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                         1               10                  20                  30                  40
QUERY                    M E P A A R R R A R E C A V Q A L Y S W Q L S Q N D I A D V E Y Q F L A E Q D V
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UniRef90_S6AJI5          K K S R R K A R E F G V V Q G L Y Q W K L T G G D A N T I L S Q L R E E K E Y
UniRef90_S6HLQ1          K S A K R R E A R Q M A T Q A L Y Q W H M A G H S L N E I E A Q F R V D N D F
UniRef90_I1E2I7          M K P N A R R Q S R S L A V Q G I Y S W H V S Q N P I T E I E Q Q L L L E T N V
UniRef90_D5X7S3                  R S A R K L A L E V I Q V D R E G A Y S N I A L N K V L E K Y Q P
UniRef90_Q1LSN4          M K I T A R R R A R E C A V Q A L Y S W Q L S N N N I A D I E A Q F L A E Q D I
UniRef90_G2DBX2          M S K K   R S Q A R R H A V Q A I Y Q W Q M A G Q D L A A I Y E Q F L G E Q D L
UniRef90_B8I258                  A R E T A L K L L Y D I T E N H A Y S N I S V N R H L E N D K L
UniRef90_N2J015          K I A A R R E A R S L S V Q A L Y Q W H M A G Q A I N E I E A Q F R V D N D F
UniRef90_A2SK13          Q K S S R R R S R E F A L Q G L Y Q W L V S G S E A V V I E A H M R E L D G F
UniRef90_UPI0003640021   S P S A R R R A R Q L A L Q A L Y Q W Q I A K S P L I Q I E A Q F R T D N D F
UniRef90_B1I502                  A R E I A L H V L K A V E A D G A Y A N L A L N R A L E E F R P
UniRef90_M1Z170          M P T K M K K E A R E T A L D I L L R I E E E G A Y S N L L L R T A L D R S G M
UniRef90_C3X5P8                S P R H R S R E F A L Q G L Y E W L L N K D D A P V I I E H I R Q A H G F
UniRef90_A1SUU6          M K P A E R R R A R Q S A V Q A I Y Q W Q I T K L S A G Q I I E Q F S T D Q D L
UniRef90_C5BS84                A T R S R A R H F A M Q A I Y Q W Q M N G N P L H V I E A E F H T D N D M
UniRef90_B1YUJ1          M K K S A R R Q S R E L A T Q G L Y Q W L L S N A A P G E I D A Q L R G A L G Y
UniRef90_UPI00035D17FB           A R T N A R R S A V Q A L Y Q W Q M T G Q N L S E I E R Q F L E E E R L
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UniRef90_UPI00037E9DE6   M S S G G R S T S R S I A L Q V L T A V E Q E G A Y S N L L L N G A L Q K S R L
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UniRef90_Q0VMI0          T P S A R R K A R R F T L Q A L Y Q W Q L A G A A V S D I E A Q F L A N Q D F
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UniRef90_B6IZ82          M I N K T R H N A R R Y A L Q A L Y Q W F F C E T K P D A L I S Q F M E E H D L
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UniRef90_W4V3E8                  R R A S R E I A M K L L Y Q L E I Q K D S K E E Q V N N T L E Q Y D L
UniRef90_G2LPV1          M K P A Y R R K A R A C A Q M L Y S W E I S H N N I K E S A I Q F L K E I N K
UniRef90_F3KDA7                S P A L R R N A R L A M Q A L Y Q W E L A S S S L L E I E R E F R E D N N M
UniRef90_UPI0003755E23           S K H S V R D H A L T I L E R V E Q E G A Y S H L L I N H V L E E H D M
UniRef90_UPI00035CA3C5           R R R A R R L V L Q A L Y Q W Q M A S S S A S Q V E A E F I I D N D M
UniRef90_D0YZG4          M K P A A R R N A R Q F A V Q A I Y S W Q I T Q G D I A D I E Q H F L S G D K F
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UniRef90_H1G305                  A R R H A R R L V M Q A L Y Q W Q L T G Y H P K D I L A Q F K E D P E M
UniRef90_L7VQZ2                 S R R I T R E N A M K L L Y Q I Q L R D D D I E E Q I R M F L E E E D L
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UniRef90_UPI00035CBEF7           A R D T A L H V L T E V E Q E G A Y S N L L L N T A L Q K A G L
UniRef90_Q2S9S0          M S K A K R R A A R K L A L Q A L Y Q W R V A G A S I S Q I E A F A V D N D L
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UniRef90_W5YJP9          K A G D R R R A R A L A L Q G L Y Q R H F S K S S I S D I E A E F M V D N D M
UniRef90_F6DUA3                  R R Q S R E T A L Q V L F A I D V G K N E P D F A L R N T A E E F G A
UniRef90_E0RET5                  T A R E V A L D V L I G V E Q E G A Y S N L E L N R R L Q Q A G L
UniRef90_UPI00036B9AF1   M E K Q S K R R A R K L A L Q A L Y Q W L L S G A D L H E I E A Q F R V M N N M
UniRef90_E8Q619          M K F I T R R L A R L C A L Q A L Y S W Q F S K N D L I E I E N Y I V S I Q N I
UniRef90_J3YTA8          M K P A A R R R A R E C A V Q T L Y S W Q I S H N D I T D I A V Q F L E E L D T
UniRef90_P57868          K I S P R R R A R E C A V Q A L Y S W Y V S Q N S P A E I E L N F M A E Q D L
UniRef90_C0N8C8                 P R T K A R R A A V Q A L Y Q A L V N N E T P Q K A G L E F V T A E Y A
UniRef90_W4LD45                 S R Q T A L Q V L Y A I D A Q Q A Y T D V A L R Q A L G Q S R L
UniRef90_D8IQF1          T P R H R A R E F A L Q G L Y Q W L L N H E D A G A I E A H I R E A H G F
UniRef90_E0RSE5                  R R K A R I L A F Q A L F A S D G G G G D G L E V F S F P W A D G E I
UniRef90_Q9K9Y7                  R E V A L E T L V Q I E K S Q A Y S N L L L N Q K I K Q A N L
UniRef90_UPI00047A4F3D   M K         R R T A R E K A L Q A L F Q V N V S Q T D P N E A I E H A L E E E R S
UniRef90_Q2RK22                  A R E A A L Q V I Y R V T E E G A Y A G L A L D E V L K S A G L
UniRef90_R9CHC5          M K K     T R K N V R E A A L D I L E S I Q K N Q A Y S N L L L N T T I K K N E I
UniRef90_N6XWI8          S K M A R R R A R E L A L Q G V Y Q W L L S G N A M T T V Q R H L E A E E N L
UniRef90_W0ZC31                  S A R T K A R E L A L D I L F Q A D V R G D E P G V I L A Q R A A S E P A
UniRef90_W0DQX1                  S Q R S M T R R V A V Q A L Y Q W T L N P Q D T Y L I E K Q F Y E E G W L
UniRef90_D2RNU3          K G T A K N P R E A A L L I L E Q I F L R G A Y N L A L D Q G L R G A T L
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UniRef90_G2G0A9                  S R R L A R E T A L Q V L F Q R D L T K E P A A E A V Q R W A T E F S V
UniRef90_R5BP85          M D K G T Q V N I R R L A V Q A L L Q I N R D G A Y A N I V L Q Q M L G D N K L
UniRef90_UPI0003772146           S R R Q A R E V A L Q T L Y Q I D I S G T D P L L A L D L L L E K F S L
UniRef90_B0TEI6                  S R R Q G R E T A L Q T L F M A D V G R M E P A Y A L Q Y A S E E F G I
UniRef90_UPI00036314D8           R R K A R E L A L Q V L F Q K D L R R K G V D D I L P Y T P L P A S W
UniRef90_X0VY18          M K K T K I D P I R E I M L T L L V K I D S Q Q G Y I N I L L S K S L D K E K I
UniRef90_D1BMC4          K T N Q Q Q N I R L L A V K A L S E I N R N G A Y A N I K L Q E Y L Q K Y H L
UniRef90_G2SXS5                  N T R E L I L E L L L E V T E R G Q Y S H L V I R S V L E K Q Y L
UniRef90_C6D4F5           P A R V R T P R E L A L D T L V K V A E T G A Y S N L Q L N R V L Q E A Q L
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UniRef90_D4J0V1                  N L R E I A M E T V I E I L E N G Q F S H I Y L K A V L D K Y G L
UniRef90_R7C093                  R E C A L D V L I K V D K K E E L S H I A I S N V L E K Y Q F
UniRef90_UPI00036FD3BF   G K R R S S R E L A L K F L Y Q F E L N E G G L D E Q I K L F L E R N S S
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UniRef90_B3DWQ3                  S R R K I R E L I V Q F L Y Q W E M N G V G L D N M L L D F W D F S P L
UniRef90_UPI000395C6F5   K P A A R R N A R Q F A L Q A I Y T W Q I A K G N V A D I E A Q F L A A D K Y
UniRef90_UPI0002F3E8B3   A K Q Q T V R E A V N L L Q R V S Q S G G F S H I L I N Q A I S K H E N V
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UniRef90_G5HXP4                  R E I V L D I L T E V L E Q G A F V H L V L N Q A L Q K Q Y L
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                                     50                 60                 70                 80
QUERY             K D V D V L Y F R E L L A G V A T N T A Y L D G L M K P Y L S R L L E E L G Q V
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UniRef90_B0TJZ1   A G V D I A Y F R E L L G G V A T K K S Q L D E L I T P F L T R P L D D P V
UniRef90_Q67PQ9   D G R E R A L A T E L A Y G V T R R R A T L D W A I G Q V A A R P L E K M D P W
UniRef90_S6AJI5   P N I D E E H L T V L V R G V I A Q A Q E D V L I T P Y L D R P A G D L S P V
UniRef90_S6HLQ1   K S V D G A Y F S E L L R G V P T N K D E I D A V L A P C L D I T I E E L D P V
UniRef90_I1E2I7   K H L D V G Y F Q D L V R G V V K N H A I L D E A L K Y L D R P F E E I D F V
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UniRef90_M1Z170   R D A D K R L A T E L V Y G V L T H R L R L D Y A I R P Y L S R P L E K L E P W
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UniRef90_A1SUU6   S K T D V P Y F K E L L T G V I H R V D F L D E K L S P Y L S R K I E D V D M V
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UniRef90_J3YTA8   S D I D I S Y F Y E L H E G T A K N A G E L D K L M E P Y L S R R L T E L G Y V
UniRef90_P57868   K G V D T A Y F R R L F R Q T A E N V D A V D N L I M I P Y L D R E V S E L D P I
UniRef90_C0N8C8   D K I D R K Y F T T L I E G T I K Y Q Q A I D A E L S E A V D R D L N A V D P V
UniRef90_W4LD45   E R R D R T L I T E C V Y G V V R W Q G R I D W L L Q H V C H R P L D A L T P W
UniRef90_D8IQF1   D K A D A E H F D T L L T G A I R D A E K L R A G L A P L I D R P I K E L S P V
UniRef90_E0RSE5   P E E V R T F A Q L L L R G T L E H L P E V D D L I K K H L E H W F G R I A R T
UniRef90_Q9K9Y7   E P R D I G L L T E L V Y G T V Q R Q K T L D Y Y I A S F V A K G K R K L E D W
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UniRef90_Q2RK22   D G R E R A L A T E L A Y S A I K A W G T L D W A L G L F L R Q P L E K L P P W
UniRef90_R9CHC5   P T K D I G L L T E I V Y G T L Q R K M A L E Y Y L R P F L N K G K K I E E W
UniRef90_N6XWI8   D K T D R E L F V S L L R G A I G S A D E L R G C F E P L L S R P I A E L S P I
UniRef90_W0ZC31   R E A S W L Y A R E I V D G V L D H H E E I D E L I A T H S K D W I E R M P A V
UniRef90_W0DQX1   S G T D R V W F K D I L N Q V T Q D V A L L D D T Y A P F L D R S V K L I N P V
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UniRef90_C5BS84          T L A L L R Q A T F E L K N R V D V P Y K V V I N E A V N L A K K F G A E D S H
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UniRef90_G2LPV1          E K A I L R I A F Y E L Y N R K D I P Y K V S I N E G I E L A K L F G S E D S H
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UniRef90_I8IZX7          V L V L L R V S L Y Q M I F L D K I P D H A I L N E A V E I A K K R R G H K G I S
UniRef90_UPI00035CBEF7   V R N L L R L G F Y Q I Y Y L D R I P P H A A V N E A V N I A K R R G H Q G I S
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UniRef90_W4LD45          I R N I L R L G V Y Q C L W L E G T P A R A A V H E A V T L A R R Y G H N G T A
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UniRef90_E0RSE5          D R A I L R M S V Y A L L Y Q K E I P A R V I I D E A V E I A K Q F G T Q D S Y
UniRef90_Q9K9Y7          V R I L L R L S V Y Q L V Y L D K V P P H A I I H E A V N I A K K R G H K G I S
UniRef90_UPI00047A4F3D   D K T I L R M A A Y E L K F A E D V P A N V A I D E A V E L A K A F G D D H S S
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UniRef90_R9CHC5          V Y I L L Q M T V Y Q I V Y L D R I P D H A A I N E A V E I A K K R G H K G I S
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UniRef90_W0DQX1          E R C I L R L A V Y E L R D Q V Q V P S K V I I N E A V E L T K H F G A E D A H
UniRef90_D2RNU3          V L V I L R L G A Y Q L L Y L D R I P A S A A C N E S V K L A K K W V H E G A G
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UniRef90_UPI00047D5B31   V V V L L R M S M F Q L L F L D R V P D H A A V D E A V T I A K K R S H K G T S
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UniRef90_S6AJI5          K F V N G V L D K L A A Q V R A V E
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UniRef90_I1E2I7          K F V N G I L D K A V R V L R P
UniRef90_D5X7S3          K F V N G V L R N V V R
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UniRef90_B8I258          R F V N A V L R N I A K
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UniRef90_C3X5P8          K F V N G V L D K I A A K L R P A E
UniRef90_A1SUU6          K F V N G V L D K A L R K L R E E E Q
UniRef90_C5BS84          K F V N G V L D K V A A D L R A L E
UniRef90_B1YUJ1          K Y V N G V L D K L A A K L R P A E
UniRef90_UPI00035D17FB   R Y I N G I L D K V A Q K Q R A L E
UniRef90_A5D1B7          K F V N G V L R N I S R R L N E
UniRef90_UPI00037E9DE6   G M V N G V L R S V L R     R K E E
UniRef90_D5CNI3          K F V N G V L D K L A A E V R A T E
UniRef90_Q8Y1H9          K Y V N G V L D K L A A Q V R A V E
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UniRef90_F5S776          K F I N S I L D K L A G E L R P D E
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UniRef90_F5SCV6          G L V N G V L R S Y L R R G R E
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UniRef90_UPI0004770C0D   K Y V N G I L H A L A S Q L R A T E
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UniRef90_F3KDA7          K Y V N G I L D K L A G R L R L E A K
UniRef90_UPI0003755E23   G L V N G V L R N L D R K G I P D
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UniRef90_W8KHE9          K F V N G V I D K V A
UniRef90_H1G305          R F I N G V I D K V A A Q V
UniRef90_L7VQZ2          N F I N G V L G K I A A G L K A D E E
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UniRef90_UPI00035CBEF7   G M V N G V L R N V L R R
UniRef90_Q2S9S0          K F V N S V L D K L A P Q L R Q A E
UniRef90_UPI000362EBC7   G F V N A V L R N L L R A G Q P D
UniRef90_B8KWB3          R Y V N G V L D K L A Q D L R S I E
UniRef90_C5CPZ2          K Y V N A V L N G L A P Q L R A A E
UniRef90_W5YJP9          K F V N S V L D K L S R R L R L A E
UniRef90_F6DUA3          R F V N G I L G K I I E E
UniRef90_E0RET5          G M V N G V L R S M L R E
UniRef90_UPI00036B9AF1   R Y V N G V L N N L A K Q V R S V E
UniRef90_E8Q619          K F I N G V L N K I V T E
UniRef90_J3YTA8          K F I N G V L D K I V P K I R I N K K
UniRef90_P57868          K Y V N G V L D K V A P V L
UniRef90_C0N8C8          K Y V N G V L D K M G A R L R P H E
UniRef90_W4LD45          R L V N G V L R A L L R E
UniRef90_D8IQF1          K Y V N G V L D R F A A Q T R A T E
UniRef90_E0RSE5          R F V N G V L D A I R K T L
UniRef90_Q9K9Y7          G L V N G V L R S M Q R Q G M P
UniRef90_UPI00047A4F3D   R F V N G V L S K I K Q N L E
UniRef90_Q2RK22          G L V N G V L R H L D R Q
UniRef90_R9CHC5          G F V N A V L R N M L R Q G L P
UniRef90_N6XWI8          K F V N G V L D K T A A R L R P E E
UniRef90_W0ZC31          S F V H G V L A R V S R
UniRef90_W0DQX1          K Y I N G V V D K V A K Q L R P V E
UniRef90_D2RNU3          K L V N G A L R Q L A R T
UniRef90_E2ZCK2          K F V N A L L R N S L R Q
UniRef90_UPI00047D5B31   G F V N G L L R A F L R
UniRef90_G2G0A9          K F V N G I L D R I V D S V S K V E Q
UniRef90_R5BP85          G F V N G V L R N F I R N
UniRef90_UPI0003772146   R F V N G V L G K I W Q E
UniRef90_B0TEI6          K F V N G I L G Q L A R E L R E
UniRef90_UPI00036314D8   R F I N G V L G R L V R H L G K S K E
UniRef90_X0VY18          K F A N G V L R N I I R N
UniRef90_D1BMC4          G F V N A V L R S V L R E
UniRef90_G2SXS5          G F V N G V L R G V S R G L
UniRef90_C6D4F5          G M V N G I L R S I D R N
UniRef90_E5WD56          G M V N G V L R N V Q R K G L P D
UniRef90_D4J0V1          G F V N G V L R N I S R E
UniRef90_R7C093          G F I N G V L R N I S R K
UniRef90_UPI00036FD3BF   E F I N G I L D K V Y N E I
UniRef90_R6MRY7          G F V N G L L R N V S K T
UniRef90_B3DWQ3          K F V N G I L D S V L K D
UniRef90_UPI000395C6F5   K F V N G V L D K A Y P R L R
UniRef90_UPI0002F3E8B3   G F V N G V L R N I Q R K G V P
UniRef90_R1GXK4          K F V N G V L D K A V P T L R K
UniRef90_G5HXP4          G F V N G V L R T I S R E K E K
UniRef90_UPI000479BC79   R F V N G I L D K L A V S L R P H E
UniRef90_X1PYS5          S F V N G V L G K I N K N D K I L K K
UniRef90_D0L1W4          K Y I N G V L D K L A D R V R L N E
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                        1         10        20        30        40
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UniRef90_Q1YIM6         R G A A R L A A V Q A L Y Q M E V G G T A L L E T V A E Y I D G E T Y
UniRef90_J0B9G3         S A R R R S R E F A L Q G I Y S W L L R G A D A T S I D A H I R G D E E F
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UniRef90_UPI0003679AE2  A A R N T A R K R A F Q I I F E S D Q R G A P A G Q V L E D W I R L G S T
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UniRef90_G0VRT8         N V R E I A F Q S L L T I C R D E G Y S N I V V S K A I Q K H Q F
UniRef90_F7NJY1         S R R K A R E I A L Q T M F Q M D Y N D A D P N A A L D A C T E Y E H V
UniRef90_A0A011NUZ5     E F V L Q G L Y Q W Q V S G S D E A A I E A N L R D S E G F
UniRef90_V5HJR3         K P A A R R N A R Q F A L Q A I Y S W Q L T K E N I A T V E E Q F L S A G K Y
UniRef90_E3I0J9         P R T R A R L A A V Q A L Y Q M E M T Q R D L S L V L Q E F L G R E I Y
UniRef90_UPI00036AEA93  R G V A R L A A V Q A L Y Q L E I T S A P V N D V L K Q D I E G E S L
UniRef90_E6LED7         M S K T V T K T V R Y I A F T L L E R V D K G G A Y S N L A I K E A I A T T Q L
UniRef90_R9NFE9         S A Y T D S R E L I L E I L L Q I T R D G E Y S H I A L K H A L D Q Q Y L
UniRef90_C9LUK3         K A R E T A L K A L H E V N E K G A Y A N V A L A R S L R A A K L
UniRef90_UPI0003B7683D  M K K T V S A R D V A L D V L L Q V E Q H Q A Y S N L A L N Q A L Y H S G L
UniRef90_A6Q4Q9         A T R H Q A R E A V I G L L Y A Y D L G N P E I K K F A E D I L E E K K I
UniRef90_C6W8Z7         G A R T K A R K A V D V I Y E A D Q R G V D A V T L L S D R V G S T D V
UniRef90_R4PLY2         S N R H L G R I V A L Q T L Y E Y E F R T Q D L D E I L A R N L E R Y E S
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UniRef90_D5MFF9         G K R H R A R E L A L S L L Y Q L E F Y P L E A F E V Q A A F W A D H P A
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UniRef90_A9ET18         G A R S T G R E A A L Q M L F A V E A G G S S A P R V V A T F W R E T P G
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UniRef90_S9P072         G A R R T A R E R A L Q A L Y Q M E M T P G S I H D A L E A A W A A A E V
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UniRef90_I5AV83         R V N V R E A V E T L L A I Q K E N R Q S H L L I R D V L D Q Y A L
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UniRef90_Q3Z709         T S R R K A R E I V L Q A L Y E Q D L A G H N A E D V L K R L L T E T P Q
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UniRef90_UPI0004755B5F  M Q A L Y S W Q M T G A H P K D I L A E F R D D E E H
UniRef90_R5AEQ3         S R S V A R E V A M K L V Y S R L L G G D D P D A V L E K S E I K E P L
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UniRef90_D5HFY3         T K T R E V V L T T L L D I E K N H T F S N I A L G T A L A N Q F M
UniRef90_D1BGZ9         G A R T K A R K R A L D V L F E A E Q R H L D P I T L L A D R V A E P G T
UniRef90_R7QTI3         R E L V L E I L L A V T R D G E Y S H I A L K N V L D K Q Y L
UniRef90_UPI000248D5BF  R R L A R E L A V Q S L Y Q I E M N E A T A A D A I A H V I E E A R T
UniRef90_R5R5J4         R G I A L E I L M E I I Q Q K E Y S H I V I R N A L D K Q Y L
UniRef90_R7MKT0         K E P R Y L A V E L L N K T F K N N G Y S N I Q L N Y G L E K S E M
UniRef90_Q9K965         R R L S R L R A V Q A L Y Q M D I D T S M E K A I E S V L D E G
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UniRef90_I8J686         M K R R L A R E K A F Q S L P I E V S D I E P K V A M G H V L E E G E R
UniRef90_R6RHX8         N T R E L I L G I L L E V N K E G Q Y S H L L I R S L T L E K Q Y L
UniRef90_H1LGF1         T R H H I R E L A F Q T L F A L N T N E Q T D W K D F Y Q V L T D G K Y
UniRef90_O83979         K I G R R R A R I L A F Q A L F A W D A A G I T P E T L T Q F T W L R R N P
UniRef90_A0Z0V8         F A L Q G L Y Q W S M T R A N L A E I E A E F R I D N D F
UniRef90_K2ENM6         A N R H L A R S V A M Q S L Y E W D F K G E N L E E I V R K N I K E F A P
UniRef90_Y0KJJ8         K P K T R R K S R E L V L K A I Y R G M M N A G E L K Q I A T D A K D D P D Y
UniRef90_B3PVD4         R G A A R L A A V Q A L Y Q M D V G G T G V L E I V A E Y E A H R L G
UniRef90_X1M7F4         M D N L K V D R I R E L A L N L L V K I D H K K G Y I N I L L N N L L E K N K V
UniRef90_U7QN38         R Q L A F I L L R E V E R R G V Y A D I A L D E N L R K A D L
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                                    50             60             70             80
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UniRef90_Q1YIM6          R E A D A G W F R D V V S G V V R S Q T E I D P K I H A S L D W P L S R I D T T
UniRef90_J0B9G3          G E A D A A W F K T L L F G V M R E A P V L R E R F L P Y V D R P L E E L S P I
UniRef90_M1M3K9          K E A D I E W F N V L I Y G V L Q N H D N L I K K I L P Y L D R P L K S I S P I
UniRef90_UPI0003679AE2   D P R Q P D F T R K L V E G Y E A H A A R I D E L L G S Y S V G W L D R M P V V
UniRef90_B8I3B0          T K N D R E Y I K G I V D G V Y E K T P V L D G I I E K K A T G W I N R L S K I
UniRef90_G0VRT8          A D R D R R F Y T E L V Y G T L R C L N Y L D W I I S Q I S T R K L K K L D P V
UniRef90_F7NJY1          A D T T R T Y A H E L V Q G T K N H L P E I D R L I A G N S D W K L E R M A G V
UniRef90_A0A011NUZ5      D K A D G E F F T G L L R G V I T Q R E A L Q E Q L Q T C L D R P F G E L S P V
UniRef90_V5HJR3          G E E D V A Y F R D L L T G V A L S H Q E L D S K L R P F L S R P M Q D L D M M
UniRef90_E3I0J9          A G A D R S F F R D I V E G I A R G Q A K I D L E I A A H L A W K L S R I D S L
UniRef90_UPI00036AEA93   R D L D F A W F R S I V G G V V S D Q R E I D P R V N A A L D W P L K R V D A T
UniRef90_E6LED7          N E K D A R L L T E L V Y G T I G N Q L R L D Y Y L A P F L K _ K A K K V D R W
UniRef90_R9NFE9          D K K E R A F I T R V V N G T L E R M I E L D Y I L D Q F S K V K A S K M K P V
UniRef90_C9LUK3          S E V D R R F A T E L A Y G A A K A G G T L D W I L R R Y L N R P L S K I P P M
UniRef90_UPI0003B7683D   D D R D K R L A T E L I Y G T V A R L N T L D W I G N L L V K N G L R S L Q P W
UniRef90_A6Q4Q9          R N K Q R E F A L A L F K G T V E H L D T I D E M I K K H L E S W M E R V G H I
UniRef90_C6W8Z7          P P I N _ E Y T V S L V E G V T A H R A R I D D L I S E H S E G W L Q R M P A V
UniRef90_R4PLY2          A I D D T A F V K S L V E G V V K E Q A H L D E T I Q P I A E W P I E Q I A R I
UniRef90_G4CGV5          A K A D D A L F T N V F F G A H Q A Q R E L M Q T M R P L L D R D E K D L N P I
UniRef90_D5MFF9          G P E I R S L T D E L V Q G T L Q H Q K P I D E V L A S H V E H W L S R L A L V
UniRef90_D7CLQ8          N G S Q H A L V T E L V N G T V R M R K H L D W V L N L F L S K P I Q K Q N P W
UniRef90_D6XTR5          K E V D V A L L T E I V Y G T L Q H Q R R L D Y Y V S A F S K K E L N K L E N W
UniRef90_UPI000262A2DF   R A A S W L Y A R E I I V D G V T D H R D R I D E L I M S Y A Q G W L E R M P H V
UniRef90_I9CKR4          Q E V D T A F F R D L L R G T V E E Q R A I D Q K L D Q A L A W P L R R I E I V
UniRef90_R6DSJ6          E A R D T A L C T R M T Y G V V Q N R T L L D Y Y I D H W C T Q K A A R L E P V
UniRef90_A9ET18          D P E G R A Y A D E V V V G V A E D L A A V D E A I R K A S T N W L E R M A R V
UniRef90_L0K7J7          L D L R G S F L S D I I E G T Y H K K H E L D Q L V D D N S N W K M E R M G K V
UniRef90_UPI00037448F8   F K A D E P L F N Q V F E N A F E T Q T E L L N L M L P H L D R A L D E V S P I
UniRef90_F4A2D7          S T L D R A F I T D M V Y G V T R Y R L T L D W L I K R Y S R G G _ K A S P W
UniRef90_D8HZE7          D P I G D Y T I T _ L V E G V T G R K T Q I D E L L A E H A Q G W L E R M P K V
UniRef90_E4WH10          D D P V A P Y T V T V V Q G V A E N L D R L D Q V I E S H L Q D W L D R L P A V
UniRef90_V4LBW5          I E A D L R L F N D L L Q G V V E H A D E I N D A L R P L V N R P L R G I D P V
UniRef90_S9P072          E P E A V K F A R E L T E G V M A H R A E I D R L I E Q H S H N W L D R M S R I
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UniRef90_C8XJK9          P D R H S D Y A E G L V R G F V E H Q D R V D T L L A E H S R G W V D R M P A V
UniRef90_Q3ARJ4          E R V E R A L A T E L V N G V L R W Q L Q L D S R I S L A Y H H K L E A A A P V
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UniRef90_F4A2D7           G Y V  N A V L R R L I  Q E
UniRef90_D8HZE7           R F V  N G V L G R I
UniRef90_E4WH10           G F V  N G V L G Q V V
UniRef90_V4LBW5           R F V  N G V L D K L A R Q V R R D E
UniRef90_S9P072           A F V  N G L L D R V A
UniRef90_UPI000289386A    K F V  N G V L S K Y
UniRef90_C8XJK9           R F V  N G V L G Q I  A
UniRef90_Q3ARJ4           K L V  N G V L R H L
UniRef90_R6S0L6           G F V  N G V L R N I  S R N L
UniRef90_I5AV83           G F V  N G V L R S I  A R E P E K V K
UniRef90_A6W2L6           K Y V  N G I L D K L A Q R V R R E E
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UniRef90_UPI0004721ADF    G L V  N G V L R S V L R Q
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UniRef90_R9IX06           G F V  N G V L R N I  S R N L
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UniRef90_C4L3F7           K L V  N G V L G N I  I K E
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UniRef90_Q3Z709           R F I  N G V L S S V S K A L A D T A K
UniRef90_S0FVH0           S F V  N G I L D R I
UniRef90_C0GE32           K F L  N G V L D K L A R H H E G K E
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UniRef90_R5AEQ3           S F V  N G I L G T I  A K T L
UniRef90_UPI0003B6D951    G F I  N G L L G R I  A Q T
UniRef90_K9WI11           G V V  N G L L R Q Y E R
UniRef90_UPI0002DAC216    K F V  N A V L S K V K E H L
UniRef90_I6TA06           K F V  N G V L R N Y Q R Q G K P D
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UniRef90_D1BGZ9           V F V  N G L L G R I L   E L K P
UniRef90_R7QTI3           G F V  N G V L R N I  S R N M E
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UniRef90_R7MKT0           G M V  N A V L R N F I  R A G K
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UniRef90_B4S6M0           R I V  N G V L R S V A
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UniRef90_W7C3Y1        D Y V K K L V F G V S E H K Q E L D Q K I E A H L N W K L D R L N K V
UniRef90_R4LUW6        P H P D H D Y T I S L V Q G V A E H L D R I D E L I A S Y A E G W I D R M P V V
UniRef90_M9M3B1        E R A D A A L A T E L V Y G T I Q R L N T I D S V L A R K V Q R G L A K L K P W
UniRef90_D9QHN4        A E A D E A Y F A D V V R G V I Q S Q R E I D A S V K A A S N W R L E R L D A T
UniRef90_B2V4R8        K E L D I T Y I K R I L I G V E N N K D N I D E A I S K N L C N W I D R I S K V
UniRef90_G5H4X6        T E R D R R F L T E L V Y G V V K A G D T I D Y M I G K Y V S D L R K A Q P A
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UniRef90_W7C3Y1         K F I N G V L A N I A Q N
UniRef90_R4LUW6         R F L N G I L G R I A E
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UniRef90_B2V4R8         S F I N G V L D N I L K K
UniRef90_G5H4X6         S F V N G V L R T A L R E
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UniRef90_K0J3H4          A H K D Q A L F T E L V Y G T L Q R K L T L D Y F L N H F V D   P N K K V E K W
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UniRef90_M5S9U3          R F V N G V L D R L Y K E L E A
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UniRef90_B9DPM6          K V V N G I L R N M M R S N L P N
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UniRef90_UPI00036F4898           R G A A R L A A V Q A T Y Q L S L T G G R I D D V L S D L I E D P D L
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UniRef90_Q4JVG6         S K P V P E Y T Q Q I V P G V A T N L D A L D E A I   A L H L D W Q L D R L P A V
UniRef90_UPI0002491324  S N A D S R L M T N I V Y G V L Q H R Y V L E Y Q I   K P Y I Q D   K K V E Q W
UniRef90_Z9JWE3         S G R D A A F A T E L F Y G S L R A Q G R L D A I I   A A C V D R G L D D I E G D
UniRef90_F8AZW6         S A R D R G F A T E L T Y G R L R A L G V L D G L L   A T V A N R P V D E V D P P
UniRef90_UPI0004644E11  E V A D L E Y F E D L V R G V L G H H A A L D A S L   Q P F L D R P I G E V D Q I
UniRef90_UPI0003B3C9ED  A E A E P D F F D D V V T G V D A R R D E I D I L I   G V R L A W K L E R L D K T
UniRef90_UPI00047EF74E  E P R D A A F A T Q L A Y G T L R A T G T L D A V L   T T L V S R P L A E L D P K
UniRef90_U4TUM9         T S V D T V L A T T I V Y G S L Q H W L T L D W Q L   A P F L H G   K K V E P W
UniRef90_E8WZL3         D E E T R G F A E D L Y R I A T S R G T E I D A L I   E E H S Q N W L E R M P V V
UniRef90_UPI00036F4898  E T E E V V P L I E L V R G V D A M K T R L D E V I   D A S L N W D S T R L E P L
UniRef90_I9L802         A Q A E I T F F D D I V Q G T V A R R D E I D A L I   S A R L T W S I T R L D K T
UniRef90_D7CVY2         E E E G L A F A E R L L R A F H T H R E E V D A R L   S E A L E G W F A Q M A Q T
UniRef90_A9IVB9         L D A D F Q W F L A I I T G V V Q D Q K Q L D P L L   H Q Q L E W S L S R L D S I
UniRef90_UPI0003FA2C68  D T K S K A F I K Y L A G G T V E R K L T L D Y V I   N Q F S K T P T E K M A L P
UniRef90_UPI0003B39105  D P R D K A F I K Y L T E G V V S Y Q I K L D Y V I   G Q F A K V K   G K M K P L
UniRef90_D7BAF7         E E A S L E F A R R L L E G Y Q R H E S E I D E V L   G N T I Q G W F G Q M A K T
UniRef90_U2TLW9           G P L N P Y A Q T L A L T A S D K I P A L D G I I   T R F S K R W V M R M P A V
UniRef90_UPI000368484C  Q T P L P T Y A I E I V Q G V A H H R R T I D K A L   S E A S T S W V K R M P A I
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UniRef90_G7M118         K E I D L T Y V K Q A L I G I E N N K E E I D K V I   E A N L H N W I D R I S K V
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UniRef90_R6ZFJ1         N T A D C D Q I R D K V N R I V E K L D E I D E K L   N M T A E G W T K R M G K V
UniRef90_R6Y1I2         V P S   A F A E Q E A L G V E A H R E E I D S V I   E Q H I R G W L R R L S K V
UniRef90_R9JFL0         K D E D A A Y I S T K S N K I I E K L D E L D A M I   N K Q A K G W T Q R M G K V
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UniRef90_V4J612         S R M A R E Y A F S L I N G V S N N K S R I D S I I   T S H A N W R L D R L A A T
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UniRef90_R5GX49         S E K D A A Y I R S K Y E K L A E K L P E I D K L I   N E T A I G W T Q R M G K V
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UniRef90_V6Z5W0         H E K D R Q L I T E I V Y G T V S R K I T L E W Y L A H F I D D R   N R L E P W
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UniRef90_A0A010PE76     D K R D A G F A T E L T Y G T L R G T G T Y D A I L   S A C V D R P L S E L D A P
UniRef90_UPI000472F94F  H T V H I G Y Y H E M M R D I P E Q I E A L D A L I   S Q H L D R E I D K L D T V
UniRef90_B4U4H4         S D K D K A L V T I I S R K I T L E W Y L A H Y I E D R   D R L D K W
UniRef90_Q1WUB0         S V K D T K L L T T I V Y G V I Q H K L T L E Y W L   E P F I K   K A N K L Q L W
UniRef90_R5VAQ2         T D Q D F K Y I A D R Y R D I Y N H L T E I D E A I   N E V A K G W K T R M G K V
UniRef90_M1WKR2         S E T A R Q F A R D L V L G V D A K R T E L D A T I   R D N S Q H W I E R I A L V
UniRef90_C0EFY5         E F E V N S D V I A L F T G V Q Q H I S E L D R L I   S E H L T K W I T R L S K V
UniRef90_A0A010ZVW3     T G R D A A F V T E L T Y G T L R H R G T L D A I L   A A G S S R P I D K V D L R
UniRef90_F9NT36         T N P V R P F A A D L V R G V A A T Q V G L D S I L   T D C L S W T L A R M P R V
UniRef90_W7Z288         P N E       F Y H A L V Y G T L E K R D E I D G Y L   S G H L K Y T I D R L G H V
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UniRef90_UPI0003B6F3D5  L D A N Q K S F I K L A E G T I E R Q I S L D Y V I   G L F S K T P I S K M A K P
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UniRef90_D4MXR7         N E K T Q K E I T E K T E N L I E H L D E Q I S A H T N A W L E R L G K A
UniRef90_U5PF11         S E V D K S L V T E I V Y G V S R K L T L E W Y L S H F V A D R   D Q V D P W
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UniRef90_C4RHR2         T G R D A A F A T E L T Y G T L R H L G T L D A I L   T D A A G R D V A R I D P P
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UniRef90_F6EMG2         T G R D A A F A T E L T Y G C R A F G L D A I I   G A A A D R D V S T L D G D
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UniRef90_A8FKG9         R N E Q K N F T L N L Y H G I L D N L N N I D E T L   N S F L D N Q I T A L G H V
UniRef90_S6AUD5         S S A D K G L V T E I V Y G T V A R K I T L E W Y L   H V I E D R   D K L D S W
UniRef90_UPI0003B4ACCB  E S R D R L F V R E L V L G V L R W K L R L D Y I I   D T Y Y E K K S K K L D P A
UniRef90_I0GJH4         S P V S L E Y A L K L V Q G T I E N L S D I D E K I   K S L L K N W F E R L N A V
UniRef90_D1KDZ6         G K I S K A F F S N L F I N L K N R I E I D A Q I   A P T L S R E T D E L G S V
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                                           90            100           110           120
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UniRef90_F8AZW6          V R D A L R L G A Y Q L L R T R V P A R A A V D S T V D L V R R T S G E R P V
UniRef90_UPI0004644E11   E R A M L R I A A Y E L Q H R I D V P Y R V V I D E A L K T V K R F G S E H G H
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UniRef90_UPI00047EF74E   V L D L L R L G A Y Q L I D L R V P A H A A V D T T V A L T R A I V G T G A S
UniRef90_U4TUM9          V H T L L L T A L Y Q M T A L D R V P D R A V L F D S T E I A K K R G N P G L A
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UniRef90_UPI00036F4898   T R S I L R C G L Y E L L E R P T M P A R G C I S E Y V D I T R S F F E G A E P
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UniRef90_UPI000368484C   D R N L A R M A T W E I V Y N E E I P A G V A I N E A I A L A K T Y A G D E T P
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UniRef90_R9JFL0          D L T I L R L A V Y E I V F D E D V P T G V A I N E A V E L A K R F G Q E E S S
UniRef90_Q03FZ6          D R V I L Q M G T Y E I K Y T E T P D K V A I N E A L E L A K K Y T D E D A R
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UniRef90_B4U4H4          V Y Y L L M L S L Y Q L A Y L D K V P A H A I V N D A V N L A K A R A H G R G A
UniRef90_Q1WUB0          V K E L L L V S L Y Q M V Y L D K I P D R A V F N E S I E I A K I K G H T G I R
UniRef90_R5VAQ2          D L A L I R L A V Y E I R Y D D E I P F K V A I N E A V E L A K Q Y G T N D S P
UniRef90_M1WKR2          E L S I L R L S L Y E M I Y T D I P V K A A I N E A I E L S K T F G D E K S R
UniRef90_C0EFY5          I L A I L R L A V Y E I V Y V E R V A E A P I A I N E A V A K E Y A T Q E D A
UniRef90_A0A010ZVW3      V L Q A L R L G A Y Q L L F T R V P D H A A V A G T V E V A R V A L T D G P A
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UniRef90_W7Z288          D R A I A R M S L Y E M L Y I E D I E M N I S L N E A L E L A K A F G G Q D A G
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UniRef90_UPI0003B6F3D5   I L Y I I R M G T F Q I L Y M D S V P D S A A V N E S V K L A A K L H F M G L K
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UniRef90_G4QCK1          K F I N G A L  D K L A E K I R I H E
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UniRef90_R6CC10          G F V N G V L  R K L S K E K R P D K K
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UniRef90_E1TQG6            R W L A V A A L A K I   K N G A Y S N L Q L N Q L I N D H Q M
UniRef90_R6U843          P I K R R E I R E S A F L L I F E K M F R Q D D L D D I F M S A M E V N E I
UniRef90_UPI0003B544BA M K   R S Q I R E N I F K L L F D F N S E D M K E Q L N F Y L D D S K M
UniRef90_G5G6U5        K K T S Q K N V R T L V A V Q I I F Q V L E Q G K S L S V L L P E   A Q S S L
UniRef90_D1B5H9          P K K R R R A R E L A L Q L G Y L M D M R Q E L G I N E V L G S L P L D E E
UniRef90_Q2WB24        M K R A S S T S P R A L A V L S M V L D K G R L L D D V L D D S R L S R L
UniRef90_G2IGY4               N L R Y D C V I L N N V L Q A Y S N I T L K D Y L D K S D L
UniRef90_R5SNS6           S R S K A R E H A L K V L Y A K E I N P N T A E V S A D I   S D A L
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                              50             60             70             80
UniRef90_R9L4P8        E P A P P E A A D E L I  R G V Q E Y Q A A I  D E R L E G A S E N W L S R M P I  V
UniRef90_C7H6X0        R P V D V F G  Q R L L S A Y Y S H S A E V D D L I  R D H L R N W M E R L P R V
UniRef90_F5TC65        S D L D S K F L R E I  V Y G T L E N R I  Y L D Y I  I  K K L C K L R I  K K F N P Y
UniRef90_UPI000395AE57 A P R D A A L L Q E I  C Y G T L R W L P R L E H I  V Q A L I  D K P L K G K Q R V
UniRef90_C3API3        D R K D I G L L T E I  V Y G T I  Q R R D T L D Y Y L Q P F L R K K V E        A W
UniRef90_R5QKF2        T E K E Q K Q I  Q D K Y D Q I  L A H L D K I  D A Q I  N E K S V G W V S R L G K V
UniRef90_W2EZW5        S G R D A A L A T E L A Y G T L R G L G T Y D E V I  A A C S D R A P E D V D P P
UniRef90_U2E019        K T R P S E H L Y E T I  Y G V M E K R T E L D I  I  S R H L E K W L T R L S F L
UniRef90_E8RCI6        P D I  D R G L V K T L I  Y G V L R Q K E Y L D H I  L R T F A K H P L R K M K P R
UniRef90_Y5PIG9        A T V D K A L F T E L V Y G T I  K R K M T L D F Y L K P F V K T        R I  K G W
UniRef90_E3B6Y7        P A P L P E Y T A V L V R G V V D H W R T L N E A L E T Y A R G W L D R M P A V
UniRef90_D0YSW2        N R R D A A F A T E L A Y G T L R L Q G R Y D A I  I  A R L V D R D L G E L D A D
UniRef90_C3XMJ2        K N A Q N E F A K T L F N G V L E H L E E V D L R I  K H Q L K N W F E R I  G D M
UniRef90_M5A0I0              E L T Q L I  V R G V A E H G E R L D A A I  D R R A T G W L A R M P V I
UniRef90_Q894G5        D E V D L E Y L I  H T L K G V E E N S K V L D E H I  E K Y L K N W L N R L A K V
UniRef90_UPI00046A4E66 S G K D K A L L A E L C Y G V M R T L P Q L D K R V S D C L S K Q F K G K Q R I
UniRef90_G2FUS5        D S R D R Q F V T L L V N G A L K H R L T L D Y V L R K Y L S K P M S A L P H E
UniRef90_E4RLT8        D Q R D K N L F T E I  F Y G V I  R N K L Y L D H I  I  K H F S N K S L E K M D K E
UniRef90_S5XYX3        P E A D E K L F S R I  V E D A V T W Q S K I  D Q M T D R A L K W P I  D R I  D P V
UniRef90_R6M0Q5        K K I  D T E Y L N T L I  N G V L N N I  D D I  D K S I  E K Y I  E S W I  D R L G L T
UniRef90_D2RBE8        Q T P L P E Y A V E I  V R G V G E R R N R I  D K T L N R Y S T G W V G R M A V I
UniRef90_B5RLI1        D G D L K L F Y S V L V N G T Y D N L E S I  D K L I  S G S L N W R L D R M D K V
UniRef90_B1ZVQ6        P R D H Y A F G E E L I  H G V I  E H S D D I  D A R I  K G L A H N W F D R I  A K I
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UniRef90_D6DH01        D V Y D S G Y V K N K V E K V L E K L T E L D T A I  N E T A K G W T R R M G K V
UniRef90_V7I042        E N E V P A D I  K E L V E G V L T N R L A I  D D L I  G T H L K W S I  A R L N K A
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UniRef90_D7AG84        K G P D R G L L T E L V Y G V L R R T A T L D Y L V D L F C A T R A A K L E R S
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UniRef90_V6MF19        S D K D K A L L Q E I  C F G V L R T L P Q L E W I  I  Q Q L M D K P L K G K Q R I
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UniRef90_E4Q5Y1        R D I  D E E Y L E K L L K G V I  Q N Q Q R I  D S L I  E K Y S K W P L S R L P M V
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UniRef90_E3DRK1        L S E D L Y V A    E I  L E G I  I  L E L E L L D A Q I  D Q Y A I  N W I  E R M P A I
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UniRef90_UPI0003B5F45D    P P L R E Y T A E L V E G V M A N L R S I  D A R L S Q A L D W S L P R M P R V
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UniRef90_K9EZH5        N K L D A S F A T N L T Y G T L R L Q G R Y D A V I  A R C S D R P V D D I  D A P
UniRef90_U2IUI8        S Q Q D K A L V T E I  V Y G V V A R K I  T L E W Q L A H F I  E D R    E K L E P W
UniRef90_R5MQC9        F S E S    A F A S S L A K A V F E N I  D A V D A V I  D K Y S I  G W K K R L P K T
UniRef90_K7YPT1        S D R D R N F A R S L V A N S L R R L G H I  D Q V I  N I  C L T R P L P M K A S I
UniRef90_D4YQH2        S G P D A A M C T E M T Y G T L R A R R F Y D A V I  E K V S D R P V D Q I  E A A
UniRef90_UPI0003B74299 A E A D V A F F D D V V R G V A E R L G E I  D L L V E Q R L T W S L E R L D K P
UniRef90_A4EDE7        T E G D D T F R A L M E K A V D D Q A A I  D Q L T D R A L K W P I  A R I  D P T
UniRef90_E8JEZ4        Q T P L P E Y S I  Q I  I  A G V A D S L R R I  D D L I  E A H A R V P L D R V A A V
UniRef90_UPI00031AA6EE R A D D A A L A T E L T Y G T L R A R G L Y D A I  I  A E A A S R K V D T L E I  P
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UniRef90_R5MUB6           E I  D N E F V R D I  I  Y G V I  T Y E D E I  I  N I  A N K Y M K N W I  S R I  D K T
UniRef90_K9VTF2        S R S D R N L V T G V S V R R L R S L D A L L D Q L G K K K A N Q Q N P D
UniRef90_UPI000367D79D E T R D K G F A T E L L Y G T L R M Q G R H D Y I  L Q Q V F D R P G S E V D P G
UniRef90_A0A016QNM3    N E E A L A F A R Q L V E G L R D H R P D V D A T L R R T I  R G W F E Q M A Q T
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UniRef90_S9QTM6        D P R D A L I  T E L V Y G T T R R E L A L D A V I  T R F A D R K L D A L E D K
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UniRef90_R5RU97        D E K D K R E L R D K F N E L V E N L E D I  D A K I  E E K A N G W I  N R I  A K S
UniRef90_R5FUE6        K E E D R A Y L E K R V E K I  M E L I  P E I  D E K I  N E I  A E G W T R R M G K V
UniRef90_C5EH32        Y D T D P E G V L Q V L H K V I  D K I  P E I  D A K L N E V A G W K K R M G K V
UniRef90_R5NAW2           E I  E N E F V K E I  V Q T T Y K N E L D N L A N K Y M K D W I  D R L G F T
UniRef90_R7WKG5        S G R D A A F A T E L T Y G S A R A L G F L D A V I  A D A A G R P V A D I  D G P
UniRef90_UPI00034B7087 S P A D K H L A T E L V Y G T V A R K I  T L E W Q L A H F I  E D R    E K M D S W
UniRef90_M1E5X4        Q P E D F E F I  R V R A E G I  I  E N K D A I  D K L L D E L S D W P T E R M V V T
UniRef90_B2VK95        G D K D K A L L Q E I  C Y G V L R T L P Q L E W V I  G R L M S D R P M T G K Q R A
UniRef90_UPI000255D58C V V N D    Y T V T L V Q G V S E E Q E R L D E L I  S T Y A R G W L D R M P R V
UniRef90_E1TQG6        D R R D I  N L L T N M V Y G V I  Q H R L T L E Y W L T P F V R H P    H Q I  D P W
UniRef90_R6U843        I  V N D E    V K K L V E N V C E K Q D E I  D S I  I  S K F S K R T V E R L P K I
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UniRef90_G5G6U5        K A Q D L P L L Q E I  C F G V C R V L P R L E Q I  V A Q L V D K P L R G K K S I
UniRef90_D1B5H9        D P E V R D Y A V A L T S G L Y R E R Q R L E G I  I  R E R L V G W P E R M V A V
UniRef90_Q2WB24        E D R D R G F V R M L C Y G T T L R R L G Q I  D T L I  E H C L D K P M R A G A A G
UniRef90_G2IGY4        K Y I  D K K L V T I  Y G T I  R Y K L T I  D L S K F V K    K L D Q N D    I
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                          90        100       110       120
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UniRef90_F5TC65          I L N I L R I S I Y Q I I F M D K I P E F A I I N E A V N L T K V F K L K K F S
UniRef90_UPI000395AE57   F H H L L L V G L Y Q L G Y M   R I P A H A A V A E T V N A T K T L K R P Q L R
UniRef90_C3API3          V K I L L R L S L Y Q M L Y L D R V P E R A A I H E A V E I A K R R G H K G I A
UniRef90_R5QKF2          E L A I M R L A V Y E I L F D D T I P G S V S I N E A V E L A K K Y G A Q E S P
UniRef90_W2EZW5          L L D A I R L A V Y H Q L L   R T R I P P H A A V S A T I D L V R L R V G P G P S
UniRef90_U2E019          D Q S I L R Y A V Y E M L Y V D T V P A V V A I D E A V E F T K R Y G D G K A K
UniRef90_E8RCI6          T L M T L R I G V Y Q L L F L S R I P E S A A V N A T V N T L K A A S Q P W L I
UniRef90_Y5PIG9          V R Q L L W M S L Y Q Y V F L D K I P N H A I I N E A V N I A K R R G G Q H N G
UniRef90_E3B6Y7          D R A L L R V A A Y E V L Y V D D V P D G V A V S E A K N L A T E L S T D N S P
UniRef90_D0YSW2          V L T V L R L G C H E L L G M   R V E S Y A A V D S A V D L A R D R I S T G P A
UniRef90_C3XMJ2          E R A I L R L G A Y E I I F S G   M D K A I V I N E A L E I T K N F S N E T S T
UniRef90_M5A0I0          D L N V L R I G A F E L A E R V D V P T A V V L D E A V E L A K Q F S T D D S G
UniRef90_Q894G5          D L A I L R L C S Y E I L F S N E V P D N V A I N E G V E L A K K Y G D D K S P
UniRef90_UPI00046A4E66   V H Q L L L V G C Y Q L   Y F T R I P A H A A I S E T A E A C R Q L K F E N L V
UniRef90_G2FUS5          V R A I L R I G A F Q L L Y V D K V P D A V A V N E S V E L A K L F     P K Y T
UniRef90_E4RLT8          V L L G L R I G I Y Q L L F L D K I P A R A A I Y E S V E A V K M L K N K G A A
UniRef90_S5XYX3          L R A V F R A A G A E L M   T P A T P P K V A I T E Y V R I A Q A F F D D G E S
UniRef90_R6M0Q5          D Q A I L R I S V Y E L I Y   T D T P D L V C I N E A I E L S K K Y S D E K V S
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UniRef90_B5RLI1          D L A I L R M S V Y S L K F Q D D V P K R V I I D E A I L I A K K Y G N K N S D
UniRef90_B1ZVQ6          D L T I L R L A I F E I L H R K D I P P V V S I N E A L D L S K Q F S N A D A K
UniRef90_UPI00046A6ED9   L D L L L M S A V Y Q L H F L D K I P D H A V L N E S T E I A K Q K A G R G A S
UniRef90_D6DH01          E L T I L R L A L F E I R Y D E E V P D K V A I N E A V E L A K K F G G D E S P
UniRef90_V7I042          D L A I L R L A V Y E M K Y   T E T P A K I A L N E A L Q L A K E F S D D K S R
UniRef90_R7N4V5          D L T I L R L A V Y E I E Y D E D I P T G V A I N E A V E L A K K F G Q D S S A
UniRef90_D4YGE7          V W S L L I V S A Y Q M Y L L D N I P N Y A V V D E A V R I V R K R G N Q T L A
UniRef90_UPI000411DFD7   D L A V L R V A T W E M L A K D D V P A V I A I D E A I S I V K S L S T E A S A
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UniRef90_R5ITR1          E L T I L R L A V Y E M L Y D D T I P E K V S V N E A V E L A K K F G G N E S P
UniRef90_H3KGZ8          E H A V L Y V G S Y E L L R C P Q T P W R V V L N E S V E L A K E F G S     G Y
UniRef90_Q5LSK4          L R A L F R A A G A E F   S Q N D T P P K V V I T E F V D I A R A F F P E G E T
UniRef90_D7AG84          V L I L L R L G L Y Q I F F L D R I P V S A A V N E T V T L A R E K S   P R A S
UniRef90_G8PDJ7          D L T I L E L G T F E I L H   T E T P N S V A I N E A I E L A K E Y T D E S S K
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UniRef90_E4Q5Y1          E L E L M R V A V Y E L L F E E D V P V S V A I D E A V D L S N I F G I E K A P
UniRef90_I2K6X2          E K A I M R L G A Y E I L   V A K T D K A I I I N E A V E L A K E L A D E K S P
UniRef90_E3DRK1          D R N I L R I A A Y E I Q H   D I P A K V A I N E A V K I A K K Y A D D S S P
UniRef90_R5IGP7          A V A I M E V C M Y E A L Y I D D A P I S A A I N E A V E L T R K Y E N E D V V
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UniRef90_F2NNY1          D L T V L R L A A Y E M L Y E P   T P Y A P L I E V A V K I A K K Y G G E D S G
UniRef90_A7GWZ7          E L A I L R L G V Y E M K F   T G T D K A V I N E A I E L A K E L G G D S A P
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UniRef90_D5HI83          E L A I L R L G V Y E V K Y D E S I P E K V A I N E A V E L A K K Y C D A S A S
UniRef90_B1C650          V I A V L R L G V F E I M Y N E D I P P L V G L N E A V S L A H T Y S D E K E A
UniRef90_UPI0003B5F45D   D R A L A R I A V Y E I D H G G   I D H R V A I A E A L V L A G E L S T D E S P
UniRef90_U1LXK3          F Q F L L L Y V G I Y Q L Q H M   R V P A H A A V A E T V N A A N K L Q A P G L K
UniRef90_V8CIL5          E K S I L R L G A Y E I L Y   T Q T D S P I I I N E A I E L A K M Y G D D N A P
UniRef90_UPI00035F23AB   H R N I L R L G A F Q L L H L D G I P A H A A I F E T V Q L A K S S R G R K T A
UniRef90_S2VUH7          D R A I L R V G A W E I V W N E D V P S V T A I D E A V T L A K D I S T D E S P
UniRef90_K9EZH5          V L D L L R M G C H Q L I E L G   T P P H A A I N E T V A I A R N E L G Q G T G
UniRef90_U2IUI8          V Y T L L L L S L Y Q L L Y L N K I P H H A I V N E A V N L A K V R S Q K G A D
UniRef90_R5MQC9          T L A I L R L A C E M M F V D S I P E S V S I N E A V E L A K F A T A E D A
UniRef90_K7YPT1          V R D V L R I A A T E L L L L   N I P P Y A T I H S A V N L V R S Q G E D K F A
UniRef90_D4YQH2          V L N A M R L G A H Q V L A M   R V A D H A A V S E T V G V I S K N A D T K A A
UniRef90_UPI0003B74299   M K A I L R A G T Y E L L A R A D V P V G A A I S S Y V D V A H A F Y Q K R E A
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UniRef90_UPI000395AE57   G L I N A I L R N Y Q R D
UniRef90_C3API3          G M V N G V L R S I Q R E G V P
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UniRef90_W2EZW5          R Y A N A V L R K V A
UniRef90_U2E019          A F N N S I L D K I R K S L
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UniRef90_Y5PIG9          N I V N A I L R H I F K S D L P
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UniRef90_C3XMJ2          K F I N G I L D G I A K N
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UniRef90_E3DRK1          S F I N G I L S K F A
UniRef90_R5IGP7          S F V N G I L G G F A R E V Q Q
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UniRef90_F2NNY1          R F V N G V L G R L K R R I D A G E
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UniRef90_R5MQC9          S F V N G I L G S Y S R D N K N E
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UniRef90_UPI0003B74299   G F V N G L L D A I G K Q V R
UniRef90_A4EDE7          K F V N A V L D H M A R E A Q P E
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UniRef90_G9ZS37          R F V T G I L H Q M D R K G L S N
UniRef90_R5RU97          G F I N G I L A S V V K E V
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UniRef90_Q2WB24          K L L N A V L R R L D R E G R D
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UniRef90_R5SNS6          R F I N G I L S A V
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UniRef90_U1LTT5                 A R L V A R D V V L A V D R D D A Y A N L L L P A R I R E A G L
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UniRef90_F8I1T3             R V N A R Q V A L D T I A L V E   S G A P I N E A L S R V   K G L
UniRef90_R5NVP0           T R R S I R E N I F L I V F K A E F N N Q E E M E E Q I R Y S E T G K V
UniRef90_F3Z0N1               A R R A A L E A V S K S L N T S T D V Q A A L D T Q I T A R R L
UniRef90_X4V5N5             K T R A Q A A L V I Q Q V L D Q G Q S L S A V L P A   A Q E K V
UniRef90_UPI00026CA0C8              L Y Q H D M E A T P I A Q L L N E F I E D A E Y
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UniRef90_M4U3A2             N V R A L A A Q V L N L V V E Q G Q S L S Q A L P   V L Q K D L
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UniRef90_UPI0003B3BA49        V D I L Y E A E N R D T D P E E R E A L W R E D H E S
UniRef90_I8QV89                           M R G V G V L E I L T A R R A Q A D
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UniRef90_Q04EK8           S R Q Q I R E L S F Q A I F A L E I N S D Q D K A L L K K V L F K Q N T
UniRef90_E0NP19               R R E A L Q I L K N V S   S G A F L S E E L N K S R S E N
UniRef90_UPI0002E0E0FA        N V R A A A A K V L F E V V D Q G Y S L S S S L P A   A Q Q T I
UniRef90_C0T013             H E V R V L A F Q K I Y S I D I N Q S A M D D I F D F N I E D K G L
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UniRef90_A9FBW8            V A A R V L A R V W G S D A F A S A A L D A E L R R P A L
UniRef90_N9QFR7           N L R A Q V V K T L L A V Q   N G Q S L A S V L N Q H I   N I V
UniRef90_C7M0X2           R E R V L E L L Y E A D T K G E A P A D L L
UniRef90_H1G0D0          A R E A A L G V I L R V L R D G V S L F E A L P P R L D Q     V
UniRef90_I3YS66
UniRef90_D4YGA5
UniRef90_F9EGV7         T A R T K A R R A V E I L F E A D Q R G E R L R E F A A E R A V H S A N
UniRef90_UPI0004721FDD     R S S R A L A H A L L M D V L E K G R S L S A S R D R H L D K N   I I
UniRef90_U7LZB8              D I L Y E A E N R D V D P V A I V E D R V A L A R E
UniRef90_R5STA4                         D Q P L L P E F K
UniRef90_A4BK87          T N T R L I A A E I L L Q V V D E G R S L N D E L P R R L K H     I
UniRef90_UPI00037B643E  R H E Q R K I F Q L I F Q M D H G S V E L E N T A F Y D L Y N E
UniRef90_Q2NCI1                                                 D G E H Y
UniRef90_A0YKZ7
UniRef90_D3F1H6          A R Q V A A A V L R R V E S D G A Y A D R A L A G E A R R A G L
UniRef90_UPI0003A8EB54    R Q C A V E A T E Q V V L H G A S L N S V L E P A V A   D L
UniRef90_T2J601                    A S A V E F P E I V Q L A T
UniRef90_UPI0003697F5A  N S R I A A A D L L I E T L D N G R T L D E A M E T S E A Y G K L
UniRef90_D7E4L0             Q T A I N Q V G T A V D F P E L I Q L A N Q
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                              50            60            70          80
UniRef90_F5YJB4      A T L D G G T A R L L I Q G T I E N I A A V D A M I R S H L K N W F S R L N R V
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UniRef90_R6YG55      N A R D H F V Q R E A L G T I E R A I E D E Y L G A V S H T P V V K M D P V
UniRef90_D4J416      E Q K E V D Y I V Q K T E K I M A M I P E L D T M V N E H S V G W T E R M G K V
UniRef90_V4RJ21      V P P D V N F L R D L L R G V V A E Q R K V D A E V N R V L A W P L K R L D V T
UniRef90_W1JC58      S D K D K A L L Q E L C F G V M R V L P Q L E W F I T Q L M A K P L K G K Q R I
UniRef90_X0PEC9      S S Q D T N F V T N L V Y G V L Q H K L T L D Y Q V Q P F L K   T A K K T Q P W
UniRef90_C0QT45      S K K T V D Y I Y S I L K G I D E H L P E I D D I L R E N L K N W L E R L G Y P
UniRef90_J9A1Y9      L D A D R D H F E A L L R G V V D E Q R Q I D K A I N D L L R W V L R R L D I T
UniRef90_UPI000237EC53 P D A D A R L F G I V V R G A M A R Q D R I D A L L H D I L S W P L A R L D P V
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UniRef90_E6PFK4      D A R D R R F A T E L S Y G A I K M R R A L D D A L R P F L K E R A K T L P S T
UniRef90_X8IPK9      K A L R Q K Q A I E T L E A I R D H I A D I D R L I A D N I D H W I K R L P K A
UniRef90_F8I1T3      S S A D R A L V T Q L V Y G V E R Q R R F L D A W I G Q L R Q G P V E       P K
UniRef90_R5NVP0      K E G D L A Y I A D K S H K I L S M L P A L D E K I S E I S D G W I G R L G K P
UniRef90_F3Z0N1      A P R D I G L A T E L T Y G Y L R L K S R L D A L L D H F L R A P   G K L P A R
UniRef90_X4V5N5      A P R D R A L L Q E L C Y G T L R W L P R L D A A V G E M M D K P L K N K S R T
UniRef90_UPI00026CA0C8 A E A E V D F F D D V V K G T E A R L G E I D T A I A A G K L A W N L A R L D K A
UniRef90_B0UWZ3      K P Q D F P L L Q E I C F G I C R V L P R L E R I I Q L L L D K P L K G K T R I
UniRef90_B8FS79      D P R E R Q L A T L L V N G T L K H R L T L D Y A L R R H L R K P L S Q L P H E
UniRef90_M4U3A2      T P K D K A L L Q V L C Y G V L R T L P R L D F F C R S L M Q K P L K G K Q R V
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UniRef90_A0A059F8Q4  E E A D P D L F K A I V N G V V D N Q A A I D K A I L K R L A W K L T R L D A T
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UniRef90_K1LAC0      N D P E E G W S T E L V A G V T E H Y Q E L D S E I A H Y L S W T L E R I A R I
UniRef90_R9L272      S R E E R A F A T R L V L G V A S T R G T L E E I V T S C M D S P   D D A A P A
UniRef90_Q04EK8      I D       D Y F N E L V D G V F A V H K E L E E K Y K P Y L K W S L E R I S K T
UniRef90_E0NP19          I A L L R N I T T G S L N T Y L D Y L I K K N S K I R F K K L H E D
UniRef90_UPI0002E0E0FA R P R D H A L L Q E I C Y G A L R Y L P R L E S I V N E L M D K P L K G K Q R V
UniRef90_C0T013      D E S I K S F Y S S L V I G T F N N L E H I D S L I D I S L N W S L E R M D K V
UniRef90_B3ERI6      G T N A A S F Y D K L I A T A L E Q E K F I D N L I Q Q H I K N W I E R T V L L
UniRef90_G1WG52      D E R D A G L T R R L V L G V T A T S G C L D D F L Q Q C S D   P K T R F S P R
UniRef90_D2TVJ5      S D K D K S L L Q E L S F G V L R V L P L E W F I Q Q L I T K P L K G K Q R I
UniRef90_U2RLM8      T G R D A A F V T E L V F G T C R M A G S Y D A I I E K A S G R D L D E L E P D
UniRef90_UPI00035E317B E A A A Y E F F C L G L Y D G V V E V L K T L D A R I S A A S N W K L H R M A A S
UniRef90_A3CL45      E A D I P A F L L N L V S G V V Q S K D D L D K K I A Q H L K W T V D R L T L V
UniRef90_J4UAC4      K D E E K N F I T Y L S Y G V L G N I Y F L D Y F I R K Y S D I S F S K I S N K
UniRef90_H1PV83      N E N E I T F I K K Y M N G I A E N N D R I L K T I E E K I T G W F E R I G N V
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UniRef90_UPI000364B97C P D R D K A L L Q E L S F G V L R T L P Q L E W L V N Q L M S R Q M T G K Q R S
UniRef90_C2KVE0      G N R E K A F L T R S S H G I L E R Y L Q L D Y V I S L Y S S V K L K K L K P V
UniRef90_F9MPU0      T A P L A S Y V T Q L V Q T V T D H K A E L D A I I S E L A D W D I T R F N Y T
UniRef90_W1TZC5      E         Y A Q K I I T A V D Q N Q T A I D V L I N R Y S K N W T A Q M N K V
UniRef90_B8E0X4      S L K E K H F I T E L V Y G V T R W K I T L D Y I W S R F V R R   D N L S L F
UniRef90_R5FBQ4      K E A D S E Y L Q A R T A N I M E K I P E I D E K L N Q A A A G W K K R M G K V
UniRef90_X1D4J8          R V F A G I I A H R D E I D A L I S Q R T V G W F E R L A F I
UniRef90_R5XUS7      G K A       F A A R L I Y G V L E R K L T L E Y L I D K F C N K P K P K V N
UniRef90_A4XL79      K T E D R A L F V E L H G V L R Y K N I L D Y Y I N F V A K K G V K     D K K
UniRef90_R6C0E2      E D R T R E Y V K N V A N G I K E H G E E I T E K I A K N L K W T I E R I S K V
UniRef90_C6I119      D P M A N A Y A D R L Y A E I L F R K P E I D A V I E E L A R G W L P R L T R V
UniRef90_W5WXK6      E P D V R D Y A D G L I R G V Q A H L P A I D S K I Q A S S A H W V E R M A T I
UniRef90_A8AVV4      S Q Q D K S L V T E L V Y G T V A R K L T L E W Y L S H L I E D R   D K L D S W
UniRef90_X0Y6X8                      D E L I A S T I K W Q L S R L S A V
UniRef90_B9D5B1      R N D Q R S L A L S L F H G I L E H A D G L A L L N A R L K E W I N E I G S I
UniRef90_UPI00029A6D1D F H D V A P Y T M E I V T G V A E R L D R I D T M I S E H L R E W L E R L P A V
UniRef90_R5Q223      A R C D R E L L T T L L S G A I G E H A A L E A E F S P F V D R D L K R V S L V
UniRef90_R5LPC7          E V Q N E F V D S C V H G I L E N K S T L S S L A N K Y L S S W L D R L N K V
UniRef90_D4K692      E G R D K A F A S A I F Y T V L E H R G T L D Y I L E Q F L P K G L A K L D A P
UniRef90_R6ZWD7      P K K D Q A L C T R I F Y G T I Q N Y D Y C Q Y M Y Q Q F T N R   K K I E S K
UniRef90_R7GN31      S P S E R G L I T T L V Y G T I Q N R L Y L E Y Q L E P H I H T     R L K V V
UniRef90_C7RA09          S D N S L F R A L V L G S C R Y F I R L E S I A K Q L L Q K P F K P K D Q D
UniRef90_U4TLL5      D E G D K S L L Q E L C F G S I R W Y Q R L D A I C D Q L L N R P L R R R E A S
UniRef90_A0A031K2C0  A Q A E V A F F D D V V K G T I A R R D E I D A L A S K L T W S L L D K T
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UniRef90_Z4WRS4      E E E D E T F A R H L L R Q V L V K H D E Y L K L I E P I L T W S S E R L A D M
UniRef90_K0ZFA5      E T P L P E Y S I Q A I E G V A D N L R R I D D L I E K H A N V G L D R I A G V
UniRef90_A9FBW8      D P R D I G L A T E L V Y G V A Q A A L E A R I A A F A A K S R W T A D P L
UniRef90_N9QFR7      S E R D R G L Y H E L T L G C L R Q W H G L K A I T L P L L T K P L D N Q A L
UniRef90_C7M0X2      R G D E P A F I R E R I R G L T E R R S E I D A Q L T A H V I G W L E R L A P I
UniRef90_H1G0D0      G A R D R G L V Q A L S Y G T L R W H R R L E A M L A Q W M D K P L R G R D Q D
UniRef90_I3YS66      N D E D R E Y A L Q L F R K V I L N E D K L N A Q I E G K T P N W D D R I A D V
UniRef90_D4YGA5          P A Y L R T L V E G V K A N R F E I D Q M I D N H I H W S V Q R L E L V
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UniRef90_UPI0004721FDD E P R E R A L A Q E L A F G T L R H L S R L D A W L S Q L V P Q R P R K R D G D
UniRef90_U7LZB8      D R H A V A P I A D I V Q G V A E E L D A I D D T I S R Y L N W E L R R I P A V
UniRef90_R5STA4      D D E D R E F A R R L F R R T I L N C D Y Y R H L I S E N T R N W L D R V A F M
UniRef90_A4BK87      D P D Q Q A F L Q Q L V Y G S T R Y Y F A L D E I N L L V E K P I R G K E R L
UniRef90_UPI00037B643E      Y E Y I K R I I D F Y L D N S E T V D E K I S R H L N Y T L E R I P K V
UniRef90_Q2NCI1      A D A E V D F F D D I V S G V D A R S D E I D E L V T A K L A W T L A R L D K T
UniRef90_A0YKZ7      Q E E V A A Y A I E I L T E I H A R R T E I D E L I N Q A L D W Q I N R L P R I
UniRef90_D3F1H6      D A R D H A F A M A L A F G A V Q R R R T L D H V I E R L A R R P V G Q L D P P
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UniRef90_D7E4L0      D K E V R N Y A K E I I I T V N E N R N V I D G L A S D A L D W Q V T R L A Q I
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                                90                  100                 110                 120
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UniRef90_UPI00037A069A  L R W L L H I G L Y Q I L K M T K I P Y S A S I S T T V E T A K K S D L N K L S
UniRef90_R6YG55         V R T I L R M G T Y E L F Y M D K V P D A A A C N E M V L L T K R E K L E K Y A
UniRef90_D4J416         D L T I I R L A V Y E M K Y D D D I P V S V A I N E A V A L A K R Y G S E N S P
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UniRef90_W1JC58         F H Y L I M I G M Y Q L T Y T R I P A H A A L A E T V N G A I S L K R P Q L K
UniRef90_X0PEC9         I L I V L N I A V Y Q M F Y L D R V P T R A A I F E A V K I G K A R G N G G I G
UniRef90_C0QT45         E R A L L R L G V Y E L L F S D I E D K G R V F M D I L D L T K C Y I D P D T V
UniRef90_J9A1Y9         L R A I M R A G T F E L M F C K D I P A K V C I S E Y T S M A H A Y F N A P E A
UniRef90_UPI000237EC53  L R A I M H A A G G E M T G A D P V P A R V I I N E Y M D I A H G F L A G D E P
UniRef90_U1LTT5         T R A T L R I G S H Q L S R M R V P A H A A V H E T V A L L G R R N K G R L
UniRef90_UPI00046D7115  L V D A L R L G A Y Q I L W T R I D A Y A A V S T T V G L V K G A V A P K V S
UniRef90_E6PFK4         I Q E L L R L A V Y E L R Y T Q P D V H A T L F E W V N L A K R Y G H Q G L G
UniRef90_X8IPK9         D L A I L R T A L A E M I Y I N T I P A N V S I N E A V E L G K T Y G D D R S Y
UniRef90_F8I1T3         I R N I L R L A L F Q L H F L D R I P D Y A I F H E A V E A A K R V N P R A A
UniRef90_R5NVP0         E L A I L R L A L Y E M Y D E E V P F R V A I N E A V E L A K K Y C N P D A S
UniRef90_F3Z0N1         V R L I L G L A A Y E L S Y L D R V P A Y A S V N W A V D A V K A D F G Q G L S
UniRef90_X4V5N5         F H Y L I L V G L Y Q L I Y T R I P A H A A V A E T V N A V K L L K G T S L R
UniRef90_UPI00026CA0C8  M R A I L R A G T Y E L L A R A D V P V G T V I T E Y V D V A H A F F D K R E A
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UniRef90_A0A059F8Q4     M R A L L R A G A A E F I V H Q H L S H A V I M D E Y V S L A H D F F E E S E A
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UniRef90_K1LAC0         D L T I L R L A F Y E L I K D P D L V P S V V A D E A I E L A K T F S D D R S R
UniRef90_R9L272         V R D A L C L S T Y E I V F L Q K S P H A A V D Q G V E L V K S V A P R A G
UniRef90_Q04EK8         A D I A M Q I G L F E L T S R I D I P K K V S L D Q A T E L A K N F G D E S D G
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UniRef90_UPI0002E0E0FA  F H H L I L V G I Y Q L S F M R I P H A A V G E T V E G T Q D L R G P R L R
UniRef90_C0T013         D L A I L R M G V Y S L K F Q N E N S K R A I I D E A I L I A K K Y G S K N S Y
UniRef90_B3ERI6         D R I I I K M G L C E M K Y F D S I P T K V A I N E Y V D L A K K Y S T A K S S
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UniRef90_D2TVJ5         I H Y L I M V G I Y Q L R F T R I P P H A S L A E T V D G A N A L K L P Q L K
UniRef90_U2RLM8         L V D V L R L G A H Q G L T M R V P D R A A V D T S V D L A A H V V G E R A C
UniRef90_UPI00035E317B  D R N V L R L G A Y E L V H A K E T P A A V A L D E A I E L A R R Y G S K D S P
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UniRef90_W1TZC5         D L V L L R M A I A E S K Y I E D L T P A I I I N E A L D L T R Q Y S T D E A V
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                                                  50             60             70           80
UniRef90_UPI000468BDF7   L K Q L S A Y S K T L I E G V M F K R E E L D S D L S A H L K W T L D R V S A I
UniRef90_C7MCJ5          Q T P L P Q W S R T L V E L Y A P H A V D I D E D L A T H S D W P L H R M P A V
UniRef90_A0A022LJ78      S Q E F H D V A T D I V T G V A Q R L D S M I S E H L R E W L E R L P A V
UniRef90_G8TGG3          S K E K W Q F A K N L L Q T T L E K K E L A L Q Y I K P K L K N W P D R I A S L
UniRef90_H3NN74          E N S E     F A R S S I I S I L Q N I D K I D N I I K S K L N N K L E T M L P I
UniRef90_UPI0003655AAA   W E E D E F F L N T L F Q K S L E N D A E Y E Q L L A E Q L Q N W M E R V A M I
UniRef90_A0A023DXT1      D D T D T V F A Q N I I F G V Q T H K D L L Q E I I E T G L S R T V L Y L E E V
UniRef90_F0S0X1          H P Q D R A F I R E I V S G T V R F L R L L D F S I E K A T G K N L K R Q K N T
UniRef90_E1SG53          S D K D S A L V Q E I C F G V L R T L P Q L E A L I G R L M E R P L T G K Q R V
UniRef90_R7LYH7          Q N E V K D Y A I R I A E T F Q Q N H K E I D E L I I K N C S S G W F D R L V K M
UniRef90_D1AIM6          K E E D I E F M R E Y I K N V T E H K E S L E D K I K S K L V G W F D I L G T V
UniRef90_UPI000362A701   D K K F T E E L F R K T I R H Q A E T K N M V D E K A Q N W L D R I A T I
UniRef90_UPI0004259CF7   D G R D R A L A K R L V F G T V Q R R G T L D W I I A N H V N R K L D P Q V R A
UniRef90_R6I2M7          H E M D S A Y F A D L V K G V H A R K E D I E K S L S S Y L A W T L E R M D E T
UniRef90_B0JGZ3          E V R E Y A L E I I G T V Y R R R A E I E E L T G A L V D W Q L H R L P R I
UniRef90_K8GJZ3          S D V R A Y A L E I V R T L K K N L A D I D Q L L A R A L D W Q L S R L A V I
UniRef90_K9SND2          Q P E V K E Y A L E I L T T V N A N R A K I D E T I A A A L E G W L N R L P K I
UniRef90_G2KLU1          V V P D G M M F T T I V N G V Y D R L N E M E S Y I A N A S G R P V K P K E P L
UniRef90_Q21DD2          S D R D R A L M R R L V A T I L R R L G T L G H V L S R M L D R G L P T D A P R
UniRef90_D4CTD6          N E N Q L E F I R S S I N G I A E N Y D N I K D I I K K N T K N W Y S R I G L V
UniRef90_L0LQV5          S D G D R A L V R A I L N S A L R H L P R I E A A I S S L L D S P L P E G A R A
UniRef90_L8M0P8          Q E K V K E Y A I A I I A A V K E N R Q Y I E Q Y I E E V L V A W L S R L P K I
UniRef90_J9GGA4          D Q D F A R R L F R R A I L N D E Y Y R H L I G Q H T K N W L D R I A F M
UniRef90_I7LC39          K E L S A Y S Q A L I A G I I E H R D E L E A D I T D H L K W R L S R I N A I
UniRef90_A3WIH5          S A E D K R L A Q A I S Y G V M R Y L P V L T E K V S G K L D K P L K G K N Q I
UniRef90_R6XDC2          D E I S A F A K S L Y N G V I D N L E A V D E T V R A V L N R D E S R I P R V
UniRef90_F5Z9W8          H P R D N A W I Q E M S L G V M R K L P I L Q H W L R E L L D R P L K G N K K V
UniRef90_L7VTR8          S G E D R G L V T D L V Y G T L R R R R G I D H L I D R F L T T     E P P A S
UniRef90_UPI0003675C55   L P K D S A W L Q E M S M G A M R Q L P Q L Q L W L R A L L D K P L K G N K K I
UniRef90_F2HLC7          D L E A P E Y F T Q L V D G V L D K K E D L E A N I S K Y L T W S F S R L T L V
UniRef90_F8E5S8          E K F V K D F A E D L H K A Y R N M S Y N D E L V R K Y L K W S Y D R L G E V
UniRef90_X1D328          K Q R     A T D L V F G T I R N R A A I D M V I A K F A D C P V E R I P P K
UniRef90_U2KDV2          D E D D E R F A R M L F R Q T L L K Y S E Q M K L I E P V L E W S S E R L A D I
UniRef90_W2UTZ5          D E D D L K F A S D L F K K T V L N Y E K L E E I V G K T P N W D V E R I A D L
UniRef90_F9VA28          P V E A P A Y F T E L V D G I L E K Q N V L D A A L S E H L A W T F S R L T T V
UniRef90_R6GG21          K E K D K E Y I I N R V T D L V S R I D D I D K E I D K V A S W K T D R M A K A
UniRef90_D1KD39          P D Q D D A L A K S L V F G T I R F Y H Q L N D I V T D L L N H S L E K E D L D
UniRef90_R5DK79          Q H D V K N Y A I Q I A D F F Q K N H E E V D E I I Q K Y A K N W L G R L V K M
UniRef90_K9RAG8          Y K E I N E Y A I K L V R K I T S E R Q L I D E K I S T A L D W Q V K R L A Q I
UniRef90_S9QY03          A E G D V D L F R R I V L E A V N H Q A R I D Q M T D R A L R W R I E R L D A T
UniRef90_A6EY69          A D N E R P P L Q A L C Y G T C R W F H R L D G E L Q A R L N K P L R K S N R V
UniRef90_J0X9G1          N S A N H T E A R E I L S G V A D H L G E V D E I I E T Y S Q G W L A R M P A V
UniRef90_B1A1G7          D E D K E F F E D L Y K Y T L E Q E E S F K E I I A K K S K K W I D R I A K V
UniRef90_UPI000348ED87   E D D K E F F I D L F N L S I R H E K E Y E E M I S Q K S K N W V E R L A L L
UniRef90_F4GJ66          E P E V V L F A R Y L V A G T L E N I D G I D D V I A A Y S R R A F D R I D V I
UniRef90_UPI0003A03B38   V P R D R A L L Q Q L C Y G T M R F E P R L S L I A D H L L Q K P F R D K D A D
UniRef90_D1Y3T9          A D Y R R S C E H A C L V R R A L P E I D A L I E T Y S T E W K E R M S L V
UniRef90_R5LPS8          D E E D K D F A R K L F R S T I L N A D K Y Q R Y M S E T S R N W F S R L A Y M
UniRef90_B4SKH5          D S R D R A L L E A L C F A V L R R S T Y D A A L Q G W M Q K P L S A R D A D
UniRef90_D7WCI2          P T P V A D Y T R E I I A G A A A A L D E I D N A I E R F L N W E L N R I P A V
UniRef90_Q21PV7          E P K E R P L M Q T L C L G S L R V F P K I D L I A R K L L Q K P F K S R D N D
UniRef90_I4AJ48          E D D K E F F E E L F Q N T V N E S L Q N E K L I A E R L K N W I N R V A L T
UniRef90_I6X069          E T R D A A F V T E L V A G T C R L R G T Y D A L I E S A S G R G L K T M Q P A
UniRef90_K9YB07          Q E V R D Y T L Q L L T T I V K H R Q E I D D A I R E S L D W N F D R L P K I
UniRef90_UPI000381444D   R N Y A L Q L V K T L Q A S K G E I D E R L Q A A L V G W L K R L G R V
UniRef90_G9WTC7          D T R S R A F I T R L S R G I L E R Y I Q I D Y F L S L Y S N T P L R K M K P V
UniRef90_UPI00037A4A98   D E E D K E Y A L L K L L H N S I L D E K E Y R G L L E H T K W D F D R I A F M
UniRef90_Q6F6P8          P E R D R A L F H E L V L G T I L R Q W Y A L K S I T L P L L T K P L N   N E T
UniRef90_M7P3X8          E D K Q R S L C Q Q L S Y G V I R H Y S T L D Y L S Q Q L L S K P L K A K D Q D
UniRef90_K9YSG9          Q E V R D Y T V Q L L T T I V E H R E K I D D L I R A S L D W N F D R L P K I
UniRef90_I7LBN4          K Q L S A Y S Q S L I S G V I E N R A Q L E A D I T K H L K W R L E R V N A I
UniRef90_UPI0002E2EFF1   D K D V A R Y A I D I V R T V N E N Q T L I D E E I S Q A L D W Q V N R L A Q I
UniRef90_UPI00047D6FFB   E D K F K N L V F A I V H G T I I T Y K L Y L E Y L T S K M V D P     K R T P I E
UniRef90_E1GYA1          D D E D R K F A I D L F R A T I I N A E V Y Q G Y M S Q A S R N W F S R L A Y M
UniRef90_W6WVH2          S D A D R A L T R A I L N T A L R H L P R I E A A I A S L I D T P L P E G A R A
UniRef90_H2BWI2          S P E D E Q F A I D L F R K V Y L N D E E L N E M L G K T P N W D K E R I A E I
UniRef90_E1JSJ9          D P R D R G L A T E L V Y G Y L R L R G R M A F L C A R F L K R P D A V P A P V
UniRef90_N8WUT0          A D R D R A L F H E L V L G T L R Q W Y A L K S I T L P L L V K P L N   N D T
UniRef90_W7PYT0          E D A D L A L F H D L L H G V A R Y R G D L D A A I G P L D R R I E E L D P I
UniRef90_Q0AJ03          T P Q Q R G A I Q D I A Y G T L R H Y G Q L D A I L H Q L L N K P   A Q D K S
UniRef90_B3E3P1          Q G P D R G L F A E L V F G V L R D H Y L K Q L V Q Q P L E R L E L P
UniRef90_F7L092          N S K E K A F M T E I F Y G V I R N K K F L D Y I I D I Y T K D I R K E     W
UniRef90_K9YJP8          R E Y A I E L I N T I N R R Q G E I N Q M L D D M I D W K L N R L S L I
UniRef90_UPI000468DD1C   D T E D K E Y V R D L F R K T L L N E K E L A K T Y D D K T P N W D D R I A E I
UniRef90_D7VJY8          N W D D R E F V L D L L A N T I R Y G E E Y Q S L I A A A K T K N W A D R I A L L
UniRef90_C2M6F3          D K S D K D F A I E L L R K V L N D E A F H K Y L V E K T P K W D A D R I A E L
UniRef90_UPI00047EF9B1   N Q D D L D F V S E L F K K V I L N H H T F E N D I K I H T P N W S D R I A D M
UniRef90_K9SU16          Q E V R A Y V Q I L Q T I Y E Q R S H I D K L I T G A L D W Q L N R L S Q V
UniRef90_U9W2K4          Q A Y A T R I I N Q L V Q H R E E I D H R L D S A M V G W L K R L A R V
UniRef90_A0A059G972      E G S D R G F A R A I A S S A L R H L G W I D T A L A P L L S R P L P A V T A P
UniRef90_UPI0003658B43   K K V D F N K F S G S L K S I D K N M K K I E S V I   K S V D I S S S N M E L I
UniRef90_B6GC41          S S R D A A F A L R L A L G V T A T E G C L D D A L N S H L A K P G K V S A R V
UniRef90_L8LID8          R E Y A L E L V L T I V K R N N E I E N V L D W H F S R I A K L
UniRef90_A0A016QMY7      P A R D S G L A T H L V Y G T L R Y A P R L E A A L A P L L R     D E T H P K
UniRef90_UPI00038246B1   K K I D T D L F T S I T K G V Q K N K I S I D D I I S R H L D W S F S R L S E T
UniRef90_I1JJK1          N H H D L R L V T D I V G G T I R W R R Y L D H L I S S L C H D K I S S M E P L
UniRef90_U1QBZ3          V S T A Q V P I G E L E A Y A G N I D D V D T I V E A S S E D W M S R M N A V
UniRef90_W7YF29          D E D D A F V K Q L F R K A A V N H N D Y L I K K H S K N W D R V A F M
UniRef90_K5YYG0          E P R D K A A A H R L A A C V L R H V G T L D A V L E P Y L R R   D P P P E
UniRef90_K4IQC2          E D E N F A K E L F T K T L L A N D Q L T E I I T K N K T P N W D D R I A D I
UniRef90_UPI00037A9A7A   A T I D K A I D T A S N F D I E R I S A L
UniRef90_Q9CKP7          K T Q D L P L L Q E I C F G V C R V L P R L E I I K Q L V D K P L K G K T R L
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                                      90              100             110             120
UniRef90_UPI000468BDF7  T V A I L E V A L Y E I K N S A E I E P K A A V N E A L N L C D E F A D P K A K
UniRef90_C7MCJ5         D R A I L R L G A A E V L Y G E E E S R R T I I G E Y T K I A E V L S T D D S P
UniRef90_A0A022LJ78     D R A V L R A G A W E L L F T E D V E A A I V I D Q S V L L I S D L S A E K S V
UniRef90_G8TGG3         D M I L M R M G V C E F L F F E T I P P K V T I N E Y I D L A K E Y S T P Q S G
UniRef90_H3NN74         E K A I L R V S I N E F L I Q K S V P V S V S I N E A V E N T K K F S N E D S Y
UniRef90_UPI0003655AAA  D K I L I K L A V C E L L S F P N I P V K V T I N E Y I E L A K A Y S T P K S G
UniRef90_A0A023DXT1     T K S I L L C G A W E L K Y A T E N P V S V I L Y E Y V Q W A K H F L P E G G S
UniRef90_F0S0X1         V R N S L R V I A Y Q I F F T N V P P Y A A L N E T V E A V K K I L G K K A A
UniRef90_E1SG53         L H Y L I M V G L Y Q L E Y T R V P A H A A L A E T V A G A E V L K R T S L K
UniRef90_R7LYH7         D K D I L R I A L S E L L F I K E T P L K V V V D E A V E L A K K Y S T D D S A
UniRef90_D1AIM6         E K T L L K M S F Y E I T E A G T G H E I V I N E T V E L A K K Y G E D K T P
UniRef90_UPI000362A701  D L I I L E M A L T E F L Y F P N I P A K V T I N E Y V E L A K N Y S T E K S R
UniRef90_UPI0004259CF7  A L L L G L Y Q L L Y T D V P A H A A V A E S V E L A K P S P G A
UniRef90_R6I2M7         L R A L L L C A I Y E I T T T L D I D A K V I I K E Y V D L A Y A F F T K Q E P
UniRef90_B0JGZ3         D R D I L Q I A V A E M L Y L D L P Q K V A I N E A I E L A K R Y S D D E G Y
UniRef90_K8GJZ3         D R D I L R I A V T E M L Y L G V P D R V A V N E A V E L A K R Y S G E D G Y
UniRef90_K9SND2         D Q K I L R I A V A E L M Y L E T P T Q I A I N E A I E L A K R Y S G E D G Y
UniRef90_G2KLU1         L H A I M L C G A Y E M A D S P D V D G P V I I S D Y L D V T H A F Y E Q G E A
UniRef90_Q21DD2         A Q S A L L I G A A Q I L W M E V P D H A A V D L S V R L V Q D R R A A K Y A
UniRef90_D4CTD6         E R T L L I I A T Y E F L F K N T P I E V V A N E T V E L A K E Y G N E K S Y
UniRef90_L0LQV5         L H H V L V V G A T Q I L Y L D V P D H S A V D L A V E Q A R D P R N R R F A
UniRef90_L8M0P8         D Q D I L R I S V A E M L Y L E L P I R V A I D E A V E L A K R Y S D D E G F
UniRef90_J9GGA4         D V V I M Q I A L A E I L S F P N I P V S V T L N E F V E I A K L Y S T P K S G
UniRef90_I7LC39         V V A I L E V A L Y E I K Y R E E L Q P K A A V N E A L N L C D E F A D P K A K
UniRef90_A3WIH5         I Q S L L L V G T Y Q L F K L R T K D H A A V S A T V E A S K L L K R K A L S
UniRef90_R6XDC2         V R A V L R D A A Y E L K Y A P E V P I E I I A N E A V E I C R E Y G E H A M T
UniRef90_F5Z9W8         I E H L I L L G L Y Q L A F S R V S Q H A A V G E T V N A S P Y L G G T A L K
UniRef90_L7VTR8         A R R V L R V G T Y Q L I H R A D I P D Y A A V S T T V A A A P K R F R
UniRef90_UPI0003675C55  L E H L I M L G F Y Q L A F S R V S A H A A V A E T V H A A S V L G G D G L K
UniRef90_F2HLC7         E Q A I L Q V S S Y E I L Y T E T P D V V A V N E A V E L S K D F S D E K S S
UniRef90_F8E5S8         E K A V F R V A L A E L F E G D A P V Y A I L D D Y V S I A S S Y M D E K S A
UniRef90_X1D328         L L N I I R I A S F E L I Y S P Q T G E H A I V N E A V E N A K A V A G P V R S
UniRef90_U2KDV2         D A L L I N L G L T E F L Y F P M I P T Q I T I N E Y V E L A K H F S T A H S A
UniRef90_W2UTZ5         D S I L L K M A I C E F L R F P S I P V K V T M N E Y V E I A K E Y S T P K S S
UniRef90_F9VA28         E Q A L L R L G A Y E I L F T E T P D L V A I N E S I E L A K D F S D E K S S
UniRef90_R6GG21         D L N I L R L A Y Y E M N I D D D I P K P V A V D Q A V E L A K K Y G T D D S P
UniRef90_D1KD39         I H C L M L G A Y Q I L Y S K V A I H A S I F E T V D T L N F L D K T W A K
UniRef90_R5DK79         D K D I L R I A I V E L L Y I K D A P M K V V V D E A L E L A K K Y S T E D S A
UniRef90_K9RAG8         D R D I L R I A V A D I E F F D I P S K V A I N E A V E L A K R Y S G E D G H
UniRef90_S9QY03         L R A L F R A A G A E L V A L D T P P K V I I S Q Y L D V A E A F Y P D R E K
UniRef90_A6EY69         V H H M L V A L F Q L R F S Q Q A T Y A I L N E T V E A C R A L D K Y H L T
UniRef90_J0X9G1         D R A I A R V A T W E I V W N D D V D V P V A V D E A M T L G R M L S T D D S P
UniRef90_B1A1G7         D S I L I N M A L A E M L N F R N I P V K V T I N E F I E I S K Q Y S T P K S W
UniRef90_UPI000348ED87  D R V I L I M A L C E M I N F S S I P V K V T I N E Y I E L A K K Y S T P K S K
UniRef90_F4GJ66         D R N I L R I S V F S L F F S E D T P H P H V I I D E A V K L S Q E F S S E V N Y
UniRef90_UPI0003A03B38  L Q A L V L L G L Y Q L D Q T R I A D H A A I S E T V D A T K E L N K D W A R
UniRef90_D1Y3T9         D R T I I R L A L Y E A V I A K K V P P G V A L S E A V R L A K E Y G S D D S S
UniRef90_R5LPS8         D V V I M Q I A I A E M L T F A N I P V N V T I N E Y V D L A K V Y S T P K S A
UniRef90_B4SKH5         L R T L L M V G F A Q L D V L E L P A H A A L A S A T V D A A R A L G R E R Q A
UniRef90_D7WCI2         D R A I L R V A T W E I L Y N D E V E P P I S I A N A M E M S T E Y A G D N A S
UniRef90_Q21PV7         V Y A L I V L G I Y Q M D Y L R T P D H A A I G E T V E A A K A L N K P W A S
UniRef90_I4AJ48         D T L I L K M A I S E M M H C P S I P V K V S I N E Y V E L A K N Y S T P K S K
UniRef90_I6X069         V V D L L R L L A H Q A L G M A V P A R A A V A A T V G L A R D T V G Q R V T
UniRef90_K9YB07         D R S L L R I A V A E M V F L E T P V Q I A I N E A V E L A K R Y S D E E G Y
UniRef90_UPI000381444D  E R D I L R L S V V E I D I L Q T V P E R V G I N E A V E L A K T Y G G E E S P
UniRef90_G9WTC7         L L Q V L R L S V Y Q L L F L D K I P P H A A I N E G L N Y L K K R K L Q G L V
UniRef90_UPI00037A4A98  D L I I M Q A L S E I F T F D S I P T N V S L N E Y I E L A K S Y S T S K S G
UniRef90_Q6F6P8         V E T C L Y L G L Y Q V L C T R I P A H A A I S E T V T A T K Q L G F H A L S
UniRef90_M7P3X8         L K N L L C G L F E L M H M R T P P H A V L S E T V N A S K K L G K Q W A S
UniRef90_K9YSG9         D R S V L R I A V A E M V F L D T P L Q I A I N E A V E L G K R Y S D E E G Y
UniRef90_I7LBN4         V V A I I E I A L Y E I K Y S E N I E P K V A V N E A L N L C D E F A D P K T K
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UniRef90_UPI00047D6FFB  L Q I V L W M S I Y Q I K F L T T I P H Y A I V N E A V N I A K S I N P K F A
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UniRef90_K4IQC2          T F I N G V L D T V S K E Y Q T N G K
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UniRef90_F0GWJ2              N L S Y I T K V I Y G V L E N K I Y L D Y M I D K L S K V K L R K I H K N
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UniRef90_S2ZNH3          G E K D R A L A T R L L L G S V A A V G E L D R A V A S H L S T T   T H L E P K
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UniRef90_S6ADW2        V R S L L L V A L Y Q L Q Y   S R S A E H A V V D H A V R A A E T L K K P W A K
UniRef90_R7EXW1        D V I I M L T A M A E M L N F P S I P L K V T L N E Y I E I A K S Y S T A K S G
UniRef90_B6BEZ6        V M N A L R L G T V E L   C S G G A A H G V V N A M V A I V K H R R H G Q L K
UniRef90_A5GPV4        D Q D I L R L A V V E I D E F Q   T P A A V A C N E A V E L A H R Y S D E A G R
UniRef90_W9VEJ5        I D A L I L I G L Y Q L S A M   H T P A H A A V S A T V D A A R L L G K V N K A
UniRef90_E4TCS6        D R V I L I A A I T E L D H F P L T P S K V I I N E Y I E I S K A F S T D K S Q
UniRef90_V5BZU8        V K A L L L I G L N Y M   R V K P H A A V S E T V Q A A R N L   P W A R
UniRef90_I1ARS4        V H N V L R L G A F E L   C T G G A A H G V V N E A V R I V G A R K T Q T M K
UniRef90_W6M5V8        V R A L L L A G L Y Q L   H H L R I P E H A A V A E T V T A A R Q L H K P W A A
UniRef90_H0HLL7        L S H L L H V A A A Q I L F L   D I P D S A A V D L A V T H A K S D S T A R F S
UniRef90_R6XCC0        L K N A I R V G V Y S I D Y L   N I Q D V V N S L V Q T V K K   K D Y K A S
UniRef90_Q8P4G1        L K A L L M A G F A Q L   D V L Q L P A H A A L S A T V E A C R A L G R P R Q A
UniRef90_UPI000372E472 D R I I L I A G I T E I D E F P Y T P S K I I I N E Y I E V S K A F S T D K S Q
UniRef90_Q1H4Y2        I H H L L L V S L Y Q L V Y   D R A G A H T V V N Q A V L A A K T R K T W A K
UniRef90_D9SHN6        I S Y L L L V A L Y Q L Y   S R A A Q H A V V D H A V R S A   D I L N P K I R
UniRef90_UPI00035F2FF3 D K N I L R M A A Y E M L Y D K D L A P A I I N E Y I E I A K K Y S S E Q S A
UniRef90_UPI000469A0CF I Q N V L R V G T V E L C H G G   A A H G V V N A M V N L A Q H N K L S H L K
UniRef90_T2RHU5        V H C L L L V G L Y Q L Y M   R V P P H A A V N S T K V L K L D S F R
UniRef90_UPI00035E1604 I L L T M S C Y G L L F L N K V P A Y A V V D A N K L A V H Q L   R G Q K
UniRef90_UPI000380E513 L P A I L H V A A A Q I L F M   D V P D H A A V S A V E T A E A R D A R H F K
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UniRef90_K1HB86           K F I N G T L R N Y L R N
UniRef90_R7PC09           S Y I N G M L D N I V K K L K A A N K
UniRef90_K2BAT5           G L V N K I L R I V I T Q Q K E N
UniRef90_C7JHE4           R L V N G V L D T L F K R L A A E R
UniRef90_S2DLW2           Q F V N G L L D V L S K E L T E N G Q
UniRef90_F3KGH7           G L I N A I L R R S Q R E K E A
UniRef90_I4CMJ2           G L L N A V L R R A Q R E G E A
UniRef90_R6TIT9           K F N N R L L D N I A K N I
UniRef90_UPI0003B323D2    I F I N G I L D N L V K E F Q A N
UniRef90_L1LXY9           G L L N A V L R R A Q R E G Q A
UniRef90_T0S2G4           A F I N G I L D K V N K E L
UniRef90_UPI0004649C7D    Y F I N G V L D K I S K D Y E A T D R
UniRef90_E1VWD1           E F V N G V L G R I Q
UniRef90_UPI0002260D04    G L A N A V L R K V A T Q
UniRef90_B7A6B9           G L V N A V L R R L K P R E A P E
UniRef90_F0GWJ2           G F V N A I L R N F I R N E K E
UniRef90_R7A392           K L L N G V I D Q L
UniRef90_S2ZNH3           G L A N A L L R H I A E E D R P
UniRef90_S7VWB7           L F I N G I L D K I V K E Y Q A E
UniRef90_F4B0U5           I F I N G I L D K L V K Q Y E S E K R
UniRef90_W0DR40           G L V N A L L R R A L R E R E P
UniRef90_F6GEX9           V F I N G I L D K L V K E Y E N E G K
UniRef90_UPI000467E81C    K F I N G I L G S I V N E
UniRef90_UPI0001486896    K F V N G I L D K L S Q E I
UniRef90_UPI0003B6C9EE    K L I N G I L D Q L
UniRef90_Q6YQD1           K F N N K L L D Q I Y Q Q L Q M Y K K
UniRef90_J4KT40           K F L N A I I D K Y I K
UniRef90_A5CEP9           G F V N S L L E K I S F N V R T N
UniRef90_A9CUM2           G L V N A L L R R M G R E
UniRef90_S6G902           K F V N A I L D K I E E K
UniRef90_Q9Z6S0           P F I Q A I L N D I
UniRef90_Q9LK54           D F V N G I L R K L V
UniRef90_D5E5F5           K F V N A I L Q N V Y K A I
UniRef90_Q0F395           G F V N A V L R R V S E H E P P Q K
UniRef90_UPI0003B5D78E    G F V M G V M N R A A D I I E R E E
UniRef90_F3XXA3           L F I N G I L N V I H K E L E E K E
UniRef90_R5ALJ9           Q F I N G I L Y S V V N K L K E E
UniRef90_M2Q276           K F I N G V L N D I V
UniRef90_J2IU67           K L V N A V L R R L G R E
UniRef90_R5FTX8           G F L N A T L K T V I R E
UniRef90_UPI0003778EA7    G F V N S L L E K A S L K I R K N
UniRef90_A5WI31           G L V N A V L R K V A K N P N K F R K
UniRef90_Q822B1           T F V H A V L N D I F R
UniRef90_F4MMK3           I F I N G V L D N S L K D
UniRef90_W8G5G3           S V V N A C L R R Y A R E Y E E
UniRef90_W7U612           S F T N A L L R K L
UniRef90_E2ZE93           K F V N G I L G A Y A R T
UniRef90_UPI00047D406E    L F I N G M L D K I V A H L I S E G
UniRef90_M3IDF3
UniRef90_L2F974           G L V N A I L R K V A
UniRef90_K9UKV5           K L I N G V L R R V T E Q L K
UniRef90_E7MM10           E F V N A V L R K V Q
UniRef90_G8PIF1           K L V N A V L R R A T R E
UniRef90_B9NTT7           G L V N A V L R K I A A D
UniRef90_C7LLX8           K F V N A V L D K L V K
UniRef90_C6WZZ6           I F I N G I L D K Y T K D
UniRef90_H0J546           R V L N G
UniRef90_F0F2H5           S F A N A I L R R F L R E
UniRef90_F7QHF7           G L V N A V L R R C A R E G Q P
UniRef90_J0QCH5           R F V N A L L R N I A R E
UniRef90_F2IZG2           G L V N G V L R R L S R E
UniRef90_Q11CT6           R F V N A V L R N L A R R
UniRef90_B0B961           S L I L A V L G S I
UniRef90_J5XWY4           V F I N G I L D T L S K D F T Q D G
UniRef90_W6TGW1           G F V H G V L D N I R P L L R S E
UniRef90_A3JWD8           G L V N A V L R K V A R D G Q A
UniRef90_UPI00026C7AD3    G L V N A V L R N F C R Q H E E
UniRef90_X5GI37           N F I N A I L N Q V K F T A R P
UniRef90_H6SNT9           G L I N A V L R K V A K E
UniRef90_R6TN59           T F V N A L L R K Y Q Q
UniRef90_F0J4Y0           G L V N A V L R K V S A D
UniRef90_A2BTW5           K M I N G V L R R L Q K
UniRef90_S6ADW2           G L V N A V L R N F L R Q
UniRef90_R7EXW1           M F I N G L L G V I I A K L Q R E G
UniRef90_B6BEZ6           G L V N A V L R K V A E E G P A E
UniRef90_A5GPV4           R M I N G V L R R Y
UniRef90_W9VEJ5           S L V N A L L R R F L R E R E A L E E
UniRef90_E4TCS6           V F I N G L L G K Y A E D I
UniRef90_V5BZU8           A L I N G V
UniRef90_I1ARS4           G M V N A V L R K V A E D
UniRef90_W6M5V8           N L C N A V L R S F L R R
UniRef90_H0HLL7           G L V N G V L R S L A R
UniRef90_R6XCC0           T F L N A I L R K Y L E
UniRef90_Q8P4G1           G M V N A V L R R A Q R E G F P
UniRef90_UPI000372E472    V F I N G I L G R Y A E D
UniRef90_Q1H4Y2           G L V N A V L R N F L R Q
UniRef90_D9SHN6           G L V N A V L R N F L R N
UniRef90_UPI00035F2FF3    T F I N G I L D A L K K R I K D D E
UniRef90_UPI000469A0CF    G L T N A V L R K I A A D
UniRef90_T2RHU5           A L T N G V L R R F L R E
UniRef90_UPI00035E1604    G L V N A L L R K V
UniRef90_UPI000380E513    G L V N A V L R R L T E Q
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Multiple sequence alignment

Position markers: 1 ... 10 ... 20 ... 30 ... 40

Sequence	Alignment
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UniRef90_UPI000362C2FE	
UniRef90_UPI0003824005	M K P A S R H H A R A S S A R A I S R V L R G A S L D D A L L P A A R F R M
UniRef90_C7HTD5	K L I L D G L Y R I S Y K N E K S T D I I N E I A K K V E
UniRef90_UPI0002DCE8E9	R A A A A R S L V P I L T D K G S L A G L D E H S V
UniRef90_I1YJI9	
UniRef90_J9DGE9	S D L
UniRef90_S5LZV2	K K R R R M T I Q I L Y R L F L L D E N V N K I K Q E I L D G F Q L
UniRef90_A2BZB2	
UniRef90_V4RJ66	A A R R A A L H L V L Q A L S D R A P E D P D A V A L P A G L
UniRef90_V8A589	R D L A F D I V C G V V E H R R M L E T T L D R S P L T
UniRef90_E6WPC3	E V R V H A A R V L D A V V N R G R S L K S E L A P V L P R L A
UniRef90_Q5X1U7	R F N A L K I L T A L M E S R K N L S Y L M S
UniRef90_J2WC30	A R R A A L K L L D A V L R R G D P L E L A L H G A T Q G L A
UniRef90_X7F6P1	A R R A A I D L L G Q V L G E G R L L S E A L A G P R V A A L
UniRef90_UPI00037A0FAE	D F Y L T Y E A H
UniRef90_E0Y0F8	A R E A A V R L L H A V L L E H R L L I D I V N E D S L L I D L
UniRef90_B0UJW1	A A R R L A Y A S V A D L L G A R S G T A L D D V L D P A A S R A A L
UniRef90_C7N8U4	A K K K N I K L D I V N L L D E I Q N G K Y S N I Q L N Y Y F S K K N Y
UniRef90_N9VD26	R K N I I N Y I Y Q F E L F D I N L N T E E I V N N K L N V I
UniRef90_K4APA2	
UniRef90_R5B8A4	
UniRef90_K2GTY7	M Q K I S R H K T R T C L F Q A L Y S L H L E D S F S K E S F I E S F F E S D D
UniRef90_U2YYR4	A R R A A L H L I E Q A T G G Q R L M S E T I A A G A L E R L
UniRef90_E1PT15	R R Q F R L G I I N V L Y R Y E L M D Q K I N V N E L F D S E S N L
UniRef90_UPI00047E1F82	E R V
UniRef90_A3V2W4	R R S A H H L L M Q I T T E G R L M A E L I A G G A L A Q L
UniRef90_UPI00047E484A	A T R R T A H R L L G A I I E T N T S F D A L T D D A H G H P H Y L A L
UniRef90_UPI000255A710	M
UniRef90_Q5FHK4	S K K T T T R F L A V Q G T Y A M T F N N Y T I N D L D N L I D Y L Y E M
UniRef90_W5UXG9	N T R A I A A K T I L D I L D N K Y S L L T I E Q K L V K L N L
UniRef90_F2BBB0	G Q N L Q D V L E R I R A H P E L
UniRef90_B0T415	A R E G A L A L I D A A L S R R G G L D E A A S A N A F R F L
UniRef90_B5Y8M6	R E L L L Q E L L G Y E L G L T S Q E D L W P R L K V A L P K
UniRef90_E1L398	A R R S A Y A L L V Q Y D L P A R Y I K D I L R S S K R L A D V
UniRef90_A0A023NXK2	R A L A A Q A L A D V A L R G V S L R D A M E R Y A P R L A
UniRef90_R5FIE5	Q E L L P E Y A
UniRef90_UPI0003656A5A	H R I Q E L A A G L I A R V E E G R T L T E A L A A A Q R S T E L
UniRef90_UPI000466315D	A R R S A V F L L D Q I L G E G R L M A E L P G A L A P L
UniRef90_B7L0E3	A A R H A A R E A V A T L L G P A R G L A L E D A L A Q A A R G A G L
UniRef90_UPI000476AC67	W Q A Y P E L
UniRef90_T1AL79	Y A W Q V S G T S I D G V I E Q F R H E Q D M
UniRef90_UPI0003754BE9	R H E E A
UniRef90_UPI000378E0DE	K K Y S N I Q L N Y Y F S K K N Y
UniRef90_UPI00036E23D8	Q G R E M L L Q E L M S Y E L G V V D K D A L W R S L S P S L P K
UniRef90_L1QGQ1	E A R L V A G L L L N A A L E K R T G L D E A L S Q S P A R D L
UniRef90_B6BPG5	R V I I I Q K L Y G K F Y N E D N N L D F P K H R F
UniRef90_UPI0002B44468	
UniRef90_UPI00046EF705	R M E I M Y Q Y A L N E H L N F L D Y L M L
UniRef90_W6AAM0	R K G L I K I L Y R F Y I L N C E D Q R I K Q E L L D N F E F
UniRef90_B4RCX9	
UniRef90_V4P0T3	N A R L G A L K L I E A A L D H R G G F D E A G S T A E F L Q L
UniRef90_M5WJ39	
UniRef90_UPI00036A7346	

Prediction tracks:

lupas_21
lupas_14
lupas_28
jnet
conf   9 9 9 7 2 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 8 7 4 0 8 8 7 5 6 8 9 9 9 8 8 6 5 1 5 7 8 8
sol25   B   B B   B B B   B B B   B B   B   B B   B B   B
sol5   B   B B   B B   B
sol0   B   B B   B B
jhmm
jpssm

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                                          50              60              70              80
UniRef90_Q87AR1          D V R D R A L V E A I C F A V L R R R P V Y E A A L T R W L A R P L G R G D A Q
UniRef90_UPI000362C2FE   P E R D K A Y A T H L V Y G A L R R L R L L D F L L E P F L P H P   E K L P P E
UniRef90_UPI0003824005     P A D A A M T R M L A Y G V L R E L S L L Q A L A A Q L V D K P L A Q   D D E
UniRef90_C7HTD5              D I S Y I T K N I Y G V L E N K L Y L E Y I L A K L S K I K V K K L D K K
UniRef90_UPI0002DCE8E9   V A R D R A L L K E L C Y G T C R R L P R L Q A L A Q R L L K Q P F K K R D A D
UniRef90_I1YJI9               Q Q L I Y G T L R H Y Y S L S G L A E K L L Q K P L K A K D Q D
UniRef90_J9DGE9          S P P D R R L A K A M V M F A L R R R G D I S S I L A K Y I K R N I P G R P H L
UniRef90_S5LZV2          E S F D E E   I N D Y I F E I L E N I Y E Y K E L I S N L L P W S W T R L P K V
UniRef90_A2BZB2          Q K E I R E L A V R R V D L V I E K Q D E I D H T L D S V M E G W L K R L P R I
UniRef90_V4RJ66          E P R D R A F V K N L S T Q T V R R L G Q I R A A L K R F M D R P P H R G S R L
UniRef90_V8A589          D P R D R A S A H R L A A T V L R H M G S M T E L L Q P L L R R     E P P A P
UniRef90_E6WPC3          D P R D R A L L E A V V F A A L R G R H R Y E A A L R G W M A K P P G A G D G S
UniRef90_Q5X1U7          P Q E I S P M T K E I C Y G F C R H Y F R L Q S I A D T L I N K R P K     D N E
UniRef90_J2WC30          D R A D R A L V H A I V A E T L R H L P D L D A L I D G A T K Q P L P D D A K
UniRef90_X7F6P1          A P E D R A A A Q R L A T S V L R E L P R A D A V L A P F L R     K A P P L R
UniRef90_UPI00037A0FAE   S E A I V D F G R P L L K F V V E A D V Q L L D R I K T V L Q N W A E R V A I I
UniRef90_E0Y0F8          E P S E R A R A Q S L A M T T L R N L G P I D I V L K K Y L T     K K P P F A
UniRef90_B0UJW1          P G P D L A L A R A I A T A T F R H L G L I R H A L A A R L A E G L P E G Q P K
UniRef90_C7N8U4          T K K E K M F I T N V V N I V I K N L I Y I D Y L I G K S V R N V K K R K
UniRef90_N9VD26          N E N E       L K T L E L I E C K Y E T L K N I A K K F L S W E W S R I S P L
UniRef90_K4APA2               R E L L V A V A S G W D K H V D I I D K I I Q T W K D E P V A R I     L
UniRef90_R5B8A4            E S D K A F I Y K L V R T A Y A C F G K Y S H L V A E S T S Q W K D R L F T T
UniRef90_K2GTY7          S F I D K I Y F D E A F D W I Q E N E G K L I Y I I N K F A D I L S M P I I N I
UniRef90_U2YYR4          S P P D R A R A Q R L A T Q V L R Q L P T A D R A L K P F L T     K Q P P L A
UniRef90_E1PT15          S N E Q F S H L E K I A K N Y D F Y K K A V S Q F L K E     G W S W E R I S P L
UniRef90_UPI00047E1F82   P A A R R P A V Q D I V Y G T L R R Y G E G D A L L A P L L R N P P     Y P V
UniRef90_A3V2W4          A P D D R A R A Q R L A T D A L R G L D R A D R M L K P Y L K K P P G D H
UniRef90_UPI00047E484A   D R R D R A L L R A I L M V A L R F R A E L S D V L D S F I D K P L P A G A T A
UniRef90_UPI000255A710   P A P E R A R A Q R L A T E G L R Q L E R C D R L L D H L K     K T P P L P
UniRef90_Q5FHK4          K E V D D Q L L L K I I S T M L I A F N N I N S N I A G F L K W S I D R I N L I
UniRef90_W5UXG9          L E Q D K S F I K L L C Y E F F R H Y Y S L E K I I A L Y L T Q K T K V K A K V
UniRef90_F2BBB0          S A Q E N G T L Q D I A Y G C Q R Y L G S L H H M L S H M L K K P V D     N R E
UniRef90_B0T415          E P R E R A F A R A L A M A T L R H L G P I D R A L A G K L A     K E P P P R
UniRef90_B5Y8M6          S D R V K R H I K R L L N A Y L E N R E E I D I W I D H S L K S K F A A Y S D L
UniRef90_E1L398          T P A D R A F A E F L C M G S V G A Y R Y L C D V L S G Y C K     R F S H L E K K
UniRef90_A0A023NXK2      D A R D R A L L M A L L S D G S R W W L R F D A A I D R L L D K P L R Q K E P A
UniRef90_R5FIE5          D V E D K E F A R K L F R A T I N A D T Y Q R Y M S E Y S R N W F S R M A Y M
UniRef90_UPI0003656A5A   T V G E R G A L Q D I G Y G T L R H L G Q L R F I L R E L V P K R L P S D D
UniRef90_UPI000466315D   D P A E R A R A Q R L A L D A L R G I E R A D R L L E P H L R     K N P P L H
UniRef90_B7L0E3          D A G E A A L A R A I A T A S F R R L G F I K A A L A A R L R D G L P E D R P H
UniRef90_UPI000476AC67   T P A G R G A V Q D L L Y G S L R D F G R G T A I L E V L L S S P I S E     K R
UniRef90_T1AL79          E V A D L D Y F E D L L K G V A R H V E E L D A G L T P F L D R S V A Q V D P I
UniRef90_UPI0003754BE9   G P R D R A L A R A I A T V A L R R L G T I R L G L K R F L E R G L P R N A G L
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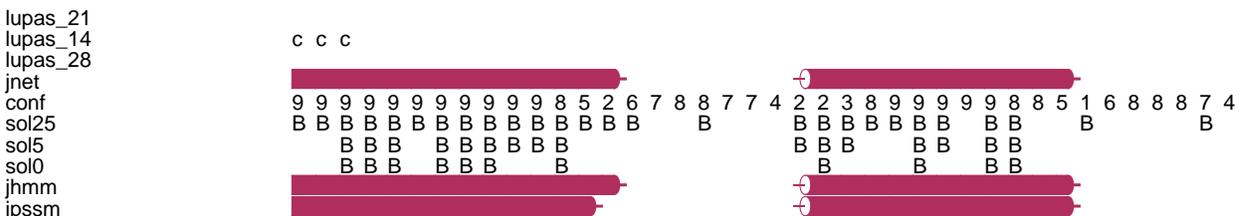
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jpssm
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