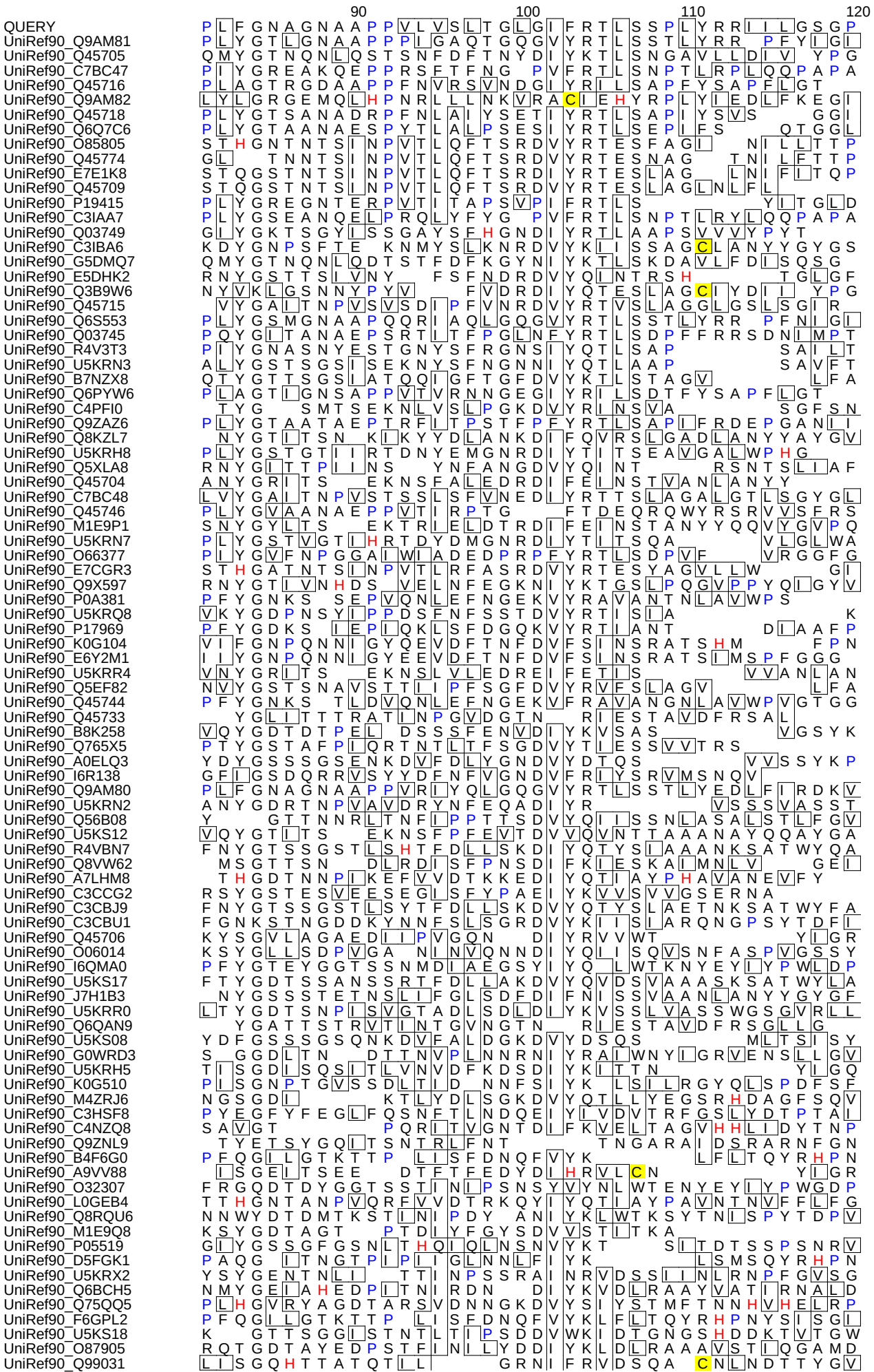
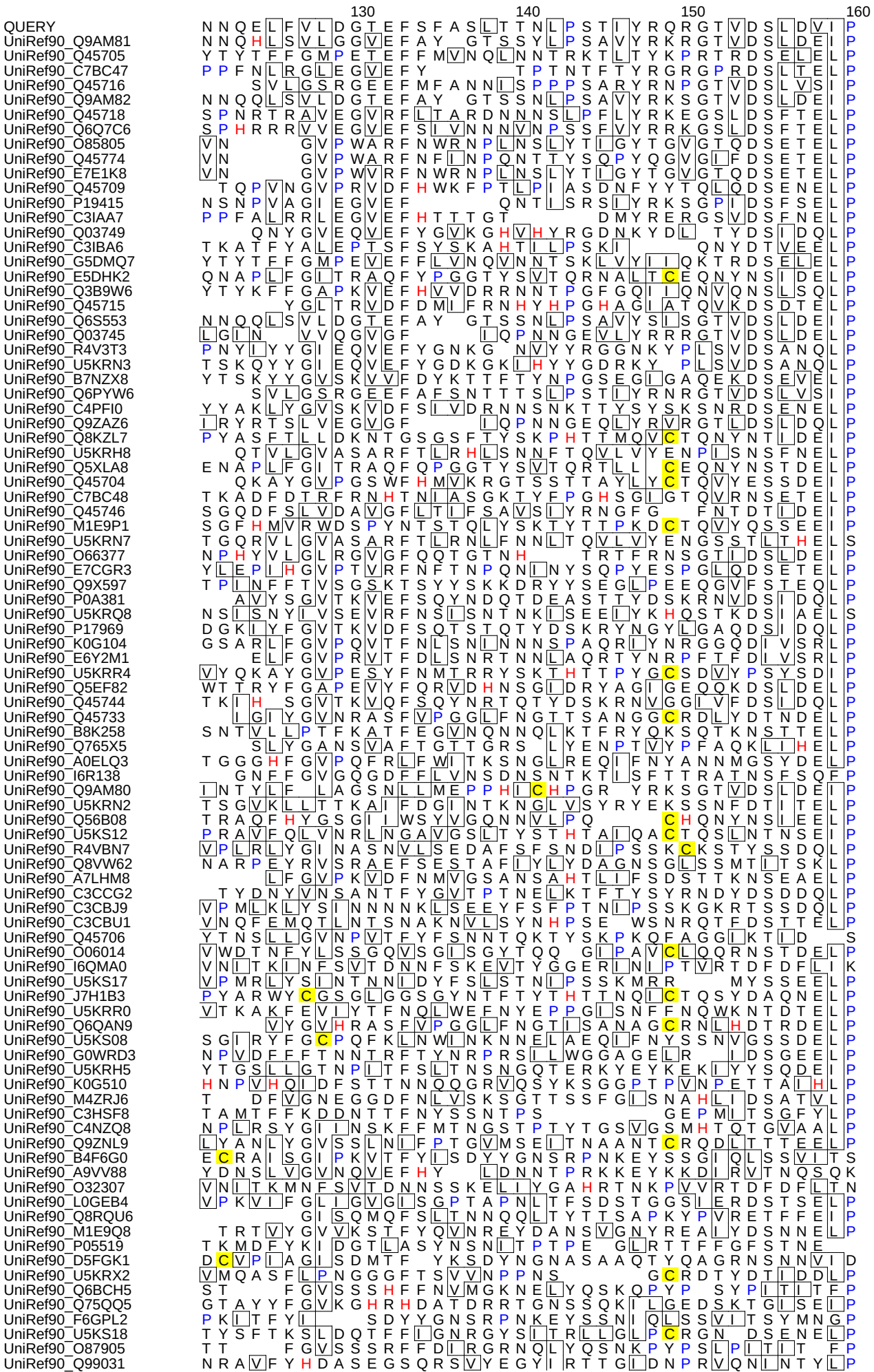
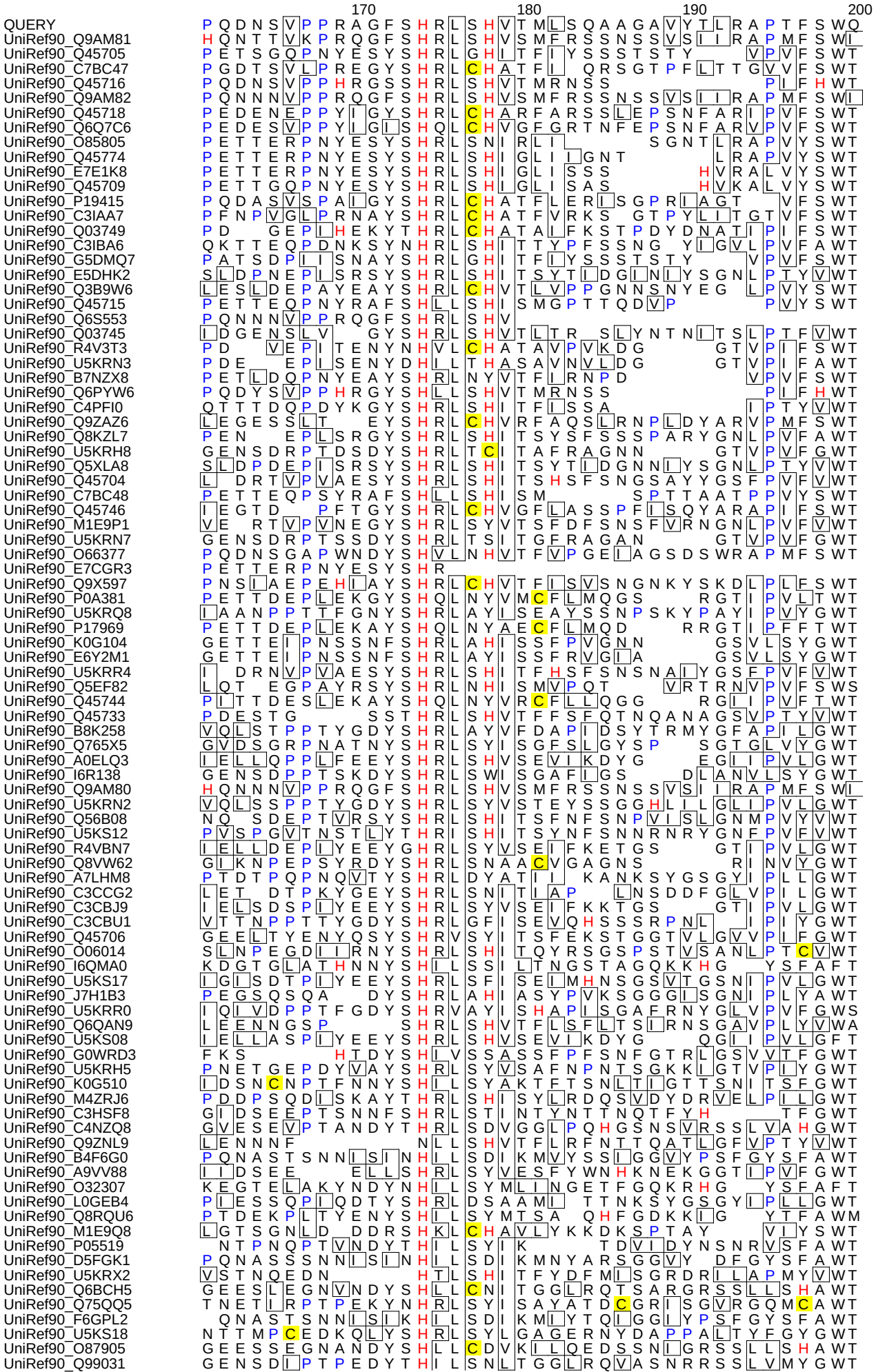
1
10
20
30
40
QUERY
UniRef90_Q9AM81
UniRef90_Q45705
UniRef90_C7BC47
UniRef90_Q45716
UniRef90_Q9AM82
UniRef90_Q45718
UniRef90_Q6Q7C6
UniRef90_O85805
UniRef90_Q45774
UniRef90_E7E1K8
UniRef90_Q45709
UniRef90_P19415
UniRef90_C3IAA7
UniRef90_Q03749
UniRef90_C3IBA6
UniRef90_G5DMQ7
UniRef90_E5DHK2
UniRef90_Q3B9W6
UniRef90_Q45715
UniRef90_Q6S553
UniRef90_Q03745
UniRef90_R4V3T3
UniRef90_U5KRN3
UniRef90_B7NZX8
UniRef90_Q6PYW6
UniRef90_C4PFI0
UniRef90_Q9ZAZ6
UniRef90_Q8KZL7
UniRef90_U5KRH8
UniRef90_Q5XLA8
UniRef90_Q45704
UniRef90_C7BC48
UniRef90_Q45746
UniRef90_M1E9P1
UniRef90_U5KRN7
UniRef90_O66377
UniRef90_E7CGR3
UniRef90_Q9X597
UniRef90_P0A381
UniRef90_U5KRQ8
UniRef90_P17969
UniRef90_K0G104
UniRef90_E6Y2M1
UniRef90_U5KRR4
UniRef90_Q5EF82
UniRef90_Q45744
UniRef90_Q45733
UniRef90_B8K258
UniRef90_Q765X5
UniRef90_A0ELQ3
UniRef90_I6R138
UniRef90_Q9AM80
UniRef90_U5KRN2
UniRef90_Q56B08
UniRef90_U5KS12
UniRef90_R4VBN7
UniRef90_Q8VW62
UniRef90_A7LHM8
UniRef90_C3CCG2
UniRef90_C3CBJ9
UniRef90_C3CBU1
UniRef90_Q45706
UniRef90_O06014
UniRef90_I6QMA0
UniRef90_U5KS17
UniRef90_J7H1B3
UniRef90_U5KRR0
UniRef90_Q6QAN9
UniRef90_U5KS08
UniRef90_G0WRD3
UniRef90_U5KRH5
UniRef90_K0G510
UniRef90_M4ZRJ6
UniRef90_C3HSF8
UniRef90_C4NZQ8
UniRef90_Q9ZNL9
UniRef90_B4F6G0
UniRef90_A9VV88
UniRef90_O32307
UniRef90_L0GEB4
UniRef90_Q8RQU6
UniRef90_M1E9Q8
UniRef90_P05519
UniRef90_D5FGK1
UniRef90_U5KRX2
UniRef90_Q6BCH5
UniRef90_Q75QQ5
UniRef90_F6GPL2
UniRef90_U5KS18
UniRef90_O87905
UniRef90_Q99031

50
60
70
80
QUERY
UniRef90_Q9AM81
UniRef90_Q45705
UniRef90_C7BC47
UniRef90_Q45716
UniRef90_Q9AM82
UniRef90_Q45718
UniRef90_Q6Q7C6
UniRef90_O85805
UniRef90_Q45774
UniRef90_E7E1K8
UniRef90_Q45709
UniRef90_P19415
UniRef90_C3IAA7
UniRef90_Q03749
UniRef90_C3IBA6
UniRef90_G5DMQ7
UniRef90_E5DHK2
UniRef90_Q3B9W6
UniRef90_Q45715
UniRef90_Q6S553
UniRef90_Q03745
UniRef90_R4V3T3
UniRef90_U5KRN3
UniRef90_B7NZX8
UniRef90_Q6PYW6
UniRef90_C4PFI0
UniRef90_Q9ZAZ6
UniRef90_Q8KZL7
UniRef90_U5KRH8
UniRef90_Q5XLA8
UniRef90_Q45704
UniRef90_C7BC48
UniRef90_Q45746
UniRef90_M1E9P1
UniRef90_U5KRN7
UniRef90_O66377
UniRef90_E7CGR3
UniRef90_Q9X597
UniRef90_P0A381
UniRef90_U5KRQ8
UniRef90_P17969
UniRef90_K0G104
UniRef90_E6Y2M1
UniRef90_U5KRR4
UniRef90_Q5EF82
UniRef90_Q45744
UniRef90_Q45733
UniRef90_B8K258
UniRef90_Q765X5
UniRef90_A0ELQ3
UniRef90_I6R138
UniRef90_Q9AM80
UniRef90_U5KRN2
UniRef90_Q56B08
UniRef90_U5KS12
UniRef90_R4VBN7
UniRef90_Q8VW62
UniRef90_A7LHM8
UniRef90_C3CCG2
UniRef90_C3CBJ9
UniRef90_C3CBU1
UniRef90_Q45706
UniRef90_O06014
UniRef90_I6QMA0
UniRef90_U5KS17
UniRef90_J7H1B3
UniRef90_U5KRR0
UniRef90_Q6QAN9
UniRef90_U5KS08
UniRef90_G0WRD3
UniRef90_U5KRH5
UniRef90_K0G510
UniRef90_M4ZRJ6
UniRef90_C3HSF8
UniRef90_C4NZQ8
UniRef90_Q9ZNL9
UniRef90_B4F6G0
UniRef90_A9VV88
UniRef90_O32307
UniRef90_L0GEB4
UniRef90_Q8RQU6
UniRef90_M1E9Q8
UniRef90_P05519
UniRef90_D5FGK1
UniRef90_U5KRX2
UniRef90_Q6BCH5
UniRef90_Q75QQ5
UniRef90_F6GPL2
UniRef90_U5KS18
UniRef90_O87905
UniRef90_Q99031

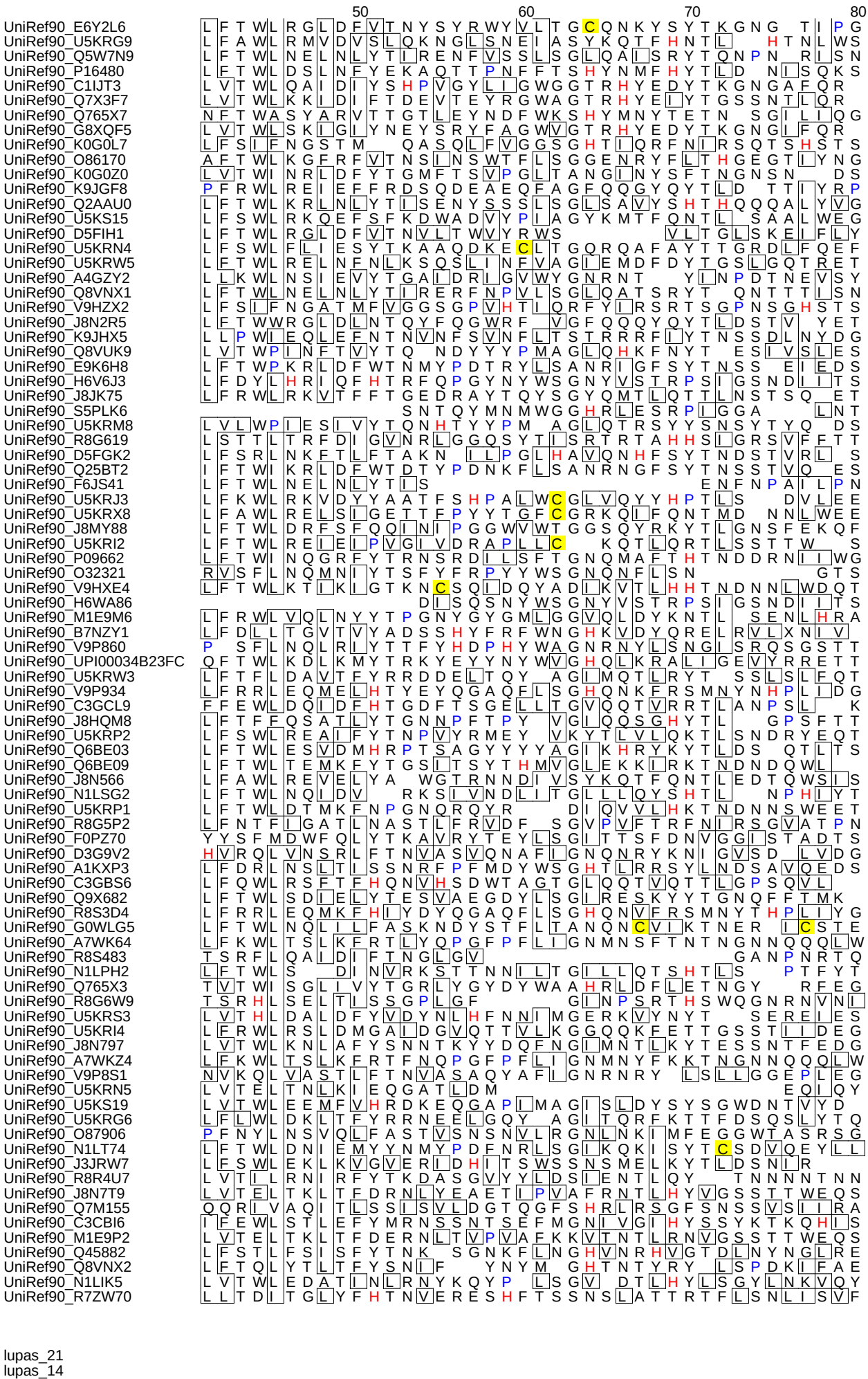

90
100
110
120
QUERY
UniRef90_Q9AM81
UniRef90_Q45705
UniRef90_C7BC47
UniRef90_Q45716
UniRef90_Q9AM82
UniRef90_Q45718
UniRef90_Q6Q7C6
UniRef90_O85805
UniRef90_Q45774
UniRef90_E7E1K8
UniRef90_Q45709
UniRef90_P19415
UniRef90_C3IAA7
UniRef90_Q03749
UniRef90_C3IBA6
UniRef90_G5DMQ7
UniRef90_E5DHK2
UniRef90_Q3B9W6
UniRef90_Q45715
UniRef90_Q6S553
UniRef90_Q03745
UniRef90_R4V3T3
UniRef90_U5KRN3
UniRef90_B7NZX8
UniRef90_Q6PYW6
UniRef90_C4PFI0
UniRef90_Q9ZAZ6
UniRef90_Q8KZL7
UniRef90_U5KRH8
UniRef90_Q5XLA8
UniRef90_Q45704
UniRef90_C7BC48
UniRef90_Q45746
UniRef90_M1E9P1
UniRef90_U5KRN7
UniRef90_O66377
UniRef90_E7CGR3
UniRef90_Q9X597
UniRef90_P0A381
UniRef90_U5KRQ8
UniRef90_P17969
UniRef90_K0G104
UniRef90_E6Y2M1
UniRef90_U5KRR4
UniRef90_Q5EF82
UniRef90_Q45744
UniRef90_Q45733
UniRef90_B8K258
UniRef90_Q765X5
UniRef90_A0ELQ3
UniRef90_I6R138
UniRef90_Q9AM80
UniRef90_U5KRN2
UniRef90_Q56B08
UniRef90_U5KS12
UniRef90_R4VBN7
UniRef90_Q8VW62
UniRef90_A7LHM8
UniRef90_C3CCG2
UniRef90_C3CBJ9
UniRef90_C3CBU1
UniRef90_Q45706
UniRef90_O06014
UniRef90_I6QMA0
UniRef90_U5KS17
UniRef90_J7H1B3
UniRef90_U5KRR0
UniRef90_Q6QAN9
UniRef90_U5KS08
UniRef90_G0WRD3
UniRef90_U5KRH5
UniRef90_K0G510
UniRef90_M4ZRJ6
UniRef90_C3HSF8
UniRef90_C4NZQ8
UniRef90_Q9ZNL9
UniRef90_B4F6G0
UniRef90_A9VV88
UniRef90_O32307
UniRef90_L0GEB4
UniRef90_Q8RQU6
UniRef90_M1E9Q8
UniRef90_P05519
UniRef90_D5FGK1
UniRef90_U5KRX2
UniRef90_Q6BCH5
UniRef90_Q75QQ5
UniRef90_F6GPL2
UniRef90_U5KS18
UniRef90_O87905
UniRef90_Q99031


130
140
150
160
QUERY
UniRef90_Q9AM81
UniRef90_Q45705
UniRef90_C7BC47
UniRef90_Q45716
UniRef90_Q9AM82
UniRef90_Q45718
UniRef90_Q6Q7C6
UniRef90_O85805
UniRef90_Q45774
UniRef90_E7E1K8
UniRef90_Q45709
UniRef90_P19415
UniRef90_C3IAA7
UniRef90_Q03749
UniRef90_C3IBA6
UniRef90_G5DMQ7
UniRef90_E5DHK2
UniRef90_Q3B9W6
UniRef90_Q45715
UniRef90_Q6S553
UniRef90_Q03745
UniRef90_R4V3T3
UniRef90_U5KRN3
UniRef90_B7NZX8
UniRef90_Q6PYW6
UniRef90_C4PFI0
UniRef90_Q9ZAZ6
UniRef90_Q8KZL7
UniRef90_U5KRH8
UniRef90_Q5XLA8
UniRef90_Q45704
UniRef90_C7BC48
UniRef90_Q45746
UniRef90_M1E9P1
UniRef90_U5KRN7
UniRef90_O66377
UniRef90_E7CGR3
UniRef90_Q9X597
UniRef90_P0A381
UniRef90_U5KRQ8
UniRef90_P17969
UniRef90_K0G104
UniRef90_E6Y2M1
UniRef90_U5KRR4
UniRef90_Q5EF82
UniRef90_Q45744
UniRef90_Q45733
UniRef90_B8K258
UniRef90_Q765X5
UniRef90_A0ELQ3
UniRef90_I6R138
UniRef90_Q9AM80
UniRef90_U5KRN2
UniRef90_Q56B08
UniRef90_U5KS12
UniRef90_R4VBN7
UniRef90_Q8VW62
UniRef90_A7LHM8
UniRef90_C3CCG2
UniRef90_C3CBJ9
UniRef90_C3CBU1
UniRef90_Q45706
UniRef90_O06014
UniRef90_I6QMA0
UniRef90_U5KS17
UniRef90_J7H1B3
UniRef90_U5KRR0
UniRef90_Q6QAN9
UniRef90_U5KS08
UniRef90_G0WRD3
UniRef90_U5KRH5
UniRef90_K0G510
UniRef90_M4ZRJ6
UniRef90_C3HSF8
UniRef90_C4NZQ8
UniRef90_Q9ZNL9
UniRef90_B4F6G0
UniRef90_A9VV88
UniRef90_O32307
UniRef90_L0GEB4
UniRef90_Q8RQU6
UniRef90_M1E9Q8
UniRef90_P05519
UniRef90_D5FGK1
UniRef90_U5KRX2
UniRef90_Q6BCH5
UniRef90_Q75QQ5
UniRef90_F6GPL2
UniRef90_U5KS18
UniRef90_O87905
UniRef90_Q99031

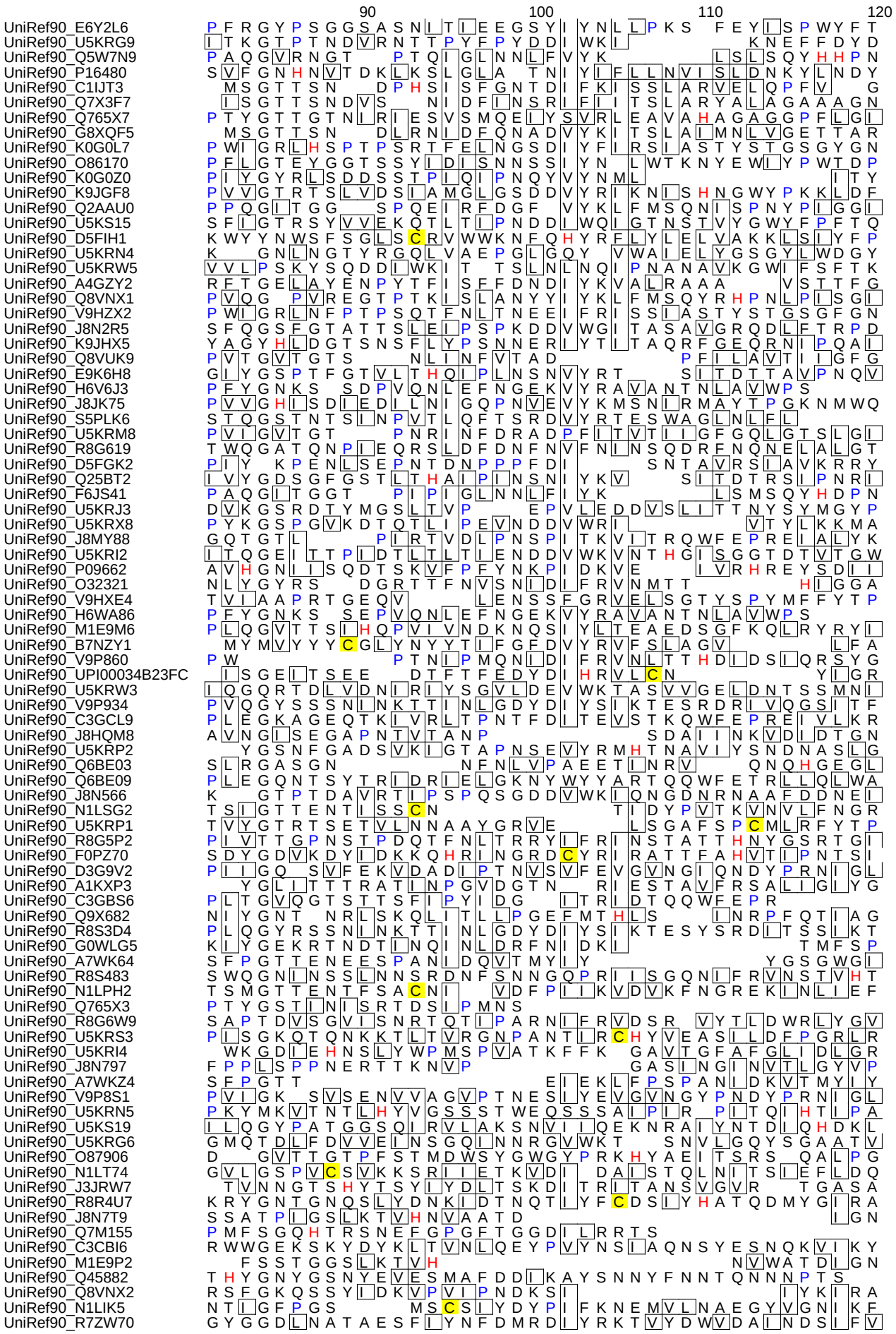

170
180
190
200
QUERY
UniRef90_Q9AM81
UniRef90_Q45705
UniRef90_C7BC47
UniRef90_Q45716
UniRef90_Q9AM82
UniRef90_Q45718
UniRef90_Q6Q7C6
UniRef90_O85805
UniRef90_Q45774
UniRef90_E7E1K8
UniRef90_Q45709
UniRef90_P19415
UniRef90_C3IAA7
UniRef90_Q03749
UniRef90_C3IBA6
UniRef90_G5DMQ7
UniRef90_E5DHK2
UniRef90_Q3B9W6
UniRef90_Q45715
UniRef90_Q6S553
UniRef90_Q03745
UniRef90_R4V3T3
UniRef90_U5KRN3
UniRef90_B7NZX8
UniRef90_Q6PYW6
UniRef90_C4PFI0
UniRef90_Q9ZAZ6
UniRef90_Q8KZL7
UniRef90_U5KRH8
UniRef90_Q5XLA8
UniRef90_Q45704
UniRef90_C7BC48
UniRef90_Q45746
UniRef90_M1E9P1
UniRef90_U5KRN7
UniRef90_O66377
UniRef90_E7CGR3
UniRef90_Q9X597
UniRef90_P0A381
UniRef90_U5KRQ8
UniRef90_P17969
UniRef90_K0G104
UniRef90_E6Y2M1
UniRef90_U5KRR4
UniRef90_Q5EF82
UniRef90_Q45744
UniRef90_Q45733
UniRef90_B8K258
UniRef90_Q765X5
UniRef90_A0ELQ3
UniRef90_I6R138
UniRef90_Q9AM80
UniRef90_U5KRN2
UniRef90_Q56B08
UniRef90_U5KS12
UniRef90_R4VBN7
UniRef90_Q8VW62
UniRef90_A7LHM8
UniRef90_C3CCG2
UniRef90_C3CBJ9
UniRef90_C3CBU1
UniRef90_Q45706
UniRef90_O06014
UniRef90_I6QMA0
UniRef90_U5KS17
UniRef90_J7H1B3
UniRef90_U5KRR0
UniRef90_Q6QAN9
UniRef90_U5KS08
UniRef90_G0WRD3
UniRef90_U5KRH5
UniRef90_K0G510
UniRef90_M4ZRJ6
UniRef90_C3HSF8
UniRef90_C4NZQ8
UniRef90_Q9ZNL9
UniRef90_B4F6G0
UniRef90_A9VV88
UniRef90_O32307
UniRef90_L0GEB4
UniRef90_Q8RQU6
UniRef90_M1E9Q8
UniRef90_P05519
UniRef90_D5FGK1
UniRef90_U5KRX2
UniRef90_Q6BCH5
UniRef90_Q75QQ5
UniRef90_F6GPL2
UniRef90_U5KS18
UniRef90_O87905
UniRef90_Q99031

QUERY H R S A E F
UniRef90_Q9AM81 L R S A E F
UniRef90_Q45705 H R S A D L
UniRef90_C7BC47 H R S A D
UniRef90_Q45716 H R S A
UniRef90_Q9AM82 H R S A E F
UniRef90_Q45718 H R S A
UniRef90_Q6Q7C6 H R S A
UniRef90_O85805 H R S A D
UniRef90_Q45774 H R S A D
UniRef90_E7E1K8 H R S A D
UniRef90_Q45709 H R S A D
UniRef90_P19415 H R S A
UniRef90_C3IAA7 H R S A E
UniRef90_Q03749 H R S A E Y
UniRef90_C3IBA6 H R S V N L
UniRef90_G5DMQ7 H R S A D L
UniRef90_E5DHK2 H R D V D L
UniRef90_Q3B9W6 H K S A S L
UniRef90_Q45715 H Q S A D
UniRef90_Q6S553
UniRef90_Q03745 H H S A
UniRef90_R4V3T3 H R S A D Y
UniRef90_U5KRN3 H R S A D Y
UniRef90_B7NZX8 H R S A D
UniRef90_Q6PYW6 H R S A
UniRef90_C4PFI0 R K S A D L
UniRef90_Q9ZAZ6 H R S A
UniRef90_Q8KZL7 H R S A D
UniRef90_U5KRH8 S R T V
UniRef90_Q5XLA8 H R D V D L
UniRef90_Q45704 H T S A D L
UniRef90_C7BC48 H Q S A D
UniRef90_Q45746 H R S A T L
UniRef90_M1E9P1 H R S A D L
UniRef90_U5KRN7 S A T V D
UniRef90_O66377 H R S A D
UniRef90_E7CGR3
UniRef90_Q9X597 H S S V D F
UniRef90_P0A381 H K S V D F
UniRef90_U5KRQ8 H T S V R Y
UniRef90_P17969 H R S V D F
UniRef90_K0G104 H H S V
UniRef90_E6Y2M1 H H S V D
UniRef90_U5KRR4 H V S A D L
UniRef90_Q5EF82 H R S A D I
UniRef90_Q45744 H K S V D F
UniRef90_Q45733 R R D V D L
UniRef90_B8K258 H I S V
UniRef90_Q765X5 S T T A
UniRef90_A0ELQ3 H V S V
UniRef90_I6R138 H R S V D
UniRef90_Q9AM80 L R S A E F
UniRef90_U5KRN2 H T S
UniRef90_Q56B08 H R S V D L
UniRef90_U5KS12 H R S A E I
UniRef90_R4VBN7 H V S V
UniRef90_Q8VW62 H T S
UniRef90_A7LHM8 H R S V D
UniRef90_C3CCG2 H T S
UniRef90_C3CBJ9 H V S V
UniRef90_C3CBU1 H T S V N L
UniRef90_Q45706 H S S A
UniRef90_O06014 H R D V D L
UniRef90_I6QMA0 H S S V D
UniRef90_U5KS17 H T S V
UniRef90_J7H1B3 H R S A
UniRef90_U5KRR0 H V S V D
UniRef90_Q6QAN9 R Q D I D L
UniRef90_U5KS08 H V S V
UniRef90_G0WRD3 H S S V D L
UniRef90_U5KRH5 H T S V
UniRef90_K0G510 H N S V D
UniRef90_M4ZRJ6 H R S V S F
UniRef90_C3HSF8 H V S V D
UniRef90_C4NZQ8 H K S
UniRef90_Q9ZNL9 R E D V D F
UniRef90_B4F6G0 H T S V D
UniRef90_A9VV88 H H S V
UniRef90_O32307 H S S V D
UniRef90_L0GEB4 H R S V D
UniRef90_Q8RQU6 H E S V D F
UniRef90_M1E9Q8 H A S A
UniRef90_P05519 H K I V D
UniRef90_D5FGK1 H T S V D
UniRef90_U5KRX2 R Q D V D L
UniRef90_Q6BCH5 H K S
UniRef90_Q75QQ5 H V S A D
UniRef90_F6GPL2 H T S V D
UniRef90_U5KS18 H V S A D
UniRef90_O87905 H A S L D
UniRef90_Q99031 H K S

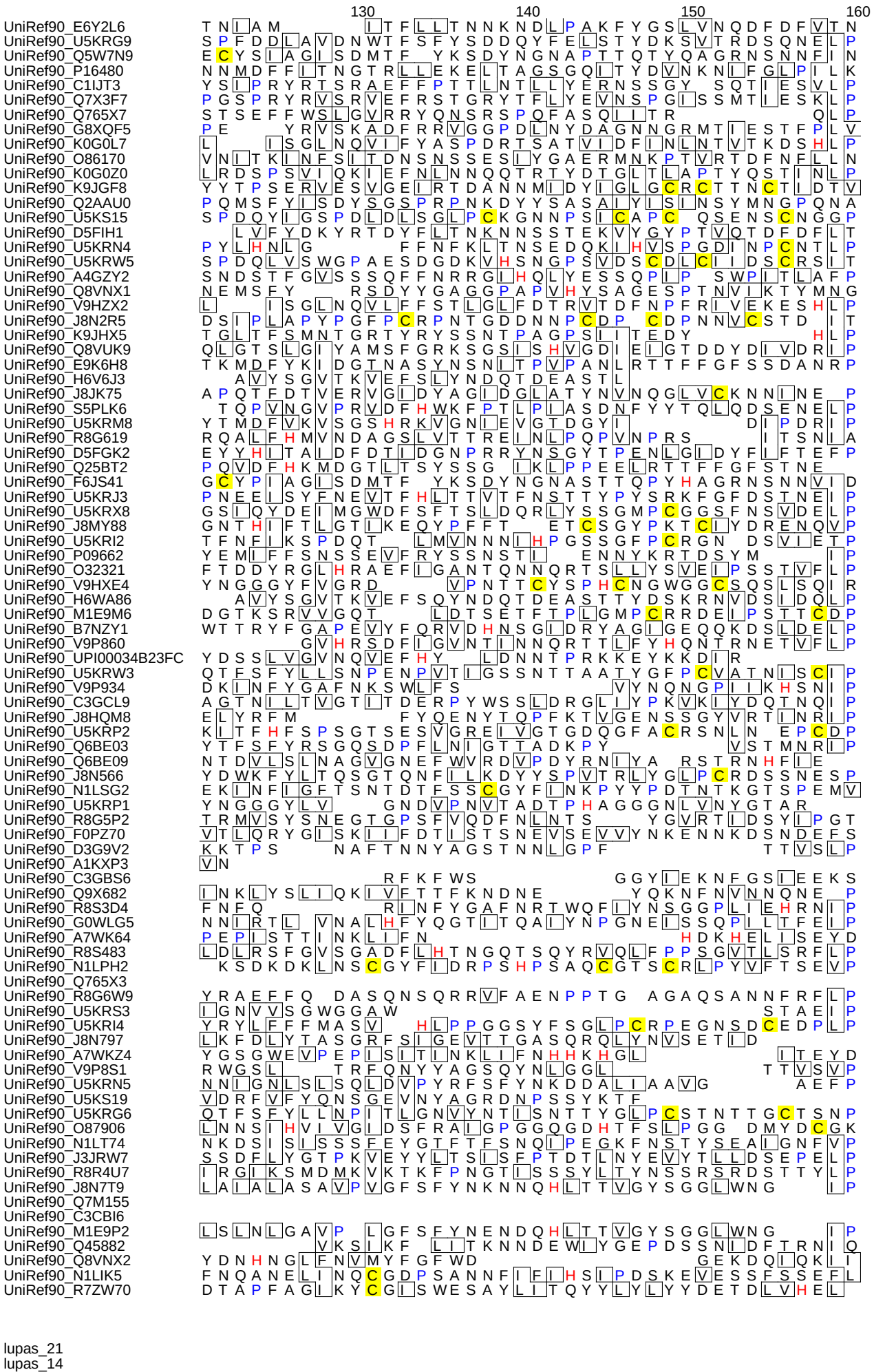
lupas_21
lupas_14



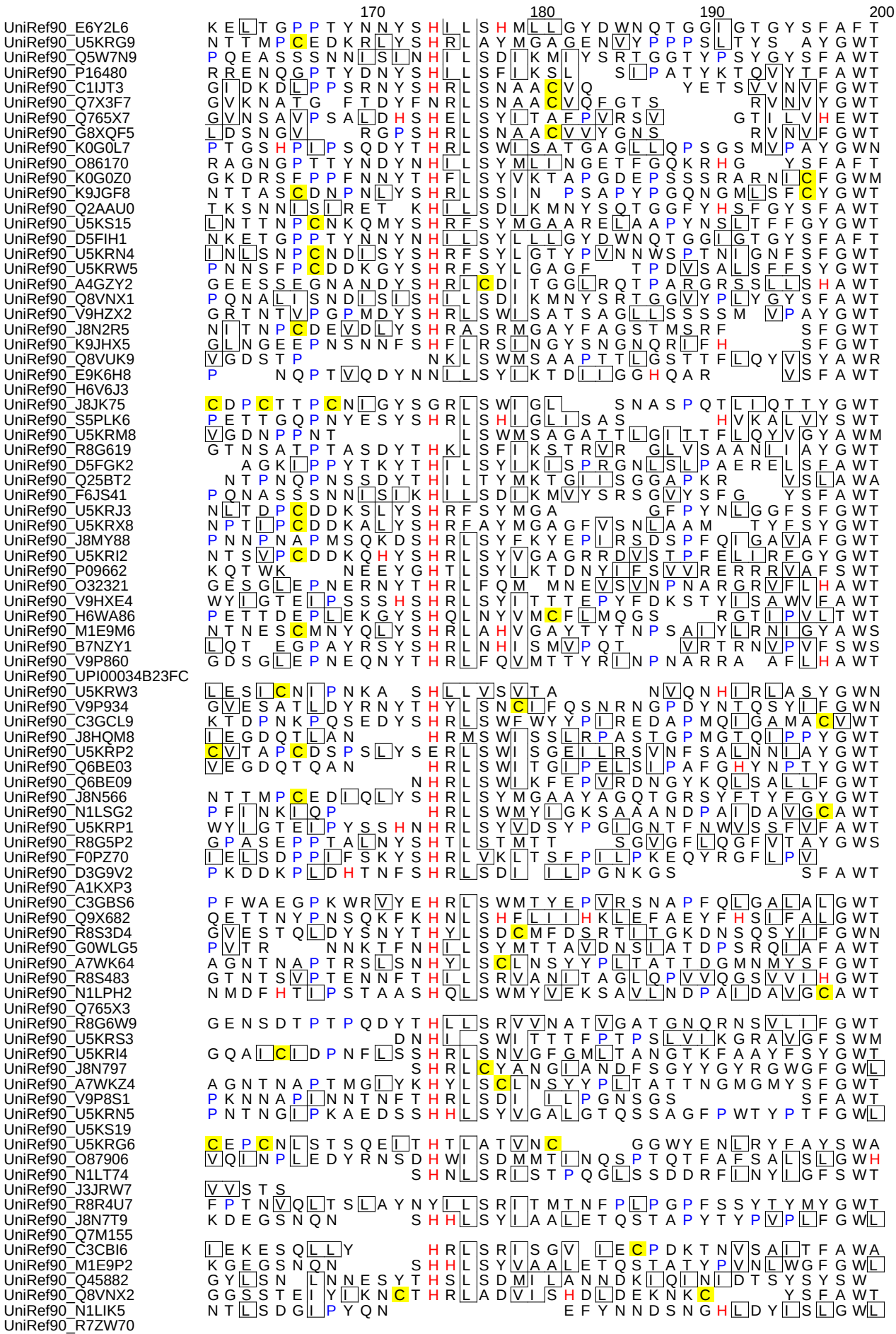
lupas_21
lupas_14



lupas_21
lupas_14



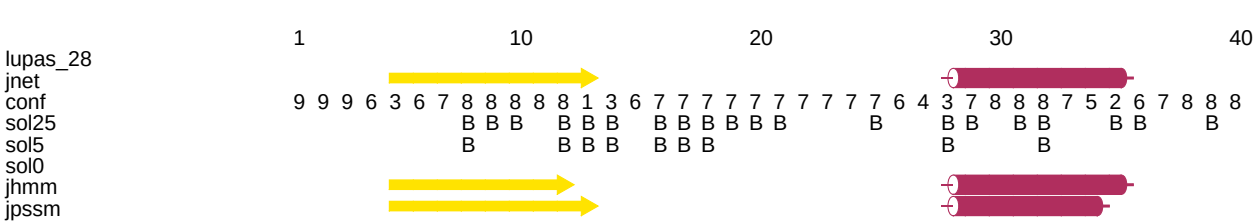
lupas_21
lupas_14

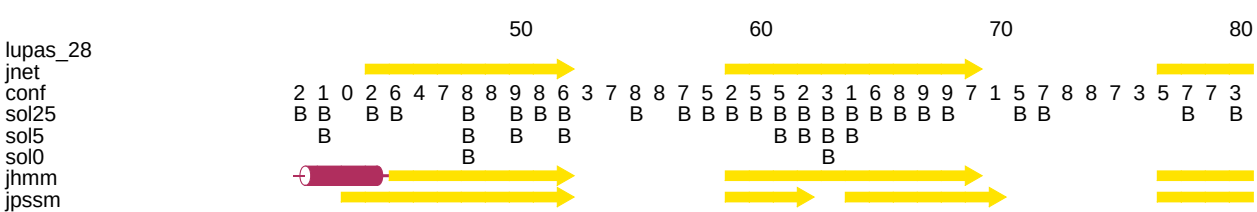


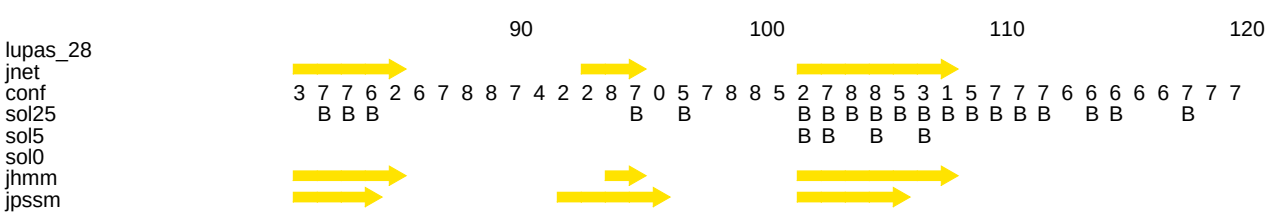
lupas_21
lupas_14

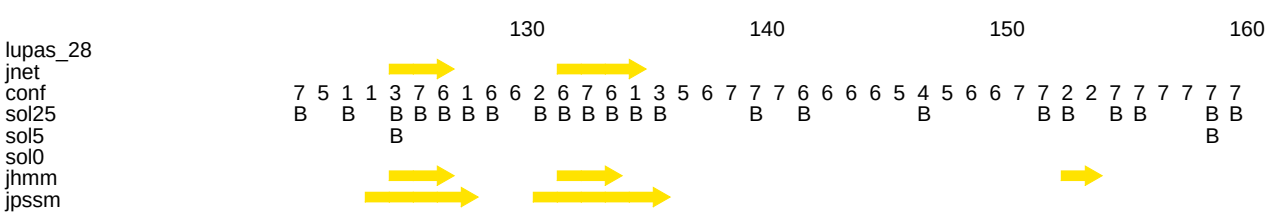
UniRef90_E6Y2L6 H S S V D
UniRef90_U5KRG9 H V S A D
UniRef90_Q5W7N9 H T S V
UniRef90_P16480 H S S V D
UniRef90_C1IJT3 H T S
UniRef90_Q7X3F7 H I S
UniRef90_Q765X7 S T T V
UniRef90_G8XQF5 H T S
UniRef90_K0G0L7 H I S A E
UniRef90_O86170 H S S V D
UniRef90_K0G0Z0 H F S V
UniRef90_K9JGF8 H F S V D
UniRef90_Q2AAU0 H T S V D
UniRef90_U5KS15 H I S A D
UniRef90_D5FIH1 H S S V D
UniRef90_U5KRN4 H I S A D Y
UniRef90_U5KRW5 H V S V D
UniRef90_A4GZY2 H S S
UniRef90_Q8VNX1 H T S V D
UniRef90_V9HZX2 H I S A E
UniRef90_J8N2R5 H I S A D
UniRef90_K9JHX5 H A S V D F
UniRef90_Q8VUK9 H P S V D
UniRef90_E9K6H8 H K G V
UniRef90_H6V6J3
UniRef90_J8JK75 H V S A D
UniRef90_S5PLK6 H R S A D
UniRef90_U5KRM8 H P S V D F
UniRef90_R8G619 H I S
UniRef90_D5FGK2 H T S V N F
UniRef90_Q25BT2 H K S V
UniRef90_F6JS41 Y T S V D
UniRef90_U5KRJ3 H V S A D
UniRef90_U5KRX8 H V S A D
UniRef90_J8MY88 H
UniRef90_U5KRI2 H V S A D
UniRef90_P09662 H T S V D F
UniRef90_O32321 H R S
UniRef90_V9HXE4 H N S V
UniRef90_H6WA86 H K S V D F
UniRef90_M1E9M6 H F S S D
UniRef90_B7NZY1 H R S A D I
UniRef90_V9P860 H R S
UniRef90_UPI00034B23FC
UniRef90_U5KRW3 H L S A D
UniRef90_V9P934 H N T I D
UniRef90_C3GCL9 H M S V D
UniRef90_J8HQM8 H I S A
UniRef90_U5KRP2 H V S A D
UniRef90_Q6BE03 H L S V E
UniRef90_Q6BE09 H N S V D L
UniRef90_J8N566 H V S A D
UniRef90_N1LSG2 H P S V D
UniRef90_U5KRP1 H N N V D
UniRef90_R8G5P2 H K S A
UniRef90_F0PZ70
UniRef90_D3G9V2 H V D V D
UniRef90_A1KXP3
UniRef90_C3GBS6 H Q S V D
UniRef90_Q9X682 H N S V
UniRef90_R8S3D4 H Y T I D
UniRef90_G0WLG5 H S S V D
UniRef90_A7WK64 H N S V D F
UniRef90_R8S483 H R S
UniRef90_N1LPH2 H P S V D
UniRef90_Q765X3
UniRef90_R8G6W9 H K S
UniRef90_U5KRS3 S N T V D
UniRef90_U5KRI4 H A S A
UniRef90_J8N797 H N S
UniRef90_A7WKZ4 H E S V D F
UniRef90_V9P8S1 H V E V
UniRef90_U5KRN5 H N S
UniRef90_U5KS19
UniRef90_U5KRG6 H I S V
UniRef90_O87906 H S S A
UniRef90_N1LT74 H P S I
UniRef90_J3JRW7
UniRef90_R8R4U7 H S S V N L
UniRef90_J8N7T9 H N S
UniRef90_Q7M155
UniRef90_C3CBI6 H V S V
UniRef90_M1E9P2 H N S
UniRef90_Q45882
UniRef90_Q8VNX2 S T T I S L
UniRef90_N1LIK5 H P S L D
UniRef90_R7ZW70

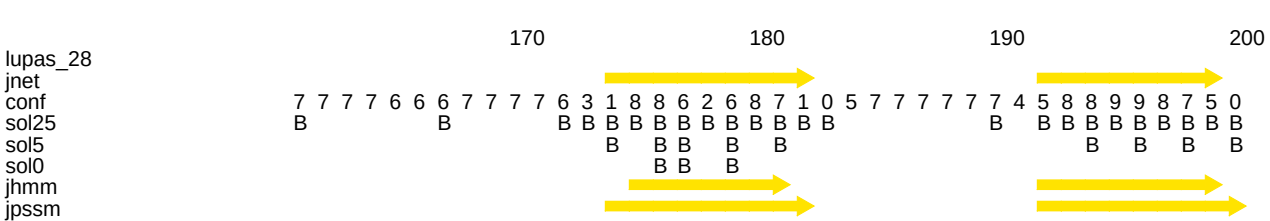
lupas_21
lupas_14


1
10
20
30
40
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm
9 9 9 6 3 6 7 8 8 8 8 8 1 3 6 7 7 7 7 7 7 7 7 7 6 4 3 7 8 8 8 7 5 2 6 7 8 8 8
B B B


50
60
70
80
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm


90
100
110
120
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm
3 7 7 6 2 6 7 8 8 7 4 2 2 8 7 0 5 7 8 8 5 2 7 8 8 8 5 3 1 5 7 7 7 6 6 6 6 6 7 7 7
B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B


130
140
150
160
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm
7 5 1 1 3 7 6 1 6 6 2 6 7 6 1 3 5 6 7 7 7 6 6 6 6 5 4 5 6 6 7 7 2 2 7 7 7 7 7 7
B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B
B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B
B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B


170
180
190
200
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm

lupas_28						
jnet						
conf	4	6	3	5	8	9
sol25	B		B	B		
sol5				B		
sol0						
jhmm						
jpssm						