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                    1              10                  20                  30                  40
QUERY               V H Q V L Y R A L V S T K W L A E S V R A G K V G P G L R V L D A S W Y S P G T
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UniRef90_F6W6L0            L F R A L V S A K W V A E A L K T S Q P       L Q L L D A S W Y L P K K
UniRef90_M3ZFY9     M A A D P T P A V V S G Q W L A D A I Q N K L V G P K L R I L D G S W Y L P K T
UniRef90_H8FQL6     M S I A N P D A L V S T N W L A D H L S A       P D V R V V D A S W F L P K Q
UniRef90_H0VBR7            L F R A L V S A Q W V A E A L R A P R A G Q P L Q L L D A S W Y M A K G
UniRef90_UPI0004698642       P K T L V S T E W L A Q H L K       D P D I R V L D A S W Y L P D E
UniRef90_V4RAZ2           E T L V S T D E L A R R L G E       P D L A I V D A S W Y L P D K
UniRef90_U2YM20             T L V S T R W L A E R L K       P D L R I L D A S W Y L P D T
UniRef90_UPI00033194FB    Q Q L F R A L V S A Q W V A E A L R A P R A G P A L Q L L D A S W Y L P K G
UniRef90_G3NZ80            T R A L V S A Q W L A D A L C S N L V G P K L R V L D S S W Y L P K K
UniRef90_UPI00037CDEBE    P R T L V S T G W L A D H L G       A N P D L R V L D A S W Y L P D G
UniRef90_A3K561           P K V L V S T H W L A R H L N       D P D L R V L D A S W Y L P D G
UniRef90_A0A037ZN59 M H Q D D P K T L V S T D W L A A H L K       D P D L R I F D A S W H M P A S
UniRef90_D5VJH0           S D P L V S T A W L A E H L D A       P D V R V V D A S W H M P A Q
UniRef90_C8S4F0           P R T L V S T D W L A A H L       A N P D L R V L D A S W Y L P D G
UniRef90_UPI0003B40F68    P K T L V S T E W L A Q H L K       D P D L R I I D A S W H M P A A
UniRef90_A5EPT2           D P L V S T D W L A A H L G       D P R V K V L D A T F K L P G V
UniRef90_G8PKN9     M A Q D P I V S V S W L K D H L D A       P D V V I I D A S W Y L P A E
UniRef90_Q2W7S2     M M H P N S D A L V S T E W L A S H L S A       P D V R V V D A S W Y T P G Q
UniRef90_UPI0004263F8D M A H D D P R T L V S T G W L A A H M K       D P D L R I L D A T W F M P D G
UniRef90_S9RGS5           P K T L V S T K W L E D H L N       D P D L R I L D A S W Y L P D E
UniRef90_E6VKW5           D P L V S T D W L A D R L G       D P S V K I I D A S F K M P G V
UniRef90_UPI00037AF68F M A E P H Y S F F V S T A W L A D N L T A       P D L V V I D G T F F M P D G
UniRef90_A9W5V6           M T T S P F V T V E W L H Q R L N A       P D V V V L D A S W L P A Q
UniRef90_W8S4C4           P K T L V S T E W L A A H L D       D P D L R I L D A S Y Y L P E G
UniRef90_UPI00035E03BE       T F V S T D W L A A H L G       D P D V A I I D G S W Y L P E G
UniRef90_E2CD74     T T P S P I V S T D W L A A N L S S       P D L I V V D G S W Y L P Q G
UniRef90_H2RVI7           S K A L L T S K W L A D A M K T Q S       K M R I L D T S W Y L P K R
UniRef90_B3PXP4     M T E S K S R F V V S A D W L Q G E L G K       P D L R V L D A S F Y L P A Q
UniRef90_D4I8G3     T T P S V F V S A Q W L A Q H L S       D E D I Q I L D A R M L A P G T
UniRef90_UPI00031E453D     H F V S T A E H L G A       P D I A I V D A S W Y L P D N
UniRef90_W4C1K9           E P I V S T R W L L A R L       Y E P E L V I V D C R F L L T D P
UniRef90_A7HXG3           T S P L V T T E W L E E H L D A       P D V R V V D A S W Y L P Q Q
UniRef90_A3JRR0     M P H S D P K T L V S T Q W L A D H F K       D P D L R V L D G S W H L P T D
UniRef90_A3WY54     M I S M L D D P L V S A A N L R       D V K V I D A S F K M P G M
UniRef90_Q65NR2           S V L K S P E W V Y K R L M E K T       D Q T V I V D R F H L T K P
UniRef90_UPI000366D4FE M S E T T S R F V S A D W V E K Q L G T S       G F K V V D A S W Y L P A K
UniRef90_C1A3S1           L P T P L V S T A W L A D H L D       H P A L R I V D A S W Y M A A S
UniRef90_D3PL61           M P S P L V S A Q W L H E H L G       D E R L R I V D C R F S L Q D P
UniRef90_UPI000375662A M T N P N L V S T E W L S Q R L G       D P T V I P V D G S W Y L P A N
UniRef90_A3SLZ4           T T L V S T G W L A D H L K       D P D V R V L D G T W F M P A T
UniRef90_T0KHU3             L V S T D W L E G A L G A       P D L R I V D A T F F L P G T
UniRef90_UPI0003FBB6C8       R H F V T A D W L S R H I G       D P D V A V V D G S W H M P A T
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UniRef90_A9D5T7     M T D T D T S P F V S F D W L T E R L G       D P D L K I V D A R M S P P G K
UniRef90_UPI0003693BB5       L I T A R D L K P H I G R       D G L S I V D A S W Y L P A Q
UniRef90_C5D2I6           K H I V S Q A W L S E R L N K       E D V R I I D C R F Y L N D P
UniRef90_G8MCA9     M P H T H Y T T I S A T N L A E R L A A       A P G S I V F D C R F D L A A P
UniRef90_UPI00046A0682 M T S S F F V T A D W L A E H L S E D T       L Q V I D A R M L P P G V
UniRef90_A0A024Q629       S Y L I S V N R L K S R L E N N Q       D N T V L V D V R F Q L G D P
UniRef90_V7FRX7             I D A D W L Q K R L G E       P G L T I V D A S W Y L P A Q
UniRef90_UPI0003467581 M T T S F F V T A D W L A E H       Q I E N D V Q V I D A R M L P P G Q
UniRef90_UPI0003B6AD78       E P L V S T Q W L A N E M G A S       D L R I V D A S C F L P E K
UniRef90_J3DH09     M T Y A T L I S A A E L A A H       A G D A N L L I V D C R H D L A N P
UniRef90_Q11IF3           V V S P D W L Q E R L G S       P G L S I V D G S W Y F P G
UniRef90_W9BUJ7           L V S T E W L A N E M G A S       D L R I V D A T K F L P D G
UniRef90_D6V8X0           M S D P L V S T S W L R E H L       I D S D V R I D A A Y R M P A P
UniRef90_B2T9H7     M P H T H Y T T L I S A T N L A E R L A A       A P G S V F V I D C R F D L A D T
UniRef90_UPI00034839BA M P H R H Y T T L I S A A N L K E R L D A       A P G S V L I F D C R F D L A D P
UniRef90_L0MG18     M N S P F L V T P Q W L E Q H L H       D A D L V L V D V R M S P P G K
UniRef90_UPI0001D2EF11 M T R P D P Q N L V T T Q W L A E H L H A       P D L L V L D A S W H M P A G
UniRef90_G2DY17     M N P T P F Y P L I D A R T L I D Q I Q       D P N L R V F D C R F S L A E P
UniRef90_V4K864           E P V V S V D W L H A N L K E       P D L K V L D A S W Y M P E Q
UniRef90_R9NU14     M T N T F F V T A D W L A K H Y S       D N D I Q I I D A R M L P P G Q
UniRef90_I0HYJ9     M F T T L I S T A E L A A H L D       D P D W A I V D C R F A L D D P
UniRef90_F2IXB8           P L V S T A W L A D H L E A       P D V V V D A S Y H L P A G
UniRef90_A3WDM5           L V S T Q W L A S N L E A A       D I A V L D A S R H L P A N
UniRef90_A0A059E7X1       D P L V T A E W L K E N I T A       P D V R V D A T W F P P M E
UniRef90_A0A017HVE7       P R T L V S T E W L A Q R L R E       P D L V L D A S W H M P N G
UniRef90_V4BFJ4     M S R P A L V S I K W L A D K I K A       P P K D F R I L D A S W H L P N T
UniRef90_H8GJQ1     M S Y S T L I S A D A L K A Q I D R       P D W V V V D C R F A L A D T
UniRef90_UPI00036D9198       L V T V E W L S R R L E       D P G V V V L D A T Y L P F E P
UniRef90_Q3SG14     M F S N T L V S T E D L A A H L D       P D N W V V L D C R F T L T D P
UniRef90_UPI0004253C56       S Y I I N V E E L V E K I       T N N P E V V I V D A R F Q L N D S
UniRef90_UPI00026CB0AA       L V T T E W L A N E L G A N       D L R I V D A T Y F A G G D
UniRef90_UPI0003B53EA1 A L P T P L I S A E Q L S A R L N       D P D L V I L D A S Y F M P A Q
UniRef90_C0LIR5           T N E P V V S V D W L H A N I R       D P D L K V L D A S W Y M P D G
UniRef90_A0A024K884 M S P A P F V T T E W L A A N L H S       P S I A L V D A S W Y M P A K
UniRef90_UPI000381476F       S P L I S T T D L A A R L G A       P D L R I V D G S W H L   D G
UniRef90_W0PA71     M K A N P L I S A Q E L S N L L D T A S       N L V V C D C R F E L T N P
UniRef90_UPI00030E83FA     E N L V S I D W L A E H       T D D P D V V I V D C R F T L G K P
UniRef90_K5XTQ3           S P L L R P A E L L A A L G Q       D I A I L D A T Y F L P E G
UniRef90_V9ZGH7           M S T S F F V A A D W L A E H I D       D P E I Q I I D A R M A P A G Q
UniRef90_B4EN25     M P H T H Y T T L I S A A N L A E R L A A       A P G S V A L F D C R F D L A D P
UniRef90_F5L5V1     M N S K T I V S F D W L K S R L D       D P Q V V I A D C R F V L G Q P
UniRef90_G5ZY60     M Q T L V T V D W L L S R       S D T N L I I F D A S Y F L P T D
UniRef90_UPI000369DACA       S R Y L V S T D W L A H L G A       P N L V I V D G S W H M P A T
UniRef90_Q9I452     M S S A Q L L T A Q Q L A A R L S E       P D L L V L D C R F A L E D P
UniRef90_E0Y153           Q V T V S T D W L E K N       H Q D V I V L D A S W F L P E N
UniRef90_L8J9Z8     S K L L S S P L V S A Q W L A H L N       N P E V V V L D A S W F L P G S
UniRef90_L0I9V1     M T D H D T A L V T A D W V E N H L D D F Q D D P A Y R L L E V N N P T V T A
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                                            50              60              70              80
QUERY                    R E A R K E Y L E R H V | P G A S F F D I E E C R D K A S P Y E V M L P S E A G F
UniRef90_H0ZK98          R D P K R E F E E R H I | P G A V F F D I D Q C S D R T S P Y D H M L P K A N D F
UniRef90_F6W6L0          R D P R Q E F E E R H I | P G A A F F D I D L C S D R T S P Y D H M L P K A S D F
UniRef90_M3ZFY9          R D T R E E F N Q K H I | P G A S F F N I D E C C D Q S S P Y D H M L P T P S D F
UniRef90_H8FQL6          R N A R E E Y E A E H I | P G A V F F D I D E I A D T D S G L P H M L P P P E K F
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UniRef90_V4RAZ2          R N G R E E Y L D R H V | P G A V F V D I D E V S D R S D P L P H M A L P T A E A F
UniRef90_U2YM20          R D G R A E Y E A A H I | P G A F F D I D D I S D H R S G L P H M A P P P E K F
UniRef90_UPI00033194FB   R D A R R E F E E R H V | P G A A F F D L D A C S D P D S P Y D H M L P R A E H F
UniRef90_G3NZ80          R D P R A E F A Q K H I | P G A S F F D I D D C R D K S S A A D H M L P T C G H F
UniRef90_UPI00037CDEBE   R D A K A E F A S A H I | P G A R F F D I D D V S D N R S E L P H M V P P V E K F
UniRef90_A3K561          R D A K A E Y A A A H I | P G A R Y F D I D A V S D A R S E L P H M A P E P E K F
UniRef90_A0A037ZN59      R D G A A E F E Q R H I | P G A R F F D I D E I S D S R S A L P H T V P P V E K F
UniRef90_D5VJH0          R E P Y K E F L A A H I | P G A V F F D I D D I S D E T S D L P H M I P T A V K F
UniRef90_C8S4F0          R D P R A E Y D A G H I | P G A R F F D L D E I S D Q R S A L P H M A P T P E K F
UniRef90_UPI0003B40F68   R D A R A E Y N S T H I | P G A R F F D I D E I S D H R S D L P H M A P P V E K F
UniRef90_A5EPT2          P L P K D D Y L K A H I | P G A V F F D V D E V S D H A N P L P H M Y P S A E Q F
UniRef90_G8PKN9          R N A K E Y E Q E H I | P G A V F M D I D E V S D Q S S P L P H M M P E P H V F
UniRef90_Q2W7S2          R N A R E E Y D A E H I | P G A V F F D I D E I A D T D S T L P H M L P A P E K F
UniRef90_UPI0004263F8D   R D A Y A E Y K A A H I | P G A R F F D I D E I S D L R S D L P H M A P P V E K F
UniRef90_S9RGS5          R D G R E E Y E R G H I | P G A R F F D I D E I S D T R S S L P H M A P P V E K F
UniRef90_E6VKW5          P L P A E D Y L A A H I | P G A V F F D V D A V S D H T S P L P H M Y P T A E Q F
UniRef90_UPI00037AF68F   R D A Y Q E Y L A G H I | P G A V S F D I D K I A D L S S E L P H M L P D A P F F
UniRef90_A9W5V6          R D A A A E Y Q A A H I | P G A I R F D L D A M S D T E S A L P H M L P R P E V F
UniRef90_W8S4C4          R D A K A E Y D A A H I | P G A R F F D I D D I A D A R S D L P H M A A P P E K F
UniRef90_UPI00035E03BE   R D P A A E Y R K A H I | P G A V R F D I D K V A D T S S G L P H M L P S P E N F
UniRef90_E2CD74          R D A D A E Y L E G H I | P G A I R F D I D E V S D P T S G L P H T L P A P H V F
UniRef90_H2RVI7          R N A K S E F K K K H I | P G A T F F D I D Q C C D K T S P L D H M L P S E K V F
UniRef90_B3PXP4          R D A D A E Y A A G H I | P G A I R F D Q D K I A D H S T S L P H T I P S P E Y F
UniRef90_D4I8G3          R D V H A E Y L A A H L | P G A P F F D I E A L S D H T S P Y P H M M P R A G R F
UniRef90_UPI00031E453D   R D G A A E Y R A A H I | P G A V H F D I E A L R D E T T D L P H M M P T A E R F
UniRef90_W4C1K9          E A G R K A Y T E D H I | P G A V Y L H L E E Q L S S S H G G R H P L P E I S K L
UniRef90_A7HXG3          R D A R A E Y E R E H I | P G A A F F G I D E I C D L A S P Y P H M L P A P E K F
UniRef90_A3JRR0          R D A L A E F E A N H I | P N A R F F D I D E I A D S R S P L P H M V P T V E K F
UniRef90_A3WY54          P L A V D D F H A A H I | P G A V F F D V D A V S D R A S S F P H M F P D A A Q F
UniRef90_Q65NR2          D E G R K A Y T K G H V | P G A V F I D L K E D L S R N P E G R H P L Q D P D L L
UniRef90_UPI000366D4FE   R A A K D E Y V A G H L | P G A V F F D Q D V I A D H S T G L P H S L P S P E F F
UniRef90_C1A3S1          R K G G V D F G T A H I | P G A V Y A D I D W L S D E A A P Y P H T L P S P E T L
UniRef90_D3PL61          S A G R Q A Y T A G H L | P G A L F L D L E Q D L S A P R G G R H P L P T P E A L
UniRef90_UPI000375662A   R D G P R E F L D A H I | P G A A F F D I N V V A D T S T D L P H M L P A P D V F
UniRef90_A3SLZ4          R D A R A E F E T R H I | P N A R F F D I D D I S D H R S D L P H M V P P V E K F
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UniRef90_UPI0003FBB6C8   R S G R A E Y L A G H I | P G A V F F D L D A I A D T T S P L P H M L P T P D A F
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UniRef90_A9D5T7          R N G A E E Y A A A R I | P G A V F F D Q D K I V D P G S S L P H T L P A P E H F
UniRef90_UPI0003693BB5   R F A R P E F E A G H I | P G A V F F D Q D E I A D K S S P L P H T L P S E A F F
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UniRef90_G8MCA9          D S G E A A Y A Q G H I | P G A H Y L H L D R D L S T G T N G R H P L P E R A A L
UniRef90_UPI00046A0682   R D I H A E Y R A G H L | P S A P F F D I E A L S D R T S P Y P H M L P R P E N F
UniRef90_A0A024Q629      Q A G R K A Y L A E H I | P G A V Y M D L E K D L S E K H G G S H P L P D I D M L
UniRef90_V7FRX7          R D A R A E Y D A A H I | P G A R F L D Q D A V S D P D A A L P H T L P S P Q H F
UniRef90_UPI0003467581   R D I K A E Y L A G H I | P G A P F F D I E A L S D H T S P Y P H M M P R A E S F
UniRef90_UPI0003B6AD78   R D A A L E Y E A C H I | P G T V F M D L G N L V D N A T G L P N T L P A P A E K F
UniRef90_J3DH09          A A G L D A Y R A G H I | P N A R F A H L D Q I S D G K F K G R H P L P E R Q D F
UniRef90_Q11IF3          R D A R A E Y E A S H I | P G A V F F D H D L V V D T D S D L P H A L P D P L T F
UniRef90_W9BUJ7          R N A L A E Y L A G H I | P G A V F M D L E E L V D S N A A V E N T L P P A E K F
UniRef90_D6V8X0          P T A A E E Y A A R H I | P G A V F F D V D V I A D R T S S L P H M L P K A D Q F
UniRef90_B2T9H7          E A G E K A Y L A G H L | P G A H Y L H L D R D L S N G Q N G R H P L P D R A R L
UniRef90_UPI00034839BA   A S G E A A Y A A G H L | P G A R Y L H L D R D L S G S S N G R H P L P D R A K L
UniRef90_L0MG18          K D M Q A E F E R G H I | P G A V Y F D I D D V A D K H S A L P H M L P D A A A F
UniRef90_UPI0001D2EF11   R D A H A E Y L A G H I | P G A V F F D I D A I A D H S T D L P H M L P D A V A F
UniRef90_G2DY17          E L G S R V Y R E G H I | P G A Y Y A N L D T H L S S P E T G R H P L P D P A R L
UniRef90_V4K864          R N P I Q E Y Q V A H I | P G A L F F D L D G I S D R T T S L P H M L P S E E A F
UniRef90_R9NU14          D R G R D E Y L N Q H L | P N A P F F D I E A L S D H S S P Y P H M L P R A E S F
UniRef90_I0HYJ9          A K G R R D Y L A A H I | P G A L Y A H L D E D L S P G Q T G R H P L P S I E A F
UniRef90_F2IXB8          R D A D A E Y R A E H I | P G A V R F D I D A V S D P A S D L P H M L P Q P H V F
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UniRef90_A0A059E7X1      K T G R Q A W S E G H I | P G S V Y F D I D A I K A G G T D L P H M L P D P V M F
UniRef90_A0A017HVE7      R D P E A E F R V A H I | P G A R F D I D A L S D H A S P L P H M A P P A S D F
UniRef90_V4BFJ4          R N A L K E Y H E G H I | P G A L F F D I D G C A D K T K S T A H M L P P A K D F
UniRef90_H8GJQ1          G L G A K N Y R H G H L | P N A R Y A H L D K D L S T S R T G R H P L P D F R V L
UniRef90_UPI00036D9198   R D A A A E Y R A G H I | P G A R F L D L A T L A D R A D P R P T M A P D L D G F
UniRef90_Q3SG14          G A G R E A Y E K A H V | P G A R Y V H L D E D L S A P P Q T G R H P L P D A E L L
UniRef90_UPI0004253C56   E A G K A Y K E S H I | P G A V Y F D L E E D L S S K H G G N H P L P D V A V F
UniRef90_UPI00026CB0AA   R D A A A E Y E A T H I | P G A V F M D L A E I A D T S S D L P S M L P S A E K F
UniRef90_UPI0003B53EA1   R D G V A E W K E Q R I | A N A Q H F D F D T I C D P D A E Y P H T M P S P E L F
UniRef90_C0LIR5          R N P L Q E Y Q V A C I | P G A L F F D I D G I T D R T T N L P H M L P S E E A F
UniRef90_A0A024K884      R D P A G E F L Q S H L | P G A V A D K T T D L P H M L P T P E D F
UniRef90_UPI000381476F   R N A R A D F E Q T H I | P G A V F F D I D A I S D R D S P L P H M M P T P K A F
UniRef90_W0PA71          S Q G L Q L Y N D G H I | P G A R H V D L D Q V L S I P D Q G R H P L P A R E H F
UniRef90_UPI00030E83FA   G L G L A E F L Q D H I | P G A L Y F D L E Q D L S A P H G G R H P L P A A D A L
UniRef90_K5XTQ3          Q D G A A N F R Q A H I | P G A V F D I D A V A D H A S G L P H M L P T P E A F
UniRef90_V9ZGH7          R D M A A E Y R A G H V | P N A L F F D I D A V S D H T S P L P H M M P R A E A F
UniRef90_B4EN25          G A G E A A Y A A G H I | P G A Q Y L H L D R D L S T G T N G R H P L P T R D A L
UniRef90_F5L5V1          E A G A E G Y R K D H I | P G A V Y F D I E K D L S Q A H G G R H P L P D L D A F
UniRef90_G5ZY60          R D G R T E Y D A G H I | P G A V Y F D I D G I K D E T S A L P H M I P S A E V F
UniRef90_UPI000369DACA   R K G R E E F L K A H I | P G A V F F D I D A I S D I S S P L P H M P S A E T L F
UniRef90_Q9I452          S Y G A R V Y Q E N H I | P G A H F A D L E R D L S A P V T G R H P L P D P A E L
UniRef90_E0Y153          R D S F N E F K S R H I | P N A Q F F D I D V I S D T N S P L P H M L P S P S S F
UniRef90_L8J9Z8          R D P V Q E W H E K R I | P G A T F F D W D E D L S D P V Q R D L L G K E A F
UniRef90_L0I9V1          D S D Y T P Y E E G H I | P G A T F F D W D E       D L S D P V Q R D L L G K E A F
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                              90        100       110       120
QUERY                   A D Y V G S L G I S N D T H V V V Y N G D D L G S F Y A P R V W W M F R V F G H
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UniRef90_F6W6L0         A E Y V G K L G V S N S T H V V V Y D A S D Q G L F S A P R V W W M F R V F G H
UniRef90_M3ZFY9         S R Y V S D L G I G N D T H V V V Y D T S D F G S Y T A P R L W W T F R V F G H
UniRef90_H8FQL6         S S K V R K L G L G N G N R I V V   Y D S N N Y A A S A R V W W M F R T F G H
UniRef90_H0VBR7         S E Y A G H L G V G T T T H V V V Y D T S D Q G L Y S A P R V W W M F R A F G H
UniRef90_UPI0004698642  M S R M R A L G V G D G H Q V V V   Y D G A G I M S A P R V W W L F K L M G Q
UniRef90_V4RAZ2         A A R M G A L G I S D R N R I V V   Y D G A G L F S A A R V W W M L R V M G A
UniRef90_U2YM20         V S R L R A M G V G D G H R I V I   Y D G A G L F S A A R V R W L F R L M G K
UniRef90_UPI00033194FB  A A Y V G G L G V G A D T H V V V Y D A S D Q G L Y A A P R V W W M F R V F G H
UniRef90_G3NZ80         S R Y A G D L G I G N G T H V V V Y D T S D L G S F S A P R V W W M F R L F G H
UniRef90_UPI00037CDEBE  M S R V R A M G V G D G H Q V V V   Y D G A G L F S A A R V W W L F Q L M G Q
UniRef90_A3K561         M S R M R A M G V G D G H Q V V V   Y D G A G V F S A A R V W W L F K L M G K
UniRef90_A0A037ZN59     M S R M R A L G V G D G H Q V V V   Y D S H G L F S A A R V W W L F R L M G K
UniRef90_D5VJH0         A S R V K K L G L G D G S R I V V   Y D S I G I L P A A R V W W H F R A M G H
UniRef90_C8S4F0         V S R M R A L G I G D G H Q V V I   Y D G S G I F S A P R V W W T F R L M G K
UniRef90_UPI0003B40F68  I S R M R A M G I G D G H Q V V V   Y D S T G L F S A A R V W W T F R L M G K
UniRef90_A5EPT2         G R D A A R L G V S N G D I V V V   Y D A G G W V A A P R A W W M F L S F G H
UniRef90_G8PKN9         S S K M R K M G I G D G Q T I V V   Y D G A G I F S A A R V W W M F R A F G V
UniRef90_Q2W7S2         S S K V R K L G L G N G N K I V I Y D G S   G F A S A A R A W W M F R T F G H
UniRef90_UPI0004263F8D  M S R M R A M G V G D G H Q V V V   Y D T Q G L F S A A R V W W L F R L M G Q
UniRef90_S9RGS5         M S R S R A L G V G D G H Q I V V   Y D G A G L F S A A R V W W L Y R L M G K
UniRef90_E6VKW5         A R D V E A L G I S S G D T V V A   Y D A G G W V A A P R A W W M F L S F G H
UniRef90_UPI00037AF68F  E G K M A A L G I A E D M Q I I V   Y D Q Q G L L G A A R V W W T L R I F G A
UniRef90_A9W5V6         S S K M R A L G V G D G A Q V V V   Y D G M G L F S A P R V R W M L Q T F G M
UniRef90_W8S4C4         M S R M R S L G V G D G H Q I V V   Y D A V G L F S A A R A W W N F R L M G K
UniRef90_UPI00035E03BE  A R T V G A L G I S   D E Q V L V V   Y D G A G L F S A P R V R W T F R T M G A
UniRef90_E2CD74         A S K M R L G I G D G A R I V V   Y D G I G L F S A P R V W W M F K V M G V
UniRef90_H2RVI7         A D Y V G N L G I E S D T H V V L Y D T N Q L G A F S A P R V W W M F R V F G H
UniRef90_B3PXP4         A T E V G R L G I S E N N R I V V   Y D G I G L F A S P R V W W L F R V M G A
UniRef90_D4I8G3         A A A M R E L G I S S A K H L V V   Y D E G N L F S A P R A W W M L R Y F G V
UniRef90_UPI00031E453D  A D A V G A L G I G   D G M R I V V Y D G A G L L A A A R V W W M F R A F G A
UniRef90_W4C1K9         T A A L S K V G I N R D S I V V A   Y D D D Q G A Y A S R L W W M L K Y L G H
UniRef90_A7HXG3         S S R V R A M G L G D G N R I V V   Y D G A G L F S A A R V W W M F R V M G H
UniRef90_A3JRR0         M S R V R A M G V G D G H K I V V   Y D V Y G I R S A A R V W W L F R L M G H
UniRef90_A3WY54         A R D V G A L G I S S K D K V V V   Y D S G G W L A G P R V W W M F L S F G H
UniRef90_Q65NR2         A A K L G K I G I D R Q T D V V V   Y D D S G G M F A A R F W W Q L H Y L G H
UniRef90_UPI000366D4FE  A A E V G K L G I S E T D T I V V   Y D G M G F F S A P R V W W M L R T M G A
UniRef90_C1A3S1         A S K L S A L G I G N T H A V V V Y D G S   G Q H F S A P R L W Y M L R A L G H
UniRef90_D3PL61         A Q T L G R A G I G N E H F V V A Y D D P P V G G M Y A P R L W W L L R W L G H
UniRef90_UPI000375662A  A D A V G A L G I G D G A T I V A   Y D G A G L F A A A R V W W T F R A F G V
UniRef90_A3SLZ4         M S R V R A L G V G D G H K I V V   Y D A H G L F S A A R V W W L F R L M G H
UniRef90_T0KHU3         T Q R A Q A L G L D T D S R I V V   Y D N S P V R S A A R G W W M L R L F G V
UniRef90_UPI0003FBB6C8  A A A V G A L G I R D G A T I V V   Y D S V G L F S A P R V W W S F R I M G A
UniRef90_A4TNL1         S E M A G Q L G I T E Q H T V V I   Y D E G N L F S A P R V W W T F R T F G A
UniRef90_A9D5T7         A R A A G E L G I S E N D T I V V   Y D G P G M F T A P R V W W V L R T F G A
UniRef90_UPI0003693BB5  A E R V G A L G V R E T D T I V V   Y D G M G F F S A P R V W W M L R V F G A
UniRef90_C5D2I6         A E K L S A A G I D E T   V T V V A Y D D Q D G A M A S R C W W L L R Y L G H
UniRef90_G8MCA9         V A K L A S F G L N E G Q Q V V A   Y D A H G G M Y A A R L W W L L R W L G H
UniRef90_UPI00046A0682  A V A M R E L G V S S D K H L V V   Y D E G N L F S A P R W M L K Q F G V
UniRef90_A0A024Q629     A A K I S N I G I D H D T T V V V   Y D K E N D M F A A R F W W L L H Y M G H
UniRef90_V7FRX7         A Q Y V G A M G I S A D D T I V V   Y D G P G F F S A P R A W W L F R V M G V
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UniRef90_UPI0003B6AD78  A S R M Q S L G L G D G S R I V L   Y D D S P I K S S T R A W F L L T L F G A
UniRef90_J3DH09         I D A M R V I G V N A N T Q V V A   Y D A H G G M F A A R L W W L L R W V G H
UniRef90_Q11IF3         E R H A S S M G I S K D D T I V V   Y D G P G L L A A P R V W W L F R V M G A
UniRef90_W9BUJ7         A S R M Q S L G L G D G S R I V L   Y D D S P L K S S A R A W F M L N M F G A
UniRef90_D6V8X0         A R D V G G L G I G N D D L V V I   Y D R G D Y M G A P R A W W M F G V F G H
UniRef90_B2T9H7         V E T L E S R G L K Q G Q Q V V A   Y D A Q G G M Y A A R A W W L L R W L G H
UniRef90_UPI00034839BA  V D T L A A H G L N E G Q Q V V A   Y D A Q G G A F A A R L W W L L R W L G H
UniRef90_L0MG18         G R A A G E L G I S E N S T L V F   Y D E G N Q F S A P R G W W T F R N F G A
UniRef90_UPI0001D2EF11  S S A V R   K L G F G D G M R A V V Y D S V G L F S A P R V W W T L Q V F G A
UniRef90_G2DY17         A D W L G Q C G V T S D T R V V V   Y D D L G G T F A G R L W W L L G W L G H
UniRef90_V4K864         A A G C S A L G I E N K D G V V V   Y D A K G I F S A A R V W W M F R V F G H
UniRef90_R9NU14         A V A M R Q L G I N S D R H L V V   Y D E G N L F S A P R A W W M L R Q S G T
UniRef90_I0HYJ9         V A T L S A W G I D D T V Q V V V   Y D D L S G V F A G R L W W M L R W L G H
UniRef90_F2IXB8         S S R M R K L G I G D G Q T I V V   Y D S V G C F S A P R A W W M F K V M G V
UniRef90_A3WDM5         A E R I A Q L G I T H E H R I V L   Y D D S A V K T S A R A W L A L T S H G L
UniRef90_A0A059E7X1     S S R V R K L G I G D G N R I I V   Y D Q F K F F A S A R V W W M L R V M G Q
UniRef90_A0A017HVE7     A A W M A R E G I G P G T Q V V V   Y D S L G V F S A P R A W W T F R R M G H
UniRef90_V4BFJ4         E E Y V G N L G I N N N T H V I V Y D N N A K F G F S A Q R V W W T F R V F G H
UniRef90_H8GJQ1         A Q K L G H W G I D N R S Q V V V   Y D D A G G A F A G R L W W L L R Y L G H
UniRef90_UPI00036D9198  R E R M A A L G V R R D D R I I F   Y D D S P H R T S A R A W W L F R L F G S
UniRef90_Q3SG14         N E K L C R W G V G V N K Q V V V   Y D D S F G S M A V R L W W L M R W L G H
UniRef90_UPI0004253C56  A E K L G I D Q D T T V V V   Y D K G N D M F A P R F W W D L Y Y M G H
UniRef90_UPI00026CB0AA  A S R M Q S L G L G D G S R I V L   Y D N S P Y H T A A R A W F M L R T F G A
UniRef90_UPI0003B53EA1  S E A V Q A L G V N Q D S Q I V V   Y D S L G L F A S P R V W W M F R A M G H
UniRef90_C0LIR5         A A A V S A L G I K N K D G V V I   Y D G K G I F S A A R V W W M F R A F G H
UniRef90_A0A024K884     A R M V G A L G I G S D Q T I V V   Y D E S G L F S A P R A L W T F R T M G A
UniRef90_UPI000381476F  G A A V G A L G L S V D D Q I I V   Y D S A G L F S A A R M L K T M G A
UniRef90_W0PA71         A Q T M A A I G I S D A T H V V C Y D A N D S   M F A A R L W W M L R W I G H
UniRef90_UPI00030E83FA  V E L F S S A G I D R D   V T V V A Y D D Q D M A M A A R L W W L L R Y M G H
UniRef90_K5XTQ3         A T A M Q D I G I S N T T R I I V   Y D Q R G L F S A P R L W W M L R V F G H
UniRef90_V9ZGH7         A V A M R E L G V C S D K H L V V   Y D E G N L F S A P R A W W M L R T F G V
UniRef90_B4EN25         A T L L A S R G L K Q G Q Q V V A   Y D A Q G G Y A A R L W W L L R W L G H
UniRef90_F5L5V1         V E K L G R A G I D E T K T V V A   Y D D Q G G P M A A R L W W M L K Y L G H
UniRef90_G5ZY60         Q A T M R M L G I R D G Q Q V V   Y D D S P F L S A R A W W M L R Y F G H
UniRef90_UPI000369DACA  R A A M E S L G I G R Q   M K I V V Y D A L G L F S A P R V W W T L R A F G A
UniRef90_Q9I452         A L K L Q A W G L R Q D S Q V V L   Y D D G P G A F A A R V W W L L H W L G K
UniRef90_E0Y153         N D H V E N L G I S N N   L K I I I Y D T E G L F S A A R M F M F K I M G H
UniRef90_L8J9Z8         S R E V S E L G I K E Q D T V V   Y D S Q G M F S A P R T W W M R T M G H
UniRef90_L0I9V1         E D L N A Q A G I T E D S T V V I Y G G G R V P N W F A L F A Y W E Y K Y Y G H
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                              130          140         150          160
QUERY                R T V S V L N G G F R N W L K E G H P V T S E P S R P E P A I F K A T L N R S L
UniRef90_H0ZK98      E A V S L L D G G L K N W Q R E G N A L S S G K T Q V A P S E F H A S L D K S L L
UniRef90_F6W6L0      K T V S L L N G G L K N W Q R E G P L G S G R A R P V R A E F Q A T L N P M F
UniRef90_M3ZFY9      S S V S V L D G G F K N W V A D G H P V T S D Y T K P E K R D F Q A T L N Q S W
UniRef90_H8FQL6      T D I S V L D G G L P K W L R E G R P V E D L P P V P R T R H F V A R F N R L L
UniRef90_H0VBR7      R T V S L L D G G L H W S H L N L P L S S G K S H P V P T E F R A Q L D P T F
UniRef90_UPI0004698642 E N V A V L D G G L P K W V A E G R P T E D M P P V L R D R H M T V R F Q N Q L
UniRef90_V4RAZ2      R Q V A I L D G G L P K W L A E G R P T E S G E T R R K P A I F S A S L D A A A
UniRef90_U2YM20      E E V A V L D G G L P K W R A E G R P L T A E A T P L R D R H L T V T P R R D M
UniRef90_UPI00033194FB R A V S L L D G G L R H W L R L G L P L A S G P G R P A P A Q F R A T L N P A F
UniRef90_G3NZ80      G S V S V L D G G M R S W L A G G H P V T C D D T E P E R A E F E A T L N P V
UniRef90_UPI00037CDEBE R N V A V L D G G L P K W V A E G R P V T G A P P Q I R D R H M T V A R Q N Q M
UniRef90_A3K561      D D I A V L D G G F P K W Q A E G R E V E D L P P V I R D R H M T V R R Q A H L
UniRef90_A0A037ZN59  T D I A V L D G G L P K W L A D G H P V D D L P P V I R D R H M T V S R Q A N L
UniRef90_D5VJH0      E D V V V L D G G L P K W L A E G R P I E D G P A A P Q E R H F T P R Y Q A D I
UniRef90_C8S4F0      L D V A V L D G G L P K W R A E G R E I E D M P P M V R D R H I T V Q R Q A T L
UniRef90_UPI0003B40F68 T D V A V L D G G L P K W L A E G R E V E D M P P V V R D R H I T V Q R Q S G L
UniRef90_A5EPT2      A D V R V L D G G L K K W L A E G R P I D S G Q V T P T L G T Y N A R F D A A R
UniRef90_G8PKN9      E S V F V L D G G L P A W K E E G Y P L T D E V P T R L E R H F T A M L N H D M
UniRef90_Q2W7S2      R D V S V L D G G F P K W L R E G L P V E D L P P V P R T R H F I S H Y N H L L
UniRef90_UPI0004263F8D P D I A V L D G G M A K W V A E G R E V E D M P P M V R D R H M T V R R Q N Q M
UniRef90_S9RGS5      T D V A V L D G G Y P K W L A E G R P T E D L P P V H K E R H I T I H R Q A H L
UniRef90_E6VKW5      A D I R I L D G G L K K W M A E G R P T E A G K P T I A P G R F S A K L D A S F
UniRef90_UPI00037AF68F Q K V K I L E G G L A A W K A E G R P L E N G P V E R P F A K F I A R L E T D M
UniRef90_A9W5V6      R E V K I L E G G M P A W V A A G Y P T E D G E G P R D R H F T A R L N N G A
UniRef90_W8S4C4      T D V A V L D G G L P K W Q A E G R P I E D M A P I I R D R H F T A Q R Q A H L
UniRef90_UPI00035E03BE R D V R I L E G G F P Q W I A D G R P V E S G E A K P E P K V F H P H F D A E A
UniRef90_E2CD74      E D V Y I L D G G M R K W A E D R P L E D L P V K R P E R H F T A R L D T S A
UniRef90_H2RVI7      S T V S V L N G G L R N W E L E G R P V T N Q N F K P T A T D F K A S L N R S W
UniRef90_B3PXP4      K N V F V L D G G L D G W K A E G R P L E T T T P A Y M P T T F K P N F D A S R
UniRef90_D4I8G3      D R V S I L A G G L A G W Q Q A Q L P L V S G A V D V A E A E F V V G P G W G E
UniRef90_UPI00031E453D Q D V K I L D G G F P K W L A E R R P V D A E P A Q P P R R S F T A R A P Q G V
UniRef90_W4C1K9      E R V F V M D E G Y S A W K A S F P V S D H Q A V R I P S Q Y E A D V Q K K M
UniRef90_A7HXG3      D D V V V L D G G M K K W K A E G R P T D D M K P R A S A R H F A A R R N T G L
UniRef90_A3JRR0      E N V A V L D G G L P K W V A E G H P T D S T P P V I R D R H M T V N R Q N Q L
UniRef90_A3WY54      A D V R V L D G G L K K W R A E G R Q V E S G E A S P K P G H F T A T F D P L N
UniRef90_Q65NR2      D S V Y I M D G G L S N W I K A G Y E V N A E D P R P S E R E F K P A L R E N E
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UniRef90_V4RAZ2         A G H I P G S L N L P Y R Q I L A A D G T V K P D A E L Q A A L R G A G V D P A
UniRef90_U2YM20         S G H V P G S R N L F F R D L L R P D G T M R D E A G I R A A F A G A G V D L D
UniRef90_UPI00033194FB  P G H I P G T V N M P F T D F M T E E G L E K S P E D I R R L F Q D K K V D L N
UniRef90_G3NZ80           G H I P G A I N M P F T S F L D A S G K E L R A E G L S K L F R E A G V D L G
UniRef90_UPI00037CDEBE  S G H I P G A R N V P F V T L L H E D G T M K P P A E L R A V F E A A G L D L S
UniRef90_A3K561         S G H I P G S K N V H Y A T L L T S E G T L K D P D A L R A V F E A A G V D L S
UniRef90_A0A037ZN59     A G H I P N A R N I P F G T L L N D D G T M K S P D D L R A V I E T A G T D L S
UniRef90_D5VJH0         G G H M P G A R N I P L A A M I A P D G T M L P A D L R T V F E A A G V D I N
UniRef90_C8S4F0         A G H I P G S K N L P A A S L V N P D G T L K S P P E L R A L F E A A G V D L H
UniRef90_UPI0003B40F68  S G H I P N S K N L P F G N L L N D N G T M K A P P A L K A A F E T A G V D L S
UniRef90_A5EPT2         S G H I P G S R N L P Y A E L F D A T G V M K P L D Q L R S A F G A A G V D L A
UniRef90_G8PKN9         A G H M P G A L N L P F G L L L N E G K L R S K E D L Q N I F K Q V G V D A S
UniRef90_Q2W7S2         Q G H I P G S V N V P F A D L I D E R T R C M P T E Q L K A R F D A A G I D S K
UniRef90_UPI0004263F8D  K G H V P G S R N V Y Y R N L L N A D G T M K S P D D L R A V F D A A G V D M S
UniRef90_S9RGS5         M G H I P G S K N I P Y T S V L T A D G T M K S P A E L R E L F H D N G V D L T
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UniRef90_UPI00037AF68F  S G H I P G S L N V P Y R E L L D G G K L K A P D I K Q A F V Q A G V D L A
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UniRef90_D5VJH0     K P I V S T C G S G I T A S V V A L A L A R M G K P R S A V Y D G S W T E W G
UniRef90_C8S4F0     K P A I S S C G S G V T A A V L D L A L E R I G H R K H A L Y D G S W A E W G M
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UniRef90_G8PKN9     T P V I T S C G S G V T A A V I T L A L E Q V G F S K N A L Y D G S W T E W G S
UniRef90_Q2W7S2     Q P V T I S C G S G V T A C T V A L A L H L V G H E N V A V Y D G S W A E W G N
UniRef90_UPI0004263F8D K P A I T T C G S G V T A A I I S L A L E R I G K T D H S L Y D G S W A E W G
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UniRef90_E6VKW5     L P V V T T C G S G V S A A V L T L G L Y R L G V R G S A L Y D G S W S E W G L
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UniRef90_B3PXP4     K P V V T S C G S G I I T A A I I T L A L E S L G H H D N K L Y D G S W S E W G S
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UniRef90_Q65NR2     S E I V V Y C G S G V S A C P N V L G L K E A G F E N V K L Y A G S W S D W I S
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UniRef90_Q11IF3     R P V V T S C G S G V T A A V I T L A L E S L G H K D N R L Y D G S W S E W G R
UniRef90_W9BUJ7     Q P I V T T C G S G M T A S V V A F G A H L L G K T D V S L Y D G S W A E W G
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UniRef90_L0MG18     G P I V V S C G S G V T A A V L A F G L Q S L G A P Q V R L Y D G S W S E W G L
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UniRef90_R9NU14     E P T V A S C G S G V T A A V L I L A L N T L G A K N V R L Y D G S W G E W G S
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UniRef90_V4BFJ4     K P I T A S C G S G I S A C T I A L A A Y I C G K K D V A V Y D G S W M R F V I
UniRef90_H8GJQ1     P E Q V V H C G S G V T A C H N L L A M E H A G L K G S K L Y A G S W S E W I R
UniRef90_UPI00036D9198 R P L V F T C G S G I T A A G L L F A A H M L G R E D T A L Y D G S W S E W G
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UniRef90_K5XTQ3     R P I I A S C G S G V T A C V L A L G L V Q A G L P E A A L Y D G S W A E W G A
UniRef90_V9ZGH7     R P I I A S C G S G V T A C V V V L A L T T L G V N G V C L Y D G S W A E W G A
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UniRef90_F5L5V1     K E L I V Y C G S G V T A C A N V V A L H E V G L   Q P K L Y V G S W S D W I S
UniRef90_G5ZY60     Q P A V T T C G S G V T A A G L T L A L A L L G K T D I R L Y D G S W A E W G A
UniRef90_UPI000369DACA K P V I T S C G S G V T A A I W L A L E T I G A P P A A L Y D G S W T E W G A
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UniRef90_H8FQL6        R E G       S P V A Q G
UniRef90_H0VBR7        R A Q P E N I I S E G R G
UniRef90_UPI0004698642       F P T V P V A T G D A
UniRef90_V4RAZ2        A       D T P V E T G R
UniRef90_U2YM20            F P D L P V E T G P A
UniRef90_UPI00033194FB R A Q P G D I V S E D P G
UniRef90_G3NZ80        R A S P E H I I S E G E G
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UniRef90_A3K561          A F P T L P V A T G E
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UniRef90_C8S4F0        Y D D     L K V E K G
UniRef90_UPI0003B40F68 F D D     L P I A K G
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UniRef90_G8PKN9        S E K T E
UniRef90_Q2W7S2        R D D     T P I E K
UniRef90_UPI0004263F8D   A F P T V P V A T G D A
UniRef90_S9RGS5        F D     Q L A V E T G
UniRef90_E6VKW5        Q D G P       P I A T G
UniRef90_UPI00037AF68F R S     E L P I A T
UniRef90_A9W5V6          A D P A R P V E T G P A
UniRef90_W8S4C4        F D     Q L K V E T G
UniRef90_UPI00035E03BE   G A K D A P V V T G P A
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UniRef90_W4C1K9        Y E     E N P V A T G E G
UniRef90_A7HXG3          A V T E M P V E
UniRef90_A3JRR0        E S N     L K V V T G E
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UniRef90_T0KHU3            D P A T P K A T G E A
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UniRef90_C5D2I6        Y       P E N P I A T G E
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UniRef90_UPI0003467581 R D D     L P I K T
UniRef90_UPI0003B6AD78   A D P A T P K E T G P A
UniRef90_J3DH09            D S T R P V A T G P
UniRef90_Q11IF3        H Q D     T P V V T G
UniRef90_W9BUJ7          A D A D A P K V T G
UniRef90_D6V8X0        P D G P       P V A T G K
UniRef90_B2T9H7            D P K R P I A T G
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UniRef90_F2IXB8        R Q D T E
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UniRef90_A0A059E7X1        D S S R P I A K G A A
UniRef90_A0A017HVE7    G G       R P V E T
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UniRef90_H8GJQ1        N K N     R P V A T G K
UniRef90_UPI00036D9198   A D P S T P K A T G
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UniRef90_UPI0004253C56 Y D     E N E V E T
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UniRef90_UPI000381476F R T D     T P V A A G
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UniRef90_K5XTQ3        Q S D     T P I E
UniRef90_V9ZGH7        R S D     L P I E
UniRef90_B4EN25          A D P S R P I A T G P
UniRef90_F5L5V1        Y E D N E     I E K G
UniRef90_G5ZY60            S D A P I E T
UniRef90_UPI000369DACA     S E K P V A T G P A
UniRef90_Q9I452            D P R R P V A T G
UniRef90_E0Y153        R D D     L P I A T
UniRef90_L8J9Z8        K
UniRef90_L0I9V1        I     I R A P I E T G E A
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UniRef90_UPI00040754E5            S P E W V W K R L K E K P G     Q T V I V D V R F H L T N P
UniRef90_UPI00026273CD        S V V V S D K W L E Q R L E     N D P E N I V V V D T R F E L T D A
UniRef90_UPI00031850DB    M P T P L I T A S E L D Q L R A A G K Q H   V V V F D C S F D L T N P
UniRef90_K2P175                   V S A D W L E K H L G E       P G L C V V D A S W Y L P A Q
UniRef90_V6MCM2             Q T F V S P Q W L H D H L D         D E H I I V D C R F V L T D A
UniRef90_UPI00030EED38    M Q L I D P A T L V S E N L A S       P D I L V F D A S W H M P A S
UniRef90_N4V5V8           M R R S L S S Y I V T P K E L D E A L K K N P P S P R V I P L C A S W F L P D G
UniRef90_W4BMF9               K N I V S M R W L L A R M       Y E P D V V I A D C R F L L G Q P
UniRef90_G0SAW7               S S Y L V T P Q E L S D A L K K S P Q S P N V I P L C A S W F L P N D
UniRef90_UPI00047DB494        K F V V N K E W L N E Q L N       N E Q F K I V D C R F E L G N P
UniRef90_U2ZA45             M V H H P L L S T D E L A A L L D A     P D V R I I D A S W R M D G S
UniRef90_B9H614           S L S M N E P V V S V D W L H A N L R E   P N L K V L D A S W Y M P D Q
UniRef90_UPI000364A412    M T T P L F V S V E W L Q E H     A A D E N L Q I L D A R M L P P G Q
UniRef90_K2RUN7           S Y T L T S Y L V T P A E L S D A L Q K N S T A P R V V P L C G T W F L P N D
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UniRef90_UPI0001CBB0AF        S S L V N V R W L A D K I V S G T T   K N L R V L D S S R Y S S E T
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UniRef90_UPI0001CBB0B0    M S K M S P M V G I K W L A E K L S S G A T   K N F R V L D S S W H L P N T
UniRef90_I3ZEE7               S A L V S P Q W V A S R L S S     P D L V I V D A T M P P V G K
UniRef90_E8RSQ7               I E A D A L K S L L D A G S       V K I I D G S W A L D G T
UniRef90_A0A024QES4         T Y L I S V N R L K N R L N N S L N     N T V I I D A R F E L T K P
UniRef90_D3KZR7           Y A N P D A I V S V D E L H S H I E K G E   V K I I D V R G G M K
UniRef90_W0LD25           M N S P F L V T A Q W L E Q H V N       D E N L V V I D V R M A P V G Q
UniRef90_K9UIY3           M L S S P V I T A E L L H S Y L V T G S   N P N L T I V D C R F A L A D P
UniRef90_H8GJB0               S A L I S C E G L R Q H L D R     P D L V I L D A T Y F L P Q Q
UniRef90_G2IVI8             M F T T L I S A S E L A A L P A A E R   V V L D C R F H L S D P
UniRef90_UPI0003B40EE4    M T P S P L K S A A W L T E H L N       D P Q L R V L D C R Y A L S D P
UniRef90_I7A7N2               L I T P Q R L S S R L Q Q       P N L R I L D C R F S L E D P
UniRef90_D9QHX3             M A S F L I S T E D L A R D L G A     P D L R I V D A S W H L   D G
UniRef90_E4V3D9               S Y V V T P K E L H E A L K E N V P T P R V I P L C A A W F M P N D
UniRef90_D5ZQS4           T R M S H P L L V T P D A W L H E R L G   D P A I R I L D A T T F L T Q P
UniRef90_UPI0004769F74    M P S P L I S A Q A L R T A L A S S Q P P   V L I D V S F D L A D P
UniRef90_UPI0002E2BAD4        K N I V D V Y W L K E N I N       N P S V R V I D C R F V L G S P
UniRef90_W9T2F1               L I S P T Q L A D R L Q         D P Q L L V L D C R F A L E D P
UniRef90_A4IN72               L V S H E W L L T H L S E       E N I R I L D C R F W L G D P
UniRef90_Q0BTI3             V L V D A E W L R E S M G A A       D L I I F D A T K F L P N Q
UniRef90_UPI00037234E5      N P L I S A A D L K T L L D S K S D A S K V H L I D V R H S L Q D P
UniRef90_A9ITD0             M T M T L I S A A D L A E R L Q S     P G V R I F D V R H D L A D H
UniRef90_C6CPD0           M S I S T A G L F V S A S W L N A H     R H D D D I A L I D A R M L P P D T
UniRef90_F7YRZ4             L M S P L V S P Q W L A Q K L G     D P R T V V L D C S I E F Q I P
UniRef90_F9U7H5           M N R A R E N L V D A S T L L A         G I V D P D L R L F D C R F S L A D P
UniRef90_G4H864               N H I V S M K W L L A R L       Y E P D L V I V D C R F T L G Q P
UniRef90_L0A4C9           M A Q G P L V S A D W L I E H       A R S D K V R V V D C R F S L S D P
UniRef90_A1ST81               P G P L V S I D W L E K H L S     H P D L V I L D G S W H M P S K
UniRef90_A5UR80           Y A H P E A L V D T A W V A D H L N       D P K V R I V E C
UniRef90_B2U935           R A H Y A T L I T A P Q L A A L     Q Q S A P E A V V V I D C S F D L A N P
UniRef90_Q474C7             M P N P L I S V A     A L Q A L Q A A P A R N V V V I D C S F D L A N P
UniRef90_L0EK36             R A I V S M R W V L A R M         Y E P D L A I V D C R F L L S D P
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UniRef90_V9DRI2               S S Y L V T P K E L D E A L K K N A P T P K V I P I C A A W F M P N D
UniRef90_J1JWP8               L V T Q E W L K H H I E R       P D I S I I D G S W F L P A H
UniRef90_I3UUG0               L I T P Q Q L A E R L G S       P K L V I L D C R F A L E D V
UniRef90_T0J2W9           M A Y D T L I S V S Q L H D L F A A G A   D L L V L D C D F E L G E P
UniRef90_E9CIW1             M V K P V I S A G A L H E L I R Q S A A Y P A L R V I D C S W H M P A N
UniRef90_D3UX62           M K N E Y F V S P Q W L N D H L H       D E N V V I V D A S A P M P T Q
UniRef90_W0Z9D6             M S N I L I T P E A L A A L I A E G A P   V R V L D V R W R L   D R
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UniRef90_UPI00037B9F60      M H T T L I S A A D L A Q H V   L D S R W V V L D C R H D L M N P
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UniRef90_UPI0003B706C2        S P L I R A E H R A L L A D D P S D T D L V L D V R W Y L P D P
UniRef90_E4NI70           M T S P L I T V A E L A D A L G T E R P P   V L L D I R W A L G G P
UniRef90_E6SJF3           Y A H P E V L V S T E W V A E H L D E L A D P N S T K   Y R L V E S
UniRef90_UPI000472297B    M T M T L I S V A D L A A R L G Q       P D V R I F D V R H D L M D H
UniRef90_U2ZHZ7               L I S T T A L H A R L Q E     P N L V L D C R F A L E D P
UniRef90_B6XIP0           M M Y N Y F V T P E W L N S H L S       D S N L I V L D A S T P P P A P
UniRef90_UPI0004703468           V S I R W L L A R M           Y E P D L V I A D C R F W L N D P
UniRef90_Q31KG2           M S S P L V S A E W L Q A H L H       D N D L C L V D C R F N L M Q P
UniRef90_G4UVS2               S S Y L V T P K E L H E A L K K A P P S P R V I P L C A S W F L P N D
UniRef90_UPI00047483E0    D V L I S A E W L R S N L G A       P N L R V I D A S T F M P G P
UniRef90_W5MZ79                                 K T S E R G R X L H I L D A S W Y L P E N
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UniRef90_L0AIU5           M T E Y D T D V L V S A D W V E D H L A A F Q D D P D Y R L V E V S P E S P E E
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UniRef90_D2B907               S P L I S P E L A D L A G A       T V L D V R W K L G G P
UniRef90_W4AKZ5               N N I V T M K W L L A R L Y E S     D L V L D C R F A L G K P
UniRef90_UPI0004652180        N V I I S A S E L A A A L Q T D R P P   V L L D V R W Q L E P P
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UniRef90_N1QA27           T S Y L V T P A Q L D K S L K K N A P S P K T I P V C A A W F L P N D
UniRef90_S6JEC9               L I S P L A         L D L R K E Q P G L V D C R F A L E D P
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UniRef90_B0YBV3               S S Y L V S P R E L H E A L K K N S T S P R V I P L C A A W F M P N D
UniRef90_D5C2W8           M P Y R T I S P T E L A R V L G       N S N S V I F D C R F N L M D S
UniRef90_F0RJQ2           T Q S D L P T P L V S A E W L Q A H L H     D P R L R L D C R F D L R D A
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UniRef90_C1DPN3          A Y G A R S Y A E A H I | P G A R F A D L E R D L S G P V T G R H P L P D P V L L
UniRef90_UPI00040754E5   E E G R K A Y R Q G H L | P Q A V Y V D L N K D L S E K H G G R H P L P P H E K I
UniRef90_UPI00026273CD   D A G R K A Y L Q G H I | P Q A V Y F D L N K D L S D K H G G S H P L P D M E M F
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UniRef90_UPI00030EED38   R D A R A E F E A G H I | P G A V F F D V D A I A D H S A G L P H M L P S P D A F
UniRef90_N4V5V8          R T G I E V F R Q Q R I | P K A R F F D L D K V I D R R S P Y P H M L P S A K D F
UniRef90_W4BMF9          E A G R Q A Y E A G H I | P G A V L D L E K D L S S P H G G R H P L P D P A V L
UniRef90_G0SAW7          P K G R Q V F T E K R I | P K A R F F D L D K V I D K H S P Y P H M L P T P K H F
UniRef90_UPI00047DB494   A K G E K L Y Q E N H I | P G A V Y F D L E K Q L S A P H G G R H P L P D I N Q F
UniRef90_U2ZA45          R P G D D E P R I | P G A V R F D L D A V A D T A S P L P H M L P S S E A F
UniRef90_B9H614          R N P I Q E Y Q V A H I | P G A L F F D I D G I V D R T I N L P H M L P S E E A F
UniRef90_UPI000364A412   R D I Q A E Y L A A H L | A D A P F F D I E A L S D H N S P Y P H M M P R P E R F
UniRef90_K2RUN7          P E G W Q T F K A C R I | P K A R F F D L D A V K D R D S P Y P H M L P S S E D F
UniRef90_S6AH78          A Y G Q R S Y A E S H I | P K A R F A D L E Q D L S G P V T R R H P L P D P A T L
UniRef90_UPI0001CBB0AF   R D A L A E Y K K E H I | R G A L F F D I G A C S D V T S P Y S N M L P N A Q F F
UniRef90_A2SJ51          A A G E R S Y R E G H L | P G A H Y L H L D R D L A D H T P G R H P L P T R E A F
UniRef90_UPI0001CBB0B0   R I A A Q E Y P K K H I | R G A L F F D I D V C S D T T S K Y V H M L P S A E L F
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UniRef90_F6DGU1          D E D I L L Y D T G H I | P G A Q K I D W Q R D F W D P V V R D F I S E E E F
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UniRef90_UPI00037F72FB   D A G R A E Y D A G H I | P G A T Y I S L E S D L S G Q H G G R H P L P N I S V M
UniRef90_W4ZGM2          K S G N E E H Q E Q H I | P G S L Y F N L D E C K D K E S H F K V T L P R L N E F
UniRef90_D1C1D9          S G R E V Y A E S H I | P G S L Y H L D W A D L S D P N H P V D Y M M P A E Q V
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UniRef90_W0Z9D6        Q A A V R R W G I D D G D T V V V   Y D D L K S L S A A R A W W V L T D A G L
UniRef90_F6DGU1        A K L M E R L G I S N D T T V V A   Y D G K N N W A A Y A F W F F K Y N G H
UniRef90_K8WMH5        S H A V G A M G I S N N T Q V I I Y A Q N N   L F S A P R A W W T F T T M G H
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UniRef90_I4CRJ2        L T H L R Q W G L G D G S E V V L   Y D D G P G A F A A R A W W L L W L G K R
UniRef90_UPI0003B706C2 Q Q A M R R A G V N E D S Q V V V   Y D Q G S S L A A A R L W W L L R D A G Q
UniRef90_E4NI70        A T A L R R A G V R A D R P V V A   Y D A G F A L S A A R A W W L L R W A G H
UniRef90_E6SJF3        A K L M S E K G I D N D T T V I F   Y G D K N N W W A A Y A F W V F Q L F G H
UniRef90_UPI000472297B A G L M A A H E V T P E T L V V A   Y D G S G G A Y A A H L W W M L R W M G H
UniRef90_U2ZHZ7        V D R L R S W G I D N D S T I V L   Y D D G P G A F A A R A W W L L A W L G K
UniRef90_B6XIP0        S Q A V G A M G I N N Q T Q V I I Y A Q N N   L F S S P R A W W T F R T L G C
UniRef90_UPI0004703468 A R V F G R V G I S Q D D R I V I   Y D D N N G M N A A R L W W M L T Y L G H
UniRef90_Q31KG2        A A R L G A I G I S S D P A T L V V A Y D A S F S A F A S R L W W L L R Y L G H
UniRef90_G4UVS2        A A A M S E L G I R R E D T V V I Y D S Q E L G I F S A P R V G W T M K V F G H
UniRef90_UPI00047483E0 Q E C V S K L G I D N T D A L V V   Y D S A G I F S A P R V W W M F R I M G H
UniRef90_W5MZ79        A A Y V G K L G I G N D A H V V V Y D A S D F G S F S A P R V W W M L R V F G H
UniRef90_W4YAF9        A E F V G K T G I D K D T H V V I Y E N E L F Y I M S A P R I W W M F R Y F D H
UniRef90_UPI00037F72FB E E L F S Q I G I D Q H T T V V A Y D G D D   M A M A A R L W W M L R Y V G H
UniRef90_W4ZGM2        E D Y V S K L G I S N G T R V V Y E N D P R Y K A T S A R V W W M L R Y F G H
UniRef90_D1C1D9        A A V M S R L G V G D D T L I V A   Y D D E G G H Y A S R L W L I L R Y G K E
UniRef90_L0AIU5        E D V V G E H G I S E D S T V V F Y G D G W I P N W F A L F A Y W E F K Y Y G H
UniRef90_UPI000248C8F0 A A K L G Q A G I H A G S T V V A   Y D D Q G G A M A S R L W W L L T Y L G H
UniRef90_K1XWR9        A A A M S A L G I K R D D T V V V Y D T A E L G I F S A P R V G W T L K A F G H
UniRef90_D2B907        Q D A M R R L G V S G S R P V V V Y D G A D S T   A A A R W W L L R Y F G H
UniRef90_W4AKZ5        A K R L G Q S G I L Q G S R V V I   Y D D G G A M A S R L W W M L K Y T G H
UniRef90_UPI0004652180 G A A M R R A G V S A G T P V V V   Y D G G I G W A A R A W W L L R W T G H
UniRef90_Q7NQ95        A V D L G A L G V G E N T Q V V A   Y D D G A G Q Y A A R A W W L L R W L G H
UniRef90_N1QA27        R D A M R R L G I K R D D T V V V Y D A A E T G I F S G P R V A W T F K V F G H
UniRef90_S6JEC9        Q A R L Q A W G I D A D S D V V L   Y D D G P G A F A A R L W W L L A W G K R
UniRef90_UPI0003C76333 G A A M R A A G V S S G S R V V T   Y D G G L G W A A R A W W L L R W A G H
UniRef90_B0YBV3        A E A M S E L G I R R D D E V V Y D T E E L G I F S A P R V G W T L R V F G H
UniRef90_D5C2W8        A A W L G E V G V D S A T Q V V A   Y D D A S G A F A A R L W W L L R W L G H
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                                   130             140             150             160
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UniRef90_UPI00040754E5   T S V Y V L D G G F S H W V K A G Y D I T T E I P R P V P R E F S P E L A K E E
UniRef90_UPI00026273CD   E D V H L L D G G F E Q W K A G H E T T T E V P A L K A K E F K P V F R E N D
UniRef90_UPI00031850DB   A A V A V I D G G R N A W V A A G L P L E H G A T P D P E T A G N L T R R P S L
UniRef90_K2P175          Q K V Y V L E G G I D G W R A E G R A V T S E Q T R I A A S V F D A R L D R D R
UniRef90_V6MCM2          D N T A V L E G G Y S A W K A G F A V T A E L P S P V P S A F V P A V R P E M
UniRef90_UPI00030EED38   E K V S I L A G G L P A W K A E G R P V G T G D F A R E P R P F T P R F N P E L
UniRef90_N4V5V8          N N V H I L N N F K Q W V A Q G L P T E S G E Y S V E C C P Y P I P K M D E G K
UniRef90_W4BMF9          E Q V Y I M D E G F S A W K N A K F P V T T D V P V Q I P S S F E V N I Q P A M
UniRef90_G0SAW7          P K V H I L N N F R L W V E Q G L P T E S G N W T V E C G T Y P I P E M D E D R
UniRef90_UPI00047DB494   E N V Y V L N E G F K G W I E G G Y K T T K E I P E F E L T H F D V H I Q K E M
UniRef90_U2ZA45          R R V Q V L D G G L P K W M A E G R P V E T G P G T P T P H V F N T D F Q A A R
UniRef90_B9H614          S K V W V L D G G L P R W R A S G Y D V E S Q G Q T V R P I T F Q A K F Q P C L
UniRef90_UPI000364A412   D Q V S I L A G G L A A W A S M P L A T G P V A L E Q A E F E A S Q P E I S
UniRef90_K2RUN7          Q N V H I L N N F K Q W V E E G Y P T E W G E D K V D A V E Y P V P E L D R S
UniRef90_S6AH78          E G V F L L D G G L K A W R D A G L P L T A V T P A V Q P G R F A G Q P D D S L
UniRef90_UPI0001CBB0AF   P N V S V L N G G L Q R W I K E G Y P L T D E P T V V E P E K F Q A V S N M S E
UniRef90_A2SJ51          R E V T V L D G G L A A W R A V G G A L E S E T P A A V A A R P A Y G P A A S L
UniRef90_UPI0001CBB0B0   P H V S I L D G G L P K W I N E G H P L E S G P V V R E R T K F H A T L D K A A
UniRef90_I3ZEE7          K N V H L L D G G L K A W E A A G L P L E S G P V V R E R T K F H A T L D K A A
UniRef90_E8RSQ7          K K V Q V L A G G L P A W I A A G Y P T G S G A E W V K G V P Y T P N L N P D L
UniRef90_A0A024QES4      D K V Y I L E G G Y Q R W K E E G N P T T D A I P E L Y A K E F E A K L R Q N Q
UniRef90_D3KZR7          K N I K L L N G D I A A W E S A N F N K E M L S P K I E A T T Y I I N G V D N S
UniRef90_W0LD25          H N V Y V L D E G L H G W V A R G N Q L A T G A A H P K P A T F N A R F N A D A
UniRef90_K9UIY3          D R V A V L D G G Y S N W V E S G F T V T A E P A A S A P G N F K P Q V R T E W
UniRef90_H8GJB0          D K V K V L D G G L T R W K Q L A F P L T D K R K A P V Y K A F H A V F H P E L
UniRef90_G2IVI8          E A V A V L D G G L P A W L A I G G E L T R D V P R R H T Q R Y I S H P A L A Q
UniRef90_UPI0003B40EE4   R D V F V L D G G W P A Y L A A G G P V S T D D P A P V P T T F T P D V Q P S M
UniRef90_I7A7N2          R D G V Y L D G G L Q A W R E A G L P L D D A T P S C T P G N F T G E A D D T L
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UniRef90_E4V3D9          P N V H V L N N F R L W V R E G Y P V E E G E V A P N E S S D Y V V D D H Y P N
UniRef90_D5ZQS4          D D V S V L N G G L P A W I R A G H E V E R S G V E S N E P A V F T A R R R P E L
UniRef90_UPI0004769F74   S E V A V L D G G L P A W E A L G A P L Q A G P V T P A P R D Y P L R P A G M P
UniRef90_UPI0002E2BAD4   E Q V Y I V D G G F S K W V S N G F P I S N E L P E I N R K E F F E P R L Q P Q L
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UniRef90_UPI00037234E5   A H V Q V L N G D M A A W Q A V G G Q L E Q G A V A Y A V E W Q D A P R L V G G
UniRef90_A9ITD0          E R V V V L D G G W Q G W L A A G H P V D T V T V A A E P L A G A A A P A A P D
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UniRef90_F7YRZ4          A S V Y V L D G G L T E W K R Q G L P V V K E Y H A F K H G N F R G T L D P R Y
UniRef90_F9U7H5          D R V A L L D G G L Q A W I A A G G T L T R A V H R H E P A E L I A R P E D T R
UniRef90_G4H864          E Q A Y V M D E G F T A W K K A S Y P V T D E T P V V I P V T Y E P S L Q P A M
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UniRef90_A1ST81          E N V A V L D S G F P A W L E K S L P I E S G H I P Q P K G D F I A N Y Q K A L
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UniRef90_L0EK36          E R V Y V M D E G F S A W K K A G F P V T D A P P P I R P K T Y V P D V R Q E L
UniRef90_W2DLJ4          R D G V S I D G G L K A W H N A G F P L S L D A P K I E P G T F V G S P D N H L
UniRef90_U2YU79          E D V K I L D G G R D Y W L E E G Y P T T D E V P E F D S V N Y T A R G P F E S
UniRef90_L5KIB5          R T V S V L N G G F R N W L K E G H P V T S E P S R P E P A V F K A T L D R S L
UniRef90_V9DRI2          P K V H V L N N F R V W V Q E G Y P V E T G P P Q V P N I T K Y A V P A Y N T
UniRef90_J1JWP8          K K V F I L D G G L K G W K D A G L P V T N Q I T K V A P A S F L T D F Q R D K
UniRef90_I3UUG0          R G V A I L D G G L K A W H A A H L P L S L D P P P K R E G T F S G E P D A K L
UniRef90_T0J2W9          A Q V A L L D G G K Q A W A E A G L P L E T G Y P A V P G D F T P G E P L V P A
UniRef90_E9CIW1          E N V S V L N G G V A W K Q A N L P L E T T K P A S V T P S Q F I M R D F P F
UniRef90_D3UX62          R N I R I L E G G L Q G W Q Q M G Y P T E S G E V T R Q P Q I F N S Q F T P E K
UniRef90_W0Z9D6          A D V R I L D G A L R A W T A A G L P L D E G D V V P V A G S A T L S A G R L A
UniRef90_F6DGU1          K D V V L M N G G R Q K W V E E G R P L T T E V P S Y P P G R Y E V P Y R D E S
UniRef90_K8WMH5          K H V K I L A G G I D A W K A G F K T E S G E V A S P V Q T F I A K R H D A N
UniRef90_UPI00037B9F60   P A V A V L D G G L A A W Q A A G E P L V T P V A P R A R G A I A E R P S L T Q
UniRef90_I4CRJ2          E G V Y L L D G G V N A W R E A G L P M E S T T P E V Q P G H F D G N A D D S M
UniRef90_UPI0003B706C2   A D V R V L D G G L R A W I A A G G E V T D R V P Q P H L G D V V L R S G Q L P
UniRef90_E4NI70          P D V R V L D G G L A A W T A A G H P L S T D A P A P A P G D G D F K V D P
UniRef90_E6SJF3          K N L K I M D G G R A K W E A E G R L T K E V P T F P K T H Y K A V T R Y D P
UniRef90_UPI000472297B   A Q V A V L D G G W G A W T A A G L P V E S G V A Q S P Q T G I R A G A S L V G
UniRef90_U2ZHZ7          R D G V W L D G G L A A W K A A G L A L T A D L P K Q R A G S F D G Q A D G S L
UniRef90_B6XIP0          K H V K I L A G G I N A W K A A G F A T Q S A G K I T P P T Q T F I A D R Q N A N
UniRef90_UPI0004703468   T Q V Y I L E Q D F S A W Q Q A G F P V T E E Q P V V I P V T H P Q P D M
UniRef90_Q31KG2          E R V A V L D G G L A A W Q A I G G E L V T D I P A I A P A K F Q P H P Q T G W
UniRef90_G4UVS2          P K V H W I E E G L P T E S G N V W T I E C G T Y P I P E M N E D K V A S F E E
UniRef90_UPI00047483E0   Q S V A V L D G G L P A W E S L G G P L D T Q T P T E P E F T Y K A S F Q P E R
UniRef90_W5MZ79          R A V S V L D G G L I N W I R E G Y P V T D E H S E P K P V T F V A K L E A S R
UniRef90_W4YAF9          G V V S V L D G G L Q Q W I A E N R A V T D E A T P S P K P F K V T K T R A E I
UniRef90_UPI00037F72FB   E R V Y V L D G G Y A A W N R A N Y P T S T E I L Q R K S R S F T A N V Q S D M
UniRef90_W4ZGM2          S K V S V L D G G L E Q W V K D G L P V T S D K T E D P V K A M K A N V Q L Q L
UniRef90_D1C1D9          G Q M R I L D G G W T R W V M E E R P V T M E P T P L P A P A T F T I D P A A E
UniRef90_L0AIU5          D D V R V L D G G K D Y W V D E E Y P L T D E V P A F P E Q V Y D A N G P F E S
UniRef90_UPI000248C8F0   E K V Y L L D G G Y S K W K E A G Y P V T D E P P L L R E A V F T P R V R E D L
UniRef90_K1XWR9          D S V H V L N N F K L W V E E G L P T E S G E W D V D T C V Y P I P E F D A S K
UniRef90_D2B907          P D V R V L D G G F R A W A A E G L E T A A A P G D F V A R P A G G M P
UniRef90_W4AKZ5          E Q A Y V M A E G Y S A W K S A S Y P V T D E Q P I V I P V T Y E M K L Q P H K
UniRef90_UPI0004652180   P D V R V L D G G L S A W E G P L E T A V P E P A E G D F V P E P G D
UniRef90_Q7NQ95          D K V A V L D G G F A A W K A A G G A V D A E P P Q R R P C R F S I R P L Q A
UniRef90_N1QA27          P D V H L L N N F R L W V E E Q G Y P T E G D Q K K F E T D Y P T P E D L S K
UniRef90_S6JEC9          E G V F I L D G G L K A W H A A G L P L S L D A P P S T P G S F V G S P D H S L
UniRef90_UPI0003C76333   P D V R V L D G G L A A W R G E L S T A V P E T V P G D F V P V P G G L P L L D
UniRef90_B0YBV3          P R V H V L N N Y R L W V R D G Y P T E T G E P A P V E K T S Y P L P Q F D S K
UniRef90_D5C2W8          E S V H V L D G G W Q R W R E G E L P T E G H P L E S A A A H F E T R V Q P S M
UniRef90_F0RJQ2          T Q V A V L D G G L A A W Q A L G G E L T D A E P Q N A P A T F A Q V Q P G Y
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                                170              180              190              200
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UniRef90_UPI00026273CD V A H I E E V T E K L G H Q S A T L I D S R S D R Y L G K T E   P L Y I K
UniRef90_UPI00031850DB V K T V D A L L A N L S Q P S M L V V D A R A A D R F R G E N E T L D P V G
UniRef90_K2P175        V V D L E K M R S V V A D G D M Q V A D A R S P G R F C G A E P E P R E G   I R
UniRef90_V6MCM2        L V D V Q V R E R   S P Q T V L L D S R A G E R Y R G E V E   P L D P K
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UniRef90_G0SAW7        V A S F E E V K E I A L D V Q I L D A R S Y G R W S G Q A P E P R P G   L S
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UniRef90_K2RUN7        K V V S F E Q V K D I A K K Q G Q I L D A R S K G R W E G K E P E P R P G   L S
UniRef90_S6AH78        L V D A D S L Q Q R L G N A G L T L L D A R A L P R F K G E V E P I D P V A
UniRef90_UPI0001CBB0AF V K T F E D I V Q N I K D G R F Q M M D A R S P T A F E S E E D P K S
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UniRef90_I3ZEE7        V K D Y H Q I R A T L A A G E Q V L   D A R S E G R F T G A H P E P R A G L
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UniRef90_A0A024QES4    T V E M K E V K D K L A K Q T A V V I D S R S K E R Y L G D V E   P L Y A R
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UniRef90_H8GJB0        L A D L A Q M R E I Q Q Q G S A Q I L D S R S A D S F M G Q R P Q H E P G   L Q
UniRef90_G2IVI8        A V K V D A V A A N L R E P A F V L V D A R S P E R Y R G E G E T L D P V G
UniRef90_UPI0003B40EE4 V A T A Q D V A T R P   P G T L L I D A R A P E R Y R G D T E   P L D R K
UniRef90_I7A7N2        I I Q A A P L A D R L G S D R L T L L D A R A L P R F L G E V E P I D P V
UniRef90_D9QHX3        A V A D M A M V L A A L S G D A Q I V D A R P A P R F R G E A A E P R A G   L R
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UniRef90_V4QAJ5              I D A E D L H R L I A N G T       V K V L D G S W A L D G T
UniRef90_U9W3L9             S H I V S P Q W L G N H L G E       V I V I D C R F S L P D P
UniRef90_S9U9B0            Y T V I V S L E E A A K L I E E G Q A A   V A D C R F W L T E P
UniRef90_W8X4Q7          M T A L L I Q P E A L R E R L     T R P G C L V F D V R H D L A D H
UniRef90_UPI00046FB28D        V T R R W L L A R L       Y E P E Q T I V D C R F T L G K P
UniRef90_UPI00047D5C13         A E T L L S S V P G S G V V V L D A T A L L P G T
UniRef90_S5XZG5          M S N W L I E T E E L A R I L G D G A     D R V V L D C S W Y L P A D
UniRef90_A0ZHS4            T Q L V V S P T W L F E H L H     D P H I V I V D C R F S L A D P
UniRef90_Q6LIX6            P S S L V T T D W L F E H L H       T D D N V I L D A S W F M P S T
UniRef90_E7QZ89             D V L V E A E W L A E R L D E R S D D P S L R L I E A
UniRef90_A0A031J2W3   M T Y E T L I A V D A L K D M L A S G A     D V L I F D C E F E L G A P
UniRef90_U3I1N5
UniRef90_V4ZR23             D V L V S A D W V E E R L D E F G T D       D P T H R L V E V
UniRef90_I0I3N9          Y A H P E V L V S T E W V A E H L N       D P S I R L V E S
UniRef90_UPI00037075D3    M R Q G N I V S M E W V H T H L     A D S N V I L V D C R F M M G G P
UniRef90_UPI00047CA65D      K Y I K D Q E W V L K S L N E N H     V R I I D C R F S L A E P
UniRef90_R7YKK9       R T L S S Y L V T P A E L S T A L K K N S T A P R I V P L C A T W F L P N D
UniRef90_A0A024G8W0         T L I T P Q R A K A L L D S   S V S A R V R F V D S S W Y L H K N
UniRef90_W7KLU6            K Y L A E K E W V F S K L D       D P N I R I A D C R F K L G S P
UniRef90_A0A010NQ00   Q Y A H P D A L V S T D W V A Q H Q D     D P S V V L L E         S
UniRef90_A3UKT4          M N Q P L I S P Q Q L Q Q R L   L A E D N I I I L D A S I E F Q I P
UniRef90_UPI00034D6563     T N T D S V V S L Q W L S Q H L N     D P Q V A I V D C R F S L A D P
UniRef90_UPI0003B2EA8D   Y A H P E R L V S T E W L A A H L G     D E G L V V V E         S
UniRef90_UPI0003810532       N A I I T A T E L A S E L A R P T P P   V L L D V R Y Q L G G P
UniRef90_D0MHB9         T Y A H P E V L V S T E W L A E H L N     D T E H V R I V E
UniRef90_A9GXE8            P G P L V D V A W L A A H     A G D P R V R V V D C R W Y L G G R
UniRef90_U2BE80             L L T P A Q L Q Q R L G Q A E     L V L L D C R F A L D D P
UniRef90_B0R7S1       M A D Y A T D V L V T A D W V D D H L D Q F R D D P D H R L V E V D V D
UniRef90_V4NV67              I D T T A L K A L L D E G S       V K I I D G S W A L D G T
UniRef90_F9RUM8       M T S L V S T P L V S A K W L Y Q H     S S D P N L V I L D A S I D F Q I P
UniRef90_UPI00047A9336       L V N A S W L K E N L N       N E K L V I V D C R F D L M D K
UniRef90_B4CWP0       Q Y A H P E A L V S T D W L A A H L N E     P N T R I V E         S
UniRef90_UPI00035C0F42       L V E V D V A A E M R G D D P P     T L L D V R W S L T G P
UniRef90_F4Y266              I V S A Q Y L S E H L D     D P D I V I V D C R F A L S D P
UniRef90_S0EXC5       M D D L R H Q H L V E T E W L A E R I A E G D N T L R I V D G R V E L E T Q
UniRef90_UPI000376870B       V L V S V E G L R A A I D G T A P P   V V L D V R W T P G G P
UniRef90_UPI00036178FD      S V L I T A A D L A A D L S E P     V L L D V R W Q L G G P
UniRef90_W0JMK3             D V L V T A D W V E D R L D Q E S D D S D L R L V E V D V D
UniRef90_F9S677       M T L S I S S P V V T A Q W L Y Q Q F E   N P N L V I L D A S I E F Q I P
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UniRef90_UPI00035DF503      N P L M D V S R L E S R R A A G H     R T V L D V R W V L G D P
UniRef90_UPI0004768D58     M M Y F K S I E W L K E R L E     D E N I R I V D A T Y S L N D H
UniRef90_C5BXL4     T E Y A H P E R L V S T Q W L A D H L G A A     G L V V V E         S
UniRef90_UPI00026C6EA0   Y A H P E R L V T T Q W L A D R L A E G E T E G L V V V E         S
UniRef90_UPI00035C0E01    M S Y T H L I S P D I L N Q H V N     D R N W I I F D C R F S L A D T
UniRef90_R1J0L6            R N E L V S A E W L R D N L N S     P Q L K L V D A S W F M P G T
UniRef90_UPI00026271F2    R P P V L I T A D E L Q R Q L D S S A P P   V L L D V R W A L G D P
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UniRef90_Z9JQY8        Q Y A H P E K L V T T A W L A E N L G T     E G L V V V E         S
UniRef90_G2I4U6              H P L I S A S D L S Q L Q Q D D I L V L D A S M A L P G G Q
UniRef90_UPI0002F3C36B       F V S A V E L K D L L D E G A P     R V I D V R W R L D R P
UniRef90_UPI0004749B71       I V D S S W L Y E R L D       D P N L R L L D A T T F L S I P
UniRef90_Q8ELM9       M S E R N I P L L V T T D W L A E R M D     D P N L R I L D A T T F L K Q P
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UniRef90_UPI0002ECC9D9    M T K I I V S R E W L L E H L     A D P Q V V I V D C R F S L A D P
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UniRef90_K6VG24          M H R H P L I T A S Q L A D L L A G S P G D A P L I D V R W E L G S
UniRef90_M7N855         Y A H P E R L V S T E W L A A N L S A     E G L V V E         S
UniRef90_W4S234       E L H W T L V D S A T L A A A V P H P Q L R L L D A R A A P P D P
UniRef90_F6CRR1          M I P T T L I T T E E L E S L L D S     P N L V L L D C R F Y L T D L
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UniRef90_UPI0003FC6FED  P   G R E A Y D A G H L P G A V F V D L D T E L A P G A G G R H P L P D A Q R L
UniRef90_U2EKV9         D Y G K R C Y E N G H I K N A F F L D V K K D L S K E H G G R S P L P D L N V L
UniRef90_X4ZK14         A V G P R A Y E Q A H I P G A R Y L N H E T E L S T G Q N G R H P L P P R D Q V
UniRef90_W5WI56         P   G V Q A Y Q E G H L P G A V F V D L D T Q L A P G A G G R H P L P E P A R L
UniRef90_B6BS21         R N G F E E Y K K D H I P N A L F F D L D K N S K I N T D L P H M L T D I N S W
UniRef90_UPI00037D2DBB  E L G R F M Y E G S H I Q G A Y Y L H L D H D L S T P L T G R H P M P D A E Q L
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UniRef90_K9SM39         G L G R Q K Y Q A G H I P G A Y Y L D L N Q D L S S P H G G R H P L P E L D K L
UniRef90_F2ZS56         D Y G Q R S Y A Q G H I E G A S F A D L K R D L S G P A T G R H P L P E P A A L
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UniRef90_B1Y2W9         L A G A A A Y A E G H L P G A A Y L D L D R H L S T K D G G R H P L P T A P A F
UniRef90_W4D6M8         K A G R D S Y E Q E H I P G A I Y L D L K L D L S S P H G G R H P L P D P E V L
UniRef90_A0A022LTE6     T D G P E T Y R P V H I P G A V F A D L V D F A D P D A P Q P F T A P D H E R F
UniRef90_R7Y7B6         E E G P E S Y R A E H I P G A V F A D L T D F A D A A S A E P W T V P S S E Q F
UniRef90_G6FN55         Q L G R Q Q Y Q T S H I K G A Y Y L D L N Q D L S P V G G R H P L P H P D E L
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UniRef90_D5DQ68         E A G S D A Y Q N E H L P D A H Y L D L E K D L S T S H G G R H P L P D V Q K L
UniRef90_X1PC72         R D A E G E Y K S A H I P G A V F F D H E K L S D P E S S L P H T L P K P E A F
UniRef90_V4QAJ5             D M R A L H E Q C H I P G A F F D I E V V S D H S T E L P H M A P S P K Q F
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UniRef90_W8X4Q7         Q A G R R A Y E A G H I P G A L Y L D H E T A L K T G R N G R H P L P D R A D F
UniRef90_UPI00046FB28D  E A G R E S Y E Q E H I P G A V Y L D L E H D L S S P H G G R H P L P E P Q V L
UniRef90_UPI00047D5C13  R D P D S E F L A H R I P G A R R F D I E V F S D P E A S L P H M A P T A S R F
UniRef90_S5XZG5         K H A R D D F R A G H I P G A R F V D L A E I S D P A S P Y V N M L P D P A L F
UniRef90_A0ZHS4         Q L G K Q Q Y Q A S H I E N S Y L D L N Q D L S S Q H G G R H P L P N V N D L
UniRef90_Q6LIX6         R K P Q Q E W S E K R I P S A R Y F D F D K I A E P S T Q F P H M L P S P E L F
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UniRef90_A0A031J2W3     D K G H D I Y L K G H I P G A R Y A H L D E D L A S P S N G R H P L P A P V A M
UniRef90_U3I1N5                 Q E F R E S H I P G A S F F D I E E C R D K S S P
UniRef90_V4ZR23         D V D T E A Y D E E H A P G A I G F N W E T D L Q D Q T T R D I L   E K E D F
UniRef90_I0I3N9         N E D V L L Y D T G H I P G A V K V D W H T     D L N D P V I R D Y I N K E Q F
UniRef90_UPI00037075D3  D L G Q R Q Y E E G H L P G A F Y L D L D R D L S S P H G G R H P L P H L D T L
UniRef90_UPI00047CA65D  E K G K Q E Y L Q G H L P G A V F F D L E K D L S S P K Q G R H P M P V L E E F
UniRef90_R7YKK9         R T G W N E F K S I R I P R A K F F D I D K I S D   S S S Y P H M L P S A D L F
UniRef90_A0A024G8W0     R N A K E E F H K E R I C N A K F F D I D K I S D T S S S L P H M L P T P S A F
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UniRef90_UPI00034D6563  Q L G Q N Q Y S D S H I P G A F Y L D L D R H L S G S H G G R H P W P D P A Q L
UniRef90_UPI0003B2EA8D  D E D V L L Y E T G H I P T A V K I D W H T     D L N D P V L R D F V S G E R F
UniRef90_UPI0003810532  P   G R P E Y A A G H V P G A V Y V D L D N E L A S P P G G R H P L P D L D V F
UniRef90_D0MHB9         D E D V L L Y E T G H I P N A V K I D W   V Q D L Q D P I L V R D Y I S K E R F
UniRef90_A9GXE8         R   G A D E Y A R G H I P G A V H L D V D A D L S H G G P G R H P L P D A A A F
UniRef90_U2BE80         A Y G R R S Y L E G H I P G A C F A D L E E D L S G P V T G R H P L P D P A R L
UniRef90_B0R7S1             T E A Y E E S H A P G A I G F N W E T Q L Q D Q T T R D I L D K D A   F
UniRef90_V4NV67             D M Q A L Y V Q D H V P T A H F F D I E A L G D K S T E L P H M A P S S D Q F
UniRef90_F9RUM8         S E T E K D   K E N L I P Q S I R F D Y D K F C D P D V A L P H M M P S E A R F
UniRef90_UPI00047A9336  Q Y G K R S Y D E G H I K G A V R V D L E T E L S S K V K E H G G R H P I P N I
UniRef90_B4CWP0         N E D V L L Y D T G H I P G A V H I D W R Q     D L Q D A L V R D Y I S P E A F
UniRef90_UPI00035C0F42  P   G R D A Y A A G H L P G A V F V D L D T D L C G P P G V R H P L P E P A A L
UniRef90_F4Y266         D L G Y E Q Y K V S H I P G A H Y L D L N K D L S R P H G G R H P L P D P R K L
UniRef90_S0EXC5         P D G P D A Y E R G H I P G A I Y L D W K D I V A E D D P V P V Q V A S F E K L
UniRef90_UPI000376870B  P   G I S E F R E G H I P G A R Y A E L D T E L A P G D G G R H P L P D P A A F
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UniRef90_UPI00036BF0AC      Y G R D H Y A D G H I P G A V Y V D L D T E L A P A G G R H P L P D L A E L
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UniRef90_C5BXL4         D E D V L L Y E T G H I P G A V K I D W H     L D L N D P E I R D Y L D G E G F
UniRef90_UPI00026C6EA0  D E D V L L Y E T G H I P G A V K I D W H     L D L N D P V T R D Y V D G E G F
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UniRef90_Z9JQY8         D E D V L L Y E T G H I P G A V K I D W H     L D L N D P V T R D Y V D G E G F
UniRef90_G2I4U6         A D P Q Q R F A N A H V G G A V R F D I D T F S D P D S P L P H T I P G Q T R F
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UniRef90_W7GB52          A A R L G Q W G I G T D T Q V V V Y D G S D G   S M A A R A L W W L L R L I G H
UniRef90_A0A022LNY6      A E L L G G K G I G R D T T V V I     Y G D K N N W W A A Y A L W V F T L F G H
UniRef90_UPI0003FC6FED   G A T L R A A G V G A G R P V V V     Y D A V D G S A A A R A W W L L R W A G H
UniRef90_U2EKV9          K L K F E A V G I S N D K T V I A     Y D E G A L A G A E R L W W M L K Y L G H
UniRef90_X4ZK14          A G L M A A H G I K P S T L V V A     Y D A S G G M Y A A H L W W M L R W I G H
UniRef90_W5WI56          R E V L R A A G V R A N H P V V A Y D G A D G S V     A A R A W W L L R W A G H
UniRef90_B6BS21          E L I M N S M G I S N E D E I V I     Y D N S D V I S S C R C W Y N L I Y F G H
UniRef90_UPI00037D2DBB   S A K L R A C G L N N D T Q V V V     Y D D N I G A M A A R A W W L L R W L G H
UniRef90_UPI0004155D83   T A K L G R W G I S P R H Q V V A D A G N G   G L A A A R F W F L L R A L G H
UniRef90_K9SM39          A A K L G S F G I N S G S E S I V V L Y D D S R F A F A A R A W W L L R Y L G H
UniRef90_F2ZS56          L H C I Q A W G I H P H S E I V L     Y D D G P G M Y A A R A W W L L A W M K R
UniRef90_A4YYY0          A H K V G L L G I S N A D R V I V Y D R H Y G   G S A A G R V W W M F R V F G H
UniRef90_B1Y2W9          A H T L G Q L G V T P A Q A V V I     Y D T Q G G M F A A R A W W M L R W L G H
UniRef90_W4D6M8          A A R L S K L G I G N D T R I V A     Y D D E N G M N A A R L W W L L R Y L G H
UniRef90_A0A022LTE6      V A A A G A L G I G D G A T V V V     Y D Q H D G F W A T R F W W H L R Y E G F
UniRef90_R7Y7B6          A S A A S A L G I G D G A T V V V     Y D Q L E G F W A T R F W W H L R L E G F
UniRef90_G6FN55          A H K L S T I G V K S Q K T L V V A   Y D D S R L A F A S R L W W L L R Y L G H
UniRef90_UPI0001E895C3   Q E H S K L E N I G V H D G G K V L I Y D D Q N G A M A S R L W F L L K V L G H
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UniRef90_A0A031J2W3      V A W L R A Q G L R K G Q Q V V A     Y D S N G G A W A A R L W W L L R W L G H
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UniRef90_UPI00035C0F42   Q A S L R A A G V R A G H P V V V Y D G G D     G M S A A R A W W T L R W A G H
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UniRef90_UPI000376870B   G E T L R R L G V R H D R P V V V C D R R D S T I     A A R L W W M L C Y H G H
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UniRef90_Z9JQY8          A Q L M A R S G I S R D T T I V V     Y G D K S N W W A A Y A L W V F E L F G H
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UniRef90_UPI0003FC6FED  P E V A V L D G G Y A A W V G A G H P V T T E V P A A R P G D F E V V P G A M P
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UniRef90_W5WI56         E Q V A V L D G G Y A A W T A L G L P V T T D L P D P E P G D V A V V P G G M P
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UniRef90_UPI0004155D83  R D V A V L D G G L A R W T A L G L P T T T D V P T A A A D Y P G T F D Q E R
UniRef90_K9SM39         H Q V A I L D G G F S A W H E A D Q P I S A R V P P L K V G N F A I K L N P N L
UniRef90_F2ZS56         E G V Y L L D G G L K A W H L A G L P L S L D E P N H E P G S F Q G E P D M S M
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UniRef90_D5DQ68         E Y V Q I L N G G F T N W K Q S G Y E T T K S V P A A S P Q T F V P F V Q Q D W
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UniRef90_V4QAJ5         K S V Q V L R G G L P A W K A A G L R I E G G V P V V A E V A Y T P R P L A E K
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UniRef90_U2BE80         R D G Y L L D G G L K A W R E A G L A L D R R Q P T P T P G D F A G Q A D A S L
UniRef90_B0R7S1         D D V K L L D G G R D Y W M D N D Y P T S E E P P S F S A T D Y D A S G P F E G
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UniRef90_B4CWP0         T K V K I L D G G R D K W V K E D K S L T K E K P K Y P A T N Y P V P A K R L D
UniRef90_UPI00035C0F42  R S V R L L H G G H P A W V A A G L P T S T E V P T P R L G D V A V R P G A L P
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UniRef90_UPI0001E895C3      Y  T  D        N  P  I  S  K
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UniRef90_M0M1M0             S  V  G  A  S        I  E  K  G
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UniRef90_U9W3L9             Y
UniRef90_S9U9B0             Y  A  D        N  P  V  A  T  G  E
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UniRef90_UPI0003610C31        G  D  D  A  L  P  V  E  T  G
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UniRef90_F6CRR1            R
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UniRef90_I0JYQ6          N E D V L L Y D T G H I P G A V H I D W R K   D L Q D P I I R D Y I S A E K F
UniRef90_L8JM29          S G D K A E L G E I Q I P G A R W F D L E T F S D K N S L L P H M L P V P K E F
UniRef90_J0S4W6          A S T F E T Y Q K E H L K G A R F V D L N R D L A P A N G G R H P L P S S Q D F
UniRef90_W4T527          K E V R Q N Y L E K H I K G A R F I D L D K D L A A F G G R H P L P A L E K F
UniRef90_F3WTQ1          E T A R R G F E D G H I P G A R F L A L G Q L A D P D S D L P M T L P P A E I V
UniRef90_E9UXF8          D E D T T A Y D K G H I K G A I K L D W T T     D L Q D V R R D F V N K D Q F
UniRef90_UPI0003448C66   R D G H E A Y R S G H L P G A V W A D V D T D L S S E P T R R H P L P S P E A F
UniRef90_I4EMG0          D E D V L L Y E I G H I P G A V K V D W H T     D L Q D P L V R D F I G P K E F
UniRef90_U1LM65          D E D V L L Y E V G H I P G A V K I D W H T E L   N D P V L R D Y V S P E E F
UniRef90_UPI0002E52731   Q D P G A E F E A G H I P G A R L L D L D T L V D A E N P L P S M L P K R S V F
UniRef90_C6W588          A D A L E R Y N Q A H L E S A Q F V D L E T D L D P A S G G R H P L P R P E D F
UniRef90_A0A024ICX9      A A G R E Q F E A E H V P G A V Y V D L D Q D L S Q A S D G R H P L P E R E R F
UniRef90_E8UD64          A F G R K A Y E K S H I P N A I F F D H E T D L C T S K S G R H P L P D R R H F
UniRef90_UPI0003C7E27C   D E D A S A Y D K G H I R G A V K L D W R Q     D L Q D G V R H D F I G K D K L
UniRef90_UPI000382BAEF   F D G R A E Y T A G H I P G A V Y V D L D Q E L A S A P G A R G R H P L P G T F
UniRef90_UPI0002E78D5F   D V           Q I K G T R T F D I N K F S D S N S A L P N T V P S P E A F
UniRef90_UPI0003660D85   D E D V S A Y D K G H I R G A V K I D W K T E L   Q D P V R R D F V D R Q G F
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UniRef90_Q0RJ10            H G H D H Y R E G H L P G A V Y V D L D T E L A A A P G G R H P L P A L A D L
UniRef90_W1NAR0          G D     R S S F E K A H I P G S I Y S S Y D G W R E T R D G V Q G V M P P V S S L
UniRef90_UPI000465D492   P     G R P A Y E A G H L P G A V Y V D L D A D L A G P S G G R H P L P D V A A F
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UniRef90_UPI00046521EA   D E D T T A Y D G G H I P G A V K I D W K N E L   Q D V R R D F V D R A G F
UniRef90_O50528          F D G R A E Y A A G H I P G A V Y V D R E L A S A P G V R H P L P E V G E F
UniRef90_N0APX6          G D E A K D Y K K G H I P G A V H I N T D E V E E G P V W N R L K D Q E L E K F
UniRef90_UPI0003694282   S D G H E L Y R Q S H I P G A V Y V D L D T E L A G N A G G R H P L P D I A D L
UniRef90_UPI0003B4D527   D E D V L L Y E T G H I P G A V K I D W H   L D L N D P V V R D Y V S D E R F
UniRef90_UPI000050FF34   D E D V L L Y E T G H I P G A V K V D W H T E L   N D R T R D Y V D G E G F
UniRef90_UPI0000E0FF00   S D S V I F P E Q L I P N S L F F D F E Y F A D P T A L G M H M M P S A E Q F
UniRef90_I0LEA4          D E D V L L Y E S G H I P G A V K V D W H   L D L N D Q V T R D Y L D A T S F
UniRef90_L8DDI7          S D   R A A Y E A G H V P T A Q F V D L D A E L A A P P D H R H P L P D A E T F
UniRef90_UPI0003464A35   E W G Y Q Q Y T N S H I T N S Y Y L H L N Q D L A S P H G G R H P L P D T H V L
UniRef90_UPI0002F3C3AE   D M G Q S Q Y V I N H I P G A I Y L H V E K Q L S T E H G G R H P L P H I D E F
UniRef90_J9HEI1          T S A Y E S G H I Q G A I A W N W T T Q L     N D Q V R R D I L N H E Q W
UniRef90_M5E2J4          S N V D F L K G H I P G A I Q I G R D E F E D T N A K Y N Y I M A S P E K I
UniRef90_V6ARW6          Y R K G H I T G A R L V W W R     R D I N D P Q T R D I V N K Q Q F
UniRef90_U5ENG4          D G P Q H Y L D G H I P G A V F V D L E T E L A S P A R G R H P L P D G T F
UniRef90_W4QZJ9          E E G Y E D G H I P G A K H F N M D L L I D K R H A I E G H L I N K E V F
UniRef90_J4PEW7          L Y E R G H I P G A A N V S W H T     D L V D T V N R D I A P P K Q F
UniRef90_UPI000344C7AE   A Q G R Q Q Y A V S H I P G A Y Y L D L N Q D L S S P P Q R Y G G R H P L P D L
UniRef90_A0A024IU50      V Y E R G H I P G A V N L N W H T     D L V D R E R R D I A A R E N F
UniRef90_V4HLG3          S G V Y Q P D T I   I P G A L R F D I H T F S E H N T S V P N M M C S R E V F
UniRef90_H8G7Z3          P     G R D S Y D E G H V P D A V F L D V D T D L S P G P Q G R H P L P D A D A L
UniRef90_A0A022L022      R   G R E H Y F S G H I P G A Q Y V D L P T E L S G Q R N V R H P L P S P E D L
UniRef90_UPI000288310F   D A G R R L C E A G H V P G S L H L D L D R D L A P G A G G R H P L P S A D D F
UniRef90_B2HEK4          D E D V L L Y D I G H I P G A V K I D W H T     D L N D P R V R D Y I N G A Q F
UniRef90_G7FRC6          L         R T Y M P E A M L P N A K R F D I N E L A D K S N P L S S T M C N A Q Q F
UniRef90_UPI00029A0CE5   G A H R G A V R I P G A R P F D L D D L S D H T S T V P H T M P G A A H F
UniRef90_F3NNV1          F D G R A A H A A G H I P G A V Y V D L D A D L A G P P G G R H P L P D V E H F
UniRef90_K7TBG0          N N P D A A F R E A R I P G A R R F D I D V F A D P E S S L P H T V P G A A R F
UniRef90_UPI0003B37487   T S A Y A E G H I A G A V G L N W Q T Q L C     D Q V R R D I L T R E Q F
UniRef90_D2GZH2          R D A R R E F E E R H I P G A A F F D I D Q C S D R T S P Y D H M L P S A A H F
UniRef90_S3X4Y3          E D G H A Q Y V A G H V P T A V F L P F D G V L S P G V T G R H P F P E P E T F
UniRef90_A1W4U4          T L G A S Q Y R E A H I P G A F H A D L D K H L S P A S G G R H P L P N R E R F
UniRef90_I3PG25          Q G A R D A F D K R H I P E A Q F F D V N E C C D K S S H L M T T I P K P R V F
UniRef90_S5TJI5          E S G R T A Y E A E H I P G A V H A D L H D L A D Q D S E H A F T V L D S A T F
UniRef90_A0QXB3          N G E Q A Y L D G H I P G A V Y V S L D D H T R G R H P L P S G R H L
UniRef90_K9WMJ3          D V G H Q Q Y L E S H I P M A H Y V D L N Q D L S A P H G G R H P L P D I D E L
UniRef90_K1ZVV9          R D A K Q E F L D K H I I D A H F D L N Q F H D I Q T D L P N M I H D E A E I
UniRef90_F4KTU1          P D V R V R Y V T S H L A G A L H A D L D T D L A D A D G G R H P L P S P A Q F
UniRef90_D6U5V7          E G A R D E Y E T G H L P G A Y Y I D W S D I V D P D D A V E A Q V A P A A R F
UniRef90_C5CA10          G P D H A A Y L Q G H L P G A V Y V D L D T P L S Q L A G H A G G R H P L P D A R Q F
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UniRef90_H5TIE6         T D A A R W G V D D T S P V V V         Y D D N G N L A S A R A W W L L R W L G H
UniRef90_F2PEL4         A R E V S K L G I S N D T H V V I       Y D S L G M F S S A R G W W M F K A M G H
UniRef90_M2WDD4         A E L M S A K G I S R E Q T I V V       Y G D K S N W W A A Y A L W V F T L F G H
UniRef90_UPI000464696E  A A L C R K N G I S E T T     T C L F Y G D K S N W W A C Y A L W A F R L Y G H
UniRef90_UPI00036F34A7  T A L V D T L A A R G M R N Q Q V V A Y D A Q G G A Y A A R L W W L L R W L G H
UniRef90_UPI00034532F3  A A A L S R L G I G D A T P V V A       Y D D A G G S A A A R L V W M L R V L G
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UniRef90_E1IDU0         A G L M S R K A I I P Q T T V V L       Y G D K N N W W A T Y A F W V L K L F G H
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UniRef90_M9RRS4         E S V V G G L G I G D T T D V I I Y D A         G Y V S A R L W W M F R T F G H
UniRef90_Q54E40         E K E M K R L G I T N D D H I L I Y D T R A Q Y V A S A   R V W W T F L I F G H
UniRef90_UPI0002EB18B1  Q S L M R G L G L R P E       I K V A V Y D A S G S M F A A H L W W M L R W M G H
UniRef90_A4BTX4         M H W L A R Q G I G N A S Q V V A       Y D A G P G A I A A R L W W L L R W L G H
UniRef90_B6K5Y7         A E Y I G K L G I D R N S S V V V       Y D R I G L F S S P R V Y W T F K V F G H
UniRef90_UPI0003FA0E34  A K L L G G L G I A R N D T V V I       Y G D R S N W W A A Y A L W V F T L F G H
UniRef90_I9C3M5         A A W L R D Q G L R K G M Q V V A       Y D A A G G A W A A R A W W L L R W L G H
UniRef90_A8IIG4         A A K M G L L G V G T G D R A V V Y D R L C G   G A A A A R A W W M F R V F G H
UniRef90_F4QQV2         G E A V G R M G V S A G D H V V I       Y D R Q G L F S A A R V W W T F T V M G H
UniRef90_I0KYV5         R V A L R A A G V R S G H P V V V Y D G G D       G L A A A R A W W T L R W A G H
UniRef90_B4VF51         T A A M R E L G V D D T S T V V V       Y D G F G I Y S S A R A W W M L R A M G F
UniRef90_B4V8Q2         G A V M R R A G V S A G     V P V V V Y D G G L G W A A A R A W W L L R W T G H
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UniRef90_B1XIW9         V S L L S R L G I E R N H T E V I I     Y D D F H C A F G A R F W W L L K Y Y G H
UniRef90_B7LKB7         A V A M R E L G V N Q D K H L I V       Y D E G N L F S A P R A W W M L R T F G V
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UniRef90_L8JM29         E D E C Q K L G I S K N S K I V I       Y D N L G T Y F S P R V W W M F K A M G H
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UniRef90_W4T527         A E T L S E L G I V E D A H I I V Y D D K N G S N A A A   R A W W M L R S F G F
UniRef90_F3WTQ1         A H A M S E V G V G H A D R I I L       Y D R S P L H S S A R M W W L L T L F G A
UniRef90_E9UXF8         S A L L S E R G V S N D D T V L Y G G N N     N W F A A Y A F W Y F K L Y G H
UniRef90_UPI0003448C66  A E A L G R L G I G D R T E V V A       Y D D A G G S T A A R L V W M L R V L G S
UniRef90_I4EMG0         T A L M N Q L G I G D D T     T A V F Y G D K N N W W A A Y A Y W F F R Y M G N
UniRef90_U1LM65         A R L L G S K G I G R D T T V V F       Y G D K A N W W A T Y A L W V F A L Y G H
UniRef90_UPI0002E52731  E A R M A E L G V T A T S R I V L       Y D N S P H H T A C R A W W V L R M F G V
UniRef90_C6W588         G R F L G I L G I S P S S T V V V Y D D K K G A N A A A   R F W W M L K A A G H
UniRef90_A0A024ICX9     A A R L A E L G L S P G T Q V V V M       D R Q G V N F C G R L W W M L R W C G H
UniRef90_E8UD64         A K L L A S T G I S L H D E I V T       Y D C G S L M F A S H M W W L L R W L G I
UniRef90_UPI0003C7E27C  E K L L S E K G I G N D D T V V F Y G G N N     N W F A A Y A Y W Y L K Y Y G H
UniRef90_UPI000382BAEF  G A A M R R A G V S A D R A V V V       Y D G G Q G W A A A R A W W L L R W A G H
UniRef90_UPI0002E78D5F  A A A C R K I G I Y N G S K I V V       Y D A K G I Y S S P R A W W L F K V M G H
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UniRef90_Q0RJ10         Q R A A R S W G L T A G R P V V V       Y D D N G G L S A A R A W W L L R W A G H
UniRef90_W1NAR0         E R L I G G L G I D N D D T V V I V P A G T G D F G S A A R V F W T F Q V L S H
UniRef90_UPI000465D492  G A A M R R A G V S A G R P V V V       Y D G G L G W G A A R A W W L L R W T G H
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UniRef90_UPI000050FF34  A A L M S A K G I S R E D T I V F       Y G D K S N W W A A Y A L W V F S L F G H
UniRef90_UPI0000E0FF00  T Q A A K Q L G I N H N T T Y V V       Y D D K G I F S A P R V Y K M L V A S G H
UniRef90_I0LEA4         A E M C A A K G I G R G D T V V F       Y G D N F N W W A A Y A L W V F S L F G H
UniRef90_L8DDI7         V A A M R G A G V D D D S S V V V       Y D G G P A T A A S R A W W L L R Y Y G H
UniRef90_UPI0003464A35  G D K F A Q M G I I   H N E T T I V A Y D D S R F A F A S R L W W L L Q Y L G H
UniRef90_UPI0002F3C3AE  K R M L Q E A G I S N D T I V I A       Y D G G E G A F A A R F W W L L K Y V G H
UniRef90_J9HEI1         A E L L S N S G A T P E T L I V L       Y G D N N W F A A F A Y W Q L K I F G H
UniRef90_M5E2J4         E N L L Q E K G I K N G D L I V A       Y D A S N N L W S S R V W W L L K M Y G H
UniRef90_V6ARW6         E A L M S K N G I K P D T E V I L       Y G D F N N W F A A F A F W V F K Y Y G H
UniRef90_U5ENG4         E K C A R S W G L S A G E P V V V       Y D A T G G M A A A R A W W L L R W A G V
UniRef90_W4QZJ9         E K Q M S E I G I R R D A Q V V I       Y D K G K D T N A T R L F Y A L E Y Y G H
UniRef90_J4PEW7         Q A L V A R S G L N P D T     T T I L Y G D N N N W F A A W G A W I F D I Y G I
UniRef90_UPI000344C7AE  D A L A A T L A Q A G V E G G K T W V Y D D S R F A Y G A R L W W L L R F Y M G H
UniRef90_A0A024IU50     Q S L L Q K A G V G D D T T I V L Y       G D N N W F A A W G A W I F E T Y G L G
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UniRef90_A0A022L022     Q D S F R R A G V N N D S R V V I       Y D D S G N T S A A R A W W L M R W A G K
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UniRef90_G7FRC6         T Q V M Q H A G V N H D S F I V V       Y E D A G L F S A A R A W W M L K A M G H
UniRef90_UPI00029A0CE5  T E A L R A L G V H D S D M V V V       Y D A Q G I Y S S A R A W W M L R A M G A
UniRef90_F3NNV1         G A A M R A G V R E D R P V V V         Y D G G Q G W A A A R A W W L L R W A G H
UniRef90_K7TBG0         A R L M G E L G L T E D T P I V F       Y D E K G S V G A C R G W W L A R L F G H
UniRef90_UPI0003B37487  E A L C N D S G I A N D T T V I F       Y G D N N N W F A T Y A L W Q F R Y Y G H
UniRef90_D2GZH2         A E Y A G R L G V G A A T V V V Y D A S D Q G L Y S A P R V W W M F A A F G H
UniRef90_S3X4Y3         Q A G M R A V G V S A S R P V V V       Y D D W K S I A A A R A W W M L C W A G H
UniRef90_A1W4U4         A T W L S     D I G F A N D M Q A V V Y D R N G A N Y C G R L W W M L K W A G H
UniRef90_I3PG25         E D Y V G N L G I S N K T H V I I Y D N T P G C A F S A P R V W W M F K Y Y G H
UniRef90_S5TJI5         A E R I G A L G V T N D S H V L I       Y D Q G Q M M W A T R L W W N L R L E G H
UniRef90_A0QXB3         E A A R R W G V R     D G V P T V V Y D D W N R A G S A W C L T A A G I
UniRef90_K9WMJ3         A Q K L A A M G V   N F Q Q T L V V A Y D N S R L G F A A R L W W M L R Y M G H
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UniRef90_D6U5V7         A E A V R M W G I G D Q H L V A Y   D S H P A S Q F A T R L W W A L N Y Y G H
UniRef90_C5CA10         A E A V R M W G I D E G D T I V V       Y D D H G L S A A A R A W W L L R H A G L
UniRef90_UPI0003FB9EF5  E R V L R A A G V R A D L P V V V Y D G D N G S V   A A R A W W L L R W A G H
UniRef90_UPI0004144A1C  Q A A A R G W G L R     T G E P V V V Y D A V R A T A A A R A W W L L R W A G V
UniRef90_S7W236         Q K A A R G L G V N V G D D I V V V       Y D D W N S L A A A R A W W L L R Y M G V
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                                            130              140            150             160
UniRef90_UPI00035E3360   N Q V Y I L E Q D F S A W K Q A G Y P V T D E Q P V I V P K T F E A R P Q E D M
UniRef90_B1MEA7          S N V R I L D G G W A A W Q R S G G P V A T E E V V P V V G D I T I T S H G L A
UniRef90_H5TIE6          R D V R L L D G G L A A W R D A G M R L S S G D T P V R P G A V T L R S G A M P
UniRef90_F2PEL4          N K V S V L D G G L P A W I A A G Y D T E S G E P T I T P S V F N A E L Q P E W
UniRef90_M2WDD4          Q D V R L M D G G R D K W I A E G R E L S T E T P S R E R T D Y P V V E R D D S
UniRef90_UPI000464696E   G R V K I L N G G R D K W I R E G R P L V R E K P V Y P E T S Y A V P T V R H D
UniRef90_UPI00036F34A7   D S V A V L D G G L Q A W R A G Y K L D T A T P A R V K G D F K A G A P L A V
UniRef90_UPI00034532F3           G S A A L L D G G I Q S W T G P L E S G P V T P E P A S R T P R P W P A D R
UniRef90_UPI000466495C   D S V Y L L D G G L A A W R A A G Y P V E S G E V S P A V G N V M V G A A R M P
UniRef90_E1IDU0          Q D V R I M N G G R T K W I A E K R E L S R V V A S F D P T E Y P V P T R D D I
UniRef90_UPI0003603F36   E D V R I L D G G R D A W L A E I R E T T L D V P E Y P A T D Y P V V E R N D A
UniRef90_M9RRS4          D R V R I L N G G L R K W I A D G Q N L E T E P V P A T R R D F K A N I I P G R
UniRef90_Q54E40          S A S K V S E G G L P A W E R E G Y P V Q S G P I E N S N N D E S K T Y K S T F
UniRef90_UPI0002EB18B1   E Q V A V L D G G W Q A W L A A G G L V E A G Q V A S R R P A H E A P V Q G M P
UniRef90_A4BTX4          N A V A V L D G G F L A W A L G Y P I S R N R P L L R S A D F Q G R A G A M P
UniRef90_B6K5Y7          E D V S I L S G G L P A W T E A G F E L E T G E P A V P K E Y K G A V L N K N L
UniRef90_UPI0003FA0E34   E D V R L L D G G R D K W I A E G R E L T R E V P S R E L V E Y P I I E R N D A
UniRef90_I9C3M5          R N V A V L D G G L P A W I E A G L P L E T G D A S V V P D F E P A E P L V P P
UniRef90_A8IIG4          E N V A L L D G G Y A K W A A E K R P A E M A P V R P E A R S F T A G F N P A L
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UniRef90_I0KYV5          R P V R L L H G G F P A W V A A G R Q V S T T A P A P V D G D V E V R P G D L P
UniRef90_B4VF51          D R A A V L D G G L P A W K A A G L P L E A A G P A Y P R G S F T A R P R P G L
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UniRef90_E8NFY1          A D V R L L D G A L A A W T G A G F E V E E G   D A E T P A P G T V E L S Y G A
UniRef90_B1XIW9          D K A R L L D G G F P A W Q T A Q A P I A T D I P G F K P G Q F E P N P Q P Q L
UniRef90_B7LKB7          E R V S I L A G G L T G W Q R D E L L L E K G D V E L P E G E F T A K F T P D A
UniRef90_I0JYQ6          K N S K I L N G G R D K W I K L G L P L T K E K P S F E K T H Y P V P R M D E E
UniRef90_L8JM29          E N I S V L D G G L P A W I K Q G F E T Q P V K E E K Y H P N F K S N F L P E F
UniRef90_J0S4W6          E K I Q V L N G A Y P A A I Q A G F P T N S G I E T F E K T I Y P S Q E W K L P
UniRef90_W4T527          E N V Q V L D G G M Q A A E K S E V E F S S E E M V E K A P S I K K E D W S L P
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UniRef90_UPI0003C7E27C   T D L R L L D G G R K K W E L D S R E L T D A P T E R P T T S Y T A S E P N T D
UniRef90_UPI000382BAEF   P D V R V L D G G L P S W E G P L   E T D T P T P A E G D F A P E P G A
UniRef90_UPI0002E78D5F   E N V L V L D G G L P A W I K E G Y A T E K R Q E Q Y E E G D F T A N F Q P Q L
UniRef90_UPI0003660D85   T N V K L L D G G R K K W E L D S R E L V E D V P S R P A T Q Y Q A K D Q D L S
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UniRef90_Q0RJ10          A D V R I L D G A L A A W R D A G L P I E T G   E I I P L P G D I V L E A G H
UniRef90_W1NAR0          D D V T I L D G G F A G W Q E A G L D V A S G E V Q Y P D P V R F E G S L D D S
UniRef90_UPI000465D492   P D V R V L D G G L A A W T G E L S E K T P E P E P G D F R P E P G     A
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UniRef90_N0APX6          K D V R V V N G G F T A W S N S S Y K V E T E T V T S F G A K V P A N P D Y I I
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UniRef90_UPI0003B4D527   E D V R L L D G G R D L W I A E G R E I T T D A P E V T P V D Y P V V A R D D R
UniRef90_UPI000050FF34   E D V R L M D G G R A K W Q A E D R E L T T D K P R P E P T E Y P V I E R D D T
UniRef90_UPI0000E0FF00   Q R V H I L D G G L P A W L A K E L P T Q A E I S Q T S V L G D F I A R D Q S V
UniRef90_I0LEA4          A D V R L L D G G R Q K W I A E G R E V T R D K P A R P R A D Y P V P L R D D A
UniRef90_L8DDI7          R D V R V L D G G L A R W V A E G F V T G T E P S I I A A G S F T A R P S L A R
UniRef90_UPI0003464A35   D R V F L L D G G W Q E W S N L N Y P V T S E I P K S V Y G S F V P Q P R L D W
UniRef90_UPI0002F3C3AE   Q N V F I L D G G Y T E W L A S E Y P V S E E I H T Y P T A N Y D I H I N D E M
UniRef90_J9HEI1          E N V K L M D G G R K K W E L E G R E L V K E V P S R T K T Q Y P V P N R D L D
UniRef90_M5E2J4          N N V K L L D G A L G K W E E L G Y E T K M V E F Q S Y E N Y Q I G P I N K D M
UniRef90_V6ARW6          K N V K I M N G G R K K W E L E K R P Y V T E E P A I A S T N Y V A Q P P D E G
UniRef90_U5ENG4          E D V R I L D G G L P A W I A S G G E P A T G A E A D P E P G D L V V R P G A L
UniRef90_W4QZJ9          P H V K I I N G G Y A A W E A E G K I T T T E E P K V V H S E Y V A E E K S E L
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UniRef90_F3NNV1          P D V R V L D G G I A A W D G P S A T G A E E P E P G D F R P R P G A L P L L D
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UniRef90_A1W4U4          D A V A V L D G G A G G A V A S G D P A R F Q S H R L Q A P L R R
UniRef90_I3PG25          S A A S V L N G G L P K W L K E G L P T T S D H Q P A A P E I F K A K I V P K F
UniRef90_S5TJI5          D R I S I L D G G L P A W K A A G L P L A A D V E A N E P A T F T P H R R D A L
UniRef90_A0QXB3          S G V R I L D G G L V A W E V T G P V T P E P G D R V V H R V V L Y
UniRef90_K9WMJ3          D Q V A L L N G G W T A W Q A A G Y P V T E V P P T P V P G T F V P Q J R S D W
UniRef90_K1ZVV9          N Q L Y I L D G G L K A W E K Y N G K I A S G D E P S S R K Q Y T A Q F Q P H L
UniRef90_F4KTU1          Q Q V Q V L N G G L N A A I E A G F F L A G E I A P V E D Y P I Q D W S L P
UniRef90_D6U5V7          T Q V V L N G G L P K W K R A G R P L T S T V H T Y E P T S F T P V M Q P Q L
UniRef90_C5CA10          R D S V L L D G G L E W R A A G L P L Q P G   E V I P V P G T A R P S W G R
UniRef90_UPI0003FB9EF5   G E V A V L D G G Y A G W V A G G G A T G T A E P S P E P G D F Q V R P G G M P
UniRef90_UPI0004144A1C   A V V R V L D G G L D A W T A A G F A L E T G E V I P E P G D I V L E S G R L P
UniRef90_S7W236          D V R L L D G A L P T W T A A G H P L A T G T D D R T N A T P G A I T L S A G
UniRef90_C6WIR9          D   V R L L D G G L A A W V A G G F P V E R G D V V P T P G D V V S E N R L A
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                              170              180              190              200
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UniRef90_H5TIE6         V A D I D D V A     A R D P G T V L V D A R A A A R Y R G E I E     P V D P R
UniRef90_F2PEL4         V I D A D G L N Q L L A D D S V A V I D A R P R A R F L G S V K E P R A G   I R
UniRef90_M2WDD4         R I R A F R Q D V L D E I G R T P L V D V R S A P E Y T G E R T H M Q E G V L R
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UniRef90_UPI000466495C  A L T E Q E A G Q W H C N G       V L L D A R A G E R Y R G E V E     P I D P R
UniRef90_E1IDU0         R A F R D Q V F Q H I R H E G V A L V D V R S P Q E Y T G E R T H M P E Y P Q R
UniRef90_UPI0003603F36  P I R A Y A S D V L S A L G S V P L V D V R S P A E Y T G E R T H M P E G A L R
UniRef90_M9RRS4         V A S L D E V R D A G I N G N A V I D A R T A A K F D G H E G S G Y P G V A S
UniRef90_Q54E40         N N N K Q D I L S N L Q S K E Y Q L I D A R S A D R F W G R V D E P R P G L L R
UniRef90_UPI0002EB18B1  T V D A Q A V L A N L E N P A L T V V D A R A P E R F R G E V E P M D P V A
UniRef90_A4BTX4         T I D T D T L A R E R T R Y R I I D A R V V E R F R G D V E       P I D P V
UniRef90_B6K5Y7         V A S F E D I I E I S Q G P N A Q V V D A R A P E R F N G S V P E V R P G I A C
UniRef90_UPI0003FA0E34  P I R R E H V L E H L E A   S G P L L D V R S P L E Y S G E R T T M P E G A L R
UniRef90_I9C3M5         P V T A H D V L A N I A S G N T Q V L D A R D P V R F   A G N P N P V D P V
UniRef90_A8IIG4         L R T L D Q M K A N L A S G A E Q V L D A R G P G K F D G T Q E D V Y A   F A K
UniRef90_F4QQV2         G S I I D R K A L M D T P N R Y L V L D A R S R A R F E G T A P E P R A G   L R
UniRef90_I0KYV5         V L D A G Q A A A L A A A D D A V L D V R A A P R Y A G E V E P I D P V
UniRef90_B4VF51         V V D S A A I E A A L A D P A A A V L D A R T R G R F A G T A P E P R P G   L R
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UniRef90_E8NFY1         L P T L E L D E V G A F A S S D L L L D A R A G E R Y R G E V E     P I D P R
UniRef90_B1XIW9         V V N R Q D L L   I A T D N Q R L V I D A R D G D R Y L G K I E     P I D P I
UniRef90_B7LKB7         V V N V T D V L L A S H E K T A Q I I D A R P A A R F N A E V D E P R A G   L R
UniRef90_I0JYQ6         I R I F Y N G V L D Y L K T K G P L I D V R S P G E Y S G E P E Y P Q E G V L R
UniRef90_L8JM29         V K D V D F V K N N L L S K E A V I I D A R S R E R F D G M A P E P R E G   L R
UniRef90_J0S4W6         L A D I E E V E K A R K N D Q N L V I D V R D K N R F D G L V E       P L D L I
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UniRef90_C6W588         L V D A D D V A L A A A D P D S M V I D V R E H Y R Y L G E S E     P I D L V
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UniRef90_V6ARW6         L R A Y F D V R R A L D K S E I A L V D V R S P K E F T G E I T A P P E Y P M E
UniRef90_U5ENG4         P V       I D A D A A G S W S G V L L D A R A G E R Y R G E V E     P V D P Q
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UniRef90_S5TJI5         L A D V D L S D I V N D D V L L I N S L D L P T Y T G E R       K T Y E R
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UniRef90_M5E2J4         G G R I P S S V W I E W T A A L N K D G T F K S A E E L K E I Y Q Q K E V T S E
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UniRef90_B7LKB7         K P I I V S C G S G V T A A V L L A L A T L D V P N V K L Y D G A W S E W G A
UniRef90_I0JYQ6         K E T V V Y C R I G E R S S H T W F V L K L L G H K N V K N Y D G S W T E W G N
UniRef90_L8JM29           P L V F S C G S G V T A C I L L L A S E L A D I K N Q K V Y D G S W A E W G Q
UniRef90_J0S4W6         P E N I V H C G S G V T A C H T L A M D Y A G L P I P K L Y A G S W S E W S R
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UniRef90_I4EMG0         Q D I V V Y C R I G E R S S H S W F V L H L L G Y P N V R N Y D G S W T E W G N
UniRef90_U1LM65         D D V I A Y C R I G E R S S H T W F V L H L L G L P R V R N Y D G S W T E W G S
UniRef90_UPI0002E52731  Q P L V A T C G S G I T A A V I V F A A H L L G H   D I A L Y D G S W T E W G A
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UniRef90_A0A024ICX9     P A G V V H C G S G V S A V P N L L A M A I A G L G T T T L Y P G S W S A W C N
UniRef90_E8UD64         A   I V H Q C G S G I T A C L N E F A M E E A G L E G S G L Y A G S W S E W I
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UniRef90_UPI0003660D85  K D T I A Y C R I G E R S S H T W F A L E L L G L E N V K N Y D G S W T E Y G S
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UniRef90_W1NAR0         A P M V S F C N T G H W A A T D W F V Q I A G Y D D V A L Y D G S M A E W T Q
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UniRef90_N0APX6         N Q L A F Y C G T G W R A A E V L F Y A D V L G L K N I S L Y D G G W N E W S M
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UniRef90_UPI0000E0FF00  D P I V F T C G S G V T A C L L S V A A E I C G F K N I S I Y D G S W S E W A N
UniRef90_I0LEA4         D D V I A Y C R I G E R S S H T W F V L H L L G Y P Q V R N Y D G S W T E W G N
UniRef90_L8DDI7         K D V A V Y C G S G V T A A H Q I L A L E L A G I   D A A L Y P G S W S G W I T
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UniRef90_UPI0002F3C3AE  E P V I V Y C G S G I T A A P N Y I A L K E A G F T D V K L Y A G S F S D W I S
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UniRef90_V6ARW6         K E V I C Y C R I G E R S S H S W F V L K L L G Y P Q V R N Y D G S W T E W G N
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UniRef90_J4PEW7         K P I I T Y C R I G E R S S H S W F A L R K L L G Y D V R N Y D G S W T E Y G N
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UniRef90_I3PG25         K S F V A T C E V G V T A C A A V L L A R L F D N N G V T V Y D G S W Q E W D A
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UniRef90_M2WDD4         S V G     L P V V M G E
UniRef90_UPI000464696E  K A P I E R P
UniRef90_UPI00036F34A7      A E P A R P I T V G
UniRef90_UPI00034532F3      A D E E L P V E T G D G
UniRef90_UPI000466495C  N A       A N P V A L G
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UniRef90_UPI0003603F36  A V R V       P I A R G E
UniRef90_M9RRS4         R E D T E
UniRef90_Q54E40
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UniRef90_A4BTX4             D P V R P V A R G N A
UniRef90_B6K5Y7         R A D P K L
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UniRef90_I9C3M5             A D P Q R P V E R D P G
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UniRef90_B4VF51             P S A L P V V T G
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UniRef90_E8NFY1         H E       E L P V A T G P
UniRef90_B1XIW9         Y V A P
UniRef90_B7LKB7         R A D       L P V E
UniRef90_I0JYQ6         K V G       A P I E R
UniRef90_L8JM29             P G S L P V E Q
UniRef90_J0S4W6         N D
UniRef90_W4T527         R E G K E
UniRef90_F3WTQ1             D P S T P K A K
UniRef90_E9UXF8         L V G V       P V V T G
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UniRef90_UPI0003694282      D S T R S V A I G P A
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UniRef90_UPI000050FF34  V V G V       P I V T G
UniRef90_UPI0000E0FF00      D P N T P I V T
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UniRef90_V6ARW6         M     I G N P I E K
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UniRef90_G7FRC6         S N       S L P I V T G E
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UniRef90_A1W4U4             D P G R P V E R G
UniRef90_I3PG25         K A S S E L
UniRef90_S5TJI5             A D H S L P L E
UniRef90_A0QXB3         C D P G R P V A R G E
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UniRef90_K1ZVV9         E K L T E R P V A T
UniRef90_F4KTU1         S D K P
UniRef90_D6U5V7         R A D L P T E I
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UniRef90_A0A023BRB9       M T Q P I V S V N W L S K H L D         H P D L V I L D A T I K K V T A
UniRef90_F4CM40             D V L V S T D W A E K N L G A           E G V V F V E V
UniRef90_B1VXP1             K P I I T A S A Y A S E S A G S R P P       V L L D V R W Q L G G P
UniRef90_L0DJL4         Y V H P E V L V S A D W V E E H         R N D P K V R I V E             S
UniRef90_M7MH01             T S P I V S V E W L K T H L K         H P N L V I L N A T I P K V T G
UniRef90_K6WPE2         Y A H P E R L V T T Q W L S A H L G S K       G L K I I E             S
UniRef90_C7QKH0             R N D V L V D A D W V Q A H L D         D P K V V L V E V
UniRef90_G0VB80                 Q K G S T T S R V I P I D S T W Y L P N N
UniRef90_UPI0003653CE8    M R E R V L V D A A T L A A D L Q V G D A P D R P V V L D V R W A L     G M
UniRef90_K9UY61             S S I I S A Q S L F E N R D Q         V V I L D C R F S L A D S
UniRef90_H5WT70           M S H P S L I A A T E L M A L Q Q S G Q P     L V L D C S F D L A D P
UniRef90_J0U9Z3           M T Y T T L I S A T E L Q S L A A S G T P     L M V F D C S F D L T Q S
UniRef90_D1C1D3             L V S V E W L A A H L E         D P D L R I I D L S
UniRef90_S2YUG0             N A I I S A D E L A S D L A G Q H P P       V L L D V R W Q L S A P
UniRef90_K6ZDI5             S S A L V S A N W L S E H L Q         D E N L M V F M S T M D D I A S
UniRef90_D7VV17             S P I I S S Y E L K         N I P A E N L I I L D A R       T G
UniRef90_UPI000360E195    Q E I P A L F T S A R W L A E H         R G D E N L V I L D A C V T R D I H
UniRef90_UPI0003B5190E    Y A H P D V L V A T D W V A E H     H T E T E D I R I V E             S
UniRef90_L0A3R6             D V L V S T D W A Y E H L N         D E G L R F I E V
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UniRef90_UPI00046F98EB     S V F V T P E W L A Q R L D T         V V P V D A S W F M P D S
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UniRef90_UPI0003B74167           Q A L A E A D P V F V D A S W F L P G G
UniRef90_UPI00040810B6      F S P L I Q P Q E L L E L Q H S K       N L I L V D A S       N G
UniRef90_UPI000379FCDE      L V T V D W L A R H L N         D P R V R I I D A R S S L
UniRef90_UPI0003456CE6      V S A A W L R D H R D E         V V L V D S R W Y L     D G
UniRef90_UPI0004251402   Y A H P E R L V S T Q W L A D H L N         D D S L V V V E             S
UniRef90_K0BH37             V L I S T T E L N S I L N E S         N L I I A D T R S F
UniRef90_E6X9E0             T S I V S S K W L Q A H L N         D S N L I L D A S A A N P M S
UniRef90_I4VPE4         T L L T T L I D P A T L S A M       A P G E V L I V D C N F D L A D P
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UniRef90_X5M0J4         A R S D V L V S T E W A G N N L D T         P G V V F V E V           D
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UniRef90_UPI0003825557   Y V H P E R L V S T E W L S A H L G T         D G L K I I E             S
UniRef90_UPI0004690642   M T Y A N P N A L V D T S S L Q H R L R       D P N L R L F D C S T V L Q F E
UniRef90_E5XV67             N V L V T A D W A E Q H L E         D P K I V F V E V
UniRef90_UPI0003795741     D T L L N A A A L K N R M D A V E T G R R T V L L D V R W A L G D P
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UniRef90_K1LBC6           T P F V S T Q W L A D H L D         D P D L L V I D A S V L F N D P
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UniRef90_Q0SJX1           R S N F L V D A E W V V E H         G H D P D V V L V E V
UniRef90_UPI0002F5477A  H Y A H P E R L V S A D W L A Q N L D N P S V         V V V E S
UniRef90_A4BGT3             S Q L I S P A E L K N L Q R T H Q P       I I L D C R S D L T D K
UniRef90_UPI0002F577A9     P F V D V A W L K A H Q N S         V V T A D V R W Y L     D G
UniRef90_M1I858       M T Q T T T Q V I V D Y K W V L D H         Q K D P K V R I V E V D Y
UniRef90_UPI000255BAAB   M N Y Q G V I E V A E L A L Q Q Q S R E D G Q L V L L D C R Y D L A D I
UniRef90_M2WRD6             V S V D W L R E H L D         D P G T I V V D S S T H L A L P
UniRef90_I4X3P2             I V S T D W L E Q R L G         D P K L R I V D A T T F M D I P
UniRef90_A1C8P8       M T Y P F D S V L V T P A Q L H A       A V T N P P P R R I I P V   A A G R L
UniRef90_UPI000359562A M A L C R V P A L V S S S W L K Q R L P A S G N D A P L R L D T S W V P E P D
UniRef90_A3Y989             Q T L I S A K D L L         K E S D N Q D L I I L D S R F Y L T D L
UniRef90_A0A059MSQ9         V L M T V R E L A D L V E V G R P P     V L L D V R W S L D D P
UniRef90_UPI0003013AE9     K V L I E A G E L A E A L A G D R P P     L V L D C R A R L G D P
UniRef90_W5TFH2         M A A V L I S P E E L R N T L S D S E C     R T H L D V R W A L G D P
UniRef90_UPI00046D0DB7     D V L V T V D W A E N L D K         D G V V F V E V
UniRef90_A4XPX4             V I E P A E L A E R L D A A         D L I L L D L S
UniRef90_UPI0003732576   M P S P L I S P T E L A D L I R S G T P P     R I L D V R W R L     D Q
UniRef90_H9UIN2             Q I L V D A E W L E Q R L G E         V V I L D S A R S L
UniRef90_J9S9U4         M S D V V I D P L D L A E M L L A T P P     V L L D V R W Q L     G D
UniRef90_D0KJ23             L V S T K W L A A H         R T D P N I L I F D C T T R L V P D
UniRef90_UPI000380CAFD     S P L V T A Q W L H Q H         K D D D G L L I F D C S M N K T V S
UniRef90_M7NJF6         M T D V F K S V D D L S E         G Y Y K L I D A R F S L S D P
UniRef90_U5BVI8             E N L V L V D A R       A G
UniRef90_V6AVX9             L I S V R E L A G R L S E K         D L I I I D C R S Y
UniRef90_W9GHW2             T H L I S A A A L A T E I         E D V V V I D V R W T L T T Q
UniRef90_K0IJG1         Y A H P E V L C E T D W V A S N L K N G S       I R I L E V D Y
UniRef90_F2F3V6             Y V V D G D W L E A R L E         D P N L R I L D A S T F L K I P
UniRef90_R7Q4K2       S A R P S A L V D P A W V L R R M         P H V S I L D A S W Y M P K N
UniRef90_D5UIR8             E V L V E P D E L A R L L A D         D E P V T L L D V R W A L     G R
UniRef90_C5BZY3         M S D V L V S A T D L Y T R L S S A R E     K D P V L L D V R W T L A E P
UniRef90_UPI00037294D4         I I E A E D L A A E L E R         E E L L I V D L S
UniRef90_UPI00037FB69E     H P E K L V S P D W L S A H L G T         P G L R V V E             S
UniRef90_Q9RXT9             D V L V S T E W A A Q N L Q T         P G V R F I E V
UniRef90_Q00VJ9             R A L I S C A F A R E H A D         G L T F V D A S W H M P D K
UniRef90_A4S6Y9             S A D W L D A H R D         D V Q I V D A S W H M P D K
UniRef90_A4WJB6       M Y Y M A L V T T E W V H Q N L N         N P K V R I V E V D Y
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                                                  50              60              70              80
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UniRef90_A0A023BRB9  P D E S T N S N L K   I K G A R F F D I K N F S D I T T D I P N M L P T A E A F
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UniRef90_C7QKH0      D E D T A A Y D K N H I R N A V R I D W K     R D L Q D P V R R D F V N Q E Q F
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UniRef90_H5WT70      G A G E D G Y H G G H I P G A C Y A H L D N D L S S A K T G R H P L P S R E A F
UniRef90_J0U9Z3      T A G A Q Q Y A Q A H I P G A V Y A D L N E N L S A K H G V P H P L P S R E R F
UniRef90_D1C1D3          P V R E Y R G G H I P G A T H I W W Q D T I E V H N S T Y G M L V G R E G I
UniRef90_S2YUG0      F D G R A A Y A S G H I P G A V Y I D L D A E L A G T D R G R H P L P D L E V F
UniRef90_K6ZDI5      G K P   E A T P A G Y I P N A Q L F D F E K I C D T Q S G L P H S M P S P A V F
UniRef90_D7VV17      K D A K Q N Y L D K H I K G A R F I D L D R D L A E I G E N R H P L P S V E K F
UniRef90_UPI000360E195 P D G L P T Y R E G H L P G A I H A D L D D F S D P T T E M R F T R P T R E Q L
UniRef90_UPI0003B5190E N E D V L L Y D T G H I P N A V H I D W T N D L Q Q E D V R D F I T A D     Q F
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UniRef90_UPI0003B74167 M T G E E V F E E R R L P R A V F F D L D G V C D V S S P L P H M A P G A A A F
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UniRef90_E6X9E0      G   A L S E N I S T R I V G A R Y F D L K T F S E T E N P Y P N K I P S P E Q F
UniRef90_I4VPE4      G K G E R E F R L G H I P G A V Y A N L D R D L S D L S R G R H P L P L E A A F
UniRef90_A0JY94          H G R E H Y L E A H I P G A I Y V D L P T A L A G P A Q G R H P L P P L Q Q F
UniRef90_A2QM61      S           F E S R H V P N S V F F N M D A V K D T N S P Y P M M L P S S A Q F
UniRef90_X5M0J4      E N T S A Y D D E G H I P G A V K L D W K D     D L Q D A V K R D F V D Q Q Q F
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UniRef90_K1LBC6      D S G L E D Y Q K E H I P G A V F A D Q F Q L A K E D A P I P F T A I D H D V F
UniRef90_I4F043      T D G R E Q H L A G H L P G A V F V D L E T E L A G P A E G R H P L P S L P A L
UniRef90_U7P468      P L K A E S Y A E G H V P G A V F L D K A R L M R G E G E V P C L E P T V E Q L
UniRef90_K9U0A6            A P E E Y A I A H I P G A V N I R E I F T Y L A A S T P E G L N S L H A E F
UniRef90_D9WXS2      D E D T S A Y E K N H I R N A I R I D W     T Q D L Q D P V R R D F V D Q E G F
UniRef90_S2KLI2      P L K A E S Y T E G H V P G A I Y L D H R R L L H G S G E V P N D V P D E A A L
UniRef90_M9SPZ3        D Q R P A Y L A G H L P G A V H V D L D G E L A G G P G G R H P L P D V E A F
UniRef90_UPI00035D02CA   S P E D Y S K G H I P G A V N I H S I F T F L A T S T P E G I S E L K E N F
UniRef90_S3ME14        S S A R Y E A G H I R G A R F V D P K R T Q L G K P P A P G L L P D T A S L
UniRef90_E6V6W5            L Y E R G H I P G A V N F S W H N     D L N D R V R R D I V S Q A D F
UniRef90_UPI00047E39D7 N A Q E N Y E K E H L K S A R Y V D L N K D L A T V D C N P H P L P S L E K F
UniRef90_Q0SJX1      D E D T A Q Y E T N H I D G A V R I D W K     R D L Q D P V R R D V I D R R S F
UniRef90_UPI0002F5477A D E D V L L Y S T G H I P G A V K V D W H T     D L N D E V T R D Y V D G A A F
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UniRef90_UPI0002F577A9 A S G R A A Y D G G H L P G A V F V D L D V W L S G N S G P R G L N P D P E V F
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UniRef90_UPI000255BAAB E V G Q Q A F L K A H I P G A Q Y A S L H R D L S A P I E R R H P L P T A Q Q F
UniRef90_M2WRD6      K D G R S T F D A E H I P G A V F A D L T D F A D P G S A A A W T A P D S D R F
UniRef90_I4X3P2      E N G K A S Y K E E H I P G A V Y A D L H E L S D P E S Q L P F M A P P R D H F
UniRef90_A1C8P8      A A H A Q S Y Q T H H I P G S V F F D M D L I R D T T S P Y P Q M L P S A A D F
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UniRef90_UPI00046D0DB7 D E D T A A Y D S G H L K G A V K L D W K K     D L Q D P V R R D F V N T E Q F
UniRef90_A4XPX4        G A A R Y A A G H I P G A R W V D A K R T Q L G Q P P A P G L L P Q R D Q L
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UniRef90_H9UIN2              D A F L E G H I P G A A L V A R E V T W E T I D G I E G M L P D P E L V
UniRef90_J9S9U4      F D G R R A Y R E G H I P G A V Y V D L D S E L A P P S S G P H P L P A V A D L
UniRef90_D0KJ23      E K A R A D F Q A G H I P G A Q F I D V Q D L S D N T H R Y K Y M L P T P E S F
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UniRef90_M7NJF6      E A G R K A Y E E G H I A G A V Y W D L E K D M S D S D R G R H P M P S R E Q L
UniRef90_U5BVI8      K D A K S N Y E V K H L Q G A V Y V D L D L Q L D F S K G G R H P L P P L K Q F
UniRef90_V6AVX9            K E Y S E G H I P G A V N L D L F A F H W F D T S E S G I E G F D A Q T
UniRef90_W9GHW2      G A G R A E Y A A G H V P G A F F V D L D T E L A A P A G G R H P L P S P E V V
UniRef90_K0IJG1        D P E N A Y R Q G H V P G A H L V W W K     R D I N D P V R R D I I N K Q Q F
UniRef90_F2F3V6      E S G Y E A Y K E E H I P G A A Y A D L K D F T N P E G K A P F T I A T R E Q F
UniRef90_R7Q4K2      R D P N T E F I D E R I P G A R R F D I D G L A D L N S D L P H M L P S P E D F
UniRef90_D5UIR8      T D G H E R Y L A A H L P G A V Y V D L D T E L A S P A T G R H P L P A V A D L
UniRef90_C5BZY3        D G R R A Y S A G H L P G A V Y V D L H E L A G P G S G R H P L P T L A D L
UniRef90_UPI00037294D4     S N Q N Y L S G H I P G A L H L P F Q A L M A G T P P A P G A L L P A V A D F
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UniRef90_Q9RXT9      D E D I L L Y E T G H I P G A V K L D W Q T D L W H     P V E R D F I E P Q Q V
UniRef90_Q00VJ9      R S G R G E Y M K S R L P E T R F L D V D A V S D R D A R A P H Q L P A P E A F
UniRef90_A4S6Y9      R N G A R E H A R T R L P Q T V F F D V N L S D R H P N M L P S A K A F
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UniRef90_A0A023BRB9    S E A C K S L G I S S H H T I V V     Y D T L G I Y S S P R V R W M F I A M G H
UniRef90_F4CM40        E A V L S A K G I S N D D L V V L Y G G N N     N W F A A Y A Y W E F K L Y G H
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UniRef90_L0DJL4        A A I C A R S G I A N D T T V V F     Y G D K S N W W A C Y A F W A F K L F G H
UniRef90_M7MH01        T N E A Q A L G I N K Q S G I V V     Y D E K G I Y S S A R V W W L F K A F G F
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UniRef90_S2YUG0        G A A M R R A G V T A G R P V V A     Y D G A Q G W A A A R A W W L L R W T G H
UniRef90_K6ZDI5        Q R E V R K L G V N Q D S V I V I     Y D N Q G L F S A P R V W W M F K Y M G H
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UniRef90_UPI00040810B6 S K T L S R L G I S K E S H V V V Y     D D K M G A N A A A R F W W M L K A V G H
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UniRef90_K0BH37        R N L L S F L G V T P E K K I V F     Y D S V S G M L A A R G V W M L M Y F S H
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UniRef90_A9DVT2          F R N Y G G M L Q E L L D A K S I I L D A R S A A R F T G E Q P E P R A G   L R
UniRef90_A0A023BRB9      V T N A K T V L I E M N A E N T L L D A R S P G R F T A S E P E P R K   S L K
UniRef90_F4CM40          I R A F R D E V V A S I   G V K N L V D V R S P D E Y S G K A H L P Q E V S Q R
UniRef90_B1VXP1          L P T L D A E S A A A F A R S G L L L D A R A A E R Y R G D V E     P I D R V
UniRef90_L0DJL4          T I R V F R D A V M D H S K S G P L L D V R S P K E F T G E K T H M Q E G S L R
UniRef90_M7MH01          L V F F K D L K N A A Q D N K Y L I I D A R S E N R F K G L E A E P R E G   L R
UniRef90_K6WPE2          R I R A F A A E V L G V L G E Q P L V D V R S P Q E Y T G E R T H M P E G A L R
UniRef90_C7QKH0          I R A Y R D D V V A A I   G S T N L V D V R S P D E Y L A P A H L P Q E Q S Q R
UniRef90_G0VB80          D L R D K E V V S Y E E K K K F N V F D A R A L P R F E G N A P E P R P G   L P
UniRef90_UPI0003653CE8   V I D A D G A A E   L A D G A G V L L D A R A R G E V E     P V D P Q
UniRef90_K9UY61          V V D I A D V K K Q Q N L A E A V L V D S R E R D R Y H G     I H E P I D K I
UniRef90_H5WT70          M P V T L A T D L M A R L P D L Q L L D A R A A E R F R G E V E P L D P V A
UniRef90_J0U9Z3          L A T A S D V L A H L Q Q P G Q T V V D A R A A P R Y R G E V E P L D P V
UniRef90_D1C1D3          V I G P E E I A Q H L D D P A F V V V D N R T P E E Q A A T       W H G R L R
UniRef90_S2YUG0          A D A       A A A L A R T G V L L D A R A A E R G E V E     P I D R V
UniRef90_K6ZDI5          L L V D A Q V L A G L N A T D R R V I D A R S A D R F Y A K V A E P R P   H L R
UniRef90_D7VV17          P V S S E I V E N E L K N N S S T V I D V R D A Y R Y K G E S E     P I D L V
UniRef90_UPI000360E195   Y F V D A D D V R D L G S D S V L V N V L R P E V F S G D E V P Y G R A
UniRef90_UPI0003B5190E   S I R A F R D V L S H Q D A G G P L V D V R S P E E F R G E K L H P Q E G S L R
UniRef90_L0A3R6          I R A Y R D E V E K V R A G Q G A M V D V R S P D E F S G K V T H M Q E G V L R
UniRef90_U1NYF2          V A D K D D I T S Q L D S G E A C V I N A L Q P S D H A A Q R I P G S E N V P A
UniRef90_UPI00046F98EB   Y R Y I D G D T L A E K L A A I N V I D V R P E T R F Y A Q V P E P R E G   I R
UniRef90_UPI00046E7121   V I D A S S L I N Q D N K N S L I L D A R S P G R F N A L E P E P R A   S L T
UniRef90_E6PF05          V V T A E E L L T E I E R G A L Q P V D A R A P E R G E V E     P I D P V
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UniRef90_UPI00040810B6   L A T M D E V E A V V Q D T H H L V I D V R D S E R Y R G E K E     P I D L I
UniRef90_UPI000379FCDE   R V D W L T V W R A V Q K G E A Q L L D A R D       P K T F S
UniRef90_UPI0003456CE6   I V G T E A L Q R E L A D P D R L L L D A R V H G R F T G E E P     A P V D A R
UniRef90_UPI0004251402   R I R A F K D D V L A H F G N   P L I D V R S P D E Y S G A R T T M P E G A L R
UniRef90_K0BH37          I S G F E Y I R D N L D N     L K I L D A R S T G E Y D G T T V     R A A Q
UniRef90_E6X9E0          V V D F N S V L E N T I S E V A L L I D A R S Q G R F N G T A A E P R K   D L R
UniRef90_I4VPE4          Q V L I D H     A A L R E G S R Q L L D A R A A P R Y R G D V E     P L D R V
UniRef90_A0JY94          M P V I D A A Q A A Q W P G R G V L L D A R A G E R Y R G E V E     P V D P R
UniRef90_A2QM61          S I D P D P E A D N     K G K F Q I I D A R P N D L F S G R A A A N G A A S V R
UniRef90_X5M0J4          I R A Y R D E V I A A I   G T K N L V D V R S P D E F L A P A H L P Q E Q S Q R
UniRef90_B7JV69          R V T L E Q V K Q A I G K P G V V F I D P R P P E L F S G E     Q Q I W V R
UniRef90_A0A021VWW7      P V L T A D D V L     A G G R V L L D A R A A E R F R G E V E P I D P V
UniRef90_UPI0004166D0C   V R T K E Q V L E N I Q T K E A L L I D A C S N D R F T G E T E E P R E G   L R
UniRef90_F4AQ55          L I D Y Q G V S H A L D T T D S W V V D A R A A P R F N G A A P E P R P   H L R
UniRef90_UPI0003825557   V I R V F A D E V R G L I G T E P L I D V R S P Q E Y T G E R T H M Q E G A L R
UniRef90_UPI0004690642   F V S K D D V L A C L G D P E V C L V N A L G R D V F S G Q T     A R Y G R
UniRef90_E5XV67          I R A F R D E V I S A I   G T A N L V D V R S P D E F L A P A H L P Q E Q S Q R
UniRef90_UPI0003795741   A I     D A G Q A A T W G R R G L L L D A R A A E R Y R G E I E     P V D P R
UniRef90_K6VWF6          V V D I D D V A     S T R A T I V D A R A A E R Y R G E V E     P V D P R
UniRef90_K1LBC6          Y T D L E G M K A L V D Q E D P Q T V I I D V L S P D Q F S G A F A S F G D D R
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UniRef90_U7P468          V V D R A E L A E R L G E K G F A V W D A R S P A E Y R G E K G D N R       R
UniRef90_K9U0A6          M V T T E Q M L Q S L D N P A I I K L D V R D R D E W M G D S S S P Y G V D F C
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UniRef90_S2KLI2          R I E I E E L L E R L G E K G F A I W D A R S Q E E Y N G Q K G Q     N K H
UniRef90_M9SPZ3          L E L L D A D G A A A L A A S G V L L D A R A A E R Y R G D V E     P I D R V
UniRef90_UPI00035D02CA   Y M I D K E A V L N A L D S D I K L L D R D V D E W L A E S P Y G K D F C P R
UniRef90_S3ME14          T A T R E Y L Q S R L G A A D L A I W D A R A P T E Y S G E K V V A A K G
UniRef90_E6V6W5          I R A R L A D V L A V A E G K V D I R S A D E Y S G K I F A P A G A E L A V R
UniRef90_UPI00047E39D7   V A D I E E V E K A R K N D Q N I V I D V R D K N R F D G L T E     P L D L I
UniRef90_Q0SJX1          I R A H R D E V I E Q I   G S K N I V D V R S P D E F L A P A H F P Q E Q P Q V
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UniRef90_A4BGT3          V V D A D R L L S E T G S H R L L D A R A L T R Y R G D E E P L D S K A G H I P
UniRef90_UPI0002F577A9   P W P D A G L A Q E D I T A G A A G I I I D A R N A D R F D G S L Q L P T D P Q
UniRef90_M1I858          W G S H R A F F W E L L Q R S L V L V D V R S P K E F T G E V E Y A D E Q T Q V
UniRef90_UPI000255BAAB   L L S Y S D I Y P N L E N P P W K L V D A R E N K R F L G N E E     P I D P I
UniRef90_M2WRD6          I R S T Q Q V G D T L D D A G T V L V N V L D P A T Y R G E T S     T Y A R
UniRef90_I4X3P2          L A T K E D V E K A T G D D N I I L I N S L S P E D Y R G E T D S       Y P R
UniRef90_A1C8P8          Y A D A A R D V V L R G G R E Y Q I I D V R I R G R F S G A Q P E I Y P E   L S
UniRef90_UPI000359562A   L L D Y Q A M L K V V D A Q S A Q L L D S R P G V G G F Y I T D D D K S G
UniRef90_A3Y989          A V S E E D V L E N M E A E I F Q L V D A S D R Y E G Q N E T M D P       L
UniRef90_A0A059MSQ9      S T V G I D E A A E F P S R   G T L L D A R A A A R Y R G D E E     P V D P R
UniRef90_UPI0003013AE9   V M V Q A       D E V F S G R A L K L D A R S P A E R F R G E A E     S V D A L
UniRef90_W5TFH2          P V V Q A D E V A G W     S G A L L D A R A A E R Y R G Q I E     P V D P R
UniRef90_UPI00046D0DB7   I R A F R D D A V A A I   G Q A N L V D V R S P D E Y L A P A H L P Q E Q S Q R
UniRef90_A4XPX4          T A T R D Y L Q S R L G A S D L A I W D V R G A D E Y R G E K L S S A R G
UniRef90_UPI0003732576   D G I A D I D G V E E W P D H G L L L D V R A P D R Y R G D S E P H D P V
UniRef90_H9UIN2          I A D R D Y I L D K L D S G A L T V L D T R S P D E F T G A D V R A E R G
UniRef90_J9S9U4          P V A T I D D V A     A G P E H L L D A R A A E R Y R G E S E     P V D P R
UniRef90_D0KJ23          L I A E K N D V L D A I G N E H I C L L S A R Q P T Q F S G A E G N N Y G R P
UniRef90_UPI000380CAFD   V E D A S H I V T L L N S D E V K I I D A R A K E R F D G K V D E P R K G   L R
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UniRef90_U5BVI8          I A D M A E V E K V S Q D K D H L V I D V R D A N R Y H G E T E     P I D L V
UniRef90_V6AVX9          L A S Y E Y I R K N L     G K L I L I D A R S R E E Y S G D V I R G S R R G H I
UniRef90_W9GHW2          T V D A A G A A D W P R S G     L L L D A R A E R Y A G E V E P I D P V
UniRef90_K0IJG1          V R A Y M P D V R R A I E R A E Q L V D V R S P K E F T G E I T A P E Y P M E
UniRef90_F2F3V6          I V T K E E V S A L G D E N I V L I N S L S P E D A F R G E T T T Y T R P G H I
UniRef90_R7Q4K2          A T K N E Q L V K S M Q D M H G V I I D A R S K G R F E G T A P E P R E G   L M
UniRef90_D5UIR8          T V D A D G A A A L A S D G     V L L D A R A A E R Y A G L V E     P V D P R
UniRef90_C5BZY3          T I D A       D G A A N W A G I L L D S R A G E R F R G E S E     P I D P R
UniRef90_UPI00037294D4   S I D A E Q I Q A Q L G N P D F I I W D A R S P Q E Y S G E R V L A M K G
UniRef90_UPI00037FB69E   R V F V P E V A A A S R S Q S A T I Y D V R P F T Y F S G E Q T F S E K V A T R
UniRef90_Q9RXT9          R D E V R A H L E S V N N G Q G A M V D V R S P D E F S G K V T H M Q E G V L R
UniRef90_Q00VJ9          V K T K A D V L K N L D D R S F Q V V D A R G A A R F R G E T K E P R E G   V R
UniRef90_A4S6Y9          M R T K R E V V E N I Q T K S F Q V V D A R A A E R F R G E T V E P R E G   L R
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                              210        220        230        240
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UniRef90_A9DVT2      S G Q I P T S Q N L P Y T E V L E N N H F K   S K A A L K T I F E S F Y K E D
UniRef90_A0A023BRB9  G G H I P N S M N L H Y T K V L D D G K M R P T A E L Q E I L Q H F N I E D K
UniRef90_F4CM40      R G H V K G A I N V P W S K A A N E D G T F R S D E L T A L Y G A G L D G K
UniRef90_B1VXP1      G G H I P G A V S A P T T Q N V D E D G R Y L P A E R L A A R F A G L G A A E S
UniRef90_L0DJL4      G G H I P G A V S V P W S R A V N E D G T F K T A D E L K A I Y E E V G L K P T
UniRef90_M7MH01      R G T I P N S V N L P F E N L L D N K G F L K P E D A I K Q L F Q G P L A D T N
UniRef90_K6WPE2      G G H I P T A L S I P W A Q A A A D G R F R P R T E L E E V Y G G L   D P E
UniRef90_C7QKH0      P G H V P T A A N I P W S K A A N D D G T F K S D D E L T A L Y E G E G V D L S
UniRef90_G0VB80      S G H V P G A Q P L P F I N V L D K E W L T Y P S T A E E M K A K L D E F D P K
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UniRef90_H5WT70        G R I P G A R N R F F K D N L G A D G R F L P A E Q L R A A F L A L G A D   T
UniRef90_J0U9Z3      A G H I P G A L N R P F V D N I G P D G K F K P A A V L R A E F D T L L Q G R D
UniRef90_D1C1D3      E G R I P G A V S I P W T A V V E P V P Y Y R S P D E L R R L F E D A G V T P D
UniRef90_S2YUG0      G G H I P G A V S A P T N E N V G A D G R F L P A E Q L A G R F K A L G A A G G
UniRef90_K6ZDI5      A G H M P N A V N L P F N Q C I D N G R L A D V H T L R S K F N L L G V N H Q
UniRef90_D7VV17      A G H I P G A I N I P F S E N L D E N G N F L S P E V L K E K Y S Q L L K D K P
UniRef90_UPI000360E195   G H I P G S V N L P F A E L I D P D G S E I D L D R A R R T A E S I     P P
UniRef90_UPI0003B5190E G G H I P G A R N V P W S E A A A D G T F K S R E E L L E E L Y Q N E G L S P D
UniRef90_L0A3R6      G G H I P G A S N I P W A R T V N E D G T F K S A D E L K A M Y E A E G V T P D
UniRef90_U1NYF2      V G E E A           V I T D D G T Y Q S E E T L Q K R F A D V G A T D A
UniRef90_UPI00046F98EB S G H M P G A I N L P F S E L T D P R G F V I S   S D I A R N I V L P H L S D T
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UniRef90_K0BH37      S G H I P N A I N I D W N Q N L N E D G T F K D D D E L S K M Y D   Y P K D
UniRef90_E6X9E0      S G S I P N S I N I P Y T T V L D N H   K F K D K T E L L Q L F E N V K N D   V
UniRef90_I4VPE4      G G H V P G A L N R P F S D N L A D D G R F K P A A Q L R A E F S A V L G D R P
UniRef90_A0JY94      A G H I P G A V S A P T A G N I G S D G R F L P P E E L R G R F T A L G V S P D
UniRef90_A2QM61      L G H M P S A I N V P F D S V L G L D K T F L P P A E L R D Q F V K W R G R E D
UniRef90_X5M0J4      P G H I P G A L N V P W S K A A N E D G T F K S D E E L A K L Y A A A G L D G E
UniRef90_B7JV69      N G H I P G A K N I P W G T F T V N F H Q L K P L D E I K Q L L A Q R G I T P D
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UniRef90_I4F043      A G H V P G A V S A P T T G N L D E S G H F R T A A V L T E R F T A L G V Q P G
UniRef90_U7P468      L G H V P G A V N L E W T E A M D R E R R I R D Y A E L I T E L E A L G L T P D
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UniRef90_D9WXS2      P G H V P S A R N I P W S K A A N D D G T F K S D D E L K E L Y T E E S V D L A
UniRef90_S2KLI2      L G H I P G A V N M D W I D V M D R S R R I R D Y A E L I T E L E A L G L T P D
UniRef90_M9SPZ3      G G H I P G A V S A P T T E N T G E D G R L L P A A E L A G R F A A L G A N P G
UniRef90_UPI00035D02CA K G R L P G S V W I E W Y R M M K P G E T F K S P D E I L A E C Q S V G I D Q D
UniRef90_S3ME14        G H I P G A N F E W T A V G M D K A R N L R I R Q D M P E I L R D L G I T P D
UniRef90_E6V6W5      A G H I P G A A N V P W G R A V N E D G T F K S V A E L K A L Y A G V G I D G S
UniRef90_UPI00047E39D7 A G H I P G A I N V P F S E N L D E N G F Y K S R E D L N E K Y T A I L G N I N
UniRef90_Q0SJX1      P G H V P G A I N V P W S K A A A D D G T F L G E D E L R A L Y G D A G L D E T
UniRef90_UPI0002F5477A G G H I P T A A S V P W A R A A A E D G T F R S R A E L D A I Y R D E V G K D D
UniRef90_A4BGT3        G A D N A D F T R N L Q A D G A F L E K N A L F N R F A S L A N
UniRef90_UPI0002F577A9 A G H I P G A V N V P C R G N L T P D G R L R P I A E L R R E F A R V G V E D A
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UniRef90_UPI000255BAAB A G H I P G A I N K P W Q E I T D T D G K I L P P A A L R A H W Q S I P A D D G
UniRef90_M2WRD6      P G H I P G S I N F P V A Q L R D P D T T L R P V E E L R A L F E A A G L D P D
UniRef90_I4X3P2      K G H I P S S V N V F F S H A D M E T K R M L T D A E L R E P F E K I G A D P G
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UniRef90_J9S9U4      A G H I P G A I S V P T A D N V D A S G R F R P A D E L R R R F A G V G L D P E
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UniRef90_U5BVI8      A G H I P G A N N V P F T E N L L P E G F F L S P E T L K K K Y S G I L A G R K
UniRef90_V6AVX9      P G A I N V D F N L N I S D     D G T F K D E G S L S A L Y K I P K D
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UniRef90_F2F3V6      P G S K H A F F G S H S D   P E T R L L F D D A T L C A T F E K L G A L D P N
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UniRef90_M7MH01          R D L I F S C G S G I T A C V L A L G A E I A G Y K N L S V Y D G S W T E W G S
UniRef90_K6WPE2          T P T I A Y C R I G E R S S H T W F V L Y L L G F S H R N Y D G S W T E W G N
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UniRef90_S2YUG0          S Q V G V Y C G S G V S G A H E V L A L A V A G I E A D L Y V G S W S E W S S
UniRef90_K6ZDI5          H R L I F S C G S G V T A C V L A L A A H E A G Y N H L S V Y D G S W S E W G
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UniRef90_UPI0003B5190E   T E T I A Y C R I G E R S S H T W F V L K L L G F E N V R N Y D G S W T E W G N
UniRef90_L0A3R6          K E I I A Y C R I A E R S S H S W F V L K L L G Y P K V T N Y D G S W T E W G N
UniRef90_U1NYF2          D N V I T Y C G A G I A A S S E A L A L Y Q A G V T D A A V Y D G S L S E W T
UniRef90_UPI00046F98EB   R L N V A S C G S G V T A C I L A A V A E H Y F A Y P L A V Y D G S W T E W G G
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UniRef90_UPI000379FCDE   K P I V T Y C N S G R E A S Q L W F T L R H V N I P Q V A V Y D G S W I D W T A
UniRef90_UPI0003456CE6   G T V T A Y C G S G V T A C H D L L E H A G F T N T R L Y P G S W S R W G
UniRef90_UPI0004251402   D D V V A Y C R I G E R S S H T W F V L H L L G F D N V R N Y D G S W T E W G N
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UniRef90_E6X9E0          R P L V F S C G S G V T A C I L L L A S E L V G I K N K K V Y D G S W T E W A Q
UniRef90_I4VPE4          A D V V H M C G S G V T A C H N L L A M E R A G L H G S R L Y A P S W S G W I S
UniRef90_A0JY94          V P T A V Y C G S G V T A A H E I A A L E I A G F P A A L Y P G S F S Q W S N
UniRef90_A2QM61          V P A V L T C N S G V T A A V V D L A L R V A G L N K T S L Y D G S W S E W A D
UniRef90_X5M0J4          K E T I A Y C R I G E R S S H T W F V L E L L G H Q N V K N Y D G S W T E Y G S
UniRef90_B7JV69          Q D I I V T C S T G R E A T L Q Y H V L H L L G Y P K V R V Y E G S W T E Y S S
UniRef90_A0A021VWW7      G E V G A Y C G S G V T A A Q L V L A L H E V G V V A A L Y A G S W S E W V R
UniRef90_UPI0004166D0C   K P I Y F S C G S G V T A C I V L M A Y E I V A N N N P K I Y D G S W T E W G Q
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UniRef90_U7P468          M E V V T H C Q S H H R S G F T W L V G R A L G F E R I R G Y A G S W K E W G N
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UniRef90_S2KLI2          M E V V T H C Q S H H R S G L T W L V G K A L G F E K M R A Y D G S W K E W G N
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UniRef90_UPI00035D02CA   S E V Y L Y C F K G A R A S N T Y V A L K S A G I D N V K L Y F G S W N E W S R
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UniRef90_UPI00046D0DB7   K D I V A Y C R I G E R S S H T W F A L E L L G F N N V K N Y D G S W T E Y G S
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UniRef90_J9S9U4          T A S V V Y C G S G I N A A H Q I A A L A I T G I D A A L F P G S F S Q W A S
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UniRef90_V6AVX9          S Q I V T Y C Q G A Y R A A N S F V A L K K L G F E N V R V Y L G S W G E W S N
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UniRef90_B1VXP1            D P S R P V A T G P
UniRef90_L0DJL4           L V R A P I A K G
UniRef90_M7MH01
UniRef90_K6WPE2        A V R V       P I A I G P
UniRef90_C7QKH0        L V G V       P V S L G
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UniRef90_UPI0003653CE8      D P A R P V A V G
UniRef90_K9UY61        Y E
UniRef90_H5WT70         A D P T R P V A R G
UniRef90_J0U9Z3           D S S R P V E R G
UniRef90_D1C1D3        A D P A L P V A
UniRef90_S2YUG0           D P T R P V A V G P
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UniRef90_UPI00040810B6  N
UniRef90_UPI000379FCDE
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UniRef90_K0BH37        K L D    L P V E K
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UniRef90_I4VPE4           D P S R P V A K G
UniRef90_A0JY94           D P A N E V A T G A A
UniRef90_A2QM61        R V D E D
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UniRef90_I4F043           D P T R P V A T G P
UniRef90_U7P468        R D D    T P I E K
UniRef90_K9U0A6           D P S L P I E T G K
UniRef90_D9WXS2        L V G V       P I E L G
UniRef90_S2KLI2        R D D    T P I E
UniRef90_M9SPZ3         A D P D R P V A T G P
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UniRef90_S3ME14        H    P E T P V E
UniRef90_E6V6W5        A
UniRef90_UPI00047E39D7  N D
UniRef90_Q0SJX1          L V G A P V E R
UniRef90_UPI0002F5477A  A V R V       P I V K G E
UniRef90_A4BGT3        N S N    H P I A T G E
UniRef90_UPI0002F577A9   A E P H R R A E L G
UniRef90_M1I858        V V G       S P V K K G
UniRef90_UPI000255BAAB  H
UniRef90_M2WRD6         A D A S L P L V T G
UniRef90_I4X3P2
UniRef90_A1C8P8        R V D
UniRef90_UPI000359562A  I A E P R N I V Q R
UniRef90_A3Y989        R
UniRef90_A0A059MSQ9       D P A R E I A T G
UniRef90_UPI0003013AE9  D A D     R P I A T G
UniRef90_W5TFH2           D P E R P V A T
UniRef90_UPI00046D0DB7  L V G V       P V A L G
UniRef90_A4XPX4           L P D T P I E R
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UniRef90_H9UIN2           D P D A P I
UniRef90_J9S9U4           D P Q R H V V E G
UniRef90_D0KJ23        A D D
UniRef90_UPI000380CAFD   A N P G L P I A
UniRef90_M7NJF6           D P D N P V E K E N G
UniRef90_U5BVI8        N N K P
UniRef90_V6AVX9        R     T E L P V E
UniRef90_W9GHW2           D P G R P V A T G R
UniRef90_K0IJG1        M     I G N P I E K
UniRef90_F2F3V6         A D E S C P L V K G
UniRef90_R7Q4K2        H H       E N P V N K
UniRef90_D5UIR8           D P A R P V A T
UniRef90_C5BZY3           D P D R P A A T G
UniRef90_UPI00037294D4     L P D T P V E Q
UniRef90_UPI00037FB69E  A V G       M P I E V G
UniRef90_Q9RXT9           G V G L P I E K
UniRef90_Q00VJ9           D P E C P L A T G
UniRef90_A4S6Y9        A D A Q C P L A T G P A
UniRef90_A4WJB6          L V G A P V E K
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Multiple sequence alignment (positions 1–40)

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                              1         10        20        30        40
UniRef90_I3I878                       L I E A A Q L Q E I L K Q D N S       L L C C L L R P V G
UniRef90_R4VG05         M A Q Q N L L L V V D T N T L A E R L G S     P G L R I V F V
UniRef90_Q5Z156             Y A H P H R L V T T E W L S A N I G A     P G L K I V E                 S
UniRef90_UPI0004655F50           K T L M D V Q T L R D R M T S G L Q T     V L L D V R W A L G D P
UniRef90_I2N7L9               M P S P I I S A A G L A E A L A G P R P P     V V L D V R Y R L G G P
UniRef90_R7RQZ9         V S Y K N Y H M L V P A V W V K D L I D G K N P G G P V K I F E V S W
UniRef90_F1YP06             A R S D V L V S A D W A E E N L N T D K     V V F V E V
UniRef90_UPI0004744D06             V D P V A L A A E L A G D E A P     V L L D V R W A L     G R
UniRef90_UPI00042A6EFA           P I V D A A W L T A H R D       D V V R A D V R F Y L     D G
UniRef90_Q8FRN9             Y A H P E R L V S A S W L S A R L G S     P G L K V V E                 S
UniRef90_UPI00046796C6   M S R A   T S L V S T D W L V     T N K S V V F V E V
UniRef90_UPI000478BA6E         Y T T L I D A R T L A A L     P P H D V L I V D C R F E L A D P
UniRef90_UPI00034B4FBE           V S A D W L R D H       S D R V V V D S R W Y L     D G
UniRef90_G8JNP6             L I T P K E F S K L I K   N T T N S R V I P V D A T W Y L P I K
UniRef90_UPI00041ECF41         V D E L L P K L K E K     N L R V I C R F T L G R P
UniRef90_K9Q5Q9         H Y A H P E A L A D T Q W L M D H L S     N P L V R I V E V D M S L D S H
UniRef90_H8H334             T H D V L V N T M W L T Q H       H L D P D I R V L E A S
UniRef90_C1MKI4                 V V T P A W L A S N T D R     D D V K V L D C S W Y L P N G
UniRef90_UPI0003477000           P L I D V A G L A     G I P A G E V M I F D C R V D L A D P
UniRef90_UPI000464A66D       K N I S A K R L I D I L D K E D     N L V I D C R F D L I N R
UniRef90_A7TH63             L I T P K A F S E L L H K E T T C   R V I P V D A T W F L P N K
UniRef90_U1N3Q6                 A Q E L K H I V H T D S I   R F I C R Y S L N D A
UniRef90_F5YZ68           K V L I T A T E L A E L L R A G D P     V T I L D A R W S L D A P
UniRef90_E3HD50         Q Y S N S K I L I S P E K A N E M L T A     D K N I V L D V R K E P
UniRef90_H5YFL4         M T Q   P T P L I T T E Q L A A Q L G     D P N L R L Y D C T T Y P P G S
UniRef90_J9TTI3             R V Y V S A D W V K S V I D G N Q S S S N Y V I L E A S W
UniRef90_F5XEM5         M N G P L I S A   A E L A A E L A A G S Q V V L A D V R W A L T G P
UniRef90_Q8EHG0             P L V S P L V E E Q L     T S P E L V L L D A S M A V V L G
UniRef90_W0TCB1             L I S P K   V F T E L V L N E T K R R V V P V D S T W Y L P N H
UniRef90_UPI00036F7E78   Y A H P E K V V S A S W L S A R L G     V E G L R V V E                 S
UniRef90_L9XRN5         M D E S V V V S P D W L A T R L E     D P D V A V V D V R
UniRef90_V5I4S1
UniRef90_D2RU85           M N D S V V V T P D W L A A H     R E D P Q V R I V D V R
UniRef90_F8K3H1             Q S L V D A D W V Q Q H V D         D A S V V I A E V
UniRef90_K9SNV7             V L I S P K E L S E L     Q A S Q K I V I L D T R
UniRef90_UPI0004788C90       R S V I E F E E L H S R L H     D S N V R I D C R F E L G H P
UniRef90_A1WN01             T T L I S A G E L Q S L I A S G A P   L M V F D C S F D L A Q P
UniRef90_F6C3Z4           S P L V D A E W V K A N     A G D K D V V I L D I R D K V A E T
UniRef90_Q97ZB1             L V S V E W L N N N L K       D V K V V E I G Y
UniRef90_Q2JFV7         K A L V D A S W V E A N R N D P K V     V L V E V
UniRef90_UPI000359DF29         T L V S T T W L K Q Q M G K I T L R R S L R I L D T S W T P E P E
UniRef90_UPI0003653966         Q P L V D A A W L K S H L G     N K S L V V I D V R       D A A
UniRef90_Q83GC2         S Y A D P N R L V T T D W L A K N L D     R V T V I E               S
UniRef90_UPI00046ECFE9     M T P A P L I D V Q T L M A L     P P R R Y R Y L D A S I L L P G Q
UniRef90_UPI0002557F01         P L I P E P E Q L A A L L E     H E E I R V I D L S
UniRef90_M3VI07           M T S I P L I S A S D L A G R L D E     P N L R I V D A T V H L S F D
UniRef90_R8AVC6         S L A H Y Q A L V P A S W L A D L Q A A N A P A K G W K V I E V E W G A P
UniRef90_UPI00046E5D3B           M S S P L V C V W L A E H L N     D Q N L V I L D A S M E H V V A
UniRef90_UPI000378C384           P D A I V S C E W L N K N I N     N P D I R I Y D C T T Y L H Y R
UniRef90_N0E2Y7               S F L V S A H E L A R L L E T G G T   R V L D V Q F A L G G P
UniRef90_UPI00047DAD8D   Y A H P E R L V S T D W V A A N L N T     P S V R L L E C
UniRef90_Q0A7E6         M A E A L P L V L   E P A R L Q E A L A Q R D     G L L V V D L S
UniRef90_J9RKA3             T S L I S A P D L A A R L G E     E N L R I V D A T V H L T F D
UniRef90_UPI0002F64AB9         I V E P E Q L V E H L G     D P Q L L I V D V
UniRef90_S2YTP8         A H P E H L V S A S W L A A H A G T R     G L A I V E                 S
UniRef90_UPI000379D72D       M N P G P F I G A E E L F S A L S G G T P P     V I L D A S L V L H R P
UniRef90_UPI000289D4E2   T Y E N Y Q M L V P A S W L D G K H P G K D Y K V F E V S W     G K E
UniRef90_R5JFA1             L I S I D E F N E M     K K K D D K I V I F D C R F D L M N K
UniRef90_J6EP81             L I S P E A F V K   L V A S Q K G R R V V P V D S T W Y L P S W
UniRef90_U1QWS5         H Y E S H E S V T T A E W V R G N L E T V R S D P D V R L V E V D M E P
UniRef90_C5CBI7         Y A H P E K L V S T Q W V A D H V G D D D V     V V L E               S
UniRef90_I7BS06         M D D S V V V S P D W L A S H L D       D P A V R I V D V R
UniRef90_Q6CTU6             L L T P K A F A E L L   S K E T K R R I I P V D S T W Y L P N N
UniRef90_H1G5I0             I I D P L A L E A R L Q     D Q R L R I V D L S
UniRef90_U5T4H8         M A E I M P   P V I T P E H L V A H L G     N S D L Q V V F V
UniRef90_UPI00037AA369         L V E P E T L A E S L D T     P G L L I V D L S
UniRef90_M1FFB7             P L V D A D W L Q Q Q R Q Q S E     L V I V D I R S G I D N G
UniRef90_F2TZ40           R V L V S T A W L A R Q L V A K   N S T V K V I D A S F N M P A N
UniRef90_N6WP35             V I E P E T L E P L L T P E S T A E E     S G L L L I D
UniRef90_U1KST9               S C H W L L K N L N     R V T V L D C L M L K P G A
UniRef90_D3F7Z3         D P L V S T D W L A A R L E E     P R L R V V D C R F A L G D P
UniRef90_UPI0003B5AB3A             G A V P D G A V L A D V R W Y L     D G
UniRef90_W5TFD6         S H A Y P H R L V T T E W L S A N I G A R     G L A I V E                 S
UniRef90_S7WUG5           L N S D L V S V E W L H K N     S A A T N L I V L D A T I N K V I S
UniRef90_X5LQY1         M V S E R S Q V F V T A A E L S R L I A A G E P   V T L D V R W T L A E P
UniRef90_S3A6N8         L S P M S M S P L I T P S E L K A Q L G S L T P P     V V L D V R Y R L D A P
UniRef90_A0LFK9             L V E T A W L N E H L G R G     D V R I I E T R
UniRef90_G8SFU7           M I D A V V D Q D W L R A H A A E     V I V A D V R W Y L     D G
UniRef90_UPI000440D893         L I S P K E L T E L F R T A G S A E D I S V L D A S W H M P N P
UniRef90_J7IYN3           T K V F V S A D W V K G V I D G K Q P S K D Y V I I E A A W     G Q
UniRef90_R7UUB7             Y H K L V Y P Q W L K Q Q L E R K K E Q S L I I L E V G Y
UniRef90_UPI000463AB44   M S D K V L I N A S K L N L M T A G T S T     V I I D T R
UniRef90_U1JP98               S C G W V V R N L D K     V L V F D A G I V K P G L
UniRef90_UPI000369151A   A L M N A I I T A S E L A S E L A G E R P P     V V L D I R W Q L A P E
UniRef90_A8ZXY1             D A Q W V K A H L     T D T D L V V V D V R T D
UniRef90_W1N402             I V E P E A V A D A L G       H E D V L I I D V P M K P
UniRef90_G7V7G1             I V E P E T L W L K A N K G S     V V I V D A R
UniRef90_UPI00046AFB28       S P I I K P E E L T W L N Q     D D E I V I I D A S
UniRef90_UPI000463E6D3             K E L V N S S I R W V D T R F S L Q D A
UniRef90_V6JDB8           V I E A A D L L P R L G S     P D L I L V D L S
UniRef90_I4N4P5           I E A V Q L Q Q R L D A     P E L L V D L T
UniRef90_I4Y625                       K N F I A L D A S W H M P N D
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                                                  50             60             70             80
UniRef90_I3I878            V A A E S L N E S D F I P A S R L F D I D D F S K P D A P F P H T L L S A R D F
UniRef90_R4VG05             G D R A L Y E Q A H I P G A T Q I E Y A A L N A G G P P A M G Q L P S P T S L
UniRef90_Q5Z156           N E D I L L Y D I G H V P G A I K I D W R G   D L E D P L M R D Y I D G P R F
UniRef90_UPI0004655F50     H G H G H Y Q S A H I P G A V Y V D L E A T L S G E P E G R H P L P G L E Q L
UniRef90_I2N7L9            H G R P D Y D A G H I P G A V F V D L D A E L A P G E R G R H P L P D V A D F
UniRef90_R7RQZ9           G D E S K D Y N N G H I P G A V H I N T D E V E E G P         M W N R L S D D R L
UniRef90_F1YP06           D E D T S I Y D S N H I P G A I R L D W R K   D L Q D G L R R D F L N A E Q F
UniRef90_UPI0004744D06    A D G H E R Y L D E H L P G A V Y V D L E R E L A A P A S G R H P L P D V A A L
UniRef90_UPI00042A6EFA    R D P R A A Y D A G H L P G A V Y V D L H R W L A A E P S G R H P L P T P E H F
UniRef90_Q8FRN9           N E D S I L Y D I G H I P G A V R I D W D K   D L N D P V T R D F I D G K A F
UniRef90_UPI00046796C6    D E D T T L Y E K G H I D G A I T F H W R E   D L Q D G L I R D L I S K E K F
UniRef90_UPI000478BA6E    D K G E R A Y R E G H I P G A V Y A H L D R D L S D L S R G R H P L P S E A T F
UniRef90_UPI00034B4FBE    R S G R E A H L N G H L P G A V F A D V D T D L A A P D G G R H P L P S P E D F
UniRef90_G8JNP6           K D G R S E F R N E R I P N A V Y F H L G E V S D N E P K A S R M L P T L D V F
UniRef90_UPI00041ECF41    D E G R E R Y N E G H I P N A V Y L D L E K D L S K E H G G R H P L P P M N E F
UniRef90_K9Q5Q9           K D         N H I P G A I F W N V   F A D L L Q P D H S I N L D P A A I
UniRef90_H8H334             E D G A L Y D T G H V P G A L R   L D S R R D L W H P V I R D F I A P E A F
UniRef90_C1MKI4           R D G V A E H A S G R V S N A R Y F D V D E I S D R S S P L P H M M P S S T Q F
UniRef90_UPI0003477000    T K G R R D F L A G H I P G A V Y A D L D H D L S D L S R G R H P L P S V A A F
UniRef90_UPI000464A66D    T Y G I D S Y K K G H I P G S F I L D L D K D L S K S A E G K N P I Q D P Y V L
UniRef90_A7TH63           R D G R Q E F K D E R I P G S V F F D I D Y I K D P N S K Y T H M A P D S N T F
UniRef90_U1N3Q6           S Y G K Y A Y R Q G H L P N A V F L D L M E D L S G P H G G R H P L P S K Q A W
UniRef90_F5YZ68             D G H Q A Y L Q G H L P G A V Y V S L E D D R A V T G R G R H P L P T R R N L
UniRef90_E3HD50               D Y N K G H I P G S Y Q I W R P S F S A D K G E Y E Y M R A T R E K M
UniRef90_H5YFL4           D V P Y H A F E A G H I P G A D F L D L Q E F S D A S A Q Q F F M M P D V A Q L
UniRef90_J9TTI3           G E P S A D Y K K A H I P G A L H I N T D L I       E E P N Y W N V R T P E E I
UniRef90_F5XEM5           S   G R P D Y E A G H L P G A R W V D L E S E L T T H G P G R H P L P D P E V F
UniRef90_Q8EHG0           K E P I L Y H E P I C P R S R R F D V E E F C D K T S T Q I H A L P R F E S F
UniRef90_W0TCB1           R D G K Q E F D E E R L K G A V F D I D S V K D L K S E Y P H M L P D S E T F
UniRef90_UPI00036F7E78    D E D A F L Y D I G H I P G A V R I D W H K   D L N N Q V T R D F I D G E A F
UniRef90_L9XRN5             D A W E Y D G I G H V P G A V N V P F D S Y R D E T G P D P G T L P G R E A F
UniRef90_V5I4S1               R P S Y E K Q H I P G S I F F D M D M V T D T T S P Y P Q M L P T A S Q F
UniRef90_D2RU85             D A W E Y D G I G H V P G A V S I P F D S Y R D E S D V D R G T L P G A E A F
UniRef90_F8K3H1           D E D V S A Y D T G H I P G A V K L D W K N   D L Q D P V R R D F V D Q K G F
UniRef90_K9SNV7               D P D D F A K E H I P G A V N R K L F T Y L V E D S T P E T L T K L Q T D F
UniRef90_UPI0004788C90    H S G F N Q Y M K S H I E N A L Y F D L E K D L S R E V G G R H P L P P I V E F
UniRef90_A1WN01           T A G A Q Q Y A Q A H I P G A V Y A D L N H D L S P A S G R H P L P S R E R F
UniRef90_F6C3Z4           E L G D K P Y         I Q G A V V A P Y A S W R T E V G G V P G M L P P L E Q I
UniRef90_Q97ZB1             N P Q I N Y Y E G H I P G A V L I N W R D F L D D N S       R D F A S P G K L
UniRef90_Q2JFV7           D E D V S A Y D K G H I P G A V R L D W K   S E L Q D P V I R D F I N R E Q F
UniRef90_UPI000359DF29    V D G Y K T F F E A H I P S S L Y F D L K Q V Q T S G Q K G P F P I P D S N R F
UniRef90_UPI0003653966    K D G A N P Y A K G H V P G A V S A P Y S T W R A E V N G V P G M L P P L E T I
UniRef90_Q83GC2           D E D V L L Y E S G H I P G S I K V D W H T   D L N D T V L R D Y L S P E K F
UniRef90_UPI00046ECFE9    Q D M E R A F R E L A F R K A D R F R I D E I C D K D S P L P H M V P G A G L F
UniRef90_UPI0002557F01       S P Q N Y L A G H I P G A L G L P F Q A L M A G T P P A P G K L P S I E R L
UniRef90_M3VI07           A D G A E T Y R Q G H I P G A V F I D I T G L T D P E G E A P F A A A T S E K F
UniRef90_R8AVC6               K A Y L L G H I P K A G Y M D T N T L     E S E P L W N K V D N A S L
UniRef90_UPI00046E5D3B    K E P L V Y E H F C C I P N A I A C D I E Q F V D K N S A Q V H T M P T A E Q F
UniRef90_UPI000378C384    D E G R E K Y D L S H I P N S S F W D L Q Q L S D Q E S P Y R F T L P K L D V L
UniRef90_N0E2Y7           P   S I E L Y A A G H I P G A P H L P L E P A L A G P A G G R H P L P D P Q V L
UniRef90_UPI00047DAD8D    N E D V L L Y D V E H I P G A Q K L D W H     I D L N D Q V E R D Y L D R A G F
UniRef90_Q0A7E6             D G N D Y R E A H I P G A V H L D F P H L L R Q V P P A M G L L P D L R T L
UniRef90_J9RKA3           A D G R D T Y L A G H L P G A V F A D I A D L S D P D G E A P F A A A D S A R F
UniRef90_UPI0002F64AB9    P L N G D S Y R Q G H V P G A I Y L D Y R Y L M R G E G P V P N D V P S V A F L
UniRef90_S2YTP8           D A D D Y Q Y D L G H I P T A I R I H P Q     S E L A D P L R R E I L S P E D F
UniRef90_UPI000379D72D    E S G R S R W E D A H L P G A I H V R V D T D L S V P A A T H N H R P P P Q E L
UniRef90_UPI000289D4E2    Q D S P S Y L K D G H I P G S V H I N T D D I E K G P L W N R V S D E E L L E K F
UniRef90_R5JFA1           T Y G V D S Y S K G H I K G A Y L M D I E H D L V D P H G G R H P F K K P E D L
UniRef90_J6EP81           D N K H D F L T K P R I A N S I F F D I D A I S D Q R S P Y P H M F P A K Q V F
UniRef90_U1QWS5               D V Y D D W H V P G A V R V D W Q T   D I V D G L G G D L V G P E A L
UniRef90_C5CBI7           N E D A L L Y S T G H I P G A Q R V D W H T E L     N D P V S R D F V G P E A F
UniRef90_I7BS06             D A W E F D G I G H L P G A V N V P F D S Y R D E S D V D R G T L P G A D A F
UniRef90_Q6CTU6           R S G K Q E F D E E R L K G A V Y F D I D G V K D M K S E Y P H M L P D L S T F
UniRef90_H1G5I0             P A E R H A A G H V P G A L H L D Y G R I V A S A A P V M G L L P E I G V L
UniRef90_U5T4H8           G D G A V Y T Q G H I E G A T C I R Y S D L V T R R P P A S G A L P D A S D L
UniRef90_UPI00037AA369      D A D A Y E R A H I P G A V H L R Y S D I L R Q E G N A K G L M A D V D T L
UniRef90_M1FFB7           G D   R S T F R K A H I P G S V Y S S Y D G W R E S R D G V T G V M P P V P S L
UniRef90_F2TZ40           R D A L Q E Y E A S H I P T A T F F D V D K I K D E T S D L P H M L P P A N V F
UniRef90_N6WP35           L C H P E R Y A G G H L P G A V Y V H P H E T L L G Y P P A P G K L P T V E A L
UniRef90_U1KST9           K G     K Y V P S G I I A G A K R F D I H A F S D A N G A C P N T M C N A A Q F
UniRef90_D3F7Z3           A A G R A Y A A G H I P G A A F L D L D A D L S D P P A G P A P G A G T G P R F
UniRef90_UPI0003B5AB3A    R G G R E A Y E A G H L P G A V F I D L D A W L A G D G G G R H P L P A P E T F
UniRef90_W5TFD6           N E D I L L Y D I G H I P G A V K I D W R A E L     T D P L T R D V I D G T R F
UniRef90_S7WUG5           A         V S T R I P N A R F F D I K Q F S D V S A P F P S T L P S K E Q F
UniRef90_X5LQY1             D G H E A Y L G G H I P G A V Y V S L D D E L S D H S R G R H P L P S G R N V
UniRef90_S3A6N8             D G A E A Y R V P G A V Y V R M D A V H G A A S E G R H P L P S P A D F
UniRef90_A0LFK9             S Q P A Y N G G H I P G S V R M D P E H F R G V V G G V S S M V L P V D M I
UniRef90_G8SFU7           R S G R A A Y E R G H L P G A V F I D L D T A L A S P A A P L P D P A V F
UniRef90_UPI000440D893    L N A K E E F L K K R I P G A R Y F D L D D I A S P N E G L K H M M P T G E I F
UniRef90_J7IYN3           V S E D K A Y T E A H I P G A I H L N T D E I       E E K K W D I R T G A E I
UniRef90_R7UUB7           E E E S K Y R S G H I P G A I Y L D T R E I E W N Q G T H S W N F I P D N R L
UniRef90_UPI000463AB44       S A E A Y E Q G H I P G A V N I H I F T F L A T S T P E G L Q E L K E N F A
UniRef90_U1JP98           D E P Y E P V A I A     K G A R R F D I S A L A K P N T G L S N M M C D Q Y Q F
UniRef90_UPI000369151A    F D G R A A Y A A G H I P S A V F I D L D R E L A G P G E G R H P L P D L Y A F
UniRef90_A8ZXY1               D H Y D G S V I P G A V R L P W S E F Q D V G E D L A S T F V G V R Q A
UniRef90_W1N402             E S Y T E G H I P G A L F L D H R R L L K G S G K V P N E V P D V E A L
UniRef90_G7V7G1           P K S M Y S A G H I P G A V N A E W T Y F A N M G S P G W G D L Y P K D I L
UniRef90_UPI00046AFB28    A G S K A R Y D E Q H L A G A L F A D V N E D L D F A V G G R H P L P T S E Q F
UniRef90_UPI000463E6D3    Q A G R K L F D Q G H V K D A V Y L D L E K D L S D K T T G R H P L P D K E T I
UniRef90_V6JDB8           S A N R Y V S G H I P G A H F V E G K R T Q L G Q P P A P G L L P S L S D L
UniRef90_I4N4P5           S A A R Y A T G H I P G A V H F V E G K R T Q L G Q P P A P G L L P T Q A A L
UniRef90_I4Y625           R N P E Q E Y L Q K H L P K A R R W N L D K I A A P H P N V G H M L P T P E I F
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                              90           100          110         120
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UniRef90_Q5Z156          T E L M R A K G I G R E D T V V I     Y G D R G N A Q A A H T L W L F T L F G H
UniRef90_UPI0004655F50   Q E A A R Q W G I N D G D V V V A     Y D N S G N T S A A R L L W L R W A G L
UniRef90_I2N7L9          G A V M R R A G V S A G T P V V A     Y D G H L G W G A A R A W W L L R W T G H
UniRef90_R7RQZ9          E K F A L N N G I T A D T T V V L Y G T D   S M A A F R V A A I L K Y M G V
UniRef90_F1YP06          G A L L S R G V A N D D T V V L Y G G N N   N W F A A Y A Y W Y F K I Y G H
UniRef90_UPI0004744D06   E A A A R R W G V R E G G R V V A     Y D D V G G T S A A R A W W L L R W A G L
UniRef90_UPI00042A6EFA   A E G L G R A G I G D G T A V V A     Y D D A G G V I A A R L V W M L R A L G H
UniRef90_Q8FRN9          A D L M N R K G I H R D D T V V I     Y G D K S N W W A A F T L W V F E L F G H
UniRef90_UPI00046796C6   E A L L S K N G L S N D S T V V L Y G G N N   N W F A T Y A F W Y F K I Y G H
UniRef90_UPI000478BA6E   S A A L S R W G W H P G L Q V V A Y D A A G G A L A A A R L W W L L R L A G V
UniRef90_UPI00034B4FBE   A T A L G R L G I G D G S T V V V     Y D D A G G S V A A R L V W M L R V L G T
UniRef90_G8JNP6          N G A M S K L G I K S D D T L V V     Y D R I N N F S A S R V A W V L T T L G H
UniRef90_UPI00041ECF41   V S R L E E A G I Q N S T T I V I     Y D G G E G S Y S A R L L Y F M L K Y I G H
UniRef90_K9Q5Q9          A R L L S R S G I T P K T T V I A Y G S Y P G T G A W   I F W L L K L F G H
UniRef90_H8H334          A S L M S R L G I T P E T T V V L     Y G D K S N W W A T Y A F W V L R Y N G H
UniRef90_C1MKI4          A A A C D A L G I K N S D V V V C     Y D G A G L F S A A R G W F M F R A F G H
UniRef90_UPI0003477000   S A T L G R W G W R P D L P V V C Y D A G N G A L A A V R L W W M L R A V G A
UniRef90_UPI000464A66D   K G K L E K L G I D N D T T V I A     Y D D G D L N G A S H L F F Q L K H M G L
UniRef90_A7TH63          N K S M R E L G I K K D D I L V V     Y D R N G N F S A P R V A W T I A L F G H
UniRef90_U1N3Q6          T E T L R R I G I Q R D D L V I I     Y D D G F P F A A R A W W L F K W A G H
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UniRef90_H5YFL4          E A A F G R H G L D A S K S V V L     Y S I G T M M W S T R F W W M L R S L G V
UniRef90_J9TTI3          E Q V M K D F G I S K D T A V I I Y G E P S P   A A R V A L T F L W A G H
UniRef90_F5XEM5          Q A A M R R L G V S A S T P V I A     Y D G A T S L A A S R L W W L L T D A G H
UniRef90_Q8EHG0          V E G I A K L G I E P Q S L I V I     Y D N Q G I Y S S P R A W W L F K V M G F
UniRef90_W0TCB1          N N S M S E L G L R K D D I L V V     Y D R I G N F S A P R C A W T L S V M G H
UniRef90_UPI00036F7E78   A E L M N S R G I S R D D T V V I     Y G D K S N W W A A Y T L W V F E L F G H
UniRef90_L9XRN5          E E L L G E A G I E P E D T I V A     Y D D T H G V F A A R F L L T A R A Y G H
UniRef90_V5I4S1          A A Y M G Q L G I R P D D L L V V Y D A F D V G T Y S A P R V A W T C R Y F G H
UniRef90_D2RU85          A D L C S E A G I S P E D T I V A     Y D D T H G V F A A R F V L T A L E Y G H
UniRef90_F8K3H1          E E L M S Q R G I T P D H T V V L Y G G N N   N W F A A Y A Y W Y F K V Y G H
UniRef90_K9SNV7          A E I L G A A G L S G S E P A V I Y E E A N K G Y G Q S C R G Y F I L K Y L G Y
UniRef90_UPI0004788C90   L Q K V R T A G L C D N D T V V V     Y D N Q D G A M A S R C W W M L R Y I G L
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UniRef90_F6C3Z4          T K L I G D L G I D N D D H V V P W G T D S T E F G G A T R V Y W T F K Y L G H
UniRef90_Q97ZB1          S K V L G N A G I N N D D L I V L     Y S E M N N R Y A F Y V Y W I L K A Y G H
UniRef90_Q2JFV7          E K L L S E K G I S N D D I V V L Y G G N N   N W F A A Y A Y W Y F S L Y G H
UniRef90_UPI000359DF29   Q D Y V E D L G I S N D T H V I A     Y D R F N S R P S F R T W F L F R L F G H
UniRef90_UPI0003653966   T K T I G D L G V G N D S H V V I V P N D S S E F G G A T R V Y W T F K V L G H
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UniRef90_UPI00046ECFE9   A T F M K S L G I G R E T G L I F     Y D Q K G S I G A C R A H W M A S L F G H
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UniRef90_UPI00046E5D3B   T Q A A Q Q L G I N Q D T V V V I     Y D N Q G V Y S A P R A W W M F K V M G F
UniRef90_UPI000378C384   V E S F R K L G V G D P F H V I L Y S R N G A Q   W S A R L W W M L R A V G F
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UniRef90_UPI0002F64AB9   S Q L F S A M G L T R D T H V V A     Y D D E G G G W A A R L L W T L E L I G H
UniRef90_S2YTP8          A Q L M K D K G I A P E D T V V L     Y G D N A N V W A C Y T A W V M R Q Y G H
UniRef90_UPI000379D72D   A D R L A Q F G I G A D T P T V V Y D S T G G F W A A R T W Y L L R W I G I
UniRef90_UPI000289D4E2   A V A N G I T K D T T T V L Y G D D   S M A A F R V V T I L K Y M G V
UniRef90_R5JFA1          K T V L E N F G V D N D T I I T     Y D D G D I Q G A A R L V F Q L N Q L G I
UniRef90_J6EP81          D D A M S N L G V Q K D D I L V V     Y D R V G N F S A P R C A W T L A V M G H
UniRef90_U1QWS5          S S L L G E L G I T P E T T V V V     Y G D R A N W F A A H V L W V L R Y Y R H
UniRef90_C5CBI7          A E F A A S K G I S R D T T V V F     Y G D K S N W W A A Y A L W V F T L Y G H
UniRef90_I7BS06          A D L L G N A G L S P D D T I V A     Y D D T H G V F A A R F V L T A L E Y G H
UniRef90_Q6CTU6          N K S M S E L G L K K D D I L V V     Y D R I G N F S A P R C A W T L A V L G H
UniRef90_H1G5I0          R T I L A E L G I G P D T H V V C     Y D E G G G K A A R L L W T L A V C G H
UniRef90_U5T4H8          A V V L G E A G I T P S T H V I A     Y D A S G G G A A S R L L W T L D C L G H
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UniRef90_F2TZ40          Q E A M R D R G I Y N N D H V V I Y D C S D F G I F S A P R L W W M F R M F G H
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UniRef90_UPI0003B5AB3A   A E G M A S L G V A D D D R V V A     Y D D A G G V I A A R L V W M L R A T G H
UniRef90_W5TFD6          A E L M R A K G I A R T D T V V V     Y G D K V N G T A A A T A W V L G L F G H
UniRef90_S7WUG5          Q T E A Q L L G I N S D S V V V     Y D D K G I Y S S A R V W W L F K V F G F
UniRef90_X5LQY1          E A A A R R W G V R E G V P V V V     Y D D W N R A G S A R A W W V L T A A G V
UniRef90_S3A6N8          E R S V R R W G I D D G D T V V V     Y D D W N S F A A A R A W W M L T D A G V
UniRef90_A0LFK9          V R H L E L L G I R P E T T I V V V P S E   K I M D A T L I G T A L E R A G H
UniRef90_G8SFU7          A A A M S A A G I G D A D T V V A     Y D D A G V G A R L W W L L R A L G C
UniRef90_UPI000440D893   G A A L R K A G I S P S S H I I I     Y D S V G I F S S P R A L F T F K A L G H
UniRef90_J7IYN3          T Q V M K N Y G I T K D T N V I V Y G A D S G   A A R V A F V C I W A G V
UniRef90_R7UUB7          A K L L A Q Y G I D K N T M V V     Y A D E L A M G A Y R A A V A L L Y A G V
UniRef90_UPI000463AB44   S A F G E A G L S G E E T A V F Y E D S M A T G F G Q S C R G Y F L L S Y L G Y
UniRef90_U1JP98          Q S H M R Q L G V N Q A D T V V     Y D D K G L F S A A R A W W M L K S M G F
UniRef90_UPI000369151A   G A A M R A A G V S A D R D V V V     Y D G G Q G W A A A R A W W L L R W T G H
UniRef90_A8ZXY1          Q D I L G R H G I T R K D T V V L Y D S V E R D G G A A S Y V F W V L D V L G H
UniRef90_W1N402          S E L L F S S L G L T R D T H V V A     Y D D E G G G W A G R L L W T L E L I G H
UniRef90_G7V7G1          A K K I G A L G I D G K K P V V V Y D P G G W G Q D G W V V W L L R L S G I
UniRef90_UPI00046AFB28   S T V L Q K L G I T K H S H V I V Y   D D K N G G N A A A R L W W M L K A I G H
UniRef90_UPI000463E6D3   Q E L F E S H G F E Y G D H I A I     Y D Q G G V P F A A R A Y W L F C Y A G F
UniRef90_V6JDB8          E K L L F A E L G H R S D A V Y V V     Y D D D G G A S A G R F I W L L D V I G H
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                        130            140            150            160
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UniRef90_R4VG05      H N W S L L D G G V I A W Q A D G L R F E Q G P G P D V A V A D Y P V D V N A S
UniRef90_Q5Z156      Q D V R L L D G G R E A W I S E G R D T T F E P P Y L T V S D Y P A A R R D D T
UniRef90_UPI0004655F50 D T V Q L L D G G L A A W V D A G Y E T E G G E E Q H C L G E V E L G L D E E G
UniRef90_I2N7L9      A D V R V L D G G L A A W R G P L       E K D A P S P A E G D F E P R P G G
UniRef90_R7RQZ9      K D V R V L N G G L S A W V R E G Y Q L E T K K N P V Q S F G A K V P V N K N Y
UniRef90_F1YP06      K D V R V L D G G R K K W E L D G R Q L S S D A V T R A A T Q Y V A Q A A D T S
UniRef90_UPI0004744D06 R D V R L L D G G L A A W R D R G L A L E A G V V V P E P G D V V L A P G S L P
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UniRef90_Q8FRN9      A D V R L L N G G R D A W M S E E R D T S Y A V P A Y P P T N Y P V V E R V D E
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UniRef90_UPI00034B4FBE P A A F       L D G G V Q A W N G P L E T G E V A S G P A E R T P V P W P C D R
UniRef90_G8JNP6      S K V Y L M T G F N Q Y V K E G Y T V D H D K V L S D S P Y P A T K Y E S T N S
UniRef90_UPI00041ECF41 S G V F L L Q G G F K A W E A G N P I S R E L P A F E K T T F T P D L K P E I
UniRef90_K9Q5Q9      E K V L V L N G G H Q K W V A E N R P V T S E L S E F A P T Q Y P Q K T I N S S
UniRef90_H8H334      Q H L K L V N G G R Q K L I A D G F D L S R E A P E V T P T T Y P V G K R D E R
UniRef90_C1MKI4      E N V A V L D G G A P A Y E K A G Y P M D V D V I E D M A F V S A A T I A S D T
UniRef90_UPI0003477000 R A V A V L D G G L A A W L A A G Q P L E A G E A A R A P T H V D I T F E P
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UniRef90_A7TH63      S P I Y L L N N F Q L Y K N E G Y P I D T T K K S A F S E Y P K S D Y T I V S Y
UniRef90_U1N3Q6      E R V I V L E G G I Q S G I T Y C G E T T T D V P S Y P V S D Y T P V F Q D K M
UniRef90_F5YZ68      A G V R I L D G G L S A W T A N G G V L Q T G E V S P E P G N V T L Y D G L R P
UniRef90_E3HD50      E K M V L I D G G I D G W K N A G L P M V A E K P E S V K Y E F P K S E D T S K
UniRef90_H5YFL4      D A R   V L D G G L D K W K D E G R P I V T G A P K G Y P T T F K A T P R A G F
UniRef90_J9TTI3      E E V H I L D G N L K A W T D M G Y A T S N N D E K A T P I E D V P A H P E Y I
UniRef90_F5XEM5      Q D V R V L D G G F A A W E A A G S P I E T G P G P G P D G D F V G R P G G Q R A
UniRef90_Q8EHG0      H R V Y V L D G G L P Q W I A E D R V T S S R Y Q E E G I D Y G V T Q Y Q S A K
UniRef90_W0TCB1      D P V Y L L N N   F Q T L K Q S G Y P V D T S K V S S I T P Y G K S E Y T S N T
UniRef90_UPI00036F7E78 P D V R L L D G G R D A W M G E E R D T S F A V P E Y P S A N Y P V V E R D D S
UniRef90_L9XRN5      E D A R L L D G D F S A W N R E R E T D A E T P I V E P T A Y A A D P F S F D R
UniRef90_V5I4S1      Q A V H V L N N F R S Y V E Q K F P I S E G E M L N L P I D Y P V S E P D P H
UniRef90_D2RU85      D D V R L L D G D Y S A W N R E Y E T S S E T P D V E S T E Y E P D P L A P E A
UniRef90_F8K3H1      E R V R L L D G G R K L W E L Q S R P L T E E V P Q R P R T D Y T A K E P D Y S
UniRef90_K9SNV7      P Q V G V L H G G Y M A W K Q A G L P V T A E T T T P E P K T F P M N V S D A I
UniRef90_UPI0004788C90 E N V F V L N G N F S S W E D N N F P T S S V I P T F R H S D Y E V K I Q E H M
UniRef90_A1WN01      D A V A V L D G G L Q A W Q A A A V S S G A G P A P P A D F R L A A P L R Q
UniRef90_F6C3Z4      E E V S I L D G G W R Q Y D A A G G T R S A E A V K P E P A T F H A E P Q E K L
UniRef90_Q97ZB1      S N L A I L N G G I Y K W L K E G Y P I E S D G I V V N K K S E Y K A R K P D W
UniRef90_Q2JFV7      A D V R L L D G G R K W E L D S R E L T T E A T P R Q P T S Y T A P E P R T D
UniRef90_UPI000359DF29 D K V S V L N G G L R Q W T D G Y H V T V D E P D V E E G E F E V N F R P H L
UniRef90_UPI0003653966 D A V S I L D G G A R A W E A S G G E V A T D V A K P A A V A F K G E L K K E L
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UniRef90_G7V7G1        D E I V V Y D T A G V R V A M A G F E N A R N Y D S S F H E W A
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UniRef90_UPI00034B4FBE     G D E R L P A E T G
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UniRef90_UPI000464A66D   Y E
UniRef90_A7TH63          R S D P S
UniRef90_U1N3Q6          Y         P E N K V
UniRef90_F5YZ68              D P S R P V A R G E
UniRef90_E3HD50          N A
UniRef90_H5YFL4              D P A L P I E T
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UniRef90_W0TCB1          R S D A         I A K G K
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UniRef90_Q6CTU6          K D G         E V A K G
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UniRef90_A0LFK9          R         P E L P V E T
UniRef90_G8SFU7          T D R P
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UniRef90_J7IYN3              D E K N P V
UniRef90_R7UUB7              D P S N P V A
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UniRef90_A8ZXY1            P D K F F P V E T R E
UniRef90_W1N402          R D D
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UniRef90_UPI00046AFB28   N N
UniRef90_UPI000463E6D3   Q Y P V E
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UniRef90_UPI00036F683D                        S K L N P E H Y I L I D A         G S G
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UniRef90_F2IYU7            M T D R S L I S P A D L D A L M T S E P C     V V I D T R
UniRef90_I0R1W5                    L V S T D W L E Q N L D     D P D L V V L         Q I
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UniRef90_B8KIW6                                       V V V D C R F S L A D A
UniRef90_R7V7H6               A L V T R G W L R K A I Q E P R   K Q L R V L E A       A R G
UniRef90_W7TBX7          M F Q S P L V T A E Q V K S S L A E S N K S G D I K F L D S S W H L D K S
UniRef90_UPI0004225F52      M S P S L F V P P E W L A A H L     A D A D L Q L L D A R L L P P G Q
UniRef90_I3C9H2              M S K N I V S T T W L A K R I D     N P N L I I L D A T F       P
UniRef90_W8AGW3        S Y A H P H R L V T T E W L S A N I G T     P G L K I I E           S
UniRef90_E2MVH4                  I S V Q E L R D K I A G G G     R I V V V D A R W S R A
UniRef90_U1H8H8            M T D V L I T A G E L A E L V K K E P C     V I I D T R
UniRef90_R6SDJ3              T V Y V T P E W L K S A M D G N Q K G E N V V V A E V A Y S     D D
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UniRef90_K0C6E0                                 D D A N L L I V D L S
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UniRef90_W5Y3M8              S I L V S P Q A L N E A I H Q G Q R Y T L L     A S L W G T S E
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UniRef90_F2EQS3           M T T P L F V S A D W L Q E H Y N     D E T L Q V L D A R M L M D A V
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UniRef90_UPI00036F683D  K E T Y Q R Y L K Q H L K G A I Y L D L N Q D L D A K Q G G R H P L P V I K D F
UniRef90_W0JI47           D A W E F D A I G H I P G A V N V P F D S Y R D E T S D E P G T L P D A S A F
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UniRef90_W8AGW3       N E D I L L Y D I G H V P G A I K I D W R   S E L I D P R T R D V V D G A A F
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UniRef90_U1H8H8             N P D A Y A A G H L P G A V N H D I F T Y L A T S T P E G   M H A L K T K F
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UniRef90_U2FSC7           D S P R D Y A Q V H I P G A L Q I A M T D F T T S A P P V A G L L P D T E R L
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UniRef90_R7V7H6          T E H L R S L G I  N K D D H V V I     Y D R G N Y Y P A C R A W W L L R A Y G M
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UniRef90_G4I291          Q A A A R R W G V R     D G V P V V V Y D D W N R A G S A R A W W V L T A A G V
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UniRef90_X2GMK3          A S V F Q E L G L  R Y E D Q I V V     Y D Q G A S P F A P R A W W M L T Y A G F
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UniRef90_L0JVW2          G D L L G E V G I  E P E D T I V A     Y D D S N G V F A A R F R L T A L A Y G H
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UniRef90_D5SRE6          R A L L V R A G V  H R D R T H L I Y A T G N D E I L S A T M V A Y V L E K F G V
UniRef90_E8W513          G A V M R R A G V  G R R S P V V V     Y D G G Q G W A A A R A W W M L R W T G H
UniRef90_U3GZY5          Q R A F N S W G L  Q D N H V V V     Y D Q G K G I Y A A R A W W L L T W A G H
UniRef90_UPI0003649C8D   S K L L S Q Q G I  T P D V H L V L     Y D D M G N L N A S R L Y W E L R K L K H
UniRef90_F2EQS3          A V A M R E L G V  N S D K H L I V     Y D E G N L F S A P R A W W M L R A F G V
UniRef90_F7VGH9          S T L F A D Y G L  D G S K K A V Y E D A H T R Y G A G S C R G Y W I L S Y L G Y
UniRef90_A0A023RGC7      K Q L L L E N G I  R H D T T V I L Y G R N     T M A A A R A A H L M M Y A G V
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UniRef90_S7QN91          G K S S I L D G G L P R W E V E G Y P V E T G P P L T A V K K T T Y P E P H L D
UniRef90_L8JBY9          E D V R L L N G G W K S W V N A G Y M L N S A S A N V E F G R P I P S R P D L L
UniRef90_UPI00036F683D  E T V Q V L D G G L Q M A I A A G I P T D S G V E K P N P N M I E V Q A W Q L P
UniRef90_W0JI47          E D V R L L D G D F S A W N R E R E T T T D E P E L E S S S Y E P D P L S A E E
UniRef90_F2IYU7          P K V K V L H G G F Q A W T M E G F P A S T D A V S P E P K T F P V S D A G K D
UniRef90_I0R1W5          N N V R L L D G G W S K W Q A E G K Q V S L A Q P T V E L G D F V P T E A N L E
UniRef90_S3JXF3          K D V R L L D G G W T T W S A A D L P V E R G L E V E P A P D F G A A I P G
UniRef90_UPI00046E9559  P N V G I L D G G L M A W K Q A G G E L T T E K T R P E R S V F P A A L Q N S L
UniRef90_L9WC59          T D V R L L D G G K Q R W T E S G Y P M T T E E P E I T P Q E Y S A H A P D E R
UniRef90_UPI0003B47504  D N V S I L D G G F K E W K K N N L P T S Q T S L T Y S P S N F E F T P R E N I
UniRef90_Q10W62          P Q I K V L H G G Y E A W T L A G M P T S S Q A V T P E P K I F P S S E A G A S
UniRef90_UPI000381F619  D D V R V M N G G R K K W L V E A R P L V T E T P T I T P T T Y T A Q N L D S S
UniRef90_B8KIW6          R E P R F L N G G F S A W L A A G H T P D A S I P V L E P A E I P P V P D A W P
UniRef90_R7V7H6          E N V S V L D G G L P H Y G H N A E A T F G E E S A A Q Y G D F E A N P Q K T L
UniRef90_W7TBX7          E K V Y I L Q G G L P A W Q A A G K T E T G P A Q A Q K Q G F Q A K L Q A D L
UniRef90_UPI0004225F52  P R V S L L A G G L A A W Q R L G L P L Q G E M S A S E P G A F [C] A R L D T R R
UniRef90_I3C9H2          D N V Y V L N G G L T K W I A D G F E V I N N Y K T D V A T S N F K V D F L K T
UniRef90_W8AGW3          E D V R L L D G G R D A W I S E A R D T T F E V P A A G L G E Y P V V D R D D K
UniRef90_E2MVH4          E N V R V L T G G L A A W E A D G N E T A F G P G N L P Q P G T I A V S E G N M
UniRef90_U1H8H8          P K I K V L H G G F D A W K A A D L P V T T D V A V P A K A A F I V P E A G D I
UniRef90_R6SDJ3          E D V K I V N G G I D A W E K A G Y E T E T G T E A K D F G T T V P A H P E Y W
UniRef90_U2FSC7          S A I S L L D G G L A A W H Q A G L A L E N G P P Q H G A S S F K V E R Q A D G
UniRef90_G0CPA1          P D V V I L D G G Q K A W E A A G Y E T L G G P G N P R T Y S T I E P E L G S M
UniRef90_UPI0002F2DC45  E D V R V L D G G W T A W K G A G L A V E T G A G A G A A S G Q P F T A R P G G
UniRef90_V5PRU1          D K I K V L H G G F A A W R A A G L P S S T E V P H P A P V A F P E N A G A R D
UniRef90_UPI00040E349B  Q D V R I L D G G L G A W R S A G M R L S T G D A T P R V G S V V L S A G Q L P
UniRef90_E3DQP5          N K V R I L K G G L K A W K E E D F A L E R M S F R P Q K G D F V V N K V N N D
UniRef90_G7ZA81          D A V S V L D G G F A A W T A A G A V N P L P A D R K P A T F T A R P R N D L
UniRef90_UPI000378B626  A D V K V L D G G L P A W L A A G G E M A V E R L P A E R P P G P P G S W K P T
UniRef90_W2UDJ9          H N W S Y L N G G I I A W I K E G F V T E A Q A N Q R V A S E T T I S I A N P G
UniRef90_V5AG03          H N V A I L D G G L G A W Q A I G G P T D S T N G T V E P M T A T A A T A P V I
UniRef90_G4I291          P D V R I L D G G W S A W A A G L E T G P V D P A P G D V I I A H D D L Y
UniRef90_C2GE04          K N V S V L D G G L T K W R E L K Y P R M G G P G N P R S L G A L K V D P G H M
UniRef90_X2GMK3          P N V V I V N G G A T A L E E K V T F T K D I V K Y A P T T L D L N W Q D H L
UniRef90_K4KLP7          H K Y S Y L N G G L L A W K A E G L P L E Q M T R P V K A S D A K L F K S A Q F
UniRef90_L0JVW2          D D V R L L D G D F S A W R E T E T G T P S V E A T A Y T A E P F S F A E S
UniRef90_K0C6E0          A H Y T Y L N G G I H A W L A A D L P T S S E P H T P T P G D Y E V S L H K A G
UniRef90_U3H8I0            A A R V L D G G L K A W R H A G L P L A S G D Q P V D T A P L P P L Q A R A G
UniRef90_UPI000255CC9E  N D V R I L N G G F Q S W Q D A G F F T D I P K T P V K D F G V V I P Q K P E L
UniRef90_S8AM10          E S V S V L N N F K I Y V D Q Q V G P V V K G E E G L Y D Y E G R E I A L Q D E
UniRef90_F5Z7Z8          E N V K L L N G G Q V A W E K N L P V S E Q R I P S H F K Y E S N A Q S K W F
UniRef90_G4REJ6          D E V S I L D G G W R Q F D A A G G E R V A E L A A P E A A E F T A D V R P E L
UniRef90_F2IA56          Q K V Q V L N G G F Q E A E R V D F P I N S N I I P I S A E S Y K I E D W Q L P
UniRef90_UPI0003B78D65  D D L A I L N G G L N A W T E A G L E L D D A A V T P Q P S D I T V T W D D T W
UniRef90_W5Y3M8          K N V H I L D G G M A N W R R N K L P T L T G P G N I S V E S D Q V V N P Q H H
UniRef90_M1N0T5          E N V T V L D G G L P S W E H E G Y P V V G G P G N I T A P G D A K V S A
UniRef90_UPI000382CD89  A Q V R V L D G G F D A W T A A G G P T S T V S G G V R A Q G D V D V A G G A
UniRef90_C7NH57          Q D V R V L D G G L A A W Q E A G L P V E T G P P P A P R P G R N P P A P H V L
UniRef90_UPI0004690573  T R F S Y L N G G L H A W Q G D G L P L V D T V T Q W Q P S E Y R A A Y M A T R
UniRef90_K9RDQ3          Q D V R I L N G G R R K W V A E K R P L A P V Q P V V N Q T L Y S A Q E P D G N
UniRef90_UPI00036920C6  A D V R I L D G G L A A W T A A G G A L Q T R P V E P V P G D V V V T H D D L Y
UniRef90_UPI00044172A7  A N S S V L N G G L P A W I V A G Y D T E S G P I K T P E K T A Y P T P T L D E
UniRef90_A5ESH9          A D A K L L D G G L N A W K A A G L R L T S G E V L P R Q S S D I E V R A G A L
UniRef90_A0RXK7          G D A Q M L D G G F R G W T A G G R P S E A G T N P F D P R P F E G R P D P D L
UniRef90_UPI0003B68D53  D G V A V L D G G L A K W K A E D R P T D T G H V E P R V V E A F S A T E R P E
UniRef90_T5I1Y7          E A R V L D G G L A E W T R R G F A L V S G D D E T H T S A S T R W S V T D L
UniRef90_D5P0P0          E D V R L L D G G R D S W M A A E E R D T S Y M V P D F P E S D Y P E I P R N D D
UniRef90_UPI0004211589  D R V K L L D G G T N E W T A F N T L S T D A P E I E P G N V T L E E A R D D L
UniRef90_H2C1J0          E D V R L L N G G R T N W A K L G L P T S K E V P N Y P R T S Y K V K K V D W G
UniRef90_M0D7M5          D R L H L L D G D Y S A W N R E R E T T T E A A A Y G E T T Y E V R E P E R S P
UniRef90_U7LLZ8          K D V R L L D G G R D A W M S E E R D T S F M V P E F P E S N Y P E V A R D
UniRef90_K0EU46          A D V R I L D G G L P G W T N A D G A L A T G T E S D P E P G D V E L T P
UniRef90_B2WAT1          P K V H V L N N F R K W V D E G Y P T V S G E P K E A E I T E Y A V P E I D E G
UniRef90_F7XLZ5          K D V R I L N G G L Q S W L D A G Y N V T T E P A K I S K V S F G A N I P L N P
UniRef90_J7S955          K E L Y L L N N Y N S Y R A A G L P L E D T T M D S E T R F P R T V Y E S Q V D
UniRef90_UPI00046A0D23  K D V R V L N G G D A W V R A G Y K T K N D K S G K D F G A T I P A N P D L
UniRef90_C6PU32          K N V K M L N G G W N A W K S K K Y P S D R K V P T P K A V A F K I S A M D E S
UniRef90_L0DDT2          P R V G L I D G G F P L W E R E K R P V N A D I A Q A K P H E F A V H F H A K R
UniRef90_V9LH46          R A V S V L D G G L A A W R R L G L P L E S G H A S P R P R A F T A S Y
UniRef90_UPI0002DF5C3F  K E L V L L N G G V K A W A T T G L P Q N N Q A V K V A A S S F Q P Q I D K S L
UniRef90_B5JX10          D R [C] S L L N G G M A A W K G E I E A L D S T P E Q A E P S G Y Q A H L K G D N
UniRef90_K9B1G2          S A R V L D G G I D A W V A A G G D L E F G A G S P V E P S S V V I T P G S M
UniRef90_X5K681          E N V Q V L N G G L Q A I N N N I P T T T N T S P E R T S G N Y T F T E W Q L P
UniRef90_Q31H13          E N V A L L D G G S V Q W L K G Y P V T G K M P K L K P A N Y P T P S S S S T
UniRef90_R9P5A7          L N V S V L N G G L P A W I N Y G L P T E S G E P T S V S R T D Y P E P V L Q D
UniRef90_Q2C301          K N I A I L N G G L N A W Q Q H N L L T R T V N T L P K S D F V P V L K S N I
UniRef90_UPI000474C817  E E V A I L D G G F A G W Q A Q G M D V A S G A P E R G E F D F E G E L Q P E L
UniRef90_UPI00037BAFDA  T E V Y V L E G G F P S W E A A G G P V S A D V P V V E P S E L V V K P G G M P
UniRef90_UPI0002486A48  P D V R L L D G G R D A W M Q E E R E T P T S G Y P V V E R D D T T F R V F V D
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UniRef90_I4X505          E K V Y I S Q K G F N Q L K E Q E I N V N M E V S Q Y Q P T E V K L D F I Q D I
UniRef90_UPI00046812BB  D R V A V L D G G A T V W R A E G R P V T R G H V E P R T V P F T A V E R P G F
UniRef90_UPI00046716F4  K K V S L L D G G S V A W L D G Y P V T Q K M V K P K T N Y P L P K K N Y E
UniRef90_L1PX42          K D V R L L S G G I E R W V K E G H L L T K D P T P L P T E P T T F N Y Q T D M
UniRef90_M7A7B7          Q D V R L L D G G R K K W E L D G R P L S T I E V A Y P R T E Y R A S E R D H T
UniRef90_D5SRE6          E D I R I V D G G L P D W K A A G L T Q E Y F G N P P G L L P V K G Q P S I
UniRef90_E8W513          L D G G L A A W T G E L S T D V P K P E E G F E P R P Q P Q A
UniRef90_U3GZY5          S N V K I L D G G L D A W E A A G G D T V G G P G N H N N [C] T L T P E P G Q L P
UniRef90_UPI0003649C8D  N K V N I L D G G I V S W I L K G F K V T Q T Q P Q H P T K T L Y P Q A T L P L
UniRef90_F2EQS3          A Q V S I L A G G L Q G W K A A G F A L A E G E V S L P E G E F E A E F D D G L
UniRef90_F7VGH9          P K V S I L D G G L A A W T G E L T A E R T V I T P T Q F P L K V N T A L
UniRef90_A0A023RGC7      E D V R L L D G G L D A W F V Q H L R T E T G F E P V K E F G V T I P A H P E Y
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                                        170              180            190            200
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UniRef90_L8JBY9         I D V P E A K N I L A D P K H K S L V S I R T W D E Y I G K T S G Y K Y I K P K
UniRef90_UPI00036F683D  M V M L E D M K N H Y Q N S D Y R I I D V R S A E R Y     A G L S E P I D T V
UniRef90_W0JI47         S P L I D L E G V E A A L E R D A I F V D T R E R D E Y E E A R L P G A V R F D
UniRef90_F2IYU7         M I D A A T M L E A V K S D A I V K L D V R D I D E W I A E S P Y G K D F C P R
UniRef90_I0R1W5         R A F I E E V V A T A S A G P D T N S I I V D N R S L E S Y V G E E T S G A K F
UniRef90_S3JXF3         Q P Q M E Q A R A L L H R K D A S L V S I R S W P E F I G T T S G Y S Y I K P K
UniRef90_UPI00046E9559  M A T Y Q D V L H A L T D P T V R L L D N R D K V E W L A E S S S P Y G V D P R
UniRef90_L9WC59         I R A Y R A D I E T A L A Q D V A I V D V R S S P E Y H G D I T Q P P P E A R T
UniRef90_UPI0003B47504  F V N K D V V I N A I D N P D Y I I L N S L T A D I H       E G Q N P R Y G R
UniRef90_Q10W62         M M D T A D M L A A V K D V S K S V V K L D V R D I D E W I G E S P Y G K D F C P R
UniRef90_UPI000381F619  I R A R E Q V Q A S I G K L D R V L V D V R T P Q E Y C G E T M K P P E G T E R
UniRef90_B8KIW6         G C C D R E Q L Q Q L Q A Q S A L L V D A R E G A R Y R G E H E P I D P V A
UniRef90_R7V7H6         I K D F N D V K D V M G S R S T Q I I D T R R H K H F M G E V E Q V T P T K M T
UniRef90_W7TBX7         V Y S W Q Q V L K V V E Q K H H W I A D A R G P P R F N A D V D E P R P G   L A
UniRef90_UPI0004225F52  L C S A A Q V L Q A V R S G Q R Q I V D A R A A A R F Q G R A P E P R P G   L R
UniRef90_I3C9H2         D R S Y L F I K K H I S S E K I I T I D A R S K G R F N N T E D D P R K E   L K
UniRef90_W8AGW3         T S R A F R Q D V Q A H L G   G P L I D A R A F D E Y T G E L D R P E E Q A L R
UniRef90_E2MVH4         P V A S L D D V R T   W S E R G I L V D A R E P S R F E G R S E R       V D L Q
UniRef90_U1H8H8         M I D A K A M L A A V G K P G V A I L D V R D V D E W I G E S P Y G K D F C P R
UniRef90_R6SDJ3         T S I E E A K D K L A N D D N F K L V S I R S E E E W L G K T S G Y N   Y M D K
UniRef90_U2FSC7         I A D R E W I R A H L N D D D V A F L D V R S A P E Y V G T D V R S A R G
UniRef90_G0CPA1         P T A T       I E D V K N H T G I L L D A R E A N R F A G R K E R L D       L K
UniRef90_UPI0002F2DC45  M P A L S A D D A A Q L A Q S G V L L D A R A P E R Y N G S T E P L D P V A G H
UniRef90_V5PRU1         I L V D A A M K I A V A D K R I V K L D V R D V D E W I A E S P Y G K D F C P R
UniRef90_UPI00040E349B  A V D I D D V D P D A       T L L L D A R A P E R F S G E S E     P V D P R
UniRef90_E3DQP5         L I N T D T I A E N L N N K D F L I V D T R P K A E F L G Q N T T A K A   Q R
UniRef90_G7ZA81         R A T L D D V E A A V K A G G T P L H D A R S A E Q F A G K A K S P Q A R A A
UniRef90_UPI000378B626  F D N E V L V A E G V T D S S V M K V D A R S L E R F R G E S E       P I D A V
UniRef90_W2UDJ9         V I C A D E I I G Q L D N S D F V V W D A R S P G E Y S G D       M V R S A R
UniRef90_V5AG03         P V D T D T V L H N L Q E R P Q T Q C I V D A R G A P R F T G T T   E P L D P V
UniRef90_G4I291         A G A L P T L T A D E L D R R   P L L D A R A P E R F R G D V E     P V D P V
UniRef90_C2GE04         P I V T T E D V K K H     S G L V D T R G R N R F T G K T E R L D       L K
UniRef90_X2GMK3         Y A P R E V V K A I V D E Q S A T L L D A R A A A R Y R G E V E     P L D K V
UniRef90_K4KLP7         T V D I P D L L A R I G D D N F L V W D A R S P A E Y R G E K V F A Q K G
UniRef90_L0JVW2         P F V D R S G V E A A I E G D A V L V D T R D R E E Y   A E A H L P G A V R F D
UniRef90_K0C6E0         V N V D E T V L A E Y Q N P D V V I W D A R S P E Y A G I R A F A Q K G G H I
UniRef90_U3H8I0         F W A N R Q E V L A V V E G R A P G T L V C A L S A G L F D G S A V T   R Y A R
UniRef90_UPI000255CC9E  F V D T P Q A K E M L V S P K A E L V C R S W P E Y I G E V S G Y N Y I E A K
UniRef90_S8AM10         Y P E D I K V L K N P G D V K V Q I F D A R P G G R F A G K D P E P R P G   L S
UniRef90_F5Z7Z8         V N S S A V I Q   A I N T D A Q L V D A R S E A R F Y G Q V E E P R P G   I R
UniRef90_G4REJ6         I A T T D D V L E A L E N G T A   L V D G R P V E Q H L G Q     S K S P V V A T
UniRef90_F2IA56         L A T I S E V E K A S K D E N H L I I D V R D E E R Y T G K I E     P I D L I
UniRef90_UPI0003B78D65  T A S V D D V Q A   A I D G E T D T Q L V D A R P E S F W K G E Q A H P A A A R
UniRef90_W5Y3M8         M V A N F N D V K     N H S G L L I D T R E A N R F A G R R E N L D       L K
UniRef90_M1N0T5         G Q L P V A T I D D V R A D G L L D A R E A R R F     A G H R E V L D L K
UniRef90_UPI000382CD89  M P V L T A E S A A S V A R D A T L L D A R A A E R Y R G E T E P I D P V
UniRef90_C7NH57         P L R T A S D L E Q G L P R N E V L L D A R P A R R Y A G E D L G P D P V
UniRef90_UPI0004690573  E D I L D R L A A D A P E D K V V V W D A R S V E E Y R G E K G Q N A R L G H I
UniRef90_K9RDQ3         L R V F E D V C K S I N Q A D R V I V D V R T P Q E Y S G E W F Y D K P P E N N
UniRef90_UPI00036920C6  H G G R R T I A D E A G A H A G V L L D A R A P E R F R G D V E     P M D A A
UniRef90_UPI00044172A7  H V V R G Y E D I V A N S E R Q P V L D A R S R G R W L G T D P E P R S G   M S
UniRef90_A5ESH9         P F L Q A D E A A A F P A K G T L V D V           R P L A Q F G A D G
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UniRef90_B2WAT1         K V V A F E E V K E I G A D E V Q I L D A R S L G R W K G V D P E P R E G   I S
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UniRef90_U1H8H8            D P A L P I D E G
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UniRef90_B5E8D7      Y A R G S A L I T A K E L K Q L I D A K     D K K L V I I A A
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UniRef90_C8W2D9        A H P E Y L I S A E Q L K K K I G Q A     N L T I I D A R
UniRef90_J3EXQ0      M Y E N L V S A D W L A D N L D D V R V V                       D V
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UniRef90_Q64EF6                        K N V S D P N V V I V D V
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UniRef90_V4ARH9
UniRef90_S3NNU7            L I E A E Q L V A Q L N       H P M L R I V D L S R A S V
UniRef90_K0EQM6        Q Q T F G P L L T P E Q A A E A Q A S G E A     L F I D I R       A G E
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UniRef90_A4H4E2          P L V S A D W V A A H     A C K P G V V M L D V R     N P I G
UniRef90_A5FVU2          V V P P E W V A E R L G       D P D V R L V D V R
UniRef90_V4HJ44      S I L V S P Q E L K E S I Y H G D     R F T L L G T H W Q     P K T
UniRef90_U7LX09        Q V F V S V H L A E H L H     D D N L R I F D A R F V Y P N S
UniRef90_W4LQ18      M Q Q T V P S P L V S P E W L L E L L S D E S     I L D A R   L P D G
UniRef90_U3GZ76          L I T A F G L A Q L I A A G     D V T L L D V R W Q L A K P
UniRef90_UPI00037D4405  S W I L T P G E A R A I L S E S L     V L D T R
UniRef90_V6HMK5          L I D A A L K G N     S A K W V I L D A R
UniRef90_A5GEA5      L P R I I I S A A E L R E R Q K N G     E Q F A L I D V R
UniRef90_E8XQY4      T N Y Q L S V S P Q W L N A V I H G E K P N D K L M V F E V S W       G D
UniRef90_E1W5H6      M S T P T V V D P S W L A A H     R E S V T V V D V R S Q
UniRef90_L0K4D9      M S E P L V T A H W L A A A L D     N P R L C L L D A S V E L A A P
UniRef90_UPI000467E2D5  M S L K K I I D V G S V N S L L K K G I I N E G V R I I D C S F A M A A P
UniRef90_E3LPS3
UniRef90_L2FRY0            V D T E W L K G H L N D     D M A I L D V
UniRef90_UPI0003622267  Y H W L V S A Q W L K D A L D G K K P E T D I M V F H V S W G P L E Q
UniRef90_B0BUH2          F I S V S E A A S L       P N R C F I D V R S R V V H G
UniRef90_R5PNF6        N H I V S T N W L E K N Q D     N K N I V V I D T R
UniRef90_UPI00047BBC1C  F E A V V D S M W L D E Y L     E D V E L L D I R
UniRef90_L9YCI9        H T L V T P E W I V D       T K D K L V V L D C     G S
UniRef90_A0A024TJI8
UniRef90_C6TH99       Q P L L N P E Q L Q P L L Q Q A     D V R L I D I R
UniRef90_D0J2K9
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                                                  50             60             70           80
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UniRef90_I2G3M4        R N A F E E F K A G R L  P K A L F W N V D K V A T T G E S V P H M M P S P A T F
UniRef90_R4YRH1        Q G K L E T F L N A H V  P G A V H L D F K D L Q L G E K P T P G A L P S L A Q L
UniRef90_B5E8D7        E N D V E Y R L G H I    P G S F Q V D Y E A P A A T Q N G V T G N L I D A A G F
UniRef90_C1D3J5                                 P G A V Q L D C R A D L W     D P V I R D F V S P E A F
UniRef90_UPI00036BF1F3      A R G Y E A G H I    P G A V R I D V K E L K N A S G   C T F A P A E A I
UniRef90_T4VK27        F A G Y I A Y K E S H I  P N A L F L D I N K D I C G S P Q I H R P L P D N I L
UniRef90_G5HSY9            D E Y G A G H V A G A V N I P T E D I V I N V P V K N M L T S K K K I
UniRef90_G9PUW5            P E S L Y S G G H I  P G A V N A P W T Y F A N M N A K Q G T E K W G V I W P
UniRef90_N9D118              Y D Q L H I  P H A L H L K P K F L V R Q D E Q A T G L L P D V D G L
UniRef90_Q1Z1X6           D Q S A Y E N G H I  P G A I S F P T E   M S Y K T E K N S F Y V K G K N E I
UniRef90_C8W2D9           D R N T Y Q L A H I  P G A I C Y N M K A L S D P N R R G R F T   S P K L L
UniRef90_J3EXQ0        R D A W E F D G I G H V  P G A V S I P F D S F R S D V G D E G M L P G T D V W
UniRef90_F4CQ86        D S G A A L W E A A H I  P G S R H V D L D A L S D P G A G F H L S V A A A P R M
UniRef90_M0QMR1        D D G S H L F E S G H I  P S A R F A D L F A F S D P D S P I P F T R P T P S Q L
UniRef90_G5PC83        R D M A G E Y R A G H I  P G A L F F D I E A L S D R A S P L P H M M P R P E A F
UniRef90_Q64EF6        C S P A K Y A A G H I    P G A I N L P W E L F R A D N G V L       T S L E N V
UniRef90_H3GGS8            N H R A S F P R G H V P D A V P L A L A A L L K D P T P Q A T G V V S N Q L F
UniRef90_T1W922        G A T T S W H A A G H V  P G A L Y A D L E D F A D P A A S V P V T R P G A E Q F
UniRef90_U1Q504            D T W E F E G I G H I P N A V N V P F D S F R D   S A G K G M L P D P A E W
UniRef90_U2GVR1        N E D S V L Y N I G H L  P S A L R I N P D E L I D     P T T L D I I D G E G F
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UniRef90_V4ARH9                           H I  P G A V F I D V M E   A D H T D L Y P R N I P S I E V F
UniRef90_S3NNU7              Y A Q L H L  P N A I H V K P N M L V Q Q D D Y A T G L L P D E T A L
UniRef90_K0EQM6              Y D I G H V  P G A I K I D W R G     D L N D P V T R D Y I D G A R F
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UniRef90_M4UB43        R D D M T H F I A S H V  K G A R Y A N T N     D F E V E P L W N I V P L K Q L
UniRef90_F7PKK3        D A W E Y E G I G H L  P D A V S I P F D S F R A   S E G D A G M L P G A D V F
UniRef90_E0SN80                                                        M M P D I D A F
UniRef90_UPI000363020E Y T G Q A S F K G Q R I  E G A I       D T Q A Y E D F Q S P G Q R P L P D I A V L
UniRef90_Q2SBA9           T E N Y Q A A H L  P G A I H I P P G A T Q Y G R P P A P G L L P E E S Q L
UniRef90_E5V4S6        E G D K A I N Y K E H I  K G A Y H F N T D W I E D G P V     W N L R S A D E I
UniRef90_UPI0002651465 G         K A H I  P G S H H I D I H Q L S N K D S S Y H F T A P T P A N F
UniRef90_V4JA84           P H R Y F T V G H I  P G A V Q Q R F K D L G D N T A N L L M R F P S K D A F
UniRef90_A8MLP3        F D A T D S S A N Q H I  P K A Q Y V L L E E H M S Q P H G G R H P L P D M E K F
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UniRef90_Q65TG3        V E K S E E Y K Q H I  P G A F H F N T D W V E     N D P V W N L S   D P K I I
UniRef90_UPI00034CE77A E S G E E G W L Q A H I  P G A R H A D L T E L A D T Q A S F S F A L P P P E T L
UniRef90_UPI00046AC38B N N S        Y A E G H L P G A V N A P Y A L F R G P S E N R G E L V   P E D R L
UniRef90_A0ZKG4            S P E E Y I K S H L  P G A I N I E L F T Y L L E N S Q A D G L K K L S Q H F
UniRef90_H3NJW9        N R T S E D Y A L G H I  P G A I H L N T D E L     G E F K D Y F N T P E Q M
UniRef90_E6PPS8        K T G K K D L V Q G H L  A G A I S V D F G K I R E E R T K I K A Q L P T A E F F
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UniRef90_G5GK40        K D D Y T A     T G H I  K G A V A L N A D D I N H I P G P R D V R E Y E S I P I
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UniRef90_L1KLW8        N L   R S E Y E E A H I  P G A V Y V D L D S Q L A G P D A G R H P L P E S E T F
UniRef90_U4ZMK3        T E S E K D W V N K   I  P N A Q R F D Y D K F C D P D S R L P H M M P S E E R F
UniRef90_F2RC44        T D G G S R L     G R I  P G S V L D W T G     D L Q D P V R R D V I G P A A F
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UniRef90_E1IFP4          D R Q N Y D A G H L  P G A V W F D R T M L S R T C E D H S V T L I S S A L F
UniRef90_B9QVJ1        K S G K D D Y L K G H I  P G A V W S E Y P G W R T S R G D V T G V L P S I E K L
UniRef90_W9TM38           S A A R Y A E G H L  P G A H F V D P K Q T Q R G Q P P A P G L A P E A Q L
UniRef90_UPI0002192649 N S S W L A Y V S Q H I  P G A M F C D P L A A L A G T P A R R N P L P Q P D V L
UniRef90_J9INQ8        Y S P R D D H I K E R I  P G S I W F D F K A F S H P H L K L S Y M M P P D H Y F
UniRef90_UPI0003B5D6DE P G G D D H L I E G H V  P G A V F A D L E E F S D P A G R F P F T R P D L D R L
UniRef90_K9PQR8           P E E Y A V S H L  P S A I N I G F F T Y L L E N S N P E G L R K L H Q Y F
UniRef90_Q1K4G7            D A Y N N G H V  P G A I H V N T D E I E D S L P R N W W N I Y P D Q Y L
UniRef90_W7Y0N2            N R E A Y L S G H I  L G A I D I D     T L S L E A P E T W N R R S P D E L
UniRef90_Q21H91           S E Q T Y R H G H I  E G A I S I P V G I L M S G Q P P A A G K I A S Q D Q L
UniRef90_W6K971           P H R Y H T I G H I  P G A V Q V Q R F R D L G D N G G N P L M F P S R E A F
UniRef90_U2SSN0        S K G Y       A Q H I  T G A Y H F D T D W I E     N G P V W N L S   D P K V I
UniRef90_C0Q8Q2           S A E A Y S Q G H I  N G S I S I P W Q Q F L D A D S N L L A T     D Q L
UniRef90_H5TFK8
UniRef90_A4H4E2        N H G S I E Y A K E H L  K G A I R A D V D T N L S K F V P G S T A R H P L P P C
UniRef90_A5FVU2        G G N V Q T Y M H G H V  P C A V Y S N Y S Q W R K D V D G A P G M V P P V A E L
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UniRef90_W4LQ18        P Q G E E M Y E A G H I  P G A T F V H W R R D L S V N T P V P N L V L G P E A F
UniRef90_U3GZ76        T R A V A L L C A E A I  A G S I H A D L E D F S D P E D P L P H T Q   P A D V
UniRef90_UPI00037D4405   D G R D E Y L A G H I  P D A V Y V S L D D L S D H T V T G R G R H P L P S G A
UniRef90_V6HMK5            P R S V F F R E H I  T G S R F V S W E E F S V S E L P H K G N L L P V E V I
UniRef90_A5GEA5          P K A D W E T G H I  P G A I Q F S W D N Y R T D A K G V K Y S S F P P Q E L
UniRef90_E8XQY4            E I A Q W Q A A T L  P G A H L N V Y D Y F I P D S T E A G V N S L F N A F
UniRef90_E1W5H6        L E K A K S Y T Q   H I  V G A Y H F N T D W I     E N D P V W N L S   T P K V I
UniRef90_L0K4D9              R D Y A T L G H I  P G S V N V P T E T F R D P S S V A V G K L P G A E T F
UniRef90_UPI000467E2D5 E S G H D G W L A G H I  R G A R H A D L D E L A D P Q A S C S F A L P D P Q V A
UniRef90_E3LPS3        S P S R K L Y Q T G H I  P E A V V D L D I A T Y P S R Y Q R F Q Q Y R A D L F
UniRef90_L2FRY0                                                       M L P S A K D F
UniRef90_UPI0003622267 Q P N I H D Y I V E H L  P G A A H L D Q E F L R S S L G G L P G Q F M P P E A V
UniRef90_B0BUH2        A Q G Y K Q   H V  S G A Y H F D T D W I     E N G P V W N L S A P D I V E
UniRef90_R5PNF6        W D A L G A Y S K G H I  A G A Q F L A F D R V F A R D P G R H P W P D R R T V A
UniRef90_UPI00047BBC1C     A E A E Y K K G H I  K N A Y N Y S K D D W Q K G T T K I P K L Y N T P G Q I
UniRef90_L9YCI9            A E D E F A A G H I  A G A H R L D T E L L R D H E E T A D G Y E A S P E V I
UniRef90_A0A024TJI8    L D G       Y H R G H V  P N A L H F G L P         S K D P K D P F H I I T E K Y F
UniRef90_C6TH99
UniRef90_D0J2K9            D P K A F E A G H I  A Q A A N A P Y G K W R G P A T N P G E L P   D Q A K L
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                               90          100         110        120
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UniRef90_I2G3M4      A E A A S E H G I E P E T H V V V     Y D T H G V F S A P R T A F T F K A F G H
UniRef90_R4YRH1      S I V F S N I G L T L D K H V V V     Y D D E G G G W A G R L I W A L D M I G H
UniRef90_B5E8D7      T K L A Q E L G I N K D S K V V V Y D T K     Y D A T R L W W A F L Y Y G K
UniRef90_C1D3J5      A A L M G R L G I T P D T V V L     Y G D K S N W W A T Y A F W V L R Y C G H
UniRef90_UPI00036BF1F3  C S L L E S C G V S D S Q T V V V     Y D E G G G V L A P R V F Y V L E Y F G M
UniRef90_T4VK27      Q S K L S S F G I N Q N S T I V Y     D E K L Y S S P R A F I Q L K S M G Y
UniRef90_G5HSY9      E K V M G E N G I S N D T L V L A Y     D S N R M G A S R L L W S L F M Y G H
UniRef90_G9PUW5      A A T M A K R G V D G K K T V I A Y C   D A G G W G Q S G W T L W I L R Q A G I
UniRef90_N9D118      Q E L I R Y L N I S P E H H V V V     Y D D E G G A W A G R L I W N L H C L G F
UniRef90_Q1Z1X6      A P L L R E K G I D K S K L I V L Y D S G D V K H     A A R I F W V L E L Y G I
UniRef90_C8W2D9      S L S I R E F G V N M T D H I V I Y     S D N Y Y H A S L W F Y L H M Y G L
UniRef90_J3EXQ0      T D L M D E A G I D A D D T L V A     Y D D T H G V F A A R F L V T A E L Y G H
UniRef90_F4CQ86      G A A L A A V G V R P G A R V V C     Y D S G D G S W A A R L W W I L R G F D V
UniRef90_M0QMR1      V A A T A A V G     V G S S S S V V V Y D R S N G A W A A R L W W V L R S W G H
UniRef90_G5PC83      A V A M R E L G V R Q D K H L V I     Y D E G N L F S A P R A W W M L R T F G A
UniRef90_Q64EF6      T G L L G E H G I S Q D N G V I V Y S D T C P T C G A S S Y I F W M L E Y L G H
UniRef90_H3GGS8      R D V L Q S L Q V P K H T T L V F     Y D D E M S L K A T R M W W V F R H F G F
UniRef90_T1W922      E W A A R A L G I V H R A S T V V Y D D D D G Q     W S A R L W W I F H S F G F
UniRef90_U1Q504      Q S L M R E A G I D Q D T A I V A     Y D D M H G V F A A R F L V T A E I L G H
UniRef90_U2GVR1      S A L L S R L G I G R D D T V V F     Y G D R S N R W A C F A L W V F E L F G H
UniRef90_V4Y9Z4                                           N W F A A Y T Y W Q F K Y Y G H
UniRef90_V4ARH9      E R K V Q E V G I G N D S H V I V Y S D T D N A G Y F S G R G W W N F K I F G H
UniRef90_S3NNU7      Q Q L I S H L N I S Q D H H V V V     Y D D E G G A W A S R L I W T L S L G F
UniRef90_K0EQM6      T E L M R A K G I E R D D T V V I     Y G D R G N A Q A A R H T L W V F T L F G H
UniRef90_A4WTF3      T E I L Q G L G V T A D R P T V I V H E D A T D F G A A A R V Y W T L K S S G V
UniRef90_M4UB43      K E K I E A L G I T H N S T V V L Y G R     L N L S A A R L A Q I L M Y A G V
UniRef90_F7PKK3      A D L L S A A G I T A A D D I V A     Y D D T H G V F A A R F L V T A E L Y G H
UniRef90_E0SN80      A D A L G K L G L N E Q Q H L V I     Y D E G N L F S A P R A W W M L R L T G A
UniRef90_UPI000363020E  Q A K A R A W G L R R E S T I V I Y D A D R S     M T A A R A W W V L R W A G L
UniRef90_Q2SBA9      Q A I V Q H I G L R T D S H V V V     Y D D E G G G W A G R M I W L L D S I G F
UniRef90_E5V4S6      K T N L L K Q G I T S D K T I I L Y S D D A S     A A F R V N W A L R W A G V
UniRef90_UPI0002651465  A E Y V G K T L G I D N D T H V L Y E G K V K V M T A P R M W W M F R L F N H
UniRef90_V4JA84      Q A T L R R W G I S D D S T L V L     Y D D S R T A L A S R L Y F L L A L Y G F
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UniRef90_Q65TG3      E Q N L L N A G I N K D K T I I L Y S D N Q     L A A Y R I F W A L K W A G V
UniRef90_UPI00034CE77A  V S V M A     S L G A G Q G K T L V V Y D R A D G F W A A R L W W M L R G V G I
UniRef90_UPI00046AC38B  Q E T L R G L G I S L D R P V L I R H Q D V T D F G S A A R V Y W T L K T S G V
UniRef90_A0ZKG4      S E L L S K A G I S G A E K L I V Y D A N Q G Y G Q S C R A A F L L K Y L G C
UniRef90_H3NJW9      R E V F L K K G V H K D S Q V V F Y I Y A R D I L Y I A S R M A F A A Y Y L G V
UniRef90_E6PPS8      T K A M D D A G L N K T D K I V P T G E S V D S M D M A T R L Y F Q L R Y F P R
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UniRef90_L1KLW8      G T A M R A A G V S A D R P V V V     Y D G G L N W A A A R A W W L L S W A G H
UniRef90_U4ZMK3      N T L A R E L G I N Q D S F I V V     Y D N S G T F A S P R A W W M F K A M G H
UniRef90_F2RC44      A E L L G R H G I S P D H T V V F L S G N N N W W A A A     G Y W Q F A L Y G H
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UniRef90_B9QVJ1      E A S L S E L G V H E D R T V V L V P A G T S H F G A A T R I Y W T F K Y L G H
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UniRef90_UPI0002192649  Q R H C R D W G I D A A Q P V R I     Y D A G R N L Y A A R A W W V L R W A G H
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UniRef90_C0Q8Q2      E Q D L S Q M G L T R T L S M I I Y D D T T A S F G G A G R L F W M L E V L G C
UniRef90_H5TFK8                                           Y G G N N N W F A A Y A Y W Y F K L Y G H
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UniRef90_N9ABB3        T Q T S L L N G G I H A W L G A G L P T T S E V D T I H L Y P V D T S H A A Q Y
UniRef90_E1IFP4        T Q A A V L S G G V D A W T H A K Q R V T R S R V L C Y P Q T F V A T P D A T Q
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UniRef90_H5TFK8        Q D V K L L D G G R K K W E L D G R P L S T D A V S R P A T E Y K A A D P D N S
UniRef90_A4H4E2        E A Y V I N G G I Q A C R A A G L E M E S G E P S S P P T P A A H W P Y K
UniRef90_A5FVU2        N N I S I L N G G Y A G Y V G R G S H P V Q A G F V K T R F V A H V R P R
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UniRef90_A4H4E2        T D F Q H H Y L M H E I P L N A I I T D A R P A D R F S T T V   R P Y A L D K L
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UniRef90_A5GEA5        P Y I V S T E E V Q K G K G S F V L V D V R S T F E W   I
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UniRef90_B0BUH2        G E P Y A G T D S S N V A D Y Y D P D G S L R N P K E I F A L W E Q Q G I K P N
UniRef90_R5PNF6        P G H V P G A V N R P A T E N L D A D G S L K S R E A L R R E W Q A V I G S R D
UniRef90_UPI00047BBC1C R I P T A K L T P M M R Q E N N Y Y I F I D E K D S R K L L N N A G F G I E L D
UniRef90_L9YCI9        H G H I T G A I N I E F T Q N L V D D R L R S P D D L E Q L W L E E A G L D P A
UniRef90_A0A024TJI8    P G H V P R A L H L E W S D T L Q P S G Q F K S T D E L V A L L A A A G L S A D
UniRef90_C6TH99        S G H V P G S K C I P F A Q L L D S S Q T L L P A L K H K R F E Q E G I S L E
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                                        250            260            270            280
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UniRef90_I2G3M4        S D I V N T C G S G M T A A T L W L A L Q E L G V   Q S S L Y D E S W M G W A S
UniRef90_R4YRH1        K E I A T H C H T H R S G F T Y L V G K I L G   R N M K A Y A G S W A E W G N
UniRef90_B5E8D7        K D Q Y F F C Q S G V R S T Q A M F T F Y L L G Y P L N K L Y D S S W I G W S K
UniRef90_C1D3J5        R M V V T Y C R I A E R S S H T W F V L Q L L G Y P D V R N Y D G S W T E W G N
UniRef90_UPI00036BF1F3 K T V V P Y C Q S N Q R G A H A Y F V L R L L G Y A D I R P Y E G S W D E W G N
UniRef90_T4VK27        K E V I T Y C G S C I E A C I N Y T L L D E L S Y   N A K T Y I G S M S D W V S
UniRef90_G5HSY9        D E I I V Y C Q T S M R A A P V F V Q L Y E A G Y R N L R I Y D G A Y L E W S S
UniRef90_G9PUW5        S E I V V Y D T A G V R S A F V T M L L R Y S G F T K S Q S Y D E G F Q A W A
UniRef90_N9D118        E P V V V Y C Q S H H R S G L A Y I L G R L L G W   N I Q A Y D G A W S E W G N
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UniRef90_C8W2D9        K Q I I T Y S N N F Y R A S Y I Y F A L Q L L G Y E K V K V Y D G F Y L Y W S R
UniRef90_J3EXQ0        K E V V L Y C N T A R R I S H T Y V V L R H L G Y E N V A F Y E G S L T E W D E
UniRef90_F4CQ86        P Q P I T Y C G M G V S A A G L A L G L V G A G Y T G L R I Y D G S L E E W T
UniRef90_M0QMR1        H S P I L Y C G G G I N A A G L A L A L A E Q G V   A T R V F D G S L A E W
UniRef90_G5PC83
UniRef90_Q64EF6        K D T V V Y C E S G A S A S F L Y L A L R M M G Y   Q V R N Y D G S W N V W C E
UniRef90_H3GGS8        K P V I T Y C Q R G I R A A H T A F A L E Q M G F K D V K I Y E D S M L Q Y L N
UniRef90_T1W922        D E V V T Y C G V G S A A C V D A L A L T M L G H D R V R V Y D G S L A E W
UniRef90_U1Q504        T E V V L Y C N T A R R I S H T Y L I L R E L G F A H L G F Y E G S L T D W K E
UniRef90_U2GVR1        Q S S V I Y S Q V G A R A A L V W F I G R L L G H T E T R I Y D G G W S E W G N
UniRef90_V4Y9Z4        G T T V A Y C R I G E R S S V A W F A L H L L G Y E D T I N Y D G S W T E W G N
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UniRef90_S3NNU7        Q P I V V Y C Q S H H R S S L A Y V I C R L L G W   Q V L A Y D G A W S E W G N
UniRef90_K0EQM6        D D V I V Y S R V G E R S S H T W F V L G I E T V R N Y D G S W T E W G N
UniRef90_A4WTF3        E E L I S F C N T G H W A A T N W F A L E L A G V E N V K L Y P E S M V G W S N
UniRef90_M4UB43        Q K V S F Y C G T G W R G S E V F L Y A Y M M G W K N I   S L F D G G W F Q W S M
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UniRef90_H3NJW9        Q E V I L Y C G T S W R S S T A F F L L K H L G W K R V V M F D G S W Y K Y A H
UniRef90_E6PPS8        A P T V T Y C N T G H L A S G A W F V T H E I G N Q N S K L Y A G S M I E W T N
UniRef90_M5FQU5        R P I V T T C G S G M T A A I I W L A L Q E L G I   D A S V Y D E S W M G Y A A
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UniRef90_F2RC44          P T V V Y C R V G W R S A H S W F V L E L L G L P D I R N Y D G A W R E F G S
UniRef90_N9ABB3        Q P I V V Y C Q S H H R S G L A Y I L A R L L D W P   V R A Y D G A W S E W G N
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UniRef90_B9QVJ1        T P V V S Y C N T G H W A A T N W F V L E L L G Q E N V A V Y D D S M V G W S Q
UniRef90_W9TM38        K E I I T H C Q T H H R S G L T Y L L A K A L G Y P
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UniRef90_J9INQ8        D E V I M T C Q R G I T A C I V D A A F R T V G N N N T S V Y D G S Y E E Y A K
UniRef90_UPI0003B5D6DE   V V V Y C G A G I A A A G T G F A L R R A G R A D V A L Y D G S L D E W A
UniRef90_K9PQR8        S I V Y V Y C F K G S R A A N T L I A L G E A G I   Y I R N Y F G S W N E W S R
UniRef90_Q1K4G7        K A L S Y Y C G T G W R S S L A W F Y G Y M M G Y E R N Y N F D S G W F E W S M
UniRef90_W7Y0N2        K H L A F Y C G T G W R G S E A F F N A W L M G W P R V S V Y D G G W F E W S N
UniRef90_Q21H91        K N I V T H C Q S H H R S G Y T L V G K Y L G L   N I K A Y D G S W S D W G N
UniRef90_W6K971        K T V Y A Y C H D G F R M G L A Y M Q L K H L G Y G D V R L Y N G G W G H W G N
UniRef90_U2SSN0        D K L A F Y C G T G W R A T V P W F M T I M A G W K N T Y I Y D G G W N A W Q M
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UniRef90_A5FVU2        G R Q I N F C N T A H W A A L G W F A Y E L L G N K Q A K L Y T G S M S Q W S R
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UniRef90_V6HMK5        S V V I S Y C T G G I R S A W V T T I L R N E G Y   N A K N Y A G S M W E W S S
UniRef90_A5GEA5        K P V V V Y C L G G V R S A Y A W T Q L A G L P E A R N Y K G S W A A W E K
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UniRef90_B5E8D7            D A       S  L  P  I  E  T  G
UniRef90_C1D3J5            A V  G  V       P  I  E  T
UniRef90_UPI00036BF1F3     A E       H  T  P  V  E
UniRef90_T4VK27            Y D  E  N  D
UniRef90_G5HSY9            N S  D     N  P  V  E
UniRef90_G9PUW5              G D  P  E  L  P  L  V  K
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UniRef90_G5PC83
UniRef90_Q64EF6            T H  P
UniRef90_H3GGS8            R D  D  S  E
UniRef90_T1W922
UniRef90_U1Q504            R N  A  P
UniRef90_U2GVR1            M V  G     M  P  I  E  T  G
UniRef90_V4Y9Z4               L  V  G  A  P  I  E  T  G  E  A
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UniRef90_S3NNU7            H       P  N  S  P  I  V  S  G  E
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UniRef90_A4WTF3            A G  L  P
UniRef90_M4UB43              D  S  Q  R  P  V  E  T  G
UniRef90_F7PKK3            A G  E        P  I  E  T  G
UniRef90_E0SN80            R D  D  V       P  V  V  T  G
UniRef90_UPI000363020E       D  P  S  R  P  V  V  S  G
UniRef90_Q2SBA9            H       P  D  T  P  I
UniRef90_E5V4S6            Q L  D  S  S  L  P  V
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UniRef90_A0ZKG4              D  F  S  L  P  I
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UniRef90_Q1K4G7            G E  G  S  D
UniRef90_W7Y0N2              D  P  A  N  P  Y  E  T  G
UniRef90_Q21H91            T D  G     L  P  I  E
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UniRef90_A5GEA5            R A
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UniRef90_E3LPS3            R A  P  K  K     I  S  E  G  P
UniRef90_L2FRY0            R V  K  P  S
UniRef90_UPI0003622267     Y       P  D  N  P  T  V  T  G  P
UniRef90_B0BUH2            D G
UniRef90_R5PNF6             A D  S  H  L  P  A  E  I  G
UniRef90_UPI00047BBC1C     T N  F  P
UniRef90_L9YCI9            S E  D  D  G  Y  Y  Y  T  T  G  E  G
UniRef90_A0A024TJI8        A       P  D  T  K  V  E
UniRef90_C6TH99            Q S  N     T  P  V  D  T
UniRef90_D0J2K9            S K  D
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UniRef90_C0QUS7                 L I W V D D A H K L L G K       P D V R F V D
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UniRef90_M0CZ25        M S D I V V P A E W V A D R L D E       V R I V D T R
UniRef90_UPI00036AD40C          D A Q W L S E Q I D         D T N L I V L E V R Y H
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UniRef90_N6YR61                                  G V T I I D G R
UniRef90_N8VU37          L I E P E Q L V P Y L G H E L         L R I V D L S R A S V
UniRef90_F9GNY0        F Q Y S V S P E W I N S V L K G E K P N D K F A I F E V S W       G P
UniRef90_UPI00031619F7
UniRef90_B9LQB1                V V D S Q W L E S N L D           D V H L L D A R
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UniRef90_F9GDY8        S S Y L T S P R E L H N A I K T S P S S P R V I P L C V S W F P D N D
UniRef90_W6K6B0          P L V D V D W V V A A L G R         P G L V F L D L R P A P V
UniRef90_E8TY77              T P A E L S A Q T A Q P T P P         R V I D I R
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UniRef90_H6C3L1                            A G P D A V V L D A S W P D P P T
UniRef90_Q0A844        L P G P L V S A D W L A A H L D         D V V V L D I R T D I D A P
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UniRef90_G0HQP8              F V S A E W V A S Q         G E G I R I V D V R
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UniRef90_UPI00037569AA
UniRef90_E8WKY7          T A L I E P D V L K Q W M D E G K V N D R V V I V D I S
UniRef90_W6J2H1              A T W L A D M L Q H R P P E G E W R L L E V       G
UniRef90_C7NPR7                    A A L G D R D A A I V D V R
UniRef90_M0E6Z3        H F V G P S W L A D N         R E D T V V L D A R
UniRef90_C0Q904          S A Q Y L L D N G A S N S A N S T P I I I D T R
UniRef90_V6UNQ5
UniRef90_E3KHR3            L V S P Q E V Q A H         G I K N Y K V L D G S F H L P N S
UniRef90_U2DXS0      H Y V N K N S I I S V K E L K K N I E K E K V         E L I A I
UniRef90_S6TG97        M S I A Q L I S P       E R L A M R Q K T P G L V I L D C R F A L E D A
UniRef90_UPI0003718A1C                            N L T V L D A R N I M D D L
UniRef90_UPI0003103DEC      D V L V S A D W A E S N L H A         P K V V F V E V
UniRef90_UPI000475E423  V R W R Q L V T P A W L A A   L T A G A R V E A A P L A D W R L F E V G C
UniRef90_UPI00036CF712          I T P E E L         L S K I K S N E N V T I V D V R
UniRef90_A8MR47
UniRef90_UPI000262CBD7      T P V I D S F T L T D L I E         D N S V K V L E I R
UniRef90_W0JL98            I L S T Q E V A S M I G K K         G V V I I D T R
UniRef90_UPI0003729493        V L I K A E E L Y Q E I K E         N K D I V I I D V R S F I
UniRef90_UPI0001850F25  M N S S F I Q A D D L L N S I D F D Y         V K I I D C R Y N L E D K
UniRef90_J0M779        M K L R N F I S T S V V A D L L K K G K N G G G Y R L L D C G G D L Q P R
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UniRef90_X0VA27
UniRef90_A5GEA0        L S D Y F K S T D W V A L H       A S D Q N F V I V D T R
UniRef90_V7I7F2                                  G L T V I D A R
UniRef90_H5TVE6        M G T P H L I T A S D L R D L         G D D P K L R V V D A T V H L P Q I
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UniRef90_R8ZMG6                                P E F K L I D T R S V M
UniRef90_I0IIN4                              P G V V L V D A R
UniRef90_R6LEK5                      S K V G D E N T L F V D G R
UniRef90_M6DAS4
UniRef90_B6FVX9        Y S M Y V H P Q W V Q D L I D G K N P G N D F K I V E M S L G S E E G
UniRef90_I0QVG3                D L L Q R M K T G E Q F V L I D V R
UniRef90_A0A024GHZ5      F S S L V S P S W I         L S E Q S K N D S L I V L N C
UniRef90_B6BLT5          S D A F I T P S E L K N S L K         D K N I I I I D V
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UniRef90_B2B3H0            I V S P W W L       N R C K Q H L D M V V I D L R
UniRef90_K0UW45        T Q S V I S V E D L D A R L D         D P Q L A V I E V Y A S A P D R
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UniRef90_G7LK76              L I T A Q E I         L T Q Q R L G Q S Y L L I D V R
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UniRef90_A0A016U7Z5    M S L K R L I D V G T V S Q L L K K N I I N E G V R L L D C S Y D L A Q P
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UniRef90_Q12DR7                        S A A P A N N W R L L E V D C G A P
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UniRef90_C0QUS7          G D S P K K F K E G H I P G S V N H D L H Y L E D I R K C D G L P M C P D R A A
UniRef90_E6PW13          D A S S S P Y A A G H I P G A V W A P Y S S W R G A A D N   P G K L R S V P D Y
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UniRef90_F9GNY0          L E K S Q G Y V Q H I V G A Y H F D T D W I       E N G P I W N L S S P E V I
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UniRef90_F9GDY8          Q E G I Q T F C Q K R I P E A R F F D L D I V I D T E S P F P R L L P S A L G L
UniRef90_W6K6B0                F K K A H V P G A I S T D Y D G W R I M I D G V A G L L P D V P D L
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UniRef90_W6J2H1          C D A E H I Y R A G H I P G A D Y I D T R E V E S L P   L W N V L K P A Q L
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UniRef90_X0VA27                                                              D A E G W
UniRef90_A5GEA0            P A A K Y N A G H I P G A I N I P R D Q F Y G Q P V Q I A Y D I P T P A E L
UniRef90_V7I7F2            K R D A Y L E D H Y R G S Y N L D L D L D L A G P H G G R H P L P D T A V F
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UniRef90_F4G0D6                                    W R L L R H P I K R D F A S K E D L
UniRef90_D5X3K0          T N D P K E E V G G H I P D A L S V N F W G L R Q K H K K L D F M L P T A K E F
UniRef90_W4LRM8          D P I D A Y T R A H I K H A I G I P V H H Y Y A E N P R Q K P L V A P P D T M
UniRef90_R8ZMG6              A R I K T K I P D A K L L S W E E L S R S E T P F R G K L Q S E D K I
UniRef90_I0IIN4          D P E A F A A G H L P G A V N L P P A A L R S T G D D P R E R R I D A E R Y
UniRef90_R6LEK5            G E K K A I L G T V K G A I A T V W Q D W S K Q G D E K W G C I Q E P E Q L
UniRef90_M6DAS4          D A R E G I K F S G I P K S I P L G W Q E I S R K E F P H Q G N L I E A S E A
UniRef90_B6FVX9          E Y     E G G H I K G A V N V E Y D A V P L E E Q L K F W N R N S D D V I
UniRef90_I0QVG3            E K A D W Q R Q T L P G A Y H L N V Y E Y F I P D S T E Y G V Q Q M A N A F
UniRef90_A0A024GHZ5      D H P S E F D R G H I P A A K P F S Q A F F G L K G S G G C L S E R Y L
UniRef90_B6BLT5          A D D T I Y K T S H I K G A I N S D V T K F I N Q D P Q N I Y L M N S P E I I
UniRef90_S7WE21                Y S N Y E K G H L D G A L H V D L N K D L S Q A H G G R H P L P S P A A F
UniRef90_U2LF92          V R D V A E W Q A N T L P G A C N V Y D Y F I A D S T P A G L A A M A A D A
UniRef90_B2B3H0            S A E E Y A V S H I P G S I S A P F E P I S A W S Q M G P G D L P E Y N D L
UniRef90_K0UW45          P L               I P G A R A V F W K D L A W H   P L K R E L A T G A E L
UniRef90_A4WQI9            G A D L K K A A P L E G A A A V I W Q D F T N A D L P V K R L L Q D D A A L
UniRef90_D6Z074          V G A A A Y E A E H I P G A F L L N T A A D L S A T R N D G I Q V P T I T Q M
UniRef90_G7LK76            E E A D W Q A A T L P G A A S M N V Y D Y F I P D C T A E G L A A M A A S
UniRef90_UPI0003B76E6F     P T Y E Y I R G H I P G A L H L D L F G L S L I D T R K E T Y D A F M W M I
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UniRef90_H3EWB1          P D Y R R F K E E S H I P G A V H C T Q G I A T Y P S R Y E R F T Y Y P A D I F
UniRef90_X7XZS6          P D G H S A Y L R S H L P G A V Y V S L E D E L S D H T V V R H P L P S G R S L
UniRef90_I4FUT0            L E Y I T G H L P K A V N I A D N N F R G P N G F L P V Q Y W Q E D K I
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UniRef90_J3C808            A D W Q R A T L P G A Q H C N V Y D Y F I E D C S E A G L A V M A A E A
UniRef90_B3E747            A N Y A T A H I P G S Q L L D S G A L L E G V T A I G T M V M D G P T I
UniRef90_UPI000476D809   D A A L F S A G H I P G A G Y   L D T A Q L E R A P L W D K V P D P A L L
UniRef90_S3UH90           L P K S I S L G W Q E I S R K D S P F A G N L L P D S E A
UniRef90_B0SGQ5            S Q S A Y E E E T L E G A Y Y Y P F I K   K A F G S D A E S Q K K L Y G P M
UniRef90_G5EEV0          A K S R D A F S V D H I E S A R L I F H S N L S H A G V P V     H P L Q F
UniRef90_UPI000477D0E8   S S S V E R I E K S P V E G S V H I P W M F T E D G M N G G R H P I P N S G V I
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UniRef90_D6Z432          D R E S Y L E G H V P G A I H Q D I D P K Q G K L I E H L E P R P V A E L E
UniRef90_F6DEB0            P R P A Y E A G H I P G A R H L D L S A P K L R L R E E A E L K A L E G G L
UniRef90_A0A016U7Z5      C P S K R L Y L S G H I P Q A P H V C L D V A T Y P S Q Y E R Y A P Y P P D V F
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UniRef90_F0LUQ3       E V L V H N L G I K Y D T T V I L Y     G R E N M A A A R L A N I L M Y A G V
UniRef90_C0QUS7       E F I G K V L G I D N N T T V I A     Y D D G R G P N A S G V W F F L S L Y G V
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UniRef90_UPI00037E7F56 E E S F R E W G L E K D R P V V V     Y D E G N N V Y A A R A W W T L R W A G V
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UniRef90_UPI00036AD40C Q R T L R G W G V N D D S T L V L     Y D D S R T A L A A R L Y Y L L D L Y G F
UniRef90_D0KY91       E K L V Q S W G V N K G Q P I V I V P K G T P D V D E A T R L Y W Q L K Y Y G Q
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UniRef90_UPI00031619F7     M W G I D D G D T V V V     Y D D D R G L S A A R A W W L L R H A G L
UniRef90_B9LQB1       A W T L S E A G I E P D D D V V V     Y G A E S N L W E T Y A I Y T L N A L G H
UniRef90_A4HSL9       A E F I E W C M A N G M E L P V L C Y D D D E C G A M G G C R L W W M L N S L G A
UniRef90_F9GDY8       A S S M S G L G I R K E D I L V V Y D T S E L G I F S A P R V G W M L K V F G H
UniRef90_W6K6B0       E A L L G R L G I G N D T H L V L L A P G N T A W G M A T R I Y W T M K V L G H
UniRef90_E8TY77       T E L V Q S L G L T P G T H V V S T G S D T T D F G A A A R V Y W T L K L L G L
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UniRef90_H6C3L1       A A F A G K H G V V K D S H V I V     Y D G E G V F A A P R T A W T F K V Y G H
UniRef90_Q0A844       Q A A M Q A A G V N A G Q P V V V T S Q G I S D M A N A T R L Y F A L R H F G H
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UniRef90_U7QRK3       T Q K L Q A I G I F Q D R P V I V Y I D P K T G W G E E G R I V W M L R S L G H
UniRef90_UPI00037569AA                                                                     H
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UniRef90_W6J2H1       R P V L L N H G L R A D S T V I Y G R G     N Y A A E R M A H I L L Y A G I
UniRef90_C7NPR7       A T W L G E A G I S P T D P V I A     Y D D D C G V Y A A R F L A T L A A F G H
UniRef90_M0E6Z3       A T A F G E I G V S P E D D V L V     Y G A S V G S R V T R V A F A L A A V G H
UniRef90_C0Q904       E T T L G S L G L T R E A T I V I Y D D T L A S W G S S G R I F W M L E Y L G C
UniRef90_V6UNQ5                                             W W L L A W L G K R
UniRef90_E3KHR3       K R E V E R L G L T R N D H I L V     Y D S V G I F S A P R A A W L L N A Y G H
UniRef90_U2DXS0       E S L L S K K G L E E S D T I V V     Y D E N Q S L Y A A R L W W T L K A Y G H
UniRef90_S6TG97       L E S I Q A W G I N A D S D V V L     Y D D G P G M F A A R A W W L L A W M K R
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UniRef90_W0JL98       E A A L S N A G I L P T D T V I V Y S G G D N P A F F A T R V I L A L K W V G I
UniRef90_UPI0003729493 I K V L E K N G F D S E K E T R I Y C     D K N T V T N A S Y L F F I L E Y L G F
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UniRef90_A0A049TSU9   Q A T V R R C G I R     H D V P V V V Y D D W N R A G S A R A W W V L T A A G I
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UniRef90_X0VA27       S Q R I G G M G I G A D S R V V V     Y D D A S A K N A A R I W W L L R Y W G V
UniRef90_A5GEA0       I D I L T R N G I T P D T V V A Y D N D T S S Y G G     R V P W V L K S Y G H
UniRef90_V7I7F2       Q E K L R S I G L R D G S S V M I     Y D N G G N D S A G R L W W M L K Y Y G M
UniRef90_H5TVE6       A A A V G A A G V G D D S R V V V     Y D S E N G I W A T R L W W Q F G L E G F
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UniRef90_D5X3K0       E Q T M Q A V Q L E P G K P I V I V P T G D T S L Q E A A F F A W E L Q V F G V
UniRef90_W4LRM8       K A L M E E L G I G D G R L V V A     Y D S N G C L W S A R L W W V L N Y Y G H
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UniRef90_I0IIN4       A E L L G A A G I S A D D T V I A Y G N H A G Q A D G S T V L M I L D L L G H R
UniRef90_R6LEK5       E E T L G N L G I T K D K E I I L I G E T L D G W G D D A R L L W E L R A A G Y
UniRef90_M6DAS4       K E L L R K K S L Y P D K I V L V F G D P I G G W G E E G R I V W S L R T L G F
UniRef90_B6FVX9       K K D L E N L G I T K D T T V L Y A T T P A T T A A A R A A L I M K Y A G V
UniRef90_I0QVG3       H H A W Q Q L L L G     D N V T P V F F E Q Q V G M R S P R G A W F A L F S G M
UniRef90_A0A024GHZ5   E D F L Q D T     G Y D S S K T L V L Y D N K K N L L S S R A W W I L S H Y G I
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UniRef90_A4WQI9       T Q K L Q G I G L S K T V P A V V V A D S V N G W G E D G R I V W T F R T L G H
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UniRef90_X7XZS6       Q A A A R R W G I Q Q D G L L V V A     Y D D W H R A G S A R A W W V L S A A G I
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UniRef90_E3KHR3          P Q V S V L D G G L P R W I K E E C P V E T G S P V D P E P S E Y T L P G F D Y
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UniRef90_A0A049TSU9      A N V R I L D G G L P A W R S A G G S I E T G Q V S P Q L G N V T V L H
UniRef90_UPI0002F79140   P D V R V L D G G L A A W T G D L T T E I P H P A E G D F R P K P G A L P T L D
UniRef90_R2SU38          S E I K I L E D G L T S W R A L D Y W S S A E K V S S F G R H V P G R S A I L I
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UniRef90_D5X3K0          E Q I A I L N G G M H A W I S A G Y D V D T D A I A P M S S S W K A R A P N P A
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UniRef90_R8ZMG6          P H A Y W Y D G S V S S E K R K Q N K V I N P I I N S T N T I K T G V L K K T
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UniRef90_H3EWB1          E K L S L L D G G L E N W T K N K F E L S N Q P I Q L P K G D W T A K D R I D F
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UniRef90_D6Z432          E D V V R V L D G G I E N W W A H P L G Q G E N R L P P S D F R A R L Q P Q V
UniRef90_F6DEB0          E V Q L W T E G     W E P Y A T E K E E P K P E R T E V V A K L R R D W
UniRef90_A0A016U7Z5      E K L S L I D G G F D E W K K K G H E I S K D D V L K P G S W T A K A D N F N
UniRef90_F4BSU5          E D V R L L D G G I D D W V A A S N P T W S E P A R L A P R N Y T P A I D A D L
UniRef90_Q12DR7          K D V R L L D G F D A W L R A A L P C A E G A P Q R H P F G A A F P C P Q Y
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                                    170             180             190           200
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UniRef90_F0LUQ3        D L P E A K A L L T L P Q D Q Q S L V S I R T L A E F N G E T S G Y D Y I Q S K
UniRef90_C0QUS7        M I A T E D I K K N G K S Q Y F I L D A R R F A E Y T G E K P G K H I T V A R
UniRef90_E6PW13        L A S R T Q V A Q D L R Q S Q S T L L L D A R P R A F Y L G Q V K A P A A A Q P
UniRef90_UPI00037E7F56 N T L P T A T M Q D V R E F D G M L L D A R N E S R F A G R R E I     L D L K
UniRef90_M0CZ25        L V G I D A V A A A T D P D T V V V D T R E G W E F             E
UniRef90_UPI00036AD40C D A N P D R F V E W T A V Y D D V V S R R D P N V V L L D A R P A D M Y T G K V
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UniRef90_N6YR61        S K S G V P Q F I N I D E L K K A T D D K K A V I       V D V R A P A D Y D
UniRef90_N8VU37        V Q Q H R I E Y N E L L Q Q V Q E Q N I Q L W D C R T N E E Y T G L R L A A R R
UniRef90_F9GNY0        D I E T P K E I M L A Q Q N G L K L I S N R A W D E Y T G K V S G Y D Y I P G K
UniRef90_UPI00031619F7 M P V V D T S G A E A M A S G G L L L D A R A A E R Y R G E T E P I D P V A
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UniRef90_F9GDY8        I A T Y E E V L E A V M D H N I Q V L D S R S S D D F S G K Y P G P R P D S L S
UniRef90_W6K6B0        L V A D G G L V R K A L D D G V L M L D S R P T D Q Y L G   L N K T G D V A R
UniRef90_E8TY77        L A T R D D V G Q H V Q L N N A A L V D S R P D A F Y Q G K V R A P A A K L A G
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UniRef90_E3KHR3        D D L V R N F K E T A E E E R M S V F D A R P R G R F L G A D P E P R P G   L S
UniRef90_U2DXS0            L N E E M I A S L E D I K N S L N N K E E R V V D V R T K K E Y N
UniRef90_S6TG97        L L S G S R L Q S R L G R V E M T L I D A R A E A R F R G D V E P L D P V A G H
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UniRef90_UPI0001850F25 I V T M D E V K E I S N E K E G I L L D S R A E D R Y K G I V E     P M D R I
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UniRef90_X0VA27        L M S K D Q V L A A L A G H R L Q I V D A R S N D E F C G     N D L K G C K R
UniRef90_A5GEA0        Q N H R D T A N G N V T K A G Y V I S D V R T P S E Y T G F V T T V T S G T A S
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UniRef90_H5TVE6        I E T T D E V V T D V D D D S G V L L I N A S T
UniRef90_UPI0004657447 R V D K A Y V E T K L K S N D S V I V D G R           N A D A Y V
UniRef90_F4G0D6        V M V W E I L K R L K E A D F Q L L D V R Y R E E Y Y G D V E H P N E E S Q T
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UniRef90_W4LRM8        L C T L D Y G R D N V G N A D V V Y L D V R S D G E W D G S N S R     G N Q R
UniRef90_R8ZMG6        D I S K E E I N K Q I K L N A Y Q I L D T R E P R E F A G A T P Y     G E S R
UniRef90_I0IIN4        I W T A R E V A A A A G D P G V V L W D T R S T D E F     T G V D R R K N A R
UniRef90_R6LEK5        H V M T T E E L Q K N Y D E   Y K I V D V R T D E E Y E G A I L Y D E A     K
UniRef90_M6DAS4        S A D S K F V L S Q L S D K K F A F I D T R E E R E F L G Q T P Y     G E S R
UniRef90_B6FVX9        Y D Y D E E L K V V E N P D K A V V A S I R S W D E Y T C K V S G Y T Y I G N S
UniRef90_I0QVG3        L V A T R E E V L S I H Q N G S I L V D A R P S E F H G K F A H D C   C H R
UniRef90_A0A024GHZ5    R I Q L D E I Q T L L N E K D G I F I D T R T E E F S G Q F L S G N A R G G H
UniRef90_B6BLT5        Y L L V S R D K V Q D N L A S T L M L D A R S S Q M Y Y G T E   R S E K V A S
UniRef90_S7WE21        L A D L T E V K S A S G K R N Q M I I D V R E S E R Y Q G L K E     P I D K I
UniRef90_U2LF92        S R W V S S R Q Q V I N A D G K T V I N V D A R R P S E F D G S F V H D C C H R
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UniRef90_H3EWB1        N I P Y E E L L Q K D A D G K E F I E K I D E C R F V D A R V R G Q F D G T E D
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UniRef90_I4FUT0        R V N L A E V E K L I G K P D V V F I D P R P E E L F Q G K Q D I W
UniRef90_R6DLN6        H L I N T D A L V E T Y D S V K V V   D V R A D E Y K G E V L Y       G E K A
UniRef90_J3C808        R E L V C S R E Q V L A A D G V N V V N V D A R R P S E F D G S F A H A C C Q R
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UniRef90_D6Z432        I A H E A E V L R L A R F N P S Y L Q D V N P H Q F E L P Q L V D V R V D V E H
UniRef90_F6DEB0        L L T A D E A   A R H P L L L D V R S P E E F Q G K V   H P P C C P R
UniRef90_A0A016U7Z5    K Y F
UniRef90_F4BSU5        L A T Y D F V       C S G I P Q I I D A R T             G R D F E
UniRef90_Q12DR7        L I N R H Q A K S L L S Q P D G A L A S I R T W D E F T G K T S G Y I K A R
UniRef90_K3WI78        T V G L D V V K Q G L A D G S A Q F V D A R T P A E Y T G Q N P N G N A R A G H
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                                     210           220           230           240
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UniRef90_N8VU37        G G H I P N A L H F E W S T A L N R E N H L H P L E R T Q Q R L E Q L G F N L Q
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UniRef90_UPI00031619F7   G H I P G A R S L P T A G S L A E D G R L R P A E E L A A R F D G V G V D D E
UniRef90_B9LQB1        F G H V T G A T N L N F V Q S I D D E A G R L R S P E E L E W I D D A G I S P D
UniRef90_A4HSL9        P G H I E G A R N L P Y T S H L V I R G D G K V L R S E E E I R H N I M T T D L
UniRef90_F9GDY8          G H M P G S I N I P Y D L V L D T E T K A F L P S D Q L A K L F K A K G V D P
UniRef90_W6K6B0        Y G T L P G A L S L P G Q W L T H D G G G V F R D A E T L R L Y D V V K I P R D
UniRef90_E8TY77        T L P G A Q Q L D F N Q W F V P G T T T F V D K A T A Q K I A A K V K R E Q G
UniRef90_I0PUA8        A G H I P G A V S A P T A E N L T A D G T F K P V A E L R E R F D K L G A G A
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UniRef90_G0TZ82        P G H I E G A V N I P T S V N V K D Y K R L R P F D E C R S N L L K G L N G K W
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UniRef90_C7NPR7        P G A V Q L D W K V F V D D E T G R R R S V E A I G S T L A E H G L E P D
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UniRef90_V6UNQ5          G H I P G A Q C A A F T D N L G E D G R F L P A D K L K Q R F A E K L G D R S
UniRef90_E3KHR3        S G H M P H A L S L P F T S L L T Q P S D A E P Y R K H D H Q K W E Q I K A G Q
UniRef90_U2DXS0        N G H I P G A V N V P W S Q T L N D D G T F K K A S E L R K L Y R T K G I T Q E
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UniRef90_V7I7F2        K G R I P N T I N I F Y R K C F N T D N S L K D M D F I S A S F K K A L A F
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UniRef90_W4LRM8        S G R I P G A V H L E W L H L V D K Y K T I K P A A E L R G M L E A V G A T P D
UniRef90_R8ZMG6        G G H I P S A K L F Y Y Q N L F D D N G R I K S K E E V D Q I L N Q I G I S T T
UniRef90_I0IIN4        G G H L A G A K H L D Y A A L L D A E N R V K P A D H V A S E R D A A G V A P A
UniRef90_R6LEK5        G G H L P G A I H I R Y T D L F D D A G Y L K S N E E L T K M F E D A G L S K D
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lupas_28
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sol0                                             B                         B B     B
jhmm                                     ◖▀▀▀▀▀▀▀▀▀▀◗               ▬▬▬▬▬▬▶
jpssm                                    ◖▀▀▀▀▀▀▀▀▀▀◗               ▬▬▬▬▬▬▶
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UniRef90_D2Z6D1  G N N P K V Y R K G H I P G A V N I G F H F L S R P G D P G W G T S L P I D R L
UniRef90_W0JHM3    S K Q N Y L H G H L P K A I N L T E N E I L V S Q E N E L G L M P Y N N Q L
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UniRef90_C5NWP6  E E G S L M Y D K         A I V V D W T D I S E F G G E D L G K L L S K D N Y

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lupas_14
lupas_28
jnet
conf             7 6 2 6 7 7 7 7 4 1 5 7 8 8 7 7 7 6 6 4 0 0 2 2 2 5 6 7 7 7 7 7 6 5 2 7 8 9 9
sol25                B B     B B     B B   B B B B B     B B         B B       B   B B B B   B
sol5                             B         B       B     B         B                         B
sol0                             B
jhmm
jpssm
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```
                      90              100              110              120
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UniRef90_D2Z6D1    E K K L R E L G V N D D S I V V L Y S D M F K G P G A D G R N F W Q L K M A G M
UniRef90_W0JHM3    E K I F S A Y G L K R N A T Y I V Y N Y D N S A R F I A Q A A W I I L Y W S G I
UniRef90_R1D909    A A E L A S L L G V R A E A A H L V L Y S S R H V M W A T R L W W L L H S S G F
UniRef90_C5NWP6    Q Q I F S K V G I T N E S E V L V Y G F P E Q G F G D E A R V L Y T F S Y A G F

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lupas_14
lupas_28
jnet
conf               9 9 8 7 4 2 5 7 8 8 8 7 4 4 8 8 8 6 0 5 7 8 7 6 3 1 8 9 9 9 9 9 9 9 8 5 2 6 7
sol25              B     B B     B     B         B B B B B B B B     B B   1 B B B B B B B B B B B B   B
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sol0                     B                       B B B B                 B     B       B     B     B
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jpssm
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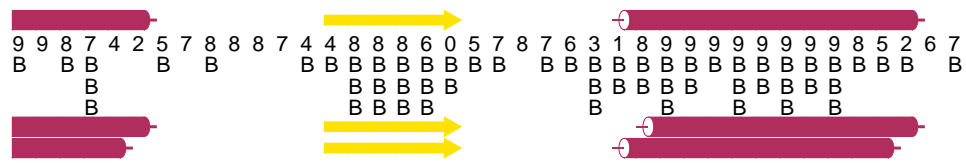
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UniRef90_D2Z6D1	K N V K L L Y G G L P L Y R S L G Y D L T R K V A K P S P S N E G A L H E Y D P
UniRef90_W0JHM3	K D I Y Y M D G G F E K W K S E G L P V L I G N Y S L P K S H F T I E Y N P G N
UniRef90_R1D909	P R V S V L D G G V Q A W R A R G Y A T E S G P P P A E P E G R E G P P P R L R
UniRef90_C5NWP6	D N I K F I D G G F K Q V E K L G F N K K Y V P T T D R I D V S D V V R Q N E K

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lupas_14
lupas_28
jnet
conf   8 8 8 2 1 2 3 0 1 8 8 8 8 7 4 2 6 6 3 2 5 6 7 7 7 7 7 7 7 7 7 1 0 4 4 6 7 8 7
sol25   B B B B   B B B   B B   B   B   B   B   B
sol5   B   B B   B
sol0
jhmm
jpssm

```
                          170              180              190              200
UniRef90_A0B831  L A S I D Y I K      N S D V Q L V D A R T V Q E F                         E
UniRef90_D2Z6D1  S W Y T T M D Q V Y S S L G K E L I I D T R T K K E F        D G S T N A G E P R
UniRef90_W0JHM3  I L A Q K S F L L W V I N N E N T I Q V V D S R S R K E Y E G H I K G A K W L Y
UniRef90_R1D909  W R D G A F V G K E A V L R S V G N A D V A L I D S L K P E S Y S G A R P Y G R
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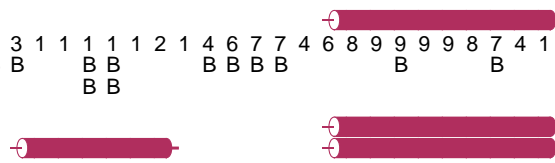
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sol25           B B B     B B B     B B         B B B B B B B     B     B                 B B B
sol5                  B                     B           B
sol0                  B
jhmm
jpssm
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UniRef90_D2Z6D1    G G H I A G S E W M L W L D I L N K D G S P K S A E E I K S I M K D R F
UniRef90_W0JHM3    A G D F L E K I N N Y W V           I K P K N T I E N L F L K E D I D I N
UniRef90_R1D909    R G H I A S A V N V P Y A R V V D P S G L F L G P R E I R S A F V A A G L R P N
UniRef90_C5NWP6    A G H I P G A I S L P F N S L V D S N G F L K S R A S L E K Y V T D K G L D K N


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lupas_14
lupas_28
jnet
conf               6 7 7 7 5 4 6 7 7 6 4 3 1 1   1 1 1 1 2 1 4 6 6 7 7 4 6 8 9 9 9 9 8 7 4 1 1 5 7 8 8 7
sol25                B B B B B B B B B B B         B B       B B B B       B               B
sol5                                               B B
sol0
jhmm
jpssm
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UniRef90_D2Z6D1

UniRef90_W0JHM3   K P T I S Y C Q S G H L S S V F W F I A

UniRef90_R1D909   E D A R R R R H L G D D A T L R A D A A R L   S L Y D A S L S E W A V

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sol25   B B B B B B B B B B B B B B B B B B B B B   B   B B B B B B B B B B B B

sol5   B B B B B B B B B B B B B B B   B B B   B B B B B

sol0   B B B B B B B B B   B

jhmm

jpssm

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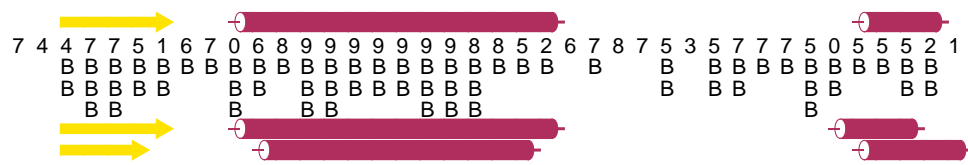
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UniRef90_C5NWP6   V G

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jnet
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