

1 C G K H G T C E D C V L A R D P Y C A W S P P T A T C V A L H Q T E S P S R G  
 UniRef90\_O09126  
 UniRef90\_UPI0003F083A1  
 UniRef90\_UPI00333B34D  
 UniRef90\_L9KFX8  
 UniRef90\_K9J315  
 UniRef90\_V8PI99  
 UniRef90\_UPI0002C67A55  
 UniRef90\_UPI0003316169  
 UniRef90\_H0YQ93  
 UniRef90\_UPI0003C2AA34  
 UniRef90\_UPI00033437DB  
 UniRef90\_D2HCJ2  
 UniRef90\_UPI00045E1997  
 UniRef90\_H2TRG9  
 UniRef90\_H2LME8  
 UniRef90\_UPI000350E0D7  
 UniRef90\_G3VQJ3  
 UniRef90\_G1MGS1  
 UniRef90\_F1QR50  
 UniRef90\_UPI0003443C2B  
 UniRef90\_W5N1F4  
 UniRef90\_I3JLN9  
 UniRef90\_UPI0004435B7F  
 UniRef90\_UPI00033381E7  
 UniRef90\_UPI0003C154D1  
 UniRef90\_UPI0003AE02ED  
 UniRef90\_F1QK68  
 UniRef90\_UPI0004575600  
 UniRef90\_UPI0004438F65  
 UniRef90\_L9KNS1  
 UniRef90\_B3DLC3  
 UniRef90\_UPI00020E3A95  
 UniRef90\_L8Y9H7  
 UniRef90\_Q9WUH7  
 UniRef90\_H0UV31  
 UniRef90\_L5LIM8  
 UniRef90\_UPI0003C25DAA  
 UniRef90\_S7QAT8  
 UniRef90\_L5MIF3  
 UniRef90\_UPI000388D741  
 UniRef90\_UPI0003317FA0  
 UniRef90\_Q62179  
 UniRef90\_G1MZC4  
 UniRef90\_UPI00042BF85C  
 UniRef90\_UPI0003C027A3  
 UniRef90\_K9J3Q6  
 UniRef90\_W5LEFO  
 UniRef90\_UPI0003C285C6  
 UniRef90\_F6VD85  
 UniRef90\_A9JRL7  
 UniRef90\_H2MK68  
 UniRef90\_U3K202  
 UniRef90\_UPI0002990297  
 UniRef90\_F6W3R1  
 UniRef90\_UPI00032B1E36  
 UniRef90\_UPI0003AF8029  
 UniRef90\_G3TJK7  
 UniRef90\_UPI0003C2616E  
 UniRef90\_Q6DCD2  
 UniRef90\_F7CPP4  
 UniRef90\_Q6DCP0  
 UniRef90\_V9KEI7  
 UniRef90\_S4RZV8  
 UniRef90\_D3YWV5  
 UniRef90\_H3B7V2  
 UniRef90\_UPI0003593A5E  
 UniRef90\_F1RB05  
 UniRef90\_UPI0003EBCDDE  
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 UniRef90\_G3PR11  
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 UniRef90\_UPI0004628866  
 UniRef90\_S4RMF6  
 UniRef90\_UPI000398F56E  
 UniRef90\_UPI000440C5DE  
 UniRef90\_UPI000388FEC2  
 UniRef90\_UPI000398FDFF  
 UniRef90\_UPI000298ADDD  
 UniRef90\_L5JPY4  
 UniRef90\_UPI0003AEBC04  
 UniRef90\_H0VK11  
 UniRef90\_Q66KH4  
 UniRef90\_UPI00046B179E  
 UniRef90\_H2SUB4  
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 UniRef90\_H3B8Q9

10 20 30 40

10 C V L A R D P Y C A W S P P T A T C V A L H Q T E S P S R G  
 20 C V L A R D P Y C A W S P A [ ] K A C V T L H Q E E A S S S R G  
 30 C V A L H Q T E S P S R G  
 40 C V A L H Q T E S P S R G

The sequence alignment shows a highly conserved region from position 10 to 40. The sequence starts with C G K H G T C E D C V L A R D P Y C A W S P P T A T C V A L H Q T E S P S R G. The region from 10 to 40 is highlighted in yellow, showing a high degree of conservation across all entries. The first 9 positions (1-9) are also highlighted in yellow, indicating they are part of the same domain or motif.

50

QUERY	
UniRef90_O09126	L I Q E M S G D A S V C P D K S
UniRef90_UPI0003F083A1	W I Q D M S G D T S S C L D K S
UniRef90_UPI000333B34D	L I Q S M S G D V S A C P D R
UniRef90_L9KFX8	W I Q E M S G D T S S C P D K
UniRef90_K9J315	L I Q D L S G D A S T C P D V S
UniRef90_V8PI99	L I Q E M S G D T S A C P D K
UniRef90_UPI0002C67A55	W I Q N S G D A S S C S D K
UniRef90_UPI0003316169	L I Q D M S G D V S S C P D R A
UniRef90_H0YQ93	W I Q N G G D A S S C S D K
UniRef90_UPI0003C2AA34	W I Q N G G D A S F C S D K
UniRef90_UPI00033437DB	L V Q Q M S G D V S A C P D K
UniRef90_D2HCJ2	L T Q Q M S G D V S G C R D K T
UniRef90_UPI00045E1997	L I Q D M S G D V S A C P S M S
UniRef90_H2TRG9	L I Q S L N G D A D K C P S M S
UniRef90_H2LME8	L V Q S L R G D A D R C P S
UniRef90_UPI000350E0D7	W I Q D V E G G N A Q
UniRef90_G3VQJ3	L I Q K M N G D A S S C T D K
UniRef90_G1MGS1	L I Q D M E R G N R G C P
UniRef90_F1QR50	M I Q N L K G D A G I C P
UniRef90_UPI0003443C2B	L I Q R M S G D T A G C P S
UniRef90_W5N1F4	L I Q N L N G D A H K C P S
UniRef90_I3JLN9	L I Q S L K G D A N M C P
UniRef90_UPI0004435B7F	L I Q N I N G D V S E C P K
UniRef90_UPI00033381E7	W I Q D I E G A N A Q
UniRef90_UPI0003C154D1	W I Q S V H G D P S K C P
UniRef90_UPI0003AE02ED	L V Q Q M S G D T S V C P
UniRef90_F1QK68	L I Q S L K G D A T Q C P
UniRef90_UPI0004575600	L M Q N L K G D A V P C
UniRef90_UPI0004438F65	L I Q S L S G D A D I C P
UniRef90_L9KNS1	W V Q D I E G A N A K
UniRef90_B3DLC3	L I Q K L N G D A S Q C P A S A
UniRef90_UPI00020E3A95	L I Q D I E R G N R G C E E S S
UniRef90_L8Y9H7	L I Q D V E R G N R G C E E S S
UniRef90_Q9WUH7	L I Q D I E R G N R G C E G S T
UniRef90_H0UV31	L I Q D I E R G N R G C E G S T
UniRef90_L5LIM8	W I Q D I E E G
UniRef90_UPI0003C25DAA	L I Q S L K G D V S K C P S
UniRef90_S7QAT8	L I Q D M S G E V S A C P D E S
UniRef90_L5MIF3	L I Q D M S G E V S A C P D E S
UniRef90_UPI000388D741	L I Q S V N G D A S K C P K
UniRef90_UPI0003317FA0	W V Q D I E G A N A R
UniRef90_Q62179	WT Q D I E G A S V K C K N S S
UniRef90_G1MZC4	L I Q N V K G D A S S C
UniRef90_UPI00042BF85C	WL Q D I E E T G
UniRef90_UPI0003C027A3	W I Q D I E E G
UniRef90_K9J3Q6	W V Q D I E E G A N A
UniRef90_W5LEFO	L V Q S L E E G D P A R C P D
UniRef90_UPI0003C285C6	WA Q D I E E G A N T E
UniRef90_F6VD85	W V Q D I E E
UniRef90_A9JRL7	WL Q D I E E R G N
UniRef90_H2MK68	M V Q S L E E G D V S E C P
UniRef90_U3K202	L V Q D V Q S G N K G C R S S
UniRef90_UPI0002990297	A L Q S L E E G D L S Q C P D
UniRef90_F6W3R1	L T Q D V E R G N R G C
UniRef90_UPI00032B1E36	WK Q D M E R G N
UniRef90_UPI0003AF8029	M I Q S L S G D I T M C P
UniRef90_G3TJK7	W L D I S S G A E Q C P K
UniRef90_UPI0003C2616E	L V Q D V Q R G N E G C G N N S
UniRef90_Q6DCD2	L L Q D L K S D T S V C E V Q S
UniRef90_F7CPP4	WK Q D M E H G N
UniRef90_Q6DCP0	W V Q D I E
UniRef90_V9KEI7	F L Q D I Q K G N A A C P V Q
UniRef90_S4RZV8	W I Q D I E A D A S G C P
UniRef90_D3YWV5	WK Q D M E R G N
UniRef90_H3B7V2	R R Q D V H G D A Q Q C
UniRef90_UPI0003593A5E	F W A S V S G G V Q Q C P S M T
UniRef90_F1RB05	L T Q D I Q N G N Q G C D K S T
UniRef90_UPI0003EBCDDE	W S Q D M E K G N P Q
UniRef90_UPI00044217A7	W V Q D I E G
UniRef90_Q6NZU7	W I S I S E G V Q Q C P S M T
UniRef90_UPI0003C1A175	M I Q D L E N R N P Y C L N S
UniRef90_UPI0004575D05	R R Q D I N G N P A Q C L D Q S
UniRef90_H3B1B4	W V Q D V E G N V S
UniRef90_UPI0003343FA3	WK Q D M K R G N
UniRef90_G3PR11	L I Q S V K G D A S L C P N
UniRef90_H2SU15	L I Q S V E G D A K L C P
UniRef90_UPI0004628866	W L Q D I E E G A V R L C P E
UniRef90_S4RMF6	W I Q D I N G D P T Q C S D Q
UniRef90_UPI000398F56E	R R Q D I H H G N H Q C L D Q
UniRef90_UPI000440C5DE	W I S I R E G P Q Q C P S M T
UniRef90_UPI000388FC2	WA Q D I E
UniRef90_UPI000398FDFF	L V Q D V S S D T R A C
UniRef90_UPI000298ADDD	L I Q D I Q Q G N R G C E N
UniRef90_L5JPY4	S K Q E V V G G P
UniRef90_UPI0003AEBC04	W K Q D M E Q G N
UniRef90_H0VK11	R R Q D V H G N A A Q
UniRef90_Q66KH4	W L Q D I S S G V K C P
UniRef90_UPI00046B179E	W Q Q S I
UniRef90_H2SUB4	W I Q D I Q H G N R G C E K
UniRef90_UPI0002A4C754	W D V H G D P S Q C W D
UniRef90_H3B8Q9	Q D V H G D P S Q C W D

1 10 20 30 40

UniRef90_UPI000440A801	C S R Y Q S Q P D C L L S R D P Y C A W D S E G R A C V R I D L H R G S M S T
UniRef90_H9GKU4	C D Q Y T I C T D C L A A A D A Y C G W C T L E T R C S L Q H E C A N S D E P
UniRef90_UPI0000D9A200	C E T Y G T C A E C C C L A R D P Y C A W D G A S C T H Y R P S L G K R R F
UniRef90_I1G2B3	C E R Y P T C S E C I S S R D P Y C A Y H V E G G K C V I S T I T S V G G S G S
UniRef90_U3JIT4	C T L H R S C A E C V L A R D P Y C A W H S L E G S C Q P A H L A A Q D G N A
UniRef90_U3JF90	C G R Y Q S C T D C V L A R D P Y C A W S R N G S A C V I R T D G H N G S H
UniRef90_F7HI45	C E T Y G T C V E C C L A R D P Y C A W D G A S C T H Y R P N L G K R R S
UniRef90_UPI0004415A9	C G K H Q S C S E C L A A G D P H C G W C H S V Q R C T F K E D C I H P Q N
UniRef90_G3PGT6	C Q L Y G A C A E C C C L A R D P Y C A W D G H T C S Q Y V P A S K R R A R R
UniRef90_UPI0004575D8D	C N T Y T T S C S Q C C L A R D P Y C A W D G T L C S R Y T P A P K R E T R R
UniRef90_UPI00044100F4	C S F Y S S C A E C V L A R D P Y C F G W D S Q G K G C V P V S N M Y S S
UniRef90_H2VC82	C G R Y H T C V D C I L A R D P Y C G W D L A A E R C V A S S L K
UniRef90_UPI000388E48E	C A K Y R S C A D C V L A K D P Y C A W S R N A S R C L R A D G S D G S L
UniRef90_Q4RYH6	C Q R Y A S C Y D C V F A R D P F C G W D G K A C V E L A S R A Q R S N
UniRef90_H2SUQ0	C E T Y G A C A E C C C L A R D P Y C A W D G A V C A R Y L A N S K R R F R R
UniRef90_G3NR19	C E T Y K A C A E C C C L A R D P Y C A W D G S L C A R Y T P N S K R R Y R R
UniRef90_F6U8I4	C S K H K S C S A C L T V S D P H C G W C H S L Q R C T F K E D C V Q N S E N
UniRef90_F6UCF0	C S V Y E S C M D C V L A R D P H C A W D P S R I C H L P T P I P K S
UniRef90_UPI000359DCFF	C S K R K S C S E C L A A A D P H C G W C L P L Q R C T F R C T H G G S F E N
UniRef90_I3SD69	C S L Y R S C G E C V L A G D P Y C A W S G G A C Q L L I P G P W P L Q P V T
UniRef90_I3ND46	F C E K H S S C A D C V L A R D P Y C A W S P A T A A C V A L H Q A E G P H R
UniRef90_UPI000333B765	C S S K Q N T C A A C L K A A D P H C G W C H S L Q R C T F Q G D H S N N S G N
UniRef90_G3NZ63	C H R Y T S C Y D C I F A R D P H C A W N G T R C V A V M A Q A D R S T
UniRef90_F7C5U5	C N K H Q F C T A C L M A M D P H C G W C H S L Q R C T F Q D D C K G N T Q T
UniRef90_G3N3Z9	C N L Y G S C K E C C L A R D P H C G W C L P L Q R C T F P S T R R R A R R
UniRef90_Q4SAC2	C Q A Y G S C A D C C L A R D P Y C A W D G R S C S R F Y P A A K R R S R R
UniRef90_G3N8N7	C S F Y W T C P Q C V L A R D P F C G W D P V S R A C V G A S N S R T S L R G
UniRef90_W5JXY2	C G V Y K A C S D C C L A R D P Y C A W D G E N C A P F T Q A T K R R S R R
UniRef90_W5LCT9	C S Y Y S S C A E C V L A R D P F C G W D L S R R A C V D I D S V R E N
UniRef90_UPI00046C3606	C N K Y G S C K E C L S A K D P H C G W C H L R K R C T L K G D C S H S S R D
UniRef90_W5K9Y5	C E L Y K A C A D C C L A R D P Y C A W N G S T C S S Y F P S N K R R A R R
UniRef90_G3PN18	C S R Y D S C T D C I L S R D P Y C V W D F T P K L C S V H T S T A
UniRef90_UPI0003872AED	C S S L Y R S C G E C V L A R D P F C A W S R G A C G C R R A T L H P T A H P Q L
UniRef90_L5MJ56	C G R L Q S C S E C I L A Q D P V C A W S F R L Y A C V A H A N E H G Q G
UniRef90_H3BDX5	C E R Y G T C R K C V A A R D P Y C G W N R A S Q K C S S I Q E S S S S S E G
UniRef90_UPI00039417D5	C G R Y G T C R E C I L S R D P Y C G W D K S R R K C I A P P A Y N S S T G
UniRef90_V8NJ85	C S K Y R T C S D C C L A R D P Y C A W T W N G S R C V R I D A Y D G T S L
UniRef90_F7E4S6	C S R Y K R C L D C V L A R D P Y C A W A Q H F N E C V P V A H H K D T P D
UniRef90_UPI0003C8DF41	C D V Y S T C E D C V G A A D A Y C G W C A L E T R C A L Q Q D C A N S S R H
UniRef90_UPI000457554E	C S I Y Q I C G E C V L A R D P Y C A W D G M M C R S I R G L Q F N S Q
UniRef90_UPI000441E084	C R Q Y I S C F N C I L A R D P Y C A W D G K S C R E V A D V L D R S L
UniRef90_E7FAU7	C S A Y P N C A E C V L A R D P F C A W D T E T R A C T A V S E T K S T L R
UniRef90_B2GU89	C G I Y K A C A E C C L A R D P Y C A W D G A S C T R F L P N T K R R S R R
UniRef90_G1KD81	C R E Y G A C A D C C L A R D P Y C A W D G Q R C T R Y S H T A K R R S R R
UniRef90_U3IZN8	UniRef90_UPI0003C11CDF F C D K Y T T C V D C V L A R D P Y C A W K P L E A S C V D I F K E S E I E R
UniRef90_G3PVX2	C S I Y Q S C G E C V L S R D P Y C A W M K E R G C R V P H P S D E I D
UniRef90_K7FLY9	C S N Y L S C G E C V L S R D P Y C A W T G R L C P A L P H V A L F C S S H
UniRef90_I3JVW4	C D Q Y A T C T E C L A A A D A Y C G W C T M E T R C S L E H E C V N S T Q P
UniRef90_S4RIM3	C S F Y W T C A Q C V L A R D P F C G W D T A S R V C V M V S T T N T N
UniRef90_M9MMB6	C H V Y K A C A E C C C L S R D P Y C A W D G T A C S R Y F P S N K S L R R A
UniRef90_V8P493	C G M Y K A C A E C C C L A R D P Y C A W D G T T C T R Y L Q N T K R R F R R
UniRef90_UPI0004423AB6	C S K Y I S C R D C L S A M D P H C G W C H A K K S C T L K G E C S N N S P N
UniRef90_UPI0003D09245	C S K Y L S C P D C L L A R D P F C A W S R N A S R C V R A D G R N R A L
UniRef90_UPI000334128F	C E A H A T C G D C V G A A D A Y C G W C A L E T R C T M Q Q D C T N S S Q P
UniRef90_UPI000359FCEA	C S V Y E S C V D C V L A R D P H C A W D P E S G M C S L L S G S T L
UniRef90_I3J305	C S N Y L S C G E C V L S R D P Y C A W T G Q L C Q D D V R M A P P D S H
UniRef90_UPI000328C425	UniRef90_UPI00035075E3 C A K Y R S C T D C V L A R D P Y C A W S V N A R C V A S G G H S G A L
UniRef90_W5KJ73	C S N Y Q S C G E C V L S R D P Y C G W T R G Q C V D V R Q F S P K S K F
UniRef90_B6E444	C S H Y R S C A E C V L A R D P F C G W D L S T D S A K C T K A R E G M S Y S S
UniRef90_H3B4E8	C S W R Y R T C Q E C I L A Q D P L C W D T D S A K C T K A R E G M S Y S S
UniRef90_I3KD98	C T N Y Q S C G E C L S R D P Y C A W N G K Q C V D V R A T P N N A
UniRef90_F2UKN8	C A V H T T C T S C M Q A R D P Y C G W C A A T A S C V L A S T C P D A A T N
UniRef90_UPI00035075E3	C H R Y R K Y C L D C I L A R D P Y C A W S Q A S H A C V L L S D Q T G D T K
UniRef90_UPI0003EC3C25	C Q A Y G A C A D C C C L A R D P Y C A W D G Q A C S R Y T A S S K R R S R R
UniRef90_G3H1Q9	C T K Y R F C V D C V L A R D P Y C A W N V N T S R C V A T F G D H S G S L L
UniRef90_I3J1B8	C S T Y T T C S Q C L L A R D P L C G W S R T S R A C T R V H G S H E D M W G
UniRef90_H2ZYT3	C A R Y R L C E D C C L A R D P Y C A W D R S R A G C V N T A Q H S R S
UniRef90_UPI0003991333	C G R Y A S C M D C V L A R D P Y C A W S Q A S N K C V L L A N Q T G H T K
UniRef90_Q64151	C T K Y R F C V D C V L A R D P Y C A W N V N T S R C V A T T S G R S G S F
UniRef90_UPI000395C111	C E L Y K T C T D C C C L A R D P Y C T W D S K T C A P H L L T E K R R A
UniRef90_UPI0003F1274B	C A S H R A C A E C C C L A R D P Y C A W D G A T C T R F Q S S A K R R F
UniRef90_V8NPZ9	C V S Y S T C N L C I Q A R D P Y C G W C V T E G K C T R K K D C V R S A R N
UniRef90_UPI0003EA915B	C T F Y T T C S G D C I L A Q D P F C A W D S S R G V C S D I S Q S K P N S Q L
UniRef90_T1HE73	C S V Y K T C L D C L L G A K D P Y C G W C S L E N K C S L K S D C Q D A G R D
UniRef90_UPI0003C2858F	C S R H L S C A S C L A L R D P Y C G W C V L Q G R C S R R S E C L R S R V S
UniRef90_M7C0J9	C E L Y K D C A D C C C L A R D P Y C T W D G K G C S P Y R L T E K R R A
UniRef90_I3J1B7	C S T Y T T C S Q C L L A R D P L C G W S R T S R A C T R V H G S H E D
UniRef90_UPI0003AFA20A	C M K Y R P C A D C V L A R D P Y C A W N A N S S R C V A V G G H S G S L
UniRef90_E0VB61	C G S Y G N C S A C L D A R D P Y C G W C S L E K R C I I R S A C Q K S S P R
UniRef90_UPI0003C2A213	C G Q Y R T C W K C V L L A R D P Y C G W D L E N K R C S A V S Q E A N A T S S
UniRef90_F8W238	C G R Y G S C R E C I L S R D P Y C A W D V H K K K C T A I T T A P K A R S
UniRef90_UPI0003834FCD	C S L H R S C A E C V L A R D P Y C G W N S N Q G S C Q P L R G A Q D I G A R
UniRef90_V9KQX1	C S L Y G S C R A C C V A A R D P Y C G W D R P S S T C A P V P P W M N S S D
UniRef90_E6ZFJ0	C Q Q H T D C L S C V L A H D P Y C G W C V L E G R C V L Q S A C A R G K Q P
UniRef90_G1TCL5	C S K R K S C S A C L A A A D P H C G W C L S Q R C T F Q C T H S E N L D N
UniRef90_UPI0002A4BCEB	C S R Y G T C R D C I L S R D P Y C G W D K A R R K C V T I P P K Q R R T S P
UniRef90_W5LHM7	C S R Y G S C R E C I L S R D P Y C G W D W A K R K C L A I P A N Y N T T G G
UniRef90_J9AMS7	C N R F N T C T D C V A L R D P H C A W D L E A K K C I L N D N L N G L Y E
UniRef90_UPI0003834E7D	C E T Y G T C A E C C C L A R D P Y C G W D S G A C T R Y Q P S G K H R Y R R H
UniRef90_UPI0003317613	C A L H A T C A D C V G A A D A Y C G W C T L E T R C T L Q R D C A N A S H F
UniRef90_G1KDV4	C E Q Y L T C A D C L G S R D P H C G W C V L H N R C C R E S E C P R A S E P

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UniRef90_I1G2M3	L L Q D I N G D S S N C P
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UniRef90_U3JF90	L V Q D V S S D T S A
UniRef90_F7HI45	R R Q D I H G N P A Q C L D Q S
UniRef90_UPI00044415A9	W L D I S S G A K A C P
UniRef90_G3PGT6	Q D I H G D P S Q C W D
UniRef90_UPI0004575D8D	Q D V K G D P T Q C W D Q
UniRef90_UPI00044100F4	L H Q D V E N G S E Q C E D
UniRef90_H2VC82	E G D L S Q C P D
UniRef90_UPI000388E48E	L V Q D V N A D T A L C
UniRef90_Q4RYH6	L T Q D V L R G I R G C R E N S
UniRef90_H2SUQ0	Q D I H G N P V Q C S D Q
UniRef90_G3NR19	Q D I H G N P A Q C V D Q
UniRef90_F6U8I4	W L D S S G A K E C P
UniRef90_F6UCF0	W K Q D M E R G N
UniRef90_UPI000359DCFF	W L D I S S G P K K C P K
UniRef90_J3SD69	W V Q D I E G E T S Q C Q S S S
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UniRef90_UPI000333B765	W M D M S F G A E Q C P K
UniRef90_G3NZ63	L I Q D V Q Q G S K G C E N
UniRef90_F7C5U5	W L D V S S G A R K C P K
UniRef90_G3N3Z9	Q D V H G D P S Q C P
UniRef90_Q4SAC2	Q D M H G N A T Q C
UniRef90_G3N8N7	Q C Q D I D R G N
UniRef90_W5JXY2	Q D V H G D P R Q C
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UniRef90_W5KJ73	L Q D V E A D T T L C K D S
UniRef90_B6E444	L A Q D V E G K V S Q C S S
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UniRef90_F2UKN8	W A Y S V T A N T D A C
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UniRef90_V9KQX1	F L Q S V E Q N I S I C E S L T
UniRef90_E6ZFJ0	W S F D M E Q Q C
UniRef90_G1TCL5	W L G V S S G G K K C P K
UniRef90_UPI0002A4BCEB	K E V V I Q S N T S V C P V R S
UniRef90_W5LHM7	F I Q S L D S N D S V C
UniRef90_J9AMS7	Q Q V T G D T Q G C
UniRef90_UPI0003834E7D	G T R H N N P A H Q C L D Q
UniRef90_UPI0003317613	W T S A S E G P G R C P T M A
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1                    10                    20                    30                    40

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UniRef90\_U3IB15    C F K Y S D C E K C M Q A R D P Y C G W C V R E G R C T K R A D C E T A D K H  
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UniRef90\_W5NBQ4    C G R H T D C P S C L S A R D P Y C G W C V L E G R C C C R K L E C S R H Q K P  
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UniRef90\_H2RM15    C G R Y G T C R E C I L S R D P Y C G W D W A R R R C I A I P P G Y N V T T G  
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 UniRef90\_W5P0W4 **V L Q S** I S P P H K G **C P** N  
 UniRef90\_H2XTU2  
 UniRef90\_UPI0003EAC790 W**I**  
 F E Q D **V** E H G N S Q **P** D Q T  
 UniRef90\_H3CGA6 S **L** Q D  
 UniRef90\_UPI0002654093 I I Q D **V** H D T R H A P S **T**  
 UniRef90\_U3ITB2 L S Q  
 UniRef90\_W5NCK2 A I Q N V E G N I D **V** C  
 UniRef90\_UPI0003837623  
 UniRef90\_F6ZNQ8 W E Q S **I** S A **C P**  
 UniRef90\_Q5RH90  
 UniRef90\_UPI0003AEC422  
 UniRef90\_I3KE06 I I Q N I  
 UniRef90\_J9JWK6 F I Q N I T G **L** H H E **C P** S A S  
 UniRef90\_H3CN71 L  
 UniRef90\_UPI00046C09E1 L I Q R F A A **V** P G P **C P**  
 UniRef90\_UPI0003C91578 V L Q S I N P D H K E **C P** N  
 UniRef90\_H2TG39  
 UniRef90\_E1FHQ8  
 UniRef90\_UPI0003AF6A4A F E Q D **I** E G D H S F H P D S  
 UniRef90\_G1MJ17  
 UniRef90\_UPI00034F877A F E Q D **V** E H G N T  
 UniRef90\_UPI0003890526 F E Q D I E H G N T  
 UniRef90\_H3A1J8 F E Q D I D Q G N T S  
 UniRef90\_L5LTF9 W T Q N I T A **C P** V R  
 UniRef90\_G3PTE7  
 UniRef90\_E5SM07 W I K I S S A D P  
 UniRef90\_I3LRN7 F E Q D T E F G N T A  
 UniRef90\_UPI000350A86B W L W S Y E E D S H **C L** Q V Q S  
 UniRef90\_I1EG71 L T Q  
 UniRef90\_G3VV55 F E Q D I E N G Y T Q H P D S  
 UniRef90\_W5MLZ9 T **C P** I I D G D P  
 UniRef90\_H2VPV1 F E Q D I E H G N T  
 UniRef90\_UPI0003EA8E55 W I Q H I E S **C P**  
 UniRef90\_V3Z401 Y E Q D V E G N T A Q  
 UniRef90\_UPI000203AEA9 W L Q  
 UniRef90\_UPI0002652972 L T Q G D S N N C F D  
 UniRef90\_I1GIG1 S L Q T G E H P Q C P E S  
 UniRef90\_R7UTK7 L Q Q L L T D Q T T Q C P  
 UniRef90\_E3NEQ6 W R Q  
 UniRef90\_W4XQX4  
 UniRef90\_A0A044TGW0 F V Q D **V** E G N T S  
 UniRef90\_F1QI04 W L D F Q N S K **C P**  
 UniRef90\_E3MXT1 W L W S Y E E D S  
 UniRef90\_UPI0002ADB3F2  
 UniRef90\_UPI0003AFA93E  
 UniRef90\_E2AH08 L F Q D I T G R H R N C  
 UniRef90\_N6T8S8 D C Q D A A K D P  
 UniRef90\_UPI0002246671 L F Q N I S G K H K G C  
 UniRef90\_W5KZZ0 F E Q D V E Q G N T  
 UniRef90\_A8QBD6 W V N S N S K D T G K C  
 UniRef90\_W4ZKK5  
 UniRef90\_UPI00039430C9 F E Q D **V** E N G Y H Q H P D  
 UniRef90\_E0VPJ5 W F Q S V T Q **C P**  
 UniRef90\_UPI000395D2F7 V L Q N L N **D S**  
 UniRef90\_H2Y5W4 L L Q N I E S G T T R  
 UniRef90\_Q0IG92 Q **C P** S V E A Y P  
 UniRef90\_G0PGU0  
 UniRef90\_UPI0003B67A11  
 UniRef90\_K1RF00  
 UniRef90\_G1KK42 W E Q S **I** S M **C P** T K  
 UniRef90\_N6UOLO W K Q  
 UniRef90\_W6NBR7 L T Q D I E K **C S** T Q V A E K T  
 UniRef90\_UPI00022C90B8 W H Q E V T K C P V L T  
 UniRef90\_F7AB92 L Q A V V H E D P H L C P  
 UniRef90\_T1PIJ7 W L Q A D D F S C P V L T  
 UniRef90\_W4YB55  
 UniRef90\_Q4SW39 F E Q D **V** E A G  
 UniRef90\_B0WZU2 W I Q N A T E **C P** V L T  
 UniRef90\_B8JHX0 F E Q D **V** E Q G N T S  
 UniRef90\_L5LK92  
 UniRef90\_UPI0003C17C15 Y E Q D **V** E Y G N T G  
 UniRef90\_UPI000388F98B F E Q D V E N A A K Q C Q D  
 UniRef90\_UPI0002C44946 V L Q S I N P P H K E **C P** N  
 UniRef90\_I1FRT1 F C Q D  
 UniRef90\_UPI00044104E0 W I  
 UniRef90\_H3CSL6  
 UniRef90\_F1RAS2 Q R F A S R **V** D Q **C V** E L T  
 UniRef90\_D3ZTD8 W D Q S V  
 UniRef90\_E9GIV0 L L Q D V S S  
 UniRef90\_UPI0002651AF9 L M D L K N G S N T L C P V A S  
 UniRef90\_G1L558 F E Q D V S G

Sequence alignment of UniRef90 entries showing conservation across 40 positions. The alignment is color-coded by residue type: yellow for hydrophobic, blue for polar, red for acidic, green for basic, and purple for aromatic.

	1	10	20	30	40
UniRef90_U6U8U4	T S F H E C V A L Q D P Y C A W D K V Q G K C R S K P G K W G E E S Y				
UniRef90_UPI0004573638	C E Q H A T C M S C I G T Q D P Y C G W V G D G T C A Y L E P G T S L P				
UniRef90_K1Q3X2	C D G Y S S C E A C V M S R D P A C G W C G D H C S L H T E C L N P P V Q				
UniRef90_G6DH31	R Y D A C V R C A R D P Y C G W D R E A G V C R E Y M P G				
UniRef90_R7VNM5	C R V Y R N C E S C L L J A R D P Y C G W L N G T C Q S V Y L S Q E V H Q N				
UniRef90_U6NVR4	C H T I S S C Q E S C V T S P D P M C Q W C P A A G K C M T S M H C P S S A A S				
UniRef90_T1GK5	C G R H V S K C H S C L L S A M D P Y C G W Y E L H D R C T T A P D G D S S S Q L G				
UniRef90_Q7PP64	R Y D S C Y R C C V Q D P Y C G W D R D S G S C R P Y Q L				
UniRef90_UPI00045453DC	C Q L Y S G C M K C I G S Q D P Y C G W A P D G S C I F L R P G T S A M				
UniRef90_G3HEH7	C E V Y G G C H G C C I M S R D P Y C G W D Q D H C V S I Y S S Q R S				
UniRef90_H9JKS3	C S R Y K S R S G C C I S A T D P H C G W D D A R E R C V R A V D H L H D H S F				
UniRef90_UPI0002654092	C S Q Y Q S C V E C C I G D D G P Y C G W C S L E A R R A P F R D E S T R				
UniRef90_UPI0003D0EB45	C E A H G A C R S C C L A S R D P Y C V W L R T G A C V A F G N D I R A G Y				
UniRef90_E0VEV7	S C E E C V A L Q D P Y C A W D K Q S Q K C R A F G S K W N D E K Y				
UniRef90_V8P829	C S A L R S C G G C C L K A D P R C G W C V S E K R C S L R Q H C P L S E S				
UniRef90_H3F4U9	C E R H E E C A L C C L T K D P F C G W C P A S T C S S F C P				
UniRef90_UPI0002247892	C H R H R D S Q S C I N A Q E P Y C G W D E L A L K C V P A S T Q S P G G Y				
UniRef90_E2B814	C Y R H R D S S Q A C C L N A Q D P Y C G W D E H L M M C T Q A P K Q N Y L V K H				
UniRef90_D7EII6	C S R H T S T K T S C L N A M D P Y C G W N E R Y E N C S T A P N A D P L D K Y				
UniRef90_W5KHS3	C L Q F T S C S T C M A A E I N F C S W C H R L N R C S S G F D R H R Q D				
UniRef90_U1NQL4	C Q L Y I T C V Q C A V D P Y C S W S S A R S L C F R R K T A H S S R L L H				
UniRef90_Q95XP4	C S E Q P S C A L C S L D P Y C S W N A V N S K C S L K T K T N E K S V G				
UniRef90_B4MLI3	C C Q R H V S Q S S C L N A M D P Y C G W N E L V E R C V P Q P L E A T Y Y Q				
UniRef90_B416C8	C S S L I V D C L G C I S I Q D P N C A W D I O T H F C K N I S Q O H K F G T K S				

lupas\_21  
lupas\_14  
lupas\_28  
jnet  
conf  
sol25  
sol5  
sol0  
jhmm  
jpssm

UniRef90_N6U8U4	F F Q S   S G E H [ ] A C P
UniRef90_UPI0004573638	F E Q D V E Y G N T
UniRef90_K1Q3X2	W Q N D
UniRef90_G6DH31	L I Q D V
UniRef90_R7VNM5	L [ ]
UniRef90_U6NVR4	V C P V R N G P P S
UniRef90_T1GBK5	W I Q N
UniRef90_Q7PP64	F L Q D V G N R T S
UniRef90_UPI00045453DC	F E Q D V S G A S T S
UniRef90_G3HEH7	V L Q S I N P P H K E C P N
UniRef90_H9JKS3	
UniRef90_UPI0002654092	W L S Y N A L Q C
UniRef90_UPI0003D0EB45	F E Q D V E G N L G G C Q D
UniRef90_E0VEV7	Y Y Q S V T G S H P A C P Q S
UniRef90_V8P829	W M H A S N G N S R C A D
UniRef90_H3F4U9	
UniRef90_UPI0002247892	L V N H W K Q D A T K C P V L T
UniRef90_E2B8I4	W L Q E D T K C P
UniRef90_D7EI6	W K Q A V T
UniRef90_W5KHS3	W V D N S C P D E T
UniRef90_U1NQL4	V L Q W V N A G P G E T P K
UniRef90_Q95XP4	W I S S
UniRef90_B4MLI3	W Q Q
UniRef90_B4J6C8	Y L Q S L N A A A S L C P K

lupas\_21  
 lupas\_14  
 lupas\_28  
 jnet  
 conf  
 sol25  
 sol5  
 solo  
 jhmm  
 jpssm

1	6	8	7	1	3	6	7	7	7	7	7	8	8	9
B	B	B	B	B		B		B		B				
B		B												