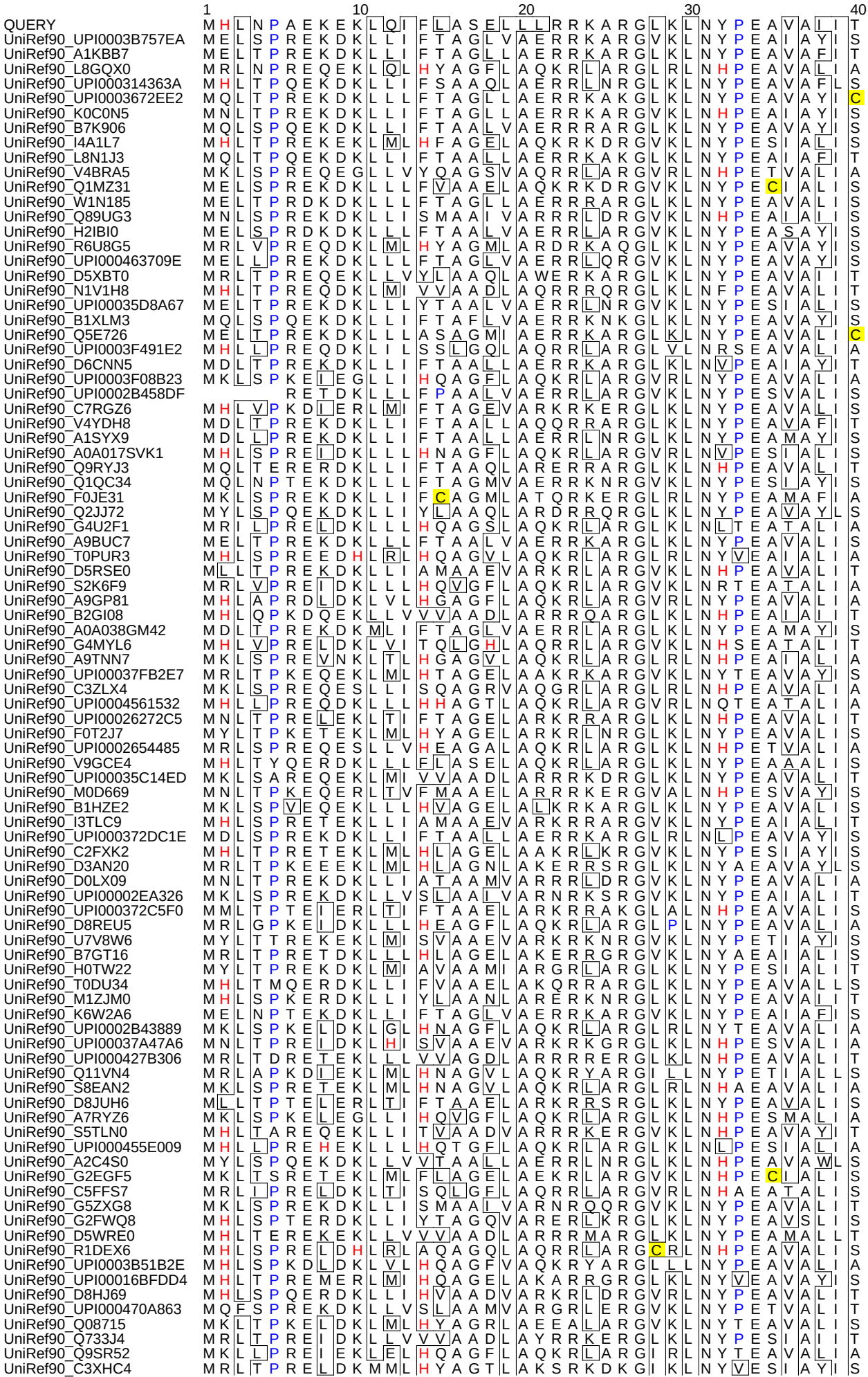
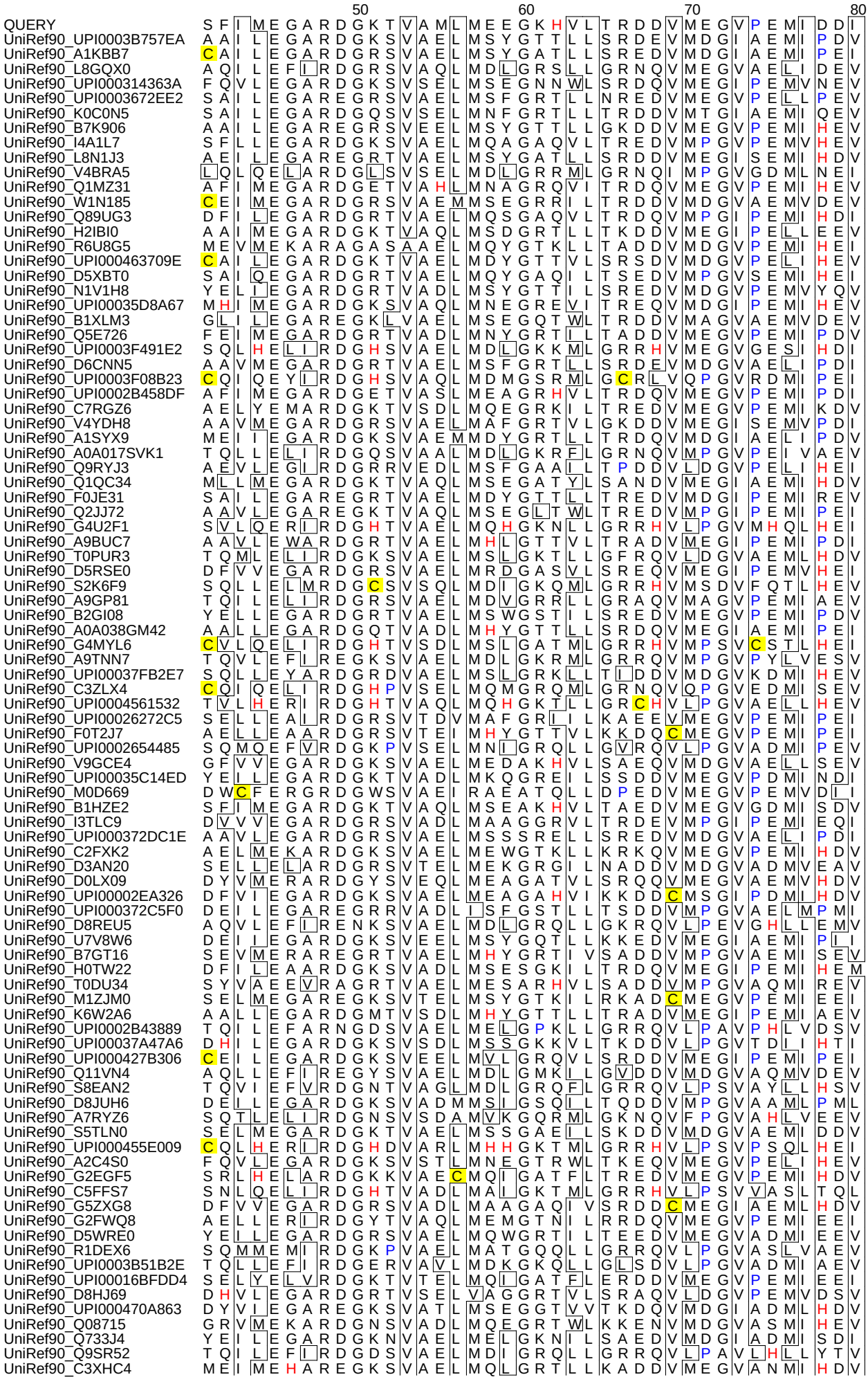
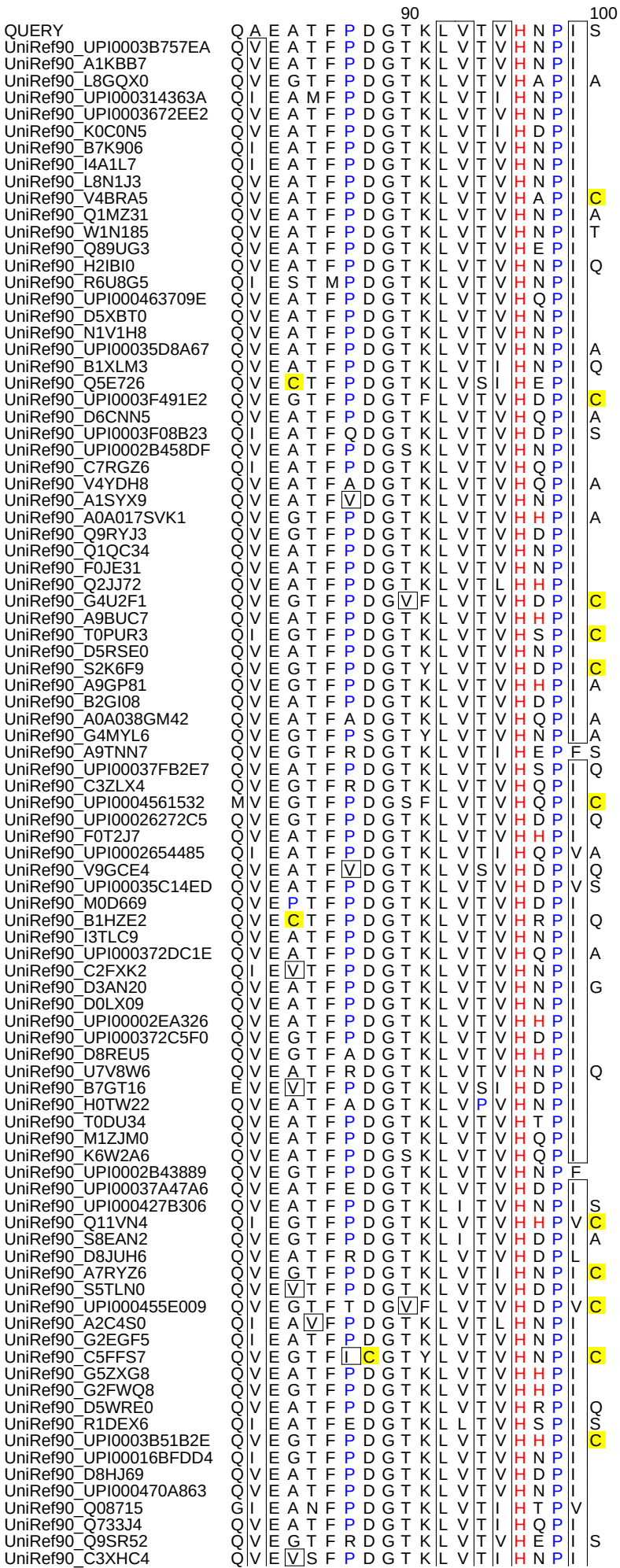
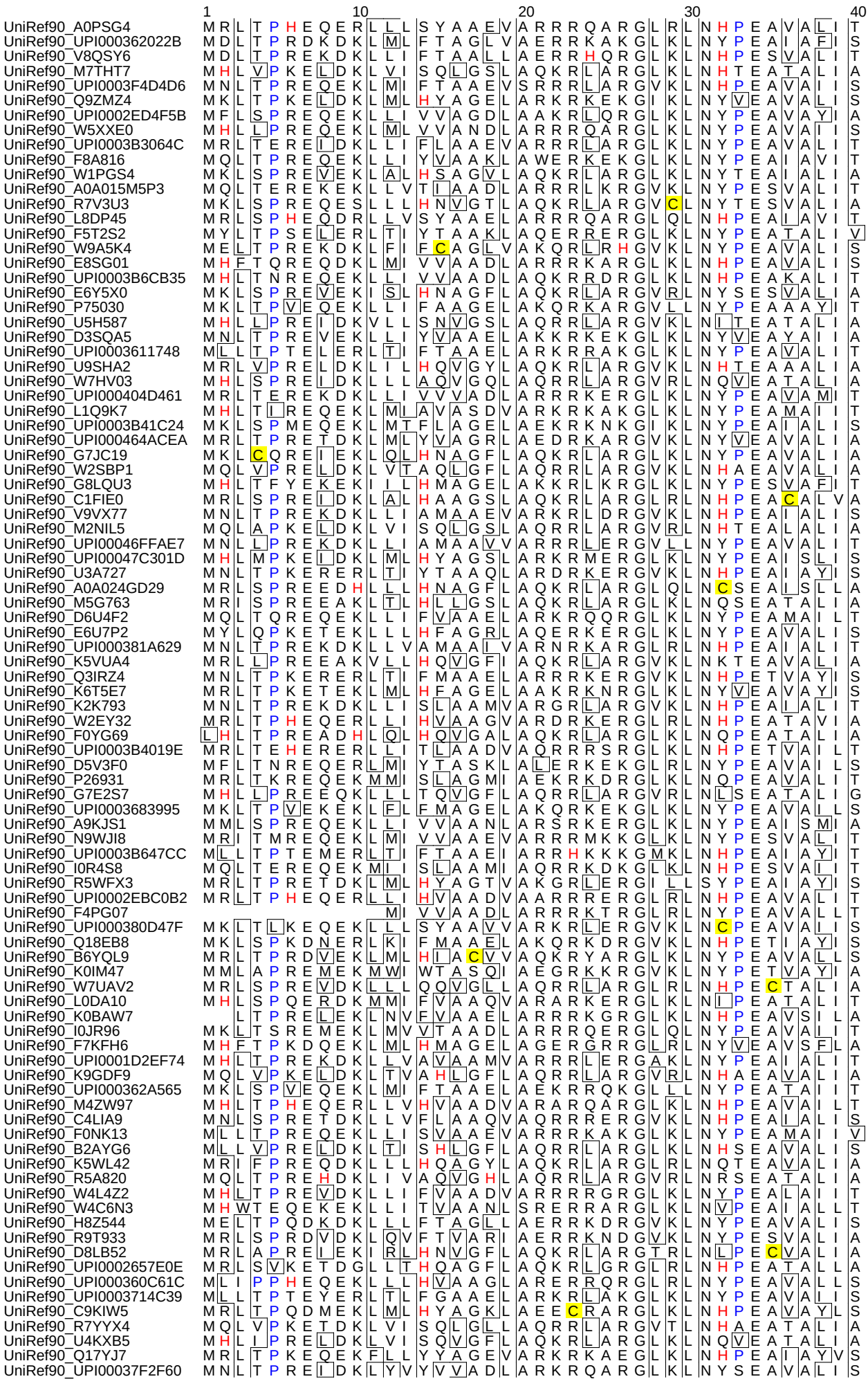
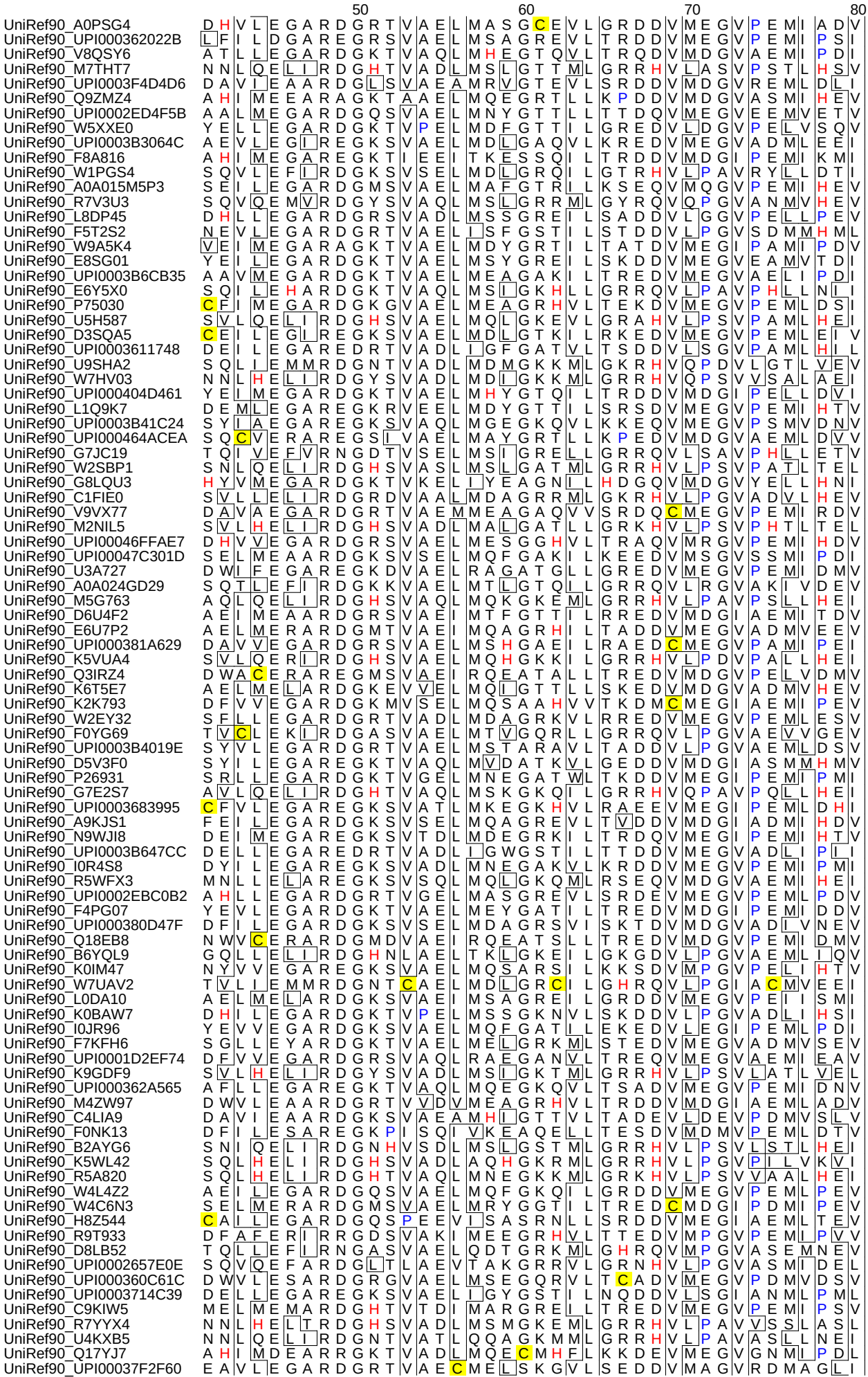
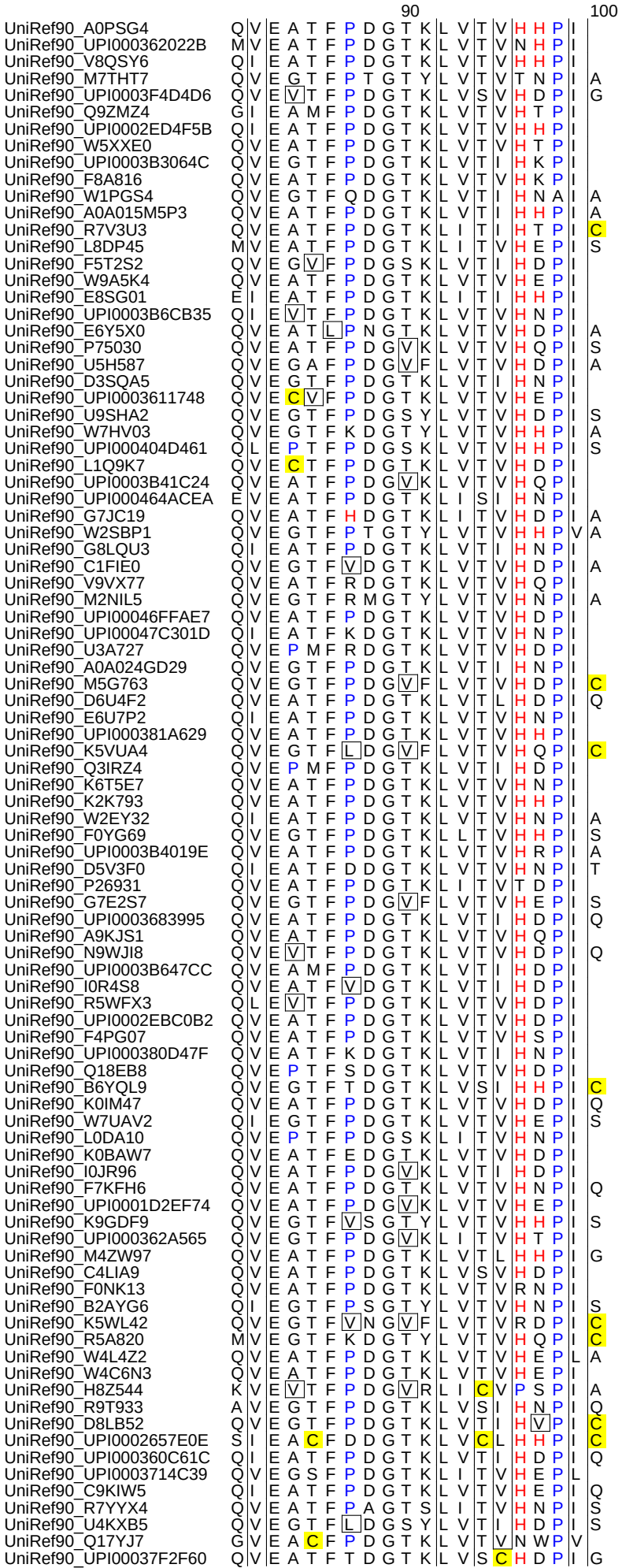

1
10
20
30
40
QUERY
UniRef90_UPI0003B757EA
UniRef90_A1KBB7
UniRef90_L8GQX0
UniRef90_UPI000314363A
UniRef90_UPI0003672EE2
UniRef90_K0C0N5
UniRef90_B7K906
UniRef90_I4A1L7
UniRef90_L8N1J3
UniRef90_V4BRA5
UniRef90_Q1MZ31
UniRef90_W1N185
UniRef90_Q89UG3
UniRef90_H2IBI0
UniRef90_R6U8G5
UniRef90_UPI000463709E
UniRef90_D5XBT0
UniRef90_N1V1H8
UniRef90_UPI00035D8A67
UniRef90_B1XLM3
UniRef90_Q5E726
UniRef90_UPI0003F491E2
UniRef90_D6CNN5
UniRef90_UPI0003F08B23
UniRef90_UPI0002B458DF
UniRef90_C7RGZ6
UniRef90_V4YDH8
UniRef90_A1SYX9
UniRef90_A0A017SVK1
UniRef90_Q9RYJ3
UniRef90_Q1QC34
UniRef90_F0JE31
UniRef90_Q2JJ72
UniRef90_G4U2F1
UniRef90_A9BUC7
UniRef90_T0PUR3
UniRef90_D5RSE0
UniRef90_S2K6F9
UniRef90_A9GP81
UniRef90_B2GI08
UniRef90_A0A038GM42
UniRef90_G4MYL6
UniRef90_A9TNN7
UniRef90_UPI00037FB2E7
UniRef90_C3ZLX4
UniRef90_UPI0004561532
UniRef90_UPI00026272C5
UniRef90_F0T2J7
UniRef90_UPI0002654485
UniRef90_V9GCE4
UniRef90_UPI00035C14ED
UniRef90_M0D669
UniRef90_B1HZE2
UniRef90_I3TLC9
UniRef90_UPI000372DC1E
UniRef90_C2FXK2
UniRef90_D3AN20
UniRef90_D0LX09
UniRef90_UPI00002EA326
UniRef90_UPI000372C5F0
UniRef90_D8REU5
UniRef90_U7V8W6
UniRef90_B7GT16
UniRef90_H0TW22
UniRef90_T0DU34
UniRef90_M1ZJM0
UniRef90_K6W2A6
UniRef90_UPI0002B43889
UniRef90_UPI00037A47A6
UniRef90_UPI000427B306
UniRef90_Q11VN4
UniRef90_S8EAN2
UniRef90_D8JUH6
UniRef90_A7RYZ6
UniRef90_S5TLN0
UniRef90_UPI000455E009
UniRef90_A2C4S0
UniRef90_G2EGF5
UniRef90_C5FFS7
UniRef90_G5ZXG8
UniRef90_G2FWQ8
UniRef90_D5WRE0
UniRef90_R1DEX6
UniRef90_UPI0003B51B2E
UniRef90_UPI00016BFDD4
UniRef90_D8HJ69
UniRef90_UPI000470A863
UniRef90_Q08715
UniRef90_Q733J4
UniRef90_Q9SR52
UniRef90_C3XHC4

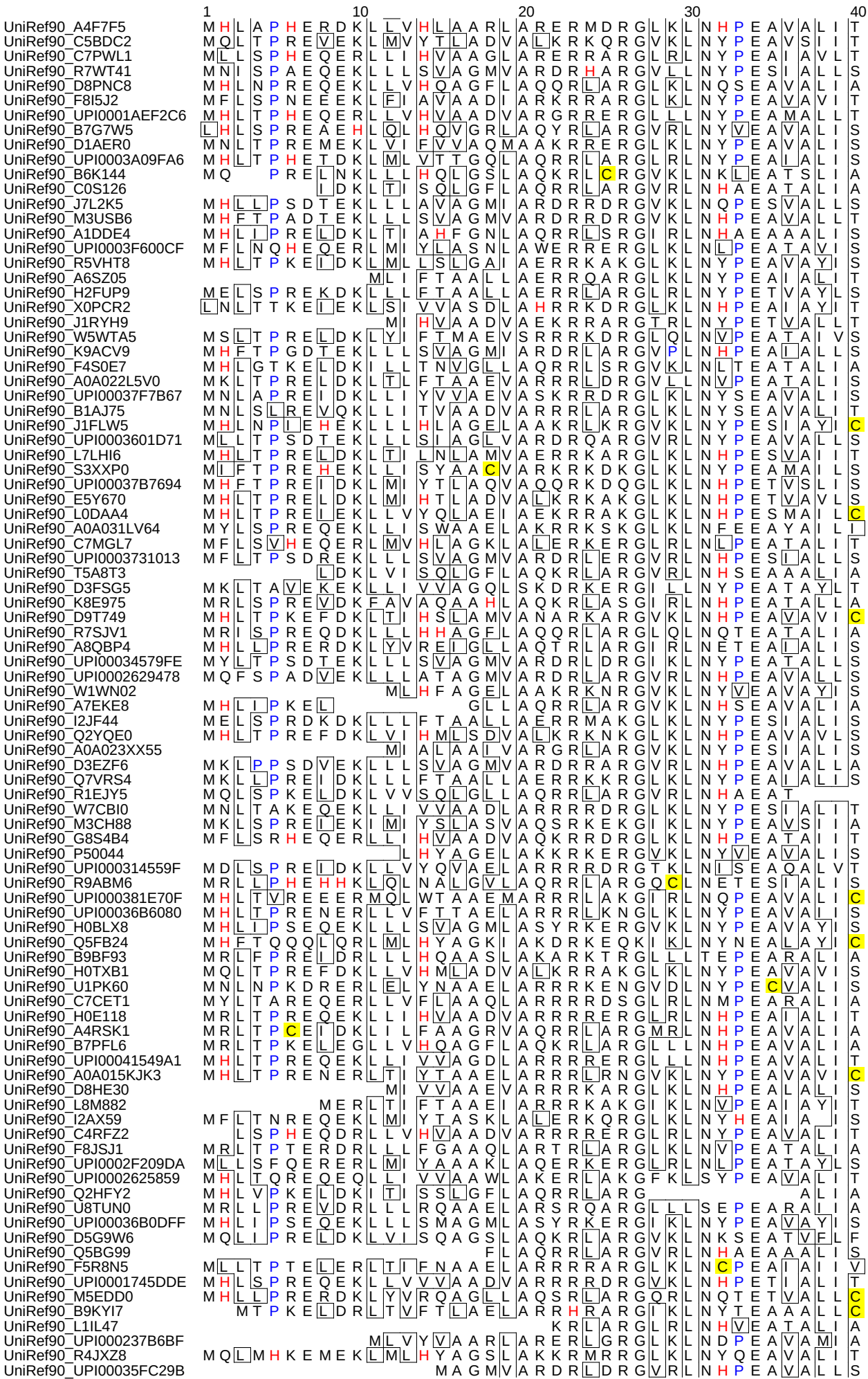

50
60
70
80
QUERY S F I M E G A R D G K T V A M L M E E G K H V L T R D D V M E G V P E M I D D I
UniRef90_UPI0003B757EA A A I L E G A R D G K S V A E L M S Y G T T L L S R D E V M D G I A E M I P D V
UniRef90_A1KBB7 C A I L E G A R D G R S V A E L M S Y G A T L L S R E D V M D G I A E M I P E I
UniRef90_L8GQX0 A Q I L E F I R D G R S V A Q L M D L G R S L L G R N Q V M E G V A E L I D E V
UniRef90_UPI000314363A F Q V L E G A R D G K S V S E L M S E G N N W L S R D Q V M E G I P E M V N E V
UniRef90_UPI0003672EE2 S A I L E G A R E G R S V A E L M S F G R T L L N R E D V M E G V P E L L P E V
UniRef90_K0C0N5 S A I L E G A R D G Q S V S E L M N F G R T L L T R D D V M T G I A E M I Q E V
UniRef90_B7K906 A A I L E G A R E G R S V E E L M S Y G T T L L G K D D V M E G V P E M I H E V
UniRef90_I4A1L7 S F L L E G A R D G K S V A E L M Q A G A Q V L T R E D V M P G V P E M V H E V
UniRef90_L8N1J3 A E I L E G A R E G R T V A E L M S Y G A T L L S R D D V M E G I S E M I H D V
UniRef90_V4BRA5 L Q L Q E L A R D G L S V S E L M D L G R R M L G R N Q I M P G V G D M L N E I
UniRef90_Q1MZ31 A F I M E G A R D G E T V A H L M N A G R Q V I T R D Q V M E G V P E M I H E V
UniRef90_W1N185 C E I M E G A R D G R S V A E M M S E G R R I L T R D D V M D G V A E M V D E V
UniRef90_Q89UG3 D F I L E G A R D G R T V A E L M Q S G A Q V L T R D Q V M P G I P E M I H D I
UniRef90_H2IBI0 A A I M E G A R D G K T V A Q L M S D G R T L L T K D D V M E G I P E L L E E V
UniRef90_R6U8G5 M E V M E K A R A G A S A A E L M Q Y G T K L L T A D D V M D G V P E M I H E I
UniRef90_UPI000463709E C A I L E G A R D G K T V A E L M D Y G T T V L S R S D V M D G V P E L I H E V
UniRef90_D5XBT0 S A I Q E G A R D G R T V A E L M Q Y G A Q I L T S E D V M P G V S E M I H E I
UniRef90_N1V1H8 Y E L I E G A R D G R T V A D L M S Y G T T I L S R E D V M D G V P E M V Y Q V
UniRef90_UPI00035D8A67 M H I M E G A R D G K S V A Q L M N E G R E V I T R E Q V M D G I P E M I H E V
UniRef90_B1XLM3 G L I L E G A R E G K L V A E L M S E G Q T W L T R D D V M A G V A E M V D E V
UniRef90_Q5E726 F E I M E G A R D G R T V A D L M N Y G R T I L T A D D V M E G V P E M I P D V
UniRef90_UPI0003F491E2 S Q L H E L I R D G H S V A E L M D L G K K M L G R R H V M E G V G E S I H D I
UniRef90_D6CNN5 A A V M E G A R D G R T V A E L M S F G R T L L S R D E V M D G V A E L I P D I
UniRef90_UPI0003F08B23 C Q I Q E Y I R D G H S V A Q L M D M G S R M L G C R L V Q P G V R D M I P E I
UniRef90_UPI0002B458DF A F I M E G A R D G E T V A S L M E A G R H V L T R D Q V M E G V P E M I P D I
UniRef90_C7RGZ6 A E L Y E M A R D G K T V S D L M Q E G R K I L T R E D V M E G V P E M I K D V
UniRef90_V4YDH8 A A V M E G A R D G R S V A E L M A F G R T V L G K D D V M E G I S E M V P D I
UniRef90_A1SYX9 M E I I E G A R D G K S V A E M M D Y G R T L L T R D Q V M D G I A E L I P D V
UniRef90_A0A017SVK1 T Q L L E L I R D G Q S V A A L M D L G K R F L G R N Q V M P G V P E I V A E V
UniRef90_Q9RYJ3 A E V L E G I R D G R R V E D L M S F G A A I L T P D D V L D G V P E L I H E I
UniRef90_Q1QC34 M L L M E G A R D G K T V A Q L M S E G A T Y L S A N D V M E G I A E M I H D V
UniRef90_F0JE31 S A I L E G A R E G R T V A E L M D Y G T T L L T R E D V M D G I P E M I R E V
UniRef90_Q2JJ72 A A V L E G A R E G K T V A Q L M S E G L T W L T R E D V M P G I P E M I P E I
UniRef90_G4U2F1 S V L Q E R I R D G H T V A E L M Q H G K N L L G R R H V L P G V M H Q L H E I
UniRef90_A9BUC7 A A V L E W A R D G R T V A E L M H L G T T V L T R A D V M E G I P E M I P D I
UniRef90_T0PUR3 T Q M L E L I R D G K S V A E L M S L G K T L L G F R Q V L D G V A E M L H D V
UniRef90_D5RSE0 D F V V E G A R D G R S V A E L M R D G A S V L S R E Q V M E G I P E M V H E I
UniRef90_S2K6F9 S Q L L E L M R D G C S V S Q L M D I G K Q M L G R R H V M S D V F Q T L H E V
UniRef90_A9GP81 T Q I L E L I R D G R S V A E L M D V G R R L L G R A Q V M A G V P E M I A E V
UniRef90_B2GI08 Y E L L E G A R D G R T V A E L M S W G S T I L S R E D V M E G V P E M I P D V
UniRef90_A0A038GM42 A A L L E G A R D G Q T V A D L M H Y G T T L L S R D Q V M E G I A E M I P E I
UniRef90_G4MYL6 C V L Q E L I R D G H T V S D L M S L G A T M L G R R H V M P S V C S T L H E I
UniRef90_A9TNN7 T Q V L E F I R E G K S V A E L M D L G K R M L G R R Q V M P G V P Y L V E S V
UniRef90_UPI00037FB2E7 S Q L L E Y A R D G R D V A E L M S L G R K L L T I D D V M D G V K D M I H E V
UniRef90_C3ZLX4 C Q I Q E L I R D G H P V S E L M Q M G R Q M L G R N Q V Q P G V E D M I S E V
UniRef90_UPI0004561532 T V L H E R I R D G H T V A Q L M Q H G K T L L G R C H V L P G V A E L L H E V
UniRef90_UPI00026272C5 S E L L E A I R D G R S V T D V M A F G R I I L K A E E V M E G V P E M I P E I
UniRef90_F0T2J7 A E L L E A A R D G R S V T E I M H Y G T T V L K K D Q C M E G V P E M I P E I
UniRef90_UPI0002654485 S Q M Q E F V R D G K P V S E L M N I G R Q L L G V R Q V L P G V A D M I P E V
UniRef90_V9GCE4 G F V V E G A R D G K S V A E L M E D A K H V L S A E Q V M D G V A E L L S E V
UniRef90_UPI00035C14ED Y E I L E G A R D G K T V A D L M K Q G R E I L S S D D V M E G V P D M I N D I
UniRef90_M0D669 D W C F E R G R D G W S V A E I R A E A T Q L L D P E D V M E G V P E M V D I I
UniRef90_B1HZE2 S F I M E G A R D G K T V A Q L M S E A K H V L T A E D V M E G V G D M I S D V
UniRef90_I3TLC9 D V V V E G A R D G R S V A D L M A A G G R V L T R D E V M P G I P E M I E Q I
UniRef90_UPI000372DC1E A A V L E G A R D G R S V A E L M S S S R E L L S R E D V M D G V A E L I P D I
UniRef90_C2FXK2 A E L M E K A R D G K S V A E L M E W G T K L L K R K Q V M E G V P E M I H D V
UniRef90_D3AN20 S E L L E L A R D G R S V T E L M E K G R G I L N A D D V M D G V A D M V E A V
UniRef90_D0LX09 D Y V M E R A R D G Y S V E Q L M E A G A T V L S R Q Q V M E G V A E M V H D V
UniRef90_UPI00002EA326 D F V I E G A R D G K S V A E L M E A G A H V I K K D D C M S G I P D M I H D V
UniRef90_UPI000372C5F0 D E I L E G A R E G R R V A D L I S F G S T L L T S D D V M P G V A E L M P M I
UniRef90_D8REU5 A Q V L E F I R E N K S V A E L M D L G R Q L L G K R Q V L P E V G H L L E M V
UniRef90_U7V8W6 D E I I E G A R D G K S V E E L M S Y G Q T L L K K E D V M E G I A E M I P I I
UniRef90_B7GT16 S E V M E R A R E G R T V A E L M H Y G R T I V S A D D V M P G V A E M I S E V
UniRef90_H0TW22 D F I L E A A R D G K S V A D L M S E S G K I L T R D Q V M E G I P E M I H E M
UniRef90_T0DU34 S Y V A E E V R A G R T V A E L M E S A R H V L S A D D V M P G V A Q M I R E V
UniRef90_M1ZJM0 S E L M E G A R E G K S V T E L M S Y G T K I L R K A D C M E G V P E M I E E I
UniRef90_K6W2A6 A A L L E G A R D G M T V S D L M H Y G T T L L T R A D V M E G I P E M I A E V
UniRef90_UPI0002B43889 T Q I L E F A R N G D S V A E L M E L G P K L L G R R Q V L P A V P H L V D S V
UniRef90_UPI00037A47A6 D H I L E G A R D G K S V S D L M S S G K K V L T K D D V L P G V T D I I H T I
UniRef90_UPI000427B306 C E I L E G A R D G K S V E E L M V L G R Q V L S R D D V M E G I P E M I P E I
UniRef90_Q11VN4 A Q L L E F I R E G Y S V A E L M D L G M K I L G V D D V M D G V A Q M V D E V
UniRef90_S8EAN2 T Q V I E F V R D G N T V A G L M D L G R Q F L G R R Q V L P S V A Y L L H S V
UniRef90_D8JUH6 D E I L E G A R D G K S V A D M M S I G S Q I L T Q D D V M P G V A A M L P M L
UniRef90_A7RYZ6 S Q T L E L I R D G N S V S D A M V K G Q R M L G K N Q V F P G V A H L V E E V
UniRef90_S5TLN0 S E L M E G A R D G K T V A E L M S S G A E I L S K D D V M D G V A E M I D D V
UniRef90_UPI000455E009 C Q L H E R I R D G H D V A R L M H H G K T M L G R R H V L P S V P S Q L H E I
UniRef90_A2C4S0 F Q V L E G A R D G K S V S T L M N E G T R W L T K E Q V M E G V P E L I H E V
UniRef90_G2EGF5 S R L H E L A R D G K K V A E C M Q I G A T F L T R E D V M E G V P E M I H D V
UniRef90_C5FFS7 S N L Q E L I R D G H T V A D L M A I G K T M L G R R H V L P S V V A S L T Q L
UniRef90_G5ZXG8 D F V V E G A R D G R S V A D L M A A G A Q I V S R D D C M E G I A E M L H D V
UniRef90_G2FWQ8 A E L L E R I R D G Y T V A Q L M E M G T N I L R R D Q V M E G V P E M I E E I
UniRef90_D5WRE0 Y E I L E G A R D G R S V A E L M Q W G R T I L T E E D V M E G V A D M I E E V
UniRef90_R1DEX6 S Q M M E M I R D G K P V A E L M A T G Q Q L L G R R Q V L P G V A S L V A E V
UniRef90_UPI0003B51B2E T Q L L E F I R D G E R V A V L M D K G K Q L L G L S D V L P G V A D M I A E V
UniRef90_UPI00016BFDD4 S E L Y E L V R D G K T V T E L M Q I G A T F L E R D D V M E G V P E M I E E I
UniRef90_D8HJ69 D H V L E G A R D G R T V S E L V A G G R T V L S R A Q V L D G V P E M V D S V
UniRef90_UPI000470A863 D Y V I E G A R E G K S V A T L M S E G G T V V T K D Q V M D G I A D M L H D V
UniRef90_Q08715 G R V M E K A R D G N S V A D L M Q E G R T W L K K E N V M D G V A S M I H E V
UniRef90_Q733J4 Y E I L E G A R D G K N V A E L M E L G K N I L S A E D V M D G I A D M I S D I
UniRef90_Q9SR52 T Q I L E F I R D G D S V A E L M D I G R Q L L G R R Q V L P A V L H L L Y T V
UniRef90_C3XHC4 M E I M E H A R E G K S V A E L M Q L G R T L L K A D D V M E G V A N M I H D V

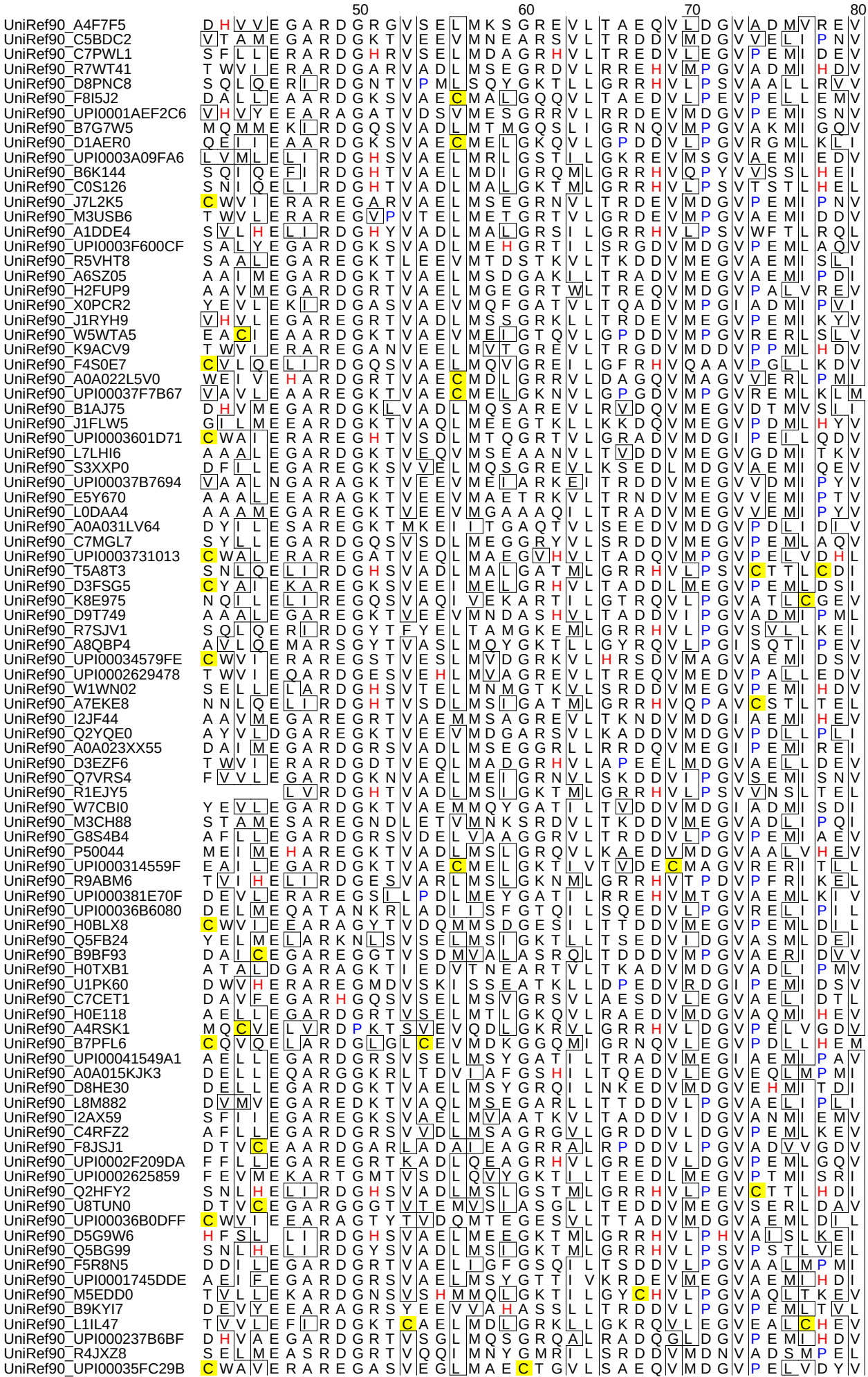

90
100
QUERY Q A E A T F P D G T K L V T V H N P I S
UniRef90_UPI0003B757EA Q V E A T F P D G T K L V T V H N P I
UniRef90_A1KBB7 Q V E A T F P D G T K L V T V H N P I
UniRef90_L8GQX0 Q V E G T F P D G T K L V T V H A P I A
UniRef90_UPI000314363A Q I E A M F P D G T K L V T I H N P I
UniRef90_UPI0003672EE2 Q V E A T F P D G T K L V T V H N P I
UniRef90_K0C0N5 Q V E A T F P D G T K L V T I H D P I
UniRef90_B7K906 Q I E A T F P D G T K L V T V H N P I
UniRef90_I4A1L7 Q I E A T F P D G T K L V T V H N P I
UniRef90_L8N1J3 Q V E A T F P D G T K L V T V H N P I
UniRef90_V4BRA5 Q V E A T F P D G T K L V T V H A P I C
UniRef90_Q1MZ31 Q V E A T F P D G T K L V T V H N P I A
UniRef90_W1N185 Q V E A T F P D G T K L V T V H N P I T
UniRef90_Q89UG3 Q V E A T F P D G T K L V T V H E P I
UniRef90_H2IBI0 Q V E A T F P D G T K L V T V H N P I Q
UniRef90_R6U8G5 Q I E S T M P D G T K L V T V H N P I
UniRef90_UPI000463709E Q V E A T F P D G T K L V T V H Q P I
UniRef90_D5XBT0 Q V E A T F P D G T K L V T V H N P I
UniRef90_N1V1H8 Q V E A T F P D G T K L V T V H N P I
UniRef90_UPI00035D8A67 Q V E A T F P D G T K L V T V H N P I A
UniRef90_B1XLM3 Q V E A T F P D G T K L V T I H N P I Q
UniRef90_Q5E726 Q V E C T F P D G T K L V S I H E P I
UniRef90_UPI0003F491E2 Q V E G T F P D G T F L V T V H D P I C
UniRef90_D6CNN5 Q V E A T F P D G T K L V T V H Q P I A
UniRef90_UPI0003F08B23 Q I E A T F Q D G T K L V T V H D P I S
UniRef90_UPI0002B458DF Q V E A T F P D G S K L V T V H N P I
UniRef90_C7RGZ6 Q I E A T F P D G T K L V T V H Q P I
UniRef90_V4YDH8 Q V E A T F A D G T K L V T V H Q P I A
UniRef90_A1SYX9 Q V E A T F V D G T K L V T V H N P I
UniRef90_A0A017SVK1 Q V E G T F P D G T K L V T V H H P I A
UniRef90_Q9RYJ3 Q V E G T F P D G T K L V T V H D P I
UniRef90_Q1QC34 Q V E A T F P D G T K L V T V H N P I
UniRef90_F0JE31 Q V E A T F P D G T K L V T V H N P I
UniRef90_Q2JJ72 Q V E A T F P D G T K L V T L H H P I
UniRef90_G4U2F1 Q V E G T F P D G V F L V T V H D P I C
UniRef90_A9BUC7 Q V E A T F P D G T K L V T V H H P I
UniRef90_T0PUR3 Q I E G T F P D G T K L V T V H S P I C
UniRef90_D5RSE0 Q V E A T F P D G T K L V T V H N P I
UniRef90_S2K6F9 Q V E G T F P D G T Y L V T V H D P I C
UniRef90_A9GP81 Q V E G T F P D G T K L V T V H H P I A
UniRef90_B2GI08 Q V E A T F P D G T K L V T V H D P I
UniRef90_A0A038GM42 Q V E A T F A D G T K L V T V H Q P I A
UniRef90_G4MYL6 Q V E G T F P S G T Y L V T V H N P I A
UniRef90_A9TNN7 Q V E G T F R D G T K L V T I H E P F S
UniRef90_UPI00037FB2E7 Q V E A T F P D G T K L V T V H S P I Q
UniRef90_C3ZLX4 Q V E G T F R D G T K L V T V H Q P I
UniRef90_UPI0004561532 M V E G T F P D G S F L V T V H Q P I C
UniRef90_UPI00026272C5 Q V E G T F P D G T K L V T V H D P I Q
UniRef90_F0T2J7 Q V E A T F P D G T K L V T V H H P I
UniRef90_UPI0002654485 Q I E A T F P D G T K L V T I H Q P V A
UniRef90_V9GCE4 Q V E A T F V D G T K L V S V H D P I Q
UniRef90_UPI00035C14ED Q V E A T F P D G T K L V T V H D P V S
UniRef90_M0D669 Q V E P T F P D G T K L V T V H D P I
UniRef90_B1HZE2 Q V E C T F P D G T K L V T V H R P I Q
UniRef90_I3TLC9 Q V E A T F P D G T K L V T V H N P I
UniRef90_UPI000372DC1E Q V E A T F P D G T K L V T V H Q P I A
UniRef90_C2FXK2 Q I E V T F P D G T K L V T V H N P I
UniRef90_D3AN20 Q V E A T F P D G T K L V T V H N P I G
UniRef90_D0LX09 Q V E A T F P D G T K L V T V H N P I
UniRef90_UPI00002EA326 Q V E A T F P D G T K L V T V H H P I
UniRef90_UPI000372C5F0 Q V E G T F P D G T K L V T V H D P I
UniRef90_D8REU5 Q V E G T F A D G T K L V T V H H P I
UniRef90_U7V8W6 Q V E A T F R D G T K L V T V H N P I Q
UniRef90_B7GT16 E V E V T F P D G T K L V S I H D P I
UniRef90_H0TW22 Q V E A T F A D G T K L V P V H N P I
UniRef90_T0DU34 Q V E A T F P D G T K L V T V H T P I
UniRef90_M1ZJM0 Q V E A T F P D G T K L V T V H Q P I
UniRef90_K6W2A6 Q V E A T F P D G S K L V T V H Q P I
UniRef90_UPI0002B43889 Q V E G T F P D G T K L V T V H N P F
UniRef90_UPI00037A47A6 Q V E A T F E D G T K L V T V H D P I
UniRef90_UPI000427B306 Q V E A T F P D G T K L I T V H N P I S
UniRef90_Q11VN4 Q I E G T F P D G T K L V T V H H P V C
UniRef90_S8EAN2 Q V E G T F P D G T K L I T V H D P I A
UniRef90_D8JUH6 Q V E A T F R D G T K L V T V H D P L
UniRef90_A7RYZ6 Q V E G T F P D G T K L V T I H N P I C
UniRef90_S5TLN0 Q V E V T F P D G T K L V T V H D P I
UniRef90_UPI000455E009 Q V E G T F T D G V F L V T V H D P V C
UniRef90_A2C4S0 Q I E A V F P D G T K L V T L H N P I
UniRef90_G2EGF5 Q I E A T F P D G T K L V T V H N P I
UniRef90_C5FFS7 Q V E G T F I C G T Y L V T V H N P I C
UniRef90_G5ZXG8 Q V E A T F P D G T K L V T V H H P I
UniRef90_G2FWQ8 Q V E G T F P D G T K L V T V H H P I
UniRef90_D5WRE0 Q V E A T F P D G T K L V T V H R P I Q
UniRef90_R1DEX6 Q I E A T F E D G T K L L T V H S P I S
UniRef90_UPI0003B51B2E Q V E G T F P D G T K L V T V H H P I C
UniRef90_UPI00016BFDD4 Q I E G T F P D G T K L V T V H N P I
UniRef90_D8HJ69 Q V E A T F P D G T K L V T V H D P I
UniRef90_UPI000470A863 Q V E A T F P D G T K L V T V H N P I
UniRef90_Q08715 G I E A N F P D G T K L V T I H T P V
UniRef90_Q733J4 Q V E A T F P D G T K L V T I H Q P I
UniRef90_Q9SR52 Q V E G T F R D G T K L V T V H E P I S
UniRef90_C3XHC4 Q V E V S F P D G T K L V T I H N P I

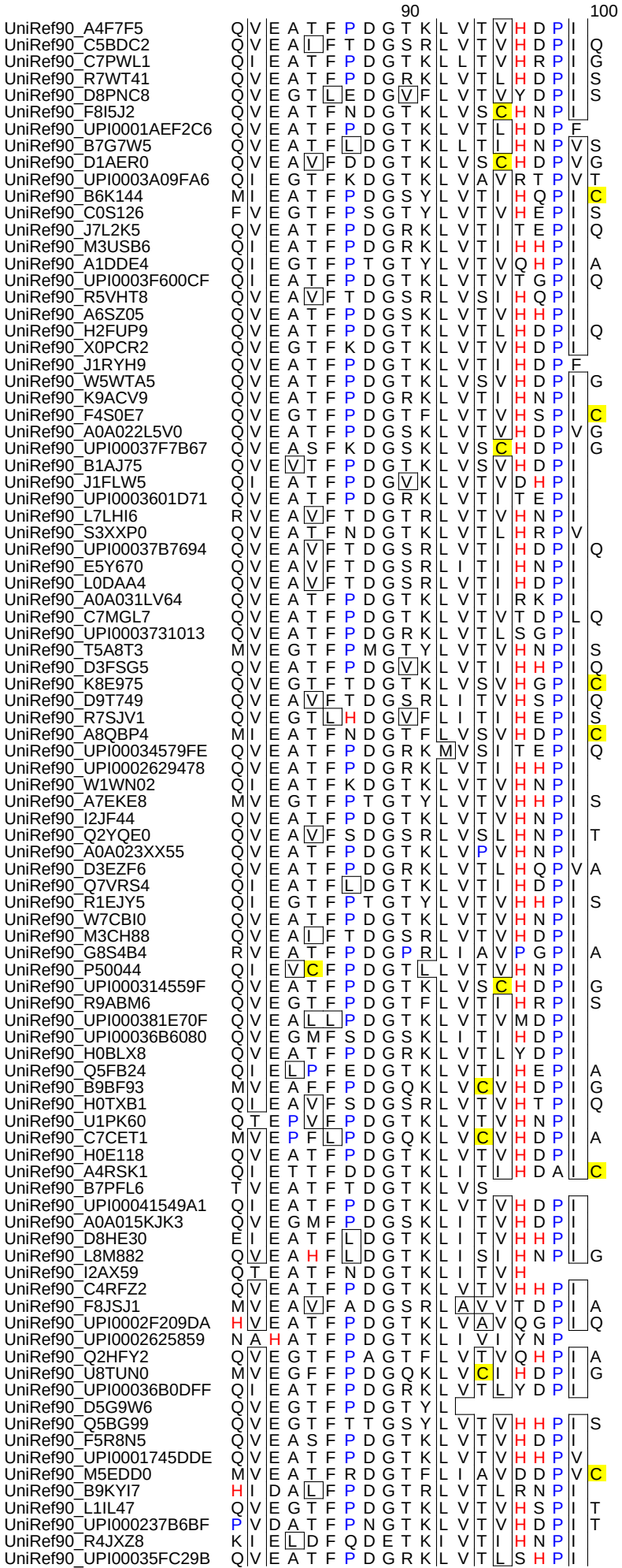

1
10
20
30
40
UniRef90_A0PSG4 M R L T P H E Q E R L L S Y A A E V A R R R Q A R G L R L N H P E A V A L I T
UniRef90_UPI000362022B M D L T P R D K D K L M L F T A G L V A E R R K A K G L K L N Y P E A I A F I S
UniRef90_V8QSY6 M D L T P R E K D K L L I F T A A L L A E R R H Q R G L K L N H P E S V A L I T
UniRef90_M7THT7 M H L V P K E L D K L V I S Q L G S L A Q K R L A R G L K L N H T E A T A L I A
UniRef90_UPI0003F4D4D6 M N L T P R E Q E K L M I F T A A E V S R R R L A R G V K L N H P E A V A I I S
UniRef90_Q9ZMZ4 M K L T P K E L D K L M L H Y A G E L A R K R K E K G I K L N Y V E A V A L I S
UniRef90_UPI0002ED4F5B M F L S P R E Q E K L L I V V A G D L A A K R L Q R G L K L N Y P E A V A Y I A
UniRef90_W5XXE0 M H L L P R E Q E K L M L V V A N D L A R R R Q A R G L K L N Y P E A V A I I S
UniRef90_UPI0003B3064C M R L T E R E I D K L L I F L A A E V A R R R L A R G L K L N Y P E A V A L I T
UniRef90_F8A816 M Q L T P R E Q E K L L I Y V A A K L A W E R K E K G L K L N Y P E A I A V I T
UniRef90_W1PGS4 M K L S P R E V E K L A L H S A G V L A Q K R L A R G L K L N Y T E A I A L I A
UniRef90_A0A015M5P3 M Q L T E R E K E K L L V T I A A D L A R R R L K R G V K L N Y P E S V A L I T
UniRef90_R7V3U3 M K L S P R E Q E S L L L H N V G T L A Q K R L A R G V C L N Y T E S V A L I A
UniRef90_L8DP45 M R L S P H E Q D R L L V S Y A A E L A R R R Q A R G L Q L N H P E A I A V I T
UniRef90_F5T2S2 M Y L T P S E L E R L T I Y T A A K L A Q E R R E R G L K L N Y P E A T A L I V
UniRef90_W9A5K4 M E L T P R E K D K L F I F C A G L V A K Q R L R H G V K L N Y P E A V A L I S
UniRef90_E8SG01 M H F T Q R E Q D K L M I V V A A D L A R R R K A R G L K L N H P E A V A L I S
UniRef90_UPI0003B6CB35 M H L T N R E Q E K L L I V V A A D L A Q K R R D R G L K L N H P E A K A L I T
UniRef90_E6Y5X0 M K L S P R E V E K I S L H N A G F L A Q K R L A R G V R L N Y S E S V A L I A
UniRef90_P75030 M K L T P V E Q E K L L I F A A G E L A K Q R K A R G V L L N Y P E A A A Y I T
UniRef90_U5H587 M H L L P R E I D K V L L S N V G S L A Q R R L A R G V K L N I T E A T A L I A
UniRef90_D3SQA5 M N L T P R E V E K L L I Y V A A E L A K K R K E K G L K L N Y V E A Y A I I A
UniRef90_UPI0003611748 M L L T P T E L E R L T I F T A A E L A R K R R A K G L K L N Y P E A V A L I T
UniRef90_U9SHA2 M R L V P R E L D K L I L H Q V G Y L A Q K R L A R G V K L N H T E A A A L I A
UniRef90_W7HV03 M H L S P R E I D K L L L A Q V G Q L A Q R R L A R G V R L N Q V E A T A L I A
UniRef90_UPI000404D461 M R L T E R E K D K L L I V V V A D L A R R R K E R G L K L N Y P E A V A M I T
UniRef90_L1Q9K7 M H L T I R E Q E K L M L A V A S D V A R K R K A K G L K L N Y P E A M A I I T
UniRef90_UPI0003B41C24 M K L S P M E Q E K L M T F L A G E L A E K R K N K G I K L N Y P E A I A L I S
UniRef90_UPI000464ACEA M R L T P R E T D K L M L Y V A G R L A E D R K A R G V K L N Y V E A V A L I A
UniRef90_G7JC19 M K L C Q R E I E K L Q L H N A G F L A Q K R L A R G L K L N Y P E A V A L I A
UniRef90_W2SBP1 M Q L V P R E L D K L V T A Q L G F L A Q R R L A R G V K L N H A E A V A L I A
UniRef90_G8LQU3 M H L T F Y E K E K I I L H M A G E L A K K R L K R G L K L N Y P E S V A F I T
UniRef90_C1FIE0 M R L S P R E I D K L A L H A A G S L A Q K R L A R G L R L N H P E A C A L V A
UniRef90_V9VX77 M N L T P R E K D K L L I A M A A E V A R K R L D R G V K L N H P E A I A L I S
UniRef90_M2NIL5 M Q L A P K E L D K L V I S Q L G S L A Q R R L A R G V R L N H T E A L A L I A
UniRef90_UPI00046FFAE7 M N L L P R E K D K L L I A M A A V V A R R R L E R G V L L N Y P E A V A L I T
UniRef90_UPI00047C301D M H L M P K E I D K L M L H Y A G S L A R K R M E R G L K L N Y P E A I S L I S
UniRef90_U3A727 M N L T P K E R E R L T I Y T A A Q L A R D R K E R G V K L N H P E A I A Y I S
UniRef90_A0A024GD29 M R L S P R E E D H L L L H N A G F L A Q K R L A R G L Q L N C S E A I S L L A
UniRef90_M5G763 M R I S P R E E A K L T L H L L G S L A Q K R L A R G L K L N Q S E A T A L I A
UniRef90_D6U4F2 M Q L T Q R E Q E K L L I F V A A E L A R K R Q Q R G L K L N Y P E A M A I L T
UniRef90_E6U7P2 M Y L Q P K E T E K L L L H F A G R L A Q E R K E R G L K L N Y P E A V A L I S
UniRef90_UPI000381A629 M N L T P R E K D K L L V A M A A I V A R N R K A R G L R L N H P E A I A L I T
UniRef90_K5VUA4 M R L L P R E E A K V L L H Q V G F I A Q K R L A R G V K L N K T E A V A L I A
UniRef90_Q3IRZ4 M N L T P K E R E R L T I F M A A E L A R R R K E R G V K L N H P E T V A Y I S
UniRef90_K6T5E7 M R L T P K E T E K L M L H F A G E L A A K R K N R G L K L N Y V E A V A Y I S
UniRef90_K2K793 M N L T P R E K D K L L I S L A A M V A R G R L A R G V K L N H P E A I A L I T
UniRef90_W2EY32 M R L T P H E Q E R L L I H V A A G V A R D R K E R G L R L N H P E A T A V I A
UniRef90_F0YG69 L H L T P R E A D H L Q L H Q V G A L A Q K R L A R G L K L N Q P E A T A L I A
UniRef90_UPI0003B4019E M R L T E H E R E R L L I T L A A D V A Q R R R S R G L K L N H P E T V A I L T
UniRef90_D5V3F0 M F L T N R E Q E R L M I Y T A S K L A L E R K E K G L R L N Y P E A V A I L S
UniRef90_P26931 M R L T K R E Q E K M M I S L A G M I A E K R K D R G L K L N Q P E A V A L I T
UniRef90_G7E2S7 M H L L P R E E Q K L L L T Q V G F L A Q R R L A R G V R L N L S E A T A L I G
UniRef90_UPI0003683995 M K L T P V E K E K L F L F M A G E L A K Q R K E K G L K L N Y P E A V A I L S
UniRef90_A9KJS1 M M L S P R E Q E K L L I V V A A N L A R S R K E R G L K L N Y P E A I S M I A
UniRef90_N9WJI8 M R I T M R E Q E K L M I V V A A E V A R R R M K K G L K L N Y P E S V A L I T
UniRef90_UPI0003B647CC M L L T P T E M E R L T I F T A A E I A R R H K K K G M K L N H P E A I A Y I T
UniRef90_I0R4S8 M Q L T E R E Q E K M I I S L A A M I A Q R R K D K G L K L N H P E S V A I I T
UniRef90_R5WFX3 M R L T P R E T D K L M L H Y A G T V A K G R L E R G I L L S Y P E A I A Y I S
UniRef90_UPI0002EBC0B2 M R L T P H E Q E R L L I H V A A D V A A R R R E R G L R L N H P E A V A L I T
UniRef90_F4PG07 M I V V A A D L A R R R K T R G L R L N Y P E A V A L L T
UniRef90_UPI000380D47F M K L T L K E Q E K L L L S Y A A V V A R K R L E R G V K L N C P E A V A I I S
UniRef90_Q18EB8 M K L S P K D N E R L K I F M A A E L A K Q R K D R G V K L N H P E T I A Y I S
UniRef90_B6YQL9 M R L T P R D V E K L M L H I A C V V A Q K R Y A R G L K L N Y P E A V A L L S
UniRef90_K0IM47 M M L A P R E M E K M W I W T A S Q I A E G R K K R G V K L N Y P E T V A Y I A
UniRef90_W7UAV2 M R L S P R E V D K L L L Q Q V G L L A Q R R L A R G L R L N H P E C T A L I A
UniRef90_L0DA10 M H L S P Q E R D K M M I F V A A Q V A R A R K E R G L K L N I P E A T A L I T
UniRef90_K0BAW7 L T P R E L E K L N V F V A A E L A R R R K G R G L K L N H P E A V S I L A
UniRef90_I0JR96 M K L T S R E M E K L M V V T A A D L A R R R Q E R G L Q L N Y P E A V A I I T
UniRef90_F7KFH6 M H F T P K D Q E K L M L H M A G E L A G E R G R R G L R L N Y V E A V S F L A
UniRef90_UPI0001D2EF74 M H L T P R E K D K L L V A V A A M V A R R R L E R G A K L N Y P E A I A L I T
UniRef90_K9GDF9 M Q L V P K E L D K L T V A H L G F L A Q R R L A R G V R L N H A E A V A L I A
UniRef90_UPI000362A565 M K L S P V E Q E K L M I F T A A E L A E K R R Q K G L L L N Y P E A T A I I T
UniRef90_M4ZW97 M H L T P H E Q E R L L V H V A A D V A R A R Q A R G L K L N H P E A V A I L T
UniRef90_C4LIA9 M N L S P R E T D K L L V F L A A Q V A Q R R R E R G V K L N H P E A I A L I S
UniRef90_F0NK13 M L L T P R E Q E K L L I S V A A E V A R R R K A K G L K L N Y P E A M A I I V
UniRef90_B2AYG6 M L L V P R E L D K L T I S H L G F L A Q R R L A R G L K L N H S E A V A L I S
UniRef90_K5WL42 M R I F P R E Q D K L L L H Q A G Y L A Q K R L A R G L R L N Q T E A V A L I A
UniRef90_R5A820 M Q L T P R E H D K L I V A Q V G H L A Q R R L A R G V R L N R S E A T A L I A
UniRef90_W4L4Z2 M H L T P R E V D K L L I F V A A D V A R R R R G R G L K L N Y P E A L A I I T
UniRef90_W4C6N3 M H W T E Q E K E K L L I T V A A N L S R E R R A R G L K L N V P E A I A L L T
UniRef90_H8Z544 M E L T P Q D K D K L L L F T A G L L A E R R K D R G V K L N Y P E A V A L I S
UniRef90_R9T933 M R L S P R D V D K L Q V F T V A R I A E R R K N D G V K L N Y P E S V A L I A
UniRef90_D8LB52 M R L A P R E I E K I R L H N V G F L A Q K R L A R G T R L N L P E C V A L I A
UniRef90_UPI0002657E0E M R L S V K E T D G L L T H Q A G F L A Q K R L G R G L R L N H P E A T A L L A
UniRef90_UPI000360C61C M L I P P H E Q E K L L L H V A A G L A R E R R Q R G L R L N Y P E A V A L L S
UniRef90_UPI0003714C39 M L L T P T E Y E R L T L F G A A E L A R K R L A K G L K L N Y P E A V A I I S
UniRef90_C9KIW5 M R L T P Q D M E K L M L H Y A G K L A E E C R A R G L K L N H P E A V A Y L S
UniRef90_R7YYX4 M Q L V P K E T D K L V I S Q L G L L A Q R R L A R G V T L N H A E A T A L I A
UniRef90_U4KXB5 M H L I P R E L D K L V I S Q V G F L A Q K R L A R G L K L N Q V E A T A L I A
UniRef90_Q17YJ7 M R L T P K E Q E K F L L Y Y A G E V A R K R K A E G L K L N H P E A I A Y V S
UniRef90_UPI00037F2F60 M N L T P R E I D K L Y V Y V V A D L A R K R Q A R G L K L N Y S E A V A L I S

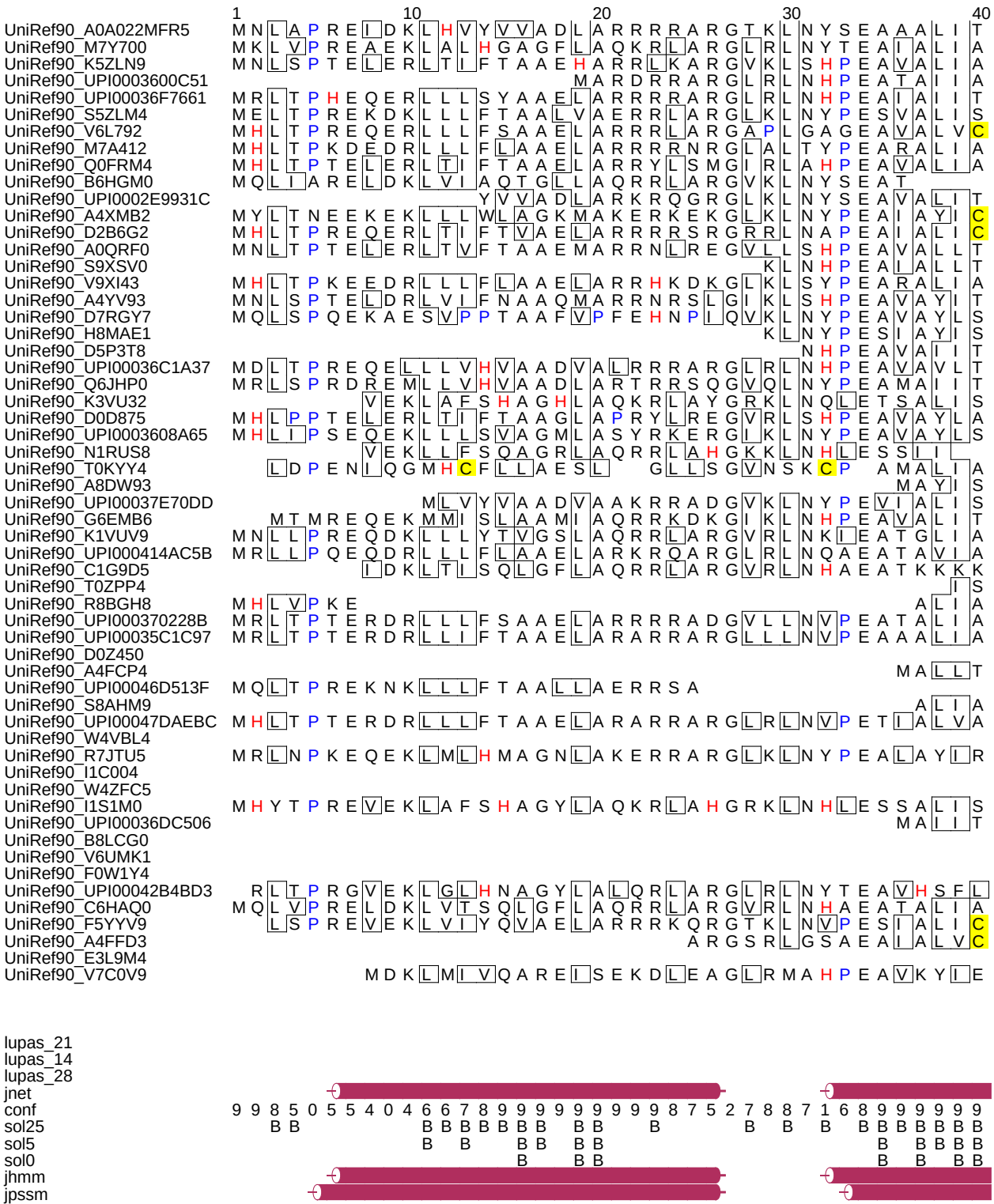

50
60
70
80
UniRef90_A0PSG4
UniRef90_UPI000362022B
UniRef90_V8QSY6
UniRef90_M7THT7
UniRef90_UPI0003F4D4D6
UniRef90_Q9ZMZ4
UniRef90_UPI0002ED4F5B
UniRef90_W5XXE0
UniRef90_UPI0003B3064C
UniRef90_F8A816
UniRef90_W1PGS4
UniRef90_A0A015M5P3
UniRef90_R7V3U3
UniRef90_L8DP45
UniRef90_F5T2S2
UniRef90_W9A5K4
UniRef90_E8SG01
UniRef90_UPI0003B6CB35
UniRef90_E6Y5X0
UniRef90_P75030
UniRef90_U5H587
UniRef90_D3SQA5
UniRef90_UPI0003611748
UniRef90_U9SHA2
UniRef90_W7HV03
UniRef90_UPI000404D461
UniRef90_L1Q9K7
UniRef90_UPI0003B41C24
UniRef90_UPI000464ACEA
UniRef90_G7JC19
UniRef90_W2SBP1
UniRef90_G8LQU3
UniRef90_C1FIE0
UniRef90_V9VX77
UniRef90_M2NIL5
UniRef90_UPI00046FFAE7
UniRef90_UPI00047C301D
UniRef90_U3A727
UniRef90_A0A024GD29
UniRef90_M5G763
UniRef90_D6U4F2
UniRef90_E6U7P2
UniRef90_UPI000381A629
UniRef90_K5VUA4
UniRef90_Q3IRZ4
UniRef90_K6T5E7
UniRef90_K2K793
UniRef90_W2EY32
UniRef90_F0YG69
UniRef90_UPI0003B4019E
UniRef90_D5V3F0
UniRef90_P26931
UniRef90_G7E2S7
UniRef90_UPI0003683995
UniRef90_A9KJS1
UniRef90_N9WJI8
UniRef90_UPI0003B647CC
UniRef90_I0R4S8
UniRef90_R5WFX3
UniRef90_UPI0002EBC0B2
UniRef90_F4PG07
UniRef90_UPI000380D47F
UniRef90_Q18EB8
UniRef90_B6YQL9
UniRef90_K0IM47
UniRef90_W7UAV2
UniRef90_L0DA10
UniRef90_K0BAW7
UniRef90_I0JR96
UniRef90_F7KFH6
UniRef90_UPI0001D2EF74
UniRef90_K9GDF9
UniRef90_UPI000362A565
UniRef90_M4ZW97
UniRef90_C4LIA9
UniRef90_F0NK13
UniRef90_B2AYG6
UniRef90_K5WL42
UniRef90_R5A820
UniRef90_W4L4Z2
UniRef90_W4C6N3
UniRef90_H8Z544
UniRef90_R9T933
UniRef90_D8LB52
UniRef90_UPI0002657E0E
UniRef90_UPI000360C61C
UniRef90_UPI0003714C39
UniRef90_C9KIW5
UniRef90_R7YYX4
UniRef90_U4KXB5
UniRef90_Q17YJ7
UniRef90_UPI00037F2F60

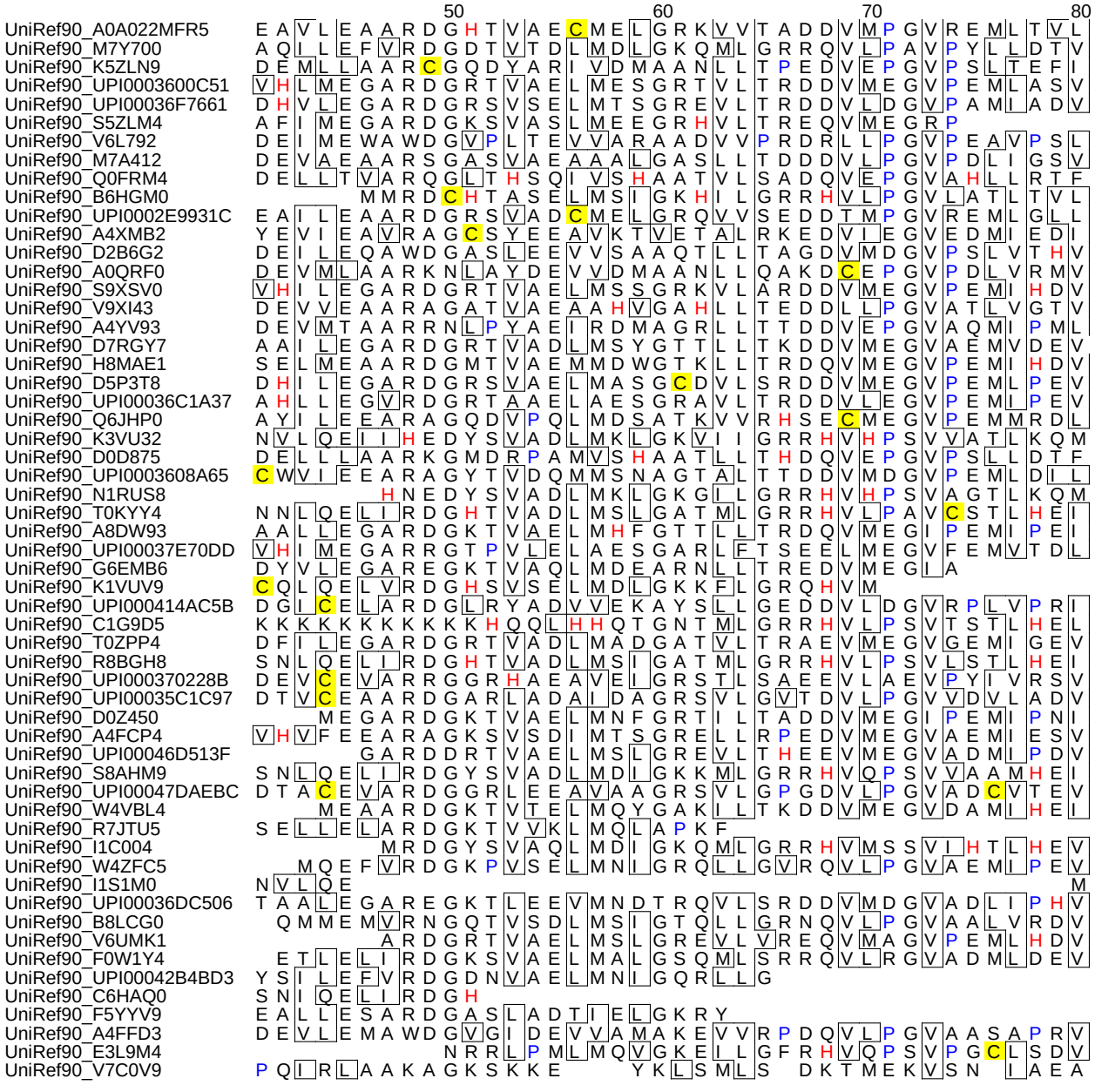

90
100
UniRef90_A0PSG4 Q V E A T F P D G T K L V T V H H P I
UniRef90_UPI000362022B M V E A T F P D G T K L V T V N H P I
UniRef90_V8QSY6 Q I E A T F P D G T K L V T V H H P I
UniRef90_M7THT7 Q V E G T F P T G T Y L V T V T N P I A
UniRef90_UPI0003F4D4D6 Q V E V T F P D G T K L V S V H D P I G
UniRef90_Q9ZMZ4 G I E A M F P D G T K L V T V H T P I
UniRef90_UPI0002ED4F5B Q I E A T F P D G T K L V T V H H P I
UniRef90_W5XXE0 Q V E A T F P D G T K L V T V H T P I
UniRef90_UPI0003B3064C Q V E G T F P D G T K L V T I H K P I
UniRef90_F8A816 Q V E A T F P D G T K L V T V H K P I
UniRef90_W1PGS4 Q V E G T F Q D G T K L V T I H N A I A
UniRef90_A0A015M5P3 Q V E A T F P D G T K L V T I H H P I A
UniRef90_R7V3U3 Q V E A T F P D G T K L I T I H T P I C
UniRef90_L8DP45 M V E A T F P D G T K L I T V H E P I S
UniRef90_F5T2S2 Q V E G V F P D G S K L V T I H D P I
UniRef90_W9A5K4 Q V E A T F P D G T K L V T V H E P I
UniRef90_E8SG01 E I E A T F P D G T K L I T I H H P I
UniRef90_UPI0003B6CB35 Q I E V T F P D G T K L V T V H N P I
UniRef90_E6Y5X0 Q V E A T L P N G T K L V T V H D P I A
UniRef90_P75030 Q V E A T F P D G V K L V T V H Q P I S
UniRef90_U5H587 Q V E G A F P D G V F L V T V H D P I A
UniRef90_D3SQA5 Q V E G T F P D G T K L V T I H N P I
UniRef90_UPI0003611748 Q V E C V F P D G T K L V T V H E P I
UniRef90_U9SHA2 Q V E G T F P D G S Y L V T V H D P I S
UniRef90_W7HV03 Q V E G T F K D G T Y L V T V H H P I A
UniRef90_UPI000404D461 Q L E P T F P D G S K L V T V H H P I S
UniRef90_L1Q9K7 Q V E C T F P D G T K L V T V H D P I
UniRef90_UPI0003B41C24 Q V E A T F P D G V K L V T V H Q P I
UniRef90_UPI000464ACEA E V E A T F P D G T K L I S I H N P I
UniRef90_G7JC19 Q V E A T F H D G T K L I T V H D P I A
UniRef90_W2SBP1 Q V E G T F P T G T Y L V T V H H P V A
UniRef90_G8LQU3 Q I E A T F P D G T K L V T I H N P I
UniRef90_C1FIE0 Q V E G T F V D G T K L V T V H D P I A
UniRef90_V9VX77 Q V E A T F R D G T K L V T V H Q P I
UniRef90_M2NIL5 Q V E G T F R M G T Y L V T V H N P I A
UniRef90_UPI00046FFAE7 Q V E A T F P D G T K L V T V H D P I
UniRef90_UPI00047C301D Q I E A T F K D G T K L V T V H N P I
UniRef90_U3A727 Q V E P M F R D G T K L V T V H D P I
UniRef90_A0A024GD29 Q V E G T F P D G T K L V T I H N P I
UniRef90_M5G763 Q V E G T F P D G V F L V T V H D P I C
UniRef90_D6U4F2 Q V E A T F P D G T K L V T L H D P I Q
UniRef90_E6U7P2 Q I E A T F P D G T K L V T V H N P I
UniRef90_UPI000381A629 Q V E A T F P D G T K L V T V H H P I
UniRef90_K5VUA4 Q V E G T F L D G V F L V T V H Q P I C
UniRef90_Q3IRZ4 Q V E P M F P D G T K L V T I H D P I
UniRef90_K6T5E7 Q V E A T F P D G T K L V T V H N P I
UniRef90_K2K793 Q V E A T F P D G T K L V T V H H P I
UniRef90_W2EY32 Q I E A T F P D G T K L V T V H N P I A
UniRef90_F0YG69 Q V E G T F P D G T K L L T V H H P I S
UniRef90_UPI0003B4019E Q V E A T F P D G T K L V T V H R P I A
UniRef90_D5V3F0 Q I E A T F D D G T K L V T V H N P I T
UniRef90_P26931 Q V E A T F P D G T K L I T V T D P I
UniRef90_G7E2S7 Q V E G T F P D G V F L V T V H E P I S
UniRef90_UPI0003683995 Q V E A T F P D G T K L V T I H D P I Q
UniRef90_A9KJS1 Q V E A T F P D G T K L V T V H Q P I
UniRef90_N9WJI8 Q V E V T F P D G T K L V T V H D P I Q
UniRef90_UPI0003B647CC Q V E A M F P D G T K L V T I H D P I
UniRef90_I0R4S8 Q V E A T F V D G T K L V T I H D P I
UniRef90_R5WFX3 Q L E V T F P D G T K L V T V H D P I
UniRef90_UPI0002EBC0B2 Q V E A T F P D G T K L V T V H D P I
UniRef90_F4PG07 Q V E A T F P D G T K L V T V H S P I
UniRef90_UPI000380D47F Q V E A T F K D G T K L V T I H N P I
UniRef90_Q18EB8 Q V E P T F S D G T K L V T V H D P I
UniRef90_B6YQL9 Q V E G T F T D G T K L V S I H H P I C
UniRef90_K0IM47 Q V E A T F P D G T K L V T V H D P I Q
UniRef90_W7UAV2 Q I E G T F P D G T K L V T V H E P I S
UniRef90_L0DA10 Q V E P T F P D G S K L I T V H N P I
UniRef90_K0BAW7 Q V E A T F E D G T K L V T V H D P I
UniRef90_I0JR96 Q V E A T F P D G V K L V T I H D P I
UniRef90_F7KFH6 Q V E A T F P D G T K L V T V H N P I Q
UniRef90_UPI0001D2EF74 Q V E A T F P D G V K L V T V H E P I
UniRef90_K9GDF9 Q V E G T F V S G T Y L V T V H H P I S
UniRef90_UPI000362A565 Q V E G T F P D G V K L I T V H T P I
UniRef90_M4ZW97 Q V E A T F P D G T K L V T L H H P I G
UniRef90_C4LIA9 Q V E A T F P D G T K L V S V H D P I
UniRef90_F0NK13 Q V E A T F P D G T K L V T V R N P I
UniRef90_B2AYG6 Q I E G T F P S G T Y L V T V H N P I S
UniRef90_K5WL42 Q V E G T F V N G V F L V T V R D P I C
UniRef90_R5A820 M V E G T F K D G T Y L V T V H Q P I C
UniRef90_W4L4Z2 Q V E A T F P D G T K L V T V H E P L A
UniRef90_W4C6N3 Q V E A T F P D G T K L V T V H E P I
UniRef90_H8Z544 K V E V T F P D G V R L I C V P S P I A
UniRef90_R9T933 A V E G T F P D G T K L V S I H N P I Q
UniRef90_D8LB52 Q V E G T F P D G T K L V T I H V P I C
UniRef90_UPI0002657E0E S I E A C F D D G T K L V C L H H P I C
UniRef90_UPI000360C61C Q I E A T F P D G T K L V T I H D P I Q
UniRef90_UPI0003714C39 Q V E G S F P D G T K L I T V H E P L
UniRef90_C9KIW5 Q I E A T F P D G T K L V T V H E P I Q
UniRef90_R7YYX4 Q V E A T F P A G T S L I T V H N P I S
UniRef90_U4KXB5 Q V E G T F L D G S Y L V T I H D P I S
UniRef90_Q17YJ7 G V E A C F P D G T K L V T V N W P V
UniRef90_UPI00037F2F60 Q V E A T F T D G T K L V S C H D P I G

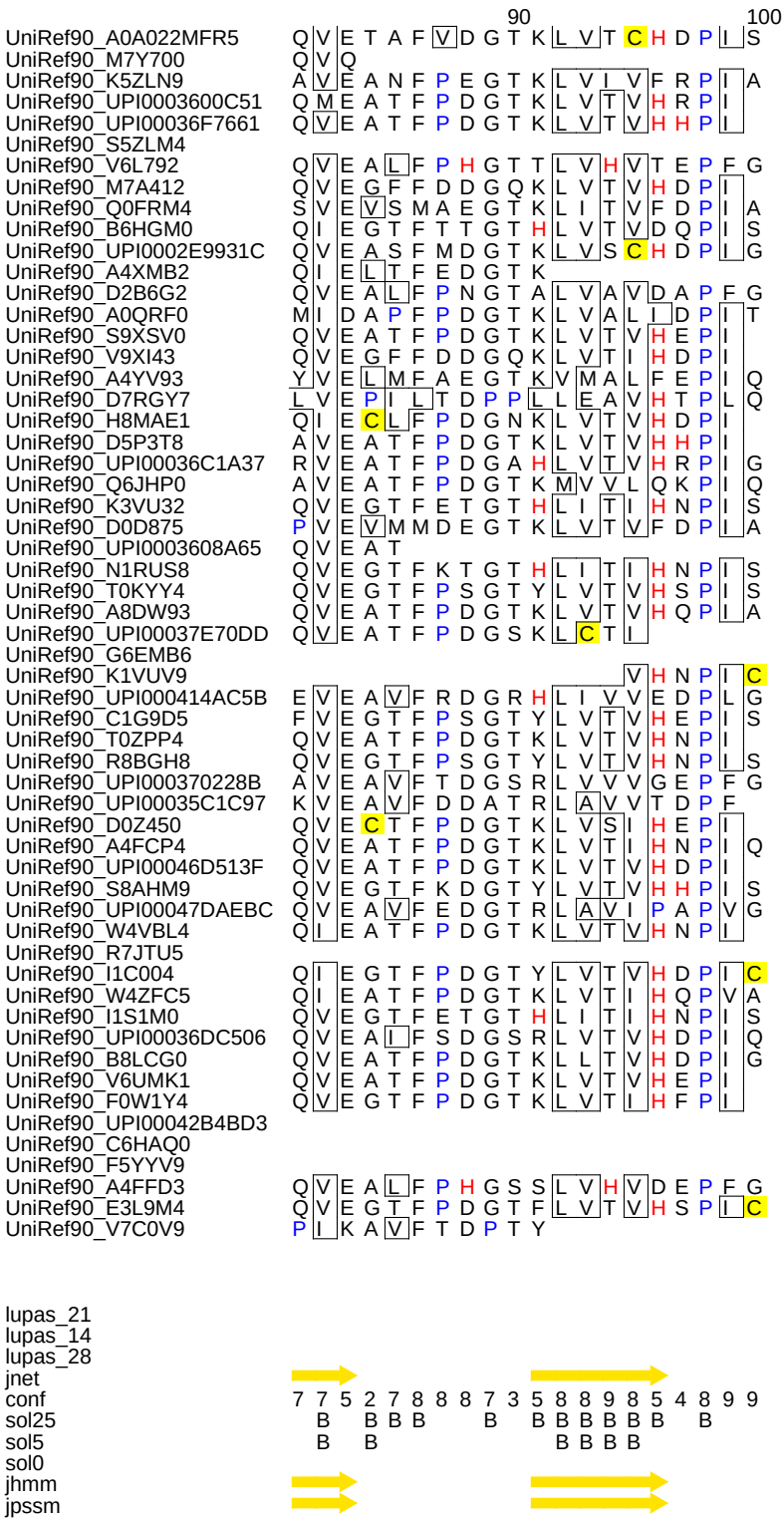

1
10
20
30
40
UniRef90_A4F7F5
UniRef90_C5BDC2
UniRef90_C7PWL1
UniRef90_R7WT41
UniRef90_D8PNC8
UniRef90_F8I5J2
UniRef90_UPI0001AEF2C6
UniRef90_B7G7W5
UniRef90_D1AER0
UniRef90_UPI0003A09FA6
UniRef90_B6K144
UniRef90_C0S126
UniRef90_J7L2K5
UniRef90_M3USB6
UniRef90_A1DDE4
UniRef90_UPI0003F600CF
UniRef90_R5VHT8
UniRef90_A6SZ05
UniRef90_H2FUP9
UniRef90_X0PCR2
UniRef90_J1RYH9
UniRef90_W5WTA5
UniRef90_K9ACV9
UniRef90_F4S0E7
UniRef90_A0A022L5V0
UniRef90_UPI00037F7B67
UniRef90_B1AJ75
UniRef90_J1FLW5
UniRef90_UPI0003601D71
UniRef90_L7LHI6
UniRef90_S3XXP0
UniRef90_UPI00037B7694
UniRef90_E5Y670
UniRef90_L0DAA4
UniRef90_A0A031LV64
UniRef90_C7MGL7
UniRef90_UPI0003731013
UniRef90_T5A8T3
UniRef90_D3FSG5
UniRef90_K8E975
UniRef90_D9T749
UniRef90_R7SJV1
UniRef90_A8QBP4
UniRef90_UPI00034579FE
UniRef90_UPI0002629478
UniRef90_W1WN02
UniRef90_A7EKE8
UniRef90_I2JF44
UniRef90_Q2YQE0
UniRef90_A0A023XX55
UniRef90_D3EZF6
UniRef90_Q7VRS4
UniRef90_R1EJY5
UniRef90_W7CBI0
UniRef90_M3CH88
UniRef90_G8S4B4
UniRef90_P50044
UniRef90_UPI000314559F
UniRef90_R9ABM6
UniRef90_UPI000381E70F
UniRef90_UPI00036B6080
UniRef90_H0BLX8
UniRef90_Q5FB24
UniRef90_B9BF93
UniRef90_H0TXB1
UniRef90_U1PK60
UniRef90_C7CET1
UniRef90_H0E118
UniRef90_A4RSK1
UniRef90_B7PFL6
UniRef90_UPI00041549A1
UniRef90_A0A015KJK3
UniRef90_D8HE30
UniRef90_L8M882
UniRef90_I2AX59
UniRef90_C4RFZ2
UniRef90_F8JSJ1
UniRef90_UPI0002F209DA
UniRef90_UPI0002625859
UniRef90_Q2HFY2
UniRef90_U8TUN0
UniRef90_UPI00036B0DFF
UniRef90_D5G9W6
UniRef90_Q5BG99
UniRef90_F5R8N5
UniRef90_UPI0001745DDE
UniRef90_M5EDD0
UniRef90_B9KYI7
UniRef90_L1IL47
UniRef90_UPI000237B6BF
UniRef90_R4JXZ8
UniRef90_UPI00035FC29B


50
60
70
80
UniRef90_A4F7F5
UniRef90_C5BDC2
UniRef90_C7PWL1
UniRef90_R7WT41
UniRef90_D8PNC8
UniRef90_F8I5J2
UniRef90_UPI0001AEF2C6
UniRef90_B7G7W5
UniRef90_D1AER0
UniRef90_UPI0003A09FA6
UniRef90_B6K144
UniRef90_C0S126
UniRef90_J7L2K5
UniRef90_M3USB6
UniRef90_A1DDE4
UniRef90_UPI0003F600CF
UniRef90_R5VHT8
UniRef90_A6SZ05
UniRef90_H2FUP9
UniRef90_X0PCR2
UniRef90_J1RYH9
UniRef90_W5WTA5
UniRef90_K9ACV9
UniRef90_F4S0E7
UniRef90_A0A022L5V0
UniRef90_UPI00037F7B67
UniRef90_B1AJ75
UniRef90_J1FLW5
UniRef90_UPI0003601D71
UniRef90_L7LHI6
UniRef90_S3XXP0
UniRef90_UPI00037B7694
UniRef90_E5Y670
UniRef90_L0DAA4
UniRef90_A0A031LV64
UniRef90_C7MGL7
UniRef90_UPI0003731013
UniRef90_T5A8T3
UniRef90_D3FSG5
UniRef90_K8E975
UniRef90_D9T749
UniRef90_R7SJV1
UniRef90_A8QBP4
UniRef90_UPI00034579FE
UniRef90_UPI0002629478
UniRef90_W1WN02
UniRef90_A7EKE8
UniRef90_I2JF44
UniRef90_Q2YQE0
UniRef90_A0A023XX55
UniRef90_D3EZF6
UniRef90_Q7VRS4
UniRef90_R1EJY5
UniRef90_W7CBI0
UniRef90_M3CH88
UniRef90_G8S4B4
UniRef90_P50044
UniRef90_UPI000314559F
UniRef90_R9ABM6
UniRef90_UPI000381E70F
UniRef90_UPI00036B6080
UniRef90_H0BLX8
UniRef90_Q5FB24
UniRef90_B9BF93
UniRef90_H0TXB1
UniRef90_U1PK60
UniRef90_C7CET1
UniRef90_H0E118
UniRef90_A4RSK1
UniRef90_B7PFL6
UniRef90_UPI00041549A1
UniRef90_A0A015KJK3
UniRef90_D8HE30
UniRef90_L8M882
UniRef90_I2AX59
UniRef90_C4RFZ2
UniRef90_F8JSJ1
UniRef90_UPI0002F209DA
UniRef90_UPI0002625859
UniRef90_Q2HFY2
UniRef90_U8TUN0
UniRef90_UPI00036B0DFF
UniRef90_D5G9W6
UniRef90_Q5BG99
UniRef90_F5R8N5
UniRef90_UPI0001745DDE
UniRef90_M5EDD0
UniRef90_B9KYI7
UniRef90_L1IL47
UniRef90_UPI000237B6BF
UniRef90_R4JXZ8
UniRef90_UPI00035FC29B


90
100
UniRef90_A4F7F5 Q V E A T F P D G T K L V T V H D P I
UniRef90_C5BDC2 Q V E A I F T D G S R L V T V H D P I Q
UniRef90_C7PWL1 Q I E A T F P D G T K L L T V H R P I G
UniRef90_R7WT41 Q V E A T F P D G R K L V T L H D P I S
UniRef90_D8PNC8 Q V E G T L E D G V F L V T V Y D P I S
UniRef90_F8I5J2 Q V E A T F N D G T K L V S C H N P I
UniRef90_UPI0001AEF2C6 Q V E A T F P D G T K L V T L H D P F
UniRef90_B7G7W5 Q V E A T F L D G T K L L T I H N P V S
UniRef90_D1AER0 Q V E A V F D D G T K L V S C H D P V G
UniRef90_UPI0003A09FA6 Q I E G T F K D G T K L V A V R T P V T
UniRef90_B6K144 M I E A T F P D G S Y L V T I H Q P I C
UniRef90_C0S126 F V E G T F P S G T Y L V T V H E P I S
UniRef90_J7L2K5 Q V E A T F P D G R K L V T I T E P I Q
UniRef90_M3USB6 Q I E A T F P D G R K L V T I H H P I
UniRef90_A1DDE4 Q I E G T F P T G T Y L V T V Q H P I A
UniRef90_UPI0003F600CF Q I E A T F P D G T K L V T V T G P I Q
UniRef90_R5VHT8 Q V E A V F T D G S R L V S I H Q P I
UniRef90_A6SZ05 Q V E A T F P D G S K L V T V H H P I
UniRef90_H2FUP9 Q V E A T F P D G T K L V T L H D P I Q
UniRef90_X0PCR2 Q V E G T F K D G T K L V T V H D P I
UniRef90_J1RYH9 Q V E A T F P D G T K L V T I H D P F
UniRef90_W5WTA5 Q V E A T F P D G T K L V S V H D P I G
UniRef90_K9ACV9 Q V E A T F P D G R K L V T I H N P I
UniRef90_F4S0E7 Q V E G T F P D G T F L V T V H S P I C
UniRef90_A0A022L5V0 Q V E A T F P D G S K L V T V H D P V G
UniRef90_UPI00037F7B67 Q V E A S F K D G S K L V S C H D P I G
UniRef90_B1AJ75 Q V E V T F P D G T K L V S V H D P I
UniRef90_J1FLW5 Q I E A T F P D G V K L V T V D H P I
UniRef90_UPI0003601D71 Q V E A T F P D G R K L V T I T E P I
UniRef90_L7LHI6 R V E A V F T D G T R L V T V H N P I
UniRef90_S3XXP0 Q V E A T F N D G T K L V T L H R P V
UniRef90_UPI00037B7694 Q V E A V F T D G S R L V T I H D P I Q
UniRef90_E5Y670 Q V E A V F T D G S R L I T I H N P I
UniRef90_L0DAA4 Q V E A V F T D G S R L V T I H D P I
UniRef90_A0A031LV64 Q V E A T F P D G T K L V T I R K P I
UniRef90_C7MGL7 Q V E A T F P D G T K L V T V T D P L Q
UniRef90_UPI0003731013 Q V E A T F P D G R K L V T L S G P I
UniRef90_T5A8T3 M V E G T F P M G T Y L V T V H N P I S
UniRef90_D3FSG5 Q V E A T F P D G V K L V T I H H P I Q
UniRef90_K8E975 Q V E G T F T D G T K L V S V H G P I C
UniRef90_D9T749 Q V E A V F T D G S R L I T V H S P I Q
UniRef90_R7SJV1 Q V E G T L H D G V F L I T I H E P I S
UniRef90_A8QBP4 M I E A T F N D G T F L V S V H D P I C
UniRef90_UPI00034579FE Q V E A T F P D G R K M V S I T E P I Q
UniRef90_UPI0002629478 Q V E A T F P D G R K L V T I H H P I
UniRef90_W1WN02 Q I E A T F K D G T K L V T V H N P I
UniRef90_A7EKE8 M V E G T F P T G T Y L V T V H H P I S
UniRef90_I2JF44 Q V E A T F P D G T K L V T V H N P I
UniRef90_Q2YQE0 Q V E A V F S D G S R L V S L H N P I T
UniRef90_A0A023XX55 Q V E A T F P D G T K L V P V H N P I
UniRef90_D3EZF6 Q V E A T F P D G R K L V T L H Q P V A
UniRef90_Q7VRS4 Q I E A T F L D G T K L V T I H D P I
UniRef90_R1EJY5 Q I E G T F P T G T Y L V T V H H P I S
UniRef90_W7CBI0 Q V E A T F P D G T K L V T V H N P I
UniRef90_M3CH88 Q V E A I F T D G S R L V T V H D P I
UniRef90_G8S4B4 R V E A T F P D G P R L I A V P G P I A
UniRef90_P50044 Q I E V C F P D G T L L V T V H N P I
UniRef90_UPI000314559F Q V E A T F P D G T K L V S C H D P I G
UniRef90_R9ABM6 Q V E G T F P D G T F L V T I H R P I S
UniRef90_UPI000381E70F Q V E A L L P D G T K L V T V M D P I
UniRef90_UPI00036B6080 Q V E G M F S D G S K L I T I H D P I
UniRef90_H0BLX8 Q V E A T F P D G R K L V T L Y D P I
UniRef90_Q5FB24 Q I E L P F E D G T K L V T I H E P I A
UniRef90_B9BF93 M V E A F F P D G Q K L V C V H D P I G
UniRef90_H0TXB1 Q I E A V F S D G S R L V T V H T P I Q
UniRef90_U1PK60 Q T E P V F P D G T K L V T V H N P I
UniRef90_C7CET1 M V E P F L P D G Q K L V C V H D P I A
UniRef90_H0E118 Q V E A T F P D G T K L V T V H D P I
UniRef90_A4RSK1 Q I E T T F D D G T K L I T I H D A I C
UniRef90_B7PFL6 T V E A T F T D G T K L V S
UniRef90_UPI00041549A1 Q I E A T F P D G T K L V T V H D P I
UniRef90_A0A015KJK3 Q V E G M F P D G S K L I T V H D P I
UniRef90_D8HE30 E I E A T F L D G T K L I T V H H P I
UniRef90_L8M882 Q V E A H F L D G T K L I S I H N P I G
UniRef90_I2AX59 Q T E A T F N D G T K L I T V H
UniRef90_C4RFZ2 Q V E A T F P D G T K L V T V H H P I
UniRef90_F8JSJ1 M V E A V F A D G S R L A V V T D P I A
UniRef90_UPI0002F209DA H V E A T F P D G T K L V A V Q G P I Q
UniRef90_UPI0002625859 N A H A T F P D G T K L I V I Y N P
UniRef90_Q2HFY2 Q V E G T F P A G T F L V T V Q H P I A
UniRef90_U8TUN0 M V E G F F P D G Q K L V C I H D P I G
UniRef90_UPI00036B0DFF Q I E A T F P D G R K L V T L Y D P I
UniRef90_D5G9W6 Q V E G T F P D G T Y L
UniRef90_Q5BG99 Q V E G T F T T G S Y L V T V H H P I S
UniRef90_F5R8N5 Q V E A S F P D G T K L V T V H D P I
UniRef90_UPI0001745DDE Q V E A T F P D G T K L V T V H H P V
UniRef90_M5EDD0 M V E A T F R D G T F L I A V D D P V C
UniRef90_B9KYI7 H I D A L F P D G T R L V T L R N P I
UniRef90_L1IL47 Q V E G T F P D G T K L V T V H S P I T
UniRef90_UPI000237B6BF P V D A T F P N G T K L V T V H D P I T
UniRef90_R4JXZ8 K I E L D F Q D E T K I V T I H N P I
UniRef90_UPI00035FC29B Q V E A T F P D G R K L V T L S H P I


1 10 20 30 40
UniRef90_A0A022MFR5
UniRef90_M7Y700
UniRef90_K5ZLN9
UniRef90_UPI0003600C51
UniRef90_UPI00036F7661
UniRef90_S5ZLM4
UniRef90_V6L792
UniRef90_M7A412
UniRef90_Q0FRM4
UniRef90_B6HGM0
UniRef90_UPI0002E9931C
UniRef90_A4XMB2
UniRef90_D2B6G2
UniRef90_A0QRF0
UniRef90_S9XSV0
UniRef90_V9XI43
UniRef90_A4YV93
UniRef90_D7RGY7
UniRef90_H8MAE1
UniRef90_D5P3T8
UniRef90_UPI00036C1A37
UniRef90_Q6JHP0
UniRef90_K3VU32
UniRef90_D0D875
UniRef90_UPI0003608A65
UniRef90_N1RUS8
UniRef90_T0KYY4
UniRef90_A8DW93
UniRef90_UPI00037E70DD
UniRef90_G6EMB6
UniRef90_K1VUV9
UniRef90_UPI000414AC5B
UniRef90_C1G9D5
UniRef90_T0ZPP4
UniRef90_R8BGH8
UniRef90_UPI000370228B
UniRef90_UPI00035C1C97
UniRef90_D0Z450
UniRef90_A4FCP4
UniRef90_UPI00046D513F
UniRef90_S8AHM9
UniRef90_UPI00047DAEBC
UniRef90_W4VBL4
UniRef90_R7JTU5
UniRef90_I1C004
UniRef90_W4ZFC5
UniRef90_I1S1M0
UniRef90_UPI00036DC506
UniRef90_B8LCG0
UniRef90_V6UMK1
UniRef90_F0W1Y4
UniRef90_UPI00042B4BD3
UniRef90_C6HAQ0
UniRef90_F5YYV9
UniRef90_A4FFD3
UniRef90_E3L9M4
UniRef90_V7C0V9
lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm


50
60
70
80
UniRef90_A0A022MFR5
UniRef90_M7Y700
UniRef90_K5ZLN9
UniRef90_UPI0003600C51
UniRef90_UPI00036F7661
UniRef90_S5ZLM4
UniRef90_V6L792
UniRef90_M7A412
UniRef90_Q0FRM4
UniRef90_B6HGM0
UniRef90_UPI0002E9931C
UniRef90_A4XMB2
UniRef90_D2B6G2
UniRef90_A0QRF0
UniRef90_S9XSV0
UniRef90_V9XI43
UniRef90_A4YV93
UniRef90_D7RGY7
UniRef90_H8MAE1
UniRef90_D5P3T8
UniRef90_UPI00036C1A37
UniRef90_Q6JHP0
UniRef90_K3VU32
UniRef90_D0D875
UniRef90_UPI0003608A65
UniRef90_N1RUS8
UniRef90_T0KYY4
UniRef90_A8DW93
UniRef90_UPI00037E70DD
UniRef90_G6EMB6
UniRef90_K1VUV9
UniRef90_UPI000414AC5B
UniRef90_C1G9D5
UniRef90_T0ZPP4
UniRef90_R8BGH8
UniRef90_UPI000370228B
UniRef90_UPI00035C1C97
UniRef90_D0Z450
UniRef90_A4FCP4
UniRef90_UPI00046D513F
UniRef90_S8AHM9
UniRef90_UPI00047DAEBC
UniRef90_W4VBL4
UniRef90_R7JTU5
UniRef90_I1C004
UniRef90_W4ZFC5
UniRef90_I1S1M0
UniRef90_UPI00036DC506
UniRef90_B8LCG0
UniRef90_V6UMK1
UniRef90_F0W1Y4
UniRef90_UPI00042B4BD3
UniRef90_C6HAQ0
UniRef90_F5YYV9
UniRef90_A4FFD3
UniRef90_E3L9M4
UniRef90_V7C0V9
lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm


90
100
UniRef90_A0A022MFR5 Q V E T A F V D G T K L V T C H D P I S
UniRef90_M7Y700 Q V Q
UniRef90_K5ZLN9 A V E A N F P E G T K L V I V F R P I A
UniRef90_UPI0003600C51 Q M E A T F P D G T K L V T V H R P I
UniRef90_UPI00036F7661 Q V E A T F P D G T K L V T V H H P I
UniRef90_S5ZLM4
UniRef90_V6L792 Q V E A L F P H G T T L V H V T E P F G
UniRef90_M7A412 Q V E G F F D D G Q K L V T V H D P I
UniRef90_Q0FRM4 S V E V S M A E G T K L I T V F D P I A
UniRef90_B6HGM0 Q I E G T F T T G T H L V T V D Q P I S
UniRef90_UPI0002E9931C Q V E A S F M D G T K L V S C H D P I G
UniRef90_A4XMB2 Q I E L T F E D G T K
UniRef90_D2B6G2 Q V E A L F P N G T A L V A V D A P F G
UniRef90_A0QRF0 M I D A P F P D G T K L V A L I D P I T
UniRef90_S9XSV0 Q V E A T F P D G T K L V T V H E P I
UniRef90_V9XI43 Q V E G F F D D G Q K L V T I H D P I
UniRef90_A4YV93 Y V E L M F A E G T K V M A L F E P I Q
UniRef90_D7RGY7 L V E P I L T D P P L L E A V H T P L Q
UniRef90_H8MAE1 Q I E C L F P D G N K L V T V H D P I
UniRef90_D5P3T8 A V E A T F P D G T K L V T V H H P I
UniRef90_UPI00036C1A37 R V E A T F P D G A H L V T V H R P I G
UniRef90_Q6JHP0 A V E A T F P D G T K M V V L Q K P I Q
UniRef90_K3VU32 Q V E G T F E T G T H L I T I H N P I S
UniRef90_D0D875 P V E V M M D E G T K L V T V F D P I A
UniRef90_UPI0003608A65 Q V E A T
UniRef90_N1RUS8 Q V E G T F K T G T H L I T I H N P I S
UniRef90_T0KYY4 Q V E G T F P S G T Y L V T V H S P I S
UniRef90_A8DW93 Q V E A T F P D G T K L V T V H Q P I A
UniRef90_UPI00037E70DD Q V E A T F P D G S K L C T I
UniRef90_G6EMB6
UniRef90_K1VUV9 V H N P I C
UniRef90_UPI000414AC5B E V E A V F R D G R H L I V V E D P L G
UniRef90_C1G9D5 F V E G T F P S G T Y L V T V H E P I S
UniRef90_T0ZPP4 Q V E A T F P D G T K L V T V H N P I
UniRef90_R8BGH8 Q V E G T F P S G T Y L V T V H N P I S
UniRef90_UPI000370228B A V E A V F T D G S R L V V V G E P F G
UniRef90_UPI00035C1C97 K V E A V F D D A T R L A V V T D P F
UniRef90_D0Z450 Q V E C T F P D G T K L V S I H E P I
UniRef90_A4FCP4 Q V E A T F P D G T K L V T I H N P I Q
UniRef90_UPI00046D513F Q V E A T F P D G T K L V T V H D P I
UniRef90_S8AHM9 Q V E G T F K D G T Y L V T V H H P I S
UniRef90_UPI00047DAEBC Q V E A V F E D G T R L A V I P A P V G
UniRef90_W4VBL4 Q I E A T F P D G T K L V T V H N P I
UniRef90_R7JTU5
UniRef90_I1C004 Q I E G T F P D G T Y L V T V H D P I C
UniRef90_W4ZFC5 Q I E A T F P D G T K L V T I H Q P V A
UniRef90_I1S1M0 Q V E G T F E T G T H L I T I H N P I S
UniRef90_UPI00036DC506 Q V E A I F S D G S R L V T V H D P I Q
UniRef90_B8LCG0 Q V E A T F P D G T K L L T V H D P I G
UniRef90_V6UMK1 Q V E A T F P D G T K L V T V H E P I
UniRef90_F0W1Y4 Q V E G T F P D G T K L V T I H F P I
UniRef90_UPI00042B4BD3
UniRef90_C6HAQ0
UniRef90_F5YYV9
UniRef90_A4FFD3 Q V E A L F P H G S S L V H V D E P F G
UniRef90_E3L9M4 Q V E G T F P D G T F L V T V H S P I C
UniRef90_V7C0V9 P I K A V F T D P T Y
lupas_21
lupas_14
lupas_28
jnet
conf 7 7 5 2 7 8 8 8 7 3 5 8 8 9 8 5 4 8 9 9
sol25 B B B B B B B B B B B
sol5 B B B B B B
sol0
jhmm
jpssm