Multiple sequence alignment (positions 1–40).

```
            1         10        20        30        40
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UniRef90_UPI0002F35DBF      M L D T P K K F T L I A G S A E G P S R L N A F D N A L L A A G I G N V
UniRef90_Q0AZ60             M L P L P K K Y F L T A A S C E G E T E L T A F D R A L L E A G V G N T
UniRef90_E6SLH7             M L P T P K K V T V V A G S G E G D H K L T A F D N A L L A A G I G N L
UniRef90_A6UUL7        P I H S P Y K A P N T I S L V A G K G D T N N P L N A F D M A L L D A G I C N V
UniRef90_UPI0003678E93      M L P T P K K Y F L T A A A A E G S G L L T A F D N A L L A G G I G N I
UniRef90_K4LWV6             M L P V P S K F T L V V G H G E G S T P L N A F D A A L I D A G I G N L
UniRef90_E6SMA1          A M L P I P N R F A L V T G R A E G E T P L T A F D A A L L D A G V A N V
UniRef90_B1I647             M L P T P T R Y S V T A A C A E G S T A L N A F D N A L L A A R I G N V
UniRef90_UPI00035FE49C      M V E T P N V Y C L V S G A A E G N T R L N A F D N A L L E A G V G D T
UniRef90_A5D3S1             M L P T P K K F F V T A G S A E G K N H L N A F D N A L L K G R I G N L
UniRef90_G7VA79             M L P I P E K F T L S V G K G E G K E K L T A F D A A L L D A G I G N M
UniRef90_F6CHJ1             M L P T P T R F T L V A G A E G Q T P L N A F D R A L L E A R A G N V
UniRef90_A4G0Z0          I H S P F E A P N T I S L V A G T G D S N N P L N A F D M S L L K S G I G N L
UniRef90_F8E6K4               F K T P T K H F F V F G T S E G Y T M L N A F D G A L L D A G I G N T
UniRef90_D5VTV2              L P I P N T V S L V A G S S E G E T P L N A F D G A L L K A G I G N V
UniRef90_K4LT24             M L P T P K S Y T L V A A A A E G E K E L T A F D R A L L L A G I G N V
UniRef90_UPI00046CAF30      M I R T P T H Y F L V A G D A E G Y M E L N A F D A A L L R A G V G N T
UniRef90_X1UAG9              F I E T P T K Y F L A S G K A E G I T P L N A F D N A L L D A G V A N T
UniRef90_C5A4C1              W M T P K R A F M G A A A A E G G T K L N A F D N A L L K L G I G N V
UniRef90_UPI0003B34E32      M I E T P D L Y T L V V G K G E G E K L T A F D A A L L E A G V G N M
UniRef90_E8V4X1             M N M V P K R L F F T K G V G K H K E R L T S F E M A L R D A G L A A Q
UniRef90_X0SRA6              F F I I P K Y Y F V S A S S E G I S K L N S F D N A L I S A G M G N Y
UniRef90_M1E4P5             M L P I P T K Y F I S F G S C N A D H P L N A F D G A L L S A G V G N T
UniRef90_T1AH76           T L I P I P R R F F V T S G K G I N K T E L N A F D L A L L Q A G I G D Q
UniRef90_Q2NEP9               K V S L T K G A S E G P T K L N A F D N A L L D A D I G N V
UniRef90_E3GWR9               I A I T S G K S E G P T K L N A F D N A L L D A G I G N V
UniRef90_D7DUJ7          I H S P F N A P N T I S L V A G E G D A E I A L N A F D M C L I Q S G I A N V
UniRef90_H5SPK7            M Y A L P N L V I L V N G A A E G E T E L T A F D N A L R N A G I G D L
UniRef90_Q8TXD4               V P K K Y A L V S G T G E A D T S L A A F D A A L I D A G I G D C
UniRef90_H8I6X7               I P K K V F F T S G A G T H K E M L E S F E M A L R D A G I E K Y
UniRef90_I0I2H1            M R L I P R K L F L T R G V G I H K E K L T S F E L A L R D A G I A Q F
UniRef90_B5IA53            M N L I P T K V F F T K G V G R H K S E L G S F E R A L R D A G I A Q F
UniRef90_X1GZC7            M S L V P K K V F V K G I I G H H K S K L A A F E Q A L R N A G I E K Y
UniRef90_UPI0003743938       V P K K I F F T K G I G R H K S Q L G S F E N A L R D A G I A R F
UniRef90_W6LTL6           M F P T P T R V F L T K G I G V H R H T L T A F E L A L R D A D I E Q Q
UniRef90_H1YWL6               V P K K V F F T S G A G S H P D K L T S F E M A L R E A S I H C Y
UniRef90_W0JF62        I D I F S S V P N I Y K L S S S N A E G L T L L N A F D V A L L E S G V G N T
UniRef90_I4CAB3            F G P L P R H F F L T S G A G D A T T G L N A F D A A L L D A K V G N T
UniRef90_H1XYV9               V P K K I F L T K G I G V S K E Q L T S F E M A L R N A G V G P Y
UniRef90_F0T652               R I S I T S G R A E G P T K L N T F D N A L L N A G I G D V
UniRef90_Q12UX3              I P K K A F V V K G T G V H K D K L A S F E L A L R D A G I E K F
UniRef90_X1B5S9              I P K K I F F T K G V G N H F D K L Q S F E L A L R D A G I E K F
UniRef90_E1QDK3               V P K Y I Y L T K G K G E H K E K L A S F E A A L R D A G I A A Q
UniRef90_T0MIZ2           M L V V P K K S F L T K G V G R H K E Y L S S F E L A L R S A G I A R F
UniRef90_UPI0003B68E49        V P R K F F L T K G V G Y H K E E L A S F E L A L R D A K I G Q F
UniRef90_S0APU9              L P K K V F F T R G I G R G E T Q L Q S F E N A L R D A D I A A Y
UniRef90_E8R5A0               V P K Q L F F T R G V G V H R E K L T S F E M A L R D A H I A C Y
UniRef90_F2LTM1           F N R A P N I Y A I K A A E A E G F S P L N A F D V A L L E S G V G N T
UniRef90_D3DZ43               R I A I V S G N A E G P T E L N A F D N A L Y E A K I G D V
UniRef90_R9T5C4           M H L V P K K F F V S S G C A V S K S D L N A F D K A L L E A G I G E L
UniRef90_UPI0003B4D8BF        I P S Q I F L T K G T G R H K E K L A S F E L A L R E A G I A P F
UniRef90_H5SQH3               V P T R L F F T K G V G T H K E E L R S F E A A L R D A G I E K Y
UniRef90_D7EA96           M N L V P K K M F F T S G I G R H S E H L E S F E A A L R N A G I E K F
UniRef90_X1SY92               V P K K M F F T K G V G N H K E E L A L R N A G I E K F
UniRef90_N0BH39           M K L V P K K V F L V S G K G S H S D A L V S F E L A L R D A G I E K F
UniRef90_Q2LWF1           M F L P N K I F F T K G V G T H R A E L H S F E L A L R D A G I E K C
UniRef90_Q64BF8              I P D A F F V T S G A G M D F E Q A N A F D L A L H D A G I S E C
UniRef90_A2SPX3               V P K K V F F T R G K G V H K D Q L V S F E M A L R N A G I A P F
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UniRef90_M9SEH0           M I P T P S K F F I T S G Y A T S P S D L N A F D L A L L K A Q I S E Q
UniRef90_G7Q5W0           M I P V P T K A F F T K G V G R H K N K L Q S F E L A L R E A G I E K L
UniRef90_T0LHI6               V P K K L F F T R G V G R G H S M L M S F E E A L R D G G I A Q F
UniRef90_X1NE10               V P T K V F L T K G V G H K E K L T S F E L A L R N A Q I A K Y
UniRef90_K2EU29               V P K K T F L T K G V G V H K D R L S S F E Q A L R N A G I E K C
UniRef90_B2A8A5             L K T L K Y F K L V T G T G E G N T S L T A F D K A L L N A E V G N F
UniRef90_UPI000376615B        V P K R I F L T K G V G R H Q D R L A S F E I A L R D A G I A H C
UniRef90_Q2Y4T2              I P R E F F V T S G V G M D S E R A A A F D F A L Y D A G I G E C
UniRef90_V4JHI3               V P T K M F F T K G V H H L N K L Q S F E M A L R E A G V E K C
UniRef90_D6SQP2               V P S R A F F T R G I G R H K N K L Q S F E L A L R D A G I E K Q
UniRef90_A3CXH3           M F V P T K C F F T K G V G I H K D K L A S F E L A L R Q A G I E K Y
UniRef90_U1YWF2                I Y V S H G T G T G R T E L S A F D A A L T D A G V G D F
UniRef90_A1RYJ3             L P K K V F F T K G K G L S N S P L M A F N N A L R E A G I H Q L
UniRef90_B2KEY8             V P Q E I F L T K G I G R H K E K L A S F E E A L R D A Q I A S Y
UniRef90_F2KMH2             L P K K V F F T T G I G K H E D A L V S F E L A L R D A G I E K L
UniRef90_T0M2P2             V P K K V F F T R G V G R G Q S Q L Q S F E E A L R D G G I A P F
UniRef90_B3QWJ5         M T F V P S K I F F T K G V G R H R E Y L S S F E L A L R D A K I E K C
UniRef90_M4YMD5               V P S A Y F V T S A A T S P S D L N A F D L A L L K A G L S E Q
UniRef90_D8P811              V P T H M F L T R G V G V H K E K L A A F E Q A L R S A G V A Y C
UniRef90_X1HES8           M S L V P A K M F L T K G V G S H R Y K L R S Y E L A L R D A G I E K F
UniRef90_C7P2V8               I R I V W G T A G G P T E L S F D A A L A D A G I H N Y
UniRef90_Q97AN7              V P S E I F F T R G V G R G E T Q L E S F E A A L R D A G I A Q F
UniRef90_L0I5E0              S T I R V V W G S S T G P T E M A A Y D G A L A D A G I E N Y
UniRef90_D3RX16        P L S A T K L I P R K V F F T T G V G H E D A L V S F E L A L R D A R I E K F
UniRef90_Q2FMS8               V P K K V F F T S G V G V H E D A L A S F E L A L R S A G I E M F
UniRef90_D3RYM4           M L K P R K F F L T A G V G F H E D P L V S F E L A L R D A K I E K F
UniRef90_R1E3I6               V P K K V F F T S G I G V A D D P L L S F E Y A L R D A K I E R F
UniRef90_A0RUV5               V A K K L F L T K G V G V H E D K L T S F E Y A L R D A K I S G T
UniRef90_E1YD46               V P R Y M F L T K G F G V H K D R L A S F E L A L R A A Q I E H L
UniRef90_K4MHI6             A P K R A F L T K G F G V H K D R L A S F E L A L R A A Q I E K Y
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UniRef90_B0TES5         N L V R V S
UniRef90_C8VVZ3         N L I R V S
UniRef90_UPI0002F35DBF  N L I R V S
UniRef90_Q0AZ60         N L L R V S
UniRef90_E6SLH7         N L I K V S
UniRef90_A6UUL7         N L I K I S
UniRef90_UPI0003678E93  N L L R V S
UniRef90_K4LWV6         N L I R V S
UniRef90_E6SMA1         N L V K V S
UniRef90_B1I647         N L V R L S
UniRef90_UPI00035FE49C  N L M R M S
UniRef90_A5D3S1         N L M R V T
UniRef90_G7VA79         N L L R V S
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UniRef90_D5VTV2         N L L K I S
UniRef90_K4LT24         N L V R V S
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UniRef90_M1E4P5         N L V R V S
UniRef90_T1AH76         N L V S V S
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UniRef90_D7DUJ7         N L I R I S
UniRef90_H5SPK7         N L I R V S
UniRef90_Q8TXD4         N L V E L S
UniRef90_H8I6X7         N L V N V S
UniRef90_I0I2H1         N L V R V S
UniRef90_B5IA53         N L V E V S
UniRef90_X1GZC7         N L V N V S
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UniRef90_W6LTL6         N L V Y V S
UniRef90_H1YWL6         N L V E V S
UniRef90_W0JF62         N L V K M S
UniRef90_I4CAB3         N L I K L S
UniRef90_H1XYV9         N L V S V S
UniRef90_F0T652         N L I K V S
UniRef90_Q12UX3         N L V T V S
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UniRef90_T0MIZ2         N L V P V S
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UniRef90_F2LTM1         N L V K M S
UniRef90_D3DZ43         N L I K V S
UniRef90_R9T5C4         N I V S V S
UniRef90_UPI0003B4D8BF  N L V K I S
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UniRef90_Q2LWF1         N L V Q V S
UniRef90_Q64BF8         N L V E V S
UniRef90_A2SPX3         N L V Y V S
UniRef90_UPI0003B5654E  N L V R V S
UniRef90_M9SEH0         N L V A V S
UniRef90_G7Q5W0         N L V Y V S
UniRef90_T0LHI6         N L V S V S
UniRef90_X1NE10         N I V N V S
UniRef90_K2EU29         N L V Y V S
UniRef90_B2A8A5         N L L K V T
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UniRef90_Q2Y4T2         N L V G V S
UniRef90_V4JHI3         N L V A V S
UniRef90_D6SQP2         N L V Y V S
UniRef90_A3CXH3         N L V Y V S
UniRef90_U1YWF2         N L V R L S
UniRef90_A1RYJ3         N L V P V S
UniRef90_B2KEY8         N L V P V S
UniRef90_F2KMH2         N L V A V S
UniRef90_T0M2P2         N L V G I S
UniRef90_B3QWJ5         N L V T V S
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UniRef90_D8P811         N L V S V S
UniRef90_X1HES8         N L V Q V S
UniRef90_C7P2V8         N L V T L S
UniRef90_Q97AN7         N L S S I S
UniRef90_L0I5E0         N L V A V S
UniRef90_D3RX16         N L V T V S
UniRef90_Q2FMS8         N I V N V S
UniRef90_D3RYM4         N L V P V S
UniRef90_R1E3I6         N L V P V S
UniRef90_A0RUV5         N L V L I S
UniRef90_E1YD46         N I V T V S
UniRef90_K4MHI6         N L V T V S
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Protein sequence alignment (residues 1–40)

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UniRef90_L7VYL9                        R V D V V G A V G S G P T S L A A F D A A L V A C G V A N F
UniRef90_J1L547          V P K R V F F T C G V G R D S E Y L G S F E M A L R T A K I E C Y
UniRef90_M0MCR5                      S T I R I V A G T G R G P T A M A S Y D T A L A D A G V H N Y
UniRef90_K0IKU7                        F F T K G K G M H K D Y L T S F E L A L R D A E I A D L
UniRef90_L0AI95                      S T I R I V W G S A S A P T A M S S Y D G A L A D A G I E N Y
UniRef90_U2YU22                        T I S V V W G T G T A P T A M S A Y D A A L A D A N V H N Y
UniRef90_U1QBU6                          I I R V V A G T G T G P T A T A A Y D D A L E A A G I H N Y
UniRef90_U1PDC4                          I I R L V W G E A V G P T E K A A F D G A L A D A G V H Q Y
UniRef90_H6RAI4          K E P L T I Q I A A A T G S G A T G V A A F D A A L C E L G V G E A
UniRef90_UPI00035D234F   V A K K L F L T K G V G I A D D K L T S F E F A L R Q A G I A G T
UniRef90_W5TBW2                          I E V A T A I G T G T T E V S A F D A A L R E L G V G E A
UniRef90_UPI000376E63D   I P R T F F I T K G S G E S D L E M H A Y H M A L H D A G I C D F
UniRef90_L9P9E0                        V I T G V G H G Q T E L S A Y D D A L W K T G I G N F
UniRef90_B9LQG7          N T I H V A G G V G V A D T A M A S Y D A A L A D A N L H N Y
UniRef90_D8J8W9                        I R I V R G S A I A P T E M A S Y D A A L A E A N V H N Y

lupas_21
lupas_14
lupas_28
jnet
conf     9 9 8 7 4 2 4 6 7 5 4 8 8 9 8 8 8 5 1 7 8 7 4 4 5 8 9 9 9 9 9 9 8 7 2 4 7 8 8 7
sol25              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
sol0                             B
jhmm
jpssm
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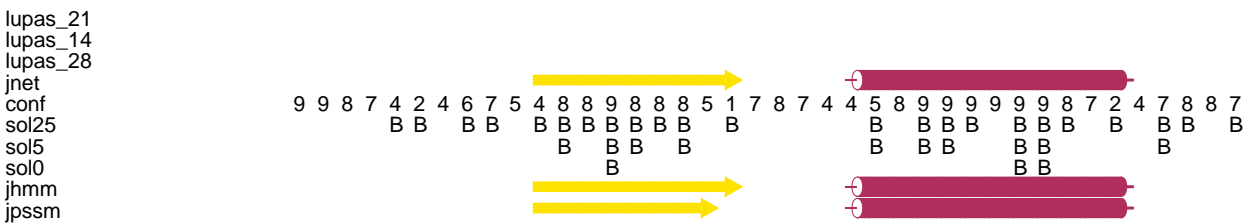
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UniRef90_C5BZE7          N L L R L S
UniRef90_L7VYL9          N L V R L S
UniRef90_J1L547          N L V T V S
UniRef90_M0MCR5          N L V S V S
UniRef90_K0IKU7          N L V S V S
UniRef90_L0AI95          N I V S V S
UniRef90_U2YU22          N L V A V S
UniRef90_U1QBU6          N L V T V S
UniRef90_U1PDC4          N L R R L S
UniRef90_H6RAI4          N L I R L S
UniRef90_UPI00035D234F   N I V L I S
UniRef90_W5TBW2          N L I R L S
UniRef90_UPI000376E63D   N I M T Y S
UniRef90_L9P9E0          N V I A L S
UniRef90_B9LQG7          N L V A V S
UniRef90_D8J8W9          N L T H V S
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lupas_21
lupas_14
lupas_28
jnet        ➡
conf        1 4 6 3 2 9
sol25       B B B   B
sol5          B B
sol0
jhmm        ➡
jpssm       ➡
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