

QUERY 1 10 20 30 40  
UniRef90\_J6UJD4 A T P D D L F A F L D R L G S V V D H K T L V R H P P P L F T T V E E D S R K L R R G E E L P P  
UniRef90\_K2KM47 T T A D A D L F A R L Q A E M Q Q I T S Y E V E H R H H P P P L F F T T I V E E D S K E L R G L E K E  
UniRef90\_R6QT32 M Y T Q K E D V R K R L Q E D E K Q I D Y S T K Y E H H P P P L F F T T V E E Q A K Y V S S S K  
UniRef90\_F4HPK3 T K D Q L L D R L Q E L E I I D Y S T K Y E H H P P P L F F T T V E E Q A K Y V S S S K  
UniRef90\_UPI00047ED640 K T R A A L M A F L D R L G A I A S H S T L R H H P P P L F F T T V E E Q A K Y V S S S K  
UniRef90\_UPI0002B4C148 UniRef90\_UPI0003C10CAC L A T A E D L F A F L D R L G A I A S H S T L R H H P P P L F F T T V E E Q A K Y V S S S K  
UniRef90\_D5BMJ9 T T P Q E A L M A V L K R L G I I S F S Q T H H H P P P L F F T T V E E Q A K Y V S S S K  
UniRef90\_UPI00035E5EC4 T T T Q Q G L L A Q L T D M G I S H S Q T H H H P P P L F F T T V E E Q A K Y V S S S K  
UniRef90\_F8JGA2 T R Q Q C L F Q T L A D L G I I E T E T I G H H P P P L F F T T V E E Q A K Y V S S S K  
UniRef90\_I4YZH8 T R Q Q E L F D R L S S L G I I K T E T Y D H H A P V F T T V E E S A S A E T G H V P  
UniRef90\_I3TQD2 A T R A D L F A F L D R L G I I K A H T E T Y D H H A P V F T T V E E S A S A E T G H V P  
UniRef90\_UPI00047E3E22 T N E Q R V Y E L D L L G I I K A Y T K Y E H N A V I F T T V E E A K E N L D I D I P  
UniRef90\_A0A059FD86 A T P E D L F A Y L D T L G I I K A H T T H W H E A V F T T V E E D Q G A K E L K A A M P  
UniRef90\_U2W2K9 M E N I K E R T L L A A L D A A G I I R Y D K L E H H P V V C T M E E M D A A G I T A R  
UniRef90\_W9QVS0 T K D Q L L S R L Q E L G I I D Y S K F E H H P V V L T V E E A Q A E H V G D L G  
UniRef90\_B8IUF2 T P E K L L S R L A D L G I I P V R T V A H R P V H T V E E A S R A D L K A G L P  
UniRef90\_S8D4J2 T K E K L L S R L E E L H I K F S A Y E H H P V V L T V E E A S R A D L K A G L P  
UniRef90\_G6YD63 K T E A E L L A F L A D L G I I T V S T R R H H P P L Y T T V E A D S Q A L R G E I P  
UniRef90\_UPI0003667A49 A S P E E D L F A Y L D R L G I I D F H E A R V D H A T F T V E D E G R D L K E S A M P  
UniRef90\_F4XEM9 T T E E A V Y D K L E E L G I I D F F A R V D H D A D T M E D C L K I E S I L G  
UniRef90\_M0Y424 R T K D E L L A R L E E L K I I D F K R Y D H H P V V L T V E E Q A K H V I G N F G  
UniRef90\_R6DBW4 L P Q E A A A F D L D K L G I I E Y D R V S H K D A A F N M E E L C A E V S R A L D  
UniRef90\_R7CQT4 L N K E E T C Q Y L K D H G I I T F E T T E H K A V F N M E E L A E V K L P Y P  
UniRef90\_T3GML7 N E T K I Y D I L D K L N I V E Y D V V E H E A V Y T A E Q L V I L D G I T K  
UniRef90\_A0A010Z5E1 L P K E I R T Y D L L E K L N I V S Y Q R V D H H P L P T I E A C H R E I V D A L L K  
UniRef90\_R5CXC6 L P K E Q R C Y E L L D R L G I I P Y Q R F E H H P V Y T C E E A A R L T P D L P  
UniRef90\_U1A2I2 L P K E Q R V Y F T L D S L G I I S Y T R I L D H D P T E T I E S C H E R V E R L D D  
UniRef90\_E7GK05 L P K E Q R V Y F T L D S L G I I S Y T R I L D H D P T E T I E S C H E R V E R L D D  
UniRef90\_I3YQD4 L E N E Q Q V Y D K L D S L G I I E Y K L I E H E P L F T A E D M D K I A D R A P  
UniRef90\_E0E2Z8 L D R E I R V Y D L D D S L G I I D Q F K R T D H H E P A T T M E A C C R K I A D K A L G  
UniRef90\_UPI0004106AB3 L D K E I R V Y D L L D K L S I V T Y Q R V D H H E A A M T M E A C C E I I D L G D D  
UniRef90\_R5DM92 A N K D T E V Y Q L L E K W G V P Y E R V D H H K A V Y T V A E I D F S I D  
UniRef90\_D4LYV9 A T D T E V Y Q L L E K W G V P Y E R V D H H K A V Y T V A E I D F S I D  
UniRef90\_R2S1M8 N K Q E T Y D F L T Q S G V K F F E T E H K A V Y N M A E L A Q I D N P H P  
UniRef90\_R7KR17 A S P E A L F A Y L D G L G I I A H R T H R H H A A V F T V D E G R D L K A T M P  
UniRef90\_A0A059FM52 L A K E V R V Y D L L D S L S I I E Y E R V D H H E A A N T M E D S C E E V D K L L D  
UniRef90\_R5NHW9 L A K E T A L F D Y L E N L G I I K T S T H A H H V P L F T V E E D S Q K L R G D L P  
UniRef90\_K2L973 G K E E V C A Y L D E R G V V Y D R V D H H E A V F T V E E A M D A L E L P F A  
UniRef90\_S6CFJ0 G R A D L F A F L D R L G I I K T E T T H H E A V F T V E E A M D A L E L P F A  
UniRef90\_UPI0003645561 G R A D L F A F L D R L G I I K T E T T H H E A V F T V E E A M D A L E L P F A  
UniRef90\_UPI0004737075 T P D A L L D L L A E N G I I A A T T H A H H P P V H T V E E S Q A L R G D I P  
UniRef90\_A7IC32 T E I Q V L D F L D K L S I I P Y E R A D H P Q A D T I E A S C Q S L R D G A I Q  
UniRef90\_R6YRM2 T S A E L H Y E Y L K N L D I E V K T V E H H P P L F T V E E S Q S L R G E I A  
UniRef90\_M3JL72 E R E I A V Y D L L D Q L E I I P Y Q R I D H A E P V F T C E E A S R L L P N L P  
UniRef90\_X4V3U3 K T R D D L F A F L D G L D I I K H S T K S H A P V F T V E E S V A L R D E I P  
UniRef90\_R5JZ04 M D L Y T P V V A K L N E L S I V S F T V H D H H V A V A T V E D S A V T G H I P  
UniRef90\_J2IYQ9 T P P Q L V V A K L Q D L G I I Q T E T K T H A P P A L T T V E E S K A L R G D L P  
UniRef90\_F6IDS0 M E A Y E K V V E M L N G L D I P F E I V E H H E P A L T T E Q A D S F I E G I E  
UniRef90\_UPI000380B4F3 M D A F E K V V E K L K E L D I P Y F L V E H H E P A L T T E Q A D A F I E G I E  
UniRef90\_UPI0003764E8C N K A E V Y A Y L D E H K I I Q Y E V T E H K A V F N M K E I S D I K L P Y P  
UniRef90\_F9P1G4 L P K E I R T Y D L L D S L G I I T Y T R A D T L P T M E A C C V G K L L G  
UniRef90\_F9HGD7 M T D D S R L H A E L R S A G I A F D Q V E H H E A V F T V L E S S A I E E R A I P  
UniRef90\_R5BWJ4 L E K E I R T Y D L L D H L D I A Y E R V D H H E P A M T M E V C Q A I D E V L Q  
UniRef90\_B0E662 A S R D E L M G F F Q D L G I I S V I T V D H D P V F T V A E S G D L H D R I P  
UniRef90\_R5PZ7 L P Q E A A F A L L E E L G I I E Y D R V S S E P A D T M E K C A A V S E A L G  
UniRef90\_W9BST0 M E Q Y K M P K D K L N E L N I D F K I V E H H P P A F T T K Q C A D E F I E G H E  
UniRef90\_C2KXP5 L A D S Q H L M T M L A E L D I V T T T V E H H P P L R T L E D S K R L R G N L A  
UniRef90\_R5EEC7 K Q S L V A F L D Q L G I I Q H L T Y R H D P V F T V E E A V S A D G G M P  
UniRef90\_UPI00041A2BF1 E K I V A A F L H A L G I I P L E N V D H H V P A F T V E E Q A A A V G H L P  
UniRef90\_B9QVR3 L E K E L A V Y D L L D E L E I A Y E R V D H H E A L Q T I E A C R E V D E T L G  
UniRef90\_R9MICY3 T E D E L Y A E F A K A G I A T E T I E H H P P V Y T V D Q S T A I V D A L P  
UniRef90\_UPI00038037F6 L E K E I R T Y D Y L D N L G I I E Y E R V D H H E A A E T M E A C K A V D E A L G  
UniRef90\_A0A011RXD0 N K E E V Y A F L K E K S I P F E V T E H H K A V Y N M A E L T E V G L P H P  
UniRef90\_UPI00037FF559 L E K E Q K V Y K L L D Q L H I E Y D R I D H H E P A M H M D V C E I E D K T L G  
UniRef90\_W4GVM1 S S D D V L A L L D A W S I A Y T R A D H H V P L R T V E D S K K V Q N E E G  
UniRef90\_R6WBG8 A K E E R V Y D L L E K L H I D Y Q R I D H H E K A D T M E I C L E I E K S L Q  
UniRef90\_X0STK4 L E K E I R T Y D Y L D N L G I I D F K R I E H H P A V Y T I E E M K A L D F P A H  
UniRef90\_UPI00037AC1AA L E K E I R T Y D Y L D N L G I I A P E S H S H P P V M T V A E S E Q L A L E I P  
UniRef90\_D4I260 L E K E N R I Y D L L E E L S I I P Y Q R I V R H K D A M Y T V E E A K S I P L E I S  
UniRef90\_R7EQD7 K K D E I Y Y K F L K N L G V K F K L D N H K A V F S M G E L D D E S L K Y P  
UniRef90\_R7EC14 N K Q E I Y N F I K S K N L W H E I T E H E A V F N M D E L S K I E V P Y N  
UniRef90\_U4USH8 N K E E I Y N F I N E K D F W H E I T E H E A V F N M D E L S E V D L P Y P  
UniRef90\_R5QU95 T P S E L Y H F L D E H Q I S Y E K F D H H P A V Y T V E E S K K L S P E I S  
UniRef90\_G4L750 E L E A R L R A L L G I I P V S L T I D H H P V F T V E E S A D L H G D R I L G  
UniRef90\_W0PGS4 L A D K Q K A A V L T Q L N I I E Y D V I E H H P A L H G S L D A D E L M V N R P  
UniRef90\_R7EYF0 E K E A V Y F D L L E R L D L M D Y T I V E H H P A A F T M E E C A E V S Q A L H  
UniRef90\_D4J782 M S L Y L E L I N K L D N L K I P Y E I V S H H P A L T T K Q A D S F I E G I E  
UniRef90\_UPI00037C4EC3 E K V S R L N E L D I D R F K L Y K H K E V F T I D D D N L A I K F D  
UniRef90\_R5SZ35 T P S E L Y H F L D E H Q I S Y E K F D H H P A V Y T V E E S K K L S P E I S  
UniRef90\_R2SNE4 E L E A R L R A L L G I I P V S L T I D H H P V F T V E E S A D L H G D R I L G  
UniRef90\_UPI00026276B5 L A D K Q K A A V L T Q L N I I E Y D V I E H H P A L H G S L D A D E L M V N R P  
UniRef90\_G8PGP2 E K E A V Y F D L L E R L D L M D Y T I V E H H P A A F T M E E C A E V S Q A L H  
UniRef90\_UPI0003D08BBD M S L Y L E L I N K L D N L K I P Y E I V S H H P A L T T K Q A D S F I E G I E  
UniRef90\_E6RJR0 E K V S R L N E L D I D R F K L Y K H K E V F T I D D D N L A I K F D  
UniRef90\_R7FCY4 T P S E L Y H F L D E H Q I S Y E K F D H H P A V Y T V E E S K K L S P E I S  
UniRef90\_G7SHH2 M T R E E T V L N Y L R E H D I P F T N Y N H P E G K T I E E A K Q W W K D D G  
UniRef90\_UPI0003794C79  
UniRef90\_K6U660  
UniRef90\_UPI0003330242  
UniRef90\_R6W6J3

QUERY UniRef90\_J6UJD4 UniRef90\_K2KM47 UniRef90\_R6QT32 UniRef90\_F4HPK3 UniRef90\_UPI00047ED640 UniRef90\_UPI0002B4C148 UniRef90\_UPI0003C10CAC UniRef90\_D5BMJ9 UniRef90\_UPI00035E5EC4 UniRef90\_F8JGA2 UniRef90\_I4YZH8 UniRef90\_I3TQD2 UniRef90\_UPI00047E3E22 UniRef90\_A0A059FD86 UniRef90\_U2W2K9 UniRef90\_W9QVS0 UniRef90\_B8IUF2 UniRef90\_S8D4J2 UniRef90\_G6YD63 UniRef90\_UPI0003667A49 UniRef90\_F4XEM9 UniRef90\_M0Y424 UniRef90\_R6DBW4 UniRef90\_R7CQT4 UniRef90\_T3GML7 UniRef90\_A0A010Z5E1 UniRef90\_R5CXC6 UniRef90\_U1A2I2 UniRef90\_E7GK05 UniRef90\_I3YQD4 UniRef90\_E0E2Z8 UniRef90\_UPI0004106AB3 UniRef90\_R5DM92 UniRef90\_D4LYV9 UniRef90\_R2S1M8 UniRef90\_R7KR17 UniRef90\_A0A059FM52 UniRef90\_R5NHW9 UniRef90\_K2L973 UniRef90\_S6CFJ0 UniRef90\_UPI0003645561 UniRef90\_UPI0004737075 UniRef90\_A7IC32 UniRef90\_R6YRM2 UniRef90\_M3JL72 UniRef90\_X4V3U3 UniRef90\_R5JZ04 UniRef90\_J2IYQ9 UniRef90\_F6IDS0 UniRef90\_UPI000380B4F3 UniRef90\_UPI0003764E8C UniRef90\_F9P1G4 UniRef90\_F9HGD7 UniRef90\_R5BWJ4 UniRef90\_B0E662 UniRef90\_R5IPZ7 UniRef90\_W9BST0 UniRef90\_C2KXP5 UniRef90\_R5EEC7 UniRef90\_UPI00041A2BF1 UniRef90\_B9QVR3 UniRef90\_R9MICY3 UniRef90\_UPI00038037F6 UniRef90\_A0A011RXD0 UniRef90\_UPI00037FF559 UniRef90\_W4GVM1 UniRef90\_R6WBG8 UniRef90\_X0STK4 UniRef90\_UPI00037AC1AA UniRef90\_D4IZ60 UniRef90\_R7EQD7 UniRef90\_U4ECL14 UniRef90\_U4USH8 UniRef90\_R5QU95 UniRef90\_G4L750 UniRef90\_W0PGS4 UniRef90\_R7EYF0 UniRef90\_D4J782 UniRef90\_UPI00037C4EC3 UniRef90\_R5SZ35 UniRef90\_R2SNE4 UniRef90\_UPI00026276B5 UniRef90\_G8PGP2 UniRef90\_UPI0003D08BBD UniRef90\_E6RJR0 UniRef90\_R7FCY4 UniRef90\_G7SHH2 UniRef90\_UPI0003794C79 UniRef90\_K6U660 UniRef90\_UPI000330242 UniRef90\_R6W6J3

50 60 70 80

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

QUERY	90	100	110	120
UniRef90_J6UJD4	L	V	V	D
UniRef90_K2KM47	L	V	V	D
UniRef90_R6QT32	L	V	V	D
UniRef90_F4HPK3	L	V	V	D
UniRef90_UPI00047ED640	L	V	V	D
UniRef90_UPI0002B4C148	L	V	V	D
UniRef90_UPI0003C10CAC	L	V	V	D
UniRef90_D5BMJ9	L	V	V	D
UniRef90_UPI00035E5EC4	L	V	V	D
UniRef90_F8JGA2	L	V	V	D
UniRef90_I4YZH8	L	V	V	D
UniRef90_I3TQD2	L	V	V	D
UniRef90_UPI00047E3E22	L	V	V	D
UniRef90_A0A059FD86	L	V	V	D
UniRef90_U2W2K9	L	V	V	D
UniRef90_W9QVS0	L	V	V	D
UniRef90_B8IUF2	L	V	V	D
UniRef90_S8D4J2	L	V	V	D
UniRef90_G6YD63	L	V	V	D
UniRef90_UPI0003667A49	L	V	V	D
UniRef90_F4XEM9	L	V	V	D
UniRef90_M0Y424	L	V	V	D
UniRef90_R6DBW4	L	V	V	D
UniRef90_R7CQT4	L	V	V	D
UniRef90_T3GML7	L	V	V	D
UniRef90_A0A010Z5E1	L	V	V	D
UniRef90_R5CXC6	L	V	V	D
UniRef90_U1A2I2	L	V	V	D
UniRef90_E7GK05	L	V	V	D
UniRef90_I3YQD4	L	V	V	D
UniRef90_E0E2Z8	L	V	V	D
UniRef90_UPI0004106AB3	L	V	V	D
UniRef90_R5DM92	L	V	V	D
UniRef90_D4LYV9	L	V	V	D
UniRef90_R2S1M8	L	V	V	D
UniRef90_R7KRI7	L	V	V	D
UniRef90_A0A059FM52	L	V	V	D
UniRef90_R5NHW9	L	V	V	D
UniRef90_K2L973	L	V	V	D
UniRef90_S6CFJ0	L	V	V	D
UniRef90_UPI0003645561	L	V	V	D
UniRef90_UPI0004737075	L	V	V	D
UniRef90_A7IC32	L	V	V	D
UniRef90_R6YRM2	L	V	V	D
UniRef90_M3JL72	L	V	V	D
UniRef90_X4V3U3	L	V	V	D
UniRef90_R5JZ04	L	V	V	D
UniRef90_J2IYQ9	L	V	V	D
UniRef90_F6IDS0	L	V	V	D
UniRef90_UPI000380B4F3	L	V	V	D
UniRef90_UPI0003764E8C	L	V	V	D
UniRef90_F9P1G4	L	V	V	D
UniRef90_F9HGD7	L	V	V	D
UniRef90_R5BWJ4	L	V	V	D
UniRef90_B0E662	L	V	V	D
UniRef90_R5IPZ7	L	V	V	D
UniRef90_W9BST0	L	V	V	D
UniRef90_C2KXP5	L	V	V	D
UniRef90_R5EEC7	L	V	V	D
UniRef90_UPI00041A2BF1	L	V	V	D
UniRef90_B9QVR3	L	V	V	D
UniRef90_R9MICY3	L	V	V	D
UniRef90_UPI00038037F6	L	V	V	D
UniRef90_A0A011RXD0	L	V	V	D
UniRef90_UPI00037FF559	L	V	V	D
UniRef90_W4GVM1	L	V	V	D
UniRef90_R6WBG8	L	V	V	D
UniRef90_X0STK4	L	V	V	D
UniRef90_UPI00037AC1AA	L	V	V	D
UniRef90_D4I260	L	V	V	D
UniRef90_R7EQD7	L	V	V	D
UniRef90_R7EC14	L	V	V	D
UniRef90_U4USH8	L	V	V	D
UniRef90_R5QU95	L	V	V	D
UniRef90_G4L750	L	V	V	D
UniRef90_W0PGS4	L	V	V	D
UniRef90_R7EYF0	L	V	V	D
UniRef90_D4J782	L	V	V	D
UniRef90_UPI00037C4EC3	L	V	V	D
UniRef90_R5SZ35	L	V	V	D
UniRef90_R2SNE4	L	V	V	D
UniRef90_UPI00026276B5	L	V	V	D
UniRef90_G8PGP2	L	V	V	D
UniRef90_UPI0003D08BBD	L	V	V	D
UniRef90_E6RJR0	L	V	V	D
UniRef90_R7FCY4	L	V	V	D
UniRef90_G7SHH2	L	V	V	D
UniRef90_UPI0003794C79	L	V	V	D
UniRef90_K6U660	L	V	V	D
UniRef90_UPI0003330242	L	V	V	D
UniRef90_R6W6J3	L	V	V	D

QUERY  
UniRef90\_J6UJD4  
UniRef90\_K2KM47  
UniRef90\_R6QT32  
UniRef90\_F4HPK3  
UniRef90\_UPI00047ED640  
UniRef90\_UPI0002B4C148  
UniRef90\_UPI0003C10CAC  
UniRef90\_D5BMJ9  
UniRef90\_UPI00035E5EC4  
UniRef90\_F8JGA2  
UniRef90\_I4YZH8  
UniRef90\_I3TQD2  
UniRef90\_UPI00047E3E22  
UniRef90\_A0A059FD86  
UniRef90\_U2W2K9  
UniRef90\_W9QVS0  
UniRef90\_B8IUF2  
UniRef90\_S8D4J2  
UniRef90\_G6YD63  
UniRef90\_UPI0003667A49  
UniRef90\_F4XEM9  
UniRef90\_M0Y424  
UniRef90\_R6DBW4  
UniRef90\_R7CQT4  
UniRef90\_T3GML7  
UniRef90\_A0A010Z5E1  
UniRef90\_R5CXC6  
UniRef90\_U1A2I2  
UniRef90\_E7GK05  
UniRef90\_I3YQD4  
UniRef90\_E0E2Z8  
UniRef90\_UPI0004106AB3  
UniRef90\_R5DM92  
UniRef90\_D4LYV9  
UniRef90\_R2S1M8  
UniRef90\_R7KRI7  
UniRef90\_A0A059FM52  
UniRef90\_R5NHW9  
UniRef90\_K2L973  
UniRef90\_S6CFJ0  
UniRef90\_UPI0003645561  
UniRef90\_UPI0004737075  
UniRef90\_A7IC32  
UniRef90\_R6YRM2  
UniRef90\_M3JL72  
UniRef90\_X4V3U3  
UniRef90\_R5JZ04  
UniRef90\_J2IYQ9  
UniRef90\_F6IDS0  
UniRef90\_UPI000380B4F3  
UniRef90\_UPI0003764E8C  
UniRef90\_F9P1G4  
UniRef90\_F9HGD7  
UniRef90\_R5BWJ4  
UniRef90\_B0E662  
UniRef90\_R5IPZ7  
UniRef90\_W9BST0  
UniRef90\_C2KXP5  
UniRef90\_R5EEC7  
UniRef90\_UPI00041A2BF1  
UniRef90\_B9QVR3  
UniRef90\_R9MCY3  
UniRef90\_UPI00038037F6  
UniRef90\_A0A011RXD0  
UniRef90\_UPI00037FF559  
UniRef90\_W4GVM1  
UniRef90\_R6WBG8  
UniRef90\_X0STK4  
UniRef90\_UPI00037AC1AA  
UniRef90\_D4I260  
UniRef90\_R7EQD7  
UniRef90\_R7EC14  
UniRef90\_U4USH8  
UniRef90\_R5QU95  
UniRef90\_G4L750  
UniRef90\_W0PGS4  
UniRef90\_R7EYF0  
UniRef90\_D4J782  
UniRef90\_UPI00037C4EC3  
UniRef90\_R5SZ35  
UniRef90\_R2SNE4  
UniRef90\_UPI00026276B5  
UniRef90\_G8PGP2  
UniRef90\_UPI0003D08BBD  
UniRef90\_E6RJR0  
UniRef90\_R7FCY4  
UniRef90\_G7SHH2  
UniRef90\_UPI0003794C79  
UniRef90\_K6U660  
UniRef90\_UPI0003330242  
UniRef90\_R6W6J3

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

QUERY	F A A M E <input type="checkbox"/>
UniRef90_J6UJD4	<input type="checkbox"/> S E P A A
UniRef90_K2KM47	<input type="checkbox"/> L
UniRef90_R6QT32	
UniRef90_F4HPK3	<input type="checkbox"/> L E A N P <input type="checkbox"/>
UniRef90_UPI00047ED640	<input type="checkbox"/> L
UniRef90_UPI0002B4C148	<input type="checkbox"/> L E A N P S <input type="checkbox"/>
UniRef90_UPI0003C10CAC	F A A <input type="checkbox"/> L E
UniRef90_D5BMJ9	F D S K
UniRef90_UPI00035E5EC4	F S A T P
UniRef90_F8JGA2	<input type="checkbox"/> L T A
UniRef90_I4YZH8	<input type="checkbox"/> L P E P P A
UniRef90_I3TQD2	<input type="checkbox"/> L D T P
UniRef90_UPI00047E3E22	<input type="checkbox"/> V
UniRef90_A0A059FD86	F T Q <input type="checkbox"/> L
UniRef90_U2W2K9	<input type="checkbox"/> L P K
UniRef90_W9QVS0	<input type="checkbox"/> L E A N P S <input type="checkbox"/>
UniRef90_B8IUF2	<input type="checkbox"/> L
UniRef90_S8D4J2	<input type="checkbox"/> L E A N P A <input type="checkbox"/>
UniRef90_G6YD63	<input type="checkbox"/> V S A
UniRef90_UPI0003667A49	F A A <input type="checkbox"/> L
UniRef90_F4XEM9	<input type="checkbox"/> L P D P
UniRef90_M0Y424	<input type="checkbox"/> L E
UniRef90_R6DBW4	<input type="checkbox"/> L
UniRef90_R7CQT4	<input type="checkbox"/> I
UniRef90_T3GML7	<input type="checkbox"/> V
UniRef90_A0A010Z5E1	<input type="checkbox"/> L P T
UniRef90_R5CXC6	<input type="checkbox"/> L P W E
UniRef90_U1A2I2	<input type="checkbox"/> V P R R D
UniRef90_E7GK05	<input type="checkbox"/> L
UniRef90_I3YQD4	<input type="checkbox"/> L
UniRef90_E0E2Z8	<input type="checkbox"/> L
UniRef90_UPI0004106AB3	<input type="checkbox"/> L
UniRef90_R5DM92	<input type="checkbox"/> L T
UniRef90_D4LYV9	<input type="checkbox"/> L E
UniRef90_R2S1M8	<input type="checkbox"/> I P E K Q
UniRef90_R7KRI7	<input type="checkbox"/> I S
UniRef90_A0A059FM52	F S A
UniRef90_R5NHW9	<input type="checkbox"/> L
UniRef90_K2L973	F D E E
UniRef90_S6CFJ0	M D <input type="checkbox"/> V A P A
UniRef90_UPI0003645561	<input type="checkbox"/> L
UniRef90_UPI0004737075	F G A <input type="checkbox"/> L D
UniRef90_A7IC32	<input type="checkbox"/> I P A P E A
UniRef90_R6YRM2	<input type="checkbox"/> L P
UniRef90_M3JL72	<input type="checkbox"/> V S E
UniRef90_X4V3U3	<input type="checkbox"/> L P
UniRef90_R5JZ04	<input type="checkbox"/> L P E G E
UniRef90_J2IYQ9	<input type="checkbox"/> V T S
UniRef90_F6IDS0	<input type="checkbox"/> L Q T E D
UniRef90_UPI000380B4F3	<input type="checkbox"/> L
UniRef90_UPI0003764E8C	M D N <input type="checkbox"/> L D
UniRef90_F9P1G4	<input type="checkbox"/> L
UniRef90_F9HGD7	<input type="checkbox"/> L
UniRef90_R5BWJ4	<input type="checkbox"/> L T E
UniRef90_B0E662	F
UniRef90_R5IPZ7	<input type="checkbox"/> L P Y A E
UniRef90_W9BST0	<input type="checkbox"/> V P
UniRef90_C2KXP5	<input type="checkbox"/> L K G E E
UniRef90_R5EEC7	<input type="checkbox"/> L
UniRef90_UPI00041A2BF1	F
UniRef90_B9QVR3	<input type="checkbox"/> V S A
UniRef90_R9MCY3	<input type="checkbox"/> L
UniRef90_UPI00038037F6	<input type="checkbox"/> L
UniRef90_A0A011RXD0	<input type="checkbox"/> L P Q
UniRef90_UPI00037FF559	F
UniRef90_W4GVM1	F S
UniRef90_R6WBG8	<input type="checkbox"/> L S
UniRef90_X0STK4	<input type="checkbox"/> V P K
UniRef90_UPI00037AC1AA	<input type="checkbox"/> L P
UniRef90_D4IZ60	<input type="checkbox"/> L
UniRef90_R7EQD7	
UniRef90_R7EC14	<input type="checkbox"/> L
UniRef90_U4USH8	<input type="checkbox"/> L T
UniRef90_R5QU95	<input type="checkbox"/> V
UniRef90_G4L750	F A
UniRef90_W0PGS4	<input type="checkbox"/> V P A
UniRef90_R7EYF0	
UniRef90_D4J782	<input type="checkbox"/> L
UniRef90_UPI00037C4EC3	<input type="checkbox"/> L
UniRef90_R5SZ35	<input type="checkbox"/> I
UniRef90_R2SNE4	
UniRef90_UPI00026276B5	<input type="checkbox"/> I P E <input type="checkbox"/> L E
UniRef90_G8PGP2	<input type="checkbox"/> V S A E
UniRef90_UPI0003D08BBD	F E
UniRef90_E6RJR0	<input type="checkbox"/> L P S
UniRef90_R7FCY4	<input type="checkbox"/> L
UniRef90_G7SHH2	<input type="checkbox"/> L G E
UniRef90_UPI0003794C79	<input type="checkbox"/> L
UniRef90_K6U660	<input type="checkbox"/> I
UniRef90_UPI0003330242	F D K N
UniRef90_R6W6J3	<input type="checkbox"/> L

UniRef90\_B1C3U0  
UniRef90\_H2LBL4  
UniRef90\_R7M5L8  
UniRef90\_J1JXK4  
UniRef90\_E1STD1  
UniRef90\_E3GMT9  
UniRef90\_UPI00046422FA  
UniRef90\_U1JUQ2  
UniRef90\_E1ZG15  
UniRef90\_F5T8I3  
UniRef90\_E8RNH1  
UniRef90\_H1LZL5  
UniRef90\_R6HNF6  
UniRef90\_R6QJZ4  
UniRef90\_B7QW73  
UniRef90\_V5XMQ4  
UniRef90\_D8LNW5  
UniRef90\_R6W5U5  
UniRef90\_M8B1Y7  
UniRef90\_J3S0J6  
UniRef90\_A9RWL0  
UniRef90\_UPI00038353E1  
UniRef90\_Q388V7  
UniRef90\_V3ZTR0  
UniRef90\_W2C4J4  
UniRef90\_UPI00047A2B9B  
UniRef90\_K7UKW6  
UniRef90\_E0RWI9  
UniRef90\_C7HST1  
UniRef90\_R6AGV6  
UniRef90\_UPI00036B2ED2  
UniRef90\_F9V665  
UniRef90\_R7HRC1  
UniRef90\_A3X606  
UniRef90\_U3ATH6  
UniRef90\_Q7RN08  
UniRef90\_Q6PFS2  
UniRef90\_F5Y6X5  
UniRef90\_UPI000468B9ED  
UniRef90\_E3PXL2  
UniRef90\_UPI0004631E47  
UniRef90\_B9NSH5  
UniRef90\_I0R3W9  
UniRef90\_UPI00031887D6  
UniRef90\_E5Y497  
UniRef90\_F7NIL7  
UniRef90\_R5M3X8  
UniRef90\_R6DUZ5  
UniRef90\_G5H6G6  
UniRef90\_E9BDV2  
UniRef90\_D1AYE9  
UniRef90\_C3X939  
UniRef90\_UPI00047C6DD6  
UniRef90\_R6E4B5  
UniRef90\_A3SM17  
UniRef90\_R5DAR4  
UniRef90\_J9CP51  
UniRef90\_R5HBK1  
UniRef90\_UPI00046AEE3F  
UniRef90\_F5RL23  
UniRef90\_A0A031GDS9  
UniRef90\_UPI0003C7DCF3  
UniRef90\_R5ADI6  
UniRef90\_UPI000375FCC1  
UniRef90\_UPI0003B5FCFB  
UniRef90\_A7ZDS7  
UniRef90\_R6J3V1  
UniRef90\_F5TEU8  
UniRef90\_A7GUG2  
UniRef90\_UPI00040FB5AB  
UniRef90\_R5QL33  
UniRef90\_UPI0004634E1C  
UniRef90\_K2A2E6  
UniRef90\_A1V1B4  
UniRef90\_UPI00025552EE  
UniRef90\_F5LBF8  
UniRef90\_B1Y795  
UniRef90\_R7EQ86  
UniRef90\_C5D6G6  
UniRef90\_D1NXD6  
UniRef90\_I8SEP3  
UniRef90\_N9LVF4  
UniRef90\_C7N4R3  
UniRef90\_UPI0003767284  
UniRef90\_UPI0003B4E4A8  
UniRef90\_R6A885  
UniRef90\_E3GLT1  
UniRef90\_C4G819  
UniRef90\_S0RLP3  
UniRef90\_UPI0004785C4F  
UniRef90\_R6N223  
UniRef90\_N1ZCZ0

1 10 20 30 40  
K N Q I Y E Y L N N N N N I K Y E T S E H A V Y N M E E A Y D L K L P Y  
R A E L E R F L L Q Q S N N I Q T T C V E E H P P V F T T V E E E M M P H L Q D V S  
N I F D F F K Q L N E I V F T T H Y H E A L F K V I S E E Q Q N I K K N I S  
K D P Q P L Y F D F L N K L N E I V V T T H Y H E A L F K V I S E E Q Q N I K K N I S  
L Q S R L L A S L N G I D Y H A Y E H H P P L H D C S E E A D R L A L T D R S K  
M N C E M T L S R L D A A L H I D T D E K L D D H P P V T T V E E A M Q F V K T L L D  
M R G M E Q T L Y H T L A A L H I D T D E K L D D H P P V T T V E E A M Q F V K T L L D  
M T P E Q Q L K T V L D T L N I S F K S Y E H H P P L P T T C D A Q A A L G L K R S  
D A L L A K L Q A L Q I S Q H E T H A H P A V M T C E A Q A A A L S G V P  
R K E L A V Y D Y L D K L G I S Y E R A D H A E A H T M E D C G E E I K D S L P G  
T Q S T A V L L Q A L N G W G L L P R T T E H E A V F R V G E G E I K D S L P G  
E K E K R C Y D F L D G L G V E Y E V T E H Q P I Y T V E E G E A L K L P H P  
R S E I I J S L L N A A G I A F E V T E H Q P I Y T V E E G E A L K L P H P  
A T E K K V Y Q L D K L K I S Y E R V D N D V V E T V E E C E E I D K A L G  
S S D A L L A Q L D D W G I D N Y R L H E H V P L R T S V E D A K N G V E D A F M  
A T K Q E A Y E L L D L L A I E G A L F E H H R A M T V P E Q E M A L R G V S  
E Q E V Y K V F K K V G I E G A L F E H H R A M T V P E Q E M A L R G V S  
D S F K R H D H P V V L T V E E D Q A K H V V Q H L N  
R Q A L E A H L Q G L G I D Q A L S V E H P A V F T V E E M M P Y V V Q H L N  
L H T R E T L L S F L Q E H G V D C V T H N H P A V S T V E E M M P Y V V Q H L N  
R E A L E Q R L R D L G I A T I L T A E H H P E V F T V E E M M P H V V Q H L D  
R G E A E L L Q V L Q S L L G L S L P I T T S H E E K H T V E E A N K E L V G E V P  
G K D E L L A K L K D L G I D C I T T V E H P E V F T V E E Q A L P H V S H L E  
E K K T N A A R L L D K A G V I Y E T V P Y E V D E N A T H V A E Q L H E D I  
K K D I Y I K L D E L N I K Y K T L K H K E V F T A E E F Y D V T K D M P  
T K D Q L L A H L Q K L K I S Y F T C Y H D H P V V L T V E E Q A K H V V Q H L N  
M K K K T N V M R V L D G K K I S Y V S H S Y E P T L T T G E E I A G L V G E D S  
M S S K K V F D R L N K L N I K Y D M V E H H P P A E T T E E A D K Y I E G K K  
M M N E K E V Y A A L D R M G I E Y T R I E H H P A A A T M E A C A A I G E G T G  
U P I 0 0 0 3 6 B 2 E D 2 E L V N K L D Y W K I S Y K L Y F H H P L M T V K E S K T M Q K T L F  
M R S F K E V E K L M A E L E I P Y K I V E H P A S H S T E E S D Q Y T E G H E  
G K T N V A R L L D T R A K I K Y E L V P Y E V D E T A Q H I A D Q L G E D I  
D A L L A Q L T D R A W G L P Y T L F T H H V P L R T V E E A K Q V E A E M Q  
Q T P L M Q F L T T Q N I E F R L L E H H Q P A T T I E D A A E Q R G I R P  
Q K L F E E L K E L N I N E T K E V K H G K V N S I K E L L D L N L E K S  
R K E L D E F L K R L N I N E T C I L H H P E V F T V E E M M P H V S H L S  
K T N A M R L L D A A G I Q Y T V K E Y E S D L S A V H A V E L L G M P G  
M K K T N A A R L L D R L H K V S Y E L L E Y E D D L S A H V A E L T G V D I  
E I L N E L C I L E Y E W V D N D E V S S M E E C T E I S E K L G  
M K N K T N V M R V L D S L K I S Y S G H E Y E P G L T T G E Q I A G I L G E D V  
S S D A L L A Q L D A W G L R Y R L H H H V D L R T V E E D A K A V E L G G E N  
M E E K T N V M R L L D Q K K I K Y N H Y S Y V D T P S T N E V A K L L G Q D E  
K T N A A R L L D R A K I A Y E L I P Y E E H L A A T H V A E Q L G E E T  
K K T N A A R L L D E L G I G Y E L H E Y D E A D S A T A M A R K V L G V P V  
K K T N A A R L L D G L G I T Y E L K E Y E N D L S A T S V A A K V L G L P A  
N K E Q I Y R Y L K Q K N I W Y E I T K H K A V Y N M K D L Q D V D L P Y P  
K T N V A R L L D Q K K I P Y T A H S Y D P D G P V D S V A Q L L G Q D P  
M K N K T N A A R L L D R A H I A Y E L V P Y E E H L A A A H V A E Q L N E D I  
E V K A L L Q E L G L D E I P V H H D E K A T V E E V L D L L H G I H  
I Y E L L K K L N I E Y V T L K H E P I S S V K D H L H F E L E  
S K T N A A R L L D K S K V P Y K L V P Y E D D L S A E N V A A N V L G E N I  
M K K T N A A R L L D K N K I K Y T L L E Y E G D L S A E N V A A N V L G E N I  
K T N A M R L L D A L K I K Y K E H T Y D A V S G V E V A E V L N Q G E P  
S S D K M L D L L R A A G C E V T A Y S H I P L R T V E E D A K T V Q G A G  
M K N K T N V A R L L D K A K V A Y Q L V P Y E N D L S A T H V A D Q L G E N V  
M K T K T N V A R L L D K A K V P Y E L I P Y E N D L S A T H V A E S L R G E D I  
M E Y K T N V M R L L D K H K I S Y K H Y T Y D A V S G V D V A A V L R Q N P  
K T N A A R L L D A A G I S Y E L V P Y E N D L S A T H V A Q S L N E D V  
K T N A A R L L D R L H K V S Y E L L E Y H T P S D L S A A H V A E V T G P L  
Q E T L S R W L E S H A G D C P F V E H P A V H T I D E A L I H V I P A M S  
S E E R A T A A L D E T G T D Y T I V R H G P V T S L A E A A E A R G V E P  
K T N A A R L L D R M K I P Y E A H T Y P C E E F T D E V A K L L G L P P  
K K T N A A R L L D R M K I N Y E L K E Y K N D L S A V H V A T E A G M N I  
M K K T N A A R L L D G L G I P Y E T A E Y E D D G E H E L A K E K L G V A P  
K T N A A R L L D S K K I D A Y N H Y T Y D S T V N G V E V A R L G Q D E P  
T K K T N V M R M L D S N H L P Y D T K S Y E E D L S G I H A A A V L G L P P  
E E V S L L H K T N A S Y E K F H E E P V Y E T D R V R E R L G L Q  
K T N V M R L L D G K K I A Y E S H A Y E P D A T M E E I A G I L G E D P  
K E K T N V M R L L D Q K K I A Y E S Y S Y V D T G A V S E E V A E V L G E N P  
M E T Q E K V Y T T L K L N I P F E R V D T D E A I T M E D C V A I E E K L D  
L D S K N D I P F E K Y H E P V Y T S E Q A K I L R G T D I  
S E T P A T Q F L R R H G V A F H V Y E Y V I E H G G T S E S A R Q L G V D E  
K T N V H R L L D A V G I S Y T S V E Y E K D L S G V H A A E L T G I P A  
K T N A C R M L D K L G I T Y T L H E Y E W D E D Q L D A A G K V G I G I  
S E T P A T Q F L R R A G I A F T E H P Y D Y V G G T A E S A R Q L G V D E  
M K N K T N A A R L L E Q K K I D F K V F D Y T D S G A V E E L V A A L G E D P  
M A T K T N A M R V L D K K M L P Y N V F T Y D S Q D G R I D V A Q K I R G K D P  
T Q L T Q L L D N H H A K Y R V I E H P T A G K S E E V A K I R G T Q L  
K K T N A A R L L D G L K I S Y E I R E Y E S D L G A E N V A K K I E V L P L  
T P A C K L E K N K I A F T I H E Y E H D V N A K E A E K I L N L N V  
K D K T N A M R M L D A A K V A Y R V E H Y D P L D S G T E I A N L L G Q D T  
M K T E T P A T K F L R K H Q V A Y S L Y A Y E E H G G T K V S A R A L G V D E  
L D R A G V R Y E H H P S A T S Y E A A E A L D G V P P  
M K N K T N V M R I L D Q E K T E Y T P F F Y E P K L T G E I A K I L N E P V  
K N K T N V M R I L D K A K L P Y T P H E Y D H E D G A V D V A A R L G Q K V  
K T N V M R I L D Q A K K L R Y E A Y N E K L G L T K E I A E A L G E D P  
L K D K F L K E N I P F E L Y D Y R A I Y T N E D A V K K E Q G F T  
K T N A M R A L E Q R R I P Y T A Y Y D A A H S G L A V A Q A G V I P P  
K T N A M R L L N A S K I K Y E T V Y E A E H F G E A I A E M T G I P A  
T K T N A M R L L E Q Y H I S Y D T Y E Y D E N L S G V H A A K A G L P P

UniRef90\_B1C3U0  
UniRef90\_H2LBL4  
UniRef90\_R7M5L8  
UniRef90\_J1JXK4  
UniRef90\_E1STD1  
UniRef90\_E3GMT9  
UniRef90\_UPI00046422FA  
UniRef90\_U1JUQ2  
UniRef90\_E1ZG15  
UniRef90\_F5T8I3  
UniRef90\_E8RNH1  
UniRef90\_H1LZL5  
UniRef90\_R6HNF6  
UniRef90\_R6QJZ4  
UniRef90\_B7QW73  
UniRef90\_V5XMQ4  
UniRef90\_D8LNW5  
UniRef90\_R6W5U5  
UniRef90\_M8B1Y7  
UniRef90\_J3S0J6  
UniRef90\_A9RWL0  
UniRef90\_UPI00038353E1  
UniRef90\_Q388V7  
UniRef90\_V3ZTR0  
UniRef90\_W2C4J4  
UniRef90\_UPI00047A2B9B  
UniRef90\_K7UKW6  
UniRef90\_E0RWI9  
UniRef90\_C7HST1  
UniRef90\_R6AGV6  
UniRef90\_UPI00036B2ED2  
UniRef90\_F9V665  
UniRef90\_R7HRC1  
UniRef90\_A3X606  
UniRef90\_U3ATH6  
UniRef90\_Q7RN08  
UniRef90\_Q6PFS2  
UniRef90\_F5Y6X5  
UniRef90\_UPI000468B9ED  
UniRef90\_E3PXL2  
UniRef90\_UPI0004631E47  
UniRef90\_B9NSH5  
UniRef90\_I0R3W9  
UniRef90\_UPI00031887D6  
UniRef90\_E5Y497  
UniRef90\_F7NIL7  
UniRef90\_R5M3X8  
UniRef90\_R6DUZ5  
UniRef90\_G5H6G6  
UniRef90\_E9BDV2  
UniRef90\_D1AYE9  
UniRef90\_C3X939  
UniRef90\_UPI00047C6DD6  
UniRef90\_R6E4B5  
UniRef90\_A3SM17  
UniRef90\_R5DAR4  
UniRef90\_J9CP51  
UniRef90\_R5HBK1  
UniRef90\_UPI00046AEE3F  
UniRef90\_F5RL23  
UniRef90\_A0A031GDS9  
UniRef90\_UPI0003C7DCF3  
UniRef90\_R5ADI6  
UniRef90\_UPI000375FCC1  
UniRef90\_UPI0003B5FCFB  
UniRef90\_A7ZDS7  
UniRef90\_R6J3V1  
UniRef90\_F5TEU8  
UniRef90\_A7GUG2  
UniRef90\_UPI00040FB5AB  
UniRef90\_R5QL33  
UniRef90\_UPI0004634E1C  
UniRef90\_K2A2E6  
UniRef90\_A1V1B4  
UniRef90\_UPI00025552EE  
UniRef90\_F5LBF8  
UniRef90\_B1Y795  
UniRef90\_R7EQ86  
UniRef90\_C5D6G6  
UniRef90\_D1NXD6  
UniRef90\_I8SEP3  
UniRef90\_N9LVF4  
UniRef90\_C7N4R3  
UniRef90\_UPI0003767284  
UniRef90\_UPI0003B4E4A8  
UniRef90\_R6A885  
UniRef90\_E3GLT1  
UniRef90\_C4G819  
UniRef90\_S0RLP3  
UniRef90\_UPI0004785C4F  
UniRef90\_R6N223  
UniRef90\_N1ZCZ0

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

UniRef90\_B1C3U0  
UniRef90\_H2LBL4  
UniRef90\_R7M5L8  
UniRef90\_J1JXK4  
UniRef90\_E1STD1  
UniRef90\_E3GMT9  
UniRef90\_UPI00046422FA  
UniRef90\_U1JUQ2  
UniRef90\_E1ZG15  
UniRef90\_F5T8I3  
UniRef90\_E8RNH1  
UniRef90\_H1LZL5  
UniRef90\_R6HNF6  
UniRef90\_R6QJZ4  
UniRef90\_B7QM73  
UniRef90\_V5XWQ4  
UniRef90\_D8LNW5  
UniRef90\_R6W5U5  
UniRef90\_M8B1Y7  
UniRef90\_J3S0J6  
UniRef90\_A9RWL0  
UniRef90\_UPI00038353E1  
UniRef90\_Q388V7  
UniRef90\_V3ZTR0  
UniRef90\_W2C4J4  
UniRef90\_UPI00047A2B9B  
UniRef90\_K7UKW6  
UniRef90\_E0RWI9  
UniRef90\_C7HST1  
UniRef90\_R6AGV6  
UniRef90\_UPI00036B2ED2  
UniRef90\_F9V665  
UniRef90\_R7HRC1  
UniRef90\_A3X606  
UniRef90\_U3ATH6  
UniRef90\_Q7RN08  
UniRef90\_Q6PFS2  
UniRef90\_F5Y6X5  
UniRef90\_UPI000468B9ED  
UniRef90\_E3PXL2  
UniRef90\_UPI0004631E47  
UniRef90\_B9NSH5  
UniRef90\_I0R3W9  
UniRef90\_UPI00031887D6  
UniRef90\_E5Y497  
UniRef90\_F7NIL7  
UniRef90\_R5M3X8  
UniRef90\_R6DUZ5  
UniRef90\_G5H6G6  
UniRef90\_E9BDV2  
UniRef90\_D1AYE9  
UniRef90\_C3X939  
UniRef90\_UPI00047C6DD6  
UniRef90\_R6E4B5  
UniRef90\_A3SM17  
UniRef90\_R5DAR4  
UniRef90\_J9CP51  
UniRef90\_R5HBK1  
UniRef90\_UPI00046AEE3F  
UniRef90\_F5RL23  
UniRef90\_A0A031GDS9  
UniRef90\_UPI0003C7DCF3  
UniRef90\_R5ADI6  
UniRef90\_UPI000375FCC1  
UniRef90\_UPI0003B5FCFB  
UniRef90\_A7ZDS7  
UniRef90\_R6J3V1  
UniRef90\_F5TEU8  
UniRef90\_A7GUG2  
UniRef90\_UPI00040FB5AB  
UniRef90\_R5QL33  
UniRef90\_UPI0004634E1C  
UniRef90\_K2A2E6  
UniRef90\_A1V1B4  
UniRef90\_UPI00025552EE  
UniRef90\_F5LBF8  
UniRef90\_B1Y795  
UniRef90\_R7EQ86  
UniRef90\_C5D6G6  
UniRef90\_D1NXD6  
UniRef90\_I8SEP3  
UniRef90\_N9LVF4  
UniRef90\_C7N4R3  
UniRef90\_UPI0003767284  
UniRef90\_UPI0003B4E4A8  
UniRef90\_R6A885  
UniRef90\_E3GLT1  
UniRef90\_C4G819  
UniRef90\_S0RLP3  
UniRef90\_UPI0004785C4F  
UniRef90\_R6N223  
UniRef90\_N1ZCZ0

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



UniRef90\_B1C3U0 F F E T P L I G V H P N D N R T T L F L 140 L K I N D L I N I L K A H G N K V V I Y N  
UniRef90\_H2LBL4 L V E H E R I Y F H P M T N S A T M G L L R S P D D L L R F L K E T G H E P I L L E S  
UniRef90\_R7M5L8 L K G G K K I L V H P N T N E A T L V L L R S Y D D D L L K F I E E T G H N Y I L L I  
UniRef90\_J1JXK4 L M Q N L Y I N C H P L T N E A T T S I H R D D L L K F V E A T H H D V R I L L H  
UniRef90\_E1STD1 I W Q G E G L H C H P M D N T A T W V L L K P D D L I K T L L A H W G R S P L T L L E N  
UniRef90\_E3GMT9 L E G C P N L G V H P C D N T A T V V L L S Y E D D L V K C I E S N G N S L A L L E N  
UniRef90\_UPI00046422FA L I G K R L L V H P L E N T N T K A T M A I L N Y D D L I R F L D A T N H B P T L L  
UniRef90\_U1JUQ2 L L N E L E W Q C H P F E N D K T W V L L Q S Q H D L Y T F W R Q T G H Y P R L V D  
UniRef90\_E1ZG15 L R G Q P R I C V H P L D N T A T M V L L S S E G D L E A F V R S V T G R E P A W V D D  
UniRef90\_F5T8I3 L L K D E Y I G A H P C H N I A T L K V K T K D F F T K F I K A T K H Y K T E V T  
UniRef90\_E8RNH1 L Y E A E L V N F H P L I N T A T T A L L D Q G D F R L F L D K L R R D Y R V I D  
UniRef90\_H1LZL5 V T K A D F I R C H P C V N T S T L K I A T D D D F L K V I P A L L K K E A K L I D  
UniRef90\_R6HNF6 F K E S L I G V P L L T N T A T I W L N G A D L A L M L T Q L R H K K V N W L A  
UniRef90\_R6QJZ4 V A Q E E W F G C N P G I N T S H L K M K T E D L L K F L P Q I R H K A K I M E  
UniRef90\_B7QW73 A Q N A D S T I Y M H P L V N D R T I G L L R D A D F F A V M D R L G V E I Q W V  
UniRef90\_V5XMQ4 I D R K D S T V G F H P L S N T S T I I F P F A D F F E R L L A H V D H L P R Y  
UniRef90\_D8LNW5 V M E A E E V L V H P L R N D R S V R I K A A D L V K Y V T A C G H A P T V L D  
UniRef90\_R6W5U5 V A E A E Y F V C N T G I N T T H L K F K T S Q D L L K F L P Y T H H R P R L V D D  
UniRef90\_M8B1Y7 L K S K Q S C Y F H P L T N D V T I A L S F S S N L D K F L L S I G K Q P A Y V D  
UniRef90\_J3S0J6 F L E H D R L Y F H P M T N A A T M G L L H P D D F L K F L K S T G H E P I I V H  
UniRef90\_A9RWL0 F Q K Q S R V F F H P L S N D V S T A V S T T E N L D K F L K A L G R E P S Y I D  
UniRef90\_UPI00038353E1 L L E H E K V Y F H P M T N C A T M G L S P D D F L R F V R S T G H D P S I V H  
UniRef90\_Q388V7 L V D S T P V V F H P C R N D K S T L I T P T Q L Q D F L Q K I D F P Y I V V D  
UniRef90\_V3ZTR0 F L D Y P R L Y F H P M V N S A S T G V S A E T L Q T F L Q H T G H K P S I V N  
UniRef90\_W2C4J4 C T Q H P H I Y V S A G R R G L Q L K L S P T D L A T F I G A T  
UniRef90\_UPI00047A2B9B L L D G K N L N F H P A I N T E T F N I S G D D F N K F L E H I S N N V I K V N  
UniRef90\_K7UKW6 F K S K Q S C Y F H P L T N D V T I G L  
UniRef90\_E0RWI9 A S D L D K I Y V S A G K V N D F Q I L L S P Q D L I T V S R I T T A D L I  
UniRef90\_C7HST1 E E N D L M T F H P D D N T K T L F I K N E D I F K L V K D S G Y D Y E I F D  
UniRef90\_R6AGV6 L L N E E R I L I H P N I N T A S L V V K T S D I L R F L D L L G Y E F T P I A S  
UniRef90\_UPI00036B2ED2 L K S F K K I F A H P L E N N Q T V E L S I E H L E I F F K K I S V T P I W V S  
UniRef90\_F9V665 L E E H D I M T L H P N D N T K T I F F P I E D C F K L L D A Q C Y T Y T I D  
UniRef90\_R7HRC1 C L D F N F I Y V S A G V R G L Q L K L D P K D L I E Y V G A S T A D I V  
UniRef90\_A3X606 A R D V D V I Y M H P L V N D R T V M M A R G D F L A F L E R I G C E I L N W V  
UniRef90\_U3ATH6 L L N E S E V T I S S G D R M A G L A L S I H D L I Q L C Q P T I A D  
UniRef90\_Q7RN08 I K N M D E V I H P M H N Y S C L V I K T T D V L K Y C D L H N H T P E F I N S  
UniRef90\_Q6PFS2 L T H H T H I H C H P M N Y S A T M G I V T P A D L I R F L E E T Q H T P V I L S  
UniRef90\_F5Y6X5 A E L F D Y I G I S A G I R G C Q T F L A P G D F L K F T A A A A D L T V  
UniRef90\_UPI000468B9ED A L S Q S D I L V S A G Q R G L Q L K I K P Q N I L D L L N A  
UniRef90\_E3PXL2 V A K N D W F G C N P G V N T S H L K I K T N D L I K F L P Y I N H K P T I T S  
UniRef90\_UPI0004631E47 A N S L I T K I Y V S G G K V G A Q I E L E P A D L I R A A A C T P A D L I  
UniRef90\_B9NSH5 A Q Q A D V I N M H P L V N D R T V A M S P R A D L M A F F D W V I G C A V I W L  
UniRef90\_I0R3W9 A G D Y E N I F S G G K I G Y Q V E M S P K A D L D K F V P  
UniRef90\_UPI00031887D6 A S E H P F I Y I S A G V R G L Q L K L A P A D L L A A Y V R A A F A E I  
UniRef90\_E5Y497 A L L H E R I Y V S A G H R G V Q L R L L A P D D L L R A V E G T  
UniRef90\_F7NIL7 A S Q W S F L S I S A G L R G V Q L L L A P A L I Q A T G A T V C P I T  
UniRef90\_R5M3X8 L L E E P I G V H P N E N T A T V W L K T R D L I T I L K E N N V K V Y Q V Q  
UniRef90\_R6DUZ5 A L L Y G A I C V S A G K R G H Q V E C D P N A L I A L L R A K T A D V I V  
UniRef90\_G5H6G6 C R D F D H I Y V S A G V R G L Q L R M A P D D L V R Y A D A V  
UniRef90\_E9BDV2 L E A S T P L A F C L C R N D Y T A V I T F E E L K K Y L E K L G H A Y K L V D  
UniRef90\_D1AYE9 I D T N T T I G A H P F I N T K T L N I Q F K D F E K F F E Y T G H K I N F I E  
UniRef90\_C3X939 I E G F D K I W V S A G I R G L Q I E I A P K D L I R E V R A S V A D I I  
UniRef90\_UPI00047C6DD6 I E N F P K I L I S A G V R G C Q I A L N P S D L I K I V N  
UniRef90\_R6E4B5 A A D Y E T I F F S G G R T G F Q I E L A F S D L Q K A I K I Q T A D I S S D  
UniRef90\_A3SM17 L R Q A E V V H L H P L V N D R T V A M T P D D L R E V L R G W G A E I R W L E  
UniRef90\_R5DAR4 A G Q F D H I Y V S A G Q R G L Q I R L A P G D L I R E A R A E I A D I I  
UniRef90\_J9CP51 C R D Y P F I V S A G I R G L Q V K L A P D D L I R  
UniRef90\_R5HBK1 A L N F S T I F S A G K I G Y Q V E V S L D D L R K V I R  
UniRef90\_UPI00046AEE3F I N N F E H I Y V S A G V R G L Q L R I A P Q D L I D Y I P  
UniRef90\_F5RL23 I L Q H D S I C V S A G R R G E A L A L A P C H E L V R A A N A T  
UniRef90\_A0A031GDS9 V W D A D S V Q A H P L R R N T A T V A L A H A A F V R D F L A H T G H V P R I L N  
UniRef90\_UPI0003C7DCF3 V E G T I S I G A G A H G V S A Q V S A V D V I R A L L S A T V A D  
UniRef90\_R5ADI6 V R D K E I Y V S G G K R G L Q L S L S P Q D L V K A A G A M W G D V I  
UniRef90\_UPI000375FCC1 A L N W E K I A V S A G I R G G Q I I K P Q D L I N A T N A T  
UniRef90\_UPI0003B5FCFB V I L H D Q V C I S G G Q R G V Q I K I A P N D L I K A T D A T V V D  
UniRef90\_A7ZDS7 A K E Q E Y L L V S A G V R G A Q V I K I A P N D L L K A C E A  
UniRef90\_R6J3V1 A A D Y D T I F F S A G R V G A Q V E L P L S A L Q Q A L P V T P A D I I  
UniRef90\_F5TEU8 V R A F D T V S I S A G Q R G L Q V L L S P Q D L T P L I R A V I V A P L V M D  
UniRef90\_A7GUG2 V Y N Y D K I L I S P G V P D F T I E L S T E E L K K I L S T C Q N P V  
UniRef90\_UPI00040FB5AB A E A F D R L F V S A G K V G Y Q I E L A P T D L I S V T  
UniRef90\_R5QL33 A K N F E T M I F S G G K I G Y Q V E L S L E D L L K V I P A  
UniRef90\_UPI0004634E1C V L K E E Y Y G C S D G T T R G Y M K L K T E D L H K F M P F T K H T V L F V E  
UniRef90\_K2A2E6 L L S E N K E I V F N A G R H D R S I K M R Y S D F V R L  
UniRef90\_A1V1B4 L L D L P S I Y L N G G R R G Y L V S L A P A V L A T L L Q A R P V Q C A S V D  
UniRef90\_UPI00025552EE A E L F D T I G V S A G A R G C Q V L L K P G D L J E F V A A K L A D L T V  
UniRef90\_F5LBF8 A L A T E P V S I S A G R R G L Q I F L S P G D L  
UniRef90\_B1Y795 V L A L P C I Y I N G G R R G F L V G I A P A V L V D S L G A R A V E A I  
UniRef90\_R7EQ86 A K K Y E R I Y F S G G R I G L Q V E T L A E L E K V I K  
UniRef90\_C5D6G6 A C Q F E H I V S S G G K G L L I E L S V E D L Q S I T E A T F H E V V  
UniRef90\_D1NXD6 L F R F E E L A F N A G S L I E R S L I L N T H D Y Q R I A K P T L V E  
UniRef90\_I8SEP3 M L K W P Y I A I S A G V R G C Q M L V S P N D L V S A T K  
UniRef90\_N9LVF4 A K S L N K L I Y V S G G K R G L D I G L N P I D L A R L L E A T  
UniRef90\_C7N4R3 V T L F D V F M C S A G R R G C Q I Q L T L E D L L K V I P V E V V D  
UniRef90\_UPI0003767284 L L D L P L I Y I N G G R R G Y L V G I D P Q D L Q R L L  
UniRef90\_UPI0003B4E4A8 A L E H G T I L V S G G R G F D L E V S P D D L D D V V R  
UniRef90\_R6A885 A L S Y D Y I F F S G G K V G S Q I K L K T Q D A L K V A E L I P A S I  
UniRef90\_E3GLT1 C K S H T I V S A G K I G Y Q I E M E P S A L V T F V R G S V A D I I  
UniRef90\_C4G819 A E Q Y E T I L F S G G K V G F Q V E L A P S A L K K L I R F S F A D V T V  
UniRef90\_S0RLP3 L L S H Q K I V F A P G R P D Q T M V V E V A D L E K I I R V L G L E V Y Y L P  
UniRef90\_UPI0004785C4F A Q N F E E L Y V S A G Q R G I N L R L R V A D L J A L T G A  
UniRef90\_R6N223 A Q N F E T I A I S G R G C G T T L I L S P N D V Q K A T D C V F A D I T  
UniRef90\_N1ZCZ0 A I L F E Q I A V S A G I R G Q Q I L I S P E T L I T F I Q A K Q A D I T

UniRef90_B1C3U0	F
UniRef90_H2LBL4	F
UniRef90_R7M5L8	
UniRef90_J1JXK4	I S Q N Q
UniRef90_E1STD1	V P Q I Q V
UniRef90_E3GMT9	L
UniRef90_UPI00046422FA	
UniRef90_U1JUQ2	I P C L
UniRef90_E1ZG15	L E A D P V I
UniRef90_F5T8I3	L
UniRef90_E8RNH1	F S
UniRef90_H1LZL5	
UniRef90_R6HNF6	L
UniRef90_R6QJZ4	
UniRef90_B7QW73	
UniRef90_V5XMQ4	
UniRef90_D8LNW5	F S A V K
UniRef90_R6W5U5	L
UniRef90_M8B1Y7	L E A S P V V
UniRef90_J3S0J6	F D E
UniRef90_A9RWL0	F E A V V V V
UniRef90_UPI00038353E1	F D E
UniRef90_Q388V7	F S E K
UniRef90_V3ZTR0	L
UniRef90_W2C4J4	
UniRef90_UPI00047A2B9B	I
UniRef90_K7UKW6	
UniRef90_E0RWI9	
UniRef90_C7HST1	F K A
UniRef90_R6AGV6	V E D A D A
UniRef90_UPI00036B2ED2	L
UniRef90_F9V665	I
UniRef90_R7HRC1	
UniRef90_A3X606	I C R E E
UniRef90_U3ATH6	L S
UniRef90_Q7RN08	
UniRef90_Q6PFS2	F
UniRef90_F5Y6X5	
UniRef90_UPI000468B9ED	
UniRef90_E3PXL2	L
UniRef90_UPI0004631E47	
UniRef90_B9NSH5	
UniRef90_I0R3W9	
UniRef90_UPI00031887D6	
UniRef90_E5Y497	
UniRef90_F7NIL7	
UniRef90_R5M3X8	I
UniRef90_R6DUZ5	
UniRef90_G5H6G6	
UniRef90_E9BDV2	F G A A S A
UniRef90_D1AYE9	L
UniRef90_C3X939	
UniRef90_UPI00047C6DD6	
UniRef90_R6E4B5	L
UniRef90_A3SM17	
UniRef90_R5DAR4	
UniRef90_J9CP51	
UniRef90_R5HBK1	
UniRef90_UPI00046AEE3F	
UniRef90_F5RL23	
UniRef90_A0A031GDS9	V P A
UniRef90_UPI0003C7DCF3	V T S S Q A T
UniRef90_R5ADI6	
UniRef90_UPI000375FCC1	
UniRef90_UPI0003B5FCFB	L E
UniRef90_A7ZDS7	
UniRef90_R6J3V1	
UniRef90_F5TEU8	
UniRef90_A7GUG2	
UniRef90_UPI00040FB5AB	
UniRef90_R5QL33	
UniRef90_UPI0004634E1C	V
UniRef90_K2A2E6	
UniRef90_A1V1B4	
UniRef90_UPI00025552EE	
UniRef90_F5LBF8	
UniRef90_B1Y795	
UniRef90_R7EQ86	
UniRef90_C5D6G6	
UniRef90_D1NXD6	F I R T E V
UniRef90_I8SEP3	
UniRef90_N9LVF4	
UniRef90_C7N4R3	V T A
UniRef90_UPI0003767284	
UniRef90_UPI0003B4E4A8	
UniRef90_R6A885	
UniRef90_E3GLT1	
UniRef90_C4G819	
UniRef90_S0RLP3	V G E
UniRef90_UPI0004785C4F	
UniRef90_R6N223	
UniRef90_N1ZCZ0	

UniRef90\_R5TQ25 1 K T N A M R M L D K A K I V E Y R T K E Y E S D L S G S H A A D M M G V D H  
UniRef90\_D8MP35 T P A V K L L E K Q K I V S F Q L Y E H D S N D T H D E A V R K L N Q N A  
UniRef90\_A6NYF2 K T N V M R I L D Q K K I V R Y E T P H T Y E P P D G A V D G A A G L I G V E P A  
UniRef90\_R5YBC7 E V K T N A V R I L E R N K I I S F Y E L I N Y E C D E F I D G M H T I E G A P A  
UniRef90\_C8PKY1 M S S K T N A A R V L D G L K I I P Y E I K E Y E P L N L D A V H V A N S V N E P I  
UniRef90\_D7N8U4 N E K T A Y E L L D K N Y N I S F Y V R F D H E P L E T L I G N L K L V E  
UniRef90\_C6PY01 N Q K E T Y R V L Q N L H I S F K R V D T D E A I T M E D C V I G L N K L D  
UniRef90\_E0NNM8 K K T N V M R I L D S H K I V I N Y R S Y E P D E A L S G V D A A E K L G V D T  
UniRef90\_D5U3B4 T P E R V R G L L E E K K V W Y R F Y E F P D E T A T V E A A V S K V G A D P  
UniRef90\_UPI0002881231 K T N A L R L L D S K K V I Y E V H E Y D V D D G L I D G L S V L G L S A  
UniRef90\_R5YMH0 M S N K T N A M R L L D K H K I A Y K T Y C Y A A T G A V S E V A A A L L G Q N P  
UniRef90\_UPI00035D93C7 D V K S Y L L Q N G I N F E L F E H N A V I T C D E G K A A E N I G A K  
UniRef90\_U7UNU7 K K T N V M R L L D K E K I P Y T T K A Y E N D L S G I H A A A A L G L A P  
UniRef90\_R5ASD0 K T N A A R L L D R A A A V P Y E L I P Y P D D L S A T H L A A E L G E D V  
UniRef90\_A0A031GZ79 S E T Q A T Q L L R K H Q V S F E E H P Y E H G G T S V S A R E S L G V P E  
UniRef90\_UPI00037C4154 K T N A V R L L D T H Q I P Y E L R E Y E E H V D A M H V A E S L G V N P  
UniRef90\_R5RL50 E I K T N A M R L L D K N K I D Y E F I Q Y E C D N F I D H T A Q K T G A P V  
UniRef90\_E5V415 E I K T N A M R F L D D N N V P E Y T H F E F D A T S D A A K V A D I L G R N H  
UniRef90\_P45202 T P A I D L L K K K V I F T H T Y D H D P N H F G D E A A E K L G L S A  
UniRef90\_V9HE04 M D E K T N V M R I L D K K K I S Y S Y V D T D A I S G V E V A K V L G Q D P  
UniRef90\_S0N7P3 K T N A L R L L E Q Q K I A Y V E H Q Y E E H L S A N D V A Q Q L G E Q  
UniRef90\_R6YSQ9 N K T V M K L L E Q Q K I N Y E Y F E Y D A V D G I G V A S A L K E R D V N  
UniRef90\_R2T0N1 Q E Q A Y Q A M D E L M I S F E R V A T D E V I T M E D C Q Q I N E R L D  
UniRef90\_UPI0003B39074 S K T N A A R I L E G L G I P Y E L H T D E N D L S A V T M A H N L G V D P  
UniRef90\_R6BPC9 K T N A M R I L E K E K I S Y Q M H T Y D A S D G G A A V A R K V G M D P  
UniRef90\_R7C6X5 E V K T N A M R I L E K L K I T P F E V K T Y E C D E F V D G M A D Q L G Q P Y  
UniRef90\_UPI0003B4E98F T P A I N Q F T A L D I T C E Q V L S H P P L A T A Q A A D N I A L E R P P  
UniRef90\_Q2SKM7 N K T N V C R K L E Q Q K I S Y E L L E Y E D S L D A T H V A L E T G D S P  
UniRef90\_G2ZD92 E I K T N A M R L L D R Q K I K Y E V L Q Y E C D E F I D H T A E K T G A P V  
UniRef90\_R7JMX6 T Y Q Q L I S L L E Q Q H A S F Q A L E H P S A G K S E E V A K I R G T E V  
UniRef90\_V8G3B2 M S K T T R A T Q F L A K A G I T A F D V L Q Y A Y E A G A E Q A A E A I G E P P  
UniRef90\_UPI000464EFC9 D L Q E I E T Q N Q I A F E L Y R H R P I F T N E D A V K E E Q G F S  
UniRef90\_I6TCP8 Q K K T Y R L L Q N L N I P F E R V S T D E A V T M K D C L G I N K K L D  
UniRef90\_D1ANS3 K T N V A R F L Q K K G V K F D L I P Y E N D L G A E H V A E S L S E N V  
UniRef90\_R7P6E8 M A K K T A A T Q W L R A H R I A F T E H P Y D Y V D G T A E S A R Q L G V D E  
UniRef90\_A0A059KG77 S K T N A M R F L D N L G I S Y V T H Q Y P D N V G A G S V I A E T G L D P  
UniRef90\_UPI0003B483F9 K K T N A M R I L E G L K I P Y E A K E Y E D V D H V L L E M A E K L G V S P  
UniRef90\_I0X8G0 Q K K V Y Q V L A E L K I P Y K R V D T D E A I T M E D C V Q I N A K L D  
UniRef90\_B0NEK5 K T N A M R V L D A A G T P Y E A F D C P E A V S G V E V A R I L E L D P  
UniRef90\_C8W11 K T N V M R V L E Q H K I T P Y E G H N Y G A V S G T E V A A L N E D P  
UniRef90\_R7N858 S E T P A T Q M L K R H N V P Y T E H V Y D Y V D G A Q E A A R Q L G L D P  
UniRef90\_UPI00047A9052 Q E E I F D L L N E L N V I P Y R E D H H K P I F S V E S D D L D I P P  
UniRef90\_UPI000374B7FB K T N A C R L L D Q K K L A Y T L H E Y P K H L D A V H V A S E T G Q N P  
UniRef90\_W7DR38 K T N A V R I L D G M N I P Y E L R E Y E D L S A E T A A K K L G L P S  
UniRef90\_UPI0003152531 M A K K T A C R L L D K A G I T Y S L R E Y E D A L D A L S V A K K L G L A P  
UniRef90\_UPI0003165322 S E T P A T Q F L R K Q G V A F T E Y D Y E E H G G T S V S S R E L G V D E  
UniRef90\_D8J031 K T N A A R L L D A L G I S Y E L R E Y P E D L R A E T V A A K L G M P A  
UniRef90\_A0A017TEL4 T A V T R F L E E E G V D F R L L H S P A K T I E E A A Q E R G V D P  
UniRef90\_Q1ZNC8 K T N A M R I L D K A K I S Y Q T Y T Y D A D D G A I D V A K K C S Q A P  
UniRef90\_UPI0002EEFDF7 M K K K T N A M R I L E N N K V D Y K I H E Y P W D E D H L D A A D E V E M P L  
UniRef90\_UPI00030016E8 T P A V N L L K K K V A F T L Y E H D P N N T N Q E A V E K L G V D A  
UniRef90\_UPI00034941EB M K K K T N A A R I L D R L K L P Y D L L E Y E P D D L V A G S A A K L G L P P  
UniRef90\_F5L3A7 K T N A M R L L E Q H Q V I E Y Q L L T F T Y D E T A A Q A A K E V L G L P P  
UniRef90\_R5YDW4 K T N A M R L L D R L K I P Y E T Y E C D E F V S G V Q T A E Q I G L P H  
UniRef90\_UPI00047BA143 K T N V M R V L D G K K I A Y K M Y E Q D A S L S G E E I A G I L L G E D A  
UniRef90\_UPI000370D0D7 M S L Y E R N L A L L E R H A I P Y R Q V E H E P V Y P T A H A V R E R F G M L P  
UniRef90\_C1F368 R T N A A R F L D T L K I P Y E L R E Y P E E F S A I A V A E K I G M P P  
UniRef90\_R9JKW0 M A V K T N A M R I L D S M K I P Y T L H T Y D E F I D G E Q I A D M L G L P Y  
UniRef90\_R5NXQ3 K T N V M R L L D T S A K I P E K H Y C H A P T D A V G E V A V L H Q D P  
UniRef90\_K4RCY9 K T N V M R L L T S A G V F Y T Y E H D P A H P S E E A A D A M G V S P  
UniRef90\_F5WRN5 K K T N A M R I L D Q K K I V Y Q M R E Y Q S D G I N I D V A E Q I T Q E S V  
UniRef90\_UPI0004715CDA T Q K T N A M R I V E Q H K I T Y Q K E Y F E W S L S A N S V A E K I G T I E D  
UniRef90\_F3YAU3 L S N K T N A V R I L E K Q K I L Y N S Y E F D E H L D A V S V A H K I Q L S V N P  
UniRef90\_U7UJR7 K K T N A M R I L D R E K V N Y K V Y E P D E N I T G L D A A K K L G Q D P  
UniRef90\_D0I4N2 T P I L S V L R D A G I S Y F R L L P H Q A A T T I H D A A E Q R G V L P  
UniRef90\_R7GY80 S I K T N V M R I L D Q A G I S Y Q H H R D G A L S G A Q L A A L L E F E P  
UniRef90\_D3QZJ8 M K N K T N A L R A L D T A K I P Y T T H T F D S A L S A V E V A T A I A E P P  
UniRef90\_UPI00028859E4 K A K T N A M R I L D T E H I H Y E V K T Y E I L S D G L L D V A E K C G E D P  
UniRef90\_C3AW69 M N M Y N Q A V I Q L L E E A D I P Y S Q Y E H E P L L N Y D T D R K I R E N L E  
UniRef90\_R7X2H2 S E T P A T Q F L K Q K K V A F T V Y E Y V D H G G T G E S A R Q L G V A E  
UniRef90\_UPI000469B504 N L A E K F K Q E N A L Y E Y L E H R A I Y T N E D A V K S E K G F T  
UniRef90\_V6JQZ3 L T T A K A L E F T L Y E H D P A A P S E E A A E A L G V S A  
UniRef90\_F8F1H8 M E K T T V I R M L E Q Q H T P F Q V L E Y E V D E T A T H A A E L L G L E A  
UniRef90\_R6RHB8 K T N A L R L L D Q K K I K Y Q M H D Y S A T S A I S E V A D A L N E D P  
UniRef90\_UPI000475061B S K T N A M R I L D K K K I G Y E L L T Y E N K D G K I D V A E K I G K D P  
UniRef90\_F8CC03 K T N A A R L L D S L G V K Y A L R D Y P E D L S A E T V A A K V G M P A  
UniRef90\_UPI000411DBCE T P A T A L L A K R K I T H Q V Y E H D P R E S Y G E A A A L L G V L P  
UniRef90\_UPI000347DFDC L Q Q L N I P F Q R V D T D E A I T M D D C T L I N K K L N  
UniRef90\_B7VK91 E T L I T Q W L D Q Q Q V D Y R L V Q S K P T T S I E E T A Q E R G I N A  
UniRef90\_UPI000467B656 M N Q K T N V M R L L D G K K I A Y N Y H T Y A D T D A I S E V A T V L G Q D P  
UniRef90\_Y5PG38 M K K K T N A M R M L D R A K I N Y S V N T F E E H L D G E T I A E L V H A N V  
UniRef90\_T0RQM0 M N I N E K L H Q L L K D N N I G Y E L M T H D R A L T C E Q S A M A R G L D Q  
UniRef90\_UPI000369B782 K G K T N A M R L L D A G G A Y N V Y K Y D E I D G V S V A G K I E K A T  
UniRef90\_S2Z862 K T N A M R I L E K K K I P F T Y I T Y E C E E F V D Q I A D K L G Q P H  
UniRef90\_T8U9P1 T P A V K L L E K N K I S F Q L Y E H D P A E T N D E V V K K L G L N P  
UniRef90\_I7LEA6 V E K L L D Q N K I K Y R Q A Q H E D H G G F L A Q M D S I L E D N E  
UniRef90\_W1TTV6 K T N A M R A L E N A G I A A Q M T Q V S S K G E F L D A A S A Q L G V D P  
UniRef90\_B5EIB1 T A A V R V L R Q A G V S Y H P Y Q Y E E K G G T A V S A R E L G V D E  
UniRef90\_E1QE08 T Q A V R A L R Q A G V A F E L H S Y E E K G G T A V A R E L G W D E  
UniRef90\_Q5P257 E T P A T R F L K Q H R V J A Y T T H S Y E P H G G T K V S A R E L D V D E  
UniRef90\_I0FA60 E S V K T H F T Q W N R E N D V M E F E S S A T V E Q A A E T I G V S P

UniRef90\_R5TQ25  
UniRef90\_D8MP35  
UniRef90\_A6NYF2  
UniRef90\_R5YBC7  
UniRef90\_C8PKY1  
UniRef90\_D7N8U4  
UniRef90\_C6PY01  
UniRef90\_E0NNM8  
UniRef90\_D5U3B4  
UniRef90\_UPI0002881231  
UniRef90\_R5YMH0  
UniRef90\_UPI00035D93C7  
UniRef90\_U7UNU7  
UniRef90\_R5ASD0  
UniRef90\_A0A031GZ79  
UniRef90\_UPI00037C4154  
UniRef90\_R5RL50  
UniRef90\_E5V415  
UniRef90\_P45202  
UniRef90\_V9HE04  
UniRef90\_S0N7P3  
UniRef90\_R6YSQ9  
UniRef90\_R2T0N1  
UniRef90\_UPI0003B39074  
UniRef90\_R6BPC9  
UniRef90\_R7C6X5  
UniRef90\_UPI0003B4E98F  
UniRef90\_Q2SKM7  
UniRef90\_G2ZD92  
UniRef90\_R7JMX6  
UniRef90\_V8G3B2  
UniRef90\_UPI000464EFC9  
UniRef90\_I6TCP8  
UniRef90\_D1ANS3  
UniRef90\_R7P6E8  
UniRef90\_A0A059KG77  
UniRef90\_UPI0003B483F9  
UniRef90\_I0X8G0  
UniRef90\_B0NEK5  
UniRef90\_C8W11  
UniRef90\_R7N858  
UniRef90\_UPI00047A9052  
UniRef90\_UPI000374B7FB  
UniRef90\_W7DR38  
UniRef90\_UPI0003152531  
UniRef90\_UPI0003165322  
UniRef90\_D8J031  
UniRef90\_A0A017TEL4  
UniRef90\_Q1ZNC8  
UniRef90\_UPI0002EEFDF7  
UniRef90\_UPI00030016E8  
UniRef90\_J4USS6  
UniRef90\_UPI00034941EB  
UniRef90\_F5L3A7  
UniRef90\_R5YDW4  
UniRef90\_UPI00047BA143  
UniRef90\_UPI000370D0D7  
UniRef90\_C1F368  
UniRef90\_R9JKW0  
UniRef90\_R5NXQ3  
UniRef90\_K4RCY9  
UniRef90\_F5WRN5  
UniRef90\_UPI0004715CDA  
UniRef90\_F3YAU3  
UniRef90\_U7UJR7  
UniRef90\_D0I4N2  
UniRef90\_R7GY80  
UniRef90\_D3QZJ8  
UniRef90\_UPI00028859E4  
UniRef90\_C3AW69  
UniRef90\_R7X2H2  
UniRef90\_UPI000469B504  
UniRef90\_V6JQZ3  
UniRef90\_F8F1H8  
UniRef90\_R6RHB8  
UniRef90\_UPI000475061B  
UniRef90\_F8CC03  
UniRef90\_UPI000411DBCE  
UniRef90\_UPI000347DFDC  
UniRef90\_B7VK91  
UniRef90\_UPI000467B656  
UniRef90\_Y5PG38  
UniRef90\_T0RQM0  
UniRef90\_UPI000369B782  
UniRef90\_S2Z862  
UniRef90\_T8U9P1  
UniRef90\_I7LEA6  
UniRef90\_W1TTV6  
UniRef90\_B5EIB1  
UniRef90\_E1QE08  
UniRef90\_Q5P257  
UniRef90\_I0FA60

50 60 70 80  
G S V F K T L V L K G E K M G Y L V C C I P V D A S E L D L K K T A R A A G D K K  
E Q V Y K T L L L N G D G K T Q Y Y V F V V P V A S Q L D L K N V A K A L G G A K K S  
E E R T F K T L V M R G A S K Q K Q N Y Y V F V V P L A E S V D L K A A A A K A V G E K S  
E R Q T Y K T L V M Q G A S K Q Q Y Y V F V I P L A E S V D L K A A A A K A V G E K S  
E R V Y K T I V C T A D H E Y V V A C L Q E G D L N D L K A L A H I C G G A K R R  
G K Q M V K N L V L K N R K K Q N T F Y F L I T T E E G D S K P F K S K N F S K A I G I J A R  
M K M V Y K T L V T E S G D L N F V F V I P S D D N L D L K K A A K A C G V K K  
U N I R E F 9 0 \_ U P I 0 0 0 2 8 8 1 2 3 1 H V S Y K T L V T A H G K G S D G N D K Y V A A I I P I E N D E L D L K K A A K A C G G E K K  
A Q V F K T L V T A G K S G T H Y V F M L P V A A E L D L K K A A R T V N E K S  
G R I T K T L I L T D D G S D G N D K Y V A A I I P I E N D E L D L K K A A K A R I T K K  
H V S Y K T L V T A H G K G S D G N D K Y V A A I I P I E N D E L D L K K A A K A C G G E K K  
A Q V F K T L V T A G K S G T H Y V F M L P V A A E L D L K K A A R T V N E K S  
E R V F K T L V A Q G N K T G P V V F C I P C H Q E L D L K K A A S C S G S G N K S  
R R V F K T L V L Q G D D R S H F V A V V P G D A E V D L K K A A R A A G V K K S  
E H D V T K T L V M Q D E A A K P M I V L M H G A C H Q E L D L K K A A R A S T G C K  
E G L Y K T L I L K G N V E P Y L V A V I P A N T H L D M K K F A K A S S G N K N  
D Q S F K T L V A Q G K S R Q Y Y V F V V P I A E E V Y L K N A A K A V G E K S  
N Q V F K T I M T T D D G S D G N D K Y V V G V L M S E A D N L N F K K L A K A A G L K S  
N R S F K T L V A E E N G D Q L A C F V L A T A N M L N L K K A A K A S S G V K K  
K Q V F K T L V T V G K S K N Y Y V F V I P V E K E L N L K K A A K S I G V E K S  
E N I Y K T L V A V G N K N T G P L V A V I P G N A R A L D L K K M A K A S S G N K K  
Q V F K T L V T T D G N N H F Y V F V I P V N A T L D V K K L V S G K K S  
M N M V K T L F L C N R Q Q N F Y L F V T R G D K P F R S K D F S K A L L E I A R  
A C V F K T L V A R G D K T S V L M A C I P A A A E L D L K K A A A A S G E N K H  
A K V F K T L V T R G G H S G N Y Y V F C V L P V E A H E L D L K K A A K V F G E K S  
A Q S F K T L V M Q G K S K E Y Y V F C V L P V D K E V D L K K A A H V V G E K S  
G V R L K N L F L L T R G Y A G R H F L L I T A H D A Q L D L K A L A S T A Q Q V S R  
E R V F K T L V L T G G A Q K L A V G I V P V S G K L D L K A V A K A L S G A K K  
S H I F K T L V L K G D K T G N I V A C I P A D K E S I D L K R L A K I S G N K S  
E Q S F K T L V A Q G K S K Q Y Y V L V L P I A E E V Y L K N A A K A V G E K S  
G Q G A K A L V C K I K G N Q Y V L A V L P A D Q E A N L K K V A L A L G G T R S  
A R V L K T L M V L V D G K P A C C V V P S D G E L S M K R V A A A F G G K S  
G E T E K S L Y L K D K R N N R Y I F L T F T T K R F S D F K K L S K L T N I R  
M E M V K T L F L C N R N N E T F Y L F I T A G D K P F R S G D F S S A L N I S R  
E Q V F K T L V L H G D K S G Y I V G V L P G N H E I D L K K L A K V S G N K K  
H A V V K T L V M Q D D D A R P L I V L M H G D R S T L D L K K L A R Q T G A K K  
N N V F K T L V L R T S D D S Y L V C V I P G L S T L D L K K V A K A V T G H K S  
E M V F K T I V M R T E S R E I C V F C Q S A V N E L N L K K A R Q A A G C K E  
M D M V K T L F L C N K K K T L F Y L F I T T D K P F D T K K F C E A L E I P R A  
D I V F K T L V T R G K S G E H Y V F M I P V A C E L D L K K A A V V G E K K  
E V V F K T L V T V G K T G N H Y V F L V P V E K E L N L K K A A A V G E K N  
H L V A K T L I M E D E A A R P E Y F V V I M H G D R V E L D L K K L A R Q A G L K K  
G P Q V K Y L L I Q P K K D E Y F L V V I A H D E V H P D L K Q L A Y D L G T K R  
A K I Y K T L V T T I G D K T G Y A V A A I P A N K S L N L K A F A K I S G N K K  
E Q V F K T L V L R G D R T G T I L A V I P G N Q L D L K K A L A P L S G N R K  
H F I F K T L V L R G N H T G V L A L V P G D E Q I D L K L A R I S G N K H  
H A V I K T L V M Q D E A A K P L L V L M H G D C K V S T K N L A R Q T G C K S  
E Q V W K T L V L A R G D R N G F V C F A V V P A T A E L D L K G L A K L S G D R K  
K Q L V K S L L L K D M A N G F H V L A C V P G P N A V D P K K V R E L F G C R R  
Q K V F K T L L T R G S S K N Y Y V F V I P V E H E L D L K K C A K A V N E K S  
E T L Y K T L V A T G G T T G E V V C I P A G Q S S L D L K R L A K Q S G N K K  
N Q T F K T L V A E E N G D Q L A V M V V P V S S L N L K R A A Q A L G V K K  
A Q V F K T L V V R G D R Q G I C F A V V P G D S S H L N L K A L A Q L T G D R K  
S R V F K T L V L N G D K T G L V L A S L P A D C D L N L K A L A R A S S G N K K  
E Q V Y K T L V T T G K S G E H Y V F V I P I E K E L N L K E A A K A V H E K S  
D K V F K T L V T V G K T G Q H Y V F V I P V K A E L D L K K A A K A V S E K S  
G A E S K S L F L R L R D R G Y A M L V T L E N A R A D W A Q L K A L L G A R  
E Q V F K T L L C V T H E R D H V F A V V P G N E L D F K K L A Q A A S T R K  
E K V Y K T L V A Q G S S K N Y Y V F V I P I A E K L D M F K K A A A A V G E K S  
D Q A F K T L V T V G K S G E H Y V F V I P V N A E L D L K K A A E A A G E K S  
D R V F K T L V A E V D G D L T V A V V P V A G Q L D L K A L A T A A V G E K R  
E R V F K T I V L H N G H S Y Y V A L I P V A D H I D L K A C A K G L G V K K  
G K I F K T L V T V G N R T G P V V A V I P G N K E L D L K K L A R A S S G N K K  
E R V F K T L V T T G N R T G T I V A V I P G N N E L D L K K L A R I S G N K K  
N K V F K T L V T K S K D D H F V F V I P V G E E L N L K K A A Q V A Q V K K  
Q Q L V K S M L L R D M G S G A M L A C V P G T A S V D P R K V R A L L G C R K S  
D R V F K T L V T I G K G Q A H Y V F M I P V A E E L D L K K A A A A V Q E K S  
A K I Y K T L V T A G K S G A H Y V F V I P G A A E L D L K K A A R L A D E K S  
K N V Y K T L V T Q G H S G E F Y V F V L P V A S E L D L K K A A A C V G E K R  
G I P S K S L F L C N R Q Q N F Y L F I T T G D K P F C S K D F S S A L N I A R  
H I V V K T L V M E D E K A R P L I V L M H G D R T V S T K N L A R Q T I G A K R  
G T E T K S L F L K K D G R N F V L T F T T K R T D F K L L K H V V G E K  
D R V F K T L V A D V D G E L T V A V V P V S S L N L K A L A A A V G G K R  
D R V F K T I V L E G E R S G Y L V C V I P G T C E L D V K K A A R A A G D K A  
A T V F K T L V T K G K C K N Y Y V F L V P V A S E L D L K K A A Q A V G E K A  
A K V F K T L V A Q G A S K E L Y V F I P V A D E L D L K K G A K A A V G E K K  
E Q V F K T L V A R G D R T G V L M A V V P G N A E L D L K A L A R L S G D R K  
A R V F K T L L A E V D G T L T V G I V P V D T Q L D L K A L A A A V G G K K  
M K M V K T L F L C N R Q Q N F Y L F I T T G D K P F C S K D F S S A L N I A R  
S Q M V K C I L L K D M G N Q Y A L A C T P G D R S I D P K K V R S V L N C R R S  
K H V F K T L V T Q G K S K N Y Y V F V V P V E S D L N L K K A A Q S V I E E K S  
K D V Y K T L V L E N A N K D H F V C V I P V S E T L D L K K E V A H V I G E K K  
K F G G K T L L F K D K N D F R L F V I S A S Q Q V D S A K V R S L L K S Q K  
E N V F K T L V T V G A A G L Y V F V V P V I E E L D L K K A A R A A G E K K  
G L V Y K T L V T V A G A S R E Y Y V F V I P I E E E L D L K K A A R V V G E K S  
D Q V Y K T L V A G D M K H L A V A V T P V A G Q L D L K K V A K A L G A K K  
H L V Y K T L V C A G N K T G P V V G V I P V T E H L D L K K A K V S G N K K  
N L V Y K T L V L E G G P T G H F V A V V P A T H E L D L K K A A R C F G V K H  
S C V I K T L I M E D E A K S P L V V L M H G D L Q V S T K E L A R V I G V K S  
H A V I K T L V F V D D S G R P L I V L M H G D R Q V S A K N L A R A L G A K A  
H A I V K T L V M E D E S G A P L I V L M H G D R K V S T K E L A R Q A G R K  
A R I A K T L S F R G E G D Q A L L V A A G D A K I D N K T F R Q T F G F K

UniRef90\_R5TQ25 V E I I P M K D L L L A V T G Y I R G G C S P I I G M 110 K K Q F P T F V E E S  
UniRef90\_D8MP35 V E M A D P Q T A L Q R T T G Y L L G G G C S P L I G M Q K K R L P T V I D S L  
UniRef90\_A6NYF2 I E M I H Q A E L L T A I T G Y V R G G C C S P V L G M K K Q F K T V I D D S  
UniRef90\_R5YBC7 I V E M I H V K D L L T A I T G Y V R G G C C S P L G M K K A F P T V I D D S  
UniRef90\_C8PKY1 C E L M D L K D L Q K V T G Y V R G G C C S P L G M K K H F R T F I D D S  
UniRef90\_D7N8U4 L S F A S L E N L D E Y L K K K I S A V T P L G L F Y D E N K K V Q V L I D D S  
UniRef90\_C6PY01 V S F A P A D L M E K M L G A K I G A A T V F S A I L L D K K N N D V Q L I F D K D  
UniRef90\_E0NNM8 I E M L K A K N L L P L T G Y I H G G C C S P V G M K K L F P T F I H K D  
UniRef90\_D5U3B4 I R L A R A R E V E K A T G Y P V R G A V P P V G M H G L K T Y V D R E K  
UniRef90\_UPI0002881231 I E M L A V K D L L E V T G Y I R G G C C S P I G M K K L P T V I D D S  
UniRef90\_R5YMH0 V E M L K Q K D L L P L T G Y V H G G C C S P I G M K K Q F P T V V D Q T  
UniRef90\_UPI00035D93C7 L K F A N E E N L R T I L G L S P G S V G S P F G L F N D H E N V V K L L R K S  
UniRef90\_U7UNU7 V A L I H V K D L L G L T G Y I R G G C C S P L G M K K K F P T Y L D R T  
UniRef90\_R5ASD0 A D L I P M K E L L P L T G Y I R G G C C S T S I G M K K Q F P T F F H S T  
UniRef90\_A0A031GZ79 V E P C K P D V A Q R H S G Y M I R G G T S P F G T K K A M P V Y V E E Q S  
UniRef90\_UPI00037C4154 C E M L P L K D V L N V T G Y I R G G C C S P I G M T K K Q F P T Y I E E L  
UniRef90\_R5RL50 I E L I P V K E I T K V T G Y V R G G C C S P L G M K K N F P T I I H T S  
UniRef90\_E5V415 L S M L P L K D L T K I T G Y V K G G C C S P F A M K K L F P T F V D D R  
UniRef90\_P45202 V E M A D K D A A Q K S T G Y L V G G C C S P L G M Q K K R V K T V I N S T  
UniRef90\_V9HE04 I E M I K S K E L L P L T G Y I H G G C C S P I G M K K S F V T I L D I S  
UniRef90\_S0N7P3 V E M L H L R D L E A T T G Y I R G G C C S P V G M K K L F P T Y F D Q S  
UniRef90\_R6YSQ9 I D M I K Q K D L E P L T G Y I H G G C C S P I G M K K K F P T Y L D K T  
UniRef90\_R2T0N1 V S F A S E E L M A E M L G T K I G A A T V F S T L V D P E K K V Q I V F D Q D  
UniRef90\_UPI0003B39074 V E M V P L K D V R P L T G Y M R G G C C S P L G M A K K A Y P V F V D E N S  
UniRef90\_R6BPC9 L E M I P V A K I N A V T G Y I R G G C C S P I G M K K S Y R T V F D C  
UniRef90\_R7C6X5 L A M V H V K D I Q A V T G Y I R G G C C S T S I G M K K K Y R T V I H E S  
UniRef90\_UPI0003B4E98F L G F A S N E R L Q R Y L G V H P G G C C S M L A L M N D P E N Q V E L W L D E A  
UniRef90\_Q2SKM7 A E M A D P K E A E R A T G Y I V G G C C S P L G M Q K K R L P T V L D D T  
UniRef90\_G2ZD92 C E L V P V S T L E K L T G Y V R G G C C S P I G M K K L F P T F I D S S  
UniRef90\_R7JMX6 I E M L H V K D I T A V S T G Y V R G G C C S P L G M K K Q Y P T V I Q E C  
UniRef90\_V8G3B2 A S L A S P D E V T R L T D C V R G A I P P F S F H P E L M L V A D P A  
UniRef90\_UPI000464EFC9 A A M M P P A E A E K A T G Y H V G G I S P F G S R K K A P V A L D A A  
UniRef90\_I6TCP8 V S V V S A E E M E A E T G Q K P G A V S P F G Y E S S V P I I I D E E  
UniRef90\_D1ANS3 V S F A P V E L T E K T L G V K I G A V T V F S A V L D K N N K I K V I F D K D  
UniRef90\_R7P6E8 C E P L P L K D L L P T T G Y I R G G C C S P I G M K K K F Q T Y I H T T  
UniRef90\_A0A059KG77 V E P C K P E V A Q R H S G Y L V G G T S P F G L R K A M P V Y V E S S Q  
UniRef90\_UPI0003B483F9 H M I H V K D L L E P L T G Y K R G G C C S P F G L K H S F P L V L S S Q  
UniRef90\_I0X8G0 I N P V K P E E L L J A L T G Y I R G G C C T P I G M K K Q F R T F I D E S  
UniRef90\_B0NEK5 V S F A P Q E L F E E I L G T K I G A A T I Y S V L D D W D K T I Q V I F D Q E  
UniRef90\_C8W11 V A M I R S R E L L G L T G Y V H G G C C S P L A M L K P F P T A I D E T  
UniRef90\_R7N858 I E M L K S K E L L P L T G Y I H G G C C S P I G M K K Q F Q T V V H E S  
UniRef90\_UPI00047A9052 V A P C H P E V A Q R H S G Y Q V G G T S P F G T R N K R M P V W V Q A Q  
UniRef90\_UPI000374B7FB L S F P S N E A M K N L L G I E F G S L T M L S L I A D T N H K V T P V F D T A  
UniRef90\_W7DR38 V E M I H V N D L E K I T G Y I R G G C C S P I G M K K A F P T F I D Q A  
UniRef90\_UPI0003152531 V E T V S L K E V Q P L T G Y I R G G V T A L A C K K K D Y P V F V D E L  
UniRef90\_UPI0003165322 V E L V V T K D L P V L T G Y I R G G V S P L G M K K S Y P C Y L D D S  
UniRef90\_D8J031 V E P C K P E V A N R H S G F L I G G T S P F G T R K A M P V Y V E S S T  
UniRef90\_A0A017TEL4 V D T V A L K E V Q P L T G Y I R G G V T V L G L A K K A Y P V Y V D E T  
UniRef90\_Q1ZNC8 M T C A D A S D V E K I T G L V I G T V A P L G L K R P L I F D H Q  
UniRef90\_UPI0002EEFDF7 V D M I P V S E I N K V S G Y I R G G C C S P I G M K K L Y K T V L H E S  
UniRef90\_UPI00030016E8 V E M L H M K D L E K T T G Y I R G G C C S P V G M K R Q F P T Y V S E S  
UniRef90\_J4USS6 V E M A D K E I A Q K T T G Y L L G G I S P L G M Q K K R L P T V I E A S  
UniRef90\_UPI00034941EB V E P V T L K E V Q P L T G Y I R G G V T A L G M S K K D Y P V Y G D Q S  
UniRef90\_F5L3A7 V E L L P V K E I P K V T G Y V R G G V S P V G M K K N Y P F Y I H R S  
UniRef90\_R5YDW4 V E M L H V K D I T K V T G Y V R G G C C S P I G M K K Q F P T V I D S S  
UniRef90\_UPI00047BA143 I A M L P Q K E L L P L T G Y V H G G C C S P I G M K K A F P T I I N E S  
UniRef90\_UPI000370D0D7 P S I A S D A E L A R T G C V P Q C A C P F G H A A E L A L V L D E A  
UniRef90\_C1F368 A E M V A V K D V Q P L T G Y V R G G C C S P I G M A K K S F P V F V D E T  
UniRef90\_R9JKW0 V A M L H V K E I N A V T G Y I R G G C C T A I G M K K Q Y T T C I E Q S  
UniRef90\_R5NXQ3 I A M L K S T E L L P L T G Y I H G G C C S P L G M K K Q F R T F F H Q T  
UniRef90\_K4RCY9 A S M A D P T Q A E R T T G Y V R G G C C S P L G M Q R K K L P T V L D A S  
UniRef90\_F5WRN5 L E L L H V K E L F D L T G Y V R G G C C S P I G M K K Q F P T I I D E T  
UniRef90\_UPI0004715CDA V D M L H L K D L L E E T T G Y I R G G C C S P I G M K K L F P T Y V A K E  
UniRef90\_F3YAU3 I E L L P V N D L E K T T G Y I R G G C C S P I G M K K S F P I Y L S Q E  
UniRef90\_U7UJR7 I E M L P L K E L L P T T G Y L H G G C C S P V G M K K Q F K T F I H E S  
UniRef90\_D0I4N2 M T M V D S Q H V Q S P T T G Y S P G T V T P L S V Y G M V P I F F D P  
UniRef90\_R7GY80 I A M L K S K D L L P T T G Y I H G G C C S P I G M K K P F P T T I H Q T  
UniRef90\_D3QZJ8 I A M L P S K D L L K L T G Y V H G G C C S P V G M K T L F T T Y I D A S  
UniRef90\_UPI00028859E4 V E M I H V K D I Q K H T G Y V R G G C C S P I G M K K M Y T T V I D A S  
UniRef90\_C3AW69 I S L C S E E L I E K T S C V P G C V A P F G Y Q E E I T L V I D R K  
UniRef90\_R7X2H2 V E P C K P E V A Q R H S G Y Q V G G T S P F G T T R R A M A V Y V E A S  
UniRef90\_UPI000469B504 L S I V S S D D M E E T T G Q K S G A V S P F G Y P S D T R R I P L T V D E S  
UniRef90\_V6JQZ3 A T M A D P A A E E R T T G Y V R G G C C S P L G M Q R K R L R T V V D S  
UniRef90\_F8F1H8 V R P L P L R E L E A V T G Y I R G G C C S P L L M K K K F P T Y I D E T  
UniRef90\_R6RHB8 I E M I K S K E L L P L T G Y I H G G C C S P I G M K K F F K T V I D E S  
UniRef90\_UPI000475061B V E M I P V K E I Q K V T G Y I R G G C C S P I G M K K G Y P T V I H D G  
UniRef90\_F8CC03 V D T V P L K E L Q P L T G Y I R G G C C T A I G G K K D K K Y P V Y V D E T S  
UniRef90\_UPI000411DBCE A R M A D V T V A E R T T G Y V A G A A T P L G Q R K R L R T V L D T S  
UniRef90\_UPI000347DFDC A S F A P E L M K D M L G T K I G A A T V F S A L F D K G N N V Q I V F D K D  
UniRef90\_B7VK91 M T C V S L J A D V E A I T G F K A G C V I G P I A L K R Y M P I I F D P S  
UniRef90\_UPI000467B656 I A M L K S K D L L S L T G Y I H G G C C S P I G M K K S L T T V I D K S  
UniRef90\_Y5PG38 L N L M P M D D L K K V T G Y I R G G C C S P I G M K H S F P T I I D E S  
UniRef90\_T0RQM0 L R F A T S D E L G E L C G V E K G A L V P F G G G V I Y P Y D L Y L D E S  
UniRef90\_UPI000369B782 I E M I P V K D L T K Q T G Y I R R G C C S P I G M K K L Y P T F I D A S  
UniRef90\_S2Z862 L I M L P L K D L T A V T G Y I R G G C C T A I G M K K P F P V V E K C  
UniRef90\_T8U9P1 V E M A D P M V A Q R S T G Y L V G G C C S P L G M Q K K R L P T I I D A P  
UniRef90\_I7LEA6 V E M L P L K D L Q K T T G Y V H G A N T P I G L Y F N H H F P I Y L D E S  
UniRef90\_W1TTV6 L T M L P L K Q L T P L T G Y R K G A C S P I G M K K K D F P T V I D E S  
UniRef90\_B5EIB1 V A P C T P D T A N R H S G Y M V G G T S P F G T R K Q M P V Y L E E S  
UniRef90\_E1QE08 V S P A D P A L A N R L T G Y Q V G G C C S P F G Q K A V L P V Y V E K T  
UniRef90\_Q5P257 I E P C T P E V A N R H S G Y L V G G T S P F G T R K R L P V F M E N S  
UniRef90\_I0FA60 A R M L S P D E V L E Q T G H E I G G V C P F G L A Y D L E V Y L D V S

UniRef90\_R5TQ25 A V L Y D E I A I S A G L R G Q Q I L I A P Q T L V T F I R  
UniRef90\_D8MP35 A Q Q F P T L F V S S G G K R G L E I E L S P Q D L A Q L L S A T F A D I  
UniRef90\_A6NYF2 A Q D L F A M V I S S A G G R I G F F Q V I E L S P A D D L A G L V R A  
UniRef90\_R5YCB7 A E Q F D K M Y I S S G G R I G T T I A L N S P Q D L A K V V R A T  
UniRef90\_C8PKY1 A L T Q E K I Y V S S A G V R G K Q I A L A P K D L A T A T E A  
UniRef90\_D7N8U4 L D I N T T L G L H P F G T N T T T L N I E R F K Q I I D R F F D E L E V E Y E F I N  
UniRef90\_C6PY01 V L A E E W Y G C S D G T T T G Y M K L R T Q I I D F L P F V E H T P S I I E  
UniRef90\_E0NNM8 A E N L I E E F Y V S S A G H I G E Q T I I N P K D L A S L V N A K F C D L I  
UniRef90\_D5U3B4 V L N V E T V I G S G G S T H S L I E M R T K D L L A L I Q P T V S D  
UniRef90\_UPI0002881231 A A T L E T I S I S A G Q R R G R Q I L L A P T A L T A L S G A T F A D L T M D D  
UniRef90\_R5YMH0 A A G F P T I I F S A G M I G Y Q V E L P L P A L K T V I P L T T A D I T  
UniRef90\_UPI00035D93C7 V G E S E F V Q F H P N L N T Q T M D L V Q S E F R K C L P L F G N K F D F I D  
UniRef90\_U7UNU7 A A T L E T I S I S A G Q R R G R Q I L L A P T A L T A L S G A T F A D L T M D D  
UniRef90\_R5ASD0 V N D F D T I F V S A G Q R R G L Q L K I A P A D L V G F V  
UniRef90\_A0A031GZ79 I L L D L P R I Y I N G G R R G F L V S L A P Q D L V D L L Q A  
UniRef90\_UPI00037C4154 A L L Q D R I C I S A G K R G L Q I L L A N A E D L K P L I G A Q F A D I T  
UniRef90\_R5RL50 A Q A F D K I Y I S S G G R L G T S I I L N P Q D L A R V I T G A  
UniRef90\_E5V415 C R E V E S I I V S A G K V G H Q V E V A K P E L E N L I D A Q I V D  
UniRef90\_P45202 A L E F E T I Y V S S G G K R G L S V E I A P Q D L A K V L G A  
UniRef90\_V9HE04 V E K L E T F I F S A G K I G Y Q V E L S L D E L K K V I R  
UniRef90\_S0N7P3 A E S L P T M I V S A G R R G L Q I E V A P Q D L A K I T R G Y F V D I I  
UniRef90\_R6YSQ9 V E N F S E I F V S S G G R V G L Q I K I K K E D L K I V D A  
UniRef90\_R2T0N1 V V E D Q W Y G C S D G T T T G Y L K I A T K D I E K L L P Y S K H D L T I I E  
UniRef90\_UPI0003B39074 A L L L E T I F V S A G Q R G V Q I L R L K P D D L L R A V E  
UniRef90\_R6BPC9 A Q Q Q E T M V V S S G G K I G V Q I E A K P D D L L K  
UniRef90\_R7C6X5 A R E W D T V I V S S G G R L G S Q L L S P D D L V K A V D G E M A D I V F C E  
UniRef90\_UPI0003B4E98F I W Q N T P Y H C H P F D N R Y T W L V A K Q D L L L L F R H W Q H Q V Q V L S  
UniRef90\_Q2SKM7 S L N Y A T I F V S A G K R G L E I E L A P Q D L L S L T  
UniRef90\_G2ZD92 A E S I E K I L I S A G K R G L Q I L I A P M D L K Q V V R G T  
UniRef90\_R7JMX6 A A N F D K V Y V S S G G R I G T T L C M A P E D L K K V S R A  
UniRef90\_V8G3B2 L L Q Y P E L L A F N A G T L E K S I V L K T A D Y A K I A Q P K L I E  
UniRef90\_UPI000464EFC9 V L A E P Y V I N G G Q R G V M L R L A P A D A V R V L D A V  
UniRef90\_I6TCP8 I F A Q E K L V C A P G R P D Q T M V V K V A D L D K L I Q  
UniRef90\_D1ANS3 V A D K E Y C G C S D G T T T G Y M K I K T K H I I K F L F T G H I P V I I E  
UniRef90\_R7P6E8 V N S F P Y V F V S A G V R G V Q L K I S P V D L I E Q T E A V V A D I V Y  
UniRef90\_A0A059KG77 I L L A L E R L W I N G G R R G F L V S L V P S V L T E V L G A Q P V I Q  
UniRef90\_UPI0003B483F9 A K S V D S L I V S S G G K R G V Q I E L S V S D F L K  
UniRef90\_I0X8G0 I M S Q D K V C V S A G Q R R G M Q L T L A P A D L I R A C K  
UniRef90\_B0NEK5 V A D S E Y Y G C S D G T T T G Y M K T E D D I L T F I  
UniRef90\_C8W11 C R L H E R I A F S S G G R I G C Q I E M A P D L A R A V P L A V A D L T V V  
UniRef90\_R7N858 A S T L I E K I F F S S G G K I G F Q V E V R V E D L K K V L  
UniRef90\_UPI00047A9052 V L E Y P L I Y I N G G R R G Y L V G I A P Q A L V D L L Q A R P V S V  
UniRef90\_UPI000374B7FB I D R D D T I G L L A N N R I T L T L Q V K D V E K Y L N H L G Y T P R Y I E  
UniRef90\_W7DR38 A K Q F D T I F I S A G K R G L Q I E M N A D D L L  
UniRef90\_UPI0003152531 I E I F D V I S V S A G K R G L Q I L T A P A D Y L Q A V K A T  
UniRef90\_UPI0003165322 A M V L D F I S I S A G Q R R G L Q I F V D P H A L I R L L S A  
UniRef90\_D8J031 I L E L G K I Y I N G G R R G F L V G I D P A V I L K V L P A K P V Q C A L A D  
UniRef90\_A0A017TEL4 L E L F D V V S I S A G V R M G T Q I L I A P T D Y L R A V R A  
UniRef90\_Q1ZNC8 I E Q H T K V N I S S G D R M A G L E L A T D D L V I L C D  
UniRef90\_UPI0002EEFDF7 C Q T L D T I F S S G G K I G F Q I E M N P H E L I Q L I H A  
UniRef90\_UPI00030016E8 A A S M E S I V V S A G K R G M Q M E L S P A E L L R I T G G Q Y A D I T V  
UniRef90\_J4USS6 A Q D F E V I Y V S S G G K R G L D I S L N S P Q D L A R L L D A Q F A E I K  
UniRef90\_UPI00034941EB L G G F D R V A V S A G K R G L M L W L A P A D Y V Q A T G A T  
UniRef90\_F5L3A7 V T K E E K V A V S S G G K R G L M L M L G S R D L K K I T N A V  
UniRef90\_R5YDW4 A K S L E I Y V S S G G K I G M Q L M K L A P E N L K K A A N A E F A D I I F  
UniRef90\_UPI00047BA143 A K E Y D E I F F S A G K V G Y Q V E L A V K D I E K A I R Y S F A D V V  
UniRef90\_UPI000370D0D7 L F A H S H L L Y S P G P P T L Q L E V A T A D L R R L V E H L A N P  
UniRef90\_C1F368 I E L F D T I S V S A G A R G I Q M L L S P T D Y L R A E A  
UniRef90\_R9JKW0 A E A L I E K I I V S S G G K I G L Q L E L S P Q D L Q S A S K A  
UniRef90\_R5NXQ3 A N G F E T I M F S A G K I G Y Q V E L S P E A L R K I L K Y  
UniRef90\_K4RCY9 A T T H A T I C V S A G R R G L E I E V S P T A L A T L T S A T  
UniRef90\_F5WRN5 C L L F D T I F S S G G R I G T Q I E M K P E T L I E L I G A K T G A I T A V E  
UniRef90\_UPI0004715CDA A E N F E T I V S S A G K R G M Q I E L T P S S I L Q V T N  
UniRef90\_F3YAU3 A V S F E K I I V S S G G K R G L Q I E L T P S H I L L K I T K  
UniRef90\_U7UJR7 A K N F D K F F V S A G K V G M Q L E I N P Q D L I S V V D G T F A D I I  
UniRef90\_D0I4N2 L S A F E R V N I S S G S P M A G V E I R Y Q D L A D I C Q P V L V A D  
UniRef90\_R7GY80 A T L F P T I L F S A G K I G H Q V E I A P S D L F R L I A C Q S A D L I V A  
UniRef90\_D3QZJ8 A S S L P T F I V S A G K I G L Q M E L D P Q S L A K L I K A S F G E V T  
UniRef90\_UPI00028859E4 A E E L N D H I A V S S G G K K E M Q V I L A P D D L V K A A H A Q L H A I V  
UniRef90\_C3AW69 I Y N Y N K F L L S P G V P E L T I E I H T K D I D K I L D I V K N S I L F  
UniRef90\_R7X2H2 I L D L P Q I F I N G G R R G Y L I G I A P S V L L N T L A  
UniRef90\_UPI000469B504 L Y S K E K L V F A P G R P D R T M V V L G K D L P K T I E I L G N E  
UniRef90\_V6JQZ3 A E S H P T V I V S A G R R G L E V E L S P S D L T S L T S A T  
UniRef90\_F8F1H8 A L I F E S I S V S A G R R G L Q I L I D P Q V L V I E L S Q G V F C D L I  
UniRef90\_R6RHB8 A S S Q K N I I E S A G K I G Y Q I E T L D E L H K V I E  
UniRef90\_UPI000475061B A R Q L E T I I V S S G G K I G L Q M E L K V S D L K D V T E A  
UniRef90\_F8CC03 M E L F D A I A V S A G V R G T Q L V L A P A D Y L R V T K A  
UniRef90\_UPI000411DBCE A T T F P T L F C S G G R R G L E I E L T G T D L A T L T D A  
UniRef90\_UPI000347DFDC V T N E E W Y G C S D G T T T G Y I K V R T E Q I I N F F P Y T N H K V S I I E  
UniRef90\_B7VK91 I Q S N S T V T I S S G D R M A G V A L D P N D I J A L C A P I V A D  
UniRef90\_UPI000467B656 A E E L D T V I M S G G K I G Y Q V E L S L D D L K K V V N  
UniRef90\_Y5PG38 A L S R D K I I V S S G G Q R G M Q I L E P N D L I A V T Q A  
UniRef90\_T0RQM0 I L A N E L I A F N S G I L T E S I I M R T V D Y L R L V K P I V C N  
UniRef90\_UPI000369B782 A L H L D F M I V S A G K I G A Q I E L A P M D F K T I V N A T I C E V V  
UniRef90\_S2Z862 A E A L E E M I V S S G G K I G M Q I K L T P Q D F Q K V T G A V F E E V V V S  
UniRef90\_T8U9P1 A Q E F A T I Y V S S G G K R G L D I E L A S A W Q R Y  
UniRef90\_I7LEA6 M Q A E A E I G V S S G E V G R S V E L N P E D L A R F C H A  
UniRef90\_W1TTV6 A F S Q E K I Y V S A G K R G Y Q I L V A A A D L Q R V I S A K R G E I  
UniRef90\_B5EIB1 I L I E L P L I Y I N G G S R G F L V S M P P S E L V R V L Q  
UniRef90\_E1QE08 I L D L P R I L I N A G R R G L L A E V D P A V I G Q M L T A A P V E A A V  
UniRef90\_Q5P257 I V D L P R V Y I N G R R G F L L G I S P R E I L R V L Q  
UniRef90\_I0FA60 L K R F E T V F P A C G S R N S A I E L T P E E L S E F S F S K A W I D

UniRef90\_R5TQ25  
 UniRef90\_D8MP35  
 UniRef90\_A6NYF2  
 UniRef90\_R5YBC7  
 UniRef90\_C8PKY1  
 UniRef90\_D7N8U4  
 UniRef90\_C6PY01  V  
 UniRef90\_E0NNM8  
 UniRef90\_D5U3B4  A E  
 UniRef90\_UPI0002881231  
 UniRef90\_R5YMH0  
 UniRef90\_UPI00035D93C7 F  
 UniRef90\_U7UNU7  I  
 UniRef90\_R5ASD0  
 UniRef90\_A0A031GZ79  
 UniRef90\_UPI00037C4154  
 UniRef90\_R5RL50  
 UniRef90\_E5V415  K A E  
 UniRef90\_P45202  
 UniRef90\_V9HE04  
 UniRef90\_S0N7P3  
 UniRef90\_R6YSQ9  
 UniRef90\_R2T0N1  V  
 UniRef90\_UPI0003B39074  
 UniRef90\_R6BPC9  
 UniRef90\_R7C6X5  
 UniRef90\_UPI0003B4E98F  P K  
 UniRef90\_Q2SKM7  
 UniRef90\_G2ZD92  
 UniRef90\_R7JMX6  
 UniRef90\_V8G3B2 F  
 UniRef90\_UPI000464EFC9  
 UniRef90\_I6TCP8  
 UniRef90\_D1ANS3  V  
 UniRef90\_R7P6E8  
 UniRef90\_A0A059KG77  
 UniRef90\_UPI0003B483F9  
 UniRef90\_I0X8G0  
 UniRef90\_B0NEK5  
 UniRef90\_C8W11  
 UniRef90\_R7N858  
 UniRef90\_UPI00047A9052  
 UniRef90\_UPI000374B7FB  L  
 UniRef90\_W7DR38  
 UniRef90\_UPI0003152531  
 UniRef90\_UPI0003165322  
 UniRef90\_D8J031  
 UniRef90\_A0A017TEL4  
 UniRef90\_Q1ZNC8  
 UniRef90\_UPI0002EEFDF7  
 UniRef90\_UPI00030016E8  
 UniRef90\_J4USS6  
 UniRef90\_UPI00034941EB  
 UniRef90\_F5L3A7  
 UniRef90\_R5YDW4  
 UniRef90\_UPI00047BA143  
 UniRef90\_UPI000370D0D7  
 UniRef90\_C1F368  
 UniRef90\_R9JKW0  
 UniRef90\_R5NXQ3  
 UniRef90\_K4RCY9  
 UniRef90\_F5WRN5  
 UniRef90\_UPI0004715CDA  
 UniRef90\_F3YAU3  
 UniRef90\_U7UJR7  
 UniRef90\_D0I4N2  C R E  
 UniRef90\_R7GY80  
 UniRef90\_D3QZJ8  
 UniRef90\_UPI00028859E4  
 UniRef90\_C3AW69  
 UniRef90\_R7X2H2  
 UniRef90\_UPI000469B504  
 UniRef90\_V6JQZ3  
 UniRef90\_F8F1H8  
 UniRef90\_R6RHB8  
 UniRef90\_UPI000475061B  
 UniRef90\_F8CC03  
 UniRef90\_UPI000411DBCE  A T  
 UniRef90\_UPI000347DFDC  V  
 UniRef90\_B7VK91  S  
 UniRef90\_UPI000467B656  
 UniRef90\_Y5PG38  
 UniRef90\_T0RQM0 F S K  
 UniRef90\_UPI000369B782  
 UniRef90\_S2Z862  K T E E  L  
 UniRef90\_T8U9P1  
 UniRef90\_I7LEA6  
 UniRef90\_W1TTV6  
 UniRef90\_B5EIB1  
 UniRef90\_E1QE08  
 UniRef90\_Q5P257  
 UniRef90\_I0FA60  C K

UniRef90\_M5DWC0 1 T P A I N A A K K A G I R Y D I L E H E D P D A P S E E A A N V L N L P T  
UniRef90\_A7GY14 MT H K T N A A R L L D K L N T P Y E L V E Y D E V D E N D L S A A H V N A V S T  
UniRef90\_UPI000363F8F5 MS S K A T R A T Q A L E K A G I A F S L H R Y D Y D P A A D Q A A E A L G L G L P K  
UniRef90\_T1I9K0 UniRef90\_K6ZTR2 T P A I N L L L K S K I A H Q V L Q Y E H D A Q A E E A A Q K L L S L A A  
UniRef90\_C0BWB0 E V K T N A M R L L D R M K I S Y E T E Y E C D E F V D G L Q V A D M L S G L T D R E  
UniRef90\_C57R9 S E T P A T Q M L L E K A K V V P F K T Y E Y E H S D H M D E A A K L L G L G F D E P  
UniRef90\_E4P0R1 UniRef90\_A0A021XEP7 MS K T T R A T Q A L A K A G V S F T V H T Y E Y D P N A D Q A A A A L G L G E D P  
UniRef90\_C5QQ65 T K K T N A M R M L D R A K I D Y E T H P Y D Y V G G T A H S A A S L G L G A N V  
UniRef90\_G7M1D9 E S K T N A M R L L D S Y Q I T Y S T H S Y E K I D G V A V A H K I D K D V N  
UniRef90\_W5Y818 T K Q T K A T E F L A A S G V P F T V H S Y D Y A P D G G Q Q A A Q S L G A D P  
UniRef90\_Q1QP80 MS K T T R A T Q A L T K L G V A F T L H S Y D Y D P D A D Q A A Q A L G L G E D P  
UniRef90\_D5DF18 A D K T N V M R L L D Q K K L E Y N Y S Y D K K L S G V Q V A T S L G L G E D L  
UniRef90\_UPI0003AB2171 MT T Y D K V I A L L T K A R A D F T L Y D H D P S A Q A E E A A D A L G L G E D P Y  
UniRef90\_U1TP18 T Q A I R T L K E H G V D F H L H P Y E E R G S G T T V A A R E L Q I D E P  
UniRef90\_X0RPR8 T R A L E A L T A A G V T F T I H E Y E H S S D A E E T V A K L G L G V D P  
UniRef90\_UPI0003B78F55 E V K T N A M R L L D R N K I P Y E I I N Y E C D E F I D H T A E K T G A N V  
UniRef90\_D4KPC1 K T N V V R L L Q S K E L R H E V Y E Y E V E D G L T D A A R K M G F D P  
UniRef90\_K4KS60 A V Q W L T S Q A Y A V E W V E H A A T P R V A N A L A Q G G R A P G  
UniRef90\_E0TE02 K G K T N A I R L L D S K N V P Y K I Y T Y E S N D G K I D V A K V L E T  
UniRef90\_UPI0002896A6A MS R T T R A T Q A L T K A G I P F T V H V Y D Y D P N A E Q A A E A I G A H P  
UniRef90\_T1W8A4 T P A V K L L E K H K I F T L Y H H D A D E T N E E A A R K L G L G V N K P  
UniRef90\_UPI0004787030 D K V R E Y F K G Y G I E A R I R E F S S A T V A L A A Q A L G L G E D P  
UniRef90\_R9MXT7 S E T P A T Q L L K K H K V A Y T I Y Q Y V D H G G S S E A A S Q L G L G E P P  
UniRef90\_V8QPT7 E R V R A Y L E Q Y G A A D R V E C F G S S A T V E L A A K A L G L G C E P  
UniRef90\_R6Z1K9 K T N A M R M L E R Q K I P Y E T Y E C E E F V S G V F T A D Q T L P H  
UniRef90\_R6EDT2 Q R L T L L S Q E G A T Y R V L S H E A V G K C E A V S E I R G T A L  
UniRef90\_A8AHH6 E N V R K Y M Q Q F G I E N R L M E F D S S A T V E L A A Q A L H C E P  
UniRef90\_R7R802 M N T P A H D Y L D Q L G I A Y R R M R F P P D T G A N V A R A L G L G F R E  
UniRef90\_UPI00047867A6 MS K A T R A T K M L E Q A G V A F S V R T Y E Y D S N A D Q A A A I G L G E D P  
UniRef90\_B6JD99 M K K K T N A M R L L D Q Y N I F Y T H H E F K D H L D G H E V A Q L I S L K P E  
UniRef90\_A0A033UYK5 E V K T N A M R L L E K E K I P F T C H T Y E C E E F T K I A D M L G L G L P H  
UniRef90\_R9N0L2 T N A I R F L K E K K V H F N H Y T Y Q K E D V A K A A A V D V G L V S A E  
UniRef90\_M7TTG2 M A G K T P A T A L L T R R K V P F T V H T Y D H D P R E E E A A A A L G L G V A E  
UniRef90\_UPI0004661C5F E N L Q A L L K E T N V P F E L I N H D E I R T A Q E G A A Y F K I N V  
UniRef90\_I4ACH4 UniRef90\_T2RFX2 K T N V V R L L E A A G I P C T A Y E V P P K G K V P D A A G L L G K P V  
UniRef90\_R5HQG4 T N A M R L L D N A G I A Y R A Y E H D P A A E S L E A A E A L G L G V P E  
UniRef90\_A3TL21 E V K T N A M R L L D T M K L P Y K H H E Y E C K E F V D H I A E S L G L G L D A  
UniRef90\_UPI0003B558E8 T P A I N L L K K N C D F K L Y E H D S D C T N D E A V E K L G L G L D A  
UniRef90\_A8EV32 T P A V A L E A A G V F Y R L H T F D V A L D A G Q V A R A L G L G V P A  
UniRef90\_C5CBi5 Q T P A I A L L E K N S I A H R V I E F S S A Q H A G D A A A E L G L G Q S E P  
UniRef90\_UPI00046F7DA7 R V R E F M R E R G M E D R V S Y D H D P A A P S E E A A Q A L G L G M D P  
UniRef90\_D6DIK6 T P A I N L A K K L K L N Y Q I H E Y E H D P N A E E A A D K L L G L G L P A  
UniRef90\_D9WAF1 K V K T N A M R L L D S N A G I D Y E T H S Y E H V D G L T V A N A I G L G V D E  
UniRef90\_F5SQC7 E T P A T Q F L R Q H R T A F S L Y D Y V I E H G G T A V S A A C L N G V I D E  
UniRef90\_W0DY58 E S V R A H L K K W N R D Q D I M V F D P S A T V E Q A A Q T I G L G V E P  
UniRef90\_R5X0R9 E K V R E Y L K Q F N R E N I E S Q S S A T V A L A A E A L G L G V E G  
UniRef90\_UPI0003F62737 Q H L I N L E Q H D A R F R V V E H E A V G K C E A V S E I R G T A L  
UniRef90\_E3IH13 K K A K I E F S V H Q Y E H D S G H A E A E K L A V I E A  
UniRef90\_R5H747 K T N A M R F L D K S N I E Y T V Y E C D E F L D G L H T A E K L G L G Q P L  
UniRef90\_R9VLP4 T P A V T L L T R L G V P F T E H H Y D H D P D A E E A A E K L G L G V D P  
UniRef90\_K6YBZ0 L A R A G I T R L A Y E H D P A A G S L E A A E S L G L G V P P  
UniRef90\_W7ULM2 S K K T N A M R E L D K L S V T Y D I T S H P E Q L D A T H A S E S I G L G M E A  
UniRef90\_H5UTF0 K K T N A V R A V E N L K I D Y E I L K Y E V D D E H I D A A N L I G L G Q D I  
UniRef90\_UPI0003B319F7 M K N K T N A M R E L D K H N L E Y E V L T Y D H P G K D A D V V A S M L D E D P  
UniRef90\_W7CCH7 T P A V T L L E K H H A Y E V L S H D P Q A D N Q E V A K L S L D C  
UniRef90\_J5UMK9 L D V L G V D Y R T Y R H D A E A T G A E A A R E L G L G V P A  
UniRef90\_R7AYP3 L E K N K V S F T L H P Y E H S S D G D E A V K K L G L G L D A  
UniRef90\_UPI00034DF145 T T I T E Q L S A R G I A F M L H H A A L D T V E A C K A Y R D N P H  
UniRef90\_E6SAM6 T H V T Q Y L E S L S V Q F R V L P H S P A T T I E D A A E Q R G I R T  
UniRef90\_E8XPR6 K T N A V R L I E Q K K I A H E I F E Y E A V D G L T V A G K I G L G Q P V  
UniRef90\_E9C5K6 S E T P A T Q M L R A R G V A F T E H P Y D E H G G T E E S A R Q L G L G D E  
UniRef90\_E3BFT7 MS N K T N A M R L L D S K K L K Y D V H C Y D H I D G V E V A S N I G K D V  
UniRef90\_F2F7D4 F L E K K K A S F D V L E H D P N N Q A S E A S A K L G L A P  
UniRef90\_HOC2X5 E A K T N A M R L L D A L K I P Y R H Y S Y E C R E F V D A T A E A L N L A E  
UniRef90\_UPI0004794C13 MS I E T V R A W F G T H A P D V T T I E T Q T A T V T Q A A E V H G V R P  
UniRef90\_G4QMIO K T N A M R L L D T K N I K Y V L R D Y T E T K V K K L A S I L N E N P  
UniRef90\_B2UNQ3 Q R N L D L L Q R L Q L S H R L V E H E A V Y P T A H A V R Q R F G L R  
UniRef90\_J7SJQ5 E Q L L A L L Q N Q N A R F R V I P H P P E G K S E L V A Q I R G T L P  
UniRef90\_UPI000479983D MS K S T R A T Q T L D K L G V A Y T L H S Y D Y D P D A E A A A A L G L G V P P  
UniRef90\_F4DXL7 M P K K E K L R F L R S N E V K P Y F Y K Y I D G T L E S S K Q L N V E E  
UniRef90\_UPI000378454D K E R A C Y D L L D K L I K Y Q R V D Y N F Y P T T E V G K E L I T E T L  
UniRef90\_Q2J0H2 E R L T T L F T E G G A H F R V I H H P A A G S S Q S V A E I R G T E L  
UniRef90\_F2LY33 K K T N A M R E L D K A K I K Y D L F E Y D I D E N Y L G A V S V A G A D L  
UniRef90\_R9LXT7 M K T A T Q A I R V L R A A K V P F E G H P Y K Y V D G T A Q F A E E M G V D E  
UniRef90\_G4L865 S A T P A T D W L K Q H K V A F E S Y E Y V I E H G G T A S V A A F G L D H  
UniRef90\_C7XTP3 S R E S V Q A F F E A N A P D I E V V L T D S T A T V V E A A Q A L G L G V Q E  
UniRef90\_R5Q4M5 K T F E L T A L L T E N R A S F R V I E H P R A G K S E E V A K M R G T E L  
UniRef90\_U7VAR1 D E V K A L F Q E L G L D I P L L H H D E K A T V E E V L D L L K E K M  
UniRef90\_G2E6B1 MS D K T N V V R I E S K K I K F Y T Y D S D G A I S G V E V A K Q L G Q N P  
UniRef90\_R7KN77 S K T N A A R L L D T L K I S Y E L K E Y E N L G A V S V A N K T G Q D I  
UniRef90\_W5Y488 E K V R A A F R P L G I E H R L L E F P S S A T V E L A A E A A H V I P  
UniRef90\_Q65T05 K K T N A M R L L E A A G I P Y S S I E Y E H L D A V T A A H K L N I E P  
UniRef90\_A4H9N1 MS K E T P A I R Q L R E H H I A Y E I F T Y E E H G G T A Q T A A E L G I P E  
UniRef90\_R7L3M0 MS K T T P A T L A L T K A G V S F I L A T Y D Y D P N A D Q A A E A M G V P A  
UniRef90\_UPI00046F4253 UniRef90\_R5AJ48 UniRef90\_C8PM04 UniRef90\_G9ZFP9 UniRef90\_UPI0003134B1D



UniRef90\_M5DWC0  
UniRef90\_A7GY14  
UniRef90\_UPI000363F8F5  
UniRef90\_T1I9K0  
UniRef90\_K6ZTR2  
UniRef90\_C0BWB0  
UniRef90\_C5T7R9  
UniRef90\_E4P0R1  
UniRef90\_A0A021XEP7  
UniRef90\_C5QQ65  
UniRef90\_G7M1D9  
UniRef90\_W5Y818  
UniRef90\_Q1QP80  
UniRef90\_D5DF18  
UniRef90\_UPI0003AB2171  
UniRef90\_U1TP18  
UniRef90\_X0RPR8  
UniRef90\_UPI0003B78F55  
UniRef90\_D4KPC1  
UniRef90\_K4KS60  
UniRef90\_E0TE02  
UniRef90\_UPI0002896A6A  
UniRef90\_T1W8A4  
UniRef90\_UPI0004787030  
UniRef90\_R9MXT7  
UniRef90\_V8QPT7  
UniRef90\_R6Z1K9  
UniRef90\_R6EDT2  
UniRef90\_A8AHH6  
UniRef90\_R7R802  
UniRef90\_UPI00047867A6  
UniRef90\_B6JD99  
UniRef90\_A0A033UYK5  
UniRef90\_R9N0L2  
UniRef90\_M7TTG2  
UniRef90\_UPI0004661C5F  
UniRef90\_I4ACH4  
UniRef90\_T2RFX2  
UniRef90\_R5HQG4  
UniRef90\_A3TL21  
UniRef90\_UPI0003B558E8  
UniRef90\_A8EV32  
UniRef90\_C5CBI5  
UniRef90\_UPI00046F7DA7  
UniRef90\_D6DIK6  
UniRef90\_D9WAF1  
UniRef90\_F5SQC7  
UniRef90\_W0DY58  
UniRef90\_R5X0R9  
UniRef90\_UPI0003F62737  
UniRef90\_E3IH13  
UniRef90\_R5H747  
UniRef90\_R9VLP4  
UniRef90\_K6YBZ0  
UniRef90\_W7ULM2  
UniRef90\_H5UTF0  
UniRef90\_UPI0003B319F7  
UniRef90\_W7CCH7  
UniRef90\_J5UMK9  
UniRef90\_R7AYP3  
UniRef90\_UPI00034DF145  
UniRef90\_E6SAM6  
UniRef90\_E8XPR6  
UniRef90\_E9C5K6  
UniRef90\_E3BFT7  
UniRef90\_F2F7D4  
UniRef90\_H0C2X5  
UniRef90\_UPI0004794C13  
UniRef90\_G4QMIO  
UniRef90\_B2UNQ3  
UniRef90\_J7SJJ5  
UniRef90\_UPI000479983D  
UniRef90\_F4DXL7  
UniRef90\_UPI000378454D  
UniRef90\_Q2J0H2  
UniRef90\_F2LY33  
UniRef90\_R9LXT7  
UniRef90\_G4L865  
UniRef90\_C7XTP3  
UniRef90\_R5Q4M5  
UniRef90\_U7VAR1  
UniRef90\_G2E6B1  
UniRef90\_R7KN77  
UniRef90\_W5Y488  
UniRef90\_Q65T05  
UniRef90\_A4H9N1  
UniRef90\_R7L3M0  
UniRef90\_UPI00046F4253  
UniRef90\_R5AJ48  
UniRef90\_C8PM04  
UniRef90\_G9ZFP9  
UniRef90\_UPI0003134B1D

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

UniRef90\_M5DWC0 A D M A D P K V A E R T T G Y I V G G I S P L G M 110 120  
UniRef90\_A7GY14 C E L I N L R D L E E K I T G Y I R G G I S P L A M Q K K A L P T V I D Q S  
UniRef90\_UPI000363F8F5 A Q M M K P A D A E R M T G Y K V G G I S P F G G Q K M R S V P A F L D E E A  
UniRef90\_T1I9K0 A D M A D P M L A Q R V T G Y L V G G I S P L G G Q K K F L P T A I D E E P  
UniRef90\_K6ZTR2 A Q M A D K A E V E R V T G Y V L G G V S P L G G Q K K R L M T V I D T S S  
UniRef90\_C0BWB0 L E M L H L K D L T K V T G Y I R G G C T A I G M K K Q Y P T V I Q E D S S  
UniRef90\_C5T7R9 V E P C K P E V A N R H S G Y L V G G T S P F G T T R K A M P V F I D E S S  
UniRef90\_E4P0R1 A S M A D P K V A M R E S G Y V V G G I S P L G G Q R T H H K T V L D E E S S  
UniRef90\_A0A021XEP7 A N M M K P A D A E R L T G F V V R G G I S P F G G Q K K Q V P T A I D E E A S  
UniRef90\_C5QQ65 L N L M P L D Q L K Q V L T G Y V R G G C S P I G M K K H L F K T T I D E R A S  
UniRef90\_G7M1D9 L E M I H V K D I N K I T G Y I R G G C S P L G M K K V F K T F I Q E D  
UniRef90\_W5Y818 A R M M S P E K S A E L T G F R S G G T S P F G Q E H Q L P V I M S A D A  
UniRef90\_Q1QP80 A R M M R P A D A E R L T G F H V G G I S P F G Q K K R V P L A I E A A  
UniRef90\_D5DF18 L E M I P Q K E L L P L T G Y V H G G C S P I G M K K Q F E T F I D S T S  
UniRef90\_UPI0003AB2171 A A M A D A A R V E R V T G Y V M G G I S P L G G Q R K P L P T V V D D S  
UniRef90\_U1TP18 S T F A T P E Q A Q A L T G Y C V M G A V P P F S F Q R D R L A L R V D A R S  
UniRef90\_X0RPR8 V R P C D P H V A H K H T G Y V V G G T S P F G T T R K P L K V Y T E A S S  
UniRef90\_UPI0003B78F55 A Q M A E P A V A Q R R T G Y V R G G I S P L G M Q T T E F H R T F V D E S S  
UniRef90\_D4KPC1 L E M L H V K D L T P L T G Y I R G G C S P L G M K K Q F P T V V H E S S  
UniRef90\_K4KS60 I E M L K S K E L L P L T G Y I H G G C S P I G M K K D F P T Y L E E M  
UniRef90\_E0TE02 L S F A A P D T M E Q S L G V S P G G L T P L A L I N D D E R R I R V V L A T E Q  
UniRef90\_UPI0002896A6A V E M V P V K D I N K H T G Y I R G G C S P I G M K K A Y R T F I D E Q  
UniRef90\_T1W8A4 A V M M K P A T A E K M T G Y V V G G I S P F G Q K K A V P T V F E Q T  
UniRef90\_UPI0004787030 A D M A D P Q L A Q R V T G Y L V G G I S P L G G Q K K R L P T A I D I A S  
UniRef90\_R9MXT7 A K M L S P D Q V S E M T G H Q I G G C P F A V T N R G V K V Y L D E S S  
UniRef90\_V8QPT7 M Q P C Q L J A V A P R H S G Y Q I G G T S P F G T T R K R M P V W V L D E S S  
UniRef90\_R6Z1K9 A R M L T P P E E I E H I G H A V G G V C P F G V N D G V A V L D D E S S  
UniRef90\_R6EDT2 V E M L P V K E I T K V I T G Y V R G G C T A I G M K K Q F P T V V D Q S  
UniRef90\_A8AHH6 A S L A S P A E V D A L T G C V F G A I P P F S F H P N L K L V A D P L  
UniRef90\_R7R802 A K M L T P D E V V A T E K I G H A V G G V C P F G I K D G V T V Y L D D S  
UniRef90\_UPI00047867A6 I R L A T P E T V R A T T G Y Q I G S V P P F S W Q P G F R S F I D D R Q  
UniRef90\_B6JD99 A Q M M K P A D A E R L S G Y K V G G I S P F G Q M R P P P R A A I E E Q  
UniRef90\_A0A033UYK5 L E L L P L D Q L T K V T G Y V R G G C C T A I G M K K T Y Q T V I D I N S  
UniRef90\_R9N0L2 I S M I P V K D I N Q V T G Y I R G G C T A I G M K K Q Y V T R L D E S S  
UniRef90\_M7TTG2 V R P A D Q K T A E K L T G Y K V G G T S P F G T T R K E L P V Y V D E T T  
UniRef90\_UPI0004661C5F A K L A D A T A A Q R A T G Y V L G G I S P L G G Q R S R L P L V I D V T  
UniRef90\_I4ACH4 V K L A G A R E V E K V T G C T V G S V S M V G H N L P C I I D K N S E V E V L I D S D  
UniRef90\_T2RFX2 L S F D S P E K L Y E L M K V T P G S V N P F S I I N D K S K S F P T Y F A E S S  
UniRef90\_R5HQG4 V S M L P Q K Q L L P L T G Y V H G G C S P V G M Q K R A L Q T V V D S S  
UniRef90\_A3TL21 V A M A D P A A A E R S S G Y V V G G I S P I G M Y V T K V A I L D S Q  
UniRef90\_UPI0003B558E8 V E M I P V K D I N K V T G Y I R G G T T S I G M K K N Y Q K K L L R T V L D S S  
UniRef90\_A8EV32 A E M A S K D E A Q K V T G Y L R G G I S P L G G Q R R P H P V V L D S S S  
UniRef90\_C5CBi5 L A L A D L A V V E R V T G Y V R G G I S P L G G Q K K R A P S V I D A S S  
UniRef90\_UPI00046F7DA7 A R M A N P Q D A Q R A T G Y V V G G I S P L G G Q K K R L P T A L D A S S  
UniRef90\_D6DIK6 A K M L P P E Q V E E L I G H G V G G V C P F A V T D G T S V Y L D D S S  
UniRef90\_D9WAF1 A T M A D P A A A E R T T G Y V R G G I S P L G G Q R K R L P T A L D A S S  
UniRef90\_F5SQC7 V Q M A D P K M V E R S S G Y V L G G V S P L G G Q K K R L P T I H D S S  
UniRef90\_W0DY58 V R M C A P E L A E R H S G Y R V G G T S P F G T T R H P M P V Y C E R G T  
UniRef90\_R5X0R9 V E M I H V K D I N K V T G Y I R G G C S P V G M K K L Y G T F V N E T  
UniRef90\_UPI0003F62737 V E P C K P E V A Q R H T G Y M V G G T S P F G T K K T M P V F L E K T S  
UniRef90\_E3IH13 A R M L S A E E V I E Q T G H V I G G V C P F G L A N D L D K G V K V Y L D T S  
UniRef90\_R5H747 A K M L T P E E V I E F T G H A I G G V C P F G I E N L L H L V A D P V  
UniRef90\_R9VLP4 A S L A S P A E V D A L T A C V F G A I P P F S F H P D Q K K P L K T V I D Q S  
UniRef90\_K6YBZ0 A E M A D K V E Q R S S G Y V L G G V S P L G G Q K K Q F M T V I H N T  
UniRef90\_UPI0003B319F7 V E L L H V K D I L A V T G Y V R G G C V T P I G M Q R T V L P T V L D E S  
UniRef90\_H5UTF0 V A L A D H A A A E R S S G Y V A G G I S P L G G Q R S R L R T V L D A S  
UniRef90\_UPI00037CCH7 V D M I E V K T L L P I T G Y I R G G C C S P L A M K K S L P T F M H Q S  
UniRef90\_J5UMK9 I G M I P V S D I N K I T G Y I R G G C C S P L A M K K R F K T L I D V K  
UniRef90\_R7AYP3 V E M L P V K D I T K I T G Y V R G G C C S P L A M K K K E R T H I N E S  
UniRef90\_UPI00034DF145 V A M A S A S E V E R L T G Y V L G G V S P F A Q K K R L P T F V Y Q S  
UniRef90\_E6SAM6 V R L A D P A D A A R S S G Y V I G G I S P L G G Q K R R L P T V V D T S  
UniRef90\_E8XPR6 A D M A D P M L A Q R V T G Y L V G G I S P L G G Q K K L P T V I D S P  
UniRef90\_E9C5K6 F S M T P A E L L E S L G V L P G C V S P L A L L T D F V R P A G V L L D R S  
UniRef90\_E3BFT7 M T C V S P Q E V I S T G Y E I G T V V P L M L L T D N E S I A V V F D N Q  
UniRef90\_F2F7D4 I E M L P V K E L L G L T G Y I R G G C S P I G M K K L F P T I E E A  
UniRef90\_H0C2X5 V E P C K P E V A N R H T G Y L V G G T S P F A T R K E M R V Y I E H  
UniRef90\_UPI0004794C13 I E M I S V N D I N K I T G Y I R G G C S P I G M K K A Y K T F I E S S  
UniRef90\_G4QMIO A I M A D A K K V E S M S G Y V L G G V S P F G Q K K K L M T V I D I S  
UniRef90\_B2UNQ3 L S M L P V K D I T A V T G Y V R G G C T A L G M K R K Y P T V I D A S  
UniRef90\_J7SJQ5 A K M L N A E E V V H F T G H P V G G V C P F G L P V P L T V Y A D H S S  
UniRef90\_UPI000479983D I D L L P Q K E L L G L T G Y V H G G C C S P F G M K K Q F K T I I D S S  
UniRef90\_F4DXL7 P R I A S D E E L L E H T G C V P M C A C P F G H D A T I T L L I D R A  
UniRef90\_UPI000378454D A T L A S P E E A M Q A T S C V I G A I P P F S F S P R I T L V V D P D  
UniRef90\_Q2J0H2 A R M M K P A D A E R L T G Y H V G G I S P F G Q K K R V P V A I D E A  
UniRef90\_F2LY33 V K I A P S E A E K Y T G Y K V G G T S P F G L K T K M N I F A Q K D  
UniRef90\_R9LXT7 A K M L T P E E V L E M T G H A V G G V C P F A V E N P Q V E T V L D C S  
UniRef90\_G4L865 A K M L P A K E F V E E A I G H S P G G V C P F A I E N T D Q A G Q V G V Y F D K T  
UniRef90\_C7XTP3 I T M S A D E L K N V L N S H P G A V S I T E L M Y D D L E L I C D P T  
UniRef90\_R5Q4M5 A S L A S P D E V M D L T G C T F G A V P P V S F H P D K K R H L S L I H E S  
UniRef90\_U7VAR1 V D M L E L S K L K R K T G Y L R G G C S P I G I T R H T M P V Y C E Q G  
UniRef90\_G2E6B1 I A P C A P K V A D R E S G Y Q V G G T S P F G T T R K R M P V Y V Q K T S  
UniRef90\_R7KN77 I A P C K P E Q A Q R N S G Y Q V G G T S P F G T T R K R M P V Y V Q K T S  
UniRef90\_W5Y488 P R M L P A D E V L E L T S H P V G G V C P F G L P Q P V K V F C D T S  
UniRef90\_Q65T05 A S L A S P A E V H E L T D C V F G A I P P F S F H E K L K L V A D P G  
UniRef90\_A4H9N1 L R F A S N E V L H E C L A V V Q G C V T P F P L L N H T N R P I L L L D S M  
UniRef90\_R7L3M0 I G M L K Q K D L L P T T G Y V H G G C C S P V G M K K R F A T V I D S S  
UniRef90\_UPI00046F4253 V E L I N U P I 0 0 0 4 6 F 4 2 5 3 V E L I N L E K I T T G Y I R G G C S P I G M K K A F P T F I D S D  
UniRef90\_R5AJ48 A R F L T P E E A K Q L T G H A V G G V C P F A L P E G V P V Y L D I S  
UniRef90\_C8PM04 I T P L K L E A L Q K T T G Y I R G G C C S P L G M K K H F P T F I D E T  
UniRef90\_G9ZFP9 L E P A E A N Q A H K W T G Y L F G G T S P F G C K T A L P V Y V E E S  
UniRef90\_UPI0003134B1D A S M M K P A D A E R L T G Y K I G G I S P F G Q R R Q V P T A I E E M

UniRef90\_M5DWC0 A T A F T A I Y C S A G R R G L E I G 140 A A N D L A A L T R G F A E I T 150 160  
UniRef90\_A7GY14 A R G L S F V Y V S A G G V R G K Q L R L L A P F D L A N A C E A  
UniRef90\_UPI000363F8F5 A L L A E A Q V I Y V S G G Q R R G L Q I R L L A P Q R I V A L L G A  
UniRef90\_T1I9K0 A Q L F P V I Y V S G G K R G L D I I G L L A P T D L A K L L K A  
UniRef90\_K6ZTR2 A R E L L Q T F Y V S A G G K R G L E I A L L A P D D L A S L L N A  
UniRef90\_COBWB0 A Q S L S H M Y V S G G K L G M Q L I A L L A P E E D L R R A A D A S Y A D V I  
UniRef90\_C5T7R9 L L Q L P R I A I N G G R R G F L V Q I L D P Q E C V R L L G A  
UniRef90\_E4P0R1 A L Q F D E I L L S G G K R G F S V G V N P H D L L K V L N A V A A P I  
UniRef90\_A0A021XEP7 A L V H D L Y M N G G Q R G L Q V R L A P R D V L V A V K A I A A P V I  
UniRef90\_C5QQ65 A Q N L D K I Y V S G G Q R G M Q I I K V E D L I K M T E A  
UniRef90\_G7M1D9 A L L F D T I V F S G G K I G A Q I E M N P N E L T K V I P C S F I D I I  
UniRef90\_W5Y818 A M A C P H V Y V N A G G Q R G L V R I A P L D A Q K A V G A R V A D  
UniRef90\_Q1QP80 A L G E T K V F V N G G Q R G L Q I R Q L D P N D A R A A L K A I  
UniRef90\_D5DF18 A E N C E T I Y F S G G R V G H Q I Q L T L S D L S K V I R  
UniRef90\_UPI0003AB2171 A L D F P T I F F S A G R R G L R S V A L D V D Y F R L I D D C G A E I  
UniRef90\_U1TP18 L R D V G T I Y V S G G R R G L L A E I S P R D L E R I L N P T P V I G I T I A D  
UniRef90\_X0RPR8 I M D L P K L Y I N A G K R G L L A E I S P R D L E R I L N P T P V I G I T I A D  
UniRef90\_UPI0003B78F55 C L D H E T M L V S G G R R G L S V I E L S P L D L L I E L A G A E V A D  
UniRef90\_D4KPC1 A S F D K I Y I S G G R V G T S I T V N P D A L L K V T R  
UniRef90\_K4KS60 A S E Y D Y I I S A G K I G M Q V K L D T A E L V K L T D A  
UniRef90\_E0TE02 L T S S P T I W C H P L R N T A S V G L S P E A L L A F V T A F S R Q P  
UniRef90\_UPI0002896A6A A A N L D S I V S A G K I G M Q V E V S V S D L L A V T A G Q I V D  
UniRef90\_T1W8A4 A M T E P L V Y I N G G Q R G L Q V R V S P E D A C R L T S A I  
UniRef90\_UPI0004787030 A E P F D T I F I S G G K R G L D I E L A A S D L A S L L N A  
UniRef90\_R9MXT7 L K R F D T V F P A C G S S N S A I E L T P E L E K Y A K E E G W V D  
UniRef90\_V8QPT7 V L D L P T I Y I N G G R R G Y L L A L E L P Q V L V I E L L Q A  
UniRef90\_R6Z1K9 L R R F G T I Y F A C G S S N S A I E L T P E E L E R Y S R C A E W V D  
UniRef90\_R6EDT2 A E E K E Q I V I S G G K L G M Q L K L K P D D L C R A A G A V  
UniRef90\_A8AHH6 L F E F N E I A F N A G V L I E K S V I M N T D D Y L R I A Q P E L V N  
UniRef90\_R7R802 L R K Y N T V F P A C G S S N S A I E L T P E E M E K Y T P Y T E W V D  
UniRef90\_UPI00047867A6 L L D E P E L G V G T G Q W G E E I I R P A D L V R A A Q A R V V N  
UniRef90\_B6JD99 A M A Q D L V Y I N G G Q R G L Q V R L D P H D A V K V L N A I  
UniRef90\_A0A033UYK5 A E S L S T F V S A G K R G Y Q I E L D P A D L A I V I D  
UniRef90\_R9N0L2 A K D K D I I F V S G G R I G S Q I E L E P G D L L K A C K  
UniRef90\_M7TTG2 V L Q L P T I Y I N G G R R G F L I E I A P S D L L K V L K P T P V N V  
UniRef90\_UPI0004661C5F V R R F D T V Y C S G G R R G L E I E L A P G D L V E L T G A T  
UniRef90\_I4ACH4 L F Q Y S N I Y G G S G K A C T L K I N P N A L G K L  
UniRef90\_T2RFX2 L L D G Q N L N F H P A I N T E T F N I S G D D F D R F L N N I K N K V I K V N  
UniRef90\_R5HQG4 V L L V D T M I C S A G K V G Y Q V I E V A P D D L T A L V  
UniRef90\_A3TL21 A H E H E T V L V S G G R R G L D L E L S P S D D L V A V T R A  
UniRef90\_UPI0003B558E8 A K E Q E T I Y I S G G R I G S Q L E L E L S P D D L L K  
UniRef90\_A8EV32 T K S F E T L F I S G G Q R G L D I E V K P K D L E V L L K A  
UniRef90\_C5CBi5 A L D A E L M Y V S G G Q R G L D V E I A P A D L V O V T G A V V A E I  
UniRef90\_UPI00046F7DA7 A L T F D E I F V S G G R R G L E I A I A P Q A L I D L L D T T  
UniRef90\_D6DIK6 L K R F D T V Y P A A G S A N S A V R L S P E E L V S L S G S R G W V D  
UniRef90\_D9WAF1 A D D H E T V C V S G G R R G L E I A V E L S P K E L L A S L T D A V  
UniRef90\_F5SQC7 A Q S L T T L H V S G G R R G L E I A V E L P P Q Q L A Q A L T A K F A D I V  
UniRef90\_W0DY58 L L E L P Q I Y I N G G K R G F L I A V E T R A A L Q L L Q A  
UniRef90\_R5X0R9 A Q N L D T I V S A G K I G Y Q I E L K P A D L Q E V T N F E Y A D V I  
UniRef90\_UPI0003F62737 I L D L P L I Y I N G G R R G F L V G I H P H D L L T L L K P T Q V I S V  
UniRef90\_E3IH13 L K R F K T V F P A C G S I N S A I E V S P E E L W E Y S G A K D W I D  
UniRef90\_R5H747 L K R F D T V Y P A C G S G N S A I K L T C N E L E L L S N C S G W V D  
UniRef90\_R9VLP4 L F Q F D D I A F N A G L L E K S V I M N T G D Y L R I A R P E L V D  
UniRef90\_K6YBZ0 A K Q Y P S I Y V S G G R R G L E I E L N A L D L Q T I T R A L  
UniRef90\_W7ULM2 A E I M P L F Y I S G G R I G T Q I R L S P Q E L V K A I R  
UniRef90\_H5UTF0 T L A H E T V Y V S G G R R G F D V A I A P A D L V S I L S A  
UniRef90\_UPI0003B319F7 A C D F E T V Y V S G G R R G L D I E L T P E D L I T A T G A T  
UniRef90\_W7CCH7 L L E K E K I A V S A G K R G L Q I I L S P E D L V H A T A A T  
UniRef90\_J5UMK9 A Q R L E Y I V S A G Q R G M Q I K L D V N K L R E I V D A  
UniRef90\_R7AYP3 V L N K D F I Y F S G G K I G L Q I K L E P M K I I Q L L D  
UniRef90\_UPI00034DF145 A T Q Q P R I Y V S A G K R G V E L A I A P D V L V Q L L P  
UniRef90\_E6SAM6 A T D Q A T I Y V S G G R R G F Q L E L A S P V E L L R A T D  
UniRef90\_E8XPR6 A Q T F N T I Y V S G G K R G L D I E L A A G D L C R L L K  
UniRef90\_E9C5K6 L F A Y S H L F F H P L V N T A S I G L S P A S L S F L Q E L G V P V L L D A  
UniRef90\_E3BFT7 I F D E K E V T I S S G S K M A G L A L R S E A L A E L C K P I M G D  
UniRef90\_F2F7D4 A T A L D Y I V S A G K I G M Q I K L A P E D L Q Q  
UniRef90\_H0C2X5 L L A L P R I A I N G G R R G F L V Q I D P Q V C V I Q L L A A Q P V Q  
UniRef90\_UPI0004794C13 A K N L E T I I V S A G K I G Y Q V E L S P M D L Q S I V N  
UniRef90\_G4QMIO A S N F D T L Y V S G G R R G L E L A I S P N A I E K L L S A  
UniRef90\_B2UNQ3 A E A L P E M V S G G R R G L C Q I E L N P V D L C R A A E G F F A D V A D  
UniRef90\_J7Sjq5 L R E Y D T V L P A A G S A N S A V R L T P A R L A E L T N A Q W L D  
UniRef90\_UPI000479983D F N N F K T I M V S A G K V G L Q I E L D F K E V N I E E F I V S E I K V  
UniRef90\_F4DXL7 V L A C D F L L Y S P G P Q L T L E V P G D E L P R L L A A L P N  
UniRef90\_UPI000378454D L V E Y D E I A F N A G R L D H S M V L N A Q D Y V R I A Q  
UniRef90\_Q2J0H2 A L S E A T V Y L N G G Q R G L Q I E I D P R A A V T A L G A V  
UniRef90\_F2LY33 I F E F D T I L I N G G Q R G F L V E I S T E D L K K V L N L I V V D V A I  
UniRef90\_R9LXT7 L K R F E S V Y P A C G S S N S A I E L T C E E L F S Y A K A T R W V D  
UniRef90\_G4L865 L E N F D W I Y P A A G D R S S A V K R T P E E L E N Y S S A K E W I D  
UniRef90\_C7XTP3 V L J A T K Y F R F H P N E N H A T L R I S T E D L V K L M P G L H H E I H R W E  
UniRef90\_R5Q4M5 L F R Y S E L A F N A G S R D V S I I S T D D F K R I V A  
UniRef90\_U7VAR1 C L K K D F I F I S G G Q R G L Q I K I S P N D L T N F L N  
UniRef90\_G2E6B1 I A A L P R I Y I N G G R R G Y I I S L D T Q D A L R L L P T L V E M A V  
UniRef90\_R7KN77 I L E L P E I Y I N G G R R G F I V K I N P S V L V D E L G A K P V D  
UniRef90\_W5Y488 L R A F D E I W P A A G D R N S S V C L T P A R L V E L V G A Q W V D  
UniRef90\_Q65T05 L F G Y E E L A F N A G T L E R S L L N T O D Y Q R I A N P Q L I E  
UniRef90\_A4H9N1 A H S T Q L L A F C L C R N D Y T A A L T F Q Q L K M Y L E K I G Y A Y K L V D  
UniRef90\_R7L3M0 A E N F D T I Y S A G K I G F Q V E T S L D E L G K V V A F T V G K L I I  
UniRef90\_UPI00046F4253 I L N L N S V L V S A G L R G K V L M I C V K D L I  
UniRef90\_R5AJ48 L R R F E T V F P A A G S S N S A V E L T C K E L E R Y A A A A D W V D  
UniRef90\_C8PM04 A Q L Y D T L Y V S A G E R G H T L G I A P T D L Q Q I C A A A F C D I  
UniRef90\_G9ZFP9 I Y A L D T L C I N G G R R G F Q I I T P Q D L A I L N P Q T  
UniRef90\_UPI0003134B1D A T L E D E I F L N G G Q R G L Q I R M R P D D L V Q A L G A

UniRef90\_M5DWC0  
UniRef90\_A7GY14  
UniRef90\_UPI000363F8F5  
UniRef90\_T1I9K0  
UniRef90\_K6ZTR2  
UniRef90\_COBWB0  
UniRef90\_C5T7R9  
UniRef90\_E4P0R1  
UniRef90\_A0A021XEP7  
UniRef90\_C5QQ65  
UniRef90\_G7M1D9  
UniRef90\_W5Y818 [ ] S A A P A  
UniRef90\_Q1QP80  
UniRef90\_D5DF18  
UniRef90\_UPI0003AB2171  
UniRef90\_U1TP18  
UniRef90\_X0RPR8  
UniRef90\_UPI0003B78F55 [ ] K A Q E  
UniRef90\_D4KPC1  
UniRef90\_K4KS60  
UniRef90\_E0TE02  
UniRef90\_UPI0002896A6A [ ]  
UniRef90\_T1W8A4  
UniRef90\_UPI0004787030  
UniRef90\_R9MXT7 [ ] V C K [ ]  
UniRef90\_V8QPT7  
UniRef90\_R6Z1K9 [ ] V C K  
UniRef90\_R6EDT2  
UniRef90\_A8AHH6 F  
UniRef90\_R7R802 [ ] V C K E P V  
UniRef90\_UPI00047867A6 [ ] L T T P P V  
UniRef90\_B6JD99  
UniRef90\_A0A033UYK5  
UniRef90\_R9N0L2  
UniRef90\_M7TTG2  
UniRef90\_UPI0004661C5F  
UniRef90\_I4ACH4 [ ]  
UniRef90\_T2RFX2  
UniRef90\_R5HQG4  
UniRef90\_A3TL21  
UniRef90\_UPI0003B558E8  
UniRef90\_A8EV32  
UniRef90\_C5CBI5  
UniRef90\_UPI00046F7DA7 [ ] V C K S A V I  
UniRef90\_D6DIK6  
UniRef90\_D9WAF1  
UniRef90\_F5SQC7  
UniRef90\_W0DYS8  
UniRef90\_R5X0R9  
UniRef90\_UPI0003F62737 [ ] V C K  
UniRef90\_E3IH13 [ ] V C K T E  
UniRef90\_R5H747 F  
UniRef90\_R9VLP4  
UniRef90\_K6YBZ0  
UniRef90\_W7ULM2  
UniRef90\_H5UTF0  
UniRef90\_UPI0003B319F7  
UniRef90\_W7CCH7  
UniRef90\_J5UMK9  
UniRef90\_R7AYP3  
UniRef90\_UPI00034DF145  
UniRef90\_E6SAM6  
UniRef90\_E8XPR6  
UniRef90\_E9C5K6 M S E G Q A  
UniRef90\_E3BFT7 [ ] C  
UniRef90\_F2F7D4  
UniRef90\_H0C2X5  
UniRef90\_UPI0004794C13  
UniRef90\_G4QMI0  
UniRef90\_B2UNQ3 [ ] S  
UniRef90\_J7SJQ5 [ ] V T T Q P V  
UniRef90\_UPI000479983D  
UniRef90\_F4DXL7  
UniRef90\_UPI000378454D  
UniRef90\_Q2J0H2  
UniRef90\_F2LY33  
UniRef90\_R9LXT7 [ ] V C K  
UniRef90\_G4L865 [ ] V A K E Q  
UniRef90\_C7XTP3 F S  
UniRef90\_R5Q4M5  
UniRef90\_U7VAR1  
UniRef90\_G2E6B1  
UniRef90\_R7KN77  
UniRef90\_W5Y488 [ ] V S Q P  
UniRef90\_Q65T05 F A T E  
UniRef90\_A4H9N1 F G A A S A  
UniRef90\_R7L3M0  
UniRef90\_UPI00046F4253  
UniRef90\_R5AJ48 [ ] V C K  
UniRef90\_C8PM04  
UniRef90\_G9ZFP9  
UniRef90\_UPI0003134B1D

UniRef90\_UPI000468CD66 1 K T L V E K I L D Q H K V K Y R Q A E F A V T G G V A Q M D S I L R D K E 40  
UniRef90\_UPI00037F1405 D R L V I S L L D S H G A R Y R V L Q H D A E G Q S F R V A D I L R G T E P  
UniRef90\_UPI000471BFD5 A N V K K Y F Q Q G R E N D L I E L E S A T V E E L A A K A L R Q V D Y E S  
UniRef90\_X0W1A1 H E F L T L R Q Q G E Y W F E T F E H E P V R T S E E A A K L R G D V Y S  
UniRef90\_W1RPW0 S E A S V R A F F A E A A P D V T T I D Q G S T A T V N D A A A A L G V I E P  
UniRef90\_UPI000375B82D G V I P F V L H P H D P G A G S A E A A A A L G L I D P P  
UniRef90\_UPI00030335F5 S K T N A A R I L D R L H L P Y E L L E Y P D D L A A S E A E K L L G L P P  
UniRef90\_B4V394 M A K K K Q A T V A L T A A G A E F T V Y E H D P A H P S E E A A Q A M G V S P P  
UniRef90\_F0LWK2 M S A L E T L Y Q L L H Q A G Q V P F R Q Q W Q H E P L F A T D E K V A R E L G W T  
UniRef90\_S7JC87 T P I T Q Y L D S N E I P Y T V H T H P K V C T I D D A E R L V P H L T  
UniRef90\_UPI00037CEC45 E N K T N A M R I L E N L K I P Y E T Y E C D E F I D A G Q L A D M L S L D H  
UniRef90\_UPI00035B5E1 K T N A M R I L D R K K I E Y N I T Y D S S D G K I D G I S V L G S E D P P  
UniRef90\_R4K6A1 K T N A M R I L E M Q K K A A Y I F H D Y T A S G A V E D V A A A L G Q D P  
UniRef90\_R7FU29 M T T L E S I R D W L T E Q E V I S F R E V H H E P T R T S E D S A R V R G E E L  
UniRef90\_E0XYL1 T P A I N L L N K Q I A Y Q L H P Y P H D P Q N Q E S A V E K L G L P A  
UniRef90\_Q7VNW2 R K A R V V H D I H E H D P A S E S S E A A E K I G V E P  
UniRef90\_W5YHA6 K T N A M R F L D D L D I N Y D I L E Y N A S D G K I D V A E K I G Y S L  
UniRef90\_U2JY78 M A K T T Q A T R F L D D K A G V T Y T L Y D Y D P A F K V G Q A A E A I G E P A  
UniRef90\_UPI0004659497 Q T P A T R F L D S K K I S Y K T Y E Y E C N G A K H D A A N E L N R D Q  
UniRef90\_UPI000365A6AB K T N A L R E L D A A G I P H E E F D A E P T M T G E E L A R S Q G E D P  
UniRef90\_S6CEZ5 G P E K L V A Y L Q Q A H D V R Y E G I E H P P A A S A L D Y Q K T L G T E L  
UniRef90\_W4LPY9 E R A K A Y L K E Y K M E D Q T R E F P S A T V E L A A E A L H T E A  
UniRef90\_G2T3K3 L E T L L D Q N Q V I E Y E I Q H T A L R T A K E G A A L R G T E L  
UniRef90\_V6M4J0 L T T L L D T H H A R Y R V M E H V T G G R S E E V A K L R G T P  
UniRef90\_W1X17 E R V R Q F L A E H A P D I N V T V H E P T A T V Q Q A A E A F E V I E N  
UniRef90\_K8WRL7 M S K E T P A V R F L D A K E A R F H L Y N Y E E K G G T A V S A R E L S V D E  
UniRef90\_B9M6L4 E K L K E F L D A K N K V K Y V T I N H S P A Y T A Q E I A E L S H V S A  
UniRef90\_B9M6L4 E K V K K Y F A A F G L S E R T I M E F P S A T V E L A A A A L N C E R P  
UniRef90\_I7MBF5 D K V K A Y F A E F G R E G D V M E F P A S A T V E L A A A Q A V C E  
UniRef90\_R7K869 T I E T T T Q F L T A H G I A F T L Q D Y V S D P H A A A G I G I D Q  
UniRef90\_S6CEE4 T P A I D K A K Q A R I E Y L V H E Y E H D P A A D E A A D K M G V D P  
UniRef90\_S6D413 T N E E R L L D Q H G I A Y Q E Y T F D W L N R G N D A A E E Q G V P A  
UniRef90\_UPI00035B5698 S A A R V Q A L L D S I G L G H H V V E H H S T R T S E D A A N S Q G E C V  
UniRef90\_M5J571 Q R F L D A L G L E V I V I D R A P A K S L E E A A S M L G I T P  
UniRef90\_G7Z519 R K A A V P H T I H E Y D H D P A S E E A A E K T G V D P  
UniRef90\_UPI00047E215C M A K K D R I K Q I L D K A D I P Y E I F S H G M D R S T D E L E K Y I N E H  
UniRef90\_E4PIW8 T P A I E I A K K H K I D F E V H E Y H H D T N S E E A A Q K L G V P T  
UniRef90\_F8HZY6 T P A I N Q L K S K K I Y Q L H E Y H H V A S S E A V E K L A V D P  
UniRef90\_Q087C5 V K E Y F D K F N I D K D V L E F D S A T V E L A A K A L A N T E G  
UniRef90\_S6HG82 A T F E K I T T M L R E K G I D F N L T T H E P V L T S K A A A E A R G A T L  
UniRef90\_B1C7A8 T T A V R A L R A A N V Q F T L Y E Y V E K G G T R A S S E A L G V A E  
UniRef90\_J9HY12 S E T P A T T V L R R A G V S F D V Y S W V D H G G T S E S A R Q L G L D E  
UniRef90\_UPI0003750403 E I K T N A M R I L D K L K I E Y K H Y E S P T F V S G L A T A N Q L G L P P  
UniRef90\_UPI00035C894A E N V R K I L E E Q R I P F D I R H Q P I R T A K E G A E A L N D I  
UniRef90\_UPI000349B60 G K T N V M R I L E S N D I D Y D L L N Y D K I D G V S V A N K I N K N V  
UniRef90\_UPI000379A977 M R Q G T P A T V L L A K R K L A Y R T H P Y D V S P D A A L V A A A L D V P A  
UniRef90\_G7PM85 T A A R F L R N H N I D F Q L Y D Y V E H G G T A H S A E C L G V D E  
UniRef90\_V9H8Q7 R I K S I L E E L S I R F E E I H E I N H T C E E S K K F R D D Q W Y  
UniRef90\_K2G5Y5 E T K T N A M R I L L E T K K I P Y T T H T Y E C D E F L D Q I A D M L S L P Y  
UniRef90\_R9KTC4 T P A L L E A L D K A G V S Y E V L E H P H D P R T K E G A E L M G L D P  
UniRef90\_W1XJ4 E Q L E H V L R E K G I G Y E I I H E P I K T A Q E G A F L M G L E  
UniRef90\_K0Z3R5 T P A T V A L T K A G V A F E L H P Y D Y D P D A P Q A A E A L G W A P  
UniRef90\_UPI00046F5E96 T P A I R A L R D A H I E F H L Y D Y V E K G G T V S A Q A L G V P E  
UniRef90\_L1QDH0 T P A I R F L R A H Q I P F E P R E Y A Y V G G T A Q S A L A L G V D E  
UniRef90\_I3CBY2 M T P F E Q I T V L L D R E E A A Y R V V E H A A E G R S L I E V A A V R G T S V  
UniRef90\_X2HHP9 M A H A N G A Q R F L D D A G L D V D V E R P A A R S L E E A A S L L G I T P  
UniRef90\_K1V7X8 M S K A T R A T R A L D A A G V A V V L H P Y Q Y Q A D D Q A A Q I L Q L P P  
UniRef90\_U2A2J2 M S K T T R A T Q A L Q K A G L A F T A V S Y D Y D P D A P Q A A E A I G A E P P  
UniRef90\_B0RUB8 R Y Q V Y T Y D Y H S A V E V A A A I G L P P  
UniRef90\_A8IJ45 E A K T N A R I L E T M K I P Y E A R T Y E C D D F V D A A A D K L G L D H  
UniRef90\_I016R6 M P N K Q L K E F L D Q H H V K Y L C I D H S P S Y T A Q E I A I A H V S G  
UniRef90\_C4ZBC9 T P A L A L L A K A G L T V S T H A Y E A P G V A A E A A D A L G L D H  
UniRef90\_UPI0003665435 M S D S T I L A R L D A A S A Q Y A V M E H A P V F T S E E A A A V R G T S L  
UniRef90\_UPI0002D4F4D7 K K T L V D Q I L D K A K I D H D S L V L N A L J A G Q L P Q G T E E  
UniRef90\_D2R493 V E K I L D R E K L P Y E Q K E H E H G V F Q M D T S I L R E Q D Q  
UniRef90\_UPI000403DF56 M N T F E K I V A L L E K N H A N F R V I H E P E G R T E L I S A I R G N A P  
UniRef90\_D6S5J9 M S R A T P A T A A L E K A G I P F S V I E Y D A G Q T G N H A A A S I G E D P  
UniRef90\_UPI0003456084 Y E H D P A A E S K E A A E K L E T D P  
UniRef90\_W5YK38 M E S L E K I Y Q L F N A L S I P F R E W Q H E A I F E T D I K V A A Q L G W T  
UniRef90\_Q316D1 D T L C E L L N T S G A R F R V L E H P A E G K S D A I A A L R G T R P  
UniRef90\_L8XEV6 P Q K V I R L L E R A K V K Y E P V E H R T V Y T A F D K A A T L R V P L  
UniRef90\_Q1BNJ6 T P V T R Y L D Q Q Q V D Y R L L P Q Q H A T T I E D T A K Q R G V R P  
UniRef90\_A4VWF9 M A Q E T N A V R M A K A G V S V E V V T Y P S D L S A V H A S S V L G L E L  
UniRef90\_UPI0003665435 L L D R L L D L H Q A R Y R L I D H P A E G R T D L A S V L R G H P L  
UniRef90\_UPI0002D4F4D7 T P A V R F L R A H K V P F H L Y P Y R E H G G T A H S A Q C L G V A E  
UniRef90\_HOUJB6 Q Q I L D V L T T N D C W H Q T F E H D A V L T S E A A A A T R G Y G L  
UniRef90\_A0A024YSLO T P G T L L S K A G I A F D L H P Y D Y D P D A P Q A A E A L G I D A  
UniRef90\_UPI000425FB90 D K V R N Y L K K W N A D G R V L E F E S S A T V E L A A Q A L H C E G  
UniRef90\_A9VDA2 T P A I D T A K K A G I A F E I H E Y H H D A A A E E A A E K L G V T A  
UniRef90\_V4NIQ6 E S V R Q F F A D R A P E I D I L E L E S T A T V A L A A R A H H V T P  
UniRef90\_U2B1T7 M A L G T P A T V T L D T L G I S F T A Y S H N P A A T G L E A A T E L G I S A  
UniRef90\_UPI0003602783 M S K K T K L K Q I L D K A K I A F D S L A I N A L L E G N L P E N I E R  
UniRef90\_UPI00034949FE T P A I D I L K K A H S E F R V Y T H D P K S A S Y E A A E K L G L P P  
UniRef90\_S7XLJ6 E A V R A Y L S A L G R E G E I L E F P S S A T V E L A A K A V G T I P  
UniRef90\_UPI00036C4C2B T P A T A A L D A A G I S Y V A H S Y T H S D S A E E A A Q L G V S G  
UniRef90\_C1DQU5 K T N V M R I L D K E H I K Y Q A Y D Y T K V I S S A E D V A T A L G E D P  
UniRef90\_U2D7X0 M A E S N P A L D A L A A S G L E H E I T R H G R V G S L A E A A A R G V E P  
UniRef90\_UPI00035B8A83  
UniRef90\_R5VH82  
UniRef90\_U1LP92

UniRef90\_UPI000468CD66 Q F V Y K T L V C E G N K T G P L V G V V P V T E H L S M K K L A K V S G N K K 80  
UniRef90\_UPI00037F1405 G Q G A K A M L L K G Q G E R E Y A L A I L P G D H K L D M K K L G A A L G G K K  
UniRef90\_UPI000471BFD5 E K I A K T L A F R G S E R E E F V L V V A A G N D A K R F D N K K F R K Q T F G K  
UniRef90\_X0W1A1 K Q G A K T I I V R V K K E E F V M L V L P G D A K R F D N K K F V K K L F G A K D  
UniRef90\_W1RPW0 A R I A K T L S L R V D G K V V L V C A R G D A R T L S N G K A K A A L G A K P  
UniRef90\_UPI000375B82D S K V F K T L M L D V G R G L A V G I V P V S A G T L D L K A M A A A L G A K K  
UniRef90\_UPI00030335F5 E Q V F K T L V A K G D R S G V L G A V I P G S A Q T L D L K A L A A A L G A K K  
UniRef90\_B4V394 D R V F K T L I A E V D G A L V V A V V P V S A G S L D L K A L A A A V S G K R  
UniRef90\_F0LWK2 G T H T K S L F L K L K G G Y A L L F T E K D A R N V D A K A I K A L L I G K R  
UniRef90\_S7JC87 N Q M V K C I L L R D M G D N L A L A C A P G D R N V D P K K V R A L L N W R R  
UniRef90\_UPI00037CEC45 H N L I K T V V F R I K D S H W I L A A V N G H A E R I N Y K L L A R A F G V N R  
UniRef90\_UPI00035B5E1 R L V Y K T L V T K G H S S N N Y F V F V L P I D S E E I D M K K A A R S V G E K S  
UniRef90\_R4K6A1 K V V Y K T L V L Q G S S G N N Y F V F V T P V E E E I D L K K A A V C A G E K S  
UniRef90\_R7FU29 D K V F K T L V T V G S S G K N Y V F I V P V C K E E L D L K K A A K T V G E K W  
UniRef90\_E0XYL1 R N G G K A L L V M K L D D D D F A L V V L P A D R N S A H S G T R R T L G V R K  
UniRef90\_Q7VNW2 A Q V F K T L L V A E N G D D Q L A V M V V P V A N S L N L K R A A Q A L A V K K  
UniRef90\_W5YHA6 G R V F K T L V V A V D G K E L A V A V V P V T A L L S M K R A R A A Q G K K  
UniRef90\_U2JY78 D M V Y K T L V L K G E N T F V C I V P V Q E E I D L K K A M A K A I K E K K  
UniRef90\_UPI0004659497 E R S V L K T L M A E V D G K P V C A V L P S N A E V S M K K L A A V F G K H  
UniRef90\_UPI000365A6AB N E V F K T L L I H H E K T Y I T A V I P V N A E L D L K K A A A A G E K A S  
UniRef90\_S6CEZ5 D A V F K T L V T Q G K S G G Y V F L V P V A A E L D L K K A A A A A G E K A S  
UniRef90\_W4LPY9 Q Q Q A K S L F V R H G E R G F A I V T V Q A Q K Q V D L D R I R E L L D A T S  
UniRef90\_G2T3K3 G R I A K T L F L V D G E A V L I V C A G D A R I D N A K Y K A F F R A K  
UniRef90\_V6M4J0 G Q T A P T L V L R S E K A F F A L L L S G A D R Q Q L N M D D I S S L L D S E K  
UniRef90\_W1IX17 G Q G A K A L V C H V K G N Q Y V L A V L P A D Q Q A D L A A I A Q Q I G S R  
UniRef90\_K8WRL7 G Q I A K T L S C K V N E Q V V L V M A G T S R I D N K K F K Q F F G V K S  
UniRef90\_B9M6L4 H C I K T L T I M E D D A R Q P L V V L M H G D C Q V S T K E L A R V L G V K S  
UniRef90\_I7MBF5 K K L A K C V I A K D D R D K L A M V V L P G D D K V S T F D K L K Q K T G A H K  
UniRef90\_R7K869 G R I A K T L S F A G E K V I V V V F A G D V K A D N A K F K A Y F G T K P  
UniRef90\_S6CEE4 A R I A K T L S F A V G D R V A L V V C A G D A R L A N P K F K A Q F G T K P  
UniRef90\_S6D413 N K V F K T L M V E I D K K Q I V C V A I P V H K K M D L K K V A L F G G R N  
UniRef90\_UPI000356968 A R V F K T L V V G E G K T L F V A V V P V L R Q L D L K C L A R A V G V K K Q  
UniRef90\_M5J571 G S L A K T L I F R N A N Q D P Y L V V C L Q N E I D L K K V A H E L G K K Q  
UniRef90\_G7Z519 A Q I A K S L I F R T K E T R Y P V L V V A S G A N R V D E K A V G R L I G E K  
UniRef90\_UPI00047E215C A E I V K S L V V R H K D G S Y L F A L V P G D R Q I S W P K L R A L L I G V N K  
UniRef90\_E4PIW8 A R V F K T L V V A V D G K E L V V A I V P V N T M L N M K K L A R A A G G K K  
UniRef90\_F8HZY6 D I Y K T L A L Q G N V T G P L I G I V P I D M H L S E K K L A A I S G N K R  
UniRef90\_Q087C5 E Q V F K T L V V S L D N Q A L V V G V V P V S S M L S M K L A K A A G A K K  
UniRef90\_S6HG82 A R V F K T L V V Q L D S D R L A V A I L P V V Q K L S M K L M A K A T G V K K  
UniRef90\_B1C7A8 A R I A K T L S F K D K D N C I L V V T A G D A R I D N K K F K A E F N Q K  
UniRef90\_J9HY12 A S G A K A M L L K D N S K N F Y L A V M S A S K K F S W K L L K K V L K I K N  
UniRef90\_UPI0003750403 H L V I K T I V F E D E S G A P L I V L M H G D M D V L S A Q A L A R L I G K K K  
UniRef90\_UPI00035C894A E R V F K T L L A D A D V D G A L T V A V V P V A G R L D L K A L A A A V G G K R  
UniRef90\_UPI0003B49B60 H A V I K T L V M Q D E E A Q P L V V L M H G D R E V L S T K Q L A R A Q I G C K S  
UniRef90\_H6LCP8 E F V Y K T L V T E G K S K N Y F V F V I P I A E R L D M K A A A R A V G E K S  
UniRef90\_H3SBZ1 G Q T A P A L V L T K A D A D Y V V L I M S G A R G R I D L E K A A A R M L G E R G K  
UniRef90\_U2PSM8 D M V Y K T L V T K G V S K E I Y V F V I P V T E E L D L K K A A K T T D E K K  
UniRef90\_UPI000379A977 E R V F K S L V T E V D G A L T V A V V P V T G E L N L K A L A A A V R G G K  
UniRef90\_G7PM85 G A H S K N L I T T E K D K K N Y V L V T V L H D R Q I N L N E L A K Q L N M K H  
UniRef90\_V9H8Q7 H S V I K T I V L Q N D K K Q G L I V L M H G D K H I S T R N L A R Q L N M K H  
UniRef90\_K2G5Y5 W L W S K N I V F H C K W K F Y L V V T H W D K E I K A R N F K K V F W S K D  
UniRef90\_R9KTC4 E K V Y K T L V T Q G A S K N Y Y F V I P I A E E L D M K K A A K S V S E K S  
UniRef90\_W1IXJ4 R Q V F K T L L L N G D P K N L A V A V T P V S G Q L D L K K I A K V F K A K K  
UniRef90\_K0Z3R5 D T V Y K T L M A R V D D S E D V V G I V P A T A T L N L K E L A K A A G G K R  
UniRef90\_UPI00046F5E96 G Q T A P A L V L R A G D E Y F A L I A S G D R G R V N L L E E T A A L L G R D S  
UniRef90\_L1QDH0 E Q V F K T L M T L V D A R P V C V V V P S D C E V S M K K L A A A A G G K S  
UniRef90\_I3CBY2 H S V I K T L T I M E D E H K K P L I L M H G D K E V S T K Q L A R L L A V K K  
UniRef90\_X2HHP9 H A V I K T I V L Q N E H K Q G L I V L M H G D R H I L S T R Q L A R E L G M K H  
UniRef90\_K1V7X8 S Q G A K A L V C R G I E A P G V L A V L A G D R R A E L K R I V A A V G G R K  
UniRef90\_U2A2J2 A D I V K S L V V K H R D E T F L F A L I P C G D R R I S W P K L R A L V V N K S  
UniRef90\_B0RUB8 H Q V L K T L M T W V D G H A I C V V I P C G D R R L S L K T L A S A C G G K S  
UniRef90\_A8IJ45 G R V L K T L M A E V D G K P V C A V I P S D R E V S M K K L A A A F G G K S  
UniRef90\_I016R6 E Q V F K T L V V E D P Q R K P M L V I P G P A T L D L R A F A Q A V N L K K  
UniRef90\_C4ZBC9 A G M Y K T I T T V I G K S G G Y V F V V P I D D E I D F K K A A K A G E K K  
UniRef90\_K2A0R6 K Q L A K T V I I K A G G Q F I M V V I P A T D H I N F S E L R E L T G V K E  
UniRef90\_UPI00035D70BA A R V F K T L V A E V D G S P V L A M V P V S G S L D L K A L A A A R G G K K  
UniRef90\_D2R493 S S G A K A L I C K L D D R V V M F V M P A S R K L S S K L V R Q Q K L G K S  
UniRef90\_UPI000403DF56 N D I Y K T L A L T G D K T G P V I G I V P I T E H L S E K K L A K I S G N K K  
UniRef90\_D6S5J9 R L V Y K T L A C E G N K T G P L V A V L P I T E H L D L K K L A K V S G N K K  
UniRef90\_UPI0003456084 E Q A A K Q V I A G A P V R Y V L A I I P G D S K V N F K A V A K L M D G K K  
UniRef90\_W5YK38 A R V F K T L M V L V D G R P A C V V V P V A A T V S M K K V A A A F G G K S  
UniRef90\_Q316D1 A R V F K T L V V A V S E R D L A V M V V P V L H Q L D L K L A A K A L G V K K  
UniRef90\_L8XEVB6 G T H T K S L F L K L K G G Y A Y L T D K D S R L D S K Q I K A L T G K R  
UniRef90\_Q1BNJ6 E Q G A K A M L F K D G G D T A L A V I P G H L K I D F R K V A D A V G R K  
UniRef90\_A4VWF9 E Y V T K S M C L T N K K K T A F Y L I M D D Q N L D M D Q F R D L V G A N R  
UniRef90\_UPI0003665435 K V I G K T L A V K L D K N P A L V L I P A N K N L D K E K K V A R A N K  
UniRef90\_UPI0002D4F4D7 E Q M V K S I V L R D M G N Q Y T L A C V P G D Q S V D P K K V R S L L N C R R  
UniRef90\_HOUJB6 N R V Y K T L A L D G R K A N L V A S I P A D C E V D L K A L A R A A G Y G R  
UniRef90\_A0A024YSLO E Q A A K C I I V R K R V G K Y V L A A V V P G D R Q E V D L A A V A A L F G G R  
UniRef90\_UPI000425FB90 H S V I K T I V L Q N E H K Q G C V M L M H G D K Q I S T R N L A R Q L G W R H  
UniRef90\_A9VDA2 H Q G A K A I V V R Y K T P R H A M L V L P A D A K F S N R A M A K A L G T K D  
UniRef90\_V4NIQ6 S Q T L K T L M A E V D G K P V C V V V P S D C E V S M K K A A A F H G K S  
UniRef90\_U2B1T7 K R I A K T L S F D L G D R C I L I V T A G D A K I D N A K Y K A K F G K K  
UniRef90\_UPI0003602783 D Q V F K T L V V K L D G K A L A V G I V P V T G Q L G L K Q I A K A A G A K K  
UniRef90\_UPI00034949FE G Q I A K T L S L K V K D R V I L I V T R G D A R L D N R K L K A Q A L G A K  
UniRef90\_S7XLJ6 E R V F K T L M A V V D D Q L V V A V V P V S R M L D L K A L A L A V H G R K  
UniRef90\_UPI00036C4C2B S D I F K T L A L S G D K T G P I I G I L P I T E H L S E K K L A Q I S G N K K  
UniRef90\_C1DQU5 E R V Y K T L L A A T E K G E L L V A V V P I A G S L D L K A L A S A A G V K K  
UniRef90\_U2D7X0 A R I A K T L S F V W G E S A L L V A A G D A K V D N R R F K D T F G C K  
UniRef90\_UPI00035B8A83 D R V F K T L M V S T G S T D L A V A V V P V A A M L D L K A L G M A L G K K  
UniRef90\_R5VH82 N H V F K T L V T V J A K S K E H Y V F V L P V A N K E L D L K A C A K A V N E K S  
UniRef90\_U1LP92 A A I V K T M V V R R G E G D H L L V L V P G D R A I A W P K L R E I L G V N R

UniRef90\_UPI000468CD66 C E M L P L K K L E K T T G Y V H G A N T P L G L H F 110 T H H F P L Y L D N T 120  
UniRef90\_UPI00037F1405 A E L V K A E T A M E L T G C R I G A I P P F V F D E R I E L I V D P S  
UniRef90\_UPI000471BFD5 A R L L S P D E T L D E Q T G H A I G G V C P F G L I K D L P V Y J D I S  
UniRef90\_X0W1A1 I R F A S E E E V S D L T G V K V G G V P P F G N L F N M K A V V D E T  
UniRef90\_W1RPW0 R M L G A H E V E E L T G H P V V G G V C P F G L A A P L P V Y C D I S  
UniRef90\_UPI000375B82D A S M A D P A V A Q R R T G Y V I R G G V S P L G Q R L P S P T V L D S S  
UniRef90\_UPI00030335F5 T E T V P L K D V Q R L T G Y V I R G G V T A L G T K K A Y P V Y V D S S  
UniRef90\_B4V394 A A M A D P A L A E R T T G Y V R G G I S P L G Q R K R L R T V L D A S  
UniRef90\_F0LWK2 P S I C S D E E M T E V T R C L P G A V G P E V L P Q A I P V I V D P A  
UniRef90\_S7JC87 M T C V D L S Q V E T I T G Y A L G T V T P L L L K T P M P I I F D P A  
UniRef90\_UPI00037CEC45 I R A V S P D T V E E Q L G F E I G G T G P F P I M D T V K I V V D E S  
UniRef90\_UPI00035B5E1 V E M I H V K D I N S V T G Y I R G G C C S A V G M K K D K K Q Y V T R I A Q C  
UniRef90\_R4K6A1 I K M I A V K D I N S L T G Y I R G G C C S P I G M K K D K K L F H T V I D K S  
UniRef90\_R7FU29 V E M L K S K E L L P L T G Y I H G G C C S P V G M K K L F H T V I D K S  
UniRef90\_E0XYL1 L R F A T A E E L A E L T G L V P G G V S P P F G Q P L S F P L Y V D Q A  
UniRef90\_Q7VNW2 V T M A D K D I A Q K V L T G Y L L G G I S P L G G Q K N K L M T I I D Q S  
UniRef90\_W5YHA6 A A M A D P E A V Q R S T G Y V M G G V S P L G Q K R R L K T F I D A S  
UniRef90\_U2JY78 V E M I H V K D I L T L T G Y V R G G C C S P F A M K K K Y P T Y I Q E D  
UniRef90\_UPI0004659497 A H M L D V P A A E R L T S G Y H V R G G I S P F G Q R K R V P V V F E A A  
UniRef90\_UPI000365A6AB A E M V K P E D A E R L T G Y V C G G I S P F G Q K R R T V T L L A A S  
UniRef90\_S6CEZ5 I A M L K A R E L L P L T G Y V H G G C C S P I G M K K R F P T F V D E T  
UniRef90\_W4LPY9 V K L A D K A Q E L H T H T G C Q F G E L P L G K P F D V Q R L L M D R D  
UniRef90\_G2T3K3 A K M L J A P D E V E E R I G H A I G G V C P F G I K E G V R V Y L D E T M  
UniRef90\_V6M4J0 L K M A A P E E V K Q V T G C T V G G V P L V G H S L P C I M D R M  
UniRef90\_W1IX17 A S L A S P K E E V S E L T N C V F G A I P P F S F H P D L K L J A D P F  
UniRef90\_K8WRL7 A R M L P T E E V A I L T G Y H P G G V C P F A A L D G V N V Y C D Q S  
UniRef90\_B9M6L4 V A P C S P E Y F A N R S G Y L V G G T S P F G T R R T M P V Y M E E T  
UniRef90\_U7MBF5 A E L A S E Y E F A R H S G C E L G A M P P F G N L F D N E G V E V Y L D V S  
UniRef90\_R7K869 A K M L P P E E T E R L V G Y A V G G V C P F A L V N E G C D V Y L D E S  
UniRef90\_S6CEE4 R M L P A E E A E E R I G H A V G G V C P F A V A R T Q V P V V L D E S  
UniRef90\_S6D413 A R M L G A E K A E A E L T G F K V G G I S P F G Q K K P L P T V I D A S  
UniRef90\_UPI00035B6968 V A M A E V G L V E R V T G Y V V G G V S P L G Q K K G F P I Y L D E R  
UniRef90\_M5J571 V H L A D N K K L N L T G Y V H G A N T P I G I S F H A V P P L K K G F P V L D D D  
UniRef90\_G7Z519 I E R A D P E F V R E S T G F A L G G V P I G I H A V P P L S T T P W P V Y A D E R  
UniRef90\_UPI00047E215C V S M P P A D E A F T A T G Y E R G T I T P I G Q T K K K L K T F I D D S  
UniRef90\_E4PIW8 A A M A D K Q A V E R T T G Y V L G G V S P L G W Q K K K F P L Y F D I R  
UniRef90\_F8HZY6 T D M I P T K D L Q K T T G Y V H G A N N P V G I W Q K K P L P T V I D I S  
UniRef90\_Q087C5 A H M A E A L V V E R S S G Y V L G G V S P L G Q K K S L T V I D H S  
UniRef90\_S6HG82 V T M A D S S K V E K S T G Y V L G G V S P I G N P Q G V K T Y L D V S  
UniRef90\_B1C7A8 A K M L S A D E V E E F T N H K I L G G V C P F A N P Q G V K T Y L D V S  
UniRef90\_J9HY12 M R F A T P E E V Y E R T G C L P G A V P P F G S S F D T P T L V D E S  
UniRef90\_UPI0003750403 I T P C Q P E T A N K H T G Y L V G G T S P F G T R K S M P V Y A E A S  
UniRef90\_UPI00035C894A A A M A D P A A A E R A T G Y V L G G I S P L G Q K R R R P T V V D E S  
UniRef90\_UPI000349B60 V T P C T P A I A Q R H S G Y Q I G G T S P F G V R K P M P V F V E S T  
UniRef90\_H6LCP8 I A M L H L N D L T P V T G Y V R G G C C A I G M K K Q Y Q T V I N D K  
UniRef90\_H3SBZ1 L S L A S R H E V R E A T G Y E A G T L P L V G H T L P C L V D K L  
UniRef90\_U2PSM8 I E M L I E V K D I N K Y T G Y I R G G C C S P I G M K K K Y K T F I D N S  
UniRef90\_UPI000379A977 A A L A D R A V T E R A T G Y V R G G I S P L G Q R R R L P T V L D D S  
UniRef90\_G7PM85 L R F A D E T A M L E K L K V Q G G C A T P L A L F C D Q D G D V K F V L D S A  
UniRef90\_V9H8Q7 I D P A D P N Q A T R W T G F L V G G T S P F G T K T A L P V F V E R S E  
UniRef90\_K2G5Y5 I R F A S Q E E I T P I T G S M I W S L P P F G F L D N E I M L F V D A E  
UniRef90\_R9KTC4 V V M L H V K D I N I T G Y I R G G C C T A I G M K K Q Y T T R I E Q A  
UniRef90\_W1IXJ4 A D M A D P Q L A Q K I T G Y L V G G T S P L G Q K K R L P T V I D S Q  
UniRef90\_K0Z3R5 A E M L P V A R A Q V V T G Y L A G G I S P L G Q K Q P H R I F L D E S  
UniRef90\_UPI00046F5E96 L K M A S P K Q V L Q L T G Y E V G G V S P F G L M L P L P C I V D R R  
UniRef90\_L1QDH0 A Q M M K P A D A E R L T G F K V G G V S P F G Q R K A V P T F I D E T  
UniRef90\_I3CBY2 I K P C S P D T A N K H S G Y L V G G T S P F G T R K P M P V Y M E E S  
UniRef90\_X2HHP9 I E P A S P Q A N K W T G Y L V G G T S P F G N K A G L V P V V E K S  
UniRef90\_K1V7X8 G G F A P A E L A E R L T G C V V G A I P P L P L L A E V P V V D E E  
UniRef90\_U2A2J2 L S L P A A D V A L E A T G Y E R G T I T P L G S T N A W P V Y A D A S  
UniRef90\_B0RUB8 A R M M E V A D A E R R T G Y K V G G I S P L G Q Q R P T P V L I E S S  
UniRef90\_A8IJ45 A H M M K P A D A E R L T G Y H V G G I S P F G Q K R Q V P T A M E E T  
UniRef90\_I016R6 V K M A T H E Q A E Q M T G L K T G G L S A L A L I N K G F E V Y L D K R  
UniRef90\_C4ZBC9 I E M L H L K D L T K V T G Y I R G G C C S I L G M K K Q Y P T F I H E A  
UniRef90\_K2A0R6 I D L A K E S E F K K F P E C E V G A M P P F G N L Y G M P V Y V S N H  
UniRef90\_UPI00035D70BA A V M A D V A V A E R L T G S V A G G I S P L G S R T R L T V V D E S  
UniRef90\_D2R493 L R F L T R E V E J A L T S L A P G S I P P F G S L F G L T T Y C D V A  
UniRef90\_UPI000403DF56 V S M I P Q K D L E K T T G Y I H G A N N P V G I R Q K H N F P I Y I D Q S  
UniRef90\_D6S5J9 C E M L P L K K L E K T T G Y V H G A N T P I G I H F N D H Y P I Y L D N S  
UniRef90\_UPI0003456084 S S F A P L E V A Q E L T Q C V M G A V P P F S F A S E L A L L V D Q R  
UniRef90\_W5YK38 A E M M P P P D A E R S T G F R V G G I S P F G Q R K R V R T A L A Q E  
UniRef90\_Q316D1 A A M A D V K Q V E R A T G Y V L G G V S P L G Q K K R L P T V V D A S  
UniRef90\_L8XEVE P S I C S D D E M V E Q L G C V P G A V C P I G L P K E R V T V V D T A  
UniRef90\_Q1BNJ6 A T L A S P D V A A A V T R C V M G A V P P F V F D A N V T L V V D P A  
UniRef90\_A4VWF9 I R M A S D S L M K E K M H L P A G A V S V F G L L H N V D K D I Q V F F D K E  
UniRef90\_UPI0003665435 V D F L K E V W M K N L G I L K A G A T P P F G N L W K L F T F V D R A  
UniRef90\_UPI0002D4F4D7 M T C V D S N S V A L T I T G Y Q P G T V S P L L L K T P I P V V F D V Q  
UniRef90\_HOUJB6 V E M V P L K D L F S L T G Y Q R G G C C S P L G I K R A H Q F F L D E R  
UniRef90\_A0A024YSLO T A F A T P E I A E R L A G S V C G T V M P L S F H P D L H L V V D E G  
UniRef90\_UPI000425FB90 L E P A T P E Q A H K W T G Y L V G G T S P F G M K T A L P V Y A Q T G  
UniRef90\_A9VDA2 I R F A P E D E V A L T L G V L P G G V S P P F G N L F Q L D V L V D R K  
UniRef90\_V4NIQ6 G Q M M K V P D A E R L T G Y K V G G I S P F G Q R K S T P T V I D E T  
UniRef90\_U2B1T7 A K M L P A I E V E E K I G H A V G G V C P F A V N E N I S V F L D E S  
UniRef90\_UPI0003602783 A V M A V P A E V E R T T G Y V L G G V S P L G Q K K R L A T Y I D A S  
UniRef90\_UPI00034949FE A R M L S T D E V E R N T G H V P G G V C P F G L E N P L Q V Y C D V S  
UniRef90\_S7XLJ6 A G M A N P S V A Q R R T G Y V V G G I S P V G Q K T A H R T V I D E T  
UniRef90\_UPI00036C4C2B V S M A D P Q K D L E K T T G Y I H G A N N P V G I R Q K K H N F P I Y I D Q S  
UniRef90\_C1DQU5 V D M A D A G V A Q R S T G Y L V G G I S P L G Q K K R L R T F I D E S  
UniRef90\_U2D7X0 A K M L J A P D A V E E L T G H A V G G V C P F A L A R E D I L V C L D E S  
UniRef90\_UPI00035B8A83 A Q M A D K A A A Q R S G Y L V G G I S P F G Q R Q H S R T V I D S S  
UniRef90\_R5VH82 I E M E L S R N L K L G T G Y I H G G C C P I G M K K F K T I I A M E  
UniRef90\_U1LP92 L S M P D A D V A F E V T G F R R G T I T P F G T T T P L P V I A D E R

UniRef90\_UPI000468CD66 MK Q T D E V G V S S G K L G R S V F L N P E D L A Q V T E A T 130 140 150 160  
UniRef90\_UPI00037F1405 L T R Y A E I A F N A G R L D A S M I L L A S H D Y L A I T Q P R L V D  
UniRef90\_UPI000471BFD5 V K R F N D T V F P A C G A N S F A S I E A L T I E E L Y E Y G R A L D W V D  
UniRef90\_X0W1A1 L K F K E K I V F N A G D R S F S I A M K S K D Y R E L A K  
UniRef90\_W1RPW0 L R A F D T V F P A G S R R T A S V E L T P E R L A A L T G A Q W V D  
UniRef90\_UPI000375B82D A L R L E E T V L V S G G R R G L M D I E L A P A D L I R L T D A V S A P I  
UniRef90\_UPI00030335F5 L L T F E T V A V S A G R R R G L D I W L A P Q A Y L T A T Q  
UniRef90\_B4V394 A S A H P T I C V S A G R R G L E V E L P A T L A A L T S A T  
UniRef90\_F0LWK2 L L H K Q P E L L F T P G S H L L G F S G A D L D K L L A N I A N P I I M L  
UniRef90\_S7JC87 I L Q Q Q L V T I S S G S T L A G I A L D V N D L V Q L C Q  
UniRef90\_UPI00037CEC45 L S G V G S I F C G S G N N T V T I E M D I T D L I R L I  
UniRef90\_UPI00035B5E1 A K D L D K M I V S G G R L G T M Q L E L K P D D L K  
UniRef90\_R4K6A1 A L D L N K I V S G G K I G T Q L E I L S T E D L A E V T N  
UniRef90\_R7FU29 A E S Q S T I C F S G G K I G Y Q M E A P L S E L E K V V P  
UniRef90\_E0XYL1 I E Q N E R I A F N A G S M T D S I L D V P D Y L R L  
UniRef90\_Q7VNW2 A K D F A T I F V S G G K R G L D V E I A P R D L A T V L Q A V F A D I K  
UniRef90\_W5YHA6 A Q A Y D T V F V S A G R R G L E I E L A P K D L A T L T  
UniRef90\_U2JY78 I L L Q D E I V S G G K I G M Q I K L K V E D F L K V S E A Q I V D V I  
UniRef90\_UPI0004659497 A L G H P Y I M N G G Q R G L Q V K L A P A D A V K A L G A  
UniRef90\_UPI000365A6AB A L G L P E I L V S G G R R G F S V G L S P A D L I S A L G A L T G D I T  
UniRef90\_S6CEZ5 A Q L F D T I H F S G G K V G C Q L R M N P D D D L A R L I P  
UniRef90\_W4LPY9 L L A Q D K V I V F N A G R L G T S M A V D P K E I Q R L  
UniRef90\_G2T3K3 L K K Y E T V F P A C G S S N S A I E L T P Q L E Q L A K P V C W V D  
UniRef90\_V6M4J0 L S H H P F V Y G N T G S P T S T L K I K P A D L E R V  
UniRef90\_W1X17 L N F D Y S E L A F N A G S L E R S I I L N A E D Y H R I  
UniRef90\_K8WRL7 L N Q Y D E V I P A G G S A N S G V K L T P E R L A S I T R A T W I D  
UniRef90\_B9M6L4 I H E L P Q I Y I N G G K R G F L V A M D P Q E D Y E R L L K  
UniRef90\_I7MBF5 L R S E E K E I V F N A G T H S Q L L K L E D Y E K L V K P T  
UniRef90\_R7K869 L R R F R T V F P A C G S S N S A I E L T P C E L E K Y S G S L G W I D  
UniRef90\_S6CEE4 L R R F D V Y P A C G S S N S A I A L T P D E L A A Y T P G S T W I D  
UniRef90\_S6D4I3 V L K L D T L Y I N G G R G L V V I A L K P A D A I Q C V N A R T A D V T V P D  
UniRef90\_UPI00035B6968 A E T A G T I F V S A G R R G L E I E L S P R D L A A L T G A  
UniRef90\_M5J571 I K E Y S E I S V S A G K I G R S V R M K R E D L V S L V R  
UniRef90\_G7Z519 L L R L E T I W A A A G T P N A V F R L T P A D L V  
UniRef90\_UPI00047E215C I Q G K R V S M G A G A H G K S V F V D A D E L A I A L G A  
UniRef90\_E4PIW8 A L G F E T I F V S A G R R G L E I E L A P R D L A A L V N  
UniRef90\_F8HZY6 A Q Q A G E I I L S A G E V G R S I R V K A E D I A K F V H S E F V D  
UniRef90\_Q087C5 A Q Q H Q R I Y I S A G K R G V D I S E L S P A D L Q W L L K A T F A D  
UniRef90\_S6HG82 A S S F A T V F V S A G R R G L E I E L S P A D L M L L T R  
UniRef90\_B1C7A8 M K R F D T V F P A C G S A N S A I E L T C D E L F K Y S N A L K W V D  
UniRef90\_J9HY12 L K Q G Q I I N F N C G L R T H S V R M R F E D Y I K I  
UniRef90\_UPI0003750403 I Q A L D T F W I N G G K R G F L V E K M S P R D L L Q V L D  
UniRef90\_UPI00035C894A A L A H P T V Y V S A G R R R G L E I E L A A A D L I R L I Q A V  
UniRef90\_UPI0003B49B60 V L D L D E I A I N G G R R G F L V K I D P T V L T D V L S A T P V Q V  
UniRef90\_H6LCP8 A K T L D K I Y I S G G K V G L Q L L E L K P D D L C K A A Q A  
UniRef90\_H3SBZ1 L Y Q Y P C I Y G G T G E V D S T L K L D P R D L S K  
UniRef90\_U2PSM8 C N T I E R I V S G G K I G T Q V E L K T N G L I K V T D G I V V D V K  
UniRef90\_UPI000379A977 A L R H D T V Y V S A G R R G L Q L E V S P H D L A A L T D A T  
UniRef90\_G7PM85 I L E H E K V Y F H P M T N A A T M G L S P E D F L T F V K T T G H D P I I L N  
UniRef90\_V9H8Q7 V W D L P V I Y I N G G K R G F L V A V S P E N A L H S L N P Q N V D  
UniRef90\_K2G5Y5 I F K H G F F I E N P S I P T R S I R I S P R E L K R I Y W S L E N E V R Y  
UniRef90\_R9KTC4 A Q S L D Q I I V S G G K I G M Q I E L S P Q D L  
UniRef90\_W1IXJ4 A Q T L S T L F I V S G G K R G L D I E L S P T D L C Q L L N  
UniRef90\_K0Z3R5 A T L Q E A I H V S A G K R G W S V K L E P D T L L A V C K G T  
UniRef90\_UPI00046F5E96 L F R H P F I Y G G T G E P G S T L K I S P K A L E Q L  
UniRef90\_L1QDH0 A I L F Y R V L I N G G Q R G L L E L A P D E  
UniRef90\_I3CBY2 I L Q L P K I Y I N G G K R G Y L V S L N P Q D V V R V L K P T L V N V A V  
UniRef90\_X2HHP9 I Y S L P I Y I N G G K R G F L V Q M Q P E Y L  
UniRef90\_K1V7X8 F L J A H E E I A F N A G R L D R S V V M A T A D Y V R I V A  
UniRef90\_U2A2J2 I A G R R I S M G A G A H G R S A F V D A D A L T A A L N A I V A D  
UniRef90\_B0RUB8 V L D A P A L W I N A G O R G L L E V D A G A E I V H V L G A  
UniRef90\_A8IJ45 A L J A F P A V F L N G G Q R G L Q V E V D P K  
UniRef90\_I016R6 A Q R F D A I A V S A G Q R G A N V L P V D D L V R L V N A R W V Q  
UniRef90\_C4ZBC9 A K E Q D K I T V S G G R L G L Q I T L S P D D L C R A A K A E Y V D  
UniRef90\_K2A0R6 L V S E D Q I A F N A G S H S E L I K M S Y K D F E R L V K  
UniRef90\_UPI00035D70BA A L R F D T V F C S A G K R G L Q M E L A P G D L  
UniRef90\_D2R493 L A S E T E I V F N A G D H S V S I R L A F E E Y R R V E Q P T V I A  
UniRef90\_UPI000403DF56 A L J E K G K I I V S A G E V G R S I R I D S Q T L A N F V K A N F A D I I  
UniRef90\_D6S5J9 M K N E E K I I V S S G K V G R S V Q L A P L D L Q K V V E G T  
UniRef90\_UPI0003456084 M R S A G E L F F N A G E L D K S J A L N A D D Y F R V V  
UniRef90\_W5YK38 A L J A Q P Y V I N G G K R G Y L V R L A A T D A V S A T G A V  
UniRef90\_Q316D1 A A E H A S V F V S G G R R G L D I E L A P S D L C A L T  
UniRef90\_L8XEV6 L Y Q H D E L L Y T P G L P E F T F G F A G S E L K R M L  
UniRef90\_Q1BNJ6 L V E R N T I A F N A G R L D R S V V L D A A D Y V R I A R P L L V D  
UniRef90\_A4VWF9 I L S E P L L T F H P N V N T K T I F V K T E D V L R F V E E I G F S A T I V D  
UniRef90\_UPI0003665435 L F Q N T K I I N S G D H S W S I K I T P N S L K K I I P D L C Q P T I A P  
UniRef90\_UPI0002D4F4D7 L T H Q T L I T I S S G H A M L G L S L R S D E L I A L  
UniRef90\_HOUJB6 A L A L P T I A V S A G R R G V Q M I A P S D L L K L T  
UniRef90\_A0A024YSLO L A L T E T I Y F N A A R G L D R S V L A S T S D Y L A I A K  
UniRef90\_UPI000425FB90 I F A L P E I Y I N G G K R G F L V S L A P D V L H L L P A T A A D A V  
UniRef90\_A9VDA2 L L D N E R I V F N A G D R R F S V A M L L Q D Y L R L V D P T V C D  
UniRef90\_V4NIQ6 A Q L Y D V V Y I N A G Q R G L L S I A P D D A A R F L S A  
UniRef90\_U2B1T7 L K R F D T V F P A C G S S N S A I E V N M E E L E E Y S G A C E W V D  
UniRef90\_UPI0003602783 A Q E F S K V Y V S A G R R G L E I E L A P D D L A T L C Q A G F A P L A V  
UniRef90\_UPI00034949FE L K S F T E V L P A G A F S A V E R I S P Q Q M A E L T E A K W I D  
UniRef90\_S7XLJ6 I E L F D T V F V S G G K R G F D I E L T P D D L V R A T G A T  
UniRef90\_UPI00036C4C2B A L J E K G Q I I V S A G E V G R S I R I D S Q L L A D F V Q A E F A D  
UniRef90\_C1DQU5 A R T F P S I F V S A G R R G L E V E L A A Q A L A E H T R A  
UniRef90\_U2D7X0 L R R F E T V F P A C G S S N S A I E L A G C D D L F S L A K A E K W V D  
UniRef90\_UPI00035B8A83 A Q G F E T V F I S G G R R G F S L E I A P Q D A A Q A T E A L W A A I T  
UniRef90\_R5VH82 A G S L D T I V S G G K I G Y Q I E I S L E D L K R I V N Y E L K D  
UniRef90\_U1LP92 I L I G R R V S I G A G A H G V A T V D G D A L V A H L G A Q V A D



UniRef90\_UPI000468CD66  
UniRef90\_UPI00037F1405 I S Q  
UniRef90\_UPI000471BFD5 V C K  
UniRef90\_X0W1A1  
UniRef90\_W1RPW0 I C T  
UniRef90\_UPI000375B82D  
UniRef90\_UPI00030335F5  
UniRef90\_B4V394  
UniRef90\_F0LWK2  
UniRef90\_S7JC87  
UniRef90\_UPI00037CEC45  
UniRef90\_UPI0003B5B5E1  
UniRef90\_R4K6A1  
UniRef90\_R7FU29  
UniRef90\_E0XYL1  
UniRef90\_Q7VNW2  
UniRef90\_W5YHA6  
UniRef90\_U2JY78  
UniRef90\_UPI0004659497  
UniRef90\_UPI000365A6AB  
UniRef90\_S6CEZ5  
UniRef90\_W4LPY9  
UniRef90\_G2T3K3 V C K L P A  
UniRef90\_V6M4J0  
UniRef90\_W1IX17  
UniRef90\_K8WRL7 V A C  
UniRef90\_B9M6L4  
UniRef90\_I7MBF5  
UniRef90\_R7K869 V S K  
UniRef90\_S6CEE4 V C K L P  
UniRef90\_S6D4I3  
UniRef90\_UPI0003B56968  
UniRef90\_M5J571  
UniRef90\_G7Z519  
UniRef90\_UPI00047E215C  
UniRef90\_E4PIW8  
UniRef90\_F8HZY6 I A V E D  
UniRef90\_Q087C5 I C A  
UniRef90\_S6HG82  
UniRef90\_B1C7A8 V T Q  
UniRef90\_J9HY12  
UniRef90\_UPI0003750403  
UniRef90\_UPI00035C894A  
UniRef90\_UPI0003B49B60  
UniRef90\_H6LCP8  
UniRef90\_H3SBZ1  
UniRef90\_U2PSM8  
UniRef90\_UPI000379A977  
UniRef90\_G7PM85 F  
UniRef90\_V9H8Q7 V A  
UniRef90\_K2G5Y5  
UniRef90\_R9KTC4  
UniRef90\_W1IXJ4  
UniRef90\_K0Z3R5  
UniRef90\_UPI00046F5E96  
UniRef90\_L1QDH0  
UniRef90\_I3CBY2  
UniRef90\_X2HHP9  
UniRef90\_K1V7X8  
UniRef90\_U2A2J2 I S E P  
UniRef90\_B0RUB8  
UniRef90\_A8IJ45  
UniRef90\_I0I6R6 L P E  
UniRef90\_C4ZBC9 I  
UniRef90\_K2A0R6  
UniRef90\_UPI00035D70BA  
UniRef90\_D2R493 I A D E E  
UniRef90\_UPI000403DF56  
UniRef90\_D6S5J9  
UniRef90\_UPI0003456084  
UniRef90\_W5YK38  
UniRef90\_Q316D1  
UniRef90\_L8XEY6  
UniRef90\_Q1BNJ6 I T R P E T T  
UniRef90\_A4VWF9  
UniRef90\_UPI0003665435  
UniRef90\_UPI0002D4F4D7 I C R N  
UniRef90\_H0UJB6  
UniRef90\_A0A024YSL0  
UniRef90\_UPI000425FB90  
UniRef90\_A9VDA2 F T V D P A  
UniRef90\_V4NIQ6  
UniRef90\_U2B1T7 V C K  
UniRef90\_UPI0003602783  
UniRef90\_UPI00034949FE V C Q P P  
UniRef90\_S7XLJ6  
UniRef90\_UPI00036C4C2B L C Q  
UniRef90\_C1DQU5  
UniRef90\_U2D7X0 V C K  
UniRef90\_UPI0003B58A83  
UniRef90\_R5VH82 I C E E  
UniRef90\_U1LP92 V T D P E

UniRef90\_L8J8Z4  
UniRef90\_F2I4S9  
UniRef90\_R5E3L3  
UniRef90\_F8JMF2  
UniRef90\_C1A9Y4  
UniRef90\_UPI000316519C  
UniRef90\_V7I4G1  
UniRef90\_I3E0E0  
UniRef90\_B1C904  
UniRef90\_M1F8M5  
UniRef90\_Q21UZ1  
UniRef90\_R5C3W2  
UniRef90\_C9XMF5  
UniRef90\_C7RDV8  
UniRef90\_UPI00046EA8F0  
UniRef90\_U2BYD2  
UniRef90\_UPI000289F3E5  
UniRef90\_W6S6W9  
UniRef90\_F4X8V4  
UniRef90\_UPI000375C07D  
UniRef90\_Q9M3Y5  
UniRef90\_G9PX45  
UniRef90\_UPI00041BBCA3  
UniRef90\_E6WV67  
UniRef90\_UPI0002195258  
UniRef90\_D1BVS3  
UniRef90\_UPI0003810633  
UniRef90\_F5ZBF4  
UniRef90\_Q5WIP2  
UniRef90\_U7GN67  
UniRef90\_H2JYZ0  
UniRef90\_UPI0004676926  
UniRef90\_UPI00024933D4  
UniRef90\_E0E106  
UniRef90\_W6JVZ2  
UniRef90\_UPI0003197221  
UniRef90\_R6NFF7  
UniRef90\_UPI0003B5457A  
UniRef90\_UPI00047133D0  
UniRef90\_UPI0003B72564  
UniRef90\_R9BWQ3  
UniRef90\_R9NQQ0  
UniRef90\_T5KBU6  
UniRef90\_M3GDE2  
UniRef90\_F7Z1P3  
UniRef90\_UPI00037DE072  
UniRef90\_X5DDK7  
UniRef90\_T0PQF9  
UniRef90\_D2Q598  
UniRef90\_M5PU52  
UniRef90\_UPI0002DF6BB8  
UniRef90\_G8NUK4  
UniRef90\_W1UU23  
UniRef90\_R5AXW8  
UniRef90\_L2GMM2  
UniRef90\_UPI0004647CEC  
UniRef90\_A0A031J935  
UniRef90\_A4XEA6  
UniRef90\_Q6LMN4  
UniRef90\_N0CDP9  
UniRef90\_U2GFR6  
UniRef90\_S0G2P3  
UniRef90\_R5R1G3  
UniRef90\_W9GM20  
UniRef90\_D4JFJ5  
UniRef90\_R7F8J7  
UniRef90\_F9Z1T9  
UniRef90\_UPI000426003B  
UniRef90\_U3TRH5  
UniRef90\_E8KBH3  
UniRef90\_E6WVK1  
UniRef90\_UPI0004679471  
UniRef90\_UPI0003B629B4  
UniRef90\_L8DM24  
UniRef90\_L7ZLY6  
UniRef90\_I1YFX8  
UniRef90\_F4FV18  
UniRef90\_G9RTJ7  
UniRef90\_I4EH56  
UniRef90\_UPI0003B30C9F  
UniRef90\_M3A2S8  
UniRef90\_K2JMZ2  
UniRef90\_K2C7H9  
UniRef90\_S7TCT2  
UniRef90\_F1VYS0  
UniRef90\_R6UK24  
UniRef90\_UPI000470AF30  
UniRef90\_F0FUH9  
UniRef90\_R7MUZ7  
UniRef90\_UPI0003791EC5  
UniRef90\_R5L7M0  
UniRef90\_R6QA93

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

UniRef90\_L8J8Z4 A A P T K S L F M K L I K G G G H C L L L T H R D S R L D S K L V K Q L L G K R R  
UniRef90\_F2I4S9 K S S Y K T L V A R S H D H E I I V F L V I P L D S Q R E L D L K Q C A R V I N S K R R  
UniRef90\_R5E3L3 G R I A K T L M S F L V G E E A I L L L I E G M D A K V D N K K F K N T F H V I  
UniRef90\_F8JMF2 S E A A K C I V V M K K V T T K Y V L L A V V P G D A K V D L N G I K S F L G G T Y  
UniRef90\_C1A9Y4 R T V F K T L V V D V E G V G L C C A V V P V Q G M L N L K A M A D A V G G R K K  
UniRef90\_UPI000316519C Q R V F K T L I L V D G E P V N A L V P V S G Q L D L K A L A S V A V G G K K  
UniRef90\_V7I4G1 G S L F K T I V T V G H S G N H Y V F V V Q L T E E L D L K K A A K A A D E K K N  
UniRef90\_I3E0E0 G Q T A P T L V L K S G K G C F A M I V S G S R G E L N L E E V S G I L G C N Q  
UniRef90\_B1C904 N Q V F K T L V T L G K S K E N Y V F V I P V N A K E L D L K K A A K C V G E K K  
UniRef90\_M1F8M5 A C V F K T L V V A V D V K T L V V A I V P V N A M L S M K L I A K A A S G K K  
UniRef90\_Q21UZ1 Y T V V K T L I M Q D Q D A R P L V V L M H G N R K V S T K N L A R Q A G V K K S  
UniRef90\_R5C3W2 A R I A K T L S F K K G E E T L L V V T A G D R K I D N A K Y K H Y F G L K K  
UniRef90\_C9XMF5 N E V Y K T L V T Q G V S K N I Y V Y V I P V H E N L D L K K A A K V A K E K K S  
UniRef90\_C7RDV8 D I V Y K T L A T T S K D K E V F V L V I P A A D S I D F K K A A R A C G V K K S  
UniRef90\_UPI00046EA8F0 G Q I A K T L S L K I V G Q E L I L V V M S G N A R I D N K K Y R T T L G A K  
UniRef90\_U2BYD2 A R I A K T L S F K I G E E P I L I V T A G D A K I D N H K Y K E Q F A V K  
UniRef90\_UPI000289F3E5 R Q M V K T L T F E T G Q S E K I L V M V G G D Q N I K S G K L K A A V G S K N  
UniRef90\_W6S6W9 N R I A K T L S F K V D D N V I L I V A G D A K I D N S K Y K S K F H K K  
UniRef90\_F4X8V4 A R I A K T L F L V D G K C V L I V A A G D A K I D N S K Y K G L F H T K  
UniRef90\_UPI000375C07D E Q V F K T L M A E T D G E H V V A V V P A D C T N L K Q L A K A G G K H  
UniRef90\_Q9M3Y5  
UniRef90\_G9PX45 M K M V K T L F L C N Q K T G F Y L F V T R G D K A F K S R D F D K A L D V A R  
UniRef90\_UPI00041BBCA3 D R V F K T L M T E V D G A A V C V V I P V A R R E L S M K K L A A A A G G K S  
UniRef90\_E6WM67 G Q I A K S L S F R V N D Q I T V L V V M A G D R R L D N R K Y K E F F G V K  
UniRef90\_UPI0002195258 S D I Y K T L A A K G D K T G P I V A V V P L T E R R L D M K K F A A V S G N K K  
UniRef90\_D1BVS3 A Q V F K T L L A D V D G R L V V G V V P V D K Q L D L K A L A R A V G G K R  
UniRef90\_UPI0003810633 R Q I V K S M V V K D G T G E Y H V V L V P G D R V I S E W P K L R G V L V K K  
UniRef90\_F5ZBF4 S A V F K T L V V C Q G E T N K L A V A L V P V N T T L S E K K L A K V L R V K K  
UniRef90\_Q5WIP2 H I V Y K T L V A Q G K S G A I Y V A L I P V N E E L H L K K L Q K V T A E K K  
UniRef90\_U7GN67 G Q I A K S L S F Q R K D K L F L V V A R G D A R M D N K K A K A T F G G K  
UniRef90\_H2JYZ0 D Q A A K S L V I R S K R R Y V I A V V P G D R R V D L P A L T A L Y A G R E  
UniRef90\_UPI0004676926 H H I Y K T L V L S G N V T G P L V G V L P I D E H L D E K K L A K V S G N K K  
UniRef90\_UPI00024933D4 K Q I Y K T L V L T G N K G P I V G M V A L D K H I A N Y K K L A K S G N K K  
UniRef90\_E0E106 Y K I T K T M S F L V G D D P L L L C L A G D A K I A N A K Y K K Q F G M K  
UniRef90\_W6JVZ2 A Q V F K T L L L E G G P D R T A V G I V P V T Q Q L D L K A M A T A C A A K R  
UniRef90\_UPI0003197221 A E A A K C I I J A M K K E K R F A L V V V P G D K R I D L A A V K A L Y G G T Y  
UniRef90\_R6NFX7 A R I A K T L S F K D G A G A M L V V A A G D A K V D N R K R D T F G F K  
UniRef90\_UPI0003B5457A R D L L K T L V V R M P D D S H V F V L V P G D R Q F S W P K L R A L L G T N R  
UniRef90\_UPI00047133D0 G Q T A P T L I L K T E S D G F F G L I S G D Y G R V I D F E L R E K L L V D Q  
UniRef90\_UPI0003B72564 A D I V K S L V V K R S D D T Y V F A L V P G G R K I S W P K L R A L L G V N K  
UniRef90\_R9BWQ3 K R I A K T L S F R K E D D A I L I V A A G D A K I D N K K F K Q T F T E K P  
UniRef90\_R9NQQ0 R R V Y K T L V V A G D N K T L A V A M T P V D G Q L D L K Q V A K A L A V K K  
UniRef90\_T5KBU6 S G I V K T L V V K R S D D T F L F A L V P G G R S I S W P K L R A L V G V N K  
UniRef90\_M3GDE2 A Q V F K T L L A S T E T H E L L V A I V P V A G Q L D L K A L A E A A G C K K  
UniRef90\_F7Z1P3 E R I A K T L A F R G T G E E E A L V V A A G D A K I D N K K F R Q T F G G K  
UniRef90\_UPI00037DE072 S G I V K T L V V K R S D D T Y L F A L I P G D R A I S W P K L R T V V G V N K  
UniRef90\_X5DDK7 K E V A K T V I V N V D G K M A M T V L P A S Y Q V D F E L L K D I F G S Q H  
UniRef90\_T0PQF9 A V F S K T L F L K F K D G R F A L L T H Q V G R L D N K A V K A A L G A K P  
UniRef90\_D2Q598 H Q V F K T L M A D T G T E R V V G V P V S G G H M D K A L A A A V G A K K  
UniRef90\_M5PU52 A Q I A K S L V F R R K D T G P L V I A S G A N R V D L A K V S A A L L G A P I  
UniRef90\_UPI0002DF6BB8 H T V L K T L M A W V D D T P V C V V I P C D R R V D L K K L A S A C G G K S  
UniRef90\_G8NUK4 E Q V F K T L L T H T S D K E H I F A V I P G D R S E L D L K K L A A A G A R N  
UniRef90\_W1UU23 A R I A K T L S F K T A D G C M L I L A A G D A R I D N H K K F K E F H M K  
UniRef90\_R5AXW8 E D G G K A M I L K I N D E F K L F V L S A A K I S F K K I K A R F S S K K  
UniRef90\_UPI0004647CEC D Q V F K T L I V Q G Q N K Q L A V V V L P V L K Q L D L K A I A R I L K C K K  
UniRef90\_A0A031J935 A R I A K T L S L R I G D E V A L V V A R G D A R L N N G K A K A A L G A K P  
UniRef90\_A4XEA6 G Q V F K T L M I L A D G K P A C V I A P S D G E V S L K R A A A L G A K A  
UniRef90\_Q6LMN4 A A P T K S L F M K L K G G G H C L L L T H R D N R L D S K L V K S L V G K R  
UniRef90\_NOCDP9 I Y K T L A L N G D K T G T V I G I L P I T E H L S E K L A K L S G N K K  
UniRef90\_U2GFR6 S Q G A K A L V C M K A G K I Y I L A I L P A D M Q A N L D S L T K Q F D G K R  
UniRef90\_S0G2P3 D Q I G K T L S F K L D G R P I L I V V A G R A K I D N Q K Y K Q Q F S K K  
UniRef90\_R5R1G3 E K V Y K T L V T Q G N D K Q Y V F V L P I E A E L D L K K A A K A A G V K S  
UniRef90\_W9GM20 G V F T K N L L L K D K K G N L F F V T A H E D T E I D L K T L H T R I D A R R  
UniRef90\_D4JFJ5 K N I A K S L A F L V G D Q P I L I V A S G H A K I D N A K Y K H Y F G K K  
UniRef90\_R7F8J7 K E I A K T L S F L V N D E V I L I V V A G D K K I D N A K Y K A E F N T K  
UniRef90\_F9Z1T9 S I M L K T L V V E V S N G K L A V A V V P V S R Q L D L K A F A S A V G A K K  
UniRef90\_UPI000426003B A D I V K S L V V K R P G D E F L F A L I P G D R Q I S W P K L R A V V G V N K  
UniRef90\_U3TRH5 M D D Q K M L D M E N F K E L V S G A N R  
UniRef90\_E8KBH3 K H I F K T L A L F G D K T G P V I G I V P I T E H L S E K L A K L S G N K K  
UniRef90\_E6WVK1 A R M L K T L M A W V D A R A V C V V L P S D R Q L Q P K A L A A T G G K A  
UniRef90\_UPI0004679471 Q S V V R S V V F K G E N S G F C L L A V A G G G R A D W A L L A A H L G E R K  
UniRef90\_UPI0003B629B4 H D I Y K T L A L T G N V S G P V I G I V P I D A H L D E K K L A A V S A N K R  
UniRef90\_L8DM24 E R V F K T L I V Q R A D R S L A V A L V P V T T T L S L K A A A T A L A T R K  
UniRef90\_L7ZLY6 G Q I A K T L S F R V N D V V L V L V M A G T A R I D N K K Y K Q F G V K  
UniRef90\_I1YFX8 N S V A R S L L F K T G S D K F A L L A V A G G G R A D N W A L R A Q L G E K K  
UniRef90\_F4FV18 H Q I F K T L V F S G K T T G P V V G V V P V D E H L D E K K L A K V S G N K K  
UniRef90\_G9RTJ7 E R I A K T L F L V D G G C A L V V A A G D A K V D N P R F K A Q F H T K  
UniRef90\_I4EH56 G Q I V K S L L F L G K A G D T V L V I A R G T A R I D Q R K L V A A T G I R K  
UniRef90\_UPI0003B30C9F E R V F K T L M V D T D A G L G I G I L S V R D Q L D V K A L A V E L G A K R  
UniRef90\_M3A2S8 G Q A A K C M V V M V K V G R Y A A A V I P G D K R V D F A R M K S A L Y G G T Y  
UniRef90\_K2JMZ2 A Q I A K S L I F R G K S D R P V L V I A S G A N R V D E K K V S A L I J E K  
UniRef90\_K2C7H9 K Q L A K T V I I K V D G H L A M A V V P A N D Q V N F A K L R E V T G D S S  
UniRef90\_S7TCT2 E R M F K T L V L Q G G K H P L A T A M V P V S G R L D L K A V A A A G A K K S  
UniRef90\_F1VYS0 H A V V K T L V M Q D E A G H A L I V L M H G D C K R V S T K N L A R Q A G G C K S  
UniRef90\_R6UK24 E R I A K S L S F M V R E H A V I V V A A G D C R V D N H A Y K E T F G C K  
UniRef90\_UPI000470AF30 D Q V F K T L L V A H D D K P L G V A L V P V S H Q L S L K A A A K G L S Q K K  
UniRef90\_F0FUH9 Q I Y K T L A L T G D K T G T V I G I L P I T E H L S E K K M A K I S G N K K  
UniRef90\_R7MUZ7 R R I A K S M S F L V G D H P I L I L F A G D A R V D N H K F K E R F H K K  
UniRef90\_UPI0003791EC5 A D I V K S L V F K H K D G S F L F A L V P G D Q I S W P K L R A L L G V N K  
UniRef90\_R5L7M0 K E I A K T L S F L I D D N P I L I V V A G D C K I D N S K Y K A E F S T K  
UniRef90\_R6QA93 A R I S K T L C L M S K E G P I V I S V A G D A K I D N R K F K D T F G L K

UniRef90\_L8J8Z4  
UniRef90\_F2I4S9  
UniRef90\_R5E3L3  
UniRef90\_F8JMF2  
UniRef90\_C1A9Y4  
UniRef90\_UPI000316519C  
UniRef90\_V7I4G1  
UniRef90\_I3E0E0  
UniRef90\_B1C904  
UniRef90\_M1F8M5  
UniRef90\_Q21UZ1  
UniRef90\_R5C3W2  
UniRef90\_C9XMF5  
UniRef90\_C7RDV8  
UniRef90\_UPI00046EA8F0  
UniRef90\_U2BYD2  
UniRef90\_UPI000289F3E5  
UniRef90\_W6S6W9  
UniRef90\_F4X8V4  
UniRef90\_UPI000375C07D  
UniRef90\_Q9M3Y5  
UniRef90\_G9PX45  
UniRef90\_UPI00041BCA3  
UniRef90\_E6WM67  
UniRef90\_UPI0002195258  
UniRef90\_D1BVS3  
UniRef90\_UPI0003810633  
UniRef90\_F5ZBF4  
UniRef90\_Q5WIP2  
UniRef90\_U7GN67  
UniRef90\_H2JYZ0  
UniRef90\_UPI0004676926  
UniRef90\_UPI00024933D4  
UniRef90\_E0E106  
UniRef90\_W6JVZ2  
UniRef90\_UPI0003197221  
UniRef90\_R6NFZ7  
UniRef90\_UPI0003B5457A  
UniRef90\_UPI00047133D0  
UniRef90\_UPI0003B72564  
UniRef90\_R9BWQ3  
UniRef90\_R9NQQ0  
UniRef90\_T5KBU6  
UniRef90\_M3GDE2  
UniRef90\_F7Z1P3  
UniRef90\_UPI00037DE072  
UniRef90\_X5DDK7  
UniRef90\_T0PQF9  
UniRef90\_D2Q598  
UniRef90\_M5PU52  
UniRef90\_UPI0002DF6BB8  
UniRef90\_G8NUK4  
UniRef90\_W1UU23  
UniRef90\_R5AXW8  
UniRef90\_L2GMM2  
UniRef90\_UPI0004647CEC  
UniRef90\_A0A031J935  
UniRef90\_A4XEAE6  
UniRef90\_Q6LMN4  
UniRef90\_N0CDP9  
UniRef90\_U2GFR6  
UniRef90\_S0G2P3  
UniRef90\_R5R1G3  
UniRef90\_W9GM20  
UniRef90\_D4JFJ5  
UniRef90\_R7F8J7  
UniRef90\_F9Z1T9  
UniRef90\_UPI000426003B  
UniRef90\_U3TRH5  
UniRef90\_E8KBH3  
UniRef90\_E6WVK1  
UniRef90\_UPI0004679471  
UniRef90\_UPI0003B629B4  
UniRef90\_L8DM24  
UniRef90\_L7ZLY6  
UniRef90\_I1YFX8  
UniRef90\_F4FV18  
UniRef90\_G9RTJ7  
UniRef90\_I4EH56  
UniRef90\_UPI0003B30C9F  
UniRef90\_M3A2S8  
UniRef90\_K2JMZ2  
UniRef90\_K2C7H9  
UniRef90\_S7TCT2  
UniRef90\_F1VYS0  
UniRef90\_R6UK24  
UniRef90\_UPI000470AF30  
UniRef90\_F0FUH9  
UniRef90\_R7MUZ7  
UniRef90\_UPI0003791EC5  
UniRef90\_R5L7M0  
UniRef90\_R6QA93

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

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

UniRef90\_L8J8Z4 V F S Y P E L M F T P G K P D F T F A 140 F A S S S L M T L L E A M P N T V I M 150 160  
UniRef90\_F2I4S9 C L E E E K I F V S A G E R D G K A Q I G L D P K A L L T E V T Q  
UniRef90\_R5E3L3 L K R F E D T V Y F N A A G N D H S A V K L R T K A E L E Q A S R T D G W V D  
UniRef90\_F8JMF2 L L E K F D E I Y F N A A R L D R S M A L L R T K D Y L T L T D  
UniRef90\_C1A9Y4 A P A Y D R I V H V S A G R R R G L E I E T A L L A P A D L L T L T K G I  
UniRef90\_UPI000316519C A A Q H E T V F V S A G R R R G L E I E L R P H D L F M L T N A  
UniRef90\_V7I4G1 I G S F E K I V V S A G K R R G F Q I E A D P K D L V R A T R A V  
UniRef90\_I3E0E0 L F H Y P F I Y G G T G E P T S T L K E T I P N A L E K L  
UniRef90\_B1C904 A E D F D R T F V S A G K V G Y Q V E L N L D D L K K V I E  
UniRef90\_M1F8M5 A R L F E R I H V S A G R R G L E I E L A P A D L L A T L T R  
UniRef90\_Q21UZ1 I L L A L P K I L I N G G R R R G Y L V G L D P Q V C V D L L G A K P V Q C A L V D  
UniRef90\_R5C3W2 M K R F E T V Y P A C G S G N S A I E L G L T C E E L E K Y S N S K A W V D  
UniRef90\_C9XMF5 A K N L D T I V S A G K I G Y Q I E I E L S P F D L Q R L I K V E F V D  
UniRef90\_C7RDV8 A R N H N I K V S A G K I G H G L K R L R P D D F I K A T K  
UniRef90\_UPI00046EA8F0 L Q A F S E V L P A A G S T H S C V I R I T P Q R M A E L T E A R W V D  
UniRef90\_U2BYD2 M K R F A T V F P A C G S S N S A I E L T M E E L E Q C S G Y E M W V D  
UniRef90\_UPI000289F3E5 L M K E D T L G V G A G V W G N E I I T P Q N L K R A S K A Q E V D I V  
UniRef90\_W6S6W9 L K R F E T V F P A C G S S N S A I E L T I E E L E K Y S G Y I E W V D  
UniRef90\_F4X8V4 L Q R F D T V F P A A G S S N S A I E L T C K E L E E Y S H S R G W I D  
UniRef90\_UPI000375C07D A T L Q D E I Y V S A G R R R G W S L I L A P D D V L R  
UniRef90\_Q9M3Y5 F K T Q E H C F F H P L S N D M S L I L N V R D L D T F L K S I G R D P S Y V D  
UniRef90\_C9PX45 V A R E E W Y G C S D G S T T T G Y M K V K T S D L L N Y A R H I P A L I K I  
UniRef90\_UPI00041BCA3 A L E Q P Y I V A N G G A R G V Q V K L S P T D A L T A M N G V P G D V K W V S  
UniRef90\_E6WM67 L L S Y P E V L P A A G S G N A R S G V R I N S P E K L A S I T G A  
UniRef90\_UPI0002195258 A E E A S F I L V S A G G E L G R S D K L N P R D L A E M I D A  
UniRef90\_D1BVS3 V R G H D V V Y V S G G R R G L D L G L A P A D L V R L T A A T L A D V  
UniRef90\_UPI0003810633 L V E P G M I T V Y G G G A H S V A I Y L D G D D L L A H F G A T R V D I T  
UniRef90\_F5ZBF4 A L A H E M I V V S A G K R G L E I I P Q R I I N L T Q A  
UniRef90\_Q5WIP2 A A Q L D A I V V N A G K V G L Q M E L R L S D L V E A A N A Q F A D L T I  
UniRef90\_U7GN67 L K E Y D V E I P A A G A T N A A V R I P P E R M A E I T G A E W V D  
UniRef90\_H2JYZO L F A H E V I F F N A G R L D E S V A L R T A C Y R T L V A P R V A A  
UniRef90\_UPI0004676926 A H D Q G Q I L V S S G Q I G R S V E V N A D D L A D L V H G T  
UniRef90\_UPI00024933D4 A E K S E T I V S A G K I G Y S L I E I D P H L E L A K S V K A T  
UniRef90\_E0E106 L K R F E T V Y P A A G S G N S A I E L T P E L E K Y S N Y T E W I D  
UniRef90\_W6JVZ2 A A A Q A V V Y V S G G R R G F D I G L A P A E L L R V I  
UniRef90\_UPI0003197221 L L V H E E F V F N A A R L D R S L A L E L S A K D Y R A I A E  
UniRef90\_R6NFZ7 L R R F D T V F P A A G S S S A V E L S C D E L F E C S G A E K W I D  
UniRef90\_UPI0003B5457A V V I G R T V S L G G G H G V G L T V A A E D V L A L F D A T V A D  
UniRef90\_UPI00047133D0 L N R F E Y V Y G G T G K P Q T S L K I K P Y D L E K I N K I V G Y  
UniRef90\_UPI0003B72564 I T G R V Y S M G A G E H G R S L F V D A D A L I V A L D A T V A D  
UniRef90\_R9BWQ3 L K R F T T V F P A C G S S N S A I E L T N E E L Y I Y G N V V E W V N  
UniRef90\_R9NQK0 A L G F P T I F I S G G K R G L E I E L A P L V L S Q Q L N A T F A T V  
UniRef90\_T5KBU6 I V G Q R I A M G A G A H G Y S L F V D A D D L L A A Y G A T V A D  
UniRef90\_M3GDE2 A E A L P R L H V S A G R R G L E I E L A P A D L L R L T  
UniRef90\_F7Z1P3 L K R F T T V F P A C G S G N S A I E L T C E E L Y T Y G K A E K W V D  
UniRef90\_UPI00037DE072 I V I G R R V A M G A G A H G Y S M E L V Q A D D L I S A Y G A T V A D  
UniRef90\_X5DDK7 L A E D E E I A F N A G N H T E M I K M S Y A D F E R M V E  
UniRef90\_T0PQF9 L L A H D A F T W T P G H P E Q T F I L A T E H L P R V L A Q L P C Q V S Y L  
UniRef90\_D2Q598 A L R Y D E I L L S G G K R G F S I G I N P N D E L I A V L D A V  
UniRef90\_M5PU52 L M G L E V I W A A A G T P N A V F R L T P S E L E R I T  
UniRef90\_UPI0002DF6BB8 A L D A P A L W I N A G Q R G L L L E L P G T Q L M  
UniRef90\_G8NUK4 I E L F D I L S I S A G Q R G L Q L L M K P A D Y L R A T N A  
UniRef90\_W1UU23 Y E N N V I G I H P N Q N D A T V W L Q G K E L V K L I E E H G T T I E Y I T  
UniRef90\_R5AXW8 L Q R F E T V F P A V G S P S A I E L N L D E L Y K Y S N A L E W I D  
UniRef90\_L2GMM2 L L E N N T I C F N A G S L T A S I E M S V E D Y L K L I N  
UniRef90\_UPI0004647CEC A L N Q S T I T V S G G R R G L E I E L N P Q D L A A L L Q A  
UniRef90\_A0A031J935 L R D F E T V F P A A G S R T T S V E L R P E R L A E L T G A K W I D  
UniRef90\_A4XEA6 A L L W D A I F I N G Q R G L Q V L V A G E A A A G L L G A V V A D I  
UniRef90\_Q6LMN4 L Y G F D E I M Y T P G K P T S T F S F A G A E L N S L L A L L P N P  
UniRef90\_NOCDP9 A L S R E S I T V S A G E V G R S I Q I K A Q D L A D F V Q A  
UniRef90\_U2GFR6 L L Q N D E I A F N A G L L D R S I I L N T K D Y T K I V R P T L I N  
UniRef90\_S0G2P3 L K K H P E I T P A A G D Q N A S I R L T I E E L E R F S D C N D W V D  
UniRef90\_R5R1G3 A K A L S D V Y V S G G R G C Q M N L A P D D L C K  
UniRef90\_W9GM20 L E G A A Q V N F H P M T H T E S I G L T W K G F R T F A D T T G H P P  
UniRef90\_D4JFJ5 L K T L Q Y V F P A C G S S N S C I K S T I E E L E R Y S H F I E W I D  
UniRef90\_R7F8J7 L K R F D T I Y P A C G S S N S A V K L T L A E L E K T S N Y E K W V D  
UniRef90\_F9Z1T9 V L G Q Q P R V L V S G G R R G L S V E L S P S N L V T V T G A V  
UniRef90\_UPI000426003B M V G Q R V A M G A G E H G Y S L F V D G D A L I T A L G A T V A D  
UniRef90\_U3TRH5 I V T E E R M S F R L N T N D R T I E I N T K D L F S F L K H L G Y E V N I I E  
UniRef90\_E8KBH3 S L K L E K M I V S A G E V G H S I I A P Q D L A D F V K A  
UniRef90\_E6WVK1 A L A Q E S V F I N A G Q R G L L L E L A P A D A V R V L Q A  
UniRef90\_UPI0004679471 V A G Y D T V V I G S G V L G Y A L A L R T A D L L Q C L K A R G H F V K  
UniRef90\_UPI0003B629B4 A K K A G T I V V S A G E L G R S I K V L R S Q L L A D F V Q  
UniRef90\_L8DM24 A L G F E T V L C S G G R R G L E I E L D P V D L V R L T R A T S A P I  
UniRef90\_L7ZLY6 L C S Y S E V L P A A G S D N S G V R I A P Q R L A S I T G A E W I D  
UniRef90\_I1YFX8 V N Q Y H D V I I G S G M L G Y A L A L T A S D L L S L L A  
UniRef90\_F4FV18 A K E M G E I I V S S G Q I G R S V K V D S Q Q M V D L I  
UniRef90\_G9RTJ7 L R R F E T V F P A C G S S N S A I E L T S E L E Q Y S R F D A W V D  
UniRef90\_I4EH56 V L D E P V Y G G G G T D S M I R I S P A D I Q S L T G A L V A D L S L E D  
UniRef90\_UPI0003B30C9F A L L A F A S I F V S G G R R G F D I E L A P A D L L R A V A  
UniRef90\_M3A2S8 L F R H D E L F F N A A R F D R T L A L A T E D Y R S I A R  
UniRef90\_K2JMZ2 L L A L S E I W A A A G T P N A V F R L T P G D L A T L T  
UniRef90\_K2C7H9 L S H Q D H I F N A G S H S E L M Q L A Y P E F E R L V K  
UniRef90\_S7TCT2 A A A F E T I F F S A G K R G L Q I E L A P G D L I R L C R A  
UniRef90\_F1VYS0 I L L A L D K I Y L I N G G R  
UniRef90\_R6UK24 L K R F D F V Y P A C G T P N S A I R L T I A E L E T L L P Q A S W V D  
UniRef90\_UPI000470AF30 A L S F D K I Y V S A G R R G L E I C M A P Q D L A K L C R  
UniRef90\_F0FUH9 A L E R D S I V S A G E V G R S I E I K A Q D L A D F V Q A  
UniRef90\_R7MUZ7 L K R F Q T V F P A C G T A N S A I E L T L P E L E T Y S H A R E W V D  
UniRef90\_UPI0003791EC5 I T G R R I S M G A G E H G Y S A F V D A D A L T A A L G A V V A D  
UniRef90\_R5L7M0 L K R L K I V P A C G S S N S A I K L A V D E L E K I V N N K K W I N  
UniRef90\_R6QA93 M K R F D T V F P A A G S S N S A V E L T C D E L F H Y G K C E A W V D

UniRef90\_L8J8Z4  P E K E A  
UniRef90\_F2I4S9  
UniRef90\_R5E3L3  C K E P  
UniRef90\_F8JMF2  
UniRef90\_C1A9Y4  
UniRef90\_UPI000316519C  
UniRef90\_V7I4G1  
UniRef90\_I3E0E0  
UniRef90\_B1C904  
UniRef90\_M1F8M5  
UniRef90\_Q21UZ1  
UniRef90\_R5C3W2  C K P  
UniRef90\_C9XMF5  V  
UniRef90\_C7RDV8  
UniRef90\_UPI00046EA8F0  S Q  
UniRef90\_U2BYD2  C K  L  
UniRef90\_UPI000289F3E5  
UniRef90\_W6S6W9  C K E  
UniRef90\_F4X8V4  C K  
UniRef90\_UPI000375C07D  
UniRef90\_Q9M3Y5  E A N P A  V  
UniRef90\_G9PX45  
UniRef90\_UPI00041BBCA3  
UniRef90\_E6WM67  S  
UniRef90\_UPI0002195258  
UniRef90\_D1BVS3  
UniRef90\_UPI0003810633  
UniRef90\_F5ZBF4  
UniRef90\_Q5WIP2  
UniRef90\_U7GN67  C Q P P  
UniRef90\_H2JYZ0  A S A P  
UniRef90\_UPI0004676926  
UniRef90\_UPI00024933D4  
UniRef90\_E0E106  A K  
UniRef90\_W6JVZ2  
UniRef90\_UPI0003197221  
UniRef90\_R6NFZ7  C K  L  P  
UniRef90\_UPI0003B5457A  S  
UniRef90\_UPI00047133D0  
UniRef90\_UPI0003B72564  S D A E  
UniRef90\_R9BWQ3  C K  
UniRef90\_R9NQQ0  
UniRef90\_T5KBU6  S  V  P E  
UniRef90\_M3GDE2  
UniRef90\_F7Z1P3  C K  
UniRef90\_UPI00037DE072  S Q P  
UniRef90\_X5DDK7  
UniRef90\_T0PQF9  
UniRef90\_D2Q598  
UniRef90\_M5PU52  
UniRef90\_UPI0002DF6BB8  
UniRef90\_G8NUK4  
UniRef90\_W1UU23  I  
UniRef90\_R5AXW8  C K  L  P A  
UniRef90\_L2GMM2  
UniRef90\_UPI0004647CEC  
UniRef90\_A0A031J935  C T  L  P  
UniRef90\_A4XEA6  
UniRef90\_Q6LMN4  
UniRef90\_N0CDP9  
UniRef90\_U2GFR6 F A E  
UniRef90\_S0G2P3  C T  
UniRef90\_R5R1G3  
UniRef90\_W9GM20  
UniRef90\_D4JFJ5  I  C  
UniRef90\_R7F8J7  V  C K  
UniRef90\_F9Z1T9  
UniRef90\_UPI000426003B  I S S P  
UniRef90\_U3TRH5  L  
UniRef90\_E8KBH3  
UniRef90\_E6WVK1  
UniRef90\_UPI0004679471  
UniRef90\_UPI0003B629B4  
UniRef90\_L8DM24  
UniRef90\_L7ZLY6  V T  
UniRef90\_I1YFX8  
UniRef90\_F4FV18  
UniRef90\_G9RTJ7  V  C K  
UniRef90\_I4EH56  
UniRef90\_UPI0003B30C9F  
UniRef90\_M3A2S8  
UniRef90\_K2JMZ2  
UniRef90\_K2C7H9  
UniRef90\_S7TCT2  
UniRef90\_F1VYS0  
UniRef90\_R6UK24  V  C  
UniRef90\_UPI000470AF30  
UniRef90\_F0FUH9  
UniRef90\_R7MUZ7  V S K  
UniRef90\_UPI0003791EC5  I T E P  
UniRef90\_R5L7M0  V  C K  
UniRef90\_R6QA93  I  C K

UniRef90\_A7GVX0  
UniRef90\_G4D6Y4  
UniRef90\_T0TD70  
UniRef90\_A9MBK1  
UniRef90\_S3H7N2  
UniRef90\_UPI0003789D67  
UniRef90\_Q5NL38  
UniRef90\_F0L3L6  
UniRef90\_R7MZX1  
UniRef90\_F5XWY5  
UniRef90\_R1H1T6  
UniRef90\_U1GRZ3  
UniRef90\_UPI000346EB4C  
UniRef90\_K4QZW8  
UniRef90\_W1G3B5  
UniRef90\_W8QJ9  
UniRef90\_UPI00035FE775  
UniRef90\_W4LVU3  
UniRef90\_UPI0003AD337D  
UniRef90\_D2Z8R4  
UniRef90\_F2IW69  
UniRef90\_I4AD94  
UniRef90\_UPI000465F8BB  
UniRef90\_G8QHB2  
UniRef90\_Q9Y8U3  
UniRef90\_D5DC63  
UniRef90\_B0K847  
UniRef90\_R6FVC6  
UniRef90\_B3QKW6  
UniRef90\_U3U5Z4  
UniRef90\_W6N5C5  
UniRef90\_U3TF19  
UniRef90\_G5HLG6  
UniRef90\_A4SD27  
UniRef90\_R7AXD8  
UniRef90\_D2SCV6  
UniRef90\_U7KU23  
UniRef90\_E6PPS3  
UniRef90\_R6C7R7  
UniRef90\_H8L585  
UniRef90\_F2JGM1  
UniRef90\_Q3JK64  
UniRef90\_R6AGC3  
UniRef90\_UPI0003A827AD  
UniRef90\_D2SA78  
UniRef90\_W4L4T8  
UniRef90\_E3CHX8  
UniRef90\_UPI0003F5A4E1  
UniRef90\_D2R158  
UniRef90\_M1FGV7  
UniRef90\_I0AG44  
UniRef90\_C5BJR7  
UniRef90\_UPI00037755B9  
UniRef90\_C4Z623  
UniRef90\_UPI000464BC24  
UniRef90\_I5AXN8  
UniRef90\_S6BB92  
UniRef90\_D5R164  
UniRef90\_UPI000475EDA5  
UniRef90\_G4E887  
UniRef90\_E6KQV4  
UniRef90\_C4LK65  
UniRef90\_D2MMJ3  
UniRef90\_S0JM54  
UniRef90\_N6X412  
UniRef90\_A0A024KI75  
UniRef90\_HOTJ74  
UniRef90\_H5V5R5  
UniRef90\_S1NDQ3  
UniRef90\_R6CIQ0  
UniRef90\_I7B6D2  
UniRef90\_UPI0004793069  
UniRef90\_A8H828  
UniRef90\_W9AT31  
UniRef90\_Q5NYK3  
UniRef90\_H1QDZ1  
UniRef90\_R7CNT4  
UniRef90\_D1CEN1  
UniRef90\_B8GMZ0  
UniRef90\_M4S2A0  
UniRef90\_A6FFI7  
UniRef90\_R4KBB4  
UniRef90\_B1HRQ1  
UniRef90\_UPI000455FFF7  
UniRef90\_A1SL97  
UniRef90\_A0A052JFD5  
UniRef90\_UPI0003664006  
UniRef90\_Q0BRD7  
UniRef90\_UPI0003664E5E  
UniRef90\_F4H4M3  
UniRef90\_X0QEM8  
UniRef90\_UPI000376F1AC

1 10 20 30 40

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

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

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

UniRef90\_A7GVX0  
UniRef90\_G4D6Y4  
UniRef90\_T0TD70  
UniRef90\_A9MBK1  
UniRef90\_S3H7N2  
UniRef90\_UPI0003789D67  
UniRef90\_Q5NL38  
UniRef90\_F0L3L6  
UniRef90\_R7MZX1  
UniRef90\_F5XWY5  
UniRef90\_R1H1T6  
UniRef90\_U1GRZ3  
UniRef90\_UPI000346EB4C  
UniRef90\_K4QZW8  
UniRef90\_W1G3B5  
UniRef90\_W8QJB9  
UniRef90\_UPI00035FE775  
UniRef90\_W4LVU3  
UniRef90\_UPI0003AD337D  
UniRef90\_D2Z8R4  
UniRef90\_F2IW69  
UniRef90\_I4AD94  
UniRef90\_UPI000465F8BB  
UniRef90\_G8QHB2  
UniRef90\_Q9Y8U3  
UniRef90\_D5DC63  
UniRef90\_B0K847  
UniRef90\_R6FVC6  
UniRef90\_B3QKW6  
UniRef90\_U3U5Z4  
UniRef90\_W6N5C5  
UniRef90\_U3TF19  
UniRef90\_G5HLG6  
UniRef90\_A4SD27  
UniRef90\_R7AXD8  
UniRef90\_D2SCV6  
UniRef90\_U7KU23  
UniRef90\_E6PPS3  
UniRef90\_R6C7R7  
UniRef90\_H8L585  
UniRef90\_F2JGM1  
UniRef90\_Q3JK64  
UniRef90\_R6AGC3  
UniRef90\_UPI0003A827AD  
UniRef90\_D2SA78  
UniRef90\_W4L4T8  
UniRef90\_E3CHX8  
UniRef90\_UPI0003F5A4E1  
UniRef90\_D2R158  
UniRef90\_M1FGV7  
UniRef90\_I0AG44  
UniRef90\_C5BJR7  
UniRef90\_UPI00037755B9  
UniRef90\_C4Z623  
UniRef90\_UPI000464BC24  
UniRef90\_I5AXN8  
UniRef90\_S6BB92  
UniRef90\_D5R164  
UniRef90\_UPI000475EDA5  
UniRef90\_G4E887  
UniRef90\_E6KQV4  
UniRef90\_C4LK65  
UniRef90\_D2MMJ3  
UniRef90\_S0JM54  
UniRef90\_N6X412  
UniRef90\_A0A024K175  
UniRef90\_H0TJ74  
UniRef90\_H5V5R5  
UniRef90\_S1ND36  
UniRef90\_R6CIQ0  
UniRef90\_I7B6D2  
UniRef90\_UPI0004793069  
UniRef90\_A8H828  
UniRef90\_W9AT31  
UniRef90\_Q5NYK3  
UniRef90\_H1QDZ1  
UniRef90\_R7CNT4  
UniRef90\_D1CEN1  
UniRef90\_B8GMZ0  
UniRef90\_M4S2A0  
UniRef90\_A6FFI7  
UniRef90\_R4KBB4  
UniRef90\_B1HRQ1  
UniRef90\_UPI000455FFF7  
UniRef90\_A1SL97  
UniRef90\_A0A052JFD5  
UniRef90\_UPI0003664006  
UniRef90\_Q0BRD7  
UniRef90\_UPI0003664E5E  
UniRef90\_F4H4M3  
UniRef90\_X0QEM8  
UniRef90\_UPI000376F1AC

50 60 70 80  
G Q Q G A K A L V C M K A N K I F V L L A V L P A D Y K A D L D A L T A T L G G T K  
K Q I A K T T M S F V I G D E T V L L I V T S G I T E R H L S E N K K F A K K F N S K K  
S Q D I F K T L A L T G D K D T G Q T I L I G I V T Q I T E R H L S E N K K F A K K I R S G N K K  
UniRef90\_T0TD70  
G S Q I A K T L S F S T K Q P T I L I V T R G D A R I L D N R K F K D R F G A K G  
UniRef90\_A9MBK1  
A Q I A K T L C L R V G E E T M L V V A G G L S R I L D N R K V K D R F G A K G  
UniRef90\_S3H7N2  
K M L A K T V I T M M D G E K M S M T V M P A T S R I R W D R L S R A M G T D F  
UniRef90\_UPI0003789D67  
G Q I A K T L S M R V G E E V I V L V M R G A D A R I D N R K F K Q Q F G T K  
UniRef90\_Q5NL38  
D Q I A K T L C L K A G D T I L L V V A A G T K R L D N R K F R D H F G A K P  
UniRef90\_F0L3L6  
G M I A K T M S F L Q Q G D Q V L I L T E G T A K V D N R K Y K D T F H V K  
UniRef90\_R7MZX1  
G Q I A K S V F R R K D D A V L I V T S G D R R V D E K K V E A L F V G G K  
UniRef90\_F5XWY5  
G V F S K T L F L R F K D G R F A L L L T H K E G R V L D A K A V R D H F G A K P  
UniRef90\_R1H1T6  
A R I A K T L S L R V G D R V L V I V A A G A H R V D T A A L A A A F G G K  
UniRef90\_U1GRZ3  
G A I A N S L V F W S D D E P L L V M T S G A H R V D T A A L A A A F G G K  
UniRef90\_UPI000346EB4C  
S Q A A K C I V L R R R T T R H V L A V V P G D R Q V D L D A V R D L Y A A R Y  
UniRef90\_K4QZW8  
G Q G A K A L V C K N G V N Q A H V L A I L S A D A Q Q A D L S L L A S H I G G L R  
UniRef90\_W1G3B5  
E R I A K T L S F L V N G N Q A L L V I V T S G D A K V D N K K F K E Y F K T K  
UniRef90\_W8QJB9  
L R L Y K T L V F V D I G Q N R P A V A V V P V S S Q L S L K L F A A A L G A K K  
UniRef90\_UPI00035FE775  
R Q M V K S L I F V T S I D E K V L V M L G G D Q R N A L S G H L K K A I G S R N Y  
UniRef90\_W4LVU3  
A H A A K C L V V M K K O S R E Y V L A V V P G D A R L D L Q A V K A A L I D G T Y  
UniRef90\_UPI0003AD337D  
E E I L K S L V F M V S G D P V L V L M S G D N R V D P K R I A S V M G T S K  
UniRef90\_D2Z8R4  
A Q I A K T L S L R A G D E F V L V V A R G D A R L D N R K A K A A F G A K  
UniRef90\_F2IW69  
G E I A K S L F L Q V Q G D F V M V L M A G D K R L D N R K F K D A F N G K P  
UniRef90\_I4AD94  
G Q V A S S I V F K L D D E S P L L V I T S G R H R V D T K I V A E K L G V A K  
UniRef90\_UPI000465F8BB  
A E I A K S V V F R R R S G G R V V V V C D Q R V S E K K V K A L V G G P  
UniRef90\_G8QHB2  
S E I V K T L I V L D N A G G V Y A V V I P G D Q R L N I N S M K E L A G K P  
UniRef90\_Q9Y8U3  
K R I A K S L S F N A E G T V L L I V A A G D A K I D N R K Y K E E F G T K  
UniRef90\_D5DC63  
G E I A K S M L F R L K D K Y I M N I T A G D A K I D N K K F K D T F K T K  
UniRef90\_B0K847  
D Y V F K T L V I V S N K K E Y F V F V L P V A K E L D L K K A A K A V G A K S  
UniRef90\_R6FVC6  
K E M V K T V M V N I D G R M A M A L L P A S S R Q L D F D K L R M L C G T R D  
UniRef90\_B3QKW6  
M F K P L L V A G D G K A L A V A V T P V S S Q L D L K K V A K A L G A K K  
UniRef90\_U3U5Z4  
K Y I A K T L A F K L K N E D L I V V R G D F K V S N R K F K D F F G V K  
UniRef90\_W6N5C5  
S N I V K T L J A L D S E G N A Y A V I V P G G R R L S L R K L G W L V G K P  
UniRef90\_U3TF19  
A R I A K T L S F M V E G G P V L I V A A G D A K I D N H K Y K E Q F T K  
UniRef90\_G5HLG6  
K E L A K T V M V K L E N G R M A M V V L P A S R Q I D F K L L G K L A G T D D  
UniRef90\_A4SD27  
T R A I K N L F R T R N P R Y F M I I L F S D E R F D T H A F R N K Y Q L P K  
UniRef90\_R7AXD8  
G A I A N S L V F D A D G P L L V L A S G A H R V D T R K V A A L V I G A R R  
UniRef90\_D2SCV6  
E R V L K T L V I K G P K R K L A V C V I P T T H H L S L K K A A V A H N V S K  
UniRef90\_U7KU23  
H A V I K T L V M Q S E T A K P L V V L M H G D R C Q V S T K N L A R A I G A K T  
UniRef90\_E6PPS3  
G R I A K T L S F M V E D R P I L I V T A G D R K I S N S K Y K A K F G K K  
UniRef90\_R6C7R7  
D S V A K T L V A E I D K K T P I C L V L P V H R K L D M E R V A Q L G A G R K  
UniRef90\_H8L585  
R Q I A K T L A F N V N D E S I V I V A C G T A K I D N R K F K D T F H T K  
UniRef90\_F2JGM1  
A Q I A K T L A M K V G D A H V L L V S C G D S R L D N Q K F K A A L H G K  
UniRef90\_Q3JK64  
A R I A K T M S F L L D A K P L I L V V A G D A R V D N H K F K M S F H K K  
UniRef90\_R6AGC3  
D R L A K G V L V E D A G H Y M V A V L P A T R R L Q F G K L H Y L L G E H  
UniRef90\_UPI0003A827AD  
G A I A N S L V F R D V D G A P L L V L A S G A H R V D V A R V A A L L V G R D  
UniRef90\_D2SA78  
D N L V K T V A F R L R D D R G V L L A A L A S A R I D Y K K A A V L G I G R  
UniRef90\_W4L4T8  
S S I F K T L A L I G D K T G P L I G I V P I T E H L S E K K F A K V S A N K K  
UniRef90\_E3CHX8  
S C M A K A V L L D M P D Q E P L L A V L P A D R R I D I A D L R T E L D G K  
UniRef90\_UPI0003F5A4E1  
R Q I V K S I V L A A E D E A V I A I V D G T S S V D L K R V E E L V G K K  
UniRef90\_D2R158  
D R V V K T V I I E L D G K I A M L V M P A T W R V R W H R L S Q I L D T D F  
UniRef90\_M1FGV7  
K N L A K V V M I N V K G K L A M A V L P A S Y K V N V E E L K E Q L E T D A  
UniRef90\_I0AG44  
R Q V F K T L V V K L D G D T L A V G V V P V V E K L N M K L I A K A G A K K  
UniRef90\_C5BJR7  
G Q I V K S L I F R G E S G R P Y L L V S G S K R V D E V K V G E R L G E R  
UniRef90\_UPI00037755B9  
G R I A K T M S F L Q Q G D K A V L I T E G T A K I D N R K Y K D T F H V K  
UniRef90\_C4Z623  
D Q I V K S L I F Q G H S Q C L L F L T A G G N Q V I D A K A S A L A G E P  
UniRef90\_UPI000464BC24  
P E I A K T L S F L V E D K P F I V V M A G D G R V N S S K F K A K F H A K P  
UniRef90\_I5AXN8  
E Q M A R P V L L G D D I N Y L L A V I P A N H R L D L D R L N Q V M A R S  
UniRef90\_S6BB92  
G R V L K T L M A E I D G K P V C V I L P S D R E V S M K K L A A A G G K S  
UniRef90\_D5R164  
G Q I A K T L S L S L N D G P I L I V A R G D A R L D N K K Y R A R F G A K  
UniRef90\_UPI000475EDA5  
V R V F K T L V V Q L D T A A L A V A V V P A A M L N L K S L A R A A G A K K  
UniRef90\_G4E887  
T Q A F K T L M V R E P T G E F V V G V P A A L A H L S M K L I A K A G A K S  
UniRef90\_E6KQV4  
D Q I F K T L I K E P K P D L A V A V V P V T G R L S L K H A A R G F G H G K  
UniRef90\_C4LK65  
E N V Y K T L V T Q T N T K E Y V F V V P V A Q L D L K K A A K A V G A K K  
UniRef90\_D2MMJ3  
K L V C K T L V L K G D K T G Y V I A I V P L A A H L D Y K T R K V S K D H K  
UniRef90\_S0JM54  
E R V F K T L V V Q L D G Q A L A V G I V P V T G K L N L K Q L A K A G A K K  
UniRef90\_N6X412  
G Q I A K T L C I R V N G E V F L L V T R G D A R L D N G R A K A A F G G R  
UniRef90\_A0A024K175  
A R I A K T L S L R I G E R V I L I V T S G T S R M D N K K V K A M F G G K P  
UniRef90\_H0TJ74  
G Q I A K T L S L K V K D Q I L V V A K G D A R L D N K K L K A A F G A K  
UniRef90\_H5V5R5  
T I Y K T L V L K G N K T G T V I A L V P L D G R L D Y K K T A K A S G N R K  
UniRef90\_S1ND36  
A R I A K T L V F F S A D G E G C L I V T A G D T K I D N K L F K A S T F G F K  
UniRef90\_R6CIQ0  
G Q I A K T L S L W L K D E V A I V V M G G D A K I D N Q K F K A Q F K T K  
UniRef90\_I7B6D2  
R R V F K T L M A M V D G V M A A V V P V D R R L D P K A L A A F L G A K K  
UniRef90\_UPI0004793069  
A Q L A K A V I L E D H E G R R M A V L P A N H R I S L R N L G D F L N R D  
UniRef90\_A8H828  
H R V F K T L L F A L N G D N L A V A V V P V A G M L D L K A A K A A G G K K  
UniRef90\_W9AT31  
N C L A K S V L E D D D G F L M A V L P S T Q H V Q L G W L S K A M Q S N  
UniRef90\_Q5NYK3  
E E V F K T L M T L A D G A P A C V V I P S D A E V S M K K L A A A G A K S  
UniRef90\_H1QDZ1  
G M I A K T M F L Q N D K A V L I L T E G T A R V D N R K Y K D T F H I K  
UniRef90\_R7CNT4  
G Q I V K S L I E L A G D G Y L L V L V S G K A R V D V D K L A R I V G Q E  
UniRef90\_D1CEN1  
E R V F K T L V S L D G R E L V V G V V P V A A M L S M K Q I A R A A G A K K  
UniRef90\_B8GMZ0  
D R L A K A V L L D T E G D Y L L A V L P S D C K V Q L G D L R A E L G Q K P  
UniRef90\_M4S2A0  
M S F A K T V I I T A D T R L V M V M P A P Y T I D F D N I A F S I G A N Y  
UniRef90\_A6FFI7  
G Q T A P N L I I Y T D I G F Y S L I I S G I R D K V D F K I K L K C N D  
UniRef90\_R4KBB4  
A R I A K S L S F L V N D S A I L I V A A G D A K I D N A K Y K A V F G T K  
UniRef90\_B1HRQ1  
Q Q Y T K L V F K P K T P V V V I A R D D T E T N T N A L A K H L N Q K D  
UniRef90\_UPI000455FFF7  
G A I A N S L V F D A D G S P V L I T S G A H R V D T T K V A A A L G V T K  
UniRef90\_A1SL97  
S Q G A K A L V C R S T Q R K H V L A V F P A D A Q A D L E A I A R A A G G K K  
UniRef90\_A0A052JFD5  
A A I A N S L V F R M D G G D A P L L A L T S G A H R A D T R A L A E H T G A A H  
UniRef90\_UPI0003664006  
G Q I A K T L A F L V G G Q T L I L V A R G D A R L D N R K I R T R F G G K P  
UniRef90\_Q0BRD7  
E R I A K T M S F L L G E E A I L I V T A G D A K I D N K K Y K A H F H Q K  
UniRef90\_UPI0003664E5E  
A D V V K T I V V R R G D D F L V L V P G D R T I S W P K L R A L L G L V S R  
UniRef90\_F4H4M3  
E R I A K S V L L R Q Q G A Q F V L A V C P V N R K I D M K S I S R H L L A L G R  
UniRef90\_X0QEM8  
P Q V F K T L L A D V D G K L V V G I V P V D R K L D L K A L A R A A G G K K  
UniRef90\_UPI000376F1AC



UniRef90\_A7GVX0 V S L A S P S E E V L E R L T D C V L F G S V P P F S F 110 H K N L L L I A D P S 120  
UniRef90\_G4D6Y4 A K M A S F E E V L E R L T D C H L F G G V L C P F F G L K D N N V K V Y L D E S S  
UniRef90\_T0TD70 V S M I P D Q K N T V L Q A T T G Y L H G A N N P V G L I H Q K H N F P I F L D D N R S  
UniRef90\_A9MBK1 R M L I D A Q N T V L Q A E T S H P V G G V C P F F G L P G A L P V I Y C D I I S S  
UniRef90\_S3H7N2 R M L G P D E E V M Q V T S H P V G G V C P F F G L P T T T G L P V I Y C D I I S S  
UniRef90\_UPI0003789D67 I E L A D E E E F Q R D A F D C E L G A M P P F F G N L F G M S V Y M D D E E S  
UniRef90\_Q5NL38 A R M L E A S D S V E R I F T G H P V G G V C P F F G L A Q P L R I F C D I I S S  
UniRef90\_F0L3L6 R M L G A E E E V V A V T S H P V G G V C P F F G L P S P Q L P V F C D I I S S  
UniRef90\_R7MZX1 A K M L P F E E V E E K V G H A P G G V S P F F G V N E G V I V Y L D E S E  
UniRef90\_F5XWY5 L G R A D A D F V K A R T G F S L G G V S P V G H L Q P P V V G L T L I D R E  
UniRef90\_R1H1T6 S I C G P D Q M Q E T G C L P G A V C P F L P R A D I L P L L D P A  
UniRef90\_U1GRZ3 K M L G V D E V L A D T G H E V G G V C P F G L K T P L P V Y C D D V S  
UniRef90\_UPI000346EB4C I R R A T P D Q V L A A T G Q P I G G V A P T G H P A P L L T T I V D E D  
UniRef90\_K4QZW8 V G F S D P E T A E R L A R S V P G T V L P F S F D P A L L E V V A D P E L  
UniRef90\_W1G3B5 A S L A S P A E V D L T G C V F G A I P P F S F H P N K L V L A D P L  
UniRef90\_W8QJB9 A K M L S P H E V V D L V G H E I G G V C P F A L K N G V S V Y L D I I S S  
UniRef90\_UPI00035FE775 A A M A D R E L A S R S T G Y V L G G V S P L G Q K L A L P T V I E E T  
UniRef90\_W4LVU3 I K L A S P N V Q A I T G Y A I G S I P P F H W Q S S G F R S F I D A S  
UniRef90\_UPI0003AD337D V A F A G R D R A E E L A G S V S G T V L P F S Y N P R L E V V A D P A  
UniRef90\_D2Z8R4 V K M A Q P D Y V E S N F G S K V G G V L P V G Y R P S L P A L V D E E  
UniRef90\_F2IW69 V K M L G L D E V L E E I T G H P V G G V C P F G L A R P L K V Y C D M S  
UniRef90\_I4AD94 K M P E V E Q V L E T G H P V G G V C P F G L R Q E I P V Y L D E S  
UniRef90\_UPI000465F8BB L H R V D A D Y V K E K S G F S I G G V S P V G W V N P A T I L I D E A  
UniRef90\_G8QHB2 I E R A E A E F V R Q A T G Y A I G G V S P L G Q P G E V T L L D D R L  
UniRef90\_Q9Y8U3 V R L A R A S E V V J E L T G Y P V G G V P P L G I V L L V D R L  
UniRef90\_D5DC63 A K M L G A S E V E T L I G H A V G G V C P F A V L P N N E G V H V Y L D E S  
UniRef90\_B0K847 A K M A S P E E V L E V I T G H P V G G V C P Y G L K N P I E V Y D D V S  
UniRef90\_R6FVC6 I E M I H V I D L N K I T G Y I R G G C S P V G M K K Q F V T T Y H E T  
UniRef90\_B3QKW6 V K L A E E E F S D L F E C E I G A M P P F G N L Y A M E V Y A D E A  
UniRef90\_U3U5Z4 A D M A D P Q L A Q R V T G Y L V G G I S P L G Q K K R L P T A I D Q Q  
UniRef90\_W6N5C5 A R M V D S D K V L N E I G H P I G G L C P F G L Q N E V K V Y I D V S  
UniRef90\_U3TF19 V R L A R S G E V L E L T G Y P V G G V P V A L P Q G I V V V D S S  
UniRef90\_G5HLG6 A K M L S P D E V T D L V G H S V G V C P F G V K E G V R V Y L D E S  
UniRef90\_A4SD27 V V L S D E E F G D L F E C E P G A M P P F G N L Y G M E V Y V S E E  
UniRef90\_R7AXD8 I E M V L E D E L K S L L H T H S G A V S I E L F H D V E N Q I N L Y I Q E D  
UniRef90\_D2SCV6 V R R A T P D L V L A A T G Q E V G G V A P T G H P A P L R A L V D V D  
UniRef90\_U7KU23 A A M A D P H D A S K S S G Y I P G G I S P L G Q K N P L P T I I E E T  
UniRef90\_E6PPS3 V Q P C S P A V A Q R H S G Y Q V G G T S P F A L R K T M P I Y V E A T  
UniRef90\_R6C7R7 A K M L T A E E L T E F V G H A P G G V C P F A V K E G V E V Y L D D S  
UniRef90\_H8L585 A R L I N A E K L T K M T G F L P G G T S P L G L F D H M P V I D K A  
UniRef90\_F2JGM1 A K M M S Y E E T L E K T G H P V G G A C P F G L P K Q V K I Y L D E S  
UniRef90\_Q3JK64 A K M L S A E E T V A V T G H P V G G V C P F G L P A P L P V Y C D V M  
UniRef90\_R6AGC3 A K M I P G A D C E K Y I G H R P V G G V C P F C L P E G V V Y L D V S  
UniRef90\_UPI0003A827AD V G L A T E E E V R S V F D C E Q G A V A L G T A Y G V E T L L D E S  
UniRef90\_D2SA78 V R P A S A D F V R R H T G Q P I G G V A P I G H P E P I G T L V D V E  
UniRef90\_W4L4T8 R D I A S P A F V H R R L Q V E P G G V P I G P V S D E V R V I V D A P  
UniRef90\_E3CHX8 V S M I P Q K D L E K T T G Y I H G A N N P V G I R Q R H N F P I Y I D Q V  
UniRef90\_UPI0003F5A4E1 A R L A D E K Q V V J E D C M P G A V P P L G S G Y G V D M I V D D D  
UniRef90\_D2R158 V R V A G K N E V L D L I G F P A G G V P P I G H D C K V I L D E R  
UniRef90\_M1FGV7 V E L A D E Q T F Q N L F Q C E V G A M P P F G E L Y G M N V Y C A E A  
UniRef90\_I0AG44 V K L A H E K E F M N L F D C E V G A M P P F G N L Y G M E V Y V A K A  
UniRef90\_C5BJR7 A A M A E P A E V E R S T G Y V L G G V S P L G Q K K R L K T F V D S S  
UniRef90\_UPI00037755B9 L E R A K P D W V R E V S G F A I G G V P P L G H A T P L E A L I D P D  
UniRef90\_C4Z623 A K M I P F E E V E N I G H A P G G V C P F G I N E G I D V Y L D E S  
UniRef90\_UPI000464BC24 L D R A D A A A V E R A Q T G F A I G G V S P V G H L N P I R A W V D P R  
UniRef90\_I5AXN8 H M I P R D Q V E T M I G F Q P G G V C P F A V P G D V P V W L D I S  
UniRef90\_S6BB92 L E L V D G E E L E F T F D C E K G A I P P V G E A Y G V D T V L D V A  
UniRef90\_D5RI64 A Q M L R V P D A E R I T G Y R V G G I S P F G Q K K R V P V I E Q A  
UniRef90\_UPI000475EDA5 A K M L D A E A A L I A T S H P V G G I C P F G L P E G V T V Y C D V S  
UniRef90\_G4E887 A G M A D K T L V S R T T G Y V L G G V S P L G Q K K R L P S Y I D S S  
UniRef90\_E6KQV4 A A M A D P A V A Q R R T G Y V L G G I S P L G Q T T P H R L F I D S S  
UniRef90\_C4LK65 A S M A K P K D A E H S S G Y I T G G L S P L G Q K H R L P T I I D E T  
UniRef90\_D2MMJ3 I E M V A Q K N L G L T G Y V H G A C S P V G M K K S F P T F I G Q S  
UniRef90\_S0JM54 V G F P G M D Y V M A Y T G Y P H G A N T P I G I H K E H P D Y L F L A D N T  
UniRef90\_N6X412 A A M A D A R D V E R S T G Y V L G G V S P L G Q K K R L R T V I D A S  
UniRef90\_A0A024KI75 P R M L G A E E V E E L T S H K V G G V C P F G L P G P M T I Y L D E S  
UniRef90\_HOTJ74 K M L G L E E V A E I T G H E V G G V C P F G L K A P L P V Y C D V S  
UniRef90\_H5V5R5 A R M L S S D E V V S W T G H P V G G V C P F G L H E P L A V Y C D I S  
UniRef90\_S1ND36 V G F P P M E Y V L A A T G Y H G A N T P I G I F M Q H P D Y V S I E D T S  
UniRef90\_R6CIQ0 A K M L P H D L A L Q M T G H A V G G V C P F A L P Q G V S V F L D R S  
UniRef90\_I7B6D2 A K M L N A D E V L E W T S H P V G G V C P F G L P H P L P V F V D V T  
UniRef90\_UPI0004793069 A V M A D P A A A E R T G Y V L G G I S P L G Q R H A C P V V I D E S  
UniRef90\_A8H828 L R L I E E K A E V Y D M F D C H K G A I P S L G E V Y N L E A V V Y D D L  
UniRef90\_W9AT31 A E M A D P K L A E K V T G Y I V G G I S P L G Q K K R L P T F V D S S  
UniRef90\_Q5NYK3 L R L A S E D E L S A L F D C E P G A V P A G I A Y G M R M V V D D A  
UniRef90\_H1QDZ1 A Q M M K P A D A E R L T G Y K V G G V S P F G Q R K A V P T L F D E T  
UniRef90\_R7CNT4 A K M I P F D E V E N I I G H A P G G V C P F G I N E G I E V Y L D E S  
UniRef90\_D1CEN1 V K R A D A K T V K E L T G Y T I G G V P P V G H T Q K P L A V L M D R D  
UniRef90\_B8GMZ0 A A M A D K A E V E R T G Y V L G G V S P L G T Q K K R L K T F I D V S  
UniRef90\_M4S2A0 R L A G E D E V G L I F D C A I G A V P P F G T R Y G I V T I V D D S  
UniRef90\_A6FFI7 V N L A Y E H Q F S S M F D C E T G A M P P F G H L F N M P V Y I S D T  
UniRef90\_R4KBB4 V R L A T K D E V K Q M T G L S V G S V A L F S K L T C I V D K K  
UniRef90\_B1HRQ1 A K M L G K D N V E A M I G H D V G G V C P F G V N E G V V I Y L D E S  
UniRef90\_UPI000455FFF7 M R L A T P E L L K E F L G A T K D D V S P L S I N T N N A G P L I V A L D A A  
UniRef90\_A1SL97 L K R A T P E F V R E H T G Q A I G G V S P I G H P S E V P T Y L D S W  
UniRef90\_A0A052JFD5 A A L A S H E L A R E L T G C E I G A I P P F S F N P G L H L L V D P T  
UniRef90\_UPI0003664006 V D M A D P D F V R A H T G Q V I G G V A P V G H P A P I T T L V D A T  
UniRef90\_Q0BRD7 R M L P L E D V E P V T G H P I G G V C P F G L S Q S L P V Y C D R S  
UniRef90\_UPI0003664E5E A K M I P G E L V E Q Y V G H A P G G V C P F V I P P G T K V F L D V S  
UniRef90\_F4H4M3 L S M P D A A T A R D A T G Y E R G T I T P F G S L R A W P V V A D A R  
UniRef90\_XOQEM8 L E L A S V D N L K K L G Y P R L G L P R N I V V V I D K S  
UniRef90\_UPI000376F1AC A A M A D P A A A E R A T G Y V V G G I S P L G Q K T R H A T V L D E S

UniRef90\_A7GVX0 L F E Y E E I A F N A G L L D H S I T L S A K D Y E K I V R P K L V K  
UniRef90\_G4D6Y4 L K R F D T V Y T G G G D A H N T V K V N D Q L E K Y S N Y V K W V D  
UniRef90\_T0TD70 A K E M G T M I V S A G E V G R S A V R I R D S Q A L A D F V G A  
UniRef90\_A9MBK1 L K T Y G D E L V V P A A G A T N S A V R I A P Q K M A D L V E A E W V D  
UniRef90\_S3H7N2 L R R F D V V V P A A G S T N S A V R L S T E R L A D L T G A T W V D  
UniRef90\_UPI0003789D67 L R N L D N I A F S A G S H S E A T L T M S M S D Y V D L V K P I A I T E Q F V K  
UniRef90\_Q5NL38 L K A F D S E V F P A A G G A P N A A V R I S P D A M A R L T G A G W V D  
UniRef90\_F0L3L6 L K N Y P E V V P A A G A T N A A V R I S P D A M A R L T G A E W V D  
UniRef90\_R7MZX1 L K K F E M V Y P A A G D D H S A V R F T P E L E K A A D A P G W I D  
UniRef90\_F5XWY5 L F R F E V V W A A A G H P H G V F Q L R P Q D L E R L T G A P V A D  
UniRef90\_R1H1T6 L L T H A S F T W T P G L P E L T M E L A T D A L P T L L D R L E C Q I I Y L  
UniRef90\_U1GRZ3 L K A F D V V V P A A G S T H S A V R I T P D R M A E L T A A E W V D  
UniRef90\_UPI000346EB4C L A A F P Q I W A A G T P H T V F P L T F D E L V R L T D G T  
UniRef90\_K4QZW8 V V A Q P K L Y F N A A R L D R S L C L S G A D Y A R L A K  
UniRef90\_W1G3B5 L F E  
UniRef90\_W8QJB9 L K R F E T V Y P A C G S S N S A I E L T I K Q L E K H S G Y S Q W I D  
UniRef90\_UPI00035FE775 A Q L F D T I F V S A G R R G L Q V E L S P A D L A T L T G A T F A D I  
UniRef90\_W4LVU3 L M Q E S V L G V G A G E W G Q E I L M A P E D D L V K A A Q A T I V N  
UniRef90\_UPI0003AD337D L L Q A P E L F F N A A R L D R S I A L V T D Y L R L A S P R I A P  
UniRef90\_D2Z8R4 L S R F D V V W A A A G T D H D F P I S P E L L L E Y T E  
UniRef90\_F2IW69 L K A F D V V V P A A G A V N A A V R I A P Q R M A E L T G A T W I D  
UniRef90\_I4AD94 L K K Y S V V Y P A A G A P D A A V K L T V V E L E E L V A T G W V N  
UniRef90\_UPI000465F8BB L N D Y E V V W A A A G H P H S V Y P T T Y A E L I K C T D A  
UniRef90\_G8QHB2 L Q R F A K T V W A A A G T P F S V F P L A P A D L Q R L T G A P W A D V H  
UniRef90\_Q9Y8U3 L L S R A K T V Y G A G G R E N A L L E F S P R E L V E A T G A V V A D  
UniRef90\_D5DC63 L K R F V T V F P A C G S G N S A I E L T I P E L E E F S K C L K W V D  
UniRef90\_B0K847 L K N Y E V V Y P A A G D T N A A T I K V E D L D K I V E G K W V D  
UniRef90\_R6FVC6 A Q N N P V I M V S G G K I G T Q A V E C K P D D L L K I T K G Q Y A D  
UniRef90\_B3QKW6 L D E D V D I A F N A G A H T E L L R M G W E D Y K R L  
UniRef90\_U3U5Z4 A S E F P T I F I S A G G K R G L D I E L A A Q D L A R L L D A T L A D V  
UniRef90\_W6N5C5 I K D F E Y V P A A G S K D Y A L K I P K A Q I Q E L V N A K W I D  
UniRef90\_U3TF19 L N N R E R V Y G G G S V N T L E F N P K E L V I E A V G A V  
UniRef90\_G5HLG6 L K R F D E A V Y P A C G S A S A V R I S P E L E K A S G Y L E W I D  
UniRef90\_A4SD27 L D E D E A L F A N A G A H T E L L R L P Y R R L V N  
UniRef90\_R7AXD8 V L K Q T Y F R F H P N D E D T L L R I K T K D L E T L I P F L H H T C H I  
UniRef90\_D2SCV6 L A R H P L L W A G G G D H H T M V A L S Y A D L L R L T  
UniRef90\_U7KU23 A I L F D T V F I S G G R R G L D I E L N A E D L A Q L C D A  
UniRef90\_E6PPS3 V L E L E R I Y I N G G R R G L L G M E P A L L T A Q L H A  
UniRef90\_R6C7R7 L K E Y E T V Y P A C G S S N S A I E L S S E I E Q Y S G C R E W V D  
UniRef90\_H8L585 L Q P L A T L H V N G R S A V R I A A D L A A D L Q A F T G A T F A D I T L A E  
UniRef90\_F2JGM1 L K Q S E E V Y P A A G S P H A V V K M S L P E L A E I T E G E W V D  
UniRef90\_Q3JK64 L K S Y E F V Y P A A G S T H A A V R I D P V R L A E L V E A E W V D  
UniRef90\_R6AGC3 L K R F D I V Y P A A G T D H S A V K L S L P E L E R A S A S Q G W V D  
UniRef90\_UPI0003A827AD L A D Q D K V Y V E G G D H C S L I R M T G A D F R A R L G D C R H  
UniRef90\_D2SA78 L A R H D R V W A A A G H P H V V F P T S Y E E L L R L T G G T A A E V  
UniRef90\_W4L4T8 V G E L Q E V F C A G F G R L D H T L Q I S A S E L I R V  
UniRef90\_E3CHX8 A L I E M G Q M I V S A G E L K R S I R I D S Q V L A D F V S A  
UniRef90\_UPI0003F5A4E1 L A R E P D I F F E A G D H R S L V H M E Q A E F R R L T R S A R H  
UniRef90\_D2R158 V L E N E R V Y G G G D E K H L L L V S P S D I V K  
UniRef90\_M1FGV7 L T Q Q P E L A F A A G S H S K S I H M K T A D F L A L A R P T  
UniRef90\_I0AG44 L T E D E Y I Y F N S C T H T E L I Q M Q Y K D F E K L V Q P K V L E  
UniRef90\_C5BJR7 A K H F A T I F V S A G R G L E I E L A P A D L S L V S G E F V D  
UniRef90\_UPI00037755B9 L L Q Y E Q V W A A A G T P N A L F A L T P Q Q L V A L T  
UniRef90\_C4Z623 L K Q F D I V Y P A A G D D H S A V K L T A E L E D A S Q A K G W V D  
UniRef90\_UPI000464BC24 L L D F A E I W A A A G T P R H V L A L N S A D L A R L S G A Q V A D  
UniRef90\_I5AXN8 L K R F A Y V H P A G G N E F T S V K L T P E E L E S A S N A K G W V D  
UniRef90\_S6BB92 L S H Q E A I Y F E A G D H K H L V H V R G D D F R R L M E H V  
UniRef90\_D5RI64 A L A E P Y V F V N G G Q R G L Q L R L  
UniRef90\_UPI000475EDA5 L K A F A E V V P A A G A P N A A V R I G T E R M A D L V G A E W V D  
UniRef90\_G4E887 A Q D F S T I F I S G R R G L Q L E L D P H A L A H L L Q A R F V P  
UniRef90\_E6KQV4 C L D H E T L I S G R R G L S V E L S P L D L V E L A G A Q V T D  
UniRef90\_C4LK65 A L L C D T M Y V S G G K R G L D I G L S P Q D L I S L T D A T T A D I  
UniRef90\_D2MMJ3 C L K Y D R I L C S S A G E V G L L M K V I D R E S L I N Y V R A K V V D  
UniRef90\_S0JM54 L K E Q N E L V M S S G E I G R S I K V I A R K D F E T I V Q P I Y A D  
UniRef90\_N6X412 A Q D F D I V Y V S A G R R G L E I E L A A S D L A Q L T  
UniRef90\_A0A024K175 L K I Y D E V T P A G G S T H A S V R I P L E R L A E L V G G K W V S  
UniRef90\_H0TJ74 L K A F D I V V P A A G S T H S A V R I A P G R I A E L T G A E W V D  
UniRef90\_H5V5R5 L Q E Y Q E V L P A A G A I H S A V R I S P Q R L A E L T A A H W V D  
UniRef90\_S1ND36 I L A H E E V I V S S G E L G H S V K V Q V N D L L T L I A P I Q A D I  
UniRef90\_R6C1Q0 L C R F Q T I F P S A G S S A V E M T P E E L F V S S H A Q K W V E  
UniRef90\_I7B6D2 L K K F D I V V P A A G A T N A A L R I A P E R L A Q L V Q A T W V D  
UniRef90\_UPI0004793069 A L G F A T V L V S G G R G L E I E L S P A D L  
UniRef90\_A8H828 L V E A K E I Y I E A G D H N T L V H L S R E D F V K L I K D A K H  
UniRef90\_W9AT31 A E Q F E T I C V S A G R R G L E I E L A A Q D L V  
UniRef90\_Q5NYK3 L A E Q P E I Y F E G D H E K L I Q M S C E D F M T M M E E A K H  
UniRef90\_H1QDZ1 A A L F D Q I L I N  
UniRef90\_R7CNT4 L K Q F T T V Y P A A G N D H S A V K L T I P E L E Q V A E A N G W V D  
UniRef90\_D1CEN1 L L D Y E V V Y A A A G T D R V N F A I A T T D L L R I T G A R P C D I K  
UniRef90\_B8GMZ0 A Q Q F S I F V S A G R R G L E I E L S P G D L A R L T D  
UniRef90\_M4S2A0 L E D Q P D I Y F E A G D H A S L I H M D G G E F A R L C A D A R H  
UniRef90\_A6FFI7 L T I Q Q D E I S F N A G D H A E T I K M K T S D L V D L V Q  
UniRef90\_R4KBB4 L J E N D F I Y G G T G K N E T L K V Q P E A L F K L  
UniRef90\_B1HRQ1 L K R F T T V F P A C G S S N S A I E V T I S E L E T Y T P Y E E W I D  
UniRef90\_UPI000455FFF7 L T S S D S F A V H A A A A D Q T L F M T G A E I A K Y L Q S T G A K V E V V D  
UniRef90\_A1SL97 L R R Y D V V W A A A G H P A A V F S T T Y D E L A A M T G A  
UniRef90\_A0A052JFD5 L Q R H D E I V F N A G R L D A S I I M R T D D Y F R I A Q  
UniRef90\_UPI0003664006 L A R H D T V W A A A G H P A S L F P I T F A D L V I T L T G G R A V D  
UniRef90\_Q0BRD7 L L G F A E V L P A A G S P N S A V R I A P E R L A I L T N A E W V D  
UniRef90\_UPI0003664E5E L K R F D I V Y P A A G T S N S A V E L S I K E L E D C S G C T G W I D  
UniRef90\_F4H4M3 V P G R A V S I G A G A H G V A A T V D G S Q L V R A L G A T T A D V I T  
UniRef90\_X0QEM8 L L T H R A T V I V G G N A G I E V E L G P W D L A Q A C D G E I L V I  
UniRef90\_UPI000376F1AC A E A F D V V Y V S G G R R G L D V G L A P A D L L K L T N G T

UniRef90\_A7GVX0 F A  
 UniRef90\_G4D6Y4 V C K N  
 UniRef90\_T0TD70  
 UniRef90\_A9MBK1 V C Q  
 UniRef90\_S3H7N2 V C Q  
 UniRef90\_UPI0003789D67 P S A T P  
 UniRef90\_Q5NL38 I A Q  
 UniRef90\_F0L3L6 V C Q  
 UniRef90\_R7MZX1 V C K E E A  
 UniRef90\_F5XWY5 V V Q P P A  
 UniRef90\_R1H1T6  
 UniRef90\_U1GRZ3 V C E  
 UniRef90\_UPI000346EB4C  
 UniRef90\_K4QZW8  
 UniRef90\_W1G3B5  
 UniRef90\_W8QJB9 V C K  
 UniRef90\_UPI00035FE775  
 UniRef90\_W4LVU3 L C  
 UniRef90\_UPI0003AD337D I T A P  
 UniRef90\_D2Z8R4  
 UniRef90\_F2IW69 V C R E P  
 UniRef90\_I4AD94 V A Q  
 UniRef90\_UPI000465F8BB  
 UniRef90\_G8QHB2  
 UniRef90\_Q9Y8U3 V S E  
 UniRef90\_D5DC63 V C K  
 UniRef90\_B0K847 V C Q  
 UniRef90\_R6FVC6 I C K E  
 UniRef90\_B3QKW6  
 UniRef90\_U3U5Z4  
 UniRef90\_W6N5C5 V C K N  
 UniRef90\_U3TF19  
 UniRef90\_G5HLG6 V C K  
 UniRef90\_A4SD27  
 UniRef90\_R7AXD8  
 UniRef90\_D2SCV6  
 UniRef90\_U7KU23  
 UniRef90\_E6PPS3  
 UniRef90\_R6C7R7 V C A D K I I  
 UniRef90\_H8L585  
 UniRef90\_F2JGM1 V C R E  
 UniRef90\_Q3JK64 V C K  
 UniRef90\_R6AGC3 V C K N  
 UniRef90\_UPI0003A827AD  
 UniRef90\_D2SA78  
 UniRef90\_W4L4T8  
 UniRef90\_E3CHX8  
 UniRef90\_UPI0003F5A4E1  
 UniRef90\_D2RI58  
 UniRef90\_M1FGV7 F A  
 UniRef90\_I0AG44 L C Q P  
 UniRef90\_C5BJR7  
 UniRef90\_UPI00037755B9 V C K E  
 UniRef90\_C4Z623 F T S  
 UniRef90\_UPI000464BC24 V C K  
 UniRef90\_I5AXN8  
 UniRef90\_S6BB92  
 UniRef90\_D5RI64  
 UniRef90\_UPI000475EDA5 V C Q E P  
 UniRef90\_G4E887 L C A E Q A  
 UniRef90\_E6KQV4 L A A  
 UniRef90\_C4LK65  
 UniRef90\_D2MMJ3 V E  
 UniRef90\_S0JM54 L  
 UniRef90\_N6X412  
 UniRef90\_A0A024KI75 A C Q V P T  
 UniRef90\_H0TJ74 V C E A Q  
 UniRef90\_H5V5R5 V C Q K  
 UniRef90\_S1ND36  
 UniRef90\_R6CIQ0 V C K  
 UniRef90\_I7B6D2 I A Q  
 UniRef90\_UPI0004793069  
 UniRef90\_A8H828  
 UniRef90\_W9AT31  
 UniRef90\_Q5NYK3  
 UniRef90\_H1QDZ1  
 UniRef90\_R7CNT4 V C K E  
 UniRef90\_D1CEN1  
 UniRef90\_B8GMZ0  
 UniRef90\_M4S2A0  
 UniRef90\_A6FFI7  
 UniRef90\_R4KBB4  
 UniRef90\_B1HRQ1 V C K  
 UniRef90\_UPI000455FFF7 F S K L K A  
 UniRef90\_A1SL97  
 UniRef90\_A0A052JFD5  
 UniRef90\_UPI0003664006 V A A P  
 UniRef90\_Q0BRD7 V C A E  
 UniRef90\_UPI0003664E5E V C K  
 UniRef90\_F4H4M3  
 UniRef90\_X0QEM8  
 UniRef90\_UPI000376F1AC

UniRef90\_UPI000417A322 1 MA K K T A A [L]Q[V]L[V]D A A [V]P H K [V]Y S F E G D Y G A 30 H A A N E [L]G[L]Q[L]K 40

UniRef90\_E1SGF5 R[V]A D K[L]A E [L]G H P H E [V]V[M]L P A T R T A A D A A S A [L]G[V]E [L]

UniRef90\_UPI000373087B T P A [I]D [L]L K K A K A [V]H Q [V]H S Y S H D P K A A E A A S A [L]K[L]E [L]P

UniRef90\_UPI000468F110 T [V]D A A S R [V]T G T P P

UniRef90\_V4JNC9 [L]M K A [C]G [V]T Y E Q W Q H E P [L]F D T D [L]R [V]G E R [L]G W T

UniRef90\_UPI0002E9E19D MA K G T P A T [V]A T A R A G [L]P F D [L]V E Y P A A D S [V]G A A A E A [L]G E P P

UniRef90\_UPI0003B64C76 D S [V]R A F F A E K A P D [V]E [V]I [V]T E S S A T [V]E [L]A A E A H G [V]E P P

UniRef90\_UPI000465D207 T A T [V]A [L]A A Q A H G [V]E P P

UniRef90\_M5QS34 T P A [V]R A [L]E R A R [V]A H T [L]H P Y D P E H P T E A A [V]A A [L]G A D P

UniRef90\_D2SFA0 M T [L]A R K [L]Q D Y I D G E G [V]A Y D T [V]A H H R T A T T S Q S A R A A H [V]P G

UniRef90\_W8HYW6 K L R D F L D R H K [V]V Y F [V]V S H S P A Y T A Q E [L]A A S A H [V]P G

UniRef90\_Q3APR8 K S [L]R R V K A [L]A E [L]G L H D D T I [C]E T A G A T T A Q M A A D A [V]G [C]E [V]

UniRef90\_U4UW88 T P A T A [L]L A K R K [V]P Y T L Y D H D P R H D S [L]E A A E [V]L G [L]D P

UniRef90\_W7T788 M S K T T R A T Q [A]L Q Q A G [V]S F T [V]H T Y E Y D P H A E Q A A E A M G A D P

UniRef90\_I4YNA6 Q [V]M D K H N I [P]Y E A [L]S [L]N I D K S E A E R D A [L]H V K H

UniRef90\_I7L2F9 MA [L]A T T [L]A T [C]L S S K N S H F D T I R H P Y A [L]G S M A T A Q A A H [V]P G

UniRef90\_V2JDA7 R A S [V]A F N T [L]H E Y D A S S Y G E A A D A [L]G N V P R

UniRef90\_UPI00036560BC T P A [I]N [L]A K K E G I R F N T H E Y D S S Y G E A A [L]G N I N P

UniRef90\_UPI00037DA943 R V Q Q A [L]A A H G L D [C]D I R S F P E T R T A Q E A A S A I G [C]S [V]

UniRef90\_UPI0003B7718E A S A K R V Q D A [L]H G F G L D [C]K V K E [L]E S T R T A [V]D A A N A V [L]G C C D V

UniRef90\_B5EBT8 R V R T [V]L [L]E S G I G D T [V]F E F P E T R T A D A A N A [L]G C C D I

UniRef90\_B8H7R3 [V]E Q [L]E K E S I P F E S [L]S [L]N A [L]K N E [L]P T D [V]S S

UniRef90\_K2KMY9 E S A Q R [V]A R [L]L Q E [L]G H D H S I [V]L P Q T G T S A E A A S [V]L G C Q [V]

UniRef90\_B9DRL1 E K S G I S F H [V]Y E H D P N N T H [L]E A A S [V]L G C Q [V]

UniRef90\_UPI0002DF6C0C I [V]T E Q S S A T [V]P [L]A A A A H G [V]A P E

UniRef90\_UPI00047B4CCB E K [V]K E Y F K Q Y N I E R R [L]K E [L]D E T S T [C]F L A A K A [L]G T E E

UniRef90\_UPI0003759G9 E D V K R [V]L A E H H [V]V G Y R E F A T S S A T [V]E [L]A A [L]A G [C]E P

UniRef90\_R5FQF8 T P A [V]K [L]L E K N N [V]S F T [L]Y H H D A D D T N E E A A R K [L]G [L]D K

UniRef90\_A1V9D6 M N T P E K [V]A E A L R A [L]D A T G E I R E F E T [V]P T A A A A E [V]L G [C]D [V]

UniRef90\_C6CBP9 R I T S F L E A R Q A S F E L L T H E P I R S A K E G A E Y F G T E P

UniRef90\_UPI000364256B M G S [L]S K M K E T L N S G F P F E L L E N R R I K S A S E G A T Y W G [L]E [L]

UniRef90\_UPI000472BF80 A N [V]R R [V]L A A [L]G A E D T [V]T M F D S [V]P T A A A A A T [L]G [C]E [V]

UniRef90\_UPI0003B5D79E [L]D I S I K R M E Q S T R T A E E A A K A A [L]G C A V

UniRef90\_A0JWS5 R V Q S A [L]M A R G F G H K [V]V E [L]P A T R T A K E A A Q A [V]G A E V

UniRef90\_L0LIZ7 Q R [V]A A [V]L R E Q G H P H M V [M]L D D A A R T A Q A A D A [L]G [V]R L

UniRef90\_F6DEQ9 K T N A [V]R [L]E Q Q N I S Y E L Y K T E D G Q T [V]D S [V]S E K [L]G Y [V]P

UniRef90\_J2U188 M S M S S R [L]Q N [C]L S Q H R S R Y D L L P H A T S M T R E A A R R A G [V]P P

UniRef90\_M5P5J9 K R V R Q A L A E A G I E T E I L E [L]G T A R T A R E A A D G [V]G [C]H [V]

UniRef90\_W5INA8 M [V]A S D E L T A R L S A [L]S L P S A L A A H P A [V]T N P A E W K Q A [L]G S A P

UniRef90\_UPI00035EC67A M G I [L]S R T L S D F L D Q H A V T Y Q [V]V H H P H S D S A S R S A E A A H I [L]P G

UniRef90\_UPI0003B620EF T P A T A S L [L]A N G I H F T H Y E H D A [V]A T N R E A A E K [L]R L D P

UniRef90\_G6XKH3 K S A Q S [V]Q Q A [L]A K K G [L]A F E [V]L E [L]S A T R T A N D A A N T [L]G [C]D [V]

UniRef90\_G9EPQ5 M R M A E T L Q R A H L Q R A H [C]D Y K L I E H E P S A T S [L]E A A K H I [L]P A

UniRef90\_U2B051 M T M I T Q L Q S [C]L A Q H K T R F D [V]L G H T P S M T T R E A A R R A G [L]P

UniRef90\_L8MEW0 T P A T A [V]L E R E G [L]A F S [L]H A H D Y D P G A A Q A A D A [L]G [V]P P

UniRef90\_UPI000301D8AE M S [L]S A T [L]Q D [C]L R S K G S Q Y E I [V]H H P H S H S S [L]E T A A A A H I [L]P G

UniRef90\_UPI000474EB02 M S [V]E T [V]R A [H]L E A F G R Q N D I L E S E S S A T [V]A Q A A A A F G [L]E P

UniRef90\_X1TPG3 T A Q R [V]A D [L]L K S [L]G H D K P [V]V [M]L P E T G T S A E A A A G [L]G [C]T [V]

UniRef90\_C0D180 S A T [V]D [L]A A Q A [V]G [C]E [L]

UniRef90\_I6BZ14 M S E I R G T A [L]

UniRef90\_T0I2X9 MA Q S T R A T R T [L]E Q A G [L]T F G [L]Y D Y D P S A G S [L]A A A E A [L]G A D P

UniRef90\_W4F4K5 K E S A [L]A [L]Q S [L]G F D N E [V]V E [L]P S A R T A Q E A A D A I G [C]K [V]

UniRef90\_A1VJH2 Q R [V]A A F L Q D K G G H M H D A R T A Q A A D A [L]G V A [V]

UniRef90\_UPI0003A789B6 G [V]P F [V]L H P H D P A A S S Q E A A E [V]L G [L]D P

UniRef90\_C7QAT5 Q A [V]E K E I M R A K G F E P K V [V]V L P E A P N A Q A A A D Q [V]G [C]E [V]

UniRef90\_UPI00020D969B I M D A H Q V N Y E H L E L N I L D K T D E [L]D H F Q V K K

UniRef90\_UPI00026292BB N Q T E L E N [V]L N P [L]G L T F E T I E I D P A A D T A D F [C]T H Y N V [L]

UniRef90\_UPI000377E190 R V R A A L R A A G H A D T [L]A M F P A T R T S E D A A R A [V]G [C]A V

UniRef90\_UPI000288612D MA [L]P A T L R E Y L R A [C]D I D Y E E V K H D Y E [V]S A S R [L]A Q S H V I T G

UniRef90\_UPI00035D1422 E S A R R [V]A [L]L R E R G H E K P [V]V T [L]P Q T G T S A E A A G [L]G [C]T [V]

UniRef90\_E1V5X0 T P A [V]K A L E K A D [V]D F S L Y E H D P R S P A E E A A R A [L]G [L]P A

UniRef90\_UPI00029B035F L A A R I A Q S G L P H [V]V H V H A P T R T [V]A E A E A N L D F D T

UniRef90\_U1MRF7 A K V K A Y F E S R Q V A D K L F R L P A S G T [V]A E A A K T L A I L P

UniRef90\_H2FV63 E A I R R E L A A [L]G I D R E L I R F P E T H T A K A A A A [L]G I D V

UniRef90\_R4Z1C3 M G M S [L]R L K Q F L D Q R H V P Y N M [V]H H P Y A E G A Q S A [L]A S H V [L]

UniRef90\_N8TM76 A R [V]A R A L E A A G [L]D A E [V]R H F D E T R T A D A A A [L]G [V]H Q

UniRef90\_U6KHQ7

UniRef90\_A0A011QWDO T Y Q Q I K D A [L]K N F G [L]D Y T [V]I D H P A A H T T E E A D A Y I A G C H E

UniRef90\_B3XMP0 E S A Q R [V]Q D K L S D [L]G Y P N R V [V]E [L]P S T R T A Q E A A D A I G [C]E [V]

UniRef90\_UPI000471DDAF E S A Q R [V]A D M [L]R R [L]G H G Q P [V]V [L]L P A S R T S A E A A G [L]G [C]R [V]

UniRef90\_C7RUB7 [L]G [V]E P P

UniRef90\_UPI0003B76398 R E L [L]G I [V]

UniRef90\_E3FMG5

UniRef90\_D2FK09 N K K T N A M R M [L]D R A K I K Y E [V]H S F E E H [L]S G Q E [V]A E [L]I Q A N V

UniRef90\_UPI00016A2E8F R I M D F L T A E K I N H R V M [V]H P P E G Q T [V]A A S [L]L R G H S V

UniRef90\_Q7N0Q4 [L]L E K Q K [V]S F A [L]H A Y E H D T N G D E A [V]R K L R L H A

UniRef90\_B8DKC0 D S T R T A Q E A A D A V [L]G [C]T [V]

UniRef90\_UPI0003B32E71 Q A [V]E R E [L]R S H G I T G E [V]L W [L]D E A T T A A S A A E A I G [V]E V

UniRef90\_A4X9U6 D A [V]H T A A A A A A [L]G [V]E V

UniRef90\_J9CCD1 N K T N A A R [L]M D K A K [V]A Y E [L]I P Y E S D [L]S A [V]H [V]A S [L]G E N I

UniRef90\_UPI00036FD75C [L]D E [L]N A Q [V]R R F P D A T R T A E A A A S [C]G T G V

UniRef90\_UPI00037E3D82 T [V]R E M P A T R T A E E A A A S [V]G T G V

UniRef90\_UPI00029A680B D E A A R I [L]G [V]D A

UniRef90\_A6F797 T P A [V]K [L]A K K A K [V]A H K T H E Y K H D S S A G E A A E K M A [V]A A

UniRef90\_UPI00037E0143 MA S Q T P A T A [L]V K Q K [V]A H T [L]H T Y S [V]D A D T A [V]V A E A [L]G A D P

UniRef90\_E9ACL6

UniRef90\_UPI000417A322 [ ]Q[V]F K T [L]V[I] 50 K G P K R D L A V A V I T P V S S G S L S L K K A A A A F G V S 80  
UniRef90\_E1SGF5 G Q I A K T S L L F R R S D D A A V L V V T P V S S T Q L D L K K V A S T A L G A K K  
UniRef90\_UPI000373087B A Q I A K T S L L F R R S D D A A V L V V T P V S S T Q L D L K K V A S T A L G A K K  
UniRef90\_UPI000468F110 G Q I A K T S L L F R R S D D A A V L V V T P V S S T Q L D L K K V A S T A L G A K K  
UniRef90\_V4JNC9 S D I V K T L L L I V D G R P M A V L L P G D R K L D Y R K L A S A L M K A S K  
UniRef90\_UPI0002E9E19D A M P T K S L L F L R F K S G D F A L L T H K N D R E V S M A K R V L K A A A A G A K A  
UniRef90\_UPI0003B64C76 A R V F K T L L I E A D G K P V C A V L P S D R A R L D N R K F K D A F S A K P  
UniRef90\_UPI000465D207 D Q I A K T I C L R A G E Q V M L V V A K G T A R L D N R K F K D A F S A K P  
UniRef90\_M5QS34 G Q I A K T L A F R V D G E R N L V V A R G D A R L D N K K I K A N A L G S K  
UniRef90\_D2SFA0 R Q V F K T L V A R V D G A L T V A V V P V A G S L D L K A L A A A A G G R K  
UniRef90\_W8HYW6 S R L A K S V V V H H E M G Y V L A V V P S T H R I E L S T L Q S V M N R R  
UniRef90\_Q3APR8 N E L A K T I V M V M L D G E F A M A V L P A S R L D L R L L Q E V S G A T H  
UniRef90\_U4UW88 D Q I G K S I I F Q G A T N Q V L V I T A G G Q R V D R R K A E A I V G E T  
UniRef90\_W7T788 A R V F K T L V A E V D G Q L A V A V V P V T G Q V D L K A L A A A L K G K K  
UniRef90\_I4YNA6 S S V L K T L M V L V D D K P A C V I L P S D Q E V N L K K L A A A A L G G K A  
UniRef90\_I7L2F9 D D I Y K T L L A A E G D K T G P I V A V L P I T S H L S L K K L A A A S L G N K K  
UniRef90\_V2JDA7 D R L V K T V L L E D E A G Y V V A V M P S T R L D L A E L C E R T G R R  
UniRef90\_UPI00036560BC E R L F K T L L A E V D G A L S V G V P V S G S L D L K A L A A A A L G G K K  
UniRef90\_UPI00037DA943 A Q I A K T L L V A G D N R Q L S V A V I V P V A G Q L D L K A A A A L K A K K  
UniRef90\_UPI0003B7718E A Q I A K S L I F R L P E R D E A L V V A S G V N R V D E G K L E Q L L G Q A  
UniRef90\_B5EBT8 G Q I V K S L V F R G K S K A V F V V A S G A N R V N E K S L A E L V G E K  
UniRef90\_B8H7R3 A A I T N S L I F D L N G A P L L I L A S G A A R V D T A L V A D R L G E G R  
UniRef90\_K2KMY9 S D I G K S L V F M T E A S R P V L I I M N G A D Q V D L D K V A A L L R L S  
UniRef90\_B9DRL1 S R I F K T L A L K G D K T G P V I G I L P I T E H L S E K K L A K L S G N K K  
UniRef90\_UPI0002DF6C0C S R V F K T L L F T M N G D P L T V A I V P V A G Q L D L K A A A K A S G A K K  
UniRef90\_UPI00047B4CCB A Q I A K S L I F R R A D N A P V L V I A S G V N R V D E T K V A S L V G E  
UniRef90\_W6W9G9 E R I A K T L C V R S G E M T A L V V M S G T S R L D N R K F R D H F F G A K P  
UniRef90\_R5FQF8 R R I A K S M G F L V K D T P I I V T S G D M K I D N R K F K D T F H E K  
UniRef90\_A1V9D6 G R I A K T L S L H T A E G P V V I V A M G T A R I D N R K F K D T F H E K  
UniRef90\_C6CBP9 Q Q V Y K T L L L N G D A K Q L A V A V T P V A S Q L D L K K V A S K A L A A K K  
UniRef90\_UPI000364256B G A L A N S L V F S A D G Q P L L V I T S G A H R V D T R V V S R L L G L R K  
UniRef90\_UPI000472BF80 G Q T A P A L V L R S S E Q Y W L M I V S G D R G R V D L E D L S K R L G C P S  
UniRef90\_UPI0003B5D79E G A T A P A L I L W G Q G R S L L L I V S G M L A R K V D F A A L A L E T G L P G  
UniRef90\_A0JWS5 A A I T N S L V F D V D G V P L L I L A S G A A R V D T A L V A A R L G T G R  
UniRef90\_L0LIZ7 G Q I V K S L V F V N A D T Q L T L L L V S G A H N A D T A Y I A A A Y G V R  
UniRef90\_F6DEQ9 G Q I V K S L I F V R G E R G A Y L F L V S G K N R V D L G K A T R L V G P  
UniRef90\_J2U188 G Q I A K S I I F A G V E S G E A L F L T A G N R V D D A R A S V A G E P  
UniRef90\_M5P5J9 E Y V Y K T L V A T A G A N Q Y Y V F V V P V A E E L D L K K A A K A G E K K  
UniRef90\_W5INA8 Q Q M A K P V I L D D F Q G H W L M A V V P A S R Q V D L H K V H K L T R R N  
UniRef90\_A3TWZ7 D Q I A K S I I F A G V E S G E A L F L T A G N R V D D A R A S V A G E P  
UniRef90\_X8JBM9 G V P C K T L V F K P K T P V P V V V I A R D E T Q T S S T A L G K K F N L K D  
UniRef90\_UPI00035EC67A D A V A K A V L L V E E D T Q Y R L A V V P A T R R V K L G Q L H R L L G D H  
UniRef90\_UPI0003B620EF E R V F K T L L A D A D G E L V V A I V P V T R Q L D L K A L A A A V S A K K  
UniRef90\_G6XKH3 D Q I A K T L G V K G S N A R T V L V V A G T R R L D N R L T K D T F G G R  
UniRef90\_G9EPQ5 A Q I A K S L L L E C S A R K N Q V L V L A S G I N R V N E K L T E Q W V G S K L  
UniRef90\_U2B051 A R M A K P V I L D D R R G H Y L M A V V P A N R K L D L D K V R K G S Q R  
UniRef90\_L8MEW0 Q Q M A K P V I L D D F Q G H W L M A V V P A S R H V D L G K V H K L T H R H  
UniRef90\_UPI000301D8AE E E V F K T L M V L V D R T R P G C V I V P A P M R L K L A A V A K L L G G K S  
UniRef90\_UPI0003D6S6 D R L A K T V L F E D E H G Y V A T V L P S T Y A V R L S E L W A K T G R H  
UniRef90\_W6WG91 E R I A K T L S F R A E G D A C T L I V M A S G A R T D N A L F K T R F G R K S  
UniRef90\_UPI000474EB02 A E I A K S I V F R R T D A P V M V I A S G A N R V D E K K V A A L V G E  
UniRef90\_X1TPG3 A H I A K A T L S F M V D N G A V L V V A A G D A K V D N R S Q A S D E F G T K K  
UniRef90\_COD180 G Q G A K A L V L C K N G V D G A H V L A L L A A D Q A D L R Y K S H I G G L R  
UniRef90\_I6BZ14 A Q I A K T L V L A D G K P A C V I A P S S G E V S M K K A A A H I G T K A  
UniRef90\_T0I2X9 A Q I A K S I I F R M K N T N P L L V V A S G I N R I N E K H I A K V V E D K  
UniRef90\_W4F4K5 G Q I A K S I I F R R K D D A A V L V V T S G D R R V D E K K V E A C L D G K R  
UniRef90\_A1VJH2 D R V F K T L M V E V E G K L A V A I V P V S G N L D L K A A A A L G S K K  
UniRef90\_UPI0003A789B6 G A I A N S L L F E A D G A P L V L V T S G A H R V D T A K V A A E L G V A K  
UniRef90\_C7QAT5 S D I Y K T L L A A H G D K T G P V V A V L P I T Q H L S T K K L A S A S H N K K  
UniRef90\_UPI00020D969B D Q S A N T L V I K A E P K T F V A C V L A T T R L D N G K L R K K M G V R K  
UniRef90\_UPI00026292BB A Q I A K S L V F R A K G S R P V L V I A S G V N R V D L A K V S A A L G V P  
UniRef90\_UPI000377E190 E Q L A K A I M L H G R S G Y R V A V L P S T C D A D L E S L S R L F N E P V  
UniRef90\_UPI000288612D A Q I A K S L F R R R D D D M P V L V I A S G A N R V D E E K V A A Q V I G A  
UniRef90\_UPI00035D1422 E E V E K T L L A C L D D G R L V M A L V P V P T Q L D L K A L A R A A G A R K  
UniRef90\_E1V5X0 S R I V K T I A F A L R G G G L V L A A L R G A R V A Y P A L A G A L G V G R  
UniRef90\_K6GTG0 E Q I A K T L A F K I N G Q P V V V V M A G N A R I D N H N F K A E F G V R  
UniRef90\_UPI00029B035F G A L A N S L I F W M A D A P L V V M T S G R H R V D T A A R L S A Q L G D G P  
UniRef90\_U1MRF7 A Q M A K A V M L E D N N G H S M M A V I P A A D R I D M R L S Y L V H D E  
UniRef90\_H2FV63 A Q I A K T L V F L A D G E P M V V V M G G D D R V D T A A L G T V L N G A M  
UniRef90\_R4Z1C3 D K N Y F V A I L P V N H Q L N L K K V A S T F A C K K  
UniRef90\_N8TM76 D K N Y F V A I L P V N H Q L N L K K V A S T F A C K K  
UniRef90\_U6KHQ7 D K N Y F V A I L P V N H Q L N L K K V A S T F A C K K  
UniRef90\_A0A011QWD0 A E I A K S I V F R R S D D A A V M I T A S G A N R V D E L K V A A L V G P  
UniRef90\_B3XMP0 G V R T K T M F L K G K K N F Y M V I M S D D K K P M D F H E F M A L T G A K R  
UniRef90\_UPI000471DDAF G Q I A K S I V F R K T S N K P L L V V A S G V N R V D E K L I S T R M D K L  
UniRef90\_C7RUB7 D E I A K S I I F R R A D D M A V M V V A S G A N R V D E G K V A A L V G P  
UniRef90\_UPI0003B76398 G R I A K T L A M R V N G E V L L V T R G D A R L D N K K A R E S L G G K R  
UniRef90\_E3FMG5 G G I F K S L V F T T D T D E V L V V V L P G D R R V D F K A V A R V A G C R K  
UniRef90\_D2FK09 K T V F K T L V L E N T K H E H F V F V I P V S E T L D M K K A A A L V G E K K  
UniRef90\_UPI00016A2E8F E Q A A K C M V V E N G E K S Y A L A V T S G H R V A L K K V A D C F R G V K  
UniRef90\_Q7N0Q4 R Q V F K T L V A L N G K N L V A V T P V S S E L D L K K V A D C F R G V K  
UniRef90\_B8DKC0 Q Q I A K S L I F R G K Q S G R W L I I A S G A N R V D E K R A A V L A G E P  
UniRef90\_UPI0003B32E71 G A I A N S L V F T L D G E P L V L M T S G G H R V D T A Y L G A E L G G T  
UniRef90\_A4X9U6 G Q I A N S L V F T A D G P L L V L T S G A H R V D T A Y L G A A I G V T R  
UniRef90\_J9CCD1 E C V F K T L I L H G D K T G Y F V C V I P G E H E V D L K L A A K I S G N K K  
UniRef90\_UPI00036FD75C G Q I V K S L V F R G K E S G R Y L L V S G E N R V N E K A V G R E I G E K  
UniRef90\_UPI00037E3D82 G Q I C K S L I F A A D G V P V L V L M D S G A R V D L E L V R R E L G A G Q  
UniRef90\_UPI00029A680B A R V F K T L V L A T A R P P L A V A V L P V T S T L D L K A A A A L D C G K  
UniRef90\_A6F797 E R I F K T L V V D V G D K K L V A V V P V T A M L N L K A I A K V A K A K K  
UniRef90\_UPI00037E0143 A R V F K T L V T E V D G K T L C V A V V P V T G D I D L K A I A A A G A K R  
UniRef90\_E9ACL6 A R V F K T L V T E V D G K T L C V A V V P V T G D I D L K A I A A A G A K R

UniRef90\_UPI000417A322 VVMAQPSD AQRSSGYI PGGI 100 P I G QKRA L P T V I D V S S  
UniRef90\_E1SGF5 A D M A D P Q L A Q R V T G Y L V G G I S P L G Q K K R L P T V I D D S S  
UniRef90\_UPI000373087B V G R A D A D Q D F V K A S T G F S I G G V I S P V L G H T T A P Q V I L L V D D R E S S  
UniRef90\_UPI000468F110 A D M A D P A D V A Q R A T G Y L L G G V I S P L G Q K K R L R T F L D D R E S S  
UniRef90\_V4JNC9 I R T A S P D E V I A E L T G L M P G G V I T P L G S E C I R G L K V I M D D S S  
UniRef90\_UPI0002E9E19D P S I A S P D D E M M A A I T G C V P G G V C P F G L P E S I H I L L V D D S S  
UniRef90\_UPI0003B64C76 A K M M P V P A A E R T T G Y K V G G I S P F G Q R K R L P V P T F L V E Q A S  
UniRef90\_UPI000465D207 R M L A G E E V V E L T S H P I G G V C P F G L A T D P Q P L V V Y C D V I S S  
UniRef90\_M5QS34 A K M L D A D T V V A L T S H P V G G V C P F G L A T D Q R K A L L A V Y C D I S S  
UniRef90\_D2SFA0 A A M A D P A D A E R T T G Y V L G G I S P L G Q R K A L P T V V D E S E  
UniRef90\_W8HYW6 L G L A S E E E V C S L F D C D I G A V P P L G S A Y D Q R K A L V P V I L D E S E  
UniRef90\_Q3APR8 V S A L A K E D E F A E L F E C E V G A M S P P F G N L Y G M K V F V D S E E  
UniRef90\_U4UW88 L S I A D A A L I R T T T G F A I G G V I S P V G H K S P C P K I Y F D E T  
UniRef90\_W7T788 A R M A E V A A E R A T G Y V A G G I S P L G Q R K R R L P I V I D A S  
UniRef90\_I4YNA6 A Q M M K P A D A E R T T G Y H V G G N S P F G Q K K R L V P T V L E Q S  
UniRef90\_I7L2F9 V S M L P K L K L Q K T T G Y I H G A N N P V G I W Q N K H F P F F E Q T  
UniRef90\_V2JDA7 L T M A S E D E V R E V F D C V L G A I S P V G M A Y G M R T Y I D D S  
UniRef90\_UPI00036560BC A R L A D P R Q D A E R A T G Y V V G G I S P L G Q R R R L P T V V D A S  
UniRef90\_UPI00037DA943 L T M A D P Q Q A Q R S T G Y L V G G I S P L G Q K K R L P T L L D D T  
UniRef90\_UPI0003B7718E V A K A D A F V R E K T G Y A I G G V S P V G H S Q Q P R I L L D Q D  
UniRef90\_B5EBT8 I G K A D A D F V R E Q T G F A I G G V S P V G H P A P R I H T Y V D E D  
UniRef90\_B8H7R3 I R R A S P D F V L E H T G Q K V G G V A P V G H P A P R I R T L L D V S  
UniRef90\_K2KMY9 V R K A D A T E V R E H T G Y A I G G V P F G H A K P V E T L I D K K  
UniRef90\_B9DRL1 V V M I P Q K D L A K T T G Y I H G A N N P I G I R Q K H N Y P I F I D I S S  
UniRef90\_UPI0002DF6C0C A E M A N P V I A E K T T G Y V V G G I S P L G R Q K K R L P T L L D K S  
UniRef90\_UPI00047B4CCB L G K A D A R Y V R E M T G Y A I G G V C P F G L H T V K P N M L I D Q D  
UniRef90\_W6W9G9 R M L G D E V A D I T S H P V G G V C C P F G L P S P I V K I Y C D V S  
UniRef90\_R5FQF8 A K M L T A D E L V K F I T G H P A G G V C P F A V K E N V K I Y L D I S S  
UniRef90\_A1V9D6 A R F I Q G D D V P T L V G H P V G G V S P F A L N E G V K V F L D A S  
UniRef90\_C6CBP9 A D M A D P Q L A Q R V T G Y L V G G I S P L G Q K K L L P T V I D D M  
UniRef90\_UPI000364256B M R R A D P A F V L S A T G Q E V G G V A P V G H P H R I R T L V D T W  
UniRef90\_UPI000472BF80 L K M A N P Q E V E R I T G F A V G A V P L V G I S L P C I M D R R  
UniRef90\_UPI0003B5D79E L R M A T T R E I R E R F G L K P G E V P L F G L G L P T L V D R A S  
UniRef90\_A0JWS5 I R R A S P A Y V L E H T G Q E V G G V A P V G H P E R I R T V L D E S  
UniRef90\_L0LIZ7 L K R A D I D R V R D Q T G F A I G G V A P V G H L V D H N T P L P A Y L D E S  
UniRef90\_F6DEQ9 L R Q A T P E E V R E L T G F A I G G V S P V G H I N Q A V I L V L D E D  
UniRef90\_J2U188 V G R A D A D F V R E K T G F S I G G V S P V G H I N Q A V I L V L D E S  
UniRef90\_M5P5J9 I D M I P M K E L L G V T G Y V R G G C S P I G M K K S F P A Y I D A T  
UniRef90\_W5INA8 W R L A R E G D F S A R F D C A P G A I P A V G S L F G I E T L D E S  
UniRef90\_A3TWZ7 L A K A D A A L I R A Q T G F A I G G V A P V G H L N P I R A W I D P R  
UniRef90\_X8JBM9 L R L A T D D L K E F F A L D K D S L S P L A L T K D N F S R C Q V V L D S S  
UniRef90\_UPI00035EC67A V G L A T D E D E V A S V F D C E R G A I S P A L G P A Y G I E T L V D D T  
UniRef90\_UPI0003B620EF A V M A D P K V A E R K T G Y V V G G I S P L G Q K T S L P T V I D E S  
UniRef90\_G6XKH3 P R F L S G E D V L J A L T S H P P G G V C P F G L A T P L P V Y C D E S  
UniRef90\_G9EPQ5 V K A D A H F T R D I T G F A I G G V P I G H K Q T I T H I F I D E D  
UniRef90\_U2B051 W Q L S G E Q N L D G L F D C Q R G A V P A L G A L Y G L D M L I D P Q  
UniRef90\_L8MEW0 W R L V R E Q D F K R F A D C E L G A I S P A V G N L F G L D T L V D Q S  
UniRef90\_UPI000301D8AE A T M A D P A A A E R T T G Y Q T G G I S P L G Q R K R L R T V L D A S  
UniRef90\_A0A023D6S6 A A M M A P A E A E R M T G Y Q T G G I S P F G Q K T A V P V L L D S R  
UniRef90\_W6WG91 L L L A K E V D L R E L F D C D M G A L P P V C T A Y G M R T Y L D E S  
UniRef90\_L7VW75 S M V R E A D V E R L T G H Q V G G V C P F A N P T T A E V W L D T S  
UniRef90\_UPI000474EB02 L G K A D A K F V R E L T G Y A I G G V C P V G H L E Q T V I L V D E D  
UniRef90\_X1TPG3 V S F A K P E E V S R A V G C E V G C V P F G H L S P L P I Y M D P E S  
UniRef90\_C0D180 A K M L T P Q E A E D L V G H A V G G V C P F G V K P G V R V F L D Q S  
UniRef90\_I6BZ14 A S L A S P A E V D E L T G C V F G A I P F S F H P K L V A D P L  
UniRef90\_T0I2X9 A A M M T P A Q A E R L T G Y K I G G I S P F G Q M R R V P M V I D E T  
UniRef90\_W4F4K5 L G K A D A F V R E H T G F V I G G V S P I G H V S E I L T L I D E D  
UniRef90\_A1VJH2 L G R A D A F V K S R T G F S I G G V S P L A H A T P S S V I T L I D Q S  
UniRef90\_UPI0003A789B6 A A M A D P K A A E R R T G Y V L G G I S P L G S R Q P S P T V L D E S  
UniRef90\_C7QAT5 V G R A S K E F V E H T G Q R I G G V A P L G H P A P V R T L I D R A  
UniRef90\_UPI00020D969B V K M I P M K E L Y E T T G Y I H G A N N P V G I W Q N K K F P I Y F D M T  
UniRef90\_UPI00026292BB T S F S T A E E M K A L T G M Q V G G V T P L G L P T E L P L W I D S R  
UniRef90\_UPI000377E190 I E R A D G R W R E T T G F A I G G V A P V G H E V A P V V L I D A A  
UniRef90\_UPI000288612D E L J A E E E V N R F N D C D P G A I T P V G Q A Y G L Q V Y V D D M  
UniRef90\_UPI00035D1422 V A R A D A K F V R E K T G Y A I G G V C P I G H V T P P V T L I D A D  
UniRef90\_E1V5X0 A R M A E A D A A E R A T G Y V V G G I S P L G Q K K R L P A F V D A S  
UniRef90\_K6GTG0 L S A L S P D E V L A R L G V A P G S V L A Q G R G K L L V D A D  
UniRef90\_UPI00029B035F P R M I P A D Q I N D L I G H A V G G V C P F A L N S G V E V Y L D Q S  
UniRef90\_U1MRF7 I E R A T P E Q V R A A T G Q V I G G V A P L G H P A P I R T I V D V A  
UniRef90\_H2FV63 M Q L A P E H H L G S W F D C D P G A I P A L G D A Y A V D T L V D D E  
UniRef90\_R4Z1C3 I G R A D A D A V R R G T G F A I G G V S P A G L P G G A V D T V L V D R S  
UniRef90\_N8TM76 L H M A D E K D A E R L T G Y L V G G I S P V G Q K K R L K T V I D A S  
UniRef90\_U6KHQ7 L R L A D E K L E A T L N V L P G C V T P L A M L N D E K K E V T F L D A K  
UniRef90\_A0A011QWD0 L G K A D A A F V R Q R T G Y A I G G V C P V G H C G Q T L V L V D Q D  
UniRef90\_B3XMP0 V S M A R P E H L Q E  
UniRef90\_UPI000471DDAF V K A D A D F V R E H T V F V I G G V A P I G H P E P I L T L I D E D  
UniRef90\_C7RUB7 L G K A D A S F V R A H T G Y A I G G V C P I G H L R E T L V L V D E D  
UniRef90\_UPI0003B76398 R M L D A E E T L A V T G H A V G G V C P F G L A T N V P V W V D L S  
UniRef90\_E3FMG5 V A F A S P A R A L E A T G Y P P G G T P L G Y P Q P L R V F V D E A  
UniRef90\_D2FK09 L Q L M P L D N L K N V T G Y I R G G L R T M D D R L Q V V V D R D  
UniRef90\_UPI00016A2E8F A K L A P S H V I A S Q L T R C M M G A V S P I S F D R K L P T V I D N Q  
UniRef90\_Q7N0Q4 A E M A D P Q I A Q K V T G Y L V G G I S P L G Q K K H L P T V I D N Q  
UniRef90\_B8DKC0 L G R A D A D F V R Q A T G Y A I G G V S P V A H A T P V G C L I D A D  
UniRef90\_UPI0003B32E71 L K R A S A E T V R Q S T G Q V I G G V A P T G H P A P L R T W D I A  
UniRef90\_A4X9U6 L R R A T P D V R E H T G Q V I G G V A P V G H P R P L R T L V D T T  
UniRef90\_J9CCD1 C D L I P V K E I L P L T G Y I R G G C S P V G H A Q L P V F M D A A  
UniRef90\_UPI00036FD75C L T E R P D A R Y V R E T T G Y A I G G I P I G H A R T R V L F M D A R A  
UniRef90\_UPI00037E3D82 V T R A K A D V V R E T T G Y A I G G V P P F G H R T R T R V L F M D A R A  
UniRef90\_UPI00029A680B V T L A P V D V A E K T T G Y V I G G V S P L G Q K R Q L A T V V D S S  
UniRef90\_A6F797 A V M A D K N D V M R S T G Y V L G G V S P L G Q K K R L L T I I D S S  
UniRef90\_UPI00037E0143 A A L A D R D L A E R T T G Y V R G G I S P L G Q R K K L R T I I D Q S  
UniRef90\_E9ACL6 K M L K H E E V E P Y T G F P P G G V C P F G L H D D V R V Y L D V S

UniRef90\_UPI000417A322 A L E F A E V F V S G G K R G L D I A I I S P E D L A V V T H A 130 140 150 160  
UniRef90\_E1SGF5 A S A F D A M F I S G G K R G L D I E L A P Q D L S R L L D A  
UniRef90\_UPI000373087B L F R Y P D E I W A A A G H R P H A V F P L S P D E L V S L T G A  
UniRef90\_UPI000468F110 A L R Y F S I F V S A G R R G L E V E L A A E V L  
UniRef90\_V4JNC9 I A S K E S V W V G G G T P T S L A Q V S V K D L I R A L K P T L T E V  
UniRef90\_UPI0002E9E19D L L T F E S L M Y T P G L E F E T F A F P A A N L M A L L D A L P N R I L R  
UniRef90\_UPI0003B64C76 A A G E A Y V Y N T G G R R G L Q M R L A P A D L L  
UniRef90\_UPI000465D207 L K Q F D I V V P A A G A T N S A V R I A P E R R I V E L T G A Q W V D  
UniRef90\_M5QS34 L K A F T E V M P A A G A T H T A V V R L A P D R M A E L V N A Q W V D  
UniRef90\_D2SFA0 A L G F A T V M V S A G R R G L Q V E L A P A D L V R L T R A  
UniRef90\_W8HYW6 L E D A S D V Y F E G G D H K T L V H V T G P N F R S L M K D A Q V A R K  
UniRef90\_Q3APR8 L E A D D D I A F N A G G H R E L L I L S Y K R Y K E L V Q P I V A K  
UniRef90\_U4UW88 L L K Y D E I W V A A G T P N H V F S I S P D L L E Q K I S A Q V S D F I  
UniRef90\_W7T788 A S A F D T V F S A G R R G L E V E L S P A A L A D L T G A V  
UniRef90\_I4YNA6 G L A H A E Y F M N G G Q R G L Q V K L D P R A A V S M L D A  
UniRef90\_I7L2F9 A Q N A P E Y I L V S G G E L G R S D K I N P D V A L L V G A  
UniRef90\_V2JDA7 L L G Q P E V Y F E A G D H E E L T H M T T E A F L E L M  
UniRef90\_UPI00036560BC A S G F A T Y V V S A G R R G L Q I E L A P D D L V R L T G A  
UniRef90\_UPI00037DA943 A E S F A T I F V S A G R R G L E I L Q P A D L L R L T  
UniRef90\_UPI0003B7718E L K L H S E I W A A A G T P N A V F R L T P A E L A K V T E  
UniRef90\_B5EBT8 L L G Y D E L W A A A G T P H A L F S L T P E Q L  
UniRef90\_B8H7R3 L R S H N L W A G A G D H E S M F C I T Y Q D L H R I T G A  
UniRef90\_K2KMY9 L L A K K T V W L A A G T P K T V F E L K T S D L K R V T G E T G V N I A V  
UniRef90\_B9DRL1 A L E K K E M I V S A G E V G R S L K I D S Q L A E F V K A  
UniRef90\_UPI0002DF6C0C A E Q F E T I Y V S A G R R G L E I L T P S D L L T L T Q  
UniRef90\_UPI00047B4CCB L F Q Y D T I W A A A G H P H A V F P L S P Q Q L A S M T G A  
UniRef90\_W6W9G9 L K R F P T E V V P A A G A I N A A V R I L T P E R M A D L T A A T W V D  
UniRef90\_R5FQF8 L Q R F Q T V F P A C G S I N A A V I E L T I P E L E K Y S H F E K W I D D  
UniRef90\_A1V9D6 L R A F D P V Y P A A G A P N N A V C I T L A D L E R V T D G V W I D D  
UniRef90\_C6CBP9 A Q Q F G T I F I S G G K R G L D I E L A A V D L A H L L K A Q F A D  
UniRef90\_UPI000364256B L A K H D V I W A G A G D H N H M Y P T T Y A E L L R M T  
UniRef90\_UPI000472BF80 L Y R Y P H I Y G G A G E P T S T L K I S P A D V E K  
UniRef90\_UPI0003B5D79E L F A Y D F L Y G G S G D P G L T L K I A P G A L L K L N E E S R I V D  
UniRef90\_A0JWS5 L K A H N L W A G A G D H S M F S I T Y N E L K K I T G A  
UniRef90\_L0LIZ7 L L A Y D Q V W C A A G R P D S I F S C N P T T L A E K I A A  
UniRef90\_F6DEQ9 L L G Y P E V W A A A G T P R A L F R A T P K E L L A L T G A  
UniRef90\_J2U188 L M R F D E V W A A A G H P H A V F K L M P Q E L E L L T G A P V V D V A V D  
UniRef90\_M5P5J9 A E T L D F I V S A G K I G M Q L K L A P Q D L A K A C H A  
UniRef90\_W5INA8 L G E Q A D I Y F E A G D H N A V V H M S G R Q Y L E L M P  
UniRef90\_A3TWZ7 L L A F D R I W A A A G T P H H V F G L D P R D L P R I S S A Q P A D F V  
UniRef90\_X8JBM9 I A D T A P L A L H A S S A E A T V F L S G K D I V K Y L N S L D A T V H V V D  
UniRef90\_UPI00035EC67A L L E Q H D V Y F E A G D H E S L V H L G E G D F L F L L  
UniRef90\_UPI0003B620EF A Q L F D T V F V S G G R G F D I E L A P S D L  
UniRef90\_G6XKH3 L R A F R E V Y P A A G A I N A S V R L S P E R L A D L T G N Q W V N  
UniRef90\_G9EPQ5 L L Q H K V L W A A A G T P N A V F S L N S D I E S L T  
UniRef90\_U2B051 L A R L A D V Y L E A G D H E N L V H M S M D D F F T L A P  
UniRef90\_L8MEW0 L A E Q P D I Y F E S G R H D E L V H M S G K Q Y M A L I P  
UniRef90\_UPI000301D8AE A R T H T T I C V S A G R R G L E V E L S A E D L A G L T G A V F A E I  
UniRef90\_A0A023D6S6 A L A L G A I Y V N A G R R G T Q C R V E A A  
UniRef90\_W6WG91 L A Q Q P D V Y F E A G D H E A L T H M R T D H F L D L M D  
UniRef90\_L7VW75 L Q R F D V V Y P A A G S A N S A L K L T P E E L L E I S G A R G W V T  
UniRef90\_UPI000474EB02 L L K L N S I W A A A G H P H A V F N L T P Q Q L L A L T G A  
UniRef90\_X1TPG3 L I K K N F V Y F N P G V H D K S F K I K A W D L K K L C N  
UniRef90\_COD180 L K R F E E V Y P A C G S A N S A V R L S P E L E L S S G C E K W V D  
UniRef90\_I6BZ14 L F E F D E I A F N A G M L D K S V I L K T T D Y L R I L A Q P E L V N  
UniRef90\_T0I2X9 A I L W D A I F L N G G Q R G L Q V R L T G E D A R R V L D A  
UniRef90\_W4F4K5 L F Q Y D T I W A A A G H P K A V F Q L T A D E L L Q L T  
UniRef90\_A1VJH2 L F R F E I W A A A G H P K G V F Q L S W E L Q D L T G A  
UniRef90\_UPI0003A789B6 A L J A F D T I L V S G G R R G L D I E L A P A D L L R L T N  
UniRef90\_C7QAT5 L E A Y P E V W A A A G H A H T V F A I T F A D L V R V T G G D V V E V N  
UniRef90\_UPI00020D969B A Q N A D Y I V S A G E L G Q S D K V N P Q Q M A T L V Q A  
UniRef90\_UPI00026292BB V M D C K W I V G G G R D L K V K M D P Q V L L K L  
UniRef90\_UPI000377E190 L M A L D P R W A A A G S P M H V F E T T P A E L V R L  
UniRef90\_UPI000288612D L R H Q P D I Y F D A G D H E T L L H M S G R E F E K L M G E C P H  
UniRef90\_UPI00035D1422 L L Q L D S L W A A A G H P H A V F N L S P Q E L I G L T D A  
UniRef90\_E1V5X0 A E P L E A I H V S G G R G L E I R L A P N D L A A L L N A  
UniRef90\_K6GTG0 V L T R P T V Y C G L G R S D R T L E I A P G D L V A A A G M G E V V V G E  
UniRef90\_UPI00029B035F L E N D L E V F P A A G D Q F H A A R L T L P E L L T L S H Y Q R W V K  
UniRef90\_U1MRF7 L A D Y E Q L S A A A G D A D T V F E M L T Y A E L L R I T G G E E R V V  
UniRef90\_H2FV63 L L G M A D I Y L E S G D H R D L V H I S G E D F R R L A S G W K H  
UniRef90\_R4Z1C3 L S D I G E I W A A A G T P T S V Y R T S F T E L L M V T R G R E V I S V A  
UniRef90\_N8TM76 A T A L A M M Y V S G G K R G L D I G V K P Q D L A K V L G A N F V D I V D  
UniRef90\_U6KHQ7 L K D G E E V L W H P L H N F E S I A L A P R D L V S F L I A K G V A I Q F V D  
UniRef90\_A0A011QWD0 L L H F D R I W A A A G H P H A V F E L T P G E L L A M T G A T A A E V A I  
UniRef90\_B3XMP0  
UniRef90\_UPI000471DDAF L F H Y R K L W A A A G H P K A V F F E L T P D E L A A M T R  
UniRef90\_C7RUB7 L L G F A R I W A A A G H P H A V F A L S P Q E L L A M T G A Q A V D  
UniRef90\_UPI0003B76398 L Q G F P T V F P A A G C R E S S V E I A P Q R M A A L V A R G W V D  
UniRef90\_E3FMG5 L L Q Y A Q G Y G G G R P E L L L R L T P Q E L L R V T K G T  
UniRef90\_D2FK09  
UniRef90\_UPI00016A2E8F L L P T P E I V F S A G R L D V S I G V D T G I Y L N A I R H Q I  
UniRef90\_Q7N0Q4 A Q Q F S T I F V S G G K R G L D I E L A S A D L C R L V K  
UniRef90\_B8DKC0 L L D L P D I W A A A S T P H A V F P L T P D D L V R L T G G T G H  
UniRef90\_UPI0003B32E71 L K A Y P Q I W A A A G H P H T V F P L T Y G E L V E L T G G M E I E V E  
UniRef90\_A4X9U6 L D R Y D E I W A A A G G V P R A V F S T T Y P E L L R V T G G T P A K V  
UniRef90\_J9CCD1  
UniRef90\_UPI00036FD75C L L A Y D E V W A A A G T P Q A V F A V I D P K A L R T A T N A T  
UniRef90\_UPI00037E3D82 L I D H E L V W A A A G N P H A V F P I A P K D L V A H A G A T L V D V R  
UniRef90\_UPI00029A680B A L I E H P T V L C S A G R R G W E I E L P G P D L V R L T R A L  
UniRef90\_A6F797 A Q T H E T I Y V S A G R R G L E I E L S P L D L K Q L T N A  
UniRef90\_UPI00037E0143 A V D G P Q Y F V S A G R R G L Q V Q L A P D D L V R L T S A T  
UniRef90\_E9ACL6 L K R F P Y V Y P A A G T T N T G I K V T V D E L E Q Y A S N A V E W V D

UniRef90\_UPI000417A322  
UniRef90\_E1SGF5  
UniRef90\_UPI000373087B  
UniRef90\_UPI000468F110  
UniRef90\_V4JNC9  
UniRef90\_UPI0002E9E19D [L]P[V]V[E]  
UniRef90\_UPI0003B64C76  
UniRef90\_UPI000465D207 [V]C[Q]  
UniRef90\_M5QS34 [V]C[Q]  
UniRef90\_D2SFA0  
UniRef90\_W8HYW6 F S H [L]P  
UniRef90\_Q3APR8 [L]S  
UniRef90\_U4UW88  
UniRef90\_W7T788  
UniRef90\_I4YNA6  
UniRef90\_I7L2F9  
UniRef90\_V2JDA7  
UniRef90\_UPI00036560BC  
UniRef90\_UPI00037DA943  
UniRef90\_UPI0003B7718E  
UniRef90\_B5EBT8  
UniRef90\_B8H7R3  
UniRef90\_K2KMY9  
UniRef90\_B9DRL1  
UniRef90\_UPI0002DF6C0C  
UniRef90\_UPI00047B4CCB  
UniRef90\_W6W9G9 [V]G Q D P [V]  
UniRef90\_R5FQF8 [V]C K  
UniRef90\_A1V9D6 [V]C K  
UniRef90\_C6CBP9 [L]A K R D  
UniRef90\_UPI000364256B  
UniRef90\_UPI000472BF80  
UniRef90\_UPI0003B5D79E [V]P C [L]  
UniRef90\_A0JWS5  
UniRef90\_L0LIZ7  
UniRef90\_F6DEQ9  
UniRef90\_J2U188 [L]G E E  
UniRef90\_M5P5J9  
UniRef90\_W5INA8  
UniRef90\_A3TWZ7  
UniRef90\_X8JBM9 F A A [L]Q A  
UniRef90\_UPI00035EC67A  
UniRef90\_UPI0003B620EF [V]T [V]P  
UniRef90\_G6XKH3  
UniRef90\_G9EPQ5  
UniRef90\_U2B051  
UniRef90\_L8MEW0  
UniRef90\_UPI000301D8AE  
UniRef90\_A0A023D6S6  
UniRef90\_W6WG91  
UniRef90\_L7VW75 [V]S R [L]P  
UniRef90\_UPI000474EB02  
UniRef90\_X1TPG3  
UniRef90\_C0D180 [V]C K  
UniRef90\_I6BZ14 F  
UniRef90\_T0I2X9  
UniRef90\_W4F4K5  
UniRef90\_A1VJH2  
UniRef90\_UPI0003A789B6  
UniRef90\_C7QAT5  
UniRef90\_UPI00020D969B  
UniRef90\_UPI00026292BB  
UniRef90\_UPI000377E190  
UniRef90\_UPI000288612D  
UniRef90\_UPI00035D1422  
UniRef90\_E1V5X0  
UniRef90\_K6GTG0 F S K  
UniRef90\_UPI00029B035F [V]T K  
UniRef90\_U1MRF7  
UniRef90\_H2FV63  
UniRef90\_R4Z1C3  
UniRef90\_N8TM76  
UniRef90\_U6KHQ7  
UniRef90\_A0A011QWDO  
UniRef90\_B3XMP0  
UniRef90\_UPI000471DDAF  
UniRef90\_C7RUB7 [V]A C R D A [L]  
UniRef90\_UPI0003B76398 A C [V]L P  
UniRef90\_E3FMG5  
UniRef90\_D2FK09  
UniRef90\_UPI00016A2E8F  
UniRef90\_Q7N0Q4  
UniRef90\_B8DKC0  
UniRef90\_UPI0003B32E71  
UniRef90\_A4X9U6  
UniRef90\_J9CCD1  
UniRef90\_UPI00036FD75C  
UniRef90\_UPI00037E3D82  
UniRef90\_UPI00029A680B  
UniRef90\_A6F797  
UniRef90\_UPI00037E0143  
UniRef90\_E9ACL6 [L]C E



UniRef90\_G8N8R3  
UniRef90\_U3QKB3  
UniRef90\_C8RXY2  
UniRef90\_G9YHD8  
UniRef90\_V7EE05  
UniRef90\_UPI000463061A  
UniRef90\_UPI000289D3A6  
UniRef90\_J9H6M8  
UniRef90\_F5ITR0  
UniRef90\_UPI00037F5E5B  
UniRef90\_J2Y204  
UniRef90\_H1Z6I2  
UniRef90\_A1RZK5  
UniRef90\_R7QU64  
UniRef90\_UPI000372A15E  
UniRef90\_A0A017RCC2  
UniRef90\_UPI000360FED1  
UniRef90\_UPI00034ADFE9  
UniRef90\_U3A0B0  
UniRef90\_G0QFA8  
UniRef90\_R7XWJ4  
UniRef90\_Q47V75  
UniRef90\_Q46WD6  
UniRef90\_UPI0003B77B81  
UniRef90\_A8FUD7  
UniRef90\_V4RAE3  
UniRef90\_R7SAS6  
UniRef90\_G7QDQ2  
UniRef90\_A3V6J6  
UniRef90\_L0JZ84  
UniRef90\_D9UH57  
UniRef90\_E8N9E3  
UniRef90\_UPI00037582B5  
UniRef90\_B7VKH9  
UniRef90\_Q3IQR9  
UniRef90\_Q46PU6  
UniRef90\_UPI0002D595F9  
UniRef90\_W8RUY1  
UniRef90\_C8PJ22  
UniRef90\_A6LJ40  
UniRef90\_UPI0004676BB8  
UniRef90\_UPI00035F3320  
UniRef90\_J3EWW7  
UniRef90\_J4N1Z1  
UniRef90\_Q0EZ34  
UniRef90\_H1PU35  
UniRef90\_UPI00047A0C9A  
UniRef90\_F4GZJ2  
UniRef90\_UPI0002DA62C6  
UniRef90\_I7HP64  
UniRef90\_UPI0004727C82  
UniRef90\_I0S2L5  
UniRef90\_Q1LS71  
UniRef90\_G8PHL8  
UniRef90\_V6JZ14  
UniRef90\_UPI000381954A  
UniRef90\_UPI0003A3B8A4  
UniRef90\_M0NYN1  
UniRef90\_UPI00046221EF  
UniRef90\_UPI0002EE2DF8  
UniRef90\_G0QH92  
UniRef90\_UPI0002EE6F5D  
UniRef90\_R1EY50  
UniRef90\_UPI000374220F  
UniRef90\_UPI0003B39E4E  
UniRef90\_UPI0003FE8D96  
UniRef90\_I9W6G5  
UniRef90\_UPI0003A91354  
UniRef90\_W0JZR5  
UniRef90\_UPI0004699049  
UniRef90\_Q88VK1  
UniRef90\_H3KEC6  
UniRef90\_L8MV09  
UniRef90\_G7V7S1  
UniRef90\_L0IBC6  
UniRef90\_E4N9L6  
UniRef90\_UPI0003B5D3B9  
UniRef90\_S2G9P0  
UniRef90\_UPI000475B2CF  
UniRef90\_A3K2B9  
UniRef90\_S9W1H4  
UniRef90\_Q1LAR3  
UniRef90\_UPI00035CE059  
UniRef90\_H5SHT5  
UniRef90\_UPI000262B3A6  
UniRef90\_X5M0S2  
UniRef90\_UPI00036F2172  
UniRef90\_Q0RLF1  
UniRef90\_R5HJQ3  
UniRef90\_W7ZLU0  
UniRef90\_S8DXT1  
UniRef90\_D6PK30

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

	50	60	70	80
UniRef90_G8N8R3	G Q I V K S L V F V G E K G G Y L F L V I S	G K N R L D P G K A A A L A G E		P
UniRef90_U3QKB3	G D R M A K T V L L E D G S G Y V A A V I P	S T H H V K L S E T C E Q T A G G E R K A		
UniRef90_C8RXY2	D Q I V K S L L F R G E G S Q N L R L F L Y A	A G D G N Q V C A D K A S S A L A G E K K A		
UniRef90_G9YHD8	G R I A K T M S F L V D G N P V L L I L Y A	G D V R V D N K K F K R T F H G K K A		
UniRef90_V7EE05	D Q I V K S L L F A G A E T G R L Y L F L T A	G G R N Q V A P D L A T A L A G E P		
UniRef90_UPI000463061A	G Q I A K S I L F R R K D D V A Y L V I T S	G D S R R V D E K K V E A H V I G K K		
UniRef90_UPI000289D3A6	D Q I A K S I T L Y N N G D G A Y L I V A S	G N S K I D N R S F K D T F V G I K K		
UniRef90_J9H6M8	G Q I A S S I L F K L P D N S P L L V I T S	G R N H R V D T E L V A T K L G M G E T		
UniRef90_F5ITR0	A A P A F I I K T E N D E F V A L V I S A	Q N G K I D F K K T G A S N L G F A T P		
UniRef90_UPI00037F5E5B	G A I A N S L V F V S D D E P V L V L T S	G R N H R V D T D A L A A R W G R G P		
UniRef90_J2Y204	E R V A K S V L L D D S H G H Y L M A V L	P A S R H I D L S K V R G S N E		
UniRef90_H1Z6I2	D Q I A K S I T L A P E E G A A I L V V A	S G N S K I D N K T F K D T F G I R K		
UniRef90_A1RZK5	D R I A K T V V F K S D G G E T V L V V V	R A D L K I D Q S R L A R L L G Y R R		
UniRef90_R7QU64				
UniRef90_UPI000372A15E	G Q I A K A T L S F R V N D E V V L L V M A	G T A R L D N K K Y K S Q L H G G V K		
UniRef90_A0A017RCC2	G Q G A K A L V F C K N G V N Q H V L L A I	L A A D Q R A D N K S Q L A S H L G G L R		
UniRef90_UPI000360FED1	G Q I A S S L I F K L P S G N P L L I I T S	G R R H R V D T D L V A S N L G I A E K		
UniRef90_UPI00034ADFE9	G A I A N S L V F M A D G A P L L V M T S	G R N H R V D V A L L A E R L G R T K		
UniRef90_U3A0B0	G Q I A K S L I F R S E T T E P V L V V A S	G R N R V D M A N K L T E L T G L T		
UniRef90_G0QFA8	E E I V K T L I F V A E N P V A V M C P G	H T S V S E Q K L E K I T G H E		
UniRef90_R7XWJ4	G A I A N S L V F D H D G S P V L L I T S	G A H R V D T A K V A E R L G V D A		
UniRef90_Q47V75	N Q I A K A V I L K D H E D R K L M A V L	P A K N K I S L S V I N E L F G S Y K		
UniRef90_Q46WD6	D R L A K T V L L E D E K G Y L A A V I P S	T H H L K L S E I C E Q T G R K		
UniRef90_UPI0003B77B81	A Q I A N S L V F T D D D E P I L V M T S	G S N K R V D T E W L G N Q Q L G V		
UniRef90_A8FUD7	A R V S K A V V L Q D D D G E Y L M A S L	P L P E V D N L M G K N		
UniRef90_V4RAE3	A Q I V K S L V F V G E S E T P L L L V S	G A D R V D S E P T V E R E V I G E G		
UniRef90_R7SAS6	G G V T K T L L F K S A T P T P V L L I A	R E S T Q T S S S L L A T Q L N L K D		
UniRef90_G7QDQ2	A R I V K T L L Y M A D G T P V A A L V R	G D R E L N E K L K N L G A T N		
UniRef90_A3V6J6	D Q I A K S V I F A G Q T S G R A I F I T A	G G N Q V D S S K A S V A A G E P		
UniRef90_L0JZ84	A Q I A S S L A F D V D G E L V V S V T	S G A N R V D E D A L A G A V F G V P A		
UniRef90_D9UH57	G A L A N S L V F V S D G E P V L V L T S	G A H R V D T K A L A A R W G R G K		
UniRef90_E8N9E3	V G A I A N S L V F W S D D E P L L V M T S	G A H R V D T K G L A E R L G R G A		
UniRef90_UPI00037582B5	S R V A K A V L L A G S D G Y L L A V V P	S N L R V A L S E L G G E A G Q R K		
UniRef90_B7VKH9	K R V F K T L L F S L N G K D L A V A V I	P V D Q R L N L K L A A K A K G K K		
UniRef90_Q3IQR9	L A Q I A S G I V F D V E G D L V V V T S	G A N R V S E P K L A A E C N V A S		
UniRef90_Q46PU6	D R L A K T L L L E D E M G Y V A A V I	P S N H L H M A A L C E Q T G R K		
UniRef90_UPI0002D595F9	S R A V K T L A F T A P N V P L L L V A L	W A S D R V D F M A R L S D A I G V R R		
UniRef90_W8RUY1	D Q I A K S L I F R A E D H G T A V F V T	A G G N R V D D A K A T A L A G E P		
UniRef90_C8PJ22				
UniRef90_A6LJ40	K R I V K S L I F K G R D G Y V L A V E	A A D H R E K T D L K R L A Q G L G G T K		
UniRef90_UPI0004676BB8	E Q I F K T L V V E L S S G Q L A V A V L	P V P R T L S L K G A A A A L G A P K		
UniRef90_UPI00035F3320	A A I T N S L V F D L N G E P L L I L A S	G A A N R V D T K L V A G Q L A Q G R S		
UniRef90_J3EWW7	A Q I A S S I V L V A D D E V V V S V T S	G A A N R V D M E K V A A L V G S E S		
UniRef90_J4N1Z1				
UniRef90_Q0EZ34	H R L A K G V L L R D D L G E Y L L A V L	P S P L H I V V E T L N E Q L D R N		
UniRef90_H1PU35	D Q I A K T M G Y K L K S G E Y L I L T K	G G A R V D N K K F K D K F K E K		
UniRef90_UPI00047A0C9A	G A I A N S L V F V T L D G E P V L I M T S	G S G A R V D T E M V G R E L G G R		
UniRef90_F4GZJ2	G A I A N S L V F V A D G E P L L V L T S	G R H R V D T V G L A R R L G R G R K		
UniRef90_UPI0002DA62C6	K T V F K T L L F C L N G K N L A V A I P	V D Q K L N L K L A A K A K G K K		
UniRef90_I7HP64	A Q I V K S L L F C T E K N K P V L V L A S	G V N R N E S L I V S L I N E P		
UniRef90_UPI0004727C82	N C V A K A V V L K D K K G F V L A V V P	S E K R I S L E K L N E L T D R E K		
UniRef90_I0S2L5	A Q V F K T L V I A L P K G L G V A V L P	V P E K L S L K A A A L G A P K		
UniRef90_Q1LS71	A E I A K S I I F R R E D D V P V L V I A S	G S N R V D E A K V A A R V I G A		
UniRef90_G8PHL8	E Q L V K S L V F K L D S E E A I L V L A S	G T N R V N E E A I S A F V G I G P		
UniRef90_V6JZ14	E R T V K T L A F V T P E D R L L L A A L	P G H A R L R Y G P L A R A A G I R R		
UniRef90_UPI000381954A	G Q I V K S L I F T A D G V P V L V L M D	G A S R V D V E R V R A H L I G A T E		
UniRef90_UPI0003A3B8A4	A Q I A K T L S L K L G E N D I A L L V A R	G D A R L D N R K F K D Q F Q N K A P		
UniRef90_M0NYN1	A A L A S T I V V E A G P E N L A A A V T	S G A N R L D L D A V A E Q F G A S S		
UniRef90_UPI00046221EF	S A P T K T L V Y K T A T P V P V F L I T	R E T S D V P S G A L G K V L N L K D		
UniRef90_UPI0002EE2DF8	A Q I V K S L I E Q G H S G K L Y L F L V	S G P N Q L D L G K A G A L V S E T		
UniRef90_G0QH92	N H I V K S S L I E S E G E K I L H V L L	P G D R K L S E S K L G S E Y		
UniRef90_UPI0002EE6F5D	G A I A N S L V F W S D G E P L L V M T S	G A H R V D T A A L A E R L G R G R		
UniRef90_R1EY50	G V F V K N I V F R D K K A G L F L L S V R	H D A K V D M K A L P Q L L G V I G N		
UniRef90_UPI000374220F	D Q I A K S I L F R G D S G H V V L F L T A	G G N R V D P A K A T A L A G O S		
UniRef90_UPI0003B39E4E	I D L V K T I F M Y A D D Q P I L L L V R	G D F D I N E V K V Q N L L G A N Q		
UniRef90_UPI0003F8BD96	G A I A N S L V F V C G G E P L L L A S	G A A R V D V R L T A R L N G L P P		
UniRef90_I9W6G5	D R L A K A V L L S D A H G Y V A V V L	P S T Y H V G M A E L R A R T G R D		
UniRef90_UPI0003A91354	N A L A K G V L K W E D G F V L A V L	P A S R H V D L A R M R E I T G D K		
UniRef90_W0JZR5	V A Q I A S S I V V V A D D P V V V V T	S G A N R V D F G K V A V Y Q D A S D		
UniRef90_UPI0004699049	D Q I A K S I V L R G E T S G E A V L F V T A	G G Q V C L T A A A A L A G E P		
UniRef90_Q88VK1	D Q L V K S L L F I A D D Q P V M A L V R	G D H E V N D V K L K N Y L G A D F		
UniRef90_H3KEC6	A H I A K T M A F E G R G E G P I L V L A	A G D A K I S S S L F K K T F G L T		
UniRef90_L8MV09	E R L A K P V I L D D R H G H F L M A V L	P A S R H L D M G K V R K D A R I		
UniRef90_G7V7S1	E N T I K T M F Y Q D G E K E V F V V L	V R G D H K I S E E K V K K V V I G C R N		
UniRef90_L0IBC6	A Q I A S S L V F D V D G A L V V C I T	S G A N H V D E T A L A G D H F E S P A		
UniRef90_E4N9L6	E R V F K T L L A E T D G T L A V A V V	P V S G Q L D L K A L A A A L G A K R		
UniRef90_UPI0003B5D3B9	E E C L K T V A F D A D G R L V A V L M	R G D H D V N E V K V A N A V G A E V		
UniRef90_S2G9P0				
UniRef90_UPI000475B2CF	G A I A N S L V F A A G D E P L L V L T S	A G H R V D T A H L A R L L E V I P K		
UniRef90_A3K2B9	D Q I A K S I I F R A E T S G E A V L F	L T A G G N R V C A D K A T A L A G E P		
UniRef90_S9W1H4				
UniRef90_Q1LAR3	N R L A K T L L L E D E G G Y V A V V I	P S S H H L Q M S T I C E M T G R K		
UniRef90_UPI00035CE059	S Q V A K A V M L E D H A G N K L M A I L	P A S S H K I S L T A L N E Q L N R K		
UniRef90_H5SHT5	E R V L K T L I V K G K E G E L V A L V L	R G D H H Q L N P I K A A K H P K L K A		
UniRef90_UPI000262B3A6	E R V L K S L M A W V D T R A V C V V V	P S D R R V Q L K K L A A A A G G K A		
UniRef90_X5M0S2	G A I A N S L V F E C D G E P L L V M A S	G A A R V D T G V V A D H L G A T A		
UniRef90_UPI00036F2172	E R T V K T L A F V T P E D R L L A A L	P V G H S R L R Y G A L A R A A G L R R		
UniRef90_Q0RLF1	E R L V K T M V F R N A D R G F V L L A A L	P V T G R V N Y G R L A R A A G T S R		
UniRef90_R5HJQ3	T K F V K T L I Y K I D N E F Y A C L V S	G D R E V N E N K L L K L L N A K E		
UniRef90_W7ZLU0	D H L L K A L V V F I D G K G S L L L I	R G N D E L N E V K A L H E L G A K E		
UniRef90_S8DXT1	F E T L K T M V Y K T A T P I P L V I I	A R E S T E V S N A V G K K L N L K E		
UniRef90_D6PK30				

UniRef90\_G8N8R3  
UniRef90\_U3QKB3  
UniRef90\_C8RXY2  
UniRef90\_G9YHD8  
UniRef90\_V7EE05  
UniRef90\_UPI000463061A  
UniRef90\_UPI000289D3A6  
UniRef90\_J9H6M8  
UniRef90\_F5ITR0  
UniRef90\_UPI00037F5E5B  
UniRef90\_J2Y204  
UniRef90\_H1Z6I2  
UniRef90\_A1RZK5  
UniRef90\_R7QU64  
UniRef90\_UPI000372A15E  
UniRef90\_A0A017RCC2  
UniRef90\_UPI000360FED1  
UniRef90\_UPI00034ADFE9  
UniRef90\_U3A0B0  
UniRef90\_G0QFA8  
UniRef90\_R7XWJ4  
UniRef90\_Q4V75  
UniRef90\_Q46WD6  
UniRef90\_UPI0003B77B81  
UniRef90\_A8FUD7  
UniRef90\_V4RAE3  
UniRef90\_R7SAS6  
UniRef90\_G7QDQ2  
UniRef90\_A3V6J6  
UniRef90\_L0JZ84  
UniRef90\_D9UH57  
UniRef90\_E8N9E3  
UniRef90\_UPI00037582B5  
UniRef90\_B7VKH9  
UniRef90\_Q3IQR9  
UniRef90\_Q46PU6  
UniRef90\_UPI0002D595F9  
UniRef90\_W8RUY1  
UniRef90\_C8PJ22  
UniRef90\_A6LJ40  
UniRef90\_UPI0004676BB8  
UniRef90\_UPI00035F3320  
UniRef90\_J3EWW7  
UniRef90\_J4N1Z1  
UniRef90\_Q0EZ34  
UniRef90\_H1PU35  
UniRef90\_UPI00047A0C9A  
UniRef90\_F4GZJ2  
UniRef90\_UPI0002DA62C6  
UniRef90\_I7HP64  
UniRef90\_UPI0004727C82  
UniRef90\_I0S2L5  
UniRef90\_Q1LS71  
UniRef90\_G8PHL8  
UniRef90\_V6JZ14  
UniRef90\_UPI000381954A  
UniRef90\_UPI0003A3B8A4  
UniRef90\_M0NYN1  
UniRef90\_UPI00046221EF  
UniRef90\_UPI0002EE2DF8  
UniRef90\_G0QH92  
UniRef90\_UPI0002EE6F5D  
UniRef90\_R1EY50  
UniRef90\_UPI000374220F  
UniRef90\_UPI0003B39E4E  
UniRef90\_UPI0003FE8D96  
UniRef90\_I9W6G5  
UniRef90\_UPI0003A91354  
UniRef90\_W0JZR5  
UniRef90\_UPI0004699049  
UniRef90\_Q88VK1  
UniRef90\_H3KEC6  
UniRef90\_L8MV09  
UniRef90\_G7V7S1  
UniRef90\_L0IBC6  
UniRef90\_E4N9L6  
UniRef90\_UPI0003B5D3B9  
UniRef90\_S2G9P0  
UniRef90\_UPI000475B2CF  
UniRef90\_A3K2B9  
UniRef90\_S9W1H4  
UniRef90\_Q1LAR3  
UniRef90\_UPI00035CE059  
UniRef90\_H5SHT5  
UniRef90\_UPI000262B3A6  
UniRef90\_X5M0S2  
UniRef90\_UPI00036F2172  
UniRef90\_Q0RLF1  
UniRef90\_R5HJQ3  
UniRef90\_W7ZLU0  
UniRef90\_S8DXT1  
UniRef90\_D6PK30

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

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

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

UniRef90\_G8N8R3 L L G Y G V V W A A A G T P R A L F R T R P E E L L A L T G A 130 140 150 160  
UniRef90\_U3QKB3 L L T H P D V Y F E A G D H Q E L V H M S T D Q F L E L M A  
UniRef90\_C8RXY2 L L E F P Q V W A A A G T P R S H I F A A P P H L L L R I T A A H L A D  
UniRef90\_G9YHD8 L L K R Y D T V Y P A A A G N G H S A V R T T P E E L Y I L A N A V A W V D  
UniRef90\_V7EE05 L S D F A E V W A A A G T P R H I F P I T P A D L L R I T G A T Q A P F T  
UniRef90\_UPI000463061A L L R F Q D V W A A A G D H S G T V F P L H P G D L Q R R L T G A P V V D V V  
UniRef90\_UPI000289D3A6 L K K H Q V V Y P A A G D S N S T V K L T L E E L T N L C D  
UniRef90\_J9H6M8 L A D Y E V V W A A A G H P H A V F P T T F A E L E S V C N A T  
UniRef90\_F5ITR0 L L D F D Y V Y G G T G D S L H T L K L N P E N I V S L L D G K T V E  
UniRef90\_UPI00037F5E5B L A D H P E V W A A A G T P H T V F P T T A A E L V R L T D  
UniRef90\_J2Y204 L T R Q K D I Y L E A G N H N N L V H L S M D E Y L K I V P H  
UniRef90\_H1Z6I2 L K K H Q V L Y P A G G S T N T V V Q L K Q E E L I D L C D  
UniRef90\_A1RZK5 L L D A G E V Y A A G G D E R H L V R L D L R L V E F A A A V E V P V K  
UniRef90\_R7QU64 A A Q Y D K I Y I S G G R I G T S I A L S P E D L M K V I D G A Y A D I I  
UniRef90\_UPI000372A15E L K S Y D E V L P A G G S V N S G V R L A P A R L A S I T G A D W I D  
UniRef90\_AOA017RCC2  
UniRef90\_UPI000360FED1 L N D Y P V V W A A S G H P H A V Y P T S F D E L I A C T G A S P M V V  
UniRef90\_UPI00034ADFE9 L A D Y S Q I W A A G G T P N T S I F P T D H A E L L R L T G G T S V E V  
UniRef90\_U3A0B0 L K Q Y S Q I W A A A G T P N S V F A L D T C H L E E M T Q G R W L E  
UniRef90\_G0QFA8 I L A K Q K V K P A A G S K V T G V S L K P E D L K K A S E A E T V D  
UniRef90\_R7XWJ4 L R N H E V V W A A A G H P A A V F S S T F E E L V I T M T G A R E L E V  
UniRef90\_Q47V75 L D Q L D Y V Y I E A G D H R K L L R I N N E D F K I M T A N S K H  
UniRef90\_Q46WD6 L L T H S D V Y F E A G D H Q E L V H M S T E Q F M A L M S D A Q H  
UniRef90\_UPI0003B77B81 L A D Y A V V W A A A G H A K T V F P T S F D E L V R I T G G T P S A V E  
UniRef90\_A8FUD7 L L T A E P V Y L A E S G D H E N L K L N S T E Y A K L V A K A P H  
UniRef90\_V4RAE3 L L D H P V V W A A A G T P H C V F A V A P A D L L R A C E A  
UniRef90\_R7SAS6 L A E S E E I F I H G T S G S S V L L K G T E I K I L W L E S L G G E V Q V V D  
UniRef90\_G7QDQ2 L A C G S T D W I V G A N A A D A H L R Q V D L A R D A R V V D  
UniRef90\_A3V6J6 L L D F A Q I W A A A G T P R H I F P I A P Q Q L L Q I S G A Q I A D  
UniRef90\_L0JZ84 L L E F D T V W A A A G T P T A V F P L D P E R L R R L L A D A E P A P V  
UniRef90\_D9UH57 L T A Y G E I W A A A G H P H T V F P T T A Q E L L R L T  
UniRef90\_E8N9E3 L A A F P E I W A A G G T P H T V F P L T F D E L V R L T G G T V A R V D  
UniRef90\_UPI00037582B5 L R A E P D I Y F E S G D H L S L V H V D R K D G F A R L T R  
UniRef90\_B7VKH9 A T D F E T I C V S A G K R G L E I E L D P K D L V L L T R  
UniRef90\_Q3IQR9 L T Q H D D V W A A A G T P E A V F P I P A K L R E L A D A A V V D  
UniRef90\_Q46PU6 L M K H P D V Y F E A G D H Q E L V H M S M D Q F S S L P  
UniRef90\_UPI0002D595F9 V I N C H P V F C G A G S A D R T L Q I Q A D V L A R L P R A R V V Q V R  
UniRef90\_W8RUY1 L L A F D R V Y A A A G T P R H I F A I A P D D L L R L S E A V A A D F T  
UniRef90\_C8PJ22 L F R F E I A F N A G L L D H S I L L N A Q D Y A R I A A P H I V S  
UniRef90\_A6LJ40 I K Y M K N F V V G M K N Y  
UniRef90\_UPI0004676BB8 A L R W D R M L C S A G K R G L E I E L A P A D L V R L T G A V T A A V T  
UniRef90\_UPI00035F3320 L Q E H E T L W A A G G D H K S M F S I T Y A Q L R R L T G A L E L K V R  
UniRef90\_J3EWW7 L T E F E T V W A A A G T P T A V F A V G S E E L V E  
UniRef90\_J4N1Z1 L K K H D L L Y P A A G D L N A A I R L S L D E L E K Y S R A A G W V D  
UniRef90\_Q0EZ34 L L D E P D I Y F E A G D H V E L V R V V G G T D F Q T L L K  
UniRef90\_H1P135 L K E F E I V Y P A A G S D H S A V K V P V D M L E G I T Q G E W V D  
UniRef90\_UPI00047A0C9A L E Q Y P E I W A A A G H P N T V F P T D Y Q Q L L R L T G G Q A I E V V  
UniRef90\_F4GZJ2 L A E H V R K I W A A A G T P H A V F P T T F E E L V Q V T G G T P L V V A  
UniRef90\_UPI0002DA62C6 A A E Q D K I C V S A G K R G L E I E L A P R D L L S L T R  
UniRef90\_I7HP64 L L C H E V L W A A A G T P N A V F S L S P E T L K Q L T N  
UniRef90\_UPI0004727C82 L E D N S D I Y F E A G D H E N L V H V T D W D F E I L M R  
UniRef90\_I0S2L5 A L R W D R V L C S A G K R G L D I A L P Q D L I R L T G A V T A D  
UniRef90\_Q1LS71 L F Q Y D S V W A A A G H P H A V F N L T P Q Q L Q A M T G A  
UniRef90\_G8PHL8 L L G F D E V W A A A G T P N A V F M M P G N L P D I V G E H Q V I C V  
UniRef90\_V6JZ14 V G G L G R V H C G S G R P D S S I E I D  
UniRef90\_UPI000381954A L L A H T T V W A A A G T P H T V F P M A P A E L V I E H A G A A L A D V R  
UniRef90\_UPI0003A3B8A4 L K A F E E V L P A A G A V N S A V R I N P H R L A E L T N A K W V D  
UniRef90\_M0NYN1 L A R Y D T V Y P A A A G T P S A V F A T E P E A L V D L A G A T V V D  
UniRef90\_UPI00046221EF A T A T S T F A V R G L S S D S T V F L S G K D L T A Y V K A T E G A P K L I D  
UniRef90\_UPI0002EE2DF8 L L G F D T V W A A A G A H D A V F A A E P K A L L A A A Q A R V A D  
UniRef90\_G0QH92 I F D N R V V S H T N G E R D K G L I I H S N D F K E A L D R A D F K F D I M D  
UniRef90\_UPI0002EE6F5D L A G Y P E I W A A A G T P H T V F P M S Y D E L V S L T G G T V T K V D  
UniRef90\_R1EY50  
UniRef90\_UPI000374220F L L D F E Q V W A A A G T P R H V F A I A P A E L L R L T G A T T A D F T  
UniRef90\_UPI0003B39E4E V T D M V N I T V G A N E D G  
UniRef90\_UPI0003FE8D96 L A E Y P L L W A G A G H H S A M F S L N Y G E L A R I S G A T P T Q V R  
UniRef90\_I9W6G5 L A A Q P D V Y L E G G D H E A L I H M R I D Q F L D L M E  
UniRef90\_UPI0003A91354 L R R G G D V Y F E G G D H R T L V H V S G D E F S R L M  
UniRef90\_W0JZR5 L L A H D E V W A A A G T P T A V W P I E P E R L R E L S G A E P A D V  
UniRef90\_UPI0004699049 L L E F D M I W A A A G T P H A V F G L A P K E M L Q I S G A Q L A D F R V I  
UniRef90\_Q88VK1 V K D M V N I T V G A N E D G H H F  
UniRef90\_H3KEC6 L L A F E Y V Y P A C G D D R T A V K F R P E E L Y E A A E A K G W V E  
UniRef90\_L8MV09 L T R Q R D I Y L E A G D H E S L V H M P M D E Y L R L V P  
UniRef90\_G7V7S1 V K G M V N A V V G A N Q P E R H L  
UniRef90\_L0IBC6 L L G Y E T V W A A A G T P S A V F S I D P K R L R T L T D A T P I D V T  
UniRef90\_E4N9L6 A L A H P T V F V S A G K R G T E V E L A P A D L V R L T G A  
UniRef90\_UPI0003B5D3B9 V R G M A G A V C G A N E N G R  
UniRef90\_S2G9P0 L F E F P Q I A F N A G R L D R S I L L D T E D Y L H I A R  
UniRef90\_UPI000475B2CF L G K Y D V V W A A G D H L S M F P T T F E E L R L R L T H G Q P V E V  
UniRef90\_A3K2B9 L L E F D E V W A A A G T P R H V F P I D P K R L P E L T G A E P A D F T L  
UniRef90\_S9W1H4 L I N H G L L A V H P S S E K T I F V S A A A I E T Y L K S I G A T P V V V D  
UniRef90\_Q1LAR3 L F D E P E V W F E A G D H M E L V H M Q R D Q F M T L M  
UniRef90\_UPI00035CE059 L L L Q E Q L Y L E G G D H T S L I Q L T Q N E F S R L M H N T K H  
UniRef90\_H5SHT5 A A V V A D F V C G A N Q D G K  
UniRef90\_UPI000262B3A6 A L G A G S V F N A G Q R G L L L E M D A A Q V L N A L Q A  
UniRef90\_X5M0S2 L A S Y P V I W T A A G T A D S V M P L T Y A Q L L A L T  
UniRef90\_UPI00036F2172 V S S L G H V H C G S G R P D S S I E A A H L L A A V P A A K T A P I A D  
UniRef90\_Q0RLF1 V R R M G V V C C G S G R A D S T I E V D V D H L I E L V K P I F D D  
UniRef90\_R5HJQ3 I L Y K Y N F I V G A N Q T N Y H F K V N V Q D F K Y E I A A D I K N V K E G D  
UniRef90\_W7ZLU0 I H G M E T I A C G A N D T G Y  
UniRef90\_S8DXT1 I A S S P L F V R A R S S T S T I F L S G K D I L A Y L Q S Q D A P L Q E I D  
UniRef90\_D6PK30 V I E R E K L F I G A G N R V S K F F L S P E T L I K L S N A E V L D

UniRef90\_G8N8R3  
 UniRef90\_U3QKB3  
 UniRef90\_C8RXY2 F T A  
 UniRef90\_G9YHD8  
 UniRef90\_V7EE05  
 UniRef90\_UPI000463061A  
 UniRef90\_UPI000289D3A6  
 UniRef90\_J9H6M8  
 UniRef90\_F5ITR0 I S K K E V V  
 UniRef90\_UPI00037F5E5B  
 UniRef90\_J2Y204  
 UniRef90\_H1Z6I2  
 UniRef90\_A1RZK5  
 UniRef90\_R7QU64  
 UniRef90\_UPI000372A15E V T  
 UniRef90\_A0A017RCC2  
 UniRef90\_UPI000360FED1  
 UniRef90\_UPI00034ADFE9  
 UniRef90\_U3A0B0 I A E  
 UniRef90\_G0QFA8 V S R K  
 UniRef90\_R7XWJ4  
 UniRef90\_Q47V75  
 UniRef90\_Q46WD6  
 UniRef90\_UPI0003B77B81 P P A  
 UniRef90\_A8FUD7  
 UniRef90\_V4RAE3  
 UniRef90\_R7SAS6 F G E  
 UniRef90\_G7QDQ2 F  
 UniRef90\_A3V6J6 F I A  
 UniRef90\_L0JZ84  
 UniRef90\_D9UH57  
 UniRef90\_E8N9E3  
 UniRef90\_UPI00037582B5  
 UniRef90\_B7VKH9  
 UniRef90\_Q3IQR9 V A E  
 UniRef90\_Q46PU6  
 UniRef90\_UPI0002D595F9  
 UniRef90\_W8RUY1  
 UniRef90\_C8PJ22 F T E K  
 UniRef90\_A6LJ40  
 UniRef90\_UPI0004676BB8  
 UniRef90\_UPI00035F3320  
 UniRef90\_J3EWW7  
 UniRef90\_J4N1Z1 V A K E  
 UniRef90\_Q0EZ34  
 UniRef90\_H1PU35 V C K D P V  
 UniRef90\_UPI00047A0C9A  
 UniRef90\_F4GZJ2 D D E V P A  
 UniRef90\_UPI0002DA62C6  
 UniRef90\_I7HP64  
 UniRef90\_UPI0004727C82 I C A  
 UniRef90\_I0S2L5  
 UniRef90\_Q1LS71  
 UniRef90\_G8PHL8  
 UniRef90\_V6JZ14  
 UniRef90\_UPI000381954A  
 UniRef90\_UPI0003A3B8A4 V C Q  
 UniRef90\_M0NYN1 L T E  
 UniRef90\_UPI00046221EF I A T I Q T  
 UniRef90\_UPI0002EE2DF8 L A A  
 UniRef90\_G0QH92 V A  
 UniRef90\_UPI0002EE6F5D  
 UniRef90\_R1EY50  
 UniRef90\_UPI000374220F  
 UniRef90\_UPI0003B39E4E  
 UniRef90\_UPI0003FE8D96  
 UniRef90\_I9W6G5  
 UniRef90\_UPI0003A91354  
 UniRef90\_W0JZR5  
 UniRef90\_UPI0004699049  
 UniRef90\_Q88VK1  
 UniRef90\_H3KEC6 V T K P  
 UniRef90\_L8MV09  
 UniRef90\_G7V7S1  
 UniRef90\_L0IBC6  
 UniRef90\_E4N9L6  
 UniRef90\_UPI0003B5D3B9  
 UniRef90\_S2G9P0  
 UniRef90\_UPI000475B2CF  
 UniRef90\_A3K2B9  
 UniRef90\_S9W1H4 F S A P A A  
 UniRef90\_Q1LAR3  
 UniRef90\_UPI00035CE059  
 UniRef90\_H5SHT5  
 UniRef90\_UPI000262B3A6  
 UniRef90\_X5M0S2  
 UniRef90\_UPI00036F2172 V P A D E  
 UniRef90\_Q0RLF1 L S  
 UniRef90\_R5HJQ3 I C  
 UniRef90\_W7ZLU0  
 UniRef90\_S8DXT1 F E S I K T  
 UniRef90\_D6PK30 I T

UniRef90\_Q5HPS8  
UniRef90\_C5CFP9  
UniRef90\_V6M2E8  
UniRef90\_UPI0004723CB5  
UniRef90\_UPI00031752E6  
UniRef90\_UPI00023776AB  
UniRef90\_C6BYX7  
UniRef90\_H9UAR4  
UniRef90\_C7DEM9  
UniRef90\_I0V665  
UniRef90\_H5X0Z1  
UniRef90\_UPI00036F471D  
UniRef90\_S6HQ92  
UniRef90\_B7GG81  
UniRef90\_E5V2V5  
UniRef90\_F9VB52  
UniRef90\_W7Z043  
UniRef90\_A6FR21  
UniRef90\_A0A037ZGA3  
UniRef90\_E1JYW4  
UniRef90\_B2TE33  
UniRef90\_F8C4J9  
UniRef90\_G0HSN5  
UniRef90\_D8FG32  
UniRef90\_I2F1Z1  
UniRef90\_Q0S8F7  
UniRef90\_E6JZ98  
UniRef90\_E8T2Q3  
UniRef90\_B2V6W5  
UniRef90\_E6SJR3  
UniRef90\_UPI000377C96D  
UniRef90\_H0DIT9  
UniRef90\_I31452  
UniRef90\_D5BZ49  
UniRef90\_V9EIM6  
UniRef90\_Q39VY6  
UniRef90\_D8HUS9  
UniRef90\_W6WNJ0  
UniRef90\_UPI0002ED28D6  
UniRef90\_E3C6B2  
UniRef90\_A6EVK1  
UniRef90\_Q21YZ5  
UniRef90\_M9RJN7  
UniRef90\_UPI0003687A25  
UniRef90\_D3QDB9  
UniRef90\_K9E619  
UniRef90\_K6XDY1  
UniRef90\_H4GKR0  
UniRef90\_UPI000344F815  
UniRef90\_UPI000370186F  
UniRef90\_I0HX49  
UniRef90\_UPI00038104CF  
UniRef90\_K0J4G7  
UniRef90\_G1UPB3  
UniRef90\_UPI000346128F  
UniRef90\_G4T2F7  
UniRef90\_K4LEU7  
UniRef90\_U4WWD2  
UniRef90\_Q9PK01  
UniRef90\_B4SJ64  
UniRef90\_E6PVP3  
UniRef90\_UPI00037AF6D0  
UniRef90\_D5CNS2  
UniRef90\_UPI0004784699  
UniRef90\_C0QY98  
UniRef90\_UPI000465AB5C  
UniRef90\_R6EPX9  
UniRef90\_Q97ED5  
UniRef90\_UPI000474CB35  
UniRef90\_U7C9N3  
UniRef90\_R4VE79  
UniRef90\_UPI000362A4AC  
UniRef90\_UPI000366A02F  
UniRef90\_UPI0001FFE4D4  
UniRef90\_A4BLL4  
UniRef90\_W2ELZ1  
UniRef90\_W8JEE6  
UniRef90\_UPI000302DE10  
UniRef90\_C4XTD0  
UniRef90\_UPI0003767E2C  
UniRef90\_UPI000477ACED  
UniRef90\_UPI0002D39479  
UniRef90\_UPI00034B27CE  
UniRef90\_D1A220  
UniRef90\_W7C950  
UniRef90\_A0A023CV12  
UniRef90\_M3A949  
UniRef90\_T0YKG9  
UniRef90\_A0LW02  
UniRef90\_UPI00026C81E9  
UniRef90\_V5PM03  
UniRef90\_UPI00037E1051

1 10 20 30 40

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

UniRef90\_Q5HPS8  
UniRef90\_C5CFP9  
UniRef90\_V6M2E8  
UniRef90\_UPI0004723CB5  
UniRef90\_UPI00031752E6  
UniRef90\_UPI00023776AB  
UniRef90\_C6BYX7  
UniRef90\_H9UAR4  
UniRef90\_C7DEM9  
UniRef90\_I0V665  
UniRef90\_H5X0Z1  
UniRef90\_UPI00036F471D  
UniRef90\_S6HQ92  
UniRef90\_B7GG81  
UniRef90\_E5V2V5  
UniRef90\_F9VB52  
UniRef90\_W7Z043  
UniRef90\_A6FR21  
UniRef90\_A0A037ZGA3  
UniRef90\_E1JYW4  
UniRef90\_B2TE33  
UniRef90\_F8C4J9  
UniRef90\_G0HSN5  
UniRef90\_D8FG32  
UniRef90\_I2F1Z1  
UniRef90\_Q0S8F7  
UniRef90\_E6JZ98  
UniRef90\_E8T2Q3  
UniRef90\_B2V6W5  
UniRef90\_E6SJR3  
UniRef90\_UPI000377C96D  
UniRef90\_H0DIT9  
UniRef90\_I3I452  
UniRef90\_D5BZ49  
UniRef90\_V9EIM6  
UniRef90\_Q39VY6  
UniRef90\_D8HUS9  
UniRef90\_W6WNJ0  
UniRef90\_UPI0002ED28D6  
UniRef90\_E3C6B2  
UniRef90\_A6EVK1  
UniRef90\_Q21YZ5  
UniRef90\_M9RJN7  
UniRef90\_UPI0003687A25  
UniRef90\_D3QDB9  
UniRef90\_K9E619  
UniRef90\_K6XDY1  
UniRef90\_H4GKR0  
UniRef90\_UPI000344F815  
UniRef90\_UPI000370186F  
UniRef90\_I0HX49  
UniRef90\_UPI00038104CF  
UniRef90\_K0J4G7  
UniRef90\_G1UPB3  
UniRef90\_UPI000346128F  
UniRef90\_G4T2F7  
UniRef90\_K4LEU7  
UniRef90\_U4VWWD2  
UniRef90\_Q9PK01  
UniRef90\_B4SJ64  
UniRef90\_E6PVP3  
UniRef90\_UPI00037AF6D0  
UniRef90\_D5CNS2  
UniRef90\_UPI0004784699  
UniRef90\_C0QY98  
UniRef90\_UPI000465AB5C  
UniRef90\_R6EPX9  
UniRef90\_Q9TED5  
UniRef90\_UPI000474CB35  
UniRef90\_W7C9N3  
UniRef90\_R4VE79  
UniRef90\_UPI000362A4AC  
UniRef90\_UPI000366A02F  
UniRef90\_UPI0001FFE4D4  
UniRef90\_A4BLL4  
UniRef90\_W2ELZ1  
UniRef90\_W8JEE6  
UniRef90\_UPI000302DE10  
UniRef90\_C4XTD0  
UniRef90\_UPI0003767E2C  
UniRef90\_UPI000477ACED  
UniRef90\_UPI0002D39479  
UniRef90\_UPI00034B27CE  
UniRef90\_D1A220  
UniRef90\_W7C950  
UniRef90\_A0A023CV12  
UniRef90\_M3A949  
UniRef90\_T0YKG9  
UniRef90\_A0LW02  
UniRef90\_UPI00026C81E9  
UniRef90\_V5PM03  
UniRef90\_UPI00037E1051

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

UniRef90\_Q5HPS8 V E M A T P D E E I V N L V D A N P G S L G P I G M F D K D I K I Y A D N Y 120  
UniRef90\_C5CFP9 L T M A S T L E E L R E L T G A P A G G F L G P V V G M N D K K V K I V A D F T  
UniRef90\_V6M2E8 V G M A S S E A Q Q L E L T Q A P A G G A L G S P V V G L D A K K V E I I A D Q F  
UniRef90\_UPI0004723CB5 L V G R A S A S A E Q V R R A T G F A I G G V S P V F G H A T A M R V L L A D R G  
UniRef90\_UPI00031752E6 I E M A S A E G F V K S R T G F S I G G V S P V A H A T P V K I E R I T L I D R E  
UniRef90\_C6BYX7 L T F A T P D E I F R D F G V P I G G F L G S P V G V K G I K I I A D N Q  
UniRef90\_H9UAR4 L G K A D A A L I R T Q T G F A I G G V S P V G H L I E T L A F F D E T  
UniRef90\_C7DEM9 L V D R A D A D F V R T H T G H V I G G V A P V G H P S R I T T L V D E A  
UniRef90\_I0V665 V G K A D P D F V R R H T G Q A I G G V A P V G H P S R R L T L V D T A  
UniRef90\_H5X0Z1 I R R A D A D T V K A A T G Q T I G G V A P V G H P Q R L R T V V D V A  
UniRef90\_UPI00036F471D L H L V T E P K L Y D M F D C E Q G A V P A V G Q A Y N M N A  
UniRef90\_S6HQ92 V E L A T P E E T K Q V M N C E I G S L G P I G V R N D V L V L A D H A  
UniRef90\_B7GG81 V E M A T E Q D E E D V L A M G S V V G Y M G P F G I K N C K V I I A D N A  
UniRef90\_E5V2V5 V E P A T E A D V E L A G A H F V G S L G I G L K D V K I I A D R E  
UniRef90\_F9VB52 L R M A T E E E V L Q A F G A T P G S L G P V G V S D I P I Y A D Y R  
UniRef90\_W7Z043 L G K A D A A L I R A Q T G F A I G G V S P V G H L T P P R A F F D P R  
UniRef90\_A6FR21 L G K A D A A L I R T Q T G F A I G G V S P I G H L S P I R A W F D P R  
UniRef90\_UPI00037ZGA3 L R L A S P E E V T A A T K A P V G F A G P V G L A G I P V Y A D R E  
UniRef90\_E1JYW4 L S F A K N E A A V I H S G M E F G G I T A F G L P D D W R I L V D A A  
UniRef90\_B2TE33 F R M A N E E E V R K I V G A S P G F I G P K D L K I K V I A D K A  
UniRef90\_F8C4J9 A S M A D P G D I R S V V G W S I G G V P P I C H D T A L K P T T V D P T  
UniRef90\_G0HSN5 V E M A S E R T V E E T T G A P M G F A G P V G L K I K V L A D N V  
UniRef90\_D8FG32 L V M A T P Q E V L D L L G V P I G F V A G P V G L P K E V T L I A D H T  
UniRef90\_I2F1Z1 L T R A P L D M V R I A T G Q P I G G I A S P L G H P T N L P T Y V D N A  
UniRef90\_Q0S8F7 A A M A E P A E A M R V T G Y V V G G I S P L G Q K T A H R T V I N T S  
UniRef90\_E6JZ98 V R L A T D K E I E E F T G Q P K G Y L S P V G L N L P V Y A D Y S  
UniRef90\_E8T2Q3 V R M A T K E E L E S L G I P E G F V S P I G L N L P V Y A D F S  
UniRef90\_B2V6W5 V R M A S R E E V L Q V A G A P T G S A G P V G L Q G V P V A D E E  
UniRef90\_E6SJR3 L E M A T P E Q V R W T G A P V G F A G P V K L N I K R I V A D N E  
UniRef90\_UPI000377C96D I E L A S Q D D I F N L L G A H P G S L G P V T D R D I K V Y A D Q S  
UniRef90\_H0DIT9 E L V E E E L N E I F R D C A E G A I P A L G E A Y G L D T D R D I K V I A D Q S  
UniRef90\_I31452 L Q F A T P E Q V R E I C N A G I S I P L G L D I P L I A D H S  
UniRef90\_D5BZ49 I K L A T P A E C D Y F G F E P G T I P F G H R E Q S D H R V R I Y A S S T  
UniRef90\_V9EIM6 L E M A S E E V E R V T G A P V G F A G P V G L K I K V L A D L T  
UniRef90\_Q39VY6 I A K A D A D F V R A H T G Q P I G G V A P V G H P A P L P T L V D T A  
UniRef90\_D8HUS9 I S F A Q R E L A T E Q S A M E F G G I T A F G L P A N W R V L V D A G  
UniRef90\_W6WNJ0 V E F A T E E E I Q T L L K C E V G S L G P V N L P D G V K I A D H A  
UniRef90\_UPI0002ED28D6 L E L A S E E D A V K Y L G A H P G S L G P V G V G E D V K I L A D N Y  
UniRef90\_E3C6B2 L Q P L T A R Q S A R L F D C D P G F Q P V G A A Y D L P V L V D E D  
UniRef90\_A6EVK1 F R F A T V P E I E A H F Q C Q P G Y L G P M G L R Q P V Q L V D R E  
UniRef90\_Q21YZ5 L G K A D A A L I R A T G F A I G G V A P I G H L T Q P T A Y W D A R  
UniRef90\_M9RJN7 I E M A D P D V I K T M M G A E T G S L G P V G A P E E I K I L A D N A  
UniRef90\_UPI0003687A25 I E M A T E D E I V N L V G A H P G S L G P I F D K D I K I I A D N Y  
UniRef90\_D3QDB9 L S F T S R E E R S Y F  
UniRef90\_K9E619 L S F A D Q A Q A Q S E L T G M R Q G G I T P I G L P P E W P I L V D E A  
UniRef90\_K6XDY1 L H L A T E E E A Q L L G A H P G S L G P V G V P E G E N V T I L A D N Y  
UniRef90\_H4GKR0 T S F A P M D E A T G L T G M E Y G G I T P F G V P K G W P V L V D K R  
UniRef90\_UPI000344F815 L E P A T A E E A R A F F G A D F G S L G P V G L P E G T R I V A D R R  
UniRef90\_UPI000370186F F R E A T V A E I E D H F G C K P G Y L G P I G L K K P V R V A D R T  
UniRef90\_I0HX49 F R L A T E E E I R A N L S C P P G Y L G P V G V N A N V R V V A D R T  
UniRef90\_UPI00038104CF V A L V E E E E T I K L M N V G F G S L G P I G V P E G I R V V Y D N A  
UniRef90\_K0J4G7 V E L A G A A T V E A L T H A P V G F A G P V G L D V P V Y A D L E  
UniRef90\_G1UPB3 I R F A T A D E V E Q V L G A T I G N I G P I G V K D V K I V A D H A  
UniRef90\_UPI000346128F L Q L A D E E Q V L S A C N A K P G S V G P F G L K I K I I A D R S E  
UniRef90\_G4T2F7 L E I A D E V E I L M R Y G V P M G F A G P V G L R E K M P V K I L G D E E  
UniRef90\_K4LEU7 V R M A T A E E I N E K L G A P V G F V G P V G A G E R K I E V V A D N Y  
UniRef90\_U4WWD2 C E L A S D E E I T K H L H V E K G F I G P L H C P V P C Y A D E T  
UniRef90\_Q9PK01 Q R F A S E A E I A E H L G S V P G F L G P I A P A K A L R V V A D R E  
UniRef90\_B4SJ64 A R M A T E A E I V E Y F G C K P G Y I G T A K P M R V V V D R T  
UniRef90\_E6PVP3 L T L A D A E Q V K E A T G A R I G F A G P V G L N I P I Y M D R Q  
UniRef90\_UPI00037AF6D0 F R F A T E E E I K S N M G C R P G Y I G P V N R S N T I L A D R A  
UniRef90\_D5CNS2 I T R A S K E V R D A T G Q V I G G V A P V G H P A A V P T Y V D T A  
UniRef90\_UPI0004784699 I E L A D E E T V K E V T G A R V G F A S P I G L K K K I R I F A D N S  
UniRef90\_C0QY98 V R I A T E E E L V R A T G Q K P G F L G P V G L P P S I C L V A D R S  
UniRef90\_UPI000465AB5C I E F A D E A K M S Q A T G C V G G T G P M G L Y N C K I V A D S E  
UniRef90\_R6EPX9 V E L A D E K T V K K A T G A E V G F A G P I G L D V D Y L L I D N E  
UniRef90\_Q97ED5 V E P A K G R W V R E V T G F A I G G V S P V G H L T P P L V L L D D D  
UniRef90\_UPI000474CB35  
UniRef90\_W7C9N3  
UniRef90\_R4VE79 V R L A E P D E A L A A T G V P R G F I G P K G L P E G L T Q R V  
UniRef90\_UPI000362A4AC L R P A H A E E I R D A L G A A P G Y L G A V G V T D L V K I L A D R E A  
UniRef90\_UPI000366A04F F R F A T E A E I R H F G C K P G Y L G P I G M K K A V K V I A D R T  
UniRef90\_UPI0001FFE4D4 V G R A D K E F V R T A T G Q V I G G V A P V G H P A P L R T L V D V A  
UniRef90\_A4BL4 V R L A E P S E A Q A A T G V P R G F I G P K G L P E E L T V R V D E R  
UniRef90\_W2LLZ1 A S F A P Q S E A V E L T G M E Y G G I T P I G L P A E W P V L V D E N  
UniRef90\_W8JEE6 C F L A S D E E I Q Q H L G T E K G F V G P L H C P I P F Y G D E T  
UniRef90\_UPI000302DE10 V E L A S P E E T Q V A L G C A I G S L G P V G L V T N L E I S L V N G V C G A N  
UniRef90\_C4XTD0 L R L A T P E E T V T A A T G A P V G F A G P V G L S L P V Y A D R E  
UniRef90\_UPI0003767E2C L Q F A S D E E I L G A C H C K P G S I G P I D L S V K I V A D R S  
UniRef90\_UPI000477ACED V E F A D E E R T K E L N C S F G S I G P V N L P P A T T K I V A D N A  
UniRef90\_UPI0002D39479 V E L A T A E E T L S I L D C E I G S I G P I G V P K E V E V I A D H A  
UniRef90\_UPI00034B27CE L D V A G E D T V R E L F G A G F G S L G P V N L P E G V K I I A D R K  
UniRef90\_D1A220 A S F A P M A E A T R L L G M E Y G G I T P I G L P K D W P V L V D E A  
UniRef90\_UPI00037C950 V E F A D P D A A V K L L G A N F G S L G P V G V P S D I R I Y A D N A  
UniRef90\_A0A023CV12 M R M A S D A E A K Q Y L G A D F G A L G P V G I S S E I Q V L A D L D  
UniRef90\_M3A949 A S F A S E M D A L A E A T G M E Y G G I T P I G L P A D W P L L D A A  
UniRef90\_T0YKG9 Y R L A S E A T A E Y L G G E S G F I G P L G P R K S I T V V A D R S  
UniRef90\_A0LW02 A S F A P M A E A V E R T G M E Y G G I T P I G L P G E W P I L I D P A  
UniRef90\_UPI00026C81E9 L Q F L D E E T V L K S L K A P I G S L G P V N L S I P V I A D H H  
UniRef90\_V5PM03 F R F A S E A E I V E W F T P P G Y L G P V G T K K P V K V I A D R T  
UniRef90\_UPI00037E1051 I A R A D P A F V R A H T G Q A I G G V A P V G H P E P L E T L V D R H



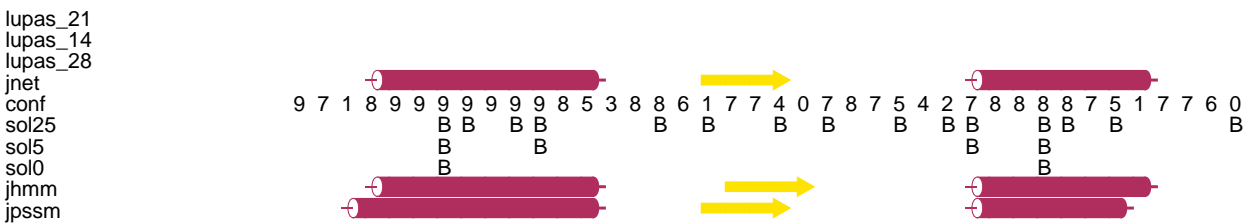
UniRef90\_Q5HPS8 L Q D L N N F V V 130 G A N E D H Y 140 150 160  
UniRef90\_C5CFP9 V K P L R N F V V G G M K E G Y  
UniRef90\_V6M2E8 V Q D V H D G I V G A N E T D Y L I H V A P  
UniRef90\_UPI0004723CB5 L L A H E T V W A A A G T P H T V F A L A P R A L V E Y  
UniRef90\_UPI00031752E6 L L R F D V V W A A A G H P H S V F P L H P R D L Q R L T G A P V V D V V  
UniRef90\_UPI00023776AB L L T E T D W I A G A N K G D T H I K  
UniRef90\_C6BYX7 V K G M K N F V V G G M E K D Y  
UniRef90\_H9UAR4 L M K F D V I Y A A A G T P R H I F P A V P A K L Q E L  
UniRef90\_C7DEM9 L R A Y D T V W A A A G H P H T V F P T T F T G L V T A T G  
UniRef90\_I0V665 L R G Y E T V W A A A G H P K S V F P T T F E D L L T L T  
UniRef90\_H5X0Z1 L A G Y P E V W A A A G H A H T V F P T T F D E L V R L T G G E P H P V E  
UniRef90\_UPI00036F471D L G R L K D I Y L E A G D H E T L I H L N R E Q F D K L M I N T M H T  
UniRef90\_S6HQ92 V K A I V N G V C G A N E A H Y  
UniRef90\_B7GG81 I K Y M Y N H S C G A N K K G Y I N V N P G D Y E  
UniRef90\_E5V2V5 V Q A V K N A I I G A N E D G Y  
UniRef90\_F9VB52 I Q A M D K I A C G A N E T G M  
UniRef90\_W7Z043 L D E F E Q V W A A A G T P R H I V F G I A P A E L L R I  
UniRef90\_A6FR21 L L N F D V W A A A G T P R H I F P I D P Q I L N L T G A E L A E F T V  
UniRef90\_UPI00037ZGA3 L S L A A D W I V G A N A D A H L R L S F T D L R Q V A P  
UniRef90\_E1JYW4 V M E R T Q I V M G A G V R A A K L L L S P D V L R Q  
UniRef90\_B2TE33 L E G Y P N F V I G A N E D E Y  
UniRef90\_B2TE33 L T H Y D V V H A A A G T P S A V F A V E P D R L V D L A D A D V V D  
UniRef90\_F8C4J9 V R T M A N F V V G G N E K D L H L K N V N L E R  
UniRef90\_G0HSN5 I K G L K N A V C G A L K E G Y  
UniRef90\_D8FG32 L S E Y A E L W A A A G H P D T V F R T S F S E L V R I T A G L A I D V  
UniRef90\_I2F1Z1 A F D Y E E M L V S G G K R G I S L G I K P E D L L A V L N K R K P A T K A D  
UniRef90\_Q0S8F7 V I P M V N F V A G A G R A D Y H L K F S V A E F V D V T E V R G G E P  
UniRef90\_E6JZ98 L K E L Y N I V V G A N E K D Y  
UniRef90\_E8T2Q3 V M A L R N T A C G A N E E G Y  
UniRef90\_B2V6W5 L R F A T D W I V G A N K A D A H L  
UniRef90\_E6SJR3 V Q D L T N I V V G A N E D G Y  
UniRef90\_UPI000377C96D L M G V E E F Y I E A G D H C K L I R L K Q P D F V Q L M E N K L H D  
UniRef90\_H0DIT9 A A H L T D F V C G A N Q E G K H F T G A N W E R D L P E P I T A D  
UniRef90\_I31452 L Q H V E S L V C G G S H E S L L W L N S K A Y F A L I D  
UniRef90\_D5BZ49 I Q G M K N F V T G G N A R D L H F K  
UniRef90\_V9EIM6 L R A H D V V W A A A G H P K A V F P T T F A G L V A L T G G T  
UniRef90\_Q39VY6 V M E R R Q V V M G A G I R K A K L L L A P S V L E Q L  
UniRef90\_D8HUS9 V A A I R N G V C G A N V A G F H L  
UniRef90\_W6WNJ0 V K V L V N M A C G A N D D G H  
UniRef90\_UPI0002ED28D6 I L G Y P R A L M C C G T D N T L L E L D R T S L A R A L A  
UniRef90\_E3C6B2 V A L M S D W I C G A N E P D F H I  
UniRef90\_A6EVK1 L S D F D T V F A A A G T P R H I F P I A P D I L L E Q S D A I  
UniRef90\_Q21YZ5 V K Y V V N G I C G A N E T D Y H F  
UniRef90\_M9RJN7 V Q D L T N L V I G A N E D G Y  
UniRef90\_UPI0003687A25 V A A A G P V V I G G G V R D S K I L L D G A A L A S L  
UniRef90\_D3QDB9 V K V L V N M A L G A N D D G Y  
UniRef90\_K9E619 V Y D T P W V V G S G L R R S K L R V P G P L L A E L  
UniRef90\_K6XDY1 V K G A Q N V V V G A N D N G Y  
UniRef90\_H4GKR0 V A N M S D F V C G A N E P D F H I A  
UniRef90\_UPI000344F815 V T L M S D F V C G A N K P  
UniRef90\_UPI000370186F V K A L S N A T C G A N E D G H Y I N V N P R D L I D P E Y A D  
UniRef90\_I0HX49 L Q G S T D Y V T G A N A D A H F R  
UniRef90\_UPI00038104CF V E V I V N G I C G A N A T N S H F  
UniRef90\_K0J4G7 V V L M S D F V C G A N Q D D K  
UniRef90\_G1UPB3 V R A L S N A V A G A N R V D Y  
UniRef90\_UPI000346128F V Q E V A S A I I G A N E V D Y H L K  
UniRef90\_G4T2F7 T R P M T N F I C A N N  
UniRef90\_K4LEU7 V A A M S D F V V G A N E A G F H L A G V N W G R D L A E P E V A D  
UniRef90\_U4WWD2 V A A M H D F V L G A N  
UniRef90\_Q9PK01 V A H K K N F I V G A N E D D H  
UniRef90\_B4SJ64 A A A L S N F V C G A N D D G Y H F S  
UniRef90\_UPI00037AF6D0 L A A H D E V W A A A G H A K T V F P T T F A E L V R I T G G T P T A V  
UniRef90\_D5CNS2 I K S V A D A I V G G N K D D T H I K  
UniRef90\_UPI0004784699 V V G C R D V V I G A N R P D Y H L  
UniRef90\_C0QY98 L T G L K N L C A G A N K E D H I K  
UniRef90\_UPI000465AB5C V T Y M Y N F I V G A N E T G Y  
UniRef90\_R6EPX9 L F R L P R L W A A A G S P S H V F E T E A G A L L R L  
UniRef90\_Q97ED5  
UniRef90\_UPI000474CB35  
UniRef90\_W7C9N3  
UniRef90\_R4VE79  
UniRef90\_UPI000362A4AC L R G R T A M T T G A N T D G V H L R G V D V A R  
UniRef90\_UPI000366A02F V A N M S D F I C G A N D E D Y  
UniRef90\_UPI0001FFE4D4 L D D Y D R V W A A G G V A R S V F P T T F A E L V A V T G G T A A E V  
UniRef90\_A4BLL4 A A A I P N F S S G S N  
UniRef90\_W2ELZ1 V I Q R P F V V I G S G V R R S K L A L S G Q A L V A A T G G E V  
UniRef90\_W8JEE6 T R K M T N F I C A G N V K D K  
UniRef90\_UPI000302DE10 E E G M H F I N V N P G R  
UniRef90\_UPI000376E2C L A L A N D W V V G A N A D A H L  
UniRef90\_UPI000477ACED V I L M S D F I C G A N Q D G K  
UniRef90\_UPI0002D39479 V E A M V N A V C G A N E D D  
UniRef90\_UPI00034B27CE V Q F V V N G I C G A N E P D  
UniRef90\_D1A220 V Q D A H N V V A G A N E D G Y H L  
UniRef90\_W7C950 V A A A P E V V I G S G L R R S K L L V P G A A L A G L  
UniRef90\_A0A023CV12 V K D V V N A V G A N E D D F H F  
UniRef90\_M3A949 I R E M D N S V V G A N E D G Y H L  
UniRef90\_T0YKG9 V V A S P Y V L I G S G R R G K L I A P G A A L A G L P G A T  
UniRef90\_A0LW02 V A V M A D F V I G A N A G Y H L R  
UniRef90\_UPI00026C81E9 V L S R D V V I G S G L R R S K L V  
UniRef90\_V5PM03 A L A M D S F I C G A N Q P D K  
UniRef90\_UPI00037E1051 V A K M S D F V V G A N E D D F H I  
L E R Y P V V W A A A G H P K T V F P T S H A D L V T L T G G T

UniRef90\_Q5HPS8  
UniRef90\_C5CFP9  
UniRef90\_V6M2E8  
UniRef90\_UPI0004723CB5  
UniRef90\_UPI00031752E6  
UniRef90\_UPI00023776AB  
UniRef90\_C6BYX7  
UniRef90\_H9UAR4  
UniRef90\_C7DEM9  
UniRef90\_I0V665  
UniRef90\_H5X0Z1  
UniRef90\_UPI00036F471D P T S  E  
UniRef90\_S6HQ92  
UniRef90\_B7GG81  
UniRef90\_E5V2V5  
UniRef90\_F9VB52  
UniRef90\_W7Z043  
UniRef90\_A6FR21  
UniRef90\_A0A037ZGA3  
UniRef90\_E1JYW4  
UniRef90\_B2TE33  
UniRef90\_F8C4J9  
UniRef90\_G0HSN5  T E  
UniRef90\_D8FG32  
UniRef90\_I2F1Z1  
UniRef90\_Q0S8F7  
UniRef90\_E6JZ98  A A  
UniRef90\_E8T2Q3  
UniRef90\_B2V6W5  
UniRef90\_E6SJR3  
UniRef90\_UPI000377C96D  
UniRef90\_H0DIT9  
UniRef90\_I3I452  
UniRef90\_D5BZ49   
UniRef90\_V9EIM6  
UniRef90\_Q39VY6  
UniRef90\_D8HUS9  
UniRef90\_W6WNJ0  
UniRef90\_UPI0002ED28D6  
UniRef90\_E3C6B2  
UniRef90\_A6EVK1  
UniRef90\_Q21YZ5  
UniRef90\_M9RJN7  
UniRef90\_UPI0003687A25  
UniRef90\_D3QDB9  
UniRef90\_K9E619  
UniRef90\_K6XDY1  
UniRef90\_H4GKR0  
UniRef90\_UPI000344F815  
UniRef90\_UPI000370186F  
UniRef90\_I0HX49  
UniRef90\_UPI00038104CF   
UniRef90\_K0J4G7  
UniRef90\_G1UPB3  
UniRef90\_UPI000346128F  
UniRef90\_G4T2F7  
UniRef90\_K4LEU7  
UniRef90\_U4WWD2  
UniRef90\_Q9PK01  
UniRef90\_B4SJ64   
UniRef90\_E6PVP3  
UniRef90\_UPI00037AF6D0  
UniRef90\_D5CNS2  
UniRef90\_UPI0004784699  
UniRef90\_C0QY98  
UniRef90\_UPI000465AB5C  
UniRef90\_R6EPX9  
UniRef90\_Q97ED5  
UniRef90\_UPI000474CB35  
UniRef90\_W7C9N3  
UniRef90\_R4VE79  
UniRef90\_UPI000362A4AC  
UniRef90\_UPI000366A02F  
UniRef90\_UPI0001FFE4D4  
UniRef90\_A4BLL4  
UniRef90\_W2ELZ1  
UniRef90\_W8JEE6  
UniRef90\_UPI000302DE10  
UniRef90\_C4XTD0  
UniRef90\_UPI0003767E2C  
UniRef90\_UPI000477ACED  
UniRef90\_UPI0002D39479  
UniRef90\_UPI00034B27CE  
UniRef90\_D1A220  
UniRef90\_W7C950  
UniRef90\_A0A023CV12  
UniRef90\_M3A949  
UniRef90\_T0YKG9  
UniRef90\_A0LW02  
UniRef90\_UPI00026C81E9  
UniRef90\_V5PM03  
UniRef90\_UPI00037E1051

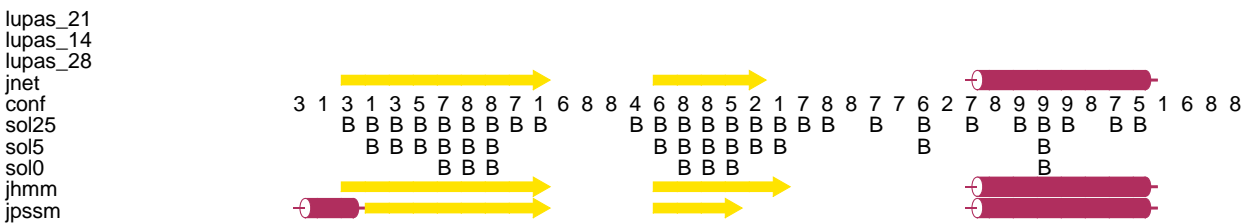
```

UniRef90_UPI0003616C16      1          10          20          30          40
UniRef90_U1FUW8             E K V A T P G Q K T C E Q V S K F M N V P L
UniRef90_UPI000375ABA5     T K I E T P N V H T A Q E L A D F L N K P L
UniRef90_D3SEH3             P M Q V T P T P G K S T C A D V A Q F L N V P L
UniRef90_UPI00047AF1F4     E K I A T P G V H T I E D L A N F L D I P T
UniRef90_K2FPG4            E A F D T P G V R T I E D L A S G F G A S A
UniRef90_J1SDQ4            E K V S T P D R K T M Q E V A D Y L G H E L
UniRef90_W1N3A5            R Y V D T D P A D T A L L V E R Y G P W L L
UniRef90_R5XA78            E L V D T P N A R T I A T L V E Q H G L P I
UniRef90_Q5L0J4            I E T P N V H T I E E L Q E F F K M D A
UniRef90_H3SGY6            T I A E V A S H L Q I S P
UniRef90_UPI000289B7D3     E R F P T P G M R T I E D L A S G L K L D P
UniRef90_M2QCM5            N L D M T M V S T P G M K T V E E V S R Y L E V A P
UniRef90_E7MPW5            I I S H D A T N S P A A W R E A V E A H P
UniRef90_UPI000364075A     T L V E T P H S R T I E E V T N F L K K D V
UniRef90_Q2YBW3            P G K S T C A Q V A E F L G L E L
UniRef90_L0IRE9            T C E E V A A Y L N V S I
UniRef90_U2SVL4            D E E K L P K E L V K T P H A K T I E D L A N F L N I P K
UniRef90_UPI00046F7B58     E K F H T P D I R T I D Q L T A A Y G L K P
UniRef90_K0D7I3            T K I D T P N E K T I D E L S A F L D V P A
UniRef90_H3NSF1            F D T P N A K T I D A L E K H Y D V P A
UniRef90_UPI0002FFE717     I Q Q L L D E R A I A Y E V H D H P G V S P D S K V Q A V L L E D T
UniRef90_F5RF13            P G T V R C E D V A L L A L P L
UniRef90_U3HF12            I L Q L L D K L G L S Y Q I R L E E P S L E P A R R V Q A V L P L
UniRef90_R8AYM0            M A V A A R L E H F L A R K G I S Y T E Q P V D Q V I N L D A V I A S G H S Q
UniRef90_B8FR28            A Y R G V D T P G T K T I E Q V A E F L K V I S K
UniRef90_R7D0Q0            E K V E T P G L G T I E A V A E F F G F P K
UniRef90_E1QG03            Q E V A T P A A H T A L Q V A K F L K T K P
UniRef90_UPI000345F140     I L D P D L A D T A Q F C E H Y G L P L
UniRef90_UPI0004774B03     P S T T T V E E L A K F L K I P T
UniRef90_UPI0003B7693A     P G A A K C E D V A S L L G I P L
UniRef90_D5X593            P T R T A Q L A A D A V E C E V
UniRef90_A3JP88            T L V D T P N A K T I A E L V E Q H G L P I
UniRef90_A5F340            V V D T P D V H T I E E V C A S L N V E A
UniRef90_UPI0003757563     E L V D T P D V K N I N Q V S K F F D I D K
UniRef90_G2KUC1            L D E I E K E M T E V D A V R T M E D G E K L H N L P L
UniRef90_K2CG80            I A Y I R D H G L A T V P E V I D P A A L P P G
UniRef90_A8IHU9            C E D V A A L L N L P L
UniRef90_A4G8R0            C E D V A Q L L G M P L
UniRef90_V2H4K0            P A L S D T A A A S E A Y G F P L
UniRef90_UPI00034A8E30     V E T P H C K T I D E V A A F L S V D E
UniRef90_Q99XY4            Q E V A T P G K H S I E E V C A F L K V S P
UniRef90_I3I979            T R V A T P N A K T I D E V A A F L N A P A
UniRef90_D0KYG5            T V V E T P A K H T I D D V S Q Y L N K P A
UniRef90_F5T009            A D T A A F C A A Y E V G L
UniRef90_C4RIF2            E N E L P L T K V S T P G Q K T I Q D T S V F L N T P D
UniRef90_D7CM40            P D M K S I A D V A A F L G L A T
UniRef90_A1APU5            T E V A T E E A H S I E E V A T Y C S M P E
UniRef90_K8Z9A1            C E Q V A E Y L K I P L
UniRef90_UPI000473E41B     K A L A D L D A S R I G V A E I D P G L A D T A A F C E H Y G S S L S
UniRef90_UPI000399C79F     M P L P T S V E S L L N S Q N I H Y D L A T A P V D A N N Q P L W H D Q H L R
UniRef90_UPI0004677536     I H T P D I G S I D D V A E F L H V S P
UniRef90_C8WAK5            E T P N V K T I E E L V K F F N T S E
UniRef90_V9H228            Q K V A T P G A K T I D E V A E F L G S S A
UniRef90_G2SNI1            Y E I H T P N V K S I D E L C A F L N T I E E
UniRef90_I0APF8            V D T D P A D T A A F V E H Y G R E L L
UniRef90_A0A022M644       D E A E T E M T K V A T P N A K T I K E V A A L D L P E
UniRef90_H1LJH0            E V K V E A K E E L K E L Q K V E T P N V R T I E E L V S F F N T P
UniRef90_I7KW60            Q S V D T P Q K H T I D E L S E F L K L P A
UniRef90_M7PEI6            P L T E V H T P N V H T I E D I C E F L H S P Q
UniRef90_R5GQX1            L K T L K I I D T P N E K T I E D L A A L L A I P T
UniRef90_A0A024TF19       V H T P K V K T I A E L V D F L K I D I
UniRef90_D5T0P2
UniRef90_Q7P0J3

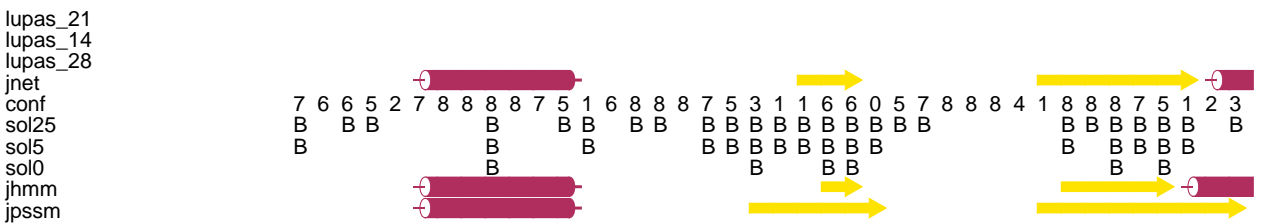
```



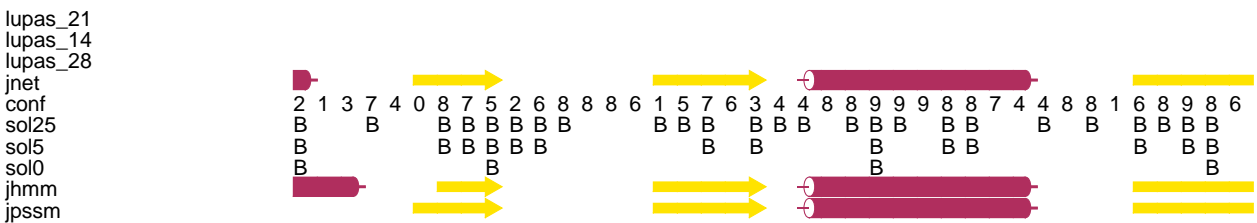
UniRef90\_UPI0003616C16 T G K V K L L V V K G A D G G L V G I A L R G D H H Q L N E I K A A K H P K A S P  
UniRef90\_U1FUW8 D E I T K S M I F K V D G E F I M V L L V R G D H H E L N D V K L K A Y F E T D H  
UniRef90\_UPI000375ABA5 Q T T V K S L V L A T D D T Q I W L L L L R G D H H E L N A V K A E K H P W A E P  
UniRef90\_D3SEH3 A Q T V K T L V V A A V D A D L V A L I L R G D H H E L N A V K A E K H P W A E P  
UniRef90\_UPI00047AF1F4 D R Q I K T L V H L L D G K L T L V L L R G D H H A L N E Q K L L D A T G A T E  
UniRef90\_K2FPG4 E R G L K S I M F K V D D E Y V L V V T R G D H H E V N D V K V K N F M D A K V  
UniRef90\_J1SDQ4 E Q S A N C V V V R G G E T T L A A C V V L S H T R V D N G V V R R Q L G V A R K  
UniRef90\_W1N3A5 E K T I K T L M V R G E Q G G L V A L L V R G D H E L N E V K A E H L E E A T P  
UniRef90\_R5XA78 G Q F A K T L I Y Y A D G K T V A V V V R G D D R D V N E T K V A N A I G D A E  
UniRef90\_Q5LQJ4 E R C I K S L L F N V D G R Y V L V L V R G D H H E A N E V K V K N V L D A T V  
UniRef90\_H3SGY6 S A I I K T L I Y T A D G A P I A V L V R G D H H E V N E V K V K N C L G A E A  
UniRef90\_UPI000289B7D3 S Q I A K T I A C R A D G Q I V L A L V R G D H H E L N E I K L K N L L G A E V  
UniRef90\_UPI000289B7D3 S E L I K V L V Y K T A T P Q P L V I I A R E S T E I Q A N L I A K K L I G L K E  
UniRef90\_E7MPW5 K K F V K T L I Y N V D G K A V A V M V R G D D R D V N E T K L R K L L E A N S  
UniRef90\_UPI000364075A S R T V K S L V L A T D E K Q W L L L V R G D H H L N E V K A G K I E F L K A D  
UniRef90\_Q2YBW3 E Q T V K T L A V M A N G G M H L L L L R G D H H L N E T K V K N I F L S D  
UniRef90\_L0IRE9 E K T V K A V M L K E D G E N F V M A L I R G D D L D V N S V K L G N A I G A K E  
UniRef90\_UPI00046F7B58 E Q I I K T L I Y K A G G D I V A V L V R G D H H E L N E V K L G K Y L G A E D  
UniRef90\_K0D7I3 A H L A K T I I F V A D E T F I A V V T T G D F E V N P V K V Q N F L H A D T  
UniRef90\_H3NSF1 A S S I K T L F V E D A E G A L V A L V L R G D H H Q L N E I K A E K I A G S Q P  
UniRef90\_UPI0002FFE717 A G A L M V L F A Q S Q L L D L N R L A D L I G R R  
UniRef90\_F5RF13 D R T V K S I V L K E G K T E L W L L M L R G D H H E L N E V K A S K L A G L K E  
UniRef90\_U3HF12 E D A V G T L L V F Y P R N Q L L D L N R L A Q E L T G R K  
UniRef90\_R8AYM0 D Q F I R A T L L I D I N G V V M A V H G F N S S L D M D A V L Q Q E L T G R R  
UniRef90\_B8FR28 S D L V K S L L Y Q G D D K L F L I L V R G D R E I N E I K V N N A L I G F I N  
UniRef90\_R7D0Q0 N G T R K S L A L T I D S E G K P V V A L V P G D H H E L N E C K A E H V F G K G  
UniRef90\_E1QG03 K S I A K T M I Y I A D G K A V A A M V R G D R E V N E V K L K N I L G A D V  
UniRef90\_UPI000345F140 G T S A N C V V V R G G E T S Y A A C M V L A T T D R A D N G T I R R H T G A R K  
UniRef90\_UPI0004774B03 S E L I K V L V Y K T A T P Q P L V I I A R E S T E I Q A N L I A K K L I G L K E  
UniRef90\_UPI0003B7693A S K I I K S F F V K T E S G T Y A A C M V L A T T D R A D N G V I R R H L G V R K  
UniRef90\_D5X593 Q Q T L K S V V L A V D G D K P V L L V R G D H A V N E V K V S K L A G L A S  
UniRef90\_A3JP88 D Q I A K S I L F Q G Q S G D L Y L F V T A G A N E V H P A K A T E L A G E V  
UniRef90\_A5F340 E K T V K T L F V K E I D A P I V A L I R G D H H E L N E I K A E K L A E A S P  
UniRef90\_UPI000375563 A Q V V K T L L V E G Q Q A P V V A L L V R G D H H N L N E I K A E H I E G A S P  
UniRef90\_G2KUC1 S Q I I K S L L Y M D E K F V L L I R G D Q E V N P A K V K N H F H A D E  
UniRef90\_K2CG80 W Q Q M K D V L Y V D E K R F I L A V I R G D L E V N E I K L M H A V K A Y Q  
UniRef90\_A8IHU9 S A I V K S I V L M A G D A P L V A V V L L Q D R V D E R K I A D L L N L A R  
UniRef90\_A4G8R0 A Q T V K S I V L T V E K E D I W L L L L R G D H H E L N E V K A A K I P G L T D  
UniRef90\_V2H4K0 E R T V K S I V L A T E G P Q I W L L L L R G D H H L N E I K A S K V P G L A E  
UniRef90\_UPI00034A8E30 E A G A N C I V V R G G E V R R A A C V V L A T T R L D N G A V R R R L D V R K  
UniRef90\_Q99XY4 T Q T I K T L L F V A D N E P V V A L L V G N D H I N T V K L K N Y L A A D F  
UniRef90\_I3I979 E Q T V K T L I V A D K T P L V A L L V R G D H H E L N E I K A E K L T G A A P  
UniRef90\_D0KYG5 T K I L K T L L V R G K E T P V V A I I L R G D H H E N D I K A T K H P L I A D P  
UniRef90\_F5T009 S Q C L K T L L V E G V E S V V A L V R G D H H E L N E I K A E K H L V A A P  
UniRef90\_C4RIF2 D V I S A N C V V V R E G E T R Y A A C V V L A T T R A D V N G V A R A L D V R K  
UniRef90\_D7CM40 T R Q V K T M V Y V I A D G V P V A V L V R G D R E V N E I K V K N Y L N A N F  
UniRef90\_A1APU5 D R T I K A L V Y S S T T G E H V M A I L R G D H H E L N E I K L K N C L G W D E  
UniRef90\_K8Z9A1 Q K I V K S M L M M V D G K P V L A L V Q G T D E V N D V K L G N I F A G S D  
UniRef90\_UPI000473E41B E K T I K S I V L K P E G K E V W L L L L R G D H N L N E V K V S K L D G T A G  
UniRef90\_UPI000399C79F A S A N C V V V L R G G E E R L A A C L V L A T T R A D N G V L R K Q M D V R K  
UniRef90\_UPI0004677536 N V I G A A K A V L L E D E K G R I L A V I S A D T L L D L N A V N R Q M D R E  
UniRef90\_C8WAK5 A A T R K A L A L V D G N G K P V V C F V P G T H E L N E V K A E H A F G E Y H  
UniRef90\_V9H228 K K F A K T L I Y N A D G K I V A V M V R G D R E V N E V K V S N A L G V V N  
UniRef90\_G2SNI1 D R E I K T L L F I A D E K I V V V L M H G N D E V N E V K V K N Y L S C D F  
UniRef90\_I0APF8 E V C A K S R V Y I S N G E A V L I L M Q G N D E V N E T K L E K V L G S  
UniRef90\_A0A022M644 E Q S A N C V V V R G G T S R L A A C V V L S T T R V D N G V V R R Q L D A R K  
UniRef90\_H1LJH0 T K T I K S M L Y I S D E K P V M V L V R G D Y D V N E V K V K N Y L K A D F  
UniRef90\_I7KW60 Q K F A K T L I Y K A D D K V A V M V R G D R D V N E T K V I N Y L K C I N  
UniRef90\_M7PEI6 E R C L K T L L V E G E K N T V V A L V V R G D H D L N E I K A E K H L V A A P  
UniRef90\_R5GQX1 E K S C K A V V Y R N H D S Y V V V F I R G D L D I N E T K L T N Y L G C  
UniRef90\_A0A024TF19 I D V N K L H S F V Q S K A  
UniRef90\_D5T0P2 A S L A K T I T F L V D G Q L V A V V T T G D F E V N P V K V Q N F L H A D A  
UniRef90\_Q7P0J3 K Q T V K A V V V E G E Q D E A V L M L V R G D H E L N E V K A Q K V A G I K N



UniRef90\_UPI0003616C16  
UniRef90\_U1FUW8  
UniRef90\_UPI000375ABA5  
UniRef90\_D3SEH3  
UniRef90\_UPI00047AF1F4  
UniRef90\_K2FPG4  
UniRef90\_J1SDQ4  
UniRef90\_W1N3A5  
UniRef90\_R5XA78  
UniRef90\_Q5LQJ4  
UniRef90\_H3SGY6  
UniRef90\_UPI000289B7D3  
UniRef90\_M2QCM5  
UniRef90\_E7MPW5  
UniRef90\_UPI000364075A  
UniRef90\_Q2YBW3  
UniRef90\_L0IRE9  
UniRef90\_U2SVL4  
UniRef90\_UPI00046F7B58  
UniRef90\_K0D7I3  
UniRef90\_H3NSF1  
UniRef90\_UPI0002FFE717  
UniRef90\_F5RF13  
UniRef90\_U3HF12  
UniRef90\_R8AYM0  
UniRef90\_B8FR28  
UniRef90\_R7D0Q0  
UniRef90\_E1QG03  
UniRef90\_UPI000345F140  
UniRef90\_UPI0004774B03  
UniRef90\_UPI0003B7693A  
UniRef90\_D5X593  
UniRef90\_A3JP88  
UniRef90\_A5F340  
UniRef90\_UPI000375563  
UniRef90\_G2KUC1  
UniRef90\_K2CG80  
UniRef90\_A8IHU9  
UniRef90\_A4G8R0  
UniRef90\_V2H4K0  
UniRef90\_UPI00034A8E30  
UniRef90\_Q99XY4  
UniRef90\_I3I979  
UniRef90\_D0KYG5  
UniRef90\_F5T009  
UniRef90\_C4RIF2  
UniRef90\_D7CM40  
UniRef90\_A1APU5  
UniRef90\_K8Z9A1  
UniRef90\_UPI000473E41B  
UniRef90\_UPI000399C79F  
UniRef90\_UPI0004677536  
UniRef90\_C8WAK5  
UniRef90\_V9H228  
UniRef90\_G2SNI1  
UniRef90\_I0APF8  
UniRef90\_A0A022M644  
UniRef90\_H1LJH0  
UniRef90\_I7KW60  
UniRef90\_M7PEI6  
UniRef90\_R5GQX1  
UniRef90\_A0A024TF19  
UniRef90\_D5T0P2  
UniRef90\_Q7P0J3



UniRef90\_UPI0003616C16 A A E V A D F V C G A N E N D H H L S  
UniRef90\_U1FUW8 L Q D L N N I V V G A N E D G Y H L  
UniRef90\_UPI000375ABA5 V A V M A D W I C G A N Q E D A H I  
UniRef90\_D3SEH3 V L G M S D M V V G A N E N G H H L K  
UniRef90\_UPI00047AF1F4 L R G R R N M F T G A N R D G V H L R G V D V A R D I P S P A W A D  
UniRef90\_K2FPG4 V E P L V N V S C G A N E E G Y  
UniRef90\_J1SDQ4 V A D T P Y A L I G S G S R R R G K L I L P G K A L A E L P G A T  
UniRef90\_W1N3A5 V A L M S D F G A G A N T D G K  
UniRef90\_R5XA78 V V D Q R N V I V G A N K T G Y H I  
UniRef90\_Q5LQJ4 V A A I T N G V C G A N E E G Y  
UniRef90\_H3SGY6 V A A M S E G I A G G N A A D V H V K  
UniRef90\_UPI000289B7D3 L R N A A S L V I G A N Q E D A  
UniRef90\_M2QCM5 I T N S D S V Y V H A L S S S E T I F L T G K D I Y A Y L  
UniRef90\_E7MPW5 V L Y M Y N F V V G A N K T S Y  
UniRef90\_UPI000364075A V A N M S D F V C G A N D V I G Y  
UniRef90\_Q2YBW3 V A T M S N F V C G A N E E D Y H L  
UniRef90\_L0IRE9 V I D R S R V I V G S G I R G S K L L A A A D I L G S L P T A E V V S  
UniRef90\_U2SVL4 V K Y V R N F A L G A N E E H H Y I N V N L E D I V  
UniRef90\_UPI00046F7B58 V A A M T E G T G A G E R D Y H L R  
UniRef90\_K0D7I3 A A D L V N F A G A N  
UniRef90\_H3NSF1 A S V L I N F V C G A N E D D K H F R  
UniRef90\_UPI0002FFE717 L L Q Q P L L L I S A G E P G L L L E I T R E D F Q R L L  
UniRef90\_F5RF13 V A N M S D F V T G A N E V D A H L  
UniRef90\_U3HF12 L L Q E P L L L I E S G H A G V L L E L A A E D F R Q L L  
UniRef90\_R8AYM0 V L S Y P R A L M T S G N D H T L I E M D G R A L  
UniRef90\_B8FR28 V P L M A K A V C G A N  
UniRef90\_R7D0Q0 L K E S K S W A C G A N E I D Y H F  
UniRef90\_E1QG03 L A Q I P W L V V G A N K A D A  
UniRef90\_UPI000345F140 V A A E P E V V V G S G L R R S K L L V P G K L L T E L  
UniRef90\_UPI0004774B03 V A E A E A V V V G S G V R R S K L T V P G R M L L A L  
UniRef90\_UPI0003B7693A V L D C  
UniRef90\_D5X593 V A N M S D F V V G A N  
UniRef90\_A3JP88 L T E F D I V W A A A G T P N H V F S S T P T Q L L A L S G A  
UniRef90\_A5F340 V A V M N D F G A G A N I D G K  
UniRef90\_UPI0003757563 A E K L A D F V C G A N E T G K H L S  
UniRef90\_G2KUC1 V Q S  
UniRef90\_K2CG80 L R T I K N A Y T G A N K K H K  
UniRef90\_A8IHU9 V T R M T R L Y G G G D P D M E V E A A G A R L  
UniRef90\_A4G8R0 V A A M S D F V C G A N E V D  
UniRef90\_V2H4K0 V A N M S D F V C G A N E R D Y H L  
UniRef90\_UPI00034A8E30 V A A C P L V V I G S G V R R S K L I V P G A A L A G L  
UniRef90\_Q99XY4 V Q N L T N A V A G A N K D G F H M  
UniRef90\_I3I979 A A H L A D F V C G A N K D G F H L  
UniRef90\_D0KYG5 A A F V S D F V C G A N Q D D K H L  
UniRef90\_F5T009 V V A T P Y V I V G S G V R H G K I A L P G P A L  
UniRef90\_C4RIF2 V Q S M N N F V C G A N E D D Y  
UniRef90\_D7CM40 L R G M A N A V I G A N E K D M  
UniRef90\_A1APU5 V A D L Q N V M V G A N R A G Y  
UniRef90\_K8Z9A1 V A R M S D F V C G A N T E D Y H F  
UniRef90\_UPI000473E41B V A A A P E L V I G S G I R G S K L L V P G D L M A A L P  
UniRef90\_UPI000399C79F L L R R E S L L L D S G D D T Q L L H I N R D D F Q Q V L E A T P L D P L E V D  
UniRef90\_C8WAK5 L E D T Q W W L C G A N K A D Y H L  
UniRef90\_V9H228 I V N M Y N F I V G A N K T G Y H I E  
UniRef90\_G2SNI1 L Q D R N N L F S G A N K N D Y H I G G I D L K R D V P Q V Q Y A D  
UniRef90\_I0APF8 V V D L P Y V L V G S G R R R G K L L V P G K A F T E I  
UniRef90\_A0A022M644 V A N M K N A V V G A D E N G Y  
UniRef90\_H1LJH0 V K Y I E N M I I G A N E  
UniRef90\_I7KW60 A A H V A D F V C G A N E D E K H L  
UniRef90\_M7PEI6 L Q N T N N L S C G A N K E E Y  
UniRef90\_R5GXQ1 L V H D D A I Y C G A G A L H R V V A L S P L Q L L Q  
UniRef90\_A0A024TF19 A A D L V N F T A G A N  
UniRef90\_D5T0P2 V A K M A D F V I G A N E D D  
UniRef90\_Q7P0J3



UniRef90\_UPI0003616C16  
UniRef90\_U1FUW8  
UniRef90\_UPI000375ABA5  
UniRef90\_D3SEH3  
UniRef90\_UPI00047AF1F4   
UniRef90\_K2FPG4  
UniRef90\_J1SDQ4  
UniRef90\_W1N3A5  
UniRef90\_R5XA78  
UniRef90\_Q5L0J4  
UniRef90\_H3SGY6  
UniRef90\_UPI000289B7D3  
UniRef90\_M2QCM5  
UniRef90\_E7MPW5  
UniRef90\_UPI000364075A  
UniRef90\_Q2YBW3  
UniRef90\_L0IRE9   
UniRef90\_U2SVL4  
UniRef90\_UPI00046F7B58  
UniRef90\_K0D7I3  
UniRef90\_H3NSF1  
UniRef90\_UPI0002FFE717  
UniRef90\_F5RF13  
UniRef90\_U3HF12  
UniRef90\_R8AYM0  
UniRef90\_B8FR28  
UniRef90\_R7D0Q0  
UniRef90\_E1QG03  
UniRef90\_UPI000345F140  
UniRef90\_UPI0004774B03  
UniRef90\_UPI0003B7693A  
UniRef90\_D5X593  
UniRef90\_A3JP88  
UniRef90\_A5F340  
UniRef90\_UPI0003757563  
UniRef90\_G2KUC1  
UniRef90\_K2CG80  
UniRef90\_A8IHU9  
UniRef90\_A4G8R0  
UniRef90\_V2H4K0  
UniRef90\_UPI00034A8E30  
UniRef90\_Q99XY4  
UniRef90\_I3I979  
UniRef90\_D0KYG5  
UniRef90\_F5T009  
UniRef90\_C4RIF2  
UniRef90\_D7CM40  
UniRef90\_A1APU5  
UniRef90\_K8Z9A1  
UniRef90\_UPI000473E41B  
UniRef90\_UPI000399C79F  
UniRef90\_UPI0004677536   
UniRef90\_C8WAK5  
UniRef90\_V9H228  
UniRef90\_G2SNI1   
UniRef90\_I0APP8  
UniRef90\_A0A022M644  
UniRef90\_H1LJH0  
UniRef90\_I7KW60  
UniRef90\_M7PEI6  
UniRef90\_R5GQX1  
UniRef90\_A0A024TF19  
UniRef90\_D5T0P2  
UniRef90\_Q7P0J3

T K P

S A E

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

▶  
▶  
▶

1 5 7 8 8 9 9  
B  
B