```
                              1         10        20        30        40
QUERY                    A N I V G G I E Y S I N N A S L C S V G F S V T R G A T K G F V T A G H C G T V
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UniRef90_UPI0003A4E8C6   A D V I G G G R Y T I N G S T V C S V G F A V         S G G F V T A G H C G D P
UniRef90_G3JB56          A T V Q G G D A Y Y I N N Q F R C S V G F S V T         T G F V T A G H C G T V
UniRef90_UPI00036F5F22   D V V G G D A Y Y I G G S A R C S I G F S V           N G G F V S A G H C G S Q
UniRef90_UPI00029B13D5   D I R G G D A Y H T G D G G R C S V G F A V T K G T R H G F A T A G H C G R V
UniRef90_D6X6J3          D I R G G D A Y Y M G G G R C S V G F A V T R G T T Q G F A T A G H C G R A
UniRef90_A4FNQ0          N V V G G D A Y Y M     G G R C S V G F S V R S S S G Q G F V T A G H C G T R
UniRef90_E8SCA7          D I R G G D Q F V I N G N V L C S V G F A V V         G G F V T A G H C G A A
UniRef90_S2YGX7          P F I A G G D A I T G S G G R C S L G F N V V K G G G Q P Y F I T A G H C T E A
UniRef90_D9T5P5            I S G G Q A I Y A G G G R C S L G F N V R S G S T Y Y F L T A G H C T N I
UniRef90_UPI00040FCF99     V V G G D A Y Y I D N A A R C S V G F S V       Q G G F V S A G H C G Q P
UniRef90_N0CQX7          A D I R G G D A Y Y M N P S G R C S V G F A V T R G T Q H G F V T A G H C G R V
UniRef90_F4FCN3          A D V R G G E P F F V G A G   R C S V G F A V V       G G Y V T A G H C G R V
UniRef90_UPI00037FCB79   A G T V G G D P Y Y T G N V R C S I G F S V         Q G G F V T A G H C G G A
UniRef90_UPI000377B085     I S G G D A I Y T   G G S R C S L G F N V T K D G E P Y F L T A G H C V E L
UniRef90_UPI00038254E8   A G T V G G D P Y Y T G N V   R C S I G F S V H     G G Y V T A G H C S G A
UniRef90_S9P8B8          D V R G G E V Y F F G T G G A C S V G F S V V       G G F V T A G H C G G A
UniRef90_W7SIB4          A G T V G G D P Y Y I N G N V R C S I G F S V       S G G F V S A G H C G Q P
UniRef90_K6ULM6          A H I G G G D R I D Y G N V Y S C S Y G F S V T K G N E E G F V T A G H C A E K
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UniRef90_UPI000371C7CD         G A E P I L S T A G R C S A G F N V T D G S D D F I L T A G H C G P T
UniRef90_K4WV5              L S G G D A I   F A G G A R C S A G F N V T A G G S P A F L T A G H C G V A
UniRef90_UPI000365D338       A G A A P I L T R G S R C S A G F N V T N G T T D F I L T A G H C G P P
UniRef90_UPI000363B3F9   D I H G G N P Y Y P D R T Y V C S V G F G V         E G G Y V T A G H C G E R
UniRef90_B5H9S5          P L L G A G D A I Y G S G Y R C S L G F N V R S G S T Y Y F L T A G H C G D V
UniRef90_V6KFV1          P F L E G G D A I F G G G A R C S L G F N V T Q D G T P G F L T A G H C G V A
UniRef90_C7MTG2            I Y G G E A I T G G G S R C S A G F N V N S G G Q N Y I V D A G H C T G A
UniRef90_K0JZK1                I T G G G T R C S V G F N T N K G G Q N Y I L V D A G H C T R A
UniRef90_V6JLB8            L S G G D A I Y   S S L G R C S A G F N V R S G T T D Y F L T A G H C T D G
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UniRef90_UPI0003736D1A     V G G G E R W M P G T D G I C S I G F S V T G P H H Q G F L T A G H C T Y G
UniRef90_W7IWP6          A T V Y P G S K M T I N G G G Y C S V G F G A R S S S G Q Y L V S A G H C V A G
UniRef90_T1VJY1              G G D A F G A T S G N R C S F G F N G T D G S G F R T V I S A G H C D P N
UniRef90_H6R7A1          A S L A G G D G Y A S V A G R R C S F G F N G V D D G A T V N I L T A G H C N P D
UniRef90_UPI0003636C8B             N G G Y C S V G F G A R D Q G R Q Y L A T A G H C I K G
UniRef90_P41140            I A G G E A I Y A A G G G R C S L G F N V R S S G A T Y A L T A G H C T E I
UniRef90_UPI0003625534     V R G G E T W V P G A E G A C S V G F S A V A D G S R H F L T A G H C T N D
UniRef90_F8UWQ4                  G S R C S L G F N V R S S G T T Y Y L L T A G H C T D G
UniRef90_D9XK98
UniRef90_I3IK77              G D A I Q   N S Q G R C S L G S G V I I D E D G Y I V T N E H V V S R
UniRef90_D8I6Z1                                      L G F N V T R G G S P F L L T A G H C T N L
UniRef90_S9S7Y6                                    S L G S G F I I D P A G Y I V T N N H V I A D
UniRef90_D3KZU1                                      G F I V S K D G   Y I L T N N H V I E G
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UniRef90_D0RPV3                                    L G S G F V I K E N G T V I T N N H V I Q N
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UniRef90_Q6SHZ8                                    M G S G S I I D A E G Y L T N H H V V G E
UniRef90_UPI00037E4FD1                             L G T G F I L S S D G Y V V T N N H V V E G
UniRef90_S7UUR7                                    S L G S G F I I D T E G Y I V T N N H V V E G
UniRef90_D6Z3R5                              R T S L G S G V V I S P D G Y I V T N N H V V E N
UniRef90_G0A032            G P G R G Y V P R E T S   S L G S G F V I S K D G Y I L T N H H H V N N
UniRef90_I3XXQ9                                    S L G S G V I I S K D G Y I V T N N H V V E G
UniRef90_UPI0003B32F4B                             S L G S G F I I D E A G Y V I T N N H V I D N
UniRef90_UPI000381467C   D I Q G G D G Y V A G R D G L C S F G F A A Y D S A N P L F L T A G H C L E P
UniRef90_U9VYT6                                    G S G F I I S S G Y I L T N A H V V N Q
UniRef90_D6SUA6                                    S L G S G F I I S Q D G Y V V T N N H V V E G
UniRef90_H2J6T7              G E T P W T Q D R E F K A L G T G F I F D K R G Y I L T N F H V V E D
UniRef90_E8PLR5                                    T G S G F V I D K E G Y I L T N Y H V V E N
UniRef90_A1ZGC2                                    S S G S G V I I T D N G Y V A T N Y H V I E N
UniRef90_B5YHV1                                    S L G S G V I V D S S G Y I L T N Y H V I K G
UniRef90_J6LDD7                                    S L G S G F V I D P S G I V V T N N H V I S D
UniRef90_M3F5Z0          N V S G G A S I G A V G S A S C T A A F A V G A N G Q S G F L T A G H C F S P
UniRef90_J0RGV4                                    S L G S G V I D A K G I I V T N Y H V I V D
UniRef90_W4LY87                                    G S G F I I S Q D G Y I V T N Y H V I E D
UniRef90_D1VX49                                    T G S G V I I S S D G Y I V T N N H V V E G
UniRef90_H5SNV6                                    T G S G V I I S P D G Y I V T C Y H V I E K
UniRef90_G4SXU4                                    S E T S Y I I V T N N H V V A N
UniRef90_B8KIX8                                  G F V W H D S G L I V T N Y H V I A D
UniRef90_UPI000255A0C6                             S L G S G F I I S D D G Y I L T N H H V I K D
UniRef90_Q0W0Z3                                    G F I F T P D G   Y I L T N S H V V H E
UniRef90_U7NIC9            P M P P G G A P N R N E E P R Q S L G S G F I F D E D G Y I M T N A H V K D
UniRef90_W6LZX3                                    S L G S G F I L S P D G Y I N A H V A R D
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                                        50              60              70              80
QUERY                   N A T A R I G G A V V G T F A A R V F P G N D R A W V S L T S A Q T L L P R V A
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UniRef90_D2B7M9         G A T T G F N R V A Q G V F Q A S N F P D S D F G W V A V N N N D W T P K P L V D
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UniRef90_D6X6J3         G T S T S Y N Q V A Q G T F Q A S T F P G R D T A W V A A N S N W T S T P Y V K
UniRef90_A4FNQ0         G T A V S Y N Q V A M G S F Q G S S F P N N D Y A W V S V N S N W T P Q P W V N
UniRef90_E8SCA7         G S P T R F N N A A Q G T F A G S S F P G N D Y A W V R T N A D W T P R P W V N
UniRef90_S2YGX7         I S T W S S S G N E I G T N E Q S S F P D N D F G L V K Y T S N V D H P S E V D
UniRef90_D9T5P5         S S S W Y S N T S L L G T R T G T S F P G N D Y G I V R H N N S A N A A G N V L
UniRef90_UPI00040FCF99  G S S V G A D R S A M G T F Q G S T F P G N D Y S W V E T N S S W E P S P L V N
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UniRef90_UPI00037FCB79  G Q A V G W D G S Y I G N F Q G S S F P G N D Y S W V N V G S G W W T E P V V L
UniRef90_UPI000377B085  G G S S W S E T S V I G E A E G A T F P G N D R A L V K Y T A D V E H P S E V N
UniRef90_UPI00038254E8  G A R T R W D G S A Q G V F R G S S F P G N D Y A W V Q I D S G W W T V P V V L
UniRef90_S9P8B8         G T P A G F N W Q S M G S V R G S V W P G S D M G W V S T N G S W T P Q P W V Y
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UniRef90_K6ULM6         G R K F T K E S K S L G E I K E F S F P G E D M A Y A S L D M T Q W I G D A S V
UniRef90_D1A3V1         S S T W Y A N S S V L G T R V G T S F P G N D Y G I V R Y T N T G I A K P G T V
UniRef90_UPI00037194B9  N S T L G Y N N V S Q G T F R G S S F P V N D Y A W V Q T N G N W V S R P W V N
UniRef90_UPI0004672336  G A R T S       G P S G T F R G S S F P G N D Y A W V Q V D A G N T P V G A V N
UniRef90_UPI000462EA12  I S S W S Q G G G E I G T N A G S E F P D N D F G L V K Y T S G T A H P S E V D
UniRef90_UPI00037DCFF0  T N D W W A N S Q H I A T T Q A A D F P G T D Y S W A L Y D D G V D A P S A V N
UniRef90_G8SAL5         G A T W T N G S S T L G T R A G T S F P G N D F G I V R Y T N T S V T K S G A V
UniRef90_UPI000371C7CD  G S V W E G G D R Q V G R T V A G S F P G D D F S L V E Y A D G E A G E A G V
UniRef90_K4WV5          A A E W S D G G A P I A T V D A A T F P G G D F A L V K Y D D P A T E A P S V N
UniRef90_UPI000365D338  G T G W N Q G T R P V G T T V S T S F P G G D F S L V Q Y Q N D G S D H S S V V
UniRef90_UPI000363B3F9  G K G A F H N A G R Y G K V A D A D F P G T D M G W V K T T G R W T P T R R V N
UniRef90_B5H9S5         A P T W Y A N S A Q I G P T V G S S F P S N D Y A L V R Y D N A S L S H T G G F
UniRef90_V6KFV1         A E Q W S Q N G A P V G T V Q A A T F P G D D F A L L T Y D D P A T D A P S E V
UniRef90_C7MTG2         V S Q W         N V G P S V G A S F P G D D Y G L I R N D T G S A P G A V S L
UniRef90_K0JZK1         V S Q W         N V G P S Q G A S F P T N D Y G L I R N T T G S A P G A V S L
UniRef90_V6JLB8         Y P S W Y T N T T L I G A T A G S S F P G N D Y G I V R Y D N S G V S R P G T V
UniRef90_UPI00047708CD  T E N W Y A D S S R M G A A I H K S W P G D D Y G I V R Y E E G K H G Y G H V
UniRef90_UPI000366D7B4  G T T F W S N S S V I G S R I G T S F P T N D Y G I V R Y S G S I T R P G N V Y
UniRef90_W0BZB8         G E I V Y Q E V S Q V G T F S A S T M P G P D R G W V K V D T T H T L S P S V Y
UniRef90_V6JVL5         G D V T S         L G T T V N S S F P G N D Y A L I R Y S N Q S A A E G S V Y
UniRef90_S3ZGC2         G S R W F A D P G H V G V T E V S V F P G N D Y A L I R Y T N P D Y S Y P S V V
UniRef90_V6L3P2         A W S D S Q N G Q P I A T V D Q A K F P G N D F S L V K Y N D K T T Q A P S E V
UniRef90_L8ESB3         A K D W Y A D A A R V G V T E A V R F P G T D Y A V I R Y T N P A V S Y P E I D
UniRef90_K1E3H3         L P D I D A N G T H I G K G T H T R F R T G D M G L M D I D S E D T G R P Y V D
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UniRef90_UPI000476216B  V S T W Y T N S S H I G P T V S Y S F P G N D Y A L V R Y N N T S L S H P G G Y
UniRef90_UPI0003736D1A  K D G S R I G T S N Q G G T H S V N G Y A G D F G L V S V Q P G W R L T P E V R
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UniRef90_UPI0003625534  A D Q A R V G T S N T G G T H S V N A R E G D F G L V D V D Q P A W T L S P G V
UniRef90_F8UWQ4         A G T W Y T N S S V I G P T A G S S F P G N D Y G I V R Y S N T S L S H P G T V
UniRef90_D9XK98                                                           S G W W T V P V V L
UniRef90_I3IK77         A S K I K V R L S N G Q D F E A T M D P I S D I A V L K I N S P   T P L P Y V K
UniRef90_D8I6Z1         G G T W S G G D V S G A Q V V E S D C P G A D S G L L T R P N G   T G P G E I N
UniRef90_S9S7Y6         A D E I S V D S V F Q A T V V G R D P K V D L A L L K I D P G K K V L T A A T
UniRef90_D3KZU1         A D K I T V D G R Q L D A K I V G K D P T F D L A V I K V T A G N     L P V L P
UniRef90_G7V982         A D E I T V S M S D G K T Y P A K I D P S Y D L A V I K I E G E N     L P L P
UniRef90_K2KM82         A D E I T V R L H D G D T L D A G R D P K T D V A L L K V   E P K E D L P F V K
UniRef90_L0K857         A E A I K V D G R E L Q A K L V G N D P R S D L A V I K V     D A K D L P V L A
UniRef90_UPI0003631245  G G Q V T T G G E L V G V V R G S T Y P V P G G A W V Q T T G A W A L S P T V G
UniRef90_D0RPV3         A E G I F V K F T D G K E Y E A K T D P V S D I A V L K I Q S D K K F   P A V N
UniRef90_UPI00046CD467  A S D I R V T L L L N S G D V V I G T D P K A D I A L I K I K P S G D   L P T L K
UniRef90_A5EY82         A D S V S V D Q R E Y S A E I V G V D K R T D I A L L K I A A Q K   L P T V Q
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UniRef90_UPI00037E4FD1  A D E V I V K M R D G T E H E A K I D P K L D V A L I K F K A     K H L K A V K
UniRef90_S7UUR7         A D E I K V N E K E F D A E V I G R D P N T D L A L I R I   A P N K D L V A L E
UniRef90_D6Z3R5         A D S I N T N F E E Y D A E V G R D P K T D L A L L K I   E P R N P L P A V T
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UniRef90_I3XXQ9         A D T L P N D E K E Y K A K V I G E D P K T D L A V V K I D A T N L H V A K F
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UniRef90_UPI000381467C  A G G L T F P V E K I G T F Q E V A F G N G S D D Y A T I A P S D A L S T S V N
UniRef90_U9VYT6         A D R V T V T L K D G R H F D G T V E G S D I K I D A D N E N L P V A F
UniRef90_D6SUA6         A E E I K A T F R T F E A E I I G T D P E T D L A L I K I   N T D M E L P T L E
UniRef90_H2J6T7         A D E I T I T T L E G K K Y K A K Y V G G D D I A V L Q V K T N D K L P V I E
UniRef90_E8PLR5         A S R I T V D P K E Y Q A R L V G A A P P L D L A L L K V E A P K E K L V P L V
UniRef90_A1ZGC2         A G Q I D V D K R S Y K A K L V G K D P T T D L A L L K I Q E K N L P F V K
UniRef90_B5YHV1         A D E I K V D K K V F D G T V I G Y D A K T D I A V I K I K A N G L R P   I K
UniRef90_J6LDD7         A D E V N V D G T R L K A E I L G R D K E I D L A L L K V K S D K P L K A V A
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UniRef90_J0RGV4         A D D I K V T L T T R Q Q F N A K L I G G D D L A L L K I E A   D E Q L P T V P
UniRef90_W4LY87         A A D I K V T L T T R Q Q F N A K L I G G D D L A L L K I E A   D E Q L P T V P
UniRef90_D1VX49         A D E L T V T L T D N R E F S A R I I G T D D L A L I K I E G K N     L P T L A
UniRef90_H5SNV6         A S S I Q V T L T D N R T F R A S T D P S T D L A L L K     S A E G L P T L E
UniRef90_G4SXU4         A D K I R V T F Q D G R E F D A K I D P K S D I A V I E I L K A G N   L P T L P
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UniRef90_U7NIC9         A D E I G V R R E L E A E L V G A A K D T K D V A V L K I   L P T L E
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UniRef90_E8SCA7      N Y G G N A P V A G S R D A V I G S S V C R S G R T T G W R C G V L L G R E E T
UniRef90_S2YGX7      Y N G S T Q K I T K A A D A T V G E K V Q R S G S T T Q V H D G T V T G L D A T
UniRef90_D9T5P5      Y N G S F Q D I T S A G N A Y V G Q S V R R S G S T T G L R S G S V T A L N A T
UniRef90_UPI00040FCF99 G G N G D V T V G G S Q E A G V G Q S V C R S G S T S G W H C G T I E S K N A T
UniRef90_N0CQX7      G Y G G D V T V T G S T P S V V G A S V C R S G S T T G W H C G T I Q Q L N T S
UniRef90_F4FCN3      D R G G I A R V A G S R E V P A G S S I C R S G S T T G V R C G T V Q A R N A T
UniRef90_UPI00037FCB79 G W G S D R L V R G S A E A P V G A S I C R S G S T S H H C G T V L A K N E T
UniRef90_UPI000377B085 Y D G S A Q E I T G A R E A T V G E T V Q R S G S T T Q L H D G T V V A L D V S
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UniRef90_S9P8B8      N N N G N V L V Q G S N Q A G I G A S I C R S G N T T G W R C G T L Q A T N I T
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UniRef90_G8SAL5      G S       Q D I T S A G T P A V G A T V Y R R S G S T T G I H S G R V T A L N S T
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UniRef90_V6KFV1      G N G Q T L P I G Q A G E A A V G L D V I R M G S T T G L A D G S V T G L N A T
UniRef90_C7MTG2      Y D G T V Q Q I N S A S N A Y V G Q S I C K S G S T T G L T C G T V Q A I N V T
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UniRef90_L8ESB3      I G G S H L D V T G A A Q P A V G Q T V C L P G S T S A V H C G P V R A L N V S
UniRef90_K1E3H3      G H S G Y Y S V A G A S K N A V G S E I C K A G N T T G W T C G T I K A Y N R T
UniRef90_UPI00037201ED G G G A P V T V T G A Q E G L A G M S L C H S G Q S S G W H C G E I T R V D Q T
UniRef90_UPI000476216B T           V A D A V V G E S V T R K G S T T G T H S G T V T A L N V S
UniRef90_UPI0003736D1A G G G S P V T V T G S Q Q G I V G M S I C H S G Q T S G W H C G E I T R T D Q T
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UniRef90_T1VJY1      P F N R S V N I T G T A D P I V G A P V C K A G S T T G F S C G V V T G V N R V
UniRef90_H6R7A1      P G A A P I M V D G V A T P V V G A P V C K S G S R T G F S C G T I S S Y N H S
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UniRef90_F8UWQ4      G S       Q D I T G A A N A T V G M S V T R R G S T T G T H S G T V T G L N A T
UniRef90_D9XK98      G W G S D Q L V R G S A E A P V G A S I C R S G S T T H W H C G R V L A K N E T
UniRef90_I3IK77      M G T S K D L M I G E T V I A L G N P F G L E N S V T T     G V L S A K N R T
UniRef90_D8I6Z1      T G         R P I T S A A T P T V G E Q M Q K Q G S T T G G G S G E V T S V D E S
UniRef90_S9S7Y6      F G N S D D A R V G D W V L A I G N P F G F G G     T V T A G I V S A R A R D
UniRef90_D3KZU1      L G D S D A L Q V G E W V V A I G N P F     G L D H T V T V G V I S A K N R S
UniRef90_G7V982      L G D S D K V R V G E W V I A I G N P F     G F E S T V T V G V V S A K N R S
UniRef90_K2KM82      W G D S D S A R I G D W A M A I G N P F G L G G     T V T A G I I S A R N R D
UniRef90_L0K857      L G N S K Q I D V G Q L A I A I G S P Y D V K F R N T   V T T G V I S A V N R T
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UniRef90_U9VYT6      L G D S N R V D V G D W A I A V G N P L G L D N T V T L G I V S T L K R S S A T
UniRef90_D6SUA6      F G N S E D M K V G Q W V V A I G N P F     G L N H T V T A G I I S A K G R V
UniRef90_H2J6T7      L G D S D N I Q I G E W A I A I G N P L     G F K H T V T L G V V S A V H R K
UniRef90_E8PLR5      L G D S D R I R V G Q K A I A M G N P F G L E F T V T Q G I V S A I R E N P G A
UniRef90_A1ZGC2      Y G N S D K T H I G E W V L A I G N P F D L     T S T V T A G I V S A K G R N
UniRef90_B5YHV1      W G D S D K L K V G E T V I A I G N P     Y G L S L T V T S G I V S A T G R
UniRef90_J6LDD7      F G D S D R L R I G E W V I A I G N P F S L G G     T V T A G I V S A R N R D
UniRef90_M3F5Z0      D D N G T H P V R G I T A P T V G T E I C M H G I T S G T S C G K V T L V N T R
UniRef90_J0RGV4      F G D S E K A R I G D W V M A I G N P Y G F G G S V T     V G I I S A R N R D
UniRef90_W4LY87      A G N S D Q L E V G E W V M A I G N P F     G L G H T V T T G I V S A K G R T
UniRef90_D1VX49      I G N S D N L K V G E W V I A I G N P F     G L N N T V T A G I V S A K A R S
UniRef90_H5SNV6      F G D S D N L K V G E W V L A V G N P F N L     T S T V T A G I V S A K G R T
UniRef90_G4SXU4      L G D S T K L E V G E W V A I G N P F     G L S H T L T V G V V S A K G R T
UniRef90_B8KIX8      L G D S T E L S V G R K V L A I G N P F     G L D T T L T T G V V S A L G R E
UniRef90_UPI000255A0C6 L G R S A D L K V G E W V L A I G S P F     G F D H S V T A G I V S A T E R A
UniRef90_Q0W0Z3      G D S Q S L K V G Q L V I A I G N P       Y G F Q C T V T S G V V S A V G R S
UniRef90_U7NIC9      L G E S T D L K V G E W V A I G S P F     G F D H S V T S G I I S A V N R T
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                              130        140        150       160
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UniRef90_A4FNQ0       V R Y A E G T V Y G L T R T N V C A E P G D S G G S F I   S G N Q A Q G M T
UniRef90_E8SCA7       V N Y A Q G A V Y G L S R S N A C A E G G D S G G A W L   S G D Q A Q G V T S G
UniRef90_S2YGX7       V N Y G N G D V N G L I Q T D V C A E P G D S G G S L F D   G E S A I G L T S G
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UniRef90_N0CQX7       V T Y P E G T I S G V T R T S V C A E P G D S G G S Y I   S G S Q A Q G V T
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UniRef90_B5H9S5       V H Y G G G T V R G M I Q T N V C A E P G D S G G A L Y D   G T K A L G L T S G
UniRef90_V6KFV1       V N Y A E G S V S G L I Q T N V C A E P G D S G G S L F T A D G T A I G L T S G
UniRef90_C7MTG2       V N Y P Q G A V H E L V Q T S A S V N S G D S G G A   L F A G S V G L G I T S G
UniRef90_K0JZK1       V N Y S E G A V R E L I Q T N A L A N P G D S G G   C L F A G S V G L G I T S G
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UniRef90_W0BZB8       V S Y P D G T V T G L T R T S A C A E G G D S G G S F I T G A G Q A Q G V L
UniRef90_V6JVL5       V N Y G D G I V Y G L I Q S N L C S E P G D S G G P V Y   S G T Q A M G L I S G
UniRef90_S3ZGC2       I N F P E G V V N G V F R S T L C A E P G D M G G G P A F S G N T A L G
UniRef90_V6L3P2       V N F G T D T V N G L I Q T N V C A E A G D S G G S L F T Q D G S A V G L T S G
UniRef90_L8ESB3       V S Y P E G T V S G L V Q T A A C A E P G A V G R P A V   S G R T A I G I V I G
UniRef90_K1E3H3       V N Y G G T V V S G L A E A S V C T E G G D S G G A Y I G V G N L A Q G M T S G
UniRef90_UPI00037201ED V D Y G N T V I E G L S F T N A C S A P G D S G G S Y V T Q P N K A L G V H S G
UniRef90_UPI000476216B V R Y P G G T V S G L I Q T T V C A E G G D S G G P L Y D   G S K A L G L T S G
UniRef90_UPI0003736D1A V D Y G T T V I S G L S F T N A C S A A G D S G G S Y V S Q P G K A V G V H S G
UniRef90_W7IWP6       V T Y P N T V R G L G S S S V C T M G G D S G G A Y I   S G N Q A Q G M T S G
UniRef90_T1VJY1       A K V L D H T L D N G F T T N I C V L Q G D S G G P I V   S G T L A V G I T S A
UniRef90_H6R7A1       V Q V G D R Q L T Q S F S A N I C A L P G D S G G P I V T   G R L A L G I S S A
UniRef90_UPI0003636C8B V T Y T D P G V K G L A K S T V C I H K G D S G G A W I   T N Q G Q A Q G V T S G
UniRef90_P41140       V N Y G G G D V S G L I Q T N V C A E P G D S G G A   L F A G S T A L G L T S G
UniRef90_UPI0003625534 V D Y G N V V I D G L F V T N A C S Q G G D S G G S Y V T   G D K A V G I H S G
UniRef90_F8UWQ4       V N Y G G D V Y G M I R T N V C A E P G D S G G P L Y   S G S R A I G L T S G
UniRef90_D9XK98       V N Y S Q G A V R Q M T K T S V C A E G G D S G G S F I   S G D Q A Q G V T S G
UniRef90_I3IK77       I I T Y G E I N Y N G L I Q T D A L I N P G N S G G P L I N I D G E L I G I N A A
UniRef90_D8I6Z1       V N F D V G V L N H E F G T T A H T D H D S G G P A Y D   G S T G L G T L S A
UniRef90_S9S7Y6       I I N A   G P Y D A P I N R G N S G G P M F N M K G E V I G I N S A
UniRef90_D3KZU1       I R A G N V S F D G F L Q T D A A I N P G N S G G P L L D L D G K V V G I N T A
UniRef90_G7V982       I R A R D F S F D G F L Q T D A A I N P G N S G G P L L N L K G E V I G I N T A
UniRef90_K2KM82       I N   Q G P Y D D F I Q T D A S I N R G N S G G P L F N L D G N V I G I N S A
UniRef90_L0K857       I R T K N G I L E N L I Q T D A S I N P G N S G G P L L N S G D G E V I G I N T A
UniRef90_UPI0003631245 V T F P Q G T V S G L T R T T L C S E R G Q D E G T P V V S G N Q A Q G V L L L
UniRef90_D0RPV3       I I N M   G R Y D N F I Q T D A S I N Q G N S G G P L F N M D G E V L G I N T A
UniRef90_UPI00046CD467 I   G E G P F D H F L Q T D A A I N P G N S G G P L V N M K G E V I G I N T A
UniRef90_A5EY82       L   P S G T Y T P F I Q T D A A I N P G N S G G P L F N G K G E V I G I T S Q
UniRef90_Q6SHZ8       N V G I N E Y E N F I Q T D A A I N P G N S G G P L V S L R G E I I G V N S A
UniRef90_UPI00037E4FD1 I   G S G P Y D D F I Q T D A A I N P G N S G G P L F N T R G E V V G I N T A
UniRef90_S7UUR7       I   G A G P Y D D F I Q T D A S I N P G N S G G P L D M N G R V V G I N T A
UniRef90_D6Z3R5       L   G S G P Y E N F I Q T D A S I N P G N S G G P L F N L Q G E M V G I N T A
UniRef90_G0A032       L   P D G N Y V P F I Q T D V A I N P G N S G G P L F N M Q G K V V G I N S Q
UniRef90_I3XXQ9       N V G L N Q Y E N F I Q T D A S I N P G N S G G A L V D S R G A L I G I N S A
UniRef90_UPI0003B32F4B L   S G S Y D D Y I Q T D A S I N R G N S G G P L F D M N G K V V G I N T A
UniRef90_UPI000381467C W E F P D G V S V D G F E F N A C V E G G D S G G A I V   A G T L A V G M S S A
UniRef90_U9VYT6       V G I P D K R L   D F I Q T D A A I N P G N S G G P L L N M Q G E V I G I N T A
UniRef90_D6SUA6       I   G A G P Y D N F I Q T D A A I N P G N S G G P L L N M Q G E V I G I N T A
UniRef90_H2J6T7       L P K P D G Q Y A D L I Q T D A A I N P G N S G G P L L N I H A Q V I G I N T A
UniRef90_E8PLR5       I G D E S L V P Q V I Q T D A A I N P G N S G G P L L N S R G E V I G I N T A
UniRef90_A1ZGC2       I N I L S G Q I E F I Q T D A A V N P G N S G G P L L N I K G E L V G I N T A
UniRef90_B5YHV1       A N V G I S D Y E D F I Q T D A A I N P G N S G G P L V N V R G E L V G I N T A
UniRef90_J6LDD7       I N   S G R Y D N Y I Q T D A A I N R G N S G G P L F N L D G Q V V G I N T A
UniRef90_M3F5Z0       V T Y P S T Q V S G L I Q S D L C S E P G D S G S A V Y N T G I N A V A I N S G
UniRef90_J0RGV4       L N A   G P Y D N F I Q T D A A I N P G N S G G P L F D R N G E V I G I N T A
UniRef90_W4LY87       I   G A G P Y D N F I Q T D A S I N P G N S G G P L F N M R G E V I G I N T A
UniRef90_D1VX49       L   Y A N G V E S F I Q T D A A I N Q G N S G G A L V N A Q G E L V G I N   A
UniRef90_H5SNV6       L G L E A F R V E S F I Q T D A A I N P G N S G G A L V D I N G K L V G I N T A
UniRef90_G4SXU4       L   S G I I G D D F I Q T D A A I N P G N S G G P L L N L D G E A V G I N T A
UniRef90_B8KIX8       I R A P S G Q I R G V V Q T D A A I N P G N S G G P L L N S L G Q L I G V N T A
UniRef90_UPI000255A0C6 L   A N E T Y V P F I Q T D V A I N P G N S G G P L F N L D G E V V G I N S Q
UniRef90_Q0W0Z3       L R T Y N G R I D D V I Q T D A S L N P G N S G G P L V N S A G E V I G I N S A
UniRef90_U7NIC9       L   P Q D V Y V P F I Q T D A A V N P G N S G G P L F N L R G E V V G I N S Q
UniRef90_W6LZX3       N L P S G T V P F I Q S D V A V N P G S S G G P L F N L R G E V V G I N S Q
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                              170              180            190
QUERY                G N V Q S N G N N C G I P A S Q R S S L F E R L Q P I L S Q Y G L S L V T G
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UniRef90_D2B7M9      G S G D C T                     S G G I T Y F Q P I G E I L T T Y G L S L V T
UniRef90_UPI0003A4E8C6  G S G N C T Y                  G G T T Y F Q P V N E A L N A Y G V N L V T G
UniRef90_G3JB56      G N G D C T R                   G G T T Y F Q P V N R I L Q T Y G L T L V R G
UniRef90_UPI00036F5F22  G S G D C T                   S G G E T F F Q P V N E I L S A Y S L T L V T G
UniRef90_UPI00029B13D5  G S G D C R                   T G G T T Y H F Q P I N P L L R T Y G L T L T T
UniRef90_D6X6J3      G S G D C R                     S G G T T F H H Q P I N P L L Q G Y G
UniRef90_A4FNQ0          S G G S G N C S S G G T T Y F Q P V N E A L S A Y G L S L V R G
UniRef90_E8SCA7      G S G N C T                     T G G T M W F Q P V N E I L G V F G L S L V
UniRef90_S2YGX7      G S G D C T                     S G G E T F F Q P V T E A L S T F G A E I
UniRef90_D9T5P5      G S G N C R                     T G G T T Y F Q P V T E A L S R Y G V S V
UniRef90_UPI00040FCF99     S G G S G D C S S G G T T Y F Q P V N P I L S A Y G L Q L V T G
UniRef90_N0CQX7          S G G S G N C S S G G T T Y F Q P L L P A L Q A Y G L T L A T
UniRef90_F4FCN3      G S G D C             V R G G T T F Y Q P I N E I L Q R N N L T L L T
UniRef90_UPI00037FCB79      G G W G D C S G G G E T W Y Q P I N E I L N H Y G L T L R T
UniRef90_UPI000377B085  G S G D C T        N G G E T F F E P V V A A L D E Y G A T I
UniRef90_UPI00038254E8  G W G N C                 S S G G E T W F Q P V N E I L G A Y G L T L H T
UniRef90_S9P8B8      I A G G C D                   S S A P Q T F Q P I N P I L S K F
UniRef90_W7SIB4      G Y G N C                     S S G G E T W F Q P V G P I L A A Y G V G L V T
UniRef90_K6ULM6      G N A T S F K D G K C Q N S R G D K T H F Q P I N P I L K K Y G L T L
UniRef90_D1A3V1      G S G N C L W               G G T T F F Q P V T E P L S V Y G V S V Y
UniRef90_UPI00037194B9     S G G S G N C S S G G T T F F Q P V N E V L G A Y
UniRef90_UPI0004672336  G S G N C R             S G G T T Y F Q P V G E I L S A Y G L T L V T
UniRef90_UPI000462EA12   S G G S G D C S S G G E T F F Q P V P E A L A A F G A E I
UniRef90_UPI00037DCFF0  G S G D C N               S G G E T F F Q P V P A A L S A Y G L T L
UniRef90_G8SAL5      G S G N C T                   S G G V T Y F Q P V V E P L S V Y G V S V Y
UniRef90_UPI000371C7CD  G N G D C D             K G G T T F Q P L P E A M E A L G V R L L
UniRef90_K4QWV5      G S G D C T V               G G E T F F Q P V T T A L E A T G A T L
UniRef90_UPI000365D338  G S G D C K            A G G I T F F Q P V T T A M A T L G V S L
UniRef90_UPI000363B3F9  G A G N C T             S G G T T F F Q P L R P I I E K Y D L T L L T
UniRef90_B5H9S5      G S G N C                   S T G G T T F Y Q P V T E A L A K Y K V S L Y
UniRef90_V6KFV1      G S G D C                   A S G G E T F Q P V T T A L A A V G A E I
UniRef90_C7MTG2                                 M G G G S S Y F Q P L T E A L S A Y G V S L N
UniRef90_K0JZK1      K                           G S G T S Y Y Q P V A E A L T A Y G V T L N
UniRef90_V6JLB8      G S G N C S S G G         T T F F Q P V T E A L S A Y G V S I Y
UniRef90_UPI00047708CD    G G L G G G C P N D N A R G F H Q S V V E A L D A Y
UniRef90_UPI000366D7B4     S G G S G N C S S G G T T Y F Q P V P E V L S V Y A A S I Y
UniRef90_W0BZB8      S G G S G S C S G S Q G N N G G G N S Y Y T P I N S I L S A Y A L T L R T
UniRef90_V6JVL5      G S G N C                   S T G G T T F A Q P V V E P L S A Y G V S V
UniRef90_S3ZGC2          F G I G G S G N C S S G G T T F H Q P V A P V L A A H G L R V
UniRef90_V6L3P2      G S G D C T                 S G G E T F F Q P V T A A L Q A T G A T
UniRef90_L8ESB3      G S G S C A S G G T S         Y L Q P V V P A L Q A F G L T L
UniRef90_K1E3H3      G P V G V E C G Y N Q G Y N A G S Y S F Y Q P V V D A A S Y Y G V R I D T
UniRef90_UPI00037201ED  G       G A A H C G T F G G A T L T I F Q P I G E A L E K W N L R L V T G
UniRef90_UPI000476216B  G S G D C T             S G G T F F F Q P V R E A V N A Y G V T I L
UniRef90_UPI0003736D1A  G       G A A T C D V G G D T V T I F Q P I D V P L R K W N L K L V T G
UniRef90_W7IWP6      G P T G Q Q C T Y N G G N Q A G K S S Y F Q P L S D A L S Y Y G L T L N V G
UniRef90_T1VJY1      S N V A T S P L C T L F G Q E A P T Q Y A T P I N D I L A A
UniRef90_H6R7A1      S S V A D F P I C E I P N L I G A L T F A Q P V S V V L S D N G L R I R T
UniRef90_UPI0003636C8B  S S D L S C D G S F G S       G A S W M Q P L D D L L R Y Y G L T L N T
UniRef90_P41140      G S G N C R T G G               Q S G P N T D A Q P V G E A L A K W N L T L A T G
UniRef90_UPI0003625534  G G N A C G                 Q S G P N T D A Q P V G E A L A K W N L T L A T G
UniRef90_F8UWQ4      G S G D C                   S S G G E T W F Q P V N E I L N R Y G L T L H T
UniRef90_D9XK98      G W G N C                   S S G G E T W F Q P V N E I L N R Y G L T L H T
UniRef90_I3IK77      I V N Q A Q G I G F A I P V D               T S Y F Y P L T L E L Q A Y G L E L
UniRef90_D8I6Z1      G D T V                           I I S P S G G S I G I G F A I P S S L A M P V I D D L R K S G
UniRef90_S9S7Y6      I   I S P S G G S I G I G F A I P S S L A M P V I D D L R K S G
UniRef90_D3KZU1      I I P Y A Q G I G F A I P V N M A K S Y V Q P L T D I A Q A Y G L K V E K G
UniRef90_G7V982      I I P Y A Q G I G F A V P V
UniRef90_K2KM82      I Y S P S   G G S V G I G F A I P S A I A Q S V V E Q L K E Y G R T
UniRef90_L0K857      I I G                 G S A Q G I G F A I P I N K A
UniRef90_UPI0003631245  A S G P C P G G G G G D H V       L P V T A L L A A W G L T L L T
UniRef90_D0RPV3      I F S N S   G G S V G I G F A I P S N F A K N V I D Q L I K F G
UniRef90_UPI00046CD467  I I A N G Q Q G I G F A I P I
UniRef90_A5EY82      I Y T R S G A F N           G V G F A I P I N
UniRef90_Q6SHZ8      I F S Q S G G Y         Q G I G F A V P I N
UniRef90_UPI00037E4FD1  I Y S R S G G N N         G I G F A I P I N
UniRef90_S7UUR7      I I A S G Q G I G F A I P V N M A M N I V G
UniRef90_D6Z3R5      I I Y S R G G N             I G I G F A I P V N
UniRef90_G0A032      I I Y S R S G G Y M         G L S F A I P I D V A M N
UniRef90_I3XXQ9      I L S R S G G N N G I G F A I P S N M V Q K I A S S L I E N G
UniRef90_UPI0003B32F4B  I I F S Q S   G G S V G I G F A V S S N L A K Q V T D Q L K E F G R T
UniRef90_UPI000381467C  A Y Y D Y D Q Y G N E T C H P Q S S S F S E P       R A L G V S L V
UniRef90_U9VYT6      I R A D A M G I G F A I P I N K A K S I
UniRef90_D6SUA6      I V A A G Q G I G F A I P S T
UniRef90_H2J6T7      I V N P Q E G Q N L G         F A I P I N
UniRef90_E8PLR5      I F T P T   G Q F G A A Q F A G V G F A L P I N L V K Q Y L
UniRef90_A1ZGC2      I   A T R T G S Y S G Y S F A I P V N I V K K V L D D L M K Y G Q T
UniRef90_B5YHV1      I F S T T G G Y         Q G I G F A I P
UniRef90_J6LDD7      I   I S P S G G S I G I G F A V P S K T A M P V I D Q L R K Y G
UniRef90_M3F5Z0      A S L F S L G
UniRef90_J0RGV4      I V S P S G G       S I G I G F A I P S D M A L S
UniRef90_W4LY87      I V P Q G Q G I G F A I P S
UniRef90_D1VX49      M L Y S Q T G S Y A G Y G F A I P T S I M S K V V E D L K K Y G
UniRef90_H5SNV6      I   A S T T G T F A G Y S F A V P V T I V K K V V E D L R E Y G
UniRef90_G4SXU4      I F S R S G G H M           G V G F A I P
UniRef90_B8KIX8      I I Y S P S G           A S A G I G F A I P V N T V
UniRef90_UPI000255A0C6  I Y T R S G G F M         G L S F A I P I D V A M N
UniRef90_Q0W0Z3      I I L P A Q G I C F A I P S S
UniRef90_U7NIC9      I L T R S G G Y M           G L S F A I P I D V A L D
UniRef90_W6LZX3      I Y S S T G G Y M           G L S F A I P I K L A M Q
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UniRef90_S9Q778                                                          L G S G V L V D A S G V I I T N D H V I R G
UniRef90_S6D6K9                                                          L G S G F I I D P T G Y I V T N N H V I R K
UniRef90_UPI000366F97A            G D R F D T P G Q T Q T S L G S G V I F S P Q G Y V L T N H H V I R D
UniRef90_A0PYZ4                                                          M G S G I I F S E D G Y I L T N Y H V V K G
UniRef90_B1I5S5                            S S P S R R G M G S G F L F S E D G Y I L T N E H V I R G
UniRef90_F3YV16                                                  S L G S G F I I S Q D G F I V T N N H V Q D
UniRef90_W7E0C1                                                          L G S G F I V D P T G W I V T N Y H V I K D
UniRef90_K9TSD3                                                          T G S G F I I S D D G Q I L T N A H V I N G
UniRef90_UPI00037FD14C                                                   M G S G F I I S R D G Y I L T N E H V V S G
UniRef90_H8MKJ9                                                          L G S G A I I D P S G I I V T N D H V I R G
UniRef90_C3XCC9                                                  S L G S G V V V S H D G Y I M T N N H V V E T
UniRef90_L0RGP8                                                  S L G S G F I I S A D G Y I V T N N H V V A S
UniRef90_C6WX92                                                  S L G S G F V I S S D G Y I L T N A H V V S D
UniRef90_UPI0004637E6D                                           S L G S G F I I D P T G I I V T N N H V I E N
UniRef90_UPI0002EC038D                                           S L G S G V I V D S R G L I L T N Y H V I K D
UniRef90_R4KGL1                                                          M G S G F I I S E D G Y V L T N E H V I S S
UniRef90_F5L8E0                                                                  K K D G K A Y I V T N F H V I Q G
UniRef90_UPI0004737F45            G D G Y G D Q E E K Q S S L G S G V V I S P Q G Y I L T N N H V V E A
UniRef90_Q0AF65                                                  S L G S G F I I S K D G Y I L T N A H V V E A
UniRef90_A0A024JSR3              L V S D G I T K C S T G F A A Q N D G G Y Y L F T S G H C D H G
UniRef90_E8YP89                  G G D G G D A P D Q P S A S L G S G F I V S S D G Y I L T N A H V D G
UniRef90_UPI0003B304AD                                           S L G S G F I I S P D G Y V L T N A H V V A K
UniRef90_E3PVW3                          F F F G A R Q T S G V G T G V I V D E R G Y I L T N S H V V D D
UniRef90_K9YDG2                                                          T G S G F I F S S D G L V L T N A H V V E D
UniRef90_A4GHT8                            N S R P V V S T G S G F F I S D D G F L L T N N H V V E D
UniRef90_UPI00037E4370                                           S M G S G F L I S T D G Y I V T N N H V I D G
UniRef90_UPI00036ED7DB                                           S L G S G F I V S S D G Y I L T N A H V I E G
UniRef90_UPI0001D310D8            I S V K S R T G G S E G T G V L T A D G Y V L T N N H V V A D
UniRef90_A8LK83                                                            G S G F V W D R D G H V V T N A H V I R G
UniRef90_UPI000237C0ED                                             A G S G V I I T K D G Y I V T N N H V I E G
UniRef90_UPI00046F2086                                             I G S G F I F D K T G Y I L T N N H V I D G
UniRef90_R7RUA6                                                    I G S G V I D K D G Y I L T N N H V A G Y
UniRef90_K9TR74                                                            G S G F I I D G D G L I L T N A H V V S D
UniRef90_UPI0004794BAA          G Q S P E G T R S Q P R V G T G S G V I I N D K G Y I V T N N H V I D N
UniRef90_F6B3P5                                                          L G S G F I I S K D G Y I L T N E H V I E G
UniRef90_U7DAC6                                            R S G I G S G V I V S S D G Y I L T N S H V I H G
UniRef90_I2F2X7                          I P G Q K V T G V G S G F I F N K D G Y I F T N E H V V S G
UniRef90_S6CES0                                                          T G S G F V W D D L G H I V T N H H V I A G
UniRef90_D8GJ96                                                            G S G V I I D S N G Y I V T N Y H V V Q G
UniRef90_F4KTZ3                                                            G S G F V W D R S G H I I T N Y H V I Q G
UniRef90_B4WNB4                                                            G S G F I I N D Q G D I L T N A H V V N N
UniRef90_UPI00045E9E5E                  F G T G P T Q Q V S T G S G V I I S D D G Y I V T N N H V I D R
UniRef90_UPI0003811E10                                           S L G S G F I I S A D G Y I L T N A H V V E N
UniRef90_A0A011NER1                                                      T G S G F I W D H A G H V I T N Y H V I E N
UniRef90_A4VIX1                  P G A P G Q G Q Q R E A Q S L G S G F I I S D D G Y V L T N N H V V A G
UniRef90_A3Y8F6                                                  S L G S G F I I S Q D G Y V L T N N H V I D G
UniRef90_UPI000376D9F7                                               G F I I T D D G     Y I L T N A H V V T G
UniRef90_B4UKN1                                                  S L G S G V I V S P D G Y V L T N N H V V E R
UniRef90_C6DY12                  P V A G G Y I I G S T N K F E G T M G C V V T D G A Y F H I L S C C H V A T L
UniRef90_UPI0003614C3B                                                   L G S G I F D R K G Y V I T N Q H V I E G
UniRef90_R6STS5                          G D Q M G P Q S R E Q K A S G S G V I I R S D G Y I V T N N H V V D G
UniRef90_T4VMF9                                                          V G T G F I V D S K G Y I L T N S H V V S D
UniRef90_A0A024K5Y2          A P P M P G V Q V D   D E S S S C T A G F A A Q D D G S Y Y L L T S G H C D A H
UniRef90_I3Y6P3                                                  S L G S G F I V S S D G Y I L T N S H V V D G
UniRef90_Q3SH45                                                    A G S G F I V S S D G Y I L T N A H V V K G
UniRef90_A4U0K9                                                  S L G S G V I V T P D G T V I T N R H V V K G
UniRef90_Q725Z5                                                  S L G S G V I D G E R R L V L T N A H V I A G
UniRef90_UPI00034C7719                                                   T G S G F I L S S D G Q L L T N A H V V D G
UniRef90_B7KEQ4                                                            G S G F I V D R S G I I L T N A H V V D N
UniRef90_D4H1H3                                                          L G S G F I I D K S G L I I T N N H V D G
UniRef90_R9U0E0                                                          T G S G V I D G G K A Y I I T N N H V V E G
UniRef90_S7UJC3                                                  S L G S G V I D G R A R L V L T N A H V I A G
UniRef90_UPI00035F7627          P L Q G G I T L G A S T S G E C S L G Y S A I D N S N P Y V I T A G H C W G E
UniRef90_F4GIN4                                                          M G S G V I L S K T G Y I L T N T H V I E D
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UniRef90_I3CCB8                          N A P Y L N E L P S T S L G S G F I I S A D G Y V V T N N H V I A G
UniRef90_X5JY01                                                            G S G V I F T Q D G Y I L T N S H V V N D
UniRef90_K9X4H8                                                          L G S G F I I D K S G L I L T N A H V V D Q
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UniRef90_UPI0003B4AD35          D L V G G Q G F Y T Y D S Y Y C S V G F N G R S S H S S Q F L T A G H C V E P
UniRef90_D3FAW3                                                            G T G F V L D S E G H I L T N Q H V V G E
UniRef90_UPI0003704BDC                                                   L G S G V I V S D E G Y I L T N N H V I E E
UniRef90_M4VAQ3                                S N R P R R V G L G T G F I I R E D G L I V T N A H V I K D
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UniRef90_B4WLG5                                                          T G S G F I L D G N G T I V T N A H V V E G
UniRef90_UPI0004660AA1                          G S Q K V Q S L G S G V I D A N E G I V V T N N H V I A D
UniRef90_B5JX04                  A P Q G G G R G A P I P R D Q H H S L G S G F I I S D D G Y I I T N N H V I E G
UniRef90_Q024W1                    G M G P D M P N R K S Q A L G S G V V V D R A G Y I L T N N H V D K
UniRef90_A8GM89                                                          L G S G F I I E P N G L I V T N Y H V I A N
UniRef90_D7CMF8                        G I S P R S T Y E T G I G S G C I I S S D G Y V L T N Q H V V N N
UniRef90_Q1QEG2                                                          T G F F V T D D G     Y M L T N H H V V A G
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UniRef90_B6YQJ5                                                            G S G F I I S T D G Y I L T N H H V I D E
UniRef90_I5BTD7                                          S S G S G V I I S P D G Y I V T N N H V I E N
UniRef90_Q5GRL6                                                          L G S G F I I D K S G T I V T N Y H V I K N
UniRef90_D9SC24                                                  S L G S G V I V S S D G F I V T N A H V V Q D
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UniRef90_D9TNQ3                                                          V G S G F I V D K N G Y V I T N N H V A S P
UniRef90_UPI0002FECFBC                                                   V G S G F I V I N S N G Q I L T N A H V V N N
UniRef90_UPI0003792793                                                   V G S G F I I F R K D G Y I L T N S H V V D G
UniRef90_K9X6B3                                                            G S G F I I N A S G Q I L T N S H V V D G
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UniRef90_E3PVW3         G T A T S V D G S K Q E A K V L W N E K A L D L A V I K V E   K T G L P V A E
UniRef90_K9YDG2         A D E V K V D G R K F D G V V V G A D P V T D V A V I K L P T N N   L P T V T
UniRef90_A4GHT8         A D E I T V D R R E F K A E V I G T D E R S D V A V L K I D A E N   L P F L K
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UniRef90_B4WNB4         A D Q V T V D G R Q F E G Y V E G V D E I T D L A V I R I N T A G E P L P V S T
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UniRef90_UPI0003811E10  T D E V T V N K R E Y K A K V I G A D A R T D V A L I K I D A S G   L P V V P
UniRef90_A0A011NER1     A S A A S V K L A D G R S Y Q A A L V P A H D I A V L K I G V G F N R P P A V P
UniRef90_A4VIX1         A D E I I V D R S E L E A K L I G A D P R S D V A V L K V E G   K G L P T V K
UniRef90_A3Y8F6         A D I I H V D R R E Y Q A K L V G T D K R T D L A L L K I E A D D   L P T V K
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UniRef90_A0A024K5Y2     D G S V W T Y G P S I P T V S E K E V D K R D A A I I R L N P A V G V P T G G V
UniRef90_I3Y6P3         A D E I V R T S D R R E F V A T L I G T D D M A L L K V D A E G L P V A R
UniRef90_Q3SH45         A D E V V V K L T D K R K F V V G S D P R T D V A V I R I T A R N   L P A V R
UniRef90_A4U0K9         A D E V T V V L A D R R E F E A K L L G S D D L A V L K I D P G K D A L P V L P
UniRef90_Q725Z5         A T S I A V R L L D G R T F T A G A D P D F D L A V L R L   A G A G R L P E A P
UniRef90_UPI00034C7719  A D V V Q V T L K D G R K F D G K V D P L T D V A V I K I D A E D   L P A V Q
UniRef90_B7KEQ4         A D K V T V T L K D G R T F D G I V R G S D D V A V V K I D P Q G E Q L P I A P
UniRef90_D4H1H3         A D E I I V K L N D E H K F D A K R D P L T D L A L I K I E P K G V M L H T L P
UniRef90_R9U0E0         A S K V T I S L Y N G K T A D A K I I G S D D L A V L E I S S K G V D K V A   S
UniRef90_S7UJC3         A T Q T R V D G R S Y E A D L V G A D P D F D L A V L R L A G D E L P Q A Q V
UniRef90_UPI00035F7627  N I G I Y Q G G S Y I G T R S N I S H Y G N D A D A V A I R V S S N T L L S N Y
UniRef90_F4GIN4         A A S L S V R L H D G T S V P A R M D Q E N D L A V I K I E P T E Q M M P I V F
UniRef90_Q3AYH6         A D Q V A V T L P D G R S F K G K V D P L T D V A V V K V V A E N   L P V A S
UniRef90_I3CCB8         A D E I I V R L T D R R E F T A E L I G A D D L A L L K L   S A T E L P F V K
UniRef90_X5JY01         A S K I Q V T L S D G H S Y D A E I D A D T D L A V I R I H A P N L I A A K F G
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UniRef90_UPI0003704BDC  A D E I Q V S G D E V S A E V I G S D P Q T D I A V L Q I   D V D D L P V V E
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UniRef90_UPI000427D55C  A D E V V V D G R E F A A R V V G S D E Q S D V A L L K I   P A T G L P T L R
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UniRef90_B4WLG5         A D E V M V D G R E L R G E V I G E D S L T D L A V I K V   D A R D L P T V T
UniRef90_UPI0004660AA1  A D D I E V N F S D G V T L K A K L I G T D D I A V L K V D P K G H K L T A V K
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UniRef90_A8GM89         V N K I N A D N T E L P A K L I G S D T K T D L A L L K I   D S D E P L P F V E
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UniRef90_Q1QEG2         A D K I T V D R T E L D A T L V G S D E R S D V A V L K V T G K K F P A
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UniRef90_UPI000366F97A V G G S S D L R V G D V V L A I G N P F     G V G Q T V T Q G I V S A T G R S
UniRef90_A0PYZ4        F G D S D I Q V G D P A I A I G N P L G K Q F L G S   V T S G V I S A V N R Q
UniRef90_B1I5S5        L G D S D N V R V G E W V I A I G N P     Y G L D H T V T V G V I S A K G R P
UniRef90_F3YV16        F G N S E Q A K V G E W V L A V G N P F G L D H S V T     A G I I S A K G R V
UniRef90_W7E0C1        F G N S D Q S R V G D W I L A I G N P Y G L S G     T V T S G I I S R G R D
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UniRef90_C3XCC9        F A D V D K A K V G D V V L A I G N P F     G V G Q T V T M G I I S A L G R S
UniRef90_L0RGP8        F A N S E K A E V G E W V L A I G N P F     G L G H T V T K G I I S A K G R I
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UniRef90_V9WAN3        L G D S D Q V E V G Q R L V A V G N P     R G Y D H T V T T G V   L S A K E R T
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UniRef90_I0RRP2          L G G G S G L V V N G E T L C T L T A I G H D A G A L V G F T S A H C G G P
UniRef90_D8MXM9                          V V I N A D K G Y V L T N N H V V N G
UniRef90_UPI00035DE0B9   P F R G G E G A P E P R E R R S Q G S G F F I S A E G Y V V T N N H V I D G
UniRef90_Q2G307          F G G G Q G N G P Q T R E A Q S L G S G F I I S A D G Y V V T N N H V I T A
UniRef90_F5SS21                         L G S G V I V S A D G Y I V T N A H V I A K
UniRef90_UPI000378A2DC                  S L G S G V I D A E G F I V T N N H V I E G
UniRef90_A3ZSX5                           G S G S V L D K Q G H I L T N Y H V I E G
UniRef90_UPI000428A2A6                   T G S G V I I T E D G Y I V T N N H V I Q N
UniRef90_L0WFX2                           V I V D A K N G Y V L T N A H V A K N
UniRef90_L1NTI3               D L F Y G N R G G E Q T T G S G V I I P D G Y I L T N Y H V V Q D
UniRef90_F0RN82                           G F F V T S S G D I L T N Y H V V Q D
UniRef90_B9EAT0                                     Y I V T N H H V V A K
UniRef90_R7L3H7                          G S G I I I S E D G Y I L T N N H V N S
UniRef90_A0PVW1                          G S G V I V D G R G Y I V T N N H V I S E
UniRef90_C0E9G4             Q S S Q A S S E G S G V I V Y T Q D G Y I L T N Y H V V Q D
UniRef90_W7VXJ9          Y G G S E E E A A Q G Q S S L G S G V I V A A Q G F I L T N N H V I Q N
UniRef90_W1S0T8                         L G S G V I A T K S G Y I L T N N H V I Q N
UniRef90_UPI0004749E8F                  S L G S G F V I D A E G I L I V T N N H V I G E
UniRef90_B7RX58                           M G S G F I V S K D G G I V T N N H V V E G
UniRef90_B7RM48                         L G S G F I V S K D G Q I V T N N H V V E G
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                                    50          60          70          80
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UniRef90_G6FX41        A D T V K V T L K D G R S F D G K K D E L T D V A V I K I A A N N   L P T L A
UniRef90_UPI000370DDCC G H E V A A E G A E N R G T L G V M V A G S D Y A V I E F D P A K V Q P L N N V
UniRef90_Q11HS9        A D E V K V A L A D G R E F E S T I D E G L D L A V L K V   E G S D P F P A A A
UniRef90_D7FK95        A Q S A Q V R L T L G D G T Q R T Y D P D K D V A V L K I D A P S E L L R P I A
UniRef90_A0A022H110    A R E V T V D R R E F K A Q V L G V D P R S D V A V V   C I K A K D L P T V K
UniRef90_K9SKD7        A D D V E V K L R D G R T F R G K V D V V T D I A V V K I   D G T D L P V A P
UniRef90_UPI00040CFE42 A S T I T V D R R E F K A K L V G S D E Q S D V A L L K I E G K G L P A L R T A
UniRef90_C8W2Y8                                    D C A L C K P D N P E F I S P E I Y
UniRef90_K2DC95        T N T T Y S V V T K D G T K S I Y R D P T L D L A I V Q V D P N N   L K A L E
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UniRef90_M1ZE80        A D Q V K H D G K E Y E A E V I G K D P A T D I A V R K E G D T S P L P H M K
UniRef90_E1L7A2        A S N G E V D G T T V K G T V M G T D E Q S D L A V V K I D P P K N I Q P   V A
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UniRef90_E6U6A0        A D V V L H N G K H Y A A A L V G T D A R T D L A V L K I N A Q K L P Y A
UniRef90_G4E4J5        A D E I I V D G R R F D A T V V G S D A D T D L A V I Q I Q A S D L V A L R A A
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UniRef90_M1P1R7        G T S Y S V D G T E L N A K L I G S D P R T D L A V L K V   N D K R K F S Y V D
UniRef90_UPI0003FBF249 A A Q T T A S G E I F E A E V V G T D P T T D L A V L K P I N P P K D L Q M A K
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UniRef90_D1CEU6        A D K I T V D N R I L S A R L V G A D P T T D L A V K V E A S N L K P L R L
UniRef90_V6T382        A S K V E V S L Y N G K K V D A E V I G A D D L A V V K I D A A K A A D V   I E
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UniRef90_UPI000426BE0F A R Q V T V D R R E F R A K V L G T D P K T D V A V L R I E A K D   L P V V K
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UniRef90_D4YSZ7        A D A V Q V M L A N G K T V N A K I D S T T D L A V L S I D S K Y V T Q T A S F
UniRef90_UPI000365BC72 A F S V K V D G N I V N G R V L R R D S V A D A A L V K L E G D I S E V T G L P
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UniRef90_C0GDJ1                                D A A V A K P V S I D L L D S S I L
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UniRef90_N6V775        A D D I K I A L S D G R E F V I L K D D R V D L A V L K I Q S K N E S F P I L P
UniRef90_UPI0003B5A506 A D E L T V D K R E F K A K L V G A D K R S D V A L V K I E A T N L P
UniRef90_D0YRG0        Q R Y G A S G Q V S L T R K G T Y I G D S G D V A I Y H A D R G W T A P K F Y Y
UniRef90_C7BL69        A D K I R V Q L N D G R E Y E A R R D P Q T D I A L L Q L K G A K N L T A I T I
UniRef90_H5XA74        A R R D E Q A K I M T V F I D G T R A P A Q V V G T D P K T D L A V L K V D V A
UniRef90_UPI0003023511 A S E I S Y K A K L I G T D S K M   D I A L L K I D A K E T L P Y T T F
UniRef90_K9Q975        A D N V S V D G R S L Q G K V V G V D R V T D V A V V R I K G   T G L P T V K
UniRef90_R5P669        A D K I V D K K E Y E A K L I G Q D P I T D I A L L Q I E A K D   L V Q L P
UniRef90_I8UA80        A T E I Q V R L K D G R T F S A K K D P D S D I A L L Q I E A K D   L V Q L P
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UniRef90_UPI0004691B07 A S E I E I T L N N K K T Y K A K L I G T D D I A L L K I S A D E K L P Y T V F
UniRef90_UPI000475FD10                L N E N E I E A T L I G K D P D T D L A I L K I Y A Q G Y S V A R L
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UniRef90_A3ZSX5        A T E I D V N A E N Y S A T L V G Q D P V N D I A V L K I D V P A E V L Y P V S E
UniRef90_UPI000428A2A6 A T E L E V T L N N N K S Y K A K L I G T D D I A L L K V D A E E K L P Y A T
UniRef90_L0WFX2        A D D I K V T L   T D G R E L S A T L V G L D E E V D L A V L K L E K A
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UniRef90_F0RN82        A D E I T V D T R S Y P A E V V G T A P D Y D L A I I R A K N P K E E I H A L P
UniRef90_B9EAT0        A P T I E V T Q G K L K E K A T L I G K D T D I A V I R I P N G N   L K S T V T
UniRef90_R7L3H7        T S T S Y N D N T E Y E A K I I G T D E Q T D L A V I K I   N K T G L T A A E
UniRef90_A0PVW1        A A V V F N D G K E V P A S L V G R D P K T D L A V L K V D N V D N L T V A R L
UniRef90_C0E9G4        A S S S N G G T I N V Y A T L V G Y D A G A D L A V I E K T G L T P   I E
UniRef90_W7VXJ9        A D E I A V G G K V A E A R V V G T D P E T D L A V L R I D A K G L Q P I T F A
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UniRef90_UPI0004749E8F A N D I T V V F T D G S K L K A E I V G K D D L A V L R V K   P D R P L K A V R
UniRef90_B7RX58        A D S V M S D R E F D A Q V V G T D P R S D L A L L R V   D A T K L P V L E
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                                    90              100             110             120
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UniRef90_Q7UQ70          R G V S A D L E V G R T A L A I   G N P F       G L D Q T L T T G V I S A L G R E
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UniRef90_UPI00041A4870   L G D S N S T Q V G E W L V A I   G N P         E G F E H T V T A G V L S A K E R T
UniRef90_E1VHD6          M A S S R E V R V G D V V L A I   G N P F       G V G Q T V T E G I V S A L G R N
UniRef90_F2IUM5          I G T S N E L R V G Q S V F A I   G N P F       G L D W T M T T G I V S A L G R E
UniRef90_UPI00047E1B76   L G N S D G A Q V G D W V L A I   G S P F       G L S Q T V S A G I V S A K N R S
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UniRef90_G6FX41          M G N S E Q L Q P G Q L A I A I   G N P L       G L D N T V T T G I I S A T G R N
UniRef90_UPI000370DDCC   N G F Q I D G I G     P D P A F G Q V A [C]K L G R T T G Y T [C]G
UniRef90_Q11HS9          L G D S E A L E V G D L V L A I   G N P F       G V G Q T T T S G I V S A V A R S
UniRef90_D7FK95          L G V S N T L K V G Q L A L A I   G N P F       G L D H T L T M G V V S G L G R E
UniRef90_A0A022H110      L G D S S Q L R A G E A V L A I   G S P F       G F E N S A S A G I V S A T S R
UniRef90_K9SKD7          I G S A E N L Q V G D W A I A L   G N P L G L D N T V T L G I I S T L S R P S N Q
UniRef90_UPI00040CFE42       T D P P K P G Q W V V A I   G S P F G L D H S V T     A G I V S A V G R S
UniRef90_C8W2Y8          E I G     K I T G L E Q V S P G I S V E K S G R T S G L T S G R V S A V G V T
UniRef90_K2DC95          L G D S Q K L R V G Q T A I A I   G N A L G R L D N T   V T S G I V S G L G R S
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UniRef90_E1L7A2          I G D S D S L Q V G E P A I A I   G N P L G L E F K G S   V T S G V I S A L A R T
UniRef90_UPI00047AE96D       L R I G D A N S L K V G E P V L A I G S P F G F S A G I V S A K S R T
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UniRef90_G4RC11          F A D S D Q L E V G D L V L A I   G N P F       G V G Q S V S S G I V S A L A R T
UniRef90_UPI00047BE660   V P D T I L K V G R S K D A K V G E W V M A I G S P L G V T V G L I S A V D R P
UniRef90_K9TTV7          G D S S V Q V G D W A I A   V G N P L G L D N T V T L G I V S T L K R S S A Q
UniRef90_N9MB34          L S G N E V       G D W V L A I   G N P F       G V G Q T V T Q G I I S A T G R S
UniRef90_E1L105          T A D S D K L Q V G D W V M S V   G S P       Y G L N Q S V S A G I V S A R N Q S
UniRef90_E6U6A0              Q F G D S D Q [C]H V G E Q V L A V G N P S G V T Q G I I S A L N R N
UniRef90_G4E4J5          D     S D H L R V G D T V L A I   G N P F       G L G Q T V T S G L V S A L G R S
UniRef90_L0HI56          S S G S Q P W V Y G T M T P Y V G L G V T M S G I S S G V T T G T V V E T S I Y
UniRef90_M1P1R7          F G D D T K L R V G D W V V A I   G N P F G L G G       T V T A G I V S A R G R D
UniRef90_UPI0003FBF249   L G A S S G L T V G Q P V A A I   G N P L       G Y S S T M T T G V I S A L D R P
UniRef90_UPI0003811484   I A D S S R L R V G D F V V A I   G N P F       G L G Q T V T S G I I S A L G R S
UniRef90_D1CEU6          G D S S K L Q V G E P V V A I   G N A L G L P G G P T   V T T G V V S A L N R S
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UniRef90_J1ELP5          L G S T R D L Q V G E W V L A I   G S P F       G F E N S V T A G V V S A K G R S
UniRef90_I3U8A1          Y N A G N T P R I G D M V L A I   G N P F       G V G Q T T T M G I V S A L G R T
UniRef90_G3YYS8          F A S S K N L V P G Q P V I A V G S P L G S Q Y A T S   V T Q G I I S A K S R V
UniRef90_UPI000426BE0F   L G H T S D L R V G D W V L A I   G S P F       G F E N S A T V G V V S A K G R S
UniRef90_K9TGW0          L G N S E N L V P G Q W A I A I   G S P L G L D N S V T     V G I I S A T G R S
UniRef90_D4YSZ7          G D S K S L Q   A [C]Q T V I A I   G S P L G   S E Y A S T V T Q G I I S A P S R T
UniRef90_UPI000365BC72   I [C]H T D R V R V G D I L A V   G N P L S F S N S V T G I V S G F R R N A S R S
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UniRef90_Q01UD7          L A D S D R V R V G D I [C]L A V   G N P L       G V G Q T V T A G I I S A R S R S
UniRef90_X0QQJ2          G F R K E P I R V G D L A L A I   G N P F       G V G Q T V T Q G I I S A T G R T
UniRef90_UPI00047B6B16   G A D A A V H P M P T A I A F L P E Q V [C]K N G R I T G T T C G H T T A S Q A K
UniRef90_A8M9L0          L G D S D K L M V G E P V I A I   G Y P L G L M N Q P T A   T F G I V S A L G R T
UniRef90_B5JEK7          V A D S A D I I V G Q K S V A I   G N P F       G L D H T L T V G T I S A L G R S
UniRef90_UPI0003609A51   F A D S D E L E V G D L V L A I   G D P F       G V G L T V T Q G I V S A L A R T
UniRef90_N9D6R9              S L K I G N V D Q L K V G E P V L A I G S P F G F S A G I V S A K S R
UniRef90_N6V775          I A N S D A V E V G D L V L A I   G N P F       G V G Q T V T S G I V S A L A R
UniRef90_UPI0003B5A506       T V K I G D V G L E W V I A I G S P N T V T A G L V S A Q R
UniRef90_D0YRG0          A P G K L R D I N A V K N T Y N G Q K I [C]V N G Q Y S A N K [C]T T V L S V N
UniRef90_C7BL69          A D S D K L R V G D F A V A   V G N P F       G L G Q T A T S G I I S A L G R S
UniRef90_H5XA74          N P V   V I E I G R S A D L A P G D S V I A V G S P F G V T E G I V S A L N R P
UniRef90_UPI0003023511   G N S D S V K I   G E W V L A V G N P     Y N L T S T V T A G I V S A K A R
UniRef90_K9Q975          L G N S D N L L P G Q W A I A I   G N P L       G L D N T V T Q G I I S A T Q R S
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UniRef90_UPI000475FD10       G D S N A L Q I G Q F V I A I   G N P     Y G Y Q H T V T T G V V S A L G R T
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UniRef90_C0GDJ1      V N V G F G R F T N Q I I T S K M G E P G D S G S L L L N N A N H A V G L L F A
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UniRef90_UPI00040CFE42          Q I F S S S G G Y Q G V S F A I P M D L A A S
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UniRef90_K2DC95        T T E G A Q N I G F A I P I
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UniRef90_E1L7A2            S K I S K E G V E G M F A I P I N S A
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UniRef90_C1DUW9            I I A G A Q G L G F A V P I N Q A
UniRef90_D7AE78
UniRef90_G4RC11        R S G G S Q G I G F A I P S
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UniRef90_J1ELP5            Q I Y S R S G G Y Q G V S F A I P I
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UniRef90_K9TGW0        I R A D A Q G L G F A I P I
UniRef90_D4YSZ7        K L A E S S D G T S V       E G M G F A I P S N E V
UniRef90_UPI000365BC72          E K I A S E G I E G L G F A L P I G E V L Q R L N V S I
UniRef90_E4KZT7        K V Q S A E G L G F S I P I
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UniRef90_Q01UD7            Q I L S P T G G N I G I G F A I P S N L A K N V M D Q L I T T G
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UniRef90_V7I6I1        K S S G T D V           E G L G F A I P I N D V
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UniRef90_W9RS53                                  G S G V V W D G Q G H I V T N Y H V I G N
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UniRef90_C5TCI9                              I G T G V V I V D S G V I L T N L H V V R G
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UniRef90_B5V4T6                                      G N K A Y I V T N N H V V D G
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UniRef90_UPI0003B4AEC2  P L R P G L S L A N V D V S A G T L G A F V T D D D V R Y A L S N W H V L A G
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UniRef90_F7Y2Y4                              L G S G F I V G A D G T I V T N N H V V D G
UniRef90_UPI0004649BA6                    G F V I T N D G Y V V T N N H V I A G
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UniRef90_U2EUR3       G I A V Y S Q Q S T V S S Y G S G I I M S A D G Y I I T N A H V V E G
UniRef90_UPI00046A4343                           S L G S G V I L S A D G L V V S N Y H V V G M
UniRef90_I0YUL0                              T G S G F I W D T K G H V V T N F H V I R G
UniRef90_T1BAZ2
UniRef90_UPI00037E2908                           G S G V I I D S N G L V L T N A H V V E R
UniRef90_X0SKV2                                        Y V I T N Q H V I E G
UniRef90_K8ECM8                                V W D S E N G Y V V T N Y H V V S S
UniRef90_F4CFF3                                G S G V I I S N D G Y I V T N N H V V E G
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UniRef90_Q01FU1              G T G C G L       V I D A D R G Y V V T N S H V V K S
UniRef90_R7F0K7                              T G F V Y K D N N K G Y I L T N A H V I E G
UniRef90_W2BXU8                                A G S G V I I Q K N G Y I L T C N H V I Q G
UniRef90_E8N3F4                                G S G F V W D K E G H I V T N N H V V E G
UniRef90_E6SIM9                                        I L T N A H V V G R
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UniRef90_UPI000262721D                           G S G F V L S T D G Y I L T N N H V V E V
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UniRef90_B5JRN9                                G S G V I F S D Q G Y L L T N Y H V I A G
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UniRef90_UPI0003A2488B                           G S G F F I S D D G Y L V T N N H V V E D
UniRef90_E8WAW2                                    V Y D K E G H I L T N N H V V A S
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UniRef90_B9S0Y6                                T G S G F I W D T F G H I V T N Y H V V A K
UniRef90_V4Q2M9            V P Q S R T E G S L G S G V I V R K D G I V V T N N H V V A G
UniRef90_UPI0003774653                           V V I I S Q D G Y I L T N N H V S G
UniRef90_K0K8W5        G G S G I T F A A N G H C S A G Y T V Q N S G T R F M V T A G H C F A D
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UniRef90_L0NEC0                                G S G F F I S E D G Y L V T N N H V I A D
UniRef90_UPI000225BF21                             D G K A Y V V T N H H V V N G
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UniRef90_V7ENX5                              S L G S G V I L A A D G I V V S N Y H V V G Q
UniRef90_X1MPQ2                                        G Y I V T N N H V Q N
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UniRef90_G4KXT4          A N A V K V T L Y N G D T Y D A T V I G S D D Y D I A V L K I E A T G L Q P V I
UniRef90_F4ABI0          G D I K T D V I G N L S K Y I K I K F K G T D C S I A K V I D K S L V S P K I A
UniRef90_W5TT10          S A G V Y L P N Q Q F G T F V K A Q L G G A D Y S V I K L N D K A V D Q P S V R
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UniRef90_UPI0004781094   A T T I E V L L H D G R R T M A R T D P D T D L A V L Q T E T   K E L P A I T
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UniRef90_UPI00016C553A   L E S V D V T L H D G R K F T T S R D P K T D L A V I K I E S   K A P L P F L E
UniRef90_E0NIN4          G E N I A K D V E V V K G K V V W S D K A V D I A I V K I E G A N N L V P A   E
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UniRef90_G0GCK1          A D E I S V K L Y D Q R T F P A K I V G K D D L A V V S F E T S E E I   P V A R
UniRef90_S2XMH0          A S S I K V Q L H N S K Q V D A K T D P L T D I A V L K I K D R D D I K A I T F
UniRef90_F7Y2Y4          A S S I K V D G T E L P A K V V G S D A K N D L A V L K I K A S K   P L P T V K
UniRef90_UPI0004649BA6   A T Q V E V T F D D G R T L P A K I I G T D D L A L L K I S D G N N L P H
UniRef90_UPI00037F7C3B   G S T V L S E L W P L R G P V G V I D Q V N D Y A L I R F D R S A V R P L R T V
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UniRef90_UPI00046A4343   A T D I R V D R R E F T A K V L L G D E A S D L A I L K I D A P D   P L P F L E
UniRef90_I0YUL0          A S D I K V A D S S V Y P A K A R G D P D K D I A V L Q L Q A P E E K L R E V T
UniRef90_T1BAZ2                                              D I A V L K I D A K N   L P V V A
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UniRef90_K8ECM8          A I S T I P K G R E I G E V A S K V Y P G E D I A V L K I C E R G V L T P I Q F
UniRef90_F4CFF3          A D K I T V N K K V Y D A K I I G R D P N T D L A L I K V   N A T N L P I V K
UniRef90_S4XWB8          A Q S L V V Q L Q G E K T F P A K L V P R K D I A V L K I D A P K E M L P I Q V
UniRef90_Q01FU1          E E Q V K V T F I D   G N V Y D G E V K G T D I A L I R L K P A G H A L P Q A R
UniRef90_R7F0K7          A T V V F T N E E E V T V D L V G S D T Y S D V A V L S V D Q S K V I S V A E I
UniRef90_W2BXU8          A S K I K V T L S N N K S Y D A K L V P D D D L A V L K I   N A V G L N T A T
UniRef90_E8N3F4          A D K I E V T F S D G Y V V P A G T D P Y T D L A V I K V D V S A D R L V P V T
UniRef90_E6SIM9          A T E V T V G K R L V G T V A G R   D R L Y D V A V V E V P A G S L P A A R T A
UniRef90_L7V981          N Y S A G G G Y V N I G T F S Q S V S E G H D I G L I T L D S G K I P Q S P A I
UniRef90_UPI000381D082   P N A Q L Q V T L N D G S V H P A D L V G T D I A V I K I R D   V K D L P V I S
UniRef90_V5SGS8          R G E A E A D K R E F D A R V I S Q D D K T D I T V L K I D A G A Q T F P T L D
UniRef90_E4KQT6          A D S V E V T M A N G D T L E A K I V G S D D L A V L S I D A S K V T Q T I E F
UniRef90_H7EJR7          A S R I N I S L A D G S A Y E G K V V G A D D I A V L K F D P N G K E L R T I D
UniRef90_C5VQW6          N V R G T V D K R F V P D L G G D F N Y D A A I V K T D R S K A S I A I A F
UniRef90_S3JLS6          A S E I Y V S L S D G T Q Y E A G Q D S E S D L A V I K F T P P A T V L K T I S
UniRef90_UPI000262721D   A A A V F Q D G T K A A A S I V G R D P T T D I A V V K V D G V K N L T P V A L
UniRef90_A0A023NPJ4      A D D I Q V D G R V A K A K V V G A D M E T D L A V L K I D A G N L P V I H I A
UniRef90_Q1MYN8          A D E I L V A L N D G R T R V V G S D A A T D V A V L K I D L E D   L P V I P
UniRef90_UPI00047C24CF   A D E V T V T L H D G R V L D A E F D P D T D V A V M K I P A G D L Q A I P L A
UniRef90_B3QX69          A T R I V V T L T D G T R H D A K L V G A D D L T D I A L L K D G E D F P Y L K
UniRef90_E8XSG1          A T K I S V Q L N D G R K F D A K K D P R S D I A V I Q L Q N A K N L T   A I K
UniRef90_A0A023UKD7      S T G T P T G S K R Y R G E I V K L D E T Q D L A L L K I S P D E L L K P A P L
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UniRef90_B5JRN9          A E E V R V S T T D G R D F A A Q A D P E T D L A V L A I E A S D L E P I T L A
UniRef90_K0JRX7          A V Q D T S G K R A V A Q V V G R   D P K T D I A V I K V Q   V E N P T V L Q
UniRef90_R5ZZS2          A S S I S V R T T D G K D Y E A Q K D A D S D L A V I K I K A D N L T P A T F
UniRef90_N9ALI5          A S K V T I D R R E I D A T V V G S D E R T D V A L L K V N G A G F P E L R T
UniRef90_W9GZA6          A D E I S V T L H D G T K L D A K R D A K T D L A L L K V D A G K S   L P Y L E
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UniRef90_E8WAW2          A A A T F S N G K K Y D A E V I G R A Q G Y D V A V L K L K N A P D G L T P L A
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UniRef90_B9S0Y6          L A T D Q S G L Q R C K V F I I G F D P A Y D L A V L K V D V E G H E L K P A V
UniRef90_V4Q2M9          G Q T F M V D R R E Y S A K L L L S D P R S D L A V L K L E A P G E T F Q T I E
UniRef90_UPI0003774653   G G T L N E G R K T Y N A K V I G R D P S T D I A V L K V E A N N   L P Y M I
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UniRef90_W8RXK6          A D E I F R S G Q E L E A T I I G T D P N T D L A L K V E A D D   P L P F V S
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UniRef90_A6DPJ9          E T Q I T V K I E L K V K I I A L H P Y R D I A L L K L L Q A D E K G L D L K
UniRef90_J2LBY5          A Q I I K V T F A D G L E S T A S I Q P E N D L A V L Q A H K I P D D L I A A T
UniRef90_V7ENX5          A T E I I R V D R R E Y A A D V I L G D E E S D L A I L R L R   G A E D L P F L P
UniRef90_X1MPQ2          A E K V Q V E L A D G R T F P A N I V G T D D L A V L K I E A   T E L P Y A Y
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UniRef90_C7JEP2      W G D S R L V Q V   G D W I   M A A G N P F       G L   G S S V T A G I   V S A R G R D
UniRef90_G4KXT4      M G D S D T L N V   G D H V L A V   G N P L G       E L T F S M S A G M V S S V N R A
UniRef90_F4ABI0      L V G M P       K G I N T P K L N E N V K K V G A I S E L T T G V I   T S L H T T
UniRef90_W5TT10      G N G T T L T L T   G T A E P I T G A P V C K S G Q S S T F T C G F V   A D R V T
UniRef90_C7MVJ7      N P V   V I E I   G D S D S L A P G D R V M A I   G S P F G V T E G I   V S A L N R P
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UniRef90_C1EGP7      I   G T S S D L L V   G Q R V Y A I   G N P F       G L D H T L T T G V I   S G L G R E
UniRef90_UPI0002888FD6  G D S S S L K   K G E S V M A I   G N P L G L D Y Y G S   V T T G V I   S G L D R S
UniRef90_UPI00016C553A  L A D S D E M E V G D R V L A V   G A P F G L T G S V T     S G I   V S A K S R N
UniRef90_E0NIN4      L G D S D A L E V   G Q T A I   A I   G N P I D L A F Q R S   L S K G V I   S G L N R F
UniRef90_W9RS53      V G Q S Y L L R V   G Q Q C L A I   G N P F       G F D H T L T V G V I   S G L N R D
UniRef90_K9QSI3        G N S D N L M P G Q W A I   A I   G N P L     G L D N T V T Q G I   I S A T Q R S
UniRef90_E9T763      G Q V T I T D I   G K P A Q F P     A V A C K Q G R T T G H T C G V V
UniRef90_R6UDB1      D D V Y N N I   K L G S R E L I I   G A P V R R L G Q T T G N T T G H I   L S T N Y N
UniRef90_R6MU94      L G D S T T V Q V   G E T A V A I   G N P M G Q E F S G S   V T S G I   I S A V N R T
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UniRef90_B8G6B6      L A D S R L V Q V   G Q T A V A I   G S P F       G Q P N T L T V G V I   S G L G R T
UniRef90_B7EBF9      V G Q S S A L R V   G Q Q C L A I   G N P F       G F D H A L T V G V I   S G L N R D
UniRef90_B5V4T6      L G D S S K I   R A G E K A I   A I   G N P L G F D G S V T E     G I   I S S K E R E
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UniRef90_C2STG6      I   G D S N T V R R G E P V I   A I   G N P L G L Q F S G T   V T Q G I   I S A N E R I
UniRef90_W3A8I4      L G D S D V L K R G E T V I   A I   G N P L G L D F S G S   V T T G V V   S G T D R A
UniRef90_UPI0003B4AEC2  A I   Y P V G M V T S T A P V E G G E L V G K I   G R T T G I   T A G H V T A V G V R
UniRef90_G0GCK1      L G D S D T L E V G D W V L A V   G N P     Y G F E S T V T A G I   V S A L G R K
UniRef90_S2XMH0      A D S S K V K T G D S V F A M   G N P L G L E F S N T   V T S G I   I S A N E R T
UniRef90_F7Y2Y4      W G D S D R L M T G D Q V L A I   G N P F       G I   G T T V S A G I   V S A R G R D
UniRef90_UPI0004649BA6  D W A S S S P R V G D W V L A I   G N P F G L G G     T V T A G I   V S G L N R D
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UniRef90_U2EUR3        G N S D Q M K V G E D V L A I   G N P G G P S L A G S   V T K G I   V S A V N R T
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UniRef90_X0SKV2      A N S D D L R V   G E Q V L A I   G N P L G L D L S R T     V T Q G I   V S A L N R S
UniRef90_K8ECM8      G A S A E Q I   K V G Q I   A L A I   G N P F     G F D H T L T T G I   I S G K N R S
UniRef90_F4CFF3      L G N S D N V N I   G E W V L A V   G Y P L     G L Q S T V T A G I   V S A K G R A
UniRef90_S4XWB8      A P L R E P L E V G Q K A I   A I   G N P F     G L D H T L T T G L I   S A L G R Q
UniRef90_Q01FU1      L G D S D H V E V G D Y A I   A L   G N P L G L D N S V T L G I I   S N V H R T S A E
UniRef90_R7F0K7      G S S E D L R V G D T A F A   V G A P I   D S S Y A W T V T R G I   I S G K N R L
UniRef90_W2BXU8      Y G N S S K L A V G D H V V A I   G N P L G E L S N T     A S T G I   I S A L N R K
UniRef90_E8N3F4      L A D S S Q V Q V G Q L A I   A I   G N P F G L S N T M T     V G I   V S A T G R T
UniRef90_E6SIM9      D S R Q L K P     G Q A V I   A V   G N P F     G L G T T V T M G I   I S A V D R T
UniRef90_L7V981      K A A V P V T   G I   A T D L K V G Q L L C K F G M K T G R E C G Q V T D I   S A S
UniRef90_UPI000381D082  F G D S D Q V Q V G Q S V I   A I   G S P L     G L A S T V T T G I   V S A L N R P
UniRef90_V5SGS8      F E D S D S L E V G D M V L A I   G S P F       G V G Q T V T S G I   V S A L A R T
UniRef90_E4KQT6      A K S E D V K V G N I   A I   A   I   G S P I   G   S E Y A S S V T Q G I   V S G L D R Q
UniRef90_H7EJR7      F G N S N N L K V G Q K V I   A I   G N P F A L E R T M T T     G I   I S G L G R P
UniRef90_C5VQW6      I   G       P I   N R T S F T Q I   G E K V K K V G A T T E L T T G I   I K T K Y T S
UniRef90_S3JLS6      F G D S S K L K V G Q K V I   A I   G N P F       G L D R T M T T G I   V S G L A R P
UniRef90_UPI000262721D  G N S D D L N V   G Q S V V A I   G S P F E L A G     T V T S G I   V S A L H R P
UniRef90_A0A023NPJ4  D R Q P V R     T G D V V L A I   G N P L     G L N Q T V T M G I   V S A L G R
UniRef90_Q1MYN8      F A Q D A S L N V G D V T L A I   G N P F       G V G Q T V T M G I   V S A T G R N
UniRef90_UPI00047C24CF  D S S S L R     V G D F V V A V   G N P F       G I   G Q T V T S G I   V S A V G R S
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UniRef90_A0A023UKD7  G D S S K V Q V A D S   V I   T I   G S P F     G L D L T V S R G I   I A G L R R A
UniRef90_K2F963        V V S L G D S D L K I   G Q S V I   A I   G N S L G E F S G I   V S G L K R N
UniRef90_B5JRN9      P S E S H R     V G D V A L A I   G N P F       G V G Q T V T M G I   I S A T G R D
UniRef90_K0JRX7      F G N S D D L A V G D A V L A I   G S P L S L S N T V T E     G I   I V S A L H R P
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UniRef90_N9ALI5          G D V G R L R V   G E P V L A I   G S P F G F S A G I   V S A K M R
UniRef90_W9GZA6      F G D S D T A R V G D W V I   A I   G N P F G L G G     T V T S G I   V S A R G R D
UniRef90_K9EX53      F G D S E G L T L G E P A V A I   G S P L G S D F A L S     V T S G V V   S G V N R T
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UniRef90_W8RXK6      L G D S E S M R V G D W V M A M G N P L     G Q G F S V S V G V V   S A R G R E
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UniRef90_J2LBY5      M R S T A D L A P G D Q V M A V   G N P F G I   G P S A S Q     G V I   S G L K R N
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UniRef90_C7JEP2           I     G T S P F D D F L Q L D A P I N P G N S G G P T F N L A G Q V V A L N T A
UniRef90_G4KXT4           I N V   D G T P F N M I Q T D T S I N P G N S G G P L F N E Y G E V V G I
UniRef90_F4ABI0           I R V N Y D I Y K E Q I L T T Q M A E G G D S G A V L L D K N N Y V V A L L M S
UniRef90_W5TT10           T E G V S K T V R G F A S T   A C T L G G D S G G A I V   S G T L A L G I T S G
UniRef90_C7MVJ7           V T A P G E V T Y D A I Q T D A A I N P G N S G G A L V D S T G A L V G I N S
UniRef90_U1HKN2           Q V G I T D Y Q F F I Q T D A A I N P G N S G G A L V D M T G R L A G I N T A
UniRef90_UPI0004781094    Q L G I N T F E N F I Q T D A A I N P G N S G G A L V D I H G N L V G I N T A
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UniRef90_W9RS53           I F S Q T G T I S G G I Q T D A A I N P G N S G G P L L D S K G N L I G I N T A
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UniRef90_R6UDB1           C N I S Y D G V T N T I K Y S T D S E G G D S G G P V Y F N G G G L I G M H F A
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UniRef90_M2C5Z1                        S S G S G S I I D E S G L V L T N A H V I S E
UniRef90_G7Z5U7                  G R S G A L G S G F I I D P A G F V V T N N H V I D G
UniRef90_UPI0002F5FEE6                 L G S G V I D A E K G Y I L T N N H V I A D
UniRef90_A0A014LHJ0           G N N G E S G T G T G F V Y D K Q G H I L T N N H V V A S
UniRef90_K6WYK1                         V G S G V V L S P D G Y V L T N N H V V A G
UniRef90_W7SAJ7        G L P V V V Q I A N S Q G L G S G V V I S S D G L V L T N N H V I A G
UniRef90_UPI00047B1ED8                        N D T A Y I V T N N H V I Q N
UniRef90_A0A017HJI6                    L G S G F V I S D D G Y L V T N N H V I E G
UniRef90_R6N5B2       S P I S S G S G I V F S E D G H I V T N S H V I G D S N Q Y P V   K V V F T
UniRef90_T1D2C9                        L G S G V I I N A R G Y V L T N D H V I R H
UniRef90_Q5HQE2                        I G S G V V Y G D S I Y I F T N A H V V G D
UniRef90_UPI00038253EF              S L G S G V I V S P D G Y V L T N E H V V R D
UniRef90_C2KX85                                 I V T N K H V V E D
UniRef90_B3ECV9            Y S G S A S S C P V A N S I             A E A C N L V
UniRef90_UPI00046EB8F4             L G S G V I V S D D G Y L L T N N H V V K E
UniRef90_W7J1W4                        G S G V I S D G L I V T N N H V V E V
UniRef90_UPI0002EA586D                   V V I D A K Q G H I V T N Y H V I N G
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UniRef90_UPI000363974C                 L G S G V I D S E K G Y I V T N N H V I E N
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UniRef90_V5XLA1                            G G S A Y I V T N N H V V D G
UniRef90_N0CUM0            L H V S G T A E S G T G T G F V L D A R G H I L T N N H V V A P
UniRef90_R7Y0T9                              S D G T I L T N N I A V
UniRef90_D5UWU0            C T M G F A V T A N G E R L G V T A G H C G S A
UniRef90_G0FZ55                        G S G F V I S T D G Y L T N N H V V E V
UniRef90_B3PU64                        G S G F F I S E D G Y I V T N N H V V S D
UniRef90_C3BV13
UniRef90_UPI0003755E47          G Y N L T H G S G V I I R S N G W I V T N A H V V D G
UniRef90_UPI0003A69C39            A G S G F F I S A D G L L V T N Y H V V S E
UniRef90_UPI0004665B7B                      T N N H V V A S A A D G G T
UniRef90_A0A011P5X2                 L G S G V I M S S N G Y I L T N K H V I Q D
UniRef90_U3C271                     L G S G V I N A D K G V V T N Y H V I K G
UniRef90_V4JKE4                     L G S G V I M S S D G Y I L T N Y H V I N S
UniRef90_UPI0004789D9B                   V N G K D A Y I I T N A H V V E G
UniRef90_A9B6Z5                     L G S G F L V D D D Q G H I A T N N H V I E G
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UniRef90_UPI00021A85A7  D F Q T G K P F N I S N G S G F I V E S D G L I L T N A H V V T A
UniRef90_H5YFQ0                      G S G F F I S A D G Y A V T N N H V V D H
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UniRef90_B8I3E3                        G T G V I Y R S S G Y I I T N A H V V K D
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UniRef90_I0JTH8                    V G S G V I Y D G T A H V V T N N H V I E G
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UniRef90_A0A033UZ49                V G S G V V N K K A Y I V T N N H V V S S
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UniRef90_K1Z128                    T G S A F F I N D E G Y L V T N A H V V N E
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UniRef90_UPI00036F1BDF     L H V S G S D E Q G T G T G F V L D G R G H I L T N N H V V G P
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UniRef90_A1SFZ1                    T G S G F V L D R Q G H V I T N N H V V D G
UniRef90_UPI00042B8383                       V Y I T N L A V V T L
UniRef90_R7HGD8                       I D G N D T Y I V T N N H V V D G
UniRef90_G8PBY0                          K N G N T A Y I V T N N H V V S G
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UniRef90_I0YRJ3                                         G A D
UniRef90_I3CY20                     G T G F Y I G S S G W L L T N Q H V I G Q
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UniRef90_V4JKE4        A D Q I I V D G R Q Y Y G V L I G F D T I T D L A V I K V   N E D H L P V I P
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UniRef90_V3TVN3        A D Q I I V T L Q D G R V F E A L L V G S D D L A V L K I E G   T N L P E I P
UniRef90_I0JTH8        A S E I E V D E T R I K A Q L V G S D V F T D L A V L K   M P G D Q V K H T I E
UniRef90_UPI00036D62E8 N P S A T I K V E L S N G D Q Y P Q D P G Y D I A V L Q I Q M G N   L P V V A
UniRef90_A0A033UZ49    D K T A A N G K Y D G K V L G S D Q W S   D I A V L T I P I E K T D F K P I K
UniRef90_U2M5L4        Q I Q M S D E E T T Y D A R I V A Y D K E A D I A V L K I D A D N L T P A E F G
UniRef90_V9G8M1        A D T L E V G E K R T A T L V G T   D R V S D I A V L S I D S K G I G E V A   E
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UniRef90_A0A022L2L0    G A A G G Q I E V R F H A T I V G T D P A T D I A V I R A E T D R S L T P   I A
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UniRef90_I3CY20        A R A V R V S G R E L L A E V V R V D A A R D I A L L K T E A P G V R P M P L R
UniRef90_D4JM81        S E E L T V D D S V V K A E I R G T D P D D D L A L L V R V K K A D L G K   D T Y
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UniRef90_UPI0003604742 V R G L S P P N A Q G Q Q R I G T G T G V V I V D E G L I L T N L H V V M G
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UniRef90_UPI0003B77404                   S S G S G V I I G Q N D S I V T N N H V V E D
UniRef90_D6BC13                                    T N N H V V A S A A D G G K
UniRef90_UPI0003B657C4          G G R A G H G S G F A I S P D G L V V T N N H V V D D
UniRef90_E0RW79                          V G Q N D S E L L I A T N Y H V I E G
UniRef90_H2G840              G V C T V G F V D T E N N R V W T D A H C G E N
UniRef90_A9B7M5                           G S G A I I N E D G Y I I T N N H V V E G
UniRef90_L8PFF6             L H V S G S E E Q G T G T G F V L D D R G H I L T N N H V V E P
UniRef90_UPI00031B91D9                   V G S G F L Y N T R G D I I T N A H V I D G
UniRef90_R9GUY0                           G S G V I V S P D G Y I V T N N H V V E K
UniRef90_F2NW48          P I V T E S G S G S G S I I D K R G Y V T N V H V I E K
UniRef90_F6ERC6                           G S G V I L T S D G L I V T N N H V I A P
UniRef90_G8RRV8                   C T L T A I G D D N R G N L I G T S A H C G G P
UniRef90_R5ECH7                          L G S G V I D A A Q G L V V T N N H V I D S
UniRef90_UPI000381AA7B         I H T Q G S S E Q G T G T G F V L D D R G H I L T N N H V V E P
UniRef90_F0LWC9                          L G S G V I V S E K G Y I I T N Y H V V A Q
UniRef90_E3YLT2             T S S E Q E A S S G S G V I Y N G K A Y I V T N N H V V A D
UniRef90_F6ENG9                   C T L T T I G Y D N G G R V G F T A G H C G G P
UniRef90_UPI00037E0DCD                   G S G S V I S D D G L I L T N N H V V A G
UniRef90_F9U6H3                A S R T G L G S G V I L S P D G F I L T N R H V V Q G
UniRef90_A0A024JZV3   V S P G M E I L Q D N R L C T L G Y V D Q A A R V A Y T A G H C R S T
UniRef90_D7A945         R P G P R A Y D G S G S G V I F D A A K G L L L T N N H V I E G
UniRef90_UPI000380B963      L H V S G T A E S G T G T G F V L D N R G H I L T N N H V V A P
UniRef90_R6DQM6                           A G S G I V Y S E D G Y I I T N N H V I S G
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UniRef90_UPI000369F61A                    I G S G V I V T P D G Y T I T N A H V I T A
UniRef90_H3KH35                          L G S G V I V S K D G H V L T N Y H V V E E
UniRef90_UPI0004273721                   G S G V V F D G R G H I V T N A H V V A G
UniRef90_U5N4J4                           V V V D A A R G L V L T N H H V V Q G
UniRef90_UPI00035EAB03                           Y I V T N N H V V D G
UniRef90_L7V6T7       V F P G M E I H Q D N H V C T L A W V D P A M H M A F T A G H C R G D
UniRef90_E4L1W3            N G Y S I Y S E G S G V I Y G K E Y I V T N N H V I D K
UniRef90_UPI000360D10F                    G N S A Y L V T N T H V V A G
UniRef90_L0DKN4                           T G S G V I V R A D R Y V L T N N H V V D G
UniRef90_G2LFT4          V S E D G G T S I G S G F C L D A K G E I V T N F H V G G P
UniRef90_E6TT59                           S I G S G F L Y N D M G D I V T N A H V V A G
UniRef90_K0PV70                           T T G T G V T D A R N G Y I L T N N H V I E G
UniRef90_U2YYJ8
UniRef90_X1QTB4
UniRef90_UPI0003B317F0                    L G T G V I A T A T G A V L T A N H V I A D
UniRef90_B7AA12
UniRef90_UPI00036B4984                  S L G S G V I K G G K A R I I T N A H V I Q G
UniRef90_UPI000475D8BC                     V I S K D G Y I L T N N H V A T A
UniRef90_C9R3V8                          L G S G V I M S K D G Y I L T N K H V I Q N
UniRef90_E6LI69                            K S G D T A Y I V T N N H V V E G
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UniRef90_S6C2P0                            K K D G K A Y I V T N N H V V S G
UniRef90_UPI00035D1DB9                  L G S G V I Q G G K A I M T N N H V V E G
UniRef90_X1A2K2       P I P G G V S I G H P S I T A G T H G V S L K F L G I P D G L S N N H V L A A
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UniRef90_M5UQL4                           A G S G V V I A G D R W V L T N R H V I K G
UniRef90_UPI0003B7A11F                   L G S G I I I D K K G Y I L T N F H V V A Q
UniRef90_A4WF47                         T L G S G V I M D E R G Y I I T N K H V V D G
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UniRef90_K7IR33        D L F T G K P A T A S N G S G F I V K E D G L I L T N A H V V K P
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UniRef90_C7R0P2         A I E V D A Q S G S G Q G S G V I I D S D G R I L T N N H V V E S
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UniRef90_R9KZN3                             I V T N Y H V V S G
UniRef90_T0ZLM6
UniRef90_UPI00036E5CD7                    I G S G V I L T A D G R I L T N N H V V D G
UniRef90_W9G5G9             I Q V S V D G G S D T G S G F V V D T R G H I L T N N H V V S A
UniRef90_C6WG55       G T V V R L A S N E Q C V N G F T V E D H L L L P P D C V P R
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UniRef90_R6T1L3        G S G I V M S E D G Y I V T N A H V V D G A Q S I S V V L P D S Y N D
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UniRef90_L0J7D8                           T G T G M V I D P G G A V L T N Y H V V A G
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UniRef90_M8CFJ7          E D S T G T S Y S K E G R L I G   Y D P T Y D L A V L K V D D V D G D R L R P A L
UniRef90_UPI0003604742   A Q V V F H D G H E A E A D V V A V Q P E N D L A V I K P R S P D L Q P A T L
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UniRef90_UPI0003B77404   N D S L S I T F Y D G A K A A G Y I K G T D D L A V V S V K L D D   I S V D T L
UniRef90_D6BC13          L S A T F S N G K K V A E V V G R A E G Y D V A V L K L R N S D G P A P L P L
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UniRef90_A9B7M5          Q S R L Q V I Y S D G T S H N A E L I G T D D I A V I R V L D A V   P A T I S
UniRef90_L8PFF6          A G D D G E I T V T F H S T V V G R D G G Y D L A V V K V T G V S G L E P L P L
UniRef90_UPI00031B91D9   A K T I N V T M S N T E T Y P A A I G E D Q D I A V I R V P Q L I N Q K P   I P
UniRef90_R9GUY0          A S K I E V D N R S Y E A K V I G R D P N T D L A L I K V   A A T G L P V V K
UniRef90_F2NW48          A S V I N I S L A D G T T Y E G T V V G Q D D I A V L K F E P A K A D L K T I S
UniRef90_F6ERC6          S G G T F Y D G T T A T G R V I A G D P N T D V A V Q V E G R T D L T P A T L
UniRef90_G8RRV8          G A K V G A E G A P N A G E L G T M V A G N D A L D Y A V I Q F D P A K V R P V
UniRef90_R5ECH7          A D E I K V Q L S D G R E F D A K K D A H T D L A L L K L K E F K N L T Q I D L
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UniRef90_UPI00037E0DCD   S V V T M H D G K H Y R A D F V A G D S D T D V A V I K L R D A H D L T V M T F
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UniRef90_UPI00035DFF37   A T E I E V D G R E L K A E L I G T D A Q T D L A V I K V T E E G T   Y P F V E
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UniRef90_E4L1W3          T D R I E I L L A D G S K V V G K L V G A D D L A V V K V S S E K I K T I A K F
UniRef90_UPI000360D10F   A E Q I E I K L A D G N T V K G T L V G S D T Y S D I S V I D A S V T T V A E
UniRef90_L0DKN4          A Q P E K I D G T A I R P N R T W L D A K A D I A V L G L   G R D D L P A A R
UniRef90_G2LFT4          I L A V T Q D G R I L T A S V R G Y D E A T D L A L L E V D L G Q Q P L P T L P
UniRef90_E6TT59          V N N V T V D S R Q L Y G T V I G I S D T I D I A L V R V D D L A G T D P   L
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UniRef90_U2YYJ8                          V V G R D P G H D L A V L R I E G R D L P A P L
UniRef90_X1QTB4                          N D L A I L K I D A Q K   L P A L K
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UniRef90_U5WI85          G A V S D R D N N V I G S T V A T D Q S I D D Y E A I A L V D G V R V S D V L P
UniRef90_S6C2P0          S D K L E V I L S D G T K L T A S T D S T S D L A V L T I D G S K V T T V A S F
UniRef90_UPI00035D1DB9   S N Q V T V D G E T K K A K V I G K D H T D I A V L S V D D K N I R T V A   E
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UniRef90_B7G9W1                                     P A L D V A V L K I V T P K E T S P W L A
UniRef90_X1BKB7          E T R V T V F V K T K D G F E K K K F K K V D L A L L K V E D E G L K T T Y V P
UniRef90_H6RAR8          G A Q V Y A G Y G P I G K F V F S N H E   L D Y A V I Q F D P N R I T P V N R I
UniRef90_B5GQ35          G G S I R V T F S G G T V R A S K D S G Y D L A V V K V T G V S G L T P L P L
UniRef90_A0A024Q180      A D V L Y V N A Q I Y P A A V V G V G E E K D V A V I R V P Q L A D Q N L N V E
UniRef90_UPI000225AD63   A T E V S   I K T I S G V E Y P G T V I G Y S N E T D I A V V Q V P D L
UniRef90_A8M1V8          A S V V F S D G S S S P A T I V G Q D P E S D I A V I R V M   K
UniRef90_R5P5D9          A D S L Q V Q F I D G E V T D A A I K G T D D L A V V A V K L S D I K K S T L T
UniRef90_C3YIW2          K R Y V K V D G R L L D G V V T L V D Q A A D I A A V K I I N C N T P L K T V K
UniRef90_R6ADH6          F H T V D N D R N P Y L A K V V L V N P S L D I A L L A V D A D F S V L P E L S
UniRef90_K5YX94          A A Q I T V T L D N G E K F T A Q L V G A D D L A V I K I H P S K P L Q P A R W
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UniRef90_K7IR33          N S I V K V R L Q D G S T Y T G D I D V Q S D L A T V R I   N K T K L P V M K
UniRef90_UPI00037A15CB                                                               P W P K A V
UniRef90_A3WPY9          A S E I V V N G R E Y D A K L V G R D E Q S D I A L L Q I E D A E D L T D I E I
UniRef90_C7R0P2          G E Q G T D D G R I F D A T I T G L D A A T D L A V I T L T D P P A D L V P A I
UniRef90_UPI00047ECDD7   S G S V T V N G D Q K E A K I V G K D T I T D L A V L E V D D K G I D T V A   D
UniRef90_R9KZN3          G T E L T V V F S Y   D E D S D D P S I V T A K I K G Y D A D K D L A V I A
UniRef90_T0ZLM6                              D P M T D I A V I K I   N A R T L P T V T
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UniRef90_W9G5G9          A A D S G D I T V L L G D T E K A R I V G R D Y D L A V L K M D R T D L K P L Q
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UniRef90_T1IQJ2          R A S V I V D G R I F N G L V E D I D S V S D L A T V R I Q C K N   L P V M K
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UniRef90_E0RW79        L G D S D A L V L G E P A I A I G N A L     G Y G Q S V T T G V I S A L N R Q
UniRef90_H2G840        G Q N Y F S Q N T I A R D P A V G D N L C N Y G G R T S V V C T P I T N I N G P
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UniRef90_UPI00031B91D9 L E T S E K L L P G A E I I A V G S P L     G F Q N S V N I G I I S G L D R S
UniRef90_R9GUY0        L G N S D N V Q V G E W V L A V G Y P L T L     Q T T V T A G I V S A K G R S
UniRef90_F2NW48        F G N S G S L K V G Q K V I A I G N P F A L E R T M T T     G I I S G L G R P
UniRef90_F6ERC6        G S S S D L R V   G Q D V V A V G S P L G L D G     T V T S G I V S A L H R P
UniRef90_G8RRV8        N N V E G F Q I D G G P D P V P G D I A C K Q G R S T G Y S C G
UniRef90_R5ECH7        A D S D S L E V G D F A V A   I G N P     Y G L G Q T V T S G I V S A L G R T
UniRef90_UPI000381AA7B G N S E N V Q V   G D P V V A I G A P F D L     A N T V T S G I I S A K E R P
UniRef90_F0LWC9        Q N P N Y Q A K V G D V L A I G N P Y N L   G Q T     T F G I I S A T G R S
UniRef90_E3YLT2        F G D S D S L K L G E P A I A L G S P L G T E F S G S   V T Q G I I S G L N R A
UniRef90_F6ENG9        G P T T I T     G T G G P A H F P E L V C K Q G R S T G H T C G I S V F V D
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UniRef90_UPI000360D10F F G N S D N L V G E V A I A I G S P L G T E Y A N S   V T Q G I V S S L R T
UniRef90_L0DKN4        L G D S D A V P V G T W V L A L G S P F     G L T H S V S Q G I I S A R G R H
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UniRef90_B7G9W1        F G A S S D L L V G Q G L I A I G N P F     G L D N T V T T G V V S A L N R E
UniRef90_X1BKB7        L G D S D R I K V G E E V F A V G N P L     G L E R T V T N G V I S T R N R P
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UniRef90_A8M1V8        D G L R P V A F G D S E A L A V G D P V L A I G S P N T V T A G I V S A L D R T
UniRef90_R5P5D9        L G D S D K L E V G E G T I A I G N A L     G Y G Q S V T T G I V S A L N R D
UniRef90_C3YIW2        L G N S S T L R P G E W V V A M G S P L S L S N T I T A G V I S S V Q R G S R E
UniRef90_R6ADH6        L A A D D S L A I G G K V S V A G Y P     Y G M P F T V T E G S V S S P K
UniRef90_K5YX94        G D S S K V Q V   G D W V L A A G N P F A L G N S F T     L G I V S A E G R D
UniRef90_I3TF67        L G D S R Q I R V G E I V L A V G S P L G L     F E H S V T M G V V S A T G R N
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UniRef90_K7IR33        L G S S E K L R P G E F V V A I G S P L A L S     N T I T S G V V S S V S R Q
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UniRef90_C7R0P2        F A D S N D V T V G D S V I A I G N P L     G L S Q T A T T G I V S A L N R P
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UniRef90_R6FXF5         V S L T D G T   M N L L Q T D A A I N P G N S G G V L I N M D G Q V V G I N N A
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UniRef90_A9B7M5         I D S M E G       L I Q T D A A I H G N S G G P L I N L K G E I V G I N T
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UniRef90_UPI00031B91D9  F D I D D Y H Y T D V Y Q I S A N I T H G N S G G P L I D R T G K V V G I N S A
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UniRef90_F2NW48         I Q S A N V I I R N M I Q T D A A I N P G N S G G P L L D S Q G R M I G I N T M
UniRef90_F6ERC6         V S A D Q Y T V I D A I Q T D A A I N P G N S G G A L V N M D G E I V G I N T A
UniRef90_G8RRV8         V T W G P G E E P G T F I N Q V C G Q P G D S G A P   V T V N N R L V G M I H G
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UniRef90_E3YLT2         V P V D E D W E A D V I Q T D A A I N P G N S G G A L I N I E G Q V I G I N S
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UniRef90_D7A945         S G Q A Y E E L I Q T D A R I N P G S S G G A L I D A R G H V V G I T N A
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UniRef90_UPI00035EAB03  V P V G D G T Y D N V I Q T D A A I N P G N S G G A L I D R A G N L I G I N
UniRef90_L7V6T7         W F T M T G G V E         S Q R G D S G G P V Y L A G G Q L V G I F N S
UniRef90_E4L1W3         V T L G Q T I S T N A I Q T D A A I N P G N S G G A L I N I E G Q V I G I N S S
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UniRef90_UPI0003B317F0  A D T N N G Q F S G L I Q F D A S V N P G S S G G P L L D S K G N V V G I V V S
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UniRef90_X1A2K2         V S V G Y G D F H N Q I I T D V M G D P G D S G S A V L D M S P N L V G L L F A
UniRef90_B7G9W1         L R T R G N D I R N C I Q T D C A I N P G N S G G P L L N L K G E V V G V N T A
UniRef90_X1BKB7         F       E G L I Y     I Q T N A D I N P G N S G G P L F N L A G E V V G V T N M
UniRef90_H6RAR8         T N Y E         T W A Q M C V V E G D S G A P V V V   G S T L V G M V N A
UniRef90_B5GQ35         I T A G D V S Y V D A L Q T D A P I N P G N S G G P L V D T T A R V I G I N S A
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UniRef90_A8M1V8         M R A G E T R Y Y A A I Q T D A A V N H G N S G G P L V D G A G R V I G V N S T
UniRef90_R5P5D9         V Q Y E N R T M K   L I Q T N A A I N P G N S G G A L L N S K G E V I G I N A A
UniRef90_C3YIW2         L G L R H N D   M D Y I Q T D A A I N F G N S G G P L V N L D G E V I G V N T
UniRef90_R6ADH6         Q L M E G K Y Y       I Q T D A A V N P G N S G G P I F N E N S E V V G V T V S
UniRef90_K5YX94         I     G E G P F N H F L Q L D A P I N P G N S G G P A F N M Q G A V I G I N S A
UniRef90_I3TF67         I I Y T E E L M L E D L V Q T D A A I N P G N S G G P L V N L R G Q A
UniRef90_G0CPI8         V R T G Q S S L I D A V Q T D A A I N P G N S G G P L V D S D G N Q I G V N S V
UniRef90_M5UQL4         L G E E R I D L Q D F F Q T D A A I N P G N S G G P L L N L R G E V I G L N T A
UniRef90_UPI0003B7A11F  G M S N L G R   Q D F L Q T D A A I N E G N S G G A L I N S R G E L V G I N
UniRef90_A4WF47         G L N P S G R   Q N F L Q T D A S I N H G N S G G A L V N S L G E L M G I N T L
UniRef90_E0WUF9         V G L S D S G R Q N F L Q T D A S I N R G N S G G P L V N S L G Q L V G I N
UniRef90_K7IR33         S E E L G L H H K H M I Q T D A A I T F G N S G G P L V N L D G E A I G I N
UniRef90_UPI00037A15CB  V S G I Y D K R F N L I Q T D A A I N P G N S G G P L L N A N G E V V G I N T
UniRef90_A3WPY9         A N L G I E E L E N F I Q T D A A I N S G N S G G A L V T L D G K L I G I N T A
UniRef90_C7R0P2         V T T A Q T V V T N A I Q I D A A I N P G N S G G P L F N A Q G E V I G I T S S
UniRef90_UPI00047ECDD7  I P V S D G N Y D W V I Q I S A P I N P G N S G G P L V N L D G E V V G I N S
UniRef90_R9KZN3         V T V S D G T I T N L I Q T D A A I N P G N S G G A L L N M N G E L I G I N
UniRef90_T0ZLM6         N M G I E Q Y E N F I Q T D A A I N P G N S G G P L V N L R G V G M N T A
UniRef90_UPI00036E5CD7  V T I P G Q V S Y K A I Q T D A S I N Q G N S G G P L F D T S G R V I G I N S A
UniRef90_W9G5G9         V S P G G G N Y I N A I Q T D A A I N P G N S G G P L D M S G K V I G V N S A
UniRef90_C6WG55         V N W A E G T V T G L S E L R V C A S G P W N W A P V V D   G S L A V G H V L G
UniRef90_F4ABK7         V N Y S D D K F K D Q I L T T H M G A D G D S G S I L V N K N N C A V G L L F S
UniRef90_K4ILM5         V S V M D E S V T N A V Q L Q T D A A I N P G N S G G P T F N A A G E V I G I N S
UniRef90_UPI0003823388  V S S G T G Y R N D S S A Y Q V A I N P G N S G G P L L D G S G N V I G I I S G
UniRef90_UPI0003692AE2  T G L K D D P A F F Q V S L P I Q P G N S G G P L F N E R G E V I G I T T A
UniRef90_R6T1L3         L T V E D R T   M N L I Q T D A S I N S G N S G G P L I N A Y G Q V I G I T S A
UniRef90_D5VG14         V N A E A D F G S Y F I Q T D A A I N P G N S G G P L V D M D G D L V G I N T F
UniRef90_T1IQJ2         S K E L G I R H K N M I Q T D A S I N V G N S G G P L V D G D E A I G I N T
UniRef90_L0J7D8         V N A E D E E V N G L I E V A A D V R P G D S G G P L I V N G S G Q V G V V A A
UniRef90_D2AQB4         V S S P G A T I T G A I Q T D A A I N P G N S G G A L V N L S G E V I G I P T L
UniRef90_Q1AY91         I P V Q I P S L T L I Q T D A A I N P G N S G G A L A N A G G E V I G I N V A
UniRef90_J3FB61         V T S G E T I S T N A I Q T D A A I N P G N S G G A L I N I K G Q V I G I N S S
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                                    170             180             190
UniRef90_E6RKG9        Q F K T R E N L N I G I F F A V P Y T L A K E V M G K L I R H G   R V V R G
UniRef90_R6FXF5        K L E D               T S V E G M G Y A I P I T T A
UniRef90_M8CFJ7              T F T R K G S G I S S G V N F A I P I D T V
UniRef90_UPI0003604742  I L N P T E H R V F V       G I G F A V P I E N A A A V G L S
UniRef90_K2AMM3
UniRef90_UPI0003B77404            N K I G G A S V E G M G Y A I P I N R A
UniRef90_D6BC13        I Q S A G N G G G S G A G S V G L G F A I P I N Q A K N V A E Q L I K T G
UniRef90_UPI0003B657C4  V I Q G A Q S I A F A V A S
UniRef90_E0RW79        K I G G D T V E G M G Y A I   P I S A A K P I I E Q L
UniRef90_H2G840        S D V I W R S       D V G D F T T T V F R K I A D
UniRef90_A9B7M5          L V V R G D L G S I D E A Q G L G F A V P V S D A L I A N G
UniRef90_L8PFF6        I R S A D S G S D S G Q S G S I G L G F A I P V N Q A
UniRef90_UPI00031B91D9  G I E D S D I G           F S I P I S A I I D D
UniRef90_R9GUY0        I A S Q T G Y Y         A G Y G F A I P V N
UniRef90_F2NW48        I Y S S S G S S A G V G F A I P A S T   A R R V V S D L L K Y G
UniRef90_F6ERC6        I A T L G A M P G V   N P G S I G L G F S I P I D Q A
UniRef90_G8RRV8        A F S Q D
UniRef90_R5ECH7        I M A P S     G G N I G I G F A I P A N M V K T V T E Q L L K F G
UniRef90_UPI000381AA7B  S S G S G S E L D G G Q A G S I G L G F A I P I N Q A
UniRef90_F0LWC9        S F Q Q A T E M E         T Y G I S F A I P
UniRef90_E3YLT2              M K I S M E N V E G I S F A I P S N T V
UniRef90_F6ENG9
UniRef90_UPI00037E0DCD  I A T T S A G   G S D T A G S I G V G F A I P S N Q A
UniRef90_F9U6H3        I F T E   T G T A Q G I G F A I P T E I A I D V A R A L A T Q G
UniRef90_A0A024JZV3    I F N S M W G D F P A A V S W R S T S
UniRef90_D7A945        S Y L D D L N D E T G I N Y A I P S G L A L R I A R Q L A D A G
UniRef90_UPI000380B963  I R A A D S G K G G G Q S G S I G L G F A I P I N Q
UniRef90_R6DQM6        K S S G S D V E G L G F A I P A D T
UniRef90_UPI00035DFF37  I   F S P T G G S V G I G F A I P A E L A V T V T D A L I K D G
UniRef90_UPI000369F61A  I I S Q T R         S S I G I G L A I P I N
UniRef90_H3KH35        I F S P E H S E G F G I G F A I P T S I I R Q V L P A M
UniRef90_UPI0004273721  A A S D P S I G G       A A N G F A T P S G T V
UniRef90_U5N4J4        G G R G G Q G G N I G I G F A I P T S M A Q A V L D Q I I R F G
UniRef90_UPI00035EAB03        A M K V N S P T V E G I G F A I P S N E V
UniRef90_L7V6T7        I W G D F P A A V S W Q R T S D
UniRef90_E4L1W3        K I S Q S N A S G N A V       E G M G F A I P S N D V I
UniRef90_UPI000360D10F  K I T S S S A S L S S S V S V E G M G F A I P A N D A V A
UniRef90_L0DKN4        I A S N G G G N       E G V G F S I P M N     L A H W
UniRef90_G2LFT4        V L A R G Q G L G F A I P V
UniRef90_E6TT59        A A D Q           G S I G F S I P I I D V L
UniRef90_K0PV70        I L G P S G       A N I G I G F A V P I N T A
UniRef90_U2YYJ8        I S G A S A G I G F A V P P S L G L G F D A R I N A A V N R Q G L T
UniRef90_X1QTB4        K I A T I G V E G M G Y A I S T E T     A I P I I E E L I K L G V V L Y T
UniRef90_UPI0003B317F0  I A D P G H D D A F A       G I A F A V P I G T A I
UniRef90_B7AA12        I F T P T     G Q F G A A Q F A G V G F A L P I N L V K Q Y L
UniRef90_UPI00036B4984        M K V A D M G V E G I G F A I P I H D V M
UniRef90_UPI000475D8BC    I Y S P G S G T G Q A G S V G L G F A I P V D Q A
UniRef90_C9R3V8          S T L S I G K T S N E I A E G L N F A I P I D
UniRef90_E6LI69        K I A S S S S S S G V S V   E G M G F A I P S N D V
UniRef90_G8AEB7
UniRef90_U5WI85        V W G Q Y P A A V S W Q A A S D
UniRef90_S6C2P0        K L S G S S S S S D S A T I E G M G F A I P S D E V V S
UniRef90_UPI00035D1DB9        M K I A D M G V E G L G F A I P A N E L M
UniRef90_X1A2K2        G             S E Y V T I H N H I R N V L S A I G
UniRef90_B7G9W1        I V T T S G         S S A G I G F A V P S D E V
UniRef90_X1BKB7        G Y I F L G G L G F A I P V D
UniRef90_H6RAR8
UniRef90_B5GQ35        I R A A D T G P G T G Q S G S I G L G F A I P I N Q
UniRef90_A0A024Q180    G T E D             G L I G F S I P M N E V L S D
UniRef90_UPI000225AD63  E S I E D A S I G F S I P L       Y T V H S L I D S W I N Q
UniRef90_A8M1V8        I K S I A E G H E A G N     I G L A F A I P I N Q A
UniRef90_R5P5D9        S S S S V E G M G F A I P V S
UniRef90_C3YIW2              M K V T T G I S F A I P I D K V
UniRef90_R6ADH6        K F T N A D N M G F G V
UniRef90_K5YX94        I   V S P S G G S V G I G F A I P S N S A A P I V A Q L I A H G
UniRef90_I3TF67
UniRef90_G0CPI8        I S Q R Q P Q A G A P R A G S I G L G F A I P
UniRef90_M5UQL4        I A S S S G G S E G I G       F A I P I N
UniRef90_UPI0003B7A11F      T S E F Y A T S K N I S S G I S F A I P
UniRef90_A4WF47        S F D K S N D G E       T P E G I G F A I P
UniRef90_E0WUF9        S F D K S S N G E I P       E G I G F A I P
UniRef90_K7IR33            A M K V T A G I S F A I P I D
UniRef90_UPI00037A15CB      L I R S G P G A G L S F A I P I N K A
UniRef90_A3WPY9
UniRef90_C7R0P2        I A T S G S S G S I G L G F A I P A N L A Q N I G D Q L I A N G
UniRef90_UPI00047ECDD7        M K V A D M G V E G I G F A I P I D D A M
UniRef90_R9KZN3            S V K V S S S S V E G M G Y A I P I S D V
UniRef90_T0ZLM6            I Y T T N G G Y       E G I G F A I P V T M V
UniRef90_UPI00036E5CD7  I I Y S P V S G S D   G S A G S V G I G F S I P I D T V K Q V V G
UniRef90_W9G5G9        I   A R V P G T T G S T G G N L G L G F A I P S D Q A
UniRef90_C6WG55        G                 A G C S L Y F L P I A P L L A G S G L R L V
UniRef90_F4ABK7        A S P N M T G             F N R L S T V L D Q L D V H L
UniRef90_K4ILM5          S I A S M A S S K S E A G S I G I G F A I P S N L V
UniRef90_UPI0003823388  K Q V S S E G A S F A I K T D
UniRef90_UPI0003692AE2  S
UniRef90_R6T1L3        K V S S S V G         E G L G F A I P I D E A L
UniRef90_D5VG14        I I S R S G S S S G V G F A I P A A V V K Q V V N A A L
UniRef90_T1IQJ2              M K V T E G I S F A I P
UniRef90_L0J7D8        A T V N F Q M G P A       G K G F A I P I N A A M A
UniRef90_D2AQB4        T A V N P E L G G G Q A P     G I G F A I P S N T A
UniRef90_Q1AY91        Y L P P Q T G I G F A I P A P V A T S V A D Q I I E V H P Y L G V S L
UniRef90_J3FB61        K I A S S S N S S N G V S V   E G M G F A I P S N D V V S
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Multiple sequence alignment

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                                  1          10          20          30          40
UniRef90_UPI0002898040                     A Y K C T A G F A V K Q H A T G Y L T T A G H C Y G N
UniRef90_F4BVD0                    Y D S N G N E L G Q G S G F I I S K D G G I V T C Y H V M R G
UniRef90_Q0S4Y2                                I V I S S D G M I L T N N A V A G A
UniRef90_UPI0002B4BC9F         I Y G I A S A K S M G S G T I I D K D G T I L T C A H V G K V
UniRef90_E7QN87                                G V G Y V V T N Q H V V A Q
UniRef90_R6FJH0                                     F V T N Y H V V E G
UniRef90_J2IHA0                           L G S G V I M S A E G Y I L T N Y H V V Y G
UniRef90_W7YKP8                           L G S G V I F K K T R G V I T N N H V I E G
UniRef90_UPI0003613C57
UniRef90_X8DFH3                                                     G V K
UniRef90_F9DUD4                                I D D K Y A Y I V T N N H V I E G
UniRef90_UPI000370BEAD          R T S L G S G V I M T E S G Y I L T N N H V V Q N
UniRef90_H2G1K2                           L G S G V I D A D K G Y V I T N N H V I D D
UniRef90_A4VYG9                                     Y I V T N T H V I N N
UniRef90_S2E1K8                         M G S G F V Y D N E G H I I T N Y H V V A G
UniRef90_N1Z1T9                Y D I D G D A L S S G S G F F I D K N G K A V T N F H V L E N
UniRef90_W7ZPT4          D L F G E G D A S E S G T G S G V I Y K A E G Y I V T N Q H V I D G
UniRef90_R4UPP6        V Y P G M E I I Q G T Q S C T L G F V D P G A R V G L T A G H C A T D
UniRef90_A0A037ZCS0           Y A N T E Q G L S Q G S G F L Y N S D G D I I T N A H V V G D
UniRef90_H5TRV4                         C T I G F T A H D P G R P I A I T A G H C A G D
UniRef90_M4AG77                        S N G S G F I I S S D G L I I T N A H V V A N
UniRef90_D8G4I8                           G S G T I V T P D G M V L T N A H V V S E
UniRef90_UPI00037856AB  I G P G T A I V M T E G E L C T I G F V V L P D G R K F A I T A G H C S A Y
UniRef90_UPI00037C36D3           T G S G I I L T S D G L I L T N N H V I A
UniRef90_A0B0S5                   G S G F I V S A D G L I L T S A H V V D E
UniRef90_L9W4P2                        D D S H V V T N D H V I D G
UniRef90_K9VU11                         G F I V S K D G Y I I T N A H V V A G
UniRef90_F5Y0L7                     A G S G F V F T Q D G Y L I T N S H V V R A
UniRef90_F4AAY6      P T L G G Y I I G N E Y D T V G T L G C L V T D G K N L F I L S N N H V L A G
UniRef90_UPI0003B4EBCB          S L G S G V I L G A G G L V M S N F H V V G E
UniRef90_N0B194                   G S G F F I T G D G Y L V T N N H V V K N
UniRef90_Q2IUH1                   G S G F I T A D G Y A V T N N H V V D G
UniRef90_D5WNE4       P V I S G S K V S V P S G S C S V G A V L V Q R A T R W L V L A K H C A P M
UniRef90_R6S6L2                   S V G S G I I I G Q T D S I L T N N H V V E G
UniRef90_H5Y5A6           G Q P L I L S N N H V L A N S S N G R D R R A K I L I L Q P G A I D G
UniRef90_UPI0003B6C24A     G Q S Y Q Q E S E G A G S G I I I A Q S D S E L I I T N N H V V S G
UniRef90_G2FUW9                   A A S G V I A S S D G K I F T N Y H V I D G
UniRef90_A0A024KF41               A G S G F V I S A D G Y I V T N N H V V K N
UniRef90_M5VZD5        G S G T I I N Q D G T I L T C A H A V V D F H G L R A S S K G K V
UniRef90_UPI0003955AFD            G S G F I V S E D G L I V T N A H V V T N
UniRef90_R7ZK45                 M C S G S G V I I H S S G Y I L T N L H V V G G
UniRef90_S4XFE8             I Q V T S G Q T A S E G S G S L I S S D G L I L T N N H V V S D
UniRef90_C3MMT3                     S G Y S I G K N V L I T S Y H V I S N
UniRef90_UPI00047EF055       T V G S G F L Y N H K G D I I T N A H V I S G
UniRef90_UPI0001E93048       S I G S G T I I D A D G T I L T C A H V V V D
UniRef90_Q2IMY4                   L G S G V V V D P D G Y I V T N A H V V A G
UniRef90_D4HUW8                   L G S G V I M D P R G Y I L T N K H V I N D
UniRef90_X1AK44
UniRef90_G5HT19                                I A T N N H V V D G
UniRef90_C5VSL9     P V P G G Y S I G I P E T Q T G T M G C L V T D G S D I F V L G N N H V L S D
UniRef90_H9GES8           Y T N K E I L V S S G S G F I V S E D G L I I T N A H V L T N
UniRef90_W6K6E9                  S L G S G F F I N E G Y V V T N N H V I E G
UniRef90_Q2PYC7
UniRef90_C6WJF1                  A G S G F V I S S D G L V V T N N H V V E S
UniRef90_D1PRL4            G G Y Y V Q S G A G S G V I I S Q D G Y I L T C A H V V S G
UniRef90_UPI00037A5BA5  L G G G S G I L F P T G G A C T L T T I G H D N N A L V G L T A G H C G K A
UniRef90_UPI0002F37834            S L G S G F L F E E K G T V I T N A H V V A G
UniRef90_UPI00046E6044            L G S G V I Y R K T G F I I T N N H V I S G
UniRef90_UPI0004636382            I G S G V V I D G A G Y I V T N N H V I S M
UniRef90_A6C4H8                     V I I D N K A G Y I L T A A H V I G N
UniRef90_D6ZFL0                 T G S G V I L S A D G K I L T N N H V V S G
UniRef90_A8M2P3                    G S G V I L S T D G Y V L T N N H V I A S
UniRef90_H0UZ52                  S S G S G F I V S E D G L I V T S A H V L T N
UniRef90_F5YUX1           M G Y Q S A V G A G T G I I V L D P S G I V L T N N H V V A G
UniRef90_M0NDC4                              N G Y V V T N A H V V S N
UniRef90_UPI0004088DE6              M G S G V I Y D D S G H I I T N H H V V G T
UniRef90_E6WII2      N V Y N R S A Q G N N N H G I T T L G S G V I M N V K G Y I L T N K H V I N N
UniRef90_W5KUD6                  S N G S G F I V S S D G L I V T N A H V V A N
UniRef90_X8CWI4        V Y P G M E I R Q D N R V C T L G Y V D P A L K V A F T A G H C R G G
UniRef90_R5XHM9                     D G G K T Y V M T C A H V V S G
UniRef90_D7VH86                  T G F M V T K D G Y V V T N F H V I N G
UniRef90_UPI000377EBD9  A Y I N G G G A F E D R D G H T C T V G F A W S L P A G R R L V T A G H C L P A
UniRef90_UPI0003B481F8             A G T G M V L T S S G E I L T N N H V V D G
UniRef90_K9RMX7           G S G N G S G A I V A Q Q G N T Y H V L T A Q H V V R G
UniRef90_U1EEL2                   L G S G V V Y D D S I F I I T N A H V V G D
UniRef90_UPI000369E225
UniRef90_UPI0003790C53     E I N A T S N S G E S T G S G V I I T S D G E I T N N H V V A G
UniRef90_V9XG70         G G S G I T L G D N G Q C T L T T I G N D A A R V G L T A A H C G S P
UniRef90_UPI000476FBD4   I K A T S G N E G G T G S G V I L D D Q G H I L T N T H V V T L
UniRef90_D0LFH7                       C S A G F G G R D S G M Q L V V T A R H C G P E
UniRef90_R6NUR9                      S C G S G I I V S Q D D D Q Y Y V A T N N H V V S G
UniRef90_X0Q6K8                N D E L L C S L T T I G H D N A G R V G L T A G H C G V V
UniRef90_I2GBE0        A L S V N P G Q V A G T G F L L T A D G Y F I T S N H I V Q E
UniRef90_UPI0003F06E19            S S G S G F I V S E D G L I V T N A H V L T N
UniRef90_UPI0002C62723            S S G S G F I V S E D G L I V T N A H V L T N
UniRef90_E6PFP8                   G S G F V Y D T K G D I V T N A H V V T P
UniRef90_H5U3A4            I D V V S G S E A G E G S G V I L S E D G Y I M T N N H V V A G
UniRef90_F7MS82
UniRef90_C5VTZ7
UniRef90_G8ASB9                   L G S G F V I D P N G Y V V T N N H V V E N
UniRef90_UPI0004656083   I Q A Q V P G G T S G S G F V I S Q D D G I V L R S D G V I M T N A H V V K N
UniRef90_T2MI67             N G Q I S S V G S G F F V T E D G I V L S N A H V V K N
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                              50                60                70                80
UniRef90_UPI0002898040   L T H V Y S R G Q N F G N W V G Q V T R R D Q N I D T E L M S G N T A K P Y L A
UniRef90_F4BVD0          Y S T A I V T T S D E K K F Q V R N V T A D D L A R I S L S V D N H S F S N L N
UniRef90_Q0S4Y2          A A V A F S D G S T A D A K L V G A D P V S D L A V I K V D G K T D L T P I E L
UniRef90_UPI0002B4BC9F   E V T L Q D G R T F E G T V M N A D F H S D I A V K I   N S K T P L P K A K
UniRef90_E7QN87          A T R L R V Q F D R G R A T V V G A A P K R D L A V L R V Q N V P S Y V E S L S
UniRef90_R6FJH0          F R Q V A L E D N Q K N R Y L A N I V P I L D I A L L S A E G D F T A L P E I S
UniRef90_J2IHA0          A D H I E V D G R W L E A V L I G Q D E I S D L A V L Y V Q A D N   L P V I P
UniRef90_W7YKP8          A E E L Q V M M V N G K A T L V G T D K V N D I A V L S   M D D A N I N A I A E
UniRef90_UPI0003613C57          S D G S M I P A T L V G R D P E T D V A V L K L D         T V P
UniRef90_X8DFH3          A T V T L S D G R T V P F T V V G A D P D D D I A V V R A Q G V N D L T P I S I
UniRef90_F9DUD4          A Q K I E V T L D K G V K A S A K L L G T D D I A V L Q I   D K K F A T T A V T
UniRef90_UPI000370BEAD   A D S I V V D G Q I L E A Q I V G Y D P Y T D L A V L K I K G D N L H   A I P
UniRef90_H2G1K2          A D K I E Y E A E L I G T D Q Q T     D I A L L K V D A K N     L V E I D
UniRef90_A4VYG9          A E K I D I L L A S G E K I S G E L V G S D D I A V I K I S A D K V T A V A E F
UniRef90_S2E1K8          V D N V D V A L S N G D I F S A K V I G T N D I A V L Q L T D N D E S L T P V S
UniRef90_N1Z1T9          A Y T A V I T M A D G I E Y N V K G V L G Y D M Q L A I L Q V D G N N F P F L S
UniRef90_W7ZPT4          A T E V E V D G T R V E A E V I G E D E L T D L A V L R I S S D D V D T V A S F
UniRef90_R4UPP6          G P V Y D S T G E L I G V L V I A G S N L H D G D R I D G F R D D V A I N D I L
UniRef90_A0A037ZCS0      A L D V R I R M A D T G T V I G K S I N   T D L A I L R V P A L K
UniRef90_H5TRV4          S A Y T S A A A A P I G T I A A T S I Q D L D Y A V I A L A H G P V D D T P I G
UniRef90_M4AG77          K R G V R V K L T N G D T T V Q D I D P G A D I A T I K I T S T K   P F P T L K
UniRef90_D8G4I8          G G T V T V G S K V T A D V I G F G E D G L D L A V V K I R D R T N L P
UniRef90_UPI00037856AB   I D D D E Q T H E P I G Q Y R V W Q D E G D D S G S V S S A D T F A P G V R V S
UniRef90_UPI00037C36D3     R T R Y G G Q A A V R F S S G R S A N V K I V E T D A A R D L A L L R A Q G V
UniRef90_A0B0S5          A T D V T V D R R E F K A T V L A V D P Q S D V A V L R V     D A T K L P F V R
UniRef90_L9W4P2          G E S I Y I N G D W T G T R L L G T D R Y S D L A V L E V D H S P E T A T P L S
UniRef90_K9VU11          A P S V F D G K Q V P A D V I G F A K G G L D L A V L K I A R P Q K L T   T V A
UniRef90_F5Y0L7          G S A S F S D G R E F A A R W V G D D P H T D L A L L H I D G S Q G A L S P A A
UniRef90_F4AAY6          G D F K T D V V A I L S K F I P I K F E G A D C A I A K V I N K S L V T T Q I A
UniRef90_UPI0003B4EBCB   A T D I R V D R R E F T A R V I M A D E E S D L A L L Q L   D E A K D L P F L S
UniRef90_N0B194          A K K V E V R T T G G K T Y T A K I D P K T D L A L L K V   D A S E D F P H V A
UniRef90_Q2IUH1          A D K V E V T T D D G K T Y V I G T D Q R T D L A L I K   A E G R T D F P F A K
UniRef90_D5WNE4          Y A T I Q V G T V A I G N V V W Q S A   A S D I E L V R V C S P I Q T Y T P L A
UniRef90_R6S6L2          N T V S F V D N E S V E A N V K G T D S T K D L A V V A V K I S D V K D S T M
UniRef90_H5Y5A6          G S T S A D G I A R L K K Y V A N E Y P T R D C A L A Q P L N N E L I I P E I L
UniRef90_UPI0003B6C24A   A N S M E V S F A D G S T A T A Y T E S S V D I A V A V E L E D L S K D T L L
UniRef90_G2FUW9          V S R A K V D G R V L D V T N I S G Y N P N Y D A V V L K V N A H D L Q P A K F
UniRef90_A0A024KF41      A D K V T V N G D E M S A K V I G T D E K T D V A V K V E G K D L P F V Q F A
UniRef90_M5VZD5          H V T L Q D G R T F E G T V V N A D L Q S   D V A I V K I   N S K T P L P T A K
UniRef90_UPI0003955AFD   K N R V K V E L K N G E T Y E A K I D E K S D I A L I K I D S Q G K L   P V L L
UniRef90_R7ZK45          G H Y Y S V T Q E Y L T D H F I K Y H Q L Y D L A I I K V D K D C S P       L T
UniRef90_S4XFE8          A G S G A S I     T V T T N D G A Q Y D A T V V A T D P Q T D I A V I Q A V G A
UniRef90_C3MMT3          S E E I V V I S E D G F R E E A Q V V A I N P Y H D L A M L S T T L N L P S L K
UniRef90_UPI00047EF055   A K Q V K       I R T T D A M G Y E G E V I G I S T E T D V A V V R V N G L
UniRef90_UPI0001E93048   F Q N I R Q D G R T F E G V V V N A D L Q S D L A V K I K S   K T P L P T A K
UniRef90_Q2IMY4          A Q R V R I L L P E G R G P A A H T A R R I Y D A R V I G V E P E I D L A L L K
UniRef90_D4HUW8          A S Q I V V N L Q D G R S F E A M L V G S D D L A V L K I N A A S L P
UniRef90_X1AK44
UniRef90_G5HT19          A Q V T F V D N N D V S A A V K G T D S A S D L A I I A V Q L Q D I P S D T M
UniRef90_C5VSL9                  M N F V P L G T P V M Q P G P E D D A A I A K V S D K K L V S A G I A
UniRef90_H9GES8          K Q R I K V E L K S G H Q F D A K I K E V D D I A L I K I   D A N M D L P V L L
UniRef90_W6K6E9          A D K I F V D D T R L E A D L V G R D P K T D V A V L K L V D E K K V D P L E L
UniRef90_Q2PYC7
UniRef90_C6WJF1          A A V V F Q D G R T A S A K I I G R D P S S D L A V I K   A D G V S G L P T A E
UniRef90_D1PRL4          A T S V K V E L S T G D S Y D A T I V G S D D I A V I K I D A T G L T P A V I
UniRef90_UPI00037A5BA5   G T P V L S E S S K A A G Q L G V I V F S N D Y A L I R F D A A L V N P V E R I
UniRef90_UPI0002F37834   Y K E V I N G Q Q T M G K V I G I S D   L Y D I A L I Q V N D
UniRef90_UPI00046E6044   A G V V T V D G Q E T R K A E L V G A D K V S D I A V L S I D G G G I N T I A Q L
UniRef90_UPI0004636382   V A L D K S G K G K I A A Q I V G R D P K T D L A V L K V D V K N L T V A R
UniRef90_A6C4H8          A T I I L H D G R T L K G R T M G L N R G L D A G L V K L V E D N E V D I S K L
UniRef90_D6ZFL0          A A S G G A V M Q V L P A S V V A T D P D T D L A V I Q A K   G R T D L P V A K
UniRef90_A8M2P3          G G T V L V T F A D G E T A Q A K I D P K T D L A V V K A S G V S D L T P A T F
UniRef90_H0UZ52          Q Q R I Q V E L Q Q Y E A T V K D I D H K L D L A L I K I   E P N T D L P V L L
UniRef90_F5YUX1          A T S L T V       V S V G N G Q S Y D V D V L G F D R S H D V A V L Q L R G A
UniRef90_M0NDC4          A S T V E V R F S E G E W R S A S T D P S S D L A V L D V R T P P D H A T P L P
UniRef90_UPI0004088DE6   A S Q I Q V T L A D G R I Y D A G T D P A T D L A V V Q I V N A P D D L T V A Q
UniRef90_E6WII2          A D Q I I V A L Q D G R F F E A T L V G S D D L A V L K I T A T N L P
UniRef90_W5KUD6          K R D V R V K L T S G E T V V Q D V D Q A A D I A T I K I Q   P K H P L P T L R
UniRef90_X8CWI4          G G V V T V D D N T P S G T T V S T S Q V I N D Y E A I V L D N D V T A N N I L P
UniRef90_R5XHM9          G S S F T V T L N D G T E Y D A S M D S Q T D I G V L S I N A T G L K I A T F A
UniRef90_D7VH86          A D S I H L Q N N K G D S F R A S T D A A K D L A I L H I N D S N F R K L K
UniRef90_UPI000377EBD9   N S T G D A M F T P G G T R E G K N E S Q G D S A L A S P N A S I Y P T A S I F
UniRef90_UPI0003B481F8   S T S I S V V V V S T G K T V V G T D P T D D V A V I Q L A K D A S G L A T A N L
UniRef90_K9RMX7          N R T L T L T T A D V N P S Q L K I L P G V D L A L V Q F T N S E K Y Q V A N L
UniRef90_U1EEL2          K E T Y G D D N E T I G K V I G T   D K W S D I A V V K A I K K Q S D I K A I K
UniRef90_UPI000369E225                  D P S S D I A V V R A K G V S G L T P   I S
UniRef90_UPI0003790C53   A S T I K V S T S N G K T Y T A K T D P K K D L A L I K L E N A S G L T V A T L
UniRef90_V9XG70          G M T V K A E Y D L A A G S V G R I V S T N E R L D Y A V I E F D R S K V V P V
UniRef90_UPI000476FBD4   D G A T T S D G K V L K A T V V G T D P L S D L A V I K V S D A S G L V P A T L
UniRef90_D0LFH7          R R S I P A Y L G D S H L P D G W L V P S T V L A G N L D Y S V V R L R P G R A
UniRef90_R6NUR9          A Q S I T V Q F S D D S T V A A G T D A G S D L A V V A V   P I S D I S A D T L
UniRef90_X0Q6K8          G A S V V A E A S Q D S G V V G Q F V P A L D Y A V I Q F D P G E V V P V N R V
UniRef90_I2GBE0          A D S I Y V Q S Q V Y K A R V A H S D K E H D L A L I Q L R E D S A F Q P L P T
UniRef90_UPI0003F06E19   W Q R I Q V E L Q N G A Q Y E A T V K D I D D L A L I K I   E P N T D L P V L L
UniRef90_UPI0002C62723   Q R W I Q V E L Q Q Y D A T V K D I D H K L D L A L I K I   E P N T D L P V L L
UniRef90_E6PFP8          P T V V F A D G D H V P A H V V A E N I G A D L A V I R V D G Y K K L P P P L Q
UniRef90_H5U3A4          S S G S G K P S A I Q V N F Q D G T R A A A K L I G A D S I A V I K V E K
UniRef90_F7MS82                  D C A I A R E Y E P G I F S P Q I Y
UniRef90_C5VTZ7
UniRef90_G8ASB9          A D K V E V T L S D K Q T L P A K I V G T D D L A L L K V   D P K Q P L P S V Q
UniRef90_UPI0004656083   A R Q V A V K F S D G R T A S A R V L G A D L A I K A E G V S G L K P A T L
UniRef90_T2MI67          A S T V K V H L S T G E T V I I D V D P V S D L A A I K L V N E K K K F P Y L K
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Multiple sequence alignment (positions ~85–120)

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                                   90          100         110         120
UniRef90_UPI0002898040   G S G A S M F V H G T E L P D N G T K V C V S G S V S F N H C G P I S N S R F S
UniRef90_F4BVD0          V N T T T P E V   G Q D I I A I G G P L       G L A K T V S E G I V S A I R
UniRef90_Q0S4Y2          G T S G N V Q V   G Q Q V V A I G S P L       G I I S A L N R P
UniRef90_UPI0002B4BC9F   L G S S S K L R P G D W V A I G       C P L S L Q N T V T A G I V S C V D R S
UniRef90_E7QN87          L A E Q   R A E P G Q S V A A L G S P L G L Q G T I T Q     G V V S G V N R T
UniRef90_R6FJH0          L A C T E V T L   G Q K I N V A G Y P F       G M P F T A T E G T V S S P K Q L
UniRef90_J2IHA0          Q D P A I E P Q V G D L V L A I G N P L N L G     Q T I T Q G I I S A N G N T
UniRef90_W7YKP8          M G D S S K V R F G E T V I A I G N P L       G L G D T L T S G I I S Y T N R I
UniRef90_UPI0003613C57   E D L T P L P I G A S D D L F V G D P V M A L G N P L G V T T G I V S A L N R P
UniRef90_X8DFH3          G S S K D L K V   G Q N V V A V G S P L G L Q G T V T T     G I I S A L N R P
UniRef90_F9DUD4          F G D S S L L R A G D S V I A I G N P L G L D F S G T     V T K G I V S S V S R T
UniRef90_UPI000370BEAD   Q T E N P D V A V G D M V M A I G N P F D L G     Q T V T H G I V S R A G R T
UniRef90_H2G1K2          F A D S D K L R V G D F A I A I G N P F       G L G Q T V T T G V I S A L R T
UniRef90_A4VYG9          A D S D T I K V   G E T A I A I G S P L G S V Y A N T   V T Q G I I S S L S R T
UniRef90_S2E1K8          F A D S S Q I K V G D Q V I A I G N P F G L S N T M T T     G I V S Q I G R L
UniRef90_N1Z1T9          A G D S D E V T S G E K I Y A I G S P L G L S N T I S E     G I V S G I N R T
UniRef90_W7ZPT4          G D S D S L S V   G E P A I A L G N P L G L E F A G S   V T Q G I I S A T E R S
UniRef90_R4UPP6          P N G I R L E R G S G I Q P H T G L P V C R N G V T T G E S C G T V T N I N N G
UniRef90_A0A037ZCS0      G K A P L K I A K N Y K A T I G T E V I A I G S P L G I T T G I I N D L D R D
UniRef90_H5TRV4          A P G P T       G Q T V C K V G R M T G R T C G P V A V T D T
UniRef90_M4AG77          L G Q S S E V R Q G E F V V A M G S P F A L     R N T I T S G I V S S A Q R G
UniRef90_D8G4I8          T I P L A A A G S I K V G Q R A Y A I G N P F G Q F Q G T F T V G I V S
UniRef90_UPI00037856AB   S A I Q L G G I T G I G S V D P G D Q A C K L G Y T T G W T C G A V T S V N
UniRef90_UPI00037C36D3   G G L T P A K L G D S S K A R V G M S V V A I G S P E G V T A G I V S A L D R R
UniRef90_A0B0S5          I G D S S K V R A G E P V M T I G A P     D G S G N T V T A G I V S A T S R
UniRef90_L9W4P2          L A   T E R P V V G Q N V L A I G N P Y G L E G S M T K     G I V S G V D R T
UniRef90_K9VU11          L G Q P N S F K V G A R V Y A I G T P L D E D F H N T   F T Q G N I S R L D
UniRef90_F5Y0L7          L G S S A T V R R G E I A V A I G N P L   G Y E H T V T A G I V S A M G R S
UniRef90_F4AAY6          F I G T P   N G T I V P R L N Q E V K K V G F K T E L T T G K I T S I H D I
UniRef90_UPI0003B4EBCB   L R G S D A V E V G E L V L A I G N P F     G V G Q T V S S G I V S G L A R S
UniRef90_N0B194          F A S T L P K V G D W V V A M   G N P F G L G G     T V T A G I V S A Q G R D
UniRef90_Q2IUH1          L S E G K P R I     G D L V A V G N P F G L     T V T A G I V S A S G R
UniRef90_D5WNE4          N N Q V F M P R A G Q W S D A P H E Q F C T S G W R T G V R C V W R M S V E A G
UniRef90_R6S6L2          D K I A V A T M G D S S K L E V G E Q V V A L G N A L G Y T S G I V S A T E R T
UniRef90_H5Y5A6          E I G   L V R G T E T A K I G M N V K K T G R T T G L T T G R I R A V N V E
UniRef90_UPI0003B6C24A   S A I S I A T L G D S N S L T V G E S A I A I G N A L G Y T T G V I S A L D R E
UniRef90_G2FUW9          N F S S S A Q I   G D K I Y T L G N P L     G L E D T I S D G L I S T I N R V
UniRef90_A0A024KF41      E D T I R V G D W V V A V G N P F G L G G     T V T A G I V S A R G R D
UniRef90_M5VZD5          L G S S S K L Q P G D C V I A V G     C P L S L Q N T V T S G I V S C V D R T
UniRef90_UPI0003955AFD   L G Q S A D L R P G E F V V A I G S P F S L Q N T V T T G I V S T T Q R G G K E
UniRef90_R7ZK45          L K T D D N L V R G Q K I V A I G S P L     G L F N S F S D G I V S G
UniRef90_S4XFE8          S G L T P I T I G D P D A L Q V G Q S V V A I G S S S T V T S G I V S A K D R P
UniRef90_C3MMT3          F A K E Y K   T G E V V L A V G N P L G L Y     S V S M G I I S S E E R A
UniRef90_UPI00047EF055   E N V E P L K L A P N T S L E L G D E I L A L G S P L G V T T G I I S G T D R E
UniRef90_UPI0001E93048   L G F S S K L R P G D W V I A V G C P L S L   Q N T V T A G I V S C V D R S
UniRef90_Q2IMY4          I D A R N L P V L G R R E V R P G Q L V F A V G S P S T V T M G V V S S V A R Q
UniRef90_D4HUW8          V I P I N P Q R I A H I G D L V M A I G N P Q T V T Q G I I G A T G R
UniRef90_X1AK44          T S I D S A K V G D L V I A V G S P F G V T T G V I S A K G R D
UniRef90_G5HT19          S K I K V A S L G D S D N I K V G Q Q V V A I G N A L G Y T V G Y V S A L D R E
UniRef90_C5VSL9          F I G   Y L K G I G K P N L E E G V K K V G R T T D L T G K L S A V Y A T
UniRef90_H9GES8          L G R S S D L R P G E F V V A L G S P F S L Q N T V T T G I V S S T Q R D G K E
UniRef90_W6K6E9          G D S N K V R V G D W I L A I G N P F G L G G T V T A G I V S A Q G R D I N A
UniRef90_Q2PYC7          M K V T K H G R T T G L T R G K I I G I S A S
UniRef90_C6WJF1          L G N S S D L K I G Q Q V I A V G S P F D L T G     T V T S G I V S S L N R P
UniRef90_D1PRL4          G N S D A L A V G E T V V A V G N P L G T L S N S     V T D G I I S A L N R E
UniRef90_UPI00037A5BA5   G G V T I R G I R T Q A P Q F P   E I G C K E G R T T G N T C G V T W F S D G F
UniRef90_UPI0002F37834   Y A G Q T P L I V E T G E T D I G T E V I A L G S P Q G L S I G Y L T G L D R S
UniRef90_UPI00046E6044   G D S S K L Q L   G E T V I A I G N P L       G L G D T L T S G I V S Y T N R S
UniRef90_UPI0004636382   M G K S S D V R V G D D V L A I G S P L       G L T K T V T S G I V S A L N R P
UniRef90_A6C4H8          S A V K M G D I S E I E A G E W V M A T G H P N G Y Q S G P V V R L G R I
UniRef90_D6ZFL0          L G S S A D L T V G Q D V V A I G S P M G L E G     T V T R G I V S A L R R P
UniRef90_A8M2P3          G D S D A M Q V   G D Q V L A L G S P L G L Q G S V T     A G I L S A R D R T
UniRef90_H0UZ52          L G R S S D L R A G E F V V A L G S P F S L Q N T V T A G I V S T T Q R G G K E
UniRef90_F5YUX1          S G L P S A N I G D S S K V A I G D P V V A M G N A G G Q G G G K V I G L N Q T
UniRef90_M0NDC4          L V E D Q P A I   G T E V V A I G N P Y G L E G S V T     S G L V S G V N R S
UniRef90_UPI0004088DE6   I G D S S D V R V T G Q D V M A I G N P L     G L S S T V T T G I V S A L N R P
UniRef90_E6WII2          I I P I N A K R V P H I G D V V M A I G N P Q T V T Q G I I S A T G R
UniRef90_W5KUD6          L A Q S S E V R Q G E F V V A M G S P F A L     R N T I T S G I V S S T Q R G
UniRef90_X8CWI4          S G R P L V S D P G L S L A   P G Q P I C H Y G V I T G E T C G T V Q S V N N G
UniRef90_R5XHM9          N S D S V A     V G E A V V A I G C P G G V T S G V V S A I D R P
UniRef90_D7VH86          S I P Y T F K S R S S D L G E D I Y T I G P R D E A V Y G Q G Y L S S A
UniRef90_UPI000377EBD9   I G G P E V K R S W Q R R S I P G D L F C I G G A V Y G Q H C S W V I Q S E D Y
UniRef90_UPI0003B481F8   G D S S S V A V G D S V T A   V G N A G G T G G T P S S A T   G K V T A L D Q S
UniRef90_K9RMX7          A N Y S   L D I N D R V A F V S G W P V P K A K F S T G F L L G W N R G T N R A
UniRef90_U1EEL2          H G D S Q K L V L G E P I I A V G N P L G V D F K G S I S S G N R H V P V D I D
UniRef90_UPI000369E225   L G S S S N L V V G Q Q V V A V G S P L G L Q G T V T E     G I I S S L N R P
UniRef90_UPI0003790C53   G N S D G V Q V G D Q V V A   I G S P     E G L T G T V T S G I V S A L N R D
UniRef90_V9XG70          N R V G N V T I T G G A P A G F P N I A C K E G R T T G N T C G I V
UniRef90_UPI000476FBD4   G D S S K I N V G D T A V A   I G S P L G L T G     T V T D G I V S T L N R T
UniRef90_D0LFH7          V R S D P L     A G P P A V G S T V C K T G R M S G T T C G P V L A V T P T
UniRef90_R6NUR9          S T I K V A T L G N S D D L S V G Q A A V A I G N A L G Y T T G V I S A L N R E
UniRef90_X0Q6K8          G S V T I T G I G   A P A G F P V A C K E G R T T G S T C G I V
UniRef90_I2GBE0          V P Y S F   D G R S S E L G E R V F T L G Y P R E E I V Y G E G Y L S S G
UniRef90_UPI0003F06E19   L G R S S D L R A G E F V V A L G S P F S L Q N T V T A G I V S T T Q R G G K E
UniRef90_UPI0002C62723   L G R S S D L R A G E F V L A L G S P F S L Q N T V T A G I V S T T Q R G G K E
UniRef90_E6PFP8          F A N F D R V E Q G Q W A I A I G E P L E L     Q Q T V T L G I V S A F N R N
UniRef90_H5U3A4          N D L L P I N V G T S K N L A V G Q S V I A I G A P L G V T T G I I S A L D R P
UniRef90_F7MS82          M I G S L   K G V S T P Q L G K T V M K S G R T T S Y T E G L I T T I G V T
UniRef90_C5VTZ7          A P P K L G E K V F K V G R T T G F T E G I H I T E T N V T
UniRef90_G8ASB9          W G D S D R S R I G D V R Q T A     Q S E Q P D I G P G M G P F S S A R G
UniRef90_UPI0004656083   G D S S A L A V G D Q V T A   V G N A G G T     S G I V S A L D R P
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UniRef90_Q0S4Y2          V S T S Q N T V I D A L Q T D A A I N P G N S G G A L V N M D G Q L I G I N T A
UniRef90_UPI0002B4BC9F   D L G L G G M R R E Y L Q T D C A I N M G N S G G A L V N V D G E V V G V N I M
UniRef90_E7QN87          L P S Q H G T I S G V V Q T D A A I N P G N S G G P L V N C N G R V V G V N T A
UniRef90_R6FJH0          M D D S         Y Y I Q T D A A V N P G N S G G P M F N Q N G E V V A I T T S
UniRef90_J2IHA0          G L S S R G   Y P D F M R M D A A I N K G N S G G A L V N S N G V L V G I N A A
UniRef90_W7YKP8          V P V S D G V Y D W V I Q T D A A I N E G N S G G A L V N L D G E V I G I N T M
UniRef90_UPI0003613C57   V S T E N M T I T N A I Q T D A A I N P G N S G G P L V N G N G E V V G I N S A
UniRef90_X8DFH3          V A T G D D Q V M S A I Q T D A A I N P G N S G G A L V D M N G N L I G V N S A
UniRef90_F9DUD4          V N T S A G T W Q T V I Q T D A A I N S G N S G G A L F N T A G E V I G I N S
UniRef90_UPI000370BEAD        G L S N F V D F I Q T D A V L N Q G N S G G A L V D S N G V L V G I T N A
UniRef90_H2G1K2          G L N V E N   L E N F I Q T D A A I N S G N S G G A L L D L D G K L V G I N T A
UniRef90_A4VYG9          V T D G Q T I S T N A I Q T D T A I N P G N S G G P L I N T Q G Q V I G I L T S S
UniRef90_S2E1K8          L P N Q E F S I P N I I Q T D A A I N P G N S G G P L L D N T G N L I G M N T A
UniRef90_N1Z1T9          I K         N I P Y I Q I T A A I S H G S S G G A L N E K G Q V I G V T S A
UniRef90_W7ZPT4          I T T G N G Q A D W V L Q T D A A I N P G N S G G A L I N I N G E V I G I N S M
UniRef90_R4UPP6          W F E I D G             L P A D H G D S G S A V Y S G H G A I V G I A R G
UniRef90_A0A037ZCS0      F V I N N F K Y K N M Y Q I T A P I D N G S S G G P L L D K T G E V I G I N S A
UniRef90_H5TRV4                    E V V A K L A L F P G D S G S P L I D R R G L V I G I L S R
UniRef90_M4AG77          S Q G L S N S N M D Y I Q T D A T I D F G N S G G P L I N L D G E V I G I N T M
UniRef90_D8G4I8          R M D K D     R G L I Q T D A A I N P G N S G G P L L N S A G E L I G V N T
UniRef90_UPI00037856AB            D R Q I H F D I N A A P G D S G G P V V V K R
UniRef90_UPI00037C36D3   V R V G E T V T Y R A L Q T D A P L N P G N S G G P L F N L A G E V I G V N S A
UniRef90_A0B0S5              R L P D G S A F P F F E T D I A P N P D N S G G P V F N R A G D V I G I
UniRef90_L9W4P2          I N P P D R E F S N V V Q T D A A V N P G N S G G P L V D M N G N V I G V I N A
UniRef90_K9VU11              P K K G M I Q H T A S I N H G N S G G P L F N S E G Q V I G V N T S
UniRef90_F5Y0L7          M R A S T G R I P D V I Q T D A A I N P G N S G G P L L N S R A E V I G V N T A
UniRef90_F4AAY6          I Q V G Y P D F R E Q I S T T S M S T Q G D S G A V L L D K N N Y V V G L I M S
UniRef90_UPI0003B4EBCB   S A S L G R G Y     F I Q T D A P V N P G N S G G A L I D M A G R L I G I N T A
UniRef90_N0B194          I     G S G P Y D D Y I Q I D A P V N S G N S G G P T F N L N G E V I G I N T A
UniRef90_Q2IUH1            D L G N G P Y D D F L Q I D A P V N K G N S G G P A F D V N G E V M G V N T A
UniRef90_D5WNE4          V Y R G S Y E H I N G A Q S S E S I E N G D S G G P V V T Y E R Q L I G I I S
UniRef90_R6S6L2          L D G Y E G G T     L I Q T D A A I N P G N S G G A L L N S N G E V I G I N T A
UniRef90_H5Y5A6          L N V G Y G R F Q N Q I L T T N M S A G G D S G S L V L E E N N R A V G L L F A
UniRef90_UPI0003B6C24A   I E T E D G E T N S F I Q T D A A I N P G N S G G A L L N S A G E V I G V T S
UniRef90_G2FUW9          I D G       V T F I Q I S A P I S P G S S G G A L I N E Q G E V I G I T A A
UniRef90_A0A024KF41      I         G G S S Y G D F L Q I D A A V N T G N S G G P T F D T S G K V A G M N T A
UniRef90_M5VZD5          D L G L G G L R R E Y L Q T D C A I N P G N S G G P L V N I D G E V I G V N I M
UniRef90_UPI0003955AFD   L G L R N S D   M D Y I Q T D A I I N Y G N S G G P L V N L D G E V I G I N T
UniRef90_R7ZK45              F R D L D S I P M I Q F T A P I S N G S S G G A L L D M F G R L V G L I T G
UniRef90_S4XFE8          V Q A G E A S L I D A I Q T D A A I N P G N S G G A L V N L N G E L V G I P S
UniRef90_C3MMT3          I M T P N G L P I Y V I Q T D A A V N P G N S G G P L I N T K G E V V G T V T A
UniRef90_UPI00047EF055   L D V E P Y K Y D D V Y Q I S A P I A P G N S G G P L I D R T G S V V G I N S A
UniRef90_UPI0001E93048   D L G L G G K H R E Y L Q T D C S I N A G N S G G P L V N L D G E V I G V N I M
UniRef90_Q2IMY4          P D P A R P V V Y     I Q T D A P I N P G N S G G P L V D T D G N V V G I N T F
UniRef90_D4HUW8          V G L S P S R H Q D F L Q T D A S I N R G N S G G A L I N S L G E L M G I N T L
UniRef90_X1AK44          I S V S Q E T M V N L I Q T D A A I N Q G N S G G P L V N S A G Q V I G I I F S
UniRef90_G5HT19          I T D S S G I T R T F I Q T D A A I N P G N S G G A L I D L N G N V I G I N T A
UniRef90_C5VSL9          Y K Y N D K D V K D Q I F T T D M A D Y G D S G A I L V D Y K N Y A I G L L M A
UniRef90_H9GES8          L G L K D S D M E Y   I Q T D A I I N Y G N S G G P L V N L D G E V I G M N T
UniRef90_W6K6E9                G P Y D E F I Q T D A S I N K G N S G G P M F N L N G E V I G I N T A
UniRef90_Q2PYC7          V A Y S Y G N M K K V V Y F D P F S E P G D S G S L V I G T D S T A L G L V F A
UniRef90_C6WJF1          V R A G Q S T V L N A V Q T D A A I N P G N S G G P L I D M N G R V I G I N S A
UniRef90_D1PRL4          V T V E D N D M T   L L Q T D A S I S P G N S G G G L F N G N G E L I G V V N A
UniRef90_UPI00037A5BA5   A H F S         Q I C V V E G D S G S P V V V   G D R L V G M V N A
UniRef90_UPI0002F37834   F T   S D F Q Y E N V Y Q I D A Q I S P G S S G G P L L D A T G K V I G I N S A
UniRef90_UPI00046E6044   I P V S D G V Y D W V I Q T D A A I N E G N S G G A L V D L N G R V I G I N T M
UniRef90_UPI0004636382   M Q E P S E P G D D T V Q T D A A I H G N S G G A L V D G E G R L V G L N T A
UniRef90_A6C4H8          V S       R K K H L L Q T D C T L I G G D S G G P L F N M Q G Q V V G I H S R
UniRef90_D6ZFL0          V A A G G E D G G E A I Q T D A S I N P G N S G G A L V N M Q G Q V V G I N F M
UniRef90_A8M2P3          I Q A G G S P I S G L L Q T D A P I N P G N S G G A L V N T R G E V I G I N T A
UniRef90_H0UZ52          L G L K D S D I   D Y I Q T D A I I N H G N S G G P L V N L D G D V I G I N T
UniRef90_F5YUX1          V S A A D E T L T N M I K A D T A I R P G D S G G P M V N A A G Q V I G M N T A
UniRef90_M0NDC4          I P A P N G T I P D G I Q T G A P V N P G N S G G P L V N L D G E V V G V I N S
UniRef90_UPI0004088DE6   V Q S S T K T C T N A I Q I D A A V N P G N S G G P L F D E T G K L I G I T S S
UniRef90_E6WII2          V G L S S S G R Q N F L Q T D A S I N Q G N S G G A L I N S L G E L M G I N T L
UniRef90_W5KUD6          S K G L S N P N M D Y I Q T D A T I D F G N S G G P L I N L D G E V I G I N T
UniRef90_X8CWI4          W F T M S N G V Q       S H N G D S G G P V Y L A P G G G P G Q L V G
UniRef90_R5XHM9          V S S K I G Y D N K C I Q T D A A I N P G N S G G A L F N M Q G Q V I G I N S S
UniRef90_D7VH86          T G Y A G D I A Y Q I     S I P V N P G N S G G P V L D N K G N I I G I I S G
UniRef90_UPI000377EBD9   F K T D G G L L D N A I G G T H P S E G G D S G G P V Y T P D G S V V A K G I V
UniRef90_UPI0003B481F8   I T A S D E D L T G L I Q I D A D I Q P G D S G G P L Y N A K D Q I I G I D T A
UniRef90_K9RMX7          M D D R S F S Q G Y G L V Y T N F T A L G M S G G P V L D T E G R L I G I H T A
UniRef90_U1EEL2          K D D N Y D V L M D A F Q I D A P V N P G N S G G G I I D R D G K L V G I A S
UniRef90_UPI000369E225   V A A G Q N T V L D A I Q T D A A I N P G N S G G A L V N M S G E L V G I N S A
UniRef90_UPI0003790C53   V T V S S T T T Y K A I Q T D A S L N P G N S G G A L I D M N G N I I G I N S A
UniRef90_V9XG70              W G D V F G S Q E T W T Q V C V I E G D S G A P L V V G T T L V A M V N A Y
UniRef90_UPI000476FBD4   I S V A S S A A I N V I Q T D A A I N P G N S G G A L V N S K G E I I G I N S A
UniRef90_D0LFH7          A             I I A R V K V V W G D S G S P L R D A K G R I I A I T S R
UniRef90_R6NUR9          V S V G S T T T N E L I Q T D A A I N P G N S G G A L L N A K G E V I G I S S V
UniRef90_X0Q6K8              Y G D L L G T G E T W T Q A C V V E G D S G A P V V V   G T T L V A M V N A
UniRef90_I2GBE0          T G Y A G D V A Y Q V A I S V     N P G N S G G P L L D E R G N V I G I I S A
UniRef90_UPI0003F06E19   L G L K N S D   M D Y I Q T D A I I N H G N S G G P L V N L D G D V I G I N T
UniRef90_UPI0002C62723   L G L K D S D   M D Y I Q T D A L I N H G N S G G P L V N L D G E V I G I N T L
UniRef90_E6PFP8          E P I Q N D D F K G L L Q T S A P I N P G N S G G P L I D D H G K V I G I N T V
UniRef90_H5U3A4          V S T G T T S V I D A I Q T D A A I N P G N S G G A L V N A R G A L L G I N T A
UniRef90_F7MS82          V K I G I Y I F K N Q I V T T A M G Q E G D S G A V L V D S N K M A V G L L C A
UniRef90_C5VTZ7          V I N S S G K F K E Q I A A D V K S D V G S V L L N L N M N P V G L L M G
UniRef90_G8ASB9          R D I G A G P Y D D F L Q T D A I N Q G N S G G P M F S L Q G E V I G V N T A
UniRef90_UPI0004656083   I G L K D S D I R N A I Q T D A A I N V A S G Q V I G I N S A
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UniRef90_Q0S4Y2          I A S I G G S G A G E Q S G S I G L G F A I P V D Q A
UniRef90_UPI0002B4BC9F   K V D D A A G L S F A V P I D
UniRef90_E7QN87          G I V G G E N L G F A I P A S
UniRef90_R6FJH0          K L T N A D N M G F G I P I A S L C T L L E Q I S E
UniRef90_J2IHA0          A F Q V Q N Q D I Q G I F F A V P Y Q L A R N I M E K L I K Y G
UniRef90_W7YKP8          S D T G V E G I G F A I P T G Q
UniRef90_UPI0003613C57   A T L S D P T S S E A Q S G S I G I G F A I T I E Q A
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UniRef90_F9DUD4          L K V A Q S G V E G I G F A I P S N E V
UniRef90_UPI000370BEAD   N F Q V R D G R N G V R N V D G I N F A V P
UniRef90_H2G1K2          I L G P G G G N I G I G F A I P A N M V K N L V D Q I L E Y G
UniRef90_A4VYG9          K I T S S S A N S S G V A V E G L G F A I P A N D A V A
UniRef90_S2E1K8          I Q S N V G E F A G V G F A V P S N T I
UniRef90_N1Z1T9          E I A T G Q N L N F A I P I
UniRef90_W7ZPT4          I S G V A E G L G F A I P S A I V Q P V I E E L E T T G
UniRef90_R4UPP6          T T R N V D T G V V Q T T A V S W S T I L N Q L R E D L E K
UniRef90_A0A037ZCS0      K A E G A S L G F S I P I I Q V L Q D
UniRef90_H5TRV4          T D E H A T P A Q T W S A A
UniRef90_M4AG77          K V T A G I S F A I P S D R V K L F
UniRef90_D8G4I8
UniRef90_UPI00037856AB   A D G S Y M L V G I V I G A G D G Q M V A Q P I A A L L D
UniRef90_UPI00037C36D3   I Y S P S A S G D R S A Y A G L G F A I P I N Q A
UniRef90_A0B0S5          A V Q V Y P G A D R Y A S T T F A I P I A
UniRef90_L9W4P2          G G G N N I G
UniRef90_K9VU11          G I L G D V E D E Q G N R S G F F A P
UniRef90_F5Y0L7          I I A G A Q A I C F A V A I D
UniRef90_F4AAY6          S S K T E C T C N P I D I V L K Q L D V R L V T
UniRef90_UPI0003B4EBCB   I I S K A G G S N G V G F A I P A D L V A Q M M T Q A A N
UniRef90_N0B194          I Y S P S G G S V G I A F D I P S T T A K S V V D Q I K S T G
UniRef90_Q2IUH1          I Y S P S G G S V G I A F S I P A S T V K A V V Q Q L K D K G
UniRef90_D5WNE4          S G E P V G R S I V Y Y T P M Q Q V L
UniRef90_R6S6L2          K V A T D S V E G M G Y A I P I S D A
UniRef90_H5Y5A6          G S G Q A T L L N P I Q T V L S L L D I E
UniRef90_UPI0003B6C24A   S K I G A T T V E G M G F A I P I S D V I D
UniRef90_G2FUW9          G L T D G Q N L N F A I P
UniRef90_A0A024KF41      I F S P N G G N V G I A F A I P A S T I K P I V Q Q L
UniRef90_M5VZD5          K V L A A D G L S F A V P I D S V T
UniRef90_UPI0003955AFD   L K V T A G I S F A I P
UniRef90_R7ZK45          G F D R G Q N L N L A V P S D K I Y E F A Q
UniRef90_S4XFE8          V I A T L G G T S G E S G S I G L G F A I P A D Q A M
UniRef90_C3MMT3          M I R E A Q N I G F A I P S K L I D S F
UniRef90_UPI00047EF055   R I E Q G S I G F S L P I G T V L
UniRef90_UPI0001E93048   K V L A A D G L G F S V P I D
UniRef90_Q2IMY4          I L T Q G G G S E G L G F A I P
UniRef90_D4HUW8          S F D K S S N G E T P E G L G F A I P
UniRef90_X1AK44          P S G A S A G I G F A I P S D T V V N I A E Q I
UniRef90_G5HT19          A S T E V E G M G F A I P I S
UniRef90_C5VSL9          G S E S F T I Y N D I Y N V L G N L K V N I L
UniRef90_H9GES8          L K V T A G I S F A I P
UniRef90_W6K6E9          I Y S P S G G S V G I G F A Q P M A V V K P V I N Q L I K Y G R T
UniRef90_Q2PYC7          G N P H F G H T Y M L P L N P I L T K L G V E L V H G
UniRef90_C6WJF1          I Y S P N S S Q T S Q G G S V G I G F A I P I D Q A
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UniRef90_D6ZFL0          I Y T L G S D R Q G Q S G S I G L G F A I P I D
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UniRef90_M0NDC4          G G G D
UniRef90_UPI0004088DE6   A T L S S D S S K S S D G A E I G I G F A I P G N L A V K V A D Q L I K T G
UniRef90_E6WII2          T F D K S N D G E T P E G I G F A I P
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UniRef90_X8CWI4          I F N S V W G
UniRef90_R5XHM9          A S T E Y E G M G F A V P S N T A V S T A N
UniRef90_D7VH86          K Q T G L D G A G F A I
UniRef90_UPI000377EBD9   S S G T S T L L D C Y V A F T D I T T L
UniRef90_UPI0003B481F8   A S T S R S T S G F A I P I A K A T S I A K Q I
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UniRef90_UPI0002C62723   K V T A G I S F A I P S D
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UniRef90_B0MTA3                              S S G S G F V I A T N G I I V T N F H V V D G
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UniRef90_W7TPI5                                G S G F V I S E D G L V V T N A H V I A G
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UniRef90_UPI00034AD021    P L A P G C S V G H P D I T A G T L G A F V E V G G V V H A L S N N H V L G N
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UniRef90_U1PDG9                                     D A S H I V T N A H V V G V
UniRef90_UPI00036AB0D4          V N P G K F S G T G F A L T A D G   Y L V T S Y H V I Q G
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UniRef90_F5UDD1                                   G K T Y T V L T V N H V V E K
UniRef90_UPI0003081127                  G S G F V I S K D G F I I T N A H V I K P
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UniRef90_A0M4L8                                    D I G V T N Y H V L A D
UniRef90_A0JYK2                                    D D Q G H I L T N T H V V T L
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UniRef90_U5WA18        A R S V Y A D G T E S A A T V A S K A P K Q D I A T L T P A K P E T L V P A V L
UniRef90_K6X5E2        A E S T I V G G R R V A A E L A G F D E L T D L A V L K I T A D N L Q   V I P
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UniRef90_K2EWV3        Q D G S T Y K V T G I G T V N   P L Y D F A I I K I   N P S K N L P I V S
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UniRef90_UPI0003B5F7F8 A D S L G R D K Q R F R A E P V F S D V A H D L A L L R I K D K D     F N
UniRef90_S4XFR0        A D D L S D S S G Y V L D G S A N F L D P N N D F A W F R L D E S V T P D A T G I
UniRef90_H1RZI5        G K S I S I R R E K L T Y G A S L V H A D V E R D L C I L R A R G L T A P A V
UniRef90_M7NE43        Y T D V T V R N S D G K G R V V G I S D R S D V A L I K V D D Y A N I E P F Q V
UniRef90_UPI000361048C G D K I I Y A K D R S L G E V V A S D F E K T D W T L V D V T A W R L S P P F K A
UniRef90_G7WQF2                             G K D L A I I K I E T S N D L P T A T L
UniRef90_U1PDG9        A D R A G V R F N N         G D W A R A D V V G V D Q H S D L A V L S V N D V
UniRef90_UPI00036AB0D4 A D S L L I E N R A R Q R F R A F T D I A H D L A I L Q I T D K D     F T
UniRef90_UPI000376FF5B A S S I K V R T S D G K S Y T A D V V G T D D L A L I K L Q N A S G L K A A T L
UniRef90_I8G696        S T V T D E A G T P I G T V M A S H N N R A D Y E T I S L N D D A E L T S Q L G
UniRef90_UPI0002E68005 G Q T I S H D G R I V K G K T L G V N R A I D S G M A Q I T D P G   P W P Y V E
UniRef90_Q2J679        H R A I S G A S V G L A Q F A D G T D P L S D L A V L R   A R G T T P P A A V
UniRef90_UPI0003A41E6D A T R I S V T L R D G R K F V V G D D P A S G I A L L K I   P A T R L P T V K
UniRef90_B1HY29        A V E V M V R N S V G G T V V G   I S N R Y D I A L I H P N Y Q D K P P L G
UniRef90_D8TR21        Y T Q V K V K R S D V K H V A S V L S V D T D S D F W E G V E P
UniRef90_F5UDD1        A D V K Y T V R T S K G T R L Q T A D T D P D L A V V K F E S P E E Y P V A
UniRef90_UPI0003081127 P P R S T Y K P A E F P Q V V T V V F P G L D L A V L K I H G Q K N L
UniRef90_UPI0002B47ECC D T Q V K V K K R G D D T K Y V A L V A R D I A L L S V E N E E F W K G A E P
UniRef90_A0M4L8        S Q E A Y I D F Y E I T N V L S K S Y P A N D Y V I F E T E       Y
UniRef90_A0JYK2        D G K T A N A T I E V R T N S G K T D P L S D L A V I K V D N A S G L T P A T L
UniRef90_X1T317        A D S T V D N K V V V K G V I A E D R G A D L V M V T T D A P K D S I E Y I K
UniRef90_I8R0E4        G A A V R S N A N A Y G T V S N R H L P T V N G A D V E L I G G Q S Y S G R I F
UniRef90_G2ND00        A S Q I K V T L S T G K T D V V G T D A D K D L A L K L Q G A S G L K T A T L
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                              90            100          110          120
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UniRef90_I7KE78       F G N S K S L L A G Q Q V L A I G S P L G   S D Y A T S L T S G I V S A P R R E
UniRef90_A4GIG6       L M L D T P A V   G S H A C A V G N S F G L G I S L S       C G V V S A T G R K
UniRef90_G8S0B1       G D S S Q M Q V   G D T V L A L G S P L G L E G S V T       A G I I S A K D R T
UniRef90_L7U771       A S S S H V R S A D W I V V   I G N P F G L S Q S V T       V G V V S Y M G R T
UniRef90_B0MTA3       P Y A V K T P I         L D V G T S V F A L G Y P M S D I L G K V T D G I I S
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UniRef90_UPI000378EEF1 L G S S G D L R V G E P V V A L G A P L     G L T S T V T S G I V S A T D R Y
UniRef90_H6RQN9       A D S D E V Q V G D I A V A   I G A P L G L S N T V T G I I S A T G R A V A T G
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UniRef90_O04674             S V D N L E V G Q R V Y A I G N P F G L T T G V V S G T G R E
UniRef90_C5VNZ6       I I N N     K F K D I G I P E I G Q E V F K V G R T T G Y T T G R I T S I D A T
UniRef90_W7TPI5       I G Q S S N L R P G E W V V A L G S P     Q G L A N T V T V G I V S T V A R S
UniRef90_K9Y0X6             T V T L A Q P N S V R V G E P V F A I G T P L D S Q F   Q N S F T Q G N
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UniRef90_UPI0004571B0A L G Q S S D V R H G E F V V A M G S P F A L Q N T I T S G I V S S V Q R G S R E
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UniRef90_U5WA18       G G G L A V     G D D V V A M G N P L     G L T A T T T S G V V S G L D R A
UniRef90_K6X5E2       Q I D D P Q I R V G D V V L A I G N P L     N I G Q T   I T Q G I I S R S G H T
UniRef90_M2XV60       L S S G R L P Y L Q E A V T V V G Y P I G     G E N I S V T A G V V S R V E L Q
UniRef90_A5URF9             V G D S S R L R V G E L V F A I G H P W G V T A G I V S G L G E
UniRef90_UPI00035002D3 L G N S A D L R P G E F V V A I G S P F A L Q N T V T T G I V S S A Q R D G R E
UniRef90_F1ND77       L G H S A D L R P G E F V V A I G S P F A L Q N T V T T G I V S T A Q R D G K E
UniRef90_UPI00034D16D6 I D D Q Y Q V S Q D E G I R F I G N P L F F N G A N E G N L A G T V L L
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UniRef90_E9SXX1       L N P D A V L S S D G P E A R I D S M L C K A G V R T G L T C G P I
UniRef90_K2EWV3       M G N S E A L E P G D E I F A I S T P     K G L E F S I S D G I V S Q V K S D
UniRef90_I0Z3W6       L E L G P L P R L Q D A V A V V G Y P I G     G D T I S V T S G V V S R I E V T
UniRef90_R1C1T0       L G S S S D L R P G E F V V A L G A P L     G L T N S V S F G I V S A I E R T
UniRef90_B0RJ17       N F E R A I P V A G M G E P S A T Q Q I C T S G Y R T G P N C T F R L V T N A E
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UniRef90_I4F3U3       G G A L L P A V A A P D D V D P D E L V E K L G R T T G H T R G R I T A V E V D
UniRef90_S8CZE9       V G I S G D L K V G Q R C F A I G N P     Y G Y E N T L T T G V V S G L G R E
UniRef90_M0MB20       D G L S L       S D E E P R I G Q E V A L G N P L G I T Q G I V S G V D R S
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UniRef90_K8GCF1       F A S G N G I Q P G Q T V I A I G S P Y G R P G V M T V G A F N T V R G
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UniRef90_UPI00037F52AD G S S S S L Q V   G Q G V V A V G S P L G L S G     T V T S G I V S A L N R P
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UniRef90_U5WD21       F G S S A N M Q V G D T V L A L G S P L G L E G S V T E     G I I S A K D R T
UniRef90_D4GQS0       G I I S G T K I K D   R E G D T S W E V K K Q G A N T G I C S G H V T Y A Y G S
UniRef90_C7EDR4       F       A K V I E D G T V V I T S M     E D C G V L A V A V T
UniRef90_UPI0002C474C1 G R S S D L Q V   G E F V V A L G S P F S L Q N T V M A G I V S T T X R G G R E
UniRef90_W6M019       F R D G P Q A R L G E T V I V G Y P L G L L G S G P Q V T T G N V S S L
UniRef90_Q67MT3       P E E S V V P     G R Q V V A I G N P F     G F G W T V T T G V V S A V D R I
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UniRef90_UPI00037EA8E9 V Q R A A V L       P D V R E Q V F A Y G Y P V G G N S L S T T K G I V S
UniRef90_H6MZH5             S I A W N A A I V K G E R V T K N G V T T R F S A G T I T D P K P T
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UniRef90_S4XFR0       S S Q A D T G I A P V T Q D L V G S L V C K D G A K T G R T C G P V L S V N
UniRef90_H1RZI5             K I A P L S A L K V G Q K V Y A I G A P R G Y E L T L S D G L L S S
UniRef90_M7NE43       E T G     V T P I G A E V I A I G S P     H G L S N T V T T G T L T A H D Q N
UniRef90_UPI000361048C K L V G S L T V E Q M D D V R P     Q I C R L G W I T G L S C G
UniRef90_G7WQF2       G N S K D V E V   G D K V V V I G Y P     G V T T S W T S G I I S A E K R L
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UniRef90_UPI00036AB0D4 G F G R L P Y A F K R G Q S E L G E K V Y T L G Y P R E D L     V F N D G S L S
UniRef90_UPI000376FF5B G D S D G V G V G D E V V A   I G S P     E G L T G T V T S G I V S A L D R D
UniRef90_I8G696       P A L T R P I I T H P G T P T A G M V V C H R G A T T G A S C G E I D A V H D G
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UniRef90_UPI0003A41E6D I G S P S A N K A G Q W V V S I G S P     Y G L N D T V T A G I I S N M S R
UniRef90_B1HY29             I E T T E S P I G L E V I A F G S P Q G F S I G Y I T G N K R D
UniRef90_D8TR21       V V F G Q L P Q L Q D A V T V V G Y P I G     G D T M S V T S G V V S R I E V T
UniRef90_F5UDD1             T I A D S D Q A V I G T Q I F V Y G Y P T G G L F G A E R E P E V T
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UniRef90_A0JYK2       G D S G K L N V G D T A I A   I G S P L G L T G     T V T D G I V T L N R T
UniRef90_X1T317       I   S A E L P K E G E N I L V I G S P L     G L E H T V S N G I V S S I R D I
UniRef90_I8R0E4       T G G T S I P V V A A G T A Y V G T D Y C F S G R T S G E Q C G T A T S I N A Q
UniRef90_G2ND00             E G L T G T V T S G I V S P   E G L T G T V T S G I V S R I E V T
UniRef90_A0A059B6Z4   V G S S S K L R P G D W A I A M G C P L S L Q H T V T G I I S C V H R A G N E
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                              130             140             150             160
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UniRef90_I7KE78       L T A E E S S A T T A I   Q T D T A I N P G N S G G P L I N L K G Q V I G I T S S
UniRef90_A4GIG6         N I G F N P V E D F I   Q T D A A V N P G A S G G L L I N S A G Q G L G L I D A
UniRef90_G8S0B1       I Q S S S E T M T G L L Q T D A P I N P G N S G G A L V N V N G E V I G I N S A
UniRef90_L7U771       D V T P N G R D G D F M Q M D A S I N P G N S G G P V L D M H G D V V A V A N A
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UniRef90_H6RQN9       S T Q D D A T V L D A I Q T D A A I N P G N S G G A L V D G A G E V I G I N T A
UniRef90_I0IGC5       V G I I D G G Y E N F I Q T D A A I N P G N S G G P L A N V R G E V I G M N T A
UniRef90_O04674       I Q V S G R P I Q G V I Q T D A A I N P G N S G G P L L D S S G C V I G I N T A
UniRef90_C5VNZ6       I K Y P D G T F K D Q I L A S T E V K V G D S G S I L A T K N L N P L G M L S S
UniRef90_W7TPI5       E L G L H T R A E Y I Q T D A A I N A G N S G G P L V N L D G E V V G I N S M
UniRef90_K9Y0X6       V T K I D R D K F D H I Q H D A A I F G G N S G G P L L N D R G E V I G V N S E
UniRef90_UPI00034AD021 F P G G E L V F D D Q L E V S G T A G P G D S G S L I W R E G R R A V G L L F A
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UniRef90_C7PN35       A V A G T D P A G G T I T T Q V C S N N G D S G S V I L N A D N K I I A L L H G
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UniRef90_UPI0003760FCF I P V S L G W E M E V I Q T D A A I N Q G N S G G A L V N L E G K V I G I N T L
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UniRef90_M2XV60         Q Y S H G A I D L L V Q I D A A I N P G N S G G P A F N S R F E C V G I A F Q
UniRef90_A5URF9       A E T R N G Q R V A F I R S D V R L A P G N S G G P L L D A R G R V I G I N
UniRef90_UPI00035002D3 L G L R D S D   M D Y I Q T D A I I N Y G N S G G P L V N L D G E V I G I N T L
UniRef90_F1ND77       L G L R D S D   M D Y I Q T D A I I N Y G N S G G P L V N L D G E V I G I N T L
UniRef90_UPI00034D16D6         D N W D K E V V M L Q A P V Y R G N S G S P I I N R A G D V V G V I F A
UniRef90_UPI0002E5D081 V V V R D A T L T G M I R T D A P I R P G D S G G P L L D D Y G T V V G I T N A
UniRef90_UPI00035FC591 A E   G S G P Y V D Y L Q T D A V I N R G N S G G P L Y N M T G D V I A V N S A
UniRef90_UPI000382F1A8 G Q G G D D S V I D G I Q T D A P I N P G N S G G A L V D L N G N L I G I T S A
UniRef90_E9SXX1         Y G Q E A Q R I S S F V T A N G G D S G G P A F V N S G Q L V G M T R A
UniRef90_K2EWV3       V M F C P   D C I Q F T A P V S P G S S G G G L F N N R G E L I G I N A
UniRef90_I0Z3W6       S Y V H G S T E L L G V Q I D A A I N S G N S G G P V F N E I G Q C V G I A F Q
UniRef90_R1C1T0       R S L G A R N T T A Y I Q T D A S I N S G N S G G P L L D V H G R V I G V N T M
UniRef90_B0RJ17       A E A R A R G Q M V I R S T V A G T D Q G D S G G P V A S P G G V L F G I H H G
UniRef90_K9T521       K I Q S Y R T L K A F I T S S D L V L P G Y S G G P L I N S Y G Q A I G I T S H
UniRef90_I4WEX8       P E Q Q D G A W Q W M   R F S A A A S P G N S G G P L L G K D G K L I G V V L M
UniRef90_I4F3U3       V H T F D D Q V E I E G L T G A F S A G G D S G S V I W R S R D R A L G L L F A
UniRef90_S8CZE9       I P S P G G A I R G A I Q T D A A I N A G N S G G P L L D S S G H V I G V N T A
UniRef90_M0MB20       L P S P T G S I P A A I Q T D A P V N P G N S G G P L V D L D G N V L G V V F A
UniRef90_E1R3B9         G P Q N N I S D F I Q T D A A I N Q G N S G G A L M N I Y G Q V V G I N T W
UniRef90_UPI000392F4B3 G R E L G L T T S D M I Q T D A A I D F G N S G G P L V N L D G E V I G V N T M
UniRef90_S5TH17         D F I E R E S T N V I R Y E N I S D H G D S G G P V W T G A W Y A V G I T S F
UniRef90_F9VNB5       I Q S P L G N P L Y V L Q T D A A I N P G N S G G P L I N T K G E
UniRef90_K8GCF1               N G D L Q A S V V L R P G N S G G P L L N T Q G Q M I G V N K A
UniRef90_F0VC70       P Y A H S N T C L L C V Q I D A A I N P G N S G G P A L   K D G R V V G V A F Q
UniRef90_UPI0003786E5D V S V P S K T T Y K A I Q T D A A L N P G N S G G A L I N M Q G Q I I G I N S A
UniRef90_UPI0002DAD967 L D Y G E G F G E R N I G G F E L S E G G D S G S V W M F R S G N G R G L H F A
UniRef90_L0I7G7       L P G P N D D I P N A V Q T D A G V N P G N S G G P L L D M D G R V V G M I N A
UniRef90_UPI00037F52AD V V A G Q S T V T D A I Q T D A A I N P G N S G G A L V D M Q G R V V G I T S S
UniRef90_K0V769       W F T     M A N G V V S Q K G D S G G P V Y V V
UniRef90_UPI0003F5E45A P E Q Q D G R W K W M   R F S A A A S P G N S G G P L V D Q D G K V I G V V L A
UniRef90_U5WD21       I R S S S Q E M S G L L Q T D A P I N P G N S G G A L V N T N G E V I G I N S A
UniRef90_D4GQS0               T F D T D A I S R G G D S G G P H Y R E D D Y G R P L I A G
UniRef90_C7EDR4             E G V I V K D N I T Y A V S T R N G M S G S P V T N V D G R I V G I H Q A
UniRef90_UPI0002C474C1 L G L K D S D   M D C I Q T D A I I N H G N S G G P L V N L D G D V I G I N T
UniRef90_W6M019         I G P G D D T R A L Q F T A P I Q S N S G G P L L D G D G A V V G V V S S
UniRef90_Q67MT3       V     G G L D G L I Q T D A A I N P G N S G G P V D L D G R L V G I P T L
UniRef90_R4UUW6       Q Y L A T G L A D T     P G D S G G P V W T D G V A I I G I W L G
UniRef90_UPI00037EA8E9 V N Y G A F S S G L R I Q I D A P I N P G N S G G P V I   A G D R M I G L A F S
UniRef90_H6MZH5       M R T A Y G N T T T S V R A L L R S A E G D S G S G I R D A Q G N V I G I L S A
UniRef90_A0A024PI28   S D W N     R E V L M L D A P I Y R G N S G S P I N N E G K V I G V V F A
UniRef90_R9KMY0                 M I Q F T A P I S S G S S G G A V L N M Y G E V I G I S T A
UniRef90_UPI0003B5F7F8 G F E G D S A F Y   Q I S I P V N P G N S G G P L L D D R G N L I G V I S G
UniRef90_S4XFR0               T E S Q E I F A A I P A I A G D S G S P L Y T I G D H I V G V L S N
UniRef90_H1RZI5       L N K D E R D R I V R L Q T T A P I S P G S S G G L F N T D G Q L V G I T Y L
UniRef90_M7NE43       L E L G   F I Y E N I Y Q I N A R I E R G N S G G P L I D A T G K V V G I N S L
UniRef90_UPI000361048C     D Y R E G V S D L M F E A H A P A D H G D S G G P     A V A I V D D
UniRef90_G7WQF2       P D K S E   V F Q T D A A I Y H G N S G G P A F N A E G E V I G I A T F
UniRef90_U1PDG9       I P S P A G E I P D A I Q T D A P V N P G N S G G P L V D S G D V A A V I N S G
UniRef90_UPI00036AB0D4 A R S G F E G D T G F Y Q V S I P V N P G N S G G P L L D D R G N L I G V V S G
UniRef90_UPI000376FF5B V T V S T D T T Y K A L Q T D A S L N P G N S G G A L I D M N G N I I G I N S A
UniRef90_I8G696       W F T     M K P G T L T S D H G D S G G P V Y T S T P V I V G I L R G
UniRef90_UPI0002E68005 V       L Q T D N A L V G G D S G G P L F D M K G R V I G I H S R
UniRef90_Q2J679       L P T R S G V V D E V I Q T D A A L N P G N S G G A L V T A D A R V V G I N T A
UniRef90_UPI0003A41E6D   P L P G E S Y V P L I Q T D M T E N A G D A G S P V F S L N G N V I G I
UniRef90_B1HY29       M K L E N F I Y K Q I Y Q V D A A Q I D K G S S G G P L V D V N G N V I G I N S L
UniRef90_D8TR21       A Y M H G S S E L L G I Q I D A A I N S G N S G G P A F N E A G E C V G I
UniRef90_F5UDD1       S R P G N R P E G Y T L R Y Q A V T W S G M S G G P V F D S E G R V I G L H G Q
UniRef90_UPI0003081127 I N P S D G E     I Q H N A V I M G G N S G G P L L N S Q S Q V I G V N T S
UniRef90_UPI0002B47ECC S Y A H G S S D L L G I Q I D A A I N P G N S G G P A F N D Q G E C I G V
UniRef90_A0M4L8             I S G F R D N K R I Q I D A I D H G S S G G P L F N M K G E V I G I T T S
UniRef90_A0JYK2       I S V G E G G F Q N V I Q T D A A I N S N K G E V I G V N V A
UniRef90_X1T317       E D F G     K L I Q I T A P I S P G S S G G P V V N Q K G K V I G V A S Y
UniRef90_I8R0E4       V C T S S G C K S P V I A Y T G G N V G G D S G A P F Y A K D
UniRef90_G2ND00       V T V A S T E E L L G I Q T D A A I N P G N S G G P L L N T Q G E I I G I N S A
UniRef90_A0A059B6Z4       L G L E G M M E Y L Q T D C A I N P G N S G G P L C N V D G E V I G V N V
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                                        170             180             190
UniRef90_E9JEH9                         M K V T Y G I S F A I P I D Y V
UniRef90_I7KE78          K I V S S T D G T S V           E G M G F A I P
UniRef90_A4GIG6          I F T K S E D S D A G V N F A V S       A R L I D S V L L A W
UniRef90_G8S0B1          I A T S G S G G N I G L G F A I P S D K A K T V A E S L P A L G V S V T T G
UniRef90_L7U771          V N V A G Q G I G F A I P I D L A K T       V I P Q L R A H G
UniRef90_B0MTA3          G V P D A Q N V G Y A I K V S
UniRef90_UPI0003A08816   S L A T A L P N N L G V P K S H E I S
UniRef90_UPI000378EEF1   A S P G G E S G S S G L G F A I P A D F A V P T A E Q L A K Q G
UniRef90_H6RQN9          I A T V A S G V P G G Q S Q S G G V G F A I P
UniRef90_I0IGC5          I A T N N R G P G G G A A S S G V G   F A I P V A
UniRef90_O04674          I Y S P S G T N S G V G F A I P A D T V R S S V T Q I L
UniRef90_C5VNZ6          A S E N F A A Y N D M I H I T
UniRef90_W7TPI5          K L E Y S D G I G F A I P I D
UniRef90_K9Y0X6          G I V Q T G K L N T         G M N F A I P V D K L I S
UniRef90_UPI00034AD021   G S T           Y G G P D G T G L T F A N P I G A V L E T F G A R L V
UniRef90_K4KNF8                          M I L S G T E G I G F A I P V E S L L K D Y
UniRef90_C7PN35          G D E T T N           S V D I T F A N N I A N V L A A         L T T G
UniRef90_I5CFT2              E A P G I P E L G N V P A F T F A I P V D E A M
UniRef90_UPI0004571B0A
UniRef90_H3NY90          I Y T G G Q D Q R S   D A N G I G I N L A T P V N T V I S D L
UniRef90_UPI0003B7ADC9   I I Y S P S   G G N V G I G F A I P A E E A K P V V D V L M K G G
UniRef90_W6JTF7
UniRef90_UPI0003760FCF   K V S D           M G V E G L G F A I P V N Q A
UniRef90_F4L5U9          K V K D G N S I G I S L P V         Q H L A E A L A E F
UniRef90_C7QKS1          I R D D A Q G M A F A V P A A
UniRef90_U5WA18
UniRef90_K6X5E2
UniRef90_M2XV60          S L L T T E A E N I G Y
UniRef90_A5URF9
UniRef90_UPI00035002D3   K V T       A G I S F A I P S D R I T R F
UniRef90_F1ND77          K V T       A G I S F A I P S D R I T Q F
UniRef90_UPI00034D16D6   T L D H E S K G K V G L Y V       P I S Y F T
UniRef90_UPI0002E5D081   G A V Q R       N T D T S P G T R P E A Y A V P I A E A M T
UniRef90_UPI00035FC591   I Y             S P T G A S V G I G Y A I P
UniRef90_UPI000382F1A8   I A S L G S A F G   G Q S G S I G L G F A I P I D Q A
UniRef90_E9SXX1
UniRef90_K2EWV3                      R F P S E I V Q N I N F A T P I N T V K T N L N L S G Y T G
UniRef90_I0Z3W6          S M A G S D A E N I G Y
UniRef90_R1C1T0          K A M G M D G I A F A V P I D
UniRef90_B0RJ17          S A D P E H Y S N         V S I Y T P L S E
UniRef90_K9T521          R H R K T G V G R H I S V G T I R   G F I D E V V P W L R
UniRef90_I4WEX8          K S A N             E N L N Y A L P I R E V L D A
UniRef90_I4F3U3          G S T E             G G S A G G G V T F A N P L A T V L R E L G V E
UniRef90_S8CZE9                  T F T R K G T G T S S G V N F A I P M D T V
UniRef90_M0MB20          G A G Q T I G
UniRef90_E1R3B9          I A A P S G G             S V G L G F A I P I N N A
UniRef90_UPI000392F4B3   K V T S       G I S F A I P S D R L R R F L Q
UniRef90_S5TH17          G E E T D A
UniRef90_F9VNB5
UniRef90_K8GCF1          I L L E S S R G A N T G I S I A T S A A I A Q
UniRef90_F0VC70          G F D N A Q N I G Y I V P T T V I R H F       L D D V K R H N G V     Y T G
UniRef90_UPI0003786E5D       M Y S P S S S D S S Q A G S V G L G F A I P I N T V K A D L
UniRef90_UPI0002DAD967   G D A G G G A E S A I A C
UniRef90_L0I7G7          G I V E G V G
UniRef90_UPI00037F52AD   I A T Y E A A S A G S S S S T I G L G F A I P I D Q A
UniRef90_K0V769
UniRef90_UPI0003F5E45A   K S P N             E N L N Y A L P I G L V M D A
UniRef90_U5WD21          I A T S G Q G G N I G L G F A I P S D K A Q A V A N A L
UniRef90_D4GQS0          I N Y G H R T D G S D D A I G       T L M S A I E S Q F N V T V
UniRef90_C7EDR4          N T G F T G G
UniRef90_UPI0002C474C1
UniRef90_W6M019          K L N A V R V H E M T G D V P Q N V N F A I
UniRef90_Q67MT3          V L A P G Q N I G F A I P A
UniRef90_R4UUW6          S H T D N N G S T Y G R             F Y P I K E A L T G L G L R
UniRef90_UPI00037EA8E9   M A T N A Q N I G Y V I P
UniRef90_H6MZH5          G S S D T D
UniRef90_A0A024PI28              T L H D N V E G R V G L A V P I D
UniRef90_R9KMY0          G F D A G Q N I N L A V
UniRef90_UPI0003B5F7F8   R Q M D V Q S A A F A T K S S       Y L M H L V D S L S A
UniRef90_S4XFR0          G S
UniRef90_H1RZI5          M R T D A Q N I N F A I P A
UniRef90_M7NE43          V M Q D N S L V G F A I P
UniRef90_UPI000361048C   K L Y A A G F V S S G S D Y T P D R E M F A A V S P V L E H F N V Q
UniRef90_G7WQF2          G S G R T L V S G E W L D V   Q G Y N F L I P I N V A
UniRef90_U1PDG9          G G D N I G F G I S A
UniRef90_UPI00036AB0D4   R Q M D V Q S A A F A T K S S       Y L M R L V D S L S A A G
UniRef90_UPI000376FF5B   S A S S D S S S S S S S A G S V G L G F A I P I N T V K A D L D   T L R A G
UniRef90_I8G696          R N G S R T
UniRef90_UPI0002E68005   I G N F I V N N M H V P I G T F R D T W D Q L V
UniRef90_Q2J679          V A G V G L G
UniRef90_UPI0003A41E6D           E M P V T K E I G D V Q G A A F V L P I D E A M
UniRef90_B1HY29          L Y T T E T S T H F A F S I P L Y S M I A Q P L N E V L S V A N L
UniRef90_D8TR21
UniRef90_F5UDD1          G E F G F A Q T S S G E V A P I K T G F A V P I N T F I A K L
UniRef90_UPI0003081127   G I S G D N E L N A G M N F S I P V S
UniRef90_UPI0002B47ECC
UniRef90_A0M4L8          G M G T G S E L N F A V
UniRef90_A0JYK2          I A S A G G D S S S S T S G N I G V G F S V P I N
UniRef90_X1T317          H L I G G E N L N F A I S G
UniRef90_I8R0E4              A S G A W I R G H F I A F S S T T G W A E P W T V V A P T L G V S I V T G
UniRef90_G2ND00          M Y S P S S S T A D S S A G G L G F A I P V D T V K A D L
UniRef90_A0A059B6Z4              E N V K P D I A S G V S F A V P V D L I
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                                                50                60                70                80
UniRef90_M1WNJ4         Q K F V W G G L E T F G K V I A K D V R   L D L A L V K V Q D     R G A P V V F
UniRef90_H1VPF5
UniRef90_UPI0003B3AE59  L H V V R G A L K G Y A K L V S Q N I K Y N I D G V A A I D E D R V I L Q V T A
UniRef90_W3A8Y9         F T D V I V G Q D Q P G T V V G I S D E S   D I A L I K V D A F A G I D P     L
UniRef90_UPI0003AFC90D  R R R V R V R L P S G D T V V T A V D P V A D I A T L R I Q   T K E P L P T L R
UniRef90_M0LWH7         A S S V R V R F A E G G W R S A S V V   G T D V S S D L A V L E V T N K P G Y A
UniRef90_UPI000365662A  G G Q A T A D G K V Y A A T V V G T D P L S D L A V I K I D A P D L T P     I Q
UniRef90_UPI00034519B3  N P V V R V E T V Q G L T Y E G G R D P D R D L A I V E I T T P         L N
UniRef90_S2YT47         G D Y V Y L D N A P L G T L T R S R D G A N D W A V I   T W N P S V Q L G P
UniRef90_U1N4V0         R D R V D D G S W E T G T V V G S D V   Y T D L A V I R V T D P A D T T P L Q I
UniRef90_UPI00040BBD58  N T M I A L S G Q N I G Q I A N V I Y N D P V M D I A V L E F Q Q I I G P G V A
UniRef90_X1V2K9         P D T G L L Y N R R G L I Y V A V S P P N L D L A L I K I I A Q D G R D L P V N
UniRef90_A3Z0Y1         S D E V R L K W V D G S S D R A R V V A         R G S S E A P T S D L A L L A V E
UniRef90_UPI00044446E9                 D I A T I K I N P Q K K L H V   L S
UniRef90_D1C9X3         A R V R L G S Q D V V L A R V V G R D R L N D L A A L R V P R E G L A P A E
UniRef90_U2YIW9         G I V P P Q G G A A V A G R V M A Y S P K N D L A L I E T T E P L N L P P L A I
UniRef90_L0I5W3           Y T L E H K G K V V G Q V T D   L D P D Q D W A T V E I T S D S E M D F S G K
UniRef90_E5XLD4         G R V V Y S E L G Q L G Q V V R P W H E D I D F A L I E F D Q A K V V P S A A A
UniRef90_J2KNQ5         C N S V A P G   T V I T Q P S I E D H G N D P A D V I G A L S Y F V P L A A P
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lupas_21
lupas_14
lupas_28
jnet
conf   7 4 1 4 2 0 1 2 4 3 1 2 3 7 8 9 9 7 1 6 8 8 5 5 8 9 8 8 4 3 6 7 7 7 6 4 0 1 4
sol25   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
sol0   B   B
jhmm
jpssm

						90					100				110				120

UniRef90_M1WNJ4   Y G K K Q L N L A E T V E A   I G H P L   G N K F T L T R G V I S T L H E S
UniRef90_H1VPF5   V G M S G R T S G V T F G E V N Q A K S V
UniRef90_UPI0003B3AE59 F G I P S L P L G N S D A I E I G E S V Y A A G N P K G L E   G T F S D G I I S
UniRef90_W3A8Y9   E S E M N P T D V G T E V I A L G S P   S G F E N T A T I G Y L T G I D R D
UniRef90_UPI0003AFC90D L G R S A D V R Q G E F V V A M G S P F A L Q N T I T S G I V S S V Q R P A K D
UniRef90_M0LWH7   T A L P L V   E E Q P P I G T E V V A I G N P Y G R S T G I V S G V N R S
UniRef90_UPI000365662A M G R S A D L K V G D D A I A I G A P L   G L P N T V T D G I I S T L D R T
UniRef90_UPI00034519B3 L P S L T V Q V G   D A T I G Q T V Y A L G N P I G L D R T L T Q G I V S R
UniRef90_S2YT47   N G Y S G N T V L N P S A L T P G A Q V C V Y G S S T R R N C G R F V G N V D L
UniRef90_U1N4V0   A E H T A Y P Q P G Q P V A A L G N P L G L D G S V T T   G V V S G V D R S
UniRef90_UPI00040BBD58 L G D S N N V L I G Q E A F V V G F P   S H T T T I S A L G A N
UniRef90_X1V2K9   L S L T T M P V G D S N T V D I G D E L S I I G F P   D L G G A T V T F T K G S
UniRef90_A3Z0Y1   G Q R G K V L R M R D Q A S A V G Q E V F V I G A P K G L E F   S L S R G
UniRef90_UPI00044446E9 L G S S A D L R P G E F V V A L G S P F A L Q N T V T T G I V S T A Q R D G K E
UniRef90_D1C9X3   V G D S R T L R P G Q I V L A M G H P M G L S H A L T L G I   V S
UniRef90_U2YIW9   A S T P P Q D   G S Q V A A V G Y P M   N V D R A Q G L S V A D V L R P Q P P
UniRef90_L0I5W3   I H G T N R P I S G H V T Q E D G E T V Y K R G A K T C K T S G E V S G Y D E Y
UniRef90_E5XLD4   V G G N D V K V A D V G A P K V G D K A C Q S G R T T S N V C G T V T E V
UniRef90_J2KNQ5   G G T S P V D V A P V T A P Y V G M E V Q K S G R T T G V T K G K V T A I A L T

lupas_21
lupas_14
lupas_28
jnet
conf   6 7 7 7 3 0 2 2 2 5 7 6 1 1 1 1 5 3 3 1 1 2 3 6 7 8 8 1 2 5 8 9 9 9 8 6 2 3 2 9
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
sol5   B B   B B
sol0
jhmm
jpssm

Multiple sequence alignment (positions 130–160)

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                          130          140          150          160
UniRef90_M1WNJ4         I M R V K G K P V M F I Q T D T P V N A G N S G G P L F L   G N Y V I   G V N D W
UniRef90_H1VPF5         V R R V S H D G T P L I S S D P F A R K G D S G A C V F D L E G R A V G M V S G
UniRef90_UPI0003B3AE59  S I R G D G A Y K I L   Q M T A P I S Q G S S G G P V L N K K G E V I   G I S V L
UniRef90_W3A8Y9         F E   Q E F I Y E D I Y Q I D A P I A P G S S G G P L V D S T G K V I   G I N S L
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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
sol5                   B             B B   B     B B B         B B B B       B B B B B B B
sol0                                     B                 B                       B B       B
jhmm
jpssm
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UniRef90_UPI0003AFC90D
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UniRef90_U1N4V0
UniRef90_UPI00040BBD58   K F G N
UniRef90_X1V2K9          A A T E V V W V P G K I G L V R P V N L A R P L T E
UniRef90_A3Z0Y1          K F G D S E G L N F A V S S
UniRef90_UPI00044446E9                 L K V T A G I S F A I P
UniRef90_D1C9X3          A M V A S P G V A L A V P S H V V A D F V E H I G E P T P W L G I T
UniRef90_U2YIW9          T D S Q G A D A E F F F A V S A R E       I L P F L R A N G V E P V
UniRef90_L0I5W3          A V I A P H K G S V G D T S V G C A A Y
UniRef90_E5XLD4
UniRef90_J2KNQ5          S Q N N P V G L L F A G D Q G T K T T Y A N T M Q A V L K Q     L T D L T G
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jnet
conf   6 7 7 7 7 6 6 7 7 7 6 7 7 7 7 7 6 0 5 7 7 2 1 0 4 6 5 5 5 2 1 8 6 1 4 1 8 9
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sol5   B B   B B B   B   B B   B
sol0   B
jhmm
jpssm