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                              1         10          20         30         40
QUERY                  D V S I L V F Y T G V R S S E Y A E R K H I A E E S L K I L G K G S S K E V R E
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UniRef90_UPI00035E8CCE   Y R I V I M N T N K R G S K Y N E R R K E C D T A L Q I L Q I Q S L G D L P
UniRef90_UPI0003B77550   L I I M I I N S N K K D S E Y N T R R V Q C E L A A R K F N V P A L R D L S E
UniRef90_A8AJ37          V A V V I I N S N L V G S E Y N T R R E Q C E T G A R F F Q Q P A L R D V S L
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                                50                60                70                80
QUERY                  G E L S K L P P L H R K F F G Y I V R E N A R V L E V R D A L K E G N V E V G
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UniRef90_UPI0003B65C08 E A R D L D D E T F R R A R H I V T E D Q R V L D T V E T L R T D G P T A I G
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UniRef90_M1N4N1        V K D C I G D P I K I K R A K H A V Y E N R R T L K A V K A L E E N D L A L F G
UniRef90_W0RR03        A R E A E L D D V T R R A R H V V T E N A R T L A A A D A L A R G D L A E M G
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UniRef90_H1PV63        V K H F I T D E E Q L K R A T H A V T E N E R T K T A V E K L N S G D V E A F G
UniRef90_N0B597        A Q F D N F K D V L R R R A R H A V T E N E R T L K A V K E L K H G N L E A F G
UniRef90_A1JRX5        N L F F E L D P V V A K R A R H V I S E N A R T L L A A D A L A A G D L K L M G
UniRef90_C3XYY9        A H K D K F D P E V L C R A R H V I G E I R R T T E A A E A L R A R D Y A K F G
UniRef90_UPI0002888898 K E F D K I D E K I K D R A K H S V Y E N D R V I S A F D S L N K G E L E E F G
UniRef90_A3N103        E Q F Q A E N E L A Y K R A K H I I S E N Q R V L E A V E A L K A N D M V K L G
UniRef90_B1YIH8        N E F E T V D E R L E R R A R H A I S E N E R T L Q A L D A L K E D R L E A F G
UniRef90_C5CGZ4        A D V L M I S E I S Y R A M H I V E S V D I L K H S N F E N L G
UniRef90_E7NRZ7        D D F F A N D E T I K K R V R H C I F E N E R V E S A V A A L Q K E D L K T L G
UniRef90_Q0VFQ1        A M K E S L T K T C Y K R A R H V I S E I A R T T D A A D A L Q R G D Y K A F G
UniRef90_W7DK73        E N F E K Y N E T L V R R A R H A V S E N E R T I L A T K A L K N G D L M T F G
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UniRef90_UPI000475234C S E F E Q N D E V L E K R A K H V I E N Q R I L R A F Q A L E H D G L A S F G
UniRef90_D0GID5        N K G L I K N E V N R K R A K H A V Y E N Q R T L K A Q K E L S A G N L E E F G
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UniRef90_UPI000255D674 Q L M N A S H V S L R D D Y E V T G P E L D A L A E E A W K A D V I G S R M T G
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UniRef90_UPI00036A3450 P L L D A S H A S M R D D F E I S C P E L D L A V D T A R S A G A I G A R M T G
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UniRef90_W1J5V7        Q L M A E S H I S M R N D F E I T V H E I D M L V E I V K N V I G G G V R M T G
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UniRef90_B1YIH8        Q L M N A S H R S L R V D Y E V T G K E L D T L V E A A W Q P G V L G G A R M T G
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UniRef90_F4AMU3        A L M A E S H A S M R D D F E I T V P E I D F I V E T L A D Y E H G G V R M T G
UniRef90_M1VJ79        K L M Y E S H E S L R T N Y Q V S C E L D A L V E I A W K A Q R V P V Y G S R M T G
UniRef90_Q5LYY7        R L M N A S H V S L E Y D Y E V T G L E L D T L A H T A W E Q E V L G A R M T G
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UniRef90_G8PB09        R L V N A S H V S L Q Y D Y E V S A D E L D F L V D S A W K F S V I G A R M I G
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                          130        140        150        160
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UniRef90_D0FU67       G G F G G C V V A L M P R E R V A S V K A A V E R H Y Q A K S G I K E T F Y V C
UniRef90_Q836P0       A G F G G C S I A L V P K Q N I D A F I E A V G Q S Y Q D K I G Y A A D F Y P A
UniRef90_C9Q765       G G F G G C V V A L V H P T Q V D A V K R A V E R E Y Q A A T G L K E S I Y V C
UniRef90_E4RNE0       A G F G G C T V N L V K K E F V D T F V E N I K Q A Y Y E N T G L D T D V Y I T
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UniRef90_R6YS04       G G F G G C T V S L V A S D K I E D F K T A L S E V Y K K N Y D K I P E F Y I A
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UniRef90_M1N4N1       A G F G G C T V N I V K E D C I D A F I E K V K K A Y T D K I G Y E P D F Y V V
UniRef90_W0RR03       A G F G G C A V A L G E A G R A E T I A A E V A R R Y E A E V G L K P A V Y V C
UniRef90_R6NM47       A G F G G C T V S I V K D E F I D S F I Q N V G E I Y E K E I G Y A A D F Y V V
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UniRef90_V6YZK9       A G F G G C G I A I L A K D K V D T F K E T V G K T Y R E V V G Y D P D F Y I A
UniRef90_H3CAN5       A G F G G C T V T L L Q A H V I D R T L L H I Q E R Y         S G T P T F Y V V
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UniRef90_E6WC55          K  A  S  E  G  A  G
UniRef90_UPI0003A993D8   Q  A  K  D  G  A  S  L
UniRef90_I2BB23          T  P  S  E  G  A  G
UniRef90_X2H6X8          K  P  S  K  G  V  H
UniRef90_UPI00031A2003   Q  A  K  Q  G  A  G  L
UniRef90_Q65UV5          T  A  S  Q  G  V  H  L
UniRef90_E8MD08          Q  A  K  A  G  A  G  V
UniRef90_UPI000319D245   R  A  T  D  G  A  G  V
UniRef90_R8ARW9          Q  A  M  D  G  A  G  L
UniRef90_I0DQF8          Q  P  S  D  G  A  G  I
UniRef90_UPI00035E8CCE   T  I  G  D  G  A  K
UniRef90_UPI0003B77550   Q  A  K  Q  G  A  S  L
UniRef90_A8AJ37          K  P  S  Q  G  A  G
UniRef90_F3BDN7          D  I  G  D  G  A  G  V
UniRef90_UPI000255D674   D  V  G  D  G  A  R
UniRef90_B0NJU7          D  I  G  D  G  A  K  I
UniRef90_UPI0003F85102   D  I  S  D  G  T  R
UniRef90_F7NSI1          T  A  S  Q  G  A
UniRef90_UPI00047AEE5E   S  I  G  D  G  A  K
UniRef90_V6MJR0          S  A  S  Q  G  A  G
UniRef90_UPI000418AE88   E  I  G  D  G  A  K
UniRef90_Q6LQE4          K  A  M  P  G  A  G
UniRef90_W9AUM7          K  A  M  A  G  A  G  V
UniRef90_U5L540          S  V  G  D  G  T  K
UniRef90_R5TK86          E  I  G  D  G  G  R  V
UniRef90_M5EBW4          N  P  G  N  G  A  R
UniRef90_D0FU67          T  A  S  A  G  A  G
UniRef90_Q836P0          S  I  D  D  G  A  R
UniRef90_C9Q765          H  A  T  S  G  A  G  L
UniRef90_E4RNE0          N  P  A  A  G  A  R
UniRef90_R5BTZ2          D  I  G  D  G  A
UniRef90_F5T5I8          E  I  A  D  G  P  R
UniRef90_E3I9U9          K  I  G  D  G  A  R
UniRef90_UPI0003870063   K  P  S  G  G  A  K  V
UniRef90_S7JRV4          Q  A  K  N  G  A  G  L
UniRef90_J3JTL8          K  P  S  Q  G  A  R  V
UniRef90_F4FXB1          E  I  S  D  G
UniRef90_U4TP24          E  I  S  D  G  P  H
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UniRef90_A0A015KRZ5      S  I  G  N  G  V
UniRef90_S4D480          H  I  G  S  G  T
UniRef90_G6EZP0          H  A  M  N  G  A  G
UniRef90_L7ZKJ2          Q  A  S  Q  G  A  G
UniRef90_R6YS04          E  I  A  D  G  A  R
UniRef90_R1FBI2          R  A  S  A  G  A  G
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UniRef90_G2MXQ2          G  I  G  E  G  A  R
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UniRef90_G2SN74          E  V  A  D  G  T  K  V
UniRef90_W1J5V7          Q  A  S  K  G  A
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UniRef90_UPI0003B65C08   R  P  S  Q  G  A  R
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UniRef90_M1N4N1          N  I  S  G  G  A  R
UniRef90_W0RR03          T  P  S  D  G  A  S  L
UniRef90_R6NM47          E  I  G  D  G  S  R
UniRef90_H1PV63          K  I  G  D  G  S  R
UniRef90_N0B597          S  I  G  D  G  V  K
UniRef90_A1JRX5          Q  A  S  Q  G  A  G  L
UniRef90_C3XYY9          T  P  A  A  G  A  S  V
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UniRef90_B1YIH8          T  V  G  D  G  A  R
UniRef90_C5CGZ4          L  P  S  D  G  A  R
UniRef90_E7NRZ7          K  A  G  Q  G  A  A  V
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UniRef90_U1IUR8          L  P  A  S  G  V  C  V
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UniRef90_D0GID5          E  V  S  E  G  P  R
UniRef90_F4AMU3          C  A  S  D  G  A  G
UniRef90_M1VJ79          K  P  G  P  G  S  R
UniRef90_Q5LYY7          E  V  T  G  G  S  R  V
UniRef90_UPI000466379D   T  P  E  N  G  A
UniRef90_R6KIC3          T  I  S  D  G  A  R
UniRef90_D4F8D5          Q  P  S  A  G  A  S  V
UniRef90_G8PB09          Q  I  V  D  G  P  H
UniRef90_UPI0003820070   E  I  S  D  G  T  K  V
UniRef90_UPI00037B0BD0   L  P  G  P  G  A  H
UniRef90_UPI0004788B0C   N  V  G  D  G  A  K
UniRef90_A3QFA5          Q  S  G  A  G  A
UniRef90_D1AWX8          N  V  S  E  G  A  R  I
UniRef90_C3FB63          H  I  G  C  G  T  T  V
UniRef90_V6YZK9          E  I  A  G  G  S  H  V
UniRef90_H3CAN5          T  P  S  E  G  A  R
UniRef90_R5YLP9          S  I  G  D  G  P  S  I
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                                    1                  10                  20                  30                  40
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UniRef90_Q1IQZ8         D V R L V I C N S M V K H G E Y N H R R A E C A E A V K L L Q V T A L R D V T E
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UniRef90_UPI00047CF65B        A K I V I A N T N K K H S Q Y N A R R S M C E Q A L A I L Q K K S I E E F E A
UniRef90_UPI00047ABF23  D Y K I V I S N T N K R D S K Y N E R R S E C D R A V A L L G Q L T P A Q F E S
UniRef90_C9AAS6         D Y V V A I M N T N K R D S K Y N E R R A E C E E A L A R L Q K D S L G A L D E
UniRef90_V5XN47           Y A V V I M N T N K R E S K Y N E R R S E C E E A L K R L Q I K A L G E L D E
UniRef90_H3ZPN6         D V S V L V F Y T G V K S S A Y A E R R K I A E E S L R F L G K R T S K D V D E
UniRef90_A8H018           L S L I I I N S N V E S E Y N L R R E Q C E Q A A H F G L E S L R D L D E
UniRef90_B3RPU6         N I V V L I T N T N V H H S E Y P S R R R Q C E E S A K L L G K K S L R D V T E
UniRef90_G3WZY5           V F L I T N S N V H S E Y P I R R S Q C E S A A K A L G K K S L R E V D E
UniRef90_S9T2E5         Y C L I L G N T N K R D S K Y N E R R A Q C D E A V R A L Q Q L T A E Q F E A
UniRef90_N2ARR5         A K I V I S C T N K K D S K Y N E R R S E C E T A L A E I G I N S L G D L D E
UniRef90_I8UAB7         N Y K L V I T N T N L A T S K Y N E R R Q E C E R A L A F L Q E K T L S D V S L
UniRef90_C6CCT4         N V A V V I I N S N V K D S E Y N T R R E Q C E A A A R Y F Q V S A L R D V S A
UniRef90_UPI00047ED02E  D Y R I L I S N T N K K D S K Y N E R R S Q C E E G L Q A L K K A S V E E F E K
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UniRef90_I7KK97         D Y V I S I M N T N K R E S K Y N E R R A Q C E K A L A S L Q Q A S L E Q F E Q
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UniRef90_UPI0003611F99  D Y V L A I I N S N L V E S K Y N E R F N E C R T A L K A F Q Q K S V E D F E Q
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UniRef90_I0W8K2         D H T L L V L N T N L A A S K Y N E R R A T C E A A L K I F N Q K S L C D F F E
UniRef90_H9KIL6         D Y I F L I T N S N A P H S A Y C Q R R D C C Y E V A K R L N K K S L R E V S M
UniRef90_C9LRR8           S I V I T N T N K A H S A Y N E R R M Q S E A A L K A L Q K K S L R E L T N
UniRef90_U2EN61         D Y T L V I M N T N K R E S K Y N E R R A E C D E A L E I L K K E A L C D L T V
UniRef90_UPI0003658DFC    Y K L I I T N S N K N H S K Y N E R R S E C E Q A L A S I K V N N L C D L G L
UniRef90_R5AVE7           Y K L V L V D S R V K H S P Y N K R R E S C E R V A K T L G V E T L R D A D M
UniRef90_UPI000370D4C2      T V L V I D T R L V D G E Y A A R R S A C E A A A S A L G V P S L R Q A
UniRef90_UPI0003FF2F2C  D E V I I I A N T G L A D S K Y N E R R S E C E N A L S E L K I N S L G E L T I
UniRef90_UPI000479DD0C    A V M I V H S N V H D S E Y N L R R Q Q C E A A A R H F G V A A L R D V S E
UniRef90_D6XXA1           Y K I L I A N T G L A D S K Y N E R R Q E C E T A L S E L Q V S H L C E L D E
UniRef90_Q21LS0         D L A I M I I D S K V K D S E Y N T R R K Q C E E A A L I M G V S S L R D A T A
UniRef90_X4RAU9           L E I L V I D T R A S H S Q Y A K R R A A C E E A A R E L G L S S L R Y A H D
UniRef90_D2B1A2           L Q L L I I N T G V H H G Q Y A R R R Q D C E N A A K H L G V D A L R D V T D
UniRef90_UPI00047ABF66        A K I V I A N T N K K H S Q Y N A R R S A C E K A L K G L G D L S P E E F E A
UniRef90_H7EKN0         D Y R F V V M N T N L A D S K Y N E R R G E C E E A L R R L R I E A L C D M T P
UniRef90_F9Z8U5           Y K L V I A N T N K K D S K Y N E R R S E C E Q A V A S I S I T F L C E L T P
UniRef90_V9KSJ0         N L V V L I T N S N V R H S E Y S T R R S Q C E A A A K A L G K E S L R C A T M
UniRef90_A0A037ZF95     D Y K I I I S N S N K R D S K Y N E R R Q E C E R A L K Y L Q K K S L G D I T I
UniRef90_E1W0Z0         D A V V L V M D T R V E H S G Y A A R R A S C E Q A A A A L E V Q S L R E V T A
UniRef90_A5CU15           L T I A V I D T H V A H G G Y R A R R E S C E Q G A R L M G V A S L R D L A V
UniRef90_UPI00028960E4  E H L I L I M N T N K R E S K Y N E R R S C E A A L K E L D V Q A L G N I T S
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UniRef90_E3DMW3         N Y Q I V I C N S G L V D S A Y N Q R R E E C K Q A V E F F K I N A L R D L N E
UniRef90_W4QTK0           H K V I T N T G L A D S K Y N E R R A Q C E E A L K R I Q R E S V A D L P S
UniRef90_R5VJP6           V K L V L A N S N K H S A Y N D R R R E C E E A L R I M G I E A L C Q L D P
UniRef90_A3HYY0           Y S L L L T N T N V K H S A Y N K R R E A C E K S V E I L G I T T L R E V Q M
UniRef90_U3CBS1           L A V L I T N S N V H H S E Y H R R R Q C E E V A R A L G K E S L R E V Q M
UniRef90_E7RV13         E L R V M I I D S G L V G S E Y N T R R E Q C E E A A H F G V K A L R D V D Q
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UniRef90_T2KIG1         D Y E L L L I N T N V K H S A Y N D R R S V C E S V S E L L N I K A L R D A S E
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UniRef90_UPI0003A9A6F2   V K H F I K D E E Q L K R A R H A V R E N E R T K E A V S V L K A G N I E K F G
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UniRef90_UPI0003FF2F2C   E E F E N N D D I R R K R A K H A V Y E N Q R T L A K E A L E N N D L K L F G
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UniRef90_D2B1A2          G A L G R L S G D E R R R T Q H V V T E N H R V E A L I G L L R A G A V R E I G
UniRef90_UPI00047ABF66   H K D A I K D D D R R I K A K H A V Y E N Q R T I D A V A A L K A G D L T K F G
UniRef90_H7EKN0          A R W G E V E P V L E R R V T H C V N E N Q R V L D A V D A L R A G D L A R L G
UniRef90_F9Z8U5          T E F G Q Y D P I V Y R A R H A V H E H A R V K Q A I D A L K A G K L T T F G
UniRef90_V9KSJ0          A D K A S L D A E V Y R R A R Y V I T E I K R T T E A A E A L K T G N Y G Q F G
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UniRef90_A5CU15          D D R E V L D E T F R R V R H I V T E N Q R V L D T V R A L R E E G P R A I G
UniRef90_UPI00028960E4   E Q F E Q H K H L L Q K R A H A V Y E N E R T L E A L K A L K A G D L T E F G
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UniRef90_UPI0004281F44   E D L A E L D E E T F R R V R H I V T E D M R V L E T V S V L E A S G P S A I G
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UniRef90_W4QTK0          I E R L I D D E L L V R R A R H V I T E N K R T S D A K K A L Q A G D L L L F G
UniRef90_R5VJP6          D T F E T C D E D C R R R A R H A V M E N A R T K K A V E V L K Q G D I E A F G
UniRef90_A3HYY0          D D K E L L P V E L F P K A K H V I M E D H R V K E A G D C L K N S D L I A F G
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UniRef90_Q1IQZ8         R L M F A S H A S L R D D Y E V S C R E L D L L V E F A S K V E G L I A R M T G
UniRef90_D8MA38         R L L L Q S H A S L R D N F E V S T P E L D L L V E I A M Q D G V F G A R M T G
UniRef90_M4U3W6         K L M Q D S H I S M R D D F E I T V K E I D L I V D I V K K E M Q G G V R M T G
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UniRef90_UPI00047ABF23  K L M N A S H D S L R D L Y E V T G K E L D A M V D A A R R V P V L G A R M T G
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UniRef90_H3ZPN6         E I L T R A H W D I A R N Y G V S S E E L D F F V R K A R E L G A Y G A R L T G
UniRef90_A8H018         L L M A Q S H R S M R D D F E I T T T E I D Y L V E I I S N V I G G G V R M T G
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UniRef90_UPI000470DF20    L R L L V I D S K V S H S G Y G A R R R T C E E S A A I F G V D S L R E L P D
UniRef90_B8CME2           L S L V I V N T N V K H S E Y N R R R E Q C E A A V A S H F N V K A L R D V T F
UniRef90_B8KHW3           L S L A I V D S R V R H G G Y A A R R A Q C E A A E Q L G K S L R D A S V
UniRef90_F6FX93           L A L L V V D T R L V D G Q Y A A R R A A C E K A A A L L G L D S L R D V P A
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                                          50            60            70          80
UniRef90_UPI00036254B0   L A D L G D E E V R R L V R H V V T E D H R V E R V V T L L E S G D V R A I G
UniRef90_C5RC36          E E F E K I S P V N Q R R A R H A V A E N R T V L A K K A L S E H D M K R F G
UniRef90_K2PQ23          E E F E A N D E T L I K R A R H A V Y E N N R T K V A Q K A F V A G N L T K F G
UniRef90_I7A153          E N K D Q L D G V I Y K R C K Y V I E E N E R L L S A C E A L N K N D L R E F G
UniRef90_UPI00047C3111   Q Y Q Q V L S S Q T Y Q R C L Y V L Q E N E R V Q A A A S A L R S N D L F A L G
UniRef90_G0L8W9          E M K E G M S E T V Y K R C S F I V K E N D R V L A M V D A L K K N N L D E V G
UniRef90_T0C6W9          A W P V V T D T T L R R R A R H V V L E N Q R A K R A V E V L R V G D T A R F G
UniRef90_U4TMS2          T N Q A R L D K T T Y Q R A R H V I S E N A R V L A V K Q A L L N H D T A R F G
UniRef90_UPI00036B7E9D   E R L R Q L E T V F D N R V K H V I E E N A R V L A S V E A L K A N D L H R F G
UniRef90_UPI000369EAC4   A Q E K E I E P E L F K R A R H V V S E N T R A V N T L K A L K A N D M A T I S
UniRef90_S9R0F7          A D L P R L S E P L G R R V R H V V T E N A R V L A T V E A L R K G D L P G L G
UniRef90_UPI000377F46F   E M L D Q H E P L I Y R R C A Y V V Q E N A R L L A G V E A L E A N D I A A F G
UniRef90_A0A024PN19      E Q F E K H D K V N C K R A R H A V T E N Q R T L K A L D E L H A G N L A E F G
UniRef90_F9Z1D7          A V A A L D D E G M A S R V R H V V T E N D R V T Q F V K L L D T G Q I R E V G
UniRef90_B1KDE7          A A K D K L D E V S Y R R V K H V L T E N R R T Q N A A H A L E A G N I P K L S
UniRef90_C8WRS1          G Q W S E A E A L L R R R A R H V V M E S H R A R E A A R L L A D G N I E A F G
UniRef90_I2F5K0          I D L F P L G D L Y Y R R A L H V V S E N M R V L E A M K M M S N S N F E N L G
UniRef90_H1Y791          H K H L I T D A T V L N R A T H V V A E N E R V K L A A K A L A G N N L K E F G
UniRef90_UPI0003779DAD   A A A D R L P A D L V P L V R H V V T E N R R V L D M V E L L R A N R L A E T G
UniRef90_D0LM44          R R G G M L D D T T L R R A R H V I T E N A R T K E A A E A L R S G A Y E R L G
UniRef90_R5BKB5          L D L I E D D V L R R R A R H A I T E N L R V M A F M D A L R E G N T A K I A
UniRef90_I7IYJ6          Y S Y L I N D A V E L K R A R H A V L E N E R T I R A T N A M K M N D L S Q L G
UniRef90_J5US24          K D F Y L I N R L I R K R V Q H V V E E N K R V I K A Q Q A L S S N D I K T L G
UniRef90_UPI0003EC02B1   E A R G R M D D V T Y R R A R H V I E E I Q R T V Q A A K S L E R G E Y K E F G
UniRef90_UPI00037A6880   A L A R V E D D P G L R P L V R H V V T E D R R V E R V V E L L E T G D A R A I G
UniRef90_C7XXP7          Y D Y L I N D A V L I R R V R H V V T E N E R T R E A T K A M Q V N D M E R L G
UniRef90_UPI00036F2188   G D L S G L D E E T A R R V R H V L S E N R R V L E T V R R L R A G D V R G I G
UniRef90_R5KXS5          D M L N D I S E E D M K R A T Y V L G E K D R V L A V C D A L N K G D Y E T V G
UniRef90_UPI000248FB24   E V T S E I T P I A Y K R A R F V L E N V R V N K A V E A L K S K D L N T F G
UniRef90_F4F3A2          A L A R L P D D E T R R R V R H V V T E N Q R V Y D T V D L L R A R Q I Q Q I G
UniRef90_D6K367          A E L D A A E P E V R R L V R H I V T E N E R V E R V V S L L E S G R T R A I G
UniRef90_I0RYV9          A L T S V T E P V D R R A R H V V T E N Q R V L D F V A A L N G S D F G E A G
UniRef90_UPI00047C4409   T A R K D L S T E D Y D K A L Y I V E E N E R V L A F S K A I L D E D L Q T L G
UniRef90_R7V970          T F K S Q M E Q A I Y Q R A R H V I S E N Q R C E E G A G H L S S G N Y T A F G
UniRef90_E7QV03          E R A E T L P G T V R D R C E H V V R E N E R V K T A A N A L E T G D M E R V G
UniRef90_H2JHA3          D E F E Q Y K E V I K R V T H V I G E N A R V L K A A D A L Q R N D I Y E L G
UniRef90_R5SIX4          A K R V W L P E E D F L R A E Y V I G E V Q R V L D V C D A L E R G D Y E T V G
UniRef90_R6J0H1          S F R E Q L G D V R Y R R A R H V I G E N A R V N A F A N A L S R G D W D E A G
UniRef90_UPI000468A32C   E K H V I T D E T I L N R A T H V V K E N D R V H L A A K A L N S G N L E E F G
UniRef90_H7FNW4          Q H Q N V M S P N V Y K R S L F V V K E I N R V I E A C E A L D S G N I E A L G
UniRef90_UPI0004277198   A Q Q D Q F T T V V F K R V R H V V K E I N R V L A C E A L D K G N I E L L G
UniRef90_UPI000370B4C0   E D A R L S D E R I Q R Y V R H V V S D D H R V D Q V I T L L D A G D V R A I G
UniRef90_F4CEU8          E Y V K P V D E I V Y R R C S Y V V A E I A R L Q L A C E D L K K D D F K A F G
UniRef90_D3PP17          T D L P R L P E P L N R R A R H V V T E N Q R V L E G V A A L E Q G D I Q R F G
UniRef90_G2PS25          Q C K E E L G E T I F N R C S Y V I E E N L R V F K A V T A L K E K N L I K F G
UniRef90_A0A024LZA0      A G L P R I D P V D A R R A R H V L T E N Q R V L D C V A A L A S E D F G S V G
UniRef90_R7D060          E A R P D I S E E D Y M R A E Y V I E E I Q R V L D V C E A L E R G D Y E T V G
UniRef90_UPI0002378C16   A T L P K L P E E L R P L L R H V V T E N D R V L T T V D E L R A G R Y A E I G
UniRef90_F0RGX3          Q D L N T I K E E D Y Q K A L Y I I E E N Q R V T S F S K A I K A D D I Q E L G
UniRef90_J7QRP3          A Q L M R M S E L V F R R A R H V V G E I D R T L A D A G D L Q E C G
UniRef90_W5JFY2          D H L K A L E E V L V R R A R H V I T E I Q R T T E A A N A L K A N D F V K M G
UniRef90_F2R7F9          A H L P E A D E T I R R Y V R H V V T D N A R V E R T I A L L D A G D V R A V G
UniRef90_G5H980          E Y K D E M D D V V Y R R C S F V I N E N Q R L L D G C A A L E K G D Y V T F G
UniRef90_A9B770          D E Q D R F E E V I Y R R A R H V V S E N E R V H K A A A A F R A G D F G Y V G
UniRef90_S3JX95          A D L G M V D E R I F K R V R H C I T E N E R V L A A V A A L K A G N L P K L G
UniRef90_F4LMB0          L Q D S V K D P I I L K R I R H C V T E N E R V Y K A V A A L K A G A L A D L G
UniRef90_Q896X8          L K Y L I K D N R V L N R A T H V V Y E N E R V K R A Y Y L L S K R N L K E F G
UniRef90_B8E2X4          K A F E I L P S P L K E R V A H V Y N E N K R V L N F V N D L K N N K W E N L P
UniRef90_C7MQS6          D E S R M D D E V Q R R R V R H V V T E N A R V L E V V R R L R D G D L D G I G
UniRef90_UPI0004188D91   R G V Q A L D P V D A R R A R H V L T E N E R V L D F V A T C A E R D F A T A G
UniRef90_UPI000363B961   A H K S E M E D V I Y R R C K Y I V E E N L R V L A F C D A L N N A D F E S A G
UniRef90_C9LHV2          E V R S E V S K E D A L R A H Y V I G E K E R V M E V S A A L E K E D Y E E V G
UniRef90_B2J4M9          E V T E K L P E P L R R R A R H V V T E D N R V L E V L Q G V S S E R F G
UniRef90_UPI000479C2C4   E A T E D L P E P L R R R A R H V V T E N N R V L E V L Q I L E T R H L Q R F G
UniRef90_R5GGD5          E V R S E V S E E D A L R A K Y V I G E K Y R V L E V C V A L E E G D Y E E V G
UniRef90_D4GYD3          A H A D A L D P V H F R R V R H V V T E N R V R R A R D A L A A G D L D R V G
UniRef90_T1G513          D Y K E I F D D V T Y R R A K H V I S E N G R C V Q A A N A I Q N G Q Y K K F G
UniRef90_UPI00037D9501   E A R G S M S E N A F L R C R H I I T E N V R V E E A A T A L A A G D M K R M G
UniRef90_R7XYQ0          P E A L A D D E V V A R R A R H V L T E I I E R V T S C V T A L S S G D V E A F G
UniRef90_W5WMQ6          A D P E E W P A T V A K R V R H V V S E I D R T A K A I E Q L E A G D M E A F G
UniRef90_UPI00042054B6   S D L V K I P N Y L F P K A K H V I T E C K R V L E A A H A L S I G D L A T F G
UniRef90_H3NTK5          A Y A S E L S D I V R R R C S H V V N A S A A L G A G D L E E F G
UniRef90_H8KL58          V Q L D A N L D L I K K R A R H V V S E N E R V K E S V A A L S N G D L T T F G
UniRef90_I6ZDQ7          A G D T V A D P M L R A R A R H V V T E N A R V R E V V A L L Q S R D P R S I G
UniRef90_U2XLY0          R A A G I L D V T F R R V R H I V T E N Q R V L D T V R T L R E Q G P R A I G
UniRef90_Q1J3L9          S Q L D V L P P L L R R R A R H V V S E N A R V Q E A L G A D A A R F G
UniRef90_D9RUZ6          A V K D K V S A E D Y Q R A H F V L G E K E R V L A V C D A L V A G D Y E T V G
UniRef90_E2MU26          A E Q D W L D V V S R R V R H V I T E I S R T T T A I E K L Q A G D F E A F G
UniRef90_UPI000289BF9A   A E L D S A D E E I R L V K H V V T E D E R V E Q V V A L M S G A D A R E I G
UniRef90_UPI0003B3ACA6   A E A P A L D P V V R R R A R H V L S E N L R T L E A A K A M A A N Q P E R L G
UniRef90_K9VCB2          Q A V E V L P E P L R K R A R H V V T E N N R V L E A V K S L S A K R F G
UniRef90_UPI00047EC23A   A C R Q K M S P E S F A R C H I I T E N A R V L A A R E A L L A D M K R F G
UniRef90_B7P3D4          A H R E E L T T T Q Y A R A H I I S E N I G R T A A A A S A L L D G D L R R F G
UniRef90_D7GFF4          E Q L P D A D Q T L R R R V R H V V T E I A R T R Q C C D A L E H G D F Q Q V G
UniRef90_UPI0003B51FA4   Y M L D I L K E I L W K R A K F V V E E N K R V L T A K E A I K K G D K E T I S
UniRef90_D4M7N9          E D F N R L D P V N R R R A R H A V T E N Q R T L D A A R A L S L A D L R T F G
UniRef90_K1L576          K H L N E I K P F I D R R G V Y V I E E N R V I E A S E A L K E G N I L K V G
UniRef90_K9DSN2          E K G D G L D P V A L R A R H V I S E N A R V V A A E A L K E G N L R M G
UniRef90_UPI000470DF20   D D L S E L T D E Q R R V R H V I A E N A R V R S S V E L L E D N R I R A L G
UniRef90_B8CME2          D Q H N V L P A V L R R A R H V I S E T T R T V N A H A L V N K D M K T I S
UniRef90_B8KHW3          D D L P E I D D I L R A R A R H V L A F A A A L A S D D R Q T A G
UniRef90_F6FX93          E A E H D P D G V L R R R V Q H V V T E I A R T A E F A E L V R A G K V D E V G
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                                          90              100             110             120
UniRef90_UPI00036254B0   P L L T E G H A S L R D D F R I S C P E L D L A V D T S L S A G A L G A R M T G
UniRef90_C5RC36          E L L T E S H N S L R D D Y E V T G I E L D T L V S A A M Q P G V L G A R M T G
UniRef90_K2PQ23          E L L N A S L K D D Y E V T G S E L D T L A E T A Q K A G V L G A R M T G
UniRef90_I7A153          Q F M Y G S H Q G L S K E Y E V S C P E L D Y L V E L A D R E G V Y G A R M M G
UniRef90_UPI00047C3111   K L M F A S H R G L Q H Q Y E V S C P E L D F L V D Y A N K E F I Y G S R M M G
UniRef90_G0L8W9          Q I L Y R A H E G I S K A Y E V S C P E S D F L V D F S K D N P V L G A R Q T G
UniRef90_T0C6W9          E M M N A S H Q S L R D D Y E V T G P E L D A L V E A A W S V E C I G S R M T G
UniRef90_U4TMS2          T L M I E S H E S L C Q D F E V S S D A L D T I V Q I A L A S E C L G A R M T G
UniRef90_UPI00036B7E9D   E L M N A S H D S L R D L Y E V S C T E L D V M V E E A R Q I E G L G S R M T G
UniRef90_UPI000369EAC4   A E M K A S H I S L R D D F E V T K E M D G L V E M I D S V T K G G V R M T G
UniRef90_S9R0F7          R L F Y A S H D S Q R L D Y E V S V P E I D L L V D L A R E A D V Y G A R L T G
UniRef90_UPI000377F46F   Q L M Y G S H E G L S K N Y E V S C P E L D I L V D I A R H P G V F G A R M M G
UniRef90_A0A024PN19      R L M D A S H Q S L K E D Y E V T G M E L D T L V A A A R E Q E V L G A R M T G
UniRef90_F9Z1D7          P L M N A S H D S L R D D Y E V T C P E L D T A V D A A R A A G A L G A R M T G
UniRef90_B1KDE7          Q L M A Q S H A S M R D D F E I T V P E I D T L V D I I S G V V G G G V R M T G
UniRef90_C8WRS1          E L M N A S H R S L R D D Y E V T G E A L D A L V E A A W S A E C I G S R M T G
UniRef90_I2F5K0          R I L I Q S H E S L A L D Y E V T C E E T D F I V D T L R E I G V S G A R M I G
UniRef90_H1Y791          R L M Y A S H D S L K N L Y E V S G A E L D A V V E A A T D K N V T G A R M T G
UniRef90_UPI0003779DAD   P L L D A S H A S L R D D Y R I S C P E L D V A V D S A K D A G A L G A R M T G
UniRef90_D0LM44          E L L D S S H E S L R N D F E V S N A A L D A M V R H A R H A A C Y G A R L T G
UniRef90_R5BKB5          E I I T A S H E S L R Y D Y E V S G L E L D T M V E I A R K Q P C L A S R M T G
UniRef90_I7IYJ6          H L L N A S H V S L H Y D Y E V T G A E L D T L A E S A W A N G A I G A R M I G
UniRef90_J5US24          K L L I E S D N S L R E L Y E V T G A Y L D A M T K Y A N S A T C V G A R M T G
UniRef90_UPI0003EC02B1   K H M V D S H N S L R D L Y E V S C R E L D E L V S A A M E V E V F G S R M T G
UniRef90_UPI00037A6880   P V L T E G H A S L R D D F K V S C P E L D L V V A A G V E A G A L G A R M T G
UniRef90_C7XXP7          R L I N A S H V S L A Y D Y E V S S C E L D T L V N T A W Q P G V A G A R M I G
UniRef90_UPI00036F2188   E L L V A S H A S M R D D Y E I S C P E L D L A V D A A L A A G A A G A R M T G
UniRef90_R5KXS5          Q K M Y E T H D G L S K E Y E V S C E E L D F L V D M A R K N G V T G S R I M G
UniRef90_UPI000248FB24   E L M Y G S H S G L Q N D Y E V S C E E L D F L T A F S K D Y Q V L G A R M M G
UniRef90_F4F3A2          P L L V A S H T S M R D D F A I T V P E I D T A V E A A L A A G A L G A R M T G
UniRef90_D6K367          P V L T E G H A S L R D D F R I S C P E L D L A V D T A L S A G A L G A R M T G
UniRef90_I0RYV9          R I L T A S H A S M R D D F E I T T H H I D V I A D A A V E G A G F G A R M T G
UniRef90_UPI00047C4409   T L L Y Q S H E G M R D K F K I S C K E L D F L V D I T V S N H I L G A R M M G
UniRef90_R7V970          Q L M L Q S H S S L R D D Y A V S C P E L D A L V N L A M N M D V Y G S R M T G
UniRef90_E7QV03          A L M G E S H R S L R D S Y E V S C E E L D F V V E T A E S V D A L G S R M T G
UniRef90_H2JHA3          R L M V E A N D S I R D L Y E V T G R E L D I M T A E A L K V D V I G A R M T G
UniRef90_R5SIX4          E M M Y Q T H F G L S H L Y E V S C P E L D F L N K L A R K C D V T G S R V M G
UniRef90_R6J0H1          V A M R G S H A S L R D D Y E V S C A E V D T L V S L C D R I P I Y G A R M T G
UniRef90_UPI000468A32C   R L M Y A S H Q S L R N L Y E V S G K E L D A V V D F C T D E H V I G A R M T G
UniRef90_H7FNW4          K L M F E T H E G L S T D Y E V S C A E L D M I V N T L K S E D V V G S R L M G
UniRef90_UPI0004277198   Q L L F E T H Y G L S Q E Y E V S C A E L D M L V D T A K D E A I I G A R V M G
UniRef90_UPI000370B4C0   P I L T E G H A S L R D D L R I S C P E L D L V V D T A V G A G A L G A R M T G
UniRef90_F4CEU8          Q R M F E T H E G L E K Q Y E V S C K E L D L L V Q L V K N Q Y V L G A R M M G
UniRef90_D3PP17          E L M V A S H R S L R D D Y E V S I P E L D R L V E A E L R H G A V G A R L T G
UniRef90_G2PS25          Q L L Y Q T H E G L R H K Y E V S C P E L D F L V D F A K K T D V L G A R M M G
UniRef90_A0A024LZA0      E L W T A S H A S M R D D F E I T T P H L D L I A D T A V R A G A L G A R M T G
UniRef90_R7D060          Q K M Y E T H E G M S K L Y E V S C E E L D F L N E C A R Q H G V T G S R V M G
UniRef90_UPI0002378C16   P L L N A S H A S L R D D Y R V S S P E L D L A V D S A L A A G A L G A R M I G
UniRef90_F0RGX3          A L L Y Q S H N G L S T Q F K V S C K E L D F L V D K T K N N N I L G A R M M G
UniRef90_J7QRP3          R L M Y L S H E S L S D D Y E V S C A E L D L M V E I A R S P G V Y G A R M M G
UniRef90_W5JFY2          Q L M T E S H R S L S E D F D V S C H E V D L L V E A T L G A R V L G T R M T G
UniRef90_F2R7F9          P V L T E G H A S L R D D L R V S C P E L D L V V E A A D A A G A L G A R M T G
UniRef90_G5H980          Q K V F G S H E G L S K W Y E V S C K E L D F L V D I A R K N P V L G A R M M G
UniRef90_A9B770          E L M N E S H W S L R D D Y E V S G P E L D Q L T E L L R D M P V W G A R L T G
UniRef90_S3JX95          E L L K A S H A S L R Y D Y E V T G L E L D T L A D A A N E P C C L G A R M T G
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UniRef90_Q896X8          E I G E G T
UniRef90_B8E2X4          E T S N G V R
UniRef90_C7MQS6          V P A Q G A H
UniRef90_UPI0004188D91   Y A A A G A G
UniRef90_UPI000363B961   N I G S G V K
UniRef90_C9LHV2          V I G D G A R
UniRef90_B2J4M9
UniRef90_UPI000479C2C4
UniRef90_R5GGD5          V I G D G A R
UniRef90_D4GYD3          R P S A G V R L
UniRef90_T1G513          E P F H G A
UniRef90_UPI00037D9501   Q A A A G A
UniRef90_R7XYQ0          T A G G G A G V
UniRef90_W5WMQ6          L P S D G A R
UniRef90_UPI00042054B6   K L S R G A A L
UniRef90_H3NTK5
UniRef90_H8KL58          T I G D G V R I
UniRef90_I6ZDQ7          T P S D G A R
UniRef90_U2XLY0          S P S A G A R
UniRef90_Q1J3L9
UniRef90_D9RUZ6          V I S E G S H
UniRef90_E2MU26          T P S R G A
UniRef90_UPI000289BF9A   V P A P G A R
UniRef90_UPI0003B3ACA6   R P C K G T
UniRef90_K9VCB2          E I
UniRef90_UPI00047EC23A   E P E D G A
UniRef90_B7P3D4          H P A D G A
UniRef90_D7GFF4          H A A G P A
UniRef90_UPI0003B51FA4   K I S D G A K
UniRef90_D4M7N9          D A A D G A A
UniRef90_K1L576          S L G D G T R
UniRef90_K9DSN2          R A A A G A G
UniRef90_UPI000470DF20   S A G R G A A
UniRef90_B8CME2          S A E N G A
UniRef90_B8KHW3          E A V A G A K
UniRef90_F6FX93          P P S A P A A
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                              1         10        20        30        40
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UniRef90_UPI00037B0F29       L L V I D T R V Q H S G Y A E R R A G C E Q A C A A L G V R A L R D V P D
UniRef90_W2LET2          D V V I V C N S N V K H G E Y K E R V M Q C Q A A A K T L Q M T H L R D A T M
UniRef90_I3ZMN3            S I V V A N S M V K H S D Y G T R R R E L E E A V R D L G D A T M H Q L   E
UniRef90_K9ZYW4          D V D L V V L H S G V E H G D Y N T R R A E C E R A C E L L G V A S L R D L P L
UniRef90_I3R4U8            I L V I D T G V S H S G Y N D V R E C R E A V T A L R D A S G R D L L E
UniRef90_UPI0003B6A215    R I V L C N S G V K H S E Y N L R R Q E C E Q A A A I L K K N S L R D A T L
UniRef90_UPI0004666220   L T V L V I D T R A R H S G Y A D R R R S I D H A M R L L G T G S L G E F D P
UniRef90_UPI00047DD4F1   L E L L V M D T R V S H S G Y A A R R R S C E L G A E L L G V P A L R D L S A
UniRef90_G2NEH4          L Q L L V V D T R V K H G A Y A E R R A G C E T G A R T L G I P T L R D L P Y
UniRef90_R5P5B6          Y K L V L L N S K V K H P Y N D R R N S C E N V V K A L K F E T L R D A E E
UniRef90_E9FRM0          V C I L I I N S G V K H S E Y P L R R A Q C E Q A A A K T L G A A Y L C D V S E
UniRef90_A0A022L1C3      L A L L I T D T R A E H S E Y V A R R S D S E R A A E L I G V P T L R D V E E
UniRef90_E0ULA2          N T E I V V I D S G L A S S Y Y N Q R R S E C E Q A A H L L N V K A L R D I T P
UniRef90_UPI000365723A   D Y Q I I L C D T Q V K H S A Y N E R R R E C Q E G V A A V Q V N S L R D V S E
UniRef90_UPI000428517E     K I L L L N T N V K H S E Y N T R R A E C E K A I E L I K V A S L R D A T D
UniRef90_E8V0Z0          D I R I V I A N S M V K H S A Y R D R R E E V E A G Q A V L Q I K L L R D A T M
UniRef90_F0M4X7          D L V M L V I D T K V S H S G Y A S R R A S C E L G A E V L G V K A L R D V Q A
UniRef90_X0NCC4          L R L L V V D T R V R H G A Y A E R R A G C E R G A R A L G V R A L R D V P Y
UniRef90_Q0RE53          L A V V V I D T G L V T S A Y A D R R A E C E R A A R A L G V P A L R D L D A
UniRef90_UPI0003C7F0FE   L A L A L I D T R V K H G E Y A A R R D E C A A A C A E L G L E H L S A A P V
UniRef90_B0EU98          D C L I M I T N S N A P H S Q Y N E R V K Q C Q E A V R Q L N E K F L R G F T V
UniRef90_H2BRP4            K I L L I N S K V S H S E Y N T R R K E S E S G L K F I Q V K T L R D V T D
UniRef90_UPI00037CB272     T L L V V D T R L V D G E Y A D R R R E A C E K A A S A L G V R A L R D F T T
UniRef90_S2WNS6          L E M L V I D T R L A D G Q Y A N R R G T C E V A A K K L G V E Y L A S L T D
UniRef90_D9UTH9          L D L L V F D T R V Q H G A Y A E R R A G C E E G A R L L G V D Q L R D V P F
UniRef90_UPI00037C2308   V R V V V I C N S M V K H G E Y G D R S S E V E A G Q A V L G V K L L R D A T E
UniRef90_UPI00034CAC82   A E V V V I D S G L A A S G Y N E R R A E C E E A A R A L G V K A L R D I T V
UniRef90_K9EGY6          L E V L I I D T R A H H S Q Y E T R R R G S E R A A R L L G H E F L A Q A T A
UniRef90_UPI00037D11C3   Y K L V L I N S K V K H S P Y N D R R N S C E N V V K Q I A A K T L R D C T E
UniRef90_A4BXS8          Y Q L L L I N S N V K H S A Y N E K R E V C E R V A K I L K V A A L R D A T K
UniRef90_C1FA96          D I S L V I I N S M V K H S A Y K V R R A E V A E G T A V L E I H A L R D A S E
UniRef90_D9T9V7          L A V L V I D S R A P H G E Y A A R R K S C E Q A A A T L G V T A L R D V D V
UniRef90_D7FSK4          V V F V V T N T G I R H G A Y G E R V Q Q C K D A V E A I K K R H L R D A S L
UniRef90_UPI00047CC187   Y K M I M L N T K V S H S E Y N T R R K E C E D G V R I I Q K K S L R D A T E
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UniRef90_E9SZ31          D L S L V I D T R L A D G Q Y A K R R A V E R A T R R L G V A S L R E L A D
UniRef90_B0S9I3          D H E F Y L V N S N V K H S A Y N K R R Q E C E S A L A K I Q I K H L Y D V E E
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UniRef90_D6TG67          E V A I V V I D T S V R S T A Y N E R R Q Q C E E A A S L L R I K A L R D I T P
UniRef90_K7QVB3                R L S E S G Y N E R R K E A E A A R R L G V K A L R D V A D
UniRef90_E1GTG5          Y K L V L I N S K V R H S P Y N D R R K S C E E V V K V L G K E T L R D A S E
UniRef90_R9GXC6          D H L L A I I N T N L A E S K Y N E R V S E C Q E A L Q A L Q I G N L C E I H T
UniRef90_T1W8I9          Y S L V L F D S C V K H S G Y N D R R K D V E V G K E I I G I L N F R Q V T E
UniRef90_S2DIS3          N H C I L L V D S K V K H S A Y N Q R R N E C R E G A Q H L K V D A L R D M D E
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UniRef90_L1PHL0          L A L L V I D T R A A H S Q Y G Q R R A D C E E A A R Q L G V E Q L E D L E A
UniRef90_B7G669          D P V I L I T N S K V T H S E Y G I R R A Q C H D A L L A M Q V L S L R D A T K
UniRef90_C7Q8C0          N A L L L I I D T R V S H A G Y A D R R A A E F L G V A A L R D V S V
UniRef90_R1CZP5          A L V V A D S N V K G S E Y P D R V Q Q C K D A C A A M Q V R H L R D A T L
UniRef90_M4RB66          L E L L V V D T R A P H G Q Y A Q R R A T C E Q A A A G L G V E N L R V I A D
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UniRef90_L7X3T9          E A V I L V V N S N V K H S E Y P Q R R A Q C Q E A A E K L K L P S L R S A K V
UniRef90_C2GG29          L A V L V A D T N A P H G Q Y G S R R G L I D E V T A V L R K E T F R D F T V
UniRef90_A3J5Y1          N Y S L I L F D S N L Q H S E Y N N R R I E C E E G L S I I N I N S F R D C N E
UniRef90_X8A9P3          V A L L L I D S R E R H S D Y A A R R Q S C E R A A A D L G A S S L R E V G D
UniRef90_W6NCT0          D T L F L I T N S G V N H G E Y A K R R K M V D E A L H V F G V T S W R D V T H
UniRef90_UPI0003175C7F   L R L L V V D T Q V K H G A Y G R R R A S C E A G A A A L G V R A L R D L D A
UniRef90_I0XUL5            H E F Y L I D S N V K H S E Y N D R R K E V E S A T S K C N K I S P Q D F S L
UniRef90_A1A329          L E L L V L D T Q A P H G Q Y A Q R R A T C E K A A E I L G V A N L R A L K E
UniRef90_UPI0003A9C38C   L E L L V V D T R V T H G A Y A E R R A G C E A G A A A L R V T A L R D V P D
UniRef90_E8PR86            R V A V L D L G L K S A G Y N E R R K E A E E A A R R L G V R S L R D I D L
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UniRef90_A6WF47          L A L L V V D T R A E H S E Y G Q R R A D V E R A A E I L G V P T L R E V D P
UniRef90_C7R1L3          L E L L V I D T R L V D G Q Y A Q R R A V A L G V P S L R V I A D
UniRef90_X0PJ19                    R L Q T K L P I K T L G D L S E S E F D E
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UniRef90_N0E2D3            V L L V I D T R L S D G Q Y A A R R A D C E Q A C R E L S L P S L R A L P I
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UniRef90_F1YKZ5            S L L V I D S R A P H G E Y R S R R L A C E E A R H L S A H S L R Y I H D
UniRef90_U7KTW6          D M V L L I A D T N L S D G Q Y A S R R G I I D A V Q S A A G C   S I R E I S N
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UniRef90_Q08R22            L I V I N S G V A H G D Y R V R R A E L L G V K Q L R D L T E
UniRef90_G8S4J5          L A I L V I N S N A P H G E Y G A R R K S C E E S A A I L G V P A L R D V E V
UniRef90_D9WLW1          L R L L V V D T R V K H G A Y A N R R A A C E S A A R A L G V P A L R E V E F
UniRef90_D8KLY7          L A L L I A N T N L S D G Q Y A S R R G L V D D V T A V L G A K T L R D I N D
UniRef90_A0A024GPR4      V V M V V N S N I S H S E Y S E R V A Q C R T A T E I L Q I S H L R D I T L
UniRef90_X1CFA6                                                    L R D I S I
UniRef90_Q2J7D7          L A V V V I D T G V V T S E Y A T R R A E C E R A A R A L G V A A L R D L T P
UniRef90_E8U7J1          A Q V L V I D S G Y N T R R A E S G Y N T R R A E C E R E A S R L G V H E L R D V T P
UniRef90_UPI0003692438   Y D W L L V N S M V T H S E Y P V R V R E C A E A Y A A V K V P N L S S T S P
UniRef90_V4I965          L A L L V V D T R V Q H G A Y A E R R A G C E E G A R R L G V S H L R D V P H
UniRef90_UPI0003492B84   L S V L T V D T R A P H G M Y A E R R R A C E H A A R D L G V P F L R D V P A
UniRef90_UPI00047988CB   L S V L V V D T K A K H S G Y A E R R S A R I L G I E L L A D L S A
UniRef90_F5YCB6          Y K L L I M D S R V V E D E L K Q R R V D I K K G L D L L Q E A T F R E F A A
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                                         50            60            70            80
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UniRef90_UPI00037B0F29  A V L P Q L P E G L R P L V R H V V T E N D R V R Q T V A L L E S G D V A G L G
UniRef90_W2LET2         S E L D A V D E V V Y R R A R H V I T E N E R T V A A V E H I R A R Q Y A E A G
UniRef90_I3ZMN3         A C R T S I P A E S Y L R C K H V I T E N A R V R E A A E A M K R G D A T A L G
UniRef90_K9ZYW4         G D V E A L P E P L G R R A R H V V T E N A R V L E A V A A I R S G D A K L G
UniRef90_I3R4U8         S H A D A L E P V H Y R R A K H V V T E N E R N V A R D A L S A G D F E R V G
UniRef90_UPI0003B6A215  E H R D E M G D V V Y R R C L Y V V Q E N F R V E A A C Q H L K D G D L K A F G
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UniRef90_UPI00047DD4F1  E A A G L L D E E T F R R V R H I V T E N A R V Q D A V D V L S G K G P V A L G
UniRef90_G2NEH4         D H L D D V D E S V V R Y V R H V V S D N H R V E R V I E L L D A G D L R A A G
UniRef90_R5P5B6         A V K S E V S E E D Y T R A H F V V E N A R V L A V C E A L E K G D Y E T V G
UniRef90_E9FRM0         E N K E K L D A E V F R R A L H V I N E T E Y T L E F V E F L K E K N Y V E A G
UniRef90_A0A022L1C3     A L G R I D D E T V R R R A R H V V T E I R R V E E F D R L L A R E H L D E L G
UniRef90_E0ULA2         E A V E I L P E P L R K R A R H V I T E N N R V L       K V L D S V S P Q E F G
UniRef90_UPI000365723A  E V K E E V S Q V V Y T R C K Y V I E E N E R L L K G C E L L E K G D I K G F G
UniRef90_UPI000428517E  Q Y V L P V N E L V Y R R S R F V V D E M E R L N D A C K Y L E Q N D I A S M G
UniRef90_E8V0Z0         D D R G R M S D A S Y R R C R H I I T E N A R V L E A R S A L F G G D M R K L G
UniRef90_F0M4X7         E A S G L L D E V T F R R V R H V V T E N D R V L R T V E L L E S E G P G A I G
UniRef90_X0NCC4         A H L P A A D P V V R D L V R H I V T E N H R V E R T V A H L D A G R P R A I G
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UniRef90_UPI0003C7F0FE  D A I F R L D P T L L K R T R H V I T E T T R V R G A V K A L R S G S W A Q L G
UniRef90_B0EU98         D E V Q I L T G I V G N R A K H V I N E N D R V M K A I A A M K V G N V E E L G
UniRef90_H2BRP4         S C K P Q L S K T Q Y N R V L Y V L Q E N A R V L E A A I F M K S G N L Q A F G
UniRef90_UPI00037CB272  D T L P D V G E S Q R R V R H V V T E N E R V S R V V A R L R A G E L D A V G
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UniRef90_D9UTH9         E T L P Q A D E R V R R Y V R H V V T E D E R V E N V A R L L D A G E I R A V G
UniRef90_UPI00037C2308  A C R D L M S S A S F K R C R H I I T E N A R V V K A R A A L L Q G D L E R F G
UniRef90_UPI00034CAC82  E A V G G L P E P L R R R A R H V V S E N N R V L     E A V R G V P A E R F G
UniRef90_K9EGY6         D E V R N L P D E L Q P L A R H V V S E E A R V D D V V E L C D A G D F E K I G
UniRef90_UPI00037D11C3  E V K A I V G E E D Y N R A H F V L G E K D R V L A V C D A L E K G D Y E T V G
UniRef90_A4BXS8         K E L A K I K D E I S A A D Y Y V I Q E N H R V K L F A K A I R N N E L K K L G
UniRef90_C1FA96         K A R P Q M R D N V Y R R C R H I I T E N S R T V A A A A L D A G N L K E M G
UniRef90_D9T9V7         A G L D A A D D E T R R R V R H V V T E N Q R V L D T V A L L R A G R V R D T G
UniRef90_D7FSK4         A W K D E V D E K V F K R A R H V V S E D R R T L C C A M A L R R K D Y G I V G
UniRef90_UPI00047CC187  E S A A E M S K T I Y N R C L F I I S E N E R V L A T A K A L Q E N N L E L F G
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UniRef90_E9SZ31         R G R E G A D D V L R R R A W H V I S E I A R V R L A V A A A E F G D F A E F G
UniRef90_B0S9I3         I R D C G L N S E E L K R T L H V V T E R E R T K L V I Q G L E T N Q F A Q V G
UniRef90_U6I3Q7         E A C E A V S L T S G R R L H H I L T E N Q R V L D A V D A I K T A D C M N L G
UniRef90_D6TG67         E Y K D Q L P E L L R K A G Y V I A E D E R V M Q V V E L L K R N D F E A V G
UniRef90_K7QVB3         L C M V E L P P P L D R R A R H I V G E N L R V L R G V E A L R R G D A R A F G
UniRef90_E1GTG5         A V R E Q V S K E D Y S R A H F V L G E K E R V L K V C D S L Q K G D Y E T V G
UniRef90_R9GXC6         D T F N K N K P I V Q N R A K H V V E E N D R V I D A A K A L A A H K L D E F G
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UniRef90_L1PHL0         A T Q A L S D E R L I K R M R H V V S E I A R T R A L I E L L K E G S L E V V G
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UniRef90_R1CZP5         A R S H A L P E A T V R R A R H G I S E D Q R T L Q A K E A L K A C D Y A Q V G
UniRef90_M4RB66         R V N A A D D P V E R R R V R H V I T E I G R V G Q F V D A F A A G D I K R A G
UniRef90_U2QJU2         P H E R L D D P V E L K R V R H V V T E I E R V D A F V A L L R A G D Y D R I G
UniRef90_A4AK70         R A L E I L D D V T F R R V R H V V T E N Q R V L D T V R I L S E K G P N A I G
UniRef90_L7X3T9         E D                         L A E Q V A Q L L P Q K D F V A V G
UniRef90_C2GG29         E Q V L E L H D L Y R R V G H V I S E T Q R T Q H A V S C L R D G D F S K F G
UniRef90_A3J5Y1         E L L I G L K D N V F R R S L Y A V K E I K R V I Q A C T A L D K G D I E T L G
UniRef90_X8A9P3         R G P A D L D P V D A R R A R H V L S E N Q R V I D C V A A L G D G N Y A E A G
UniRef90_W6NCT0         E M I Q E L D S A T L D C A H H V V D E I E R T V K A S E A L L D N D I T H F G
UniRef90_UPI0003175C7F  A L A R I E D A E V R R R V R H V V T E N H R V E R V V A L L D A G R V R D I G
UniRef90_I0XUL5         I E K A G L T P S E F K R A T H I L G E R S R A Q N V I R S L K D K D A E N V G
UniRef90_A1A329         T L D K L E D D T M K K R V R H V I T E I A R V N S F V R A F A N G K I D E A G
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UniRef90_E8PR86         C L V E S L P S P L D K R A R H I V G E N L R V L R G V E A L R R G D A R A F G
UniRef90_D2Q490         A L A R L S D D V D R R R V R H V V T E I R R V E Q A V E L M R A G R L R D V G
UniRef90_UPI000376DCF2  D S V E S L P S P L R E R A R H V V R E N L R V L E A A A         G V S P E R F G
UniRef90_L0AC32         K E L E K L N S L Y K K R M G Y I I R E N R R V L I A R D A L K E N N L D L L G
UniRef90_U6IZE3         K I S H L L S K T H A N R L R V L T E N Q R V V D A R N A M Q T M N L T Q L G
UniRef90_S2DHF8         E M L D N M S D K I F Q R C L F V L E E N S R V I R A G N Y L K S G L S K E F G
UniRef90_A6WF47         A D L D A A G D V L R R R V R H A V T E I D R V A R T A E L L R A G R A G D V G
UniRef90_C7R1L3         R G D T M E P Q V A V R R V R H V L G D I E R V R R V A S L L E E G R T A E V G
UniRef90_X0PJ19         N S Y L I N D D T L I R R A R H A V F E N Q R T L K A K D A L V N N N L E E F G
UniRef90_D1NHF9             M T A L S P L A A K R A R H V V T E N Q R V L D A V Q A L K K N D L T R L G
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UniRef90_K9ZYW4         E L F F A S H A S M R D D Y E V S I A E V D L I V E L A R E Q Q V Y G A R L T G
UniRef90_I3R4U8         E A M V A G H E S L R D E Y E V S S P E L D A A V E L A T E V D V Y G A R M T G
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UniRef90_UPI00047DD4F1  Q L L N T S H A S M R D D F E I S C A E L D T A V D T A V S A G A L G A R M T G
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UniRef90_R5P5B6         K K M F E T H Y G L S K E Y E V S C C E L D F L N D L A K E N G V T G S R I M G
UniRef90_E9FRM0         Q R M I R S H K S L S D L Y N V S C Q E L D I I V D I A S K N G I Y G A R M T G
UniRef90_A0A022L1C3     A L L N A S H D S L R D D Y E V T V P A L D V A V D A A R A A G A H G A R M T G
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UniRef90_UPI000365723A  Q Q M Y G S H D G L S Q M Y E V S C K E L D F L A D F A K S A L A A G A R M M G
UniRef90_UPI000428517E  E C M F E T H E G L S S Q Y E V S C K E L D F L V N F V K D P E V I G A R M M G
UniRef90_E8V0Z0         D L L F A A H I S M R D D F E A S A P E V D K L V D L A R S P G C I G S R I T G
UniRef90_F0M4X7         S L L D A S H A S M R D D F E I S C A E L D L A V D T S R A S G A I G A R M T G
UniRef90_X0NCC4         P L L T A G H A S L R D D F K V S C P E L D L A V D T A N A A G A L G A R M T G
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UniRef90_K9EGY6         P L L T Q S H Y S L R D D Y R V S C A E L D V A V E A A L G G G A L G A R M M G
UniRef90_UPI00037D11C3  Q K M F E T H E G L S K E Y E V S C E E L D F L N Y I A R I N G V T G S R I M G
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UniRef90_D7FSK4         G C M T E S H T S L R D D Y E V S I K E L D L L V S I A M G T D V Y G S R M T G
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UniRef90_A4AK70         A L L D A S H V S M R D D F E I S V P E L D L A V E T A R A H G A I G A R M T G
UniRef90_L7X3T9         N N F Y K S H E S L S K L M E V S C P E L D Q L V D I L R S P G V Y G A R M T G
UniRef90_C2GG29         K L M T E S H A S L R D D Y A V V T P E L D C A V N A A L S A G A L G A R M T G
UniRef90_A3J5Y1         K L M F E T H Q G L S K D Y E V S C A E L D Y L V D L A K E E D V I G S R L M G
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UniRef90_W6NCT0         R F M C E S H Y S L K D K Y R V S C P E I D E L V S M T L S C E V F G S R M T G
UniRef90_UPI0003175C7F  P L L A E G H A S L R D D Y E V S C P E L D L A V Q A S A S A G A L G A R M T G
UniRef90_I0XUL5         K E L F A C H E S L S K N F Q V S C A E T D F I V E W F R S E K V L G A R M I G
UniRef90_A1A329         R L F N A S H D S L A A D Y E V T V P E L D I A V D V A R V N G A Y G A R M T G
UniRef90_UPI0003A9C38C  P A L T E G H A S L R D D F R V S C P E L D L V V D S A L A A G A L G A R L T G
UniRef90_E8PR86         E L M V Q S H R S L S Q D Y E V S L P E L D A L V E A L R A G A Y G A K L T G
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UniRef90_UPI000376DCF2  E L M N A S H F S L R D D Y E V S I P E L D E L C A A L R A A P V L G A R L T G
UniRef90_L0AC32         K I L V E S H K D I A E N Y E V S S K E L D F I V N R A V K Y G A L G A R L T G
UniRef90_U6IZE3         Q I M C E S H E S M K N D Y E V S C K E V D E L I D I A M K V E V Y G A R M T G
UniRef90_S2DHF8         Q L M F S S H E G L S R L Y D V S C Q E L D L L V E E A K K L P I Y G A R M M G
UniRef90_A6WF47         G L L D A S H D S L R D D Y E V S C R E L D L T V D V A R A H G A L G A R M T G
UniRef90_C7R1L3         P L L T S A H V S L R D D Y E V S C P E L D V A V D A A C D A G A L G A R M V G
UniRef90_X0PJ19         K L I N A S H I S L H Y D F E V T G K E L D T L A E T A W Q P G V I G A R M T G
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UniRef90_F1YKZ5         R L M D A S H A S M R D D F E I T T E G I D L I A E T A R K S G A F G A R M T G
UniRef90_U7KTW6         R L M R E S H I S L R D L Y E V T T P E L D S A F T A A G E       L G A R M T G
UniRef90_M3BZ68         P P L T A G H A S L R D D F A V S C P E L D L A V D T A R A A G A L G A R M T G
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UniRef90_W2LET2         A G F G G G C I V A L V Q Q Q H A Q K L M E T L V A D Y K D K F G P N P T S F L T
UniRef90_I3ZMN3         G G F G G G C T V N L V E T A T E S F Q N A L A A A Y R D R F G I T P E T Y I C
UniRef90_K9ZYW4         G G F G G S V V M L A R L G E G R R V G G A I A D E Y A R R S G R T P K L L T
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UniRef90_UPI000365723A  G G F G G G C T I N L V T K A G K E E Y E K Q I A E A Y K Q A F G T D L K I Y E V
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UniRef90_UPI00041A2A11 L A L L V I D T R A K H S Q Y G A R R A S C E R S A R V L G V D L L A D V P D
UniRef90_V4HHP2        A S L L L V D T N V K H S G Y N E R V R E C H E A T A I L R V R S L R D V T E
UniRef90_W9ANU2        L A L L V I N T N A A H G G Y G L R R S R V E R V C A R I P R S A L Y D N D D
UniRef90_UPI0002C2FBC2  Y K I L L A F S G L K N S G Y N R R V G E C Q E A A T V L L N A S E P E A Y Q
UniRef90_G7LJJ0        A K M L L A L S G L K Q A G Y N R R V A E C K E A A Q I L L E A S G D E V Y E
UniRef90_D1BXI7        L N L L V I D S R L V D G Q Y A D R R A A C D T A A G Y L G V Q S L R E L T R
UniRef90_H2MWB1            I L I T N S N L K H S E Y A K R R Q Q C E E A A T A L G K K S L R D L S N
UniRef90_B8LS15          Y K I L L A F S G L R H S G Y N S R V A E C K E A A R I L L T A S G K T F M E
UniRef90_B7B827
UniRef90_C2CQK3        D M V L L I A D T N A P H G Q Y A S R R G V I D A V Q S A L R G G T I R D I P D
UniRef90_F6I6Q3            K I L L A L S G L K H A G Y N N R V A E C E E A A R V L L H A S G N D A Y E
UniRef90_UPI0003B74904  L E L L V V D T R A P H G Q Y A Q R R S A C E S A A K L L G V A N L R V L S E
UniRef90_D7WB43        D Y L L L V A D S H V E H S G Y S R R G L I D A V A D A L G C   T F R E A W A
UniRef90_Q5YR35          L T L L V I D T R E A H G G Y A E R R A Q C E A A A L G V A A L R D V P G
UniRef90_UPI0002485649  L A L L V I N T N L V D G Q Y A S R R G V V D A V A R R L G A P T L N D A A V
UniRef90_X0Y9Q0        V R V V V A D T G V R G S A Y A E R R A Q C E A A R R F G V P A L R D V T V
UniRef90_W5JZ43                                      E E I C K I L G I T T E Q L L S A
UniRef90_UPI000334133E                               E E V C R C L G I S R T R I L S P
UniRef90_D1BDW2        L A L L V I D T R L V D G Q Y A A R R D T C E A A A A V L G V E T L R E V T D
UniRef90_K7FQJ8                            P Y S T E E I C T C L G I   S L E E L R T
UniRef90_A2EA56        A H F V V A H S G V A A A K Y N R R V E E V R R A A E L M G A K T I G D V A M
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UniRef90_B0DI09
UniRef90_G0R8M9                                      E E I A S V L Q M   S V P E L E Q
UniRef90_F0XL51                                      E E I A S V L G I   S I A D L D V
UniRef90_UPI0003AD0B4E L A A L V V D T R L A G G E Y A A R R G Q C E R A A E L L G V A A L R D V D P
UniRef90_W9WT22        D S M I E I I K S K L K E E G Y T R Q D I A E I L G I   S V Q E L E K
UniRef90_W4UFU0
UniRef90_G4MLR0                                      D E V A A A L G I   T V D E L N A
UniRef90_S3CR47            L V V T E K Y L P D D G Y T R E Q I A A A L N   T T I D D L N A
UniRef90_V8NVL3
UniRef90_K2RCE8                                      E Q I A E M L G V   S V D E L K Q
UniRef90_X1FYN4        D Y Q I V I C N S G L I N S E Y N K R R E Q C K K A T E F F K I Q A L R D V T K
UniRef90_G0S4K4                                      E E I A A A Q I   S V D E L N S
UniRef90_R9NVZ2                            R Q Q V E E L T G Y S G E E F D K E F L S
UniRef90_G3Y5Z8                                      E E I A K L L G I   T V P E L E A
UniRef90_J9HRR9            L V D A H L K K G G Y N H D K C K Q A L H E D D L D S L K D I N E
UniRef90_W9CKR7                                      E E I A S V I N M T V P E L N E
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UniRef90_C5G9R5                                      E D V A A L L G I   S V P D L E K
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UniRef90_T5AN90                                      E E I A K V L N   L S V P D L E H
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UniRef90_UPI00040C4C94  D Q F E T Y D A T N Q K R A K H A V Y E N A R T L E A L K K L Q K A D L E G L G
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UniRef90_D5BT40         I S C D R L D P L L K K R A R H V I S E N I R V Q K A A I A L E A G K A D E F G
UniRef90_D5U720         K D A D F I K E T L Q R R A L Y V S A E Q D R V N Q A V K A I K K G S V K D L A
UniRef90_V6HI92         N P A L G L N E A E T K R A R H V T S E R F R T E R M I H N L K N G N A K E A G
UniRef90_A0A059FSE2     V S I T T L D D P V R R R A R H A A T E A K R S L D A I A A L R A G D R S R F G
UniRef90_D8LNE1         E Q V D A M E D A V F R R A R H V V S E N A R T V T A A R A L T S G D Y L Q V G
UniRef90_C1D3A7         A D V E T L P S P L R E R A R H V V S E N Q R V Q Q A V Q P     G I G A A E F G
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UniRef90_S3V1T7         A E E K W L E T L E K K R A L H V I G E K K R T N D V I R N L V S G N I P K I G
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UniRef90_M2X8D0         G E L G Q L G D L L A R R G R H V V T E I E R V R E T L R L L E S G N V R D I G
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UniRef90_L7MEJ8         G C R E Q M T S E Q Y R R A R H V I S E I Q R T A Q A A K L L R K G D F R G L G
UniRef90_S9WHR6         Q I L S P N T Q D V R Q R A K H V Y S E A A R V L Q F K K I C E D N M V Q L L G
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UniRef90_D7WB43         E T S D Y D P E T V H R R V R H V A T E T A R T I A V D A L K A G D I E Q F G
UniRef90_Q5YR35         E L G R I E D P V V R R R A R H V V T E N A R V L A V A E T L R S G D P R E I G
UniRef90_UPI0002485649  R D W A A T P E T A L R R I H H V L E E T D R V N T A L P L L R A G K V A E L G
UniRef90_X0Y9Q0         E M A D T L P E A V R A R A R H I V S E N E R V L N A V A D L R R G D V A V F G
UniRef90_W5JZ43         N T Q H V T H F L Y Q R A R H V Y S E A D R V L Q F K A V C D S S P V L Q L G
UniRef90_UPI000334133E  N T Q D V S A F K L Y Q R A K H V Y S E A A R V L Q F K K I C E D G P V A L L G
UniRef90_D1BDW2         D A S G Q D P E V T A R R V K H V V S E I A R V G E V V A L L D S G R T S E V G
UniRef90_K7FQJ8         Q I L S Q N T Q D V Y Q R S K H V Y S E A A R V L E F Q K L C S E A P I Q L L G
UniRef90_A2EA56         E A A K K L P E V L R D R A V H V V G E A H R V L K M D G A       S L Q Q W G
UniRef90_UPI00042C8A20            L T F K L Y K R A K H V Y S E A A R V L Q F K K I C E D N T V Q L L G
UniRef90_R5BNS6         E F G D R L P E N W R K R A E H W F G E Y A R V E K G A E A W R N G D I E A F G
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UniRef90_L7M8J8                     L H Q R A V H V Y E E A N R V W Q F K D V C E G S H L S K L G
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UniRef90_F0XL51         R Y M S R F P V R L Q Q R A R H V F S E A R R V L N F M E L L S T E Y N E K L G
UniRef90_UPI0003AD0B4E  A L R T L R D P V L R R R V R H I V T E N A R V A S A A R L L G A A A R T P L G
UniRef90_W9WT22         Q Y M S K F P I R L R Q R A L H V L E E A G R V L K F R D T L T T S K L L Y L G
UniRef90_W4UFU0                     D E G M A S C V R H V V T E N D R V T Q F V K L L D T G Q I R E V G
UniRef90_G4MLR0         R F T S R F P V R L R Q R A E H V F S E A L R V L E F M S L L Q Q E P A A G S G
UniRef90_S3CR47         R Y M A R F P V R L R Q R A T H V F S E A L R V L E F M E L L E S G S T D I L G
UniRef90_V8NVL3                     L Y Q R A K H V Y A E A A R V L E F K D I C V R A P I S L L G
UniRef90_K2RCE8         R F E S K F A V R A E R R A M H V F S E S L R V G K F L A L L D S P P L Q E L G
UniRef90_X1FYN4         K Y Q R Q L P E V I A R R A H V I S E N Y R V Q A G I Q A L R T G N Y S T F G
UniRef90_G0S4K4         R F T S R F P V R L R Q R A L H V F T E A L R V L K F M S L L R Q Q P I S L L G
UniRef90_R9NVZ2         S F P I R A D K E L Y K R S K H V F T E A L R V L Q F R S L C S P D V Y R Q L G
UniRef90_G3Y5Z8         K Y L S S F P V L L R Q R A L H C F T E A R R V L D F K A C L A K R R I Q Y L G
UniRef90_J9HRR9         V I K Q N F S F H L H E R A A H V F S E A S R Y E F K N V C E D E S L Q K L G
UniRef90_W9CKR7         R F T S T F P V R L R Q R T L H V F T E A L R V L K F M K V L E E T F N R K L G
UniRef90_R5FTU4         D E F Y S I K D L K Q K R A M H F F E E N K R V E D A V K A L E K A D E A A F L
UniRef90_C5G9R5         Q F L S M F P V L L R Q R A L H C F K E A R R V L D F K S C L T R H N V K Y L G
UniRef90_UPI00035977F6  N T L H V E S F R L Y Q R A T H V Y S E A K R V L R F K V V C D E Q P L E Q L G
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                                          90          100         110         120
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UniRef90_UPI000370F4C7   E S M Q A S H A S L R D D Y E V S V A Q L D V S V D V A M E H G A L G A R M T G
UniRef90_W0HKR8          R L M A E S H A S M R D D F E I T V P A I D T L G T I I K G E I A G G V R M T G
UniRef90_E4N121          P V L T A G H A S L R D D Y R V S C P E T D L V V S A A N A A G A L G A R M M G
UniRef90_K1LL32          Q L L N H S H Q S L R D D Y D V T G P E L D A M V E A A W Q P A V L G A R M T G
UniRef90_UPI000478C13D   R L F D A S H A S L R D D Y E V S C E L D L A T A T A R S E G A L G A R M T G
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UniRef90_UPI00040C4C94   K L I N L S H T S L Q D D Y E V T G L E L D T I V S A A Q K E G V L G A R M I G
UniRef90_M6GSH8          E M L F E C H D S L S K D Y E V S C D E T D F I V E E L K I Q G V L G A R M I G
UniRef90_Q2GAY2          A L M R E S H V S Q G R D F G I T V P H T D V L A A L M N E A I G G G A R Q T G
UniRef90_D5BT40          Q L M D E C H T S L D A D F D V S S P I L N D L V A N L K S A G A I G A R L T G
UniRef90_D5U720          N L I L K T H D G L S K L Y E V S T A E L D I L V E E S T N M D V L G A R M I G
UniRef90_V6HI92          E I L F E C H N S L S T D Y E V S C E E T D F I V E E L K K E G A L G A R M I G
UniRef90_A0A059FSE2      Q L M I E S H D S L R D D M D V S V Q E V D Q L V Q D A V R L G A D A R I T G
UniRef90_D8LNE1          Q L M L D S H R S L R E L H Y R S C P E L D V L V E L A M E V E V F G S R L T G
UniRef90_C1D3A7          A L M N A S H A S L R D D Y A V S H P D V D S L V E L L Q A H D V Y G A R M T G
UniRef90_S3UGS4          K E L Y A C H K S L S E N F E V S C E E S D F I V D G L F K R N V L G A R M I G
UniRef90_Q11XC2          A L L T A S H L S L R D D L Y E V S C D E I D F L M E Q A I S P Y C L G S R I M G
UniRef90_UPI0003F835D5   P F L S A S H A S L R D D Y R V S C L E L D V A V A A A E S A G A L G A R F S G
UniRef90_UPI00032A878C   I L M A A S G R S S I Q N Y E C G C E P M I Q L Y E I L L R A P V L G A R F S G
UniRef90_S3V1T7          S E L F A C N D S L S R L F Q V T S P E T D F I V D W L K S Q K V I G A R M I G
UniRef90_M6ZH14          E I L F E C H S S L S K D Y E V S C K E T D F I V H E L K M E E V L G A R M I G
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UniRef90_W8AT36          P V L T A G H R S L R D D F E V S A P P L D T A V D A A L A A G A H A R M T G
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UniRef90_R6K0L6          Q L V F E S G K S S I Y S Y E C G C D E L K K L Y D I M L D T D I Y G G R F S G
UniRef90_M2X8D0          P L L T A S H I S L R D D F E V S C P E L D S A V D A A L A A G A H A R M T G
UniRef90_UPI00030EA9BD   P V M D A S H A S L R D D Y E V S C E E L D V V V T S A R A A G A L G A R M T G
UniRef90_B9RKW5          R L I S A S G L S S I Q N Y E C G C E P L I Q L Y E I L L R A P V F G A R F S G
UniRef90_W9GQB0          R L F D E S H A S M R D D Y E I S C P E L D V A T E T A R S Q G A L G A R F S G
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UniRef90_V4UJV3          K L I S A S G L S S I Q N Y E C G S E P L I Q L N E I L Q R A P V F G A R F S G
UniRef90_E3LXW1          H L M N E S H R S C A I D Y E C S C K E L D D I C Q L Y L Q N G A L G A R L T G
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UniRef90_R5FTU4         G G F A G T I I C F V E K S G S E R F I E A I K P V F G E
UniRef90_C5G9R5         A G W G G C T V H M V P Q D K V A D V T E A L K K E Y Y K K F P L E V A M V I S
UniRef90_UPI00035977F6  A G W G G C A V S L V R C D A V K P M L A Q V K D N Y Y K L E P K K E A L F A T
UniRef90_UPI0004621637  A G W G G C S V H L V D E F I A K V K E G Y A E G D K L R E V I F A T
UniRef90_T5AN90         A G W G G C S V H L V P A D K V A D V K E A L E R E Y Y A D K G L T Q E V V V S
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UniRef90_UPI0003F57D66   R A A A G A H
UniRef90_UPI00047E9E18   T A S E G A R
UniRef90_UPI000370F4C7   L P G A G A R
UniRef90_W0HKR8
UniRef90_E4N121          V P S Q G A H
UniRef90_K1LL32          Q V G D G T K
UniRef90_UPI000478C13D   T A S G P A A
UniRef90_A3D8Y9          S A S A G A G
UniRef90_UPI00040C4C94   S I G E G A R
UniRef90_M6GSH8          R I S D G V A
UniRef90_Q2GAY2          V P S D G A G
UniRef90_D5BT40
UniRef90_D5U720          K P S N G T R V
UniRef90_V6HI92          R I S D G V G
UniRef90_A0A059FSE2
UniRef90_D8LNE1          K P G F G S R
UniRef90_C1D3A7
UniRef90_S3UGS4          R I S E G V K
UniRef90_Q11XC2          I S V D G A H V
UniRef90_UPI0003F835D5   T P S A G A G
UniRef90_UPI00032A878C   D S S C A R V
UniRef90_S3V1T7          Q I S D G V R
UniRef90_M6ZH14          K V S D G V R
UniRef90_M0U2R6          E P G D S A H V
UniRef90_W8AT36          T P S A G A H
UniRef90_Q0JAB2          E P G D G A R V
UniRef90_J9YYU5
UniRef90_R6K0L6          E S A D G V E L
UniRef90_M2X8D0          G T G G
UniRef90_UPI00030EA9BD   E P A A A A G
UniRef90_B9RKW5          E A D H S A R L
UniRef90_W9GQB0          R A G G P A R
UniRef90_M2C8K4          K S A T G V R I
UniRef90_UPI00046E0D6B   E A G D S A R V
UniRef90_UPI0002D71361   T P S A G A H
UniRef90_V4UJV3          E P G D S A R V
UniRef90_E3LXW1          K P A Q G I R V
UniRef90_L7MEJ8          E P S E G A
UniRef90_S9WHR6          K P G G G A L V
UniRef90_S3ZF67          V A S A G A G
UniRef90_W9R885          E A G D C A R V
UniRef90_F5YPY8          R P A A A R V
UniRef90_A0A022QCR1      D A G D C A R I
UniRef90_Q4JXL4          L P S D G A H
UniRef90_G4ENB9          E V V N G T
UniRef90_UPI00041A2A11   V P S A P A G
UniRef90_V4HHP2          D I G D G
UniRef90_W9ANU2          I P S A A A R
UniRef90_UPI0002C2FBC2   E A G D C A R V
UniRef90_G7LJJ0          D S G D C A R V
UniRef90_D1BXI7          P P S A A A G
UniRef90_H2MWB1
UniRef90_B8LS15          E T G D K A C I
UniRef90_B7B827          V I S D G A R
UniRef90_C2CQK3          S P G D G A R
UniRef90_F6I6Q3          E A G H S A R V
UniRef90_UPI0003B74904   V A S A
UniRef90_D7WB43          S A Q D G A R
UniRef90_Q5YR35          V P A A G A H
UniRef90_UPI0002485649   T P S A G A R
UniRef90_X0Y9Q0
UniRef90_W5JZ43          R P G G G A A I
UniRef90_UPI000334133E   K P G G G A L V
UniRef90_D1BDW2          V A G G P A A
UniRef90_K7FQJ8          K P G G G A L V
UniRef90_A2EA56          N A G E G A
UniRef90_UPI00042C8A20   K P G G G A L V
UniRef90_R5BNS6          H S A D G V K I
UniRef90_UPI0003B79BD8   S P S A A A
UniRef90_UPI0004435690   K P G G G A L V
UniRef90_L7M8J8          K P G S G A A I
UniRef90_B0DI09          K P S S G A C
UniRef90_G0R8M9          R P G R G S A V
UniRef90_F0XL51          K P G S G S A L
UniRef90_UPI0003AD0B4E   T P S A G A A
UniRef90_W9WT22          K P N Q G S S L
UniRef90_W4UFU0          T P G P A A
UniRef90_G4MLR0          R P G S G S A V
UniRef90_S3CR47          R P G S G
UniRef90_V8NVL3          N P G A G A V I
UniRef90_K2RCE8          K P G S G S S V
UniRef90_X1FYN4
UniRef90_G0S4K4          R P G S G S A V
UniRef90_R9NVZ2          K P A G G A C V
UniRef90_G3Y5Z8          K P S N G
UniRef90_J9HRR9          Q P G K G A C V
UniRef90_W9CKR7          K P G G G S A V
UniRef90_R5FTU4
UniRef90_C5G9R5          K P S N G T
UniRef90_UPI00035977F6   T P G D G A A
UniRef90_UPI0004621637   K P S S G A
UniRef90_T5AN90          R P A G G S A L
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Multiple sequence alignment.

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UniRef90_I9EP62     D F E I G I F F S G L V N S D Y N L R V Y E C K T T A K T F D K T F L R D I P E
UniRef90_U2Q1P5       V L I L D T R T R H S H F G D R H A E C D R A A V L L G V D L L R D E L P
UniRef90_H9GMT6                      P Y S I E E I G E N L G I K E L R S L S Q
UniRef90_S8FWH7
UniRef90_R5Y252     H A L C I I D T G G N H S D Y A A V R G E M E K A A A V F G K S V L R E V D E
UniRef90_D8QZX0     Y K I L L A F S G L R H A G F N L R V S E C N K A A K F L K V A V L G D V A P
UniRef90_UPI0001FFF144  L E L L V I D T R A P H G E Y G Q R R A D C E E A A A L G V G A L R D A T A
UniRef90_U1GCA9                                E D L A D I L G T S V K N L E E
UniRef90_V5EYN8                        R S E V E K L T G Y S G D S F D K E F L S
UniRef90_M5XSH7
UniRef90_Q6ZP37
UniRef90_H1XWZ5     D Y R L L V V N T G G S H A D Y A S I P H E M R Q V A S A L G Q K V C R E V D E
UniRef90_Q9SEE5
UniRef90_R7BHA7       Y A L C I V D T H G N H S D Y A A V R S E M E D V A K A F G K K V L R E V E D
UniRef90_G2Q6M6                                E E I A T V L G I T V D E L N A
UniRef90_UPI0003B3C31D
UniRef90_R8BEJ7                                E E I A A V L G I S T D E L H A
UniRef90_F7AXE0     L A V L V T N S N V R H S E Y P V R R R Q C E E A A R A L G K E S L R D L S E
UniRef90_H3D853         L A L V D E V L H P E A Y S R E E I C Q G L G I T S T T V L S S
UniRef90_Q2NBZ9     H S M I V I H S G L T D G R Y K A R K E E C D A A R L A F G R E A I C T L D P
UniRef90_Q4PD51           K S G E E A A R I R V L E E K V E A L G R E K V E E L T G
UniRef90_W1PWH7         K I L L A F S G L K H A G Y N S R V A E C R E A A R I L L S S S L P D V Y E
UniRef90_UPI00035F38E1        A D R H E S C D R V A R A L G Y Q F L R E A K L
UniRef90_J4VVA1
UniRef90_W9YE84              K D I A E I L G I S V A E V E K
UniRef90_S7RIQ6
UniRef90_F4S410
UniRef90_W1TM28     L S L L V I D T C L A D G Q Y G A R R A A C E E A A Q V L G V K E L G E L I P
UniRef90_T1F3P2                                E E I C A A L R V T E Q E L D E
UniRef90_N1PJY2
UniRef90_R7NB80         E I M I V F G G L A G S A Y N T R V D E C K A A A Y A L Q A Y A G M D V Y L
UniRef90_W4KDW3                                            K E F R E
UniRef90_M2B696     H S I I L T D S R V A R E E L T A R L D E C V E A Y E L V K K K N M M H L T E
UniRef90_J3PPC4
UniRef90_E4Y353                                             L S A
UniRef90_R7UQ74                            Q E I A D L L G E D E L R D L T A
UniRef90_X1PMV9     N Y R I V I C N S Q L V N S E Y N R R R E E C K R A T D F F K I R A L R D V T I
UniRef90_UPI0004696792  A S L A I F F S G V T G T D Y N L R V S E C K T A A N D L S A T F L R N V S P
UniRef90_UPI00034FD65E  L A V L I T N S N V R H S E Y P L R R R Q C E E V A R A L G K E S L R E V R L
UniRef90_D8R9V7
UniRef90_U4L1Z4
UniRef90_E0VFL3                            C E E I N C L G G I D N L S V
UniRef90_L8WTM9
UniRef90_U7PJW7        V A L V D K H L A S E Q G Y T R E E I A S T L G V T V A S L E T
UniRef90_Q6CC28                                Q E V A G L L N V S E D D V K K
UniRef90_G7JNZ5
UniRef90_C5FDR1                            E I A E L L Q L T V P Q V E E
UniRef90_V4A5P0
UniRef90_D8UGG2                        A E I E D A L R K L G E G S L R A L A V
UniRef90_B6H4R4                            E E M A Q L L G M T V A E L E A
UniRef90_P56838     Y E I N L V D S N V K H E E Y N R R R Q E C E E V L K T L E K K S F R E V T K
UniRef90_X7ZPC4     V A L L L I D S R A R H S E Y A A R R A S C D R A A A D L R V S S L R E V D D
UniRef90_K1RY94
UniRef90_D8M8X7
UniRef90_C1MQ48             K L H D G Y Y S R G E L E E S L D S L F A G S P A S L L V
UniRef90_N1J677                   N E I G Y T L E E I A M V V G C T V W D L K K
UniRef90_R6CF26     H R L C I V D T K G S H S E Y A A I P A E M R S V A Q F F G K D Y L R E L T K
UniRef90_M1W7D0                            D E I A K V L H L T V P E L E D
UniRef90_Q6BVI1                        E T S E I A K Q L G L S V E E F T K
UniRef90_P04385
UniRef90_UPI0004634C05  A E L L V I D T R L A D G E Y A R R A E C A R A A E L A G V A T L R E L T
UniRef90_Q5BYX6                                                    L T E
UniRef90_T0LHX4
UniRef90_G3B7B4                        T T E E A A T D L G L T T E Q F T Q
UniRef90_G4TS32
UniRef90_R6L4H9         E I M I V F S G L A G S A Y N I R V D E C E M D Y K E F S T A V L R K I P K
UniRef90_R6IZT8       L T L C L T D T G G S H A G Y A R I P A D M R Y I A S F F G K E L L G E V D P
UniRef90_R0N5U8     D N V V V I M N T N K R D S K Y N E R R A E C E K A V E E L Q V A T L G E L D E
UniRef90_K1UT91     N A K I V I A C S N K K D S K Y N E R R S E C E T A L A E L Q I K T L G D L D E
UniRef90_H3G745
UniRef90_Q9HDU2                        T E E L A K E L G L S V E E F T K
UniRef90_D4MZC0     H S L C I V D T K G S H A D Y A A I P Y E M K K V A N Y F N Q E A L R E V D K
UniRef90_R7QW83     Y R L V I V N T G K N H A E Y S E I P D E M K A V A K I L G K E T L D D L L A
UniRef90_R7GSZ3     D H S L C I V D T K G S H A A Y G A I P T E M K D V A H Y F G K K F L R E V D E
UniRef90_R5Y9K9     Y E F A V I F S G L A N T A F N S R V D E A K A A S F A L R R D V P K E V F D
UniRef90_S3L3M7     E Y A L M I V N T G S G H A A Y S A I P A E M Q S V A R A L G K E H L R D T S F
UniRef90_I0YR09                                                Q L D E
UniRef90_D5U600     Y A L M I V D A K G D H S E Y A A I R E E M N A I A D Y F G K K V C R E I T K
UniRef90_G0HBA1     L A L L I I N T N L A D G Q Y A S R R G V V D A V A E H P G E E G R R Q L E Q
UniRef90_R6V878     Y S L C I V D T K A S H A D Y A Q I P A D M K K V A K F F K K N F L R E V P E
UniRef90_UPI0004180F74  Y S L C I T D T K G N H S E Y A A V T K E M K A V A E E F R K A V L V N V P E
UniRef90_Q0I1Q8
UniRef90_UPI00036C761E  L T W L A V D T R L A D G Q Y S S R R T E C E A A A A V L G V P T L R D A L P
UniRef90_UPI000440B83D
UniRef90_UPI00028A2146              A G L E L L V I D T D A P T A D
UniRef90_K0YEL6     L S V L V A D T R V A H G G Y G S R R G L V D D V A R R L A A E G L G A V R L
UniRef90_J6F1K8
UniRef90_A7TJY7                        T V D E I A A A L N I S R E A F T
UniRef90_UPI0003820242              E C A A A A E R L G V A D L R D L A T
UniRef90_UPI0003FCD7E9  D F E V I V V Y S G I S K S D F N N R V D E S R V A L A G L P L P T L E D V Y E
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                                        50            60            70            80
UniRef90_G0QP35                          Y E R A L H V Y A E A E R V Y K F K Q I C E D Q Q I N L L S
UniRef90_M3AWG4            K Y M S K F P I R L R Q R A F H V F S E A S R V I A F M E L L N S P P L K S L G
UniRef90_I9EP62            K T R D I M P A R F S R S E H F Y S E Y R R V R Q G V T A W E T G N L Q L F D
UniRef90_U2Q1P5            A A E A R L D D V L F R R L R H V V T E N A R A V R M A D D L E A G D W R A V A
UniRef90_H9GMT6            N T Q D V T T F K L Y Q R A K H V Y S E A A R V L E F K K T C M E V P V Q L L G
UniRef90_S8FWH7                          Y K R A K H V F E E A L R V L I E F R A A L P E S V L H E L G
UniRef90_R5Y252            D E F M D N I S L V R E R A M H F Y G E N R A E A E V K A L E D G D F E K F K
UniRef90_D8QZX0            E E Y T R L K A K L A R R A R H F F S E R A R V E A S V K A W V A G D L A E F G
UniRef90_UPI0001FFF144     D A V E R L D D R V R R R A R H V V T E N D R V R A V V E L L S G A D P R E I G
UniRef90_U1GCA9            E H M S K F P V Q L R S R A L H V F S E A R R V F D F K K I L R D Q E L R L L G
UniRef90_V5EYN8            S F P I R A D A E L Y K F T E A L R V L Q F Q A L C K Q H Q Y S Q L G
UniRef90_M5XSH7                          L Y Q R A S H V Y S E A K R V H A F K E A V S S N K L K H L G
UniRef90_Q6ZP37                          F R R A R H V V G E I R R T A Q A A A A L R R G D Y R A F G
UniRef90_H1XWZ5            D T F F R A L P Q L R K R A F H F I R E N Q R V L E Q V K A L H D K D F D L L F L
UniRef90_Q9SEE5                          L H Q R A A H V Y S E A R R V H G F K D T V N S N K L K K L G
UniRef90_R7BHA7            D F L N H L A E L Q D K R A F H F F G E N D R V D K A V T S L E N N D F E S F K
UniRef90_G2Q6M6            R F T S R F P V R L R Q R A Q H V Y S E A L R V L Q F L D L L E S S Y N A R L G
UniRef90_UPI0003B3C31D                   R T L H I L T E A T R V E K S C D A L H Q N D M V A F G
UniRef90_R8BEJ7            Q F T S R V P V R A E R R A Y H V F A E A L R V L Q F M D L L E D P Y N K L G
UniRef90_F7AXE0            A G K G L L S E V E F R R A R H V V G E I G R T A R A A T A L G A G D Y A T F G
UniRef90_H3D853            N T Q H V T H F K L H Q R A K H V Y G E A A R V R Q F Q S V C E G D S I Q T L G
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UniRef90_Q4PD51            Y T G E E F D K E L Y K R S K H V F T E A L R V L Q F Q A L C K Q N P Y K Q L G
UniRef90_W1PWH7            A Y K G E L E A N L A R R A E H Y F S E N N R V L E G L K A W G S G N L E D F G
UniRef90_UPI00035F38E1     E E I E Q L D D V D R R R A A Y V S S E I Q R V L D L A R V L R S E G A A H T G
UniRef90_J4VVA1                          R Q R A L H V F S E A L R V M Q F L K L L E S T D P Q K L G
UniRef90_W9YE84            Q Y L S K F P V R L R Q R A L H V L E E A G R V V K F R D T L D Q E K L L Y L G
UniRef90_S7RIQ6                          L Y K R A K H V F S E A L R V L Q F R Q A C T K A I L E V L G
UniRef90_F4S410                    M V F N R I R H V L T E A K R V E E F K D L I T E H I L E K L G
UniRef90_W1TM28            K D I T P S D N L T D S R V R H V L T E I A R C Q R L C E L L E A G D L D Q W R
UniRef90_T1F3P2            R S R H V K T F K L R Q R A E H V Y S E S L R V L N F K D V C N K F T L K R L G
UniRef90_N1PJY2                          L R Q R A L H V F S E A L R V L K F M D L L T S P P L K S L G
UniRef90_R7NB80            Q Y K D R L P E N W R K R A E H F Y G E R Q R V K D G I K A W K K G D I E E F G
UniRef90_W4KDW3            V Y L S W I D V E L Y K R A K H V L T E A L R V L E F R D I C L R D I L R E L G
UniRef90_M2B696            K E E I D I P E S V R R R V T Y I I R E S L S V D E A V D A L K R K D N I M L S
UniRef90_J3PPC4                          Y N R A R H V Y S E A L R V Y R F R E L L E N E V I L S I G
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UniRef90_R7UQ74            R S Q M V D L F N L R Q R S L H V F S E A D R V L K F K D M C S K S P L L Q L G
UniRef90_X1PMV9            E E F K Y L P E P I V R R A R H V I S E N Y R V Q T G V Q A L R E E N F S A F G
UniRef90_UPI0004696792     K H E A T M P A R F A N R A R H F Y T E C E R V N E G V N A W R E G N L T K F G
UniRef90_UPI00034FD65E     E E L E A G R E L V S K R A R H V V G E I Q R T A Q A A A A L S R G D Y R T F G
UniRef90_D8R9V7                          L H Q R A T H V Y S E A K R V Y A F R D A G E E E A L K R L G
UniRef90_U4L1Z4                          R A L H V Y K E A A R V V K M Y K L L A E E V L V Q I G
UniRef90_E0VFL3            D S N L S V I G K L L R R L R Y V I T E K M R C S E I P D I I Q L G N Y V E F G
UniRef90_L8WTM9                          L Y K R I K H V T E E A L R V L E F R D S C L S P P I T T L G
UniRef90_U7PJW7            D Y M S T F P V R L R Q R A L H V F S E A L R V L D F M E V L E A A R A A T L G
UniRef90_Q6CC28            Q Y F I F P V E A L Y S R A K H V V T E A I R V K E F Q N L L S K S D P R Q L G
UniRef90_G7JNZ5                          L H Q R A A H V Y S E A K R V Y A F K D V V S S N T L K K L G
UniRef90_C5FDR1            Q F L S S F P V Q L R Q R A L H C F K E A R R V L D F K S C L A Q H R L G
UniRef90_V4A5P0                          R A S H V Y S E A N R V L Q F K M L L Q D K T I S K L G
UniRef90_D8UGG2            A E A D K Y G F P L R K R A V H V F S E A Q R V L D F R T V C E D E R L T R L G
UniRef90_B6H4R4            T F L S A F P V Q L R Q R A L H C F K E A R R V L D F K A C L S K K R I H Y L G
UniRef90_P56838            E D L E R L S G T L R K R A Q H V L E E N E R V L K S V Q A L K E G D F E T L G
UniRef90_X7ZPC4            A L T S V T E P V D A R R A R H V L T E N Q R V L D F V A A L N G S D F G E A G
UniRef90_K1RY94                          L F Q R A T H V F S E A G R V L S F K R I C D E A D P Q K L G
UniRef90_D8M8X7                          Q Q R A L H V L S E A D R V L K F R A V C E P R K L E R L G
UniRef90_C1MQ48            L E H N K T G F K L R D R S M H V Y S E A A R V H Q F S N E C K E D P L K A L G
UniRef90_N1J677            K F M S V F P V M L R Q A L H V F S E A N R V L F I N L L N N Q T N A D L G
UniRef90_R6CF26            A D V M K L G D R A V L R A L H F F G D N E R V V K Q A A A L R S H D F K K F L
UniRef90_M1W7D0            R F M S K I P V R L R Q R A L H V F T E A L R V L K F Y M L L D R P F N Q E L G
UniRef90_Q6BVI1            I F L T K A P V R Y Q R S K H V F S D S L R V L Q V L K L L R N Y F L K K F G
UniRef90_P04385                          L Y Q R A K H V Y S E A L R V L K A V K L M T T D F F K Q F G
UniRef90_UPI0004634C05         T V P A D P V L A A R A R H V A S E N A R V L E F A A E L R G P A L P R L G
UniRef90_Q5BYX6            N S K T M E Y F N L R D R A E H V Y S E A E R V F D F Y N L C K K I Y I Q L L G
UniRef90_T0LHX4                          L R Q R A L H V F E E A L R V L Q F M K V L E K E A P K R L G
UniRef90_G3B7B4            R Y L S K Y P V R Y E K R S K H V F T E S M N V F R V L K L L K P T F L Q E L G
UniRef90_G4TS32                          L Y K R A L H V F T E A R R V L E F R D L C R Q S G P E K L G
UniRef90_R6L4H9            E Y R T K L P E N W R K R A D H F F G E K L R V T E G I K A W K E G N L D K F G
UniRef90_R6IZT8            A E F W N I S D R P V R R A K H F F D E N A R V P K M R D A L I A G N A A E Y M
UniRef90_R0N5U8            W A F D Q Y D E N R L K R A R H A V L E N Q R T L K A Q V A L Q A G D L E T F G
UniRef90_K1UT91            E T F E K F K D V R R K R A K H A V L E N Q R T I R A V E A L K N N D V K L F G
UniRef90_H3G745                          L Q Q R A L H V W S E A K R V E E F R E I C T Q K Q V V Q L G
UniRef90_Q9HDU2            V F L T K I P V K Y E R R T V H V Y S D A M R V L Q V L K L F H Q H F M L A F G
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UniRef90_R7QW83            H C N E I E D D R A L L R A I H F F E E T S R V E Q A A E A I R N K K Y D D V L
UniRef90_R7GSZ3            K E F F D H L A D V R A R A I H F F K E N A R V P Q I V E A L N N D D F D L F K
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UniRef90_S3L3M7            E E V Y E N L C R I R K R A F H F F E E N E R V D K E V R A L K T V D F T S F L
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UniRef90_R0N5U8          R L M N A S H V S
UniRef90_K1UT91          E L M N A S H V S
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UniRef90_S7RIQ6           A G W G G C T V S L V A K E S Q V Q D F I A R V K A A Y L E G E Q L K E V I F A T
UniRef90_F4S410           A G W G G S T I H L I K D E D L D G F L N V L K Q D Y Y L K R F L S S A L F T S
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UniRef90_S5ZWV4     N V Q L I V V D S G I R H S V H P S R Q E E I N S A L R K L E Q I S L D E I E
UniRef90_R6QE72       H S L C I V D T R G S H A D Y A M I P S E M K Q V A H Y F E E D V L R K V D K
UniRef90_UPI00037BA5BD
UniRef90_H9UKE2                                                        R S G D Q A D T
UniRef90_UPI0003C371DB D L V V L I C N S D V R H S E Y P T R R K Q C S E A L K L M G L K S Y R H A T E
UniRef90_UPI00035E0AB2 Y S M C I V D T K A S H A D Y A S I P E E M K K V A K F F G K T Y L R E V E E
UniRef90_A8UKY8
UniRef90_E1L260       Y A L C L V N V G S D H D E Y A A V P T E M Q E V A R A F G K T R L C E V E P
UniRef90_A7TEH8                          D E V A Q L L N I   S R N E I A S
UniRef90_A0A011QV56 D G Y L V A A D T G V K G         Q T R Q A V E G V A Q Q L K Q S Y V R
UniRef90_R7I902       Y S L V V V A T G G N H A D Y A A I P A E M K K V A A L F N E P Y L R R V R P
UniRef90_H9ULN3       Y R L C I V H T R S D H A A Y A S I P R E M R Q I A G W F G A E V L R G V D P
UniRef90_F3Y9J0     N A Y L I V A D T G I K G         Q T R E A V K A V A C L F     D S K K Q A T M
UniRef90_S0PGL0     D A F L L V A D T G I K G Q T R A A V R S V A E     L A T L Q
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                          50            60            70            80
UniRef90_S3JR61          E D T R R K L L C I M R E H N D V I D A R E A L V K N D F G T F A
UniRef90_W4WQE3    R L A L N L D E M V Q Q R A L H V F Q E A S R V F A F R H I M E H E K L Q H L G
UniRef90_R5N3R4    E E F K S K I R E L R T R A M H F Y A D N A R V L K E V D A L R G G D E T F K
UniRef90_S9VKP1    Q C K F F L T E S E F L R S L Y Q V E E Q R R T I E F R K V V L A D H L K A I G
UniRef90_E1FUE5    N T Q H M K I F K L A Q R A K H V Y T E A D R V R L F H E A C K S G N V K E M G
UniRef90_L1K342              V K K R A R H I I S E A Q R V D D F C R E C E D Q L L A S L G
UniRef90_R9LPI2    Q Q F Y D N L P Q V R H F F D E N D R V V R M V E A L E Q K E K E K E F E
UniRef90_P13045             L Y Q R A K H V Y S E S L R V L K A L K M M T E D F F T D F G
UniRef90_E2B9N8             L R Q R A L H V F Q E A G R V L A F R R A M E H E K L Q Q L G
UniRef90_D7B6R8    A L A S L P D P V L R R R V E Y A V T E V H R L N A A V G L L R A G R F G E V G
UniRef90_R9LF44    K E F M E A L P N L R L R A I H F Y Q E N K R V M E Q K K A L L E N D F D G F L
UniRef90_UPI0003B3226E        E D A R R K L L S V L Y E H N D L L N A R E G I E K G D F F K F A
UniRef90_D2NQC8    E D L S C A G M D A R A W V R H A F H D M T L V G R A A D E L G F A A F E E A G
UniRef90_Q2GZN1    R F T S R F P V R A E R R A Q H V F G E A L R V V Q F L A L L E S G T T N Q L G
UniRef90_R5JZE4    E V L A H L T E I R Q K R A L H Y V C E N E R V Q Q E T E A L K Q D R F A E F L
UniRef90_D4JZ30    E T F L A K L P E C R R R A F H V Y A D N D R V A K Q V A A L R D G D F D T F L
UniRef90_S4RK13             L Y Q R A K H V F G E A A R V Q Q F R R V C Q E A Q M S R L G
UniRef90_S0J1X9    E E F Y K N I P Q I R K R A L H F F E E D K R V E K E V S A L K N G D F Q G F L
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UniRef90_T1HM28    N T R H L T K Y L L H P R V M H V V S E A Q R V N T W I K L T A S V S P A E L G
UniRef90_UPI00046EEAE3 D E V L K H F A E L R E R A L H F Y E E N S R V D Q Q V E A L K N D D A D E F L
UniRef90_R7GLY3    E E F K A H I P E L R E R A L H F F K E D A R V E K A V S A L K N N D F D T F K
UniRef90_R6GA61    N E F Y I H I P E I R K R A M H W F E E T D R V I D Q V N A L E K E D F E G F K
UniRef90_UPI00021A706D        P F K L K Q R A L H V Y Q E A A R V V K F Q A I T E D E K L R Q L G
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UniRef90_UPI00042B5CE2      L H Q R A A H V Y S E A K R V H A F K D T V E E E K L K K L G
UniRef90_B0P930    E T F Y G R V A S L R L R A F H F Y G D N A R V P R Q V A A L R A G D F E T F K
UniRef90_R6RGQ5    E E V I R V T E V K E K R A L H F F E E N K R V E K E V C A L K E D R F E D F L
UniRef90_C4Z410    K E I L S N G D R A A L R A L H F I C E N E R V Q K E V D A L K K D N F S E F L
UniRef90_C1E0H6                G E N Q R V A N G V R A W R D G D V A S F G
UniRef90_R7I1R7    E E F I K A I P E L R K R A L H F F N E D E R A I E E A K A L E N G D F D K F L
UniRef90_U2D443    E D V I R E M A D V R M R A L H F F E E N K R V E K E Q V K A L R E G D F E T F L
UniRef90_R5A8J7    K E F Y E H I G E V R K R A M H F F D D D R L A A E E A K A L R D G D L E A F K
UniRef90_C6LDK2    E K L L E N I P Q L R M R A L H F Y N E N T R V D E E V A A L K E K R Y D D F L
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UniRef90_B3RLB9             L Y D R S L H V Y S E A N R V L T S K K I C S S E A S E L L G
UniRef90_UPI0003664AC1 K E F M E N L N K V R K R A L H F F A E Q N R V D T A V K A I K E K D Y D T F L
UniRef90_I0X778    I L D V V S E D I H R K L Y T   M L R E H N D V L E A R E G L I K S D F F K F A
UniRef90_UPI0004658F86 E Q V L L N L N E V R E R A L H F F E E N K R V D A E V A A L K E G R F E D F L
UniRef90_R5IWC0    E K V I Q H L P E I R K R A L H F F E E N K R V E A E V A A L K E G R F N D F L
UniRef90_D8IDU3    Q Q L L E N A S N I R K R A Y H F I T E N E R V V E Q I N S L K E N N I K K Y I
UniRef90_H6CF85    K D L Y A N L K M V R E R A L H F F E E N K R V D E Q V K A L Q E R R F S D F L
UniRef90_C2NSD4
UniRef90_I0X9N2    E K L L E K T P E L I L R A F H F F N E T S R V E Q M A E A I T K D D G E K I L
UniRef90_F4LLG6          E D M R R L R C I M L E H Q Y V L D A A D G L R H G D F A R F C
UniRef90_E7GDU5    A E F Y K K L P E V R T R T I H L F E E N K R V E K A V S A L N D R D F D T F K
UniRef90_UPI00047D567C D D I V T A I P Q I R E R S Y H F Q Q D N Q R V S E Q V K A L E S D N F D L F L
UniRef90_R6GVH2    D A F Y R R L P E V R R R A I H V F D E N R R V L A Q A R A L E S G D V P G F L
UniRef90_B4J155    S T Q H M Q Q F K L R Q R A L H V I Q E S G R V I K F R Q I C E Q Q D I E Q L G
UniRef90_R9LZF3    A E F Y A K I G E L R K R A A H F F A D D A R V P Q E V A A L E A G D F D H F R
UniRef90_R7GND7    D E F M K N Y R M V R A R V G H F F K E E D R V L K Q T E A L E K G D F D T F L
UniRef90_T0ZQP3    D A Y D K L D D L H Y R R T R H V L N E N S R V S R V V D S L R K G L   D V G
UniRef90_R5H6A7    D D I M L N I R V L R E R S I H F F D E N E R V D K V V H A L K S G S F D D F L
UniRef90_W4TLC2
UniRef90_R6Q2E6    T A F W Q A L P R L R T R A I H Y Y Q E N A R A L A Q K N A L Q R G D F A E F L
UniRef90_D4L8E1    N E F Y I R L D E I R E R A L H F F N E E H N V K N A V S S L E N G K F D E F L
UniRef90_F0RRZ7    A R V V P L D E E A R H I C E Y V L M E S H L A N D A A S L L T T K D A S L Y G
UniRef90_D4LP73    E N L L A H N D R A V L R A M H F Y E E N R R V A D A V K A V E N K D G E G F L
UniRef90_R7QUC6            E V G R R M S H V F S E A V R V E D F V R V S M D H N L Q Q F G
UniRef90_UPI000381F191 D E F Y A R L V E L R N R A M H V F E E N K R V Q K A V A A L N N N D L T G F E
UniRef90_B9YC59    A E F Y R R L R E V R S R A I H F F E E D A R V P L Q V Q A L K D Q D L K R F F
UniRef90_Q7QL29             L K Q R A L H V F Q E A L R V Q Q F I E T A K E D C I S R M K
UniRef90_N1ZIT8    N D I Y Q N I S A L R Q R A I H F F A D S H K A V Q E A E A L K N N N F E T F K
UniRef90_UPI000476ADF3 A L R D L Q N P V L R N R V E Y A V T E V H R L N A A V G L L R T G R V A E T G
UniRef90_R6YWU0    E E F Y K I D E V E K R A T H Y F E E N K R V A R A Y E A L T V N D F K T F F
UniRef90_R5JJR8    E E F I A A V P A L R E R A L H Y Y T E Q A R V A E G V T A L E A G E F D H F L
UniRef90_R6G5U8    D D V I E N V K A I R E R A F H F F E E N K R V D A E V E A L K E K K D F A T F F
UniRef90_M2NEE7    E K F M E R V A D L R L R A Y H F F K E N K R V D A L K K K D F D L F K
UniRef90_R7GZF8    Q D F L A A L P T L R T R A A H F Y G D N R R A S E E A A A L S E N D F A R F L
UniRef90_W9XPX3    A T L D S I D E V T M S A H A L I T S E N F     D P S S E E N I E Y L G
UniRef90_C6D3E1    E M I Y G R L A E L R E R A L H F L D E N D R V G R Q V E A I K S G E W Q N V L
UniRef90_A0A023BD65        E R V R H V L T E N E R V L E F V K I C K E L N L K R L G
UniRef90_R7FV97    D E R E D L G D R A L L R A L H F V R E N E R V K Q I S S Y I A S G D I K G F L
UniRef90_A0A024FJZ9 K F M P I V N E A L Q P I F E A A V L N Y S I T K N A E K A L L E T Y I D Y I G
UniRef90_R5K3F2    Q D I I D L G D R Y L L R A L H Y F E E V K R V E I Q V A S L T K G D M P A F L
UniRef90_A8MCB4    I D W D W L S D V H R R R L E F T I L M N E S T K K A I V E L R K S K P D R L G
UniRef90_I6XP09    D D I T D N I S M L R S R A I H Y V N E T K R A G A E A E A L R R G D T A A F L
UniRef90_S5ZWV4    P Y L D I L A E K E R K R I L F T I L M Q A S T M R A V E K M E N W N L K E I A
UniRef90_R6QE72    T D F Y L N I P A I R E R A M H L F E E N K R V E E E V E A L E Q G K F E V F K
UniRef90_UPI00037BA5BD
UniRef90_H9UKE2    A A I G S M P E E V R R G C K H L R D D E A R I A E A V Q A L E Q A D P I R F G
UniRef90_UPI0003C371DB G N L S D L K E V L V K R A H V I T E I K R T Q D A A E A L K N H D F A K V
UniRef90_UPI00035E0AB2 D D F Y K L G D R P I L R A L H F F E E E R R V E G E V K A L R E G D F K E F L
UniRef90_A8UKY8                        Y N Y I G
UniRef90_E1L260    S A F N K L G D R C L L R A I H Y W Y E N G L V D S R W Q A L Q A N D I T A F L
UniRef90_A7TEH8    E Y L T I Y P V R L Y Q R A K H V S E A L R V L R S V E L L S N H E M N R F G
UniRef90_A0A011QV56      T K K L I C H I       G K L S E A A K L A I E E E Q L R Q L G
UniRef90_R7I902    E E F Y Q A L P T L R L R A M H F F E E D E R V V R Q V A A L D R N D L F A F L
UniRef90_H9ULN3    A S F W R E I A R L R S R A G H Y F A E N E R V Q L M Q R A L T S G D I P G Y L
UniRef90_F3Y9J0    K K F Q L L G E L     T E Q A Q A M T K N Q A S L L G
UniRef90_S0PGL0          P E L V E S I T A H L     G L L T N Q A K Q A I M H N E A E T L G
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                              90             100            110            120
UniRef90_S3JR61          R A V N H S H E S M R D L F E I S C P E I D W I L K R V L R N P V T C G R I T G
UniRef90_W4WQE3          N L M S K S H A S L Y K L Y E C S H P S V D A L V E R A I L C G A F G A R L T G
UniRef90_R5N3R4          K Y I L E S G A S S Y K Y N Q N V F S V K Q Q P V S L A L A V S E G A W R V H G
UniRef90_S9VKP1          A L L N S S H T G M R D L L K V T I P Q I D Y I Q R A I T V Q P V A G A K M M G
UniRef90_E1FUE5          K L M N D S H T S C K E L F E C S C D K L D E V V E N C L R N G A L G A R L T G
UniRef90_L1K342          G L M L G S H E S C R H D Y S C S C S D E L D E L V G C F L R A G A N G A R M T G
UniRef90_R9LPI2          E G I R D S G N S S Y K Y L Q N V F A A S D Q A V S L A L A N G H G V C R V H G
UniRef90_P13045          R L M N E S Q A S C D K L Y E C S C I E T N Q I C S I A L A N G S F G S R L T G
UniRef90_E2B9N8          S L M S K S H A S L H K L Y E C S H P S V D A L V E R A V H C G A F G A R L T G
UniRef90_D7B6R8          P I L S A S H L S L R G   F G L P T P E V E L A A E T A A R A G A R G V R M S
UniRef90_R9LF44          G L V T K S G Y S S W M Y L Q N I S P A Q H Q E V A V A L A M C D G A Y R V H G
UniRef90_UPI0003B3226E   R S I N H S H E T M R D M F N I S C P E I D W I L K R V N E N P V T C G R I T G
UniRef90_D2NQC8          R I F T E S F V S M R D E L R V S R P E I D D A V Q V C L D Q G A L G A R I V G
UniRef90_Q2GZN1          V L L N A T Q D S C R D T Y E C S C T E L D T L C A L A R A A G A Y G S R L T G
UniRef90_R5JZE4          R L V K E S G D S S Y K Y L Q N V F T C H D V T H Q N V S V A L A G A S R V H G
UniRef90_D4JZ30          C L V N E S G R S S W E Y L Q N V P A G Y K E H Q E H L L G D K G A V R V H G
UniRef90_S4RK13          E L M N D S H A S C R D L Y E C S C P E L D K L V E C C L K S G A V G S R L T G
UniRef90_S0J1X9          D T V Q A S G N S S F K Y L Q N I Y T N K D V Q N Q S S I L F G H G V S R V H G
UniRef90_UPI0003B53E1B   K Q F L A S G N S S Y K Y L Q N I Y S C K D Q P I S A A L A P N K G I A R V H G
UniRef90_T1HM28          R L M S Q S H D S M S R L Y E A G H P E C D K L V E V C I S P G C L G A R I T G
UniRef90_UPI00046EEAE3   R L V N E S G N S S W K W L Q N C Y S H L A L T E R F I K R I G K G A C R V H G
UniRef90_R7GLY3          S V I K S S G D S S Y K Y L Q N I Y S N H D E T N Q A V S I A N K G V C R V H G
UniRef90_R6GA61          S L I K A S G D S S F K Y L Q N S V K N L S R Q E M A V G L A F S G V S R V H G
UniRef90_UPI00021A706D   N L M S N S H A S L R K L Y E C S H P N V D S L V D K A M A C D A F G A R L T G
UniRef90_UPI0004650B68   K L V K A S G D S S Y K F L Q N V Y A N C D V Q N Q S V I I G D N G V C R V H G
UniRef90_E9J4D0          N L M S K S H S S L H K L Y E C S H P N M D A L V E K A M L C G A F G A R L T G
UniRef90_UPI00042B5CE2   D L M N E S H Y S C S V L Y E C S C P E L E E L V K V C R D N G A L G A R L T G
UniRef90_B0P930          A L V I E S G R S S F M Y L Q N V Y T C L A L A M S E H L L A G R G A W R V H G
UniRef90_R6RGQ5          E L I T E S G N S S W K W L Q N C T T A L A L T E L F L K E K G C G A C R V H G
UniRef90_C4Z410          L L V K K S G D S S F K Y L Q N V F T C H D V S H Q N V S V A L A G V C R V H G
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UniRef90_R7I1R7          K L V K E S G Y S S Y M Y L C V C G S S K E Q A V G L V L A M C D G A Y R V H G
UniRef90_U2D443          Q D V T A S G N S S W K W L Q N V Y T T A N V Q E Q F I K E K Q K G A C R I H G
UniRef90_R5A8J7          G M I I A S G R S S L Q R L Q N S V A P L E Q G L T L A L A A G K G A W R V H G
UniRef90_C6LDK2          R L V C E S G D S S W K W L Q N C Y T P Q E Q A I C V A L A L T E L Y C R I H G
UniRef90_UPI0004760086   P I L S A S H L L R R   F D L P T P D V D L A A A S A S R A G A R G V R M S
UniRef90_B3RLB9          R L M S E S H S S C S S K Y E C S C P E L D K L V E A C M S C G S L G S R L T G
UniRef90_UPI0003664AC1   Q C I T K S G N S S W K W L Q N C F A T K D E T E Q A V E E A G R G Y C R V H G
UniRef90_I0X778          R A V N D S Y V T M R D L Y D I S C P E I D W I L K R V S E N P V T C G R I T G
UniRef90_UPI0004658F86   H N I T A S G N S S W K W L Q N C T S Y Q E Q G I T V A L E K K A G A C R I H G
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UniRef90_D8IDU3          N L M N E S G L S S F M Y L Q N C Y S I T S S K N M G V A L A I A G A V R V H G
UniRef90_H6CF85          R L V T E S G N S S W K W L Q N V Y R E Q D V S V A L A L T E I Y L K C R V H G
UniRef90_C2NSD4            M N A S H A S L R D D Y E V T G L E L D T L V A A A Q K Q E V L G A R M T G
UniRef90_I0X9N2          K L V D A S G R S S F N C Y V N A H P E L A L T T Q F I N K I G K G V C R V H G
UniRef90_F4LLG6          K A V S R S H D A M R D L Y L L S C P E I D W F D M T S V R N P N G C S R I T G
UniRef90_E7GDU5          K T I K A S G E S S F K Y L Q N I Y S N H N T D Q Q A V S I A L A L V C R I H G
UniRef90_UPI00047D567C   Q M V I E S G Y S S F M Y N Q N I P V S N V A E Q L A L S E M V L K W R V H G
UniRef90_R6GVH2          S L I N A S G A S S W K Y L Q N I A P A G A E H Q A L A V T L A L C V R V H G
UniRef90_B4J155          K L M Q Q S H H S L R E L Y E C S H P D L E R L V S L S   A R Q G I S A R V T G
UniRef90_R9LZF3          Q L V I E S G H S S F M Y L Q N V Y T C L G L A A S E Q I L S G Q G A W R V H G
UniRef90_R7GND7          K L V R E S G D S T F K A L Q N I Y P Q E S T R H Q N I G T A I V L V V K V N G
UniRef90_T0ZQP3          I Y L T A S H A S L R D D F E V S C K E L D L I V D E A L H F G A S G A R M V G
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UniRef90_W4TLC2            M N A S H D S L R D D Y E V T C P E L D T A V D A A R A A G A L G A R M T G
UniRef90_R6Q2E6          H L I R A N G E S C Q N V Y C A S D P R H Q A L S Q S I L E A G G G A W R M Q G
UniRef90_D4L8E1          D A I R K S G N S S F K Y L Q N V Y T T R D I Q N I S V A N Y G V C R V H G
UniRef90_F0RRZ7          K L M N R V Q A G L R D L L E V T C P E V D W L T K R A S E N G C L G S V Q I S
UniRef90_D4LP73          R L L E E S G N S S W E W L Q N C Y S L Q N C K E Q F L N K I G A G I C R V H G
UniRef90_R7QUC6          R I L N E G Q T S L K E V F E S S C P E V D Q V V D F C R K S G A V G S R M T G
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UniRef90_UPI000476ADF3   P V L S A S H L S L R R   F D L P L P S V D L A V E T A A R A G A R G A R M S
UniRef90_R6YWU0          K M M D E S G L S S Y N N L Q N C Y V E S E E K F V K T L K G E I Y S R V H G
UniRef90_R5JJR8          D V I K R S G D S S L L Q N I Y S T K D Q N V T V A L G F S E Y V C R V H G
UniRef90_R6G5U8          N K I T E S G D S S W K W L Q N C Y D E Q S I T V A L A L K I G R G V C R V H G
UniRef90_M2NEE7          H F V A S S G N S S Y K Y L Q N T I E P H H Q P I S I G L A I S E G V C R V H G
UniRef90_R7GZF8          E L V K E S G S S Q N L Y S C R K P T L G L W M S E Q I L G G K G A R V H G
UniRef90_W9XPX3          D L F R I N H   G L L V S L G V S H P K L E H I R E L V D Y A D I G W T K L T G
UniRef90_C6D3E1          K H I T A S G N S S W K W L Q N I Y Q E L A I T E R F I E Q L D D G A C R V H G
UniRef90_A0A023BD65      Q L L D G S F A S L D G D F D C G C T E L T Q L V N I C R N A G A L G S R L T G
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UniRef90_A0A024FJZ9      D L M N Q H H A L L R D N L L I T T P K I D A M I N A A K A G A Y G A K I V G
UniRef90_R5K3F2          A A V K A S G D S S F K Y L Q N V Y T N K D I Q A Q N V S V A L A G V S R V H G
UniRef90_A8MCB4          E I M N E Q H R L L R D L Y E V S I P E L E E I K R V L D L N G A L G S K I S G
UniRef90_I6XP09          E L V K E S G D S S F K Y L Q N V Y S V K D V T S Q N V S L A L A V S R V H G
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UniRef90_UPI00037BA5BD     M S Q S H E S L R D L N E V T G F E L D A L F E A A K S E G C I G T R M T E
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UniRef90_R6G5U8       G G F A G V I A A F L P K E E T E G F T K Y I D K A L G E
UniRef90_M2NEE7       G G F A G T I Q A F V S D N Y V Q I Y Q K E I E K V F G K
UniRef90_R7GZF8       G G F A G T I Q A F V E E Q Y C A K M D A L F G S G S C Q K L R I R T V
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UniRef90_UPI0003808FE5  D A Y L V V G D T G K T G H T L          E A V Q D        V A R L C E E N P
UniRef90_M7TEC6              E I V I G N T G K V          A N T A A A V A G V          R E R K E
UniRef90_R7GMZ9         N H S L C I V D T K D V P A E Y R A I I E E M R S V A K Y F G K E F L R E V D E
UniRef90_U2TQM0          Y D L V I V N T G R G H A E Y S A I P D E M H A V A H A L G V E Q L C Q T S E
UniRef90_S3CSA8        E L P L L L V D T K Q T K S            T A F E V A K V G N L K K A H P
UniRef90_K1RVT5          Y K L C L V N S K V K H S P Y N D R R N S C E N V V K H I A A K T L R D C T E
UniRef90_A1RYL2          V R L V L A D S G V P           R N T G E M V K R V L            E L K N
UniRef90_F7UVK8          Y A A F L V D S R C D H S E F N A V P A D M F A V A R H F G R K R L E D V P A
UniRef90_E4SSW8            L V I A D T G I H G       N T R      E A V E K V E A N G L D A L S D L N
UniRef90_A9AY65         H F V V A D S G I A              S E T K A V V G D L R Q R W L A D
UniRef90_Q5KLR5
UniRef90_U4L9L3        E L P L L L V N T K            Q S R S T A E E V A K      V R S L L E S H D
UniRef90_I6X6V8
UniRef90_U5P5C5            A K L V I A D T G I R G H T        K E A I Q K V K D L G T E A L A S F H E
UniRef90_D4KJ26          Y D F F I T P T G E D H S E Y T A I T V E M K A I S Q F F G K E Y L K D V S M
UniRef90_G2Q8J6        E L P L L L V D T K V P K S            T A H E V A K V G K L R N T H P
UniRef90_UPI000360BFAF    A H L I I A D T G V         Y G N T S Q A V Q Q V A K Q    G E A A L P M L S
UniRef90_X1R498            V E V V I G N T G L V          A N T K A A          V A G V R E R K E
UniRef90_UPI00046328D1      L V I A D S G I A G S          T R Q A V G A V Q G R Y E R D
UniRef90_M2FJ23        D A Y L I V A D T G            Q T G Q T L K A I Q       S V K A L L S
UniRef90_H1X549            T L I I A D T G V H G Q T G              L A V S V V R E
UniRef90_C5RBP2        D G T L I L A D T G I            Q G Q T G L A I S V V R E
UniRef90_F4FUX5            S L V I A D S G I K G         K T S E A V S    L V H D N L V D E P E
UniRef90_F0VY82        D A Y L V I A D T G I        Y G N T R E A V E K V A Q A      E E A N L
UniRef90_D5T0M9            T L V V A D T G I H G         Q T M H A V N I V K
UniRef90_Q0W8D2
UniRef90_C9C4G5        D A F L I V A D T G I K G         Q T R E A V K D        V A H L F E T Q P
UniRef90_UPI0003F1AB47                                  E E V C R C L G I      S L Q E L S P
UniRef90_V5XL76        D A F L I V A D T G I K G        Q T R A A V K D V A H L F E K D A
UniRef90_Q4WP25        E L P L L L V D T             R Q S R S T A V E V A K V G K L K D V T D
UniRef90_UPI00036581A9      V I V V A D T G V            Q G C T K E A V S S V R A L L Q
UniRef90_G5JGF5            M V V I D T G V K G S       T R Q A                V E D
UniRef90_C9ABC8        D G Y L L V A D T G I K G         Q T R E A          V K S V A H L F E
UniRef90_S0JUB4        D A Y L L V A D T G I K G         Q T R A A V R S V A A L F    E T A P D E T S
UniRef90_K1LQI1        N A Y L I V A D S G M V G          Q T K L A V G K V H Q L R E A K P
UniRef90_Q8ZXN6          V F V V L D S G V R H S T H S K R Q A E L Q Q A V E M L    K A E L G I Y S E
UniRef90_W7CDA8         L P I V V A D T G I P S        E T R A S V    A A V R D L Y Q K N N I E V S
UniRef90_B2B6Y4        E L P L L L V D T R T P K S            T A H E V A K V G R L K D T H P
UniRef90_C2D4N2            S L V I A D S G I K G               K T G E A V S M
UniRef90_J4KM26        E L P L L L V D T K Q P K S            T A Y E V A K V R K L R D A H P
UniRef90_G5GHI7          Y N I I L V Q T G N E H E E Y S A I P H D M K K I A G Y F G Y K G L G Q V F E
UniRef90_L7HXY8        E L P L L V V D T K Q A K S T       K Y E V E K V A K        L R E T H P
UniRef90_Q767H2          V F V V A D S G A G G S           T K E A V E L L          R D R F E
UniRef90_A2QI41        E L P L L L V D T             R Q S R S T A V E V A K V G K L K K E H P
UniRef90_A0A023BXF5
UniRef90_UPI000249319F      I V I A D S G I K G            K T K E T V A D V          R T M Y D
UniRef90_K7IW48
UniRef90_E1ICF2          L T L V I G D T G V R S        A T H R P V C D          L R E R W Q
UniRef90_E8Q9Q3            L I I A D T G V H G         H T R E A             V G K V A Q F E E
UniRef90_D9XQJ4            F V I A D S G V S G G          T R E A V E L L R R G F E R E
UniRef90_S8B7J1        E L P L L L V D T R          Q S R S T M T E V A K V L K K A H P V    V T E
UniRef90_J3AHY1        D A Y L V V A D T G            Q T G Q T L K A I Q       S V K E L L K
UniRef90_H1LG72        D L F L V I A D T G I K G         K T S E A V S L V N V V T N S D V A V
UniRef90_UPI0003B55E64      L V V A D S G           Q T S Q T K T A V A M I K Q K
UniRef90_E1QPS4          V F L V V D T G I R H S T H P K R Q Q E I D E G L N K L L S G S L R E I R E
UniRef90_E9F1Y0
UniRef90_C8NHR4            L V I A D S G V T G N T                K Q A V H H V S T
UniRef90_UPI00006CFEBC
UniRef90_W9C687        E L P L L L V D T Q Q A K S            T A V E V A K V A L L K G K H P
UniRef90_G2PLR0          K L L V A E S G V P K K T L N A R V Y A   Q E A V D A V K K V H P E F V L E
UniRef90_K4E5Y8                                                       V G E I R E L K E
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UniRef90_UPI000225B6CB  D F H F I V A D S G          R I G D T R S A V E S V A H L L K K A
UniRef90_H4GJM4          A L V I A D T G I K G A T K A A I Q A V K E K
UniRef90_I0HZ74          L T L V I A D S G V           R S P T K E       T V G A V R H L W E
UniRef90_K0B3Z2        N F H L V I A N S N V E H S          T E S V V K E      V S K F K E R N E
UniRef90_M1VUE6
UniRef90_A9WH18          L T L V V G D T G V R S       P T R         L P V G A V R E R W Q
UniRef90_J2ZQT7
UniRef90_E8N5A6            I V I G N T G I A    S P T G E V V A E         V R K N R E Q N P
UniRef90_S9V9N5
UniRef90_B8MK77        E L P L L L V N T             R Q S R S T A V E V A K V G R L R E V T E
UniRef90_UPI00034643B0      L V I A D T G V          Y G Q T R E A I L V    E A L G Q K A L P L L Q E
UniRef90_W8BHD5                                    T R V E L C A R D L D V S D E E F E R E L T V
UniRef90_B9DU64        D A Y L I I A D T G I H G         H T R E A V Q A K V A K Y          E E
UniRef90_W3WV02        E L P L L L V D T R Q P K S            T A H E V A K V A R L R          N
UniRef90_L9W6Y2
UniRef90_F3KL19        N F H L V I A N S N I E H S          T D E V        V S K V R K F K E
UniRef90_K2RWS4        E L P L L L V N T             R Q S R S T A V E V A K V Q N L R
UniRef90_L0L0R4        D C G I V I G N T G        K F S S T R Q L V S N V A Q
UniRef90_E8JYA7            L V I A D T G V          Y G H T R    E A I Q V V E S K G K E A L
UniRef90_UPI000255B02A      L V V A E S G L K K Q T M N V R F Y Q    E N A I K E V Q Q K N L R E D Y E
UniRef90_UPI00037D1A59  D T L L V V A D S G T A G S           T K E A V E L L R E G F R R D G T Q
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                                    50              60              70              80
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UniRef90_K9EBR1                                         Q L T H Q A K K A I M T N N L P G L G
UniRef90_F2N9B0           A D F D E L G D R A V L R A I H Y W R E N E L V D E R W D A L R R G D M D A F L
UniRef90_I3T0V8                                   M R V L K G I E A W K M C K F N H Y G
UniRef90_F5YDN4           E T V L A H A S E I R K R A L H F Y S E N R K V D A M L Q A L E G M K L E T F L
UniRef90_X0XS58           D R A Q A M P D N L R R R A T H Y F G E V A R V C A G V Q A W Q E S D I A R F G
UniRef90_S3A7G0           K D F N K L G D R A L L R A I H Y W Y E N D L V D K R W N A L Q H G T I D T F L
UniRef90_B5GPS7                                   V T E N H R V E R V T S A L L T G D V H A V G
UniRef90_UPI0003808FE5    D A K N W I E E L                 G D L T Y Q A K E Y L T M N Q V D L L G
UniRef90_M7TEC6           K K P E K Y K A L F D R         T E N I   A Y L A K T A L R E G D Y R E V G
UniRef90_R7GMZ9           N E F Y E H I I P M R K R A M H F Y S E E K R V N K E L K A L R D G N F N E F K
UniRef90_U2TQM0           D A L L E A L P H L R R R S F H F F E E C R R V D E A A A A L G A G D E G R V L
UniRef90_S3CSA8           A I T E S I L H A I D K V S E A A A E L I S R E D F D S D E L S S   I E E L G
UniRef90_K1RVT5           E V H A E V G E E D Y S R A H F V L G E K D R V L A V C D A L E K G D Y E T V G
UniRef90_A1RYL2           T Y P S V L E P L Y H A A G R L V V E A A R R         L E E G D Y E S L G
UniRef90_F7UVK8           D A R S A L G D R A V L R A L H Y F E E T R R V Q A Q Q H A L E A G D F A E F L
UniRef90_E4SSW8                   Q L G E L S Q K           A E R A L K A K D Q K L L G
UniRef90_A9AY65                     P E L Y N R Q F V A V G       N L V R Q I Q T A L A G N D A E L F G
UniRef90_Q5KLR5                       L Y E R L H H T L T E S L R V H K F V H L C Q N D I L S Q L G
UniRef90_U4L9L3           G I T N L M L D T I D K I T T E A H S   I I S S P D F S S A A G S P D I V R L G
UniRef90_I6X6V8                                   A V T A L E D G D L D A L G
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UniRef90_G2Q8J6           K I V G S I L D A I D K     V T E A V L T E A G F D T Q S E A D L A R V G
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UniRef90_F0VY82           P H L A V L G D L               T E I V Q K A I Q D K D I Q K I G
UniRef90_D5T0M9               S Q L D T D Y E L T W Q K I V H L G Q I T N K V R L D L T Q N N P E H A G
UniRef90_Q0W8D2                                   E L V A K N D Y V S I G
UniRef90_C9C4G5           H E T G Q M             I Q K L G Y L T K Q A K Q A I I E N S P E T L A
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UniRef90_Q4WP25           S I L E A I D Q V T L A A Q Q K I     Q E I S T N G I S Y R T L E D L G
UniRef90_UPI00036581A9    S Q     N E N V S R E T A G H I N R L G Q L A F D C A Q A L R T G S L K V L G
UniRef90_G5JGF5           V H K L C E D D Y Y M S Y V T H I     G K L V L E A S D A I E Q Q N F D D L A
UniRef90_C9ABC8           T S K Q L A S Q A I Q R L G I E       T K R A K E A I I A N Q L E I L G
UniRef90_S0JUB4           L A I H Q L G V L               A K T A K E A I V H N E A K K L G
UniRef90_K1LQI1           E F V T N M M D A I             G G F V S Q A I E A I Q H Q D I I E L G
UniRef90_Q8ZXN6           G Y W D F L P S P L R E R V L F T L E M Q R S T E R A L A Y L K R R D L R K V G
UniRef90_W7CDA8           A C I S Q L G E I S R E I G K E I T T     H G D L H T V G
UniRef90_B2B6Y4           K L V G S I L D A I D K V T Q   T S A E L I A E D D F S T E K E D S L R R V G
UniRef90_C2D4N2           V H D N L L D Q P E F   A K P L I D Q L G Q I A K D A R Q A L Q I S D E Q R L G
UniRef90_J4KM26           K L V N S I L D A M D R V T L S A S E V I D H     E D F D E K K E E S L Q K V G
UniRef90_G5GHI7           E K I L F N L Q S L R M R A L H F Y A E N G R V E N E I E A L R S G N F D K F L
UniRef90_L7HXY8           K I V N S I L D S M D K L T Q A A T D   V L T D E D F D N E D V E S L Q K V G
UniRef90_Q767H2           Q D E Q I K E A F V R R       V S E   L T T A A L R D L E D G R L T G F G
UniRef90_A2QI41           L V T E S I L D A I D K V T V S A Q S A I Q G V E G   D S I D K E T L E H I G
UniRef90_A0A023BXF5                   H L P D R L E P F F Y A A V L N H D I T Q K A L L E F K K D H L K K I G
UniRef90_UPI000249319F    K A P E K I G Q M L E Q L G Q H     T E D T V I A L K N N D L V K L G
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UniRef90_E1ICF2           A E         P A T Y E A R F D A V     A A V V T Q A R A A L A A G D L A A L G
UniRef90_E8Q9Q3           T N L P Y L A K L G R         L T E A V E Q A I T Q K D N Q T I G
UniRef90_D9XQJ4                   P R T R E A F V G Q V S D L T N E A V R D L A R G R W D G F G
UniRef90_S8B7J1           S I L N A I D Q V T C S A Q R   L L E E P D F V G D S K E T L A       H F G
UniRef90_J3AHY1           Q E K N R F N A Q L S I K E     L G E L S R L A K E A L L N N Q R Q E L G
UniRef90_H1LG72           P L I D Q L G T I A D S       A K D A L A S A D K K Q L G
UniRef90_UPI0003B55E64           Y D A N D A E T M A S I A Q I G S L V K E A T H A I N Q E D L H T L G
UniRef90_E1QPS4           D E I S R L S D V P R R R I L Y T L R A N E S T K I A L K V I K D W R E A L I G
UniRef90_E9F1Y0                                                   L M K V G
UniRef90_C8NHR4           L Q E R I I D P T T N E T G S D A V Q S I G I V Q D T K T A I E T K D P L K L G
UniRef90_UPI00006CFEBC                 Y K R A I H I V N E A I K A Q K M K Q I C S Q Q K W E Q I F
UniRef90_W9C687           A I V D S I L N A I D M V G Q S A A A M I S D P E Y D S E N L K C   V E S L G
UniRef90_G2PLR0           E S C D L V P E E F Q G Y W Y A T I Y N Y H I T L E A K K E L L K P N P N I S G
UniRef90_K4E5Y8           N N P T W F N A L L G R Y       N A C V G E A A A M E V G N L F R M G
UniRef90_G9HVY2                             F V R R A T D T D Q G R H A I D G K A E E L G
UniRef90_UPI000225B6CB               P K K I Q S K I E R I G E L T H L A K H A L E K A G R N L L G
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UniRef90_I0HZ74           Q           E T A R C E A L F D A I A G L A Q E A R Q A I E Q G D R R R L G
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UniRef90_M1VUE6                                               L R K L G
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UniRef90_J2ZQT7                   P G Y E R K R I E Q F L I E S L V L V P A G A R L I T A A D P G V G
UniRef90_E8N5A6           E K Y N A L F E K I           G Q I V L Y A R K L I E H G N V V D L G
UniRef90_S9V9N5                   E D N P K K F A Q L V T K Y N T V V E E A M I A L Q D G D L H A V G
UniRef90_B8MK77           A M L D A I D K V T M S A S E   M I K E N D     F E A D D D E D L E Q F G
UniRef90_UPI00034643B0    L                 G N L T K I V E K A I S I K D L I T L G
UniRef90_W8BHD5           N T R H M T Q F K L R Q R A L H V I Q E S L R V A K F R E I C E Q K Q F A L S
UniRef90_B9DU64           T N L P Y L K Q L           G Q L T E D V E N A I K N R D I K T I G
UniRef90_W3WV02           T H P K L V G P I L D A I D K C V H T M N D L I E D D F D K D E V E S L S K V G
UniRef90_L9W6Y2               L R E E Y E F A A D T V E S I G E I V R N G E E A L A A D D I E E L G
UniRef90_F3KL19           K N E K T F S D M C Q K       E S E L I N R V S T M L K N L L G
UniRef90_K2RWS4           N A H P G I A E G L L S A I N D V T E S A H K L I S A F D A K D P A A L Q H L G
UniRef90_L0L0R4                 L K K N Y P K I I D P I L S T I G R I L T G E K M V A K K E Y E S I G
UniRef90_E8JYA7                         P F L Y A L G E L T Q Q A E E A I I K A R D A V M L G
UniRef90_UPI000255B02A    R F N H L V S K D Y Q N H W Y A A I H N Y Q L T K R A K K L L P N S N L E E L G
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UniRef90_K9EBR1          E I L N Q S H Q L L K   D L T V S N P K L D Q L V Q A A Q D A G A C G A K L T G
UniRef90_F2N9B0          D L T R E S G A S S M F L Q N V S S G D R Y Q P A M L A L G L A E G A T R I H G
UniRef90_I3T0V8          N L I A A S G R S S I Q N Y E C G S E P L I Q L Y E I L L R A P V H G A R F S G
UniRef90_F5YDN4          N L V N K S G D S S W E L L Q N V Y S P K E Q G V S L A L A L T S G A C R V H G
UniRef90_X0XS58          S L M N D S C A S S I H E Y E S G Q D E I I A L H Q I V S A S T V Y G S R F S G
UniRef90_S3A7G0          A L T R A S G A S S A M Y L Q N V S T A Q P A M L A L G L A E H I L D G R I H G
UniRef90_B5GPS7          P V L T E G H V S L R D D F R V S C P E L D L V V S A A L A A G A R M T G
UniRef90_UPI0003808FE5   S V M N R S H D L L Q   A L R V S D E R L D F L V E V A R K N Q A L G A K L T G
UniRef90_M7TEC6          K L M N E N H K L L Q   Q I E V S S R E L D F L V N I A R E Y G A L G S K L T G
UniRef90_R7GMZ9          I Q V K R S G N S S F E Y L Q N V Y S S K D I C M S E K I L K D K G V V R V H G
UniRef90_U2TQM0          D L M R A S G N S S W K W L Q N T V S A Q D Q S I P L V L A L T E L Y C R V H G
UniRef90_S3CSA8          K L M T I N H   G L L V A L G V S H P R L D R I R E L V D H N G I G W T K L T G
UniRef90_K1RVT5          Q K M Y E T H H G L S K E Y
UniRef90_A1RYL2          R L M N V N H   G F L S A I G V S T L E L E K L V Y T A R R A G A L G S K L T G
UniRef90_F7UVK8          R L V R A S G A S S A Q F L Q N V S P R G D G S G A D Q P A A V V L A C R I H G
UniRef90_E4SSW8          Q L M S Q A H N H L K   S L G V S C D L S D L L V A T A L E H G A L G A K M S G
UniRef90_A9AY65          Q L L S Q N H Q L L Q T   L G V S A E K L D Y L V Q T A L A A W G A K M S G
UniRef90_Q5KLR5          K L F D A S H A S M R D T Y D C T H P L V D S L Q E L C L K S G A I G S R M T G
UniRef90_U4L9L3          E L I R I N H   G I L V S L G V S H P K L E R I R E L V D F A G I G W T K L T G
UniRef90_I6X6V8          R L V E R S Q R N A R D N L G N Q V R E T I R M Q A L A R D L G A Q A A S S F G
UniRef90_U5P5C5          R I L T D C H H   Y L Q A V G V S C P E A D Q L V E L A L A S G A L G A K M S G
UniRef90_D4KJ26          K A V T D S G L S S W R F L Q N C D P H Q A M N E I Y F Q N H K G V C R V H G
UniRef90_G2Q8J6          E L M T I N H   G L L V S L G V S H P R L E R V R E L V D H Q G I G W T K L T G
UniRef90_UPI000360BFAF   K L M T Q A H R   K L A A L G V S C P E A D Q L V E A A L S A G A F G A K M S G
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UniRef90_UPI00046328D1   R C M N D A H N L L D   A L R V S H P V V N A L V R T A R S N G A L G A K M T G
UniRef90_M2FJ23          E V M N Q A H Q L L A   S L T V S N Q T L D R L A Q A A R Q A G A L G A K L T G
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UniRef90_C5RBP2          H F M N E A Q K H L S   A L G I S H P K L D E L I M A A R H A G A L G A K L T G
UniRef90_F4FUX5          K L M T Q S Q R   D L A Q L G V S N H L D T F C Q V A C D N H A L G A K L T G
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UniRef90_Q4WP25          T L I R I N H   G F L V S L G V S H P R L E R I R E L V D Y A D I G W T K L T G
UniRef90_UPI00036581A9   R C L N E A H R   I L S A L Q V S S V E L D H L V E V A R S A G A L G A K L T G
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UniRef90_K7IW48          M S S S H S S L Q S L Y E C S H P R I D V L V E A A N A C G A L G A R L T G
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UniRef90_E8Q9Q3          Q L M T Q A H   S A L K A I G V S I T K A D Q L V D V A L K A G A L G A K M T G
UniRef90_D9XQJ4          R R M T E N H R L L R   D I G I S T D R I D A L V A A L A A G G L G A K L T G
UniRef90_S8B7J1          T L I R I N H   G F L V S L G V S H P R L E R I R E L V D Y A D M G W T K L T G
UniRef90_J3AHY1          E I M N E A H Q L L A   S L T V S N A A L D R L S Q V A R Q A G A L G A K L T G
UniRef90_H1LG72          M L M N Q S H H L S K   L G V S T D T L D D F C R I A V A N N A L G A K L T G
UniRef90_UPI0003B55E64   S L L T A N H E   E L K K L G V S A P I M D A L Q Q G A L G A K L T G
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UniRef90_E9F1Y0          E L M T I N H   G L L V S L G V S H P R L E R V R E L V D H E G I G W T K L T G
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UniRef90_S9V9N5          R L M N E C H K L C   V E L T I S C D E L E S I V N C C R E N G A L G A K L S G
UniRef90_B8MK77          A L F R I N H   G L L V S L G V S H P R L E R I R   W T K L T G
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UniRef90_UPI0003808FE5 G G R G G C M I A L T N Q K A V A N I A Q A L Q E A G A R Q T W I Q
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UniRef90_U2TQM0        G G F A G V I M C A L P K R E T A G Y V D F I
UniRef90_S3CSA8        A G G G G C A I T L L K P E K L D Q L A E T L E E E G Y E K F Q T T L G C
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UniRef90_A1RYL2        A G G G G F I V A L V T A E K E K E V V E A L R Q           L S P R I F S V
UniRef90_F7UVK8        G G F G G S V L A F V P N G R V A A F R A R L D K
UniRef90_E4SSW8        G G L G G C I I A L T S K D Q A R T I A K K L Q E K G A V N T W I E
UniRef90_A9AY65        A G W G G I M L A L V P A E R A S Y I Q Q Q L R A A G A V Q T W
UniRef90_Q5KLR5        G G W G G S V V S L V E S S Q V P E F L E K V R K G Y E K Y G D L E D E E F A T
UniRef90_U4L9L3        A G G G G C S I T L L K P N L K P E V L Q G L E Q R L S D E G F E K Y E     T T
UniRef90_I6X6V8        A G F G G S V W A L V P T A D A D D F A T A W L E R Y S A E F P E R A T T L I T
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UniRef90_Q0W8D2        A G G G G C M V A L C E P D R C K E I A T A I G K S C G D S F I T K P T
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UniRef90_G0EDW4                             V E E A A N A V H V G D A R R L G
UniRef90_E7N7D6             P E N I G P R I N H L G T   L T Q I A I M T L D Q A D A P A L G
UniRef90_D0R429                             T R Q N W F N Q N A E E I G
UniRef90_A9EX05        A G I T A L       V E N A A F A I E A G D A V A L G
UniRef90_M2R5A4        A Q D P E V V E K L L D A I Q T I S D E A R R A L A D P E L S R E S L L S A L S
UniRef90_U1ERM4              H R L C A S E E K Y L Q Y I K E I G K L V Y D A R N A I E Q H Q F E K L A
UniRef90_M0WYF1                        H P I Y E N F R V E A F K A L L T D E Q L S A L G
UniRef90_Q68BK4                        H P I Y E N F R V L C F R Q A L A R Q Q L E V L G
UniRef90_B1L5T4                        V R T I S D L V F K G R E A L E S G D F R T L G
UniRef90_U1PD01        Q A P A Q L R E I V Q R L E Q F L V E A H E V V P G A S A A L R D G D L A A F G
UniRef90_U3ABY7            L R E Q Y D F A R D T V E S I G D L V R R G E D A L R E G D V E E L G
UniRef90_E6N577            E L V K L Y S H V Y E       M A K E A L V E G D F Q A V G
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lupas_21
lupas_14

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                                            90            100           110           120
UniRef90_V7HVB1            Q A F D A A H H   E L Q K L G V S L P A L D N L I T I A R Q N G S L G S K L T G
UniRef90_A0A023BRX3        D L M N Q H H H I L K D I L K I T V P V I D K M V D S A I Q A G A Y G V K I V G
UniRef90_A9A427            E R V I K N Q E   Y L E R I G I S N A K L R E M I Q T G   Q N S S F G A K I T G
UniRef90_D5G5P5            E L I R I N H   G L L V S L G V S H P K L E R I R E L I D H T G I G W T K L T G
UniRef90_A2AXF8            P L L T Q Y H H L L H   D A R L S T P R I D A L V Q A A L A A G S L G A K I T G
UniRef90_A3DNN8            L I M N Y Q H I L L R D L Y D V S L P K I E K I R N V A L S A G A L G A K I S G
UniRef90_U3Q0T1            A R M G E A H D   Q L S A L G V S S P E L D A L V D A A R A A G S P G A K L T G
UniRef90_G0HC93            A R M T E A H   G I L G Q L G V S N T Q L D A L V T A S L G A K L T G
UniRef90_UPI00037DAD35     A I I S E A Q T   Q L R G L G V S S P E L D H L T Q V A T A N G A L G A K L T G
UniRef90_R9AM93            K L V A A N H A   Q L E L L S L V S H P A L E M I I   A K L K A Y G L Q T K L T G
UniRef90_U7PGA8            E I F N E C Q T   Y L S T L T V S H P K I D R L L Q V A K Q A G A V A G K L T G
UniRef90_D8LWR0            K L F Y E S Y D D S V K Y F K N D H P C I D V L K E I G L E G G V Y G G R M I G
UniRef90_K2EVI3            E L M N Q N H K   I L Q E L G V S T E K L D K M C Q A A V V A G A F G A K L S G
UniRef90_U5FG11            E L M Y Q C H Y S Y G   A C G L G S D G T D R L V E L V Q E M Q H Y G A K I T G
UniRef90_A0A059CS04        E L L Y Q C H Y S Y S A C G L G S D E M Q H N R L A K H D D G S L Y G A K I T G
UniRef90_C2ES77            I A L N   S A Q N D L A A L N V S D E H L D R L I A A A N H N G A L G A K L T G
UniRef90_G5JNI1            Q A M N R A H Q E L D R   L G V S S P E A N H L V Q V A Q S R G A M G A K M S G
UniRef90_E8R7Z1            E L M T V N H   G L L F S M G A S A W V N D Y L V H R M L G L G A Y G A K L S G
UniRef90_C5JH79            E L F R I N H   G L L V S L G V S H P R L E R I R E L V D H T G S G W T K L T G
UniRef90_U1DI52            H V M N K A H E   R L S D L G V S H P R L D N L V E T A R K N G A L G A K L T G
UniRef90_UPI00036091F6     K L L D A A Q D   Q L A A L G V S D R G L D H L I E T A R A A G A L G A K L T G
UniRef90_G8PDF5            L I F N E A H Q   D L K Y L G V S D P S V E T L I K T A N R H G A L G S K L T G
UniRef90_F0Y158            A L F R E D G L G L R D D Y A I S G P E L E T M C D I A R T V D V Y G E R M L G
UniRef90_B8D2K4            L V M N H Q H Y L L S K L Y D V S L P E I D R I V D E M N K L G A L G A K L S G
UniRef90_N1ZRU0            Q T L N A A Q K   Y L R Q L D V S E P T L D K L I E L A L Q N G A L G A K L T G
UniRef90_UPI0003696659     S M L T E H H Q W L K V   L G V S T P K L D R L V E A A L D A G A L G A K L N G
UniRef90_C6A3T5            T L M N I N H   G L L D A L G V S T K S L S D L V Y A S R E A G A L G A K I T G
UniRef90_C6BXL6            R L V S E S G H S S R E L L Q N C Y
UniRef90_E9FCS3            R L M I R M N H   G L L V S L G V S H P R L E R I R E L V D H A D V G W T K L T G
UniRef90_I1M9V9            E L L Y Q C H H S Y G T C G L G S N L V Q E L Q H S A A S K A E G G T A K I T G
UniRef90_UPI00029A120D     K T F N Q A Q A   D L K S L G V S S P R L D S L I A Q S L K L G S L G S K L T G
UniRef90_UPI000472EC8D     L A M T E A H Q L L R   S I H V S D D L L E S L V V S V A L N K G A L G A K L T G
UniRef90_J2Z6M2            Q N F T T A Q   L I L Q T L G V S S N E T I D H L V F V A Q R N G S L G T K L T G
UniRef90_D7SU50            E L L Y Q C H Y S Y   S D C G L G S D G T D R L V Q L V Q E M Q H Y G A K I T G
UniRef90_UPI000376BF5C     R L M T K D H N L L A I   L G V S S P D L Q K L V D A S L   P H S Y G A K L T G
UniRef90_K5X4K9            A L I E E N H   S Y L V S L G V S H D S L E L I R K C A S A P Y N L S T K L T G
UniRef90_A7NK08            P L L D R N Q E   A L E Q I G V S S P E L E R L I T A A R R A G A A G A K L S G
UniRef90_J0NIC3            S A M N R A H E   V L A E L G L S L P V L N R L T A A R N A G A L G A K L T G
UniRef90_M1ALA5            E L M Y Q C H F S Y S A C G L A S N   G T D R L V N L V Q E M Q H F G A K I T G
UniRef90_M2PVR7            S S L T A A H E L L R G   M G L S T D L I D R L V D V A L D A G S L G A K I T G
UniRef90_E3C8U6            M A L D A A Q A   D L T A L G V S N D Q L D H L I A V A R A N G A R G A K L T G
UniRef90_U1Q6P2            A A M D E A H T   V L A E L S L S L P V L D D L A E A A R A A G A K L T G
UniRef90_G5K3J9            Q S M T R A H E   A L Q A I G V S V E K A D H L V A S A L E A G A L G A K M T G
UniRef90_D4YEC4            A L Q V S S P E L E A G V T F A E A N G A G A A K L T G
UniRef90_K0R1M2            Q L M D Q N H T L L Q K   L T V S C K E L D D L V L A A R E A G A I G A K M T G
UniRef90_UPI000440BD4D     A L I E E N H A H L V   S L G V S H P V L E I I K A T A Q S P Y G L S T K L T G
UniRef90_Q2FTN9            K L M D M N H C L L E M   L G V G H P Q L S R L V L A A R S T G A F G A K I T G
UniRef90_UPI0003F68474     K I M T K A N T   E L G N L H I T I E K T D L F V K T A I E K G A S G A K I S G
UniRef90_Q04EX3            Q L M N E N Q L L L S K   L G V S T P Y L E R L I K I T L K H G A K L H G
UniRef90_W1Q9Z7            E L I R L N H   G L L V S L G V S H P N L E R V K L W S D E L Q I G Q T K L T G
UniRef90_V6YZ99            L V M S H A H T   I L D E L G I S S P E A N H L V A V A R K A H A L G A K M S G
UniRef90_Z9JV57            A G M T R A H E L L R   E I G V S S P V L D D L V E G A L A A G S P G A K L T G
UniRef90_K5VW31            A L I N E N H H L V T   L G V S H P S L E L I R S R T A D P Y G L S T K L T G
UniRef90_A5UV63            P L L D R N Q A L L E   E I G V S S P E L E R L I T A A R S A G A L G A K L S G
UniRef90_W5X9K6            D L M D E N H R L V A   D L G G S G E P I D R L I A L C K Q N G A L G A K L A G
UniRef90_UPI00036B7F8B     K L M Y A S D W S N R F R A G L G L P E V E Q I V R S I R K V G V Y G A K I T S
UniRef90_UPI000376BC2D     N C M N L A H E   V L K T I R V S N D K L D H L T T V A V A E G A L G A K L T G
UniRef90_G8BCD8            E L V N I N H   G L L V A L G V S H P S L E K V K M I G D E L K I G A T K L T G
UniRef90_C0BIK8            E W M N E H Q I I L Q E R I Q N T P A K M V L Q M E A A R A A G A L G A K I I G
UniRef90_UPI00035E7447     K I M T K A N T   E L G K L N I T I E K T D L F V K T A I E N G A S G A K I S G
UniRef90_U5EKQ9            D A M L   S F Q R L L A D L G V S T P Q I D A L V E A A C A A G A F G A K L T G
UniRef90_D8IKT1            K T F T L A Q K   D L I S L G V S T P K L D N L I N I A L K N G S L G S K L T G
UniRef90_Q58487            K L M T K N H E L L K K   L N I S T P K L D R I V D I G N R F G F G   A K L T G
UniRef90_W7HNB5            E L V R I N H   G L L V S L G V S H P K L E R V R Q I V D G S G I G W T K L T G
UniRef90_C7ND02            K I M T K A N   I E L R N L N I T I E K T D L F V K T A I E N G A S G A K I S G
UniRef90_B3T4Z9            L K M S E N Q K   Y L E E I Q V S N D T L   R G M I S S L K E I S L G T K L T G
UniRef90_L8WW70            A L M D E N H G H L V T   L G V S H P V L E Q I K N I A K H E Y G L H T K L T G
UniRef90_B8G3T1            P L L D A N H A L L C   E I G V S S A E L N R L T D A A R A A G A L G A K L A G
UniRef90_A5DST4            K L V N M N H   G L L V A L G V S H P A L E T V K I I S D K Y N L G A T K L T G
UniRef90_W8K130            Q I L G K S W Q S K K I I S E I S N D E L E R I Y H L A M E N G A Y S G K T S G
UniRef90_Q03FN7            K I L T E A H T   N L R Q L G V S H P A V E K L I K I A N D S G A L G S K L T G
UniRef90_G7WLX8            E L M N T N H   G L L E A V G V G T R E L S E L V Y A S R G G Q A F G A K L T G
UniRef90_UPI00047D025F     P L L T E A H V L G R   P T L D L A L S A A R D A G A L G G R A
UniRef90_S5KZJ8            A A M N K A Q   S Y L E T L T V S D S S L E K L I E V A R S S G A D G A K L T G
UniRef90_J9WQY1            E L M R A A G L S   T D R I D A M V G A A L R A G S L G A K I T G
UniRef90_G0EDW4            E I M D V A H   G L L Y A M G V S T P E I E R L W A A R R A G A F G A K I T G
UniRef90_E7N7D6            A A M N E A H T L L T K L   S L S L P I L D D L A D A A R R A G A L G A K L T G
UniRef90_D0R429            K I F N E A   E N I L A S F K L S T E R I D N I C I A N E N G A L G A K L S G
UniRef90_A9EX05            R L M D L N Q M L L A G M F   V S T E A I E A L C K L A R E A G A L G A K L S G
UniRef90_M2R5A4            A L I N E N H A H L V   A L G V S H P A L E A I K A L A S D P Y N L S T K L T G
UniRef90_U1ERM4            P A F N W C Q K   Y L K L L T V S H E K I E T I L E E S N K L G A V A G K L T G
UniRef90_M0WYF1            E L M Y Q C H Y S Y N   A C G L G S D G T D R L V N L V Q E I Q H R K T T S Q H
UniRef90_Q68BK4            E L M L Q S H S S Y S A C G L G S E E K L T A E A E G R E P A V Y G A K I T G
UniRef90_B1L5T4            S L M N I N Q   G L L Y S L G V S S F A I E R I I W E A R M K G A L G A K L S G
UniRef90_U1PD01            Q I V D R S Q H Y S E H Y L G N Q V P E T V Y L Q D S A R R L G A S A A S A F G
UniRef90_U3ABY7            R L M D V D H   G L L A A L G V S A R S L D E M V W A A R D G G A A G A K L T G
UniRef90_E6N577            R L F T L N H   L L L R S V G V S D N V L E E I V R K L R N K D V Y G A K L T G
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lupas_21
lupas_14

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                                      130             140             150             160
UniRef90_V7HVB1          G G R G G C F I N L L P D A S A K N L A A Q L K A A G A R Q I W I Q A
UniRef90_A0A023BRX3      S G G G G S I V T I A P K D K E Q Q V V E A L K R E G K                 T A Y V V
UniRef90_A9A427          A G G G G C I F A L T D E S N L E N T I K E F K E K N H E C F S V K I D F
UniRef90_D5G5P5          A G G G G C S I T L L K P K V K A N I L E E L D S K L R T E G F E K Y Q     T T
UniRef90_A2AXF8          G G L G G C M L A L T P S E Q A S A V T Q Q L H A A G A V Q T W V L P
UniRef90_A3DNN8          A G L G G S L I A L T R D R E T A R
UniRef90_U3Q0T1          A G Q G G C A L A L S S S G D A L E I A A A L R Q A G A T Q T W
UniRef90_G0HC93          G G R G G C V I A L A T E E D A E N V E K A L V D A G A R G T W V H A
UniRef90_UPI00037DAD35   G G M G G C L I A L C P D T T T Q R V Q Q S L V A A G A T A T W I E A
UniRef90_R9AM93          A G G G G C T V T L L P
UniRef90_U7PGA8          S G R G S V I T L V K D A S A K K V A Q A V K E A G A Q H T W I E
UniRef90_D8LWR0          G G W G G S I L C I V K K G M E D T L I P L I Q Q K C D E K L H K P N S C I I K
UniRef90_K2EVI3          A G G G D C M I A L V P E N I I K K V E S S I I E I G G E
UniRef90_U5FG11          G G S G G T V C V I G K N F G S N E Q I L E I Q R R Y H V A T G F K P Y V F E S
UniRef90_A0A059CS04      G G S G G T V C V V G R N C L S Q Q I L E V I Q Q K Y K K A T G Y L P F L F E S
UniRef90_C2ES77          G G R G G C M F A I T R T A L A R K L A G I L K D N G A K Q V W L Q P
UniRef90_G5JNI1          G G L G G C I I A L C R N E Q A E T L A L E L E K E G A V N T W I E
UniRef90_E8R7Z1          A G R G G I V I G L A E P A R A Q A I V E E L E R E G V K A Y R V K P D Y E G V
UniRef90_C5JH79          A G G G G C A I T L L R A N T D P A V L R Q L E K T L D D E G F E R Y E     T T
UniRef90_U1DI52          S G L G G V M V A L A E N E K A I R I S Q C L L K N G A K N T W I
UniRef90_UPI00036091F6   G G R G G C I I A L A E N S K A E K I A C A L K K A G A A K T W H
UniRef90_G8PDF5          G G L G G C I I A L S T K N T A E N L R S A L L N S G A T E A W I E
UniRef90_F0Y158          G G D K G A A G A I V A A A A V D A L V S A V R R A Y P K A H P Y K D K F H V V
UniRef90_B8D2K4          A G L G G S V I A L C R R D T A G K A L K G V L D C C A         P R G W I V
UniRef90_N1ZRU0          G G R G G C F I C L V K D Q R S A K
UniRef90_UPI0003696659   S G G G G C M F A Y A P     G K Q H Q V A K A I E R A G G K A             F I V
UniRef90_C6A3T5          A G G G G C M Y A L A P     E K Q S E V A T A I K
UniRef90_C6BXL6
UniRef90_E9FCS3          A G G G G C A I T L F R P D A Q L E T M K E L G R K F C I D G F     Q I Y E T
UniRef90_I1M9V9          G G S G G T V C V V G R N C K S S E H I F E V Q H R Y K K A T G Y L P F I F E S
UniRef90_UPI00029A120D   G G R G G C F I C L M P N R S A E R A A I K L K K A G V T A T W I Q P
UniRef90_UPI000472EC8D   G G K G G C M I A L C K N E S Q A I I I A A L K D A G A
UniRef90_J2Z6M2          G G R G G C I I A L T D Q A N T D R L L A A L A A E G V T Q T W V Q P
UniRef90_D7SU50          G G S G G T V C V I G R N C R S S Q Q I L E I Q Q R Y K G A T G Y L P L V I E S
UniRef90_UPI000376BF5C   A G G G G S M I A L T     D K P D K V A A A I     A S R G G I P       Y V V
UniRef90_K5X4K9          A G G G G C A V T L V P D E F T A S E L E A L A K D L S A A N F D P   Y F T A
UniRef90_A7NK08          G G W G G V M I A L V P E T V V S V R E A L L A V G A A R
UniRef90_J0NIC3          G G L G G C V I A L A D S E T A D A V A S A L R S A G A
UniRef90_M1ALA5          G G S G G T V C V I G R N C R S N E Q L V E I Q Q R Y K T A T G F L P Y V F E G
UniRef90_M2PVR7          G G L G G C A I A L A R G E T A G M I A R R L E E A G A V R T W S A P
UniRef90_E3C8U6          G G R G G C M F A I M E T A L A R K L A S I L K E N G A A Q T W I Q P
UniRef90_U1Q6P2          G G L G G C V I A L V I G E A A R R V R A A L E R A G A P A T W
UniRef90_G5K3J9          G G L G G C M I A L A N S A Q A Q T I S E K L R E E G A V N T W I Q
UniRef90_D4YEC4          G G R G G C Y F A L C D S
UniRef90_K0R1M2          T G R G G L C I A L T P T P E I Q K V A S A L E K
UniRef90_UPI000440BD4D   A G G G G C S I T L V P D D M E E S L L K D L M A R L S E   D G Y V P   Y L T S
UniRef90_Q2FTN9          A G G G G C M V A L A P K N I R A R I A G A I E
UniRef90_UPI0003F68474   G G L G G C V I A L A K N D I V E K I K E G L I K C G A E N I W V E
UniRef90_Q04EX3          G G L G G S I V A L T D K E T A K E I K S A L S K S G A S E S W I
UniRef90_W1Q9Z7          A G G G G C A I T L I D D D A A P E K L R Q L E E K Y N Q A G F     E T F K T T
UniRef90_V6YZ99          G G L G G C I I A L V K T A Q E A Q I     L S R E F E K E G
UniRef90_Z9JV57          S G G G G C V L A L
UniRef90_K5VW31          A G G G G C A V T L L P D D F K P E D L Q K L V D E L I R E   N F E P Y I   T S
UniRef90_A5UV63          G G W G G V M I A L V E P E T A Q Q V R Q A L Q A A G A T R
UniRef90_W5X9K6          A G L G G T V L A L T     E D A P A L R A A L E T E G Y S R F
UniRef90_UPI00036B7F8B       S G S T V A V L C H G D V S N A M I Q I L S A Y K L A W G L D A E V F   A
UniRef90_UPI000376BC2D   S G K G G C M I A L C N E E D S I H V S Q K L K E A G A
UniRef90_G8BCD8          A G G G G C A I T L V N D D V E E T V I H Q T M L E Y E R Q G Y     E S F E T S
UniRef90_C0BIK8          S G G G G C M V A M V T E N T K Q K V I N A F L S E G A
UniRef90_UPI00035E7447   G G L G G C V I A L A K N E I V E K I K D G F T K C G A E N I W V E
UniRef90_U5EKQ9          A G L G G C V L A L T P T G S V A A V S A A L R R A G A A Q T W
UniRef90_D8IKT1          G G R G G C F I S L K T K K E A E V L A K I L N Q
UniRef90_Q58487          A G G G G C V I I L
UniRef90_W7HNB5          A G G G G C A F S I L K P G G E Q A K K A A V E E T L E E E G M V T Y E     A T
UniRef90_C7ND02          G G L G G C V I A L A K N D I V E K I K E G L I K C G A E N I W M E
UniRef90_B3T4Z9          A G D G G C I I A L V K N E N M D K V P A L L K E C F S A K I D T K G V V W S T
UniRef90_L8WW70          A G G G G C A V T L I P D G F V P
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UniRef90_A5DST4          A G G G G C A I T L V D E S I D K S V I H N A M K E Y E N E G F     E S F E T S
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UniRef90_M0WYF1          G G F G A V C V I G K N S L K S S E E I F E V Q K R Y K A A T G Y L P V V F E S
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lupas_21
lupas_14
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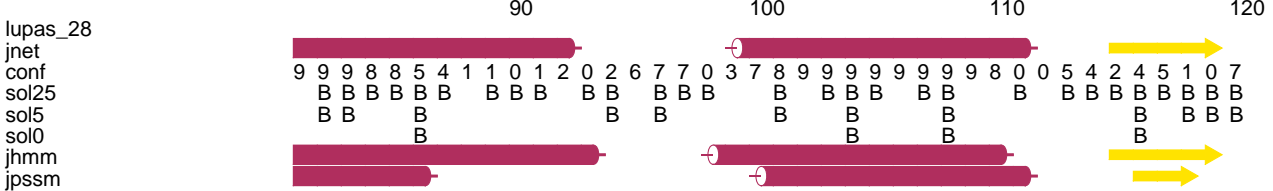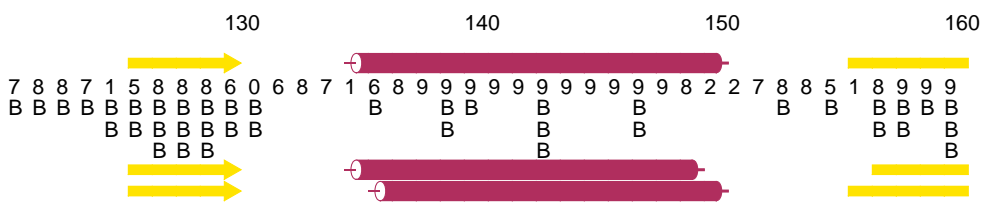
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lupas_21
lupas_14

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lupas_28
jnet

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sol25: B B B B B B B B   B   B   B B   B B   B   B B   B

sol5: B B B B   B   B B   B

sol0: B B B B   B B

jhmm
jpssm

										50										60										70								80

lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm

lupas_28
jnet
conf   9 9 9 8 8 5 4 1 1 0 1 2 0 2 6 7 7 0 3 7 8 9 9 9 9 9 9 9 8 0 0 5 4 2 4 5 1 0 7
sol25   B B B B B B   B B B   B   B   B B   B B B   B B   B   B   B B   B B B B B   B
sol5   B B   B   B   B   B   B   B   B B B   B
sol0   B   B   B   B
jhmm
jpssm

90   100   110   120

lupas_28
jnet
conf   7 8 8 7 1 5 8 8 8 6 0 6 8 7 1 6 8 9 9 9 9 9 9 9 9 8 2 2 7 8 8 5 1 8 9 9 9
sol25   B B B B B B B B B B   B   B B   B   B   B   B   B B B B
sol5   B B B B B B   B   B   B   B B   B
sol0   B B B   B   B
jhmm
jpssm

lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm

8 5 4 7 8 6 4 7
      B B   B B
                  B