

Sequence alignment of UniRef90 entries showing conservation across 40 positions. The alignment shows a highly conserved region from position 10 to 30, with many identical residues highlighted in blue. Positions 30-40 show more variation, with some residues in red and others in black.

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm

QUERY

UniRef90_UPI00037C540B

UniRef90_UPI0002FFA3F8

UniRef90_UPI0002DE78A3

UniRef90_D3VAK8

UniRef90_U7QWC8

UniRef90_T0PP68

UniRef90_T0PP68

UniRef90_B5AGW4

UniRef90_C4TVM7

UniRef90_G2HOL1

UniRef90_G2GX10

UniRef90_W6AN97

UniRef90_M7FS34

UniRef90_G2H1M0

UniRef90_W3V298

UniRef90_C0AZ64

UniRef90_B4F2V0

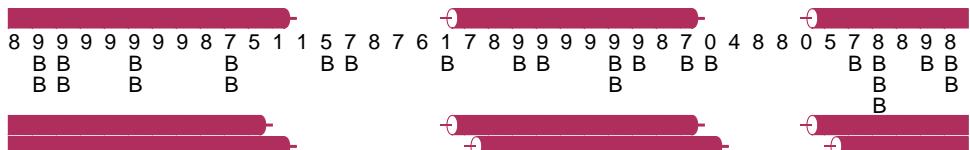
UniRef90_Q7N1Z0

UniRef90_B6VN12

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
ipssm

QUERY		90	100	110	120
UniRef90_UPI00037C540B	N A F R E L R T Q L E K A L Y L P E M E A L K K Q I L Q I P N K G S G A A R F L				
UniRef90_UPI0002FFA3F8	H A L T Q L K E Q V S T E L F K G E M K V T Q K A I D A I A K T R P E L A A D I				
UniRef90_UPI0002DE78A3	Q A F N Q L K G Q I T N A L F N G D I Q V A K E G I S E I A Q T R P E L A A R I				
UniRef90_D3VAK8	Q A L T Q L K E Q V T S A L F I G K M Q V A Q V G I N A I A Q T R P E L A A R I				
UniRef90_U7QWC8	T A I L S G V Q T Q L G D I M F R G A L Q E V R S P L L E I A Q T R P E M A S R I				
UniRef90_T0PP68	T S L R R M Q T Q L E D L M F T G T L Q M V R S P L L E M A E T R P D M A S R I				
UniRef90_T0PP68					
UniRef90_B5AGW4	N A F R E L R T Q L E K A L Y L P E M E A L K K Q I L Q I P N K G S G A A R F L				
UniRef90_C4TVM7	K A F L T L G E K I I D K S L F N S K M Q P A K N A I L R L S K T Q P E M A R L				
UniRef90_G2H0L1	A A F S K L V D Q L I N N A L F S A D M A H F K T V I N D I G A T R P A L A N Q L				
UniRef90_G2GX10	A A L K E L Q K K I H N I V F P D A D F K L Q R S I I I S K I D P E Q A A R I				
UniRef90_W6AN97	S A L L H L Q Q S L E D S L L N H S Q Q E S L D G T A R K A N T Q D V D S W D T				
UniRef90_M7FS34	T A L L S L K N R V T E S L Y S N V A Q E S R V E I A K L S A D R I D L A V D L				
UniRef90_G2H1M0	S V I S T L Q N Q I N Q V L F T H P S D P L R K N I L D M M K L Q P L I A A D I				
UniRef90_W3V298	P L L N K L I T K V R D P L L N S L Q A T S A A E L L V H K P V N L W Q T				
UniRef90_C0AZ64	E I I L N K V K N K I L E S K L F Y D R L N Y G K E K L I Q L A E K N S L V A A K F				
UniRef90_B4F2V0	D I L N Q V K Q K I I E D K L F Y G D L L Y G K E K L I A L A Q K N S L V A A I F				
UniRef90_Q7N1Z0	P A V E D L E G L S G T N K G V E P T I I G D S H K K P V D G W Q K				
UniRef90_B6VN12	P A M E D L D G L S G K N K E V E P T I I D D S H L N P V D G W Q T				

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm



QUERY
UniRef90_UPI00037C540B
UniRef90_UPI0002FFA3F8
UniRef90_UPI0002DE78A3
UniRef90_D3VAK8
UniRef90_U7QWC8
UniRef90_T0PP68
UniRef90_T0PP68
UniRef90_B5AGW4
UniRef90_C4TVM7
UniRef90_G2H0L1
UniRef90_G2GX10
UniRef90_W6AN97
UniRef90_M7FS34
UniRef90_G2H1M0
UniRef90_W3V298
UniRef90_C0AZ64
UniRef90_B4F2V0
UniRef90_Q7N1Z0
UniRef90_B6VN12

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
ipssm

QUERY

UniRef90_UPI00037C540B P E A I D F P V K Y V I E D I S V F D K I Q T N Y W E L P A Y E S W N E G S N S

UniRef90_UPI0002FFA3F8 P K D L G F D A K Y H I E L G E H Y S D F K

UniRef90_UPI0002DE78A3 P S D L G F E A K F H V E L G S Q Y

UniRef90_D3VAK8 P S D L A F A D K Y H V D L G E H Y

UniRef90_U7QWC8 P A D L A F N P K F H V D L G D Q F D D F K

UniRef90_T0PP68 P N D L P F D P K F H V E L G A Q F D D F K K

UniRef90_T0PP68 P D R L D A D G N Y R V V Y G D P A Q L A G N I R W Q V V G H G R D G D E Q N N

UniRef90_B5AGW4 P D R L D A D G N Y R V V Y G D P A Q L A G N I R W Q V V G H G R D G D E Q N N

UniRef90_C4TVM7 P E A I D F P V K Y V I E D I S V F D K I Q T N Y W E L P A Y E S W N E G S N S

UniRef90_G2H0L1 P D R L N F D P T Y H I A T G D Q F D E C K T K

UniRef90_G2GX10 P T N L D F A S T Y Q V K L A S A E D F

UniRef90_W6AN97 P E N D I D F N A K F H I P L G N K F T V F K A N

UniRef90_M7FS34 P D S L D T D G K Y R V V Y G D P E Q L S G K L R W Q V V G H G R D E S D N N N

UniRef90_G2H1M0 P N A L G F K A V Y H F P F S G E F H G L D T V L A N E Q G I G

UniRef90_W3V298 P D S L D S D G Q Y R V I Y G D P A K L S G K L R W Q L V G H G R S E S E Q N N

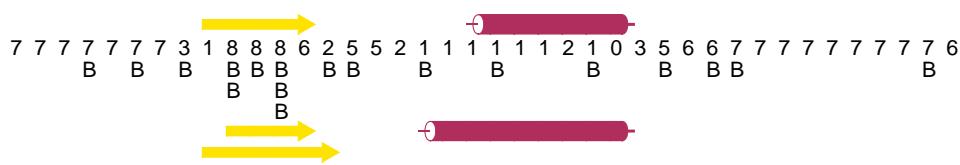
UniRef90_C0AZ64 V E G Y D Y T E F H N S

UniRef90_B4F2V0 P D S L D A N G K Y R V V Y G D L A K L S N K L R W Q V V G H G R D T S E Q N N

UniRef90_Q7N1Z0 P D S L D A N G K Y R V V Y G D L S K L S N K L R W Q V V G H G R E T S E Q N N

UniRef90_B6VN12

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm



QUERY

UniRef90_UPI00037C540B A L L P G L L R E S Q S K G M L S K C R I I E N S L Y I G H S Y E E M F Y S I S

UniRef90_UPI0002FFA3F8 Q W L E K S Q A N D L L S K A V L D E K T V H L G Y S Y Q E L Q D L T G

UniRef90_UPI0002DE78A3 A D F K Q T L E K A Q V E G L L T K A V I D E K T V H L G Y T Y Q E L Q D Q T G

UniRef90_D3VAK8 A D F K Q W L E T S Q S N G L L S K A Q D K G L L I N A R I D E Q N T V H L G Y S Y Q E L Q D L T G

UniRef90_U7QWC8 Q C L S K A Q D K G L L I N A R I D E Q N T V H L G Y S Y N E L L D M T G

UniRef90_T0PP68 S R L S G Y S A D E L A G R L R R E R L Q E A G V A S K P S Y V S L S L V S D

UniRef90_T0PP68 S R L S G Y S A D E L A G R L R R E R L Q E A G V A S K P S Y V S L S L V S D

UniRef90_B5AGW4 A L L P G L L R E S Q S K G M L S K C R I I E N S L Y I G H S Y E E M F Y S I S

UniRef90_C4TVM7 L L Q A Q S N G E L R Q V Y I N E S T F T I G Y T Y E E M F R A R G

UniRef90_G2H0L1 A E F K R L L L H A Q E Q D Q L N K V F L D E K T I H L G Y H Y Q E L I D P Q P

UniRef90_G2GX10 T H L S G

UniRef90_W6AN97

UniRef90_M7FS34

UniRef90_G2H1M0

UniRef90_W3V298

UniRef90_C0AZ64 S Q Y V N E I V E G I N I P E L K N T I L I E N K L H L K E N Y K K L S E Y R S

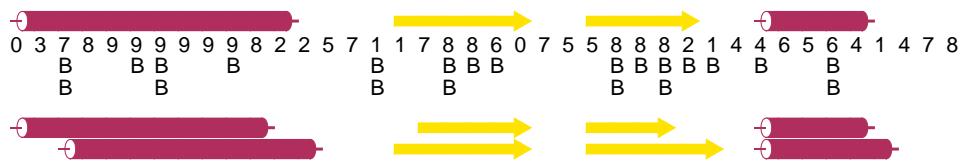
UniRef90_B4F2V0 F L L D

UniRef90_Q7N1Z0

UniRef90_B6VN12 I R L S G

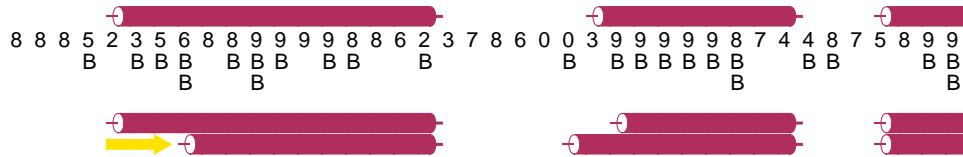
I R L S G

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm



QUERY	250	260	270	280
UniRef90_UPI00037C540B	P Y S N Q [V] G G P Y E [L] Y P F T F F S M [L] Q E [V] Q G D [L] G F E Q A F A T R N F F			
UniRef90_UPI0002FFA3F8	[V] E S [V] Q M A F Y F [L] K E A A K S S D R S S G D S A E M I L L N K F A D R N Y V			
UniRef90_UPI0002DE78A3	T E S [V] Q M A A Y F [L] K E A A K K S D P T S A D S A E M I L L N K F A D K N Y I			
UniRef90_D3VAK8	[V] E S [V] Q M A F Y F [L] K E A A K K A D P [V] S G D S A E M I L L N K F A D Q S Y L			
UniRef90_U7QWC8	S E D V K M A [V] Y F L K E [V] A K Q A D P N F A G S H E A I L L N R F A N P A Y L			
UniRef90_T0PP68	[V] E S [V] Q M A [V] Y F L K E A A K Q A D P G F A G S Q E A I L L N R F A N P A Y L			
UniRef90_T0PP68	D Q Q T G F A S R F I K A L A Q V S A R S S E V A V D L	D Q Q T G F A S R F I K A L A Q V S A R S S E V A V D L		
UniRef90_B5AGW4	P Y S N Q [V] G G P Y E [L] Y P F T F F S M [L] Q E [V] Q G D L G F E Q A F A T R N F F			
UniRef90_C4TVM7	S E N S Q F F S Y [I] L N E V A G R N N S T D R S S K E L N W L D N C A D K K F L			
UniRef90_G2HOL1	N A R T Q Q A M D Y L Q S A I A K I R D N Q D A D A E F F M I L A K F G D K N Y I			
UniRef90_G2GX10	N E H [V] G I I I Y T I I L A I Q E K R D S N F [I] Q T D L L M L K N F A N Q R Y L			
UniRef90_W6AN97				
UniRef90_M7FS34				
UniRef90_G2H1M0				
UniRef90_W3V298				
UniRef90_C0AZ64	D K Y [V] N K L L N L I E T E I D I N K G D K T S E [L] Y F E L F R N N Q F I			
UniRef90_B4F2V0	N K Y [V] N K [L] H L I I D S I K K I D N T G V Y R D L Y L E F F S N H Q F N			
UniRef90_Q7N1Z0	L K Q F Y Q A A K L G K Q A I S K P D H I S L V G C S L I S D N K F A R R F I			
UniRef90_B6VN12				

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm



QUERY
UniRef90_UPI00037C540B
UniRef90UPI0002FFA3F8
UniRef90UPI0002DE78A3
UniRef90_D3VAK8
UniRef90_U7QWC8
UniRef90_T0PP68
UniRef90_T0PP68
UniRef90_B5AGW4
UniRef90_C4TVM7
UniRef90_G2H0L1
UniRef90_G2GX10
UniRef90_W6AN97
UniRef90_M7FS34
UniRef90_G2H1M0
UniRef90_W3V298
UniRef90_C0AZ64
UniRef90_B4F2V0
UniRef90_Q7N1Z0
UniRef90_B6VN12

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
ipssm