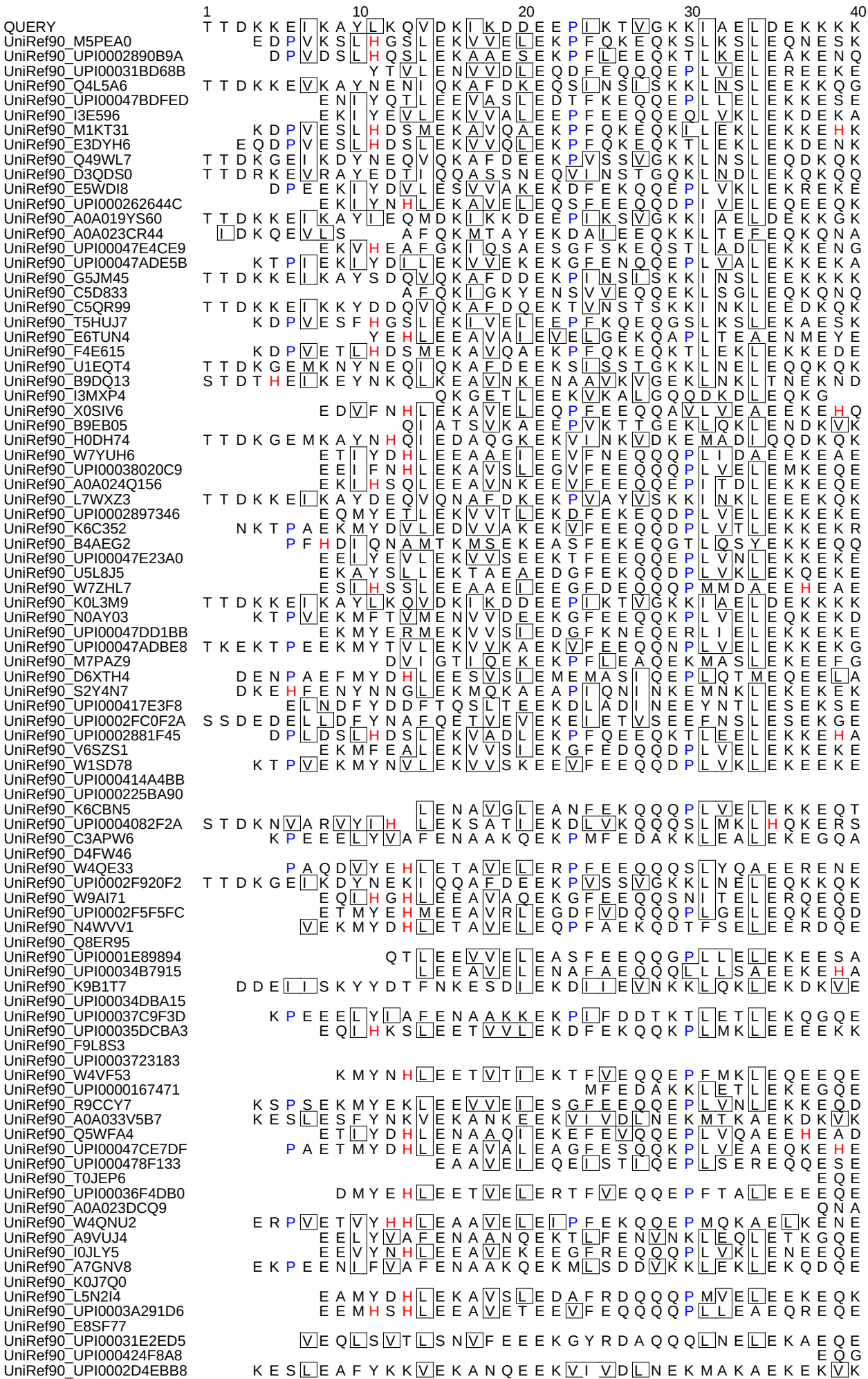
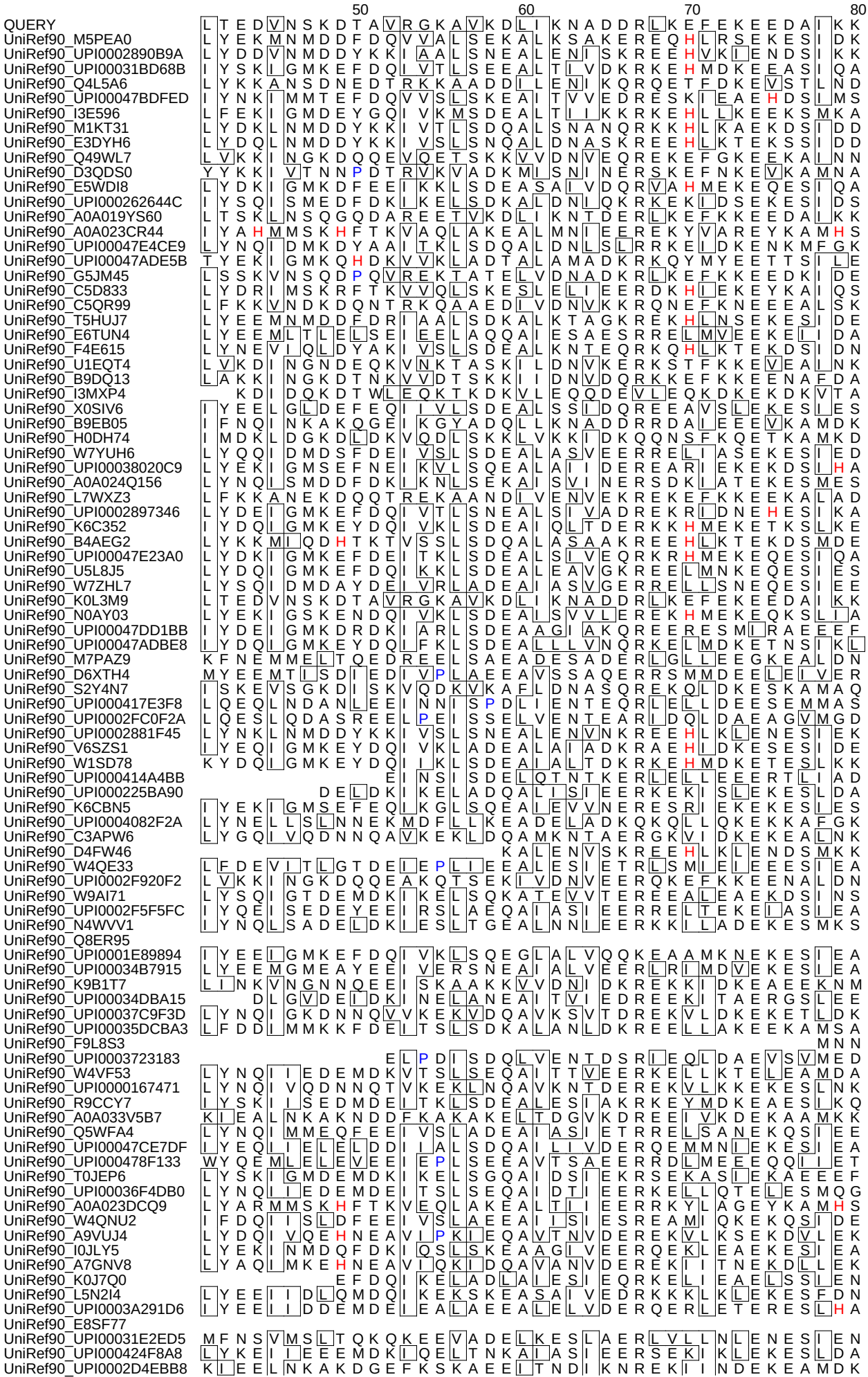
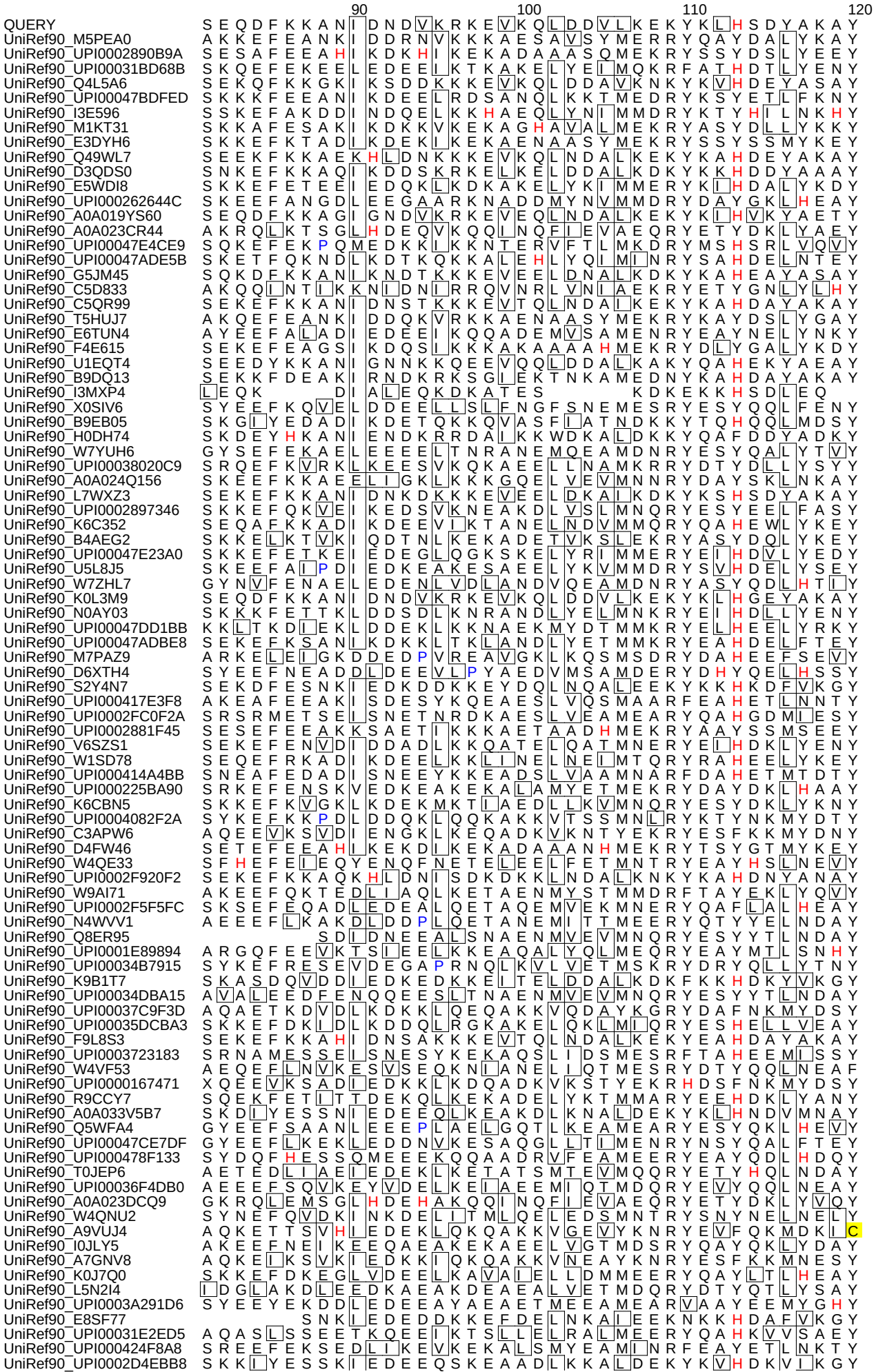
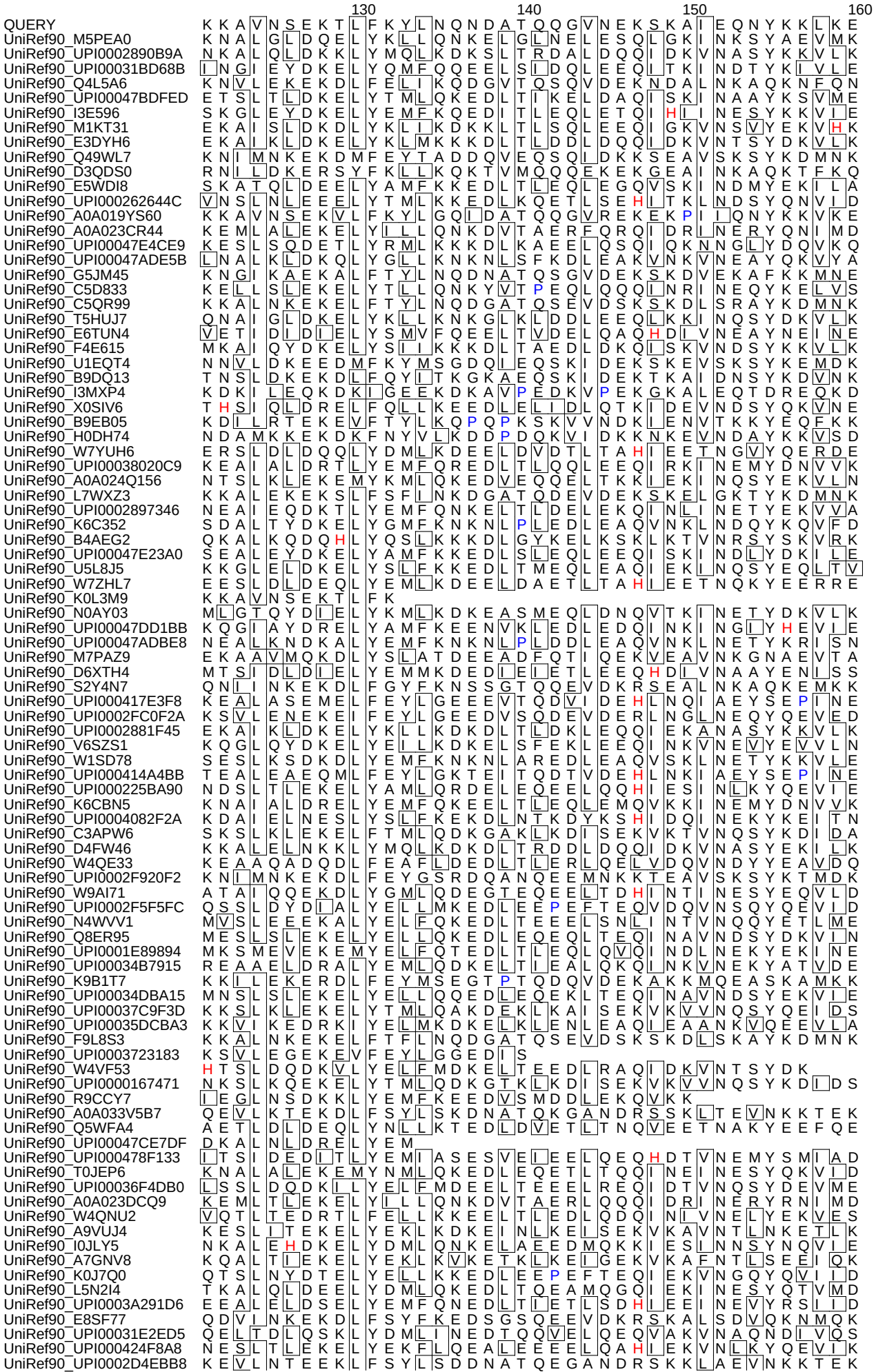
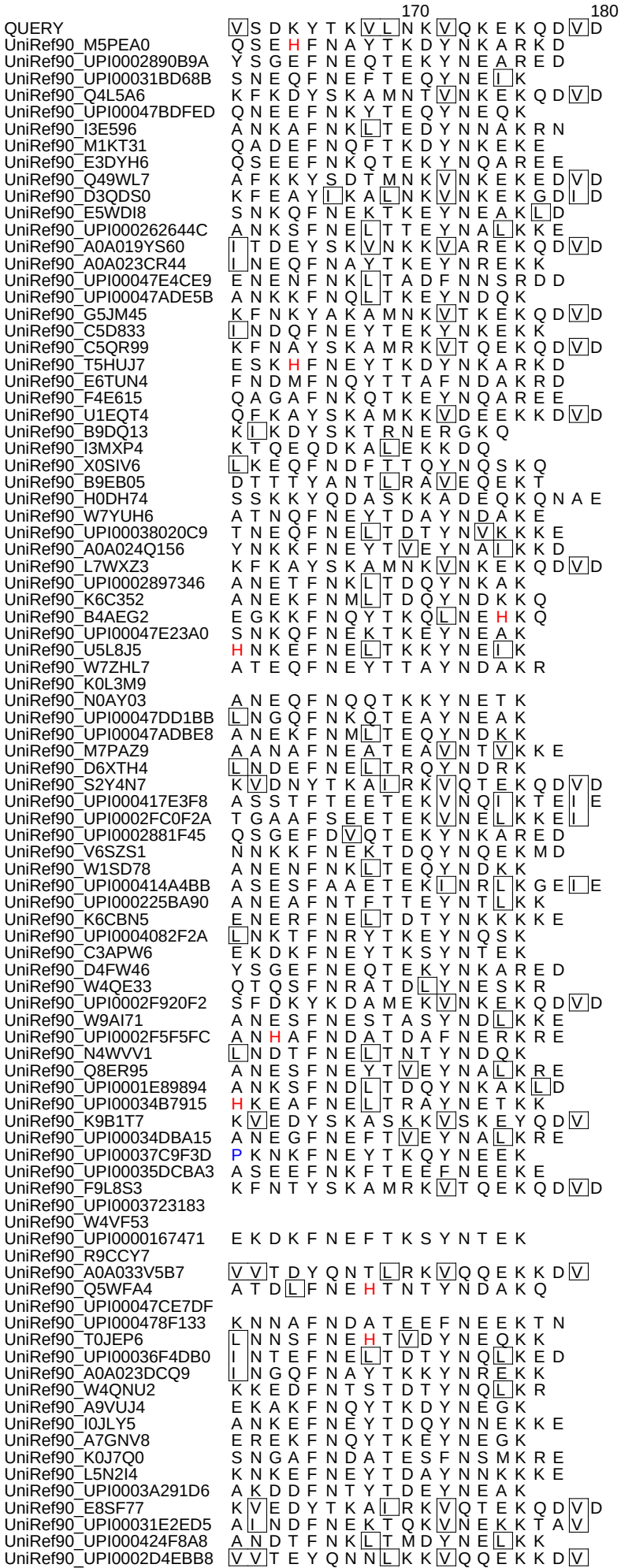
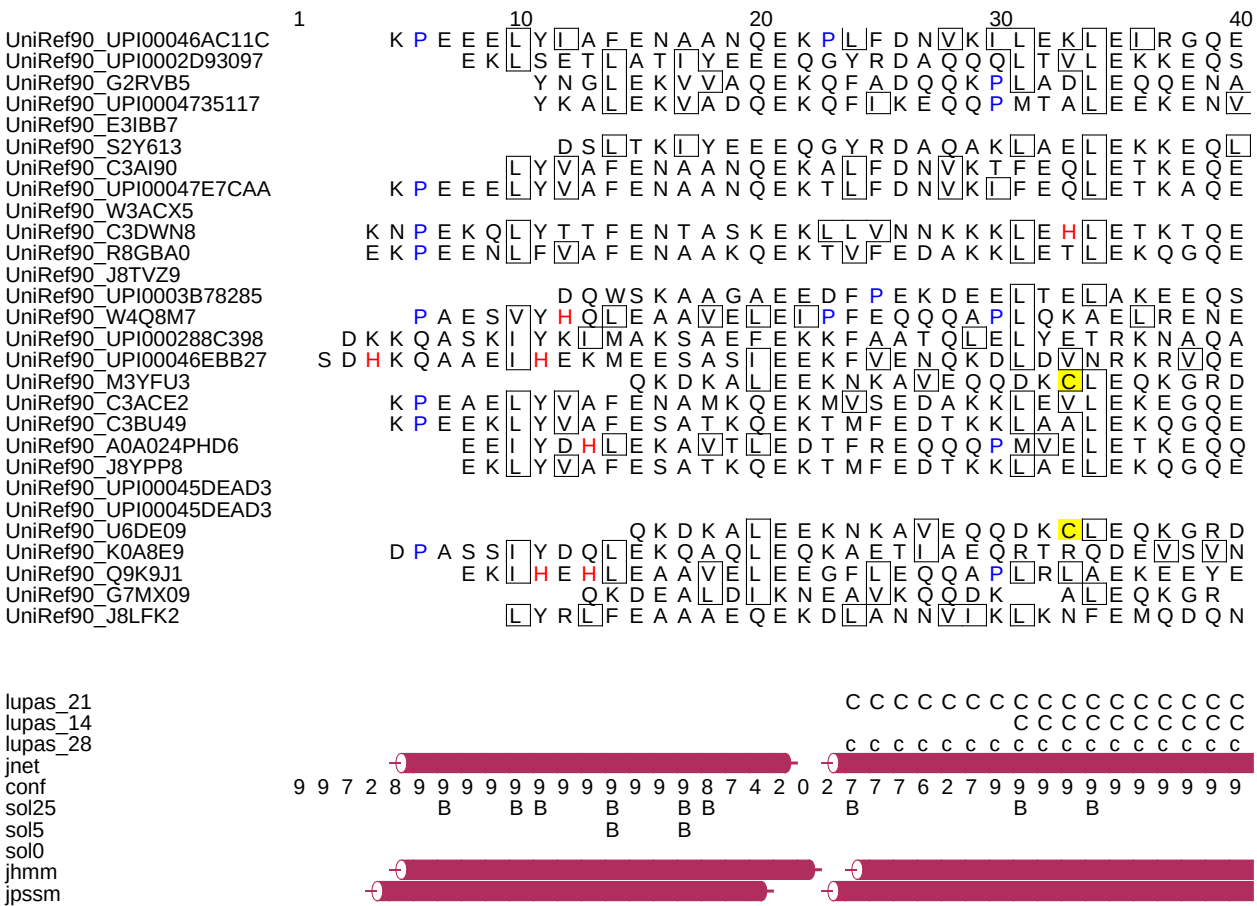

1
10
20
30
40
QUERY
UniRef90_M5PEA0
UniRef90_UPI0002890B9A
UniRef90_UPI00031BD68B
UniRef90_Q4L5A6
UniRef90_UPI00047BDFED
UniRef90_I3E596
UniRef90_M1KT31
UniRef90_E3DYH6
UniRef90_Q49WL7
UniRef90_D3QDS0
UniRef90_E5WDI8
UniRef90_UPI000262644C
UniRef90_A0A019YS60
UniRef90_A0A023CR44
UniRef90_UPI00047E4CE9
UniRef90_UPI00047ADE5B
UniRef90_G5JM45
UniRef90_C5D833
UniRef90_C5QR99
UniRef90_T5HUJ7
UniRef90_E6TUN4
UniRef90_F4E615
UniRef90_U1EQT4
UniRef90_B9DQ13
UniRef90_I3MXP4
UniRef90_X0SIV6
UniRef90_B9EB05
UniRef90_H0DH74
UniRef90_W7YUH6
UniRef90_UPI00038020C9
UniRef90_A0A024Q156
UniRef90_L7WXZ3
UniRef90_UPI0002897346
UniRef90_K6C352
UniRef90_B4AEG2
UniRef90_UPI00047E23A0
UniRef90_U5L8J5
UniRef90_W7ZHL7
UniRef90_K0L3M9
UniRef90_N0AY03
UniRef90_UPI00047DD1BB
UniRef90_UPI00047ADBE8
UniRef90_M7PAZ9
UniRef90_D6XTH4
UniRef90_S2Y4N7
UniRef90_UPI000417E3F8
UniRef90_UPI0002FC0F2A
UniRef90_UPI0002881F45
UniRef90_V6SZS1
UniRef90_W1SD78
UniRef90_UPI000414A4BB
UniRef90_UPI000225BA90
UniRef90_K6CBN5
UniRef90_UPI0004082F2A
UniRef90_C3APW6
UniRef90_D4FW46
UniRef90_W4QE33
UniRef90_UPI0002F920F2
UniRef90_W9AI71
UniRef90_UPI0002F5F5FC
UniRef90_N4WVV1
UniRef90_Q8ER95
UniRef90_UPI0001E89894
UniRef90_UPI00034B7915
UniRef90_K9B1T7
UniRef90_UPI00034DBA15
UniRef90_UPI00037C9F3D
UniRef90_UPI00035DCBA3
UniRef90_F9L8S3
UniRef90_UPI0003723183
UniRef90_W4VF53
UniRef90_UPI0000167471
UniRef90_R9CCY7
UniRef90_A0A033V5B7
UniRef90_Q5WFA4
UniRef90_UPI00047CE7DF
UniRef90_UPI000478F133
UniRef90_T0JEP6
UniRef90_UPI00036F4DB0
UniRef90_A0A023DCQ9
UniRef90_W4QNU2
UniRef90_A9VUJ4
UniRef90_I0JLY5
UniRef90_A7GNV8
UniRef90_K0J7Q0
UniRef90_L5N2I4
UniRef90_UPI0003A291D6
UniRef90_E8SF77
UniRef90_UPI00031E2ED5
UniRef90_UPI000424F8A8
UniRef90_UPI0002D4EBB8

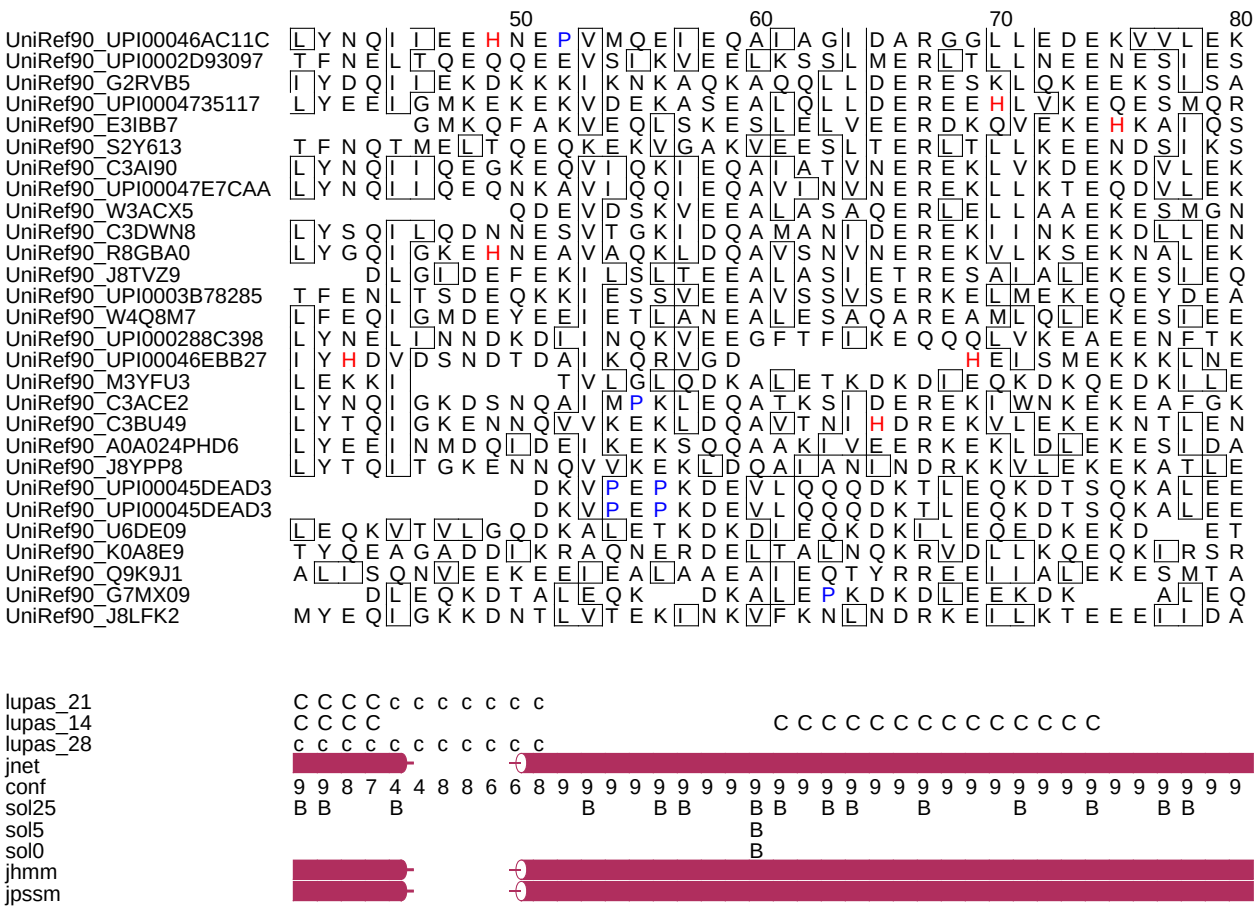

50
60
70
80
QUERY
UniRef90_M5PEA0
UniRef90_UPI0002890B9A
UniRef90_UPI00031BD68B
UniRef90_Q4L5A6
UniRef90_UPI00047BDFED
UniRef90_I3E596
UniRef90_M1KT31
UniRef90_E3DYH6
UniRef90_Q49WL7
UniRef90_D3QDS0
UniRef90_E5WDI8
UniRef90_UPI000262644C
UniRef90_A0A019YS60
UniRef90_A0A023CR44
UniRef90_UPI00047E4CE9
UniRef90_UPI00047ADE5B
UniRef90_G5JM45
UniRef90_C5D833
UniRef90_C5QR99
UniRef90_T5HUJ7
UniRef90_E6TUN4
UniRef90_F4E615
UniRef90_U1EQT4
UniRef90_B9DQ13
UniRef90_I3MXP4
UniRef90_X0SIV6
UniRef90_B9EB05
UniRef90_H0DH74
UniRef90_W7YUH6
UniRef90_UPI00038020C9
UniRef90_A0A024Q156
UniRef90_L7WXZ3
UniRef90_UPI0002897346
UniRef90_K6C352
UniRef90_B4AEG2
UniRef90_UPI00047E23A0
UniRef90_U5L8J5
UniRef90_W7ZHL7
UniRef90_K0L3M9
UniRef90_N0AY03
UniRef90_UPI00047DD1BB
UniRef90_UPI00047ADBE8
UniRef90_M7PAZ9
UniRef90_D6XTH4
UniRef90_S2Y4N7
UniRef90_UPI000417E3F8
UniRef90_UPI0002FC0F2A
UniRef90_UPI0002881F45
UniRef90_V6SZS1
UniRef90_W1SD78
UniRef90_UPI000414A4BB
UniRef90_UPI000225BA90
UniRef90_K6CBN5
UniRef90_UPI0004082F2A
UniRef90_C3APW6
UniRef90_D4FW46
UniRef90_W4QE33
UniRef90_UPI0002F920F2
UniRef90_W9AI71
UniRef90_UPI0002F5F5FC
UniRef90_N4WVV1
UniRef90_Q8ER95
UniRef90_UPI0001E89894
UniRef90_UPI00034B7915
UniRef90_K9B1T7
UniRef90_UPI00034DBA15
UniRef90_UPI00037C9F3D
UniRef90_UPI00035DCBA3
UniRef90_F9L8S3
UniRef90_UPI0003723183
UniRef90_W4VF53
UniRef90_UPI0000167471
UniRef90_R9CCY7
UniRef90_A0A033V5B7
UniRef90_Q5WFA4
UniRef90_UPI00047CE7DF
UniRef90_UPI000478F133
UniRef90_T0JEP6
UniRef90_UPI00036F4DB0
UniRef90_A0A023DCQ9
UniRef90_W4QNU2
UniRef90_A9VUJ4
UniRef90_I0JLY5
UniRef90_A7GNV8
UniRef90_K0J7Q0
UniRef90_L5N2I4
UniRef90_UPI0003A291D6
UniRef90_E8SF77
UniRef90_UPI00031E2ED5
UniRef90_UPI000424F8A8
UniRef90_UPI0002D4EBB8

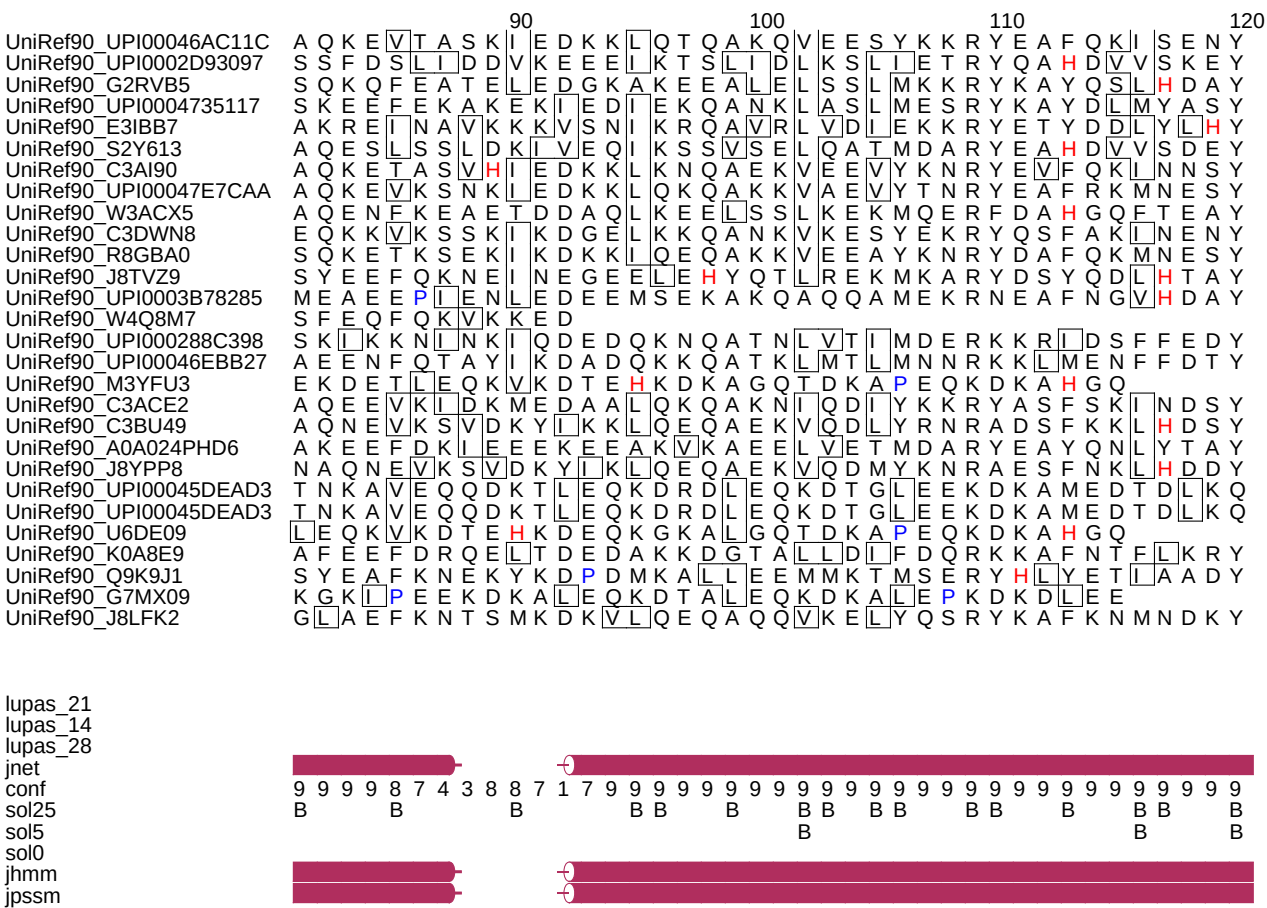

90
100
110
120
QUERY S E Q D F K K A N I D N D V K R K E V K Q L D D V L K E K Y K L H S D Y A K A Y
UniRef90_M5PEA0 A K K E F E A N K I D D R N V K K K A E S A V S Y M E R R Y Q A Y D A L Y K A Y
UniRef90_UPI0002890B9A S E S A F E E A H I K D K H I K E K A D A A A S Q M E K R Y S S Y D S L Y E E Y
UniRef90_UPI00031BD68B S K Q E F E K E E L E D E E I K T K A K E L Y E I M Q K R F A T H D T L Y E N Y
UniRef90_Q4L5A6 S E K Q F K K G K I K S D D K K K E V K Q L D D A V K N K Y K V H D E Y A S A Y
UniRef90_UPI00047BDFED S K K K F E E A N I K D E E L R D S A N Q L K K T M E D R Y K S Y E T L F K N Y
UniRef90_I3E596 S S K E F A K D D I N D Q E L K K H A E Q L Y N I M M D R Y K T Y H I L N K H Y
UniRef90_M1KT31 S K K A F E S A K I K D K K V K E K A G H A V A L M E K R Y A S Y D L L Y K K Y
UniRef90_E3DYH6 S K K E F K T A D I K D E K I K E K A E N A A S Y M E K R Y S S Y S S M Y K E Y
UniRef90_Q49WL7 S E E K F K K A E K H L D N K K K E V K Q L N D A L K E K Y K A H D E Y A K A Y
UniRef90_D3QDS0 S N K E F K K A Q I K D D S K R K E L K E L D D A L K D K Y K K H D D Y A A A Y
UniRef90_E5WDI8 S K K E F E T E E I E D Q K L K D K A K E L Y K I M M E R Y K I H D A L Y K D Y
UniRef90_UPI000262644C S K E E F A N G D L E E G A A R K N A D D M Y N V M M D R Y D A Y G K L H E A Y
UniRef90_A0A019YS60 S E Q D F K K A G I G N D V K R K E V E Q L N D A L K E K Y K I H V K Y A E T Y
UniRef90_A0A023CR44 A K R Q L K T S G L H D E Q V K Q Q I N Q F I E V A E Q R Y E T Y D K L Y A E Y
UniRef90_UPI00047E4CE9 S Q K E F E K P Q M E D K K I K K N T E R V F T L M K D R Y M S H S R L V Q V Y
UniRef90_UPI00047ADE5B S K E T F Q K N D L K D T K Q K K A L E H L Y Q I M I N R Y S A H D E L N T E Y
UniRef90_G5JM45 S Q K D F K K A N I K N D T K K K E V E E L D N A L K D K Y K A H E A Y A S A Y
UniRef90_C5D833 A K Q Q I N T I K K N I D N I R R Q V N R L V N I A E K R Y E T Y G N L Y L H Y
UniRef90_C5QR99 S E K E F K K A N I D N S T K K K E V T Q L N D A I K E K Y K A H D A Y A K A Y
UniRef90_T5HUJ7 A K Q E F E A N K I D D Q K V R K K A E N A A S Y M E K R Y K A Y D S L Y G A Y
UniRef90_E6TUN4 A Y E E F A L A D I E D E E I K Q Q A D E M V S A M E N R Y E A Y N E L Y N K Y
UniRef90_F4E615 S E K E F E A G S I K D Q S I K K K A K A A A A H M E K R Y D L Y G A L Y K D Y
UniRef90_U1EQT4 S E E D Y K K A N I G N N K K Q E E V Q Q L D D A L K A K Y Q A H E K Y A E A Y
UniRef90_B9DQ13 S E K K F D E A K I R N D K R K S G I E K T N K A M E D N Y K A H D A Y A K A Y
UniRef90_I3MXP4 L E Q K D I A L E Q K D K A T E S K D K E K K H S D L E Q
UniRef90_X0SIV6 S Y E E F K Q V E L D D E E L L S L F N G F S N E M E S R Y E S Y Q Q L F E N Y
UniRef90_B9EB05 S K G I Y E D A D I K D E T Q K K Q V A S F I A T N D K K Y T Q H Q Q L M D S Y
UniRef90_H0DH74 S K D E Y H K A N I E N D K R R D A I K K W D K A L D K K Y Q A F D D Y A D K Y
UniRef90_W7YUH6 G Y S E F E K A E L E E E E L T N R A N E M Q E A M D N R Y E S Y Q A L Y T V Y
UniRef90_UPI00038020C9 S R Q E F K V R K L K E E S V K Q K A E E L L N A M K R R Y D T Y D L L Y S Y Y
UniRef90_A0A024Q156 S K E E F K K A E E L I G K L K K K G Q E L V E V M N N R Y D A Y S K L N K A Y
UniRef90_L7WXZ3 S E K E F K K A N I D N K D K K K E V E E L D K A I K D K Y K S H S D Y A K A Y
UniRef90_UPI0002897346 S K K E F Q K V E I K E D S V K N E A K D L V S L M N Q R Y E S Y E E L F A S Y
UniRef90_K6C352 S E Q A F K K A D I K D E E V I K T A N E L N D V M M Q R Y Q A H E W L Y K E Y
UniRef90_B4AEG2 S K K E L K T V K I Q D T N L K E K A D E T V K S L E K R Y A S Y D Q L Y K E Y
UniRef90_UPI00047E23A0 S K K E F E T K E I E D E G L Q G K S K E L Y R I M M E R Y E I H D V L Y E D Y
UniRef90_U5L8J5 S K E E F A I P D I E D K E A K E S A E E L Y K V M M D R Y S V H D E L Y S E Y
UniRef90_W7ZHL7 G Y N V F E N A E L E D E N L V D L A N D V Q E A M D N R Y A S Y Q D L H T I Y
UniRef90_K0L3M9 S E Q D F K K A N I D N D V K R K E V K Q L D D V L K E K Y K L H G E Y A K A Y
UniRef90_N0AY03 S K K K F E T T K L D D S D L K N R A N D L Y E L M N K R Y E I H D L L Y E N Y
UniRef90_UPI00047DD1BB K K L T K D I E K L D D E K L K K N A E K M Y D T M M K R Y E L H E E L Y R K Y
UniRef90_UPI00047ADBE8 S E K E F K S A N I K D K K L T K L A N D L Y E T M M K R Y E A H D E L F T E Y
UniRef90_M7PAZ9 A R K E L E I G K D D E D P V R E A V G K L K Q S M S D R Y D A H E E F S E V Y
UniRef90_D6XTH4 S Y E E F N E A D D L D E E V L P Y A E D V M S A M D E R Y D H Y Q E L H S S Y
UniRef90_S2Y4N7 S E K D F E S N K I E D K D D K K E Y D Q L N Q A L E E K Y K K H K D F V K G Y
UniRef90_UPI000417E3F8 A K E A F E E A K I S D E S Y K Q E A E S L V Q S M A A R F E A H E T L N N T Y
UniRef90_UPI0002FC0F2A S R S R M E T S E I S N E T N R D K A E S L V E A M E A R Y Q A H G D M I E S Y
UniRef90_UPI0002881F45 S E S E F E E A K K S A E T I K K K A E T A A D H M E K R Y A A Y S S M S E E Y
UniRef90_V6SZS1 S E K E F E N V D I D D A D L K K Q A T E L Q A T M N E R Y E I H D K L Y E N Y
UniRef90_W1SD78 S E Q E F R K A D I K D E E L K K L I N E L N E I M T Q R Y R A H E E L Y K E Y
UniRef90_UPI000414A4BB S N E A F E D A D I S N E E Y K K E A D S L V A A M N A R F D A H E T M T D T Y
UniRef90_UPI000225BA90 S R K E F E N S K V E D K E A K E K A L A M Y E T M E K R Y D A Y D K L H A A Y
UniRef90_K6CBN5 S K K E F K V G K L K D E K M K T I A E D L L K V M N Q R Y E S Y D K L Y K N Y
UniRef90_UPI0004082F2A S Y K E F K K P D L D D Q K L Q Q K A K K V T S S M N L R Y K T Y N K M Y D T Y
UniRef90_C3APW6 A Q E E V K S V D I E N G K L K E Q A D K V K N T Y E K R Y E S F K K M Y D N Y
UniRef90_D4FW46 S E T E F E E A H I K E K D I K E K A D A A A N H M E K R Y T S Y G T M Y K E Y
UniRef90_W4QE33 S F H E F E I E Q Y E N Q F N E T E L E E L F E T M N T R Y E A Y H S L N E V Y
UniRef90_UPI0002F920F2 S E K E F K K A Q K H L D N I S D K D K K L N D A L K N K Y K A H D N Y A N A Y
UniRef90_W9AI71 A K E E F Q K T E D L I A Q L K E T A E N M Y S T M M D R F T A Y E K L Y Q V Y
UniRef90_UPI0002F5F5FC S K S E F E Q A D L E D E A L Q E T A Q E M V E K M N E R Y Q A F L A L H E A Y
UniRef90_N4WVV1 A E E E F L K A K D L D D P L Q E T A N E M I T T M E E R Y Q T Y Y E L N D A Y
UniRef90_Q8ER95 S D I D N E E A L S N A E N M V E V M N Q R Y E S Y Y T L N D A Y
UniRef90_UPI0001E89894 A R G Q F E E V K T S I E E L K K E A Q A L Y Q L M E Q R Y E A Y M T L S N H Y
UniRef90_UPI00034B7915 S Y K E F R E S E V D E G A P R N Q L K V L V E T M S K R Y D R Y Q L L Y T N Y
UniRef90_K9B1T7 S K A S D Q V D D I E D K E D K K E I T E L D D A L K D K F K K H D K Y V K G Y
UniRef90_UPI00034DBA15 A V A L E E D F E N Q Q E E S L T N A E N M V E V M N Q R Y E S Y Y T L N D A Y
UniRef90_UPI00037C9F3D A Q A E T K D V D L K D K K L Q E Q A K K V Q D A Y K G R Y D A F N K M Y D S Y
UniRef90_UPI00035DCBA3 S K K E F D K I D L K D D Q L R G K A K E L Q K L M I Q R Y E S H E L L V E A Y
UniRef90_F9L8S3 S E K E F K K A H I D N S A K K K E V T Q L N D A L K E K Y E A H D A Y A K A Y
UniRef90_UPI0003723183 S R N A M E S S E I S N E S Y K E K A Q S L I D S M E S R F T A H E E M I S S Y
UniRef90_W4VF53 A E Q E F L N V K E S V S E Q K N I A N E L I Q T M E S R Y D T Y Q Q L N E A F
UniRef90_UPI0000167471 X Q E E V K S A D I E D K K L K D Q A D K V K S T Y E K R H D S F N K M Y D S Y
UniRef90_R9CCY7 S Q E K F E T I T T D E K Q L K E K A D E L Y K T M M A R Y E E H D K L Y A N Y
UniRef90_A0A033V5B7 S K D I Y E S S N I E D E E E Q L K E A K D L K N A L D E K Y K L H N D V M N A Y
UniRef90_Q5WFA4 G Y E E F S A A N L E E E P L A E L G Q T L K E A M E A R Y E S Y Q K L H E V Y
UniRef90_UPI00047CE7DF G Y E E F L K E K L E D D N V K E S A Q G L L T I M E N R Y N S Y Q A L F T E Y
UniRef90_UPI000478F133 S Y D Q F H E S S Q M E E E K Q Q A A D R V F E A M E E R Y E A Y Q D L H D Q Y
UniRef90_T0JEP6 A E T E D L I A E I E D E K L K E T A T S M T E V M Q Q R Y E T Y H Q L N D A Y
UniRef90_UPI00036F4DB0 A E E E F S Q V K E Y V D E L K E I A E E M I Q T M D Q R Y E V Y Q Q L N E A Y
UniRef90_A0A023DCQ9 G K R Q L E M S G L H D E H A K Q Q I N Q F I E V A E Q R Y E T Y D K L Y V Q Y
UniRef90_W4QNU2 S Y N E F Q V D K I N K D E L I T M L Q E L E D S M N T R Y S N Y N E L N E L Y
UniRef90_A9VUJ4 A Q K E T T S V H I E D E K L Q K Q A K K V G E V Y K N R Y E V F Q K M D K I C
UniRef90_I0JLY5 A K E E F N E I K E E Q A E A K E K A E E L V G T M D S R Y Q A Y Q K L Y D A Y
UniRef90_A7GNV8 A Q K E I K S V K I E D K K I Q K Q A K K V N E A Y K N R Y E S F K K M N E S Y
UniRef90_K0J7Q0 S K K E F D K E G L V D E E L K A V A I E L L D M M E E R Y Q A Y L T L H E A Y
UniRef90_L5N2I4 I D G L A K D L E E D K A E A K D E A E A L V E T M D Q R Y D T Y Q T L Y S A Y
UniRef90_UPI0003A291D6 S Y E E Y E K D D L E D E E A Y A E A E T M E E A M E A R V A A Y E E M Y G H Y
UniRef90_E8SF77 S N K I E D E D D K K E F D E L N K A I E E K N K K H D A F V K G Y
UniRef90_UPI00031E2ED5 A Q A S L S S E E T K Q E E I K T S L L E L R A L M E E R Y Q A H K V V S A E Y
UniRef90_UPI000424F8A8 S R E E F E K S E D L I K E V K E K A L S M Y E A M I N R F E A Y E T L N K T Y
UniRef90_UPI0002D4EBB8 S K K I Y E S S K I E D E E Q S K E A A D L K K A L D E K Y K V H D K V I K G Y

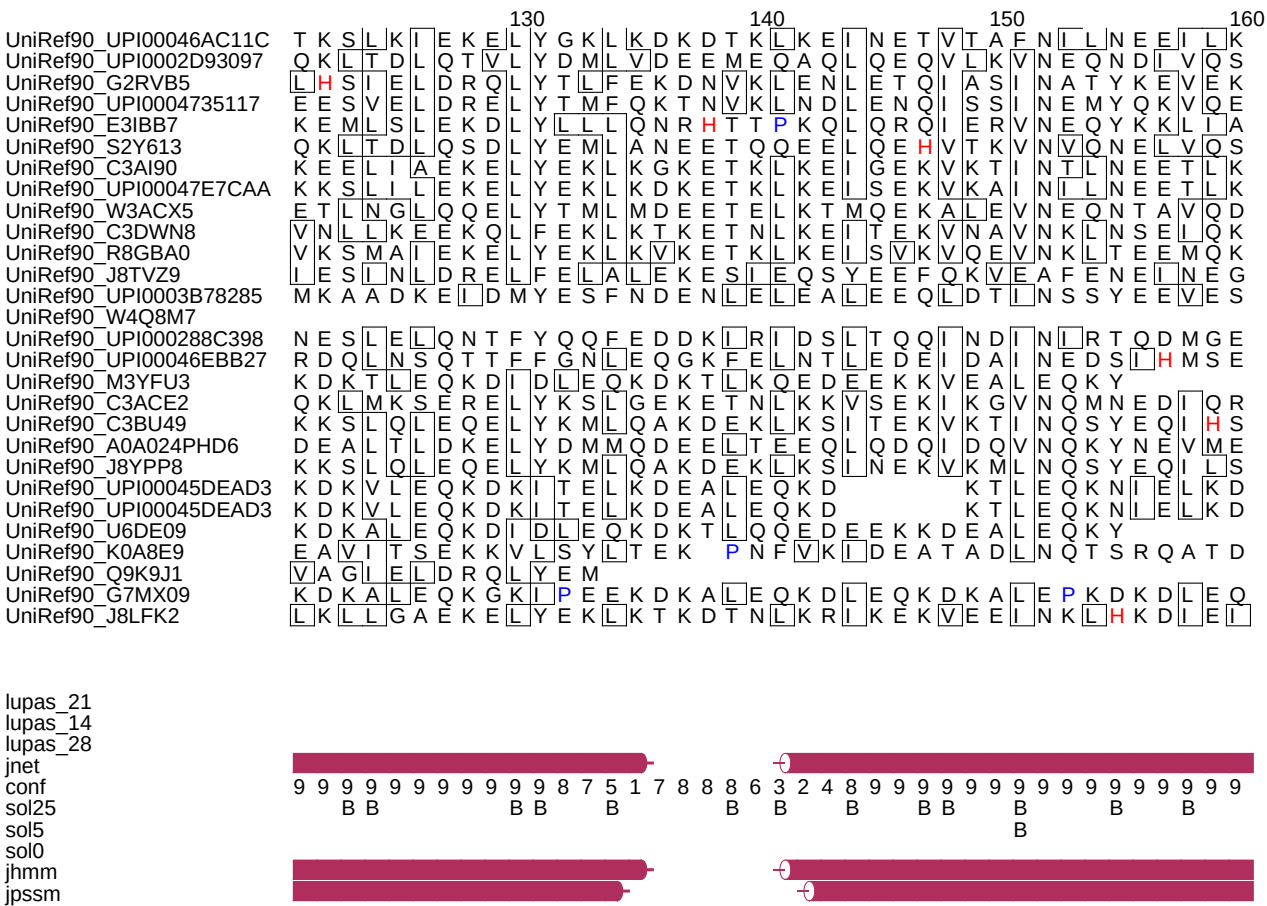

130
140
150
160
QUERY
UniRef90_M5PEA0
UniRef90_UPI0002890B9A
UniRef90_UPI00031BD68B
UniRef90_Q4L5A6
UniRef90_UPI00047BDFED
UniRef90_I3E596
UniRef90_M1KT31
UniRef90_E3DYH6
UniRef90_Q49WL7
UniRef90_D3QDS0
UniRef90_E5WDI8
UniRef90_UPI000262644C
UniRef90_A0A019YS60
UniRef90_A0A023CR44
UniRef90_UPI00047E4CE9
UniRef90_UPI00047ADE5B
UniRef90_G5JM45
UniRef90_C5D833
UniRef90_C5QR99
UniRef90_T5HUJ7
UniRef90_E6TUN4
UniRef90_F4E615
UniRef90_U1EQT4
UniRef90_B9DQ13
UniRef90_I3MXP4
UniRef90_X0SIV6
UniRef90_B9EB05
UniRef90_H0DH74
UniRef90_W7YUH6
UniRef90_UPI00038020C9
UniRef90_A0A024Q156
UniRef90_L7WXZ3
UniRef90_UPI0002897346
UniRef90_K6C352
UniRef90_B4AEG2
UniRef90_UPI00047E23A0
UniRef90_U5L8J5
UniRef90_W7ZHL7
UniRef90_K0L3M9
UniRef90_N0AY03
UniRef90_UPI00047DD1BB
UniRef90_UPI00047ADBE8
UniRef90_M7PAZ9
UniRef90_D6XTH4
UniRef90_S2Y4N7
UniRef90_UPI000417E3F8
UniRef90_UPI0002FC0F2A
UniRef90_UPI0002881F45
UniRef90_V6SZS1
UniRef90_W1SD78
UniRef90_UPI000414A4BB
UniRef90_UPI000225BA90
UniRef90_K6CBN5
UniRef90_UPI0004082F2A
UniRef90_C3APW6
UniRef90_D4FW46
UniRef90_W4QE33
UniRef90_UPI0002F920F2
UniRef90_W9AI71
UniRef90_UPI0002F5F5FC
UniRef90_N4WVV1
UniRef90_Q8ER95
UniRef90_UPI0001E89894
UniRef90_UPI00034B7915
UniRef90_K9B1T7
UniRef90_UPI00034DBA15
UniRef90_UPI00037C9F3D
UniRef90_UPI00035DCBA3
UniRef90_F9L8S3
UniRef90_UPI0003723183
UniRef90_W4VF53
UniRef90_UPI0000167471
UniRef90_R9CCY7
UniRef90_A0A033V5B7
UniRef90_Q5WFA4
UniRef90_UPI00047CE7DF
UniRef90_UPI000478F133
UniRef90_T0JEP6
UniRef90_UPI00036F4DB0
UniRef90_A0A023DCQ9
UniRef90_W4QNU2
UniRef90_A9VUJ4
UniRef90_I0JLY5
UniRef90_A7GNV8
UniRef90_K0J7Q0
UniRef90_L5N2I4
UniRef90_UPI0003A291D6
UniRef90_E8SF77
UniRef90_UPI00031E2ED5
UniRef90_UPI000424F8A8
UniRef90_UPI0002D4EBB8

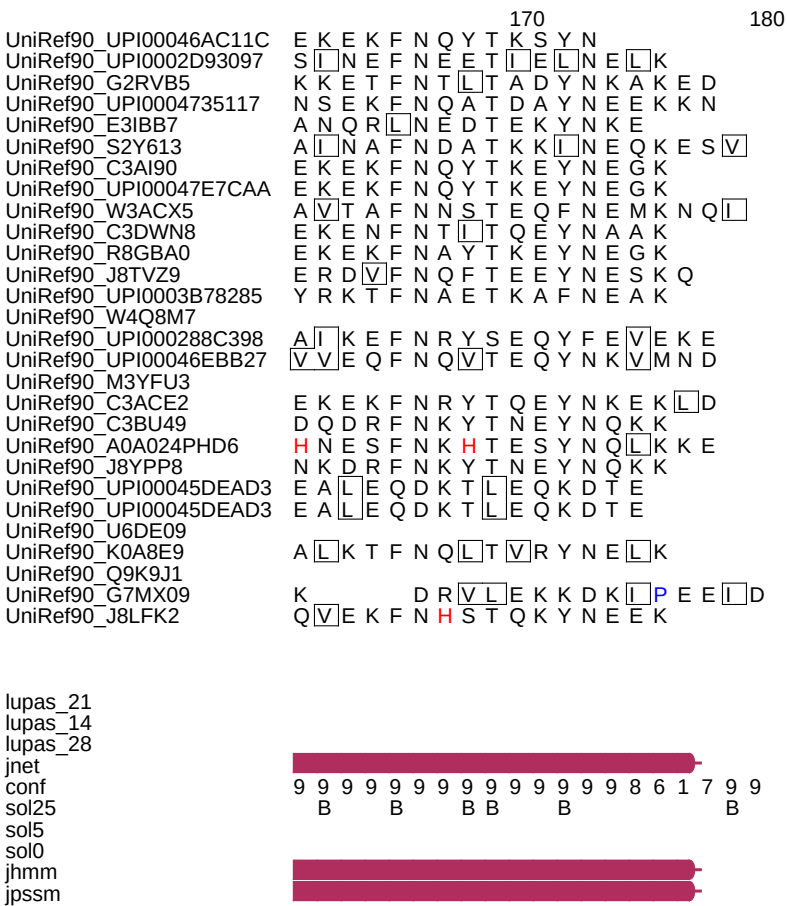

170
180
QUERY V S D K Y T K V L N K V Q K E K Q D V D
UniRef90_M5PEA0 Q S E H F N A Y T K D Y N K A R K D
UniRef90_UPI0002890B9A Y S G E F N E Q T E K Y N E A R E D
UniRef90_UPI00031BD68B S N E Q F N E F T E Q Y N E I K
UniRef90_Q4L5A6 K F K D Y S K A M N T V N K E K Q D V D
UniRef90_UPI00047BDFED Q N E E F N K Y T E Q Y N E Q K
UniRef90_I3E596 A N K A F N K L T E D Y N N A K R N
UniRef90_M1KT31 Q A D E F N Q F T K D Y N K E K E
UniRef90_E3DYH6 Q S E E F N K Q T E K Y N Q A R E E
UniRef90_Q49WL7 A F K K Y S D T M N K V N K E K E D V D
UniRef90_D3QDS0 K F E A Y I K A L N K V N K E K G D I D
UniRef90_E5WDI8 S N K Q F N E K T K E Y N E A K L D
UniRef90_UPI000262644C A N K S F N E L T T E Y N A L K K E
UniRef90_A0A019YS60 I T D E Y S K V N K K V A R E K Q D V D
UniRef90_A0A023CR44 I N E Q F N A Y T K E Y N R E K K
UniRef90_UPI00047E4CE9 E N E N F N K L T A D F N N S R D D
UniRef90_UPI00047ADE5B A N K K F N Q L T K E Y N D Q K
UniRef90_G5JM45 K F N K Y A K A M N K V T K E K Q D V D
UniRef90_C5D833 I N D Q F N E Y T E K Y N K E K K
UniRef90_C5QR99 K F N A Y S K A M R K V T Q E K Q D V D
UniRef90_T5HUJ7 E S K H F N E Y T K D Y N K A R K D
UniRef90_E6TUN4 F N D M F N Q Y T T A F N D A K R D
UniRef90_F4E615 Q A G A F N K Q T K E Y N Q A R E E
UniRef90_U1EQT4 Q F K A Y S K A M K K V D E E K K D V D
UniRef90_B9DQ13 K I K D Y S K T R N E R G K Q
UniRef90_I3MXP4 K T Q E Q D K A L E K K D Q
UniRef90_X0SIV6 L K E Q F N D F T T Q Y N Q S K Q
UniRef90_B9EB05 D T T T Y A N T L R A V E Q E K T
UniRef90_H0DH74 S S K K Y Q D A S K K A D E Q K Q N A E
UniRef90_W7YUH6 A T N Q F N E Y T D A Y N D A K E
UniRef90_UPI00038020C9 T N E Q F N E L T D T Y N V K K K E
UniRef90_A0A024Q156 Y N K K F N E Y T V E Y N A I K K D
UniRef90_L7WXZ3 K F K A Y S K A M N K V N K E K Q D V D
UniRef90_UPI0002897346 A N E T F N K L T D Q Y N K A K
UniRef90_K6C352 A N E K F N M L T D Q Y N D K K Q
UniRef90_B4AEG2 E G K K F N Q Y T K Q L N E H K Q
UniRef90_UPI00047E23A0 S N K Q F N E K T K E Y N E A K
UniRef90_U5L8J5 H N K E F N E L T K K Y N E I K
UniRef90_W7ZHL7 A T E Q F N E Y T T A Y N D A K R
UniRef90_K0L3M9
UniRef90_N0AY03 A N E Q F N Q Q T K K Y N E T K
UniRef90_UPI00047DD1BB L N G Q F N K Q T E A Y N E A K
UniRef90_UPI00047ADBE8 A N E K F N M L T E Q Y N D K K
UniRef90_M7PAZ9 A A N A F N E A T E A V N T V K K E
UniRef90_D6XTH4 L N D E F N E L T R Q Y N D R K
UniRef90_S2Y4N7 K V D N Y T K A I R K V Q T E K Q D V D
UniRef90_UPI000417E3F8 A S S T F T E E T E K V N Q I K T E I E
UniRef90_UPI0002FC0F2A T G A A F S E E T E K V N E L K K E I
UniRef90_UPI0002881F45 Q S G E F D V Q T E K Y N K A R E D
UniRef90_V6SZS1 N N K K F N E K T D Q Y N Q E K M D
UniRef90_W1SD78 A N E N F N K L T E Q Y N D K K
UniRef90_UPI000414A4BB A S E S F A A E T E K I N R L K G E I E
UniRef90_UPI000225BA90 A N E A F N T F T T E Y N T L K K
UniRef90_K6CBN5 E N E R F N E L T D T Y N K K K K E
UniRef90_UPI0004082F2A L N K T F N R Y T K E Y N Q S K
UniRef90_C3APW6 E K D K F N E Y T K S Y N T E K
UniRef90_D4FW46 Y S G E F N E Q T E K Y N K A R E D
UniRef90_W4QE33 Q T Q S F N R A T D L Y N E S K R
UniRef90_UPI0002F920F2 S F D K Y K D A M E K V N K E K Q D V D
UniRef90_W9AI71 A N E S F N E S T A S Y N D L K K E
UniRef90_UPI0002F5F5FC A N H A F N D A T D A F N E R K R E
UniRef90_N4WVV1 L N D T F N E L T N T Y N D Q K
UniRef90_Q8ER95 A N E S F N E Y T V E Y N A L K R E
UniRef90_UPI0001E89894 A N K S F N D L T D Q Y N K A K L D
UniRef90_UPI00034B7915 H K E A F N E L T R A Y N E T K K
UniRef90_K9B1T7 K V E D Y S K A S K K V S K E Y Q D V
UniRef90_UPI00034DBA15 A N E G F N E F T V E Y N A L K R E
UniRef90_UPI00037C9F3D P K N K F N E Y T K Q Y N E E K
UniRef90_UPI00035DCBA3 A S E E F N K F T E E F N E E K E
UniRef90_F9L8S3 K F N T Y S K A M R K V T Q E K Q D V D
UniRef90_UPI0003723183
UniRef90_W4VF53
UniRef90_UPI0000167471 E K D K F N E F T K S Y N T E K
UniRef90_R9CCY7
UniRef90_A0A033V5B7 V V T D Y Q N T L R K V Q Q E K K D V
UniRef90_Q5WFA4 A T D L F N E H T N T Y N D A K Q
UniRef90_UPI00047CE7DF
UniRef90_UPI000478F133 K N N A F N D A T E E F N E E K T N
UniRef90_T0JEP6 L N N S F N E H T V D Y N E Q K K
UniRef90_UPI00036F4DB0 I N T E F N E L T D T Y N Q L K E D
UniRef90_A0A023DCQ9 I N G Q F N A Y T K K Y N R E K K
UniRef90_W4QNU2 K K E D F N T S T D T Y N Q L K R
UniRef90_A9VUJ4 E K A K F N Q Y T K D Y N E G K
UniRef90_I0JLY5 A N K E F N E Y T D Q Y N N E K K E
UniRef90_A7GNV8 E R E K F N Q Y T K E Y N E G K
UniRef90_K0J7Q0 S N G A F N D A T E S F N S M K R E
UniRef90_L5N2I4 K N K E F N E Y T D A Y N N K K K E
UniRef90_UPI0003A291D6 A K D D F N T Y T D E Y N E A K
UniRef90_E8SF77 K V E D Y T K A I R K V Q T E K Q D V D
UniRef90_UPI00031E2ED5 A I N D F N E K T Q K V N E K K T A V
UniRef90_UPI000424F8A8 A N D T F N K L T M D Y N E L K K
UniRef90_UPI0002D4EBB8 V V T E Y Q N N L K K V Q Q E K K D V


1
10
20
30
40
UniRef90_UPI00046AC11C K P E E E L Y I A F E N A A N Q E K P L F D N V K I L E K L E I R G Q E
UniRef90_UPI0002D93097 E K L S E T L A T I Y E E E Q G Y R D A Q Q Q L T V L E K K E Q S
UniRef90_G2RVB5 Y N G L E K V V A Q E K Q F A D Q Q K P L A D L E Q Q E N A
UniRef90_UPI0004735117 Y K A L E K V A D Q E K Q F I K E Q Q P M T A L E E K E N V
UniRef90_E3IBB7
UniRef90_S2Y613 D S L T K I Y E E E Q G Y R D A Q A K L A E L E K K E Q L
UniRef90_C3AI90 L Y V A F E N A A N Q E K A L F D N V K T F E Q L E T K E Q E
UniRef90_UPI00047E7CAA K P E E E L Y V A F E N A A N Q E K T L F D N V K I F E Q L E T K A Q E
UniRef90_W3ACX5
UniRef90_C3DWN8 K N P E K Q L Y T T F E N T A S K E K L L V N N K K K L E H L E T K T Q E
UniRef90_R8GBA0 E K P E E N L F V A F E N A A K Q E K T V F E D A K K L E T L E K Q G Q E
UniRef90_J8TVZ9
UniRef90_UPI0003B78285 D Q W S K A A G A E E D F P E K D E E L T E L A K E E Q S
UniRef90_W4Q8M7 P A E S V Y H Q L E A A V E L E I P F E Q Q Q A P L Q K A E L R E N E
UniRef90_UPI000288C398 D K K Q A S K I Y K I M A K S A E F E K K F A A T Q L E L Y E T R K N A Q A
UniRef90_UPI00046EBB27 S D H K Q A A E I H E K M E E S A S I E E K F V E N Q K D L D V N R K R V Q E
UniRef90_M3YFU3 Q K D K A L E E K N K A V E Q Q D K C L E Q K G R D
UniRef90_C3ACE2 K P E A E L Y V A F E N A M K Q E K M V S E D A K K L E V L E K E G Q E
UniRef90_C3BU49 K P E E K L Y V A F E S A T K Q E K T M F E D T K K L A A L E K Q G Q E
UniRef90_A0A024PHD6 E E I Y D H L E K A V T L E D T F R E Q Q Q P M V E L E T K E Q Q
UniRef90_J8YPP8 E K L Y V A F E S A T K Q E K T M F E D T K K L A E L E K Q G Q E
UniRef90_UPI00045DEAD3
UniRef90_UPI00045DEAD3
UniRef90_U6DE09 Q K D K A L E E K N K A V E Q Q D K C L E Q K G R D
UniRef90_K0A8E9 D P A S S I Y D Q L E K Q A Q L E Q K A E T I A E Q R T R Q D E V S V N
UniRef90_Q9K9J1 E K I H E H L E A A V E L E E G F L E Q Q A P L R L A E K E E Y E
UniRef90_G7MX09 Q K D E A L D I K N E A V K Q Q D K A L E Q K G R
UniRef90_J8LFK2 L Y R L F E A A A E Q E K D L A N N V I K L K N F E M Q D Q N
lupas_21 C C C C C C C C C C C C C C C C C
lupas_14 C C C C C C C C C C
lupas_28 c c c c c c c c c c c c c c c c c
jnet
conf 9 9 7 2 8 9 9 9 9 9 9 9 9 9 9 8 7 4 2 0 2 7 7 7 6 2 7 9 9 9 9 9 9 9 9 9
sol25 B B B B B B B B B B B
sol5 B B
sol0
jhmm
jpssm


50
60
70
80
UniRef90_UPI00046AC11C
UniRef90_UPI0002D93097
UniRef90_G2RVB5
UniRef90_UPI0004735117
UniRef90_E3IBB7
UniRef90_S2Y613
UniRef90_C3AI90
UniRef90_UPI00047E7CAA
UniRef90_W3ACX5
UniRef90_C3DWN8
UniRef90_R8GBA0
UniRef90_J8TVZ9
UniRef90_UPI0003B78285
UniRef90_W4Q8M7
UniRef90_UPI000288C398
UniRef90_UPI00046EBB27
UniRef90_M3YFU3
UniRef90_C3ACE2
UniRef90_C3BU49
UniRef90_A0A024PHD6
UniRef90_J8YPP8
UniRef90_UPI00045DEAD3
UniRef90_UPI00045DEAD3
UniRef90_U6DE09
UniRef90_K0A8E9
UniRef90_Q9K9J1
UniRef90_G7MX09
UniRef90_J8LFK2
lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm


90
100
110
120
UniRef90_UPI00046AC11C
UniRef90_UPI0002D93097
UniRef90_G2RVB5
UniRef90_UPI0004735117
UniRef90_E3IBB7
UniRef90_S2Y613
UniRef90_C3AI90
UniRef90_UPI00047E7CAA
UniRef90_W3ACX5
UniRef90_C3DWN8
UniRef90_R8GBA0
UniRef90_J8TVZ9
UniRef90_UPI0003B78285
UniRef90_W4Q8M7
UniRef90_UPI000288C398
UniRef90_UPI00046EBB27
UniRef90_M3YFU3
UniRef90_C3ACE2
UniRef90_C3BU49
UniRef90_A0A024PHD6
UniRef90_J8YPP8
UniRef90_UPI00045DEAD3
UniRef90_UPI00045DEAD3
UniRef90_U6DE09
UniRef90_K0A8E9
UniRef90_Q9K9J1
UniRef90_G7MX09
UniRef90_J8LFK2
lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm


130
140
150
160
UniRef90_UPI00046AC11C T K S L K I E K E L Y G K L K D K D T K L K E I N E T V T A F N I L N E E I L K
UniRef90_UPI0002D93097 Q K L T D L Q T V L Y D M L V D E E M E Q A Q L Q E Q V L K V N E Q N D I V Q S
UniRef90_G2RVB5 L H S I E L D R Q L Y T L F E K D N V K L E N L E T Q I A S I N A T Y K E V E K
UniRef90_UPI0004735117 E E S V E L D R E L Y T M F Q K T N V K L N D L E N Q I S S I N E M Y Q K V Q E
UniRef90_E3IBB7 K E M L S L E K D L Y L L L Q N R H T T P K Q L Q R Q I E R V N E Q Y K K L I A
UniRef90_S2Y613 Q K L T D L Q S D L Y E M L A N E E T Q Q E E L Q E H V T K V N V Q N E L V Q S
UniRef90_C3AI90 K E E L I A E K E L Y E K L K G K E T K L K E I G E K V K T I N T L N E E T L K
UniRef90_UPI00047E7CAA K K S L I L E K E L Y E K L K D K E T K L K E I S E K V K A I N I L N E E T L K
UniRef90_W3ACX5 E T L N G L Q Q E L Y T M L M D E E T E L K T M Q E K A L E V N E Q N T A V Q D
UniRef90_C3DWN8 V N L L K E E K Q L F E K L K T K E T N L K E I T E K V N A V N K L N S E I Q K
UniRef90_R8GBA0 V K S M A I E K E L Y E K L K V K E T K L K E I S V K V Q E V N K L T E E M Q K
UniRef90_J8TVZ9 I E S I N L D R E L F E L A L E K E S I E Q S Y E E F Q K V E A F E N E I N E G
UniRef90_UPI0003B78285 M K A A D K E I D M Y E S F N D E N L E L E A L E E Q L D T I N S S Y E E V E S
UniRef90_W4Q8M7
UniRef90_UPI000288C398 N E S L E L Q N T F Y Q Q F E D D K I R I D S L T Q Q I N D I N I R T Q D M G E
UniRef90_UPI00046EBB27 R D Q L N S Q T T F F G N L E Q G K F E L N T L E D E I D A I N E D S I H M S E
UniRef90_M3YFU3 K D K T L E Q K D I D L E Q K D K T L K Q E D E E K K V E A L E Q K Y
UniRef90_C3ACE2 Q K L M K S E R E L Y K S L G E K E T N L K K V S E K I K G V N Q M N E D I Q R
UniRef90_C3BU49 K K S L Q L E Q E L Y K M L Q A K D E K L K S I T E K V K T I N Q S Y E Q I H S
UniRef90_A0A024PHD6 D E A L T L D K E L Y D M M Q D E E L T E E Q L Q D Q I D Q V N Q K Y N E V M E
UniRef90_J8YPP8 K K S L Q L E Q E L Y K M L Q A K D E K L K S I N E K V K M L N Q S Y E Q I L S
UniRef90_UPI00045DEAD3 K D K V L E Q K D K I T E L K D E A L E Q K D K T L E Q K N I E L K D
UniRef90_UPI00045DEAD3 K D K V L E Q K D K I T E L K D E A L E Q K D K T L E Q K N I E L K D
UniRef90_U6DE09 K D K A L E Q K D I D L E Q K D K T L Q Q E D E E K K D E A L E Q K Y
UniRef90_K0A8E9 E A V I T S E K K V L S Y L T E K P N F V K I D E A T A D L N Q T S R Q A T D
UniRef90_Q9K9J1 V A G I E L D R Q L Y E M
UniRef90_G7MX09 K D K A L E Q K G K I P E E K D K A L E Q K D L E Q K D K A L E P K D K D L E Q
UniRef90_J8LFK2 L K L L G A E K E L Y E K L K T K D T N L K R I K E K V E E I N K L H K D I E I
lupas_21
lupas_14
lupas_28
jnet
conf 9 9 9 9 9 9 9 9 9 9 8 7 5 1 7 8 8 8 6 3 2 4 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
sol25 B B B B B B B B B B B B
sol5 B
sol0
jhmm
jpssm


170
180
UniRef90_UPI00046AC11C E K E K F N Q Y T K S Y N
UniRef90_UPI0002D93097 S I N E F N E E T I E L N E L K
UniRef90_G2RVB5 K K E T F N T L T A D Y N K A K E D
UniRef90_UPI0004735117 N S E K F N Q A T D A Y N E E K K N
UniRef90_E3IBB7 A N Q R L N E D T E K Y N K E
UniRef90_S2Y613 A I N A F N D A T K K I N E Q K E S V
UniRef90_C3AI90 E K E K F N Q Y T K E Y N E G K
UniRef90_UPI00047E7CAA E K E K F N Q Y T K E Y N E G K
UniRef90_W3ACX5 A V T A F N N S T E Q F N E M K N Q I
UniRef90_C3DWN8 E K E N F N T I T Q E Y N A A K
UniRef90_R8GBA0 E K E K F N A Y T K E Y N E G K
UniRef90_J8TVZ9 E R D V F N Q F T E E Y N E S K Q
UniRef90_UPI0003B78285 Y R K T F N A E T K A F N E A K
UniRef90_W4Q8M7
UniRef90_UPI000288C398 A I K E F N R Y S E Q Y F E V E K E
UniRef90_UPI00046EBB27 V V E Q F N Q V T E Q Y N K V M N D
UniRef90_M3YFU3
UniRef90_C3ACE2 E K E K F N R Y T Q E Y N K E K L D
UniRef90_C3BU49 D Q D R F N K Y T N E Y N Q K K
UniRef90_A0A024PHD6 H N E S F N K H T E S Y N Q L K K E
UniRef90_J8YPP8 N K D R F N K Y T N E Y N Q K K
UniRef90_UPI00045DEAD3 E A L E Q D K T L E Q K D T E
UniRef90_UPI00045DEAD3 E A L E Q D K T L E Q K D T E
UniRef90_U6DE09
UniRef90_K0A8E9 A L K T F N Q L T V R Y N E L K
UniRef90_Q9K9J1
UniRef90_G7MX09 K D R V L E K K D K I P E E I D
UniRef90_J8LFK2 Q V E K F N H S T Q K Y N E E K
lupas_21
lupas_14
lupas_28
jnet
conf 9 9 9 9 9 9 9 9 9 9 9 9 9 8 6 1 7 9 9
sol25 B B B B B B
sol5
sol0
jhmm
jpssm