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                         1         10        20        30        40
QUERY                    T K V R G L I E I I S N A A E Y E N I P I R H H E D N L L R Q L A Q K V P H K L
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UniRef90_I1G8L0                  E L F R V F S L S S E F K Y I T V R
UniRef90_J7SBR3            T I L E L F R V F A L S N E F K L L P V R Q D E K L E L G K L L E R V P I P V
UniRef90_B4ITW8          T K V R G L L E I I S S A A E Y E D V V V R H H E E Q V L R T L S Q R L P N K L
UniRef90_L1K0L5                  E I L R I F S L A G E F K N M V V R E E E K I E L L K L A D R V P I P I
UniRef90_D8R544                  E L C R L F S Q S E E F K N V G V R E E E K L E L A K L L D R V P V P V
UniRef90_UPI0003594048          E L F R V F S L S S E F K Y I S V R E E E K L E L M R L L E R V P I P I
UniRef90_E9GW45          T K I R G L L E I I S A A A E Y K S V P V R H G E E A V L R Q L A T R L P N K P
UniRef90_R7V2A9          T K I K G L I D I I A N A A E Y E H I P I R H N E D S L L R Q L A Q R L P N K L
UniRef90_I1BMR8          T K L R G L L E I V S S A T E F D N I P I R R H E E T I L Q R I Y D R V P I K L
UniRef90_F6ZLB7          T K I R G L I E I I S N A A E Y E S I P I R H H E D S T L K Q L L P K V Q H K P
UniRef90_U9UDC4          T K L K G L L E I L S S A A E F E S I P V R H H E D T V L K K I Y D R L P V K L
UniRef90_T1KEB6          T R L K S L I E I I S S A T E Y E S I P I R H R E D A I L K Q L L S K V P N K I
UniRef90_U5H900          S G L I E L F R V F S I S E E F K N V P V R A E E K L E L A K L L E R V P I P I
UniRef90_E5SVP8                  E L R V F S L S S E F K N I M V R E E E K L E L L K L A E R V P I P I
UniRef90_G4TMC1                  E L F R V F A L S N E F R L I P V R Q D E K L E L S K L L E K V P I P V
UniRef90_G7IJ55                  E L C R L F S L S E E F K Y V T V R Q D E K M E L A K L L D R V P I P I
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UniRef90_S7N1K9          T K V R G L I E I I S N A A E Y E D I P I R H C E D N L L R Q L A Q K
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UniRef90_D8LHW4                  E I F R L F S L S G E F S H H I V V K D E E K L E L G R L A S R V P I P I
UniRef90_B8AJU4                  E L C R L F S L S E E F K Y V S V R Q D E K M E L A K L F N C V P I P V
UniRef90_W7TFU8          T K V K G L L E I L S S A S E Y G D L A I R Q G E E R V L Q Q L A T R L P Q K L
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UniRef90_G8YNQ0                G V L R V F A M S G E F K L I P V R Q E E K M E I S K L S E M C P I P I
UniRef90_W6MSK2          T K L K G L L E I L S A S F E E S I P I R H H E Q A I L T R I Y N R V P V K A
UniRef90_M3J5W3                  E V L R V F A N S G E F K Y I P V R Q E E R F E I S K L M E K C P I P I
UniRef90_D2UY12                  E L F R L F S L S D E F S Q M T V R Q E E K L E L S K L I H S V P I P I
UniRef90_K8EMU5                  E L C R L F S L A E E F K F V T V R Q E E K I E L A T L A E R V P I P V
UniRef90_A3GEY0                  E I L R V F A S S G E F K F I P S R Q E E K L E V A K L M E K C P I P V
UniRef90_M7NW84                  E L F R I F C L S D E F K Y I P V R E E E K L E L Q K L L D R V P I P I
UniRef90_M2V2U8                  E L F R V F A L S E E F K Y I P V R Q D E K L E L A K L L G K V P I P V
UniRef90_H3F748          T K Q R A L I E I I S N A S E F A T M P I R H K E D T V L K Q L A D R L P G Q Q
UniRef90_Q6BI73                D I L K I F S M S G E F K F I P V R Q E E K I E V A K L L E K C P F P I
UniRef90_UPI0002C31A94     T M R D I Y Q L F S L S E E F K Y V T V R Q D E K M E L V K L L E R V P I P V
UniRef90_D8UGT6                  E L L R L F S L A E E F R Y M V V R D E E K L E L A K L V E R V P I P V
UniRef90_R9AIP6             S L I E L F R V F A L S N E F K L I P V R Q E E K L E L Q K L M E R V P I P V
UniRef90_W3XNC0          T T I E L F R V F S Q S A E F K L I P V R N D E K V E L A K L L Q R V P I P V
UniRef90_A8JI25                  E L R L F S L A E E F R Y M V V R D E E K L E L A K L V E R V P I P V
UniRef90_B6K231          T R M K G L L E I I S S A A E Y E I L P I R K Y E D I I L D R I H R N L P V R L
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UniRef90_G3B9C0          T K L R G I L E I V C S S A E E P M R L G D S T N L Q K I Y N Q V P V K S
UniRef90_F0ZAL9          T K R K G I I D I L S N S P E F N V I P I R H R E E Q I S K M A S H L P L K I
UniRef90_M7T4M2          T K L K G I L E I V T S A T E F E S I Q I R R H E D N L L R R I Y D R V P V K M
UniRef90_W1P8W5          T K L K G L I E I L A S A P E Y T D L P I R P G K E E M I R K L I N H Q R F S V
UniRef90_K0KLL9          S K L K S I L E I I S A S E F D A L P I R Q H E S A I L N K I Y N R V P I K S
UniRef90_C4QXA9          T K L K G M L E I V A S A A E F D S I P V R K H E E G I L N R L Y D Q V P I K C
UniRef90_UPI0002C3321B   T K M K G L L E I L T H A S E Y S Q L P I R P G E E E V I R R L I N H Q R F S F
UniRef90_M2MTT0          T K L K G I L E I V T A A T E F E D I Q I R R H E G V L Q R I Y D R V P V K L
UniRef90_A0A058Z466            R G L L S I L S A A S E S D L P M R H R E D L L L E R L R D R V K L K L
UniRef90_B5YNG2          T K V K G M L E I V S H A S E S S L P I R Q G E E K A L Q L L A R N L P S K L
UniRef90_F2RXM4          T K L K G M L E I V T S A T E F E S I Q V R R H E D Y I L R R V Y D R V P V K I
UniRef90_Q0UUX7          T S L K G V L E I I T A A T E F E D I Q I R R H E D H I L Q R I Y D R V P Y K M
UniRef90_N1JCI1          T K L K G I L E I V T S A T E F E S I Q V R R H E S L L K K I Y D K V P V K L
UniRef90_R9P3I7          K M R G V L E I I T A A T E F E D I P I R Q H E D V L L K K I Y D R C P V K L
UniRef90_Q55CI8          T R R R G I M D I I S N A P E F N S L P I R H R E D Q I L M K L A S H L P Q K I
UniRef90_W9YLY4          T K L K G M L E I V T S A T E F E D I Q M R R H E D H I L R R I Y D R V P V K M
UniRef90_Q4T4J7                                                K K L A Q K V P H K L
UniRef90_G8FUG0          T N R K G I L E I L S T A P E F E Q I P I R H R E E Q M L Q K M A A H L P L K L
UniRef90_B7G2L8          T K I R G I M E I L S A A W E F S E F P I R F G E D R T L K S L A R T L P Y T P
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                                  50        60        70        80
QUERY                N N P K F N D P H V K T N L L L Q A H L S R M Q L S A E L Q S D T E E I L S K A
UniRef90_W5KE81                                      L S S A R L Y Y N T N C I T I R L S R N F
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UniRef90_UPI0002658A31 T D P K F S D P H V K T N L L L Q A H L S R I Q L S A E L Q M D T E L V L K K C
UniRef90_B3SBW2      P D L K F N D S H N K T N L L L Q A H M S R I Q L P P E L Q M D T E D I L N K A
UniRef90_T1JH32      P N P K L N N P H V K T N L L L Q A H L S R M Q L S A E L Q S D T E D I L S K A
UniRef90_I1G8L0                          E V N L L Q T Y I S Q L K L D F A L M S D M V Y I S Q S A
UniRef90_J7SBR3      K E   S V E E P A A K I N P L S D I Y V A Y C D I G F A L V A D M V Y V Q Q S A
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UniRef90_E9GW45      Q N A K F S D P H T K T F L L L Q A H L S R V Q L P A E L Q Q D T E L I L G K A
UniRef90_R7V2A9      S E P R F N D P K T K T N L L I Q A H L S R M Q L S A E L Q S D T E L I L S Q A
UniRef90_I1BMR8      A S P K F N T P R I K T N I L L Q A H F S R V Q L P P D L Q S D Q T L I L E R V
UniRef90_F6ZLB7      Q N L R F T D P H I K T N L L I Q A H L S R L Q L P A E L Q S D T E Q I L G K V
UniRef90_U9UDC4      G N P K F N S P H I K T N I L L Q A H F S R T Q L P P D L Q S D Q T A V L G K V
UniRef90_T1KEB6      Q N P K Y T D P H L K T N L L F Q A H L S R M T L P A E L Q S D T E A I L T R S
UniRef90_U5H900      K E   S V D D P S A K I N V L L Q S Y I S N L K L D F A L V A D M V Y V T Q S A
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UniRef90_UPI0002B46A67 E N P K C T D P H V K A N A L L Q A Y F S R Q S V G G N L A L D Q R E V V I S A
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UniRef90_F4NVU1      E T P N F L D P H F K T N I L L Q A H F S R L Q L P P D L E S D Q K F I L E R I
UniRef90_S7N1K9                                  A H L A R M Q L S A E L Q S D T E E I L S E A
UniRef90_S7N1K9                                  A H L A R M Q L S A E L Q S D T E E I L S E A
UniRef90_T1EDD5      Q S P K F N D P H V K T N L L L Q A H L S R M Q L A P E L M T D T E E I L G K A
UniRef90_J6F1Q0      A K P D F H S P Y F K T Y L L L Q A H F S R L H L P P D L V I D Q A A I L G K V
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UniRef90_L8GWB5      K E   T M E E P S A K V N V L L Q A Y V S R L K L E F A L V S D M V Y V T Q S A
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UniRef90_D8LHW4      K E   S V D E P T A K V N A L L Q A F I S Q L K L E G A L V S D M T Y V Q Q S A
UniRef90_B8AJU4      K E   S L D E P S A K V N V L L Q A Y I S Q L K L E G S L S S D T V Y I R Q N A
UniRef90_W7TFU8      E G A R F T E T H V K A L V L L Q A H F S R M V L P T E L R Q D Q R S V V G E A
UniRef90_UPI000161D8CD K E   S L E E S S A K V N V L L Q A Y I S Q L K L E F A L Q S D M V F I S Q S A
UniRef90_A9UYS5      K E G   I E E P T A K V N V L L Q A Y I S Q L K L E G A L M S D M V Y I T Q S A
UniRef90_G8YNQ0      R E N P   G D N L A K V N V L L Q T Y I S R L T L D F A L M A D M V Y I T Q S A
UniRef90_W6MSK2      T E V N Y E S P A F K T F L L L Q A H F G R L S L P P D L A S D Q K S V L D R V
UniRef90_M3J5W3      K E A P   N E P V A K I N I L L Q T Y I S R L S L E G A L I S D M I Y I T Q S A
UniRef90_D2UY12      K E S A   D D P S A K V N V L L Q A Y I S R L R L N F A L I A D M T Y I T Q S A
UniRef90_K8EMU5      K E   S I E E S T A K I N I L L Q A Y I S N M S L E F S L S A D M V Y I T Q S A
UniRef90_A3GEY0      K E R P   N E L A K V N L L Q T Y I S N L K L D F A L M A D M T Y I S Q N A
UniRef90_M7NW84      K E G A   E E P S A K I N T L L Q A Y I S K L K L D F A L I S D M I Y V T Q S A
UniRef90_M2V2U8      K E G   V E E P Q A K I N V L L Q A Y I S R L K L E G A L M A D L V Y V T Q S A
UniRef90_H3F748      K N Q K F T D P H V K V N L L I H A H L T R I Q L S A E L N K D M E A V V L K S
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UniRef90_UPI0002C31A94 K E   S L E D P S C K I N V L L Q A Y I S Q L K F E F S L T Q D M V Y V T Q S A
UniRef90_D8UGT6      K E   G L D E P T A K V N V L L Q A Y I S N L K L E G A L A S D M V Y V T Q S A
UniRef90_R9AIP6      K E   S V D E P A A K I N V L L Q A F I S D L R L D G A L V S D M V F V Q Q S A
UniRef90_W3XNC0      K E   S I E E P M A K I N V L L Q A Y I S N L K L E G A L M A D M V Y V T Q S A
UniRef90_A8JI25      K E   S L D E P T A K V N V L L Q A Y I S N L K L E G A L A S D M V Y V T Q S A
UniRef90_B6K231      S A P N Y Q E P H C K A F I L L A A H F S R F Q L P A N L V L D Q K T V L K Y A
UniRef90_C8VMF3      S Q V A F D S P H F K S F V L L Q A H F S R M Q L P I D L A K D Q E V I V S K A
UniRef90_G3B9C0      S N P D F E S P Y F K T F I L L Q A H F S R L Q L P L D L R A D L V F I L K Q V
UniRef90_F0ZAL9      D K P F A Q I A T K V N V L L Q A H F S R K P I S A D L Y Q D Q K F V L E N S
UniRef90_M7T4M2      S D A A Y D S P H F K A F V L L Q A H F S R M Q L P I D L A K D Q E A I V S K V
UniRef90_W1P8W5      E K P Q Y T D P H L K A N A L L Q A H F S R H T V V G N L A A D Q R E V I L L S A
UniRef90_K0KLL9      S E S N F E S P Y L K A F V L L Q A H F S R L S L P P D L A S D Q K F V L E K V
UniRef90_C4QXA9      S G A S I E S P R V K A L I L I Q A H F S R T K L T P E L H Y D Q Q F V R K M
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UniRef90_M2MTT0      S D V N F E S P H F K A F V L L Q A H F S R M Q L P T D L A K D Q E V I L R K V
UniRef90_A0A058Z466  P D R A F N D P H T K A F L L L Q A H F S R F A L P A D L E A D R K L V V G R A
UniRef90_B5YNG2      P D S A F Q D P R T K A L L L L H C H F S R K A L S S D L R T D Q K Q V L C E S
UniRef90_F2RXM4      A E P A F D S P H F K A F V L L Q A H F S R L Q L P I D L A K D Q E I I V S K A
UniRef90_Q0UUX7      Q E P N F E T P H F K A F V L L Q A H F S R M Q L P I D L A K D Q E I V I R K V
UniRef90_N1JCI1      A Q P S Y D S P H F K A F I L L Q A H F S R M Q L P I D L S K D Q E I I L T K V
UniRef90_R9P3I7      E G L D L S P Y H K V F V L L Q A H F G R L S L P V D L E M D Q V Y I V G K V
UniRef90_Q55CI8      D K P N Y Q E I S T K V N V L L Q C H F S R E S I S A D L Y Q D Q K F I L E N A
UniRef90_W9YLY4      S E P A Y D S P H F K A L V L L Q A H F S R M Q L T I D L A K D Q G E V I L G K V
UniRef90_Q4T4J7      N N P K F N D P H V K T N L L L Q A H L S R M Q L S A E L Q S D T E E I L S K A
UniRef90_G8FUG0      D A P N Y A E V N T K V N V L L Q A H F S R S P I S A D L Y L D Q K F I L E K A
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                              90            100           110          120
QUERY                I R L I Q A C V D V L S S N G W L S P A L A A M E L A Q M V T Q A M W S K D S Y
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UniRef90_UPI0002658A31 I R L I Q A C V D V L S S N G W L T P A L A A M E L A Q M V T Q G M W S K D S Y
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UniRef90_T1JH32      V R L I Q A C V D V L S S N G W L S P A L A A M E L A Q M V T Q A M W S K D S Y
UniRef90_I1G8L0      G R L L R A I F E I C L H R G W A Q L T D R T L S L C K M I D K R M W L S M T P
UniRef90_J7SBR3      G R I L R A M L E I C L K R G W A V P A K A A L D L C K M V E R R M W G S M T P
UniRef90_B4ITW8      I R L I Q A C V D V L S S N G W L S P A V A A M E L A Q M V T Q A M W S K D S Y
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UniRef90_D8R544      G R L M R A I F E I V L K R G W A Q L A E K A L N L C K M V Q R R M W S T Q T P
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UniRef90_E9GW45      I R L I Q A S V D V L S S N G W L S P A V A A M E L S Q M V T Q A M W S K D S Y
UniRef90_R7V2A9      I R L I Q A C V D V L S S N G W L T Q A L A A M E L A Q M V T Q A L W K R D S Y
UniRef90_I1BMR8      V P L L Q A C V D V I S S N G W L S P A L S T M E L S Q M S V Q A I W D S D S P
UniRef90_F6ZLB7      I R L I Q A C V D V L S S N G W L S P A L A A M E L A Q M V T Q A M W S R D S Y
UniRef90_U9UDC4      I P L I Q S I V D V I S S S G W L K P A L A S M E L A Q M C V Q A L W D S E S P
UniRef90_T1KEB6      I R L I Q A C V D V L S S N G W L S P A L V A M E L A Q M V T Q A V W N K D S Y
UniRef90_U5H900      G R I L R A I F E I C L K R G W A A L T H K A L A L C Q M V E K R M W G S M T P
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UniRef90_A9RTW1      S R L I Q A M V D V I S S S G W L H P A L A A M E L S Q M V T Q G L W E R D S Y
UniRef90_UPI0002B46A67 S R L L Q A M V D V I S S N G W L S L A L L A M E V S Q M V T Q G L W E R D S M
UniRef90_V2YTF9      L T L L S A C V D V M S S N A W L S A L G A M D L A Q M C V Q A V W D R D S P
UniRef90_D8QDY7      L N L L S A C V D V M S S N A W L N A L G A M D L S Q M C V Q A M W E T D S P
UniRef90_UPI0004411E9A L T L L S A C V D V M S S N A F L G A L G A M D L S Q M C V Q A I W E T D S P
UniRef90_I0Z225      V R L L Q A T V D V I S S S G W L N P A L A A M E M S Q M V S Q A L W E R D S V
UniRef90_G0SXF7      I I T L L S A C V D V A A S S G Y L N A V G A M E L A Q C V T Q A T W D S D S P
UniRef90_T1HLL0      I R L M Q A C V D V L S S N G W L A P A V A A M E L A Q M L T Q A M W S K E S Y
UniRef90_F4NVU1      V R L I Q A C I D V I S S N G W L T P A L S A M E L A Q M S I Q A L W E R D S P
UniRef90_S7N1K9      I R L I Q A C V D V L A S N G W L S P A L A A M E L A Q M V E Y                E
UniRef90_S7N1K9      I R L I Q A C V D V L A S N G W L S P A L A A M E L A Q M V E Y                E
UniRef90_T1EDD5      Y R L I Q A C V N V L S S N G W L A P A L A A M E L S Q M V T Q A M W K K D S Y
UniRef90_J6F1Q0      T G L L S A C V D V M S S K S Y L N C L G A M D L S Q M C V Q A I W D R D S P
UniRef90_J3L8U1      H R L L Q A M V D V I S S N G W L T L A L N A M E L S Q M V T Q G M W D R D S V
UniRef90_R1DUR0      T R L L Q A T V D V I S S S G W L A P A L A A M E L S Q M C V Q G M W D R D S A
UniRef90_A0A022QRI4  S R L L Q A M V D V I S S N G W L N L A L L A M E V S Q M V T Q G M W E R D S M
UniRef90_L8GWB5      G R L M R A I F E I V L R R G W A A L A L K A L N L C K M I D K R M W A S Q T P
UniRef90_F2US99      G R L M R A I F E I V L R R G W A Q V A G R A L T L C K M I D R R M W A T A C P
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UniRef90_G6DC55      I R L I Q A C V D V I S S S G W L S P A V A A M E L A Q M V T Q A M W A K D S Y
UniRef90_A4S4L6      G R I L R C I F E I V L K K G W S Q L A E K S L A L C K M C A R R T W A S Q T P
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UniRef90_M5E7W8      S R I W R A L V E I C I I R G Y A R T T R H A L E L A K M T E R R Q W G S M T P
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UniRef90_F4PYM5      A R I V R A L Y D I V L R K G W A Q L A R K I I N V C R M V D R R M W I S Q S P
UniRef90_R4XDT8      G R I I R S I F E I C L K R G W S Q V A R L A L D M C K M V E R S L W S T R S P
UniRef90_U6I4K7      G R L M R A L F E I V L H K G W A E L A D N A L V L A K M I E R R M W E S M C P
UniRef90_D8LHW4      A R L C R A L F E V A L K R G W A A L A E K T L D L C K M V E R R C W L S Q S P
UniRef90_B8AJU4      G R L L R A L F E I V L K R G W A Q L A E K A L N L C K M I D K H I W N V Q I P
UniRef90_W7TFU8      P R M L Q A L V D V V S S E C W L K P C I A A M E L C Q M V V Q G L W D R D S Y
UniRef90_UPI000161D8CD G R L F R A L F E I V L W R G W A H L A Q A                Q S S W
UniRef90_A9UYS5      G R L L R A I F E I V L R R G W S Q L T D R M L N L C K M V D R Q Q W Q S M S P
UniRef90_G8YNQ0      G R L L R A I F E I S L R R G W S S L S K I I L N L C K M V E K R M W L A N S P
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UniRef90_M3J5W3      G R L L R A L Y E I A L L S K W S S L A K T I L N L S K M V E Q R M W L N N S P
UniRef90_D2UY12      A R I A R A L F E I I M H R G W A Q L A S K V L N L A K M I E H K M W Y T Q T P
UniRef90_K8EMU5      G R L L R C I F E I V L K R G W A Q L C E K S L N L C K M A G K K T W S S Q T P
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UniRef90_M2V2U8      G R I L R A I F E I C L K K G W S Q V A K L A L D M C K M A E K R M W P T M T P
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UniRef90_UPI0002C31A94 G R L V R A L F E V A L K R G W A A D K T L N L C K M V S K R M W S V Q I P
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UniRef90_A8JI25      G R L M R C L F E I C L R R G W A G L T D R A L A L S K M V T Y R M W S Q T P
UniRef90_B6K231      H R L L S A C V D T L S S D N H L N A S I R P M E M S Q M V T Q A V W D R D S P
UniRef90_C8VMF3      L N L L S A C V D I L A S E G H M N A M N A M E M S Q M V V Q A M W D R D S P
UniRef90_G3B9C0      M K V I G A C V D T V S S E G Y L N A I Q V V D L S Q M V V Q G I W N R D S P
UniRef90_F0ZAL9      T R L L Q A I V D V I S S N S W L H P A I A A M E L S Q M I T Q A M W D G D N V
UniRef90_M7T4M2      L S L L S A T V D V L S S D G H L N A M N A M E M S Q M V V Q A M W D R D S P
UniRef90_W1P8W5      N R L L Q V M V D V I S T D G W L V L T L S A M E L S Q M V T Q G I W D K D T V
UniRef90_K0KLL9      L T L L Y T A V D I L S S E G Y L N A M Y A M D L S Q M V V Q A V W D T D S P
UniRef90_C4QXA9      L N L V Y T C V D I L S G E G H L N A I T A M D L S Q M V V Q G I W K N E S P
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UniRef90_A0A058Z466  L V L L R A C I D V I S S N S W L T P A L A A M D I S Q M L V Q A Q W D T E P M
UniRef90_B5YNG2      I N L L P A I V D V I S S N G W L K P A L A A M E L S Q M V V Q G L W N K D N V
UniRef90_F2RXM4      L N L L S A C V D V L S S K G H L N A M N A M E M S Q M V V Q S M W D R D S P
UniRef90_Q0UUX7      L T I L S A S V D V L S S E A H L N A M S A M E L S Q M V V Q A M W Q K D S P
UniRef90_N1JCI1      L G L L S A T V D V L S S E G Y L N A M N A M E M S Q M V V Q A M W D R D S A
UniRef90_R9P3I7      M G L L S A C V D V M S S G A R L N A I V A M E L S Q M V V Q G C W D K E S V
UniRef90_Q55CI8      T R L L Q A I V D V I S S N S W L Q P A I A A M E L S Q M I T Q A M W D S D S V
UniRef90_W9YLY4      L S L L S A C V D V L S S E G H L N A I A A M E M S Q M V V Q A M W D R D S P
UniRef90_Q4T4J7      V R L I Q A C V D V L S S N G W L S P A L A A M E L A Q M V T Q A M W S K D S Y
UniRef90_G8FUG0      T R L L Q A M V D V I S S N A T A T M E L S Q M C T Q A L W D N K D S P
UniRef90_B7G2L8      V N L V Q S I V D V I S S N G W L K P A L A A M E L S Q M V V Q G L W N K D H V
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                                               130             140            150            160
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UniRef90_F6ZLB7      L K Q L P H F S A D L I K Q C T Q K E I E S V F D I L E M E D S D R S Q L L K M
UniRef90_U9UDC4      L K Q I P Y F M A D V I K R C E E R E I D N V F G I M E L E D D E R N E I L Q M
UniRef90_T1KEB6      L K Q L P H F T S E M I K R C T E K G V E S I F D I M T L D E D E R N A L L Q L
UniRef90_U5H900      L R Q F K G V P T D V I R R A E R K E F P   W Y R Y F D L E P A E L G E L I G
UniRef90_E5SVP8
UniRef90_G4TMC1      L R Q F P H V P G D V L R K A E A K Q F P   W Y R Y F D L D E A Q L S E L L G V
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UniRef90_M5G206      L R Q F R G I P A D I I R R A E R K E F P   W Y R Y F D L Q P P E I G E L I G V
UniRef90_S8E8P2      L R Q F H G I P N E I L S K L E K K D L   T W E R Y Y D L S P Q E I G E L I R L
UniRef90_A9RTW1      L L Q L P Y F T K D L A K K C A D K P I Q T V F D L V E M E D E R R E L L Q M
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UniRef90_G0SXF7      L K Q I P H F S S E V I Q R C Q A A N V N S V Y D L L E L E D T D R D K I L Q F
UniRef90_T1HLL0      L R Q L P H F T N D I I K A C H E K N V E T V F D L M E L D D D D R A K L V Q L
UniRef90_F4NVU1      L Q Q I P H V D A A A L K R L A A A S V E Q V F D V M E M E D E D R N T A L Q V
UniRef90_S7N1K9      D I P I R H C E D N L L R Q L A Q K V P H K L N N P K F N D P H V K T N L L H L
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UniRef90_T1EDD5      L K Q L P H F N S D V I K R F N D K K I D S I F D I I E M E E E E R N E L L Q M
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UniRef90_F2US99      L K Q F P K L N P V A V Q K L E R K G L F   W S Q L T E L S H T E L G E L I R
UniRef90_E4X6D5      L R Q I P H F S V E M V T K C R G K D I D S V F D I I E M E N D D R D N L L K L
UniRef90_G6DC55      L K Q L P H F T P E L L Q R C S E R G V D T V F D V M E L E D S A R T E L L R L
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UniRef90_G0SXF7      T P R Q M R D V A A F V N R Y P
UniRef90_T1HLL0      T D A Q M M D V A K F C N R Y P
UniRef90_F4NVU1      T N R Q M G D I A R F V N R Y P
UniRef90_S7N1K9      S R M Q L S
UniRef90_S7N1K9      S R M Q L S
UniRef90_T1EDD5      S E L E K A D V A R F C N R Y P
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UniRef90_J3L8U1      S N S Q L Q D I I G F F K R F P
UniRef90_R1DUR0      T P A Q L A D V A R V A N A Y P
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UniRef90_L8GWB5        P Q Q G K P I Y R L V H K F P
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UniRef90_A3GEY0      K G N S G K   A Y Q L L Q K F P
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UniRef90_A8JI25      A P K M G K S L H K L I H Q F P
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UniRef90_C8VMF3      D N K Q L A Q A A A F T N K Y P
UniRef90_G3B9C0      E E A E L E D V A E F V N K Y P
UniRef90_F0ZAL9      D A G E T E D L I Q A F M K Y P
UniRef90_M7T4M2      T Q S Q L A Q A A A F T N K Y P
UniRef90_W1P8W5      S D S Q L L D I S K L G N R F P
UniRef90_K0KLL9      S D R P L N K V A E F V N K Y P
UniRef90_C4QXA9      S N A Q L Q K V A E F V N K F P
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UniRef90_A0A058Z466  T N R Q L E E V A A Y C N N Y P
UniRef90_B5YNG2      P D E K M A D V A V F C N N Y P
UniRef90_F2RXM4      D N K Q L A Q A A A F T N K Y P
UniRef90_Q0UUX7      D Q R Q L A D I A N F T N N Y
UniRef90_N1JCI1      S Q S Q L A K A A D F T N K Y P
UniRef90_R9P3I7      D K K A L A D V A S F V N N F P
UniRef90_Q55CI8      S Q Q E S N D L V Q S F M K Y P
UniRef90_W9YLY4      T N R Q L V E A A N F T N K Y P
UniRef90_Q4T4J7      S D I Q M A D V A R F C N R Y P
UniRef90_G8FUG0      T K E E L Q D I Q E A T S K Y P
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UniRef90_C7YKC4          T K L K G I M E I V T S A T E F E S I Q I R H E D G L L R R I Y D R V P V K M
UniRef90_M8BU23          T K M K G L L E I L A S A S E Y A E L P S C R G E E E S I E T L V R H Q R F S A
UniRef90_W2TB35          T K L R A L I E I I A N A S E F A S I P M R H R E D V V L K Q L A A R L P G Q L
UniRef90_U4KVH2          T K L K G L L E I V T S A T E F E A V Q V R H E D R I L R R I Y D N I P V K M
UniRef90_R1GUA0          T K L K G L L E I I T S A T E F E G I Q I R R H E D H V L R R V Y D R L P V K M
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UniRef90_D0NTD6          S K V R A L L T I L S S A T E F S D L P S R Y G E D K K L E G L A K H L K F P V
UniRef90_C4Y376            R L R G I F S A V V S A P E F E S L P V R A D E L P I L T R L S S A V P L K L
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UniRef90_U1GJC6          T K L K S L L E I V T S A T E F E S I Q M R H E D H I L R R V Y D R V P V K M
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UniRef90_I1P8V1              S E V I N M V A H S S E F E N I V V R E E E Q D E L E S L F K N C P H D I
UniRef90_Q74ZT5              D I L R L F A K S D E F K Y V S A R Q E E R N E L A N L L E R A P I P I
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UniRef90_F0WKU3              E I L R L F S L S N E F Q Y V S I R A E E K L E L V K L M E R V P V P I
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UniRef90_V5EC16          T K L R G L L E L V S S A A E F E D L P I R A H E D V V L G R I Y D R L P L K L
UniRef90_G0W652          S T L Q D I L E T L S S A T E F E Q I R I R K N D Y S N L V R L S K K L P L T F
UniRef90_G3AEW1          S K L K D I L L I I T S A T E F E S I P V R E E D G N V L S R L G Q K V P I K L
UniRef90_F1NTD6          S S V E E L L L I L T N A D E Y T D L P V R H N E D Q M N S E L A K H L P I E V
UniRef90_Q4CN72          S S H V D V L K A L C E A E E F N E L P V R H N E D K L N L V L S Q L L P F P I
UniRef90_S3CPK6            D V L Q M I A K C G E F D N I Q A R D S E S K E L V K L R D T G T V C D
UniRef90_A9SJ85            E L I H M V A H S S E F E N I M V R E E Q Q E L A Q L V R H C P F E V
UniRef90_D8LZ34            E L F N L F S R S A E F S Q I V V R P E E K L E L N M L M N K V P I P I
UniRef90_A7RPC5          M P E I L E M L S H A G E F E Q I K V R E D E L S E L E E L H E D C V V I P
UniRef90_G8BPS6            S E L L Q T F S L S S E F K F V S V R T E E R K E L M T L K S R S P F P I
UniRef90_L7IJV7          T F A D V L S W M C R A I E Y D E L P V R H N E D L I N I E L S K A L P I A T
UniRef90_F1KPZ2          S S V E D L L R A L A D N P E Y G E L P V R H N E D Q V N A Q L Q R Y L P I K L
UniRef90_A0A022Q4F8      T T L E V F L H V L A G A S E Y D E L P V R H N E E I H N A E L S N K V R Y M V
UniRef90_UPI00046DF198   T S L E V F L H I L S A A S E Y N E L P V R H N E N Y N E A L S E R V R Y K V
UniRef90_R7QM15          T K L G G L L N I L S L A S E L G D I P V R I G E E D V L K S L S Q D L P L S M
UniRef90_A0BQ90          S K L R D L L F I L S E A K E F E V L N I R N G E E I L L A Q L L Q K I P F Q P
UniRef90_UPI000457380F     S V E E L I S L L T D A T E Y A E L P V R H N E D Q L N S E M A K Q L P I E V
UniRef90_J9IZ88            S V A T L L N T L A Y A K E F S G L P V R H N E D V L N E A L T H L V P L R V
UniRef90_H6QV00          T K L K G I L E I I S A A Q E F E S I P L R H G E E G L L K K V H D R V P V K V
UniRef90_Q7PUB6            S M E E L R A M A D A A E F E H P V R H N E D L Y N A D L A K L C P L K V
UniRef90_F7FTH1            S V E D L L S V L T D S E E Y A D L P V R H N E D Q M N S E L A R N L P I E V
UniRef90_D3AVZ6          S E I K S L L K T L C D A Y E Y H E F P V R H N E D L M N K E L N E K L P I K L
UniRef90_G8ZLG4          T L Q D I L H I L S Q A S E F D S I P L R E D E L S M L R K L N E R V P L R V
UniRef90_UPI0002B42716   T S L E V F L H I L S A A S E Y D E L P V R H N E E N Y N G A L S E R V R Y K V
UniRef90_D0A6T2          S T H V D V L K A L C E A D E F E E L P V R H N E D R L N L T L S Q A L P L P I
UniRef90_G0S562            S L L D A L A W M S R A A E Y D E L P V R H N E D L I N A E L A K A L P F P V
UniRef90_Q9FNQ1          T S L E A F L H I L A G A S E Y D E L P V R H N E E N Y N K T L S D R V R Y P V
UniRef90_UPI0002240B49   S S V E D L L A V L T D A E E Y S D L P V R H N E D Q M N H E L A R G L P I E V
UniRef90_S6E3F6          S T L R E M L Q S L S K A S E F E G I A L R Q E D E S I L L K L N K Q M P I K L
UniRef90_C5LWR0          S K R R A L V E A L C G A S E F E S I P V R P G E E G T L R A L A E R L K V P V
UniRef90_G2YVH8          S F R D V L S W M S S A T E Y D E L P V R H N E D L I N I E L S K N L P L P F
UniRef90_E2B1P8            E I L A M I T H A Q E F N Q L K V R D D E I K E L D E L M E Q C E M V V
UniRef90_W4G240            E L F R L F S L S Q E F K Y M V R S E E R L E L E K L L E R V P I P I
UniRef90_F9X4I6            D V L K M I S M S G E F D N I T S R E S E E K E L M R L K D D F A P C D
UniRef90_I7MM90          S T K H L I N I I C S A N E F L D I P V R H Q E E N L L K Q L N Q Q I M Y P V
UniRef90_U6KTP6          S K R R A L F E I L S A A A E F S F L P V R P G E S E L L K T L A Q R L G L K L
UniRef90_X6M3H6          T Y N D L L I R V L C A T K E Y E E L P V R H N E E K L N L L A E Q V P W P V
UniRef90_I2H526          S V S D L F R I F A M S D E F N Y V S I K Q E E Q Q E M K A L L E K I P I P I
UniRef90_R7T9C7            V F E M V S K S Q E F E Q I K V R E E E M G E L E H S E H C E V P V
UniRef90_C1FG69          S M P E V F H M V A Q A T E F E N I A P R E D E M P E L E A L R R N C P L E I
UniRef90_K4E8G4            M N V I A S A S E F A D L R V R Q E E L D E L Q K I H A M L P K K V
UniRef90_F6ZCZ9          S V E D L L S V L S D S E E Y A D L P V R H N E D Q M N S E L A R L L P K K V
UniRef90_G0UAX9          S T H V D V L K A L C E A E E F N E L P V R H N E D R L N L T L S H T L P L P I
UniRef90_A0A024GDY4      S K L R G L M T I L A S S E F Q Q L P C R F G E E K L R K L A K H L K F A V
UniRef90_E0VWZ2            E E L L Q A L C N A H E Y S Q L P V R H N E D N L N G E L S K K C P L P V
UniRef90_W7I6Y1          T K L K G L E I V T S A T E F E T L Q I R K R E E V L L R R I H E S L P V R M
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                            50              60              70              80
UniRef90_W1QJ75        A S I K F E S P S F K C F I L I Q A H L S R I N L P P D L T G D L N N I L L K L
UniRef90_B2ALY5        A E P A F D S P H F K A F V L V Q A H F S R M N L P I D L A K D Q E V I L T K I
UniRef90_K4C8N4        G N P K Y T D P H V K A N A L L Q A H F S R Q M L G G N L A S D Q Q E V L F S A
UniRef90_C7YKC4        S Q P V Y D S P H F K A F V L L Q A H F S R Q M Q L P I D L A K D K E V L I S K V
UniRef90_M8BU23        E N S K N D D V H V K A N A L L Q A H F S R Q T V V G N L A A G Q R E I L L P A
UniRef90_W2TB35        K N Q K F S D P H V K D N L L I H A H L S R I Q L S A E L S K D T D M A V L K A
UniRef90_U4KVH2        S E P N Y E S P H F K A F A L V Q A H F S R M Q L P A D L A K D Q E I V V S K I
UniRef90_R1GUA0        A E A S Y E S P H F K A F V L L Q A H F A R M Q L P V D L A K D Q D T I L K K V
UniRef90_K4A4P0        D Q H H L D D P H V K A N L L F Q A H F S R V E L P S D Y A T D L K S V L D Q S
UniRef90_W4YP14        N K H S F D S P H T K A N L L L Q A H M S R A Q L C S D Y F T D T K S V L D Q A
UniRef90_D5GME2        S Q P N Y E S P H F K A F V L L Q A H F S R M Q L P A D L T T D Q A V L G K I
UniRef90_D0NTD6        A G G D Y G Q P H V K T N V L L Q A H F S K Q H L S P A L R Q D L D F V L R H A
UniRef90_C4Y376        P E S D L G S P H T K A F L L L Q A Y L S R I S V S G D L A S D Q R T V L E K S
UniRef90_J9IGS8        E D V Q Y N T A P V K T N L L L Q C H F N R T P L N I D M R I D Q E M I L K Q S
UniRef90_U1GJC6        S E P A H G S P H F K A F V L L Q A H M Q L P I D L A K D Q E M I V S K V
UniRef90_M2WXI7        I G V R Y A D P H V K T H I L F Q S H F S R I P L K G E L A E D R E V V I A G A
UniRef90_G0V9F5        N G A K Q D S T S F K V F T L L Q C Y F S R T P I P I E L K P D L Q A V L R K A
UniRef90_E6ZM88        D A L D L C S P Y H K V F I L L Q A H F A R L T L P V D L E A D Q R V V V G R V
UniRef90_R9XKM3        S A G I Q N E P A F K V F V L L Q A H F S R I K L N K E L A A D V N S I L A S A
UniRef90_L8HD92        D A H L L D D P H T K T N L L L Q A H F A G L A L P S D Y I T D T K S V L D Q A
UniRef90_P32639        P E H T S S S V S F K V F L L L Q A Y F S R L E L P V D F Q N D L K D I L E K V
UniRef90_K7HBG4        K N Q K F T D P H V K V N L L I H A H L S R V K L T A E L N K D T E L I V L R A
UniRef90_B4GRJ8        T G P K F N D P H I K T N L L L Q A H L S R L Q L G P E L Q G D T E Q I L S R A
UniRef90_M0TUC1        K G G T T D K H G K I S I L I Q V Y I S H G S I E F S L I S D A A Y I S A S L
UniRef90_I1P8V1        K G G P T D K H G K I S I L I Q V Y I S R A P I D S S L H S D A Q Y I S Q S L
UniRef90_Q74ZT5        Q E D S S S P L A K V N V L L Q S Y I S R L K L D F A L N A D M I Y I T Q N A
UniRef90_S3BW32        P S N D F N A P S S K A F I L L Q A H F S R M Q L P I D L A K D Q E V V V R K A
UniRef90_K4C8C1        D H N R L D D P H V K A F V L L F Q A H F S Q S E L P S D Y V T D L K S V L D Q S
UniRef90_A7TSN3        P E N G L N V L K F K V F L L L Q A Y F S R V K L T A D H Q Y D L N S I L L V V
UniRef90_V4AIF9        N P H S Y D S S H T K T N I L L Q A H F C Q I Q L P S D Y H T D T K S V L D Q A
UniRef90_C5DRW4        S S N S E G G P S H V L L L L Q A Y F S R M L L P I E L Q W D V Q I I L Q K A
UniRef90_E9H7W7        N P Y T Y D S S H T K A H L L F Q S H F S R L S L C A D Y V T D T K S V L D Q A
UniRef90_UPI0003EAB370 N P H S F D S P H T K T H L L Q A H F S R L S L C P D Y A T D T K T V L D N A
UniRef90_W2SGT0        A E P A F D S P H F K A F V L L Q A H F G R L S L P I D L A K D L E T V V G R V
UniRef90_C5DN54        S R E D F E S P E M K V F I L L Q T H L S R I Q L K N E L K R D M E D I L K A V
UniRef90_Q6CSU4        S E F D P R S T T A K V F V L L Q A H F S G L H L P M D L S L D L S E I L S K A
UniRef90_A0A024JMB9    N D V N F N S V R F K A F V L L Q A H L S R M T L P P D L V A D Q Q I V L E K I
UniRef90_F0VK75        N S E D L N K P S T K A L I L L Y A H F N R T P L P S D L I A D Q K I L L E P T
UniRef90_F0Y9C7        P S G G L A A P Q A K A N L L L Q S H F S R V P L S A E L R A D R D G A V A A S
UniRef90_S8CRY0        D K N L L D D P H V K A N L L F Q A H F S R V E L P T D Y V T D L K S V L D Q S
UniRef90_F0WKU3        K E A L N V H S S A K V N V L L Q A Y I S R L K L D F A L L A D M T H I H Q S A
UniRef90_C3YZL9        V P G G V E N S Y G K V N I L L Q T Y I C R H R V D F S L M S D M A Y V V Q N A
UniRef90_G8JQL0        K E N A D D P L A K V N I L L Q S Y I S R L V L D F A L N A D M V F I T Q N A
UniRef90_UPI0001EA687A K E S V G D P S A K I N V L L Q A Y I S R L P L E F A L N A D M V Y V T Q S A
UniRef90_W5J428        R G G S E N I H G K V N I L M Q T Y L S K G F V R F S L M S D M S Y I T Q N A
UniRef90_B3RYG0        D S N S Y D S P H V K T H L L Q A H F S R Q E L P V D Y R T D T K S V L D Q A
UniRef90_V5EC16        E R L D T L S P Y H K A F V L L Q A H F A R L T L P V D L E A D L R V V L G K V
UniRef90_G0W652        S D A T M N I T S F K V F T L L Q A H F S R I P L E P E F K E D L R Y I L T K S
UniRef90_G3AEW1        N E H D I E S P L Y K S F I L L Q S H I S R I E V P A E L A Q D R N T V V T K V
UniRef90_F1NTD6        N P H S F D S S H T K T H L L L Q A H F S H A L L C P D Y A T D T K T V L D Q A
UniRef90_Q4CN72        N P N N A E S P H V K A F L L F Q A H F E R A S L P S D Y Y T D L K S A L D N A
UniRef90_S3CPK6        V G G T I D S P Q T K T N I L L Q S Y I S K V Q P D F A L G N D L N Y V A Q Q A
UniRef90_A9SJ85        K G G P E D K Y G K I N I L I Q V Y L S R G F V D F S L V A D S S Y I N A S L
UniRef90_D8LZ34        R E T V D D P C A K V N V L L Q A Y I S H V K L K F A L A C D M V Y I T Q S A
UniRef90_A7RPC5        V K G G V E N T Y G K V N I L L Q T Y I S R G R V E F S L V S D L G Y V A Q N G
UniRef90_G8BPS6        P E S M D E N S T K I I I L L Q S Y I S R I Q F E G A L N A D M T F I I Q N A
UniRef90_L7IJV7        D L F P M W D P H V K A F L L L Q A H M S R I P L P T D Y V G D Q T S V L D Q A
UniRef90_F1KPZ2        P E C A M D S S H T K A H L L Q A H L S R T S I P T D Y V T D Q R S V L D Q C
UniRef90_A0A022Q4F8    D K N L L D D P H V K A N L L F Q A H F S R V E L P T D Y V T D L K S V L D Q S
UniRef90_UPI00046DF198 D K D R L D D P H V K A N L L F Q A H F S Q L E L P S D Y V T D L K S V L D Q S
UniRef90_R7QM15        N D G D F S S P H I K V H I L L Q A H M N R R S L P A Q L R N D Q A Q L L P T A
UniRef90_A0BQ90        T N V K L N E P N T K A L I L L Q A H L S R K L N S D L K S D L T I L E L A
UniRef90_UPI000457380F N P H S F D S A H T K A H L L L Q A H F S R A A L C P D Y A T D T K S V L D Q A
UniRef90_J9IZ88        A K H D L E N P H V K A N L L I Q A H L E R C P L P T D Y I T D T K M V L D Q S
UniRef90_H6QV00        G K V E Y L S P H F K T N I L Q A H F S R L T L P S D L M L D Q V E I L R K V
UniRef90_Q7PUB6        D P L S V D N P H T K V F L L L Q A H L S R L P L N S D Y G T D T K S V L D Q S
UniRef90_F7FTH1        N P H S F D N S H T K A H L L L Q A H F S R A M L C P D Y G T D T K T V L D Q A
UniRef90_D3AVZ6        I R H D D P H T K V H L L Q A H F E R A M L P S D Y V T D T K S A L D Q G
UniRef90_G8ZLG4        T D L A S N L F A N K I F L L L Q A H F S R L S L A V D F R S D L K I I L E K A
UniRef90_UPI0002B42716 D K D R L D D P H V K A N L L F Q A H F S Q L E L P S D Y V T D L K S V L D Q S
UniRef90_D0A6T2        K A N N A D S P H V K A F L L F Q A H F E R C N L P S D Y Y T D Q K S T L D N A
UniRef90_G0S562        G G L P M W D P H V K A F L L M Q A H F S R V E L P T D Y V G D L T S V L D Q S
UniRef90_Q9FNQ1        D N N H L D D P H V K A N L L F Q A H F S Q L A L P S D Y N T D L K S V L D Q S
UniRef90_UPI0002240B49 N P H S F D S S H T K S H L L L Q A H F S R A M L C P D Y S T D T K T V L D Q A
UniRef90_S6E3F6        T P S S G G S P S Y K V F L L L Q A Y F S R F P L S K E L Q F D L R I I L R K A
UniRef90_C5LWR0        E T G K L K D P A V K C A I L L H A H L A R Q R L P S D L A A D Q R T V L N S
UniRef90_G2YVH8        N G L P M W D P H V K A F L L Q A H M S R I D L P S D Y V G D Q T S V L D Q A
UniRef90_E2B1P8        A K G G V E N V H G K V N I L L Q T Y L S K I R V N A S L I S D M A Y V T Q N T
UniRef90_W4G240        K E R A S N S G S A K V N V L L Q A Y I S R L S L N F A L L A D M V H I H Q S A
UniRef90_F9X4I6        I E G G I G T Q Q G K T N V L L Q S Y I S K A N L D F T L V S D T N Y V A Q N A
UniRef90_I7MM90        D S S I F N D P N V K A Y I L L Q A Y F S R L N L S A D F S Y D Q K L V L D K A
UniRef90_U6KTP6        P P T D F N K T S T K A L I L L H A H C Q R W S L P S D L A A E Q Q Q L L L P A
UniRef90_X6M3H6        D D L A M D E P S T K A N L L Q A H F S R L P L S D Y V T D T Q S V L D Q A
UniRef90_I2H526        Q N D A E E N I I K I S V L L Q T Y I S R F S F E F A I N S D M I F I T Q N A
UniRef90_R7T9C7        A G G P E N S H G K T S I L L Q T Y I S R G N L N F S L V S D S A Y V A Q N A
UniRef90_C1FG69        K A T L A D R A G K V N L L M Q V Y I S R A R M E F S L V A D S S Y I S Q N A
UniRef90_K4E8G4        Q R Y A I T S V E L K V T T L M K A Y I S R I H V M H S L A D V N Y V M Q N A
UniRef90_F6ZCZ9        N P H S M D S P H T K T H L L L Q A H F S R A M L C P D Y A T D T K T V L D N A
UniRef90_G0UAX9        D L N N A D S P H V K A F L L F Q A H F E R S S L P S D Y C T D Q K S T L D N A
UniRef90_A0A024GDY4    P G D D Y S A P A V K V A I L L Q M H F S Q D E L G P L L R V D L K Y I L Q H A
UniRef90_E0VWZ2        N Q Y T L D S P F T K A E L L F Q A H F F D V P L C A D Y Y T D L K S V L D Q S
UniRef90_W7I6Y1        E P I N Y E S T H F K A F V L M Q A H F S R L Q L P A D L K S D Q A V L L G R A
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Multiple sequence alignment (residues ~85–120)

Position ruler: 90, 100, 110, 120

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                           90        100       110       120
UniRef90_W1QJ75         V N L L Y A A V D V L S S E G F L N   A M T A M D L T Q M V V Q A M W A N D N P
UniRef90_B2ALY5         V S L L N A I V D I L S S D G R L N   A M N A M E M S Q M V V Q A M W D R D S P
UniRef90_K4C8N4         T R L L Q A M V D V I S S N G W L N L A L L A M E A S Q M I T Q G M W G H D S E
UniRef90_C7YKC4         L S L L S A M V D I L S S D G H L N   A M N A M E M S Q M V V Q G M W D R D S P
UniRef90_M8BU23         P R L I K S L V D V I S S N G W L S L A L K A M E L S Q M V T Q G M W D R D S M
UniRef90_W2TB35         I R L V Q A C V D V L S S N G W L S P A I H A M E L S Q M L T Q A M Y S N E S Y
UniRef90_U4KVH2         L N L L S G C V D V L S S E G H L N   A I N A M E M S Q M V V Q A M W N R D S P
UniRef90_R1GUA0         L P L L S A C V D V L S S E G H L N   A M N A M E I S Q M V V Q A M W D R D S P
UniRef90_K4A4P0         I R I I Q A M I D V C A N S G W L S S A L S C M H L L Q M I I Q G L W E R D S S
UniRef90_W4YP14         I R V L Q A M I D V V S F N G W L A P A L Q T M H L V Q S I I Q A R W F D D S P
UniRef90_D5GME2         L N L L S A C V D V L S S E G H L N   A M S A M E M S Q M C V Q A M W D R D S A
UniRef90_D0NTD6         V R L L H A M V D V I S S N G W L K P A L A A M D L A Q M V V Q A Q W S S E S P
UniRef90_C4Y376         L P L V F A C T D T L S S E G H L N   A L Q A M D L A Q M L V Q G M W N S E S P
UniRef90_J9IGS8         I K L I H A M V D V I S S H G Y L K P A L L C M E L S Q M T V Q S M W V T Q S P
UniRef90_U1GJC6         L N L L S A C V D I L S S E G H L N   A T F A M D M S Q M V V Q A M W D R D S P
UniRef90_M2WXI7         P R L I Q A L V D V I S S A G Y L K A A L A A M E T C Q M I I Q G M W E R D S L
UniRef90_G0V9F5         V R L V N A I I D I L S G N G Y L N   A T T A M D I S Q M L I Q A V W D V D N P
UniRef90_E6ZM88         L N L L S A C V D V M S S N A F L N   A I V A M E L S Q M V V Q A V W E R D S V
UniRef90_R9XKM3         I P L I N G I I D I L S G D G R L S A T T A M D L S Q M L I Q G C W D T D S P
UniRef90_L8HD92         V R I L Q A M V D V A A D G G W L K T T L N C M H L M Q M V M Q A R W F T D S T
UniRef90_P32639         V P L I N V V V D I L S A N G Y L N   A T T A M D L A Q M L I Q G V W D V D N P
UniRef90_K7HBG4         C R L V Q A C V D V L S S N G W L S P A I H A M E L S Q M L T Q A M Y S N E S Y
UniRef90_B4GRJ8         I R L I Q A C V D V L S S N G W L S P A V A M E L A Q M V T Q A M W T K D S Y
UniRef90_M0TUC1         G R I M R A L F E I C L R R G W C E M S S F M L Q Y C K A V D R Q I W P Y Q H P
UniRef90_I1P8V1         A R I M R A L F E I C L R R G W S Q M T S L L L E F C K G V D R K I W P E Q H P
UniRef90_Q74ZT5         G R I F R A L F E I S L R K G W S R L L K V I L N L C K S I E K R M W L I N T P
UniRef90_S3BW32         P S L L S A A N L L V D E G H L N   A L Q A I E M M Q M V V Q A M W D R D S P
UniRef90_K4C8C1         I R V I Q A M I D I C A N S G W L S S T L T C M H L L Q M V M Q G L W D R D S P
UniRef90_A7TSN3         L P L I N A V V D I L S S D G C L N   A T T A M D L S Q M V Q G V W D T D S P
UniRef90_V4AIF9         I R I L Q A M L D V S A D Q G W L I T S L Q V I V L I Q M I I Q G R W Y H D S T
UniRef90_C5DRW4         V P L V N S A I D I L S S D G C L N   A T T G M D I S Q M L I Q G V W D T D N P
UniRef90_E9H7W7         I R I L Q A M M D V A A E G G W L A T T L R I Q Q L L Q M V I Q A M W I E D P A
UniRef90_UPI0003EAB370  I R I C Q A M L D V A A N E G W L V T A L N I C N L V Q M I V Q G R W L H D S T
UniRef90_W2SGT0         L P L L S A C V D V L S S E G H L N   A T H A M E L S Q M V V Q A M W D R D S P
UniRef90_C5DN54         P R I V S A L V D F L A G E G N L N   A T T A M D L S Q M L T Q G M W D T D S P
UniRef90_Q6CSU4         P S L A G T M V D I L S M N G Y L N   A T T A M D L S Q M I V Q G V W D T D S P
UniRef90_A0A024JMB9     L S L L A G C V D V F A G E G Y L N   A T Y A M D L S Q M V V Q A M W N K D S P
UniRef90_F0VK75         I R L L H A L V D V I S S N G W L V P A L S A M E I C Q A V V Q A M T T T A S P
UniRef90_F0Y9C7         I T L L Q A L V D V V S S N G W L A P A L H A M E L C Q M V V Q G L W H D D P S
UniRef90_S8CRY0         V R I I Q A M I D I C A N S G W L S S T L T C M R L L Q M V M Q G L W Y D D S S
UniRef90_F0WKU3         A R I F R A L F E I C L S R G W A H G F D R M L V F C K M V E R R M W C S H S P
UniRef90_C3YZL9         G R I L R G L F E I T L R K G W P L M A G K L L E L S K V V D R Q L W P F E H P
UniRef90_G8JQL0         G R L F R A L F E I C L R K R W P R L T K I L L N I C R S I D R R L W L T N S P
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UniRef90_W5J428         A R I A R A L F T I V L R A N N P I L A S R M L N V S K M F E K Q M W E S M T P
UniRef90_B3RYG0         V R I I Q A L I D V A A D G W L V I V L N V I N L L Q M V I Q G R W R R D S P
UniRef90_V5EC16         L V L L S A C V D V M S S N A Y L   G A V V A M E V S Q M V V Q A V G Q Q G S V
UniRef90_G0W652         L Q L V N S I I D I L S G E G C L N   A T T A M D I S Q M I V Q A I W D V D N P
UniRef90_G3AEW1         L D I L N A C I D C L S G E G H L N   A L L A M D L S Q M I Q A V W S T G S A
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UniRef90_A9SJ85         G R I M R A L F E I C L R R S W V T M T L L L E F C K A V D R R V W P Q H P
UniRef90_D8LZ34         G R I L R A L F E I A L L R G W S S L A Q R C L E L C K M V S H Q Q W A T Q S P
UniRef90_A7RPC5         A R L I R G L F E I A L R R G Y P V L A N R L L T L S K C I E K R L W P E E H P
UniRef90_G8BPS6         G R L M K A I Y E I C L Y K N Y A R Q T K T A I S L C K C I D N R M W S A N S P
UniRef90_L7IJV7         I R I I Q A S I D V L T E L G H L S S C L E M I K L L Q C I K S A R W P T D S P
UniRef90_F1KPZ2         V R I I Q A M F D V S L L S G W L S T S L N V I T L L Q M I V Q A R W H T D H P
UniRef90_A0A022Q4F8     I R I I Q A M I D L C A N S G W L S S M I T C M H L L Q M V M Q G L W D K D S S
UniRef90_UPI00046DF198  I R I I Q A M I D I C A N S G W L S S S I I T C M H L L Q M V M Q G L W D R D S S
UniRef90_R7QM15         V R L L R S W V D V I S S A G W L K P A I I A V E L S Q M L I Q G V W V S D P N
UniRef90_A0BQ90         I R L S T A M V D I A S S N L W L K P A I L S M Q I C Q M I V Q S L W D D D S V
UniRef90_UPI000457380F  I R I C Q A M L D V A A N N G W L I T A V N V T N L V Q M V V Q G R W L H D S S
UniRef90_J9IZ88         I R V L Q G M I D V S S H K G H L N S T L N L I H L M Q M I V Q G Q W L D Q S P
UniRef90_H6QV00         P N L I S A A V D V L S S Q E C L N T T V   A M E F F Q M V V Q A V W N H D S P
UniRef90_Q7PUB6         I R I L Q A M V D I S A E R G W L A T T L R I Q Q L M Q C I I Q A R W L D D P V
UniRef90_F7FTH1         I R V C Q A M L D V A A N Q G W L V T A L N I T S L I Q M V V Q G R W I Y D S S
UniRef90_D3AVZ6         I R I L Q A M I D V A G E F E Y F A T V I Q I I R L L Q M F V Q G R W D T D S N
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UniRef90_D0A6T2         M R V V Q A M V D I T A N N G H L H T S L R C M S L L Q C I V Q G L W W H S N T
UniRef90_G0S562         I R V I Q A S I D V M A E L G R L T S A L R F V T L L Q C V K Q G V W P D D P A
UniRef90_Q9FNQ1         I R I L Q A M I D I C A N S G W L S S S L T C M R L L Q M V M Q G M W S D D S S
UniRef90_UPI0002240B49  V R V C Q A M L D V A A N Q G W L V S A L N I T N L I Q M V I Q G R W V N D S S
UniRef90_S6E3F6         I P L I N A I I D I L S S D G L L N   A T T G M D I S Q M L I Q G V W D T E N P
UniRef90_C5LWR0         T R L I Q A M V D V V A S H E W Y R V A L R A M E L S Q M V V Q A M G P D T S L
UniRef90_G2YVH8         I R I I Q A S I D V L T E M G Y L S S V L Q M I T L L Q C I K S A R W P E D H A
UniRef90_E2B1P8         V R I T R A L F E I M L R R N N S I M A G R L L E M A K M F E A Q Q W N F L T P
UniRef90_W4G240         A R I W R A L F E I C L H R G W A A L A E K V L T I C K M V D H R M W L S H T P
UniRef90_F9X4I6         A R I C R A L F M I A L N R H W G Y Q C L V L L G M C K S I E K R V W A Y E H P
UniRef90_I7MM90         V N L T H G L I E V I N S N G L P K E A I K A M R F S H M I V Q A V W T D S S P
UniRef90_U6KTP6         A R L L H A L V D V T A S N G W L F P A L A A V E L A Q G L V Q A L P Q H A S P
UniRef90_X6M3H6         I R I I Q A M I D F V V H H S W L N C V V K L I I N L L Q M V T Q G R W D T D S T
UniRef90_I2H526         G R L F R A M Y E I C W R K G W A K Q A K Y L L D I C R S V D T R M W P L N S P
UniRef90_R7T9C7         A R I I R A L F E M A V R K G W P I M A G R L L Q L S K V V E K R Q W G F E S P
UniRef90_C1FG69         S R I C R A L F E I C L R R G W P S L A E E L L T L S K A V D L R I W P H Q H A
UniRef90_K4E8G4         P R I S R A L F E I G V Q R G R P L T T T V F L T L C K C M E Q R C W E F E H P
UniRef90_F6ZCZ9         I R I C Q A M L D V A A H H S W L I A H L V Q M V V Q N D P C
UniRef90_G0UAX9         V R V I Q A M V D V A A N N G H L F A A L R S M S L M Q C V V Q G L W W Y S N T
UniRef90_A0A024GDY4     V R L L H A M V D V I S S N G W L K P A L A A M D L I T Q G M W N T D S P
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UniRef90_B2ALY5       L K Q I P N F T T E T V K V A N K Y D I Q D I F D F M K M D P D E L I K D L G F
UniRef90_K4C8N4       L L Q L P H V T K E L A K K C Q E N P V E S V F D L V E M K D D E R Y E L L G L
UniRef90_C7YKC4       L K Q I P H F T E V V K V A E S H R I K D I F D F M E A M N P D E N K R L G L
UniRef90_M8BU23       L L Q L P H F K E L T E R W Q E N G I E S I F D L A E L S A D K M Q N L L Q L
UniRef90_W2TB35       L K Q L P H C N S G L L E R A K Q K K V E S V F E L L E L D D D V R R D I L R M
UniRef90_U4KVH2       L K Q I P Y F G P E L V T K A N E A G V N D I L K A M A D D L L K A L G L
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UniRef90_D5GME2       L M Q I P F F T P E R V K A A G E L G I K T L F D F M D A M G E D R T R L L Q R
UniRef90_D0NTD6       L L Q I P F F T K D T L K K L G E M D V E T P V D I L S M E D D A R S K L L P L
UniRef90_C4Y376       L R Q L P H V T Q E T L A R A K K Y N V E S V Y D I M A L E D K E R D D V L Q L
UniRef90_J9IGS8       L L Q L P G F D S S I V D Q M K K V K V E D I V D F M N M D D D L R E K I L N F
UniRef90_U1GJC6       L L Q I P H F T S E T V K K A A E Y R I E D I E E F M K M D P A E L V K K L L L
UniRef90_M2WXI7       L L Q L P H M D K E R C D Q L K E M G V E S V F D F M E M E D E Q R R S L Q G L
UniRef90_G0V9F5       L R Q I P H F D E D I L E K C A K K I E T V Y D I M A L E D D E R E E I M T M
UniRef90_E6ZM88       L R Q V P G F S A D V V E R C R A R G V E D V Y A L S D L S E A E R D E L L Q M
UniRef90_R9XKM3       L V Q V P A F D K D I L K K C A C K Y V E T V Y D I M A L E D D E R D N L L S L
UniRef90_L8HD92       L L T L P H A D D R L V L A F A D A G V E S L P E L L A L D E P R V Q A F L R L
UniRef90_P32639       L R Q I P H F N N K I L E K C K E I N V E T V Y D I M A L E D E E R D E I L T L
UniRef90_K7HBG4       L K Q L P H C N A G L L E R A K E K N V T S V F E L L E L E N D E R T D V L Q
UniRef90_B4GRJ8       L R Q L P H F S V D I V K R C T E N S V A S
UniRef90_M0TUC1       L R Q F D D R L S A E V L R K L E E R G T D L D R L Y E M E E K D I G A L I R Y
UniRef90_I1P8V1       L R Q F D D L S H E I C K R L E E K H V D L D R L Y E M E E N D I G A L I R F
UniRef90_Q74ZT5       F R Q F P S C P I D V I R R T E A S S L P W I E Y L A L D S P A E V A Q A I R
UniRef90_S3BW32       L K Q I P H F G P E A I K A A T K H G I K D V F D F I D A M N P E E N K Q L G L
UniRef90_K4C8C1       L W M L P C M T D D L L N S L Q K K G I A S I Q Q L L D C P S E S L R A I T G S
UniRef90_A7TSN3       L K Q I P F F D E S I L K T C A I K N I D T V Y D I M A L E D E R E E I M T M
UniRef90_V4AIF9       L L Q L P C I T P Y H I Y C F R K A P I E T L P E L L S V C D G K F E H L S E M
UniRef90_C5DRW4       L K Q I P F F D G S I L K K C E E K G V E T V Y D V M A L E D D E R D A I M T M
UniRef90_E9H7W7       I L M L P H F D S F I L P V L R S S Q L P V L Q K A F A V D C A K M C N L L D F
UniRef90_UPI0003EAB370 L L L L P N M E Q Q H L Y L F R K W N I E C L P E L I A A C E G R E H T F T S L
UniRef90_W2SGT0       L M Q L P H F T K E V A E R L A K D Q V R D V E E F M T A M D P S E N Q E M G L
UniRef90_C5DN54       L L Q I P F F D L H M V N K C N E K D V E T I Y D V M A L E D D E R E E L L N F
UniRef90_Q6CSU4       L K Q I P F F D T D I L E K C K N H N V E T V Y D V M A L E D E E R E D I I T L
UniRef90_A0A024JMB9   L K Q I P Y F T S D I I A N C K A E G V S T V A E F L E V D E S K R A R L L M L
UniRef90_F0VK75       L K Q L P H F T D E L V E K A K E M G V D D I F D L M N M E E K D R E K L L S L
UniRef90_F0Y9C7       L L Q I P H V D G D T L S R A A A A G L E T A F D V L D L E D D D V R D K I L A L
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UniRef90_F0WKU3       L R Q F Q S I P E S I M K R L E K K D I P W E R Y L D L E P S D L G Q L V M
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UniRef90_W5J428       M Y Q F G I L P I D V V D K I E K R G L S I L A L R D M D E R E I G E F L R
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UniRef90_Q4CN72       L L Q I P H V T A E H A A Q V A N S S I T A L Q T L K A V L R E D C G L
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UniRef90_A9SJ85       L R Q F D A I L S S D I L Y K L E S R D A T M E R L Y N M A D D K Q I G E L I R
UniRef90_D8LZ34       L H Q F N K L P A S V L K K L D N K P I A F D R Y F E M S A G D L E E L V S G
UniRef90_A7RPC5       L K Q F T T L S P E I L N K L E G R K A S L E K L R D M V P E E I G H L V H
UniRef90_G8BPS6       L R Q F K G C P N E V I K R T E A S Y T Q W D D Y L K I Q S P S E V G K A I R
UniRef90_L7IJV7       L A I L P G L E P E S L A T K G N K G S V T L G K L A S L P N K Q L G K E L G V
UniRef90_F1KPZ2       L L V L P H M T E E I I E R I A E F G D G K Q N I E I A K K R A V A K I L D L
UniRef90_A0A022Q4F8   L W M L P C M T D D L I T T L G Q R G I S S V R Q L L D L P T A S L Q A L I K S
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UniRef90_Q7PUB6       V M T L P N V E A Y N A A I F T D L P F L T L P A L K E K C N R K Y E N L A E F
UniRef90_F7FTH1       L L T L P H I E H H H L H L F R K W P I E C L P E L M A A C E G K E K I L S E L
UniRef90_D3AVZ6       L L T L P Y M T K D I V E L I S K N N I N S L K E L T A A P Q D K L K L V L D L
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UniRef90_Q9FNQ1       L W M I P C M N D L L L G S L T A R G I H T L H Q L L N L P R E T L Q S V
UniRef90_UPI0002240B49 L L T L P N V E Q H H L Y L F S K W P I E C L P E L I S A C D G R E K T F A S L
UniRef90_S6E3F6       L K Q I P F F D G S I L E K C K E K G V E T V Y D V M A L E D D E R D A I M T M
UniRef90_C5LWR0       L M Q L P Y I N Q D M V E E A K K M G V E D V L D I L D L D D D K R N K L F R L
UniRef90_G2YVH8       L S I F P G V A P D F K P S K D N N I P T S L Q Q F S A L P Q N A Y Q V L L Q L
UniRef90_E2B1P8       L R Q F D C L P M E V I N K I E Q R D L G I Y R L Q E M D V K E I G S I L R
UniRef90_W4G240       L R Q F P A L S D A T C R K L E K K D I P F E R Y F D L S M A D L G Q L I G V
UniRef90_F9X4I6       F H Q F D L P Q A V L R N L D E K G S T S I E S L R D M D Q A E I G S L V H
UniRef90_I7MM90       L L Q L P H F N E K I V K A L A D L D V K S I I N D L L N N D E A R D Q V F F K F
UniRef90_U6KTP6       L R Q L P H F T P E L V K A L A D L D V F D F M N M E D S Q R E K L L S L
UniRef90_X6M3H6       L L N V P G L T E E M I L K F W D M H I E S L P E L M S L P P D E I R S M L S C
UniRef90_I2H526       L R Q F S K C P P E V V Q R M E A S S V H W K D Y L S L S S P S E V G Q A I R
UniRef90_R7T9C7       L K Q F P M L S F E I L K K I E D R R L T V D R L R E M E A Q E I G H I I H
UniRef90_C1FG69       L R Q F E Q L S P E T L Y K L E E R Q A T V E R L F D M S A Q E I G S M L R L
UniRef90_K4E8G4       L I T V P S L D F T D A V Q S H L L D K K R P S M M E L G E M T A R E I G S L L
UniRef90_F6ZCZ9       L I T V P N L E K H H L H L F S K W P I E C L P E L I A V C G G R E D I F S S I
UniRef90_G0UAX9       L L Q I P H I T E A M L P V I A E H N L Q H V A Q L V N S S L P S I K K L C G L
UniRef90_A0A024GDY4   L L Q I P F F S N K M L Q Q L Q T M K V E T P T D I L S M D E E A R T E L L P S
UniRef90_E0VWZ2       L L Q I P H V E D F H V K L L Q K R N M A T L P F I D K T T K D Y Y A L A N L
UniRef90_W7I6Y1       L K Q I P Y F T G D A I K I A A S F G I K R V F D F I D E D G E Q R D E L L N F
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UniRef90_K4C8N4          S E S Q L V D I D R F C K Q Y P
UniRef90_C7YKC4          S Q K Q L A E A A N F T N K Y P
UniRef90_M8BU23          P N S Q L K D I
UniRef90_W2TB35          E D V Q L A D V A K F C N N Y P
UniRef90_U4KVH2          G Q R Q L A D I A N F T N K Y P
UniRef90_R1GUA0          S G P Q L A D A A R F V N D Y
UniRef90_K4A4P0            P F S A S D L Y Q D L Q H F P
UniRef90_W4YP14          T D R Q I D E I W H V V D K L P
UniRef90_D5GME2          T E S Q L G K I A H F T N K Y P
UniRef90_D0NTD6          D T Q K M S A V A K F C N A F P
UniRef90_C4Y376          Q E E K L N D V A C F V N K Y P
UniRef90_J9IGS8          N E K E M A K L A N V C S R Y P
UniRef90_U1GJC6          D G R Q L L E A A A F T N K Y P
UniRef90_M2WXI7          S R Q Q I A D I V D A C A A Y P
UniRef90_G0V9F5          A N E K L L D V A A F V N N Y P
UniRef90_E6ZM88          D K R Q
UniRef90_R9XKM3          P M E E L N K V A L F V N S Y P
UniRef90_L8HD92          S A R Q T R E F M Q V L R Q L P
UniRef90_P32639          T D S Q L A Q V A A F V N N Y P
UniRef90_K7HBG4
UniRef90_B4GRJ8
UniRef90_M0TUC1          A P G   G K L V K Q F L G Y F P
UniRef90_I1P8V1          S   H L G K V V K Q Y V G Y F P
UniRef90_Q74ZT5          S E K Y G K A A Y D L L K K F P
UniRef90_S3BW32          T Q A Q L V E A A Q F T N K Y P
UniRef90_K4C8C1          S A A     S K L Y Q D M R H F P
UniRef90_A7TSN3          E E K Q L I K I A E F V N N Y P
UniRef90_V4AIF9          N P N N I N Q V Y N A L S Q L P
UniRef90_C5DRW4          D N R K L V K V A N F I N N F P
UniRef90_E9H7W7          S P D Q I Q E V R Q V L S H L P
UniRef90_UPI0003EAB370   Q P F Q A S Q A W N F L S H L P
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UniRef90_C5DN54          D N D K L N C I A E F V N T Y P
UniRef90_Q6CSU4          P E N K L N K V A E F V N S Y P
UniRef90_A0A024JMB9      D D P R M V K I A N F V N K Y P
UniRef90_F0VK75          T P S Q L K D V A K A S N R Y P
UniRef90_F0Y9C7          G P A E M A D V A E W C N D F P
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UniRef90_F0WKU3          S P K H G K A L Y Q L I H Q F P
UniRef90_C3YZL9          H V R M G K M V K Q A V Y Q L P
UniRef90_G8JQL0          S E K F G K A T Y D L I Q R F P
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UniRef90_A7RPC5          H V R M G H T V K S C V N R F P
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UniRef90_L7IJV7          P A S Q Q N K F Q K A V S M L P
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UniRef90_J9IZ88          D S T Q I K E I T K A L D R I P
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UniRef90_UPI0002B42716   F P A     S K L T Q D L Q I F P
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UniRef90_G0S562          S P H Q T N R F N K A L S A L P
UniRef90_Q9FNQ1          T E N F A S R L S Q D L Q R F P
UniRef90_UPI0002240B49   V E K D L Q Q A W N F L S H L P
UniRef90_S6E3F6          E N H K L T E V A Q F I N N F P
UniRef90_C5LWR0          S E S Q V A E V A Q A C N Q F P
UniRef90_G2YVH8          P S R N I Q A F D K A A N M I P
UniRef90_E2B1P8          D Q R A A I L V K K C C D E L P
UniRef90_W4G240            P K M G K E L Y T L L H Q F P
UniRef90_F9X4I6          N Q R M G N T I G K L L D N F P
UniRef90_I7MM90          S E S E I E E I A N A A N R Y P
UniRef90_U6KTP6          T Q A Q L R E V A K A S N R Y P
UniRef90_X6M3H6          N G S D G A V S N Q V V N
UniRef90_I2H526          S E K H G K Q V Y D F L Q R F P
UniRef90_R7T9C7          H V R M G S R V K Q C V E Q I P
UniRef90_C1FG69          N T A V G Q K V R G C L E S L P
UniRef90_K4E8G4          N Q R M G G V I A G L V A T F P
UniRef90_F6ZCZ9          L E H Q I S Q A W N F V S N L P
UniRef90_G0UAX9          N E Q Q L C D A M E A V R G F P
UniRef90_A0A024GDY4      E K P Q L A A I A S F C N S F P
UniRef90_E0VWZ2          S E N E I E E I H R V I C S F P
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UniRef90_H9KJJ7             E I F S M I S Y S Q E F E Q L K V R D D E M E E L Q Y L F E E Y C N I T
UniRef90_V5F9K9             D V L R M I S M S G E F D N I Q S R D N E S K E L E R L R D E A V Q T E
UniRef90_H2TJ23             D I L S T V S K A E E F E Q L K V R D E E L D E L D Q L L C C H C K L P
UniRef90_N4VHG0             D I L K M I S M S G E F D N I Q S R D S E E K E L S R F R H E V V P C V
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UniRef90_Q6C0Y6         S K Y R S I L Q A V T T A A E F D S L P I R N H E D I L L R R L Y G H I P W K L
UniRef90_Q54G57         S D I K T L L R V L S D A A E Y S E F P V R H N E E I L N Q E L N E N L P I K L
UniRef90_H2AQA5         S T L R D I V E I L A G A N E F T N L P A R E D D Y S K L L K L H N L C P L K F
UniRef90_G1KJW3         S V E E L L S I L A D A E E Y A D L P V R H N E D Q M N S E L A K C V P I E V
UniRef90_K9KB58             E E L L S I L S D A E E Y T D L P V R H N E D H M N S E L A K C L P F E S
UniRef90_A4S1E1         T L P D I F H M L S H S S E F E N I V P R E D E I P E L E T L R R N V P I D I
UniRef90_I3KI85
UniRef90_M3X4E0             S D I F A I V S K A E E F D Q I K V R E E E I E E L D A L L N N F C E L S
UniRef90_H2TJ25
UniRef90_Q0CNC0         T F Q D V L S W M C S A T E F D E L P V R H N E D L I N A E L A R N L P L S V
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UniRef90_Q013J2         S S L E D I L E T L C G V A E Y D E L P V R H N E D R H N T E L A Q V V A F Q V
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UniRef90_G7IGX7         T D M G G L L D I V S K A P D F D A L P I R F G E E E E V C R L L S N Q R F P Y
UniRef90_H1VE63         S F L D V L S W M S R A T E Y D E L P V R H N E D L I N E E L S R N L L F P G
UniRef90_G0R9V9         S F L D V L S W M C H A T E Y D E L P V R H N E D L I N D V L S Q N L P F S G
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UniRef90_UPI0003F06FD0  T R E E I F S M I S K A E E F D Q I K V R E D E L S E L E A H E E F D C V M R
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UniRef90_S2JEH2             D V L S M M S M S S E F D Q I K S R E T E H Q E L K K L L E S A C A C D
UniRef90_S3CE74             D V L K M I A M S G E F D N V Q S R D T E S K E L S K L R D E Q F S P C
UniRef90_T1PKB2         S T S D I L L A I A D S Y E F D Q Q P V R H N E D K Y N E E M A D V V R Y R P
UniRef90_W2TG90         S I E D L L K T L S H V P E Y G E I P V R H N E D V V N T Q L Q R K L R I R F
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UniRef90_W7HM97         K F E D C L L W M S G A T E Y N E L P V R H N E D L V N A E L S K F L P Y E A
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UniRef90_UPI0003C39B4F          E I F A M I S Q A Q E F Q Q L K V R D D E M E E L D E L R H N Y C K V K
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UniRef90_A5E7Q8         S K L K D I L L A L A N A V E F E N I P I R N G E D K L L T S L A K K M P I K L
UniRef90_Q6CEQ3         S T F R D A L V W V S K A T E Y D L L P V R H N E D L V N A E L S K E M R Y S G
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UniRef90_M7T9C1             D V L S W M S R A T E Y D E L P V R H N E D L I N A E L S R N L P Y Q G
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UniRef90_L8G9F5         T F E D V L F W M S A T E Y D E L P V R H N E D L I N G E L A K N L P I D A
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UniRef90_E4V5Q0         T F A D A L G W M C S A T E F D E L P V R H N E D L V N A E L A K N L P L P T
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UniRef90_B6H0I8         T F Q D V L S W M C S A T E F D E L P V R H N E D L I N A E L A Q N L P L S I
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UniRef90_K8E8V4         S L P E V L H V I S H S S E F E N I A P R E D E M P E L E A L R R N C P I E I
UniRef90_G1X2Y3         T F E D C L L W M S R A A E Y D E L P V R H N E D L V N A E L S K Y L P F E A
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UniRef90_M2UBP6         T F A E A L A W I S H A T E Y D E L P V R H N E D L I N M E L S K A L P I S A
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UniRef90_Q7S8K0         S T E E D I L K M I A M S G E F D N I Q S R N E A N E L M A M K D V P Y K V
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UniRef90_W0TBV2          S E L D R S T K T K V F I L L Q A Y F S G L R L P P D L S Y D T T N I L K V A
UniRef90_K1RGX5          N P H T Y D S S H T K T H I L L Q C H F G Q L P P S D Y N T D T K S V L D Q A
UniRef90_A0A016T926      R G G G L A S V A G K V N V L L Q S H I S R T F V R F S L A S E S L Y V Q Q N A
UniRef90_S8ACR2          K E G A E D P Q A K I N V L L Q A Y I S R L K L D G A L M A D M V Y V T Q S A
UniRef90_F2TYV9          P V G G S E N T Y G K V N I L L Q S Q A P L R F S L T S D M N Y V A K N A
UniRef90_H9KJJ7          V Q G G V E N I Y G K V N I L L Q T Y L S H G R V N F S L I S D Q A Y I V Q N A
UniRef90_V5F9K9          V E G G N D S A H A K T N I L L Q S Y I S R A R L D F A L V S D S A Y V A Q N A
UniRef90_H2TJ23          A A G G V E N S Y G K I N I L L Q T Y I S R G E V D F S L I S D L S Y V A Q N A
UniRef90_N4VHG0          V D G G I D T P Q A K T N I L L Q A Y I S R A Q P D F A L G N D L N Y V A Q Q A
UniRef90_R8BB84          D G G I D T P Q T K T N I L L Q A Y I S K A Q P D F A L T N D L N Y V A Q Q A
UniRef90_Q6C0Y6          P E L D L L T P A F K A F V L A Q C H I A R L N L P S E L T A D Q A E V V Q L L
UniRef90_Q54G57          G N Y E D S H T K V H L L L Q A H F Q R C P L P T D F T T D T K S A L D Q G
UniRef90_H2AQA5          S G N R T E F T K F K V F V L L Q A Y F S R L G L S L E L Q Q D L A S V L K R A
UniRef90_G1KJW3          N P H S F D S A H T K T H L L M Q A H F E H A S L C P D Y V T D T K T V L D Q S
UniRef90_K9KB58          N P H S F D S P H T K A H L L L Q A H L S R T M L C P D Y D T D T K T V L D Q A
UniRef90_A4S1E1          K A S L T D K V G K V N L L L Q V Y I S R A S M Q F S L I A D S M Y I S Q N A
UniRef90_I3KI85          V E N G Y G K V N I L L Q T Y I G R G E V D F S L I S D L S Y V A Q N A
UniRef90_M3X4E0          A P G G V E N S Y G K I N I L L Q T Y I S R G E M D S F S L I S D S A Y V A Q A
UniRef90_H2TJ25          F S L I S D L S Y V A Q N A
UniRef90_Q0CNC0          E S M P M W D P H M K A F L L L Q A Y M S R I D L P S D Y V G D Q I S V L D Q G
UniRef90_J7S106          S E E K G K V V S Y K I F V L L Q A Y F S R V H L P Y E L S L D L K L I L E R S
UniRef90_Q013J2          D V R L A E D P H V K T S L L F Q C H F L R L P L P S D Y Y T D T K S V L D Q A
UniRef90_N1Q7D3          D K L P M W D P H V K A H L L L Q A H F S R I D L P S D Y V G D Q N S V L D Q A
UniRef90_M3D2V7          E N M V M W D P H V K A H L L L Q A H F S R I D L P S D Y V G D Q N S V L D Q A
UniRef90_UPI00021A7AD2   D N Y S Y G S P H T K A F L L L Q A H F S R L P L C V D Y I T D L K S V L D Q S
UniRef90_G2XFX1          T N M P M W D P H V K S F L L L Q A H F S R V N L P S D Y V G D Q T S V L D Q A
UniRef90_G7IGX7          E N S K F K D T H A I A N V L L Q A H L S R T S V G V N L A F C Q K Y V L S F A
UniRef90_H1VE63          S S F P M W D P H V K A F L L L Q A H M S R I T L P T D Y V G D Q T S V L D Q A
UniRef90_G0R9V9          N S F P M W D P H V K S F L L L Q A F M S R I D L P T D Y V G D Q T S V L D Q A
UniRef90_E2BZ67          D Q Y T Y D S P H T K A F L L L Q A H F S R L P L S S D Y I T D L K S V L D Q A
UniRef90_H9JKX0          D A L S L D S S N V K A F L L L Q A H M T R I T L N S D Y L T D T K S V L D Q T
UniRef90_UPI000329A937   N P H S Y D S A H T K T H L L L Q A H F G H A Q L C S D Y T T D T K T V L D N A
UniRef90_E9EYI1          H A F P M W D P H V K A F L L L Q A H M S R I E L P T D Y V G D Q T S V L D Q A
UniRef90_K1WTR7          T D L P L W D P H V K A F L L L Q A H M S R I D L P T D Y V G D Q T S V L D Q A
UniRef90_I1GZC1          D N P K Y C D P H I K A N A L L Q A H F S R H T V V G N L A V D Q R G V L L Y A
UniRef90_W6KX07          R E Y R I T S V Q W K V T T L L K A Y I S R L H I E D S L S A D V N Y I A Q N A
UniRef90_UPI0003F06FD0   A A G G V E N G Y G K V N I L L Q T Y I S K G K L D F S L V S D M A F T A Q N A
UniRef90_T1IVJ2          K G G K E N T H G K V N I L L Q T H I S R G D C K F S L I S D L N Y I T Q N G
UniRef90_S2JEH2          I R G G T E D T H G K V N I L L Q S Y V S N A F I D F A L V S D C A Y V A Q N S
UniRef90_S3CE74          E V E K G E S S Q T K T N I L L Q S Y I S R A Y I D F A L A N D S N Y I A Q Q S
UniRef90_T1PKB2          R S P T W D S P Y T K T F L L L Q A H F S R L S L N S D Y L T D T K S A L D N A
UniRef90_W2TG90          A T S V M D S S H T K A H L L F Q A H F S R T E I P T D Y R T D L K S V L D Q C
UniRef90_G0V069          K A Q D A D S P H A K A F L L F Q A H F E R S S L P S D Y Y T D L K S T L D N S
UniRef90_S8AWW9          E S M P M W D P H V K A F L L L Q A Y M S R I D L P S D Y V G D Q T S V L D Q S
UniRef90_U6NR83          A T S V M D S S F T K A H L L F Q A H F S R T D V P T D Y R T D Q R S V L D Q C
UniRef90_W7HM97          G R M P M W D P H V K A C L L L Q A H M A R A E L P S D Y N Q D Q I T V L D Q S
UniRef90_S4PDM4          D S L T L D S S N V K A F L L L Q A H L S R L Q L P N D Y L T D T K S V L D Q T
UniRef90_G4VKB8          A G T V D T D V I A K V N A L L Q G Y I S R H P S C H S L S S D M N F V Q Q N A
UniRef90_UPI0003C39B4F   A F G G S E N V C G K V N I L M Q T Y L S H G Y V K F S L V S D M S Y I V Q N I
UniRef90_K7J4T1          E R L S Y D S S N T K A F L L L Q A H F S R L P L C A D Y Y T D L K S V L D Q S
UniRef90_A5E7Q8          N G G T N I T P F T K V F I I L Q A F I S R V K F P D T L R F D V E K I L E V L
UniRef90_Q6CEQ3          E S M D M W D P H V K V F L L L Q A Y M S R V K L P T D Y I Q D T V S V L D Q T
UniRef90_H8WZ69          K E L P T E P L T K I N I L L Q T Y I S R L N L E G A L I S D M I Y I K Q S A
UniRef90_M7T9C1          N T F P M W D P H V K A F L L L Q A H M A R I E L P T D Y V G D Q T S V L D Q S
UniRef90_S8A4X8          G Q M P M W D P H V K A Y L L L Q A H M A R A E L P T D Y N Q D Q I T V L D Q S
UniRef90_L8G9F5          K S F P L W D P H V K S F L L L Q S H M S R I E L P S D Y I G D S N S V L D Q S
UniRef90_D8SDF9          D N K L L D D P H V K A N L L F Q A H F S R L E L P S D Y V T D T K S V L D Q S
UniRef90_E4V5Q0          D H L P L W D P H I K A F L L I Q A F M S R V E L P S D Y V G D Q T S V L D Q G
UniRef90_C1GSU4          T A M P L W D P H I K A F L L L Q A F M S R I D L P T D Y V G D Q I S V L D Q G
UniRef90_B6H0I8          D C M P L W D P H T K A F L L L Q A Y M S R I D L P T D Y V G D Q T S V L D Q G
UniRef90_U6MCR2          P S I D F T K A S T K A L V L L H A H C Q R A T L P S D L V A D Q K Q V L E P C
UniRef90_Q5BYK0          P K A K F S S P H V K A N L L L Q A H L S R L Q L P N E M Q T D T D R L L G C T
UniRef90_K2RBS1          A G G I G T P H S K T N V L L Q G Y I S K A R L E D T L Q S D T N Y V A Q N A
UniRef90_I4YG77          V K G G T D T S Q G K C N I L L Q A Y I S D F A L V S D C N Y V A Q N G
UniRef90_Q9XWI1          R G G G L A S V A G K V N V L L Q S L I S R T S T N S A L M S E Q L Y V Q Q N A
UniRef90_K8E8V4          K G D M S D K I A K V N L L L Q V Y V S R K R L E F S L V A D S S Y I S Q N A
UniRef90_G1X2Y3          G Q I P M W D P H V K A N L L L Q A H M A R A E L P S D Y N Q D T I T V L D Q S
UniRef90_F4WEX0          N Q Y D S P H T K A F L L L Q A H F S R L Q L C T D Y I T D L K S V L D Q A
UniRef90_T1GZL3          F N D P H I K T N L L Q A H L Q L G P E L Q G D T E A I L S V C
UniRef90_B4KAC8          V F G G S E N V C G K V N I L I Q T Y L S N G Y V K F S L S S D M S Y I T Q N V
UniRef90_R1BXF1          K A S L A E K E G K A S V L T Q A Y I S G T A L K S A L V S D C S F I A Q S A
UniRef90_T1HRW5          K G G K E N L H G K V N I L M Q A Y L S R C K V N S F S L M S D L S Y I S Q V
UniRef90_B3LZT5          P S A S W D S P Y T K T F L L L Q A H F S R N S L N S D Y L T D T K S A L D N A
UniRef90_T0QAI6          A K A R F N H P G I K S N L L M H A H L L R K P L S P A L E A D L N T M L K K A
UniRef90_L7M2N3          V A G G S E N S Y G K V N I L L Q N Y I S R C P V T F S L V S D Q A Y I V Q N A
UniRef90_F4P3A8          V K G G V D T N Y G K T N I L L Q S Y I S R S R I D F A L V S D A A Y V A Q N S
UniRef90_N1JBL7          I R D H I D S P Q V K T N I L Q A F I S R A N I D F A L A N D S N Y I A Q Q S
UniRef90_E5A8T9          D D F P M W D P H V K A F L L L Q A H F S R I D L P S D Y V G D L N S V L D Q S
UniRef90_E9BBB4          R D A E A D S P H A K A F L L F Q A L F E R A P M P T D Y I T D Q K S A M D N A
UniRef90_C5P4B9          S D L P L W D P H I K A F L L L Q A H M S R V D L P S D Y V G D Q T S V L D Q G
UniRef90_U1HJX8          D D L P M W D P H M K A F L L L Q A F M S R I D L P S D Y V G D C N S V L D Q S
UniRef90_M2UBP6          D D F P M W D P H V K A F L L L Q A H F S R I D L P S D Y V G D Q N S V L D Q S
UniRef90_Q6FKF7          Q G I K M E Y S S Y A S F V L L Q C H F S R I S I P Y E L A D H I N K I L L V I
UniRef90_G0U8X0          S G R E V R E D W H K V Y V L I Q A Q L G H V A V D F S L R N D C V R L W T S A
UniRef90_Q7S8K0          S T G I D Q P H T K T N I L L Q A Y I S R A Q P Q F A L T N D L N Y V A Q Q A
UniRef90_G7YI73          P I G S F E C P H T K A H L L L Q A Y I F T R L T E L P D Y V T D T R S V L D Q A
UniRef90_F0XMX4          A A A P T T A P A F K A F V L L Q A H F A R M Q L P V D L A R D Q E V V V A R V
UniRef90_D7FN81          G T E E L D S P H V K T H L L Q A H F D R C A L P S D Y V T D T K T V L D Q A
UniRef90_E9C2G0          T S K M D S P H T K A H L L L Q A H F S R A R L P T D Y I T M D N A
UniRef90_X6MYX2          K E S M E E S A S K I N V L L Q T Y I A R L K L D F Q L I A D M C Y V T Q S A
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                              90            100           110           120
UniRef90_I1FWD8          L R I L Q A M I D L S A N E G W L Q T T L K A M S L V Q M C V Q G L W S Y D S S
UniRef90_M1WDH1          I R I I Q A S I D V L A E L G Y L S S C L Q M M A L L Q C I K S A R W P T D P A
UniRef90_W0TBV2          P A L A S A M V D V L S A N G L L N A T V A M D L S Q M I V Q G V W D T D S P
UniRef90_K1RGX5          I R I L Q A M L D V S A D E G W L V T S L R I T Q L I Q M V I Q G R W Y H D N A
UniRef90_A0A016T926      S R L C R A I F E I V L R K G W A Q A A N A F L T M S K A I E R R V W P N Q S S
UniRef90_S8ACR2          G R I L R A V F E M C L K K G W S S V S K V A L E L C K T V E K R M W P T M T P
UniRef90_F2TYV9          G R L L R G L F E I A L R R S L A T L V P K L L T L C L C V D R R L W W H N T P
UniRef90_H9KJJ7          G R I F R A L F E I M L G Q N N A I M A G R L L E I A K V L E I Q Q W S D R S P
UniRef90_V5F9K9          A R I C R A L F M I A L N R R W G Y Q C Q V L L S M C K S I E K Q I W P F Q H P
UniRef90_H2TJ23          A R I V R A L F E I A L R K R W P T M T Y R L L T L C K V I D K R L W A F A H P
UniRef90_N4VHG0          G R I C R A L F E I A L N R R W G H Q C L V L L T L A K S I E K R I W P F Q H P
UniRef90_R8BB84          G R I C R A L Y M I A L N R R W G H Q C L V L L T L A K S I E K R V W P Y Q H P
UniRef90_Q6C0Y6          P T L L A A S V D L L A S E G H Q S C M Y A M D L S Q M V V Q A T L E S D S P
UniRef90_Q54G57          I R I L Q A M I D V S F E Y G Y F A T A I Q V I R L L Q M L V Q G R W D Y D S S
UniRef90_H2AQA5          L P L I N A I V D L L A S E G Y L N A T I A M D V S Q M L V Q A V W D V D S P
UniRef90_G1KJW3          I R I C Q A M L D V A A Y E G W L V T V L N I T S L L Q M L I Q G R W I R D S S
UniRef90_K9KB58          L R V C Q A M L D V A A N Q G W L V T V L N I S N L V Q M V V Q G R W L K D S S
UniRef90_A4S1E1          S R I C R A L F E L C L R R G W P S L A E Q L L T V S K S C D L R I W P H Q H E
UniRef90_I3KI85          A R I V R A L F E I A L R K R W P A M T H R L L T L C K V I D K R L W G S A H P
UniRef90_M3X4E0          S N I V M S I N E I I L T I E F R I L E L R L L N L S K V I D K R L W G W A S P
UniRef90_H2TJ25          A R I V R A L F E I A L R K R W P T M T Y R L L T L C K V I D K R L W A F A H P
UniRef90_Q0CNC0          I R I L Q A S I D V M T E L G Y L P A C Q Q L M T L L Q C I K S A R W P E D Y P
UniRef90_J7S106          I P L V N A V V D I L S S D G Y L N A S T A M D I S Q M V V Q G V W D I D S P
UniRef90_Q013J2          I R I L Q A M I D V T S D A G W L R T A M N T M N L M Q M I M Q G R M I S E S S
UniRef90_N1Q7D3          I R I I Q A S I D V L T E L G Y L Q S C K M M T L L Q C V K S A R W P D D G P
UniRef90_M3D2V7          I R I L Q A S I D V L T E L G Y M Q S C K M M T L L Q C V K S A R W P D D G P
UniRef90_UPI00021A7AD2   I R I I Q A M I D T V A E H G W L A S A L M I M N L L Q M L I Q A R W I D E F A
UniRef90_G2XFX1          I R I I Q A S I D V L A E L G Y L S S C L Q M M A L L Q S L K S A R W P T D P A
UniRef90_G7IGX7          H K L L Q A I I A I A S K K R W L G P T V L A I T F N Q M L I Q G T W E T D S V
UniRef90_H1VE63          I R I I Q A S I D V T T E L G H L T T C L E F V K L L Q C I K S A R W P T D H P
UniRef90_G0R9V9          I R I I Q A S I D V L T E M G F L S S C L Q M M K L L Q S I K C A R W P T D P P
UniRef90_E2BZ67          I R I L Q A M I D T V A E R G W L T S T L R L M C L F P M I V Q A R W I D E F A
UniRef90_H9JKX0          I R I L Q A M I D T S A E N G W L S V C L S C Q T L M Q C I I Q A R W P S D S P
UniRef90_UPI000329A937   I R I C Q A M L D V A A N E G W L V T A I S I C N L V Q M I V Q G R W L H D S S
UniRef90_E9EYI1          I R I I Q A S I D V L T E L G Y L S S C L Q M I S L L Q C I K S A R W P T D P V
UniRef90_K1WTR7          I R V I Q A S I D V L S S C V Q M I T L L Q C I K C G R W P T D Y P
UniRef90_I1GZC1          H R L L Q A I V D V A S S N G W L S L A L N T I E L S Q M
UniRef90_W6KX07          P R I S R A L F E I E L E R G H P L T T Y I F L T L Y K C L V H R C W D F D H P
UniRef90_UPI0003F06FD0   G R I V R A L F D I A I R K G W P V M A A L T L Q L S K T V D K R Q W D F E N P
UniRef90_T1IVJ2          T R I L R A L F E V V L R R R W A L M S S R M L E L C K V L E Q R M W P E D S P
UniRef90_S2JEH2          G R I A R A L F E I A L N R N W G P T A S V L L Q I N K A V E K R M W T F Q H P
UniRef90_S3CE74          A R I C R A L F M I A L N R R W G H Q C L V L L S M C K S I E K R L W A F Q H P
UniRef90_T1PKB2          T R V M Q A M V D Y T A E R G W L S P S L K I Q Q I M Q S V I Q A R W F D E S E
UniRef90_W2TG90          V R I L Q A M R D V C Q L N G W L S T V L R L T I L Q Q M C Y S G R W H D D H P
UniRef90_G0V069          V R V V Q A M I D V T A N N G H L H A S L R C M T L L Q C I V Q G L W W H S N T
UniRef90_S8AWW9          I R I I Q A S I D V M A E L G F I P A C E M F V T L L Q C I K S A R W P T D H A
UniRef90_U6NR83          V R I L Q A M S D I C Q L N G W L S T A L R I I T L Q Q M C H S G R W Y D D H P
UniRef90_W7HM97          I R I L Q A S I D V L A E L G L M S T C L T M M N L M Q C I K Q A R W P N D G P
UniRef90_S4PDM4          I R I T Q A M I D A S A E N G W L T V C L T C Q M L M Q S I I Q A R W P T D S P
UniRef90_G4VKB8          G R L V R Y L F E I S L R Q G W S H C A T I T L T L A R M F E Q R L W N D Q S P
UniRef90_UPI0003C39B4F   V R I C R A L F S I V L R N N N A I L S G R M L Q I C K M F E K Q Q W D F E T P
UniRef90_K7J4T1          I R I L Q A M I D V V A E R G F L S S T L R V M Q L L Q M V L Q A R W I D E P A
UniRef90_A5E7Q8          M K L L N A C I D M L S G E G H L N A M L L M D L S Q M I T Q R T W S F E N H
UniRef90_Q6CEQ3          L R I L Q A D T V A E L G L L F A V K T A I T V M Q C I K Q G A W P D A D P
UniRef90_H8WZ69          S R L L H A L Y E I A L L K K W S S L A K T I L G L S K M V S N R L W A S D S P
UniRef90_M7T9C1          I R I I Q A S I D V I T E L G H L S S C L E M I K L L Q C I K S A R W P E D P A
UniRef90_S8A4X8          I R I L Q A S I D V M A E L G V M S T C L M M I N L M Q C V K Q A R W P E D G P
UniRef90_L8G9F5          I R I M Q A S I D T L V E M G Y L S S T L Q M M T L L Q C I K S A R W P T D N P
UniRef90_D8SDF9          I R I L Q A M V D A A A N G G W L R T T I R A M Q L L Q M I M Q G T W S D H S P
UniRef90_E4V5Q0          I R V I Q A C I D V L A E L A Y P K A C S M M M T L L Q C I K S A R W P T D H P
UniRef90_C1GSU4          I R I I Q A C I D I L A E L G Y P N A C T T M M T L L Q C I K S A R W P D D H P
UniRef90_B6H0I8          I R V I Q A S I D V M A E L G Y I P A C Q M L M T L L Q C I K S A R W P E D H P
UniRef90_U6MCR2          V R L L H A L V D V I A S N G W L I P A L A A M E I S Q A L V Q A V L H Q A S A
UniRef90_Q5BYK0          I R L L Q A C V D V L S S N S G L G P A L A A M E L S Q M C T Q A V W H K D S Y
UniRef90_K2RBS1          T R I C R A L F M I A L N R R W G H Q C L V L L S L C K S I E R Q V W P F E H P
UniRef90_I4YG77          A R L I R A L L E I S L S H K W A V T A A S L I S M S K A L E Q R L W P Y E H P
UniRef90_Q9XWI1          G R L C R A M F E M V L K N G W S Q A A N A F L I A K C V E K Q M W M N Q C A
UniRef90_K8E8V4          S R I C R A L F E L M L K R G W P S L A E T L L T L S K A V D R R L W P H H S P
UniRef90_G1X2Y3          I R I L Q A S I D V M A E L G I M S T C L T M M N L M Q C V K Q A R W P Q D G P
UniRef90_F4WEX0          I R I L Q A M I D T V A E R G W L T S T L R I M Q L F Q M V I Q A R W I D E S A
UniRef90_T1GZL3          C V L S S N G W L S P A V A A M E L A Q M V T Q A M W S K D S Y
UniRef90_B4KAC8          G R I A R A L F S I V L R Q N N A T L T G R M L L L C K M F E R R Q W D F D S H
UniRef90_R1BXF1          S R I A R G L F A I A L S K S W I S Y A Q K V L K L S K M L E R R T W W S R C P
UniRef90_T1HRW5          I L F E I N R S N N S L L A G R F L Q M A L M M E H Q Q W N W E T P
UniRef90_B3LZT5          T R V M Q A M V D Y T A E R G W L S T T L V V Q Q M Q S V I Q A R W F D A S E
UniRef90_T0QAI6          M H L I D G M M E I C V S K G W L Q T L I N V I E F E Q H I T Q A L W V K D S A
UniRef90_L7M2N3          T R I L R A L F D M V L R A G G A I M A G R M L T L C K V V E R Q T W N F E T P
UniRef90_F4P3A8          A R I L R A I F D I A M S R N W P T A S V L S L C K T V D K R M W S F E H P
UniRef90_N1JBL7          A R I C R A L F M I A L N R R W G H Q C L I L L S L C K S I E K K I W S F Q H P
UniRef90_E5A8T9          I R I V Q A S I D V L T E L G Y F S S C E A M I S L L Q A I K S A R W P T D G V
UniRef90_E9BBB4          V R V I Q A M V D V A A N N G H L Y A A L R C M T L L M Q C M V Q A R W W D D N S
UniRef90_C5P4B9          I R V I Q A C I D V L A E L G Y A K G C W M M M T L L Q S I K S A R W P G D H P
UniRef90_U1HJX8          I R I I Q A G I D L M A E L G R S T V V Q M V C L L Q C I K S A R W P Q D Y P
UniRef90_M2UBP6          I R I V Q A T I D V L T E L G Y R S S C E T V I S L L Q A I K S A R W P N D G P
UniRef90_Q6FKF7          P Q L L S S M I D L L A S Q G L M S A L T V M D M Y Q M V M Q A L W D I D S P
UniRef90_G0U8X0          P R L A H F I V D Y A A T L D S F S F V K E S A L L H R C M E Q R M W W D G P I
UniRef90_Q7S8K0          G R I C R A L F M I A L N R R W G H Q C L L T M A K S I E K R I W A F Q H P
UniRef90_G7YI73          S R I L Q A M L D A C A Q C G W L V S S L N C L L L M Q M V T Q G I W V E D S S
UniRef90_F0XMX4          P A L L S A T A D L L A S Q G H L N A L Q A M E M T Q M V V Q A M W D R D S P
UniRef90_D7FN81          V R V I N A M L D I A A G F G L L E T T L G L L R L H Q M V Q Q A A W E D A D T
UniRef90_E9C2G0          I R V S Q A M L D S A A E L L L A H V M N I V Q M L V Q A R W D E S P
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                                          130              140              150           160
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UniRef90_W0TBV2        L K Q I P F F N E E I L Q K V C S E F G V Q T V Y D V M S L E D E D R E N I L T L
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UniRef90_F2TYV9        L R Q L G N F L P N E M Y N K I E G R G M D L F E I L D M P E D E L G H W L R
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UniRef90_V5F9K9        F H Q F D   L P Q P I L K N L D E K P T S S I E S M R D M E I A E I G G Q L V H
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UniRef90_R8BB84        L H Q F D   L P K T I L N Q L D A K E A L S I E S M R D M E P A E I G G L V H
UniRef90_Q6C0Y6        L R Q V P F F T P E I I D D L R G A G V E A V G D I S E L D E D K L K G I L N F
UniRef90_Q54G57        L M T L P H I N K D F A D F L S S N L I L S I S N L S D M L K I P R D K I I G L
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UniRef90_G1KJW3        L L T L P N I E Y H H L H L F R K W N I E C L P E L I T A C D G K E N I F T A M
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UniRef90_A4S1E1        L R Q F E K L K P E V L F K L E E K K   A T L D R L W D M S A S E I G S M L R L
UniRef90_I3KI85        L R Q F P N L S P V V L N R L E E K K L   T V D K L K E M R K D D I G H M L H H
UniRef90_M3X4E0        L R Q F S V L P P H I L T R L E E K       L T V D K L K D M R K D E I G H M L H H
UniRef90_H2TJ25        L R Q F S S L S H V I L N R L E E R K L   S V D K L K E M K K D E I G H M L H H
UniRef90_Q0CNC0        L S I L P G I D         V E R P S T A L P E T L V A L S A M P T G A V S S L A R K
UniRef90_J7S106        L K Q I P F F D N E I L K K C K E Q G V E T V Y D V M A L D D E E R E S I I Q L
UniRef90_Q013J2        L L M L P H I Q P D H L K G L E R C G V S G L S Q L I D L S T K N I Q K A C G I
UniRef90_N1Q7D3        L A V F P G V S P E K E K K R L E M S D A R P K D L I D A T T A S K S V I L A L
UniRef90_M3D2V7        L S I F P G I G A E R E K K R E N S R P Q N L I D A T T C P K G I L D S V L G L
UniRef90_UPI00021A7AD2 I T T L P H V N S E H I Q L F S A L   S S C L P K L C F I M R N K Y S T L V E F
UniRef90_G2XFX1        A S I L P G V D A E V I K E A D R K P L A A I   T A L P Q A K L S Q L A S R L G V
UniRef90_G7IGX7        L L Q V P H V T K Q L A I K C Q K R N I S S L D D L K K M E H G K L C E I F N M
UniRef90_H1VE63        A S I L P G V G V D T L K S     D K S N L T L A K V A A L K V S N L A R Q L S V
UniRef90_G0R9V9        A S I L P G V E P D A S S P S K E K D E P S L A T I S T Y S Q D Q L T S F L R I
UniRef90_E2BZ67        I T S L P H V E A T D L H L F S S S M V L P V L C H M T F D N Y D R L A M I K Y
UniRef90_H9JKX0        L T T L P H I E S Q H L Y L F S K K P C M M L N G L K V S C M R N Y E L L A K F
UniRef90_UPI000329A937 L L T L P H V E Q Q H L G L F R N R G I E G L P E L I A A C N G N E S V F R Q L
UniRef90_E9EYI1        V S I L P G V E P E S T K     D N T P L S K L S V L K P N E V N Q L S K K L G L
UniRef90_K1WTR7        L S I L P G V P V R Q P N     G E E L P V S L Q D F S F L S E V A Y Q K T L K L
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UniRef90_S2JEH2        L R Q M   G L P H D I I N K I E N R T H E S I E E M R D M D P N E L G E L V H
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UniRef90_T1PKB2        F L T L P H V N N A N V H L F H N Y E Y L T L P V L K D I C R N D Y E K L A G F
UniRef90_W2TG90        L L C L P H L K S Y D A E N I D R A T I P L L Q N Q F D V E K A S G S D I V E L
UniRef90_G0V069        L L Q I P H V T E Q H V A E L V N S P L S T L T Q L H E C L S E K       C G L
UniRef90_S8AWW9        L S I L P G I P V E K P P R G L P A S L V K L S S Q P R S A V S E L A K K L N L
UniRef90_U6NR83        L L C L P H L N I Y D A E R I G E R D I E N A Q G T D E V E K R A A N V L F E L
UniRef90_W7HM97        F S T L P G V N F E R E Q R R L E A G A S Q P T S L E N F D G I S R D R L T E L
UniRef90_S4PDM4        L T T L P Y L E S Q H L Y L F T N M T R D T V T C M R S Y E L L A R Y M R R E F
UniRef90_G4VKB8        L W Q F V E N G K Q R L I Q R V E E L Q F S I D R I R E T D V N E L A Y L F H Y
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UniRef90_A5E7Q8        L R Q I P H F D N E L L K R C K E H N V T S V Y D I M S L E D D E R D E V L Q I
UniRef90_Q6CEQ3        V T L L P G M K P Q D I T K F E E R D E I T L D T L G N M S P E K I K T A A Q F
UniRef90_H8WZ69        L R Q F G S L A P K S I I K A S E A S H L P W I Q Y F H L T T E E L A E V L N L
UniRef90_M7T9C1        L S I L P G T G A A N L K K G G G G V P A T L Q K L S S L P R A K L E Q L L G V
UniRef90_S8A4X8        L S I L P G V T L E R E E R L E R S Q L S S F E N F E G I S Q N K I T G L M K M
UniRef90_L8G9F5        L S I L P G V D I G G I P A K S Q K S P S S L M E L S R L P P A G I E S L T H L
UniRef90_D8SDF9        L L M L P N T T T E L L P S L     P F A T L D E F L S L P S Q R L R K L F E M
UniRef90_E4V5Q0        L S I L P G L E P D S V S I D A A K L P V S L T K L V A M T N P A V S R M L Q L
UniRef90_C1GSU4        I S I L P G I A P A A N E S P N P T Q L P S L P S L L A L P Q S T L T S L L H L
UniRef90_B6H0I8        L S I L P G V P T D
UniRef90_U6MCR2        L R Q L P H F S T D L V K A A N G K E V K D V F D F M N M E D A Q R E K L L S L
UniRef90_Q5BYK0        L R Q I P H F T A E R I N
UniRef90_K2RBS1        F H Q F D   L P R P V L R N L D E K G V A S I E S L R D M E S A E I G Q L V H
UniRef90_I4YG77        M K Q Q F G L R N E V V Y N I T R W A D E T I E E L V E L S P A E L G T L I H L
UniRef90_Q9XWI1        L R Q F I N I P I T W I E K I E R K K A R E   S D L L E L S A K D L G Y M F S C
UniRef90_K8E8V4        L R Q F E N L K P E T I Y K L E E K D   A T V D R L I D V S A K E V G D L L R L
UniRef90_G1X2Y3        L S I L P G V A L E N E Q V R V E R N G Q Q L A S F E N F E G V P Q S R L A S L
UniRef90_F4WEX0        I M T L P H L P H R T E D L R L F S S L   S M A L P I L C S I T Y D N Y N R L A K L
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UniRef90_B4KAC8        L R Q F P T I N A E T I D K L E R R G L   S V Y R L R E M E Q R E L K E W L R
UniRef90_R1BXF1        L R Q I G G V P A E I Y D K L E A K R Y T S M E A L K E M G V R E I G Q L V S
UniRef90_T1HRW5        L R Q F S I L P Y E I I S K I E E R D L   S V E S L R E M A E L I G I I L R
UniRef90_B3LZT5        F L T L P G V N D D N L D A F L N I D H E S L P V V K E L C R K E Y D V L A K F
UniRef90_T0QAI6        L L Q L P H F T E A E V K H T G K N G I R S L Q Q F I D A P E D A R R G M N N M
UniRef90_L7M2N3        L K Q F S E L G L S V L R N I E E K N L   S L E Q M R D L C F K D I G M M V H
UniRef90_F4P3A8        L A Q F D   L P V E I I L N R S D S I S M D A L R D M T A N E L G D L V R
UniRef90_N1JBL7        L H Q F D   L P K P I M N Q L A R K T S T S I E T L R D M E H A E I G S L V H
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UniRef90_E9BBB4        L L Q I P N V V K A M L P V I E K D G V R H A A E L A N R P L A V L Q K F F G L
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UniRef90_U1HJX8        L S I L P T V S E S L S D E L A A Q A P K D L V A L S E M P A T R L S E T L G V
UniRef90_M2UBP6        L S I F P G V D V E K E K A R L E H P K A K P K T L I E V D L E R A G K F A G V
UniRef90_Q6FKF7        L K Q I P Y F T N D I I K I C K E K N I D S V Y D I M E L D D D V R D E I L S F
UniRef90_G0U8X0        L K I E G V C D N V A K S L H Q R G I K S I L D V M K T D P R K L E A L A D K
UniRef90_Q7S8K0        F H Q F D D L P R P V L N K L D E L E A L N I E S M R E M E P A E I G S L V N
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UniRef90_X6MYX2        L R Q F P C I P N L C Q R L E R A N   M S W E G Y L R L K A E E I G E L I R M
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UniRef90_W0TBV2           P E P E L N K V A E F V N N     P
UniRef90_K1RGX5           T R N Q L D Q L Y Q V M G T L   P
UniRef90_A0A016T926       D       G E K L Y H T M R M L   P
UniRef90_S8ACR2           S S V N G R I I H G L L R K F   P
UniRef90_F2TYV9           H V R M G D K V K Q A A Q L I   P
UniRef90_H9KJJ7           N Q K E A I L V K K C C K E L   P
UniRef90_V5F9K9           N Q R M G K T L T K L L D N F   P
UniRef90_H2TJ23           H V S V G L T V K Q C V H Q I   P
UniRef90_N4VHG0           N Q N A G K K I A H L L T N F   P
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UniRef90_Q6C0Y6           T A K Q L K R V I D F V D A Y   P
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UniRef90_G1KJW3           V E H H V A Q A W H F L S H L   P
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UniRef90_I3KI85           V N I   G L T V K Q C V H Q I   P
UniRef90_M3X4E0           V N I   G L K V K Q C V H Q I   P
UniRef90_H2TJ25           H V S V G L T V K Q C V H Q I   P
UniRef90_Q0CNC0           L Q L P A A Q F T K A V S Y L   P
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UniRef90_M3D2V7           P P A S H G R V L K P L G Q L   P
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UniRef90_G2XFX1           S S S Q Q P R F L K A A A A L   P
UniRef90_G7IGX7           S D S R L C E I S Q F F S H Y
UniRef90_H1VE63           P A H Q Q P R F A K A V A Q L   P
UniRef90_G0R9V9           P S G M Q S R F K R A A S M L   P
UniRef90_E2BZ67           R E D Q I R E I H R V I R D L   P
UniRef90_H9JKX0           E E N Q I Q Q I H R A I C D L   P
UniRef90_UPI000329A937     H P S H T A Q A W C F L S H L   P
UniRef90_E9EYI1           S A Q Q L S R V A R A V S F L   P
UniRef90_K1WTR7           S P R S L S E F Q K A A Q A I   P
UniRef90_I1GZC1           P N S H L Q D I I G I V K R Y   P
UniRef90_W6KX07           N M R C G R D I A L L V S K F   P
UniRef90_UPI0003F06FD0     H V R M G E K V K L N V H Q F   P
UniRef90_T1IVJ2           N I R A G P L V K E C V E S I   P
UniRef90_S2JEH2           H R R M G M T I S K C V D Q F   P
UniRef90_S3CE74           N F A A G K N I S K I L D N F   P
UniRef90_T1PKB2           E E P E I E Q I Y K V I Q D L   P
UniRef90_W2TG90           E E M E I K E V V R A L C R W   P
UniRef90_G0V069           S A S E V R D A M E A V R G F   P
UniRef90_S8AWW9           H P G F       S K A V N Q L   P
UniRef90_U6NR83           Q E T E I K Q V I R A L C R W   P
UniRef90_W7HM97           A K E L G K Q F L R V A L S L   P
UniRef90_S4PDM4           D E N Q I G E I H R A I C D L   P
UniRef90_G4VKB8             Q G K D G A R E I R R L
UniRef90_UPI0003C39B4F     N P R N A E Q V L R A A R E L   P
UniRef90_K7J4T1           I D D H V S K I H Q V A K D M   P
UniRef90_A5E7Q8           D D E R L N D V A A F V N K Y   P
UniRef90_Q6CEQ3           G C R N I N D F V R V A S S L   P
UniRef90_H8WZ69             R G N A Q Q A W D L V H S F   P
UniRef90_M7T9C1           P T S Q Q G R F L S A A A A I   P
UniRef90_S8A4X8           P P N Y E R Q F A R V A Q S L   P
UniRef90_L8G9F5
UniRef90_D8SDF9           S Q S Q V H E V I Q A W N F L   P
UniRef90_E4V5Q0           D K P F A S Q F S K A V A L L   P
UniRef90_C1GSU4           S T Q L S S Q F Y Q A L F L L   P
UniRef90_B6H0I8
UniRef90_U6MCR2           T Q A Q L R E V A K A S N R Y   P
UniRef90_Q5BYK0
UniRef90_K2RBS1           N N K M G G I I S K L L D N F   P
UniRef90_I4YG77           N E S H G A A L H R V L K S F   P
UniRef90_Q9XWI1           D       G D R L Y T Y L R Y L   P
UniRef90_K8E8V4           N A V V G A Q V K R C V E Q L   P
UniRef90_G1X2Y3
UniRef90_F4WEX0           H E D Q I R E I H Q V I R D M   P
UniRef90_T1GZL3           S D T Q M A D V A R F C N R Y   P
UniRef90_B4KAC8           S D R Y A E Q V I R A A R E L   P
UniRef90_R1BXF1           H Q R L A A Q L K A E A S A L   P
UniRef90_T1HRW5           N S K M G V T V K R C A F E F   P
UniRef90_B3LZT5           E E H E I E Q I Y K V I Q D L   P
UniRef90_T0QAI6           S D D E K A E V N R V C S I L   P
UniRef90_L7M2N3           N V R A G A I V E Q L A R Q I   P
UniRef90_F4P3A8           H H R M G D T V S R C V M Q F   P
UniRef90_N1JBL7           N F A A G K T I R K I I D S F   P
UniRef90_E5A8T9
UniRef90_E9BBB4           R E R D V N E S M E A V R G L   P
UniRef90_C5P4B9           D E S T A T E F T K V V A L L   P
UniRef90_U1HJX8           L A A Q R N T F A K V A G T L   P
UniRef90_M2UBP6           S H G G L K R F T E P V S R L   P
UniRef90_Q6FKF7           N D S E L L N I A S F V N T Y   P
UniRef90_G0U8X0           N P P F G S E L R E K C S A F   P
UniRef90_Q7S8K0           N H R M G G K I T K L L D N F   P
UniRef90_G7YI73           R P H A L S S I K Q T L N R F   P
UniRef90_F0XMX4           T Q A Q L V E A A H F T N K Y   P
UniRef90_D7FN81
UniRef90_E9C2G0
UniRef90_X6MYX2             Q E L G K L V Y K Y I H A I   P
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                            1            10               20               30             40
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UniRef90_M7P6T7              E E V F H I L S K S S E F S Q M K Y R E N E N E E L K Q L L E K Y C H Y K
UniRef90_V9D9I4              S D V L K M I S M S S E F D N I Q S R E N E A Q E L H R L A T A C E V E E
UniRef90_U6GJ05              E L L R L F S L S S E F K Y M P V R E E E K L E L Q R L M E R V P I P V
UniRef90_E4WZD4              L L D L I A S S K E F E Q M R V R N E E M D E L D R L N K E T E Y K V
UniRef90_E1ZNR9            V Q A L L P V L C A A A E Y A E L P V R N E E L K L N V V L A Q Q V R W G V
UniRef90_D0MWE3            R M L P E I L A G S A E F R E I P R R S S D D A E L G A L F K K L K Q S M
UniRef90_L1JD34              D C F D V L S R S S E F E N V Q A R D E E N Q E L V Q L L V D C P I K V
UniRef90_S7QHP9              D V L A M L S M S T E F D Q M Q V R E S E Q K E L E E L M S Q A P C A V
UniRef90_U6GK20           S F I D I L R L L T D S E E F S Q M P L R N E E I H N A Q L A R I C P L P V
UniRef90_H2Z644              I L S M I S K S H E F Q Q I K V R D D E L T E L D D L K D D F C H L P
UniRef90_S9TL26            M G G A M N I A A C A S E F S Q L R A R Q E E L D E L Q K I H A N L P P S V
UniRef90_W6MVP8          S S F R D C L K L L C L A T E Y D E L P T R H G E E L I N M E M S E Q M R Y P L
UniRef90_D5G6C6              D I L T M L S L S G E F D N I Q S R D T E S Q E L E N L R K T V C P C Q
UniRef90_A0A024J601        F K E C L Q W I C S A I E Y D E L P V R H N E D L V N I E M S K E M R F P G
UniRef90_UPI00035A1F43        I S V H S N A A E Y A E L P V R H N E D Q L N A D L A S Q V P L E V
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UniRef90_W4FYY0          S H L K M M P E I L A G S A E F R D V P L R E S D Q A E L G A I Y R D L K Q E I
UniRef90_Q381X2           T L H Q V L R V F C H S S E F D G L R L R Q G D K K H L N L N K V I R F P L
UniRef90_E2BUS9           T L K R V I M I L A A S F E F A E V V E R E T D N E E I L S L I K Q L P N L G
UniRef90_S4ACE4              E L F R V F S V S S E F K Y I T I R E E E K L E L Q K L M E V V P I P V
UniRef90_C5DD87              D V L S M I S M S S E F D N M K F R E E E A T E L S R L M D N A A Q C Q
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UniRef90_D2VZX0              L L E L L C E A K E F A E I P V R H N E D K L N K E L S E V V P L G V
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UniRef90_W1QEM4              D V L S I I A M S S E F D N I K F R E E E S K E L E Q L K T D K T A C E
UniRef90_I0Z2E4           T V P E L L G A L C A A A E Y D E L P V R H N E D K L N M T L S A E V R F P I
UniRef90_W2S4Q9              D V L K M I S M S A E F D N I T S R E N E A Q E L H H L E K D S K T D E
UniRef90_I7IQ42              D L L R L F S L S Y E F R Y I P V R E Q E A I E L G M L M E K V P I P I
UniRef90_M3IJL2              D I L S M I S M S S E F D S I K F R E E E S N E L K H L L E E D A P C Q
UniRef90_U6KQ70          S F V E L L K L L A D A D E F D E M P V R H N E E I H N Q E L S Q I C P F P V
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UniRef90_UPI00045602B0      D V L G I L S L A T D F E Q I I P R D T E E R E L K K M L E N A P C Q V
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UniRef90_K7J3D8           T L K R I I M V L G A S F E F E D I V E R L S D N E E V P A L I R Q L Q N L G
UniRef90_G2XYF1                                                                               M
UniRef90_L2FSA0                                    R H N E D L I N D E L S R N L T Y S G
UniRef90_F0VR21              D V V K L L S D V P E F G Q M P V R H N E D N L N A D F S A V C P Y P I
UniRef90_A0A023FVC7        L R V I M V L A A S L E F E E I V L R P T D D V E L P A L I K Q L P N F N
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UniRef90_Q6FTQ7          S F Q D I L K W L S L A E E Y N E L P V R G G E A I M N I E M S A Q S R Y K V
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UniRef90_C5GUM5          K M S E I L S V L T Q A D E F R E I R L K A G E K S L Y K E L N K G N G I K F
UniRef90_J7RBW3              D V L T M I S M S S E F D G M K Y R E E E S K E L K L T E V S V Q C Q
UniRef90_B0EGZ1
UniRef90_J9JZX3           M S E I L S M I S S A K E F D Q L K V R D D E V I E L E T L A R K Y C H I E
UniRef90_F7VNJ6                                                                               F
UniRef90_UPI0002C3E6C8   S H Q E I I Q L I A D A A E Y N N H P V R H E D D N H C R T L S K S V R Y G S
UniRef90_Q6BH92              D I L S M I S M S S E F D S I K L R E E E V E L K K L S E D V P C Q I
UniRef90_U4LPS0              D V L V M I S L S S E F D Q I Q S R E S D I H E L K R L K E Q V P E K K
UniRef90_E5SI94                                           Q E L A T K C A I L L
UniRef90_S6E9R5           T F K D I L K W L S M A E E F N E L P V R G G E M I M N V E M S A Q S R Y P A
UniRef90_W2S4Q7           K L S E I L S I L T R A A F E G I R V R S G E K A F Y K L N K R A E I M F
UniRef90_A2BIH3           T L P E L I E M I S K A K E F S D M Q L R V N E R K T L N T L N K D I R F P I
UniRef90_W4Z9I9           T V S D L M V L V S K C K E F S D V Q L R V N E R K V L N K M N K D I R Y P M
UniRef90_C5MJ39             F R D C L R L L C E A T E Y N E L A T R H G E E L I N M E M S Q S M R Y P A
UniRef90_K0KKL2           T F R E C L R L L S E A I E Y N E L P T R H G E E L I N M E M S Q N L R Y P S
UniRef90_D6WNC7             L K R V I M I L A A S L E F S E I K E R D L D N E E V P Q L I K K L P N L S
UniRef90_Q75D82           K F Q D V L K W L S L A V E Y D E L P V R G G E T I M N V E M S E N S R Y S V
UniRef90_H9KPF1           S L K R V I T I L A A S Y E F A E I V E R Y T D S E E I Y S L I K Q L P D L G
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UniRef90_UPI0004414D8D      D V L A V V S M S T E F D Q I Q L R E S E V K E L K V L M D E I P C E V
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UniRef90_G8YT30             D V L S L I S M S S E F D G I K F R E E E K T E V K K L L E N E A P C Q
UniRef90_J4IBK7             D V L A M L S M S T E F D Q I Q V R E T E V K E L E L F R K N V P C N V
UniRef90_M0X5Z3          S M E D L L H L I C R S A E I S W I Q L R N E K K T L N D I N S R L R F H V
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UniRef90_G8JSQ6             D V L A M I S V S S E F D S I K F R E E E S N E L R K L L E N A V Q C Q
UniRef90_M2LV86           K I S E I L S A I A Q A S E F R E L R F R S G E K S V Y K D L N R N S S I K F
UniRef90_UPI00027F5DA8
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UniRef90_F2QNZ0             D V L S M I C M S S E F D N V K A R E D E T N E L S K L L D E S T E C Q
UniRef90_S3CRQ9          S K T E D I L N I I C Q A S E F K D L R M K P N Q R P C L R L N K S M K Y P V
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                                                    90              100             110             120
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UniRef90_L1JD34        G R I F R A L F E L S L K K G W V T L A G R L L T L C K V V E R R I W D F Q H P
UniRef90_S7QHP9        G R I V R A L L E I A I S R K W A N A S T V L M G M S K A I E K R M W P Y E H P
UniRef90_U6GK20        M R V I Q A M I D V A A E A Q L Q Y A L Y T I L L L Q C I R S S T H P A R S S
UniRef90_H2Z644        G R I V R G V F E I V L K Q G K T R L A G R M L K L C K C V E R R L W P D S T P
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UniRef90_B2B291        V R I I Q A G I D V M A E L G Y L S S L K S F A S L L Q A V K G G I W P D E D P
UniRef90_K7J3D8        P Y L I Q E M I S C V Q H L P T I T T I E N C M K L S P M I V Q A F W E F K N P
UniRef90_G2XYF1        L G L L S A T V D V L S S D G H I N A M N A M E M S Q M V V Q G M W D R D S P
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UniRef90_I2G4B6        G R I I R S L L E I A L S R R W A P T A S A L I S M S K A I E K R M W P F D H P
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UniRef90_F0ZZ16         S H   Y E N E H T K V H L L L Q A H F Q R C Q L P S D Y T T D T K S A L D Q G
UniRef90_B6QDJ5         K V E L V Q N T H   K I S L L I Q S E L S A V D F P S A E Q F Q K H R V F T H L
UniRef90_K3YZG7         K K K R V Q T R E D K I F L L A N D C L T G D P L I H D L N Q E M N S I   C S N G
UniRef90_Q0WT48         E Q A K F W K Q H V K T E L L   Q A Q L T R E S L S P A L Q G D F R R V L E L A
UniRef90_R0KVA8         N     I D L P A H K V S L I I Q S V L G S A D I   P W D G E M A K Y K M F K N I
UniRef90_UPI0002658FAD  K Q G   V Q G G K I N T L I Q N Y I   S R G D V T F S L V S D S N Y I   V Q N A
UniRef90_G3B4H2         E C D F I W D P H V K A Y L L L Q A F M S R A N L P A D Y S Q D T I   A V L D Q S
UniRef90_A2RUV5         E G   K I K T K E M K V N C L I   Q A H L G C I L V Q F S L T Q D I S K I   F R H G
UniRef90_C3YAZ8         D G   K I K T G Q M K V N C L I   Q A A L G C L P I Q F G L N Q D T N K I   F R A G
UniRef90_I2K0G0         D C E F I W D P H I K A F L L L Q A Y M S R V E M P A D Y A Q D T V S V L D Q S
UniRef90_E9C0Y9         D G   K I K T R E S K I N C L V Q A T L G N T A I   D F S L A Q D R E R V F K A A
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UniRef90_A0CXW7         S D S I I E T Q E   K V I A L I S A Y L I K M N F E N A L T M D T N I I   Q N A
UniRef90_D3Z4R1         A E   R I K T R E M K V N C L I   Q A Q L G C I P I Q F A L T Q D T V K I   F R N G
UniRef90_J9F226               M N A H L A R I Q L S A E L N K D T E V I I   L R A
UniRef90_A8HQT3         D A R T A D D P H T K A N L L L Q L P I       A D Y L T D T K S V L D N C
UniRef90_Q4P954         P P R Q V A S V A D K I S L I   Q A Q L S A I N L E A S P Y M D L K R I   V P H A
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UniRef90_E1FKG7         P D A A M D S S H T K A F L L L E A H L S R I K L M T D Y T T D Q R S M L D Q C
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UniRef90_A0CYC7         D K N K M D N P N E K A Y L L I   Q A H I   F R L K C P K D F E T D Q K L I   L D S C
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UniRef90_Q0UNS2         S P V N L D L P A H K V S L I I   Q S V L G S A D L T W D Y T E T Q I   V F K Y I
UniRef90_S3BMH6         K E   S I T E T W Q K I S L L I   Q V E L S R G T L P Y Q Y S F E A R H A M E H M
UniRef90_B9GHR8         H K K R I Q T R E E K I F V L A N D C L T G D P S V H D L T Q D M N S I   S S N G
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UniRef90_G1KUQ1         E G   K I K T R E M K V N C L I   Q S Q L G C L P I   Q F T L T Q D I G K I   F R S G
UniRef90_A0A058ZEC1     V K N D R T S P E A K V N I L I   Q A Y I   R R M P A S S S L S S D Q L Y V A Q N A
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UniRef90_M5FT17         P P Q R I M K P S D K V F L M I   Q A V L G G V N L N P D Y H L E A T S M F K H A
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UniRef90_N1J720         P S E P I S T I A Q K V S L I I   Q V H L G G I P Y P D E K E F D K N I I   F E R A
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UniRef90_M0S2W7         E Q A K F W K Q H V K M E L L   Q A H L T R T L L S S S L L N D Y R R M L E L A
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UniRef90_W7HNR7         Y R I I R C V C D T K V F L R D S A S C K N A L K L A R C I D A R V W E D T P S
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UniRef90_B6QDJ5         N R L I R C I I D C Q I H N E D G V A V R N C L E L A R S F V S R V W E N S P Q
UniRef90_K3YZG7         C R I A R C M R E Y F I Y K K S Y R S A I N S M I L A N S L H Q K L W E R S P F
UniRef90_Q0WT48         P R L L E E L L K M A Q G H G W L R P A V G V V E L S Q C I V Q A V P E G I S P
UniRef90_R0KVA8         G S L V R C I I D C Q I E L G D S V S L Q N A L M L E R S L G A R I W D D S P Q
UniRef90_UPI0002658FAD  T R I G R A L F E M A L R K G N A L A A G R L L L N S K M L E R Q S W Y F N S P
UniRef90_G3B4H2         L R I L Q A F I D V A S E F G Y L H T V C K F I Q L M Q S I K Q R V W Y D N H P
UniRef90_A2RUV5         T R L A K C L S E F L A L Q E N K F S A L N A L I L T K C F K S K L W E N S S H
UniRef90_C3YAZ8         T R V S K C L T E F L M H R P G F R V L L N A T L S K C F R S R L W E N S K V
UniRef90_I2K0G0         L R I L Q A Y I D A T S E L G F L S S V L X L I R L M Q C I K A C C W F N Q N F
UniRef90_E9C0Y9         I R I G R C V A E F L G Q Q D G F L A A L N A A I L S K C L R V R L W E N S P Y
UniRef90_G3T7C8         G R I F R A L F E I A L R K R W P A M T Y R L L N L S K V I D K R L W C W A S P
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UniRef90_I1L1W0         P R L L E E L M K M A Q G H G W L R P A I G V V E L S Q C I V Q A V P E G I A P
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UniRef90_Q0CSJ6         N R L I R C I I D C Q I C L E D S I A V R N A L E L A R S F A A K V W D N S P Q
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UniRef90_V9D2V5         N R L I R C L I D C Q I Q L Q D A I S A R N A L E L G R S L A A H V W D T A S Q
UniRef90_H3B3H8         P A L L Q E M V N V I C Q L T I M A S T R N C M K L S Q M A V Q G L Q Q F K S P
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UniRef90_K1XQE5         Q R L V R C V I D C K A H D E D S I S T R H A L D L A R S L S A E F W E Y S N Q
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UniRef90_S3BMH6         Q R L L E S Y I V C T I A D G N G H N T R I A L E L L R G M A A R A W E G G H H
UniRef90_B9GHR8         C R I A K C M K E Y F I F K R N Y K G A I N S T L L A K S L Y Q K L W D D S P Y
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UniRef90_G1KUQ1         T R L T K W L S E F L A S R E Y H F L V L N S L L A K C F K C R L W E N S H Y
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UniRef90_R7VFG1         M L Q L P H V S D E M L R Y F R K R S V R T I D L A K L K D E D R R L M L R F
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UniRef90_W0T3D3          N Q K M G G K L Y R I I S R F P
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UniRef90_Q0UNS2          N P P Y G M K V L E T V K A F P
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UniRef90_UPI00021A5827   H P P F G N Q
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UniRef90_A0A058ZEC1        Q S C G S M V K A A L R K I P
UniRef90_I2H278          N R G A G G K L Y N I L S R F P
UniRef90_Q7QJ88          N D E Q Y H N A V K V L G Q M P
UniRef90_A5DM35            K G N S Q K V H Q L L Q Q F P
UniRef90_S9PT46          N E N D L S A A I E K L M A Y P
UniRef90_G7E4N2          N D R L G G I V K L A A Q Q F P
UniRef90_A0A022R641      S A N E L Q D V E V V L E M M P
UniRef90_T1G5B7          Q P P F G N T L Q D I V K A L P
UniRef90_H2B159          N T G A G N K I K K D V S L L P
UniRef90_M5FT17          H A P F G R D V L K S V K T L P
UniRef90_J4C8I7          N Q K L G K S L H K F V H L V P
UniRef90_R7VFG1          S E A E Y H D L M L I L A E M P
UniRef90_N1J720          N P P F G M K M K D T L A S F P
UniRef90_G0W5Q0
UniRef90_J9VUU0          G H D F A R A I H E Q A R R M P
UniRef90_W5MC30          H P P F G N Q I R E A V I H L P
UniRef90_D7G5A7          T P E Q Q E E V H R V C S I I P
UniRef90_M0S2W7          S D T E V R D V E H V L E M I P
UniRef90_V2XKC9          K P P F G L S L L A A A H E L P
UniRef90_B3L1P3          N K K I A K N V Y K L V H H F P
UniRef90_S8DR85          K Y P F G N Q I K E S L L S L P
UniRef90_Q5D892          K Y P F G N T I K E S L S S L P
UniRef90_B8BTM0          T A E Q K Q D V F K T C E L L P
UniRef90_H2YTB2          H A P F G N H M H D A I K H L P
UniRef90_W4H4Z8          S P R V A E K I V Q H M K Y L P
UniRef90_UPI0001F29FA6   N P P F G L K L L G R L S E F P
UniRef90_F8NMQ4          N E R H G E A L L V A A K Q F P
UniRef90_Q9U1W0          S N E E Y R D V M V V L S M M P
UniRef90_H3AR82          H P P F G S Q I R E A V I H L P
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                              1           10              20              30              40
UniRef90_L7I1H3       T K I H D I L M T L A K A E E F K D L R I K S N E R A L Y R T L N E S I R Y Q V
UniRef90_B6A9C7             Q L F R L L S F C K E F K F L P V R S E E K S E L E K L V N K V P I P V
UniRef90_G7YNK8         S M V Q V I S N A Y E F K E V V S R P S D N V E L P P L I K D I P I F F
UniRef90_V9KB43       T L A E M V T L I S K C K E F T D V Q L P S D N V K K T L N T L N K D I R F P M
UniRef90_UPI0002B48BF8       E L F R V F S L S S E F R N I T V R E E E K L E L Q K L L E R V P I P V
UniRef90_E9B2R5          F R E A L Q L L C H C Q E L V E V R L R Q G D R G P L N E L N K T V K Y P L
UniRef90_F0YHJ2       S T A K M L P E V L A G A A N R S V S I G D G T K Q E L V R L I A K L R Q G M
UniRef90_G5DWP6           V L D V F I K A A E Y M E I P V R R V D D E P L H K L L L L V R I K Q
UniRef90_UPI0002C3FA3F    D L V S I F A K S S E F K Y V S V R E T E K P E I E K L L Q Q V P I P L
UniRef90_U6GIM6       T R L K N L P E L L A A S G E S R A M K I E R D D D K D M R Q I C D A V V E S
UniRef90_D7LM54
UniRef90_F1KWV8            I N R M I M V L G G S F E F K E I I E R E S D D I E L P P L I K E F E N K K
UniRef90_A0A017S2H5   T I L Q I L S K I A E A E E F R D L R L K S G E K S V Y K E I N R A I R F P V
UniRef90_M9LX28          R A V L E A V A E A E E F G D Q R L R Q A E K G F L A G L R T H A E I R F
UniRef90_D8RFA6           S E L F K L V S H S E F E N I M V R E E E Q Q E I A K L L H T S C P L E
UniRef90_O60072       S K M S D I I A L L S Q C S E F S Q I K S R E N E H R E L E S L M E N S S P C Q
UniRef90_A0A059LP70                 F D Q L P V R H N E D K L N A E L A K A V R W P P
UniRef90_E3S0E5            S E I L S A I V Q A T E Y S S I R F R Q G E K A L Y K S L N K S P S I R W
UniRef90_V2XYE0           D V L R V L S M S T E F D Q I Q T R E S E I K E L M S L K E N I P C E A
UniRef90_D5GAK2         L S D V L V A L S S A E E F K E I R F R S G E K G L Y K E L N K S M R F P V
UniRef90_G8JUT3       S V N M I L K L L C E S Q E F E Q I R V K H S E K K L Y R E I N M S R Y P Y
UniRef90_S7ZRZ8          V S E I M D I I C Q A E E F H C R L K V T E K A L Y R E I N K D I R F P I
UniRef90_G2QVS0           M E A L I T I L S Q A S E K E F R F K P A E R P I F R E I N Q S I M Y P V
UniRef90_G0VF25         S L Q E I L T L L S N S N E F S E I K M R H N E K R L F K E I N M R F P F K K
UniRef90_UPI0002658F58     L R R V V M I V A A S T D F E D M K M R P S D N E E I P Q L I K K I E D F G
UniRef90_W6UKJ4       T S I E D L I Y I L S M S E E F A D I P V R H S E D E V N A T L A G E M P L R L
UniRef90_G4VK99           M P R I I K V L S T A Y E F E I I C R P S D N T E L P P L I M Q I P F F F
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UniRef90_UPI0002B45F58     V M D V F I K A A E Y V E M P V R R T D N D P L Q K I F G L V R I K Q
UniRef90_A9V218           D I L A M V S R S Q E F E Q I K S R D E E M D E L K L L D D C V L H P
UniRef90_C5M6T3       S I S E I L D V I T K S K E F S D L K L K Q Q E K R L Y R E I N N S P I L R Y
UniRef90_W7G3H0                                                                           M
UniRef90_D8RME5            V E D M I Y T L A K S Q E L S W I Q L R R N E K K L L N D I N G D T T G K I
UniRef90_G8ZUD6       S V E G I L H L L T N A K E F A D I R L R Q K E K R L Y K E I N N K Y P Y R T
UniRef90_K5W6U8       T L R E I L E T I A A A E E F S S L R M R A S E K L V Y N E L R T H N D I R Y
UniRef90_B0XN39           G I I N A L S A G V E F K D M L K G P R A E A G L A K L E K K V R K T L
UniRef90_Q4XUB3           E L L K I F A M S E F K N I F I R N E E K T E L S L M E K L P I P V
UniRef90_H0GUF9       S S L H G V L N L L S N S E E F S V I R V R H N E K R L F K E I N L S L T E K K
UniRef90_G0RQ15          R K V L E I A C H A A E F R S F P I K Q D Q K N L F R E I N D H I P Y P I
UniRef90_F2U9W5          G M M E V L S C A F E F R E L K T S Q E E L G E I F A L L K Q L P I K L
UniRef90_V4MFJ1           V M E V F V Q A A E Y A E I P V R K S D D E S L K N L F T S V K M K Q
UniRef90_K1QS48       R I A E L L Y E M C G C D E F S E V Q L R N N E K K T L N T F N R D V R F P V
UniRef90_Q7RSE7           E I I D V I S K A K E F E N I Q I R     N E D     M N D F I Y Y K N K C D I
UniRef90_U4TYT0           L L R L L S E A S E F Q Q I Q V R M D E V H E L D R L R E C N E L D I
UniRef90_K4BEI4           V M D V F V K A A E F M D I P V R R A D D E P L Q E L F K L V K S E L
UniRef90_T1L109       M E D I L D M I S N S Q E F D Q L K S R E E E M D E L T H L N H N Y T W L K
UniRef90_UPI0002B47447     E I F S V V S K A H E F N Q I K V R E D E V I E L E E L N E S C V T P V
UniRef90_K6UCS1
UniRef90_M3HTA8       S V G Q V L D L L T S A S E F S D L K L K H N E K R L Y K E L N S S P M V R Y
UniRef90_W7AGT6                             H N E Q N D N Q I I N       L T N F V
UniRef90_M4B634          E K V L L V L C S S N E F E Q L K S R E E E M A E L E K L K R G C R F D I
UniRef90_B6JWX3           D I F S L L S N C S E F S Q I K S R E N E A K D L E E L L E Y S P C Q L
UniRef90_D2A5P4           D I L H L I S N A S E F Q H I Q V R N D E L D R L D R L H E E F S Q F E
UniRef90_UPI000334402B T L S D L I T M I A S C K E F L D I Q L R T N E K K T L N T L N K D I R F P M
UniRef90_W0VMI1       S I R E N L C L L S K S S E F M N I R V R H N E K R L Y K E I N I K F P F K M
UniRef90_D0NDF2           L L C V I C S S V E L R D V P L R H N E S N L I A D L C G K V K Y S P
UniRef90_K0RCY5       T L V K N L P E V L A G S A E F R E         R N E E K Q Q L T A V L A K V K P S M
UniRef90_Q8IEC8       S R S K S F P E M L A A T A E S R D I E M K K D D E Q Y I K T L M E E L I E P K
UniRef90_C5E4Y8       S V Q N I L R L L S G S K E F T D I R I R H N E K R L Y K E I N S K F P F K K
UniRef90_U6LJM6                 A K D F E S L K L R K E E T E E L D R L S S A C R L K W
UniRef90_B8YFQ3            I E V L I N S L T E A V E F K D F R I K P A E R T L F R E I N K N I M Y P V
UniRef90_D6WVU9       L Q Q I L H L I S K C S E F S E M Y L R V N D K K C L N L L N K C I R F P L
UniRef90_K9FI01           G V I S A L S S G E E F N D M L K G A R A E S G L A K L E K R V D R E V
UniRef90_L0AVZ8       T R H K A L P E V Y S C S T E C C Q I P C T M E D E K A L K K   Y T D V L G D Y
UniRef90_I0YLQ1           L A R V L D T L V F A Y E F I M L P T P S D Q A E G L E T L R R D L K E K P
UniRef90_F2UGI8       T V E S I L L A L C R A H E F E E I R L R H Q Q K R K L S E D R Q I R Y P M
UniRef90_T0QQQ4           V L N V I C S S T E F E Q V K V R D D E L V E L D K I K K A C K I P I
UniRef90_A9S1G6       T I E E L L H V L A N A A E L S W I K L R R D E K K I N G D I S G R I R Y H V
UniRef90_F7W331          G V I A A L S S G Q E F E D L F K G D K A D A G L S K I I E S K V M A P K
UniRef90_F4QEU6       R Y K Q I I E V V A A A Q E Y D E F I E R P T D E E L K K K V L A A V P Y R V
UniRef90_A2DN52           D L L R L F S L A S E F K N V V P Q E V S T V K K F Q E M V P L
UniRef90_A2ERS7       S N V V S L L R L I C M A Q E F K Q V P V R H S E D E V V M D M T P R F K
UniRef90_B9PKL4       S R L K N F P E Y L S A S G E S R A M Q V E K E D D V E M R E I I D Q A V E P K
UniRef90_S9WD71         M S A A M N I A A S A E F S Q L R V R Q E E L D E L Q K L N S A L P Y G V
UniRef90_I1F6E2           R V L M I L A T A V E F S G V K N R P S D D I Y L N E L V K K L E H T M
UniRef90_Q7REE9                                                                           I
UniRef90_Q5BF46           G I V N A L S S G D E F K E A I P A Q K A E T G L A K L E Q K V R E A I
UniRef90_K3WN69           Q I M A V I C E S S E I R E I P L R H N E I L L I T E L C N K V K Y S P
UniRef90_G6DLA2           V L E M L T R C S E D F Q Q L K V V L T E L W N L K D M Y C E L R
UniRef90_A4RXZ9       S Y A D L L R M L C E S Y E F K D I K L R R D E R K L L K Q L N K I I R F P V
UniRef90_T1KU76       S L R D L L T V L A K C R D L N Q V T I R N N E K K L N L F N A R I R F P L
UniRef90_E3K433       T M R N I L E I V S G A E E Y C T L R L R A G E G V A Y K A L N G S H P E M K C
UniRef90_M4DAK0       T T S K V M D V F I K A A E Y T E I P V R K T D D E S L K L F A S V P K K M
UniRef90_M4FTC3          G V V S A L S T G K E F E E I F K G H N A D S G L A K I E S R I T A A G
UniRef90_W5L752                                 Q L I R E L G N I N V K K K
UniRef90_UPI0002651530                                                                     P M
UniRef90_B9WB85           L C L I C E S S E F A D L N L K H Q E K R L Y K E I N G S L R Y P S
UniRef90_B7FQ60           I L Y A L A S T H E F D E L P V R H N E D I L N E E L S A N V R W G P
UniRef90_V8NDX6              M V L A G A S E F D             P Q Y N K D A R P K N
UniRef90_B3LA26       E I I D V I S K S K E F E N I Q I R N E D M K D F M W L K S K C E I
UniRef90_Q8IL78           D I F E L V V Q A A E F K D I K L R H N E D K Y N V K L R N Q I P L D I
UniRef90_K7UGV7       D T M K L I V K A S G Y C R I Q L R N D K L L N D I N A D M K N G K
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                                      50              60              70              80
UniRef90_L7I1H3          R A K D I T E A W H K V F I I V Q L D L G G G D F P S H F N I T K R Q V S D R M
UniRef90_B6A9C7          Q G T G E D D T S M K V N V L I Q L Y L S G S R W I N S L L A D L Y S I V Q A S
UniRef90_G7YNK8          K K S I F G S P S V K A R A L I Y A H L L R L N L K P E T L H Y R Q Y I V N A C
UniRef90_V9KB43          E G   K I R T N E M K V N C L I Q A Q L G C I S I Q F A L T Q D T G K I F R N G
UniRef90_UPI0002B48BF8   K E   S I E E P S A K V S P A G N S R I C P Q N P S G         V V Q S A
UniRef90_E9B2R5          H S G R V R E D W K A Y V L I Q V H I   G L L P L T E S L R N D S L R L W A V V
UniRef90_F0YHJ2          H K P R F E H P A V K G N A L L H A H I   H H L E L S P T L Q S D L R S I L V N A
UniRef90_G5DWP6          E Q A K F L K Q H V K T Q L L I Q A H L T R E T L P P T L Q D L K R V L E L A
UniRef90_UPI0002C3FA3F   K G N A   E D P E T K I G I L L Q T Y I G R L Q L P G Y L S A D T I Y V S Q N A
UniRef90_U6GIM6          K K R I F T M P V I V R N C L I N A H M Q R L H M S P R L R N E L N Q L L K D S
UniRef90_D7LM54                                                                      T A
UniRef90_F1KWV8          E R P L C L P Y S L K A R L F I H A H L N R Y E L P S D L K N D S N Y V L S K C
UniRef90_A0A017S2H5      K V D I A L P A H K T S L L I Q S E L G G V D F P F P F Q Q D K N F V F T H V
UniRef90_M9LX28          P P R Q I A G V A D K V S L L I Q A S L A A I N L E A N P F S D I K R I F Q H A
UniRef90_D8RFA6          A Y G G A E S K Y G K I N V L I Q V Y I S Q G Y L D F S L I V D S A Y I S A S L
UniRef90_O60072          L R D S I S N T S G K V N V L I Q S Y I S R A H V D F T L T S D T N Y V A Q N A
UniRef90_A0A059LP70      P P Q A L D D P H A K A S L L L Q A H L S R L P L P S D Y V T D A Q T A L E S C
UniRef90_E3S0E5          A P V N L D L P A Q K V S L I V Q S V L G S A D I S F D Y A M E V M V I F K T L
UniRef90_V2XYE0          N G I I T S T S Q G K V N I L L Q G Y I S R L L I D F A L V S D S A Y V A Q N A
UniRef90_D5GAK2          K G D L W N S S H K V Q L V I Q F E I G M M E F P P E L L Q D K A L V F Q H C
UniRef90_G8JUT3          I D T K I D T R Q Q K V S L L V Q Y E L C G I K H H Q T L I Q E R M L V F R H C
UniRef90_S7ZRZ8          K A D V T L A W H K I K L L Q S E L G A I E F P T K       K N L V F G H V
UniRef90_G2QVS0          K E A V T Q T R H   K I S L M I Q A H L G C V Q Y P D S L A M E R K L V F E R L
UniRef90_G0VF25          Q S Q I L D K T S Q K V S L L I Q Y E L G G L E L H Q M L V Q D K M R V F R H C
UniRef90_UPI0002658F58   E K N R E A P Y S I K A R A L L H A H L M R L P L S E S A A K D M R Y I I T K C
UniRef90_W6UKJ4          R E P P   E S G H A K A H L L L Q A H L S R K T L V A D Y I T D T A S L L E Q T
UniRef90_G4VK99          K K A I V G S P Y V K A R A L I Y A H L E R L E L P A N L H V D R Q Y I I K H S
UniRef90_I1BNK9          E N N S I A A Y R R K A R T L L Y A Y L L R V D I S N Q L I K D Q K F I V D K S
UniRef90_UPI0002B45F58   E Q A K F W K Q H V K T Q L L Q A Q L T R A N L P P P L N A D F K H V L E L A
UniRef90_A9V218          V K G G I E N T Y G K V N I L L Q A Y I S Q A P I S F S L I S D M N Y V A Q N A
UniRef90_C5M6T3          P S K S K E L S H D K V S C I I Q F E L G G M K L H S S F L G D K F Y V F K H I
UniRef90_W7G3H0          S V P M Y F T S H L K A F I L L Q A H I H R Y S L P L N Y L Q E T K T V L L K A
UniRef90_D8RME5          K Y H R I Q S R E E K I F L L N D A L S G D P L D F T M S Q D V T A I C T N G
UniRef90_G8ZUD6          E G Q V T A A N Q K V S L I I Q Y E L G G L E L H Q S M A Q D K M L V F R H C
UniRef90_K5W6U8          A I K K V E K T S D K V F L L I Q A I L G N I P L N T Q P Q A D A L F I F K H A
UniRef90_B0XN39          S Q M D   D S T R R K A L A L L W A Y L G R I D L D A T L N G E K Y E A A P I A
UniRef90_Q4XUB3          K E   S I N I S F T K I S I L L Q L Y L S N I T L N G Y I I N D L V Y I H Q N A
UniRef90_H0GUF9          Q S Q I I D K I N Q K V S L L I Q Y E L G G L E L H Q T L V Q D K F L V F R H C
UniRef90_G0RQ15          S G L V T E S W Q K V F L L I Q I D L S R G G W P N E L M R E S G R I Y V V L
UniRef90_F2U9W5          K D S P F   A V K A R T L L Y A H M H R L K L S P A L T A D L D F V L E F A
UniRef90_V4MFJ1          D E A K F W K Q H I K T E L L Q K Q L T R E S L S P T L Q Q D F R R V L E F A
UniRef90_K1QS48          T G   K I K T K Q M K V N I L I Q V A L G C L L L Q F S L Q Q D S T R I F R A A
UniRef90_Q7RSE7          K E N Y D E S K S M T V R L L I E M Y L R R I Q I N F S L V C E I N Y I V Q N I
UniRef90_U4TYT0          E L D F A N V T S K V I C L I Q A Y I S R E Q V R S S L A S D T Q Y I I Q T V
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UniRef90_T1L109          V G G S V D D K N G K V N V L L Q A Y L S R A K L Q A S L S S D M M Y I V Q N S
UniRef90_UPI0002B47447   K G G T   D T E Y G K V N I L L Q T Y V S K A Q L E F S L I S D M S Y V A Q N A
UniRef90_K6UCS1          S I P M Y F T P H L K A L I I L Q A H I H R Y A I P K N Y V E E T K R V L Q K T
UniRef90_M3HTA8          A S K R K E L T H D K V K L L I D F E L G G M K I H S S F L G D K F F V F K H I
UniRef90_W7AGT6          T N P S Y F T P N L K A L I L L H A H I N R F S I P V N Y I D E T K Y V L L K S
UniRef90_M4B634          L G G G M D T Y T G K T N V L L Q A L I G R A R V T F T L I S D T N Y V A Q N G
UniRef90_B6JWX3          R D S V S N T P   G K V N V V L Q S Y I S R S R V D F T L Q S D M N Y V A Q N A
UniRef90_D2A5P4          F N L D P S A V V F K V L V L I Q A N I S R A K I R S S L V S D C E F I M Q S V
UniRef90_UPI000334402B   E G   R I K T R E M K V N C L I Q A Q L G C I P L Q F A L T Q D T S K I F R S G
UniRef90_W0VMI1          H S E I I D V S S Q K V S L L I Q Y E L G G L D F P S A L E Q D K S L V F R S C
UniRef90_D0NDF2          L Q H L F A S S E V K A L L V L Q M H L T G M R L P S D F V N D L R T V L D H L
UniRef90_K0RCY5          P K P T Y T N A V M K G N I L L H A Y L T R Q T L S E S L K E D L N C M L R Y S
UniRef90_Q8IEC8          K R T F K I P V I T K N Y F L I L A H M Q R H L S E D L K K D L E H I L K F S
UniRef90_C5E4Y8          Q S Q I I D T T F Q K V S L L I Q Y E L G G L E L H Q T L V Q D K A L V F R N C
UniRef90_U6LJM6          K G D K   D S P E Y K V F I L L C C L S Q V P Q V S S L L T D L N Y I Y S N I
UniRef90_B8YFQ3          K E Q V Q H T Q H   K I S L I V Q V H L G S V Q L R R Q L M M E K K M I F E R L
UniRef90_D6WVU9          N G   K I K T L D M K I N C I I Q A V L G C L D I C D S I L S E T L K I M R N G
UniRef90_K9FI01          L K Q L D S S S H R K A L A L L W A Y L G R I D I D A S L D S E K Y E A A P V A
UniRef90_L0AVZ8          K K K N I S K E T F R N L I L L L C H L N R V D L P T Q L I S S Q R E I L K Y S
UniRef90_I0YLQ1          Q F W K R K P S I V K C N M L L L A H L S R A P V P P I F A N D M K Y V L K K S
UniRef90_F2UGI8          K E G N I R T P Q M K I N C L I Q A A L G G L K V D D Q L T Q D T Q A I F K S S
UniRef90_T0QQQ4          K G E   N T S S G K A N I L Q A Y I S N M S H K F T L I S D T N Y V A Q N G
UniRef90_A9S1G6          N K K R I Q S G A E K I F I L V N D A L S G E P S V T D F T M S Q D I I C T T G
UniRef90_F7W331          E K K K L E D P R R K A L A L L W A Y L G R I E L D A T L E K A K F Q V A P I A
UniRef90_F4QEU6          K Q F R F N Q N Y F K N T I L L Y A H I S R I H I T P R L E Q D L E K I L Q R V
UniRef90_A2DN52          K G Q P   D D P K T K I N V L L Q S Y I S R I K S E F E M M A D L V Y I S Q S A
UniRef90_A2ERS7          T E D P I D S P H T K A F F M C Q Y Y F S R R E M P P D F I T D L A S V L D Q A
UniRef90_B9PKL4          K R V L N A P I I V R N Y Y L I L G H M Q R L H L M S D L R D A L D E L L K A S
UniRef90_S9WD71          S G E S V D E T S V K V V T L L K A Y I T L G L P V D A S L S S D M N Y I T Q N I
UniRef90_I1F6E2          E Q P F C Q T Y V A K A R L I H A Y F E R I P L Q P G L K Q D Q D A I V K Y C
UniRef90_Q7REE9          K N P S Y F T A N I K V L I L L H A H M N R F P I P I N Y V N E M K H I L L N G
UniRef90_Q5BF46          K G M D   D L S R R K A L A L L W A Y L G R V E L D P I L N G E K Y E V A P I A
UniRef90_K3WN69          M T N L F K S L K S F V L L Q M H F M R M G M P S D F G N D L R T L L D Q M
UniRef90_G6DLA2          I E D A P E D I H W K I N I L L Q T Y L S R G R V S S S L Q S D L N Y I S Q N A
UniRef90_A4RXZ9          Q E T T I R T P G E K L Y L L A Q Y I L L T D V V S H P S M R M E G D K V L Q L G
UniRef90_T1KU76          T G   R I K T K E M K I N V L L Q A T L S C L P F P K D L H Q E T G N L I K V A
UniRef90_E3K433          P P G K I T Q T W Q K   A V L G G I P L N A N P L M E V N I I W Q H L
UniRef90_M4DAK0          K Q W K Q D P A V I K A E L L Q K L T R E S L S P A L Q S D F R R V L E F A
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UniRef90_V8NDX6          E P P L T C P Y S L K A R V L L S H L A R M K V P E T L E Q D Q Q F V L K K C
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UniRef90_E9B2R5         P R V S R F L E E Y A W A T T S Y S L A A H A N L L A R C I E R R V W P D G L V
UniRef90_F0YHJ2         P V L I D A M M E L A Q S Q R W M Q T S V N V V D F S Q Y L T Q A L W I K D H S
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UniRef90_UPI0002C3FA3F  S R I F R S I F E I L L L K R W A Q P A L K A L E I S I S V N R R L F G S Q C P
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UniRef90_V2XYE0         G R I I R A L L E I A I S R K W A N A S A V L M G M S K A V E K R L W P F D H P
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UniRef90_D8RME5         T R I S R C M S E Y F M K R F K E T V T A L K L A K C I H E R L W E D S S Y
UniRef90_G8ZUD6         F R I L K C I V D I F V E K K D G V S L K N A L F L L R S V N G T C W E D S A V
UniRef90_K5W6U8         V R L A K G L V E V A I V K Q L G T Q L L N G L E A L R C L N A K A W E D R A V
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UniRef90_Q4XUB3         L R I F R S F F E I S L K K G F Y N L I Y L C L K F C K M I E H R M W S S M T P
UniRef90_H0GUF9         F R L L K C M V D T F I E K N D G I S L K N T L L L R S L N G H C W E N T P V
UniRef90_G0RQ15         D R V L R C L A D I F G E R E D G R G V T V T L D V L R S V K A K V W E T E L E
UniRef90_F2U9W5         P T L I N V M A E L C F E R R W F K P V L L A L H L K Q M T I Q A V P E V D N V
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UniRef90_U4TYT0         V R L A R A L F E I A K D R N Y A L Q V S R T L K L A Q M V E Q Q M W D H I H P
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UniRef90_D0NDF2         P R L L S A A I D L C A H L K L A D L V L A G I R L S Q A V V Q G R W P N E S Q
UniRef90_K0RCY5         S G L I D A M I S V C K H S Q E S I N A A T N C I K F G Q Y V A Q G M W L K D S T
UniRef90_Q8IEC8         L L I T H S M I E I S I L R D W F L T A Q S A L T F R R C L I Q A F E A K N S S
UniRef90_C5E4Y8         F R I L K C M V D A F I E R K D G I S L K N T L F L L R S V N G N C W E D S T V
UniRef90_U6LJM6         T R L S R A L F T A A L T D I A G D T A E A A Y T L S K A I E R G L W P D A C
UniRef90_B8YFQ3         Q R L V R A V I D C K G F D R D A S V G K S A L E L A R A L S A E S W E G R P T
UniRef90_D6WVU9         E R I V K C L I E Y L E S K E K C F Q A L S T I L A K C F H V K L W E N S P V
UniRef90_K9FI01         L A L T E A F T A I S L A F G N L G P I I G A F K T S Q N L I Q A V S P G S S P
UniRef90_L0AVZ8         M I I T Q C M L D V S I C R G W I L T I K S I L D F R R S I V H G I M G K N E S
UniRef90_I0YLQ1         P Q F L E E M I N I P Q G Y G W L S P T V G C L E M A Q C I T Q A M S A D T S V
UniRef90_F2UGI8         F R V M H C F L E Y I K D G V P F D T A H A A V T L S K C L Q A R L W W D S H V
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UniRef90_A9S1G6         T R I C R C M S E Y F I F M K R F T E I R N A L L L S K C L K Q R L W E S T K Y
UniRef90_F7W331         H A L N K S F N A I A L A Y M N T A P L L A S Y F A S Q R L I Q A I P P K A S P
UniRef90_F4QEU6         R V M I N G A F Q L V K E R R F I I P V V E L I K L S Q C I T Q S A W D N Q P
UniRef90_A2DN52         E R L F R C L F E L S I S K G L S E P A L L C L S Y A K M N K R M W E V Q N P
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UniRef90_I1F6E2         P F L I N E M M N I L T Q E P S L D M Y E N I M L S Q I M V Q A M W R P F E T
UniRef90_Q7REE9         F K L V N S L I D V I S S N N L L N Y C L F V M E M S Q M L T Q C F K S S D S N
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UniRef90_K3WN69         P R L L G A V I D I C A F L K Q T E L V F A G V R L S Q A M K W P A D D I
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UniRef90_F1KWV8        I L Q L P H I T E H N L H H F R R N R I V T C A D L A N V G E A K R R H I L Q L
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UniRef90_V2XYE0        L K Q F E   L K P D V F Y G L E T W D D W E P S Q L A A C T A E E L G D L V H L
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UniRef90_S7ZRZ8        M K Q I E Q I G I V A V R K L A A V G I K D I E E L E A T E A S R I D M I L S K
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UniRef90_W7G3H0        N L Q L P H F D E H L I K K A N D L E I L D V Y D L I N A E D E P R D I L L H L
UniRef90_D8RME5        Q L Q L A G V G M V T A K A F L Q S G I D S F D K L A K A D P R K L E A I T G R
UniRef90_G8ZUD6        L R Q L K S I G L I S V R K L V Q K D I H T L Q E F G N L S D Q Q I E C Y L G L
UniRef90_K5W6U8        L R Q I D Q L G E K S L K V L A E H G I T T L D L L R Q Q P P A R I E I L L N R
UniRef90_B0XN39        L L Q L P Y F N N Q V V K A I E A K D H Y T V Q K F M S L P E D K R R S L T V L
UniRef90_Q4XUB3        L R Q F G L L S K D L I K I I E K K N I   S F K N Y L T M D L N E Y I T V F K
UniRef90_H0GUF9        L R Q L K T I G L V S V R K L I R H G I T N L E D M G N L T D T Q I E Y Y L N L
UniRef90_G0RQ15        L L Q V E G I G A A K M K R L T D A G I K T I K Q L A G L E F Y H I E R L L S R
UniRef90_F2U9W5        L E Q L P H V T K T M M D S L E K K N V R T L Q N L V M R P D D K V Q S I L S A
UniRef90_V4MFJ1        F L Q L P H V N D S I A K K I A   L Q V K S F Q E F Q E L S S E E R S K L L R L
UniRef90_K1QS48        S K Q L D G I G P A L S N A L V N A G I T T F Q K I S D T N P R E L E L V S K Y
UniRef90_Q7RSE7

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UniRef90_K4BEI4        L L Q L P N F N D A V I T K I G K K   V R T L Q N L L D M T L Q E R A E L L G L
UniRef90_T1L109        F H Q F R S L G H H D L D K I E R L G I   T V N K I D E L S T R D L S N L M R I
UniRef90_UPI0002B47447 F K Q L E G I K F E L L V K L E Q K K L   T V D M M R E M D A K E I
UniRef90_K6UCS1        L L Q L P Y F D E H L I R K A K E L E I T D V V Y D L N A E D E Q R E E L L N R L
UniRef90_M3HTA8        L R Q L D G I G P A S V K K F C N H N V L S L E D A K S L T T T Q I E Y Y L G L
UniRef90_W7AGT6        L F Q L P Y F N E E V E K A N K L E I F D I Y D L I N S E D D I K D D L L G L
UniRef90_M4B634        L L Q L P N V P Y D V V A E L D R R H N M T L Y D
UniRef90_B6JWX3        L A Q L   N L P R E I V A K L E N Q S S T S I V E M V E M D D T E L G D L V H
UniRef90_D2A5P4        L M Q F K E L E L K G H R A L D V L H N I P I E E L Q E M T E R E I L D L V R
UniRef90_UPI000334402B S K Q L E K I G K Y L C S L I S K T Q E K I X G I M E T N I K E L Q I I L N R
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UniRef90_D0NDF2        L R Q L P H A S Q A A V K L L K E F D I S D I A E L Q A A K K T Q I V A R L G L
UniRef90_K0RCY5        L L Q L P H F T E V E A G F A T K G K P N S I A K Y V K L D D E S K K G M R D F
UniRef90_Q8IEC8        L L Q I P H F D E N I V R H V H K G K V K E V L D F V H Q D H E N R K G L V D M
UniRef90_C5E4Y8        L R Q L K S I G L V S V R K L V H H D V N N L E Q M R Q I S D Q Q I E Y Y L G Q
UniRef90_U6LJM6        I L R H F T S
UniRef90_B8YFQ3        Q L Q I P N I G P V G M R K L A G K G I R T V L E F A E K D S V E L E R L M S R
UniRef90_D6WVU9        S K Q L P G I G N V M S S Q L V N A G K T S F Q L I S E C E A R E I E L L I N K
UniRef90_K9FI01        L L Q L P H F T D A I V N S V E S K E H F S V Q R Y M A L P E A Q R R S L T V L
UniRef90_L0AVZ8        F Y Q I P H F T Q D V I S H V Q K N A V K F I E D F V A Q S P S D R K G T V D M
UniRef90_I0YLQ1        L L Q L P H F D Y D V L K K L G R K K M R S L A E L A A M D P E E R L E L F G L
UniRef90_F2UGI8        T K Q L P R I G A T L S Q A F V D G G L D S R Q K L L R A P H V Q L E A L A K R
UniRef90_T0QQQ4        L R R F G N V L P D A I M R L E E R Y G N D M D T V S T L T V A D I G P L V N
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UniRef90_F7W331        L Y Q L P H F N S T I V E A V E S R V H T T V Q A F M D Q P D A K R R S L V V L
UniRef90_F4QEU6        L L Q L P H F D Q T T I A A L A Q K K V N D L S K F K K L G V D G R L E F L N F
UniRef90_A2DN52        L W Q F G N I P E N Y L N A   I D H F D N W H K Y F E V E R E A L K E K
UniRef90_A2ERS7        I Q A L   V D V Q L F K Q L Q Q Q N I N L L P Q I
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UniRef90_I1F6E2        L E Q L P H I N D R K I F Y H K K H R L S V D F L K L R N E E R R R L L N L
UniRef90_Q7REE9        L Y Q I P Y F N E N L I K K A K E L E I T D I Y E L I N S D D D I K D E L L G L
UniRef90_Q5BF46        L L Q L P H F T D K V V R S I E G K N H F S V Q K F M D M P E E K R R S L T V L
UniRef90_K3WN69        F S Q L P H A S A H L K V L R N L K L S S F A G L Q E L N K Q K K T E L T G L
UniRef90_G6DLA2        M R Q F N C F P N E I L K H I   E Y P L L K P D Q L R D M D W K E I G D L I R
UniRef90_A4RXZ9        Q R Q L K H S R K K V I E K L I E A R I M T L E D V E D A D P R R I E M K L G K
UniRef90_T1KU76        S K Q L P R I G L E L S N R M R A G G L T S F R E I E V A D P R N I E M F C G R
UniRef90_E3K433        W R Q L D S I G E K S V K R F V D A G I A T I D K L Q N T S N H R I E M I L D R
UniRef90_M4DAK0        F L Q L P H F N E T I A K K I A   L Q V G S F K E F Q E L S E E E R S K V L G L
UniRef90_M4FTC3        L L Q L P N F S P S I V K A L E S K V R T S V Q R F M D Q P D A K R R S L A V L
UniRef90_W5L752        L L Q L P H F E E E H L R Y C K K Y K V R S L Q D L V S L K D S D R R S M L R L
UniRef90_UPI0002651530 L L T L P H I T R A L L P R F K I S H E L L S Q L I N T C N G K K E V L I D L
UniRef90_B9WB85        L R Q L D G I G P A S V K K F C T H N I L S L N D A K A L T S S Q I E Y F L G L
UniRef90_B7FQ60

UniRef90_V8NDX6        L L Q L P H I E E D N L R R V K K Y K I K S I Q D L V S L K A S D R H N L L H L
UniRef90_B3LA26        F R H F C Y K N E L L E K K
UniRef90_Q8IL78        L Y I I K D I T E Y Q I V K L K Q L D I Y N L N Q L I K F D K S Y L Y S L N I F
UniRef90_K7UGV7        L L Q L P G I G I V T A K A L K T A G V Y S F E T L A T A D A R K I E L A T G R
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| ID | Sequence |
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| UniRef90_L7I1H3 | K P P F G K N L M D T M K T F P |
| UniRef90_B6A9C7 | S N K L G P G L Y N L I R K I P |
| UniRef90_G7YNK8 | S D E E Y R D V L N V C A S M P |
| UniRef90_V9KB43 | H P P F G N Q I K E A I I H L P |
| UniRef90_UPI0002B48BF8 | P K M G K T I H K Y V H L F P |
| UniRef90_E9B2R5 | L P P F G S Q V L S E V R R L P |
| UniRef90_F0YHJ2 | S D M Q C A D V I R V C N L M P |
| UniRef90_G5DWP6 | S A F E V D D V E K V L E M M P |
| UniRef90_UPI0002C3FA3F | Q P N K G N M L Y N L L H S F P |
| UniRef90_U6GIM6 | S K E Q Q A D I Q A F C E H V P |
| UniRef90_D7LM54 | S D A Q R L D I A R F C N H F P |
| UniRef90_F1KWV8 | N E P E Y R D V I F V L Q S M P |
| UniRef90_A0A017S2H5 | N P P F G L K L L A R V A E F P |
| UniRef90_M9LX28 | N P P F G N K V V A A A Q T V P |
| UniRef90_D8RFA6 | S P Y G G K L V R Q C M D H F P |
| UniRef90_O60072 | N R K M G P T V K K F I S K L P |
| UniRef90_A0A059LP70 | T P Q D V E A C L A A V R R M P |
| UniRef90_E3S0E5 | N P P Y G L K V L E N V R T F P |
| UniRef90_V2XYE0 | N V H H G Q A L L N A A K H L P |
| UniRef90_D5GAK2 | N P P F G A N V L K I A Q S V P |
| UniRef90_G8JUT3 | R M G G G L K V K K D L E M L P |
| UniRef90_S7ZRZ8 | N P P F G F K L L S R L K E F P |
| UniRef90_G2QVS0 | Q P P F G K N L Q A V L E K F P |
| UniRef90_G0VF25 | K I G S G L K I K S D L S L I P |
| UniRef90_UPI0002658F58 | D D A Q Y Q N V V K C L E S M P |
| UniRef90_W6UKJ4 | |
| UniRef90_G4VK99 | S D E Q Y R D I L T V S S S M P |
| UniRef90_I1BNK9 | S D S E Y L D V M E V A Q R I P |
| UniRef90_UPI0002B45F58 | S P A E V Q D V E T V L E M M P |
| UniRef90_A9V218 | S P A I A E R V Q R A A W M I P |
| UniRef90_C5M6T3 | K T G G G S K I K K N I Q S L P |
| UniRef90_W7G3H0 | N E K Q R S E I A N V C N I F P |
| UniRef90_D8RME5 | K Y P F G N Q V K E A L D K L P |
| UniRef90_G8ZUD6 | K M G N G S K I R R D V E L L P |
| UniRef90_K5W6U8 | K S P F G H V V L D S L A E L P |
| UniRef90_B0XN39 | S E K Q Y S T A V S V A K Q L P |
| UniRef90_Q4XUB3 | N K K I A K N I Y K L V H H F P |
| UniRef90_H0GUF9 | K I G S G M K I K S D I S L L P |
| UniRef90_G0RQ15 | N P P F G H Q M L T Q L S G F P |
| UniRef90_F2U9W5 | V P A H V D D V I E F L N V F P |
| UniRef90_V4MFJ1 | S E T D V V D V E K V L E M I P |
| UniRef90_K1QS48 | S E D M A D I V V H L V |
| UniRef90_Q7RSE7 | |
| UniRef90_U4TYT0 | A K H V A A R V K H F C S I F P |
| UniRef90_K4BEI4 | S A A E V Q D V E K V L E L M P |
| UniRef90_T1L109 | E S K G A L L K K L A Y T L P |
| UniRef90_UPI0002B47447 | |
| UniRef90_K6UCS1 | D E K E K S E V A N V C N I F P |
| UniRef90_M3HTA8 | K T G A G N K I R K N I M T L P |
| UniRef90_W7AGT6 | S E K E K G G I A N F C N S F P |
| UniRef90_M4B634 | |
| UniRef90_B6JWX3 | N K R M G N V L R N A L S H F P |
| UniRef90_D2A5P4 | S R H L A S R V H H F C K A F P |
| UniRef90_UPI000334402B | H P P F G T Q I K E A V M C L P |
| UniRef90_W0VMI1 | K M G K G A E I K K D L T L L P |
| UniRef90_D0NDF2 | T K H K I N E F A R V A E E V P |
| UniRef90_K0RCY5 | S Q E Q K E D V S K A A K L L P |
| UniRef90_Q8IEC8 | N P D Q I L D V K S F C N T I P |
| UniRef90_C5E4Y8 | K R G S G S K I K R D L T L L P |
| UniRef90_U6LJM6 | |
| UniRef90_B8YFQ3 | Q P P F G K K L K A D L D K F P |
| UniRef90_D6WVU9 | K P P A G N K I L E Q I Q H L P |
| UniRef90_K9FI01 | S D K Q Y N D A V L V A K Q L P |
| UniRef90_L0AVZ8 | S E Q E I A D V A A F C D Y Y P |
| UniRef90_I0YLQ1 | T K Q Q A E E A A T S L L S L P |
| UniRef90_F2UGI8 | H P P F G S K L Q A S L H E F P |
| UniRef90_T0QQQ4 | G P R V A E K V L Q H V R Y L P |
| UniRef90_A9S1G6 | K F P Y G D Q L K A S L N D A P |
| UniRef90_F7W331 | T D A Q Y K E S I A Y A K Q L P |
| UniRef90_F4QEU6 | T N Q Q I S D I E A V T A K I P |
| UniRef90_A2DN52 | S D K E |
| UniRef90_A2ERS7 | |
| UniRef90_B9PKL4 | S P D Q Q L D I Q A F C H Q |
| UniRef90_S9WD71 | N Q R A G K A I A D L V R S F P |
| UniRef90_I1F6E2 | S D E E Y Q D I M I F C E N F P |
| UniRef90_Q7REE9 | S E N E K S S I A N F C N L F P |
| UniRef90_Q5BF46 | S E Q Q Y T T A I T V A K Q L P |
| UniRef90_K3WN69 | S K N Q L N E F L R V A E A I P |
| UniRef90_G6DLA2 | N P K T A R H L K K C A E E F P |
| UniRef90_A4RXZ9 | S F P F G N T L Q G D V K D F P |
| UniRef90_T1KU76 | K V P F G E M V I K E V K R I P |
| UniRef90_E3K433 | N P P F G T R I V R Q A R S M P |
| UniRef90_M4DAK0 | S E S D V A D V E K V L E M I P |
| UniRef90_M4FTC3 | T E T E Y K T A V D V A K Q L P |
| UniRef90_W5L752 | G D E K Y D E V K A V L G S L P |
| UniRef90_UPI0002651530 | N P T Q I Q E I W D A L G K L P |
| UniRef90_B9WB85 | K T G A G N K I K R N I A S L P |
| UniRef90_B7FQ60 | |
| UniRef90_V8NDX6 | E D E K Y E E V M A V L G S F P |
| UniRef90_B3LA26 | |
| UniRef90_Q8IL78 | D I T Q I N F I L Q L P |
| UniRef90_K7UGV7 | N Y P F G N H I K E S M S S L P |

Multiple sequence alignment (positions 1–40)

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UniRef90_M2X2C0          T F M T V L I W L T S C E E F S D I P V R H N E D N I N A A L L Q E I Q Q Q I
UniRef90_UPI0003ABCDB1        V T L I A S C K E F L D V Q L R I N E K K T L N T L N K D L R F P M
UniRef90_A0A024W1A4       E I I Q V I S K A K E F E N I Q I R N E D M K D F L Y L K D K C D I K E
UniRef90_M7ZI73            V M D V F I K A A E Y M E M P V R R S D D E P L Q K L F V A V R I R T
UniRef90_R1G0N5            G V L A A L A T G T E F E E A L R G H K A E A G L S K V E S K L F Q E G
UniRef90_B2AXJ8            G V I G A L S T G Q E Y D E L F R G D K A D S G L S K V E S R I L A E K
UniRef90_G8BWD4                  K A E E F K G I R L R H N E K R L Y K E I N S K F P F L T
UniRef90_A5K419            G L F A L I A Q A R E F D D V P L R H N E D K Y N V K L R N Q I P L D I
UniRef90_Q0V1V6          S G V I G A L S T G E F N E V L D G H K A N G L S K L E Q K L R Q K L
UniRef90_B8C728            D L C H V M C C A D E F E N I R V R A E E L G E V D K L K K E C P I K V
UniRef90_I7J855            Q L L N L I S G S Q E F K N I P I R H N E D F Y N M K L S S M C P V P I
UniRef90_I7I8D3          S R T K N M P D V L A Q V K E F D E L C S D D D A P V L K N I V N Y V E C K T
UniRef90_E5A7U6            G V I A A L S T G E E H E V L A G N K A D Q G L S K L E Q K V R Q K L
UniRef90_M7WQE9        T T F P Q L L D I L A S S D E F A T L S L R K S A V D E Y A R L V S T V R E G I
UniRef90_I0Z7D9          S M P T L I S V L S H A E E F S G I C L R R G E K K S L N S I N K N M R F S K
UniRef90_Q4YUT3                        F K D N E E E R G N K I I N L N N F M
UniRef90_B7QH37            D I L A A V S K A Q E F D Q L Q V G R I F N S L H L W D V C C Q S R
UniRef90_UPI000265496E                  R E L V R E F S N D I G L K N
UniRef90_H3G1A0                          M A R S C R M R L
UniRef90_C5PAG8            G I I G A L S A G E E F N Q M L A N D Q E Q K I L T E L S A K D R K A L
UniRef90_UPI000023EE52         L L K K A C S A T E F N T F P I Q K H E T V F F R A I N E N I P F P I
UniRef90_U1HI66         T I G G V V A A T S T G E E F Q Q L L K G S R S D A G L S K V E K S I F A P E
UniRef90_W9S342           S E V I D M V A H S S E F E N I V V R E E E Q N E L E M L A R N
UniRef90_M3DAF1            D V L A A V S T A S E F D D I L S G T K A D A G L G K V E S K I M L P K
UniRef90_T1HLZ4          L K R V I M I L A A S L E F E E I I E R P T D N I E V P Q L I R Q L T N L G
UniRef90_F9X3Z8            D V L A A V A T A S E F K E I L H G S K A D S G L S T A E K K L D I K K
UniRef90_Q6BM64                    I K Y N E K K L Y K A I N S S I R F P L
UniRef90_R7Q9F5          K F R D L L A A F C G S Y E F R G L Y N T D N D P H L A G I V D A L K R G G
UniRef90_F0YBY8            D I L V V V C S A Y E F E Q L K P R S D E V A E L D R L R E E V C C P V
UniRef90_B6AHA1            D I L L T L S A T E F S S M I S R N D E V Y E L E K I K L N P F K G
UniRef90_G0TVJ1            D L F R L F A M S K E F A H I A V R P E E Q A Q L Q F L L E N A P I A V
UniRef90_W6KP11            D L F R V F S L S S E F S G L T V R A E E Q V Q L K E L L E S V P I A A L
UniRef90_L0AYR5             L M R I L A D A K E F S Q V P V R H N E D I Y N M Q L S E R A I F P I
UniRef90_Q4DJ49            D L F R L F A M S K E F S H I L V R P E E Q T Q L Q Y L L E N A P I A V
UniRef90_Q16RG8            E I F T L L T Y C D E F A V F K C R N S D K R T L N E L N R S I R F P L
UniRef90_J9K702          S L N D M I Q L L A H S K E F E Y I N L R R S E K G I L N I L N K N L R F P I
UniRef90_X1C381          S I E N V L K I L S S A Y E Y E E L P V R H N E D K V N E N F A K L L N F D Y
UniRef90_F2SWY9            D M I G T M S I G D E Y T E L L N G D H A H S G L A K I E K K I F E S V
UniRef90_L2FSQ0           G V V T A L S A G K E F E S V L K G D K A E S G L S K L E S K L F T N A
UniRef90_G2X1F7           G V I T A L S A G K E Y D E T F K G D K A D S G L A S I E S R I A T G K
UniRef90_S3CS25            V I A A L S T G Q E F E E L L L G D K A E S G L A K V E S R V T A P A
UniRef90_C1MM59          K V P D L L L A M S H A Q E F E G I K L R K D E K K T L K E W N V S V R Y K V
UniRef90_G1XJ55                       H E I I E S A I K D V P I G V
UniRef90_K8ETE9           L R S I L S A T C K A I E F G E I C I R R D E K T T L A L N N N I R V P L
UniRef90_U6MZV3        S K R R A L L E I L S A A A E F S F L P L R P G E D S L L R T L A Q R L S L K V
UniRef90_G0RJ75            G I I T A L S T G K E F E N I L K G D Q A E S G L S K V E S R I T A P G
UniRef90_Q5CY30         T R F K A L P E I L A L S T E F R S L K K N T S E D K V I S H L A N I L P F K K
UniRef90_UPI0002654973         E E I M L V A K A A E F K Q V K E E E E L E E H R K Y D C E V
UniRef90_V5FQT5            G I L A A L S S G E E Y K E L L I S K I E K K I L A D E T L L S P E D K
UniRef90_S9U0J4         K I Q Q L L R L L C H S E E F L E I R L R Q G D R G P L N E L N K S V K Y I L
UniRef90_S9TR10            D L F R L F S L S S E F T H I T V R G D E Q D Q L R D L L E I A P I A V
UniRef90_A5DID6            D V L A M I S M S S E F D G I K F R Q E E A N E L K A L M E N I P C Q I
UniRef90_T5AHQ8          R E V L H R A C L A A E F R S F P M K Q T E R G F F R H I N D H S P I P Y
UniRef90_R7YKT1            D L I N A I S S G E E F K H I L L H G K S D A G L A R I E Q R I L A D G
UniRef90_F6QBM2          L K R A I M I I S A S F E F S N S K V R P A D N E E L P D L L H R L E N P K
UniRef90_U4LFG1            Q L V R I L T A G E E V K E I T S G S R E K E D A T I E K K L P S Q L
UniRef90_V4CPI5                           L M K L L P H M Q E K N
UniRef90_A2DQY6           L E T A L N V L C K A E E F N D I V V R Q E D R Q K M R L M A A D S S L R F
UniRef90_A0A023B4W0          V I R L L C D C V E M S Y V P V R H S E D E S N L M W H R S L L L P L
UniRef90_M7WXW7         M R T L L E T L C S S A E L G S F R F R Q G E K S V L R R T W S D D P C S L
UniRef90_B0CSS3             L E T I S T A E E F A Q L L L S F P Q I Y N K L R N H L D I R F
UniRef90_G5DYD9
UniRef90_L8FV41            D V V Y A L S S G V E F N K V L K G N K A E V S L G R I L A D G
UniRef90_C4JI59            D V M K M I S M S G E F D N I Q S R E N E F K E L D R L L E G L R T E V
UniRef90_M2M6Z7            D V V F A I S S A T E F T E I L Q G A R A D S G L G T L E N Q L Q L P K
UniRef90_H1V9U4        T T I E L F R V F S L S A E F K Y I P V R Q D E K L E L A K L L G R V P I P V
UniRef90_W4G0S8         S M E T L L D V I C G H V P L R R N D K A A L N I L N Q K V V Q Y R V
UniRef90_H1V8V3            E I L R C A A S A T E F L S F T F S P P E K V A F A G I N N D P S T R W
UniRef90_G7E688        S S F S D L L E L L A S S D E F N G L K Q T D S A E S Y S N V E T Q I R V L L K A
UniRef90_F2TCC0            G I I N A L S S G E E Y K Q M L R D E K A E S G L A K V E K K I D R K V
UniRef90_V9IH60            E I F S M I S Y S Q E F E Q L K V R D D E M E E L Q Y L F E E Y C N I T
UniRef90_E3K459        T K F A N A V E V L C S S L E F K A L E S K H I E D Q V T T T L F N S T G E K L
UniRef90_J4C3C8        T R Y K S F P E V Y S C S T E L L E V P Y H S S Q E A E L R K Y V Y V A G D Y
UniRef90_UPI0004621E32                  E I V Y N K L R T H M D I R Y
UniRef90_A7AW09           I L E R V C E C K E F E N L M Y R N D E L E E L S D L M R H S I F K
UniRef90_S8FBP6            D I M S K M C Q I M K L P E R V T R D I I Y N K I R T H N D I R F
UniRef90_G2PZK1
UniRef90_UPI0002651FF9
UniRef90_N1PWQ9            D V V A A V S S A D E F K E I L S G A R E G N G L G R V E S K L G G S I
UniRef90_X1Y3M0         T V A K M L S L I A R A D E F A F K C R N N E K R L L N A L A G V R F R W
UniRef90_A2DKI9           S E L I C V F A S G I C D S I T V R K N E Y K E M E V Y K P V I P F
UniRef90_G0PH20            V I G L I S M A T E F A N I K C R E E E I G D L E E L M N Y C M M N V
UniRef90_M7SJ65        K L E E M L T T L C K A V E F E E F R F K P T E R P L F R K L N Q S P F I L
UniRef90_T5ACI3            G I I A A L S A G K E Y E E V L R G A Q A E S G L A K I E A R I T A E G
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UniRef90_A3FQJ4                     E E C L I R K G D N Q I L D Q L C R D L N L N L
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UniRef90_A8J8J1          S L V R I P E T L V C A M E F I T L P T P S E Q S Y G L E E L R K D L K D K P
UniRef90_G0QNH5            E I F K V F S L S S H E F K F I P I L N E L K L M D T V P I P I
UniRef90_H0Y3X7         T L S D L V T L I A G C K E F L D I Q L R I N E K K T L N T L N K D I R F P M
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                                        50              60              70              80
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UniRef90_M2X2C0          E G   R I K T K E M K V N C L I Q A Q L G C I P I Q F A L T Q N T A K I F R H G
UniRef90_UPI0003ABCDB1   E Y D     E S K N M T L R I L I E V Y L R R L Q I N F S I I C E I N Y I V Q N I
UniRef90_A0A024W1A4      E Q A K F W K Q H V K M E L L I Q A H L T R E S L P A L V K D Y R H M L E L A
UniRef90_M7ZI73          E L S P L E G A R R K A L A L L W A Y L G R V E L D P T L N A E K F E V A P I A
UniRef90_R1G0N5          D K E K L E D P Q R K A L A L L W A Y L G R V E L D P I L E K A K F A V A P I A
UniRef90_B2AXJ8          E N Q I I S Q G F Q K V S L L L Q Y E F G G L E L H Q I L V Q D K M K A L K D S
UniRef90_G8BWD4          D     M N M K N V K T Y L L L S R L Y E C T Y E T D Y H I D L K L V M D Q I
UniRef90_A5K419          D D M E   D S R R R K V L A L L W A Y L G R V E L D N D E K F E V A P I A
UniRef90_Q0V1V6          R N I       F G K A N V L L Q A Y I S R A R I N F T L I S D T N Y I A S N A
UniRef90_B8C728          D E S E A S S P H S K T F L L L Q A I M W K L P L P I D Y K T D I K T I L D R A
UniRef90_I7J855          K R T G F R S P C V K N H I I L L A H M N R L H M N P N L M N N L K E I L K Y S
UniRef90_I7I8D3          D D L D   D S R R R K V M T L L W A Y L G R I E L E D N L N D E K F E V A P V A
UniRef90_E5A7U6          E G Y A S W T P A K K R R V F I A A Y M L R L P N D A K L L K E K H L T A S I A
UniRef90_M7WQE9          P K E R I K S A A E K I F V L V N E A L T D H P L D Y S M K Q E I D Q I V K V G
UniRef90_I0Z7D9          T N P S Y F T P N L K A L I L L H A H I N R F S I P I N Y I N E S K N I L L K S
UniRef90_Q4YUT3          K H T R K K P E P G E V S V L L F A K F S R L A F A V D D L D S V A L H C Q N A
UniRef90_B7QH37          K E R P F C Y P Y V K V R T L I Y A H L A R A D L P P K L D V D R L Y V V K K C
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UniRef90_H3G1A0          S E L D   D E R R R K V L A L L W A Y L G R V D L N P T L D T E K Y E V A P I A
UniRef90_C5PAG8          S E F   I S K P W H K V I L L V Q I E L T K S G W P N E L H K E L S R M C K L L
UniRef90_UPI000023EE52   A G L S I E D P R R K V L A Y L A R V D L G D D L E S E K Y A V A P I A
UniRef90_U1HI66                          R A S Y L V R L Y I S R G S I D F S L V S D A A Y I S A S L
UniRef90_W9S342          D K T K L E P V R R K T L A L L W A Y L T R L D L D A T L E A E K Y E L A P T A
UniRef90_M3DAF1          E K N R C Y L Y S I K A R A L L H A H L N R I P L N P K L D K D R M Y I V K K C
UniRef90_T1HLZ4          L R E L E D P V R R K T L A L L W A Y I L R L D L D D T L E A E K F E L P P T A
UniRef90_F9X3Z8          H S T E F Q D S D   K V M L L L Q Y E L C G L D F P N S F E G D K C Y V F K Q A
UniRef90_Q6BM64          K D M K R T R S V V E N F H V M T A Y L C R V G I S K K L D Y I R E D I L S R A
UniRef90_R7Q9F5          R S D E L D E P A G K A A T L L Q A H V S R A P F S F T L A S D A A Y V A K N A
UniRef90_F0YBY8          R I L L D V L D T N V K I M L L L A C T A R I E I K P T L L L D S C Y I I Q N S
UniRef90_B6AHA1          R E S R Y T   P L A K I N V L L Q C Y I S G M S L Q G P L M S E L V Y V K D S A
UniRef90_G0TVJ1          R E S R Y   S P V A K I N A L L Q C Y I S R K T L D G P L M S E M V Y V R D S A
UniRef90_W6KP11          K E S E A S N P H A K T F L L F Q A R L F N L G M P F D Y N N D T K S V L D Q T
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UniRef90_Q16RG8          E G   G I N T R E T K I N C L L Q A T L G T L R I       T D S S L A Q D
UniRef90_J9K702          N N A D Y D S P F I K T E I L F R A R F Q R L A M M S D Y K T D L R S I L D Q G
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UniRef90_F2SWY9          E K A G L S Q K R R K T L A L L W S Y L G R I D L D P A L N S A K Y E V A P I A
UniRef90_L2FSQ0          D K H A L E D V R R K A L S L L W A Y L G R V K L N D Q L N S A K Y E V A P T A
UniRef90_G2X1F7          P S S A A N G V R R K V L S L F W A H L G R T P L G G D L E L A K V E V A P I A
UniRef90_S3CS25          M E A K I R T A A E K I F V M T Q E H M C D V D L P A S M R M E L E L V F S N G
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UniRef90_G1XJ55          K N T P I K F G W E K L Y V L T Q T E L K E T N L L P S L K R E V E S V M N I A
UniRef90_K8ETE9          P P S D F A K T S T K T L I L L H A H C Q R W S L P S D L A A E Q Q Q L L L P A
UniRef90_U6MZV3          E T A P F S G V R R K V L A L L W A Y L G R V E L D P A L T K A K Y E V G A I A
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UniRef90_Q5CY30          D V P K V K E S S A K V N V L L Q T Y I T G G T L C F S L V S D T N Y V A Q N S
UniRef90_UPI0002654973   E K Q L D D L P R R K A L A L L W A Y L Q R A E L D D T L N E D K Y A V A P I A
UniRef90_V5FQT5          K N R E V R E D W H K A Y I L V Q C Q L G G Q L P I Q D S L K N D F M R L W S L V
UniRef90_S9U0J4          R D S R Y T   P L S K I N I L L Q C Y I S R K D L V G P L M S E L V Y I K D S A
UniRef90_S9TR10          P G   D I D S A P G K T N I L Q A F V S H A T I D S S L I S D C N Y V A Q N S
UniRef90_A5DID6          P R E A V S E P W Q K V F L L V Q V D L H G A G W P N N L H Q E R G R I Y L L L
UniRef90_T5AHQ8          E A S P L E G V R R K A L G L L W A Y L G R V E L D D D Q L N D E K Y E V A P T A
UniRef90_R7YKT1          E R P M N F P Y S V K A R I L Y C H L C R L D I P S T L E E D L E F I L C K V
UniRef90_F6QBM2          A L E K Y E G W R R R A I T L L W A Y L Y R I D L G N D L D I A K L D V A A A A A
UniRef90_U4LFG1          K E R P L C Y P Y V K A R A L L M A H F Q R L T V P N E Q E M D L Q Y I L K K S
UniRef90_V4CPI5          P S V S I D D P S F K C F L M I Q I A L S K G K I E D S L A Q E Y N K I K R T A
UniRef90_A2DQY6          D V S R I T K G G E K A L A L F Q M I M W R L P P V H D Y W V D S M S M V A A C
UniRef90_A0A023B4W0              K V L A K Y N K V M I L Q L V L E G I P G T E L R E N E I N P M L D A A
UniRef90_M7WXW7          E V K K I E K T S D K A F L L I Q A V L G G I G L K T E F K G T A L S L F R H A
UniRef90_B0CSS3                          K A R V L L L A H L S R M Q I P E A L K E D Q Q F M L K K C
UniRef90_G5DYD9          E F G P F A A V R R K T L G L I W A Y L G R I E L N D N L D E L K F E V A P I A
UniRef90_L8FV41          E G T N   D S P H A K T N I L L Q S Y I S R A R V D F A L V S D T G K F
UniRef90_C4JI59          D K K K L E E A R R K T L A L L W A Y L G R I D N D K L E A E K Y E L A P T A
UniRef90_M2M6Z7          K E   S I E E P H A K I N V L L Q A Y I S R L K L D G A L M A D M V Y V T Q S A
UniRef90_H1V9U4          K K Y L V Q T D R M K A N V L L Q A A L G R V H L D D D L A F E M D T C V E M A
UniRef90_W4G0S8          H R E P L A Q P W H K V F L V A Q C E A T G L H A R N D L Y A C R S R I V D I L
UniRef90_H1V8V3          R G R D L S S R A M R A A V L Y A H L F R V S I D A K L L Q E R N E T V L L A
UniRef90_G7E688          L A D L E S A S R R K A L A L L W A Y L G R V E L D P V L N E E K F G V A P T A
UniRef90_F2TCC0          V Q G G V E N I Y G K V N I L L Q T Y L S H G R V N F S L I S D Q A Y I V Q N A
UniRef90_V9IH60          E G R L Y N N S S E K F A V L V Y A H M F R I P I S D A I L N A K H D I I N Y G
UniRef90_E3K459          K R K N V S A E T F R N F I L I C H L N R V D L S P Q L T K A L K E I L K Y S
UniRef90_J4C3C8          T I K K I E K P S D K V F I L I Q A I L G A I N L D P E Y K T G E T Q P L R H I
UniRef90_UPI0004621E32   P T R G L N H I T T K I S L L I E A H I N R T Y I K S S L I S D M N Y I I Q N I
UniRef90_A7AW09          Q I K K I E K P A D K V F V L V Q A V L A C I N L D S N P V M E A L S I F R H I
UniRef90_S8FBP6              P V T Q T R H K V S L I V Q A V L A C V N L R R Q L M I E R K L V F E R L
UniRef90_G2PZK1                          L I Q A T L G S I P I Q F A L N Q D C Y K I F R A G
UniRef90_UPI0002651FF9   E S G A V M L P R R K T L A L L W A Y T N R L D L D D S L E A E K Y E L A P T A
UniRef90_N1PWQ9          P G   R I S T T D A K V Y C L I Q A V F G C L P I H D H H Q E S G Q D D H S R S
UniRef90_X1Y3M0              A S A I E E V S G K V N F L L Q S L I S R E P L T L L Q L G Q G W V A D N I
UniRef90_A2DKI9          R G G G L A S V A G K V N V L L Q S L I S R S S T N S A L M S E Q L Y V Q Q N A
UniRef90_G0PH20          H P I K V T Q T W H K V F L M V Q I H L G G V E L P N D K E C E K T A I F D R L
UniRef90_M7SJ65          D A S P F N G V R R K A L A L L W A Y L G R L E N A A L T K A K Y N I A P I A
UniRef90_T5ACI3                          L F Q A H F M R T V L P T D Y R T D L K S V L D Q C
UniRef90_K7HQU8          N Y Q H R S L T S R K I Q I L L N S Y I K R H K F R P L Y K N D L I D L L R F V
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UniRef90_M7ZI73          P R L L E E L V K L M F R F G W L R P A I G V V E L S Q S I I Q A V P E G I A P
UniRef90_R1G0N5          H K L N D A F F A V G L A Y G N T P P I L S S Y H T S Q N L L Q A I P P A S S P
UniRef90_B2AXJ8          E A L N K S F T A I S L A Y M N T A P L L S S Y Y A S Q L L I Q A L P P K S S P
UniRef90_G8BWD4          Y R I I K S M I D I F I S K K D G I S L R N A L F L L R C L N G N C W D N T P T
UniRef90_A5K419          A R V I N G F I D I C L L F G R Y N Y I K N L I L I Y Q C C I N Q K I Q P S Q N S
UniRef90_Q0V1V6          L R L N E A Y T A I S L A Y G S T G A V V S A Y H T S Q N I I Q A L R P G A S P
UniRef90_B8C728          G R V S R A L F E M C L K N G R A S A A L K F L R L A K S I D A R F W W F Q S P
UniRef90_I7J855          T V I H A F I D I A A V K R R L S T V L Y L I L M Q C L I N H L N P G D I N
UniRef90_I7I8D3          M L I T H T M L E F A L S Q N W F L T A K S V L E F R R N I I Q C L G S S D N D
UniRef90_E5A7U6          L R L N E A Y T A I A L A Y G S T R G V L S A Y R T S Q N L I Q A L R P D A S P
UniRef90_M7WQE9          L P L C S G L A S I A L A H N W L S T Y I A I L H L Q Q F L L Q A V H P S S S Q
UniRef90_I0Z7D9          A R I T A C M A K L F R H K R A L A A T A N A C L L Q K C L K Q R M W D N S S Q
UniRef90_Q4YUT3          L K L I N S L I D V I S S N N I L N Y C L F V M E M S Q M L I Q C F K N T D E S
UniRef90_B7QH37          T R I L R A L F D M V L R A G G A I M A G R I L T L C K A V E R Q V W S F E S P
UniRef90_UPI000265496E   P Q L I Q E M V N T A A Q L I F W H T I E H I M K L S P M V V S T W   D K S P
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UniRef90_Q6BM64          S R I I R C M I D V F R Y K K D C V S L N T L R F S R C V A G R C W E N S T E
UniRef90_R7Q9F5          V S L L T A M T D T V F Q R P D C Q A A W T C L S L I Q C L I Q A L D E K S S P
UniRef90_F0YBY8          A R V C R A L F E M A L R A H W P S L A E R L L A L A K A V E R R L W W F Q H P
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UniRef90_Q16RG8          R R L I K C M T E F I Y V G Q G Y Q A L L S T V V L S Q C L E T K L W E N S P Y
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UniRef90_S9U0J4          P R V A R F L V D Y A W C T N L Y S M A L H A V S L L H C I E Q H V W E D G L V
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UniRef90_F6QBM2          P L L V Q E M V G C L S Q L T V M A S L E N V M K I C P M M V Q G L R E T K S P
UniRef90_U4LFG1          V T L N R S V N S I C M A F G N L G P L L T S L R L S Q F I I Q A I A P G Q S P
UniRef90_V4CPI5          T Y L I N E M V N I C A N Q V S M A M A E N I M K I S Q M V V Q A L E E K A S P
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UniRef90_F0YBY8           V R Q L A D L E P N L N E R R R K F P E D A L R Q L
UniRef90_B6AHA1           L R H F V Y H Y S L N N N R L N I E T E Y I I G K H K N I G P L K L D S I I R L
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UniRef90_UPI0003ABCDB1  H P A
UniRef90_A0A024W1A4
UniRef90_M7ZI73         S E E E A R D V E L V L E M I P
UniRef90_R1G0N5         S E S Q Y A T A E K V A S Q L P
UniRef90_B2AXJ8         T D E Q Y R E A V S V A K Q L P
UniRef90_G8BWD4         N P G A G T K I L R D V A L I P
UniRef90_A5K419         H T S Q L       N F I F Q I P
UniRef90_Q0V1V6         S Q A Q Y N T A M S V A S Q I P
UniRef90_B8C728           F R D G D M I Q K F V R M L P
UniRef90_I7J855
UniRef90_I7I8D3         S A A Q I N D I N S Y L D H F P
UniRef90_E5A7U6         T Q E Q Y A T A M S V A S R I P
UniRef90_M7WQE9         P E A E K R D I Y E V A K H W P
UniRef90_I0Z7D9         K Y P F G A
UniRef90_Q4YUT3         S E E E K S S I A N F C N S F P
UniRef90_B7QH37         N P K V G T Q V E L C A R Q I P
UniRef90_UPI000265496E  D E R Q Y Q D V L N V C A S L P
UniRef90_H3G1A0
UniRef90_C5PAG8         T E K Q Y Q T A V S V V K Q I P
UniRef90_UPI000023EE52  N P P F G Q T L L H K V A G F P
UniRef90_U1HI66         S D S Q Y A S A M Q V A R Q M P
UniRef90_W9S342         A P G   G R V V K Q Y L G Y F P
UniRef90_M3DAF1         T N D R L K V A E D V S R K L P
UniRef90_T1HLZ4
UniRef90_F9X3Z8         P T S H L K L A E S V A R Q L P
UniRef90_Q6BM64         E P G T G K N I A Q S L Q S L P
UniRef90_R7Q9F5         S D Q Q Y L D V K A F L D R F P
UniRef90_F0YBY8
UniRef90_B6AHA1         E N
UniRef90_G0TVJ1         D E R R A E A A Y A C I R Q V P
UniRef90_W6KP11         D E R R A A M V H T C I A Q V P
UniRef90_L0AYR5
UniRef90_Q4DJ49
UniRef90_Q16RG8         N P P F G S D L I A F V R T L P
UniRef90_J9K702         Q P P F G N H I H D F I R Q I P
UniRef90_X1C381
UniRef90_F2SWY9         T D S Q Y Q T A V S V A R R I P
UniRef90_L2FSQ0         T E E Q Y K T A L D V S R Q L P
UniRef90_G2X1F7         T D A Q Y K T A V S V A K Q L P
UniRef90_S3CS25         S E Q Q Y D D A V A V A Q Q M P
UniRef90_C1MM59         A F P H G N H L V S E V L K L P
UniRef90_G1XJ55         T E E Q Y K E A I S V A Q K I P
UniRef90_K8ETE9         Q P G F V H H L K E S V K L L P
UniRef90_U6MZV3
UniRef90_G0RJ75         T E E Q Y N E A I K V G K Q L P
UniRef90_Q5CY30         N E S Q K L D I E A F C N
UniRef90_UPI0002654973  F E K E G K R I K Q A S E Q F P
UniRef90_V5FQT5         S E E E Y E T A M T V A K Q I P
UniRef90_S9U0J4
UniRef90_S9TR10         D D R R G E I A L T L I R H V P
UniRef90_A5DID6
UniRef90_T5AHQ8         N P P F G Q Q M L H Q I A G F P
UniRef90_R7YKT1         T E K E Y N A A I Q I A S Q L P
UniRef90_F6QBM2         G D E E Y D T M I S V L K K Y P
UniRef90_U4LFG1         T E P Q Y K T A M T F A K S M P
UniRef90_V4CPI5         G D D E Y L D V I S V L A K M P
UniRef90_A2DQY6         R P G W G T T I A E S I S R L P
UniRef90_A0A023B4W0     A N A Q W A E F D Q V V R M L P
UniRef90_M7WXW7         K P P F G R K L I A Q A K S I P
UniRef90_B0CSS3         R P P F G L E V L A C A N E L P
UniRef90_G5DYD9         E D S N Y E E L L A V L G S F P
UniRef90_L8FV41         S D A Q F K T A M D V A L Q L P
UniRef90_C4JI59
UniRef90_M2M6Z7         T P D R L V V A E G V A R Q L P
UniRef90_H1V9U4
UniRef90_W4G0S8         G D C E L A E A K T V L D
UniRef90_H1V8V3         N P P F G Q K I V R T L A H F P
UniRef90_G7E688         E P R D A Q R A I A I A Q H W P
UniRef90_F2TCC0         S E Q Q Y A S A V S V A Q Q I P
UniRef90_V9IH60
UniRef90_E3K459         Q D H I K K Q I Q S I S E H W P
UniRef90_J4C3C8         T S A Q R A D V E E F C K Y F P
UniRef90_UPI0004621E32  K P P F G H E I L A S V N Q L P
UniRef90_A7AW09         S R S E A S A V E S F L G F V P
UniRef90_S8FBP6         R P P F G L N V I A A V K Q L P
UniRef90_G2PZK1         Q P P F G K N L Q A Q L D R F P
UniRef90_UPI0002651FF9  H P P F G N Q I V E A V S H L P
UniRef90_N1PWQ9         T N D R L K V A E S V A K Q L P
UniRef90_X1Y3M0         Q P P F G N E L I G L A S E L P
UniRef90_A2DKI9         G D N Y A A Q S L D Y A K K F P
UniRef90_G0PH20
UniRef90_M7SJ65
UniRef90_T5ACI3         S E D E Y R A S I N V G K Q L P
UniRef90_K7HQU8         E D T Q C R E V I K S L C N W P
UniRef90_A3FQJ4         S E K E I S Q I A Q V C N D F P
UniRef90_A0A024UDX1     P E H L I S E A K A V L D
UniRef90_A8J8J1         E D A G V E A V T T F L A T L P
UniRef90_G0QNH5
UniRef90_H0Y3X7         H P P F G T Q I K E T V M Y L P
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Multiple sequence alignment (positions 1–40)

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UniRef90_UPI0002C6429A    M K R L I M V L A G A S E F D D A T S K P T D N I L I P Q L I R E I N L K K
UniRef90_UPI0002C2EF13
UniRef90_J4UKE5             S A I F Q T A C T A I E L Q T F A I R P A E R A W L R Y V N E H I P Y S I
UniRef90_UPI000456069B    T P V P R I L A L M A I S D E F N D A K L N R T D E A A L T Q L E H D V R A K V
UniRef90_G2YVH9           S S E A D V L T M I A M S G E F D Q I Q S R D S E S K E L T S L R E D F S P C Q
UniRef90_W6V4Z7           T I L D L I H Y V A G C A E M H E I S I R S Q E K S Q L N R I N R R L R Y P T
UniRef90_UPI00042B5976        V L D V F I K A A E F M E I P V R Q S D G E P L L K L F M L V R S E L
UniRef90_J4CCB3                   F E S V L Y R N E E Y E E L M D L M K Q V V Y K P
UniRef90_H2AZ84             M L K W L S Y A E E F K Q F F P                         D M
UniRef90_C6LZU5           T L Q T Y L D M L V R C E E F Q E I P I R H N E D R D S A L L L Q K I R Y N M
UniRef90_L2FQA3             E E I L R C A S S A T E F R S F T F H P Q E K G A F S R I N N D P R W P V
UniRef90_B7GA67                       P V R R S E K K L L N E M H K M V K Y K L
UniRef90_U6ICD1            L E D L I Y Y I A G C V E M N E I S I R S Q E K G A L N S I N K K L R Y P V
UniRef90_G3X271
UniRef90_E4WTR9             R R A L M V F S G A F E F K D V K E R T G D A E Q L P V L M R E I E E N V
UniRef90_M4CW16             D L Y H L L S L S E E F K Y V V T I G P D E K M E L A K L L G R V M V P
UniRef90_K1X5X4             G I I S A L T T G L E F Q A A L K G D I A D S G L S K L E S R I F A E K
UniRef90_J3PRL7            M R N I L E V V S D A D E Y S T L R L R A G E G M A Y K T L N S H P E L K C
UniRef90_L7FJ22           T L M K V V E L L S F S T E F A D L E I E Q R D T T D L P L L V Q K I K F R V
UniRef90_Q4UHC2             E I A R T L S N A T E F N L V P L R H N E D V Y N V Q L S N L C P S K I
UniRef90_J4TWN9           T L D L I L H W L S F A N E F K Q F                 C P       G L
UniRef90_UPI0002C3FB06
UniRef90_W4KFF7           S G I E D I V G A L G K A V E F   E R P G K P S G V A E L E E L E K A I E A A I
UniRef90_D2KTB3           T L S D L V T L I A G C K E F L D I Q L R I N E K K T L N T L N K D I R F P M
UniRef90_M0X5Z8
UniRef90_T1KN62
UniRef90_M4SHW5           T L Y E L I M L L S E S K E F E D I K L R S N E K S I L N A L N N N G K I P V
UniRef90_B6JXN5             D L L K A F A S S D E F         R H D S K E S V D E S S K R V I R
UniRef90_C9SK34
UniRef90_V4ZGQ7              I L R L L G L A K E F A S L K V R D D E E S E L S N L R R S A I C R V
UniRef90_K0SDC7            Q I L H M L A N S P K I   Q T D L R R N E K K P L N E A Y K L I K Y R F
UniRef90_A9UPF4           R K I I E V M A V A D E F R E I T L R S T D L E T V R E V C K N A N L G S
UniRef90_M0WNX2            V M D V F I K A A E Y M E M P V R R S D D E P L Q K L F V A V R I R T
UniRef90_UPI0002C3EF79    T F P T L I E V L T L S N E I T E I T I K P D D Q K Y L P A I Q K R V N L F I
UniRef90_Q3LW60             L K T L C L S D E L Q K I V V R L D E F L D I K M L V D I I P I P Y
UniRef90_C1FEF6             V P K L L S V A A E Y I Q I P Y R R E H E E P V R R L L A V L R Y D A
UniRef90_R7QKR2           S S P A G A L R V L A A A P E L E G V C V R R A E K K S L N E L N E F I R V P V
UniRef90_X6MYP7
UniRef90_A0A059LIL5        L S R I V E T L V C A V E F I T L P F P A S Q M A A F E E L R R D L K E K T
UniRef90_W6MMD1           T K V D D V L E W I S T A K E Y E L       Q H P D L L P E D I Y S
UniRef90_U1Q564             I L E T V A N A D E F N S V S A R Q N E T D A I A A V L D R V
UniRef90_K2GXY5            F P S M I E V V S L A N E V R E V V V R P N D K N F L P V I Q K K I K E E F
UniRef90_Q7Z0P8
UniRef90_F2S185
UniRef90_V4SPF0
UniRef90_S7QKH6
UniRef90_G8JNN9                                            I L N W L S H A K E Y K L
UniRef90_I2GYL0            I I N W L S H A E E F                       Q I F F P N
UniRef90_G0WHQ3            I I K W L S H A E E F K Q F
UniRef90_C5DF29           I L N W L S H A A E F               K L L Y P D L
UniRef90_V2WLV4           S R M D E V I G A L G K S H E K P G V S L K A E E K A E L D R L E K L I S E Q V
UniRef90_UPI00044110F7    S G I D D V T T S L G K A F E Y E H R V K I A K A D G E L D Q L E T Q I K E Q L
UniRef90_D2V281           S K M K K I L Q L A C T A E E F A E Y A I R Q G K G V L I S L N Q N E K I K Y
UniRef90_G3GXK1             M K R L I M V L A G A S E F D D A T S R P T D N I L I P Q L I R E I N L K K
UniRef90_A0A023B3T1       T A H R V I A M L A A S H E I R N A P V R E I S V E E M D M L K T K C N G K E
UniRef90_I3R8Q4             D I L E T V A G A A D F R Q V S A R Q S E V D A V D S V L T G V S T E L
UniRef90_V6TSZ1           T L Q Q A L L I A T S H E Y S P I F I R A D E R F E L T S L E E H A P I K Y
UniRef90_A8P7U8           S S V D E I V S S L G K A Y K W E L P Q V K S G V D T E L A E L E K A I V E K V
UniRef90_W1QAU5             L D F L C Q T P E F G N V E Y R S L E K T L F R K I N Q S I R Y R L
UniRef90_Q961L2
UniRef90_E1ZPL9            L G R I P E T L V C A M E F I Q L A T P P D Q G P A M D E L R K A V
UniRef90_F0WJ83                        L P V R H Y D S N P L A E L G K T I R I P L
UniRef90_UPI0003EBF7DD     M K R L I M V L T A A L E F D E A T I R P T D N V E V P Q L I R N I N V K K
UniRef90_Q18DJ1            G I L E T V A G A G E F H A V S A R Q S E S D A I D K V L S D A S I S T
UniRef90_C4R7S0             E T I I E L I S K A E E L K S A T N L S S E E I E E
UniRef90_J2ZH73           T V D A I L E T V A A A A E F D S V S S R Q S E S D A V E S V L T G
UniRef90_G3AHU8                                          I L D W V L E S Q E I K K
UniRef90_I7AN67             R L I V L M T K S V E F S E Y R W R S D V E G L R S K I E S G F A F P L
UniRef90_M5GGS2           T E Y A T L V E L L G H A W E L E T P P H R R N E D G L V K I V R E K V P E W V
UniRef90_K2HPR5                                        S K F L P Q I R S K V
UniRef90_UPI0002652922     L K R A L M I L S G S F E F E Q V V N R P S D N E E L R E F S N D I G L K N
UniRef90_UPI0002061813                                                               L
UniRef90_E7QXY4            I L E T V A G A A F D S V S S R Q S E R D A I         N S V L V G Q
UniRef90_A0A024GFQ8       K G M L I F C S S K E F E Q L K T R E E E V L E L E R L E K Q C R F S V
UniRef90_Q5CRF5            Q L F R L F S T C K E F K F L L V R N E E K I E L E K L V D K V P I P I
UniRef90_C5DW08           T V E L I I H W L S E A Y E F E N L T A D D F E Q I L L D H I N R R
UniRef90_I6UPD2             L I M I M M R S V E F S E Y R W K S D V E G L R G K I E S G F A F P L
UniRef90_A8Q342            G I L L M M A Q S E L R D L V G R A S D M P A Y E Q L K K A Y R E L
UniRef90_B9LTA9           T V D S V L E T V A S A G E F D S V S A R S A E S D A I D R I L D       G
UniRef90_R4W3J7            G I L R A V A T A V E F D D V A A R S D E D A V L G E R A T D L P
UniRef90_B0WFC4                 M S G E F R N I T V R E E E T L E L Q K L M E R V L I P I
UniRef90_M1VKP0           K F R N L P E V Y G A A L E F A T R T P F E A E C G D R E A I S L L C Q A L E
UniRef90_A0BG47
UniRef90_H8X4Y6
UniRef90_K1VHU1            L R S L L E I L A G S E D   D D I R F R L G E
UniRef90_V8PEU5           T L S E L V V L I S G C S E F S D I K L R T N E K K V L N S L N K N I R Y P M
UniRef90_V4YGX1            L L E A V A G A A E F D S V S A R S A E A D A V D R V         L R G
UniRef90_K3WRG3           S S V T H L L R M L A Q C K E V Q H P L R R N E K S I L N Q I N G K V R F K V
UniRef90_F7AN12           T L A E L V S L I S S C S E F S D V Q L R A N E R R V L N T L N K D I S M P L
UniRef90_A0A024JI48       T H E K I V E F V S R A A E Y K S L L P R L T P D D I L E
UniRef90_V4GSA5            V L R T V A G A A E F D S V S A R S S E T D A V         D R V L S G A
UniRef90_UPI000444A6B0
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                                    50              60              70            80
UniRef90_UPI0002C6429A  N E P P L T C P Y L K A R V L L S H L A R M K I P E T L E E D Q Q F M L K K C
UniRef90_UPI0002C2EF13
UniRef90_J4UKE5         S E P V A E P W H   K A S L V V Q I D L S G Q P W P A E L H S D R G R I Y R V F
UniRef90_UPI000456069B  P E W G L N A S I R K A V V L L Y A H V L R I D T P S R L T K A K Y R Y A H K A
UniRef90_G2YVH9         V K G G T D S S H A K T N I L L Q S Y I S R A K L D F A L A N D T N Y V A Q Q S
UniRef90_W6V4Z7         K G   R I T T P Q M K V V T L L Q A E L N D V V L E A G L H Q E S S K A L K V F
UniRef90_UPI00042B5976  N L D L K N I R Q E         Q A K F                   W K Q H P A F V K T
UniRef90_J4CCB3         K G G   I N H I K N K V S I L I Q A Y I G K M Y V K S S L L T D M N F I V Q N A
UniRef90_H2AZ84         K P E D F E K               L L H D Y I N R R D S G S K L N M A K Y R I V A K C
UniRef90_C6LZU5         P S D I C T E P S F K A Y I L L Q A Q L V R S S P Q G D Y W L D L A T I I D A A
UniRef90_L2FQA3         R E   T L A Q P W Q K V Y L V A Q C         E G D G R E Y G E R X
UniRef90_B7GA67         E G P R V K E S E Q K A F V L L Q A S I G R I H I N F S L R Q E M C G M V D F A
UniRef90_U6ICD1         R G   R I T T P Q L K I V T L L Q A E L N E V I L D S G L Q Q E S H K T F R A F
UniRef90_G3X271                         L I Q A H L G C L P L P F S L T Q D T A K I F R S G
UniRef90_E4WTR9         S K P P T D K P S M K V R L L Y F A H M Y D I K L S P E L Q E D L D M I L K K V
UniRef90_M4CW16         N K E T L E E P S A K I N V L L Q A Y I S Q L K L E S S L T S D M V F I G Q N A
UniRef90_K1X5X4         D R T K I E D V R R K A L G L L W A Y L G R V E L D D A L N Q S K V D V A P V A
UniRef90_J3PRL7         P T G K V T Q T S Q K     A V L G G I P L   A E V K V E N T N P V M E V
UniRef90_L7FJ22         E Q K D F L P V P M K I Q T L I Q A H L S R L H M P Q Y L R D E L D Y I I E K A
UniRef90_Q4UHC2         T E S E A S D P N A K T F L L F Q A R L F N L K L P F D Y N N D T K S I L D Q L
UniRef90_J4TWN9         Q P A D F E K             L L H D H I Q R R D   S G K L N E I K F R I V A K C
UniRef90_UPI0002C3FB06              K A N I L I Q A S L S H T V L N F T L I S E T L Y A N Q N A
UniRef90_W4KFF7         G Q K W R D D G R W R A L V L I H A Y L L R L D V D S A L K K E Q V E I L L Q T
UniRef90_D2KTB3         E G   R I K T R E M K V N C L I Q A Q L G C I P I Q F A L T Q D T A K I F R H G
UniRef90_M0X5Z8                                 Q E T N S I C S N G
UniRef90_T1KN62                   H M T V H I P K H I Y F F N L K S V L D Q A
UniRef90_M4SHW5         I D G K I K N P A M K I C V L I Q S Q F G S I P I N F S L N Q D I Y R I F K V A
UniRef90_B6JXN5                     L L E E R F Q R K P   S S N E H E L E Q V L R Q S
UniRef90_C9SK34                     D F A L G N D L N Y V A Q Q S
UniRef90_V4ZGQ7         P I V D F D A P E A K V Q T L V Q A A L A Q A P I K F S L C A D S N Y V Q A N I
UniRef90_K0SDC7         E K V R I K T S A E K A F V L L Q S S V G R Y H F D F S L R S Q M Q D M V D G A
UniRef90_A9UPF4         D P F S K G K W R F N V L F H A H M E R M P V T S E M Q A D Q V V V L E L V
UniRef90_M0WNX2         E Q A K F W K Q H V K M E L L I Q A H L T R E S L T P A L V K D Y R H M L E L A
UniRef90_UPI0002C3EF79  K T P K Y N S P Q V K A Q I L L A A H L T R L H L P Y Y L R D D L D E I L Q V V
UniRef90_Q3LW60         T I E E   N I N L L K I F S L A Q A Y I G R F S F N D S L A S D S K Y I Q K T M
UniRef90_C1FEF6         K D P K F Q R R H V K A H M L M L A Q A C R L T I D A S L E A D L K L V M A A M
UniRef90_R7QKR2         H G   K V K E P L D K A I V L I Q A T I T T S C I D F S L Q S E A L R L A K S V
UniRef90_X6MYP7             K S C A L L T A H L M G L P I P E V L H D E Y L F V L Q E A
UniRef90_A0A059LIL5     A L W K M R P S V I K A H L V I L A H L S R E P I P A P L R K D A A F I L N K S
UniRef90_W6MMD1                     L L Q A H I N R E P V K D E L   L K I E V I A V A
UniRef90_U1Q564         S T D L E G G S R K V L A I L H A G M N N   Q V P S D L R S D A W I   I K Q N G
UniRef90_K2GXY5         I K K P Y N V P E V K A Q I L I G A H L S R L H L P S Y L R D D L D S I L E V I
UniRef90_Q7Z0P8                     Q P F T D Y N T D T K S V L D Q A
UniRef90_F2S185                     L N E Q K F Q V A P P A
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UniRef90_I2GYL0         K T P A Y F E K           L L L N H I N R V P M N P T D V L I K Y R I V A K C
UniRef90_G0WHQ3           Y P S L T S K D F E E     L L H D H I N R K S S N P D R N I I K N R I V A K C
UniRef90_C5DF29         T Q E T F E S             L L Y D H I N R R H   S G E L E T A K L R I V A K T
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UniRef90_UPI00044110F7  G A Q W T E D S R R R A F V L L Y A H L L R L P V H S S L Q K E Q T E L L L Q T
UniRef90_D2V281         P K K K I E M A R E K V F V L V Q S V L G S L T I E S S L R Q Q S V T L R S P L
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UniRef90_I3R8Q4         E D G P       R K V L A I L H A S M A N S T   P S E L R S D A W V I K Q N A
UniRef90_V6TSZ1         P P F T T R H E L G K I C L L L Q V Y I S T G P C Y G S L M S D Y A S I V A S A
UniRef90_A8P7U8         A D G T I H P S R A R A L A L I Y A H L C R I E V N P A L A E E Q R R I I L S T
UniRef90_W1QAU5         E G E   I E A V W Q K V H L V V Q F E L G R L D L F N F N Y D K A K V L R Q M
UniRef90_Q961L2                                 M S Y I T T N I
UniRef90_E1ZPL9                 L R L H P E L K             D K G
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UniRef90_J4UKE5         D Q V L R C I I D V L G H R G D G R G V C A G L D V L R S L H A K V W E G S A E
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UniRef90_Q4UHC2         P R I I Q S L I E I K F Q C
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UniRef90_M0WNX2         P R L L E E L V K I A L L F G W L R P A I G V V E L S Q S I I Q
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UniRef90_C1FEF6         P K L W D E A L K L Q L G Y S Y L R P V L S F L E F A Q C I T Q A V S P G L A S
UniRef90_R7QKR2         S R I C L S L V L G L S L K G P Y E A I F S T L Q V C R G L V S R C W D G P T V
UniRef90_X6MYP7         P R L L D V M I D M T L S R R Y W A Q G T Q L I Q V K Q A V V Q G V W P F E P K
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UniRef90_G3AHU8         P F L I S G L V D I A V V F R V H D V I L A A E D L K K C I V Q A V P I N G R Y
UniRef90_I7AN67         L R L V E G M K A I G I A K R Y G G V V R N L V I L E S M I I Q A V F D V K Y S
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UniRef90_M1VKP0         D S M I P A M V D V A G A T P R P E V V L R I I Q E Q S L C Q A M L P S E S E
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UniRef90_B6JXN5          T L Q L P H L K Q E D A Y K L A L H G V K H I S Q F C D L T P N E L S T L L K Y
UniRef90_C9SK34          L H Q F D   L V K S V L N Q L D A K A N L T I E A M R D M D P A E I G G L V H
UniRef90_V4ZGQ7          L M H F N C F D P D V Q K R
UniRef90_K0SDC7          L S Q I N G V T H E M S E S L R E H N I C T F A D V M R A S T E D I A R A C H V
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UniRef90_C1FEF6          L L Q L P H T D E R A A T L L T R M K C R S L R D L L A T P R N E R N E L F G L
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UniRef90_X6MYP7          L K Q L P H W T L G I E K L L N T K G F F D L T Q L N S L D P V K L R E I L S
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UniRef90_W6MMD1          I L Q L P N V E R S K I D S     S S P V H T L G K L F T L P K E K C A Q F L G I
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UniRef90_Q7Z0P8          L L T L P H M T P F H I S C L N R G P I Q T L P E F L A V C D G K F D A V L D M
UniRef90_F2S185          L L Q L P Y F T P D V V R S V E S K T H M T I Q Q F M K L P E V K R R S M T I L
UniRef90_V4SPF0          F L Q L P H F T E A V I K K I A R K K V R T F Q E L R D M S L Q D R A E L L G F
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UniRef90_G8JNN9          I L Q L P N V D K E K F M Q S R V D D I R T L G K L F T Y D D E K I G Q I L G I
UniRef90_I2GYL0          I L Q L P N V N K E H F I D S T E   D V Y T V G K L F T F E D N K I Q K M L G I
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UniRef90_G3GXK1
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UniRef90_K1VHU1          F R Q I D Q I G P K S I S V L D A N G I T     N A S R L E M W L N R
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UniRef90_F7AN12
UniRef90_A0A024JI48      S Y Q L P G A T D A V F A A       T V T R V S E L I K L P T A E A K K V L G K
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UniRef90_UPI00042B5976    S T G E T K D V E M V L E M M P
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UniRef90_K1X5X4           T N A Q Y A T A I S V A K Q L P
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UniRef90_L7FJ22           N
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UniRef90_D2KTB3
UniRef90_M0X5Z8           N Y P F G N Q I K D S L S S L P
UniRef90_T1KN62           D V K Q I R D I Y Q T I N G L P
UniRef90_M4SHW5
UniRef90_B6JXN5           T K Q Q R E E M S L V A G A I P
UniRef90_C9SK34           N Q A A G K N I S R I L S N F P
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UniRef90_K0SDC7           T T S F A N S L R T A T S K I
UniRef90_A9UPF4           G D E A M E D L L I I G S R L P
UniRef90_M0WNX2
UniRef90_UPI0002C3EF79
UniRef90_Q3LW60           S   K N I S Y I K E M A N Y F P
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UniRef90_X6MYP7
UniRef90_A0A059LIL5
UniRef90_W6MMD1           D S D T F K E T L A V A S R I P
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UniRef90_Q7Z0P8           T R N Q L D Q L Y Q V M G T L P
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UniRef90_S7QKH6           G D G R V D Q V K K A V A R L P
UniRef90_G8JNN9           S D K A L A D T L T V A S N I P
UniRef90_I2GYL0           E D K Q F E H T M K V A S N I P
UniRef90_G0WHQ3           D E K L L K R T L T V A S N I P
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UniRef90_D2V281
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UniRef90_E1ZPL9           A A G E V E E V E T M L S A M P
UniRef90_F0WJ83           G F E H G K R L V E A V G A L P
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UniRef90_M5GGS2
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UniRef90_UPI0002061813    Q P P F G N H I H D F I R Q I P
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UniRef90_B9LTA9
UniRef90_R4W3J7
UniRef90_B0WFC4
UniRef90_M1VKP0           G P S A L
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UniRef90_K3WRG3
UniRef90_F7AN12
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UniRef90_L9XDW8          D L L E A V A S A A E F D S V S A R Q D E R D A I S A   V L V G Q
UniRef90_L1J9G4        S E L I E V I S Y A Q E F S P F H C R N E Q K K I L E N A N K D V R F K I
UniRef90_G8YEU8            I L D W I C Q S N E I K T I F P   K L S V E Q L R S
UniRef90_K5W5R8    S M M E E V V G T L G K A Y Q F E D V G V K K V D D R L E S E I E K R A G V K W
UniRef90_Q5UYF9        D L L T A V A G A T E F D S V S A R S D E E D A V       H A V L G D S
UniRef90_C7NQS8        R D I L S A V A G A G E F D S V S A R T D E R D A V R A V L G D D R T D Q
UniRef90_E9BWA8    S M E D V L E Q Y G N A P E F N E G L S R A D I D S L R Q Q L Q A E H R V F L
UniRef90_V6LXU2        E L F H L L S S I P E F Q S L K P R S E E R E E N K Q I N Q Y L K Q G L L
UniRef90_G0QYC3        Q I P D I I G F C M E F R K M Y A S N L E S K Q L V K L Y S Q V V E Q F
UniRef90_L0AFJ3        D V L A A V A G A T E F E S V S A R Q D E R D A V     D A V L V G Q
UniRef90_I6TJZ1          I L K I C F E S K E L S S L G C R E E D E E A I K E L C S E M G M K Y
UniRef90_F8P6X5                                  E S V I Y D K L R L H D D I R F
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lupas_21
lupas_14
lupas_28
jnet                        ▭══════════════▷                    ▭══════════════▷
conf              9 7 6 8 9 9 9 9 9 8 7 1 2 2 2 2 3 7 7 6 7 6 3 1 7 8 9 9 9 9 9 9 8 6 2 3 6 7 7 7
sol25                 B       B B     B B B     B     B B       B     B   B       B B   B       B       B   B
sol5                        B B     B B B     B         B             B B
sol0                                      B                                       B               B
jhmm                     ▭══════════════▷                    ▭══════════════▷
jpssm                    ▭═════════════════▷                 ▭══════════════▷
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| | |
|---|---|
| UniRef90_V4X9N4 | D L D A G P R K V L A I L R A A M D G T T P A A L R S D A W I I R Q N A |
| UniRef90_L9XDW8 | E T G D L E A G Q R K V L A I L R G A A S G S V P P E L R S D A W V I R Q N A |
| UniRef90_L1J9G4 | S N T G G W T T P R K V N C L L Q I A I S T G T I N F T L R Q E M Q G I C D T G |
| UniRef90_G8YEU8 | M V H S Y L S R D P L E G S S E A D V L K L I S K I |
| UniRef90_K5W5R8 | S E V K L H V K R R R A L V L L Y A H L L R I D I S D E L Q K E Q A Q I L L Q I |
| UniRef90_Q5UYF9 | V D D S L D A G Q R K V L A I L R S G M T G T T P T E L K S D A W V I R Q N A |
| UniRef90_C7NQS8 | E D V D L D S G Q R K V L A I L E A S M R G T T P S E L Q S D A W V I R Q N A |
| UniRef90_E9BWA8 | K A T A T P A L V L L W S H L R R V Q L S D G M A K D R T I V L G R V |
| UniRef90_V6LXU2 | G K A K Y D Q P E F K V N C L I Q A F I S Q I P K N Q S L I S D Q R L V I Q S L |
| UniRef90_G0QYC3 | P Q K K K N M Q Q I K A Y V L L C A H M L G L E I P E T S R E Q L T Y I Q K K T |
| UniRef90_L0AFJ3 | E A E D L E P G Q R K V L A I L R S A A S G T T P A E L Q S D A W V I R R N A |
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| UniRef90_F8P6X5 | P I K K V Q K T S D K I F L L I Q A V L G G I P L D S Q P H Y E A F A V F R H I |

| | |
|---|---|
| lupas_21 | |
| lupas_14 | |
| lupas_28 | |
| jnet | |
| conf | 7 7 7 7 7 6 6 6 3 5 7 8 8 8 8 9 9 8 8 7 5 1 7 8 8 7 4 0 7 6 9 9 9 9 9 9 9 9 9 |
| sol25 | B B B B B B B B B B B B B B B B B B B B B |
| sol5 | B B B B B B B B B B B B B B |
| sol0 | B B B B B B B |
| jhmm | |
| jpssm | |

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UniRef90_L9XDW8   T R L L S A L G A F L D R L A D P H A A N L A R R V E A R V E N G V A E D A V G
UniRef90_L1J9G4   C R V C E A L I         G R R H G M M I R M E G Y F S S F L V Y         S D
UniRef90_G8YEU8   P K L I D G F I D L A A V F R A P E I L I S A L D L K K S V V S A V H G R H Q E
UniRef90_K5W5R8   P L L L N A L L N V S I S R N W L L P S L A I M R L N A Y F A Q A L P P V E D E
UniRef90_Q5UYF9   L R L L A A M R E F V D T L G P A R Y A N L A C R V E A R V E H G I S A D A V G
UniRef90_C7NQS8   N R L L A A L Q A F L A E F D G A R A A N L A R R I E A R V E H G I S D D A V G
UniRef90_E9BWA8   H K L H R A M L G I A A E R G D L S L V L T N L M V R Q C V V Q A S W P R
UniRef90_V6LXU2   P R V A Q A F L E S L F S M K R Q N E A L K M N D I V N S L L Y Q S W Y F T S S
UniRef90_G0QYC3   P A I L D S M I D L C C S L G Q P Q C L L N T I F F Q Q H F Y Q G L W G N N I E
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UniRef90_F8P6X5   S R I A T G I M D H A I V K K N G A Q A K H G L E L V R C L H A K A W E D R P V

lupas_21
lupas_14
lupas_28
jnet
conf   9 9 9 9 9 9 9 9 9 9 9 8 5 1 6 7 5 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 8 1 1 5 7 7 7 7 7
sol25  B B B B     B B B B B B B         B B   B B B B B B     B B     B B B B B B B B B       B
sol5       B B     B B B     B B           B B     B B     B B     B B           B
sol0     B       B       B           B       B           B
jhmm
jpssm
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UniRef90_L9XDW8    L T A I D G V G P G R A S K L S K E G L S T P G D           V A V G A D R L A A   A G L
UniRef90_L1J9G4    I T V Y E G M T   G A I R K L V A S G V K D L E D L N Q L G P G K F E S L V G R
UniRef90_G8YEU8    L L Q L P Y V N A E V V E K       Q P V R K L G K L F S V D K Q E A G K I L G I
UniRef90_K5W5R8    R L Q L P F I Q K A D V E T L D A K N L T D V A D I L E S K K D K R A S V V R
UniRef90_Q5UYF9    L T A I D G V A S G R A G K L A A A G L T S P A D V V E A G E D G L   V R A G L
UniRef90_C7NQS8    L T A I D G I G S G R A S K L A A E G L A T P A D V V A A G V E G L V D   A G L
UniRef90_E9BWA8
UniRef90_V6LXU2    P F F P L I F N
UniRef90_G0QYC3    M N Q I S Y F   Y E N V E L K K S Q K L G P L R N L V K Q T R E E R K L K V V E
UniRef90_L0AFJ3    L T A I D G V A S G R A S K L A K E G L S T P G D V L E A G I D G L A D   A G L
UniRef90_I6TJZ1
UniRef90_F8P6X5    V R Q I E H I G E K S L K V D D P T S S T L N T N L I F I P H R S L E L L L N R
```

```
lupas_21
lupas_14
lupas_28
jnet
conf     6 1 1 6 7 7 6 3 7 8 9 9 9 9 8 6 2 4 7 7 6 5 2 4 3 1 1 4 6 3 6 8 9 9 8 6 1 5 8
sol25    B B B B     B       B B     B         B           B 4 3   B       B     B B   B
sol5     B   B B     B         B     B                       B     B                 B
sol0                                                               B
jhmm
jpssm
```

170

| | |
|---|---|
| UniRef90_V4X9N4 | S D G V A D R V V E S A R E L P |
| UniRef90_L9XDW8 | |
| UniRef90_L1J9G4 | H |
| UniRef90_G8YEU8 | T D A Q L D K A L E I G A H I P |
| UniRef90_K5W5R8 | |
| UniRef90_Q5UYF9 | S D G V A E Q V L A N A R D L P |
| UniRef90_C7NQS8 | S E G V A E R V L E S A R D L P |
| UniRef90_E9BWA8 | |
| UniRef90_V6LXU2 | |
| UniRef90_G0QYC3 | S E Q D L K E V N D E I D N F P |
| UniRef90_L0AFJ3 | S E G V A E R V Y E G A Q S L P |
| UniRef90_I6TJZ1 | |
| UniRef90_F8P6X5 | R A P F G F E I L A S A R Q L P |

lupas_21
lupas_14
lupas_28
jnet
conf    6 0 8 9 9 9 9 9 9 9 8 6 1 4 9 9
sol25      B B    B B    B B     B
sol5          B     B B
sol0          B
jhmm
jpssm