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                        1          10            20          30          40
QUERY                   Q E L K G K Y M K T P T G Y L M V L R H G D N V L Q N L E Q L A R D E H I P S A
UniRef90_R7LWK5             L N Y E F K K I K D T Y I L R L N K G A E I I Q S I K D F C N E N N I K T G
UniRef90_M7T233                M R Y K F G N K F I V R L D R G E E I I E T L K Q F C K D M N I K S G
UniRef90_D4MXB5         E S M I M E Y K K F N N Q Y V I R I D K G E E I C A K L K E V A Q K E N I K L A
UniRef90_R6TMW9             M D Y R K F G N T Y V V R L D P A E E I L E Q L E H F A R Q E Q V R L A
UniRef90_R5XLS8             M E Y K R F E N T I I A R L D K G E E I L C G L E K I C K A E K I K L A
UniRef90_R5RE02          K M E Y K Q F G S Q Y F I R I N P G Q E L V S T L K E F C K A K K I T L A
UniRef90_R1CR70             M N Y K F D N K Y V V R I D K G E E V V E S L K K F C K E E N I R L A
UniRef90_R7CKC2             M D Y R K F D N T Y V V R I D K D E E I L E K V E E L A L K E N I T L A
UniRef90_B1C8U1         E I K M E F R K F K E K Y I I R L N K G D E V I S S I T D L C R K E N I K L G
UniRef90_R7JP03             M E Y K R F D N V I V A R I D K D E E I S E Q L R V I A I K E N I K L A
UniRef90_D4K9B4             M E Y K R F G N K I I V R I D K D E E I L E Q V K K L A L K E N I R L A
UniRef90_R5MEU1             M D Y R K F G D T V V A R F D R G E E F T S S L Q E L C E K E N I K L A
UniRef90_R6HW46             M K Y V K T G D V L A V R L D P G E E I I E S V L K I A K D E D I R F A
UniRef90_R5Q458             M K Y K F E N T I I A R I D K G E D I V E Q V K N I A L K E N I K L A
UniRef90_K8E9W9             M E Y K R F G S K L V V R L D K G E E I I T S L Q T L C R Q E G I R L A
UniRef90_R6GXV2             M D Y R R F K D T I Y L R L D P G E E I I E Q I E K V A K K E N I Q L A
UniRef90_J1H4X0             M E Y K R F K D S I I A R I D P G E E I L A S I R E I A L K E E I K L A
UniRef90_R6ICY7             M K Y K R F G N T I V A R I D R G E E I L D K I R E L A L S E N I K L A
UniRef90_A9BES3             M D F A K F G S K Y I V R L D K G E E I V S T L K E F C S K N S I K L G
UniRef90_R5HJW7         Q T A G Y E F K K F G S K F F I R I N K G E E I V S T L K T F C I K N N V K L G
UniRef90_G9RZB0             M E Y R R F D K T I I V R L D K G E E I L E Q V K E L A L K E R I K L A
UniRef90_R6P413             M E Y N R F G N T I V A R L D R G E E I L D R L K A I A L A E D I K L A
UniRef90_A9KJT2             M D Y R R F Q N H Y V I R L D R G E D I V A K L K E L A T T E Q I K L A
UniRef90_R6SQP2             M E Y R R F G D T I L A R I D K G E E I L T Q L R L I A E T E H I R L A
UniRef90_R7F5L7             M E Y K K F N Q V I V A R I D K G E E I L T E I E H I A K L E K I K L A
UniRef90_R6RTH4             M E Y R R F E N T V I V R M D R N E D L F A E L K K V A L K E N I K L A
UniRef90_F6B6Y1             M E F R K F G G Q K Y V L R L D K G E E V V T T L K N F C R Q N G I K L G
UniRef90_R6N8A0             M E Y R K F Q N K I I V R M D K G E E I L E K V R E V A L K E E I K L G
UniRef90_F3B998             M E Y R R M N N V I I A R I D K G E E I L E K I K E L A L A E N I K L A
UniRef90_M1ZFP2             M E F K R F G S K Y V I R L E K G E E I V E S I K T L C E R E G I K L G
UniRef90_UPI00047DD79A      M I Y K V F G D T I V M K L E G E E I I S E I T E L C K K E K A I S A G
UniRef90_A0PY01             M N Y S K R G N T W V I V L E K G E K I T E S I K K F C S E T G I K A G
UniRef90_R5XY37             M H Y R K N G D T I S V R L S I G E D I I K S L L E L C E K E K I E F A
UniRef90_UPI0003F99DC7      M D F K K I N N T W I L R I D K G E N I V S S I K S F C K D N S I K L G
UniRef90_R5D945             M E Y K R F G S R M V L R I D R G E E V L T Q L H R A A E Q E G I K L A
UniRef90_R5AYX5             M E Y R R F G N T I V A R I D R G E E V L E Q V A A I A Q A E Q I K L A
UniRef90_C7NZY7         M D Y R E V E T T R E Y V C R L E T G R D W R A Q I E D F A D E Q G I D A A
UniRef90_R5C0V0             M E Y R R F E N T I V L R L D P E E E V C E K L T E V A A K E E I Q L A
UniRef90_R5PV34             M D Y R K H G D T Y I V R L D V G D E I C A S M T A L A K E K K I A L A
UniRef90_U2QE51             M E Y R K F G D A Y I V R L D R D E E I L A Q L K I F A E K E Q V K L A
UniRef90_UPI00046F645C      M T Y K R F G N T Y I I S I E K G E E V V E S L K R F C Q E E N V K L G
UniRef90_S7VPJ2            Y T Y K Q I G N K Y V V S I Q N H A E I T K A I T A F V K E Q D I K A G
UniRef90_R9BUV6             M D Y R V F D D S I L V L R L E K G E E V I E S I K S L C E K E N I E L G
UniRef90_R6QY64             M E Y R K F G K Q Y V L R L E K G E E I V S S I K D L C V K E N I K L G
UniRef90_D6DEV6             M E Y R K F G D K Y V V R L D K G E E I V Y S L L K L C A W K D I K V A
UniRef90_B0PDQ5             M Q Y K K F G D T Y A V R L E K G E E V V A A I K G L C E K E Q I R L G
UniRef90_Q4L4B6             M K Y N K D G Q T F L L V L D K G E D I V E V L T Q F A M E Q E M K F G
UniRef90_D4LLT5             M E Y R R F G N T I Y L R L D P K E E I L E E I G K V A E K E N I K L A
UniRef90_B2A706         M K V K E F K Q G R T F M G R L P K G E D L L T S I E A I A K E K E I K V A
UniRef90_G4D2U4             M E Y R K F G T R Y I V R M D K G E E I I S K L K E F V I K E Q I D L G
UniRef90_R5Z429             M E Y K R F E N A I L V R M D A Q E D I V E Q V K K K A L T E H I T L A
UniRef90_R5MUG6             M E Y K R F N N T I V A R I D K D E E I H N I I A I K K E N I K L A
UniRef90_W7DTV8            Y S Y K Q F G D Q Y V V S L K N H V E I S K A L T E F C N D Q H I R A G
UniRef90_U1Q9W2         G M Y Y R E V E S A G E Y M A R L E T G A D W R E E I E Q L A R D E E I E A A
UniRef90_UPI00047AECAB      M E F K Q F G N K Y I L R L D K S E E I V A T L K K F C Q D Q N I T L G
UniRef90_UPI0003775747    M F P V S V N R G R T L I G R L A K G E D L L D A L N R I C Q E E N I R L G
UniRef90_D4YHG6             M D Y R R F G D V L V V R L D R G D E I I T T L A E L A K R E K I S L A
UniRef90_W0K6Z8         M N V R E V S G G R E F V A R L D H G A D W R E E L E S L A V E E G I D A A
UniRef90_C9KP19             M E Y K N I D S Q H I L R L D P N D E I V T S L M Q V A K E E H I A L A
UniRef90_R6BI45             M E Y K R F G D R Y V V R L E K G E E I V E S L T K I C D R E K I T L A
UniRef90_Q8RCX2         M G Y K E V T P K R R L M G R F P H G S D L L Q E I N K V I T E E N I L S G
UniRef90_UPI0003B3E12B      M E S K Q F G T R I L V R L D P G D E V V A S V M R A C E E Y G V K L G
UniRef90_D7GPI4             M E Y R R F G N T I V A R I D K D E D V L E K M K R I A M L E D V K L A
UniRef90_M1Y659         M D Y R H V E G G R E Y V G R L E H G G D W R G Q I E A F A E E E G I D A A
UniRef90_R5BIN5           Y R F K Q D G D R F V V S I N N H Q E L M E A V A A F C R E Q G I M A G
UniRef90_R5KKP2             M E Y K R F E N T V F A R I D K G E E I V E T L K T I C E K E D I T L A
UniRef90_R6DW94        Q E M K Y E Y K Q A G R Q Y I V S I S N G E E L M N A L T A F C Q E R N V T L G
UniRef90_K2B4Y1             M K S K K F G D K I V V R I D K G E D V L S I L K K V C E D N S I R A G
UniRef90_A0A015U2J0       Y T Y K Q I G N K Y I L S V S T G E E I V K A L N L F C E E R K I K S G
UniRef90_F4XAA6             M E Y R K F D Q G Y V L R L D P G E E V V S C L T R L V E Q E Q V Q L G
UniRef90_M0D3V3         M D Y L E V E G A R E F V A R L E H G G D W R A Q I E A F A A D E G V D A A
UniRef90_R6CPQ6             M E Y K K F G N T V V V R M D K D E E I V E Q V K Q V A L K E N I K L A
UniRef90_X1J7Y8             M E Y R K F G N K W I V R I D K G E E I V E T L K Q F C K E N K I K L G
UniRef90_D1C235         M K A Q L I Q E G K T Y A V I F D S G D E V F E G L T E F A R E Q G L T A A
UniRef90_Q026M0             M K S K K L N S G T V L V F D R G D E V V S T L T K F A K E N R V A A A
UniRef90_C7HWS6        K G L Y M I Y K R F D D K L V I R L K K G D K L V E S V R K I L E K E N V K A G
UniRef90_Q18ER4           M H Y R E V D T T Q E F L L R L E T G A D W R T E I E E F A E L N I D A A
UniRef90_M0IIC5         M N A R T V T V S D E Y V A R L E H G A D W R E E I E E F C A R K D I E S A
UniRef90_W3AP54             M D Y R V F G N Q I V L R I D R G E E V M E T I V K L C E K E K I S L G
UniRef90_U2DUI9             M I Y K L Y G D T Y A V R L E R G E E V V A S I A E L C E K E G I R A G
UniRef90_V1DCE8             M D Y R R I D N T I I G R I D T G D S L A K A I E E I A K K E N V K T A
UniRef90_L0K9N6               R E Y N V T N I Y Q G R L E T G D D I L A E L T K L V K E K G I E A G
UniRef90_F0R2X4        Q D M Y T Y K Q I G N K Y V V S I Q N R A E I V K A L N A F C E E R G I Q S G
UniRef90_A6SZE8            M H S K V I N D E K T Y V L L E T G E E V V S Q I Q R F A K E N K L T A S
UniRef90_Q895R2        K G I I M D Y K K Y G D K Y I L R L D R G D E I I V L C K K E D I K G A
UniRef90_M0MTY4         M D Y R E L D G G R E F V A G L D H G A D W R T E I E A L A T D A G V D A G
UniRef90_R7PJR0             M E Y K R F G Q K I L L R L N P G E E V A E C I R E V C R T E K V A L G
UniRef90_K5Z342                   R V F S I V L K T G E D I M E A L N A F V R E E Q V A A A
UniRef90_C5QQ62             M K Y Q T E G N T I V L V L E K G E D I I G S V T K I A Q Q Y N G K F G
UniRef90_O30132          M K V F E F E V G K G F L L R L K G D L V R Q I L E F I E K E D I H A A
UniRef90_E4RLN6         M K K K L K Q I K N T Y F L R L Q K G D D L L K S L T E I V K E N D I K A
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                        50            60            70          80
QUERY                   S F V G I  G F M S E A T F G F Y D F G R K Q F D P K T Y R N V E M A N M T G S I
UniRef90_R7LWK5         T V Q G I  G A V N S A T F G F F N P E N K K Y Q E R T F D P R E I T S L L G N I
UniRef90_M7T233         S I T G I  G A T N K A T V G L F D V E T K K Y H S K E G N F E I A P L Y G N I
UniRef90_D4MXB5         Y L T G I  G A A G K V T A G V F D T K E K V F K G H T W E D L E I V S I G G N I
UniRef90_R6TMW9         A V Q A L  G A V K E F T V G V F K T D E K K Y Y A N H F S G F E I V S L T G T I
UniRef90_R5XLS8         S I A A L  G A V N D F T V G V F N T D E K K Y Y S N S F S G F E I V S L T G T V
UniRef90_R5RE02         T V S G I  G S L K S V T L G L F F N P E S K K Y D Q K T F E Y M E M A G L T G T I
UniRef90_R1CR70         S V T A I  G A A D K I I L G L F K S D E K K Y Y S K E Y E D Y E I T G L N G N I
UniRef90_R7CKC2         H V S A L  G A V K E F T I G V F K T D T K Q Y I A N D F G C Y E I V S L T G T I
UniRef90_B1C8U1         S F V G L  G A A S K A T I G L Y D T E N K L Y H Q T T M E P M E I I T S L V G N I
UniRef90_R7JP03         S V Q A L  G A N D F T V G V Y K T D E K K Y Y S N S F Q G Y E I I T S L T G T I
UniRef90_D4K9B4         A V Q A L  G A T N S F T V G V Y N V V E K Q Y Y A N S F S G F E I V S L T G T V
UniRef90_R5MEU1         S V S A I  G A L N A F T A G V Y M V D E K R Y V K N E F K G F E I V S L T G T V
UniRef90_R6HW46         E I S A I  G A V G R A V F G L Y D L E E Q K Y H S L T F Q P L E L V S L N G N L
UniRef90_R5Q458         S I Q A L  G A N D F T V G V F K T K E K K Y Y A N E F G D Y E I V S L T G T I
UniRef90_K8E9W9         A V T G I  G A V K Q A V V G L F A T S G K T Y H P R E F G D M E I A G L Q G N I
UniRef90_R6GXV2         Q I N G L  G A L N D F T T G V F D T V E K K F H P I H F E G Y E I V S L T G T V
UniRef90_J1H4X0         S V S G L  G A V N S F T V G V F K T A E K E Y K A N E F N G Y E I V S L T G T I
UniRef90_R6ICY7         S V S A L  G A N D F T V G V F N T A E K K Y Y S N E F K G F E I V S L T G T I
UniRef90_A9BES3         T V Y G L  G S T N D I T I G L F N T H E K K Y F S K E F G D F E I L N L T G N I
UniRef90_R5HJW7         T I Q G I  G A I N S A T F G F F N P E T K H Y Q E K T I D P M E I I T S L T G N I
UniRef90_G9RZB0         S V Q A L  G A V D R F T V G V F K T D D K K Y L A N D F S G F E I V S L T G T I
UniRef90_R6P413         G V Q A L  G A T D S F T V G V Y N V E T Q Q Y K A N E F S G F E I V S L T G T V
UniRef90_A9KJT2         T L S G L  G A C G K V T A G L F D T S Q K V Y K S Y T F E D L E V V S L G G T I
UniRef90_R6SQP2         H V S A L  G A N D F T V G A L N T D A K A Y V S N R F G D Y E I V S L T G T I
UniRef90_R7F5L7         N I N A L  G A V G D F T V G V F K T K E K Q Y D S N S F G D Y E I V S L T G T I
UniRef90_R6RTH4         S I S A L  G T F S H M N V G V Y D L D Q R K F V G N D F D G F E I V S L T G T I
UniRef90_F6B6Y1         S V T G I  G A V N K A T V G L F E T A T K K Y H A K E L G D M E I I T G L V G N I
UniRef90_R6N8A0         D I S A L  G A V S E F T V G V F D T E A K E Y H A N E F K G F E I V S L T G T I
UniRef90_F3B998         S V Q A L  G A I G D F T V G V L R T E E K Q Y K S N H F G D F E I V S L T G T I
UniRef90_M1ZFP2         T I T G I  G A T D K A V V G L F E T S T K E Y H S K E L G D M E I I T S L L G N I
UniRef90_UPI00047DD79A  S V S A I  G A D N V L L G L Y K V K E K K Y F S S E Y E E M E M T S L T G N I
UniRef90_A0PY01         I V N A I  G A A K D I K I G Y F D I N T K E Y N E T N F S D Y E I I T S L T G N I
UniRef90_R5XY37         Q V N G I  G A V S R A T V G F Y D V K K G E Y M P K T F E P M E I I S L L G N M
UniRef90_UPI0003F99DC7  S I S A I  G A A T N I R I G Y F N L K T K V Y N E T L F D G Y E I I T S L L G N L
UniRef90_R5D945         A V S G L  G A V G D F T V G V F H T V E K Q Y H A H R F G D F E I V S L V G T I
UniRef90_R5AYX5         S V Q A L  G A V G E F T V G V F H T A E K Q Y H A N S F G D F E I V S L L G T I
UniRef90_C7NZY7         F F Q G L  G A V E D A E I Y F Y D Q E R Q E Y D A V T F E P L E V A A C V G N V
UniRef90_R5C0V0         T I S G L  G A V K E L T T G V F D T V T K E Y H A N Q F E G L E I V S L T G T L
UniRef90_R5PV34         E V S G I  G A V N A F T V G V Y D T A E K K Y Y A N E F S G Y E I V S L S G N I
UniRef90_U2QE51         S V T G I  G A V K D F T V G V F D S S A K A Y K S N R F Q G V E I V S L V G T I
UniRef90_UPI00046F645C  Y I T G I  G A S N K L V I G I F D T K E K V Y R S K E I G E H E I I T S L T G N V
UniRef90_S7VPJ2         T I V G L  G A V N E A T L R F F D P A T K E F V D K T F E Q M E I I T N L T G N I
UniRef90_R9BUV6         S I S G L  G A S N H V V V G L F K I D E K K Y Y S N T Y E D F E I I T N L T G N I
UniRef90_R6QY64         S L S G I  G A V N K V T A G L F K T G E K K Y Y S R T Y E D M E I V S L G G N V
UniRef90_D6DEV6         Q V T G I  G A V G E V T A G L F D T E K K E F I S H T W G D M E I I T A L T G N I
UniRef90_B0PDQ5         T V T G L  G A A D R I V I G L F N T V E K K Y Y S T T Y E P M E M T A L C G N V
UniRef90_Q4L4B6         S V S G I  G A C D N V T L I F Y N L D T Q K Y E S R E V E A L L E L T S L L G N I
UniRef90_D4LLT5         Q V T G L  G A T F T A G V Y N T V T K E Y K I I Q F Q G Y E I V S L T G T V
UniRef90_B2A706         R V E L I  G V V E N A V V G F F Q H D K K Q Y K P I I D E H M E I V N A V G N I
UniRef90_G4D2U4         Y I T G L  G A V T D V E I G L F N T S E K K Y Y S K K F E D Y E I T S L H G N I
UniRef90_R5Z429         S V Q A L  G A L K E F T V G V Y D V A N K A Y H A N S F S G Y E I V S L T G T I
UniRef90_R5MUG6         S V L A I  G A V S S F E A G V Y K L S E K K Y Y K N E F G D F E I I S L M G N I
UniRef90_W7DTV8         T I T G I  G A V K E A T L R F F N P V T K V Y K D K V F E Q L E I S N L T G N I
UniRef90_U1Q9W2         W F N A M G A V Q D A E I W F Y D Q E T T E Y R S V T F E E L E M A A C V G N I
UniRef90_UPI00047AECAB  W V K G I  G A V N R V K I G L F E T A I K A Y H S T I L E D F E I I T S L L G N I
UniRef90_UPI0003775747  K I Q A I  G A L I K A S V G Y Y H Q D T Q K Y S Q L T F E H L E L I S L Q G N I
UniRef90_D4YHG6         T V Q G I  G A C D Q V K Y S L Y N V A E R S Y S P N E L E L E L T S L N G N M
UniRef90_W0K6Z8         W F S G M G A V Q D A E L W Y Y D Q D D F E Y K A A R Y E P L E V A A C V G N I
UniRef90_C9KP19         M V Q G L  G A V K K V V M G V Y N V P E Q H Y K A N T L E G F E M L S L T G T I
UniRef90_R6BI45         T I E G I  G A A D H A V I G L Y N V G E Q V Y H K T E L G P M E I I T A L T G N V
UniRef90_Q8RCX2         E V R I I  G A V T K A V F G Y Y D S E S K N Y I Y I S D E H M E I L N C I G N I
UniRef90_UPI0003B3E12B  M V S G I  G A V G R A V I G L F R T D T K V Y I K S E L K G F E I V S L L G N V
UniRef90_D7GPI4         S V S A L  G T F S S M T V G I Y D L E K R Q F M G N D F E G F E I V S F T G T I
UniRef90_M1Y659         F F F G L  G A V Q D A T V L Y Y D Q D D Q E Y Y P E E F E P L E V T T A L G N I
UniRef90_R5BIN5         E V S G I  G A V S N A T L R F L N P A T K A Y V D K T F E Q M E I I S S L A G N I
UniRef90_R5KKP2         Y V N A I  G A V G V F K T A E K Q Y D S N R F G D F E I V S L S G S V
UniRef90_R6DW94         T I T G I  G A I D E M T L R F F N P T T K Q Y E D R K F E Q M E I A N L T G N V
UniRef90_K2B4Y1         T V Q G I  G A L S K A E I G L I D L K T K Q Y K T R K L E G Y E I T S L L G N I
UniRef90_A0A015U2J0     N I T G L  G A N E V T L R F F N P D T K K Y Y D T K F E I S N L T G N I
UniRef90_F4XAA6         C V S A L  G A A N D V T I G I F D T T E K Q Y H A R R C G Q F E I S A L V G N V
UniRef90_M0D3V3         F F F G L  G A V Q D A E I L Y Y D Q D D E E Y Y P E R F E P L E M A A C V G N V
UniRef90_R6CPQ6         Q V S A L  G A T N D F E V G L F D T Q K M Q Y L P N H F G D H E I V S L T G T I
UniRef90_X1J7Y8         T L S G I  G A T D R V T I G L F N T K N K Q Y H S Q E L G D Y E I T N L S G N I
UniRef90_D1C235         H F T G V G A F S D V V L G F F D L D K K D Y E Q I P I E Q V E V I S L V G D I
UniRef90_Q026M0         H F T A I  G A F S D A V I G Y F D L E K K D Y L K N V N E Q V E V V S L I G D I
UniRef90_C7HWS6         F L T G I  G A T D N L D I G L F D P E T K D Y N I K K Y E D L E I A N L C G N I
UniRef90_Q18ER4         W F N A M G A V Q D A E V W F Y D H T E T E Y N S V N F E P L E I A A A C I G N I
UniRef90_M0IIC5         W F S A M G A V Q D A E L W Y Y D Q D A Y G S V T F E P L E V A T C V G N V
UniRef90_W3AP54         S I V G L  G A A D H L V M G L Y D V E K Q Q F S E I K L D P L E I I T S I V G N I
UniRef90_U2DUI9         T V Q G L  G A A D D A T V G L Y S I A E K K Y Y P T E L G D M E I I T A L I G N I
UniRef90_V1DCE8         F I T G V G A A K H L D I G C Y Q F S K Q V Y V P Y S L D D F E I I T S L I G N I
UniRef90_L0K9N6         K V S A I  G A V K Q A T L S Y Y D Q E K K Y N K E F Q P L E I I S F L G N I
UniRef90_F0R2X4         T L Y G I  G A I D E L I L R F F N P Q T K Q Y V D K T F E Q M E I A N L T G N I
UniRef90_A6SZE8         R F T A I  G A F S S A T L G Y F D W N Q K D Y E K I P M E Q V E V L S L I G D I
UniRef90_Q895R2         K V S G I  G A T N D V V I G I Y E L E N K K Y N E K Q F G D F E I I T S L V G N V
UniRef90_M0MTY4         F F V A L  G A V Q D V E L F F Y D Q D R Q E Y D S V T F E P L E V A A C V G N I
UniRef90_R7PJR0         E V S G L  G A A S E A E L G V F D T E K K Y Y K S F G N Y E I I T G S I
UniRef90_K5Z342         Q I T A I  G A F S A A M L G Y Y D W A S K S Y L K P V D E Q V E V A A L L G D V
UniRef90_C5QQ62         S V S G I  G A C D A V T L N F Y N L N T Q E Y E A K D I E P L E I I S L L G N I
UniRef90_O30132         H V S A I  G A V R S A V I G V Y K K E L E I I S L S G N V
UniRef90_E4RLN6         N I T A L  G A V S K V V F S Y Y D Q Q Q R E Y F S I E K G N F E I L N L N G N V
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                           90             100           110          120
QUERY               A W K E G K P S I H A H G T V T D G T F Q G A G G H L L G L T V G T G S C E I T
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UniRef90_D4MXB5     N T M N G E T Y T H F H I S V A D E N T I G G H L T E A V I S G T G E L V
UniRef90_R6TMW9     D T M D G D F Y C H L H M S A G D D Q G R V F G G H L N R A V I S A T C E M I
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UniRef90_R5RE02     M M K D G E P V L H T V V A G D N Y K A L A G H M A A A Q V S L T A E I V
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UniRef90_B1C8U1     S T F D D E V Y L H V H I N L C N K D M Q I F G G H L N E C I I S A T S E I T
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UniRef90_D4K9B4     N T M N G E F Y T H L H M S A G N D K G E V F G G H L N R A V V S A T C E M V
UniRef90_R5MEU1     N T K G G K Y Y S H L H I S A G D E S G R V F G G H L N E A H I S A T A E V V
UniRef90_R6HW46     S R K D G E P Y L H L H A A F A D E K G A V I G G H L N E A V I S A T C E M F
UniRef90_R5Q458     N T M N G E Y Y S H M H L S A G N D Q G E V F G G H L N K A I V S A T C E M V
UniRef90_K8E9W9     S E M N G Q V Y L H V T L T D S S Y Q A F G G H L T S A T V S A T A E I I
UniRef90_R6GXV2     T R Q D G E V Y L H L H M A A G D K D G H V F G G H L S M A Y V S A T A E I Q
UniRef90_J1H4X0     N T M K D E F Y C H L H M S A G G E D G N V V G G H L N R A V V S A T C E L V
UniRef90_R6ICY7     N T M D G Q F Y T H I H M S A G N D K G E V F G G H L N R A M V S A T C E M V
UniRef90_A9BES3     S T M N G E T Y L H L H V S T S D S D L H S Y G G H L N S A I V S G T A E I V
UniRef90_R5HJW7     T T K D N E T Y L H I H M N A A G N D Y N T A G G H L V R A V V S L T A E I A
UniRef90_G9RZB0     N T M D G A F Y C H L H M S A G N D K G E V F G G H L N R A V V S A T C E M V
UniRef90_R6P413     N T M N G E Y Y S H L H M S A G N E R G E V F G G H L N R A V I S A T C E M I
UniRef90_A9KJT2     T T M N G D I Y T H L H I S V S D E N G N V V G G H L N E A I I S G T C E M V
UniRef90_R6SQP2     T T M N G A Y Y S H I H M S A G N E T G T V S G G H L N S A T V S A T C E M V
UniRef90_R7F5L7     N T M D G E F Y S H L H M S A G D E T G T V F G G H L N R A I V S A T C E M V
UniRef90_R6RTH4     N T M D G E Y Y C H L H T A A G D K N G N V Y G G H L S A G T V G A T L E M V
UniRef90_F6B6Y1     S Q M N G E V Y L H L H I T L V D S S H N A V G G H L N S A T I S A T G E F I
UniRef90_R6N8A0     N T M N D E F Y C H L H M S A G N K G Q V F G G H L N R A I I S A T C E M V
UniRef90_F3B998     N T M D D Q F Y T H I H L S A G N E K G E V F G G H L N R A V V S A T C E M I
UniRef90_M1ZFP2     S Q M E G E V Y L H L H I T L A D H N Y N V Y G G H L T S A V I S A T G E I I
UniRef90_UPI00047DD79A  S V K D N E P Y L H F H A N F G R E D G S V V G G H L N K A V I S A T C E I I
UniRef90_A0PY01     S T K D G Q P Y T H I H I N F T G A D C V G Y G G H F I E G T I T V T C E M F
UniRef90_R5XY37     T R K D G K P Y L H L H A A F S G E D C N V V G G H L N E A I I G V T A E I F
UniRef90_UPI0003F99DC7  T T K D N E P Y L H L H I N F S G E D C I T Y G G H F V E G E V T A V C E L V
UniRef90_R5D945     T T K D G E F Y A H L H M S A G D T E G R V L G G H L N E A V I S A T C E L V
UniRef90_R5AYX5     N T M D G A F Y T H L H M S A G N E K G E V F G G H L N R A V I S A T C E M V
UniRef90_C7NZY7     S L L D G E P F A H T H A V L S R P D G S A L A G H L N S A T V F A G E L H
UniRef90_R5C0V0     T R K E G K V Y L H A H L S A G D S K G N V Y G G H L N R A V V S A T A E I I
UniRef90_R5PV34     T Q K D G K P Y L H F S A G D A E G R V F G G H L N S A V I S A T A E I F
UniRef90_U2QE51     N T M N D A F Y C H L H M C A A D Q E G H A F G G H L N E A V I S A T C E L V
UniRef90_UPI00046F645C  T T M N G E I Y L H I H V T L A N S E F N A V G G H L N S A V V S G V C E V F
UniRef90_S7VPJ2     S Q Q N D K H Y I H M H V T L G R N D Y T A L A G H L L T A K I N G A A E F V
UniRef90_R9BUV6     S R M N N E V Y L H I H G T F A N F E G K C I G G H L N K A V I S A T A E I I
UniRef90_R6QY64     S R M N G E T Y L H F H I S V A N E A G E V R G G H L T E A Y I S A T G E L V
UniRef90_D6DEV6     T T K E Q K P Y E H I T V A G R D G M A R G G H L K R A V V S A T C E I L F
UniRef90_B0PDQ5     T E M D G Q I Y L H F H A N F G R A G G A V I G G H L N E A H I S A T G E I F
UniRef90_Q4L4B6     S H I D D K P F A H L H G T F G T R D F Q T L S G H L T K A V V S A T A E I Q
UniRef90_D4LLT5     T R K D G D V Y L H L H I A A G D E E G L V H G G H L N R A V I S A T A E I Q
UniRef90_B2A706     S Q K D G E I K A H I H I T L G D Q D N T Y S G H L M E G S N I F A G E I V
UniRef90_G4D2U4     S T M H G E T Y L H L H M A I S D K D Q N T F G G H L N S A T I C V T G E L I
UniRef90_R5Z429     D T M N G E Y Y S H L H L S A A D K G N T V G G H L N K A I I S A T C E M V
UniRef90_R5MUG6     N T K N D E V Y T H L H I T C S N V K G Q T F G G H L N K A F V S T T C E M I
UniRef90_W7DTV8     A Q K D G K L Y L H L H I L G R A D Y S A L A G H L L T A V I N G A G E F V
UniRef90_U1Q9W2     A R L D G E V F A H T H A V L S R E S G Q A L A G H L N G G T V F A G E V Y
UniRef90_UPI00047AECAB  S T M K G E V Y L H L H I N I S D N E Y K T Y G G H L N E G V I S A T G E F L
UniRef90_UPI0003775747  S V K D D Q P F V H A H V A L M K Q D G Q M F G G H L M P G C Q V F A C E Y I
UniRef90_D4YHG6     S M M D G E Q Y N H A T F G R A D G S V V G G H L N E A I I S G T G E I F
UniRef90_W0K6Z8     S E L D D A P F A H T H A T L S R R S G Q A L A G H L D R A T V F A G E V Y
UniRef90_C9KP19     D T M A G K P Y S H F H I A V G D E Q G A A A H G G H L N E A I I S A T A E I V
UniRef90_R6BI45     S T M D G K T Y L H I H I N L C D E K M N V K G G H L N E C R I S A T A E I T
UniRef90_Q8RCX2     S V K D G K P F P H V H I T L A D K N G A Y G G H L M E G T K V F A A E F V I
UniRef90_UPI0003B3E12B  S T M D G K T Y L H H A N L A D E K H Q C F G G H L N E A D V S A T A E I W
UniRef90_D7GPI4     N T M D G K Y Y S H I H A A A A D A K G N V Y G G H L S R G I I G A T C E M V
UniRef90_M1Y659     S H L D G G L F A H T H A T F S R A D G T M L G G H L D S G T V F A G E V Y
UniRef90_R5BIN5     S E K D G N V Y L H L H A N L G R A D Y T V V G G H L L T A T I N G A C E V F
UniRef90_R5KKP2     T Q M N G A H Y S H L H M S A G D E N G R H V F G G H L N K A V V S A T C E M V
UniRef90_R6DW94     S T L N G K I Y L H V H V T L G R A D F T A L A G H L L S A R I H G A G E F I
UniRef90_K2B4Y1     T I M N D E V R L H I H I T L S D D D C N T M G G H L F M G E V G V T C E V I
UniRef90_A0A015U2J0 S T M N G K P Y L H V H I T V G G A D Y S S R A G H L L S A V L N G A G E F V
UniRef90_F4XAA6     T R K D G E P Y L H L H I T F G N P T G K V Y A G H L T S C T I S A T L E L F
UniRef90_M0D3V3     S H L D G E P F A H T H A V L S R E D G T T L A G H L D S A T V F A G E L Y
UniRef90_R6CPQ6     N T M N G E Y Y S H L H M S A A G R D G S V V G G H L K R A M I S V T C E M V
UniRef90_X1J7Y8     S T M N G E I Y L H I H I S L A D S K Y N T Y G G H L N S A V I S G T G E I F
UniRef90_D1C235     A L D G G G P K V H A H V V V G K R D G T A Y G G H L L G G H R P T L E V I
UniRef90_Q026M0     A L D K G E P K V H A H V V V G K R N G S A M G G H L L E A H V R P T L E L V
UniRef90_C7HWS6     S N K D G K L Y T H F H I T C G D I A G E A I A G H L N E A I I S L T A E I F
UniRef90_Q18ER4     S M L D D E R F A H T H A V L S R P S G Q A L A G H L N A G T V F A G E V Y
UniRef90_M0IIC5     A L L D G E P F A H T H A V L S R R S G Q S L A G H L D S A T V F A G E L Y
UniRef90_W3AP54     T E M D G K P Y L H V H I N A S D A E G H T Y G G H L K A V R I S G T S E I F
UniRef90_U2DUI9     S R Q E G A P Y L H L H I T L A K A G G Q A V G G H L N W A V I S A T S E L F
UniRef90_V1DCE8     T T K D G E F Y L H L H I T A A D D D C K M Y G G H F N D A I I S G T C E L N
UniRef90_L0K9N6     S L K D G E P I I H A H I S L A G D E D G L Y G G H L A S E T I V F A C E F I
UniRef90_F0R2X4     S Q M D G K T Y L H L H I T V G R S D Y S A L A G H L L S A T L N G A G E F V
UniRef90_A6SZE8     A L Q D G E S K I H A H V V C G K R D G S A H G G H L L E A Y V R P T L E I T
UniRef90_Q895R2     S T Y K D N L I P H L H I L N L G D K D F N V K G G H L Q S A I S V T G E I F
UniRef90_M0MTY4     S W L D G A R F A H T H A V C S R A D G S T V L A G H L D S G T V F A G E V Y
UniRef90_R7PJR0     T Q Q G E N P Y L H M V I G N P V G E C H G G H L N R A V I S A T A E I F
UniRef90_K5Z342     A L E E G A P V L H C V L A R R D G S T K A G H L L S G T V R P T L E I V
UniRef90_C5QQ62     S H I D D K P F A H L H A T F G T Q Q Y E T L S G H L T K A I V S A T A E I I
UniRef90_O30132     S M K D S K P F C H L V L L G K D G E V V G G H L F S A E V F A C E I V F
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                          130              140
QUERY                 V T V P Q R L D R F V D P E I Q A N V L G L P
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UniRef90_D4MXB5       L T E I E G T V D R K F D E E I G L N L F E F
UniRef90_R6TMW9       V T L L P G T V D R A L S E E V G L N L W K F
UniRef90_R5XLS8       I T V I N G S V D R S F S D S V G L N L F D F
UniRef90_R5RE02       I E T V K G K I E K T Y D K N T G L N L M D F
UniRef90_R1CR70       V D V L A G E A D R I Y D E E S G L N V F K L
UniRef90_R7CKC2       I T V I D G T V D R Y F D E E I G L N L F Q F
UniRef90_B1C8U1       L L N I E G K V E R E Y D E E T G L N L Y K F
UniRef90_R7JP03       I T V I D G R V D R V H D E E T G L N I F K F
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UniRef90_R5MEU1       I R M I N G E V D R F Y D D A T G L N L F K F
UniRef90_R6HW46       I K I F D I D M S R R I S E Q T G L N I F D I
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UniRef90_K8E9W9       I D V I D G R L D R A F S E E I G L N L F K F
UniRef90_R6GXV2       I Q I S D G V I D R K Y D K K I G L N L F D F
UniRef90_J1H4X0       I R I I D G R V D R S F S E K V G L N L F D F
UniRef90_R6ICY7       V N V I D G E I D R Y A D P D V G L N L F K L
UniRef90_A9BES3       V E S I E G A V E R K F D S E V G L N Y N F
UniRef90_R5HJW7       I E Q L S G T V E R T F C E K T G L N L M D F
UniRef90_G9RZB0       V N I L E G T V D R Y Y D E Q I G L N L L R F
UniRef90_R6P413       I T V I D G E V D R F R D P E T G L N L F K F
UniRef90_A9KJT2       L T V I D G V V E R E F S E E I G L N L L K F
UniRef90_R6SQP2       I R I I D G T V N R K Y D P D T G L N L F D F
UniRef90_R7F5L7       I Y I I D G E V D R K F D S D I G L N L F S F
UniRef90_R6RTH4       I T V I D G T V D R V K D P D T G L N I F K F
UniRef90_F6B6Y1       V D A I E G E V D R E F S E E I G L N L Y K F
UniRef90_R6N8A0       I T L I D G R V D R R F E K E V G L N L F Q F
UniRef90_F3B998       V Q V I D G R V D R K F D E E T G L N L F S F
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UniRef90_A0PY01       I T E I D G E L Q R I P D A E T G I N V I K L
UniRef90_R5XY37       V N I I D G K M N R R V H P V T G I N I F D I
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UniRef90_R5D945       L E I M D G T V E R R F D P E T G L N L M E F
UniRef90_R5AYX5       I T V I D G R V D R F H S E E I G L N L F Q F
UniRef90_C7NZY7       V R A F D A E L A R E H D E T T D L D L W G L
UniRef90_R5C0V0       I Q V I P G S V G R K F S D S V G L N L F E F
UniRef90_R5PV34       V R T L C G A V G R R F D G G I G L N L L D F
UniRef90_U2QE51       V T C L P G R T D R V F S D E V G L N L Y A F
UniRef90_UPI00046F645C  V H K V E G E V D R E F D Q D V G L N V L K L
UniRef90_S7VPJ2       I E S F D G T L N R Y Y D E D T G L N L Y D F
UniRef90_R9BUV6       I T K I N G S M G R K F N E N I G L N L I E F
UniRef90_R6QY64       L T E I E G T V D R E Y S G G I G L N L F K F
UniRef90_D6DEV6       L T A A D G T V E R E M S D E I G L N L M K F
UniRef90_B0PDQ5       V R R L D G E V G R T F N E E I G L N L M K F
UniRef90_Q4L4B6       I Q M T N L D V N R T H D E E T G L N L L
UniRef90_D4LLT5       I Q M I D G E I G R E F S E E I G L N L F K F
UniRef90_B2A706       M Q E L V G E L H R K Y D E S T G I S L W D I
UniRef90_G4D2U4       V E V L S G K I D R E F S E E I G I N V I K F
UniRef90_R5Z429       I T P I K G Q I D R Y D D K T G L N L W K F
UniRef90_R5MUG6       I N I I D G C V D R F Y D E E I G V N L F K F
UniRef90_W7DTV8       V T K Y N G T L P R Y Y D Q N I G L N F Y Q F K
UniRef90_U1Q9W2       L R A F E E P L V R E Y D D V T D L D L W
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UniRef90_UPI0003775747  I N E F E A E F I R Q Y D P E T G L F L W
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UniRef90_W0K6Z8       V R E F D T E L V R E Y D E A T D L D L W
UniRef90_C9KP19       I T K L A G S V D R R K S E E T G L N I W Q F
UniRef90_R6BI45       I R T V N G K V E R F Y D K D V G L N L Y Q F P
UniRef90_Q8RCX2       V D Y G D S K L E R V Y D E T T G L Q L W D I
UniRef90_UPI0003B3E12B  I D A V E G G I D R Y F D E K I G L N L I K F
UniRef90_D7GPI4       I T V I D G V V D R V K D E E T G L N I F N F K
UniRef90_M1Y659       V R E L D T H L E R E H D E V T D L D L W P L
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UniRef90_R5KKP2       I C I A N G A V D R R F S E E I G L N L F A F
UniRef90_R6DW94       V E D L Q D R L E R S Y S D E V G L N L Y D F
UniRef90_K2B4Y1       I T E M D A D I G R K L D A E L G V N L L D F
UniRef90_A0A015U2J0   V E D F N E D I E R T Y N P A L G L N C Y D F
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UniRef90_M0D3V3       V R E F D A A L E R E Y D E E T A L D L W P L
UniRef90_R6CPQ6       I T L I D G V V D R E F V A E L G L N Q F K F
UniRef90_X1J7Y8       I E E I E D I I E R K F N E E V G L N L L
UniRef90_D1C235       V E E A P G H L R R K P D P T T G L T L I D L P
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UniRef90_W3AP54       I T V I D G H V G R E K D S N T G L N L F K F
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UniRef90_V1DCE8       I Q V L D C V V D R K L D T S T G V N I F D F K
UniRef90_L0K9N6       I E E Y E G K F K R G Y H E T T G L P L W Q
UniRef90_F0R2X4       V E D F G T P V T R V Y V P E I G L N C Y K L
UniRef90_A6SZE8       L T E S P S Y L K R S F D P E S G L C L I D L
UniRef90_Q895R2       L E P I G A T L K E I D E D T G I K I L N F
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UniRef90_K5Z342       L T E S P A H L R K T H D P E S G L A L I D L P
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UniRef90_C5EMN2          M E Y R K F G H K L V L R L D P E E E V V Q C L T E E L C E K E D I L A
UniRef90_D6SSV1          M Q Y R Q A G E K W F I R I D R G E E V L E V L A S F C R E Q G I T L G
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UniRef90_C7PFD5              Y V K V P A G Y L M V L Q Q G D D L F A Q L E A F M L K E N I P A A
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UniRef90_U2J283          M D Y K R M K D I L V I R V D R G E E L I R N I E E V C K K E N V Q S G
UniRef90_U1FVX3          M V Y Q V D G N T I V L I L E Q G E D I I S A V T D V A R E Q N G K F G
UniRef90_U1NZC6        M D Y R R V E G A R E Y V A R L E H G R D W R G Q I E A F A A A E G I D A G
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UniRef90_K2DG65            E P D K T L I G K F S Y S D D L L E V L N K F C D E N N V K T G
UniRef90_J3CPH8            R K V D N T F I V S V K N G S G I I E S L T D F V V S Q H I Q S G
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UniRef90_C5EMN2    E V S G I  G A A S E V E L G L F D T D T K S F Q G C F R G Y E I A T L T G S V
UniRef90_D6SSV1    S I S G I  G A A G E I K L G L F E T A S K T Y Q S T E L G D F E I T A L A G N V
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UniRef90_U1FVX3    T V S G I  G A C E G V E L N F Y N L D T K T Y E K Q T F E P L E L I S L L G N I
UniRef90_U1NZC6    F F F G L  G A V Q D A E L L F Y D Q D E Q V Y E S H R F E P F E M T P A V G N I
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UniRef90_T0CBE0    M L K G I  G A L K D V E L G F Y H L D T K T Y D R K E F G D F E L L S L D G N L
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UniRef90_B9XB61    Q I T G I  G A L R E V T L G H F N L E K R D Y K R I P L E Q V E V L S L V G N I
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UniRef90_M5F1J9    S L T A I  G A F E R A T V G W F D F E E N D Y H P T I L K Q C E V L S A I G D V
UniRef90_Q1ASJ2    E V T G L  G A F S S A T L G Y F D L E K R D Y E E I P V E Q A E V L T L V G N I
UniRef90_I0KDU5    T F T G L  G F V T   I Q F G F D F K K K E Y K P K T F T D V E L L T S L T G S L
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UniRef90_I3VRR5    E I R I I  G A V K K A R F G Y F N Q S T K E Y K F I E N E H M E I L S A I G N I
UniRef90_U1Q8U1    W F T A L  G S V E D A E L W F Y D Q D D A E Y R S V T F E P L E V A G C V G N V
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UniRef90_F6CJ03    V V R A I  G A V T R A R V G F Y H Q D R R T Y T Y L E F D P H E I I G L E G N I
UniRef90_U2WDB2    I V S G I  G A A D F M D V G L Y S V E E K E Y H S V E L G E M E I T A L N G N I
UniRef90_G7ZT64    T V S G I  G A C D D V L L K F F N L T T K E Y E E R H I E P L E L T S L M G N I
UniRef90_Q8A8Q1    S I N G I  G A I G E L T L R F F N P K T K A Y D D K T F E Q M E I S N L T G N I
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UniRef90_Q39YE1          A I Q V I  G A L Q G A K L  G F Y D Q W S K S Y R E L P F K P L E I V S G L G N I
UniRef90_G5HH98          E I S G L  G A A S L V E L  G M F D T E T K G F T E A C Y Q G Y E I A S I T G S I
UniRef90_R5FT83          S V V G I  G G T S D A K I  G L Y D L D K K K Y D F R Q V N K F E I T S I V G N L
UniRef90_L8PPN4          Q V T A V  G A F S R A V V  G W F D R Q A K E Y R R I V D E Q C E V L S L L G D I
UniRef90_UPI0003767349   H L S A I  G A F S H G V I  S Y F D W E S K T Y R D I V D E Q V E V A S L S G D V
UniRef90_D7W342          E V T G I  G A V S E A T L  R F F N P A T K K Y V D K T F E Q M E V T N I S G N V
UniRef90_A0A023XAW2      S L T A I  G A F E R A T V  G W F D F E K K T Y K K I E I E Q C E V L S A I G D I
UniRef90_F8L813          F Y Q G I  G A L M D V D M  G A F D V Q K N A Y H S I P L G D Y E L I M A M G N I
UniRef90_UPI00036A7455   S V T A I  G A F Q S A T L  G F F E F A T K K Y K D I P V E Q A E V L S A I G D I
UniRef90_B6YWF0          T V S A I  G S L R N P R I  G Y F V E T E G R Y K V I E L K G Y E L V S L S G N I
UniRef90_C4XHR6          H V S L I  G A L E K A E L  G Y Y P Q D T R K Y V T H T L E G T E I L A G L G N V
UniRef90_Q3B2B4          R I E A I  G A V T G A R I  G Y Y D Q H A G T Y Y S S I H G G R E I I V S L T G N I
UniRef90_Q9UZ87          V V K A I  G S L R N P K I  A Y F V E E E G K Y K E I Q L K G Y E L I S L L G N I
UniRef90_I3ZDS3          H F T G I  G A V S G A T L  A W L D L P R K I Y H A I P V E Q V E V L A L T G D I
UniRef90_Q2RJG5          S I N F L  G A V Q K A R V  G Y Y L Q D E K R F I T L D L E P M E I L S G L G N V
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UniRef90_UPI0002DDE84D   Q L T A L  G A F R S A E L  S F F E W E T K E Y L P L P V E Q S E V A A M V G N I
UniRef90_F8E8B9          F I A G I  G S V T K A S L  A F Y N Q K E G T Y E T H V N E P M E I I V S L K G N I
UniRef90_E8X1Y2          H F T G I  G A V S G A T T  G W L D L S A K V Y R T V T K E Q V E V L S L T G D I
UniRef90_O58532          I I N G I  G T L K N P K I  G Y F L E E K K E Y K V I P L K G Y E L I S L I G N V
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UniRef90_A0B8K6          F F S V I  G A L S A N L A  Y Y D Q T E V Y R K R S F E G Y E I A S C T G N I
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UniRef90_UPI000465CAB2   S V A A I  G A F E Q A D L  G W F D L E A R T Y R P I V D E Q C E V L S L L G D V
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UniRef90_Q2JVA4          F V S A V  G S L S Q A T L  R L A D Q T E D Y L L S       E R L E I L A L S G S L
UniRef90_W4XQ37          F I S C V  G S L R K A S V  R M A D S V S       V I N V D K N H E I V S L V G T L
UniRef90_UPI000412E187   S L T A I  G A F S R A T V  G F F R I E G K N Y S K I P V E Q S E V L S A I G D I
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UniRef90_K9WAB3          F I T G V  G S L K Q A T L  R F A       S Q N Y S Q V F K Q Q F E I V S L V G T L
UniRef90_W9GJP7          Q V T A V  G A F E R A V   G W F D R E A K D Y R R N V D E Q C E V L S L L G D V
UniRef90_Q3AQB3          S F I A V  G G A D K G S V  L V V G P E D G R T S P H E L Y D V H E I C G T G T I
UniRef90_UPI0003F5B11A   S L T A I  G A F K S A M L  G F F D F A T K K Y K E I P V D Q A E V L S A I G D V
UniRef90_U2YQJ6          W F H A T  G A V E D A E L  A Y Y D Q D A F A Y E T V R Y E P L E V T S C T G T I
UniRef90_I4CCS2          S F T V I  G A V E G A V L  A Y Y D H Q E R T Y K S K E F S G M E I T S C S G N V
UniRef90_Q0YPX0          S L I A I  G G A D K G S L  V V G P D E S R S H P V T P M T H L I T G T G T I
UniRef90_F4BY08          H L N V I  G A L D Q A E I  G Y Y D Q V S H S Y Q G I Q I E P V E L A S C S G N I
UniRef90_D7ADZ6          L I Q V I  G S L E R A R L  A F Y D Q R A R R Y R E F S L D P L E I T A G L G N I
UniRef90_L0HM75          I L Q A I  G S L K N A K I  G Y Y S I E L G R Y E E I E I K G V E L L M A A G N I
UniRef90_I3RDR2          V V K A V  G T L R N P K I  G Y F L E K E K R Y K I N E L E G Y E L A S L M G N I
UniRef90_UPI000311F628   F I T A I  G S L K Q A T I  R F A N Q A T S I V L P       D K F E I L S L N G T I
UniRef90_B5IAY6          T L S A I  G S L K K A K L  G Y F D I S K G K Y E E I A V E D V E L L L A T G N V
UniRef90_UPI00037DE86F   C V T G V  G S L T T A T L  R L A N Q E G P S V Y Q G H F       E I V S L V G T L
UniRef90_A6X701          S V T A I  G A F R R A T L  G F F D L E R Q D Y H R I E L E Q C E V L S L L G D C
UniRef90_A0A021WYH4      S I T A I  G A F R V A T V  A F F E F Q T K T Y R K I P V E Q S E V L S M L G D V
UniRef90_UPI0003B79BE4   M V T G V  G S L T Q A T L  R L A N Q E N P T V Y R G H F       E I V S L V G T L
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UniRef90_A6NQM8          V V S G V  G C V S K A R V  R       D A S G V Y R L D E P L E I V S M G T L
UniRef90_K9XAA7          F I S A I  G S L K Q A T I  R F A N Q E K S T V L T       D K F E I L S L N G T L
UniRef90_R7MY98          I F S G I  G G C R S A E I  Q T F I P E T G S F E V Q E L K G M E L V S L T G N V
UniRef90_Q11W73          H Y Q G I  G D A L H V E A  G W F D Y H R K E F L V I P L D T V E I T S F T G D I
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UniRef90_C0QTR0          F F W A V  G A I R N V E L  G I F D I E E K D Y I K A I F K D Y E I V S C H G N I
UniRef90_D2RXP6          F L M G I  G A V D E V V L  G H Y D V S E Q E Y N E E R F G Q Y E V T S F L G N V
UniRef90_T0RXF9          R I H G L  G A L E E C E L  G Y Y D Y H A D I Y K T K V L E D F E L L S M E G N V
UniRef90_R6T3W6          V I S G I  G S L D G C T   F F D P Q E M P G K P G L Y G P I E L V G L N G I I
UniRef90_X1TRT2          V V S G I  G Q L K K I Q L  G Y F R E K N N Y S P E N F D A P H E L L S L T G N I
UniRef90_D4GPD1          F L T G I  G A V D A V T L  G H Y D V D D Q E Y L E L E F Q G Y E V T S F L G N V
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UniRef90_R7TTS0          F V S C C  G S V T K A T L  R F A A Q D S D S E N E I R T F E H E L L A L S G T L
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UniRef90_Q5JF66          S L K D G R P F A H L H V T I G D S E F K A F G G H L I R G E V F    V A E V Y
UniRef90_UPI0003727933   S L D G N E I F I H C H V T I S D K D M N A H G G H L L P G S I T F A G E A L I
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UniRef90_T2GFM6          S I K D G E P F I H L H L T L S R H D G S C L G G H A V A G C P I F A A E C I
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UniRef90_UPI0004212146   V S P E G P A L H V H L V L G R R D G T A L A G H L A E A R V   R P T L E L I
UniRef90_M0BJ28          S L L D G E R F A H T H A V L S R P D G E A V A G H L N A G T V F    A G E V Y
UniRef90_C6A2G7          S L K D N E P F A H I H V S L G D E E G K M F G G H L V E G E V F    V A E V V
UniRef90_E5XU81          G V S S G K P T V H T H L T V G H E D G S V T G G H L L Y A   I A S P T V E V F
UniRef90_G2M2K0          S L R N G K P F A H I H V A L G D G E G R L Y G G H L V E G E V F    V A E V F
UniRef90_Q39YE1          S L R D G R P F V H L H L S I S D E E G K V F G G H A L E G C T I F A   A E Y A
UniRef90_G5HH98          T R L D G E P Y L H V H M V I G N L D G E C H G G H M I R A   V I S A T A E I F
UniRef90_R5FT83          S R K N G E P Y V H V H V T L F N E D G L T   G G H L A S A T V   S A T A E I Y
UniRef90_L8PPN4          V I G E D G P T A H L H A V L G L S D G T T R G G H L L E G Q V W   P T L E V I
UniRef90_UPI0003767349   A L N D G T P T V H V H V V L G R R D G S A L A G H L S K G F V   R P T L E I I
UniRef90_D7W342          S E I G K L T L H L H I T L G R E D Y T A L A G H L L E A K I Q   G A A E F I I
UniRef90_A0A023XAW2      A V D D G K A S L H V H V V L G L A D G T T R G G H L L E G K V   R P T L E V I
UniRef90_F8L813          S L Y E G K P F A H T H V C L S D S K G Q T F S G H L F E A T V   A I T A E I V
UniRef90_UPI00036A7455   A I D D G K S S L H M H V V L G F E D G S T K G G H F I R G T V   H P T L E V V
UniRef90_B6YWF0          S L K D G E P F T H I H V A L G D S E G R L W G G H L V E G E V F    V A E V Y
UniRef90_C4XHR6          S L K D G Q P I I H L H L T L L K G D F T I T G G H A M P G N I I F A   G E A C
UniRef90_Q3B2B4          S L S E G N P M I H A H I A L A D R E G R M N G G H L A P G T T V F A   C E Y L
UniRef90_Q9UZ87          S L K D G K P F L H A H V S L G N D E G I V F G G H L V E G E V F    V A E V Y
UniRef90_I3ZDS3          A T F N N K P V I H M H A V L G K H D G T T V G G H V F E L N V   N P T V E V F
UniRef90_Q2RJG5          S L K D G K P F V H A H V T F L D R T G T I R G G H L L P G T I V F A   G E V F
UniRef90_I6U680          S L K D G K P F V H A H V V L G D S E G R A F G G H L V R G E V F    V A E V F
UniRef90_UPI0002DDE84D   A L D E R S P V L H I H A V L G K R D G T A V A G H L A R A E V   R P T L E V I
UniRef90_F8E8B9          S L K D K P F A H I H I T L A K R D F T V I G G H L L P D T P V F A F E E I F
UniRef90_E8X1Y2          A T F Q G K P V V H G H V V L G R R D G S T V G G H L W E A K V   N P T L E V F
UniRef90_O58532          S L K D G E P F V H A H V S L G N E E G I V F G G H L V E G E V F    V A E I F
UniRef90_H6RNH7          T L D E G G W K V H G H V V C L G R R D G S T V G G H L L R A   V V R P T L E V V
UniRef90_A0B8K6          S L K D G E R F I H A H I L A D E N Y N L I G G H L L G G R I F    A A E L H
UniRef90_UPI00036E3D58   T L F E N K P L V H I H I S V S D K D G K A F G G H L V N G T K I W L I E A I I
UniRef90_M0B3V0          G P D   K V H A H I Q L G T E S Y D S I G G H C A E A T V   S G T F E I E
UniRef90_H0T8W4          A L P D G A P S I H V H L V V G K R D G S A M A G H L G S G H V   R P T L E L I
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UniRef90_Q2JVA4          C P D G   V H L H L A V A D A Q G R T W G G H L R P G C L I Y T T A E I V
UniRef90_W4XQ37          S G G H G   H L H I S L S D E K G K V F G G H L L G S A E V F T T A E V V
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UniRef90_A3DLI0          S L K E G K P L S H I H V V I G D R N Y N A Y A G H L V K A T V F    V A E V F
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UniRef90_UPI0003AA448C   A I K D N E P F I H A H I T L G N H H M E V S G G H L F E M E V   A A V G E F I
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UniRef90_I1AS12          V E A D G K H K L H V H V V L G C I D A T T R G G H L I E A S V   R P T L E I V
UniRef90_W8EQM7          A V H D G K P V A H S H I N V A T F D G L I H G G H L F E L I C G   P T I E L I
UniRef90_UPI00037CCE76   T L K D G N P F I H A H I T I G N H D L H T R G G H L F E M K V A V   V G E F I
UniRef90_K9WAB3          S T H G   I H I H I S L S N R Q G K T L G G H L L E G C I I Y T T A E I V
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UniRef90_Q3AQB3          F P D D G R P M V H A H F A C G R E E   N T V T G C I R S G V K V W H V M E I V
UniRef90_UPI0003F5B11A   A I E D G K P S L H V H V V L G F E D G S T K G G H F I E G   I V H P T F E I I
UniRef90_U2YQJ6          A L R D D E P E I S V H A V L S R P S G Q A V A G A L E R A T V F D G   E L Y
UniRef90_I4CCS2          S F K D G Q I F V H A H I I L A G H D F Q C Y G G H L M Q G A K I F A   A E L H
UniRef90_Q0YPX0          F P D D G N P V L H M H M A C G R E E   N T V T G C I R K G V K V W L V M E I I
UniRef90_F4BY08          S L L A G Q P Y A H V H A V L S G M K G K V W A G H L T S G R I F    A A E L Y
UniRef90_D7ADZ6          S L K D G T P F V H L H L S L A D Q E G A M T G G H A V A G C T V F A A E Y A I
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UniRef90_I3RDR2          S I K D G K P F L H V H V V L G D E E G V A Y G G H L I E G E V F    V A E V F
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UniRef90_UPI00037DE86F   S V N G   H L H L S V A D S T G R T L G G H L L D G N S I Y T T A E I I
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UniRef90_R5G3C9              G N V L I E R L K N G T D L K K Y I I D L A K A K S I E A G
UniRef90_W8TNN7      M K A T E G K L G R V F V I R L E E G D I V P D C I E E F A S E M N L S I A
UniRef90_V4HD57    E G V Q V R E V D T A A E V A T L Q A G E D W R A E I E T V A E A V G A D G A
UniRef90_W9A6R3                Y A K R L Q G D D L R Y S L L E F V Q K N S I Q A G
UniRef90_E8LQP9                 I A V R L T K G D D L K L A L Q Q L V S Q H Q I N A G
UniRef90_F5RGP2               V H I E R L R L S P G D D L R R S L E A W A K R Q D L G A A
UniRef90_B0CBP4    Q V Q E L G S L N V F A V R L S P G T D V R Q A I E E I A K R E Q I S A G
UniRef90_V6ML68                T T R F F A V R L L P G E D V I A V L R Q F I Q Q N N L Q S A
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                                       50            60            70          80
UniRef90_Q38VL4          A I S G I G A C N D V T V S I Y S P D S D S Y E T R S Q E Q V E L L S L S G N V
UniRef90_G9YJS7          V F S G I G A C D Y V V V G T Y V G E K H E Y L R H P V K G M E M T S L N G N V
UniRef90_H2ILR6          S I S C V G C V S Q L Q L R L A G A K S T L I K Q E P L E I V S V M G T L
UniRef90_G7WPX3          T V A A I G A L T E A T L G F Y D Q E A H E Y R T I E I E P M E I A G L L G N I
UniRef90_Q00W42          W V T A V G S L S S A R V R L A N Y S A N D V Y D A P D E R F E I V S L V G T I
UniRef90_B3QME5          W V N V V G G A D K G S Q L V V G P E E S R A F P V L Y D T H E I V G T G T I
UniRef90_G6FTC6          F I T A I G S L R Q A S I R F A N Q Q T S T V L T D K F E I L S L N G T I
UniRef90_B4S6Z9          S L I I L G G A D R H S K L V V G P M E S R S Q P V I A M E H E L Y T G T G T I
UniRef90_UPI0003B5B23B   S V I A L G G A D R E S V L V A G P E K G D Q R P I V L D D V H E I M G T G T I
UniRef90_UPI00047EAB74   A I T C A G S L T D A H I R F A N Q Q E G K S L K G Y F E I L S L T G T L
UniRef90_A8ZZZ0          A L I A V G G A D T G S T L V V G P E D G G A R P V T L D N V C E I A G V G T L
UniRef90_Q8KEI2          Y L N V V G G A D K E S K L V V G P E E S R T Y P V N P M E H E L Y D A T G T L
UniRef90_R9M9I4          V I S A I G S L A H V R F C P L E I A E K R A K Y G L D G P I E L L S A S G I I
UniRef90_R5AB60          V I S G I G S L D G A A F C N P V P L K D K E P T I L Y G P I E L T A A A G M I
UniRef90_A4SF83          S L T V L G G A D K G S R L V V G P E G S R P M T L L E L Y D A H E I T G T G T I
UniRef90_V4JZP1          L V I A I G G L R R A E V G V F D Y D V A V Y E A K E G E T I E L T S A L G S I
UniRef90_M3ZDE1          F V T C V G S V T R A T L R L A N A T A T N T N E V L Q G R Y E I V S L V G T L
UniRef90_Q3B539          S L I A V G A A D K G S R L V V G P E E S R E N P P E L Y D A H E I T G T G T L
UniRef90_E2ZA17          V F N G I G A C D K I T V G T Y I E E K H D F L D H K K E S F E M T S L I G N V
UniRef90_B1L690          I I I G L G L L S R S K I A F F D I E T Q S Y Y M N V E E P M E L A S L V G N V
UniRef90_K9SDQ6          I V T A V G S L G Q A A L R W A G Q S E T T L L T G P F E I L S L S G T L
UniRef90_L8J8L8          S L S C V G C L N K A N I R L A D E A K S L I L E E P L E I L T L A G T L
UniRef90_K9U0F1          F I T A I G S L K Q A A I R F A D R E E I T I L H D K F E I L S L N G T V
UniRef90_U1NP08          W F H A M G A V Q D A E L L F Y D Q D E K S Y E S I F F E P L E M A A C V G N I
UniRef90_U9VSZ5          Y L S C V G S L R K A A I R F A N Q P E G T V F E Q P L E I V S E G T L
UniRef90_C1MVF6          F V T C V G S L S A V T L R L A N R D G K N E V V S L D E R F E I V S L T G T L
UniRef90_UPI00037E2D1A   A L T I I G G A D K D S K L I V G P E H G R T E S I T L N N V N E I V G T G T I
UniRef90_UPI00034F495E   F V T C V G S V T K A T L R L A N S D A L N T N E I I Y E K L E I V S L V G T L
UniRef90_R4GBU5          F V T C V G S I S K A T L R L A N A I A S N T N K I V H E R F E I V S L V G T L
UniRef90_A4SB09          W I T A V G S L R A A N I R L A H H D K N A V L A L P D Q K F E I C S L V G T I
UniRef90_C7N376          V F V G I G G C D W A N V G S Y V P E K G T F K D H E V A G V E M V S L N G N V
UniRef90_UPI00036E8137   F V S G I G S L N G A S I R F A G A P T P A R I E G E L E I L T L A G S L
UniRef90_G4RLK4          F L I G L G K R A T I A W Y D Q V S K R Y E K N L D G G L E V A S M I G N I
UniRef90_J2LZX4          I I S A V G S L S R A V L R Y A D Q P E G T L L A E P L E L V T L S G T L
UniRef90_UPI0003B4AAB5   A C W L L G G C G N L V V G P E D T A E P V P M L H E I Q G V H E A A A V G T L
UniRef90_W5LG99          F I T C V G S L T K A T L R L A N A T A N N T N E V I H E R F E I V S L V G T L
UniRef90_G0A948          F V Q G I G S L S V A Q L R F A G A Q Q A I E F G D L E I L T L A G S L
UniRef90_I2GJ62          V V T C V G S L T D V T L R L A N Q E G S S V W H G H F E I V S L V G T L
UniRef90_D2QH07          A I T C V G S L T D V T L R L A N Q E N A S E W K G H F E I V S L V G T L
UniRef90_K1XSY4          T L Q F I G S V K S V T L G F Y N Q R E Q E Y E I K E F N P L E I V S G L G N I
UniRef90_R7CKB5          T F S G I G G C K D A E I Q T F I P E T G S F E Q R I S G M E L V S L N G N V
UniRef90_F0Y1M4          Y V T C V G S L Q K A T L R L A N A D R H S P N E I R E Q R F E I I T S V G T L
UniRef90_E6VA18          F V S G I G S L R G A R I R Y A G V E S A A V L D G D L E I L T L S G T L
UniRef90_H0SBE5          Q I T G I G A F E K V V L K Y F D W G D R E Y L D N V N E Q V E V A S L I G D V
UniRef90_Q397X4          F V Q G I G S L S V A Q L R F A G A D V P T E L R G D L E I L T L A G S V
UniRef90_K9W134          I I S C V G S L R S L T I R F A N K S N L T V I E E K F E I I S L A G T I
UniRef90_I0KDB5          V L T C V G S L T D V S L R L A N Q E G A T A Y H G H F E I V S L V G T L
UniRef90_C0QHB4          C I T C V G S L T R A V L R F A N Q K N S E I L T G H F E I V S L T G V L
UniRef90_UPI00031010CD   A V R A V G G C R E V R L G Y Y E P V L S R Y R H S H F G Q H E V L A L L G D I
UniRef90_V6DSB0          W F I G F G L R N A T L W F F D Q Q E R H Y D S I H F E P L E L T F C V G N F
UniRef90_D3HMJ2          S I S G I G A L S N V T I G F Y H R D A K Q H T K K L F K T Y E I A S L T G N V
UniRef90_B4VMB7          F I T A V G S L K Q A T L R F A G Q N Y A Q A F K R R F E I V S L V G T L
UniRef90_Q2BXY7          S L S G I G C L S K V N I R L A D E S K I I E V S G P L E I L T L S G T L
UniRef90_W4NN56          F V Q G I G S L S V A Q L R F A G I D Q P S E L C G D L E I L A G S V
UniRef90_C3Z3T4          F V T C V G S V S S A K L R L A N T A E K P N E V I E L D Q Y E I V S L V G T L
UniRef90_Q87HB2          S I S C V G C I S D L N L R L A G A E S T L T K R E P F E I V S V M G T L
UniRef90_Q2LXM1          A L I A V G G A D A G S R L V V G P E E G R S T P I L L D N A H E V A G T G T L
UniRef90_A2E378          I V T C V G S L K E C H V R L A G T A T D Q V I V P I P G P L E I L S L T G T I
UniRef90_UPI00035D9DAA   G L L M V G A I D K G S R L V V G P E D G D V P R V V L S K P H E V A A V G T L
UniRef90_C9YE80          F V S G I G S L S T A G I R L A G A A Q P T R L T E S M E I L T L S G T V
UniRef90_K4FUP5          F I T C V G S V T K A T L R L A N A A T N T N Q I I E L G N Y E I V S L V G T L
UniRef90_UPI00035CA0C6   F V Q G I G S L S V A Q L R F A G A E V P V S L R G D L E I L T L A G S V
UniRef90_D0IIY6          S I S C V G C L S Q L N V R L A D S V S T L K M L A P F E I L A L S G T L
UniRef90_U3BAM3          S I S C V G S L S Q L H V R L A G A E Q N M R R C E S Y E I V S L M G T L
UniRef90_U7D919          R I E V I G S V E E A K I K Y F Y K K R K M F D G V F Y R K M E I V S C I G T I
UniRef90_R1GWS0          C V S L V G C L S E L K I R V A D G K S T L S K I E P F E I L S V S G T L
UniRef90_R4KK78          I F Y T I G A M K E A S L V A G P K A C T R P P R H F D D C R E I I G I G T I
UniRef90_R6HA74          G L G A A D D V T V G V Y F P A T Q E Y K S N Q F G E Y E I I S L H G T L
UniRef90_D9QSB2          T V L F I G G A D K V A V G P K D G S A K Q P I P D T L S G V S E A I G A G T I
UniRef90_G6CDJ7          T I T G I G A C D E V T V S V Y S P E T D Q Y I A T S Q E Q V E L L A L S G N V
UniRef90_F6D3H1          I I L C I G A S L S H A V L R M S N S D E K V F K G P F E I V S A E G T I
UniRef90_A0YKV8          F I T G V G S L K Q A T L R F A G Q E T S Q C L S G R F E I I S L V G T L
UniRef90_UPI0003706398   V L T C V G S L T D V T L R L A N Q S D P R V W K G H F E I V S L V G T L
UniRef90_F7XPE2          F F I I L G A A E Q S T L V T G P K E T L F P P E T F N D V G E I I G G G N I
UniRef90_A1VI59          V I S A V G S L S R A V L R H A A Q A Q A S V Q N E P L E L I T L S G T L
UniRef90_L0HBV0          S I V F L G A L M D G K M V T G P E K P V I P P V F F E G G W E V F G V G T L
UniRef90_UPI000477156F   F V A A V G S L A S A A L R L A D R D V A H T V P G P L E I V A L S G T L
UniRef90_D5E8J7          F L F M L G A C R T A N L V T G P L K D M I P P E P L D P H E I I G I G N I
UniRef90_C6BT88          C V T C V G S L T N A V L R F A N Q G E S T E L N G H F E I V S L T G V L
UniRef90_F2NFP1          W I Q F L G A L K Q G R L V T G P E K P Q L P P K E F S Q A W E V V G I G N L
UniRef90_S0G294          S L V V L G G A D K G S E L V T G P K Q G R R F P V T L E E V H E V T G T G T L
UniRef90_Q6LR92          S L S C A G C L T T A R I R L A D E S K S L T L D G P L E I L T L S G T L
UniRef90_R6PU35          L I S A I G S L D G A A F Y N P V E L P H K K T L K G P I E L T N A S G M I
UniRef90_A4JPG7          F V Q G I G S L S V A R V R Y A G V D S P A E L H G D L E I L T L A G S V
UniRef90_R5G3C9          V V S S V G S L K E L N I R L S D L S T L H S K K K F E I L S L N G T L
UniRef90_W8TNN7          H L S M L G T L M D G E I I V G P R K T S E N P P N P Y E A H E T I A T G I I
UniRef90_V4HD57          W F T A V G G V R D A E I W F Y D Q E D L Q Y G P T V D E P M E V A S C I G N V
UniRef90_W9A6R3          S L S G V G C L S K A K I R L A N E N N V L N L E G P L E I V S V M G T L
UniRef90_E8LQP9          S I S C V G C F T H L K L R L A G A T E T L Q L N E P L E I V S V M G T L
UniRef90_F5RGP2          F V S A V G S L S P A M L R L A G R D H P T V I D G D S E I L T L S G T L
UniRef90_B0CBP4          S I S A V G S L R V Q L R F A G A K E P T E L A G K Y E I L S L T G T L
UniRef90_V6ML68          F I A G V G S L T D V L R F A G R E D N R Y L T G K F E I V S L I G T L
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                                                        90            100           110          120
UniRef90_Q38VL4        E N A D G K I S T H L H A S F A R L D T S V F G G H L E R A   V I S R T G E L V
UniRef90_G9YJS7        T T K D G S L H T H A H A M F A G E D M K S V G G H L L T A R I C Y   T G E I I I
UniRef90_H2ILR6        T P E     H Q H V H I S L S D E H G H V W G G H L M E G T I I D T T A E I L
UniRef90_G7WPX3        S I R D G R P F L H A H A T L A D S K G D V M G G H L T R G M V F     A A E V H
UniRef90_Q00W42        S A A     G A S C H L H C A L G D K R G E V I G G H V L D G C V V F T T C E I V
UniRef90_B3QME5        F P D E D N P V L H L H M A C G R E E   N T V T G C V R N G V K T W H V M E V I
UniRef90_G6FTC6        A       N T G V H L H I A I A D K E G K T I G G H L D N G C I I Y T T A E I V
UniRef90_B4S6Z9        F P D D G T P V L H M H M A C G R E E   N T V T G C I R Q G V K V W Q V M E V I
UniRef90_UPI0003B5B23B F P D E G S P I L H M H M A C G R G P   D V R V G C I R N G V K V W L Y M E V V
UniRef90_UPI00047EAB74 S T H G         M H L H I S V S D E K G N T I G G H L L T G N I I Y T T A E I I V
UniRef90_A8ZZZ0        F P D E G A P M L H M H M A C G R E D   K T T T G C I R S G V V T W Q V M E V I
UniRef90_Q8KEI2        F P D D S A P V V H L H M A C G R E E   N T V T G C V R N G V K V W H V M E V I
UniRef90_R9M9I4        C H D D G A V N L H V H V D L A D Q D G R A Y G G H L V E G T K V L L T T D A V
UniRef90_R5AB60        C H D D G N L L L H V H M S M S D Q H G T G H G G H L I E G T K V L L T T D M V
UniRef90_A4SF83        F P N D G R P I L H L H I A C G R E E N S V   T G C A R A G V K V W H M E V V
UniRef90_V4JZP1        A V D E G K P S V H I H V T I S L P D H R P A S G H L L R G I V G P L A E V F
UniRef90_M3ZDE1        N S D         A H L H I S L A D A Q G A M V G G H V L G G L E V F T T A E I V
UniRef90_Q3B539        F P D S G K P I L H M H M A C G R E E N S V   T G C A R A G V K V W H V M E V V
UniRef90_E2ZA17        T T K D G S L H T H A H A M F A D D D G E V F G G H L E W A R I C Y   T G E I I V
UniRef90_B1L690        S L K E G K P F A H V H V V L G D D G R R A L A G H L V E G Y V G G T V E I T
UniRef90_K9SDQ6        S R H G       L H L H C A I A D G Q G R T F G G H L Q P G C Q I Y T T A E I V
UniRef90_L8J8L8        T P     T H L H L H I S V A D Q K G N V Y G G H L M D G S V V S Y T A E V C
UniRef90_K9U0F1        A       N T G V H L H I A I S D R N G K T I G G H L V D G C I I Y T T A E I V
UniRef90_U1NP08        G F L D D E R F A H T H A V L S R E T G G T L A G H L N S A T V F     A G E A H
UniRef90_U9VSZ5        S Q H G       A H L H I V V S D S E G Q V I G G H L M D G S N I Y T T A E I V
UniRef90_C1MVF6        S A N G       A H L H V S L A D F E G N V V G G H L M D G C V V F T T A E I V
UniRef90_UPI00037E2D1A F P N E G E P K L H M H I A C G R E A   S T V T G C I R N G V R T W H I L E V I
UniRef90_UPI00034F495E N E G       A H L H I S L D K D G K T I G G H A I G D L E V F T T A E I V
UniRef90_R4GBU5        N E A       P H L H C L S D K D G K T I G G H V V S D L I V F T T A E I V
UniRef90_A4SB09        S R A     G A S C H L H V S L A D R R G D C V G G H V L E G N V V F T T C E I V
UniRef90_C7N376        T E E D G E L A V H A H V A F S S F E G T T V A G H L L S A H V C F   T A E I L
UniRef90_UPI00036E8137 S P D G       S H L H I S V S D A E G R V F G G H A A P G C V V R T T A E I L
UniRef90_G4RLK4        S I K D N S P F V H I H I V L G D K E G R A Y A G H L V E G T   S F H L E I M
UniRef90_J2LZX4        S A D G       V H L H A S V A T A C G E M R G G H V M P G C V V R T T A E I V
UniRef90_UPI0003B4AAB5 F P N E G S P R L H M H T S L G R G   G V A R T G C I R P G I D V W G V A E V V
UniRef90_W5LG99        N R E       A H L H I C L A D K D G K T I G G H V L G D L E V F T T A E I V
UniRef90_G0A948        S P D G       I H L H M T I A D A E G R V L G G H V A P G C I V R T T V E L L
UniRef90_I2GJ62        S T N G       S H L H L S V S D S T G R T L G G H L L D G C R I Y T T A E L V
UniRef90_D2QH07        S T T G       S H L H L S V S D S T G R T L G G H L L D G C R V Y T T V E L V
UniRef90_K1XSY4        S L K D E K P F F H A H V V L S T N T F Q T L A G H L F K S K I F     A G E F C
UniRef90_R7CKB5        V T G E N N I Y H T H A V F S Y K D G E R H A G H M K S I T V L Y T T   E I E
UniRef90_F0Y1M4        S R D G G     A H V H I G L A D A A G A C V G G H L I S G E I F T T A E I V V
UniRef90_E6VA18        S P D G       A H L H I S V S D A V G Q V R G G H V A P G C I V R T T A E I L
UniRef90_H0SBE5        A L P D G A P S V H V H L V V G R R D G S A M A G H L G S G H V   R P T L E L I
UniRef90_Q397X4        S P D G       A H L H M S V S D V V G R V S G G H V A S G C V V R T T A E I L
UniRef90_K9W134        S Q H E       A H L H I S I S D G E G K M L G G H L A E G S L I Y T T C E I V
UniRef90_I0KDB5        S T N G       S H L H L A V S D S T G R T T G G H L M A G N I I Y T T A E I V
UniRef90_C0QHB4        S D K G       S H C H M A V S D E Q G T T L G A H L M E G C K I Y T T A E I V
UniRef90_UPI00031010CD V D N G G R S E L H A R A V L G R K D S T T L G G H L E R   L V V F P K L E A V
UniRef90_V6DSB0        A C V D G S M F A H T H V T V A D M E G N S I G G H L E S A E V F V G   E V Y
UniRef90_D3HMJ2        T L A E Q G W F V H I H A A L G S D D F Q L F G G H L I D A Q   A S A S T E I L
UniRef90_B4VMB7        S I H G       I H L H L A L S D K K G K T I G G H L L E G C I I Y T T A E I I V
UniRef90_Q2BXY7        T P Q       H L H I S V A D K K G Q V L G G H L V D G S I V S Y T A E I C
UniRef90_W4NN56        A P D G       A H L H M S V S D A D G R V F G G H V A R G C V V R T T V E I L
UniRef90_C3Z3T4        N N       S C H L H I S L A D K D G A V I G G H V M G N L T V F T T A E I V
UniRef90_Q87HB2        T P E       H Q H V H I S V S D R E G R V W G G H L L E G T V I D T T A E L I
UniRef90_Q2LXM1        F P D E G H P L V H M H F A L G R K N   Q T V T G C I R K G V K V W H I L E V I
UniRef90_A2E378        S Q G       K A H L H I S V S D N K G Q V F G G H L V K G S L I E T T A E I V
UniRef90_UPI00035D9DAA F P D E G R P T V H M H L A A G R E   G M A A A G C I R R G V K V W L I A E V V
UniRef90_C9YE80        A A S G D K T G S H M H M A I S T A T G Q V L G G H V A P G C I V L T T A E V L
UniRef90_K4FUP5        N E D       A H L H I N L A D M E G H T V G G H V L G N L E V F T T A E I V
UniRef90_UPI00035CA0C6 S V D G       A H L H A S V S D A R G Q V F G G H V A S G C T I R T T A E I L
UniRef90_D0IIY6        T H D     H C H L H I A V A D A Q G H T W G G H L L E G N L I N T T A E L M
UniRef90_U3BAM3        T P Q     H Q H L H I S V S D V N G Q V W G G H V L D G C L I D T T A E L I
UniRef90_U7D919        T T H E G E P F I H C H I S L A D H E G V L Y G G H L A E G T R L Y S S E N I A
UniRef90_R1GWS0        T L E     V H L H I S L A D K Q G A V I G G H L M D G C V V S H T A E V C
UniRef90_R4KK78        F E D N G V P A L H L H G T L G K G D I   A L M G C L R G E S E V L V V E V I
UniRef90_R6HA74        T T Q E D Q P Y G H F H M S I G D Q E G R V F G G H L N R A V I S A T C E L V
UniRef90_D9QSB2        F T N E N K P K L H L H S S F G R K D K T I T G C T K A G G I D I W N I G E V I
UniRef90_G6CDJ7        E N A N G T I D V H L H A S F A R L D T S V F G G H L E R A V I S R T G E L I
UniRef90_F6D3H1        A E N G       I H V H I A I S D A D G A V F G G H L K T G C I V H T T A E I C
UniRef90_A0YKV8        S I E G       I H L H I A I A D A Q G K T I G G H L Q T G C I I Y T T A E I V
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UniRef90_L0HBV0        Y P G E I G P Y L H C H A S V G R A   G H A L T G C L R E R A V T Y L I V E A V
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UniRef90_F5RGP2        S A Q G       V H L H M S V A D A D G N V V G G H L L A G S I V R T T M E L V
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UniRef90_G7WPX3          L Q E L G T P P V R V H D P N T D L F L W
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UniRef90_B3QME5          L V E L G T E A R R V P D K A T G F N L L
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UniRef90_B4S6Z9          L F E L D T T A S R Q P D R N T G F K L L Q
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UniRef90_K9SDQ6          I A L L P Q Y F R R E M D P Q T G Y L E L E I
UniRef90_L8J8L8          L V S Y D N A F S R E F D S N T G F D E L
UniRef90_K9U0F1          I G V S E E R F L R T T D P E T G Y L E L E I
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UniRef90_U9VSZ5          L G I V N T I F K R E I D P L T G Y R E L T I
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UniRef90_UPI00034F495E   I G E L S N E F T R E M D E H T G F P E L
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UniRef90_C0QHB4          I G I L P D S F L R T F D P Q T G Y P E L E I
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UniRef90_D3HMJ2          I F P L N Y T V K R E K H P D L D I K V I S
UniRef90_B4VMB7          M G V S D N L F L R T M D E T T G Y K E L E I K
UniRef90_Q2BXY7          I A S Y N L S F S R E Y D Q L T R F D E L K I
UniRef90_W4NN56          L A L L P D H F S R E A D P H T G F M E L
UniRef90_C3Z3T4          I G E S N L T Y R R E M D D R T G F P E L
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UniRef90_F6D3H1          I M E V D K P L K R V P D P K T G Y K E L
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UniRef90_UPI000477156F   L A L T S A R F A R P T D P A T G Y A E L D F P
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UniRef90_C6BT88          L A L F P E S F L R S F D P Q T G Y P E L E I K
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UniRef90_S0G294          L Y E L T G A G V R K K D E V T G F A M L
UniRef90_Q6LR92          L L S F E Q H F S R E Y D A A T G F D E L
UniRef90_R6PU35          L G E V E G D M G R G Y D E A L E V P L F
UniRef90_A4JPG7          V A S L P A H F S R E R D A R T G F D E L
UniRef90_R5G3C9          I Q I L D A K F L S E F D E N T G F N E L K I
UniRef90_W8TNN7          L Q E I I G D A R R L F D E K T G F T L L N L
UniRef90_V4HD57          M K V F D E G F D R K
UniRef90_W9A6R3          M V A F N N N F E R E Y D S K T G F D E L
UniRef90_E8LQP9          V H K Y H Q S F S R E H D P K T G Y T E L Q
UniRef90_F5RGP2          L G I A S G Q I R R E I D P V T G F
UniRef90_B0CBP4          I A Q F N L F R T R Q W D A L T G Y P E L E I
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UniRef90_T1CTK6         M R A V Q E G S R W M V T L D D G E D V I G T L   T T L A E E R H L   R A A
UniRef90_E8RG83       M R F A Q A R Q G R V F I V R L E D G E I V H E V I   E R F A A E Q Q I   E A A
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UniRef90_S7I8F1                       K V L A T R L T Q G A D L K Q S I   M T L V Q E H S I   T A G
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UniRef90_Q46PY3                   R A H P L R L C P G D D L R G A L   E D M V R Q R Q V   S A A
UniRef90_UPI00047D06E3   M A Y K K M G S R V Y I R M D K G D E I L S C I   R R V C C E L V I   K S A
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UniRef90_D9Q311                       I I A R L H P G E E L L E S V   R Q L S R K Y S I   S G G
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UniRef90_K8FBI0                     I H P F R L K P G Q D V K K E L   E S F C Q L K N I   Q A G
UniRef90_K2R5V9                     M I V K R L V P G Q D L K Q S L   E N I R D K H G L   K S G
UniRef90_X0NYL4                       H A F R L T Q G T D L K E S I   L Q Y I Q K N Q I   Q A G
UniRef90_E8M6V9                       A V R L T Q G A D L K R S I   Q D I V Q Q N S I   Q A G
UniRef90_K1P8Z6                     Y P M R F E P G A D L Q K G L   L K F T E D N G L   S A A
UniRef90_Q13RF6                       H P L R L F P G D D L R V A L   E N V L H Q S G L   Q A A
UniRef90_C0GHY5       M K A T E G K I G R V F V I R L E E G D V V P G C I   E N F A A E N N I   K V G
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UniRef90_Q39RU9       M N Y Q T G T P G R I V V A R F D H G E D V L A G L   E E I A R R E G L   R A A
UniRef90_W0EIX9       M K Y L E A T L G R I F I L R L E Q G E K I P A I   Q D F A E K H Q I   N S A
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UniRef90_E3CWW0       M R Y S L T D E L F A L R L T E G E E L H A S I   A K A C Q E Y H C D S A
UniRef90_F4LPJ6               N T V H V F R L R R G D D L L T K I   T E Y A R K H H I   E A G
UniRef90_UPI00047AB685   M E Y F K I G R V F V L R L D Q G D Y V L E S I   N D F I K K E N I   K D A
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UniRef90_UPI00046F5944   M R A K L V S S S Q F Y P L R L L P G T E L I A E L   R Q F I A N N H I   K A G
UniRef90_UPI00046FD92E             Q T L P L R I G A G Q D L R A V L   D A L V A Q H H V   D A A
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UniRef90_X1E711         M Q S K E K D N L I F V R L F T G D L H Q N L   E E V C R K H R V   E T A
UniRef90_R7ZIM7       R V N Y G V G S F G R V I S A R I L M G T D I V E G I   E A V C E E N G I   E S A
UniRef90_A6CXY8                       I A V R L T R G T D L K Q A L   H K L V A E H Q I   Q A G
UniRef90_UPI00035C09C0   Y K F D E I E K I I I V R L R P G S D I L P S L   E K L C E R N N I   E T A
UniRef90_U2NB33       M E T S T P S T A R F V R L L P Q Q D L L A A L   R D F I R Q Q D L   R A A
UniRef90_D5EGM3       M Q A F S T D V S R M I V A R F G P G E D I F E S L   R L L C Q K M D V   E S G
UniRef90_A3CWN3       M Q Y S E G Q V G R V F T V R I D D G E D F L R E I   Q R F V T A M N I   R C G
UniRef90_Q8PT83       M E Y A K G R I G R V F T V R I D H G D D L I L E L   I K L A E L E K I   E S A
UniRef90_C5CH87         M I Y R E D E R I L F I R M D D G E N F V E N L   E K V L R E A G V   T S G
UniRef90_D2Z4Y6                   R G A R R I A V R I T P G S D L F Q G I   R D V C R H F G I   T C A
UniRef90_E3H713         E V E S I K I H C V R L N K G D D I K N F I   T N Y L A E K S I   Q A G
UniRef90_U6EF62                     M I V R R L A P G Q D L K K K S L   E N I R D A E D L   K S G
UniRef90_I0GKQ2           M T I K E G N S T I A L R M Y D G D D F M E S L   K T A C K N Y K I   E S A
UniRef90_UPI00046F4475   R V N Y A C G T T G K M I A A R I L P G T D L L T G L   E E I C I K N G V   K Y G
UniRef90_G3PDP5                   Q V H V I R V G P G Q E L L G S L   Q A F V D E R Q L   R A P
UniRef90_UPI000362D760               H P L R L S P D D D L R V A V   E E A F R Q R D L   Q A A
UniRef90_R7UCQ6                     V I A S R L T D D L K I A I   Q K M V H E H H I   S A G
UniRef90_X1KDN1           F K K V H V F R V R P G E E L L S N I   A R Y C R E H I S S G I
UniRef90_R5EMQ0                       H C V R L H R G D D L L L S I   R E L A Q E K H I   A A G
UniRef90_I1DA74                       I A V R L T K G D D L K Q C I   Q H L V T E H N I   S A G
UniRef90_H5V043                     R F Y A L R L L P G D E V L S Q L   R A F I Q H H Q L   Q A A
UniRef90_Q1NXA3       M D Y R S G Q A G R V F S V R F D E G D D L L A G L   E V I R A E N I   R C G
UniRef90_UPI00035D9BD5               I A F R L T R G A D L K H S I   L A S V Q S N N I   Q A G
UniRef90_K2DCT8       M K Y V Q A V L G R V F M V L I E D G E D I L E Q I   K D I I K K E N I   K A G
UniRef90_A0A024F014         F S S T N T S Y C F R L R P G Q D L K K E L   L F Y C Q K Y H L   H A A
UniRef90_I4BZF9         K S I Y R N D N Y L I V R L R D G D D F F E R L   T A V L E E K I   K S A
UniRef90_Q12VE7       M D Y S K G N I G R V F T V R I D T G E D I L R E L   E G I A T K E E I   K S A
UniRef90_E6VZP1       M Q Y S Q G T L G R V F T L R L E D G E R I P D T I   E T F A R E Q A I   A C G
UniRef90_W9DXX0       M E Y S Q G S I G R V F T V R L D Q G D N I L K E L   E G L A V S E N I   R S A
UniRef90_J0B5X9       M K S K E L G E R N F L L V L D G E A F E A I   T R F A Q S E G I   Q A G
UniRef90_N1JM75       M I F G R D E S V L L R F E D G E D F I D T F V R T L S D N G L   H S L
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Multiple sequence alignment (positions ~50–80)

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                        50            60          70          80
UniRef90_U2RSV3     V V S G V G C V S R W R L R     D A T G V R V R S G E   E D V E I V S L M G T V
UniRef90_J7Q9J3     W I A G C G S L T D V A L R Y A G Q E G T T L L N G T F   E V I S L N G T L
UniRef90_D5EDQ0     V V S A A G M V T N V T F G W F N   G K E Y E K A T Y N N V E L L A L N G N V
UniRef90_T1CTK6     A V L G I G M F Q R A T F G Y W N   G S E Y R P G E L T P H E V V A L H G T I
UniRef90_E8RG83     S L L V V G G A D D G S R L V V G P R E D E A M H W P L E H A H E V A G V G T L
UniRef90_UPI000366C833  V I T C V G S L T R A T L R L A N Q V E P T V W Q G H F   E I V S M V G T L
UniRef90_S7I8F1     S I S C V G C L S Q L N I R L A D S T S T L S L Q A P F   E I V S L M G T L
UniRef90_U5Q1Y6     A V L A V G A L N E N S R M T V G P E D G D A R P H T L H A P H E T A G V G T I
UniRef90_C9Q908     S I S C V G C L S R L N L R L A D S I S L M Q V S A P F   E I L S L S G T L
UniRef90_Q46PY3     F V Q G I G S L S V A R L R F A G N E S P A E L R   D D L E I L T L A G T L
UniRef90_UPI00047D06E3  M F Q G I G A C D K V V V A T F I P E K Q D F M Q H E C N G M E M I S L Q G N V
UniRef90_C4XLE0     L V A A L G E N G R   L V T G P E D G R T M P P T I D A V H E A A A V G T L
UniRef90_X7EGE3     F V A A I G S L S A A R I R     P A G R N D A L M L A E P L E I V S L S G T L
UniRef90_D9Q311     L I V A I G G L K H L E V G V Y K Q D V Q S F D A G E G E T I E L T S A V G S L
UniRef90_UPI0002B49BE1  F V T C V G S A K S A K L R L A N T A E S H Y M L D V S N P T E I V S L V G T I
UniRef90_K8FBI0     V I T A V G S L Q K A K I R L A Q T N T N E V A E L T E E R F E I V S M T G T L
UniRef90_K2R5V9     V I L C V G S L D E A V L R M A D G N K K M I K   G P L E I V S A T G T I
UniRef90_X0NYL4     S L S C V G C L K K A V I R L A D E S K T I E L A   G P L E I L T I S G T L
UniRef90_E8M6V9     S I S C V G C F K Q T K I R L A G A T E   E R V L S E P V E I V S L M G T L
UniRef90_K1P8Z6     F V T C V G S V T K A T L R M A N S T T K T Y E   G H F E I V S L V G T L
UniRef90_Q13RF6     F V Q G I G S L S V A Q L R F A G   K E D P T E L R D D L E I L T L A G S I
UniRef90_C0GHY5     F V N I I G G I G S G E V V T G P R R T Y E M P P P V D G A H E I T G T G V L V
UniRef90_G8MBE8     Y V Q G I G S L S V A R I R Y A G R D D A S E W R A   D L E I L T L A G T L
UniRef90_S7U556     S F S V R G V V S S Y T I G T Y D P R Q Q V V S A E S V P R E I I F C S G N V
UniRef90_R5AHC3     V V S G V G C L S L A C I R     D A T G E R S H T L A E R L E I V S L T G T V
UniRef90_T0LST3     L I S G I G M I S K A R I G Y L N G D   K Y V E M T F E P R E V V S F S G S I
UniRef90_K8X1R4     F I A G V G S L T Q V S L R F A G R E D T Q   E I V G K Y E I V S L I G T L
UniRef90_A5FPD1     Q V V L I G G I E G G Q V V V G P R Q S R E Y P P I P L D G A H E V A G V G I I
UniRef90_UPI000303B44D  S I S C A G C I S Q L N I R L A N A D N T   L N V C A P F E I V S L T G T L
UniRef90_A0A024IGQ3  F V I G I G S L V D A R L R L A A A D D A L V V P   G P S E I L T L S G S L
UniRef90_E1QI63     F C A M L G G V G S G R L I V G P E D G Q A R P A Q P I S G V Q E A L A V G T V
UniRef90_F2UT28     F V T C V G S V S E A V I R M A D T D Q A N H I K R V E G C H E I V S L V G T L
UniRef90_K2BT02     T F S G L G Q V H N P T L A Y F N P N D K P T L T T F S G Y Y E L A S F N G D I
UniRef90_U0G8C6     S I S C V G C L E Q I S M R L A G A E Q S I T L T Q P F   E I V S V M G T L
UniRef90_Q39RU9     A F H I V G A L K G G R Y   V V G P E A E E L P P V P L E E S H E A V G F G T I
UniRef90_W0EIX9     L V H F L G G A D K G S K V V G P E D G Q A L K P E L Q G T S E T L G V G T L
UniRef90_B5YKL5     V F W L I G G L K E G K F V V G P E D D S L P P R P I W R E I K E I L G T G T I
UniRef90_B7VSD9     S I S C V G C V S Q L N I R L A N A N N T K L I K A P F   E I V S V M A T L
UniRef90_UPI000349F786  I V T T V G S L H Q A A L R F A N R P V A Q V F S R K F   E I I S L S G T L
UniRef90_G7Y387     F I T C C G S L T K A H I R L A N L Q E S E L E   G P F E I V S M V G T L
UniRef90_R4X1Q8     F V Q G I G S L S V A R I R Y A G R D A A E L H G E L H G D L E I L T L A G S L
UniRef90_E1K0T7     V V L A L G G L G K G K   L V V G P K D G T V M P P T I S R V H E A A A V G T L
UniRef90_A5G3T0     C F S M V G G I R K G G Y   V V G P E T E A M P P V E L T E S H E A T G F G T I
UniRef90_R5RYK6     V V S A V G C V Y R W E L R   D A S G V D V Q S G T   E D V E I V S L M G T V
UniRef90_F9TIQ5     S I S C I G S L S T A C L R L A G A S E   Y L R L S E P L E I V S V M G T L
UniRef90_B5IM27     V I S A V G S Q A Q L R F A   A A D D V S R I R A D L E I L S L A G T L
UniRef90_D0DCM5     I V S S V G S L T H A A I R Y A N Q N D T T R L E G H F   E I C S L I G T L
UniRef90_D3L5B9     V V S S V G M M R D V E L G W F S G E E   Y I K K S F E P M E L L S L T G S V
UniRef90_E3CWW0     V V L G L G M V R N V T F G W F   T G T E Y L T E V H D E I F E L S A L S G D V
UniRef90_F4LPJ6     C V S C A G C V L R A H I R   D A S G L T V R T V D P M E I V S L T G T V
UniRef90_UPI00047AB685  V V S A I G T L D Y C V L H M V T P A V E H F E R W E D K P L E L S S I D G V I
UniRef90_R6MQQ6     V V S A V G C V S R A V L R   D A S G V T V R T V D E P C E I V S L N G T V
UniRef90_X1G8G5     M C I L V G G I K N G G K I V V G P E D S E S M P I V L K G V H E I C A V G T I
UniRef90_UPI0002F8BA76  I V T A L G S L T R A S L R F   A A A S A A T A I D G P L E I I S L V G T L
UniRef90_UPI00046F5944  W I S V V G S L S T V S L R Y A G C E R T S L I E G K F   E V I A L G G T L
UniRef90_UPI00046FD92E  F V Q G I G S L S V A R L R F A G R S E   F T E L R G D L E I L T L G G S L
UniRef90_F7YRW4     N I S C V G C L S E V I R L A D G S S   E L H L V D A F E I V S L I G T L
UniRef90_UPI0002E59279  S I S C V G C L S S I H L R L A G A T E R L Q M T A P F   E I V S V M G T L
UniRef90_X0TJ57     V I S A I G S A K E V R D L L A G V K S K T N E L R M M G P Y E I L S L E G N I
UniRef90_UPI000467B71A  A I S M I G S L E E A T M V C V A K D E K R Y L D P L Y G P L E F I G A Q G I I
UniRef90_A1AMZ1     V I S A V G S V R D V C L R L P I T P A R V N T H L L E G P L E L L S L T G N I
UniRef90_X1E711     V I L G M G Q L K N F Q L G Y F K G K G N Y T P E E F A K P H G L I S L T G T H I
UniRef90_R7ZIM7     I V S C I G S F L K S S F V Y L V P D E T A K I N V R F G P L E I Q G S G V V
UniRef90_A6CXY8     S I S C V G C L S Q I S M R L A G A E   H T L K R S E P F E I V S V M G T L
UniRef90_UPI00035C09C0  I V N M I G S L R K A S I L L V V K E G N V Y Y T E P I E P L E I L S G Q G F I
UniRef90_U2NB33     W I S G V G S L S D V A L R F A G C E G T T L L S G K F   E V V S L I G T L
UniRef90_D5EGM3     C I S M I G S L Q C A T L V C F P G G Q A R Y L D P V Q G P L E F I G A Q G I I
UniRef90_A3CWN3     T I Q F L G A V R S A T I   V T G P K E P V I P P E I F G G W E L V G F   A T I
UniRef90_Q8PT83     V F M L L G A L K E G K   L V A G P K E N R R P P E P F S D A R E I L G I G D I
UniRef90_C5CH87     V I S G V G M L R D L E I G W F N V E K M V Y E K E Q I S P H E L V S I S G N I
UniRef90_D2Z4Y6     S V S A L G L A S A T V V C I S P S G A S Y K E P T H A P M E L V A L C G T V
UniRef90_E3H713     V V S S V G C V I N G R I R L A D   G K S I R E L E E R L E I I S I N G T L
UniRef90_U6EF62     I I L C V G S L Q D A V L R M A D G R V K   V V K G P L E I V S A T G T L
UniRef90_I0GKQ2     V F S G L G M F R S V E L G Y W N   G H E Y V K R V F D G L E L V S L Q G N I
UniRef90_UPI00046F4475  A V N C F G S F S A A G Y M Y L V P M D A K V V I K K D G P L E F L S G T G I I
UniRef90_G3PDP5     F I T C V G S V T K A T L R L A N A T A T N T N E V L H G C F E I V S L V G T L
UniRef90_UPI000362D760  F V Q G I G S L H V A A L R F A G A Q A P T E I R   G D L E I L T L A G S V
UniRef90_R7UCQ6     S L S C V G C L S K I N L R L A G A E A T   L T N D G S F E I V S I M G T L
UniRef90_X1KDN1     I I G I I G S V E R A R L N F L M E L P G K Y E S V D Y G P L E I V C A Q G S V
UniRef90_R5EMQ0     V V S A V G C V T E A K V R   D A S G V N I R S I G E H C E I V S L N G T V
UniRef90_I1DA74     T I S C V G C F T H L K I R L A G   A T Q T L E L N   E P V E I V S V M G T L
UniRef90_H5V043     W I A G C G S L S D V A L R Y A G Q E T T L L C G T Y   E V I S M S G T L
UniRef90_Q1NXA3     W F W V L G L R A E V   V T G P K E P V M P P E P L E T A R E T L G S G L
UniRef90_UPI00035D9BD5  C I S V V G C L S T L S L R L A D   G H S V V T L E G A Y E I I A V S G T L
UniRef90_K2DCT8     F V H L I G A S S   S K V V L G P V K R E Y P P K E F N D A R E I L G L G I F
UniRef90_A0A024F014  V V S A V G S V D K A H L R M   S G G K D V V E F Q G P F E I V S L S G T L
UniRef90_I4BZF9     V V S A V G M M R D V E I G W F G G E E Y Q   K R T M S E P M E L L S M T G S V
UniRef90_Q12VE7     V F T L L G A V A V R   L V V G P K E N A I P P N H T E P Y E V I G V   G N I
UniRef90_E6VZP1     L C L M I G G A D N L V V G P R N G D S P V I D P I L H G A P H E V A A V G N I
UniRef90_W9DXX0     M F T M L G A V K E A N   L V V G P K E N I V P P D P I H D A H E L L G V G N I
UniRef90_J0B5X9     S V T A I G A F Q S A T L G F F E F A T K K Y K D L P V E Q A E V L S A I G D I
UniRef90_N1JM75     V V S G I G M L R D F T I G W F N S V S K Q Y E K E L V T P H E L L H I S G N V
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                              90            100           110           120
UniRef90_U2RSV3        S       E Y G C H L H A S F S R E D L S A F G G H L L P G C T V N T T A E I V
UniRef90_J7Q9J3          E Q S G E   H L H L C V S D P H G T M L G G H M M P G C T V R T T L E L V
UniRef90_D5EDQ0        S Y K H E G I Y P H L H A V F S R P D H T C L G G H I L Q A L V H H N V E I C
UniRef90_T1CTK6        A E A D G H P S I H L H G A A A G P D H R L V G G H L R A T V G I L E L A
UniRef90_E8RG83        F R D E G T P L V H L H M A C G R G   G Q T I T G C I R T G V R V W H V M E V I
UniRef90_UPI000366C833 S T G G       S H I H L S V S D S T G R T I G G H L L E G C I Y T T A E I V
UniRef90_S7I8F1        T P H       H L H L H I A V A D S Q G K V W G G H L I N T T A E L I
UniRef90_U5Q1Y6        F E E D G L P R L H M H V S C G R   D G E G L T G C I R V G S V V W Q I L E V I
UniRef90_C9Q908        T D D       H C H I H I T V A D A Q G R A W G G H L L D D N I I N T T A E L M
UniRef90_Q46PY3        S A D G       A H L H M S V A D S R G R V F G G H V A H G C L V R T T A E I L
UniRef90_UPI00047D06E3 V T D N G R L K E H A H G M F S S G E I A Y L G G H L H S A W I   S Y T G E I V
UniRef90_C4XLE0        F P P D G T P R L H A A L G R K   G E T K T G C V R P G L D V W K I F E V V
UniRef90_X7EGE3        S P D G       A H L H I A V A D A R G T M T G G H L L P G C A I R T T A E I V
UniRef90_D9Q311        A L D E G A P S P H I H V T A A L P D H Q P V S G H L L K G   V V S P L A E V F
UniRef90_UPI0002B49BE1 S G G G       H M H I T L S D M A G K T N G G H L L E   L I V D T T A E I V
UniRef90_K8FBI0        S A K N G       M H V A V A D A N G E V C G G H M L E G C E V F T T C E I V
UniRef90_K2R5V9        A T N G       I H L H L A V A D S Q G N V T G G H L M T G C P V H T T V E V C
UniRef90_X0NYL4        T P S       H V H L H I S V A D A K G T V I G G H L V E G S I V S Y T A E I C
UniRef90_E8M6V9        T P       T H Q H V H V S V A Q A N G Q V I G G H M L E G C I V D T T A E L I
UniRef90_K1P8Z6        S S G G       H L H M S I S D A E G N V F G G H V F G D V I V Y T T A E I V
UniRef90_Q13RF6        S P D G       A H L H M S V A D P R G Q V S G G H V A R G C V I R T T A E I L
UniRef90_C0GHY5        P G D D G R P Q L H L H A S L G R A   G K T T T G C L R P G V K T W L V G E V V
UniRef90_G8MBE8        S A Q G       P H L H M S I A D A D G R V R G G H V A P G C I V R T T A E I V
UniRef90_S7U556        Y S R D G E V E S S A H I V L A D D R G A L T G G R L F S E T R I F   S G E I R
UniRef90_R5AHC3              G A E R T H I A L A G E D L S V L G G H L L E G C T V N T T A E I V
UniRef90_T0LST3        A E N D       P I L H I   H G S F A D I H H N I S G G H F F S G T   G S P M M E I S
UniRef90_K8X1R4        D P K G E       H L H L A I S D E N G H M Q G G H M M E G C T V R T T L E L I
UniRef90_A5FPD1        A P E D G T P K L H I H A A L G R M   G K T T T G C L R P G V N T W I V G E A V
UniRef90_UPI000303B44D T P N       H Q H I H I S V A D S E G K V W G G H L L E N S I I D T T A E L L
UniRef90_A0A024IGQ3          G A D H A H L H M S V S D A Q G R V W G G H V L P G C R V R T T A E V L
UniRef90_E1QI63        F P D N G R P K L H M H G A M G R A   G Q T I T G C M R A G V D T W Q I G E V V
UniRef90_F2UT28        A V D E D S Y K Q H L H V C L S D K D N T I G G H V I S L K V   F T T A E I V
UniRef90_K2BT02        T N N N N E Y Y S H A H V L A D K K F H G I A G H V N K A K V G   L T A E I A
UniRef90_U0G8C6        T P N       H Q H I H I S V A D S D G K V I G G H L L E N S I I D T T A E L I
UniRef90_Q39RU9        F W E G D R P K V H F H G A Y G K G D   A V R V G C L R E A S E V F L V L E A I
UniRef90_W0EIX9        F R N E G K P V L H M H A A F G R E   G K T V A G C V R E G V D I W Q I G E V V
UniRef90_B5YKL5        F W H N D E P K V H L H G V Y G R E D   S V K M G C L R E N P E V F L V L E I I I
UniRef90_B7VSD9        T P N       H Q H I H I S V A D E N G D V I G G H L L E G T I I A T T A E L I
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UniRef90_F9DUL7         R I Q A V Y D N K T H R I I G R L K K E I D L F E G I I E V C K E Y G V E A A
UniRef90_R6T3Y0             Y S E G K I G R I I L A R I L P G T D L C E G I T K I L Q E K N I Q S G
UniRef90_D4M8Z2                R F Y T I R L V P G T D V V K E L R A F V D K K G L Q A A
UniRef90_Q223H2                R L A P S A L E A V I H S Q N C H A A
UniRef90_Q1PXL8           M K Y R V G N I G K V V V A K F E D G E D V L K N V I H I I K K E K I L A A
UniRef90_UPI000349BA01    M R S H E L T Q G R T F G L V F D H G E D F F S S L T E F C R T N D V R Q G
UniRef90_T0ZJG7            M I S K E E D D L V F V K L E R D D S V M Q S L E K A C N L H S I R N G
UniRef90_Q9YBU0                G R V Y A V K I D E G E D V H S V L S S L A E A E D L G F A
UniRef90_W8A432           M S I Q I A T N N Q V L Y G S L G V G D D L M D G I L A I C K E H Q I H S G
UniRef90_B5Y616             M T I K E N N G I I A V R L H D G D K F M E S L K A V A K D C G V N S A
UniRef90_UPI0004700C25         G K V H I L R L D Q G D R V L E S I C Q L I N E K N I R H G
UniRef90_F0JE08          M Q Y S Q G N V G R V F T L R L E N G E R L P D C L E Q F A R E H D I R T A
UniRef90_R6R5B2             K R V V A V R M S P G E N V M Q G L E N V C A E Y G I N N A
UniRef90_H5SUN9            M F V A E S G Q D M I V R L Q P G E D F F E S L S S L N L T A G
UniRef90_O27298                M I L I R L E P G M D L M E E M R A A F S E G V
UniRef90_Q1JZB6              K E C S G G R R F L V K I S Q G E W L V E S L C R F A A E A G V R S A
UniRef90_E7FW73              K E H V I R L M P G D D L L Q G I D A Y C K K F Q I T S G
UniRef90_A2SHX5                A L R L E P G D D L R R R L E A L T V E R G W P A A
UniRef90_UPI0003B47CB5    M F G A E A K T G R T V V A V L E P G D E V L E S L A A A C R R F E I G S A
UniRef90_C3Z3T5                 F T L R L G P G V E I Q S A L Q K F V Q E K G L K A P
UniRef90_A0LHB6        K R M Q Y G V G E M G R I F V L R L E E G D Q L P D I V E Q F A E E H G I Q R G
UniRef90_UPI0003B760BD        Y K E Y T Q G R R F V L K I S P G E N L R D H L L Q F A S E V N L S N A
UniRef90_A7HGC0           M I V G E T T C T R V L V G R L E G E W L H E A L L E L A R L E R V D A A
UniRef90_D4H8K9                E N G R R F I L K I S Q G E N I H E S L N F A K E A D V K N A
UniRef90_Q2FQJ0          M K Y T S G T C G R I F Y L H I E H G E D P I Q T M N A F V R E H E I K A G
UniRef90_E7REH8         R I Q A V Y D E K T H R I A G R L M K G V D L L E G I K E V C R H Y N V E S A
UniRef90_UPI00031890D8      H S V Y D R E N G V I F G S L T G G T D L M E G I I A E Y A K Y N V A S G
UniRef90_X1QQZ8                   S S G
UniRef90_M4YJQ8             M R A G R I F V L A L E S G D P I K A T V E N F C K D K G I S Y A
UniRef90_W4HM11               R F L A L R L L P G E D L R A A L E A A F A D A P E T A G
UniRef90_L7F1Y7          M R A T E I T V G R T F A V V F E H G E D F Y E S L D R F C R E A G V R A G
UniRef90_G7V6X0             M R Y A V S S D C I F I R P G N D E E L L T C I A T A C E E Y S I D S A
UniRef90_X1T7B7           M K Y S E G I G R V F V I R L E D G D T M P E A I E S F A Q E N N V R R G
UniRef90_A2BN70          M Q S V E L K G L R L Y M V K L E E G D R L P Q A L A G L A S S L G A D V V
UniRef90_A7NPR7                R V L A V V L C D G A D L H Q A L T E I A M T H H I T A A
UniRef90_L0KU44          M E Y T T G T I G R V F F L R V D H G D L I E A L Q T V S R K E K I R S A
UniRef90_K4MDM3                 M D H G D D L H E L E N L A R N E N I K A A
UniRef90_A9V924                V A F R A H P H E E L V D V L K D V V T Q H G L R A A
UniRef90_Q987Y2
UniRef90_C6PVV5          M I Y S E L K L G R T F G I R F E H G K D F M T E L E E F C R V N N I K Q G
UniRef90_T0LC97               E K N Y I V V K L E K G D D V G E S I S Q V L D D Y G I F S G
UniRef90_UPI00036D5458   M H S H D L T P G R M I G V V F D H G D D F F T A L T D A C R T H G I Q Q G
UniRef90_A8ZME3          M K S T E L K T G R T F G V T F E H Q S D F F Q E L S S F C K E N Q V Q Q G
UniRef90_B9Y7X1                F R V L P G Q D L A E T I E R Y C A E R Q I Q A A
UniRef90_Q7VC67               L K L N P G V D L K L S I A E F A R K N N I N G
UniRef90_S7TQ66          M L V S E G R I G R V F V V R L E D G D R L P D A L E A L A A E K K L A A G
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Multiple sequence alignment (positions 50–80)

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                              50            60            70          80
UniRef90_A7IB48          T L I F L G A L R Q G R M   V T G P E T P E P H Y V M F E G G W E M V G I G T I
UniRef90_H1CXJ4          T F Q G I   G A C G E V E V A T Y I P D R Q E F L P H V R N G M E M I S L M G N L
UniRef90_G7V9C7          V I S A I   G M L R N F T I G W L G P E G     Y V K K E Y E P Y E L L S I S G T V
UniRef90_UPI00030FF301   S F Q C I   G S L K R V G M L Q I S Q N E D T D Q I N I E K P V E I L S G T G F I
UniRef90_K8W8N4          F I S S V G S L T D V A L R F A G Q E E T     F H T T G K F E I V S L I G T L
UniRef90_B6XF07          F I A G V G S L T D V A L R F A G Q E D T H L T S G K F   E I V S L I G T L
UniRef90_B2PYI8          F I A G V G S L T F R V N L R F A G K E T T D   Q F V G R Y E I V S L I G T L
UniRef90_C1D8Z8          W I A G V G S L S V A S L R F A G E P D T T V L T     G A F E I I Q L S G T L
UniRef90_G7Q9Y4          V V L A L G G L E N G N L V V G P E D G A A M P P T A I G N V H E A A C V G T L
UniRef90_A9GBW6          W I E G V G S L E K A E V A L F D Q A S R T Y T R V L D G P C D V V A L S G N I
UniRef90_Q64BG9          A L I A I   G G A D A G S K L V V G P E Q G R P M E H I L D D V H E I A G V G T I
UniRef90_UPI000369668A   C V S V V G C L S R L V I R T A D G K S T     I D I H E D V E I I S V S G T L
UniRef90_K0TA15          F V T C V G S V Q R A T L R L A N S E T G N D I K Q Y E Q K F E I V S L T G T F
UniRef90_T0LZ02          F V S G I   G A G V E L E I G Y L     R G K T Y E R E I F P P M E I T S F S G S I
UniRef90_C8W3N1          G M Y M I   G A L K S A   A L V T G P R A L T V P P E V F A D G R E I V G L G T I
UniRef90_UPI00046EC17D   F V S G I   G S L S N A R L R F A G A E S E T S L E G M F     E I L C L S G T L
UniRef90_UPI000466D422   S V T C V G S L T E A Q L R Y A N V S E     W A N I T G H F E I V S L V G T V
UniRef90_T0RK60          R L H G I   G A L H K V E L G Y Y D Y D A D L Y D R R P F E E Y E L L S M E G N V
UniRef90_UPI000225F453   L V T C V G S L T R A V I R H A D Q P D S T S Y Q G H F     E I T S L V G T I
UniRef90_M9S9G7          Y Y T L E G N V S S F V V G L C D T N N G H H E P I I Y E N N C E F F G L G T V
UniRef90_X1EWZ9          M C I L I G G I G N I V V G P K N G D S L P P Q P I T F R G V H E I A G V G T V
UniRef90_M7P8M8          H F Q C I   G S L T Q A A F Y Q A V P A G I R Y R R I S D S P V E L L S A S G F V
UniRef90_V4AFT0          F I T C V G S V T Q A T I R L A N A D E     I I D I K G P F E I V S L V G T L
UniRef90_B4WFN0          A I L   G V G S L S K T C L R F A D     S G V H T E L S G K Q E V L T L S G M L
UniRef90_UPI00047291F6   V V S G I   G T L D R C T L H M V M P P V E H F E R W D D K P L E L A S I D G I I
UniRef90_E3BEC8          S I S C V G S L S T L N I R L A G A E E T L S L S     E P L E I V S L M G T L
UniRef90_D7E7F3          V F V L L G A V G E A N   L V T G P L E K I I P P E P L E K P S E I M G I G N I
UniRef90_F0T8D0          V V S V V G S L T R T H L R M S N G T K K L F E G F     F E I V S V E G T I
UniRef90_T1AD68          F V A G L   G R G S T L G F F N G E     R Y L K R T F E A L E L V S L T G S L
UniRef90_F3Z3F5          T C L M L G G V G H L V V G P L N P H S R P I E P K S L D I A H E V V A V G T I
UniRef90_R9LYU8          C I S M V G S V Q E A V F Y D P R P D D S N P A G I S Y G D P E L I S A H G E I
UniRef90_D9PY96          V V S G I   G S L N G V R I R T A D     E S I L T V E G P L E I I S L Q G T I
UniRef90_A3Z268          C I S G I   G S L S V A Q L R L A G R R E C T     I L R G E L E I I S L A G T L
UniRef90_L1JNB0          V L S C V G S V S C A T I R C A N Y S T T N D I K V L K Q K F E I V S L V G S I
UniRef90_Q5WBV8          M V T C I   G S L K Q A G F T V F K T D G Y A P P T V I A E P V E L I Q A T G F I
UniRef90_B1I1S9          L V F F L   G A E R G S K V V V G P E D G D V A R P V L T G A S E A V G V G T I
UniRef90_Q9HJS9          V V W A I   G M L K D F E V G Y W N     G Q D Y E K E T F E R L E I V S L H G T I
UniRef90_C6A4Z2          I V S G I   G M L R D P E I G Y Y     T G T G Y E Q K K L E G V E L V S I T G
UniRef90_I0HPB7          F V Q G I   G S L Q P A V L R L A G A E T T V A P E     G S V E L L T L A G S V
UniRef90_A0A021IZ16      S V S G I   G A C D D V V L K F F N L T T K Q Y E E K H I E P L E L T S L L G N I
UniRef90_UPI00036EE4C5   F V Q G I   G S L N V A Q L R Y A G M A Q P D A L R     G D L E I L S L A G S I
UniRef90_S7T3G5          L C L L L   G G A G D G V T G P V D G E A K K I I P I L L G E V H E L A A V G T I
UniRef90_A0ED98          S I S C V G S L L K C S I R F A N Q P Q     F T E I N G H F E I V S L V G T I
UniRef90_Q8D6S6          S I A C T G C L S E V K L R L A G A Q S     E F Q Q K A C F E I V A I T A T L
UniRef90_R1BEX5          S I T C V G S L S A L R L R L A G A C E     F L E L R E P L E I V S L V G T I
UniRef90_UPI00036355E5   I I I G V G M L K G A K I G Y Y     R D G T Y Q I K T I S D P A E L V S T S G N M
UniRef90_F9DUL7          Q F Q C M G S L A H A T I V Q P H Q N E D K D Q I V T D T P V E L L S G T G F L
UniRef90_R6T3Y0          W V S M I   G S L Q K T S Y F Y L E K N D A K L N H R T F     P V E L C N A M G L I
UniRef90_D4M8Z2          I V S A V G S L S E A N I R F A D R S E G T L M K     G K Y E V I Y F G G T L
UniRef90_Q223H2          F V S G I   G S L S T A G L R F A G A D Q P E     R L T G D I Q I L S L S G T V
UniRef90_Q1PXL8          V L Y L V G G M R E G K F   V V G A E S D T L P P V E L G E S H E V V G F G T V
UniRef90_UPI000349BA01   Y V D I V G T C E K L T     D P A A P V W S K V Q L S N V E A L G G   G T I
UniRef90_T0ZJG7          V V W G I   G M F R T V D F G Y F N     G K E Y V H K V I E P G E V V S F H G S I
UniRef90_Q9YBU0          M V T G I   G G M A E A T V A F Y S P P E A T Y Y T V D V K P I E V A A M T G N I
UniRef90_W8A432          M V T C I   G S L D K T G F T V F K P D G Y A D P F T I H E P V E L I Q A T G F I
UniRef90_B5Y616          V L H G I   G L F K N A E L G Y F N G H E Y V T K S F Y Q Q L M E V I S L E G N I
UniRef90_UPI0004700C25   V V S G I   G T L D R C V M H M V T P P Q E Y F A S W E N Q S L E L L S L Q G I I
UniRef90_F0JE08          L C T L I   G G A D N V V S G P K D G A A R V I D P I V R G A H E V L G L G T L F
UniRef90_R6R5B2          I I S G M G S L D G C E Y L V P I P L P D K D P I K V T D S V S V T G V S G M I
UniRef90_H5SUN9          A I V G I   G M L R D V T L A F W T G R E Y K   E H K V S G P A E L L S L Q G N F
UniRef90_O27298          V V T G I   G S L H R V R I R T A D E S E L T V E     G P L E I L S L Q G T I
UniRef90_Q1JZB6          V I S A V G S V T R V T F R L P I T E A R M T V H D V E G P L E L L E G N M
UniRef90_E7FW73          Y I T C V G S L S S V     V F R K G H N K K E I Q L Q G P Y E I V S C V G T V
UniRef90_A2SHX5          F V I G I   G S L R I T A L R L A E A T E P L Q L E A     P V E I L S L C G S L
UniRef90_UPI0003B47CB5   F V V F L   G A F T E L T I I G A E H P P A D E D A P L P E S V T V R N C E G T V
UniRef90_C3Z3T5          F V T C V G S V S A A K L R L A K A A G K H E I I E L D E R Y E I V S L V G T L
UniRef90_A0LHB6          L V F Y V G G G A D G S R L V V G P R E N M E Q G I T L R G V H E V L A V G T L
UniRef90_UPI0003B760BD   S V S A V G S V K D V R F R G I K T G A K T T A H E I E G P L E L L G L E G N I
UniRef90_A7HGC0          F V R G Q G I   V E L V E L D L W D P A R R S Y P L R L E G A L E L A S L S G T I
UniRef90_D4H8K9          M V S A V G S V T D V R F R L P L T N A R M T I H Q M A G P L E L L G L S G N I
UniRef90_Q2FQJ0          I I H F I   G A V K N A K   L V T G P E V D H L P P I P H S E S V V L A G T G F I
UniRef90_E7REH8          H F Q C F G S L Q Q A T Y V Q I E R D T L R Y S E R V Q S P V E L L S G S G F V
UniRef90_UPI00031890D8   M L T G I   G S L S R A T Y   V Y G V D G P D G R P T V D G P I E I L N A T G F L
UniRef90_X1QQZ8          V V I G I   G S V G S A R L N F L R E L P G K Y E T K E Y G P L E L V C G Q G S I
UniRef90_M4YJQ8          T F S V V G G I A E G S T F V A G P A G K I N E P I V I T E P S E F T G T G T V
UniRef90_W4HM11          F V A A V G S L D R A A L R     P A G R D D R L M V T G P L E I V G L S G T L
UniRef90_L7F1Y7          H L T F I   G G F S H A R E P L E H P E R P L W K E V E V E T L E V L   G S L G T L
UniRef90_G7V6X0          V V T G I   G M L K E V T F G W Y   T G T D Y A K E D L V G P F E L S A L S G N V
UniRef90_X1T7B7          M C I L I   G G I G G G K I V V G P E N S Q S I P I V P L E G V H E I C A V G T I
UniRef90_A2BN70          Y V V G I   G G L R K A R I A V F D S V R T I Y R Y V D V Q P L E V I A L S G N V
UniRef90_A7NPR7          I V H M L   G G L R E V A L V E T D V A T K K P P L V F R R H L E I I G G S G M I
UniRef90_L0KU44          F F F L L   G A I E K G E L V S G P R D A C V M W V K I D T P H E L I G I   G N V
UniRef90_K4MDM3          M F V L L   G A V K E A S   L V V G P V K E V F Q D V V G L H E V L G N V
UniRef90_A9V924          F V T C V G S I E K A C L R L A N G E D F S D F L E L D E R C E I C S L V G T L
UniRef90_Q987Y2                                  M G W F D P N A K T Y R K I P D E Q C E V L S A I G D V
UniRef90_C6PVV5          Y V N I V G T C G K M E     N P Q A P M L N S P Y F E N V E T F G C   G T I
UniRef90_T0LC97          L I Y G I   G M I R D L E V G Y W N G K E Y E   K A K L Q M P G E V V S F H G T I
UniRef90_UPI00036D5458   Y I M F I   A G L S T A K Q R L D N P D A P V W S H V D L T N I E A L G G   G T I
UniRef90_A8ZME3          Y I M F I   A G F S E V E S K I D D V N A P V W D K V H L S N V E A C G C   G T I
UniRef90_B9Y7X1          A V V A C A G L S L V R F R M A D G V T   I I Y E K Q V   D A E I V S L S G T L
UniRef90_Q7VC67          F I   G V V G D L S K A V V Q C P K N K T K T S F D G T L E I I S L N G T I
UniRef90_S7TQ66          V C M L L   G G A R R L V T G P L D G E A A Q I R P I I F G E V H E M A A L G T I
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                                    90            100           110          120
UniRef90_A7IB48          Y P G E D G P A I H Y H A S V G R A   G H A L T G C L R E K A I T Y I V A E V I
UniRef90_H1CXJ4          V T R Q G E L V Q H A H A L F S A F D G R I L G G H L K K A T V L Y T A E L V L
UniRef90_G7V9C7          N I M D G G V F I H P H A A L S G R D H S T V G G H L F S G V H N T L E A V L
UniRef90_UPI00030FF301   G L D N G E L D V H F H G L I V D P D G N I T G G H F L K G E N P T A T M E Y T
UniRef90_K8W8N4          D A K G E     H L H L A V S D E Q G Q V L G G H M M P G C T V R T T L E L I
UniRef90_B6XF07          D A Q G E     H L H L A V S D E N G H M R G G H M M P G C T V R T T L E L I
UniRef90_B2PYI8          D   S E G E   H L H L A I S D E N G H V Q G G H M M L D C T V R T T L E L V
UniRef90_C1D8Z8          E P G G       A H L H A V S D R H G H M T G G H A M P G S I I R T T C E L V
UniRef90_G7Q9Y4          F P D S G R P T L H M H A V L G R G E   D T R A G C V R P G L D V W K I F E V V
UniRef90_A9GBW6          A L Q Q G E T S L R L S A T L A R E S G Q L A A G E L V W A R V   Y G L E L R
UniRef90_Q64BG9          F P D K H N P V L H M H I A C G R E E   S T I T G C V R R G V K V W H L L E V I
UniRef90_UPI000369668A   T P D     H V H L I A V A N K Q G E M V G G H L M E G S I V S H T A E V C
UniRef90_K0TA15          S T D T G     C H V H I C L A D A E G N A L G G H L I E A E I   F T T C E I V
UniRef90_T0LZ02          T     E G D P K M H I H I N A A G P D H V T Y G G H L F S G K   A K P L M E I L
UniRef90_C8W3N1          F H D G N E P V V H L H S V F G K G E   S A L A G C V R K D T E V Y L V V E I I
UniRef90_UPI00046EC17D   T R D G     A H L H M A L A D E R G H V V G G H V C Y G N M V R T T A E V L
UniRef90_UPI000466D422   D   A E G E   H L H I S L S D G T G R M I G A H F G P G S A V Y T T A E I V
UniRef90_T0RK60          S L M E E D T F V H L H V S M S N E K F E A I G G H L F E A E V A V   T L E C F
UniRef90_UPI000225F453   D P A G Q     H L H L T I A D S K G R A F G G Y L L P G S Q V Y T T A E I V
UniRef90_M9S9G7          I R D S G E P I I H M H G S V G R   N G Q A V T G C F R E S V K V W L S M E V I
UniRef90_X1EWZ9          F P D E G N P K L H M H A S L G R E   G K A S T G C I R P G I E V W K V G E I I
UniRef90_M7P8M8          G S D E G K T D V H M H G V F V D C D G K V N G G H F L D G E N V A I T V E F V
UniRef90_V4AFT0          S G G D G G     H L H I S L S D V E G K V I G G H V I G N L I V H T T A E I L
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UniRef90_A3Z710                   L S L A P G Q D L K V S L D T L A R E Q Q C     S G
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UniRef90_V6J7X5        Q V Q Q G R L G R L V V A R L K P N E D V I D S A E A L C A S H G I A C A
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UniRef90_F8DDB2         M E S F E A D D G H V I V R L D R G D L A L E S I E T A C D E H D V T G A
UniRef90_R0GBQ3                M A R L K P N Q D L T E S V E A L C R Q H G M K T A
UniRef90_UPI000375A684            L E H G D D F Y T A V R Q A C H E H G I R S G
UniRef90_UPI0002001569            R A L P L H L E A G A D L R A S L E Q L A A S E Q A S G F
UniRef90_D2S1J3           M E S F E S D D G H V V R L D R G D M A L E S I E R A C E D H D V T G A
UniRef90_R5SXJ6             Q Y G R T M I M H L G K G E L V L E S L K A E I D R L G I K N G
UniRef90_UPI00037196BD         F G K I K R I V I A K I K I G V D L L E A I E E V I K K T G I K K G
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UniRef90_R4XTF4         R I H S R C A R R G R H V R L A L Q P G A S L F E A L V N G L A P L G H A V T G A
UniRef90_W0JST1          M E S F E S S D G H V I V R L D R G D M A L E S I E R A C E E H A V T G A
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UniRef90_W0FTZ2          M I G V G D L A E Q A Y H R E D L N E F E I A G L T G V L
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UniRef90_H0S450                    R A F A L R L R P N Q D F A G C L E A F C Q A Q G I R K A
UniRef90_H0S450                    R A F A L R L R P N Q D F A G C L E A F C Q A Q G I R K A
UniRef90_A0A023XE74          R T T S R A F A L R L R P N Q D F A G C L E A F C R A H G I A R A
UniRef90_A0A023XE74          R T T S R A F A L R L R P N Q D F A G C L E A F C R A H G I A R A
UniRef90_UPI0003617BC5          R C V V A R I R P N E D L V Q S I E Q V C R E H G L R A A
UniRef90_UPI0003617BC5          R C V V A R I R P N E D L V Q S I E Q V C R E H G L R A A
UniRef90_UPI000466681E        I T R A F A L R L R P N Q D F A G S L E T F C R A H G I T A A
UniRef90_UPI000466681E        I T R A F A L R L R P N Q D F A G S L E T F C R A H G I T A A
UniRef90_W6WAU8                       V L R P G E I F M A E V G R I F A E A G C K G G
UniRef90_W6WAU8                       V L R P G E I F M A E V G R I F A E A G C K G G
UniRef90_Q31KI4                     V L R L R P G D L K Q A L W D W T Q E H Q P S A A
UniRef90_UPI0003B4C79D        I E R V I Y A R F D A G A D L L L S L R E V I K S E N I T T G
UniRef90_D8IWE8                  K R V V L A R I R P D Q D L T M A V E A A C A E H G M A N A
UniRef90_D8IWE8                  K R V V L A R I R P D Q D L T M A V E A A C A E H G M A N A
UniRef90_X0UNK2
UniRef90_U1IN56          K T T S H A F A L R L R P N Q D F A C A L E G F C R L H G I L R A
UniRef90_U1IN56          K T T S H A F A L R L R P N Q D F A C A L E G F C R L H G I L R A
UniRef90_B8IU44                     L L K I Q P N E E L F A A V E G A C A N L G L R R A
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UniRef90_Q8U514                 R H V R L F I A A G R S L Y D G I V Q P L F E N G I E N A
UniRef90_U2CPR3               I G R T M I L E L D R G E D I V E G V E S A L K K E G I R N A
UniRef90_UPI000407FEA0         T T S R A F A M R L R P N Q D F A G C L E D F C R A R G I A R A
UniRef90_UPI000407FEA0         T T S R A F A M R L R P N Q D F A G C L E D F C R A R G I A R A
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UniRef90_X0V4W9
UniRef90_I3UCJ1        M L S L A G Q G Q S N W V L D V P E D V S I W E W V S S A F V Q H D I Q S A
UniRef90_J3CDS5                   R M I F A R V A P N E D I L G A L E A I C L K H D I K K A
UniRef90_J3CDS5                   R M I F A R V A P N E D I L G A L E A I C L K H D I K K A
UniRef90_A8S5Q7        E S G K I E E V V F A R F E P G E D I L K A L Y D I C R E K D I R T G
UniRef90_B0UR10                 G G C I L L K V Q P N E D L F L A V E A T C R E H G L R R A
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UniRef90_UPI00036EA7E8             L L S V K P G E E V I D T L T R R A A E E G I A N A
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UniRef90_A4YV42                    R A F A L R L R P N Q D V A F C L E A F C R T H G I C E A
UniRef90_I4Z121                  R V L L T K V R P N E D I S L A L E Q I C S R H G I T K A
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UniRef90_J2LFA1        D M Q A D S K I D G R T V L A R I R P D E D L N M A I E D V C R M H G I R H A
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UniRef90_A2BW30          Y V S G V V G N L S K A C I Q C P G D Q K V N I F E G N L E I V S L N G H F
UniRef90_R4XTY1          F V R G A L G S L V D A C L Y A R G G E V R Q L E G P A V E I V S L A G E V
UniRef90_W5X3H1          R L T A Q G A F S E C V V G W Y S F E Q K Q F V D T Q L E P V A I V T L A G Y I
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UniRef90_F5Q9T0          M R Y A G Q E G T T L L N G T F E V I S L N G T L
UniRef90_C5CZG0          S M T L I G G L A E L G F C L A L P D P T G R V L A T Y G A P H T V Q G A C F I
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UniRef90_W0P5U0          F V S G L G S L F R T S L M Q N E G A H A K T I E V S G V E I V S L N G E I
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UniRef90_H0S450          L V H G G V G S T I G A R F V D G S V V E P F A T E L T I T A G T I
UniRef90_H0S450          L V H G G V G S T I G A R F V D G S V V E P F A T E L T I T A G T I
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UniRef90_UPI0003617BC5   T I R G V G S I V G A R F E N A A P V D D I A T E I F V L D G V V
UniRef90_UPI000466681E   R I R G G V G S T I G A R F A D G R A V E P F A T E L T V T S G H V
UniRef90_UPI000466681E   R I R G G V G S T I G A R F A D G R A V E P F A T E L T V T S G H V
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UniRef90_UPI0003B4C79D   L I L D L G A L N V A R L Q H F D P E S K V S V V E I P G P M E A S G G G I I
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UniRef90_D8IWE8          I V R G V G S I I G A E F D D G R V L E D R A T E I L I R A G E V R Q G
UniRef90_X0UNK2          G K I V V G P K D G E A T P V I P L T F Q G V H E I S A V G T I
UniRef90_U1IN56          R L H G V G S T I G A V F T D V H D V V P F A T E L A V T A G Q I
UniRef90_U1IN56          R L H G V G S T I G A V F T D V H D V V P F A T E L A V T A G Q I
UniRef90_B8IU44          R V R G L G S I V Q P A F A D G R V V P T D A S E V L I R E G C V
UniRef90_B8IU44          R V R G L G S I V Q P A F A D G R V V P T D A S E V L I R E G C V
UniRef90_Q8U514          S L T I L G G F D I L S Y C V A D P S G K A V K P I D A G A A W L V F G N A T L
UniRef90_U2CPR3          Y I S A V G S I Q H L E Y H T M D E A T E D E F L S L N G P F E S G G I S G T I
UniRef90_UPI000407FEA0   R I R G V G S T I G A R F T H G G V I E P F E L A V K A G T I
UniRef90_UPI000407FEA0   R I R G V G S T I G A R F T H G G V I E P F E L A V K A G T I
UniRef90_J2UWV2          I V R G V G S I I G A E F E D G R V L D D R A T E I L V R A G E V
UniRef90_J2UWV2          I V R G V G S I I G A E F E D G R V L D D R A T E I L V R A G E V
UniRef90_F7T5T5          S M T L L G A F S H L D Y C T A P P D P A H L R P I A A G A A T L I F G N A T L
UniRef90_X0V4W9          P I D G A H E V V G V G V L A
UniRef90_I3UCJ1          H L D V M G G L R S A V F G Y P D P A G K R I A P N H T G N A T L I S A M G I Y
UniRef90_J3CDS5          V V R G I G S L I G A R Y E D G S I V D D V A T E V F V L E G L V
UniRef90_J3CDS5          V V R G I G S L I G A R Y E D G S I V D D V A T E V F V L E G L V
UniRef90_A8S5Q7          I I L G S G S A V D F T Y Q H F P I N P K L C P T N T M H G K C E I S L Q G T I
UniRef90_B0UR10          R V R G L G S L V R P A F A D G R V V P T D A S E V L I R D G R V
UniRef90_B0UR10          R V R G L G S L V R P A F A D G R V V P T D A S E V L I R D G R V
UniRef90_UPI00036EA7E8   I V S L I G A V E G A I S N M P A D D A S T D I V N E Y R Q P F E L S G T G E I
UniRef90_UPI0002D50492   V I N I V G G L R K A R L S M P I K E T D M D S P P E L E G M I E C S G V G T I
UniRef90_UPI000304A589   I V R G V G S I I G A E F E D G R V L E D R A T E I L I R A G E V R N G V G
UniRef90_UPI000304A589   I V R G V G S I I G A E F E D G R V L E D R A T E I L I R A G E V R N G V G
UniRef90_S2WNT1          S L T L L G D L E D L D F C V A P P D R S G H V V A T Y G P P A T L Q L F G N A
UniRef90_A4YV42          R I R G G V G S T I G A R F A D G M I V A P F A T E L T I A S G A I
UniRef90_A4YV42          R I R G G V G S T I G A R F A D G M I V A P F A T E L T I A S G A I
UniRef90_I4Z121          R V H G I G S L N G V R F A D G S R V E S H A T E V L I R E G E V
UniRef90_I4Z121          R V H G I G S L N G V R F A D G S R V E S H A T E V L I R E G E V
UniRef90_UPI00041A9901   K I R G V G S T I G A R F T D G R I V D P F A T E L T I T A G H I
UniRef90_UPI00041A9901   K I R G V G S T I G A R F T D G R I V D P F A T E L T I T A G H I
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UniRef90_W0PC73          H L D I M G G L L S A I F G Y P D P A G K R I A P N H V G N A T L I S A M G I Y
UniRef90_J2LFA1          K V R G V G S I I G A E F E D G R V V E D L A T E I L V R E G Q V
UniRef90_J2LFA1          K V R G V G S I I G A E F E D G R V V E D L A T E I L V R E G Q V
UniRef90_W1JJ52          K L H G V G S T I G A R F T H G G I T E P F A T E L A I T S G A I
UniRef90_W1JJ52          K L H G V G S T I G A R F T H G G I T E P F A T E L A I T S G A I
UniRef90_J2WNJ0          K I R G V G S T I G A R F T H G G V T E P F A T E L A V T A G T I
UniRef90_J2WNJ0          K I R G V G S T I G A R F T H G G V T E P F A T E L A V T A G T I
UniRef90_Q89L38          K I H G V G S T I G A R F T H G G V T E P F A T E L A V T A G A I
UniRef90_Q89L38          K I H G V G S T I G A R F T H G G V T E P F A T E L A V T A G A I
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UniRef90_A2BW30       N   K G V V H L H L S F A D E R C N V I G G H L E E G S I V K K G T D I L
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UniRef90_UPI000414B2E4   R S D D G S V R A A L S G V I A D P E G Q V Y G G P F V A G N P I C M T F E V T
UniRef90_A8HZ48       G L D N G A P M V H C H A L L S D A E G Q L F G G H I I P D T S M V G A V V V F
UniRef90_X1JBT0       F T E T G E V A L H L H G V F C D K D G K T M G G H L V P G E N I L A T L D A F
UniRef90_Q22NS7       S E G N   M P H I H I S L S D K Y G N M I G G H L P S S C P V N T T A E I V
UniRef90_A9ICW0       R C D N G A P T A H V T G I V M D M Q G K I H A G R F T S G R N P A M T V E A V
UniRef90_Q9SR16       R T E Q G G K S G G L S V S L S A S D G Q I I G G H L A A G P V Q V Q F C C I I
UniRef90_UPI00037CFC22   M L N E G K H T A S I L T N L V D E A G T E F C G Y L I K G H A I C I T A E I Y
UniRef90_T1D1Y4       S   E N E P I F H I H G L L
UniRef90_R5ZEX9       C Q N N N D Y D T H F H A T M C D A S G Q V F G G H I V K G T P T L T T V D L L
UniRef90_B8D4G0       L V K N G E V S I H I H V V A G F E N   T T V A G H L I H G T   A K P M L E V F
UniRef90_A0A052JBY1   G T D G G L P L V H C H A V F R D A G G R L A G G H I V P Q T I G A G A L A V L
UniRef90_J4PFI1       G T D A G A P L V H C H A A F C R D D G A P L G G H I I P Q T S I V G P V P V L
UniRef90_B5YDG1       I N Y E   P H L H F V A S D L R   N T Y S G H L E Y N S Q V L Y L A E F T
UniRef90_F5Q9T0       E Q S G E   H L H L C V S D P H G T M L G G H M M P G C T V R T T L E L V
UniRef90_C5CZG0       F G N G G T P V V H C H G A F R T A D G A V R G G H I L T D R T V V G S V T A V
UniRef90_UPI0004719F07   G V R D G S P F N H V H A S W T G P G N E A R G G H L L P G T L A G P A G   L T
UniRef90_E1TI01       V P V D G R A L G A L T A I L S G T D S Q V F A G R V V R G M N L S F T V E V T
UniRef90_W0P5U0       E P A T Q T P V A R L Y G I V A D N Q G T V F V K S E A V C V T V E V V
UniRef90_R0EJX9       G R K D G E P F V H C H A I W R G R D G Q R Q G G H L M E K T I V G Q A A P A Q
UniRef90_H0S450       A P G T D G L E A T L D V A L V D Y T G A L A H G R L V R G D N V L M T M E L V
UniRef90_H0S450       A P G T D G L E A T L D V A L V D Y T G A L A H G R L V R G D N V L M T M E L V
UniRef90_A0A023XE74   R G P S D G L E A T L D V A L I D Y T G G I A E G R L V R G D N V L M T M E L V
UniRef90_A0A023XE74   R G P S D G L E A T L D V A L I D Y T G G I A E G R L V R G D N V L M T M E L V
UniRef90_UPI0003617BC5   A E A A N G P R A T L D V A L I D P R G N I H Q G R V V R G D N P V L I C E L F
UniRef90_UPI0003617BC5   A E A A N G P R A T L D V A L I D P R G N I H Q G R V V R G D N P V L I C E L F
UniRef90_UPI000466681E   L P A D G A L E A Q L D I A L V D F T G G L A E G R L A R G D N I L M T M E L V
UniRef90_UPI000466681E   L P A D G A L E A Q L D I A L V D F T G G L A E G R L A R G D N I L M T M E L V
UniRef90_W6WAU8       G E R D G A P F L H C H G I W D T G E G A L R M G H V L P S I V S R P I A V K G
UniRef90_W6WAU8       G E R D G A P F L H C H G I W D T G E G A L R M G H V L P S I V S R P I A V K G
UniRef90_Q31KI4       C L D G   L H L H L A I A D A T G
UniRef90_UPI0003B4C79D   G Y V D G E P Y V H C H L T V   N S S V H T F M G H L M E G T I I R A
UniRef90_D8IWE8       R A R L E I G L I N P Q G Q V C E G V L A R G C N P V L I C E L V
UniRef90_D8IWE8       R A R L E I G L I N P Q G Q V C E G V L A R G C N P V L I C E L V
UniRef90_X0UNK2       F P D H G Q P R V H M H A A L G R E   G K A R V G C I R T G I E V W K L G E I I
UniRef90_U1IN56       A A D D G R L H A E L D I A L V D Y L G G T A E G R L V R G D N V L M T M E L V
UniRef90_U1IN56       A A D D G R L H A E L D I A L V D Y L G G T A E G R L V R G D N V L M T M E L V
UniRef90_B8IU44       R E P D G R P L A H L D I A V V D V A G R I H E G V L A R G R N V C I T F E L C C
UniRef90_B8IU44       R E P D G R P L A H L D I A V V D V A G R I H E G V L A R G R N V C I T F E L C C
UniRef90_Q8U514       G R M K G E P I V H C H A A M R T A G V V K G G H L L T E S C I V G G V S A L
UniRef90_U2CPR3       I N G   V A H L H F S G G G V G G V H V G   H L E R G T K V L Y L M E L V
UniRef90_UPI000407FEA0   A P G S G A L E A I L D A A L I D Y T G G I A E G C L I R G D N V L M T M E L V
UniRef90_UPI000407FEA0   A P G S G A L E A I L D A A L I D Y T G G I A E G C L I R G D N V L M T M E L V
UniRef90_J2UWV2       V R T D H G L R A R L D I G L V N P A G Q V W E G V L A R G R N P V L I C E L V
UniRef90_J2UWV2       V R T D H G L R A R L D I G L V N P A G Q V W E G V L A R G R N P V L I C E L V
UniRef90_F7T5T5       G K G D G E P L V H C H A A F C D E G G A L L G G H V I P Q T T I V G A A P V T
UniRef90_X0V4W9       P G E D G R P I L H I H A A L G R S   G K T T T G C L R P G V T T W L V A E A I
UniRef90_I3UCJ1       G K D D G K P L L H C H G C L V T G N G Q T Q G G H L Q Q C I V G Q T G I R I Y
UniRef90_J3CDS5       D S S T I A T R M K I A M V D T R G A I T Q G L I K R G E N V C I T F E I C C
UniRef90_J3CDS5       D S S T I A T R M K I A M V D T R G A I T Q G L I K R G E N V C I T F E I C C
UniRef90_A8S5Q7       G T G P G T P Y I H A H C V A S N A D Y T V   C G H L M P G T R V S H F T V I I
UniRef90_B0UR10       E A D D G S L R A H L D I A V V D V A G A I H E G A L A R G R N V C I T F E L G
UniRef90_B0UR10       E A D D G S L R A H L D I A V V D V A G A I H E G A L A R G R N V C I T F E L G
UniRef90_UPI00036EA7E8   R D G K   V H V H V V L G R E G D G A L A G H L H W A R V
UniRef90_UPI0002D50492   V Y H A D T P N L H I H L T V T H A   G K S Y M G H L I E G C L V R
UniRef90_UPI000304A589   R L D I G L I N P Q G Q V C E G V L A R G C N P V L I C E L V
UniRef90_UPI000304A589   R L D I G L I N P Q G Q V C E G V L A R G C N P V L I C E L V
UniRef90_S2WNT1       T L E T G H P A V H C H A V F S S A Q G H L L G G H V L R C R I V N A P V S A L
UniRef90_A4YV42       A A G A D G P E A S L D I A L V D Y T G A L A Q G R L V R G D N V L M T M E L V
UniRef90_A4YV42       A A G A D G P E A S L D I A L V D Y T G A L A Q G R L V R G D N V L M T M E L V
UniRef90_I4Z121       E L S H D R L R G P L H V D V V D P D G R I F S G D L V H G D N V C V T F E L M
UniRef90_I4Z121       E L S H D R L R G P L H V D V V D P D G R I F S G D L V H G D N V C V T F E L M
UniRef90_UPI00041A9901   G P G G G A P Q A E L D I A L V D Y T G G L A E G S L V R G D N V L M T M E L V
UniRef90_UPI00041A9901   G P G G G A P Q A E L D I A L V D Y T G G L A E G S L V R G D N V L M T M E L V
UniRef90_I1LH13       L Q S D N N R M A A L S V S L A G P D G R V L G G E V V G A L T A A T A V Q V L
UniRef90_W0PC73       G K D K G Q P M L H C H G C L V T G S G L T Q G G H L D T A Q C I V G G L R I Y
UniRef90_J2LFA1       S P T A D G L R C R L D I A L I D P R G K V C E G V L A R G R N P V L I C E L V
UniRef90_J2LFA1       S P T A D G L R C R L D I A L I D P R G K V C E G V L A R G R N P V L I C E L V
UniRef90_W1JJ52       E P G P S E L E A V L D V A L I D Y T G G V A E G R L V R G D N V L M T M E I Y
UniRef90_W1JJ52       E P G P S E L E A V L D V A L I D Y T G G V A E G R L V R G D N V L M T M E I Y
UniRef90_J2WNJ0       A P P S G A L E A A L D I A L I D Y T G G L A E G R L I R G D N V L M T M E L V
UniRef90_J2WNJ0       A P P S G A L E A A L D I A L I D Y T G G L A E G R L I R G D N V L M T M E L V
UniRef90_Q89L38       A P P S G A L E A A L D V A L I D Y T G G I A E G R L I R G D N V L M T M E L V
UniRef90_Q89L38       A P P S G A L E A A L D V A L I D Y T G G I A E G R L I R G D N V L M T M E L V
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                                              130                 140
UniRef90_I3TFG3          L V E V G D V V R E V F
UniRef90_S0FPW3          L L E V S G D L H R V K D
UniRef90_K5YU12          V T S L E G E L R Q T F D P E I N I S V L K
UniRef90_K9P817          V G
UniRef90_S6CZ17          V Q P I E G E L A R R P
UniRef90_A2BW30          L V S F E N K
UniRef90_R4XTY1          L E E
UniRef90_W5X3H1
UniRef90_UPI00037888C4   L V E L K G S L T R E K N E D
UniRef90_UPI0003747F93   L Q V I E E D
UniRef90_UPI0004652177   I L E V D D N L T R V L D E N
UniRef90_G0GA70          L V P G G V R L V R R R D A R L G V P V L H
UniRef90_A3SL37          L E E
UniRef90_K2PHW0          V T S L E G N L Q Q A Y D P E T N I P L L Q
UniRef90_C5CZF9          L E E
UniRef90_S2X713          L E E
UniRef90_UPI0003B4DF33   L E L L G A R F A R R V D A E T R F A I F H
UniRef90_K5YHP0          I A D H A G D
UniRef90_K5YHP0          I A D H A G D
UniRef90_UPI000414B2E4   L E E L P E D L R
UniRef90_A8HZ48          A R A F E G E A I R R Y D P E T I M S L F H
UniRef90_X1JBT0          I G E V D V K L M R R Y D E E T A L P L F S
UniRef90_Q22NS7          L T E I N L V F Q R P I D P Q T T Y D E L Q I
UniRef90_A9ICW0          I E E
UniRef90_Q9SR16          V I L G T F Q L D R K K D
UniRef90_UPI00037CFC22   L M E V
UniRef90_T1D1Y4
UniRef90_R5ZEX9          I F E I N I E M L R V Y D E E T D L T
UniRef90_B8D4G0          L I E I G E V V E E T F
UniRef90_A0A052JBY1      A T S L E G E L R A S Y D E E T H I R L L Q
UniRef90_J4PFI1          V T S L E G E L R A T Y D A E T N L R L L Q
UniRef90_B5YDG1          L L I L D
UniRef90_F5Q9T0          I G S L E E A F S R Q P C A L S G Y D E L H I
UniRef90_C5CZG0          V T A L D S E L R V V Y D D E T R M P L M
UniRef90_UPI0004719F07   I R L F D A R L I S D V D P E T G F S A F
UniRef90_E1TI01          L Q E
UniRef90_W0P5U0          I Q E
UniRef90_R0EJX9          W G L H D A T M A T R Y D P E T N F T L F
UniRef90_H0S450          L E V V
UniRef90_H0S450          L E V V
UniRef90_A0A023XE74      L E V L G
UniRef90_A0A023XE74      L E V L G
UniRef90_UPI0003617BC5   L E E
UniRef90_UPI0003617BC5   L E E
UniRef90_UPI000466681E   V E A L G
UniRef90_UPI000466681E   V E A L G
UniRef90_W6WAU8          Y G S A T A T F S S I P D P E T N F T L F S A K
UniRef90_W6WAU8          Y G S A T A T F S S I P D P E T N F T L F S A K
UniRef90_Q31KI4
UniRef90_UPI0003B4C79D
UniRef90_D8IWE8          L Q E L
UniRef90_D8IWE8          L Q E L
UniRef90_X0UNK2          V L E I D N T A Q R K E D S K T G F T M L E
UniRef90_U1IN56          L E V L E E
UniRef90_U1IN56          L E V L E E
UniRef90_B8IU44          L E V
UniRef90_B8IU44          L E V
UniRef90_Q8U514          V T S L D S V L Q Q S F D P E T N I P I L Q
UniRef90_U2CPR3          V I E L K G E L Q R K L T P E
UniRef90_UPI000407FEA0   L E V V D
UniRef90_UPI000407FEA0   L E V V D
UniRef90_J2UWV2          L E E
UniRef90_J2UWV2          L E E
UniRef90_F7T5T5          V L V T G F E L R A T Y D A E T N L R L L Q
UniRef90_X0V4W9          L E I L D A K V A R L M D N E S G F E L L E
UniRef90_I3UCJ1          V T T T E V E F A A R L D S T S G M Y V F H
UniRef90_J3CDS5          L E E T
UniRef90_J3CDS5          L E E T
UniRef90_A8S5Q7          A K I S G V E L Q A T I D H K I G F
UniRef90_B0UR10          I E
UniRef90_B0UR10          I E
UniRef90_UPI00036EA7E8
UniRef90_UPI0002D50492
UniRef90_UPI000304A589   L E E
UniRef90_UPI000304A589   L E E
UniRef90_S2WNT1          A T S L D G F G L R A Y D P E T R M S L M
UniRef90_A4YV42          L E V V
UniRef90_A4YV42          L E V V
UniRef90_I4Z121          I E
UniRef90_I4Z121          I E
UniRef90_UPI00041A9901   L E V L
UniRef90_UPI00041A9901   L E V L
UniRef90_I1LH13          L
UniRef90_W0PC73          V T A T D I E F V A R L D A T S G M Y V F H
UniRef90_J2LFA1          L E E
UniRef90_J2LFA1          L E E
UniRef90_W1JJ52          L E V L E
UniRef90_W1JJ52          L E V L E
UniRef90_J2WNJ0          L E V L G
UniRef90_J2WNJ0          L E V L G
UniRef90_Q89L38          L E V L S
UniRef90_Q89L38          L E V L S
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Multiple sequence alignment

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                            1         10        20        30        40
UniRef90_UPI000377E04F          M F V I E V P S G A E V L E T V A A E A K Q R G V T A A
UniRef90_UPI000050F9B9              H L V D L V A G D D L F D S V T V L L E T L D V S G L
UniRef90_UPI000379AB80        G R A F S F T L Q A G L P L L E A A R R G F A A E G F T S G
UniRef90_UPI000225F5C2      E D G A A L F A R I R P G E D V V T A I E T L A A R H G I S S A
UniRef90_UPI000225F5C2      E D G A A L F A R I R P G E D V V T A I E T L A A R H G I S S A
UniRef90_H0TZS2               G R A V S F T V P A G L P L L E A V R Q G F A A Y G F A G G
UniRef90_H0TZS2               G R A V S F T V P A G L P L L E A V R Q G F A A Y G F A G G
UniRef90_H0SFK1                 R A F A L R L R P N Q D F A G C L E A F C Q A R G I R E A
UniRef90_H0SFK1                 R A F A L R L R P N Q D F A G C L E A F C Q A R G I R E A
UniRef90_H0T1C9               G R S F S F T L E K G L P L L E A A H R G F A A Q G F A G G
UniRef90_H0T1C9               G R S F S F T L E K G L P L L E A A H R G F A A Q G F A G G
UniRef90_X1LNG2                                           K R E N I R T G
UniRef90_A1BBI8               D G P G L F A R I L P G E D V V A A I E T L A A R H G I R D A
UniRef90_A1BBI8               D G P G L F A R I L P G E D V V A A I E T L A A R H G I R D A
UniRef90_UPI00036C2966       E D G Q G L L A R I L P G E D V V T A V E A L A A R H G I A N A
UniRef90_UPI00036C2966       E D G Q G L L A R I L P G E D V V T A V E A L A A R H G I A N A
UniRef90_M4FGA5                       H I V N I A P G E D V A Q K I V M F A Q Q S K H E L C
UniRef90_V7CEI0                       H V I L V E S G E D I T A K I M A F S Q Q G P R T V C
UniRef90_I3UCJ0            R H C R V G R V V N A R F F C N D D L I T G M E D I C C E H E I A Q G
UniRef90_G8QWZ8             E N L F Q L V V P A G A D I M G C I L D F L A D H K L T S V
UniRef90_J2UHD8                     I T L Q P G T K V G T A L R E V L K R Y G Q R G G
UniRef90_R5RYS6
UniRef90_W8H142                   L P A G Q A L L P A L Y D A V F A R G F T S A
UniRef90_W8H142                   L P A G Q A L L P A L Y D A V F A R G F T S A
UniRef90_F6H123                   Y V L E V P G G V D I V E A I A R F S R R R N I G L C
UniRef90_V4TBU2                     L R L P A G P S V L A A A H E A L R A E G C E G G
UniRef90_A0A010ZGW8              Y D V I I P G G E D I R E A I T E F V L K K D W E
UniRef90_M8CGB2                   H I L S V K A G E D V A S K I M S F S Q Q G P R T V C
UniRef90_G7JGG3                   H V I L V E S G E D I T E K V M A F S Q T G P R T V C
UniRef90_M4EG87                   H V I S V E A G E D V V S K V M A F S Q Q R P R A L C
UniRef90_M5X3F1                   H V I T A E P G E D L T F K I I S V A E Q G P R A I W
UniRef90_A3PQX1               G D L I V A R V R P N E D L I E A L E A I A A R H G V R E G
UniRef90_A3PQX1               G D L I V A R V R P N E D L I E A L E A I A A R H G V R E G
UniRef90_R0FWZ5                     I T L Q P G S S V G E S L R S V L A R Y G Q R G G
UniRef90_A0A022PVG8               H V I T V N P G E D I N M K I I S F S Q Q G S R A I C
UniRef90_B9HMK7             R S H V L E I S S G S D I V D S L A N F S H R R H H G V S
UniRef90_M9RYN7
UniRef90_Q1YHE7                     A V T L R P N Q D V G T A I A A I C A E R G I A E A
UniRef90_Q1YHE7                     A V T L R P N Q D V G T A I A A I C A E R G I A E A
UniRef90_UPI00032AC639            H V I L V E S G E D I T E K V M A F F Q I G P R T V C
UniRef90_K7LQ84                   H V L T V K I G E D L V S T I M S F F D K D P Q A I C
UniRef90_M4DVR8                   H I V N I T P G E D V A Q K I I H F A E Q S K H E L C
UniRef90_W9H1G0                   V L A R V R P N E D I C E A V E T L C R R H G I G S A
UniRef90_E4N6H7                   L I I L G D D G D A I E A L A A I A G E R G I T A A
UniRef90_E7C2I7
UniRef90_UPI0002C2EC3C            H V I N L V A G E D V G D K I M A F M R Q S K R D I C
UniRef90_L9UAZ2                   I P L L L K G G Q S L H D A I I K E L S V H N I T S A
UniRef90_V7CH53                   H V I S A E A G E D I A A K I M A F C E Q G P R T V C
UniRef90_A5GZD1                   Y I L E I P L G V D I I D S V Y R F C R K H N T G L C
UniRef90_UPI0003736CFD             I E R D E E I R M C L D Q Y M L E S R L Q H V
UniRef90_I2N2L8                    K N D E L I E S V N R Q A A R A G V T A A
UniRef90_B8LPP3               R P H I L E V A G G H D V V E C L T Q F C G R R Q V G L C
UniRef90_S8EG75                   H V I T I N S G E D V Y A K I M E F A R Q G P R T V C
UniRef90_C0CV49             G Q I Y E V T V K A G E D I K A V T D Y V L G Q G W E S V
UniRef90_A0A022R9P8               H T I T I E H G E D I V Q R I R S F S E M T P D A I C
UniRef90_O49350                   H V I E V K T G E D I A T K I L A F T N Q G P R A I C
UniRef90_V7AFK1             M Q E T A G G N F H A L S V Q I G E N L V G M I M S F F E K S P L S V C
UniRef90_V7B636                   F I L E I P G G N D V D A L T Q F S R R K N T G L C
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UniRef90_J3MQQ9                   V I T V Q V G E D V V S R V M S F S R   N G W A V C
UniRef90_UPI0004643E8D            L R L A K G Q S V N A A I T G T L A N A G F S A G
UniRef90_UPI0004643E8D            L R L A K G Q S V N A A I T G T L A N A G F S A G
UniRef90_X1GIZ6            E G M E P K F L E L S E V Y F T R L R P G E D L F V G I T G L C K E N N M D R A
UniRef90_F2CZ86                   H V I I S A G E D V A A R I M S F S Q Q G P R A I C
UniRef90_UPI000312D9C1         R A I A C T I K P N E D I A P T I E R I C R E N G I G D A
UniRef90_Q10T05                   H L L Q I D A G E E I I P K I T A L S K S N G R V I C
UniRef90_X6L409             T A K T L Q I T L P K G A V L M Q A V A E A M K A A G A D S G
UniRef90_A0A022QAF3               H V L H V G I G E D I A A K L L A F A Q Q R S R A L C
UniRef90_H5XNP3
UniRef90_I1IE59                    H V I I I S A G E D V A A R I M S F S Q Q G P R A I C
UniRef90_UPI00037276E4
UniRef90_M4DWY1                   H V I E V K T G E D I A M K V V A F T Q Q G P R A I C
UniRef90_K7N1E6               R I V I I N V D P G R D I M E S I L D V A R Q G N V N L T
UniRef90_M0TPJ3                   H V I T I P V G E D I A A K I M S F S Q Q G P R A V C
UniRef90_S8EFS6             R T H V L D I L S G T D I L E S I A S Y A R R R H C G V L
UniRef90_UPI00047C85B2             V R P G V C V N E A I A D A F A E Q G F D G G
UniRef90_UPI000234EEC2           H V L H I N Q G E D I T S K I M S F S E L H A K S I C
UniRef90_K4BSG6                   V I L V K T G E D I V S K I M N L S Q Q G P M K I C
UniRef90_M1AWC6                   H V I H I G V G E D I A E K L L A F A Q Q R P R A L C
UniRef90_B1Y4S6                   V Q L R S G V T L L D A L H E A M A A L N A R S G
UniRef90_M4D9W0                   H V I E V K T G E D I A M K V V A F T H Q G P R A I C
UniRef90_UPI00032A9498            H V V T V N P G E D V V G K I F S F F Q K   G P R A A
UniRef90_UPI00042B1D24            H V V T V G I G E D I V A K M L S F S Q Q R P R A V C
UniRef90_L1KSZ3                 M I V F E V P S G E L V D E L N R Q A E A A G I T G A
UniRef90_UPI0004642A2D          G F A L V R P N E P V L E S I E A V C V R N S V E R A
UniRef90_M0RMP5               R P H V L E I P A G H D V A D S L A R F S Q R R N L G I C
UniRef90_V5RIG1            M E I R E K G N L I I L Y F E K N E D L L F S M L N N V V R E Y M I I D A
UniRef90_B9SY33                   V I L E I S A G S D I I D S I I N F A R R N H S G I S
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                              50            60            70           80
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UniRef90_UPI000225F5C2  R L H A V G S I D H I R F S D G Q R M D C L A T E L R F D D A R L I R G T
UniRef90_H0TZS2         V A N A L G P L A Y V M P A L A T P D H A A F Y S E T Y R P Q G I T T A T M T L
UniRef90_H0TZS2         V A N A L G P L A Y V M P A L A T P D H A A F Y S E T Y R P Q G I T T A T M T L
UniRef90_H0SFK1         Q I R G V G S T I G A R F       E S G G I V E P F A T E L T L T A     G A I
UniRef90_H0SFK1         Q I R G V G S T I G A R F       E S G G I V E P F A T E L T L T A     G A I
UniRef90_H0T1C9         V L E A L G P F A Y V M P A L S K P N H A A F Y S E T H R P G G V S Q L T G T M
UniRef90_H0T1C9         V L E A L G P F A Y V M P A L S K P N H A A F Y S E T H R P G G V S Q L T G T M
UniRef90_X1LNG2         V I S G I G A L E K G V F R N A K V I P P D Y K M E I E K P L E L V S L G G W I
UniRef90_A1BBI8         R L H A V G S I D H I R F A E G H R M D C L A T E L R F A D A R L A R G T A H V
UniRef90_A1BBI8         R L H A V G S I D H I R F A E G H R M D C L A T E L R F A D A R L A R G T A H V
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UniRef90_UPI00036C2966  R L Q G L G S I D H I R   F A E G H R M D C H A T E L R       L A G A A
UniRef90_M4FGA5         V L S A S G T I S T A S L R   Q P G G N I S Y E       G Q Y E I I S L S G F I
UniRef90_V7CEI0         I L S A I G A I C N V T L R   Q P A L S G G T A T Y E G R F E I I S L S G A M
UniRef90_I3UCJ0         V I K G L G S L F K   S S L E I M T D E G V P R T I N V E G V E I L S M N G H V
UniRef90_G8QWZ8         Y I I G I G S A K N I R V A A P D L P L R C V E I P F H S S C E I V G F T G E V
UniRef90_J2UHD8         V R M C G G T A R K L H Y H R I E T T R D A N R P Y D Y G P P H I T F V T G A I
UniRef90_R5RYS6                                                           G P L E L I S A Q A E V
UniRef90_W8H142         F G E L R G G T F E A S I C H A G T S V A T F S E P R R G G Q G P A T F V R G T I
UniRef90_W8H142         F G E L R G G T F E A S I C H A G T S V A T F S E P R R G G Q G P A T F V R G T I
UniRef90_F6H123         V L N G S G T V A N V T L R   Q P S T T P G A T V T F G R F D I L S I S A T I
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UniRef90_A0A010ZGW8     E V S V I G A V G S V Q I S F T S P I E N R L P L R T F G A A E I L S F S G E I
UniRef90_M8CGB2         I L S A N G A I S N V T L R   Q P A T S G G T V T Y E G R F E I I S L S G S F
UniRef90_G7JGG3         I L S A I G A I S S V R Q P A S G S I A R Y E V Q L V N G Q F E I I V S L S G P M
UniRef90_M4EG87         V M S G T G T V S S V T L R   Q P A T T E A S L T F E G R F E I L S L G G S Y
UniRef90_M5X3F1         I I S A N G A V S N V R L R R P D T D E G     S I T L E G V E I A H L S G S F
UniRef90_A3PQX1         I L S L I G S T V G A R F       E D G L A I D E V P T E I L G L N G R F
UniRef90_A3PQX1         I L S L I G S T V G A R F       E D G L A I D E V P T E I L G L N G R F
UniRef90_R0FWZ5         V G R M C G G     T A R R L H Y H R I E H D Y G P P H V L E G V I T F I T G A I
UniRef90_A0A022PVG8     I L A A N G S I S N V T L R Q P N S S G G T L T Y E       G C F E I L S L T G S F
UniRef90_B9HMK7         I L S G S G I V D N V T L R   Q P A A P G G V I T L H G R F E I L S L S G S F
UniRef90_M9RYN7                                         E T V L T D A I I L Q A G A H L
UniRef90_Q1YHE7         R L S G I G S L N G A R   F A N G P A M D S Y A S E L       L I R D G
UniRef90_Q1YHE7         R L S G I G S L N G A R   F A N G P A M D S Y A S E L       L I R D G
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UniRef90_W9H1G0         T V R G I G S L V G A E F G       D G R I V G S H A S E I L I T R G H V
UniRef90_E4N6H7         V V S L V G A A R S F T V S T M N A D R P W E K V H T A G R L A E V A G N G E I
UniRef90_E7C2I7                                 G P S H A A W Y S E T F A P V T V E A A G A I V
UniRef90_UPI0002C2EC3C  I L S A S G S I S N A S I R   Q P A T S G G N I T Y E G H F E I I S L S G S Y
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UniRef90_B8LPP3         V L S G R G M V T N V T I R     Q A T G T G S T V T F G R F E I L S L S G A Y
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UniRef90_C0CV49         Y I T G V G S V M S Y T T P V R D Q L P L V T A S Q P A E G A E V L S L T G E V
UniRef90_A0A022R9P8     I I S A S G T V S I A E V Y V P N P R R D I F R Y E       G E L T I I H L N G T Y
UniRef90_O49350         I L S A T G A V T N V M L R Q A N N S N P T G T V K Y E G R F E I I S L S G S F
UniRef90_V7AFK1         I L S A T G A I S N V T I R       G S N H I M R L E G T Y E I I S L S G T S
UniRef90_V7B636         V L T G S G T V G N V T L R     Q P S V A T V T F G R F D I L S M S A T F
UniRef90_V4L6H1         V L S G S G S V V N V T L R Q P S P A A P G S T I T F H G K F D L L S V S A T F
UniRef90_UPI00032A5905  I V T A N G V V S K V R I S     S H P S S D E T I T Y E G Y E I I S L S G S F
UniRef90_A0A059CH20     V L S G S G T V S A V T L R L     P A S S G E T I T F E G F E I L C L S G Y L
UniRef90_J3MQQ9         V L S A N G T I S N V T L R Q A D S S V A T V N Y E       G H F E I L S L S G S Y
UniRef90_UPI0004643E8D  H V H         L E N V A M R Y V I P A A S P D D S H V A W Y S E T Y A P D G V V
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UniRef90_F2CZ86         I L S A T G A V S T A T L     H Q D S D S G V V T Y E G R F E I L S L S G Y L
UniRef90_UPI000312D9C1  S V H G I G S L V G A T F T             E A P E M A S Y A T E V
UniRef90_Q10T05         V L S V L G A V Q E A T L L L S S G V T       S Y H K G P L E I I R L F G S I
UniRef90_X6L409         V I E V E G A I G P Y R F V G P G P S S D G L H A A W Y S P P T I T Q G T A I V I
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UniRef90_UPI00037276E4                             M H L S N V E A L G G     G T I I
UniRef90_M4DWY1         I L S A T G A V S T V M L R Q A N N P N G A V K F E       G P Y E I I S M S G S F
UniRef90_K7N1E6         V L S T S G T V T K V T L Q     N S L H G A A A L T L H G P F T L L S L N G S V
UniRef90_M0TPJ3         I L S A N G A V S T V T L R     Q S A T S G S T V T Y E G F E I L C L S G S Y
UniRef90_S8EFS6         V L S C V G N V S H L I L R Q L G G E E R Q F H       G R F Q I I S L H G S F
UniRef90_UPI00047C85B2  Y V R   L K N V P M K H L H Y V M P A A A A W Y S E T F P D G T I I D A G L H M
UniRef90_UPI000234EEC2  I L S A N G T V T N V T L R L S S H S D G L D N A V Y Q G H F E I I S L K G S C
UniRef90_K4BSG6         V H S A T G G I C N V T L Q     E S A T G G G I V T Y E G F E I I I S L S G S Y
UniRef90_M1AWC6         I L S A N G A V S A I T L R       P P A N S G A T V T Y E G F E I L C L S G S Y
UniRef90_B1Y4S6         V A R L H G G F A Y A M P A L R T P E H A V V F S D R F D A A E P V S F E A F G
UniRef90_M4D9W0         I L S A T G A V S S V     M F R Q S N P N G V V K Y E P Y E I I S M S G S F
UniRef90_UPI00032A9498  V L S A T G T V S V I L R Q P G A S D G C L R Y E       G R F E I L T L S G S C
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UniRef90_UPI0004642A2D  R I F G V G S T V G A L F         E D G P E V A S Y A T E L
UniRef90_M0RMP5         V L S G I G A V A N V T L G L V P Q P A G A P A T I V F R G F E I L S I T G T F
UniRef90_V5RIG1         K I T G F G F F K R M E F G I L T Q T E P L F F G K T L V E V T V S G V Q G L I
UniRef90_B9SY33         V I S A T G S V T N V T L R H P L S H A P S L S L H G P F N I L S L S G T F
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                            90            100           110           120
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UniRef90_UPI000225F5C2          A H I P I E V V D I H G H I A R G V L E R G N P V G V T L E L I
UniRef90_H0TZS2         G V R D E A P F F H C H A L W T E E G G R K S G G H I L P E E T V V A E A F V V
UniRef90_H0TZS2         G V R D E A P F F H C H A L W T E E G G R K S G G H I L P E E T V V A E A F V V
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UniRef90_H0T1C9         T L R D G A P F F H C H A L W T E D G A R A G G G H I L P E E T L V A E F E V A
UniRef90_X1LNG2         T T R N G E L N I H A H T T I I D D E I V S L G G H L T K G T I T S I K V V V V
UniRef90_A1BBI8         P I E    V V D I H G H I        A R G T L A R G A N P V G V T L E L I
UniRef90_A1BBI8         P I E    V V D I H G H I        A R G T L A R G A N P V G V T L E L I
UniRef90_UPI00036C2966  L T R G    R A H I P I E V V D I H G N I A R G S L R G G N P V G V T L E L I
UniRef90_UPI00036C2966  L T R G    R A H I P I E V V D I H G N I A R G S L R G G N P V G V T L E L I
UniRef90_M4FGA5         R S E Q G G K T G G L C V S L S R S D G Q I I G G A V   G T H L T A A G P V Q
UniRef90_V7CEI0         Q E S N G E R S C T L N V T L A G S D G R V L G G G V A G T L T A A S T V Q V I
UniRef90_I3UCJ0         R R D R G K T E V E L Y G I V A N N A G E V F A G R F I G G S P V C I T I E V M
UniRef90_G8QWZ8         M E K D S P L F V H L H V A A A S A G G H V F G G G F R G G K A F R
UniRef90_J2UHD8         Q N Q E G K I L L H C H A G F L D G D G T I H G G H L L L D T V E V G D D P L I
UniRef90_R5RYS6         C L T D P E P V F H V H G V V T D A D G K A W G G H F F G G N P V H A T V D I V
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UniRef90_A0A010ZGW8     M R R E N P L F V H I H A S C A I A G G H V Y G G G L K C G K A F R
UniRef90_M8CGB2         L L E D G D T R S R L S V A L A G S D G R V L G G C V A G Q L T A A T P V Q V V
UniRef90_G7JGG3         P L S E N N R T S S L Y V S V A G A D G R V L G G A V A G E L T A A S T V Q V I
UniRef90_M4EG87         L V N E G G R T G G L S V S L S G P E G H V L G G
UniRef90_M5X3F1         M F Y D G T M S G G L S V S L S G P N G S C I G G A V C G S L I A A G H V Q V V
UniRef90_A3PQX1         G G D A G G T R L D L E I A L I D A L G R I H R G R P S R G E N P V L I C E V F
UniRef90_A3PQX1         G G D A G G T R L D L E I A L I D A L G R I H R G R P S R G E N P V L I C E V F
UniRef90_R0FWZ5         Q N Q D G K V L L H C H S G F I D G D G A L H G G H L L L D T V E V G D D P L I
UniRef90_A0A022PVG8     M P S D N G L S G G M S V S L A G S D G R V L G G G L A G M L V A D G P V Q V V
UniRef90_B9HMK7         L P A P S P P G A R L T V Y L A G A Q G Q V V G G T V M G E L V A A G P V M V I
UniRef90_M9RYN7         G R R D G A A F A H V H G L W S E K S G T R H A G H L L D A T V L S I D R V V D
UniRef90_Q1YHE7         R I E A G T A E P R L D V S V V A M D G T I F E G R L V H G D N V C V T F E L V
UniRef90_Q1YHE7         R I E A G T A E P R L D V S V V A M D G T I F E G R L V H G D N V C V T F E L V
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sol0   B   B   B   B

jhmm
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jhmm
jpssm
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