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                       1                   10                  20                  30                  40
QUERY                  G V S F S E V M G K Q R D E K A Y E R L Q A L M S K I D D Q G K L L S E T R T I
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UniRef90_R6NI36           S F K F T L T S I E E Q E L Q Q R L N S L L D D I T K Q G N L I A Q H M D I
UniRef90_W4CIR3        S K N F S D M M H Q G E R A S Q A E L N R R F S E I Q L Q G D R L A K S M T I
UniRef90_S9T2G5           S F A D M M N N R H D Q A S N D E L Q Q R L Q D I Y Q Q G E R L S K S M T I
UniRef90_L5NCA9          S S F H S V I Q T K T E Q L Q Q T Q L N H L M S T I A S Q G D R V A R S R S F
UniRef90_F9DV80        N A R F G Q M V E K Q E A R L Q S E Q I T R L F G D I S S A G D R L A R S R N L
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UniRef90_R6EKX5           S F K F M L A S H K E A E L Q E R L T N L M A E I T T E G E R L A K K R D V
UniRef90_R9J2R0              L V S H I E E Q E L Q V R L T S L M E E I T M Q G D K L A K H R D I
UniRef90_X0SR38        S I R F K E V M S N K R D E Q A Q E R L T A L V G K I E E Q G K A L A E T R T V
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                               50         60         70         80
QUERY                 E E L R K Y K E L V K E F V G D A V E L G L R L E E R N R G R T K I Y K I V K
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UniRef90_U2Q2N0       A D V A A Y K R M I K D Y L E S I L K Y M Y D L K K D V S F W Q T Q Y F L T V D
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UniRef90_A9KLV2               L I S N I E E Q S L Q A R L N L L V E E I S T Q G K R I T K H M D V
UniRef90_UPI000415687E     S F K F T L S K I G D E A L A Q R L T L M M E D I Q Q Q G K L I S K K H D I
UniRef90_UPI0002F329A7  G L S F E A M V S T Q A Q K L Q G Y E L E Q L M K D I T R Q S D K L L R Y R T I
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UniRef90_L0K4Y2         N T T F L E E L K Q V H G E Q V K A K L D D L L G M I D K Q G D K L A N H R T F
UniRef90_W8QVD7         S A S F K S S M E T Q S G K M R L E Q L T V M L S D I E V F G K K L T K S R N L
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UniRef90_K0ATL0         N K K F S K E L A H L D E L T V K E K L E Y L L T K I D K Q S E K L S A K V D I
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UniRef90_UPI000370FC84                          I E Q E L T V
UniRef90_D7V0F3             K S A K K D S T T I E I Q K L L D H I N D K K T A V E I D T T V
UniRef90_Q39V75                                                L E R E P T V
UniRef90_D1B5G0       S F M E A M E E V E R A N         L I R E I S A L G E S L S K H P S I
UniRef90_R5LN11                                      I Y D A G Y M L E K S S N I
UniRef90_K0DCI6             E N G E F N L D L I K S M L D G I N E I G E R L L S E P S R
UniRef90_H2CBK3          F Q E I L N T V L P A H E E E D L H K L W S S L P G A E R L L I E N P S P
UniRef90_T0DZU5       G A S F H D S F N Q I N R L K T K E E V D G Y I N Q I K D L G K Q L V N T K G Y
UniRef90_G2ZCW6                     S L T E I K Q L I T Q V T D K K T L V E M D M T V
UniRef90_A4J1P3          F T K L L E N E E K D Y A H K Q I K E M V E K I K V A G N K L K S A A T E
UniRef90_UPI0003B36424    F S E M M Q T E Q A K T F N R Q M G I M I E Q L D Q Q G R R L M E H Q T I
UniRef90_A1ALW9                                             L E R E P N L
UniRef90_D2Z451                       E L E A L F K E L E D V G T K L S S V P S T
UniRef90_G7V5X5           E D L I K A Q S D Q L F K R L D E V A D K L F R F P S Q
UniRef90_H9UAQ6       S S F L G V F E E A E S E A I R K T I E E M I S D V V E A G N D F V R S P T A
UniRef90_H0URJ0                          R L I E E I R S L G D S L S K H P S V
UniRef90_UPI0004671B94      D E S L E D A E I Q E L D R L E K L G E Q L S R F P A E
UniRef90_E3CZ94                          R L I E E L E Q V G D R L S R Y P S L
UniRef90_G8U122                    Q T L W E R L A L V E S H V L E D P V D
UniRef90_UPI0002E0DFCF                    W T R L D A Q E K Q V I A Q L S L
UniRef90_I4BVI1                  R E E I K M M L S E L D D V G M M L S R F P S K

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jnet        O========================================O              O=
conf        9 9 1 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 8 7 4 4 8 7 5
sol25           B     B B               B       B     B B       B B   B         B
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Multiple sequence alignment (positions ~45–80)

Column ruler: 50 · 60 · 70 · 80

ID	Sequence
UniRef90_F5YNH4	E E I A Q Y K R A V R R F L R Y V V A N G Y D I E A Q I G R G T S K R H H V I R
UniRef90_W7ZYW8	G D L K N Y R A K V R A C L D Y L V N E G L E L E R T T S M G R F K H H Q L V K
UniRef90_E1R5F8	D R I K E Y R R A V S C F L Q Y I V H Y T F E A E T I N P M K K Q K R Y T L I R
UniRef90_C8VZT6	S N I A D Y K K Y I K E Y L S Y I L E N Y Y V L K F T E R Y R Q I L I S V D
UniRef90_D5WRG2	E D L Q R Y K E A L K E F L E R A M R L G L I V R E E D R R G R P Q L L K L L A
UniRef90_B8CYD3	N S L L E Y K R R V K Q F L R V V Q K E F V K A H Q W D S K G N L K T L T I I K
UniRef90_UPI000225ADA1	K D L V K F K R L I K R F L Q E A V S N G M D L E K S L S F G S S R N L T L V K
UniRef90_B9M5V9	V N F K I F R S L I S A F A K K V T A E A Y R L E I E G S P G Q R C H E I I T
UniRef90_M2BBP7	E T I N K Y K K A V K S F V N F A L Q H S L N V K A V T S G G K Q R N Y V I V K
UniRef90_R6EDA7	R D M K Q Y R K L I K E F I N E I S T H S H K F S R E N R K G R H R V Y G I I K
UniRef90_UPI0003FA7309	R E L K L Y R L M V K G F L E D T V R R G I K L K E W D R R G R G K R Y K I L E
UniRef90_R5PEL3	K D M K K Y R T S I K E F M N E V A A N A H E F S R E N R G R H R V Y G I I R
UniRef90_E8WQ27	A N F K V F R E L I G T M A R K V S A E A Y R I E M L S G G V S G R S H E V I A
UniRef90_F5YBD0	G E I L N Y K K A V R D F I H Y V V E N S Y A L V E S A G I P N A Q K Y H S I Q
UniRef90_Q5WH66	A E L H A F K R S V R Q C V S H L L E S L K V E T A S S S G Q V R Q K L V K
UniRef90_S6A366	D T I S E Y K K A V K T F V N F A V K H S L D V K S I I S G G K Q R N Y T I V K
UniRef90_T0FCA1	E N L N V Y K R I V Q A I L R E V M D R N T S V E T L R S R G S E K I Y Q L I N
UniRef90_S3JJP1	D A F A E Y R R A V S A L M K Y V V K Y S F E L E E F R M P N R R K V V V Q L R
UniRef90_R7RR77	E D A R E Y K R V Q E Y L S Y V V L K R E I G P Y S Y S L H V K I E T
UniRef90_B3E859	Q N F R R F R E L L S K L A K Q V S N E A Y R L E K I G G P M N P R Y Y E I I T
UniRef90_I0XTJ4	A N L E V Y K R I V Q G I L K E V L D R N T S L R T R A R G G S E K V Y Q V V Q
UniRef90_UPI000411870C	R D L A K F K R L V K G F L Q E A V Y S G L D L Q K S H S F G G Q N R K L M L V K
UniRef90_W8TGV4	K D V L E Y K K L V K E L L S V A V E N H S F A Q Q N R R G R H R M Y S I V K
UniRef90_H7EIA9	E N I E N Y R K K I G Q F L K Y I E K N N F E V I E K R R F G K N R R Y H Q I Q
UniRef90_A0A024PPZ9	R E L A K F K R M V K G F L Q E T V S K G F G L H T S H S F G G S R Q L S I I Q
UniRef90_A0A017RXR8	E D A R E Y K N K I K N Y L S F I V K N I Y I L K R E P G V Y N Y G I H T R I E
UniRef90_F4LM86	D S F T E Y R Q A V S H F M K F I V R S N Y D I E R P N R K F N T N K F Y L I Q
UniRef90_Q0B0V4	N D L M L Y K K L I R N F L Q E A T A K A Y L L Q K E N S R R G R T V L T T I S
UniRef90_B2S1Z5	E T I A A Y K Q A V K E F V Q Y A I H N Y T T E S K S S R G D T V I F T K I K
UniRef90_B0S8Z8	K N L D L Y K K H I K Q I A E L I L K K N Y K V M Q A P Q R G R Q K D V R Y V K
UniRef90_W4VBH7	R E L K I Y K R L I S D F L D E V L H H S H M F S K D D R R G R Y K V Y A T V K
UniRef90_B2A322	E S F I S Y R Q S I K N F L Q V F I G E A Y E V R G R N R F G S Q K L Y R H I E
UniRef90_A0RC73	D N V M E Y K N T V K S F L N F Y V D N V L Q M S R H P R Y G Y S Q K M T I V K
UniRef90_W8YST0	R E L K A Y K A M V K Q F L E M T V R R G V D V R S M D R R G R I K R H K L L D
UniRef90_S5ZWX4	Q N V V F Y K K T I G E F L S I I L S F S I S L K E Q K G G T N G E I Y S I V R
UniRef90_M6V3T7	E N L E A Y Q K H I Q A I T K A V I D Q N M R V E T L S R R M K G K I Y H V V K
UniRef90_H2JG77	R E L K V Y K Q L I S E F L D E A V S H S H N F M K K N R R G R H R V Y A I I K
UniRef90_UPI000479078C	K E V V V Y K K L I S E F M K E S V D N M V K F S K N N R R G R H R V Y G I I K
UniRef90_F2NWH8	E E F A D Y R K K V S Q F L R Y L A K N N F E V K K R E R R G F T R K F K I V
UniRef90_L7VNA0	A E L R V Y K K M I S E F L E E A V R G F A K F S K E D R R G R H R I F A I V K
UniRef90_B1HS70	L V K R F L Q E T V E H G M E L K Q W N R F G E G R H K I I I D
UniRef90_UPI000376F094	R E L R Q Y K L L V K Q Y L E E T A R R G I R L R E W D R R G R A K R Y K L L E
UniRef90_UPI0004632DF7	E T I A A Y K K A V Q S F A Q F V I K N N Y K M N K K T G M P D T I P F T K I K
UniRef90_H9UKF7	E N S S V Y R E L V R A L V E K V V R D G I I V E E H S S G S K R K S F S L L R
UniRef90_M1ZFH7	E D L N R Y K K L V R E F L D E A L S Q A L R V E E R N Y R G R M K V Y R L V E
UniRef90_C8PRA1	E T I L R Y K Q A V K N F I G Y V A R E A Y T V T R R D R T N R P R S F T Q I V
UniRef90_F6B4C3	A A I R E Y K D A I K N Y L S F V L K N Y Y K L R H D R S I N Y S T V Y T R V E
UniRef90_UPI00036CFDEC	S A V Q Q Y R E A V R R F V S R V L A Q A N N I E H E S G P G S R K R Y Y L I T
UniRef90_W7ZXB8	G A L T S F R R S L E D C L K H V L N D S Y S V R T S H Q F G Q F K Q H Q L V Q
UniRef90_A3DH84	A E L K V Y K R L I S D F L D E V L H H S H I F S K D D R R G R Y K V Y A T V K
UniRef90_UPI0003B5D28B	E N L D Q F K T S V R Q F I T F I V N N N F E V K N H K Q Q L R P K K G Q L I D
UniRef90_I0X7R3	E N L E N F K E A V G Q F I K Y I V D N N F E V N A R K P R R M Q I V N
UniRef90_Q67KN0	H D L Q L Y R E A I G R L F R D L T H H M M E V R E W D S Y W E Q R T M V T I Q
UniRef90_UPI00037B5785	R A L M N Y K E R I R R F L E E V V K G G Y G I K E R D R R G R I K L Y K I V S
UniRef90_K2C702	G L L N S Y K E S I R L F L K K L K D E F L S L K E E K K D G E Q K V Y Q L V E
UniRef90_UPI0002E1C3F9	R E M A K Y K M L I R R F I K E A I E F G L D L K D S R S F G Q T Q K L T T V E
UniRef90_I4BB24	D R Y E K Y K Q T V K L L C N M L I Q R S Y R L Q G W E D K R Q R R Y E I I K
UniRef90_UPI00036440C5	R E L A I Y R N M I K K F L E E T A R R G V I L K E W D R R G R G K R Y K L L E
UniRef90_H2J6W7	R N L E K Y K K S V K D F L K K I E K N L Y K L E S K L N F R E K N F Y V V A D
UniRef90_A8F3A2	E N F R S Y R E S I K D F L K V I E K K L Y K I G K Q L S S V D L H L I V Q
UniRef90_D5U4M2	K D F Q K F R D L I R S L T D K L V K D A Y R I I V S S Y M R G R E Y Q V V S
UniRef90_UPI000400813B	A D V K S Y K N T I K K Y L E A L V Q Y T Y T L N K I G F F E N T Y Y S T V E
UniRef90_UPI000370FC84	D N I M E Y R S T V K S F L N F Y V D N L M Q L S R H P R Y G Y S Q K M T V I K
UniRef90_D7V0F3	D N V M A Y K D A V K G F L N Y Y V D N V M T T N R H P K Y G Y Q Q K M T V I N
UniRef90_Q39V75	A N F R T F R D L I A T L A K T V T S N A Y R L E R V G G T S N P R C F E I I T
UniRef90_D1B5G0	S V L R R Y R Q L I G V A I E M V R R L E D W R R S E R T M F V L I E
UniRef90_R5LN11	K E F Q K F R D L I R A L V E K V I K D A Y R V R N L N M N R K T Y N V V A
UniRef90_K0DCI6	Q N V I F Y K K V I S E F I S I I I S S S V C L K E Q K S F G D P K R Y R I I K
UniRef90_H2CBK3	E N L S S Y R E L V K G I A R E I L N S N M K V A K L K R R V R G N E L N V L Q
UniRef90_T0DZU5	S D V I R Y K Q V I Q K Y L K S V V N Y A Y E V D R K D S F W N N N Y F R T V
UniRef90_G2ZCW6	D N V L S Y K K A V Q S F L N F Y V N N V M D Y S R H P K Y G F S Q K M T I L K
UniRef90_A4J1P3	E N I S E Y K E G I K D Y L T F V L K N Y H K L R H D R S V N Y S T I Y T R V E
UniRef90_UPI0003B36424	P E L K E Y K R L V R E I I T E L K D H G L N L Y E E R S F G R L K T H Q L I E
UniRef90_A1ALW9	D N L H R F R N L L G Q I A K R I S A E A Y R L N K I N G P Q N P R Y Y E I I T
UniRef90_D2Z451	A I M S R Y R Q L L D R A L K G V R L R R D W R R G D R G F L V V E
UniRef90_G7V5X5	R V L E E Y K G V V R E L L Q Q V Q G M L Q V R Q E F S M T S G A A F R L I T
UniRef90_H9UAQ6	E N L K K Y K E K I R N V L K Y V E K N L Y K L K Y D Y A L S Q P R L H I I A E
UniRef90_H0URJ0	S V L Q R Y R H L I G L A I G M V R S T M A L K R D Y R R S E R T L Y V L I E
UniRef90_UPI0004671B94	R L L S T Y R T V V K E L L R R A T G R L R L K D W R R Y D K N I F V L M E
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UniRef90_G8U122	R H L T Q Y L D T V R D I L N Q A L K R H Q A E T W S P R G R F R Q M R V V
UniRef90_UPI0002E0DFCF	E S V N R Y V K T V K E L L E E A L K A H Q V K A G G Y F G H F R Y L V R V Q
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lupas_14

lupas_28

jnet

conf: 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 8 8 6 1 4 0 2 2 3 1 2 6 8 8 8 7 4 5 7 8 8 5 2 1

sol25: B · · · B B · · B B · · · B B · · B B · · · B · · B · · · · · · · · · · · · · B B · · B B

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                               90             100            110
UniRef90_F5YNH4          V V D E K L E Q L A A G I L A G Q V D Q L G L L A R L D E I T G L L V D L L
UniRef90_W7ZYW8          T I D F E L E A L T K D V F N Q Q K T E F D L L K R R V G E L Q G L I I Q F Y
UniRef90_E1R5F8          V V N E K L E R L V S G V L A N Q L P Q L E L L R R V E E I N G L L V D L L
UniRef90_C8VZT6          I I N K E V E E L T R N L L L E Q K S N I D M I S K I D R I E G L L I D L Y
UniRef90_D5WRG2          I L D E R V L E I A D V L R E A E K D R I R L L A L I G E I R G L L I
UniRef90_B8CYD3          K V D E N L E V L H E M F M E E Q A D V L K I V Q K I D E I R G L L L D L Y
UniRef90_UPI000225ADA1   Q I D E K L M E L T D E I M N Q E K K T V D L L G I I G E I K G L L V N I Y T
UniRef90_B9M5V9          I I D R E A D A L Y H L I M Q E Q R N H I K I T A Q I M K I K G M V V D
UniRef90_M2BBP7          V I D E K I D K L T Q E L L F N Q L E K L Q I L A K L D E I K G L L V N L T T
UniRef90_R6EDA7          Q I N Q T L D E L A E E L L E E E K D H L A I L Q K V D E I R G L I L D I F T
UniRef90_UPI0003FA7309   E V D N L L V S M G E E L L Q S E E G R L E L L Q K V G E I R G L L I N L L
UniRef90_R5PEL3          Q V D K N L D D L A Q E L M K E E K D H L A I L G K I D D I R G L L I D I S T
UniRef90_E8WQ27          V I D K E A D L L Y H L V M R E Q K D H I R I V A Q I V K I K G L V V D
UniRef90_F5YBD0          V I D R K L D E L A A S I L S G Q A S R M D R V A K L D E I T G L L V D L
UniRef90_Q5WH66          E I D K G L V E L T N A V F D Q S K S E L D L L N K I G E L Q G L I I Q L Y
UniRef90_S6A366          I I D E K V E R L T K E L L F N Q L E K L Q I L E K L D E I K G L L I N L
UniRef90_T0FCA1          T V D D K V Q T L A D F I I H P D N S T F D L M K R M E D I R G L L V D L
UniRef90_S3JJP1          I V D E K L N D L A S E I L A N Q I D K L L I L K R V E E I Q G L L V D V L A
UniRef90_R7RR77          V I N E K V D A L T K E L L E Q H K D T I E L A D K I E E I K G L L V D V Y
UniRef90_B3E859          V I D K E A D K L Y E L V V K E Q K D R M S I T A S V I G I K G L V V D L L
UniRef90_I0XTJ4          I V D D K I Q T L A D F I V H P E N S T F D L M K R M E D I R G L L V D L
UniRef90_UPI000411870C   Q I D E K L V E L T E E I M N Q E K K T V D I L G L I G E I K G L L V N I Y T
UniRef90_W8TGV4          Q V D R E L D I I T K E F L K D Q L D H V N V L K R I D G V K G L L L D V
UniRef90_H7EIA9          I I N Q K L N N L A S D M L F N H S K N L N L L A R L E E I N G M I V D L I A
UniRef90_A0A024PPZ9      E V D E K L V E L T E E I M N Q E K K S V D I L G L I G E I K G L L I N I Y T
UniRef90_A0A017RXR8      I I D S K L D E L T K E L L N D Q K E S I E L A D R I H E I K G L L V D V Y
UniRef90_F4LM86          V I D Q K L D T L A A E L L L N H S E T L R I L A G I D E I N G L L V D L I T
UniRef90_Q0B0V4          I V D Q E V E Q L I N D F I G K K K E A V D I L T T L D D I R G M L V D L
UniRef90_B2S1Z5          V I D Q K L A S F V R E L M S H Q V D Q L T V L Q K T E E I Y G M L V D L L
UniRef90_B0S8Z8          V V D E K L D L L A K T M F S P N N S A F V I L K Q L D E I R G L L I D L
UniRef90_W4VBH7          K I N A E L D E L T T E V
UniRef90_B2A322          T L D Q K L A E L G E K V V K N E G E K M E V I A R I D E I R G L L L D L Y
UniRef90_A0RC73          Q A E M G L N E L E D N L I N T K T G H L E M L N Q I G E I H G L I V N L
UniRef90_W8YST0          E I D E S L L A M A D E L L L S E Q G R M E L L Q R V G D I R G L L I N L L
UniRef90_S5ZWX4          I I N E K L D K L A Y S V L Q N Q I S Q I K L L S S L E E I Q G L L V N L L
UniRef90_M6V3T7          I I D E K I Q I L A E L I M N E G N S A F K L L K S L T D I R G L L L D I
UniRef90_H2JG77          K I N E E L I E L T N E I V K S Q Q D N I S I L K K L D D I R G L I L D L F
UniRef90_UPI000479078C   K V N T E L E E L T K D V L Q K E K D N I K I L K R L D D I R G L I L D I Y
UniRef90_F2NWH8          V I N Q K L D E M A N W L L S S H R E A F A M L A R V N E I S G L L V D L
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UniRef90_UPI000376F094   E I D Q E L L G L A E E L L D T E Q G R I E L L R K V G E I R G M L I N L
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UniRef90_H9UKF7          V V D A K L A Q L L D G V A A T Q R E Q L Q L M A Q V E E I Q G L L I D M L
UniRef90_M1ZFH7          E V D S H L A R L T E E I L R N Q S E G L V L L E E I G E I K G L L I N Y F
UniRef90_C8PRA1          I I N E K L D K F A G E L L C D Q K S Q L F I L E R L E E I Y G L I I D L I T
UniRef90_F6B4C3          V I N Q E V D Q L T K K L L E Q Q R D C I D I V A E V D K I T G L I L D V Y S
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UniRef90_A3DH84          K I N E E L D E L T K E V L N A E K D N I R I L Q R I E D I R G L V L D L
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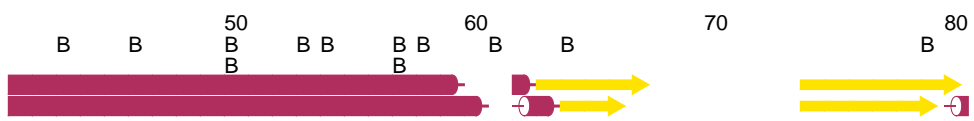   B

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