E A R E F K L V D V R E Y M E W Q M G H I K G A

UniRef90\_E0URB6 S V K E V S I L Q T D E K E N A I Y L D A R S K R M E F W D H I K D A

UniRef90\_UPI0004757B47 R S L S N G E L T A L V N G D K A V V I D I R P S K D Y S A G H I V I G A

UniRef90\_L1M5M5 T R I R A K E L D A V L R E R N V Q L I D V R P A V I E F G H C H I P G S

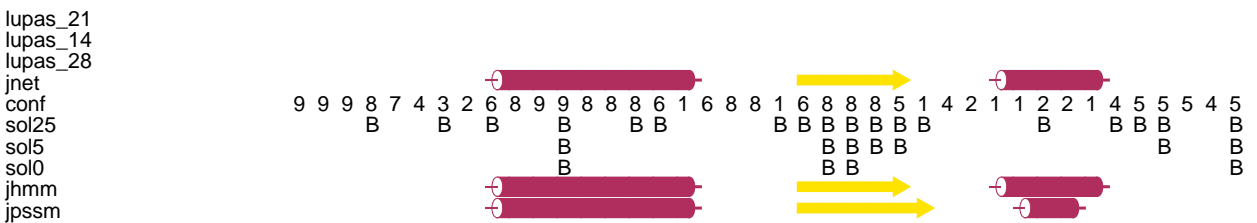
UniRef90\_M2R311 S V S A Q Q F A E L L Q S E K I Q L L D V R T T E E Y H H Y H I A D S

UniRef90\_E6XC22 I L D V R N D N E W N N G H L S Q A

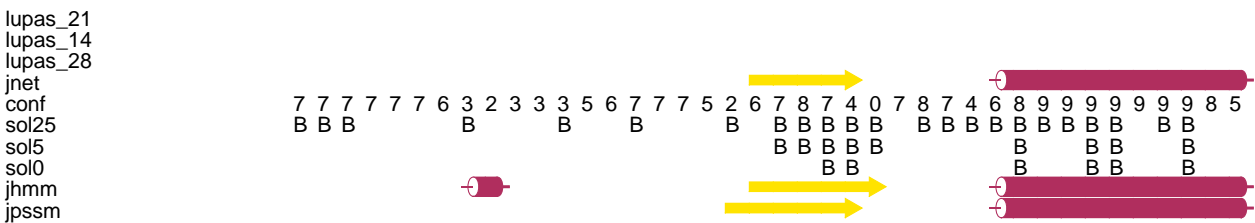
UniRef90\_Q9S0L8 V K R V T L A D L A Q W K S Q T D T Y F F D P R T P E E Y E A G H L P G F

UniRef90\_M1T3W6 I T A Q E G K K M M Q E D K L L I L D V R H A H E Y E W G H I P G A

UniRef90\_R7KM87



UniRef90\_UPI00047B2EFA Q H T P G G Q Q L I Q A Q Q K T M D K N K E Y F V F C R S D G V R A P V V A S W L R Q  
UniRef90\_UPI000363D5E2 K N L D V S S S Q F Q Q K T M D K N K E Y F V F C R S D G V R A P V V A S W L R Q  
UniRef90\_UPI000479FA20 R H V A M S Q F D P E H K D K A R E L P V V L T D K D G R G L D K A A Q R L I K  
UniRef90\_R9BX74 I N I P L G E L R V K S R E L D R N L P T V T Y C N G G V T G N A A Q N V L R N  
UniRef90\_UPI00047A31E4 I N L P L D E L R E R L T E L P E G P L V V H C A V G V R G H A G A R L L A E  
UniRef90\_D3F7J0 L H T A Y H D L G E L P A G L D P A R P V A T I C A S G Q R S A I A A S L L A R  
UniRef90\_UPI000479621D V H V P L G E L P S R T G A D L P D D R P V H V I C R S G G R S A R A A A W L N A  
UniRef90\_V4UHV7 I N I P L K E K E E H R G S N A S S G S N L Y V V C R R G N D S Q R A V Q A L H K  
UniRef90\_UPI000346A752 V N L P L Q D A H L E R I A S R T G G R L V I V C Q S G A R A L R F Q E R L A G  
UniRef90\_UPI0003B4439C A N L D V D R I T I E I R I P R A D V Q V I L Y D D G E G L V E T A A A K L L A  
UniRef90\_UPI00037134EC V Q L S A G K V L W N Q D S L P R D G R I I S F C Q S G L R S S V A A S A L R S  
UniRef90\_A3YZB0 I N I T Q Q Q F E L S G D R Y R G V L V P Y C C T I G L R S G L Y A R E L Q A  
UniRef90\_E2B1T2 I N I P M D D E R Y G K H K P D K D T K I I F S C R S G R R S G I V Q E T V Q K  
UniRef90\_UPI000361C2CE R H V S I D D E D F E I H E E D P D K P V A F Y C H T C F M S Y Q A V E R M K A  
UniRef90\_B7X2U6 T P L P F S R L E I D A P R L V P R K T V R V V Y D D G G E A L R A A Q R L Q D  
UniRef90\_W7TFF7 F R E S W D V L K T R L A D V P K D T P I L T Y C T G G I R C I K V G A Y L K E  
UniRef90\_D5VGR0 R S A P G G Q L V Q E T D V F A P V R R I V L A D D L G P R A D M T A S W L A Q  
UniRef90\_B5YL75 I N I W F A E F D K H I D P K D K N S L V Y Y C Q G P T U A P S S A R R A E A  
UniRef90\_A2SLJ6 L R N L P L S Q I K K R Q I P R D P A R S V L L I C R T Q N R S S K L A A M L Q A  
UniRef90\_U1NEK7 I N I P L D K L P R R T E E V D W K Q N I V V A C C P I G Q S S V I Q A R L I Q S  
UniRef90\_E6U3W4 L H I P L Q K I R S E L A G F H K D D L I V V H C C N K G V S G N A A Q N L I N  
UniRef90\_M4F3A6 L N I P L A N L E H G N T G S C T S P S L Y V V C R R G N D S Q R A V E Y L R G  
UniRef90\_T4VZ57 I N I P F N E V Y F K D E G I N K D D E I V T Y C T S G I R S G H M A L I L K S  
UniRef90\_A9DDR7 I N I P F E Q D A A K I N D I A K D T H L V L Y C R S G R R S G L A F D T L V A  
UniRef90\_R6VIA2 L N L P Y E D F D A E I N T I L E H L P M L L Y C D R G S S G L M A A R E L M K  
UniRef90\_UPI00046930D7 I N I S L N D I R N R L E E L P K D Q T I Y V S C C Q V G L R G Y L A S R I L T N  
UniRef90\_H2CJX4 V N I P L D E I L D R R M N E A D T N R E I I V L Y C R S G R R S G L A L D Q V R R  
UniRef90\_UPI00037BE811 K L I P L G K L R N C L L E L P M D K E I I A F C C K I S L R G Y E A E R I L T G  
UniRef90\_I0RCJ8 L H V P R G M L E F R D D H F V R D K P V I V Y C A S G G R S A L S G Q A L K E  
UniRef90\_A9C0U0 R F A V P D R L P S F V Q A L P R A Q V V L T S P D G V L A R S V A A E L A A  
UniRef90\_B3CUU9 V I P N T D T F K P S F P D W I L Q N K D V A M Y C T G G I R C V K S T A Y L  
UniRef90\_B6WTX8 E I A P L S V I R W Q D F R P V I T D K P V V F T C N S G R R T K N N S D L L E Q  
UniRef90\_B0SDP8 Q N I P V D V L P N E G A L K N K Q S K I V V Y C R S G A R S E R A K Q I L T A  
UniRef90\_UPI00045E80DF Q L I P V G Q L P A R E V R D L P R D E R I Y V I C A S G N R S R V M T D L T R  
UniRef90\_J9YX35 T N P D I K T F R D F K K Y I E Q N K K V A I Y C C T G G I R C E K A G P L M Q K  
UniRef90\_A0A011AZI7 I N I E K E A L R N G E P S L P R D R K L I L Y C C K G I R S E E A E R H L T K  
UniRef90\_W6TBH6 I N I P L D Q L R D R L S E L N P H Q A Y I V S C F S G O R S Y M A E R I L K Q  
UniRef90\_G0J5B2 T N I P L D T L S N H S R L K D K N Q P I I T C C A S G M R S A S A K R I L K A  
UniRef90\_F4PRH3 I H L P L G M L Q A L T M M F A I D D N I I F Y C C K G V R S D M A A Q M A K S  
UniRef90\_F2F7X8 I R P E V K N F R D T P Q W V R D N R N V L T Y C C T G G I R C E K F S G W M K R  
UniRef90\_F3KM92 K L I P F T Q N L F S D N Q I P K E S Q I V C Y C M H G H R A S S L F L Q L V I  
UniRef90\_UPI00036ADAF7 R S A P G G Q L V Q E T E Q F A P V R G A R F V D T D G V R A N L T A H W L R Q  
UniRef90\_UPI00037C864 V N G P P A Q L E R V F S A A G V A H T R P V V V Y G G E Q S C D A A S W L E Y  
UniRef90\_J2MQA6 Q H T P G G Q L I Q S T D L Y I R Q A R V V L F D S D G V R A P I I A G W L R Q  
UniRef90\_UPI00022C8A2F I H I P M G D E R F K K E K P S K N T K I I L S C R S G K R S G M V Q E E I R K  
UniRef90\_UPI000237C864 V Y G E K M G V L L D L V K D F E K D I P L L I Y C G Y G E R S E T V M K I L K K  
UniRef90\_UPI00029AE54E I H L D L K H F R Q K I P Q N L K K V P I V T F C C T G G I R C E K A S A L L L N  
UniRef90\_Q3A484 I P I S D L R N R L Q D L P Q D K D Q E I V C Y C K I S L R G Y E A Q R L L E A  
UniRef90\_K1ZBA1 L N L P V D E F P V S K I D T H S Q V I I I G E K N G D E N S V A V E K L K E  
UniRef90\_A8TKP6 R H A P G G Q Q G T D L Y L M V R N S R V V L V D D K R V R A D M T A S W L A Q  
UniRef90\_UPI00042AB7FE I N I P L D E V G K A L Q M N P R D F K E K Y H C F A G I R S K K A V D T A I S  
UniRef90\_L8BH76 V N A P G G Q L V Q E T D H Y A S V R R I V L V S D D E I R A P I A A S W L A Q  
UniRef90\_UPI000362CF38 I N F Y D F P Q W L E E A N I P K D K K V L M Y C T G G I R C E K F S V L M K E  
UniRef90\_UPI00031A633C T R I E T A D L A E R I A T P D K N A P V V L Y C R S G R R A S A A Q A L L Q E  
UniRef90\_A5EKJ8 I R R P A V E A P Q W S A F A G R S V I V I C Q R G A K L S H G A A W L R V  
UniRef90\_R7BY74 R F T D F C V N M R R L G L N P A S R V V V Y D Q G D C N F A A R L W F T L R W  
UniRef90\_E0URB6 D P T S S F F Q T W E A K I E S Q K D E N I I L Y C H V G S R S A H V A R I L T D  
UniRef90\_UPI0004757B47 K F I G Y D T N F K A L E S Q K D E N I I I Y C S V G S R S E V I C K K L S E  
UniRef90\_L1M5M5 I N I P Q D K F A A R I E K H K G S K T L I V D N M G Q H S G T I C R D L L K  
UniRef90\_M2R311 I N V P L S K E N P A D Y V D S N D P E T Y V I C R L G N D S Q I A V D A L R S  
UniRef90\_E6XC22 I H I P L S D L E S N L E K I D Y S K T I Y V I C Q S G I R S Q K A I H L I T A  
UniRef90\_Q9S0L8 V H V P H G K L L E T D L P F N K N D V I Y V H C Q S G I R S S I A I G I L E H  
UniRef90\_M1T3W6 R S I P G G Q Q E T E M V A P V R G A R I V L S D P G G V R A N M P A S W L A Q  
UniRef90\_R7KM87 V L L D N D D I R P E S L P E D L D H P L I I Y C R S G V R S H Y A M L K L Q A





UniRef90\_UPI00047B2EFA M G H D A S V L E D G L S 90 100  
UniRef90\_UPI000363D5E2 E G F K A Y N L A G G I G A W  
UniRef90\_UPI000479FA20 A G F G K V Y T L G G G V L J A W Q A Q L P V  
UniRef90\_R9BX74 L G F N D I Y N L S G G N K N Y Q N  
UniRef90\_UPI00047A31E4 H G R E S R N L D G G Y K T W  
UniRef90\_D3F7J0 L G V E P V H V A D G G V G T W R D H G P L E T  
UniRef90\_UPI000479621D A G V V D A V N V E G G M K A W Q A H G R P M V T D R A  
UniRef90\_V4UHV7 L G F T S A R D I T G G L E S W A N D V D P  
UniRef90\_UPI000346A752 A G A A D T A V L T G G M N A W R A A G G P V V E  
UniRef90\_UPI0003B4439C L G Y R N V R A L S G G L A G W R D A  
UniRef90\_UPI00037134EC A G F D V V E L E G S Y A G W A Q N  
UniRef90\_A3YZB0 Q G Y R V R N L A G S A L J A W A H A  
UniRef90\_E2B1T2 L G Y T K A Y N Y T G W L D W E  
UniRef90\_UPI000361C2CE A G F D D A M A M D Y G I F D W A E H Y P E D T A  
UniRef90\_B7X2U6 L G Y T D V H V L E G G T K A W Q A A  
UniRef90\_W7TFF7 L G F Q N V A R L E G G I V S Y A R H L R G T Q G A G  
UniRef90\_D5VGR0 L G W E V Y V L E G G F G G W T S S L P P E V E T  
UniRef90\_B5YL75 L G Y T N V K Q F V D G L P E W K K Q Y P V  
UniRef90\_A2SLJ6 Q G Y T N V S Y V D G G M K E W T R H F P T E  
UniRef90\_U1NEK7 Y E N V Q S M A G G Y D A W E Y E L  
UniRef90\_E6U3W4 N G F R N V Y N L S G G Y K Q Y  
UniRef90\_M4F3A6 W G F D S A K D I I G G L E A W A D V  
UniRef90\_T4VZ57 I G Y D N V K N Y D A S Y E W A K T N P V E  
UniRef90\_A9DDR7 E G F T Q S Y N G G G F E  
UniRef90\_R6VIA2 K G Y R V K S V V G G I H S Y S  
UniRef90\_UPI00046930D7 K G Y H V K N V D G G W K T Y S  
UniRef90\_H2CJX4 A G Y T K A F N  
UniRef90\_UPI00037BE811 A G F K N V K Y M D G G V V C W  
UniRef90\_I0RCJ8 L G Y Q Q V Y N L G A F G D W A S G G P V E K A  
UniRef90\_A9C0U0 R T G R D V R S V V G G T S A W A A  
UniRef90\_B3CUU9 I G F D Q V Y H L K G G I L K Y  
UniRef90\_B6WTX8 L A A G E A W Q M E G G A T A W K A G L P V  
UniRef90\_B0SDP8 S G Y S S V I N A G G L  
UniRef90\_UPI00045E80DF N G F D A L S V Q G G T G E W R S G R P V V V G  
UniRef90\_J9YX35 Y G I D T Y Q L K G G I L K Y F E D T P A S Q W N G  
UniRef90\_A0A011AZI7 Q G Y E A Y N L R G G Y G E W  
UniRef90\_W6TBH6 H G F A V E N L D G A F A L Y A A V R P  
UniRef90\_G0J5B2 G G Y K V V Y N G G A W  
UniRef90\_F4PRH3 M G F R H V V N Y P G S A A E W  
UniRef90\_F2F7X8 E G F G E V G Q L H G G V A T Y G K D P V A K G  
UniRef90\_F3KM92 A G Y E N V K L Y D G S F V D W G R R L P L E  
UniRef90\_UPI00036ADAF7 M N H E V Y V L D G A Q A Q W S A D L P P  
UniRef90\_H5SNH7 A G H K S V C L L D G G I E A W V R A V P V V V E S  
UniRef90\_J2MQA6 L G H E A Y A L A Q G V D  
UniRef90\_UPI00022C8A2F L G Y E N A Y N Y V G G W L D W E  
UniRef90\_UPI000237C864 R G F T N L F H L K N G Y E E W R K E F P V D  
UniRef90\_UPI00029AE54E A G F E K V Y Q L E G G I L N Y  
UniRef90\_Q3A484 H G W K N V K V L E G G V M A W  
UniRef90\_K1ZBA1 E K I E N I K V L A G G M E S W K Q I I N T S V T Y G  
UniRef90\_A8TKP6 L G W S D V Y V L D S G L D G  
UniRef90\_UPI00042AB7FE L G F T S A Q H Y A G G W K E W A N  
UniRef90\_L8BH76 M G W E  
UniRef90\_UPI000362CF38 N G W E D V N Q L H G G I I R Y G K E  
UniRef90\_UPI00031A633C L G Y S Q V I N A G G Y Q E L N G L V P L  
UniRef90\_A5EKJ8 A K A S A E N L D G G F E A W K A A  
UniRef90\_R7BY74 V G F K H V R V L D G G W A T W K A G M A V Q T E E P A  
UniRef90\_E0URB6 N G Y T K I G N L T N G I V S Y S G E I  
UniRef90\_UPI0004757B47 L G F T N V S N L Y G G L F E W V N Q  
UniRef90\_L1M5M5 A G F T A A K L S G G V S S W K A  
UniRef90\_M2R311 A G A K G V K D L V G G L R A W A H D V D  
UniRef90\_E6XC22 I K P E R L V N I E G G I N  
UniRef90\_Q9S0L8 K G Y H N I I N V N E G Y K D  
UniRef90\_M1T3W6 M A W D V Y V I D G I K E W K P A L P  
UniRef90\_R7KM87 A G Y T H V Y D M G G I I D W

