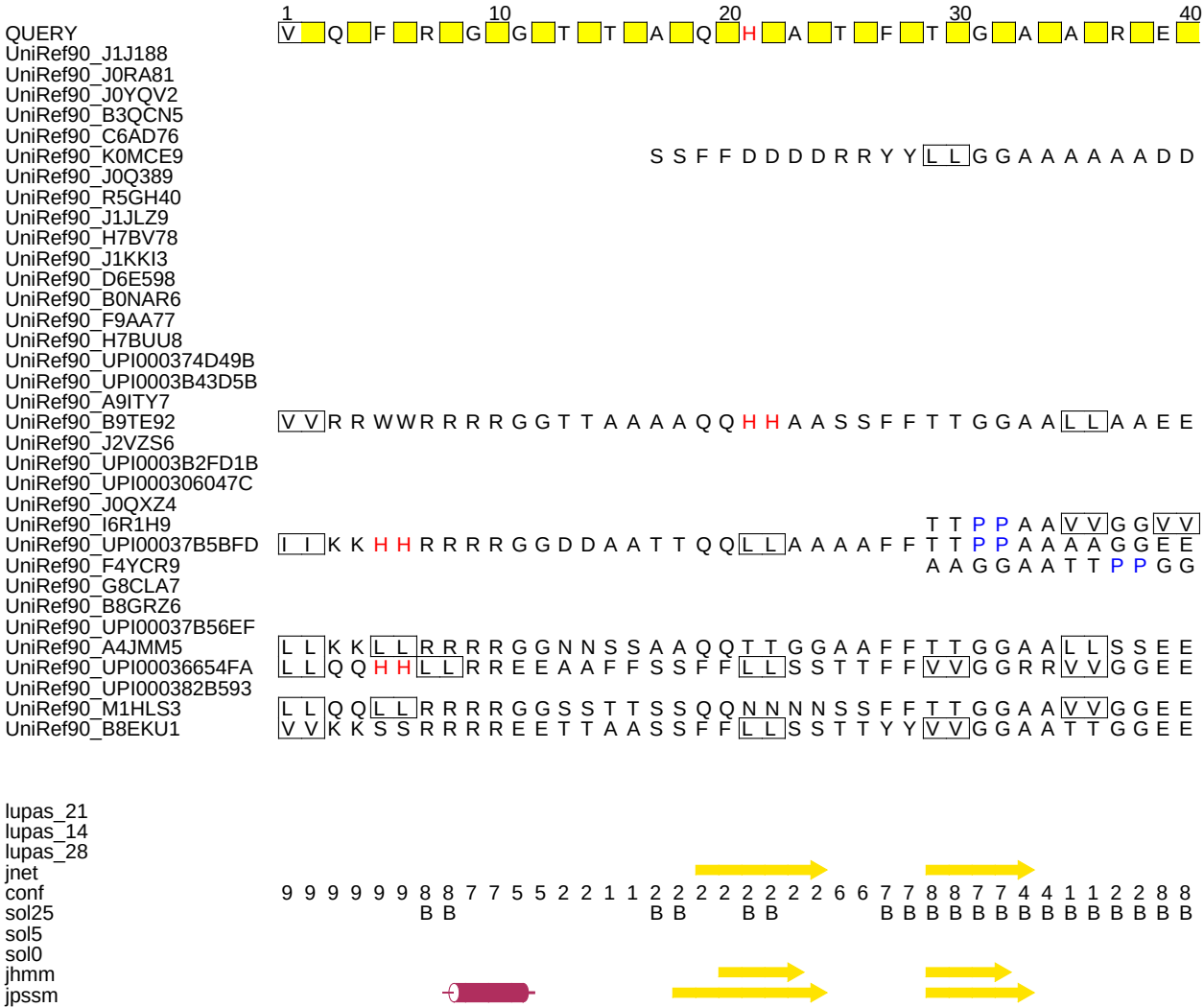
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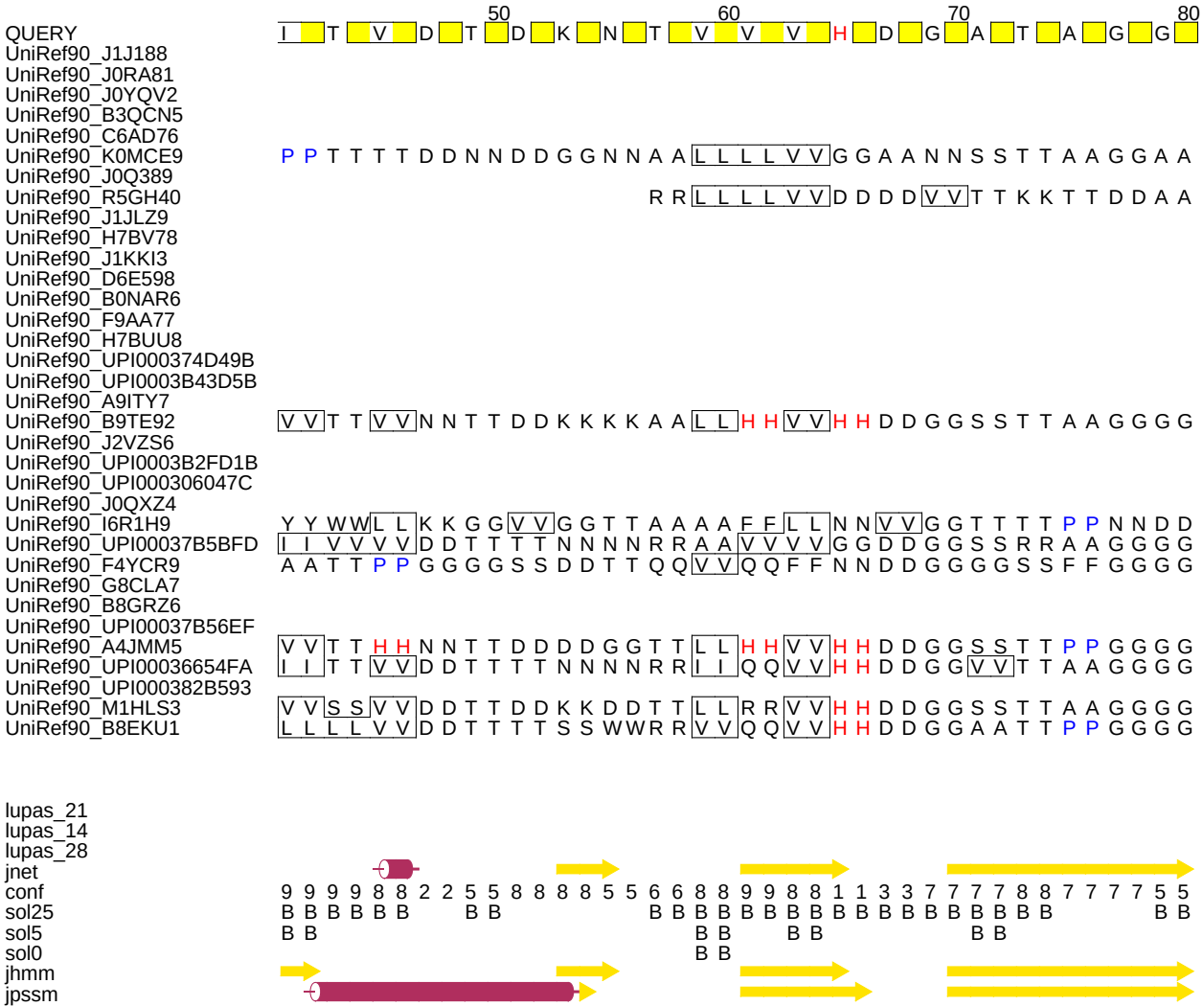
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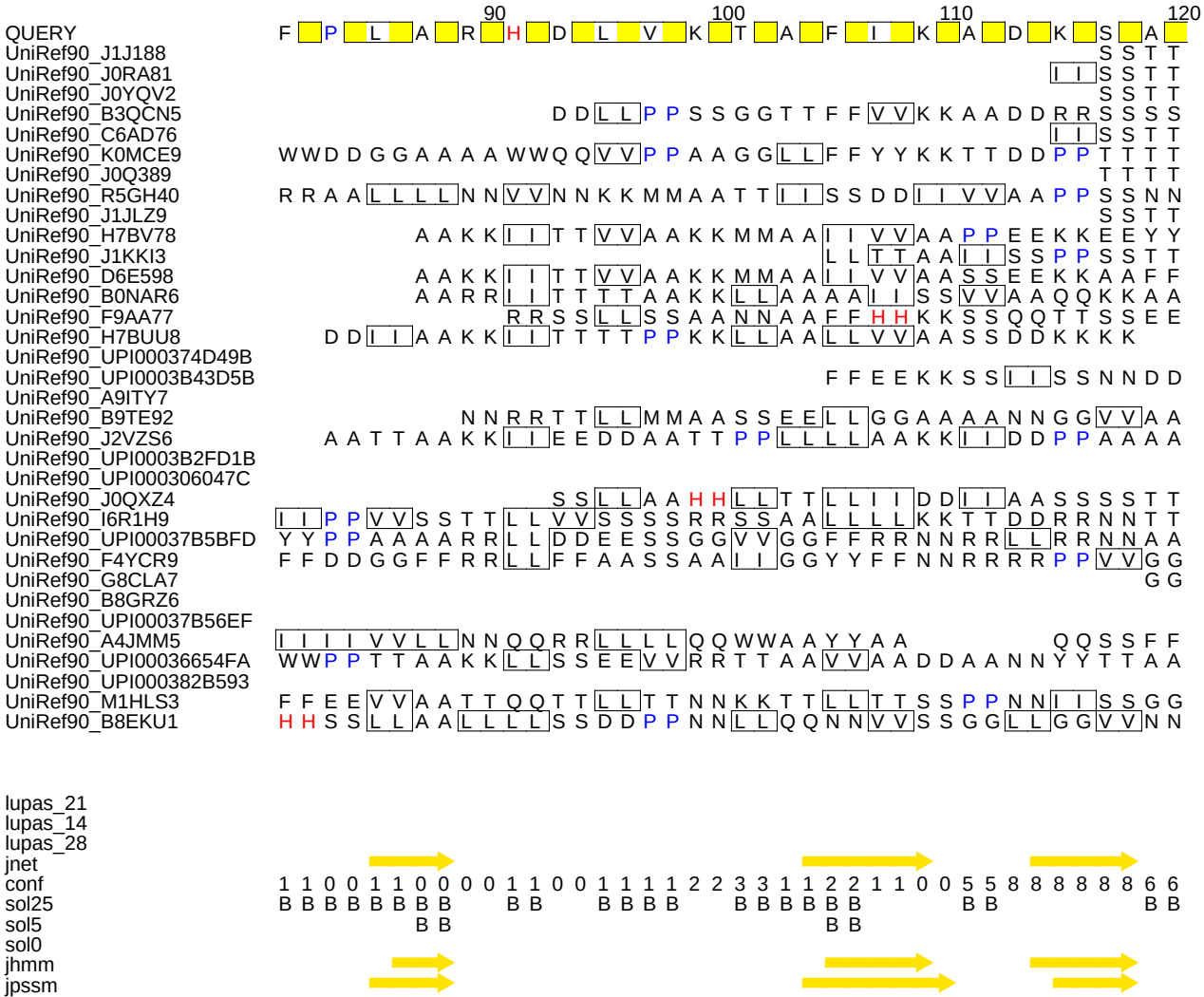
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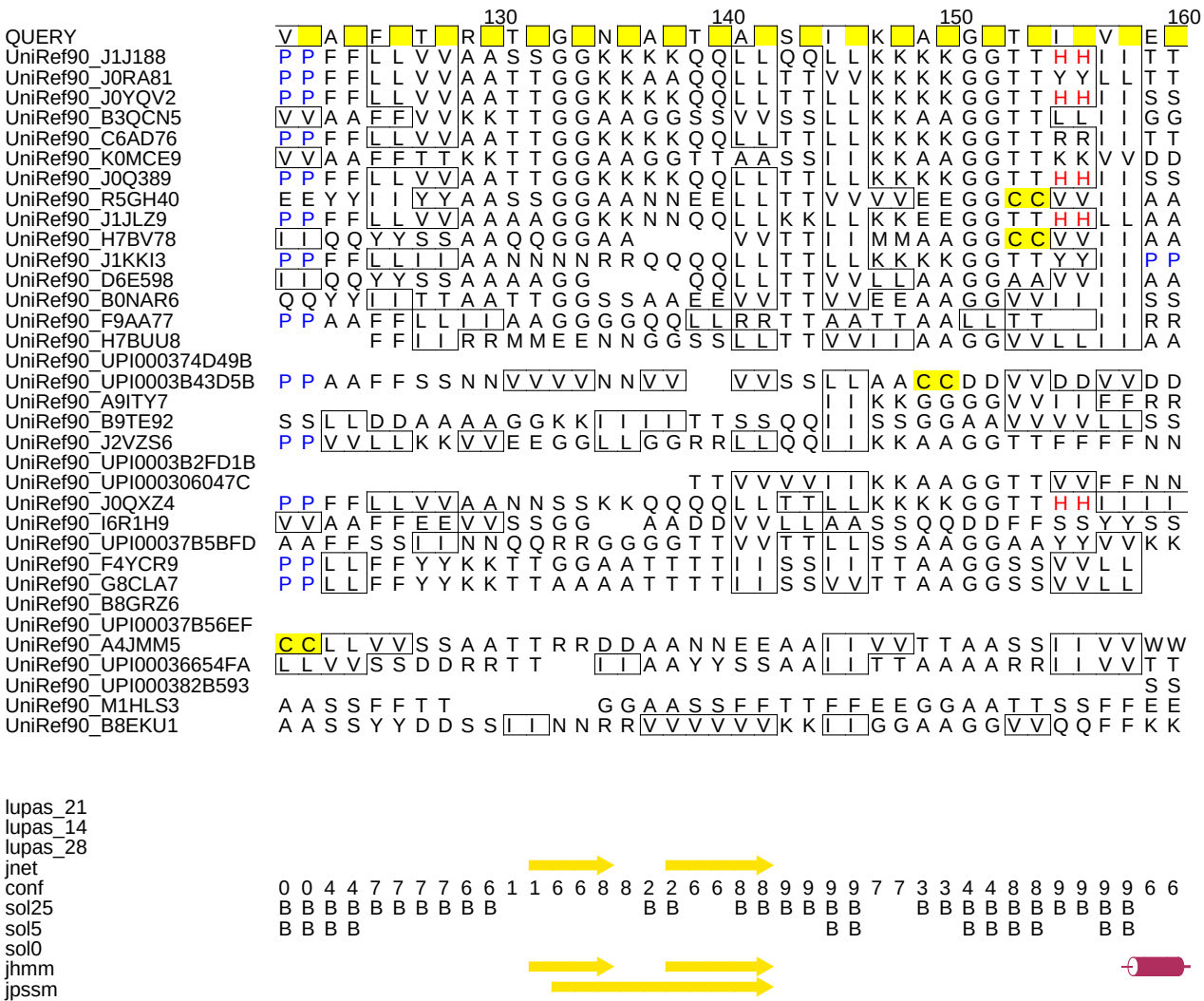
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UniRef90_B8EKU1


lupas_21
lupas_14
lupas_28
jnet                                                           E E E E E E E         E E E E E E
conf                           7 7 7 7 7 7 6 6 6 6 6 6 7 7 7 7 7 7 7 7 7 7 0 0 1 1 5 5 6 6 0 0 0 0 7 7 8 8 8 8
sol25                          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
sol5                                                                       B B         B B B B B B B B B B B
sol0                                                                                     B B B B
jhmm                                                                       E E E E E E E         E E E E E E
jpssm                                                                          E E E E E E E E E E E E E E E
```

```
                                                290                 300                 310                 320
QUERY                           A  P  G  S  N  A  A  A  Q  A  G  G  N  T  T  A  Q  I  N  E
UniRef90_J1J188                 L  L  C  C  A  A  D  D  V  V  G  G  T  T  I  I  S  S  G  G  H  H  P  P  L  L  S  S  A  A  G  G  D  D  I  I  L  L  P  P
UniRef90_J0RA81                 L  L  C  C  A  A  D  D  V  V  G  G  T  T  I  I  S  S  G  G  H  H  P  P  L  L  S  S  A  A  G  G  D  D  I  I  L  L  P  P
UniRef90_J0YQV2                 L  L  C  C  A  A  D  D  V  V  G  G  T  T  I  I  A  A  D  D  H  H  P  P  L  L  S  S  A  A  G  G  D  D  I  I  L  L  P  P
UniRef90_B3QCN5                 A  A  P  P  G  G  G  G  N  N  A  A  A  A  A  A  R  R  A  A  G  G  G  G  D  D  A  A  T  T  P  P  A  A  I  I  N  N  A  A
UniRef90_C6AD76                 L  L  C  C  A  A  D  D  V  V  G  G  T  T  I  I  S  S  G  G  H  H  P  P  L  L  S  S  A  A  G  G  D  D  I  I  L  L  P  P
UniRef90_K0MCE9                 A  A  P  P  G  G  G  G  N  N  A  A  A  A  A  A  V  V  A  A  G  G  G  G  D  D  T  T  T  T  P  P  A  A  I  I  N  N  A  A
UniRef90_J0Q389                 L  L  C  C  A  A  D  D  V  V  G  G  T  T  I  I  A  A  D  D  H  H  P  P  L  L  S  S  A  A  G  G  D  D  I  I  L  L  P  P
UniRef90_R5GH40                 G  G  R  R  C  C  R  R  K  K  V  V  D  D  S  S  N  N  L  L  Q  Q  P  P  L  L  N  N  G  G  S  S  S  S  V  V  I  I  F  F
UniRef90_J1JLZ9                 L  L  C  C  A  A  D  D  V  V  G  G  S  S  I  I  K  K  D  D  H  H  P  P  L  L  S  S  A  A  G  G  D  D  I  I  L  L  P  P
UniRef90_H7BV78                 G  G  R  R  V  V  R  R  N  N  T  T  D  D  D  D  Y  Y  G  G  R  R  A  A  V  V  N  N  A  A  S  S  G  G  S  S  V  V  R  R
UniRef90_J1KKI3                 L  L  C  C  A  A  D  D  V  V  G  G  V  V  I  I  G  G  G  G  H  H  P  P  L  L  S  S  T  T  G  G  E  E  I  I  L  L  P  P
UniRef90_D6E598                 G  G  F  F  V  V  R  R  N  N  V  V  D  D  E  E  Y  Y  G  G  R  R  E  E  V  V  N  N  T  T  S  S  G  G  S  S  V  V  R  R
UniRef90_B0NAR6                 G  G  I  I  V  V  R  R  N  N  V  V  N  N  S  S  K  K  G  G  N  N  P  P  I  I  S  S  S  S  A  A  G  G  T  T  E  E  N  N
UniRef90_F9AA77                 G  G
UniRef90_H7BUU8                 G  G  V  V  V  V  R  R  K  K  T  T  N  N  S  S  S  S  G  G  I  I  P  P  I  I  S  S  A  A  S  S  G  G  A  A  A  A  L  L
UniRef90_UPI000374D49B          L  L  C  C  A  A  D  D  V  V  G  G  T  T  I  I  A  A  D  D  H  H  P  P  L  L  S  S  A  A  G  G  D  D  I  I  L  L  P  P
UniRef90_UPI0003B43D5B          G  G  D  D  N  N  R  R                                                                                  I  I  Y  Y  P  P
UniRef90_A9ITY7                 L  L  C  C  A  A  D  D  V  V  G  G  E  E  I  I  E  E  D  D  H  H  P  P  L  L  S  S  A  A  G  G  D  D  I  I  L  L  P  P
UniRef90_B9TE92
UniRef90_J2VZS6                 A  A  P  P  G  G  G  G  N  N  A  A  E  E  A  A  R  R  K  K  G  G  G  G  D  D  T  T  V  V  P  P  A  A  I  I  N  N  P  P
UniRef90_UPI0003B2FD1B          G  G  R  R  V  V  R  R  P  P  L  L  S  S  D  D  R  R  Y  Y  S  S  A  A  G  G  A  A  T  T  V  V  Q  Q  I  I  V  V  P  P
UniRef90_UPI000306047C          L  L  C  C  A  A  D  D  V  V  G  G  T  T  I  I  K  K  D  D  H  H  P  P  L  L  S  S  A  A  G  G  D  D  I  I  L  L  P  P
UniRef90_J0QXZ4
UniRef90_I6R1H9                 Y  Y                                                                   H  H  T  T  T  T  G  G  G  G  I  I  N  N  P  P
UniRef90_UPI00037B5BFD
UniRef90_F4YCR9                 I  I  P  P  S  S  G  G  R  R  P  P  T  T  A  A  F  F  D  D  N  N  G  G  S  S  P  P  T  T  G  G  E  E  I  I  L  L  E  E
UniRef90_G8CLA7                 I  I  P  P  S  S  G  G  R  R  P  P  T  T  A  A  S  S  G  G  S  S  P  P  T  T  A  A  T  T  A  A  E  E  I  I  L  L  E  E
UniRef90_B8GRZ6                 G  G  R  R  W  W  R  R  P  P  L  L  S  S  E  E  R  R  Y  Y  N  N  A  A  D  D  P  P  S  S  V  V  I  I  V  V  M  M  P  P
UniRef90_UPI00037B56EF          G  G  R  R  H  H  R  R  P  P  L  L  A  A  E  E  R  R  Y  Y  S  S  T  T  T  T  F  F  N  N  P  P  P  P  I  I  V  V  P  P
UniRef90_A4JMM5
UniRef90_UPI00036654FA
UniRef90_UPI000382B593          G  G  R  R  V  V  R  R  P  P  F  F  S  S  E  E  A  A  Y  Y  N  N  A  A  S  S  F  F  T  T  C  C  E  E  I  I  I  I  P  P
UniRef90_M1HLS3
UniRef90_B8EKU1


lupas_21
lupas_14
lupas_28
jnet                            E  E  E  E
conf                            8  8  5  5  3  3  6  6  7  7  7  7  7  7  7  7  6  6  6  6  7  7  7  7  7  7  7  7  7  7  6  6  5  5  1  1  1  1  3  3
sol25                           B  B  B  B  B  B              B  B        B  B                 B  B  B  B  B  B  B  B  B  B        B  B  B  B
sol5                            B  B        B  B                                                          B  B  B  B        B  B
sol0
jhmm                            E  E  E  E                                                                                          H  H  H  H  H  H
jpssm                           E  E  E  E
```

```
                                                                  330
QUERY                          Y  S     L    W  D    I
UniRef90_J1J188                Q Q S S V V W W
UniRef90_J0RA81                N N S S V V W W
UniRef90_J0YQV2                N N S S V V W W
UniRef90_B3QCN5                Y Y S S L L W W D D L L
UniRef90_C6AD76                H H S S V V W W
UniRef90_K0MCE9                Y Y S S F F W W D D L L
UniRef90_J0Q389                N N S S V V W W
UniRef90_R5GH40                G G T T G G W W E E
UniRef90_J1JLZ9                D D S S V V W W
UniRef90_H7BV78                G G S S G G W W E E
UniRef90_J1KKI3                N N S S V V W W
UniRef90_D6E598                G G S S G G W W E E
UniRef90_B0NAR6                G G S S G G W W E E
UniRef90_F9AA77
UniRef90_H7BUU8                G G S S G G W W E E
UniRef90_UPI000374D49B         N N S S V V W W
UniRef90_UPI0003B43D5B         R R S S F F W W D D L L
UniRef90_A9ITY7                D D S S V V W W
UniRef90_B9TE92
UniRef90_J2VZS6                Y Y S S L L W W D D
UniRef90_UPI0003B2FD1B         N N S S V V W W D D L L
UniRef90_UPI000306047C         D D S S V V W W
UniRef90_J0QXZ4
UniRef90_I6R1H9                N N S S L L W W D D I I
UniRef90_UPI00037B5BFD
UniRef90_F4YCR9                F F S S L L W W D D L L
UniRef90_G8CLA7                Y Y S S I I W W D D L L
UniRef90_B8GRZ6                T T S S V V W W D D L L
UniRef90_UPI00037B56EF         N N S S V V W W D D
UniRef90_A4JMM5
UniRef90_UPI00036654FA
UniRef90_UPI000382B593         N N A A V V W W D D
UniRef90_M1HLS3
UniRef90_B8EKU1


lupas_21
lupas_14
lupas_28
jnet
conf                           6 6 7 7 7 7 7 7 8 8 8 8
sol25                            B B B B B B
sol5
sol0
jhmm
jpssm
```