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                              1         10          20          30          40
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                                          50              60              70              80
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UniRef90_P00046        G Q A E G F S Y T E A N R       D K G I T W D E E T L F A Y L E N P K K Y I P
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UniRef90_A8LJ38        G S I E R F S Y S D G M L R M G A D G L I W D L R T L D A Y I A N P R A L V S
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UniRef90_D0CYH6                 M K G T K M S F A G L K E E D R A A L N A Y L A T F
UniRef90_Q5LLH2                 M K G T K M S F A G L K E E D E I E N V I A Y L Q G F
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UniRef90_A7HW37                   G T N M A F P G L K E E D R A S L I A Y L K S
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UniRef90_UPI00036A73FC   G D L E N G R R A F A R C R A C H T I G E G G P D M A G P N L Y G V F G R K A
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UniRef90_Q5GTG0          E K G K S I A K K C I A C H S F D K G G A N K V G P N L W N I V G N K K
UniRef90_J6UDW6          V E K G Q A A A R K C Q A C H V F E K G G P N K V G P D L W G V V G R P V
UniRef90_G3RLK9        G D V Q K G K I F M K C S Q C H T V E K G G K H K I G P N L H G L F G W K T
UniRef90_I7ISP0        G D A S K G A K I F K K C A Q C H T I N K G G A A K Q G P N L F G F F G R K S
UniRef90_UPI000365275D      K G E Q A V K K C A A C H G F E K G G P A K A G P N L Y G I V G L K H
UniRef90_X0RPC9        E G D A A K G K R I Y K R C Q A C H N V N K D K N K I G P H L V G I V G R K A
UniRef90_E1FYJ0        E G D Y E R G K K L F K R C L Q C H V I D S D A N K N G P T L K G V I G R K S
UniRef90_Q1GVI0          D P A K G E A V F A K C A A C H T I N A G G A N G I G P N L Y G A L G K A H
UniRef90_W9C0D8          D P A K G E K V F A K C S S C H S I N S G G A N G I G P N L Y G V L G K P H
UniRef90_L0H0T2      K A D P Q R G A K V F L Q C H V A A P G A E P T V G P N L W N V V G R P V
UniRef90_D0D4Q8          A A E G E K V F K C K A C H Q V G D G A T N R T G P L L N G I V G R E I
UniRef90_UPI000369B018    D V G A G E R V A R R C A S C H T F E Q G G A D M T G P H L W G V V G R E I
UniRef90_T0K9P2       K G D A A H G Q Q L F A R C A A C H K V G P N P A R S I G P A L N G V V G R T A
UniRef90_W9H620          D P A A G E R V S K A C A S C H S F E K G G A N K V G P N L W G V V D G P H
UniRef90_A0A058ZAD9    E G D Y E R G A K L F K R C A T C H T V E E G S G K T G P H L H G L F G R T A
UniRef90_G6XSK7        E G D A A A G A T V F K K C G I C H V A E T D Q N K V G P S L N G L F G R A A
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UniRef90_UPI0003B54B9C  G D Y E R G E S L F R Q C A T C H L L D P E A G N R V G P N L H G L F G F Q R G V
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UniRef90_UPI00037F0336 G A H E G F A Y S A A M K D F K G A S E K W T F D H L N H F L A A P K K Y I A
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UniRef90_K0X1U6        G T S A N Y V Y S D A M     K N S G K T W D R D T L T A Y L K D P K G V V P
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UniRef90_H9KRS8        G T T A G F N Y T D A M     K N K N I V W N E S T L D E Y L R L P K D F V P
UniRef90_Q4FNB3        G A V E D Y K Y S K T L A S Y     G K D W T F E E L N G F L T K P S S Y L K
UniRef90_B6JIX6        A D V P N Y N F S A A M     K G S G L T W D V A T L D R Y L A D P Q K V V P
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UniRef90_W9H620        G H M E G F A Y S S A I K E M P G     N W D Y E A L N H F L L N P K G Y A P
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UniRef90_F2WQ37        G T Y D G F A Y S D A N     K N S G I   T W S P K M F E Y L K D P K K A Y V P
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UniRef90_K0X1U6                  G T R M I F W G L S D E E I D N L L  A Y L Q Q F
UniRef90_J9A3F6                  G T K M A F A G L K P Q D R A A I I  A Y L
UniRef90_A8I5P2         G          K M A F G I K N E A E R A D L I  A Y L A Q F
UniRef90_H9KRS8                  G T R M V F G I K K A D E R K D V I  A Y L A T L K
UniRef90_Q4FNB3                  G T K M S Y A G L K E A D R A S I I  K Y L N Q
UniRef90_B6JIX6                  G N K M P F P G L K E H E R S A V I  A Y L
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UniRef90_UPI0004682A1E       M K G T K M S F A G L K E D D Q K A V I  E Y L K S V
UniRef90_UPI00047C482E           N K M G F P G L N P D D I K N V I  A Y L K S V
UniRef90_A0A059FK58              G T S M S F A G L K D P D R I N V I  A Y L A S
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UniRef90_D8JTY1                  G T K M V F A G L S D T D E A D L L  A Y L A T L
UniRef90_UPI0003EE350D           G I K M I L A G I K K G D S A D L I  A Y L K
UniRef90_R0ECF3                  G T N M T F G L K K P E D R I A V I  A Y L H S L
UniRef90_UPI0003F1213E           G P K M I F A G K K A E R A D L V  A Y F K
UniRef90_K2KVZ3                D G T K M S F G G L K A E D R A A V I  A W L N T
UniRef90_C8RYL8         Y L G D P K A K G K M A F K V K T E A E A A D L Y  A Y L T S L
UniRef90_R0F7F2         Y L D D N K A K S K M A F R M K K G G E     D V F  A Y L A Q F
UniRef90_G8PLZ7                  G T S M G Y A G L K K D K R A D L I  A Y L R S L
UniRef90_D0CUF3                Q G T S M S F A G L K P E D R A N L I  A Y L Q T I
UniRef90_C6XQB6                  R T S M A F A G K S E E K R A D L I  A Y L E T L L K
UniRef90_S9QU48         A L G D S S A R S K M A Y K V R D E G Q A R D I A  A Y L A T F
UniRef90_UPI0003637DE2           G T A M S Y A G I K D E K R A D V I  V Y L R S L
UniRef90_UPI00037C1AD8  K L D D K K A K S K M S F K L K K E A D V L N I W  A Y L L S V
UniRef90_B9J7U2                  G T K M T F Q G L K D K D I D N I I  A Y L K S
UniRef90_A0A059KXU7              G T R M I F W G L S D P E I D N L L  A Y L E T F Q
UniRef90_B4G8S0                  G T R M I L A G L K P N E R G D
UniRef90_A7ANI1                  G T K M I F A G L K E Q D R A D I I  A Y L K
UniRef90_D4Z550                  G T K M T F A G L N P A D R A N L I  A W L N T
UniRef90_G5ZWR5                  G T R M A F A G L K D A D R A N V I  A Y L K T F
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UniRef90_Q5GTG0                  G T R M A F A G I S P Q E I A D L V  S Y L R Q L
UniRef90_J6UDW6                  G T A M A F A G V S A T E R A D I L  A Y L N S L
UniRef90_G3RLK9                  G T K M I F S I K K K E E R A D L R  A Y L K
UniRef90_I7ISP0                  G T K M V F A G K K A K E R E D L I  E Y L K
UniRef90_UPI000365275D         Q G T S M A F A G V K D Q E R A N I L  A Y L
UniRef90_X0RPC9         G          K M P F A G L K P A D R D N V I  A Y L K
UniRef90_E1FYJ0                  G T K M V F A G L K P Q E R A D L I  K Y I E
UniRef90_Q1GVI0                  G T K M S F A G L S P E D R A N L I  V Y M N T
UniRef90_W9C0D8                D G T K M S F A G L K A E D R A N L M  A W M N T
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UniRef90_D0D4Q8                  G T K M A F A G L K P E D I D A V V  E Y L K T F
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UniRef90_G6XSK7                  G T K M A F G V K D D T D I T N L I  A Y L K Q
UniRef90_B6JFH4         G          K M A F P G I S A G K R A D V I  A Y L K Q F
UniRef90_UPI0003B54B9C           G N R M S Y A G M R P N D R T D L I  T F L
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UniRef90_F0VPL5                  G T K M V F A G K K E K E R A D L I  A Y L
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UniRef90_UPI00046728C6           G T S M S F A G L K A D D R A D L I  A Y L Q T I
UniRef90_UPI0003757DB3           G T K M S F G G L T T S E I S D L I  G Y L R
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UniRef90_UPI000476C40B E G D P V A G A K V F K K C M A C H A V V       G K N K V G P A L N G V V G G P V
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UniRef90_H5YE64            V E K G A S A A K K C G A C H T F E K G G P N R V G P N L Y G V V G D H V
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UniRef90_K2GP37            D P S A G E R V F G K C K A C H K L E A G A   N A V G P Y L H G V V G R P V
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UniRef90_A6FPZ9        G D A A A G E K A F N Q C K A C H M I T D A D G N Q V G P N L Y G I V G R T A
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UniRef90_UPI000476C40B   G S V E G F K Y S K V M K A A G E S G M I W D E A T L A N Y L A N P R K
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UniRef90_H5YE64          G E R G G F N F S A A M     K A K G G T W D F D A L N K F I A N P K A A V P
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UniRef90_W9C0T0          G S V A G F G Y S P A M     K G A N L V W N E A T L D K W L Q R P Q S V V P
UniRef90_G2I4A9          G D I P G Y D F S D A L R     A H K D E T W T S T T L S N W L K G P
UniRef90_UPI0003337EA6   G Q A A G F S Y T D A N     K N K G I I R G E D A L M K H L E N P K
UniRef90_S9SEX2          A S A E G F G Y S R V L E D A G A A G R V W S V E E L A A Y L A D P R G
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UniRef90_A3SUE1          G T V E D Y R Y G D L V A A G E A G L V W D E A N V A K Y L Q N P T D F L R T
UniRef90_K7Z687          G T A E G Y R Y S E A M K N Y     G I I W D A N N L N I Y L E N P K K A L P T
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UniRef90_UPI000469D29F  A S V D G F G Y S G A L T S L E G D     W T E E A L F G F L L N P K G Y A P
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UniRef90_D0CRY2        G T E N D Y M F T D D M I R A G E N G L V W T Q E N L A A Y A R D P I G F I Q D
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UniRef90_UPI00037E9FCE           G T K M P E Q V T S E A D R Q A L V E F L R
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UniRef90_N6V4C1                  G I R M A F P G L K D K D L D D L I A Y L R
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UniRef90_W4HMQ2          D P A N G E R Q F K K C S V C H T L T G D G A R R A G P T L A G L F G R P A
UniRef90_UPI00041276BC        Q R G E Q V Y A R C A A C H A I E       G H R T G P Q H C G L W G R R A
UniRef90_Q13IC5          D S V A P A Q A F E R C A A C H G V A Q G D Q   R V G P S L G D V L G R Q A
UniRef90_U1IBE5                  T L Y Q G C G D C H S I E     K N D V G P M H K G V V G R L A
UniRef90_UPI0003712570       R G A H G F R A C A A C H S L V A G   E H R T G P T L A S V F G R R A
UniRef90_S2ELL2          D A G A G Q Q A F Q K C A A C H A L D A D       R V G P R L N G V V G R P I
UniRef90_UPI000372849B    D V N R G A D L Y E N C A E C H S L A K P L K N K K G P G L V G V V G R K A
UniRef90_R1BQ87          G S S D A G A K L F K K C A T C H T A N D G G P N K Q G P N L W G V M G R Q S
UniRef90_J1Q178            Q Q G Q D E F I R C V A C H S V E A G S N T E F G P H L H Q L L G R K L
UniRef90_UPI00037CCCB2        G Q A L F K K C T A C H S V D A D       R I G P R L Q N V V G R P V
UniRef90_C9Y9G6          D V Q R G Q Q L V E R C F A C H S L D A       N R A G P A L R G V V G R K A
UniRef90_W2TKL3                          R C A Q C H S I N S T   R S L A G P T L N G L I G R M S
UniRef90_A0A031JZA4                F A R C A V C H N V A K G A P D K L G P N L F G T Y G H K M
UniRef90_S6BHW8          D P G A G Q Q V F Q K C S A C H A L D A D H       V G P H L A G V V G R P M
UniRef90_W1JJ12            E A G H Q A F N N C R T C H S M   K E G D N R L G P N L N K I V G R K A
UniRef90_UPI00046EB147      A H G G Q L V R H C A Q C H A   L A A G G E G A G P V L A D V V G R T V
UniRef90_UPI00036BD530  K G D     R G A E V F R A C V A C H T L T P E D G N R A G P T L S G V F G R R I
UniRef90_W4Y4L0          G D P E K G K V I Y A N C A S C H C V E P G G T S R S G P N L S G V W G R Q A
UniRef90_A0A059FEB3      G D P V R G L Q A F E R C S G C H S V G D D I P G A I G P G L D N I F G R L L
UniRef90_V6F780                  K G F N A C K A C H K V E A G   K H G V G P S L A G V F G T K A
UniRef90_V9WF17          D P A N G E R Q F R K C S I C H A L G P G E S R K A G P S L Y G V I G R P A
UniRef90_M2YE30            A A D P P A A F T P C K A C H K V E A G A   N G V G P S L F G V V G S K A
UniRef90_UPI0004624435      A A G L Q L F K H C T A C H S L D T S   E N A F G P S L V G V V G R P A
UniRef90_Q588Z0                  F A R C A A C H S V V R G A P N K M G P N L A G I V G S K A
UniRef90_H2IKL1            I E V G E Q Q A M V C K A C H Q F E P N G V T V V G P P L W G L A E R S I
UniRef90_U6MTJ7          G D P V R G R L L F K K C A Q C H V I E K D E A   L G P S L Y G V Y G R T A
UniRef90_UPI00036F0C78     D A K H G G E V Y A E C A D C H S V   K E G K A K K G P S M F G I V G R Q A
UniRef90_H0PS53          G D P G A G A L I F E E C S E C H T Y T   G K N K V G P T L R G V I G R K A
UniRef90_S6AQL8          D A A A G Q K L F E K C T A C H S L     A E H K V G P R L Q D V Y G R Q V
UniRef90_B8G4P7          K G D P K R G K E L F G P C A A C H T T S K     E V L V G P G L A G L F S
UniRef90_UPI0004757281      A D G E R M F Q R C G A C H S M D P G     Q K S G P H L T G V I G R T A
UniRef90_H0TVY3          G D   H G A E V F R A C V A C H T L S E N D A Q R A G P T L A G L Y G R R I
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UniRef90_W6KPB2          G D A K K G K K V F K K C K A C H D M K P G   K N K V G P S L H G V I G R A S
UniRef90_W4IWE3                          N T G G A V K Q G P N L H G F Y G R K S
UniRef90_S6BIH7            V Q K G E A L F A T C G V C H S A K A D G P T M M G P N L H G L Y G R K S
UniRef90_UPI00039FC390    A A D G S S T F S E C A D C H S P T K G   K N K K G P S L F G V V G R P A
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UniRef90_UPI00046AD80D  G D     H G A D V F R A C V A C H T L S D K E V Q R A G P T L A G L Y G R K I
UniRef90_J2UKC8                          G C H Q I G P S A R A G F G P Q L N G I V G R P A
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UniRef90_D6VAS3          G D   H G A K I F R S C I A C H T L S A K D E V R A G P T L A G I F G R R I
UniRef90_A0LDB7            K A G A K E A Q K C T A C H D L T Q S A E I I V G P P L V D I V E R E V
UniRef90_A9B7B6          G D A V A G K A I F D G C L S C H V V E A G K P Q T V G P N L A G I A D R A A
UniRef90_W4HGV8                  N N C R Q C H S T D E G D   H R L G P S L Y E I V G K E A
UniRef90_B4DC91          A E E G K R L Y Q G C G M A C H A I D D T I Q P K I G P W K G L
UniRef90_F6IIA4                      A V C H S A V K G A P D Q L G P N L Y G V Y G A K A
UniRef90_E8RTU6                  C L S C H S V K P G A T G   I G P S L A G I V G K K A
UniRef90_B9EM99          G D I A K G K K A F Q K C A Q C H T V E N G G K H K V G P N L W G L F G R K T
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UniRef90_L8MC06            Q Q G E A R F A E C A V C H S A K A D G P T M M G P N L H G L Y G R T S
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UniRef90_UPI000255679A    A Q Q G N T L F D T C S V C H S A K K G V E G M M G P N L F G V V G R T S
UniRef90_G6YFB5                                  M K G V V G R K A
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UniRef90_A0LCA9            G R L A I N H C G M C H D L T A R Q V M D K G P P L W G L T E R P P
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UniRef90_G0CAG1            A G K D T F A E C A E C H S A T Q G   K N K K G P S M F G I G N R Q A
UniRef90_V5UEI7          A A R G K L L L A Q Q C A A C H T V D   G S Q G V G P T W H G L
UniRef90_F0BII5          A A D G K S V F S E C A E C H S A T Q G   K N K K G P S L F G I V N R P A
UniRef90_UPI000369960A    A R Q G G Q S L F Q Q C A A C H A V G T A A Q G V I G P D L
UniRef90_UPI00036DDB27      A G Q V A F N H C R N C H S T N P G D   N R L G P S L H N I F G A K A
UniRef90_M1ZBP2          A K A G E A V F Q N C A S C H A V D S T D K S K V G P N L D N L A N R K T
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UniRef90_UPI000424CE8A  E A D A A K G K Q L F N Q C A A C H S L T     R K M T G P L A G V
UniRef90_A0BU26          G D L T K G R I F F N N C A G C H D L D Q D L Y     L G P S L R T V Y L R R N
UniRef90_W9TUI1          E A P I A Q G E A L F R A C N A C H S I A P G   V N L A G P T L A G I A T R A E
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UniRef90_G2HZF4        Q G N V A N G E V L V T N C T A C H S I E S K G F P Q V M D N A S S S A A
UniRef90_B9XJX1            A Q R G A E L F R Q C I N C H A I G L P G E P H A G P L T H V A T R
UniRef90_A7NME2          G D P A K G Q L Y F E N C L A C H S T G T D K     L V G P G L A G V M T T A G
UniRef90_C1A5N6        Q G D A E R G R Q T F S R C I G C H A I G G T P F T S I G P N L T H V
UniRef90_UPI000462F83B    V K A A N I F R A C A A C H T V G T S A A G T N G P D L T H I G T R K
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UniRef90_Q12FL0          V A Q G G Q A L A Q S C A A C H T V D     G S A R V G P T W K G L
UniRef90_D5UZD5        K G N V A N G E V L V T N C C T A C H S I I E S K G F P P V M D N
UniRef90_D7BAM6          V A K G G Q L F N Q C T A C H A I N T Q H Q S K I G P D L T F F G N R
UniRef90_E4YFA6                                          L F G R Q S
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                                    50              60              70              80
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UniRef90_UPI00037F32BE G S I K G Y D Y S R A L      K R S Q V T W D A R S L D R W L T D P E Q F I P
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UniRef90_D3P4K4        G T A E G F D Y S D A L R      G A G F T W D A G H L E H W L S N S N Q F V P
UniRef90_Q0FS91        G T V P G Y S Y S D T L D      G S D I V W T E T T I D      A L F D Q
UniRef90_V2GY40        G A A S D Y P Y S N A M R      G S G I V W S D N T L A A F L R A P E Q V V P
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UniRef90_W4HMQ2        G A I A D Y P Y S D A L      A D S D V T W T A E T V S      A L F E I
UniRef90_UPI00041276BC G T      A Q G Y S T Y S K A L R D S A I V W D E R S L N V F L K D P M K T V P
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UniRef90_UPI0003712570 G T A E G F R Y S D A V R      Q S A V V W N E K S L D A W L R D P A S F I P
UniRef90_S2ELL2        G S I P G F K Y S K D L      A G A N S S W T V E Q L D R W L T S P A Q M F P D
UniRef90_UPI000372849B A S V P D F N Y S D A L R A S K L      V W T P D Q L D A Y L R A P K M L V P
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UniRef90_J1Q178        A G L D D Y L Y T E A V K Q I      D L V W T E E V L D A W L A K P Q Q L V P E
UniRef90_UPI00037CCCB2 A S V P T Y S Y S P A L K K L      G G A W T P A R L D Q W L S G T Q K M A P
UniRef90_C9Y9G6        G K A E G Y F F S E A M      A A A T H T W T V A G L K A W L T N P E K V V P
UniRef90_W2TKL3        G T A P G Y V Y S Q G N      K H K S V V W T R E T L Y D Y L A D P R K Y I P
UniRef90_A0A031JZA4    G Q G   K F A F S D A      V K K S G L T L D D A T L D K W L E N P R A L V P
UniRef90_S6BHW8        G A V K G F T Y S P A L A A A K D      N W T P E L L D A W L T S P A R M F P D
UniRef90_W1JJ12        G S L P N Y N Y S S S M      K E A G F N W D Q D K L T R F M V K P D E V V S
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UniRef90_UPI00036BD530 A T A D G Y N F S Q A L K N L      D I V W D A R T I S      K L F E I
UniRef90_W4Y4L0        G T L P G Y K F A K S D E      K K G I I W N D R R L W D Y F E
UniRef90_A0A059FEB3    G R Q A N F S Y S A N M      A G S P L S W D A T N L N K F I A N P S T F I S
UniRef90_V6F780        G N Y P E F K Y S D A      H K A S G L T W E A N L S K Y L A D P K G T I P
UniRef90_V9WF17        G T L A G Y R Y S E V L D      G S D I I W R E A T I D      A L F D L
UniRef90_M2YE30        G T A A G F K Y S P T L V A W      G K S W D D A N L A A Y L A N P K E T I P
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UniRef90_Q588Z0        A T R P G G R Y S P A L      K K S G L V W N K A N L A A Y L K N T Q T T V P
UniRef90_H2IKL1        A S F A G F N Y S E G I K Q H Q G K      W D A E K L D A F L A S P T E F A P
UniRef90_U6MTJ7        G S G P R T S L M D S S Q A I K D S G I V W T D I T L M R Y L K N P R Q F T Q H
UniRef90_UPI00036F0C78 G T V A D F N Y S D A M R Q S K L S      W A P D Q L S A F L K A P K Q K V P
UniRef90_H0PS53        G S A A G Y D Y S D A      V K K S D L V W T P E A I D R Y L T K P A K F S P S
UniRef90_S6AQL8        G T A Q G F G Y T P T L E      Q A G F A W N A E K L D A F L S G P M N F L P
UniRef90_B8G4P7        A S G P V L P K G V D Y N G M L P N G K E R S E A N I A E W I R
UniRef90_UPI0004757281 G S I E G A R Y S G P M R      A S G I I W D K A T L N T F L A A P R R L I P A
UniRef90_H0TVY3        A S L P G Y R F S D A L K R M      D I V W T P E T V S      K L F E L
UniRef90_Q0G146        G T V D G Y A Y S E A L      K N S D I I W T A E T V G R      L F D D
UniRef90_UPI00035FCEE6 A T V P D Y P F S E A L R G M      D I V W T R E T V A      K L F T L
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UniRef90_W0AE01        A S T E   F L Y S P A L      K G S A L K W D K P T L D K F L A G P T R M V P
UniRef90_W6KPB2        A T V E K F K Y S D A N      K A A G L T W D K E T I T S Y L K D P K G F V P
UniRef90_W4IWE3        G D S D   F P Y S D A N      K N S G I I W S D K H L F E Y L L N P K L Y I P
UniRef90_S6BIH7        G S L A G F S Y S Q A M      K T K G V E W Q L D S L E Q F I T Q P Q S F V A
UniRef90_UPI00039FC390 A S V P D Y T Y S D A L      K G S H W T W T P A Q L      K I Y L S Q
UniRef90_UPI000371F559 G K L P G F G Y S Q A L      A A S T G S L T E Q E L D L F L K A P
UniRef90_UPI00046AD80D A S L P G Y R F S D A L K A M      D I V W T P E T V A R L F E G P N A Y
UniRef90_J2UKC8        A S T R D Y R Y S P A M      Q N S R I V W T E D K L R A F M K S P
UniRef90_R0DPF5        G S L P G Y R Y S R T L L      Q S D L I W T D E T I D      A L F D Q
UniRef90_I3IHC9        S R A E E R A K E L G M A S G L D Y L I E S I V D P E K Y I V K
UniRef90_D6VAS3        A S L P G Y N F S E A L K K M      N I V W S P E T V A      K L F E V
UniRef90_A0LDB7        G S S K G F C Y S P G F R R W K E N P K V W D E V S L Y R F L Y A P Q S H I P H
UniRef90_A9B7B6        T R V A G Q D A S      Q Y L H S S I V D P N G F V V D
UniRef90_W4HGV8        G V Q E G Y Q Y S S A L E      S A D H T W D E D M L D Q W I E N P D Q V V S
UniRef90_B4DC91        Y G K T V Q I S K G P D V V A D D A Y I R E S I L V P S A K I V K
UniRef90_F6IIA4        A Q G   S F G F S D A L      K N S G L T F D A A T L D K W I E N P R A L V P
UniRef90_E8RTU6        G N D P K F S Y S A A M K      K G P V W S E A Q L D R F L A D P K G T L P G
UniRef90_B9EM99        G Q A D V L G E P Q E I H S W N K D D I C W H Q E
UniRef90_UPI000374257B G S L E G Y G Y S Q A M R      D A N I V W S R R T L D R F L A G P L E M I P
UniRef90_L8MC06        G S L A G F S Y S Q A M K T R A V      E W Q M D S L Q Q F I A Q P Q A F V P
UniRef90_A3VLZ3        G T F A D Y P Y S D A L R      G A G F V W T S G A L K A W M E D N D G F L P
UniRef90_S7VCF2        E F K D G T T A T A      D D A Y I K E S I V D P G A K V V K
UniRef90_F5ANR4        G Q A E G F S Y T D A N      K S K G I V W D E G T L M E Y L E N P K K Y I P G
UniRef90_UPI000255679A G T L Q G F S Y S K A M K D R A R      P W N N D S I Q A F I A Q P Q A D V P
UniRef90_G6YFB5        G T A P G Y V Y S S A M K G A G A A G L V W V E T N L A E Y L K N P K K K V P A
UniRef90_E7ACQ0        G V V P      P D L S H V G S V L N P Q F L A H F I K D P T A K L S H
UniRef90_A0LCA9        G T H P R Y D Y S P A F L E H R H H P F E W N R E V L E E F L Q Y P E K V I P
UniRef90_UPI00036A8845 G K S G F K K H K P A L      A K G G W V W T E A N L R K W I C N S K D A I K E
UniRef90_G0CAG1        A S L P D Y N Y S D A L K N S K      W Q W T P A Q L      K T Y L S Q
UniRef90_V5UEI7        Y G K T E T F Q D G T S A H V D D A F L A T F I R N P T A R V P K
UniRef90_F0BII5        G T V A D F      S G Y S A D L K P G K G T W S T A S L      K D F L K K
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UniRef90_UPI00036DDB27 G Q V H G F N Y S G S L      T S D M T W D E A T L D K F I T D P T A L A S N
UniRef90_M1ZBP2        I A G I L P N G S P E E F K      Q S L K K W I E D P S K V K P Q
UniRef90_H0F4P4        Y I A G V L N N T P E N I V R W L R S P
UniRef90_UPI000424CE8A G E K Y D R D W L Y K W I R N S S A L I K A
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UniRef90_W9TUI1        R T I A S A D Y      Q G G A E S V E A Y I R E S I V T P S A Y L H P
UniRef90_D5ATW2        G S F P G Y P Y S K A L      A A S G F V W T K G A I R A W I E A N D Q L V P
UniRef90_G2HZF4        Y G V T P P D L G S A G K L Y N A D Y L A A F I K D P A K K T A H
UniRef90_B9XJX1        Q T L G A G V V E N T P E H L A Q W L K N P Q K L
UniRef90_A7NME2        P V Y P E G V N Y R G N L P N G Q P R T E E N I A A W I R S
UniRef90_C1A5N6        G T R Y T I A A G L Y P N D A K H L A Y W I K S A P H M V G K
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UniRef90_Q12FL0        Y G A T R P L A D G S T V L A D E G Y L R R S I L E P Q A Q V V Q
UniRef90_D5UZD5        A S A A A A Y G V V P P D L G T A G K L Y T K D Y L V G F I M N P A R K V T H
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UniRef90_E4YFA6        G T V P A F N Y S D A N K G A K V      T W T E A T F D E Y I T D P K K Y I P
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                                              90                  100                 110
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UniRef90_Q47YK6        G N D I L V P G T R M R H V Q I T D A E Q N Y L L A Y L K S L
UniRef90_UPI00037F32BE                G Q N M D F K V S N A A E R A A L I A Y L Q S L
UniRef90_B8GVJ9                       G T K M L L G A P N D A E R A A V I A Y L A S V K
UniRef90_D3P4K4                       G S Y M N Y R Q D D D S V R K N I V Q F L E T
UniRef90_Q0FS91        G P D H Y I P G S K M P M Q V I A G G D R A D L I D Y L K
UniRef90_V2GY40                       G N K M R F W G I
UniRef90_J2XQC1                       T A M A F G G L K A E E R Q A V L C F L Q T
UniRef90_W4HMQ2        G P A H Y V P G T K M P M Q I A G A E D R A D L I D Y L R
UniRef90_UPI00041276BC                G T A M G Y A G V K D D E R A D L I A W L K
UniRef90_Q13IC5                       G N R M A F S G V D D A T R D A I V D Y L R
UniRef90_U1IBE5                       G T K M F Y E V Q D P R D R A D I I A F L K
UniRef90_UPI0003712570                G N A M A Y Q G L P D A R R G D L I A Y L R
UniRef90_S2ELL2                       T A M A F G G L N A S E R Q A V L C F L Q T
UniRef90_UPI000372849B                G G K M K F D G M K A D E R R D L I E F L G T Q R
UniRef90_R1BQ87                       G T N M A F P G K K E K D R A D C V A Y L
UniRef90_J1Q178        M C L P F T         G M R S A E A R Q A L I A Y L K
UniRef90_UPI00037CCCB2                G S K M Y L Q V D D P A Q R R L I I A Y L Q S V
UniRef90_C9Y9G6                       G Q E M N Y Y L T E A Q D R E D V V A Y L A S V
UniRef90_W2TKL3                       G T K M F F V G L K N S E R A D L L K Y
UniRef90_A0A031JZA4                   G N R M S F P G L K D A K R K E I I D Y L K
UniRef90_S6BHW8                       T A M A F G G L K A E E R K A V L C F L Q S
UniRef90_W1JJ12                       G H K M P Y G G V S A E E A A K V V A Y L Q T
UniRef90_UPI00046EB147                G T R M S F A G L D P Q D R A D A I A Y L H T L
UniRef90_UPI00036BD530 G P S R Y T P G T K M P E Q I N N A D D R E A L V R F L E
UniRef90_W4Y4L0          H G H I P G T R M F F R A L K K D Q R A D L L A Y L K
UniRef90_A0A059FEB3                   G T T M A S P P I G D A Q R R D I V G Y L K
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UniRef90_UPI0004624435                G T R M H V A I T D P A E Q D Y L I S F L R T L K
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UniRef90_H2IKL1                       G T N M V F P G K D P G A R A A I I A W L A T
UniRef90_U6MTJ7        P L S           M N F R G L D N Q D R V D L I W Y I K
UniRef90_UPI00036F0C78                G T K M K L D G L N D A E I A D L I A Y L S S L
UniRef90_H0PS53        I K M K Y E           G L P S P K D R A D L I E F L K T K K
UniRef90_S6AQL8                      G T A M A F G G L K Q D D R Q K I I C F L E Q Q Q
UniRef90_B8G4P7          T G G T G R I G Y M P S H N L T D Q E M A D L L A Y L R T L K
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UniRef90_A9B7B6        G F A Q G L M F A G Y G D A   L T P Q Q V D D V V A Y L L S L K
UniRef90_W4HGV8          G H K M K P Y P G Q D D P E I R A A I I E H L
UniRef90_B4DC91        G Y E K V E A G M P V Y Q G V L S E S Q I Q S I I L Y I K T L K
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UniRef90_F5ANR4        T K
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UniRef90_UPI000369960A   S P G V K P G S K M P F P Q L S D A D A R A I A A Y I K S L R
UniRef90_UPI00036DDB27 T T M K P F A G     V A D A E Q R K L I I D F L K T
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UniRef90_G2HZF4        K F V D G K V H P M P Q F N W M Q P Q E I A D M V A Y L Q S I
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UniRef90_UPI000462F83B   T I K P G N M P M V P L L D E L R A V S A Y M M S L K K
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UniRef90_Q12FL0        G F P P I         M P P A S L G D E E M A A L L A Y I Q S L
UniRef90_D5UZD5        K F V D G R V H P M P G F D W M Q P Q E L A D I V A Y L E S I
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UniRef90_F6GIR8        D G D A A A G K A L F N N C A S C H K L D   K K M T G P A L R N V E A R L E
UniRef90_U3G6B9                                                 M T G P S L A G V L G R K A
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UniRef90_UPI00037401EB      A K A G A S L F K G C I A C H T I N P A A A G I I G P N L T H I
UniRef90_I0WI16        E G D P V K G K S L F N N C A A C H K L D   K P S T G P A L A G V A D K Y E
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UniRef90_G0A8M5             V A Q G K A L A K A C V A C H T V D   G S P R V G P T W K G L F G K T E
UniRef90_I2FIU5        K G N A E R G K A L V A N C V A C H T L N D V G   I A G G D M A V Y F R D D
UniRef90_UPI0003B676CF      A Q N G E R L F A S C N A C H S   G N A A A R G P N L A G V
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UniRef90_UPI0003619F48      V A Q G K T L F K G C V E C H A N K K G D S Y K T G P N L W G L F Q K T P
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UniRef90_UPI000476B4C6     V A A G R R R V F Q A C M N C H T V G T A A T G R F G P D L T H F M
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UniRef90_A0A024KFC5          A S G E Q Q F A R C G G C H T V G T L A G G A T G P D L T H L M
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UniRef90_I2DYG5            D A A R G R R L F E R C A G C H A V G T D A T G D A G P D L T H V
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UniRef90_A0DUF3        D G D L K K G A Q V F M R C A S C H S L E I F T G K S S G P S L A Q I Y N K P A
UniRef90_V8C7W0             G N A E E G K Q I F E N C N S C H T V   K S Q P D L A A R S T E Q S
UniRef90_UPI00046AF56D K G D V N N G E K L A E N C A A C H R Y V N M A P D F M A P N L S N I
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                                       50            60            70          80
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UniRef90_UPI0002D89AC4                  A D R E K I A G V L D H N E E N L K K W I E N P E S V
UniRef90_UPI000463D70F      A         Y G V T P P D L G S A G K L Y S K E Y L I A F I K N P A S K V S H
UniRef90_Q53094       A S V G G F A Y S D A M V A H A A E A P T W T L E E L
UniRef90_E8YTW8                           L G A G T F E N T P A N L E S W I K A P
UniRef90_Q3SUK3                             R E W L H E W I M K P D A M I A K
UniRef90_B1ZVF0                 G R R Y L G A G I V P N T P E N L R R W L E D P Q Q V
UniRef90_UPI0003024CC8  K V I D S P E Y         K G K A T T V E E F I H E S I V E P S A Y L H P
UniRef90_W1JZ11       G K V E G F R Y S E A L       S K A D F A W D E T K L D A W L N N P Q A V I P
UniRef90_K8RKK5                         S R R L L A A G S V I N T P E N L I D W I Q
UniRef90_UPI0003775DF5                    L A S G V L S N T P E N L R A W I K D P Q A
UniRef90_K0Q4Y8                         S R R T I A A G L L D N T R G A L A A W I A D P Q T L
UniRef90_X7FE89                         G G R V S L A A G I L P M T A E A L M R W I R D P E A
UniRef90_UPI00047B1A52  G L D R Q W L Y S             W I H   N S A G M V K S G D A Y A N Q
UniRef90_A9W7F7                         S E R V Y I G G V T N T P E N L V R W I T N P K A L
UniRef90_A9F508                           E L A D G A K V I A D E N Y F R E S L F N P G G Q V V R
UniRef90_UPI00037F997B  N F E S A A S V S A             D E N Y I R E S I L N P S A K I V E
UniRef90_T1XII3       T M A D G     S T A L V           D E A Y L R S F I R D P Q A R H V K
UniRef90_G3IRH0       A S L P G     Y T D Y S V S L K A K G G K W S R E R L D Q F I S S P A A F A S
UniRef90_S7X1B0       D E         Q G L D R A W I S A W I R N S S S L     I K S G D A Y A V K
UniRef90_K7S6Q5        A D A A A S Y G V V P P D L S S A G W I Y D K N Y L A N F I F D P M H L Q H K
UniRef90_A6DSP0       T F T D G T K A I A           D H Q Y L T D S I N D P A K Q I V P
UniRef90_UPI00047B3C1F                  S R R T I A A G T L P M N R G N L A A W I I D P Q H
UniRef90_A0A033V5E1                      R D L I A G Y L K H D E E N L K K W I K D P E S V
UniRef90_I0XTF9                         E F A D G S S V T A D D A Y I K Q S I L V P T A K I V A
UniRef90_UPI000466515F             G S R K Y I G A G L F E T T R G S L A A W I A D P Q T L
UniRef90_UPI00041A1F2A                R V E I A G V L D N D K E S L V D W L Q D P E K Y K P G
UniRef90_B1Z3R0             Y G K T E T M A D G S T A K V D D A Y L R A F I T N P T A R V V K
UniRef90_T2KHP8       E E A G V               D K E W L H S W I R N S S G L I K S
UniRef90_F6GIR8       E E Q G L               D R A W L Y A W I K N S A G M I K S
UniRef90_U3G6B9       G T A D G F R Y S D A L     K Q S G L V W D K R N L D A W L E N P A A L V P
UniRef90_C3CN71                         A D R D M V A G I A E N N E N L K K W L K D P E N M
UniRef90_W0RE11                         A S R S Y I G G V L P N T P E N M M K W I M N P K G V D S L
UniRef90_UPI00016B11C0             G A R R L L A A G A L A N T P D E L R R W I A D A Q Q V
UniRef90_UPI00037401EB             G S R G T L A A G I M D M N Q Q N L A N W L K D P D E F   K P
UniRef90_I0WI16       R G W                 L Q S W I R N S S A L V K S
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UniRef90_UPI000465F086  R D R E V K Q G E G D T R F T L K A       D R S Y L H R S I R Q P D A E L A I
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UniRef90_I2FIU5       K E A T I F T       P D L S T A G A I Y D E K F L A N L I I D P A N T L H L
UniRef90_UPI0003B676CF       Y G S K L R L A A G G E V L V N E A Y L R D A I L N P S Q H V T A
UniRef90_R7ZSS2               G K E R P I K N G E A V L A N E D Y L A E S I L E P S K K I V E
UniRef90_UPI000333EFF7                        Y L E N P K K Y I P
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UniRef90_B5SB64             Y G K T E T M A D G S T A Q V D E A Y L R A F I R D P A R V V K
UniRef90_B4CYS6                       T P A Y I K E S L L E P N K V L A K
UniRef90_UPI0003619F48  K M H S I Y       L S N G R L A R V E A D Q E Y L K N S L L I P A T Q L A I
UniRef90_UPI0003FD7C26   P F G T F V P P N I S Q D A K D G I G A W S V E D L A N A M L   K G V S P S
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UniRef90_B3RBU3             Y G K T E T F A D G S S A R V D D A F L H K E I A D P H A R L I K
UniRef90_J1FBM9       Q T A N M S Y G V V P P D L S L A G K I Y N A N F L A N F I K N P E K T A H K
UniRef90_UPI000476B4C6             S R S T L A A G A A V N N A A N I R E W L K S P D H F
UniRef90_H6RNK0                 A D R R A I A G S L P N T F D D L A R W I Q D P Q
UniRef90_A0A024FF88                   A E D E G L D R A W L N A W I R N S A A V I K S
UniRef90_W6EIH3       G G Y A N A S Y L K E S I M E P S A V V V P G     Y N L N A H K N F L W Y
UniRef90_Q1YMX2                   A N R L Y L A G L L R N T P A N M I H W L R E P Q A
UniRef90_I4YVT0                   A Q Q H L L A G F L P N T P Q N L I A W L V D P V A L
UniRef90_UPI00036AE71A  M A P A L H N P G             F L A A A P D A M I K A
UniRef90_D7AG46                       G A T R N E S F L R E Q L T N P K K M N P A
UniRef90_UPI000363AF82        G S S R S F A K G K D A L A D A D Y L R E S I L Q P S V K V L K
UniRef90_A4AML3       L S E D E G L D R E W L N T W I   K N S P G M I K D G D A Y A N K
UniRef90_A0A024KFC5             G R T T I A A G T L E N S P E N L A A W I A D P Q A
UniRef90_UPI0001746B82                D E A Y I Q Q S L L E P N A K L A E
UniRef90_H0Q0N3       T L A D             G S K V V A D E T Y L A Q S M R E P T A A I V Q
UniRef90_I0XN37                         G K K Y D I A Y L Q N W L K D P Q K V
UniRef90_Q13IJ7                 S R E T I A A G V L A N T P Q N L A A W I R D P D A L
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UniRef90_J0L2C9                         R V Y I A G V L N N S A D N L V G W I V A P Q A Y
UniRef90_F0S656                         D R A W L H K W I K N A P A M V A S
UniRef90_UPI00035F129B             S R Q T M L S G M M P N T R E N L R R W L Q D P Q A V
UniRef90_D7WMG2                       R N R V A G F L E H N E E S L K A W I K N P E E F K P G
UniRef90_W0NID1                 G S R D T I G A G L M E R T R G S L A A W I A D P Q
UniRef90_G2J0T1             Y G K T E T L A D G S T V Q V D P A Y I A E S I R T P N A K I V H
UniRef90_E8X2I4                 G S R D T L A S G A V T N T P E H L R Q W I A D P S H Y
UniRef90_G0J2Y7       S A G V A F G Y E M W L I S L K D G T V A Y G F E G L Q N E V Y N P A E D I A A
UniRef90_S9S607       T E E L R G I V A N A K M T F       E G T V M P A F Y K T S G F I R P
UniRef90_UPI0003B33203           W T E A Q L R G I I A K S K M T F E T I M P S F Y Q T A G Y I R P
UniRef90_UPI00047E2921  A L D N             Q E T V I A D D R Y L R D S I L N P K K E I A A
UniRef90_UPI0001E89186                R T K I A I L D H S P A N L E K W L K N P E E V K P A
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UniRef90_L0KQZ8                 S R R T L A A G T L T M S R G N L A A W I A D P Q G V
UniRef90_Q5P1W7                 G R R V Y L A G V L P N S P A N M V R W I R D P Q S F
UniRef90_A6CN12                       R S R V A G I L E H N E E E L K N W L V D P E Q Y
UniRef90_A0A031MDL1    L L V G E A D Y S G Q A S D I       E G Y L R E S I L E P S A H L S T
UniRef90_UPI00034C9EAC                R E V I A G Y L E N N D E N L E A W I R N P Q S L
UniRef90_H5SRN6       E           V V L P D G T E T K V V A D E A Y L R E S I L D P N A K I T K
UniRef90_S9QAN8       I G P P L D G A A D R W S E A E L R G I V A N E D T M M P A F Y K V D G F I R P
UniRef90_I2DYG5                 G S R R L L A A G T L E N T P A N L R D W I A
UniRef90_H6RNJ6                 S R D T I A A G M L E N T R G N L A G W I L D P Q G L
UniRef90_A0DUF3       A S Q R V Y E Y T M A L L D S K I     F W N S Y N L F M W A K D P Q A M C K G
UniRef90_V8C7W0       D E E V S Q A Y G V I P P D L S T V A A V L D H N F L A H F I K N P I L A S K L
UniRef90_UPI00046AF56D             G G Y S T K E Y L M E S I V E P S A V V V A
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UniRef90_UPI000463D70F    K F V D G R A H P M P S Y D W M Q P Q E I A D M V A Y L E S I
UniRef90_Q53094
UniRef90_E8YTW8             G S M K P G T T M P A S Q L S A Q D L N A L V A W I G T L Q
UniRef90_Q3SUK3          K D P V A V N G M E M P N M G L T S A E V D N I I A F L E
UniRef90_B1ZVF0               K P G V L M P F K L S E R Q L D E L M A Y L E T L R
UniRef90_UPI0003024CC8  G P M Y S A N G S F M P P K D L T E E Q I D H L V A Y L A S F K
UniRef90_W1JZ11              G V N M V Y R Q A K P E T R A A I I A Y L K
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UniRef90_UPI0003775DF5        I K P G G C L M P A M H L T D N E L D S V V A Y L R T L K
UniRef90_K0Q4Y8               K P G N N M P M V P L S S D E L R Q L A A Y M D S L K
UniRef90_X7FE89              I K P G A M M P Y D H L S D D D L S A L A A Y L E G L K
UniRef90_UPI00047B1A52  I Y N E Y N G T A M T A F P Q L S E Q Q I D D I L A Y
UniRef90_A9W7F7               S P R T A M P V T G I S E A Q A R D V A A Y L
UniRef90_A9F508         G Y P P V M P S F K       G L L K D K E V D A L I A Y L K S V K
UniRef90_UPI00037F997B  G Y Q N Q M V S       Y E G R L S D D D I S D I I A Y I K T L E
UniRef90_T1XII3         G F P P V         M P K I E L S D E E L A A L V A Y I Q S L
UniRef90_G3IRH0               G T T M D F A G P S Q S D R I A I M R F L E
UniRef90_S7X1B0         I Y N E Y N Q T A M T A F P Q L S D Q D I S D M L A Y
UniRef90_K7S6Q5         Y T P E S G K A F P M P Y N W M S P Q E I M D I V A Y F Q A L
UniRef90_A6DSP0         G Y A V P         M P A Q G L N E V Q V K N L I E F I K T L
UniRef90_UPI00047B3C1F        P K P G A N M P A V P L S P Q D V S D L V D Y L M E L K
UniRef90_A0A033V5E1           K P G N K M T G Q Y K S D E D I D A L S A Y L
UniRef90_I0XTF9         G F P P A M S       S F Q G I K E D E I K D I I E F I K T L K
UniRef90_UPI000466515F        K P G N N M P L V P L S R E E L L S V S A Y L A S L K
UniRef90_UPI00041A1F2A  N L M T G K Y G D T E S A K P L T D E E A S K I A D Y L L Q L K
UniRef90_B1Z3R0         G F S P I         M P H F D L S D Q E L A A L V A Y I K
UniRef90_T2KHP8         G D E Y A N N G V P M A F P Q L S D E D L D N I L A Y
UniRef90_F6GIR8         G D A Y A N N G T A M A F P Q L S D S D I D N I L A Y
UniRef90_U3G6B9               G N A M T F P G I D A R T R A D L V A Y I E
UniRef90_C3CN71              K P G N K M T Y G N L T D D Q I D A L N A Y L Q T L K
UniRef90_W0RE11              T A M P N T G V T D S D V R H I A A Y L Y T L R
UniRef90_UPI00016B11C0        K P Q S L M P S I R L D P A Q Q C D L S A Y L A T L R
UniRef90_UPI00037401EB  G N I M S K Q G I A Y I N M G L G S E D I N N L V A Y L Q S L K
UniRef90_I0WI16         G D A D A K Q V P M T P F P Q L S D Q D I D D I L A Y
UniRef90_F7Z3L9              K P G T K M P A F G L S D R Q I D A L A A Y L M Q L K
UniRef90_UPI000465F086  A E S G S N S G P I M P A D T L S D G D L D A I G A Y L K T L
UniRef90_G0A8M5         G F A P         M M P K I D M S D A E L E A L V A Y I K S
UniRef90_I2FIU5         A H K F P N G D F P M T P Y V T D N Q E V A D I V A Y L K S I
UniRef90_UPI0003B676CF  G Y A P I M         P T Y Q G Q I S E E G L I D L V E Y L K S L K
UniRef90_R7ZSS2         G Y D E       G M P S F L G I L S E N D I A S L I L F I K S L
UniRef90_UPI000333EFF7        G T K M I F A G I K K K E R A D L I A Y L K
UniRef90_J0CWP2              K P G N N M P L V P V T S E E L R Q L S A Y M R E L Q
UniRef90_B5SB64         G F A P I         M P N F D L S E Q E L S S L V A Y I K
UniRef90_B4CYS6         G Y E N L G T S P M P M G L L K P Q E L E D I Q A F L Q T L R
UniRef90_UPI0003619F48  Q E L G P E R G S P M P K I F L N G H E R N A L F A Y L K T L
UniRef90_UPI0003FD7C26  G Q H F Y P A F P Y A S Y A R M K P G D I A D L Y A F L K T L
UniRef90_N0A4T6         T K
UniRef90_B3RBU3         G Y G P V         M P K L P I S D D E I A A L T A Y I K S V
UniRef90_J1FBM9         F S E A G K V H P M P G Y A W M S D S D I A S I V A Y L Q
UniRef90_UPI000476B4C6        K Q G S L M P A M Q L S D Q Q L D E L V A Y L S T L
UniRef90_H6RNK0              E V E P G T L M P D V G V T D E D V D D I V A Y L Y T L E
UniRef90_A0A024FF88     G Y K E Y K G V A M T P Y P G F T D Q D I S D I L A Y
UniRef90_W6EIH3         T S D E K G V R T M P P F A H L D E K S V N D L V A F M K T L K
UniRef90_Q1YMX2              I A P G S V M P D M G L T E Q Q A R D I T A Y L Y T L Q
UniRef90_I4YVT0              K P R T G M P A Q G L T E L E A R H V A S Y L Y T L
UniRef90_UPI00036AE71A  T L M K G R E G T P M V S Q G L K E K D I D D I V S Y V R S F E
UniRef90_D7AG46         T         T M P S F K G L P K Q E Q D A L V N Y L K G L R
UniRef90_UPI000363AF82  A Y A E S D I G M P T Y E G V L N E S Q I N S L V E Y I R T L E
UniRef90_A4AML3         I Y N E Y S Q A P M T A F P T L S N T D I D D I L A Y
UniRef90_A0A024KFC5          I K P G T R M P K V D L S A D E L Q A I V S F L S G L K
UniRef90_UPI0001746B82  S Y T A T P I S P M P P M G L L K P Q E L A D V L A F M L S L K
UniRef90_H0Q0N3         G Y P A I         M P Q A N L A D D E V A A L V A Y I K S L
UniRef90_I0XN37              K P G T A M P K L P L S E S E I K D L S S Y L S Q L K
UniRef90_Q13IJ7              K P G T T M P A V P L S D T D R V A V V R W L R T L Q
UniRef90_UPI00036A484D    H V A K P G V R M P A S T M D P A T L T A L A R Y L E S L K
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UniRef90_F0S656         G F N E Y N Q A P M T P F P Q L S D A D I D N I L A Y V K
UniRef90_UPI00035F129B        K P G A K M P R F I Y S K D S I N V L V D Y L T T L K
UniRef90_D7WMG2         N L M M N A E G T A P I Y G D L S D E E I E A L A T Y I M G L
UniRef90_W0NID1              T I K P G N N M P M V P L T S D E L R A V S A Y M E S L K
UniRef90_G2J0T1         G Y P A I         M P P F S L S D P E L A A L I A Y M K T L
UniRef90_E8X2I4              K D G A L M P A M H L K D A D I D L V S K Y L E S L Q
UniRef90_G0J2Y7         R K R F A T S I M P K P T D L L N E T D I S N L T A Y L Q G L K
UniRef90_S9S607         G D G Y T G K A A E P P I P I L A A Q D I E D L V A F L T T L K
UniRef90_UPI0003B33203  G D A Y G K A G T E P L P P I L S A Q Q V E D V V A Y L L T F K
UniRef90_UPI00047E2921  G Y E P V M         P S F D G L V D E G E M Q M L L A Y L K S L
UniRef90_UPI0001E89186  N L M T N T Y G N         L N Q E E V D A L V E Y L M S L K
UniRef90_C1F1C9              K P G V L M P A M H L S S Q Q L D Q V T A Y L D T L
UniRef90_L0KQZ8              K P G S H M P V V E L N G D E L N A I V A Y L E G L K
UniRef90_Q5P1W7              G F D T A M P D L Q V T E S Q A R D M V A Y L Q E L K
UniRef90_A6CN12             K P G N K M T G K D E D I D A L A E Y L M G L K
UniRef90_A0A031MDL1     G G M Y S A N G S F M P D T Y L S E E Q I E Q L V A F L A T L K
UniRef90_UPI00034C9EAC        K Q G N K M P F E D M S D E D M E A L I A Y L R S L
UniRef90_H5SRN6         G F Q A N L M     P I Y Q G Q L S E D D I K A I I A Y I K S L Q
UniRef90_S9QAN8         G N A Y T G E A A D E T F G L L S A Q A V A Y L S T L K
UniRef90_I2DYG5         H A Q Q R K P Q T L M P S F A L A P R D A D D L A A Y L A T L
UniRef90_H6RNJ6              K P G V R M P P N N L D G D E L Q A L L A Y L E S L E
UniRef90_A0DUF3         T K C L Q R G E L         L E S A E E R A D L V K F L K G F
UniRef90_V8C7W0         W H K E D L V Y P M S G Y D W L G D E A I G N I V A Y L S S I
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UniRef90_F3WW58                        C A A C H T I G T G A S G R V G P D L T H V A T R
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UniRef90_E3IB89              K P G N K M T Y G Q L  T D E Q V D A L T K Y L M S L K
UniRef90_J3HG40       G Y A A V     M P P F T P S D K E L N A L I A F L I K S
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UniRef90_L9PMJ9       G Y Q P I     M P A Q Q L S P T D V A Q L V D Y I K T I R
UniRef90_V6M570           I K P G N N M P N L N L D D N Q V N A L V E Y M S T L
UniRef90_E8TPF5         E I N P R T A M P S T R I S E Q Q A R D I A A Y L Y A L K
UniRef90_A0A017HCY5  G D G T G K A G T E P L P P L L T A Q Q V E D V V A Y L M T L R
UniRef90_UPI00035FF31D      K P G T L M P A L G L S E D E A R H M A A Y L Y T L R
UniRef90_UPI00035D209D  T L M P P F G     A F N N L T E Q E I H D V M A Y M A T L K
UniRef90_G8MKT5       H A Q R I K P D S L M P S I A L S A T D A A A L T A Y L R T L Q
UniRef90_I3XZ33       K F T E E R P H P M I A F Y G L G D Q E I A D I V A Y L Q S I
UniRef90_A7NII5       G F E A G L A R A V V D F G I L S D Q D I A D L T A Y L L T L
UniRef90_I1XG18       G E M Y S S G E T S M P T G Y L S K E E L E Q L T A F L A T L K
UniRef90_UPI000425B1D5      K P G S E M P V K G L D K K E Y E K L A E Y L Q T L
UniRef90_UPI000380A45B  G Y G N I M P P V W K P P I S L T E L E I E T V I A F L Q S
UniRef90_B8ES67             K P G A K M P V L E M S G P E I H S V T A Y L A T L
UniRef90_W6EHT8       K F N E S R P H P M I A F F G L G D Q E V A D I V A Y L Q S I
UniRef90_Q3SKK4         Y D E Q K V R R V M P K Q N L S E Q E I S D L I A F L
UniRef90_E4TAJ5       V F E K F N K T E M T A F P S L S E K D I D D I L A Y
UniRef90_W0E5G0            G A Q M P K T E L T P Q E L A D L V A Y M R S L R
UniRef90_H8GMK6             K P G A R M P A F A L T P G E T A A L S A F L S T L
UniRef90_B0UJY4             D P R T A M P V T G I S E A Q A R D I A A Y L
UniRef90_X5DAK6       G Y N K G L M V S Y     E G Q L S D D D I D N I I E Y L K T V K
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UniRef90_A7H8L3       G F Q N V M     P T Y Q G R L S P P E V A A V V E Y I K T L K
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UniRef90_UPI000374BD36      I K P G N F M P P T A L A P D D L S A L L D Y L H S L K
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UniRef90_A7BTU1       G D P P H Y R N I T M P T L N L S E T E A R D V L T Y I E
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UniRef90_F7ZJW9        G D P A N G R L I V G N C V A C H Q V S D L A D V P     W H G E I G P M
UniRef90_L7UHC7             G A Q L F Q R C A T C H S V G E G     D R I G P D L H G V L E R R
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UniRef90_UPI00036A6EB3          V S K G C V A C H S I D G S                     V I I
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UniRef90_D0CYZ0           D L A N G R H V F L A C A T C H A   T P G Q E D D T V L G G G R V L D T Q F
UniRef90_A9DAG8      E A S A E A G E L L F G G C A S C H A A G S E G D A K L V L S G G V R L E S D F
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                         50            60            70            80
UniRef90_Q1H1C0               G S R K T L A A G T L E N M P G T L S A W I L T P Q S F
UniRef90_UPI00036CE060  V A G I L I N E E G S N K P F P G K P V K       D N L I E W L Q D P N A V
UniRef90_Q5LRM5         G T F Y A P N I S P S P D H G I G G W S Q L D L A N A M M H G T S P                 E
UniRef90_A0A031JJZ0          A R Q G M I A G R V P N R P D M L T A F V R N A P A L V S
UniRef90_Q7M452              R A N E N S G V M W T P E V L D V Y L E N P K
UniRef90_S3HAE8                         D Q E W L K R M I M N P K D P T L A
UniRef90_Q0FTD4         G T F V A P N I S P D P E N G I G D W G L A D F A N A V M R G V S P S G Q H L Y
UniRef90_M4IK11         G S V D G F R Y S A A L       K G S A I A W T A K T L E T F L S N P A A M V R
UniRef90_D3UGP6         G A S A A S A F G V V P P D L S N V G A V F D G K Y L A H F I A D P K E C E N A
UniRef90_Q2S8A0         N P T E Y F                   N E A A L K Q F I K D P T S   V R K
UniRef90_C7CBM7                         W D A A H L R M I V V N P K H V F S E
UniRef90_X7F369         A L S D L P F H G E I G P P L D G V A T R W D E A Q L R G I V A N A K T F P G
UniRef90_A3VJS1             D V P F H G E V G P V L D G A G D R W S E A E L R G L V V N A K M A F D G
UniRef90_UPI000463BE28              R V Y I A G V V P N T S D N L V K W I I N P Q A L
UniRef90_A8LJJ9         S P F G T F V A P N I S P H P E V G I G D W S Q A D F A S A V L   A G V A P D
UniRef90_E6QL43              Y G S K L T L A N G E R V Q V D D E Y L R Q A I L N P S A H I T Q
UniRef90_B7L1U1         K         T P S L R D L R M Q G P Y M H D G Q L G S L N A V L D H Y V K G
UniRef90_B5JGK3         F E L R S R F Y T P S L R E V Y R T G P       Y L H H G L A D T L E E I F T
UniRef90_E1IGZ6         A L A D             G S S I T A D A A Y L Q E S I L N S A A K V V K
UniRef90_A3X8I1         G A G D R W T E A E L R G L M T N A K M T F   E G T M M P A F Y K V E G F I R P
UniRef90_B0SE55              K F A D G T K A K A D E N Y L R E S I L V S S A K I V E
UniRef90_J2WU93         G P G W K G L Y G R T E Q L V D G T R V Q V D E A Y L K E S I L D P K A R L V Q
UniRef90_UPI00042121FF  S W I E S W I Y N S A               E M I A S G D A Q A V A
UniRef90_M4UKF2         N P T E Y F Q P G V                 L H R Y L R N P A S V
UniRef90_X6KYI6         A E E L R G I V A N A K M T F       P D T V M P A F Y K T T G F I R P
UniRef90_H0HV19                    G S R E T L A A G I M P V D V E A I A S F I S K P D A
UniRef90_A3TXK4         P S D F G T F H A P N I S P G A A G I G G W S V R D L G N A M R     R G L S P G
UniRef90_A0A017TFH6     F K T P S L R Y V G G T P P Y F H D G   S E A T L A D L I
UniRef90_UPI0003B4DBE6  H A K M P I P D N R H R L L E K F D Q N V   N L A Y L Y E A I A Q P D A
UniRef90_UPI0002E210D4             S M A S Q A Y V A G T L V N T A Q Q L A R W I L H P K R Y
UniRef90_S9QCI3         A S E F G T F Y A P N I T P A P E G I G G W T L I E F A N A V M   A G V S P E
UniRef90_E5WDF0                    R D R I A G I L L D H T E E D L K D W L R D P E T F
UniRef90_L0NIL7              G A R G S V G A G T M P N T P E N V A R F I R H P
UniRef90_UPI0002D2760D          A T R S F V A G V L P N D P A N L Q R W I R H P Q R I V P
UniRef90_F6C436         L A                 A A T L E N D V A A F V R W I R D
UniRef90_M5U166         R R T E S I C L P D A R I A E G F E T A V I T E D T V E L I A A D G S R N V I E
UniRef90_K9HU62              G K S V P L K A G G T V T A D A D Y I R D S I L L P R K H I V A
UniRef90_T0HRG6              G S R R T L G A G I L P N N R G T M I G W I G D P Q S L
UniRef90_E0XRB9         L Q T S Q M W G Q E R V F D D G S S T V I D D N Y I R S S I L E P M T Q I V A
UniRef90_F7ZJW9         L D G T A D R W S E A L R G I V V N A K I L F E D S M M P S F Y K T E G F I R P
UniRef90_L7UHC7                    D E A W V T R F I T S P G A L I D S
UniRef90_Q5WFD2         G D R Q T L A G V Y D I D D D E L L K E W I R D P Q S L
UniRef90_A6CEW9         L G A D M F P             T N R G N L Q K W I R A H V S A L
UniRef90_A9ALH1         N P V D Y F Q                 P A A L R R Y I R N P   A S V R D
UniRef90_Q89PG9             Y S E A Q L R L       I V A D P K R I F T D T V M P A F F K S D
UniRef90_UPI00046E9A95  H S D A A F                 L R A P K Q G V R A
UniRef90_UPI000248FCB2  T               E W L Y K W I K N S S A L I A S
UniRef90_A0AZK8         N P V D Y F Q                 P A A L R R Y I R N P A S V
UniRef90_Q0F963             A Q S F H G E V G P E L N G A G S R W S E E E L R G I V V N S K N T F E G
UniRef90_G2PJ26                       T P E W V M N M I L N P G E M V Q Q
UniRef90_B8KN67              I A A M N A P A L A G Q   D S A Y L V R Q L Q Y F K A G I R G
UniRef90_UPI0003625E1C  E E E G L             D K E W L Y A W I K N S A G M I S S
UniRef90_UPI0001D2F3DB  T L D D G R R           V L R D E T Y L T R A I A E P D A E I V Q
UniRef90_F8EJP6         G Q Y M A I F Y P S A G V S F G T I G I V S S K T E T D L L L K F P G K M S Q V
UniRef90_G0J0N8                   F M G Q I G S I M S R E Q I A E S I L K P N A S I S Q
UniRef90_J2WC74              Y G R T E Q L V D G T S V Q V D E A Y L K E S I L D P K A R L V Q
UniRef90_B8EME5                 T E A P S F A S I A A R T T S P N S L K A F L A D P
UniRef90_Q89HT1         G T F Y V P N I S P D   A A D G I G R W S E T E F V S A V M     R G V S P E
UniRef90_U1JQX9         G Q H A D Y I Y   K Q L K E F K L G M T S G G S E                 G
UniRef90_UPI00037E174E  A               D W V T S W L S N P K N Y
UniRef90_UPI000479000C               D E A W L I K W T K N A P A M I A S
UniRef90_Q3JDQ5         A F Q A N R S P D K A Y R T P P L S G I F V R E K G L F I K D E N K G Q F F H D
UniRef90_A3ZRW8         A I R E E Y T N F R V L L V D G R S G F V R E Q D D N T I T L E N P K L V I P R
UniRef90_B3Q4F4         G R F K I D P S S P N N Q H A F K R G P Y M H D G S L K S M D E V I A H Y E S G
UniRef90_U5C3L6         K E A Q Y F G Y E G Y M V K L K D G G I I S S R T E T D I D L K M P G G T V T P
UniRef90_UPI0003699432             L S E G Q V R L R I A     D A Q R L W P E T V M P S Y Y R A D
UniRef90_UPI000378D013  N L T D             G S S V T V D E A Y L K E S I L A P G V K V V E
UniRef90_E0MIU0         H H G D M A F       Q L A V K N G V R Q H H W
UniRef90_T0ITM9                 S R R S I A A G T L P M S R G G I Q G W L A Q P Q A L
UniRef90_UPI000379B8CB                 S R T T L A A G T M P N T P G N L A G W I T D S Q
UniRef90_UPI00034AB35F  M T P R H W E E T E V A Q S A K T E K Q Y S P A Q A L H E W I K N S P R V K P G
UniRef90_UPI0004654D69             Y A T N A P A L A G Q H D W     Y L R R Q L E H F K Q G V R G
UniRef90_I0JM13                 G N R E K I A G I L E P S K E N L V N W I V H P
UniRef90_UPI000364E6A7  T F P D F T Q C S A T T     A E P N A A W     K A V I V H
UniRef90_S5SQN2         G I F R V P N I S P D P E A G I G N S W S V A D L A N A L I S G V S P S E Q H Y Y
UniRef90_A0A011VNZ3     T P F G T F V A P N I S Q D A S D G I G N W T L D D F A A A M L   K G V S P D
UniRef90_A5FJF1         D M A W I Y K W V H N S S D M I K S G     D P V A V K L F E E N N K A V
UniRef90_Q01YB9         R S A P Y C A F E K T A E D Y A R K G M P Y V F D       L E H S K C P N D G
UniRef90_H8GUT0         L G A G M W E         A M T A Q H W E E A E L H A W L K H S P V V K P G
UniRef90_I3QFY0                     S R K W L H Q W I K N N K S L R D S
UniRef90_A3T210         P H D E T             G H T W H D R N L F I V T K G G V G A I V P
UniRef90_J2WLL3             Y G E T V T L A D G T S I K A D E G Y I K D S I L N P G A K I V K
UniRef90_UPI00036E00B7  G R M P A           P P H D A S G H T W H D A V L F A I T K N   G L V A G
UniRef90_C0BHW8                   K Y D K E W L Y S W I K N S T A M V K S
UniRef90_E6PQL1         T               D W L L Q F I Q S P Q R V I Q S
UniRef90_A6UMR6              G S R L H I A A G T L P N S R G N L A A W I V D P Q A
UniRef90_UPI0004113975  E A W I K K F V K N S T E M I Q S G D P T                 A K E
UniRef90_S4Y9R7         M E K E T R A A V A L A P D L R H A R D R M E P A D L A A W V L D P
UniRef90_UPI00036A6EB3  G P S W K G I Y G T Q E D L E D G T S V E V N D A Y I K E S I L N P T A K L A K
UniRef90_A3HUH7         S                 E W I R G F I K N P Q E K I D Q
UniRef90_D0CYZ0         G V F H M P N I S P D   K D R G I G D W T L A E F D R A L R G P D G L L P D
UniRef90_A9DAG8         G T F I G P N I S P D P Q A G I G Q W A L E D F A N A M L K G V S P D G S H Y Y
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                                                   90            100           110
UniRef90_Q1H1C0                      K P G S H M P A T M L T G E D L G N L V E Y L L S L E
UniRef90_UPI00036CE060               K P G N H M P S P G L T D E E I E G I A E Y L A N I K
UniRef90_Q5LRM5          G Q H Y Y P A F P F V S Y A N T E L G D I A D L Y A Y L I T L
UniRef90_A0A031JJZ0              G M T M P A M P L D Q E E A R D V A A Y L Y T L
UniRef90_Q7M452                  M S F A G K K     A D V I A Y L E T L K
UniRef90_S3HAE8         E L D A R F Q G V R M P Y L G M S A S D A T D L I S Y L A T
UniRef90_Q0FTD4         P A F P Y T A Y A H M     R D K D V V D L W A Y L L T L
UniRef90_M4IK11                 G T R M A Q R F N N A D E R R A I I A F L
UniRef90_D3UGP6         N E G K Q D Y P M S S F K G V L S D A E I A D V V A Y L K S I
UniRef90_Q2S8A0         W S D M K M V W V K     D D I W K D E E I D D L I A Y L K
UniRef90_C7CBM7         A T V M P A F Y E F Q G K P I L T T Q Q V E D V V A Y L T T L K
UniRef90_X7F369         T I M P A F Y H T G P Y A P L L S A Q E N V V A Y L M T L
UniRef90_A3VJS1         T V M P A F Y K T D P V T P L L T A Q E V E D V V A Y L K T L
UniRef90_UPI000463BE28           S P R S A M P A T G I S E S E A R D V A A Y L
UniRef90_A8LJJ9         G S H Y Y P A F P Y T A Y A L M E D Q D V A D L W A Y M Q G L
UniRef90_E6QL43         G Y A P I M     P T Y Q G Q I S E E G I F S L V E Y I K G L
UniRef90_B7L1U1         G E T R A S L S F E M K P F E M D E R E R R D L V A F L K T L K
UniRef90_B5JGK3         E F N P D N K H G L T     A G L T K L E I S D L V A Y L K S L
UniRef90_E1IGZ6         D Y N P I M     P V Y Q G Q L K D D E V R Q L V E Y I K S L
UniRef90_A3X8I1         G A A Y G K A P T E A L T P I L S A Q E I E D V I A F I A T L K
UniRef90_B0SE55         T Y P A A M     P L F Q G Q L S D E D V A N L I E Y I K S I K
UniRef90_J2WU93         G Y P P V     M V T Y T L N D D E L G A L V A L I K S L
UniRef90_UPI00042121FF  I Y E E Y N K T A M P A F P L L T E A E I G D I L A Y V E Q P K
UniRef90_M4UKF2         R D W P A R T M P A F P P D H L S D R E I D L I I A Y L K
UniRef90_X6KYI6         G D A Y G K A A S D D L P P I L S A Q Q I E D V V A F L L T L Q
UniRef90_H0HV19         I K P G A Q M P F G M L P E A D I A A I A A Y L E G L K
UniRef90_A3TXK4         G A H Y Y P A F P Y T S Y I R A A P Q D I A D L H A F L Q T L
UniRef90_A0A017TFH6         D H N G T R M G H R Q L S P E D R K A L V A F L E T L
UniRef90_UPI0003B4DBE6       Q P Q D T L M K I T P L S E E E I I A L M V Y L K S L
UniRef90_UPI0002E210D4       K P N G A M P E L G V T P Q D A A D M S A Y L R S V
UniRef90_S9QCI3         G A H Y Y P A F P Y T A Y A K A T P E D I A A L Y A F M Q T L
UniRef90_E5WDF0         K P G N K M T Y G E L T E E Q L D A L T E Y L M G L K
UniRef90_L0NIL7         S E I K P G S R M P F G M L P D G D A E R I A T Y L A G L K
UniRef90_UPI0002D2760D  G N G M P D Q G V T P Q E A R D I A A Y L Y T L R
UniRef90_F6C436         G Q H V K P E N L M P P F E I F T D D E L R Q L A A Y L D Q L R
UniRef90_M5U166         K E A R K K G K S S M P A G L M S P R E L R D L V A Y L A S L Q
UniRef90_K9HU62         G Y P A I M     P S F E G Q I A E G D L A E L V A Y I Q A L
UniRef90_T0HRG6         K P G N R M P Y S T L P G Q D L T A I A A Y L E T
UniRef90_E0XRB9         G Y Q G V M     P T Y Q G L L S D R E L D A L I A F L K T L
UniRef90_F7ZJW9         G N A Y T G K A A D E T F G L L S A Q Q V E D V V A Y L A T L
UniRef90_L7UHC7         G D P V A N N G V R M P D Q S L T D S E R A S L Y A F F R
UniRef90_Q5WFD2         K Q G N N M P A P D I S D E D L D A I V E Y L R S L Q
UniRef90_A6CEW9         K P G V K M P F R A L K D D E Y Q T L S N Y L E Q L K
UniRef90_A9ALH1         W P G R A M P     A F P P A Q L S D R E L D E I V A Y L
UniRef90_Q89PG9         G L S R V R P E F V     G K S L S A A Q V E D V V A Y L K T L
UniRef90_UPI00046E9A95  H H W     K F G D M P P I P G L D D E E I V A I T A Y I R Q M Q
UniRef90_UPI000248FCB2  G D A E A Y N K T P M S F P Q L S N G D I D N I L A Y
UniRef90_A0AZK8         R D W P G R S M P A F P P D Q L S D R E L D Q I V A Y L A
UniRef90_Q0F963         T I M P A F Y S T Q N G V R I L S A Q Q V E D V V A Y I L T L K
UniRef90_G2PJ26         D P L A K F N G S P M S N Q G L T E D Q A R A I L E Y F R T L E
UniRef90_B8KN67         Q D P R D A L G Q Q M A A T L A D E A A V E N V V A Y I S S L
UniRef90_UPI0003625E1C  G Y E E Y N Q A A M T A F P T L S N A D I D D I L
UniRef90_UPI0001D2F3DB  G Y A K G V M S G A I P G K P L T E S E L A A L V R Y L Q S L
UniRef90_F8EJP6         V S M K K M D E S L M S A G L M S Q T E L V D L V E Y L S S L K
UniRef90_G0J0N8         G F A T V M V D T K
UniRef90_J2WC74         G Y P P V     M V A Y T L N D E E L G A L V A L I K S L
UniRef90_B8EME5         H P R M P N M S L T T D E I A D I V A Y L M S Q R
UniRef90_Q89HT1         G Q H Y F P A F P Y T S Y H L A K V E D V R D L F A Y L K T L
UniRef90_U1JQX9         R M E P V M S G M A M P     L S D Q D M K D L A A Y F A T L K
UniRef90_UPI00037E174E          N H K S L M P N L R L S K E Q V D D I A S Y L
UniRef90_UPI000479000C  G Y D Q Y K P A M M T A F G E L S D D D V K N I Y A Y I K
UniRef90_Q3JDQ5         G L E V I N H Y D N F L S L G L N E N E K E D L V E Y L K S L
UniRef90_A3ZRW8         D E I D A G P K S L M P D R L L T A T Q I R D L F A Y L Q S
UniRef90_B3Q4F4         G V G R P S Q D A A M M P F L L T D Q E R D D L I A F L G T L
UniRef90_U5C3L6         T S I T Q M E N S M M P S G L M S S Q E L V D L V E Y L M T L K
UniRef90_UPI0003699432  G L N Q V G D E Y R     G E P A L D A Q Q L E D L V A Y L A T L
UniRef90_UPI000378D013  G Y S P I     M P A Y T V S E N D M A A L V A Y L E S L
UniRef90_E0MIU0         P Y G N M P P I A G V S E A D T A A I T A Y V R T L Q
UniRef90_T0ITM9         K P G T S M P T V P L E P A D A D A V A T Y L E T L R R
UniRef90_UPI000379B8CB  R I K P G N N M P P I N V P S E D L Q P L L S F L E S L R
UniRef90_UPI00034AB35F  S I M P S Y D G S P I K G G L L T D D E I D D I V A Y L R S L R
UniRef90_UPI0004654D69  S H K G D Y Y G T Q M T L M A R D D Q A I D D L L A Y I N Q L
UniRef90_I0JM13         D E V K P G N N M P A N L V S E E E A G K I A D Y L L Q L K
UniRef90_UPI000364E6A7  G G P S R G F S T I M P F G L L S S Q D I D D V I A Y M R G F
UniRef90_S5SQN2         P A F P Y A S Y G M T L G     D I R D L Y A F L H T L
UniRef90_A0A011VNZ3     G R H Y Y P A F P Y T S Y A R M K P Q D I A D L F A F M Q T L
UniRef90_A5FJF1         M T S F P Q L S T G D I D N I I A Y T S E V K
UniRef90_Q01YB9         H E L Q V Q Q M T P M P S L R L T E D E A R D I A S Y L M T R K
UniRef90_H8GUT0         S L M P R Y D G G T S V I A G L T D E E I D D I A A Y L R S L K
UniRef90_I3QFY0         G Y K E Y G N I E M N S F P Q L S D N Q I D D I L S F I K
UniRef90_A3T210         G Y E S D M     P A Y E G I L T D D E I A D V L S Y I K S
UniRef90_J2WLL3         G Y A A V     M P A F T L S D Q E L N A L I A F I
UniRef90_UPI00036E00B7  V T A P E G Y V S D M P A Q L S D E D I V A V L A Y I K S
UniRef90_C0BHW8         G D A Q A V N G S V M S F P Q L S T T D I D N I I A Y
UniRef90_E6PQL1         G D P A A K Y G M V M P D Q A L S S T E I R G I L T Y I
UniRef90_A6UMR6         I K P G A H M P L M K L K A E E I E P L T R Y L E G L R
UniRef90_UPI0004113975  V F E K V K V Q M A S F G G L S L S D S D I D N V I A Y V K
UniRef90_S4Y9R7         G A I K P G T P M P Q V P M S P A D A R D I A A F L A T
UniRef90_UPI00036A6EB3  G F Q P L     M P V L P L S D S E I A A V T E Y I K S L K
UniRef90_A3HUH7         G D E R A K Y K V Y M P F P T L K E E D I N A L L S Y M H T
UniRef90_D0CYZ0         G Q N L Y P A F P Y T S Y Q R L S D R D L Y A Y M M T L
UniRef90_A9DAG8         P A F P Y G S Y T R M     T D Q D I A D L F A F L K T L
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                    1         10            20            30            40
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UniRef90_M1ZDD8         G D P K K G Q E L F E S C Q A C H K L   K G K G E L F A P N L S N I
UniRef90_V4RNH9           D A A A G R Q K A Q M C A V C H G L D G I G R N P D V P N L A G
UniRef90_UPI00029AC545       A V A G E R V F E R C H T C H     R S N G V A T R G P P L A G L F G H E V
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UniRef90_UPI000287A5C1  G D P E R G A R R Y R T C A N C H Q Q G E G I R A T N G P R L A G L P D W
UniRef90_H6RGV1       D G D P V A G K A L F N N C A S C H K L D     K K M T G P A L R N V E A R L
UniRef90_S2KQY0         G D A Q R G E R L Y R T C A N C H A Q G Q G M P A F N A P R L A G M N D W
UniRef90_W0TQP5         G D A A A G K A L Y G A C A G C H G P A G A G D G A A A A A L N
UniRef90_Q1LKE7             V A R G R Y L V A H C G A C H T P R G W G L Q E K A L S D D G K T Y L S G
UniRef90_T0MDQ4         D V K E G E K I F K K C T S C H K V D   R K V V G P A L K G I T E T K
UniRef90_A4CHB5           A A E G E A V Y N Q C L A C H K V     G K R F I G P A P N G I L E R R
UniRef90_H2BYE6         G D P V N G K S L F N S C A A C H     K P F S K A I G P A L H K V T D
UniRef90_UPI000367E8E0    D P A V A E L L A S Q C L T C H A I G D Q G I S L Y P D L T G I G S R E S
UniRef90_D3DFZ9           V T K G K L V I Q N C M D C H T L L G N G A Y Y A P D L T K A W L D P K
UniRef90_I0K4M5         D V A K G K E L F N N C Q Q C H N T N E V A     L V G P G L K G V R Q R T P
UniRef90_K2IRM2         G N P A E G R T I V G N C V S C H A A T D Y A
UniRef90_UPI00041D5EC9           R G Q Q A F T G C A L C H A V G T A A S G T I G P D L T H L A
UniRef90_I1B0R5         G D A V K G Q R I F G N C V S C H Q L T S L P Q G E V G P V L D G V G S Y R
UniRef90_UPI0004630B9F  G D A A E G E K V M T N C V A C H Q V S A L D Q G N V G P S L D G V A D R
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UniRef90_UPI00046A8F02  G L V E Q G R S L A E S C L A C H S V D   G S P S V G P G W L G L
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UniRef90_W3RST4         G D A E R G R L I F A A C S S C H           A S P G Q S D P L K L G G S M A L
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UniRef90_G8R2B9         D A K A G K S L F N N C A A C H K L D     K K L I G P A L A G I T E K R
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UniRef90_Q2VNK3         K A D A E E       K G C A S C D A V E K S V V A K A G P P L F A I V D R P K
UniRef90_A8LJ45         G D P A A G R E V M A N C V A C H M V S D
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UniRef90_UPI0002E67BAE  K G D V A R G R A L I S T C I L C H S                                       G
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UniRef90_I6YUU7           A Q S G K E I F A K C T Q C H K I N E       R Y T G P A L G D V T K R R
UniRef90_UPI0003F95E2C      A K G K E L F T G C G A C H T V G T A A S G Q I G P D L T H F
UniRef90_U4QD86         G D A R L A P G I F R R C T G C H A I V A G A D G K V G G E L R S L R Q
UniRef90_S2YME2        E G D V A Q G Q E I F N T C I A C H A V G A G T T G G V G P N L A T F G D
UniRef90_A9GFG2             V A R G E A L F H D C A S C H A       G A Q L T T N D S F D V G T G K A
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UniRef90_UPI00036C864A       A N Q G R E V F E Q C I G C H A I G     G Q G S E Q G P T L T N F G D
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UniRef90_Q15V46        H G D I D A G K T L Y Q A C A A C H G A D G G G N K A I G P R L S G I N D W
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UniRef90_W0TL70        K G N A A K G K P L Y E K C V R C H G Q D G S G E G   A G T G V T L S R E R S F
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UniRef90_L7VZ93                         R G C K C H G G N G E V G A P
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                                                50              60              70              80
UniRef90_J0LEY4              H                                        Y I K E S I V N P G A V I T S
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UniRef90_M1ZDD8                               G E K V S A D W I V S W L S N P R D Y
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UniRef90_H2BYE6                             K Y S R D W L N T W I R N S S A M I A S
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UniRef90_K2IRM2           D V P F A G E V G P L L D G A G S R W D E A Q L R G L V V N P K M T F E G
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UniRef90_I1B0R5              T P A E L R G I L V N A K M T F D T V M P A F Y K T S G F I R P
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UniRef90_Q46SU8        T L Q D G R A V T A       D A A Y V R D A I L M P H K D I V A
UniRef90_UPI00046A8F02        Y G K T E V L A D G S Q V A V D A S Y L K Q S V L E P N A Q I V K
UniRef90_D7ADJ0        T V T E G G V          E R T L S V D E A Y L V R S I R Q P A A Q V V K
UniRef90_UPI000475D09D P H D A           S G H T W H D D V L F R I V K E G T A A I V G
UniRef90_W3RST4        A S P F G T M R V P N I S P H P Q D G I T W S T R D L A N A L L S P R A E H Y F
UniRef90_Q72J19        P Q Y P V L V                L L Y G L E G P I A V
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UniRef90_B9CYY5                     H E N A E K W V F D F I K D P A K F Y N D
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UniRef90_A9IUK7            G S R P S L A A G M L R N N P G S L A G W I A
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UniRef90_A9B789            G N R A A Q R P D G T S A I D Y L R L S L T E P D K E L V G
UniRef90_W4NFB8           D A R R L I A A G A L T N T P E H Q L D W V R
UniRef90_L7WBF3                            K Y E R W L Y K W I K N S A K L I A S
UniRef90_Q2VNK3        N S V A G L A H S N S L R A Q E A S     W T V N E L D Q Y L A S P H G G A Q A
UniRef90_A8LJ45          M S D I P F H G E V G P M L D G A G D R W T E A Q L R G I V A N   A K M T F E
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UniRef90_G2Z4J0        T                      D W L Y K W I R N S S Q M I K S
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UniRef90_W8RV65          A D R A Y V A G V L P N T P D G L V R W L V N P
UniRef90_C1CXA2        L G A G M W E G E E A      E K N L V P W I A N S P G M K P G
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UniRef90_D5RL98          P M P A L A Y         M T E P G L R A L I R D P K S   V R D
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UniRef90_UPI0003124D9D V A G I M L N R E T A D E P I E Q A V V    E E H L R Q W I T E P Q K V
UniRef90_K8P9U0        S P F G T F Y A P N I S P H K Q N G I G S W S E A N F V T A V K    H G T S P N
UniRef90_M4ZBM7        S A Q L R L R L V D A S R        L N P Q T I M P S Y Y H V D
UniRef90_K2FLF8             G N R T K I A G I L D H N K E N L V D W I M D P D Q F
UniRef90_W4HRN7        G T F V A P N I S T D P E H G I G A W E I G D F A G A V T Q G V S P D G A H Y Y
UniRef90_UPI0003792505           E M K G R H P K Q T S S Q I R S L L K N G K G
UniRef90_UPI00036C864A        R E T L A G Y L D P T D E N L D E W I R Y P Q
UniRef90_L0DAC1        F P E S V R N Y A K A N I S A K F K S H A E G Y K W L A N W I K S P E A Y
UniRef90_Q15V46           Y V L T Q I N H F R E G I R G N D Q K   D I Y G Q Q M K A A V S
UniRef90_I2JKI4        D R Q L R Y   Y R E G V R G A H P A D
UniRef90_UPI0000E0DBE5                  Q H A K Y L A K Q L A D F K T A A L S
UniRef90_UPI0002E02EB0           S R S T L A A G I F P N E R G F L A G W I T D A R A L
UniRef90_D4H6R5             T A V K D G K K V Q L K A D A R Y I I S S I T H P S E Y I V D
UniRef90_H0I0C3        E T A F G T F V A P N I S Q D V N D G I A W S R E E F A N A M L    K G V S P S
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UniRef90_E8TEF9          G Y I G A S R A S P D A M M R W             I S
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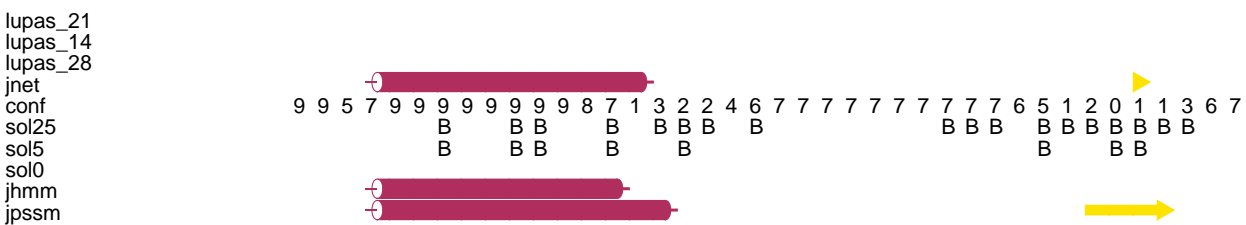
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UniRef90_V4RNH9              M S I I A Q G L S E E D I A D L T A W Y S S L K
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UniRef90_H6RGV1        G D D E Y N R A A M T A Y P Q L T N V D I D N I L A Y
UniRef90_S2KQY0        R H P Q D I Y G S Q M V D M L V D D S A L R D V V A Y I S S L
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UniRef90_T0MDQ4        G D A D Y N K S V M T S F T D L S D D N I K S V L A Y I K
UniRef90_A4CHB5        D L L M E F N G S P M A N Q G L T E E Q A R A V L E Y F R T L K
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UniRef90_I0K4M5        G D A Y A V N K T Q M S F P N L T D G D I K G I L D Y I D S
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sol0                                                                                     B
jhmm
jpssm
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