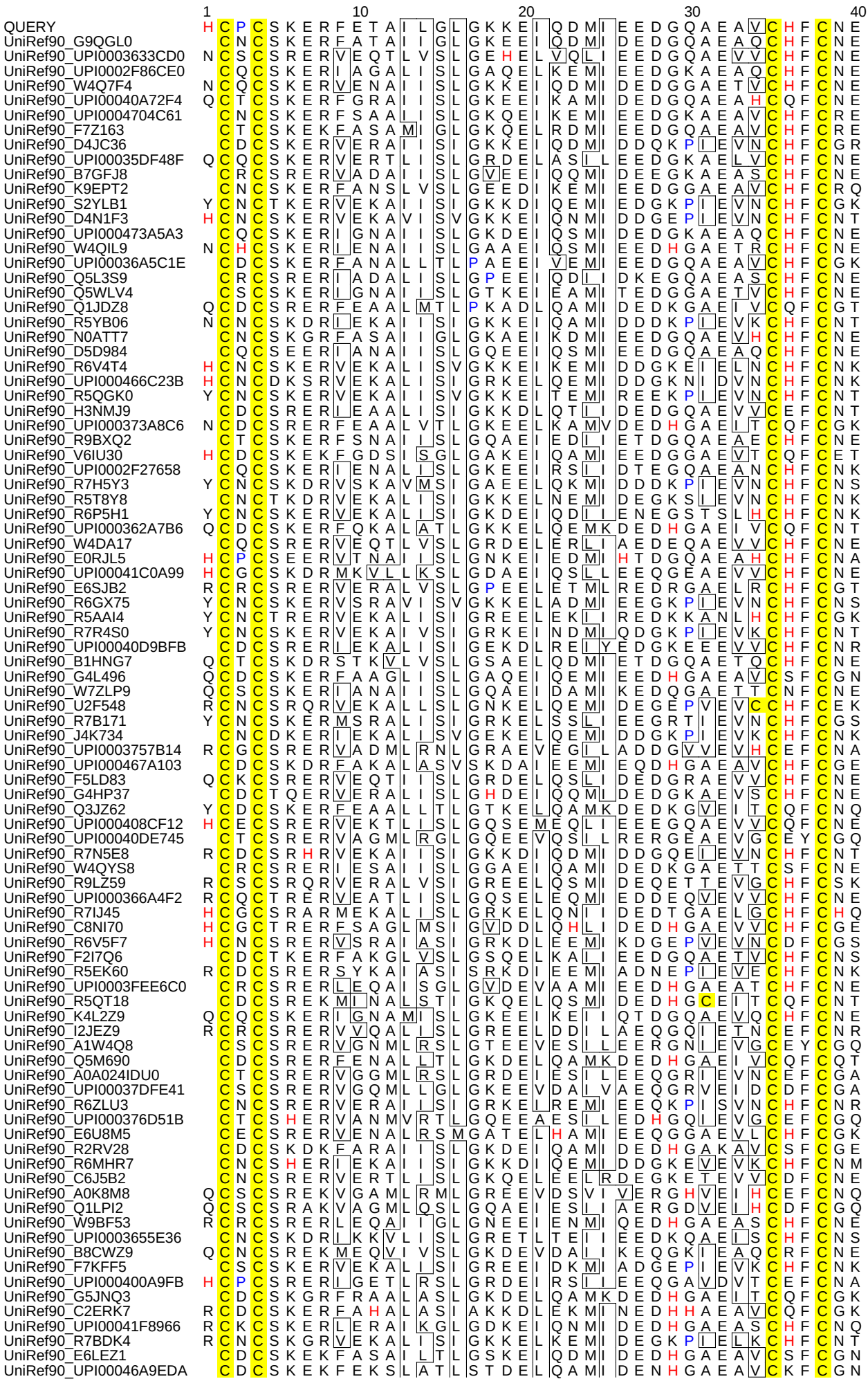
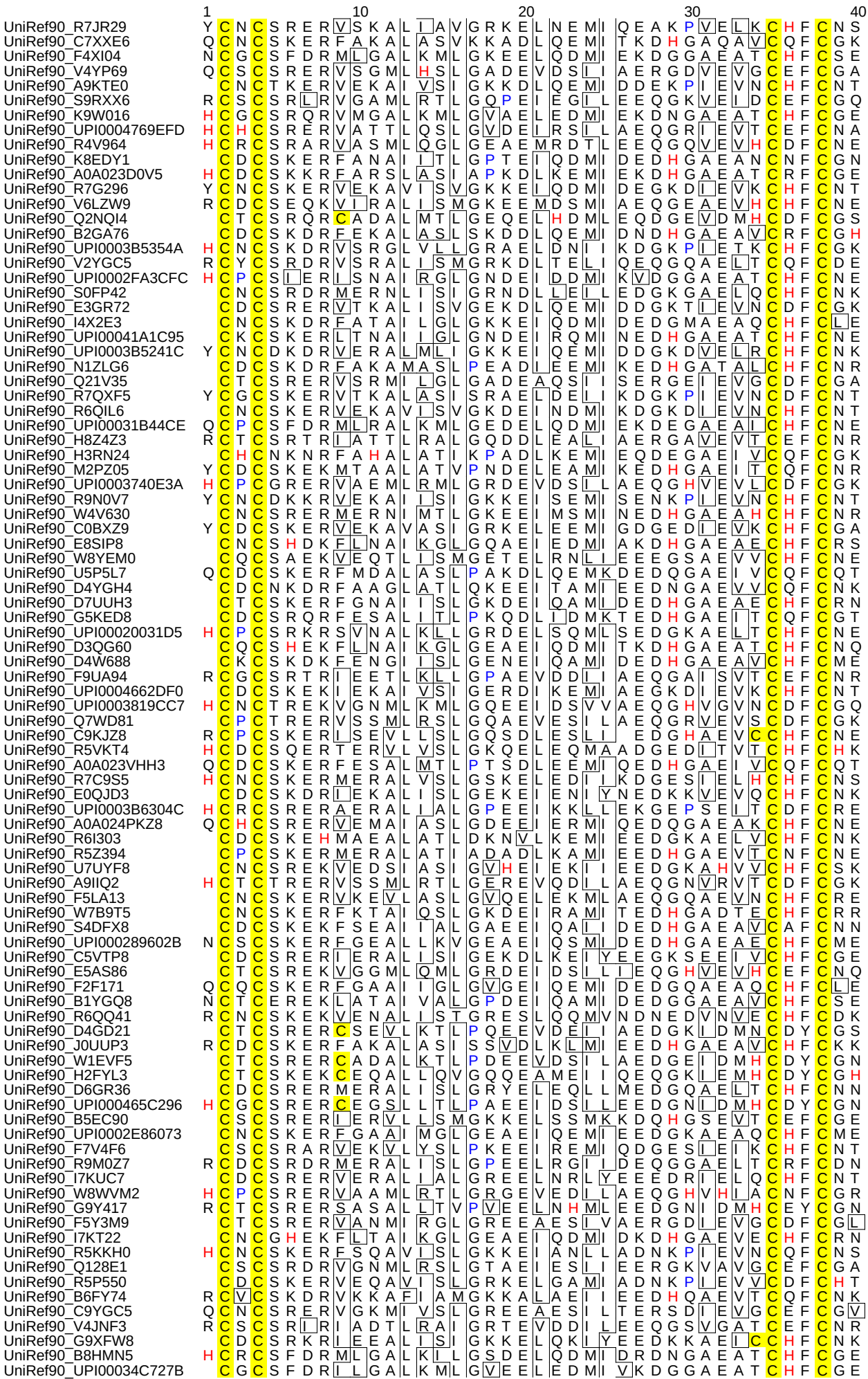
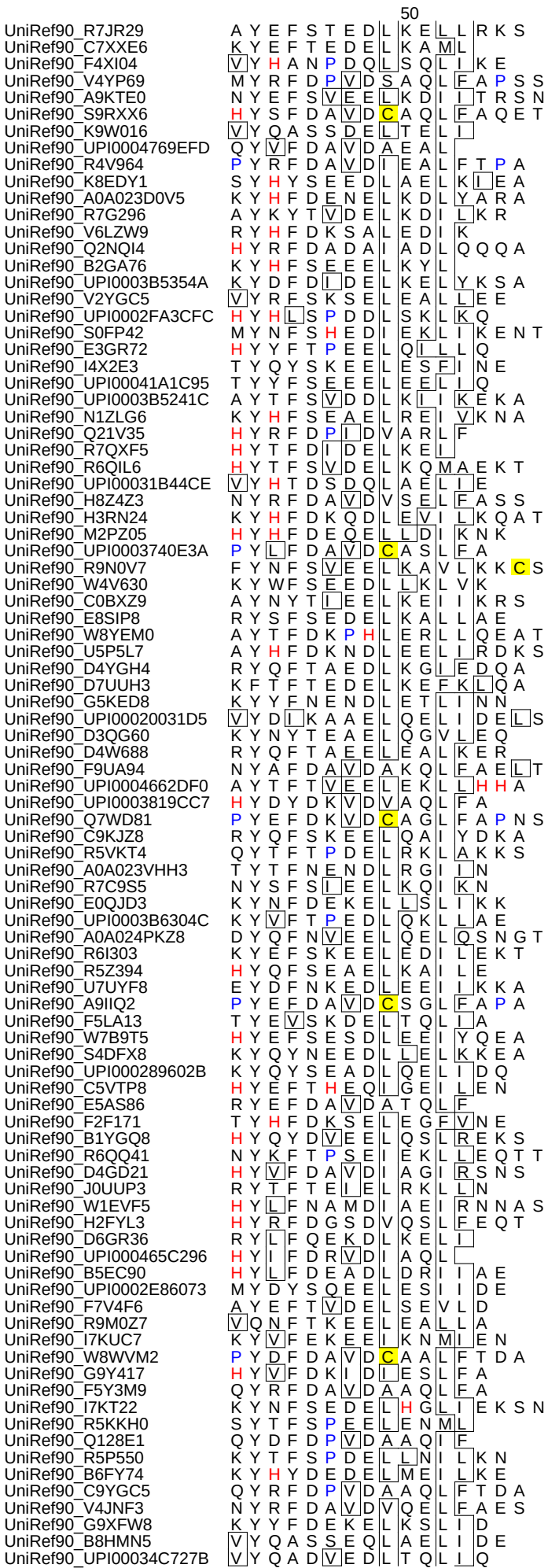
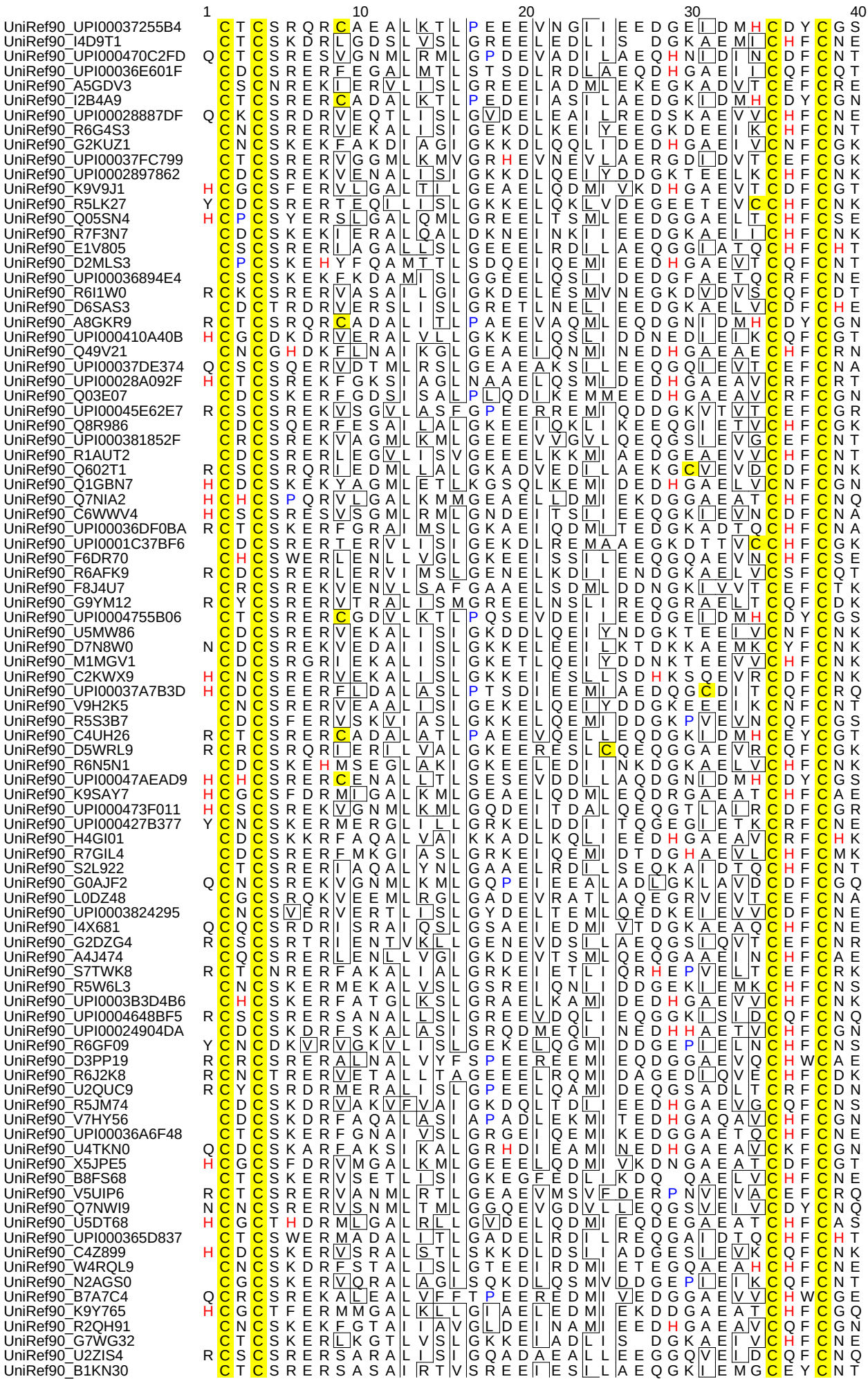
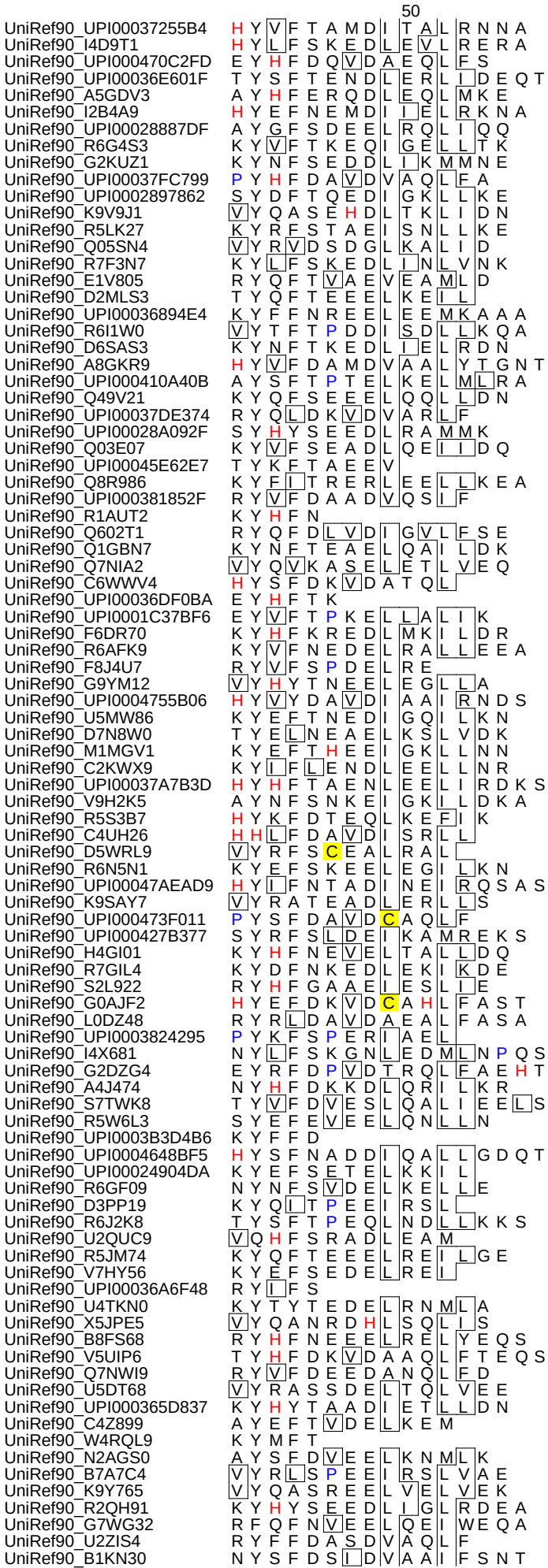

1
10
20
30
40
QUERY H C P C S K E R F E T A I L G L G K K E I Q D M I E E D G Q A E A V C H F C N E
UniRef90_G9QGL0 C N C S K E R F A T A I I G L G K E E I Q D M I D E D G Q A E A Q C H F C N E
UniRef90_UPI0003633CD0 N C S C S R E R V E Q T L V S L G E H E L V Q L I E E D G Q A E V V C H F C N E
UniRef90_UPI0002F86CE0 C Q C S K E R I A G A L I S L G A Q E L K E M I E E D G K A E A Q C H F C N E
UniRef90_W4Q7F4 N C Q C S K E R V E N A I I S L G K K E I Q D M I D E D G G A E T V C H F C N E
UniRef90_UPI00040A72F4 Q C T C S K E R F G R A I I S L G K E E I K A M I D E D G Q A E A H C Q F C N E
UniRef90_UPI0004704C61 C N C S K E R F S A A L I S L G K Q E I K E M I E E D G K A E A V C H F C R E
UniRef90_F7Z163 C T C S K E K F A S A M I G L G K Q E L R D M I E E D G Q A E A V C H F C R E
UniRef90_D4JC36 C D C S K E R V E R A I I S I G K K E I Q D M I D D Q K P I E V N C H F C G R
UniRef90_UPI00035DF48F Q C Q C S K E R V E R T L I S L G R D E L A S I L E E D G K A E L V C H F C N E
UniRef90_B7GFJ8 C R C S R E R V A D A I I S L G V E E I Q Q M I D E E G K A E A S C H F C N E
UniRef90_K9EPT2 C N C S K E R F A N S L V S L G E E D I K E M I E E D G G A E A V C H F C R Q
UniRef90_S2YLB1 Y C N C T K E R V E K A I I S I G K K D I Q E M I E D G K P I E V N C H F C G K
UniRef90_D4N1F3 H C N C S K E R V E K A V I S V G K K E I Q N M I D D G E P I E V N C H F C N T
UniRef90_UPI000473A5A3 C Q C S K E R I G N A I I S L G K K D E I Q S M I D E D G K A E A Q C H F C N E
UniRef90_W4QIL9 N C H C S K E R I E N A I I S L G A A E I Q S M I E E D H G A E T R C H F C N E
UniRef90_UPI00036A5C1E C D C S K E R F A N A L L T L P A E E I V E M I E E D G Q A E A V C H F C G K
UniRef90_Q5L3S9 C R C S R E R I A D A L I S L G P E E I Q D I I D K E G Q A E A S C H F C N E
UniRef90_Q5WLV4 C S C S K E R I G N A I I S L G T K E I E A M I T E D G G A E T V C H F C N E
UniRef90_Q1JDZ8 Q C D C S R E R F E A A L M T L P K A D L Q A M I D E D K G A E I V C Q F C G T
UniRef90_R5YB06 N C N C S K D R I E K A I I S I G K K E I Q A M I D D D K P I E V K C H F C N T
UniRef90_N0ATT7 C N C S K G R F A S A I I G L G K A E I K D M I E E D G Q A E V H C H F C N E
UniRef90_D5D984 C Q C S E E R I A N A I I S L G Q E E I Q S M I E E D G Q A E A Q C H F C N E
UniRef90_R6V4T4 H C N C S K E R V E K A L I S V G K K E I K E M I D D G K E I E L N C H F C N K
UniRef90_UPI000466C23B H C N C D K S R V E K A L I S I G R K E L Q E M I D D G K N I D V N C H F C N K
UniRef90_R5QGK0 Y C N C S K E R V E K A I I S V G K K E I T E M I R E E K P I E V N C H F C N T
UniRef90_H3NMJ9 C D C S R E R I E A A L I S I G K K D L Q T I I D E D G Q A E V V C E F C N T
UniRef90_UPI000373A8C6 N C D C S R E R F E A A L V T L G K E E L K A M V D E D H G A E I T C Q F C G K
UniRef90_R9BXQ2 C T C S K E R F S N A I I S L G Q A E I E D I I E T D G Q A E A E C H F C N E
UniRef90_V6IU30 H C D C S K E K F G D S I S G L G A K E I Q A M I E E D G G A E V T C Q F C E T
UniRef90_UPI0002F27658 C Q C S K E R I E N A L I S L G K E E I R S I I D T E G Q A E A N C H F C N K
UniRef90_R7H5Y3 Y C N C S K D R V S K A V M S I G A E E L Q K M I D D D K P I E V N C H F C N S
UniRef90_R5T8Y8 C N C T K D R V E K A L I S I G K K E L N E M I D E G K S I E V N C H F C N K
UniRef90_R6P5H1 Y C N C S K E R V E K A L I S I G K D E I Q D I I E N E G S T S L H C H F C N K
UniRef90_UPI000362A7B6 Q C D C S K E R F Q K A L A T L G K K E L Q E M K D E D H G A E I V C Q F C N T
UniRef90_W4DA17 C Q C S R E R V E Q T L V S L G R D E L E R L I A E D E Q A E V V C H F C N E
UniRef90_E0RJL5 H C P C S E E R V T N A I I S L G N K E I E D M I H T D G Q A E A H C H F C N A
UniRef90_UPI00041C0A99 H C G C S K D R M K V L L K S L G D A E I Q S L L E E Q G E A E V V C H F C N E
UniRef90_E6SJB2 R C R C S R E R V E R A L V S L G P E E L E T M L R E D R G A E L R C H F C G T
UniRef90_R6GX75 Y C N C S K E R V S R A V I S V G K K E L A D M I E E G K P I E V N C H F C N S
UniRef90_R5AAI4 Y C N C T R E R V E K A L I S I G R E E L E K I I R E D K K A N L H C H F C G K
UniRef90_R7R4S0 Y C N C S K E R V E K A I V S I G R K E I N D M I Q D G K P I E V K C H F C N T
UniRef90_UPI00040D9BFB C D C S R E R I E K A L I S I G E K D L R E I Y E D G K E E E V V C H F C N R
UniRef90_B1HNG7 Q C T C S K D R S T K V L V S L G S A E L Q D M I E T D G Q A E T Q C H F C N E
UniRef90_G4L496 Q C D C S K E R F A A G L I S L G A Q E I Q E M I E E D H G A E A V C S F C G N
UniRef90_W7ZLP9 Q C S C S K E R I A N A I I S L G Q A E I D A M I K E D Q G A E T T C N F C N E
UniRef90_U2F548 R C N C S R Q R V E K A L L S L G N K E L Q E M I D E G E P V E V C C H F C E K
UniRef90_R7B171 Y C N C S K E R M S R A L I S I G R K E L S S L I E E G R T I E V N C H F C G S
UniRef90_J4K734 C N C D K E R I E K A L I S V G E K E L Q E M I D D G K P I E V K C H F C N K
UniRef90_UPI0003757B14 R C G C S R E R V A D M L R N L G R A E V E G I L A D D G V V E V H C E F C N A
UniRef90_UPI000467A103 C D C S K D R F A K A L A S V S K D A I E E M I E Q D H G A E A V C H F C G E
UniRef90_F5LD83 Q C K C S R E R V E Q T I I S L G R D E L Q S L I D E D G R A E V V C H F C N E
UniRef90_G4HP37 C D C T Q E R V E R A L I S L G H D E I Q Q M I D E D G K A E V S C H F C N E
UniRef90_Q3JZ62 Y C D C S K E R F E A A L L T L G T K E L Q A M K D E D K G V E I T C Q F C N Q
UniRef90_UPI000408CF12 H C E C S R E R V E K T L I S L G Q S E M E Q L I E E E G Q A E V V C Q F C N E
UniRef90_UPI00040DE745 C T C S R E R V A G M L R G L G Q E E V Q S I L R E R G E A E V G C E Y C G Q
UniRef90_R7N5E8 R C D C S R H R V E K A I I S I G K K D I Q D M I D D G Q E I E V N C H F C N T
UniRef90_W4QYS8 C R C S R E R I E S A I I S L G G A E I Q A M I D E D K G A E T T C S F C N E
UniRef90_R9LZ59 R C S C S R Q R V E R A L V S I G R E E L Q S M I D E Q E T T E V G C H F C S K
UniRef90_UPI000366A4F2 R C Q C T R E R V E A T L I S L G Q S E L E Q M I E D D E Q V E V V C H F C N E
UniRef90_R7IJ45 H C G C S R A R M E K A L I S L G R K E L Q N I I D E D T G A E L G C H F C H Q
UniRef90_C8NI70 H C G C T R E R F S A G L M S I G V D D L Q H L I D E D H G A E V V C H F C G E
UniRef90_R6V5F7 H C N C S R E R V S R A I A S I G R K D L E E M I K D G E P V E V N C D F C G S
UniRef90_F2I7Q6 C D C T K E R F A K G L V S L G S Q E L K A I I E E D G Q A E T V C H F C N S
UniRef90_R5EK60 R C D C S R E R S Y K A I A S I S R K D I E E M I A D N E P I E V E C H F C N K
UniRef90_UPI0003FEE6C0 C R C S R E R L E Q A I S G L G V D E V A A M I E E D H G A E A T C H F C N E
UniRef90_R5QT18 C D C S R E K M I N A L S T I G K Q E L Q S M I D E D H G C E I T C Q F C N T
UniRef90_K4L2Z9 Q C Q C S K E R I G N A M I S L G K E E I K E I I Q T D G Q A E V Q C H F C N E
UniRef90_I2JEZ9 R C R C S R E R V V Q A L I S L G R E E L D D I L A E Q G Q I E T N C E F C N R
UniRef90_A1W4Q8 C S C S R E R V G N M L R S L G T E E V E S I L E E R G N I E V G C E Y C G Q
UniRef90_Q5M690 C D C S R E R F E N A L L T L G K D E L Q A M K D E D H G A E I V C Q F C Q T
UniRef90_A0A024IDU0 C T C S R E R V G G M L R S L G R D E I E S I L E E Q G R I E V N C E F C G A
UniRef90_UPI00037DFE41 C S C S R E R V G Q M L L G L G K E E V D A I V A E Q G R V E I D C D F C G A
UniRef90_R6ZLU3 C N C S R E R V E R A I I S I G R K E I R E M I E E Q K P I S V N C H F C N R
UniRef90_UPI000376D51B C T C S H E R V A N M V R T L G Q E E A E S I L E D H G Q I E V G C E F C G Q
UniRef90_E6U8M5 C E C S R E R V E N A L R S M G A T E L H A M I E E Q G G A E V L C H F C G K
UniRef90_R2RV28 C D C S K D K F A R A I I S L G K D E I Q A M I D E D H G A K A V C S F C G E
UniRef90_R6MHR7 C N C S H E R I E K A I I S I G K K D I Q E M I D D G K E V E V K C H F C N M
UniRef90_C6J5B2 C N C S R E R V E R T L I S L G K Q E L E E L R D E G K E T E V V C D F C N E
UniRef90_A0K8M8 Q C S C S R E K V G A M L R M L G R E E V D S V I V E R G H V E I H C E F C N Q
UniRef90_Q1LPI2 Q C S C S R A K V A G M L Q S L G Q A E I E S I I A E R G D V E I H C D F C G Q
UniRef90_W9BF53 R C R C S R E R L E Q A I I G L G N E E I E N M I Q E D H G A E A S C H F C N E
UniRef90_UPI0003655E36 C N C S K D R I K K V L I S L G R E T L T E I I E E D K Q A E I S C H F C N S
UniRef90_B8CWZ9 Q C N C S R E K M E Q V I V S L G K D E V D A I I K E Q G K I E A Q C R F C N E
UniRef90_F7KFF5 C S C S K E R V E K A L I S I G R E E I D K M I A D G E P I E V K C H F C N K
UniRef90_UPI000400A9FB H C P C S R E R I G E T L R S L G R D E I R S I I E E Q G A V D V T C E F C N A
UniRef90_G5JNQ3 C D C S K G R F R A A L A S L G K D E L Q A M K D E D H G A E I T C Q F C G K
UniRef90_C2ERK7 R C D C S K E R F A H A L A S I A K K D L E K M I N E D H H A E A V C Q F C G K
UniRef90_UPI00041F8966 R C K C S K E R L E R A I K G L G D K E I Q N M I D E D H G A E A S C H F C N Q
UniRef90_R7BDK4 R C N C S K G R V E K A L I S I G K K E L K E M I D E G K P I E L K C H F C N T
UniRef90_E6LEZ1 C D C S K E K F A S A I L T L G S K E I Q D M I D E D H G A E A V C S F C G N
UniRef90_UPI00046A9EDA C D C S K E K F E K S L A T L S T D E L Q A M I D E N H G A E A V C K F C G N

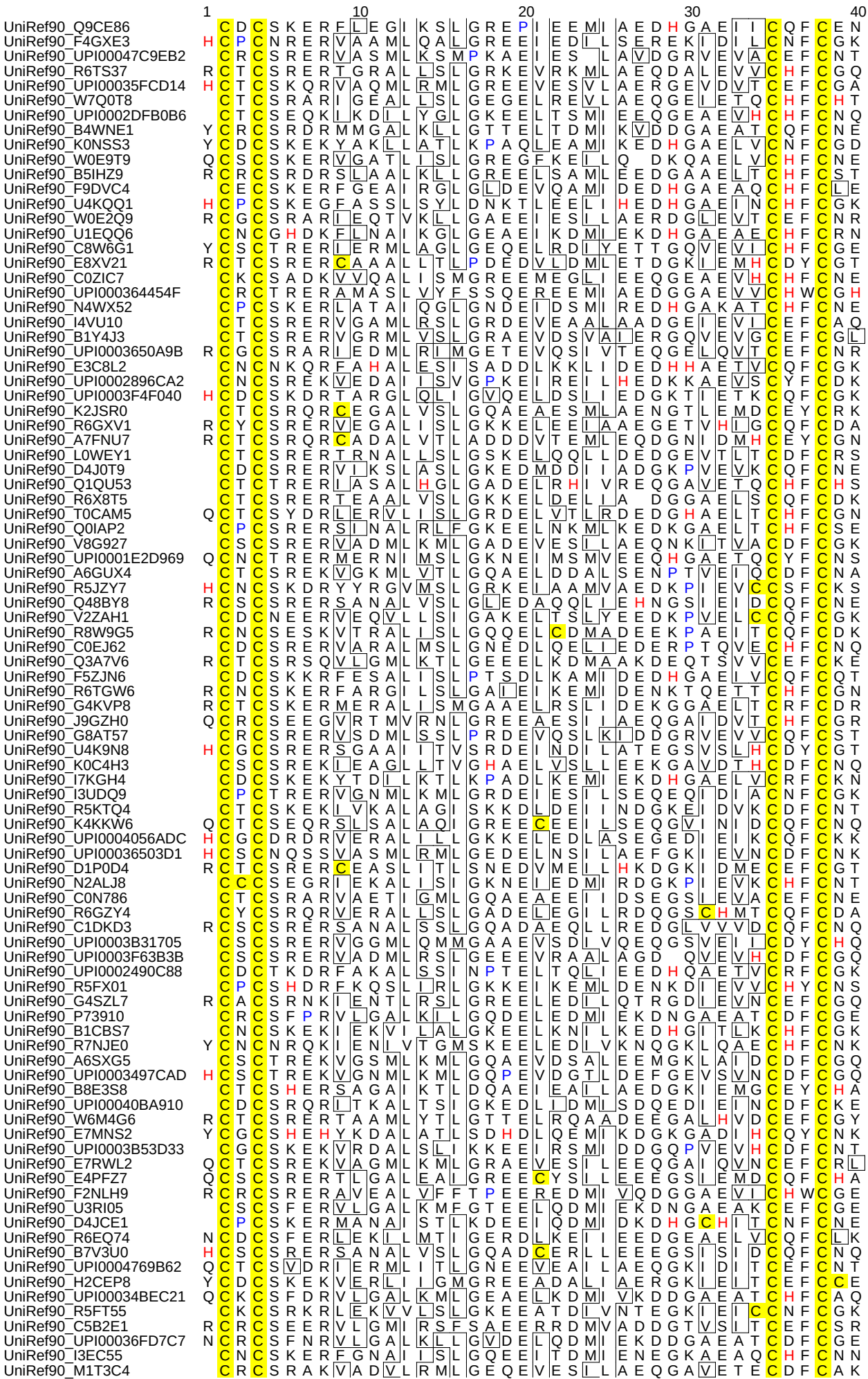
```
                                                  50
QUERY                          K Y L F T K E E L E G L R D Q T T
UniRef90_G9QGL0                K Y V F T K D E L E A M L Q E A
UniRef90_UPI0003633CD0         K Y Q F D R Q D L E R I L A E A
UniRef90_UPI0002F86CE0         K Y H F T K E E L E D L Y E Q T
UniRef90_W4Q7F4                T Y Q L N V D E L K E L L E Q A
UniRef90_UPI00040A72F4         T Y L F S R D E L E E L Y K E S
UniRef90_UPI0004704C61         A Y H F S R E E L E Q L L A E S N
UniRef90_F7Z163                K Y H F S R E D L E Q M L E E A
UniRef90_D4JC36                H Y E F S V D D L K H L L K K A
UniRef90_UPI00035DF48F         T Y H F D H N D L E Q L L R Q
UniRef90_B7GFJ8                T Y T F S A E D L E E L K K
UniRef90_K9EPT2                S Y Q F S K E D L E E I L E E
UniRef90_S2YLB1                S Y E F S V E E L K T L I K K A T
UniRef90_D4N1F3                H Y H Y S V D D L K R M L N E A T
UniRef90_UPI000473A5A3         M Y H F P A E E L K E M K E E A
UniRef90_W4QIL9                E Y H F S E D D L K Q L L E Q
UniRef90_UPI00036A5C1E         T Y H F S K E E L S E L L T Q
UniRef90_Q5L3S9                T Y H F D K A E L E Q L K Q
UniRef90_Q5WLV4                S Y S F T E A E L K A L L E E A
UniRef90_Q1JDZ8                K Y Q F N E S D L E A I I N
UniRef90_R5YB06                A Y K F E V E E L K K L L K K A T
UniRef90_N0ATT7                K Y L F S K Q E L E E L G K E A
UniRef90_D5D984                T Y R F D K K Q L E E M K E Q A
UniRef90_R6V4T4                N Y I F T V D E L K S I L K R C T
UniRef90_UPI000466C23B         N Y E F T V E D L K D L Y E K A T
UniRef90_R5QGK0                A Y T F T P Q E L Q E L L K K C T
UniRef90_H3NMJ9                R Y L F D K D D L T K L I Q E S
UniRef90_UPI000373A8C6         T Y S F T E K D L E D L I N
UniRef90_R9BXQ2                K Y M F N K D E L E K L L E E A
UniRef90_V6IU30                R Y H F T A D E L K T L I N
UniRef90_UPI0002F27658         N Y H F S K E E L E Q L E K D A
UniRef90_R7H5Y3                H Y T F T V E E L K Q M L E
UniRef90_R5T8Y8                H Y N F S V E E L T D I R D R A
UniRef90_R6P5H1                D Y E F S K E E L E A L L K R
UniRef90_UPI000362A7B6         N Y T F N E E E L E K I I N D K S
UniRef90_W4DA17                A Y V F N K D D L Q V I L E Q A N
UniRef90_E0RJL5                H Y H L T K E D L E G M L E
UniRef90_UPI00041C0A99         R Y H F D K A E L Q S I L D N
UniRef90_E6SJB2                T Y R V S E D E L D A L L A
UniRef90_R6GX75                H Y N F S V E E L E E M L K A A
UniRef90_R5AAI4                E Y D F T E E E L K K L L E D A
UniRef90_R7R4S0                A Y E F S I E D L K Q I I K R S
UniRef90_UPI00040D9BFB         K Y K F T N E D I K D L L E K A T
UniRef90_B1HNG7                T Y Q F N K S E L E A M L E Q A
UniRef90_G4L496                K Y Y F S E Q D L V E L K K E A
UniRef90_W7ZLP9                T Y T F T E D E L V S L L D N A
UniRef90_U2F548                K Y N F T Q E E L K N L K N
UniRef90_R7B171                H Y N F D V E E L K D L L H K A
UniRef90_J4K734                A Y D F N V N E L E E M L K K A T
UniRef90_UPI0003757B14         G Y R F D A V D A E Q L F A E
UniRef90_UPI000467A103         K Y Q F S E D D L R Q I M T Q A
UniRef90_F5LD83                A Y Q F E R E E L Q T M L D
UniRef90_G4HP37                T Y T F D V E Q L K S V L E R A
UniRef90_Q3JZ62                T Y Y F T E E D L E K I I N D S
UniRef90_UPI000408CF12         A Y D F N K E Q L E T I L E Q A
UniRef90_UPI00040DE745         Q Y R F D A V D V R Q L F T E
UniRef90_R7N5E8                A Y K F S V E E L K G L L R K A
UniRef90_W4QYS8                V Y Q F T E K E L E E L M E Q
UniRef90_R9LZ59                K Y L F T R D D L R R L I
UniRef90_UPI000366A4F2         A F Q F D K D E L Q Q L L I Q A
UniRef90_R7IJ45                Q Y Q F T T E E L R Q L L E K A T
UniRef90_C8NI70                K Y H F E E A E L Q S L I D E
UniRef90_R6V5F7                H Y L F D T E D L K Q M L K
UniRef90_F2I7Q6                H Y H Y S K D D L E K L L E E A
UniRef90_R5EK60                K Y H F S V D D L K E M L T H A
UniRef90_UPI0003FEE6C0         V Y Q F T E D E L R E I K D K M N
UniRef90_R5QT18                K Y Q F S E E E L Q N L I N R
UniRef90_K4L2Z9                M Y L F S K E E L E K L R N A A
UniRef90_I2JEZ9                L Y Q F N A G D I A G L F E Q G S
UniRef90_A1W4Q8                Q Y H F D A V D A A Q L F
UniRef90_Q5M690                K Y E F S E A D L E E L I N
UniRef90_A0A024IDU0            A Y E F D P V D A A Q I F
UniRef90_UPI00037DFE41         R Y H F D A V D V G S L F
UniRef90_R6ZLU3                E Y S F S P A Q L K E L L G R
UniRef90_UPI000376D51B         Q Y H F D K V E V A Q L F K P A
UniRef90_E6U8M5                T Y R F G A E E L E N L I
UniRef90_R2RV28                K Y S Y T E A E L V A L K E E A T
UniRef90_R6MHR7                A Y T F S V E E L K Q I L K Q A
UniRef90_C6J5B2                P Y L F T P E E I D Q L I A K T
UniRef90_A0K8M8                R Y E F D P V D V A Q L F A
UniRef90_Q1LPI2                R Y V F D P V D A A Q L F
UniRef90_W9BF53                K Y V F T E E E L K T L K Q
UniRef90_UPI0003655E36         A Y H Y D E D E L R E I L N E
UniRef90_B8CWZ9                N Y I F S P E E V S Q L F K
UniRef90_F7KFF5                G Y Q F S V Q E L E E I V E K
UniRef90_UPI000400A9FB         H Y H F D P V D A E A L
UniRef90_G5JNQ3                T Y N F D E K D L E E I I D
UniRef90_C2ERK7                K Y E F S E Q E L K D I Y D K
UniRef90_UPI00041F8966         T Y Q F T E E E L E A L K
UniRef90_R7BDK4                G Y D F S V D E L K K I L K
UniRef90_E6LEZ1                K Y F F D E Q E L T E I K E E I T
UniRef90_UPI00046A9EDA         K Y Q F S E A E L Q S I I S E
```

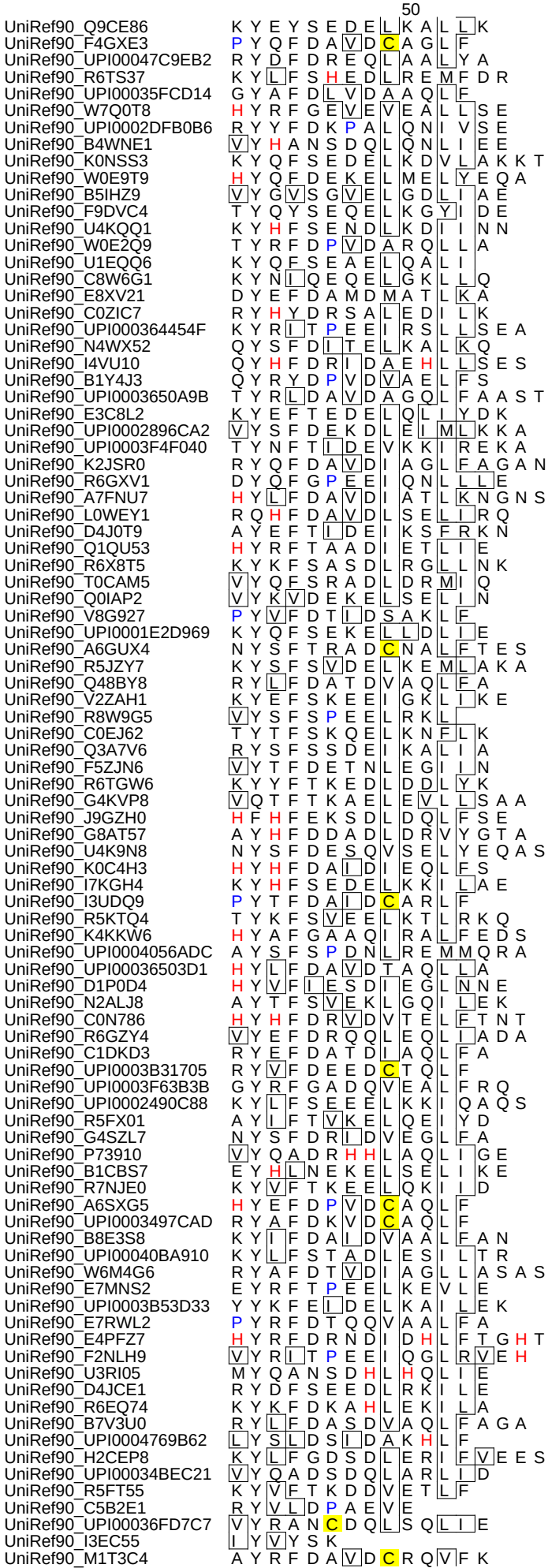

1
10
20
30
40
UniRef90_R7JR29
UniRef90_C7XXE6
UniRef90_F4XI04
UniRef90_V4YP69
UniRef90_A9KTE0
UniRef90_S9RXX6
UniRef90_K9W016
UniRef90_UPI0004769EFD
UniRef90_R4V964
UniRef90_K8EDY1
UniRef90_A0A023D0V5
UniRef90_R7G296
UniRef90_V6LZW9
UniRef90_Q2NQI4
UniRef90_B2GA76
UniRef90_UPI0003B5354A
UniRef90_V2YGC5
UniRef90_UPI0002FA3CFC
UniRef90_S0FP42
UniRef90_E3GR72
UniRef90_I4X2E3
UniRef90_UPI00041A1C95
UniRef90_UPI0003B5241C
UniRef90_N1ZLG6
UniRef90_Q21V35
UniRef90_R7QXF5
UniRef90_R6QIL6
UniRef90_UPI00031B44CE
UniRef90_H8Z4Z3
UniRef90_H3RN24
UniRef90_M2PZ05
UniRef90_UPI0003740E3A
UniRef90_R9N0V7
UniRef90_W4V630
UniRef90_C0BXZ9
UniRef90_E8SIP8
UniRef90_W8YEM0
UniRef90_U5P5L7
UniRef90_D4YGH4
UniRef90_D7UUH3
UniRef90_G5KED8
UniRef90_UPI00020031D5
UniRef90_D3QG60
UniRef90_D4W688
UniRef90_F9UA94
UniRef90_UPI0004662DF0
UniRef90_UPI0003819CC7
UniRef90_Q7WD81
UniRef90_C9KJZ8
UniRef90_R5VKT4
UniRef90_A0A023VHH3
UniRef90_R7C9S5
UniRef90_E0QJD3
UniRef90_UPI0003B6304C
UniRef90_A0A024PKZ8
UniRef90_R6I303
UniRef90_R5Z394
UniRef90_U7UYF8
UniRef90_A9IIQ2
UniRef90_F5LA13
UniRef90_W7B9T5
UniRef90_S4DFX8
UniRef90_UPI000289602B
UniRef90_C5VTP8
UniRef90_E5AS86
UniRef90_F2F171
UniRef90_B1YGQ8
UniRef90_R6QQ41
UniRef90_D4GD21
UniRef90_J0UUP3
UniRef90_W1EVF5
UniRef90_H2FYL3
UniRef90_D6GR36
UniRef90_UPI000465C296
UniRef90_B5EC90
UniRef90_UPI0002E86073
UniRef90_F7V4F6
UniRef90_R9M0Z7
UniRef90_I7KUC7
UniRef90_W8WVM2
UniRef90_G9Y417
UniRef90_F5Y3M9
UniRef90_I7KT22
UniRef90_R5KKH0
UniRef90_Q128E1
UniRef90_R5P550
UniRef90_B6FY74
UniRef90_C9YGC5
UniRef90_V4JNF3
UniRef90_G9XFW8
UniRef90_B8HMN5
UniRef90_UPI00034C727B

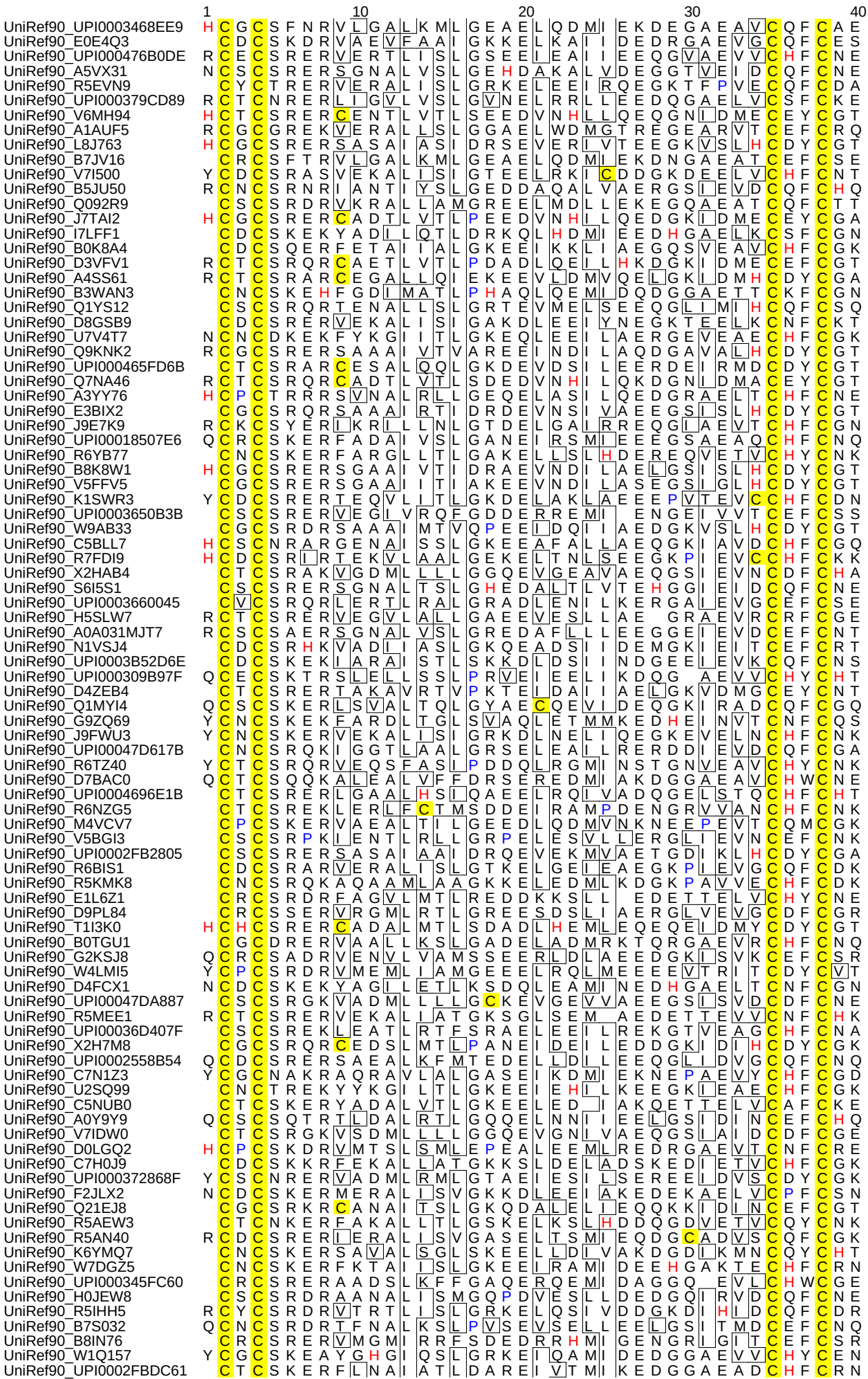

50
UniRef90_R7JR29 A Y E F S T E D L K E L L R K S
UniRef90_C7XXE6 K Y E F T E D E L K A M L
UniRef90_F4XI04 V Y H A N P D Q L S Q L I K E
UniRef90_V4YP69 M Y R F D P V D S A Q L F A P S S
UniRef90_A9KTE0 N Y E F S V E E L K D I I T R S N
UniRef90_S9RXX6 H Y S F D A V D C A Q L F A Q E T
UniRef90_K9W016 V Y Q A S S D E L T E L I
UniRef90_UPI0004769EFD Q Y V F D A V D A E A L
UniRef90_R4V964 P Y R F D A V D I E A L F T P A
UniRef90_K8EDY1 S Y H Y S E E D L A E L K I E A
UniRef90_A0A023D0V5 K Y H F D E N E L K D L Y A R A
UniRef90_R7G296 A Y K Y T V D E L K D I L K R
UniRef90_V6LZW9 R Y H F D K S A L E D I K
UniRef90_Q2NQI4 H Y R F D A D A I A D L Q Q Q A
UniRef90_B2GA76 K Y H F S E E E L K Y L
UniRef90_UPI0003B5354A K Y D F D I D E L K E L Y K S A
UniRef90_V2YGC5 V Y R F S K S E L E A L L E E
UniRef90_UPI0002FA3CFC H Y H L S P D D L S K L K Q
UniRef90_S0FP42 M Y N F S H E D I E K L I K E N T
UniRef90_E3GR72 H Y Y F T P E E L Q I L L Q
UniRef90_I4X2E3 T Y Q Y S K E E L E S F I N E
UniRef90_UPI00041A1C95 T Y Y F S E E E L E E L I Q
UniRef90_UPI0003B5241C A Y T F S V D D L K I I K E K A
UniRef90_N1ZLG6 K Y H F S E A E L R E I V K N A
UniRef90_Q21V35 H Y R F D P I D V A R L F
UniRef90_R7QXF5 H Y T F D I D E L K E I
UniRef90_R6QIL6 H Y T F S V D E L K Q M A E K T
UniRef90_UPI00031B44CE V Y H T D S D Q L A E L I E
UniRef90_H8Z4Z3 N Y R F D A V D V S E L F A S S
UniRef90_H3RN24 K Y H F D K Q D L E V I L K Q A T
UniRef90_M2PZ05 H Y H F D E Q E L L D I K N K
UniRef90_UPI0003740E3A P Y L F D A V D C A S L F A
UniRef90_R9N0V7 F Y N F S V E E L K A V L K K C S
UniRef90_W4V630 K Y W F S E E D L L K L V K
UniRef90_C0BXZ9 A Y N Y T I E E L K E I I K R S
UniRef90_E8SIP8 R Y S F S E D E L K A L L A E
UniRef90_W8YEM0 A Y T F D K P H L E R L L Q E A T
UniRef90_U5P5L7 A Y H F D K N D L E E L I R D K S
UniRef90_D4YGH4 R Y Q F T A E D L K G I E D Q A
UniRef90_D7UUH3 K F T F T E D E L K E F K L Q A
UniRef90_G5KED8 K Y Y F N E N D L E T L I N N
UniRef90_UPI00020031D5 V Y D I K A A E L Q E L I D E L S
UniRef90_D3QG60 K Y N Y T E A E L Q G V L E Q
UniRef90_D4W688 R Y Q F T A E E L E A L K E R
UniRef90_F9UA94 N Y A F D A V D A K Q L F A E L T
UniRef90_UPI0004662DF0 A Y T F T V E E L E K L L H H A
UniRef90_UPI0003819CC7 H Y D Y D K V D V A Q L F A
UniRef90_Q7WD81 P Y E F D K V D C A G L F A P N S
UniRef90_C9KJZ8 R Y Q F S K E E L Q A I Y D K A
UniRef90_R5VKT4 Q Y T F T P D E L R K L A K K S
UniRef90_A0A023VHH3 T Y T F N E N D L R G I I N
UniRef90_R7C9S5 N Y S F S I E E L K Q I K N
UniRef90_E0QJD3 K Y N F D E K E L L S L I K K
UniRef90_UPI0003B6304C K Y V F T P E D L Q K L L A E
UniRef90_A0A024PKZ8 D Y Q F N V E E L Q E L Q S N G T
UniRef90_R6I303 K Y E F S K E E L E D I L E K T
UniRef90_R5Z394 H Y Q F S E A E L K A I L E
UniRef90_U7UYF8 E Y D F N K E D L E E I I K K A
UniRef90_A9IIQ2 P Y E F D A V D C S G L F A P A
UniRef90_F5LA13 T Y E V S K D E L T Q L I A
UniRef90_W7B9T5 H Y E F S E S D L E E I Y Q E A
UniRef90_S4DFX8 K Y Q Y N E E D L L E L K K E A
UniRef90_UPI000289602B K Y Q Y S E A D L Q E L I D Q
UniRef90_C5VTP8 H Y E F T H E Q I G E I L E N
UniRef90_E5AS86 R Y E F D A V D A T Q L F
UniRef90_F2F171 T Y H F D K S E L E G F V N E
UniRef90_B1YGQ8 H Y Q Y D V E E L Q S L R E K S
UniRef90_R6QQ41 N Y K F T P S E I E K L L E Q T T
UniRef90_D4GD21 H Y V F D A V D I A G I R S N S
UniRef90_J0UUP3 R Y T F T E I E L R K L L N
UniRef90_W1EVF5 H Y L F N A M D I A E I R N N A S
UniRef90_H2FYL3 H Y R F D G S D V Q S L F E Q T
UniRef90_D6GR36 R Y L F Q E K D L K E L I
UniRef90_UPI000465C296 H Y I F D R V D I A Q L
UniRef90_B5EC90 H Y L F D E A D L D R I I A E
UniRef90_UPI0002E86073 M Y D Y S Q E E L E S I I D E
UniRef90_F7V4F6 A Y E F T V D E L S E V L D
UniRef90_R9M0Z7 V Q N F T K E E L E A L L A
UniRef90_I7KUC7 K Y V F E K E E I K N M I E N
UniRef90_W8WVM2 P Y D F D A V D C A A L F T D A
UniRef90_G9Y417 H Y V F D K I D I E S L F A
UniRef90_F5Y3M9 Q Y R F D A V D A A Q L F A
UniRef90_I7KT22 K Y N F S E D E L H G L I E K S N
UniRef90_R5KKH0 S Y T F S P E E L E N M L
UniRef90_Q128E1 Q Y D F D P V D A A Q I F
UniRef90_R5P550 K Y T F S P D E L L N I L K N
UniRef90_B6FY74 K Y H Y D E D E L M E I L K E
UniRef90_C9YGC5 Q Y R F D P V D A A Q L F T D A
UniRef90_V4JNF3 N Y R F D A V D V Q E L F A E S
UniRef90_G9XFW8 K Y Y F D E K E L K S L I D
UniRef90_B8HMN5 V Y Q A S S E Q L A E L I D E
UniRef90_UPI00034C727B V Y Q A D V E D L T Q L I Q

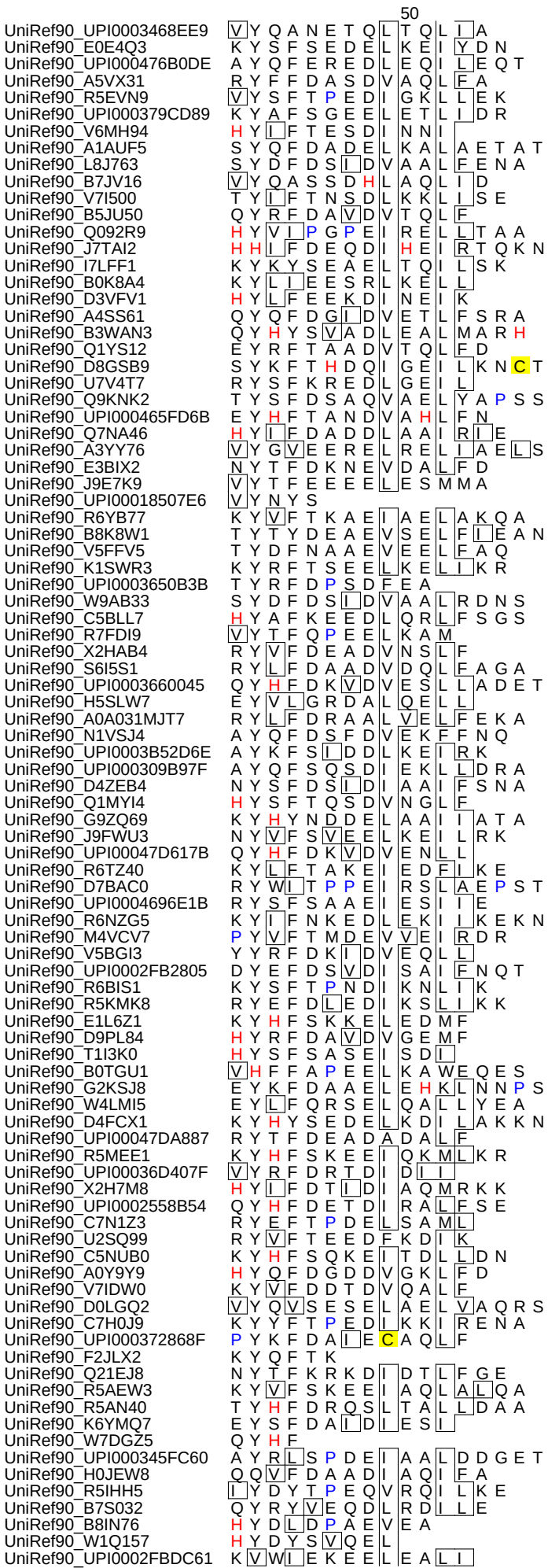

1
10
20
30
40
UniRef90_UPI00037255B4
UniRef90_I4D9T1
UniRef90_UPI000470C2FD
UniRef90_UPI00036E601F
UniRef90_A5GDV3
UniRef90_I2B4A9
UniRef90_UPI00028887DF
UniRef90_R6G4S3
UniRef90_G2KUZ1
UniRef90_UPI00037FC799
UniRef90_UPI0002897862
UniRef90_K9V9J1
UniRef90_R5LK27
UniRef90_Q05SN4
UniRef90_R7F3N7
UniRef90_E1V805
UniRef90_D2MLS3
UniRef90_UPI00036894E4
UniRef90_R6I1W0
UniRef90_D6SAS3
UniRef90_A8GKR9
UniRef90_UPI000410A40B
UniRef90_Q49V21
UniRef90_UPI00037DE374
UniRef90_UPI00028A092F
UniRef90_Q03E07
UniRef90_UPI00045E62E7
UniRef90_Q8R986
UniRef90_UPI000381852F
UniRef90_R1AUT2
UniRef90_Q602T1
UniRef90_Q1GBN7
UniRef90_Q7NIA2
UniRef90_C6WWV4
UniRef90_UPI00036DF0BA
UniRef90_UPI0001C37BF6
UniRef90_F6DR70
UniRef90_R6AFK9
UniRef90_F8J4U7
UniRef90_G9YM12
UniRef90_UPI0004755B06
UniRef90_U5MW86
UniRef90_D7N8W0
UniRef90_M1MGV1
UniRef90_C2KWX9
UniRef90_UPI00037A7B3D
UniRef90_V9H2K5
UniRef90_R5S3B7
UniRef90_C4UH26
UniRef90_D5WRL9
UniRef90_R6N5N1
UniRef90_UPI00047AEAD9
UniRef90_K9SAY7
UniRef90_UPI000473F011
UniRef90_UPI000427B377
UniRef90_H4GI01
UniRef90_R7GIL4
UniRef90_S2L922
UniRef90_G0AJF2
UniRef90_L0DZ48
UniRef90_UPI0003824295
UniRef90_I4X681
UniRef90_G2DZG4
UniRef90_A4J474
UniRef90_S7TWK8
UniRef90_R5W6L3
UniRef90_UPI0003B3D4B6
UniRef90_UPI0004648BF5
UniRef90_UPI00024904DA
UniRef90_R6GF09
UniRef90_D3PP19
UniRef90_R6J2K8
UniRef90_U2QUC9
UniRef90_R5JM74
UniRef90_V7HY56
UniRef90_UPI00036A6F48
UniRef90_U4TKN0
UniRef90_X5JPE5
UniRef90_B8FS68
UniRef90_V5UIP6
UniRef90_Q7NWI9
UniRef90_U5DT68
UniRef90_UPI000365D837
UniRef90_C4Z899
UniRef90_W4RQL9
UniRef90_N2AGS0
UniRef90_B7A7C4
UniRef90_K9Y765
UniRef90_R2QH91
UniRef90_G7WG32
UniRef90_U2ZIS4
UniRef90_B1KN30

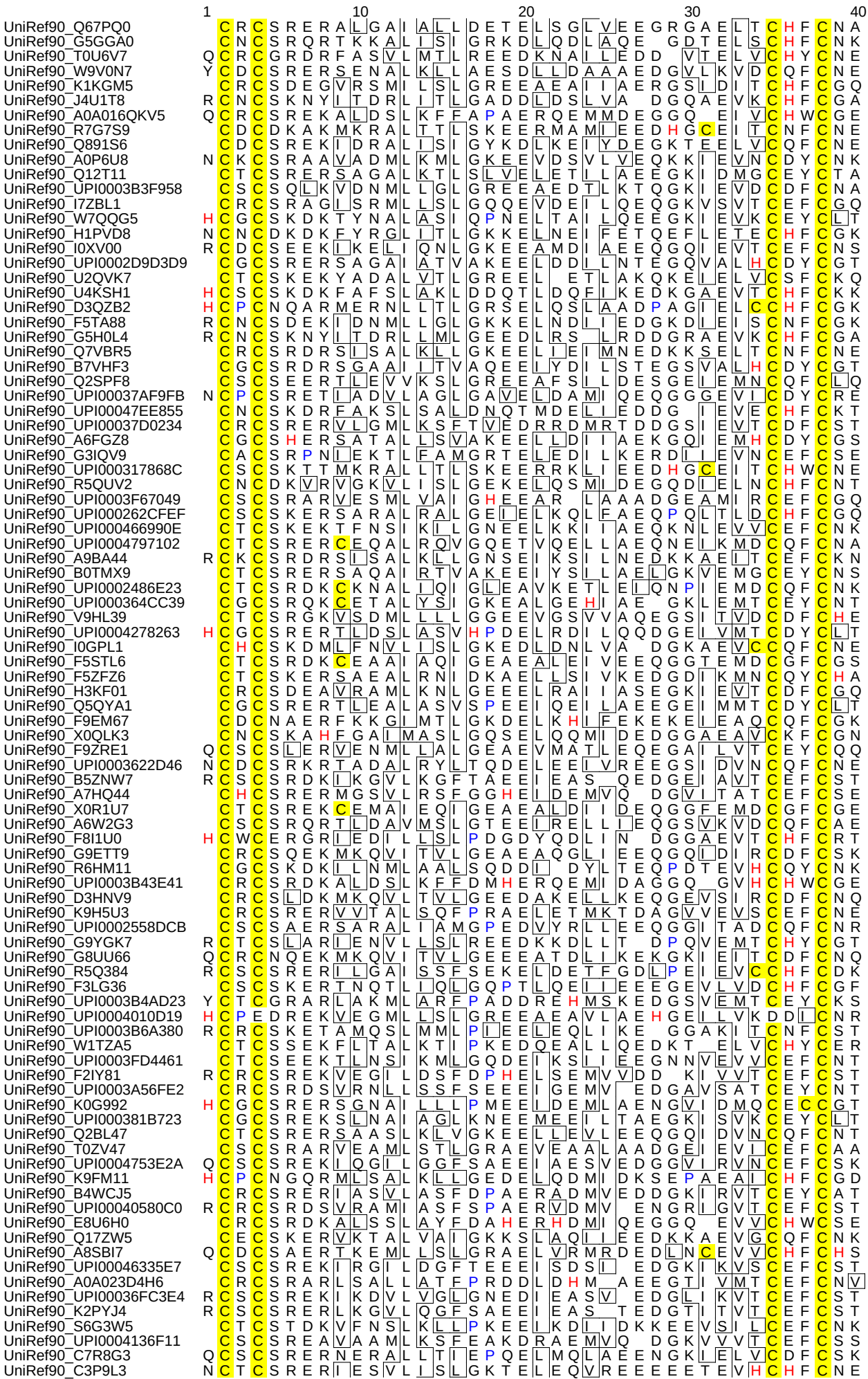

50
UniRef90_UPI00037255B4 H Y V F T A M D I T A L R N N A
UniRef90_I4D9T1 H Y L F S K E D L E V L R E R A
UniRef90_UPI000470C2FD E Y H F D Q V D A E Q L F S
UniRef90_UPI00036E601F T Y S F T E N D L E R L I D E Q T
UniRef90_A5GDV3 A Y H F E R Q D L E Q L M K E
UniRef90_I2B4A9 H Y E F N E M D I I E L R K N A
UniRef90_UPI00028887DF A Y G F S D E E L R Q L I Q Q
UniRef90_R6G4S3 K Y V F T K E Q I G E L L T K
UniRef90_G2KUZ1 K Y N F S E D D L I K M M N E
UniRef90_UPI00037FC799 P Y H F D A V D V A Q L F A
UniRef90_UPI0002897862 S Y D F T Q E D I G K L L K E
UniRef90_K9V9J1 V Y Q A S E H D L T K L I D N
UniRef90_R5LK27 K Y R F S T A E I S N L L K E
UniRef90_Q05SN4 V Y R V D S D G L K A L I D
UniRef90_R7F3N7 K Y L F S K E D L I N L V N K
UniRef90_E1V805 R Y Q F T V A E V E A M L D
UniRef90_D2MLS3 T Y Q F T E E E L K E I L
UniRef90_UPI00036894E4 K Y F F N R E E L E E M K A A A
UniRef90_R6I1W0 V Y T F T P D D I S D L L K Q A
UniRef90_D6SAS3 K Y N F T K E D L I E L R D N
UniRef90_A8GKR9 H Y V F D A M D V A A L Y T G N T
UniRef90_UPI000410A40B A Y S F T P T E L K E L M L R A
UniRef90_Q49V21 K Y Q F S E E E L Q Q L L D N
UniRef90_UPI00037DE374 R Y Q L D K V D V A R L F
UniRef90_UPI00028A092F S Y H Y S E E D L R A M M K
UniRef90_Q03E07 K Y V F S E A D L Q E I I D Q
UniRef90_UPI00045E62E7 T Y K F T A E E V
UniRef90_Q8R986 K Y F I T R E R L E E L L K E A
UniRef90_UPI000381852F R Y V F D A A D V Q S I F
UniRef90_R1AUT2 K Y H F N
UniRef90_Q602T1 R Y Q F D L V D I G V L F S E
UniRef90_Q1GBN7 K Y N F T E A E L Q A I L D K
UniRef90_Q7NIA2 V Y Q V K A S E L E T L V E Q
UniRef90_C6WWV4 H Y S F D K V D A T Q L
UniRef90_UPI00036DF0BA E Y H F T K
UniRef90_UPI0001C37BF6 E Y V F T P K E L L A L I K
UniRef90_F6DR70 K Y H F K R E D L M K I L D R
UniRef90_R6AFK9 K Y V F N E D E L R A L L E E A
UniRef90_F8J4U7 R Y V F S P D E L R E
UniRef90_G9YM12 V Y H Y T N E E L E G L L A
UniRef90_UPI0004755B06 H Y V Y D A V D I A A I R N D S
UniRef90_U5MW86 K Y E F T N E D I G Q I L K N
UniRef90_D7N8W0 T Y E L N E A E L K S L V D K
UniRef90_M1MGV1 K Y E F T H E E I G K L L N N
UniRef90_C2KWX9 K Y I F L E N D L E E L L N R
UniRef90_UPI00037A7B3D H Y H F T A E N L E E L I R D K S
UniRef90_V9H2K5 A Y N F S N K E I G K I L D K A
UniRef90_R5S3B7 H Y K F D T E Q L K E F I K
UniRef90_C4UH26 H H L F D A V D I S R L L
UniRef90_D5WRL9 V Y R F S C E A L R A L
UniRef90_R6N5N1 K Y E F S K E E L E G I L K N
UniRef90_UPI00047AEAD9 H Y I F N T A D I N E I R Q S A S
UniRef90_K9SAY7 V Y R A T E A D L E R L L S
UniRef90_UPI000473F011 P Y S F D A V D C A Q L F
UniRef90_UPI000427B377 S Y R F S L D E I K A M R E K S
UniRef90_H4GI01 K Y H F N E V E L T A L L D Q
UniRef90_R7GIL4 K Y D F N K E D L E K I K D E
UniRef90_S2L922 R Y H F G A A E I E S L I E
UniRef90_G0AJF2 H Y E F D K V D C A H L F A S T
UniRef90_L0DZ48 R Y R L D A V D A E A L F A S A
UniRef90_UPI0003824295 P Y K F S P E R I A E L
UniRef90_I4X681 N Y L F S K G N L E D M L N P Q S
UniRef90_G2DZG4 E Y R F D P V D T R Q L F A E H T
UniRef90_A4J474 N Y H F D K K D L Q R I L K R
UniRef90_S7TWK8 T Y V F D V E S L Q A L I E E L S
UniRef90_R5W6L3 S Y E F E V E E L Q N L L N
UniRef90_UPI0003B3D4B6 K Y F F D
UniRef90_UPI0004648BF5 H Y S F N A D D I Q A L L G D Q T
UniRef90_UPI00024904DA K Y E F S E T E L K K I L
UniRef90_R6GF09 N Y N F S V D E L K E L L E
UniRef90_D3PP19 K Y Q I T P E E I R S L
UniRef90_R6J2K8 T Y S F T P E Q L N D L L K K S
UniRef90_U2QUC9 V Q H F S R A D L E A M
UniRef90_R5JM74 K Y Q F T E E E L R E I L G E
UniRef90_V7HY56 K Y E F S E D E L R E I
UniRef90_UPI00036A6F48 R Y I F S
UniRef90_U4TKN0 K Y T Y T E D E L R N M L A
UniRef90_X5JPE5 V Y Q A N R D H L S Q L I S
UniRef90_B8FS68 R Y H F N E E E L R E L Y E Q S
UniRef90_V5UIP6 T Y H F D K V D A A Q L F T E Q S
UniRef90_Q7NWI9 R Y V F D E E D A N Q L F D
UniRef90_U5DT68 V Y R A S S D E L T Q L V E E
UniRef90_UPI000365D837 K Y H Y T A A D I E T L L D N
UniRef90_C4Z899 A Y E F T V D E L K E M
UniRef90_W4RQL9 K Y M F T
UniRef90_N2AGS0 A Y S F D V E E L K N M L K
UniRef90_B7A7C4 V Y R L S P E E I R S L V A E
UniRef90_K9Y765 V Y Q A S R E E L V E L V E K
UniRef90_R2QH91 K Y H Y S E E D L I G L R D E A
UniRef90_G7WG32 R F Q F N V E E L Q E I W E Q A
UniRef90_U2ZIS4 R Y F F D A S D V A Q L F
UniRef90_B1KN30 N Y S F D S I D V A A I F S N T


1
10
20
30
40
UniRef90_Q9CE86
UniRef90_F4GXE3
UniRef90_UPI00047C9EB2
UniRef90_R6TS37
UniRef90_UPI00035FCD14
UniRef90_W7Q0T8
UniRef90_UPI0002DFB0B6
UniRef90_B4WNE1
UniRef90_K0NSS3
UniRef90_W0E9T9
UniRef90_B5IHZ9
UniRef90_F9DVC4
UniRef90_U4KQQ1
UniRef90_W0E2Q9
UniRef90_U1EQQ6
UniRef90_C8W6G1
UniRef90_E8XV21
UniRef90_C0ZIC7
UniRef90_UPI000364454F
UniRef90_N4WX52
UniRef90_I4VU10
UniRef90_B1Y4J3
UniRef90_UPI0003650A9B
UniRef90_E3C8L2
UniRef90_UPI0002896CA2
UniRef90_UPI0003F4F040
UniRef90_K2JSR0
UniRef90_R6GXV1
UniRef90_A7FNU7
UniRef90_L0WEY1
UniRef90_D4J0T9
UniRef90_Q1QU53
UniRef90_R6X8T5
UniRef90_T0CAM5
UniRef90_Q0IAP2
UniRef90_V8G927
UniRef90_UPI0001E2D969
UniRef90_A6GUX4
UniRef90_R5JZY7
UniRef90_Q48BY8
UniRef90_V2ZAH1
UniRef90_R8W9G5
UniRef90_C0EJ62
UniRef90_Q3A7V6
UniRef90_F5ZJN6
UniRef90_R6TGW6
UniRef90_G4KVP8
UniRef90_J9GZH0
UniRef90_G8AT57
UniRef90_U4K9N8
UniRef90_K0C4H3
UniRef90_I7KGH4
UniRef90_I3UDQ9
UniRef90_R5KTQ4
UniRef90_K4KKW6
UniRef90_UPI0004056ADC
UniRef90_UPI00036503D1
UniRef90_D1P0D4
UniRef90_N2ALJ8
UniRef90_C0N786
UniRef90_R6GZY4
UniRef90_C1DKD3
UniRef90_UPI0003B31705
UniRef90_UPI0003F63B3B
UniRef90_UPI0002490C88
UniRef90_R5FX01
UniRef90_G4SZL7
UniRef90_P73910
UniRef90_B1CBS7
UniRef90_R7NJE0
UniRef90_A6SXG5
UniRef90_UPI0003497CAD
UniRef90_B8E3S8
UniRef90_UPI00040BA910
UniRef90_W6M4G6
UniRef90_E7MNS2
UniRef90_UPI0003B53D33
UniRef90_E7RWL2
UniRef90_E4PFZ7
UniRef90_F2NLH9
UniRef90_U3RI05
UniRef90_D4JCE1
UniRef90_R6EQ74
UniRef90_B7V3U0
UniRef90_UPI0004769B62
UniRef90_H2CEP8
UniRef90_UPI00034BEC21
UniRef90_R5FT55
UniRef90_C5B2E1
UniRef90_UPI00036FD7C7
UniRef90_I3EC55
UniRef90_M1T3C4

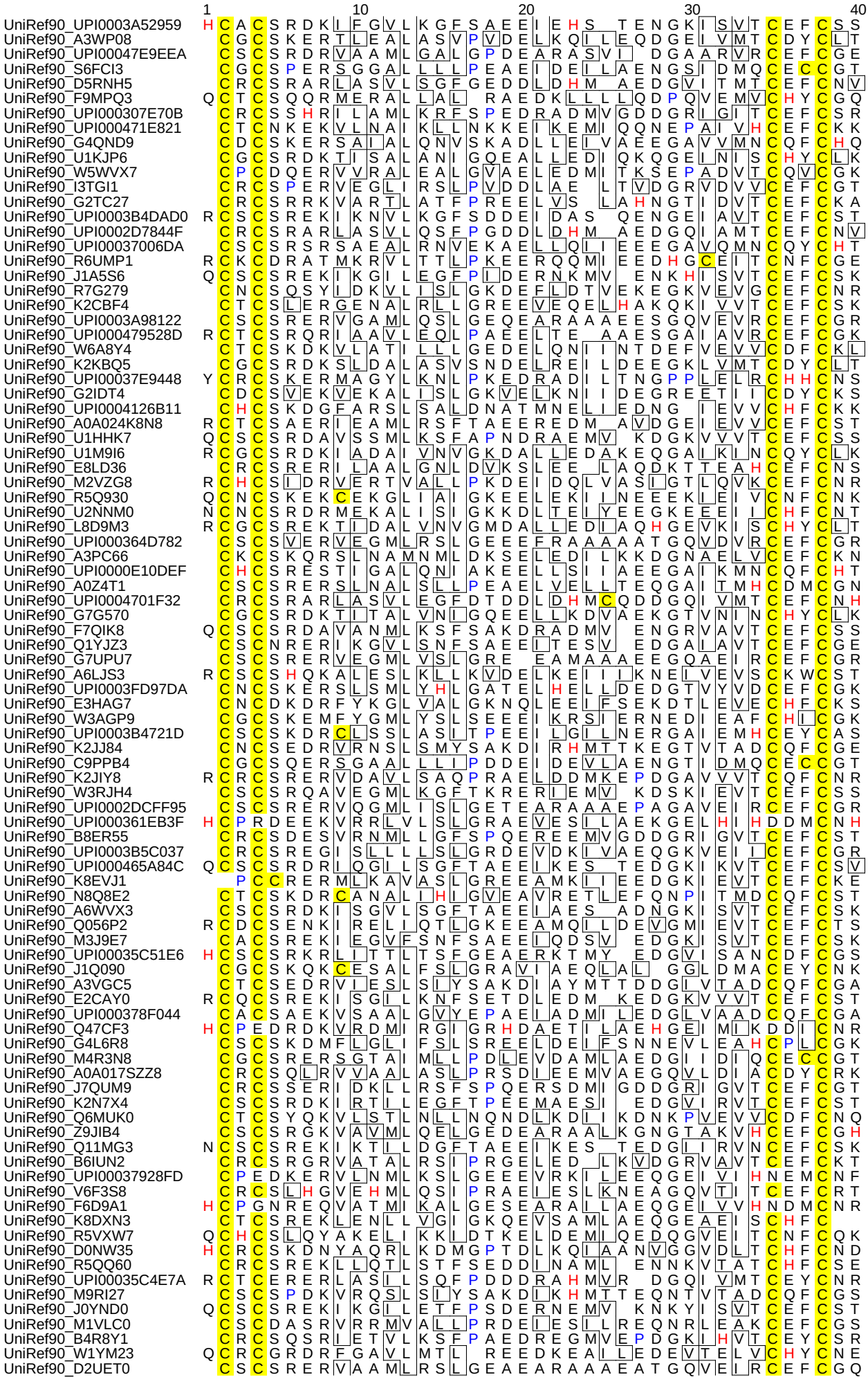

50
UniRef90_Q9CE86 K Y E Y S E D E L K A L L K
UniRef90_F4GXE3 P Y Q F D A V D C A G L F
UniRef90_UPI00047C9EB2 R Y D F D R E Q L A A L Y A
UniRef90_R6TS37 K Y L F S H E D L R E M F D R
UniRef90_UPI00035FCD14 G Y A F D L V D A A Q L F
UniRef90_W7Q0T8 H Y R F G E V E V E A L L S E
UniRef90_UPI0002DFB0B6 R Y Y F D K P A L Q N I V S E
UniRef90_B4WNE1 V Y H A N S D Q L Q N L I E E
UniRef90_K0NSS3 K Y Q F S E D E L K D V L A K K T
UniRef90_W0E9T9 H Y Q F D E K E L M E L Y E Q A
UniRef90_B5IHZ9 V Y G V S G V E L G D L I A E
UniRef90_F9DVC4 T Y Q Y S E Q E L K G Y I D E
UniRef90_U4KQQ1 K Y H F S E N D L K D I I N N
UniRef90_W0E2Q9 T Y R F D P V D A R Q L L A
UniRef90_U1EQQ6 K Y Q F S E A E L Q A L I
UniRef90_C8W6G1 K Y N I Q E Q E L G K L L Q
UniRef90_E8XV21 D Y E F D A M D M A T L K A
UniRef90_C0ZIC7 R Y H Y D R S A L E D I L K
UniRef90_UPI000364454F K Y R I T P E E I R S L L S E A
UniRef90_N4WX52 Q Y S F D I T E L K A L K Q
UniRef90_I4VU10 Q Y H F D R I D A E H L L S E S
UniRef90_B1Y4J3 Q Y R Y D P V D V A E L F S
UniRef90_UPI0003650A9B T Y R L D A V D A G Q L F A A S T
UniRef90_E3C8L2 K Y E F T E D E L Q L I Y D K
UniRef90_UPI0002896CA2 V Y S F D E K D L E I M L K K A
UniRef90_UPI0003F4F040 T Y N F T I D E V K K I R E K A
UniRef90_K2JSR0 R Y Q F D A V D I A G L F A G A N
UniRef90_R6GXV1 D Y Q F G P E E I Q N L L L E
UniRef90_A7FNU7 H Y L F D A V D I A T L K N G N S
UniRef90_L0WEY1 R Q H F D A V D L S E L I R Q
UniRef90_D4J0T9 A Y E F T I D E I K S F R K N
UniRef90_Q1QU53 H Y R F T A A D I E T L I E
UniRef90_R6X8T5 K Y K F S A S D L R G L L N K
UniRef90_T0CAM5 V Y Q F S R A D L D R M I Q
UniRef90_Q0IAP2 V Y K V D E K E L S E L I N
UniRef90_V8G927 P Y V F D T I D S A K L F
UniRef90_UPI0001E2D969 K Y Q F S E K E L L D L I E
UniRef90_A6GUX4 N Y S F T R A D C N A L F T E S
UniRef90_R5JZY7 K Y S F S V D E L K E M L A K A
UniRef90_Q48BY8 R Y L F D A T D V A Q L F A
UniRef90_V2ZAH1 K Y E F S K E E I G K L I K E
UniRef90_R8W9G5 V Y S F S P E E L R K L
UniRef90_C0EJ62 T Y T F S K Q E L K N F L K
UniRef90_Q3A7V6 R Y S F S S D E I K A L I A
UniRef90_F5ZJN6 V Y T F D E T N L E G I I N
UniRef90_R6TGW6 K Y Y F T K E D L D D L Y K
UniRef90_G4KVP8 V Q T F T K A E L E V L L S A A
UniRef90_J9GZH0 H F H F E K S D L D Q L F S E
UniRef90_G8AT57 A Y H F D D A D L D R V Y G T A
UniRef90_U4K9N8 N Y S F D E S Q V S E L Y E Q A S
UniRef90_K0C4H3 H Y H F D A I D I E Q L F S
UniRef90_I7KGH4 K Y H F S E D E L K K I L A E
UniRef90_I3UDQ9 P Y T F D A I D C A R L F
UniRef90_R5KTQ4 T Y K F S V E E L K T L R K Q
UniRef90_K4KKW6 H Y A F G A A Q I R A L F E D S
UniRef90_UPI0004056ADC A Y S F S P D N L R E M M Q R A
UniRef90_UPI00036503D1 H Y L F D A V D T A Q L L A
UniRef90_D1P0D4 H Y V F I E S D I E G L N N E
UniRef90_N2ALJ8 A Y T F S V E K L G Q I L E K
UniRef90_C0N786 H Y H F D R V D V T E L F T N T
UniRef90_R6GZY4 V Y E F D R Q Q L E Q L I A D A
UniRef90_C1DKD3 R Y E F D A T D I A Q L F A
UniRef90_UPI0003B31705 R Y V F D E E D C T Q L F
UniRef90_UPI0003F63B3B G Y R F G A D Q V E A L F R Q
UniRef90_UPI0002490C88 K Y L F S E E E L K K I Q A Q S
UniRef90_R5FX01 A Y I F T V K E L Q E I Y D
UniRef90_G4SZL7 N Y S F D R I D V E G L F A
UniRef90_P73910 V Y Q A D R H H L A Q L I G E
UniRef90_B1CBS7 E Y H L N E K E L S E L I K E
UniRef90_R7NJE0 K Y V F T K E E L Q K I I D
UniRef90_A6SXG5 H Y E F D P V D C A Q L F
UniRef90_UPI0003497CAD R Y A F D K V D C A Q L F
UniRef90_B8E3S8 K Y I F D A I D V A A L F A N
UniRef90_UPI00040BA910 K Y L F S T A D L E S I L T R
UniRef90_W6M4G6 R Y A F D T V D I A G L L A S A S
UniRef90_E7MNS2 E Y R F T P E E L K E V L E
UniRef90_UPI0003B53D33 Y Y K F E I D E L K A I L E K
UniRef90_E7RWL2 P Y R F D T Q Q V A A L F A
UniRef90_E4PFZ7 H Y R F D R N D I D H L F T G H T
UniRef90_F2NLH9 V Y R I T P E E I Q G L R V E H
UniRef90_U3RI05 M Y Q A N S D H L H Q L I E
UniRef90_D4JCE1 R Y D F S E E D L R K I L E
UniRef90_R6EQ74 K Y K F D K A H L E K I L A
UniRef90_B7V3U0 R Y L F D A S D V A Q L F A G A
UniRef90_UPI0004769B62 L Y S L D S I D A K H L F
UniRef90_H2CEP8 K Y L F G D S D L E R I F V E E S
UniRef90_UPI00034BEC21 V Y Q A D S D Q L A R L I D
UniRef90_R5FT55 K Y V F T K D D V E T L F
UniRef90_C5B2E1 R Y V L D P A E V E
UniRef90_UPI00036FD7C7 V Y R A N C D Q L S Q L I E
UniRef90_I3EC55 I Y V Y S K
UniRef90_M1T3C4 A Y R F D A V D C R Q V F K


1
10
20
30
40
UniRef90_UPI0003468EE9
UniRef90_E0E4Q3
UniRef90_UPI000476B0DE
UniRef90_A5VX31
UniRef90_R5EVN9
UniRef90_UPI000379CD89
UniRef90_V6MH94
UniRef90_A1AUF5
UniRef90_L8J763
UniRef90_B7JV16
UniRef90_V7I500
UniRef90_B5JU50
UniRef90_Q092R9
UniRef90_J7TAI2
UniRef90_I7LFF1
UniRef90_B0K8A4
UniRef90_D3VFV1
UniRef90_A4SS61
UniRef90_B3WAN3
UniRef90_Q1YS12
UniRef90_D8GSB9
UniRef90_U7V4T7
UniRef90_Q9KNK2
UniRef90_UPI000465FD6B
UniRef90_Q7NA46
UniRef90_A3YY76
UniRef90_E3BIX2
UniRef90_J9E7K9
UniRef90_UPI00018507E6
UniRef90_R6YB77
UniRef90_B8K8W1
UniRef90_V5FFV5
UniRef90_K1SWR3
UniRef90_UPI0003650B3B
UniRef90_W9AB33
UniRef90_C5BLL7
UniRef90_R7FDI9
UniRef90_X2HAB4
UniRef90_S6I5S1
UniRef90_UPI0003660045
UniRef90_H5SLW7
UniRef90_A0A031MJT7
UniRef90_N1VSJ4
UniRef90_UPI0003B52D6E
UniRef90_UPI000309B97F
UniRef90_D4ZEB4
UniRef90_Q1MYI4
UniRef90_G9ZQ69
UniRef90_J9FWU3
UniRef90_UPI00047D617B
UniRef90_R6TZ40
UniRef90_D7BAC0
UniRef90_UPI0004696E1B
UniRef90_R6NZG5
UniRef90_M4VCV7
UniRef90_V5BGI3
UniRef90_UPI0002FB2805
UniRef90_R6BIS1
UniRef90_R5KMK8
UniRef90_E1L6Z1
UniRef90_D9PL84
UniRef90_T1I3K0
UniRef90_B0TGU1
UniRef90_G2KSJ8
UniRef90_W4LMI5
UniRef90_D4FCX1
UniRef90_UPI00047DA887
UniRef90_R5MEE1
UniRef90_UPI00036D407F
UniRef90_X2H7M8
UniRef90_UPI0002558B54
UniRef90_C7N1Z3
UniRef90_U2SQ99
UniRef90_C5NUB0
UniRef90_A0Y9Y9
UniRef90_V7IDW0
UniRef90_D0LGQ2
UniRef90_C7H0J9
UniRef90_UPI000372868F
UniRef90_F2JLX2
UniRef90_Q21EJ8
UniRef90_R5AEW3
UniRef90_R5AN40
UniRef90_K6YMQ7
UniRef90_W7DGZ5
UniRef90_UPI000345FC60
UniRef90_H0JEW8
UniRef90_R5IHH5
UniRef90_B7S032
UniRef90_B8IN76
UniRef90_W1Q157
UniRef90_UPI0002FBDC61

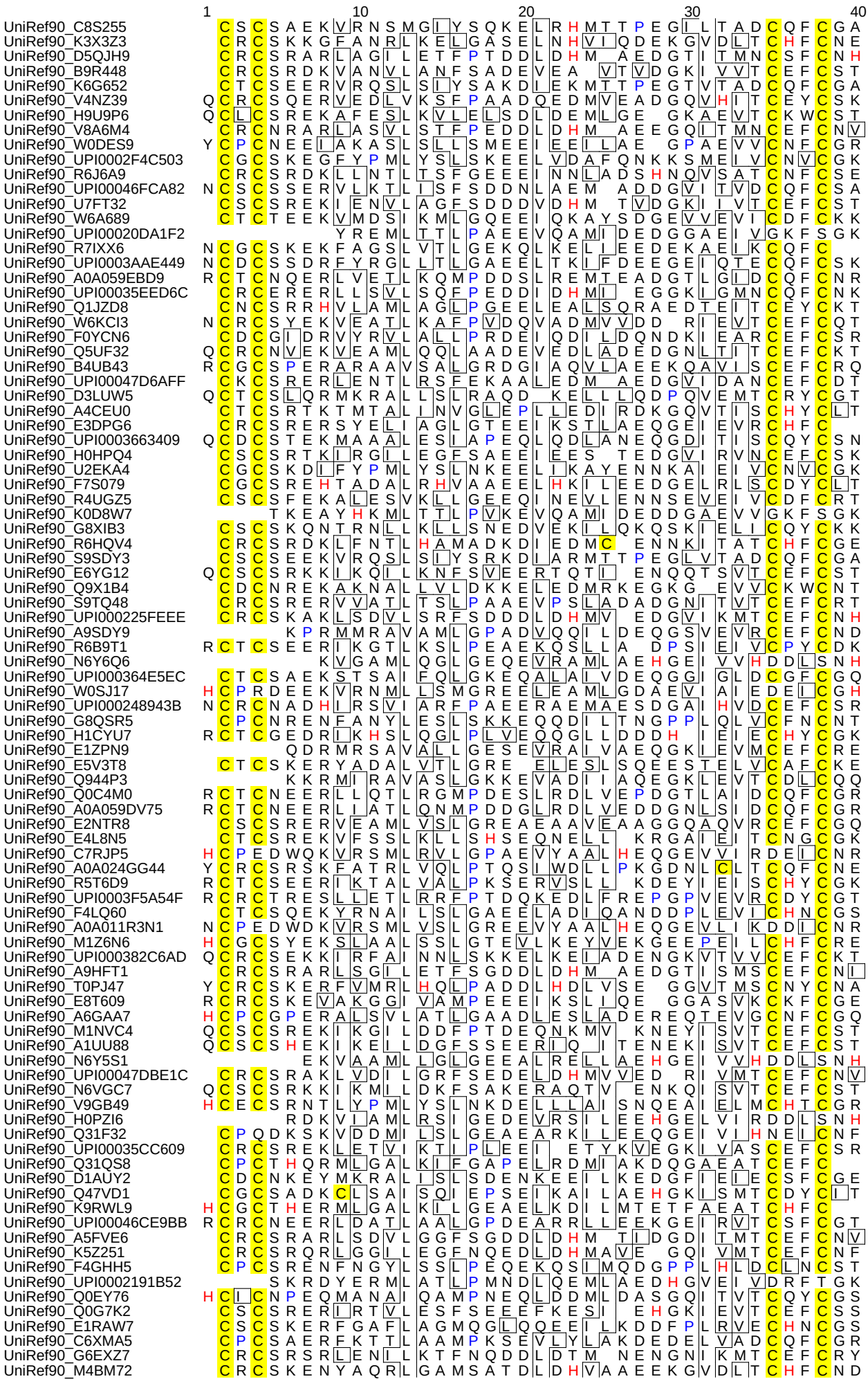

50
UniRef90_UPI0003468EE9 V Y Q A N E T Q L T Q L I A
UniRef90_E0E4Q3 K Y S F S E D E L K E I Y D N
UniRef90_UPI000476B0DE A Y Q F E R E D L E Q I L E Q T
UniRef90_A5VX31 R Y F F D A S D V A Q L F A
UniRef90_R5EVN9 V Y S F T P E D I G K L L E K
UniRef90_UPI000379CD89 K Y A F S G E E L E T L I D R
UniRef90_V6MH94 H Y I F T E S D I N N I
UniRef90_A1AUF5 S Y Q F D A D E L K A L A E T A T
UniRef90_L8J763 S Y D F D S I D V A A L F E N A
UniRef90_B7JV16 V Y Q A S S D H L A Q L I D
UniRef90_V7I500 T Y I F T N S D L K K L I S E
UniRef90_B5JU50 Q Y R F D A V D V T Q L F
UniRef90_Q092R9 H Y V I P G P E I R E L L T A A
UniRef90_J7TAI2 H H I F D E Q D I H E I R T Q K N
UniRef90_I7LFF1 K Y K Y S E A E L T Q I L S K
UniRef90_B0K8A4 K Y L I E E S R L K E L L
UniRef90_D3VFV1 H Y L F E E K D I N E I K
UniRef90_A4SS61 Q Y Q F D G I D V E T L F S R A
UniRef90_B3WAN3 Q Y H Y S V A D L E A L M A R H
UniRef90_Q1YS12 E Y R F T A A D V T Q L F D
UniRef90_D8GSB9 S Y K F T H D Q I G E I L K N C T
UniRef90_U7V4T7 R Y S F K R E D L G E I L
UniRef90_Q9KNK2 T Y S F D S A Q V A E L Y A P S S
UniRef90_UPI000465FD6B E Y H F T A N D V A H L F N
UniRef90_Q7NA46 H Y I F D A D D L A A I R I E
UniRef90_A3YY76 V Y G V E E R E L R E L I A E L S
UniRef90_E3BIX2 N Y T F D K N E V D A L F D
UniRef90_J9E7K9 V Y T F E E E E L E S M M A
UniRef90_UPI00018507E6 V Y N Y S
UniRef90_R6YB77 K Y V F T K A E I A E L A K Q A
UniRef90_B8K8W1 T Y T Y D E A E V S E L F I E A N
UniRef90_V5FFV5 T Y D F N A A E V E E L F A Q
UniRef90_K1SWR3 K Y R F T S E E L K E L I K R
UniRef90_UPI0003650B3B T Y R F D P S D F E A
UniRef90_W9AB33 S Y D F D S I D V A A L R D N S
UniRef90_C5BLL7 H Y A F K E E D L Q R L F S G S
UniRef90_R7FDI9 V Y T F Q P E E L K A M
UniRef90_X2HAB4 R Y V F D E A D V N S L F
UniRef90_S6I5S1 R Y L F D A A D V D Q L F A G A
UniRef90_UPI0003660045 Q Y H F D K V D V E S L L A D E T
UniRef90_H5SLW7 E Y V L G R D A L Q E L L
UniRef90_A0A031MJT7 R Y L F D R A A L V E L F E K A
UniRef90_N1VSJ4 A Y Q F D S F D V E K F F N Q
UniRef90_UPI0003B52D6E A Y K F S I D D L K E I R K
UniRef90_UPI000309B97F A Y Q F S Q S D I E K L L D R A
UniRef90_D4ZEB4 N Y S F D S I D I A A I F S N A
UniRef90_Q1MYI4 H Y S F T Q S D V N G L F
UniRef90_G9ZQ69 K Y H Y N D D E L A A I I A T A
UniRef90_J9FWU3 N Y V F S V E E L K E I L R K
UniRef90_UPI00047D617B Q Y H F D K V D V E N L L
UniRef90_R6TZ40 K Y L F T A K E I E D F I K E
UniRef90_D7BAC0 R Y W I T P P E I R S L A E P S T
UniRef90_UPI0004696E1B R Y S F S A A E I E S I I E
UniRef90_R6NZG5 K Y I F N K E D L E K I I K E K N
UniRef90_M4VCV7 P Y V F T M D E V V E I R D R
UniRef90_V5BGI3 Y Y R F D K I D V E Q L L
UniRef90_UPI0002FB2805 D Y E F D S V D I S A I F N Q T
UniRef90_R6BIS1 K Y S F T P N D I K N L I K
UniRef90_R5KMK8 R Y E F D L E D I K S L I K K
UniRef90_E1L6Z1 K Y H F S K K E L E D M F
UniRef90_D9PL84 H Y R F D A V D V G E M F
UniRef90_T1I3K0 H Y S F S A S E I S D I
UniRef90_B0TGU1 V H F F A P E E L K A W E Q E S
UniRef90_G2KSJ8 E Y K F D A A E L E H K L N N P S
UniRef90_W4LMI5 E Y L F Q R S E L Q A L L Y E A
UniRef90_D4FCX1 K Y H Y S E D E L K D I L A K K N
UniRef90_UPI00047DA887 R Y T F D E A D A D A L F
UniRef90_R5MEE1 K Y H F S K E E I Q K M L K R
UniRef90_UPI00036D407F V Y R F D R T D I D I I
UniRef90_X2H7M8 H Y I F D T I D I A Q M R K K
UniRef90_UPI0002558B54 Q Y H F D E T D I R A L F S E
UniRef90_C7N1Z3 R Y E F T P D E L S A M L
UniRef90_U2SQ99 R Y V F T E E D F K D I K
UniRef90_C5NUB0 K Y H F S Q K E I T D L L D N
UniRef90_A0Y9Y9 H Y Q F D G D D V G K L F D
UniRef90_V7IDW0 K Y V F D D T D V Q A L F
UniRef90_D0LGQ2 V Y Q V S E S E L A E L V A Q R S
UniRef90_C7H0J9 K Y Y F T P E D I K K I R E N A
UniRef90_UPI000372868F P Y K F D A I E C A Q L F
UniRef90_F2JLX2 K Y Q F T K
UniRef90_Q21EJ8 N Y T F K R K D I D T L F G E
UniRef90_R5AEW3 K Y V F S K E E I A Q L A L Q A
UniRef90_R5AN40 T Y H F D R Q S L T A L L D A A
UniRef90_K6YMQ7 E Y S F D A I D I E S I
UniRef90_W7DGZ5 Q Y H F
UniRef90_UPI000345FC60 A Y R L S P D E I A A L D D G E T
UniRef90_H0JEW8 Q Q V F D A A D I A Q I F A
UniRef90_R5IHH5 I Y D Y T P E Q V R Q I L K E
UniRef90_B7S032 Q Y R Y V E Q D L R D I L E
UniRef90_B8IN76 H Y D L D P A E V E A
UniRef90_W1Q157 H Y D Y S V Q E L
UniRef90_UPI0002FBDC61 K V W I E K E E L E A L I


1
10
20
30
40
UniRef90_Q67PQ0
UniRef90_G5GGA0
UniRef90_T0U6V7
UniRef90_W9V0N7
UniRef90_K1KGM5
UniRef90_J4U1T8
UniRef90_A0A016QKV5
UniRef90_R7G7S9
UniRef90_Q891S6
UniRef90_A0P6U8
UniRef90_Q12T11
UniRef90_UPI0003B3F958
UniRef90_I7ZBL1
UniRef90_W7QQG5
UniRef90_H1PVD8
UniRef90_I0XV00
UniRef90_UPI0002D9D3D9
UniRef90_U2QVK7
UniRef90_U4KSH1
UniRef90_D3QZB2
UniRef90_F5TA88
UniRef90_G5H0L4
UniRef90_Q7VBR5
UniRef90_B7VHF3
UniRef90_Q2SPF8
UniRef90_UPI00037AF9FB
UniRef90_UPI00047EE855
UniRef90_UPI00037D0234
UniRef90_A6FGZ8
UniRef90_G3IQV9
UniRef90_UPI000317868C
UniRef90_R5QUV2
UniRef90_UPI0003F67049
UniRef90_UPI000262CFEF
UniRef90_UPI000466990E
UniRef90_UPI0004797102
UniRef90_A9BA44
UniRef90_B0TMX9
UniRef90_UPI0002486E23
UniRef90_UPI000364CC39
UniRef90_V9HL39
UniRef90_UPI0004278263
UniRef90_I0GPL1
UniRef90_F5STL6
UniRef90_F5ZFZ6
UniRef90_H3KF01
UniRef90_Q5QYA1
UniRef90_F9EM67
UniRef90_X0QLK3
UniRef90_F9ZRE1
UniRef90_UPI0003622D46
UniRef90_B5ZNW7
UniRef90_A7HQ44
UniRef90_X0R1U7
UniRef90_A6W2G3
UniRef90_F8I1U0
UniRef90_G9ETT9
UniRef90_R6HM11
UniRef90_UPI0003B43E41
UniRef90_D3HNV9
UniRef90_K9H5U3
UniRef90_UPI0002558DCB
UniRef90_G9YGK7
UniRef90_G8UU66
UniRef90_R5Q384
UniRef90_F3LG36
UniRef90_UPI0003B4AD23
UniRef90_UPI0004010D19
UniRef90_UPI0003B6A380
UniRef90_W1TZA5
UniRef90_UPI0003FD4461
UniRef90_F2IY81
UniRef90_UPI0003A56FE2
UniRef90_K0G992
UniRef90_UPI000381B723
UniRef90_Q2BL47
UniRef90_T0ZV47
UniRef90_UPI0004753E2A
UniRef90_K9FM11
UniRef90_B4WCJ5
UniRef90_UPI00040580C0
UniRef90_E8U6H0
UniRef90_Q17ZW5
UniRef90_A8SBI7
UniRef90_UPI00046335E7
UniRef90_A0A023D4H6
UniRef90_UPI00036FC3E4
UniRef90_K2PYJ4
UniRef90_S6G3W5
UniRef90_UPI0004136F11
UniRef90_C7R8G3
UniRef90_C3P9L3

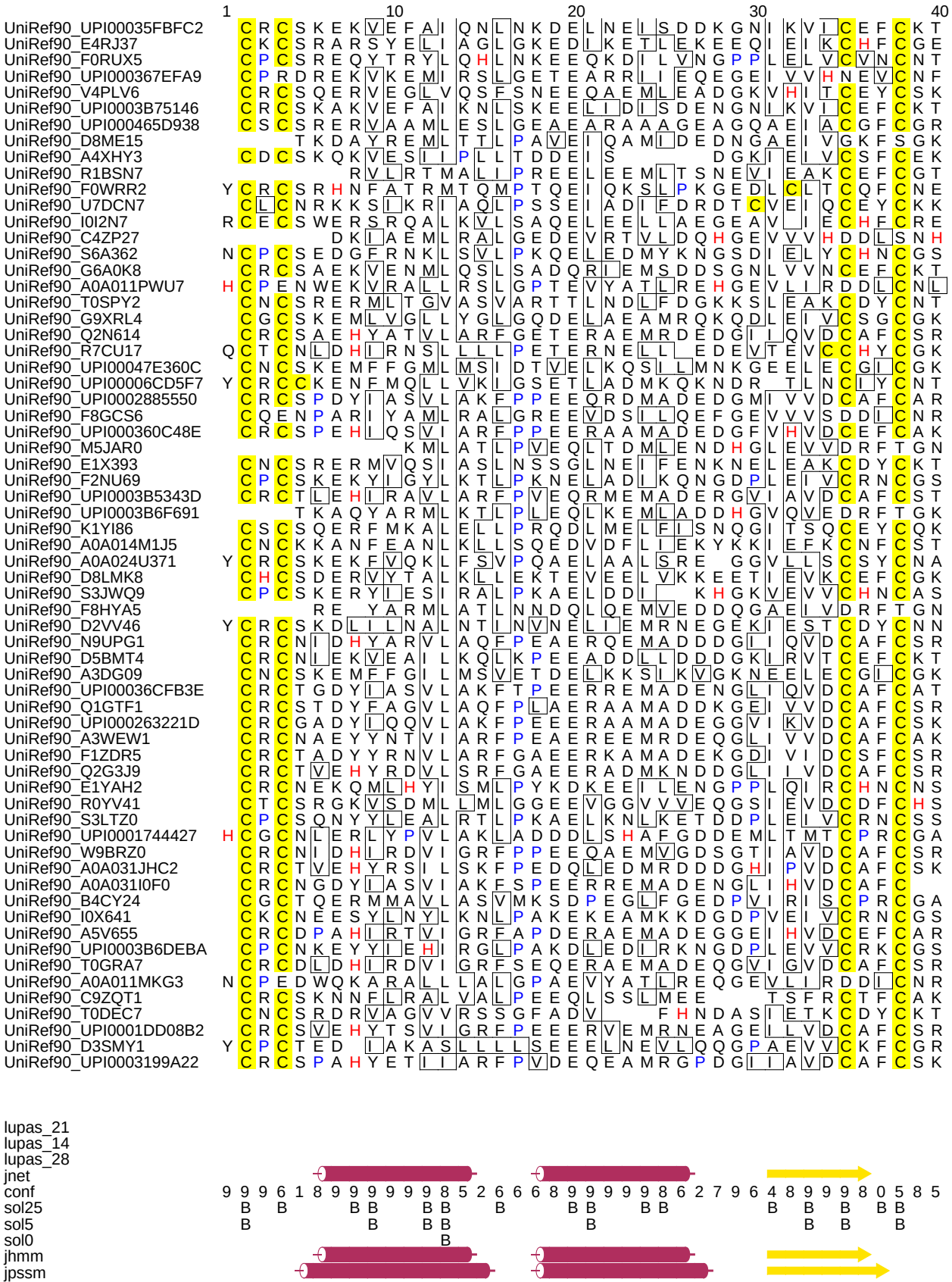
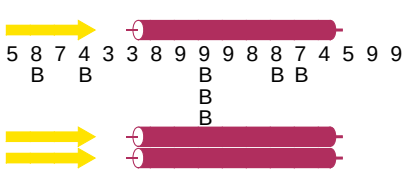
```
                                                  50
UniRef90_Q67PQ0          V Y R F S P E E V L Q
UniRef90_G5GGA0          K Y V F K S S E L K E I L S
UniRef90_T0U6V7          K Y H F T R E E L Q D M F
UniRef90_W9V0N7          R Y L F T Q T D I K S L F A E S S
UniRef90_K1KGM5          V R S F D S A D V A S L F A G A
UniRef90_J4U1T8          A Y Q F D K E E L T A I
UniRef90_A0A016QKV5      H Y Q I T P A E I A G L E A Q
UniRef90_R7G7S9          R Y Q F S E E E L R D L
UniRef90_Q891S6          K Y F Y D H E K I G E L L
UniRef90_A0P6U8          Q Y A F D Q V D V G A L F T D N S
UniRef90_Q12T11          S Y S F D A I D I A A L F S
UniRef90_UPI0003B3F958   H Y V V D E I D L E R I F S E
UniRef90_I7ZBL1          E H V F T P H Q A H E L F K A A
UniRef90_W7QQG5          K Y S F V E N D L A D L L N K
UniRef90_H1PVD8          K Y K F T R E D F K D I L E
UniRef90_I0XV00          I Y R F P K A Q V L E L F
UniRef90_UPI0002D9D3D9   T Y A F D S K E V D Q I L K A A
UniRef90_U2QVK7          K Y L F S Q T E I T D L L E N S
UniRef90_U4KSH1          G Y H F N E C D L E E I K R S K T
UniRef90_D3QZB2          K Y H F A Q A E I S G L L S R
UniRef90_F5TA88          K Y K K S I E H I K N L L N K
UniRef90_G5H0L4          A Y N F D R E E L S A I Y N A A
UniRef90_Q7VBR5          I Y N V N E Q E L K T I I G E
UniRef90_B7VHF3          N Y S F D K N D V D A L Y A E A
UniRef90_Q2SPF8          R Y S F G R E R I E Q L F D S P T
UniRef90_UPI00037AF9FB   V Y R Y N R T Q L E E L
UniRef90_UPI00047EE855   K Y N F T K D E L I K I K D N
UniRef90_UPI00037D0234   K Y G F S
UniRef90_A6FGZ8          L Y A F N A G D V E D I
UniRef90_G3IQV9          H Y R F D K V D V E N I L S Q K S
UniRef90_UPI000317868C   H Y T F S E D E L I D L
UniRef90_R5QUV2          N Y K F T
UniRef90_UPI0003F67049   S Y I F T P D E I E Q L F Q N A
UniRef90_UPI000262CFEF   V Y Q Y D Q A D L E W L L S
UniRef90_UPI000466990E   K Y Q I L F T E I E Q L L
UniRef90_UPI0004797102   Q Y R F G P E Q A L G L F
UniRef90_A9BA44          V Y Q I E E E E L R S L V D
UniRef90_B0TMX9          K Y A F G A I D V E A I Y A N A
UniRef90_UPI0002486E23   K Y Q F T A K E A L D L F G E H
UniRef90_UPI000364CC39   Q Y L F S A D E L Q Q I S N Q
UniRef90_V9HL39          Q Y T F D E Q D V H A L F
UniRef90_UPI0004278263   E Y R F S E S D L
UniRef90_I0GPL1          K Y E F T G E E L Q E L
UniRef90_F5STL6          V Y K F N K A D I E E I F D
UniRef90_F5ZFZ6          E Y R F D S I D I E A I
UniRef90_H3KF01          T R T Y D D V D V T E L F K
UniRef90_Q5QYA1          E Y R F S P S D
UniRef90_F9EM67          K Y K F T E K D F D D V L K K
UniRef90_X0QLK3          K Y Q Y S V A D L Q A L M G Q A
UniRef90_F9ZRE1          I Y R L G E A E V A A L F G Q
UniRef90_UPI0003622D46   R Y S F D Q A D I T L M F S D S
UniRef90_B5ZNW7          T Y R F E P A E L Q
UniRef90_A7HQ44          V Y V F A P D E L K E
UniRef90_X0R1U7          M Y R F N K D D V T T I F S E
UniRef90_A6W2G3          K Y E F T E A D L V D L L
UniRef90_F8I1U0          A Y H F T Q E E L E T L R R G A
UniRef90_G9ETT9          E Y L F D P I D V T L L F R K
UniRef90_R6HM11          V Y N F S S E E L K Q L K
UniRef90_UPI0003B43E41   H Y H L S P E E I A A L D D E
UniRef90_D3HNV9          K Y T F D P I D I T M L F H K
UniRef90_K9H5U3          H Y P F T
UniRef90_UPI0002558DCB   T Y K F D R D K V E E L F N
UniRef90_G9YGK7          K Y V I S H D E L E A L F A
UniRef90_G8UU66          K Y T F D S I D V T L L F R K
UniRef90_R5Q384          K Y Y F S R K E V E E
UniRef90_F3LG36          Q Y L Y N D S D I K E L F T P E T
UniRef90_UPI0003B4AD23   E W R F T A E E I D A
UniRef90_UPI0004010D19   E Y R F S K E D V A R L F A
UniRef90_UPI0003B6A380   V Y Y F T P E E I K N V I K
UniRef90_W1TZA5          K Y V F T K D E L A A A F A E
UniRef90_UPI0003FD4461   K F D I G I E K L K D L I D
UniRef90_F2IY81          K Y E F D P E
UniRef90_UPI0003A56FE2   Q Y A F D A A E L A
UniRef90_K0G992          Q Y F F D K N A I M E F K E E A
UniRef90_UPI000381B723   E Y V F N R Q D L T E L L
UniRef90_Q2BL47          H Y P F D R A D V E A I F A E
UniRef90_T0ZV47          R Y T L D A V D A E R V L A
UniRef90_UPI0004753E2A   K Y E F E A A Q L A
UniRef90_K9FM11          T Y E A Q C D R L T D L L A E
UniRef90_B4WCJ5          V Y A L E P D E V
UniRef90_UPI00040580C0   H Y D F D P Q E F E
UniRef90_E8U6H0          H Y Q I T P D E I R S L
UniRef90_Q17ZW5          K Y M Y S
UniRef90_A8SBI7          K Y Q Y       D L N A L L A E
UniRef90_UPI00046335E7   H Y E F D P T D
UniRef90_A0A023D4H6      H F R F S R D E V A G
UniRef90_UPI00036FC3E4   T Y R F E A S E V R
UniRef90_K2PYJ4          N Y D F E P G E L
UniRef90_S6G3W5          K Y T V G L E D I A K L L N
UniRef90_UPI0004136F11   V Y H F T P H E
UniRef90_C7R8G3          K E V F T E Q E L A Q L I
UniRef90_C3P9L3          R Y K F S K E D I T N L I E N
```


1
10
20
30
40
UniRef90_UPI0003A52959
UniRef90_A3WP08
UniRef90_UPI00047E9EEA
UniRef90_S6FCI3
UniRef90_D5RNH5
UniRef90_F9MPQ3
UniRef90_UPI000307E70B
UniRef90_UPI000471E821
UniRef90_G4QND9
UniRef90_U1KJP6
UniRef90_W5WVX7
UniRef90_I3TGI1
UniRef90_G2TC27
UniRef90_UPI0003B4DAD0
UniRef90_UPI0002D7844F
UniRef90_UPI00037006DA
UniRef90_R6UMP1
UniRef90_J1A5S6
UniRef90_R7G279
UniRef90_K2CBF4
UniRef90_UPI0003A98122
UniRef90_UPI000479528D
UniRef90_W6A8Y4
UniRef90_K2KBQ5
UniRef90_UPI00037E9448
UniRef90_G2IDT4
UniRef90_UPI0004126B11
UniRef90_A0A024K8N8
UniRef90_U1HHK7
UniRef90_U1M9I6
UniRef90_E8LD36
UniRef90_M2VZG8
UniRef90_R5Q930
UniRef90_U2NNM0
UniRef90_L8D9M3
UniRef90_UPI000364D782
UniRef90_A3PC66
UniRef90_UPI0000E10DEF
UniRef90_A0Z4T1
UniRef90_UPI0004701F32
UniRef90_G7G570
UniRef90_F7QIK8
UniRef90_Q1YJZ3
UniRef90_G7UPU7
UniRef90_A6LJS3
UniRef90_UPI0003FD97DA
UniRef90_E3HAG7
UniRef90_W3AGP9
UniRef90_UPI0003B4721D
UniRef90_K2JJ84
UniRef90_C9PPB4
UniRef90_K2JIY8
UniRef90_W3RJH4
UniRef90_UPI0002DCFF95
UniRef90_UPI000361EB3F
UniRef90_B8ER55
UniRef90_UPI0003B5C037
UniRef90_UPI000465A84C
UniRef90_K8EVJ1
UniRef90_N8Q8E2
UniRef90_A6WVX3
UniRef90_Q056P2
UniRef90_M3J9E7
UniRef90_UPI00035C51E6
UniRef90_J1Q090
UniRef90_A3VGC5
UniRef90_E2CAY0
UniRef90_UPI000378F044
UniRef90_Q47CF3
UniRef90_G4L6R8
UniRef90_M4R3N8
UniRef90_A0A017SZZ8
UniRef90_J7QUM9
UniRef90_K2N7X4
UniRef90_Q6MUK0
UniRef90_Z9JIB4
UniRef90_Q11MG3
UniRef90_B6IUN2
UniRef90_UPI00037928FD
UniRef90_V6F3S8
UniRef90_F6D9A1
UniRef90_K8DXN3
UniRef90_R5VXW7
UniRef90_D0NW35
UniRef90_R5QQ60
UniRef90_UPI00035C4E7A
UniRef90_M9RI27
UniRef90_J0YND0
UniRef90_M1VLC0
UniRef90_B4R8Y1
UniRef90_W1YM23
UniRef90_D2UET0

```
                                                  50
UniRef90_UPI0003A52959   R Y D F D P S E I N A
UniRef90_A3WP08          E Y V F K D E D F A
UniRef90_UPI00047E9EEA   R Y E F D R A Q V E A L L A
UniRef90_S6FCI3          H Y F F N K E A I E K L R N
UniRef90_D5RNH5          G F R F E R D E V Q A
UniRef90_F9MPQ3          H Y V L Q Q K E L A A L Y N K T N
UniRef90_UPI000307E70B   H Y D I D P A D V A E
UniRef90_UPI000471E821   E Y Q I L I D E L K Q L
UniRef90_G4QND9          E Y R F D A I D V E N I
UniRef90_U1KJP6          N Y R F K E Q D I K A I F N
UniRef90_W5WVX7          P Y T V N I E E L K V I K D R I S
UniRef90_I3TGI1          S Y V Y D D A D I A R L R A N
UniRef90_G2TC27          T Y A L S V Q E L D A L A A E A
UniRef90_UPI0003B4DAD0   T Y R F E V V E V A S
UniRef90_UPI0002D7844F   E F R F D R A D V R S
UniRef90_UPI00037006DA   E Y R F D T I D V E A I
UniRef90_R6UMP1          K Y Q F S
UniRef90_J1A5S6          T Y R F T P Q E F L E E N G E S T
UniRef90_R7G279          K Y I Y T A E D V D R L F
UniRef90_K2CBF4          E F V F D R V D V E R I F K Q
UniRef90_UPI0003A98122   E Y H F A L T D L D V L F S A A
UniRef90_UPI000479528D   E Y R F D P D G L
UniRef90_W6A8Y4          K Y N I S G E E I K K I I
UniRef90_K2KBQ5          D Y I F T A H E L
UniRef90_UPI00037E9448   A Y R F S Q E E L T G V L N
UniRef90_G2IDT4          K Y T F N Q N N L K N L Y N K
UniRef90_UPI0004126B11   K Y H F D K N D L L K I R E N
UniRef90_A0A024K8N8      A Y H F K P H E F E
UniRef90_U1HHK7          V Y E F T P Q E
UniRef90_U1M9I6          E Y Q F N K R D I E N I F N
UniRef90_E8LD36          T Y E Y T Q D E I K H L L E E
UniRef90_M2VZG8          T Y Q L T P P E I E Q I Y Q
UniRef90_R5Q930          K Y T F T R E D L K E L I K K
UniRef90_U2NNM0          S Y K F T N E E V G E L L N R
UniRef90_L8D9M3          D Y R F N E Q D V R A I F N
UniRef90_UPI000364D782   E Y H F P L D R I G V L F
UniRef90_A3PC66          K Y L I N Y E E I K L M I E N Q S
UniRef90_UPI0000E10DEF   D Y V F D A M D V E T I
UniRef90_A0Z4T1          D Y R F V Q S D I
UniRef90_UPI0004701F32   D F R F P R T E I
UniRef90_G7G570          E Y V F N E Q D I K S I F N
UniRef90_F7QIK8          T Y E F T
UniRef90_Q1YJZ3          S Y S F D P S E
UniRef90_G7UPU7          R Y H F S P D Q I A Q L F E G A
UniRef90_A6LJS3          T Y K I K P E E V K K I L E E K N
UniRef90_UPI0003FD97DA   R Y L F S E P D I D
UniRef90_E3HAG7          K Y S F S K Q E F E N L M N
UniRef90_W3AGP9          T Y T F E Q K E M Q Q L F
UniRef90_UPI0003B4721D   D Y R F E V N D L Q I L L
UniRef90_K2JJ84          H Y I L D P K T V
UniRef90_C9PPB4          H Y F F N K E A I N V L K N N
UniRef90_K2JIY8          A Y R Y
UniRef90_W3RJH4          V Y T F T P E E A D A
UniRef90_UPI0002DCFF95   E Y H F P L T E L D I L F S E P T
UniRef90_UPI000361EB3F   D Y R F S A A D I A R L F
UniRef90_B8ER55          F R A F D P S D L
UniRef90_UPI0003B5C037   D Y V Y S R S D A A T L F
UniRef90_UPI000465A84C   S Y D F D P S E F A
UniRef90_K8EVJ1          D L V F N E E E I E K A L Q
UniRef90_N8Q8E2          R Y S F T A E E A F G L F G K H
UniRef90_A6WVX3          R Y E F D P A E F A
UniRef90_Q056P2          V Y R F E R K K V S E L F
UniRef90_M3J9E7          T Y E F D P A Q F A K
UniRef90_UPI00035C51E6   Q Y A F T P D D
UniRef90_J1Q090          S Y H F S A D E L Q S I H D Q
UniRef90_A3VGC5          H Y E F D P K
UniRef90_E2CAY0          R Y E F E A
UniRef90_UPI000378F044   K Y R F D P Q
UniRef90_Q47CF3          E Y R F T A E D V A A I F A
UniRef90_G4L6R8          K Y T F T S E E I A K Y L Q
UniRef90_M4R3N8          Q Y F F D E T A I E E L R K A R T
UniRef90_A0A017SZZ8      A Y Q V A P G A L K T L L T E S
UniRef90_J7QUM9          L R S F D P T D F D
UniRef90_K2N7X4          E Y D F D P A E F D
UniRef90_Q6MUK0          K Y Q I Q I Q D V L T L L N
UniRef90_Z9JIB4          E Y R F S Y K E L T S L F
UniRef90_Q11MG3          E Y L F D P K E F D G
UniRef90_B6IUN2          E Y G F D D A A L D A V Y A
UniRef90_UPI00037928FD   H M R F H Q K D V D A L F A E
UniRef90_V6F3S8          T Y A F G D D D L D R V Y
UniRef90_F6D9A1          Y E R F N A E D I N Q L F K P A
UniRef90_K8DXN3
UniRef90_R5VXW7          K Y Y L S T D D L K A I R K
UniRef90_D0NW35          V H H F S A D E L D G L I E S M S
UniRef90_R5QQ60          K Y V F D K G E L
UniRef90_UPI00035C4E7A   D W N F D P A E I E
UniRef90_M9RI27          H Y V F H P N T L
UniRef90_J0YND0          T Y R F       E L Q E F S E E K T
UniRef90_M1VLC0          Y Y E L S S D E T R A L L R D A
UniRef90_B4R8Y1          V Y A V E P A S L E
UniRef90_W1YM23          K Y H F T R E E L Q D M F A
UniRef90_D2UET0          R Y D F P L A E F G V L F A
```


1
10
20
30
40
UniRef90_C8S255
UniRef90_K3X3Z3
UniRef90_D5QJH9
UniRef90_B9R448
UniRef90_K6G652
UniRef90_V4NZ39
UniRef90_H9U9P6
UniRef90_V8A6M4
UniRef90_W0DES9
UniRef90_UPI0002F4C503
UniRef90_R6J6A9
UniRef90_UPI00046FCA82
UniRef90_U7FT32
UniRef90_W6A689
UniRef90_UPI00020DA1F2
UniRef90_R7IXX6
UniRef90_UPI0003AAE449
UniRef90_A0A059EBD9
UniRef90_UPI00035EED6C
UniRef90_Q1JZD8
UniRef90_W6KCI3
UniRef90_F0YCN6
UniRef90_Q5UF32
UniRef90_B4UB43
UniRef90_UPI00047D6AFF
UniRef90_D3LUW5
UniRef90_A4CEU0
UniRef90_E3DPG6
UniRef90_UPI0003663409
UniRef90_H0HPQ4
UniRef90_U2EKA4
UniRef90_F7S079
UniRef90_R4UGZ5
UniRef90_K0D8W7
UniRef90_G8XIB3
UniRef90_R6HQV4
UniRef90_S9SDY3
UniRef90_E6YG12
UniRef90_Q9X1B4
UniRef90_S9TQ48
UniRef90_UPI000225FEEE
UniRef90_A9SDY9
UniRef90_R6B9T1
UniRef90_N6Y6Q6
UniRef90_UPI000364E5EC
UniRef90_W0SJ17
UniRef90_UPI000248943B
UniRef90_G8QSR5
UniRef90_H1CYU7
UniRef90_E1ZPN9
UniRef90_E5V3T8
UniRef90_Q944P3
UniRef90_Q0C4M0
UniRef90_A0A059DV75
UniRef90_E2NTR8
UniRef90_E4L8N5
UniRef90_C7RJP5
UniRef90_A0A024GG44
UniRef90_R5T6D9
UniRef90_UPI0003F5A54F
UniRef90_F4LQ60
UniRef90_A0A011R3N1
UniRef90_M1Z6N6
UniRef90_UPI000382C6AD
UniRef90_A9HFT1
UniRef90_T0PJ47
UniRef90_E8T609
UniRef90_A6GAA7
UniRef90_M1NVC4
UniRef90_A1UU88
UniRef90_N6Y5S1
UniRef90_UPI00047DBE1C
UniRef90_N6VGC7
UniRef90_V9GB49
UniRef90_H0PZI6
UniRef90_Q31F32
UniRef90_UPI00035CC609
UniRef90_Q31QS8
UniRef90_D1AUY2
UniRef90_Q47VD1
UniRef90_K9RWL9
UniRef90_UPI00046CE9BB
UniRef90_A5FVE6
UniRef90_K5Z251
UniRef90_F4GHH5
UniRef90_UPI0002191B52
UniRef90_Q0EY76
UniRef90_Q0G7K2
UniRef90_E1RAW7
UniRef90_C6XMA5
UniRef90_G6EXZ7
UniRef90_M4BM72

```
                                                  50
UniRef90_C8S255          H Y E F D P K T L
UniRef90_K3X3Z3          V Y Q F P L D E L K S I A A E L S
UniRef90_D5QJH9          A F H F Q R E E V
UniRef90_B9R448          A Y E F D R
UniRef90_K6G652          H Y N L S P E T V
UniRef90_V4NZ39          T Y
UniRef90_H9U9P6          T Y T F G P E E I K V V I E E
UniRef90_V8A6M4          G F R F D R T E I A
UniRef90_W0DES9          V Y R F D R E S L
UniRef90_UPI0002F4C503   K Y S F S S Q E I K N L I Q
UniRef90_R6J6A9          K Y V F D K G E L
UniRef90_UPI00046FCA82   Q Y K L T V Q E I Q E
UniRef90_U7FT32          S Y E F D
UniRef90_W6A689          Q Y N I K P E Q L K T L L N
UniRef90_UPI00020DA1F2   R Y F F T A D E L R E I V D E
UniRef90_R7IXX6
UniRef90_UPI0003AAE449   K Y K F E R K H F L E V L
UniRef90_A0A059EBD9      H Y D I A I E D V
UniRef90_UPI00035EED6C   T F D F T G E E
UniRef90_Q1JZD8          S Y Q F T P A E L S H I
UniRef90_W6KCI3          T Y V M D G T P L K S L L E
UniRef90_F0YCN6          L Y S L G K D E I A A H F A R
UniRef90_Q5UF32          K Y H R D A
UniRef90_B4UB43          R Y V I G E A E L R D I
UniRef90_UPI00047D6AFF   T Y S F P M A E L
UniRef90_D3LUW5          A Y V L T R K E L A T L Y
UniRef90_A4CEU0          D Y T F N E E E V R S L F
UniRef90_E3DPG6
UniRef90_UPI0003663409   H Y T L S
UniRef90_H0HPQ4          A Y E F K P A E F S A
UniRef90_U2EKA4          K Y N F N K D E L R R F I
UniRef90_F7S079          D Y V Y T R F D I D A L
UniRef90_R4UGZ5          K Y L I S S D D I K K L
UniRef90_K0D8W7          R Y F F T P D E L R E I I S E
UniRef90_G8XIB3          N Y H F N K I D
UniRef90_R6HQV4          V Y S F D K G E L
UniRef90_S9SDY3          H Y A L D P A T L
UniRef90_E6YG12          I Y H F K P E E L
UniRef90_Q9X1B4          R Y V F S
UniRef90_S9TQ48          D H V V A L T E L
UniRef90_UPI000225FEEE   D F C F D R K E V
UniRef90_A9SDY9          V I Q F K E A D L Q E V L Q S S
UniRef90_R6B9T1          K Y T I A R D T L S K W F M E
UniRef90_N6Y6Q6          T Y R F D A D D I D A L F R P P T
UniRef90_UPI000364E5EC   I Y R F D K Q A V S D I F A
UniRef90_W0SJ17          E Y R F G A E I V D E L F
UniRef90_UPI000248943B   R Y S F P L V D F A D
UniRef90_G8QSR5          T Y E F D K D E L E H L F S
UniRef90_H1CYU7          K Y E I S R E T L V K W F N E
UniRef90_E1ZPN9          T Y A F E E E E V
UniRef90_E5V3T8          K Y H F T K E E I T E L L E N
UniRef90_Q944P3          T Y N F S Q G E V D A Y L D
UniRef90_Q0C4M0          H Y T L P I E S V
UniRef90_A0A059DV75      H Y T
UniRef90_E2NTR8          T Y R F D G D E V
UniRef90_E4L8N5          N Y S F T K N D I L N L I K
UniRef90_C7RJP5          E Y R F D E A A V D E L F G G S S
UniRef90_A0A024GG44      R Y Y F S R Q Q I E E L L A E
UniRef90_R5T6D9          I R K I S R E T L Q H W F Q K
UniRef90_UPI0003F5A54F   M Y P I T R E D L
UniRef90_F4LQ60          I Y R I P K S S L
UniRef90_A0A011R3N1      E Y R F D A Q A I D E L F A
UniRef90_M1Z6N6          R Y V I P V A K V E E V I K
UniRef90_UPI000382C6AD   K R I F
UniRef90_A9HFT1          S F R F P R T E I
UniRef90_T0PJ47          A Y F V D A N Q V Q A I
UniRef90_E8T609          E Y H F S
UniRef90_A6GAA7          T T L V S A P Q L R A L A Q R
UniRef90_M1NVC4          T Y S F K P Q E
UniRef90_A1UU88          I H H F K P Q E L S E
UniRef90_N6Y5S1          S Y R F D A A D V D A L F
UniRef90_UPI00047DBE1C   D F R F S R E E V
UniRef90_N6VGC7          A Y Y F K P Q E F S E I
UniRef90_V9GB49          K Y R F D H V D I M R L V Q
UniRef90_H0PZI6          E Y R F E P E E I D D L F S N
UniRef90_Q31F32          H L R Y T K E D I D R L F A E A
UniRef90_UPI00035CC609   S Y D F D D A D L A R L
UniRef90_Q31QS8
UniRef90_D1AUY2          K Y R F E E
UniRef90_Q47VD1          T Y D F D E L S L K S F I S K
UniRef90_K9RWL9
UniRef90_UPI00046CE9BB   E W
UniRef90_A5FVE6          D F R F P R G E I A A
UniRef90_K5Z251          D F C F A R A D V A G
UniRef90_F4GHH5          A Y D F T K E E L E S I F
UniRef90_UPI0002191B52   K I Q F D E A E L S G I I A
UniRef90_Q0EY76          H Y
UniRef90_Q0G7K2          E Y V F D P A E F E
UniRef90_E1RAW7          V Y E F S R V E C E E L F S N
UniRef90_C6XMA5          I Y R I P T E D V L K L
UniRef90_G6EXZ7          D F I F K Q D E I
UniRef90_M4BM72          I H H F S A D E L K N V I K S L S
```


1
10
20
30
40
UniRef90_UPI00035FBFC2
UniRef90_E4RJ37
UniRef90_F0RUX5
UniRef90_UPI000367EFA9
UniRef90_V4PLV6
UniRef90_UPI0003B75146
UniRef90_UPI000465D938
UniRef90_D8ME15
UniRef90_A4XHY3
UniRef90_R1BSN7
UniRef90_F0WRR2
UniRef90_U7DCN7
UniRef90_I0I2N7
UniRef90_C4ZP27
UniRef90_S6A362
UniRef90_G6A0K8
UniRef90_A0A011PWU7
UniRef90_T0SPY2
UniRef90_G9XRL4
UniRef90_Q2N614
UniRef90_R7CU17
UniRef90_UPI00047E360C
UniRef90_UPI00006CD5F7
UniRef90_UPI0002885550
UniRef90_F8GCS6
UniRef90_UPI000360C48E
UniRef90_M5JAR0
UniRef90_E1X393
UniRef90_F2NU69
UniRef90_UPI0003B5343D
UniRef90_UPI0003B6F691
UniRef90_K1YI86
UniRef90_A0A014M1J5
UniRef90_A0A024U371
UniRef90_D8LMK8
UniRef90_S3JWQ9
UniRef90_F8HYA5
UniRef90_D2VV46
UniRef90_N9UPG1
UniRef90_D5BMT4
UniRef90_A3DG09
UniRef90_UPI00036CFB3E
UniRef90_Q1GTF1
UniRef90_UPI000263221D
UniRef90_A3WEW1
UniRef90_F1ZDR5
UniRef90_Q2G3J9
UniRef90_E1YAH2
UniRef90_R0YV41
UniRef90_S3LTZ0
UniRef90_UPI0001744427
UniRef90_W9BRZ0
UniRef90_A0A031JHC2
UniRef90_A0A031I0F0
UniRef90_B4CY24
UniRef90_I0X641
UniRef90_A5V655
UniRef90_UPI0003B6DEBA
UniRef90_T0GRA7
UniRef90_A0A011MKG3
UniRef90_C9ZQT1
UniRef90_T0DEC7
UniRef90_UPI0001DD08B2
UniRef90_D3SMY1
UniRef90_UPI0003199A22
lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm

```
UniRef90_UPI00035FBFC2  E R S F N
UniRef90_E4RJ37         T
UniRef90_F0RUX5         H Y H Y E R F E L E H L L S E A
UniRef90_UPI000367EFA9  H E R F D L G D I E A M F S
UniRef90_V4PLV6         T F
UniRef90_UPI0003B75146  E R I F S
UniRef90_UPI000465D938  R Y H F S L A E I G V L F E Q P S
UniRef90_D8ME15         R Y F F T P E E L T D V I L E
UniRef90_A4XHY3         K Y Y F T R E E
UniRef90_R1BSN7         L Y R S T P E E L R E K L E
UniRef90_F0WRR2         K Y Y F S S Q Q I D E L L A
UniRef90_U7DCN7         T Y T I T E D E V K G
UniRef90_I0I2N7         R Y R F D R S E I Q A L L D E
UniRef90_C4ZP27         T Y R F D R S D V D A L F R P P T
UniRef90_S6A362         V Y K Y K K E I L K E L L
UniRef90_G6A0K8         S Y H H T A
UniRef90_A0A011PWU7     E Y R F D A A A I D A L F S D T
UniRef90_T0SPY2         N Y L I T Y E E I E E I L K
UniRef90_G9XRL4         K Y V Y N A K D I V S L L K
UniRef90_Q2N614         T F A L D
UniRef90_R7CU17         K Y N I P R S T L V K W F N
UniRef90_UPI00047E360C  K Y L F N T N D L K S I V K
UniRef90_UPI00006CD5F7  N Y T I E D Q D F E Q L I K E S T
UniRef90_UPI0002885550  K F
UniRef90_F8GCS6         E Y R L D A L A V D A V F R E A
UniRef90_UPI000360C48E  S F
UniRef90_M5JAR0         R I Q F S E A E L A A I I A Q
UniRef90_E1X393         Y Y L I T K D E I S N L
UniRef90_F2NU69         V Y K I P V S E I
UniRef90_UPI0003B5343D  V F P L Q A N D L A A
UniRef90_UPI0003B6F691  Q I R F D Q A E L T S I I K
UniRef90_K1YI86         V W E A D D R Q V R K L L
UniRef90_A0A014M1J5     S K T F N K K D
UniRef90_A0A024U371     S Y F V P E L E I D Q V R Q E
UniRef90_D8LMK8         L Y R L S A E D V
UniRef90_S3JWQ9         V Y K I P L S E L
UniRef90_F8HYA5         K I Q F N T E E L Q N I M D Q
UniRef90_D2VV46         N Y F I D E N D L S L L I T K
UniRef90_N9UPG1         L F P V P L D E I A
UniRef90_D5BMT4         E R R F G T D V L A G
UniRef90_A3DG09         R Y I F R T N D L E I I V K
UniRef90_UPI00036CFB3E  K F P I P A D
UniRef90_Q1GTF1         F F P I S L T D I A G
UniRef90_UPI000263221D  Q F
UniRef90_A3WEW1         K F E L S
UniRef90_F1ZDR5
UniRef90_Q2G3J9         E F E I D
UniRef90_E1YAH2         L Y E F S K K Q I S S I F K
UniRef90_R0YV41         K
UniRef90_S3LTZ0         V Y H I P L A Q L
UniRef90_UPI0001744427  R Y R T S K E Q F E A
UniRef90_W9BRZ0         I F H I D P V
UniRef90_A0A031JHC2     V
UniRef90_A0A031I0F0
UniRef90_B4CY24         R H K I T R E A L E A
UniRef90_I0X641         I Y R F P L S Q I
UniRef90_A5V655         R F
UniRef90_UPI0003B6DEBA  V Y H I P V S E I
UniRef90_T0GRA7
UniRef90_A0A011MKG3     E Y R F D E
UniRef90_C9ZQT1         E H V L Q P E D W S K L L R D R T
UniRef90_T0DEC7         A Y L I T K D E V N S I L N
UniRef90_UPI0001DD08B2  I F T I D
UniRef90_D3SMY1         I Y R F T R E E L
UniRef90_UPI0003199A22  T F
```