

QUERY	1	10	20	30	40
UniRef90_A8F585	K S L G R H L V A E F Y E C D R E E V L D N V Q L I E Q E M K Q A A Y E S G A T I				
UniRef90_I3VWI2	K S L G R H L I A E F Y D C D Q R T L D D V Q F V E Q K M R D A A I V A G A T I				
UniRef90_M1Z8J7	N A L G R H I L A E I Y G C D E N V L D D C E L I E D I M V K A A I E A G A E V				
UniRef90_A9BI06	K S L G R H L I A E I Y D C D E E I L N D V E Q I E Y L M K K A A I E S G A T I				
UniRef90_A1HTK1	K V I G K H L T V D M Y G C S F E V L D D L E F V K N A M I T A V K E A N M T L				
UniRef90_B9MLX4	A L G R H I I A E I Y G C A P E I L N N R E L I E K I M V E S A L K A G A E V				
UniRef90_F3ZZM4	A L G R H I L A E E M Y G C A P E I L D D Q E T V E K I M V Q A A I E A G A E V				
UniRef90_B13N7	K P M G R H I L A E I Y G C D F N V L N D L K K V E E I M V N A A L A A G A E V				
UniRef90_R1CHC5	E Q L G R H I L A E F Y N C D K D I L N D H K L I E K Y M N E A A I E A N A T I				
UniRef90_B8G2N3	N S L G R H V L A E I Y G C S F E I L N N R E V E A I M V N A A L E A G A E V				
UniRef90_E3H8K4	E T L G R H I L I E Y Y N C D E E V L K S P E L I K H M N E A A R I A N A T I				
UniRef90_K4LIG1	N S L G R H I L A E F Y G C A W E T L N S T E K V K Q F M V D A A L A A G A E I				
UniRef90_F8E6K3	Q A L G K H I L V E F Y G C N P E K L K D T K M L Q T E F E N A A D M S G A T V				
UniRef90_UP10004711519	N A L G R H I L V E F Y D C S P E L M N D V V H E E N S M V A A A E T A G A T V				
UniRef90_A1ZV43	K A L G Q H V L V E F Y G C P E E V M K D N H L I E K V M N E A A K A S G A T V				
UniRef90_G7VA76	K A L G M H V L V E A Y D C P E E K L D N L K G V Q S A M V E A A E L A G A T V				
UniRef90_UP10004723768	S A L G R H V L I E Y Y G C P S E I I E N N K V I E Q F M K E A A D Y S G A T I				
UniRef90_B5YF62	K S L G R H I L A E E M Y N C N R E I I L N D V E K I K E I M V K A A I E A G A E I				
UniRef90_D7CNC9	Q S L G R H I L A E I S G C S F D I L N D M A L V Q E I M I N A A L E A G A E I				
UniRef90_UP100046D7EF2	N A L G R H I L G E Y Y G C D P E V L D D P E R V E R E L M K E A A V V S G A T I				
UniRef90_I4BVN6	Q A L G K H I L M E A Y D C C E Y D V L D D L R R G I Q S A M I E A A E R T G A T V				
UniRef90_Q3AB53	N A L G R H V I I A E I L Y G C G F D V L D D V K R V V E E I M V R S A L E A G A E I				
UniRef90_C5CD51	K A L G R H I L A E F F E C C S S E A L D N L D F V V N S M R Q A A E E A G A T I				
UniRef90_D5VTV3	K H G K H I L L E L W G C D R K A L D D E E G I R D M L I K S V E A C N A T L				
UniRef90_B3QRX7	K S L G K H I L V E F Y D C T P E V L D D V I H I E R S M V K A A E I A N A T I				
UniRef90_J7TAK2	N G L G R H I L A E I Y G C K A N L L N D K H Y I E N L M V E S A L K S G A E I				
UniRef90_G6FPH4	P V G R H I L L E L Y G C P I D L N D G F I R E A L Q A A K T A K S T L				
UniRef90_UP100037AC746	L L G R H I L V E F Y N C D K D I L R D H K Q I E Y Y M K Q A A L E A K A T I				
UniRef90_B9E851	T L G R H V L I E Y Y N C D K D I L K D H D K V E A I M N E A A R V S G A T I				
UniRef90_Q0AZ53	Q S L G R H V L A E I Y Y G C C R F E V L D N D V K K V E D I M V N A A L E A G A E I				
UniRef90_UP10003B4A36E	N S L G R H I L V E L Y G C C E D I S E I L R D H K D V E A I M N E A A R V S G A T I				
UniRef90_K2F1M0	L L G R H I L A E F Y Y G C C N S E D I L S T K L I Q Q E M E N A A D I A G A T R				
UniRef90_A0A024EZ75	K A L G R H I L V E F S G C C N A E V L N D V S I I E R S M V E A A Q I A G A T V				
UniRef90_B7J3Q3	R S L G H Q I V A D F Y H C D G S T L S D V D F V T D A M L E A A R R A N C T I				
UniRef90_F2LTM2	K A L G R H V L A E E Y F G C E K E L L N D P K A L E N H L I E A A K A A N A T V				
UniRef90_H2J3U1	K S L G R H V I V A E Y F G C E C D P A V L D D V D K I E L M K K A S I E S G A T L				
UniRef90_E6SK72	R A L G R H I L A E A Y D C D P D V I N D A A L V E N A M R N A V D A A N A T L				
UniRef90_UP100029ABA8F	E H G R H V I I E L W G C S D V I N D A A L V E N A M R N A V D A A N A T L				
UniRef90_UP10003694453	E A L G R Q I L V E F Y D C C E S S I N D V E Y I E E S M L D A T K E A N A T I				
UniRef90_A6Q574	K S L G K H I L A E Y Y R C D E N A I N D V Q K V E E A L V K A A E I A G A T V				
UniRef90_D0MEK4	Q A L G R Q I L V E F Y D C C D R E E V L N D N N M E L I Q Q E M E N A A D I A G A T V				
UniRef90_I4A180	N A L G R H I I V E L Y D C K P S L L D D V T Y V Q N A M Q N A A Q Q A G A T V				
UniRef90_F8I770	N A L G R H I L A E I H G C D S D V L N D R V A V E E I M V N A A L K A G A E V				
UniRef90_H1XQY3	N A L G Q H I L V E F V G C D P N V L N E V T T I E E Q G M L A A A D R A N A T I				
UniRef90_W6RS91	E Q L G R H I L V E Y Y N C D K E E L K D H E L I E K Y K M Q Q A A I E A K A T I				
UniRef90_F6BB46	R Y L G K H I I L E L W G C D P K A L D D Q E G I E K M L V D S V N A C G A T L				
UniRef90_UP10003752D85	E S S L G K H I I A E F F N C N P E G L N D V V F I E N A M I L E A A K E A N A T V				
UniRef90_K9EQ39	K S L G R H I I V E F H G C S S E E V L N D V P C I E S S M V G A A K E S S G A T I				
UniRef90_L0EEG3	S T F G R H V I A V A D W G V D F N L N A A E F L Q A Q L V E A A E T C G A T V				
UniRef90_E3PRB4	E Q L G R H I I L V E F Y N C D K E E V L N N H S E I E K H M N E A A I R S N A T I				
UniRef90_UP1000476B046	P V G R H I I L E L Y N C P T H L L N N P V F M K Q A L E E A A K V A K S T L				
UniRef90_B0TDX1	S T F G R H V I T V D T W G V D F E K L N D A R F L E E Q M I E A A R A G A T V				
UniRef90_A0YR54	K K L G T H I I L V I D A W Q C P A D L L N D P E R I L R R A V L D A I T A G G A T L				
UniRef90_F5L5F5	S T F G R H I I A L D T W G V D F D L L N H A E K L I K Q Y L V E A A E A C G A T V				
UniRef90_Q5N0Y1	A V G T H I I O I L E L Y G C P A E E L L N D A D Q I Q A N L R A A A T E A G A T L				
UniRef90_K9UW21	P V G V H I I L E L Y N C P T H I M N D E F F I K R T L E E A A T T A Q S T L				
UniRef90_F2I4E6	N A L G N H I I L V E F M M G C D P H I M N D V S S E E R D M V D A A L K A G A T V				
UniRef90_A4J4K6	Q P L G V Q L I M A E I W E C D P N K L N N I K V Q E I M V G A A R K A N A E I				
UniRef90_I0GIN3	R T E G K H I I M D A S G C N P E L L N D L D Y L R S S L L V E A A K K A N A T V				
UniRef90_UP100037E6A2E	N Y L G N H I I L V E L Y E C C D S L K L N N Q D Q L E R E R I L N E A V R I S G A T A				
UniRef90_I4C9K0	K A L G I H I I L L E C N R Q K I D N L D Y D L E K I M V Q G A E V A G A T V				
UniRef90_B0TE16	N P L G V Q L I L A E V W E C N P D K L N D V K T V E A I M I R A A E K S G A D I				
UniRef90_F9VJ51	N A L G R H I I L V E Y Y N C N N E I L K D P K L I E T Y M K E S A I K M G A T I				
UniRef90_W7ZJA5	T M G R H I I S E L W G C D T E K I N N M E F I E K V F V N A A L K A G A E V				
UniRef90_I3GE6	T L L G R H I I V L E M W G V C C K D V I D D A D G I L I K T K A T E S M K A T I				
UniRef90_D7CRQ2	A L L G R Q I I L V E F Y G C K E R V L I N D T E H L R Q V L L E G T R K S G A T I				
UniRef90_UP100040DD174	T M G R H I I A E I L W Q C D I D K L N D R P Y L E Q T F V N A A L E A G A E V				
UniRef90_R6P129	K Y L G Q H V I I A E F F E C D P N I L N N S Q K V E S L M I D A A L E C C G A T I				
UniRef90_UP10004684F56	S T F G R H I I A I D T W G V D F N L L N S A E K L Q H H M I E A A E A C C G A T V				
UniRef90_F8ANY0	K H L G K H I I L L E L W G C D N K A I D D Q V G I E N M L V D A V D A C G A T L				
UniRef90_B3CB32	S L G H H I I L A D F Y D C S N E E L L D D V V Q V R I Y M H E A A I K A G A T I				
UniRef90_K9RE67	P V G S H H I I L E L Y D C P K D L L N D V D F I K K T L E E G V K E A D S T L				
UniRef90_K9S7N8	P V G I H C I I L E L Y D C P S N L L N D V E F I K D S L R A A E E A G A T L				
UniRef90_F8IG85	T M G R H I I A E L W E C D P E R I N D V H G I E R A M V T A A L E A G A E V				
UniRef90_M1ZL14	S T F G R H I I A I D T W G V D F Y T L L N D A E W L K H Q L V E A A E M A G A T V				
UniRef90_D4ZX61	K Q L G T H I I L V V D A W Q C P A D I L N D P D R I R Q A I L D A I A A G S A T L				
UniRef90_C5A3H2	E T I G F H Y V V E A A G C D P E I L G N A D R I E F I L E A A K V G N M E V				
UniRef90_B5Y128	A L L G T H I I L L E L K N C N P E I L K D L E S V K N I L V D A A K K A N A T I				
UniRef90_UP1000362D62D	E Q L G E H I I L I E Y Y D C D S E V L K N T T L I E K Y M I E A A K V A Q A T I				
UniRef90_A0A010YU62	E V M G R Q I I A E L W D C N F E T N D K L I E Q I F V D A A R K A G A E I				
UniRef90_UP1000225B9FE	T M G R H I I A E M W D C N I E L L N D M G K I E Q I F V D A A L K A G A E I				
UniRef90_UP1000315C91A	Q P V G K H I I L E L Y D C N P D K L N D E A F I R T T I A T A A R E A G A T V				
UniRef90_UP10002002432	S T F G R H I I V A M D A W G V D F D L I N D V A F L E E H M K E A A K A C C G A T I				
UniRef90_UP10003B6FF92	V G G H C I I L E L Y D C P S S K L D D E V F L R S A T Q A A E R A G A T L				
UniRef90_A5GV78	V G V G H C I I L E L Y D C P S S K L D D E V F L R S A T Q A A V E A S G A T M				
UniRef90_E1QLM8	K A L G Q H I I L L E L H G C P A I L D D P Q R I E A A M I A A V E A S G A T M				
UniRef90_D5MHP0	Q A L G K H I I L V E L L H G C P E L L K K A E V V R D I L V C A A N A C C K A T I				
UniRef90_Q2JWR6	S T F G R H V I A V D A W G I D Y E V L N N A G L I E A H V E A A E C C G A T I				
UniRef90_C6J208	E T M G R H V I I A E L W E C E F D K L N D M P Y I E Q T F V F E A A L R S G A E V				
UniRef90_M7WNW1	T M G R H I I A E L W D C P E K L N D M E Y V E R L F V D A A L Q A G A E V				
UniRef90_B1YK97					

QUERY UniRef90_A8F585 UniRef90_I3VWI2 UniRef90_M1Z8J7 UniRef90_A9B106 UniRef90_A1HTK1 UniRef90_B9MLX4 UniRef90_F3ZZM4 UniRef90_B13N7 UniRef90_R1CHC5 UniRef90_B8G2N3 UniRef90_E3H8K4 UniRef90_K4LIG1 UniRef90_F8E6K3 UniRef90_UP10004711519 UniRef90_A1ZV43 UniRef90_G7VA76 UniRef90_UP10004723768 UniRef90_B5YF62 UniRef90_D7CNC9 UniRef90_UP100046D7EF2 UniRef90_I4BVN6 UniRef90_Q3AB53 UniRef90_C5CD51 UniRef90_D5VTV3 UniRef90_B3QRX7 UniRef90_J7TAK2 UniRef90_G6FPH4 UniRef90_UP100037AC746 UniRef90_B9E851 UniRef90_Q0AZ53 UniRef90_UP10003B4A36E UniRef90_K2F1M0 UniRef90_A0A024EZ75 UniRef90_B7J3Q3 UniRef90_F2LTM2 UniRef90_H2J3U1 UniRef90_E6SK72 UniRef90_UP100029ABA8F UniRef90_UP10003694453 UniRef90_A6Q574 UniRef90_D0MEK4 UniRef90_I4A180 UniRef90_F8I770 UniRef90_H1XQY3 UniRef90_W6RS91 UniRef90_F6BB46 UniRef90_UP10003752D85 UniRef90_K9EQ39 UniRef90_L0EEG3 UniRef90_E3PRB4 UniRef90_UP1000476B046 UniRef90_B0TDX1 UniRef90_A0YR54 UniRef90_F5L5F5 UniRef90_Q5N0Y1 UniRef90_K9UW21 UniRef90_F2IE46 UniRef90_A4J4K6 UniRef90_I0GIN3 UniRef90_UP100037E6A2E UniRef90_I4C9K0 UniRef90_B0TE16 UniRef90_F9VJ51 UniRef90_W7ZJA5 UniRef90_I3IGE6 UniRef90_D7CRQ2 UniRef90_UP100040DD174 UniRef90_R6P129 UniRef90_UP10004684F56 UniRef90_F8ANY0 UniRef90_B3CB32 UniRef90_K9RE67 UniRef90_K9S7N8 UniRef90_F8IG85 UniRef90_M1ZL14 UniRef90_D4ZX61 UniRef90_C5A3H2 UniRef90_B5Y128 UniRef90_UP1000362D62D UniRef90_A0A010YU62 UniRef90_UP1000225B9FE UniRef90_UP1000315C91A UniRef90_UP10002002432 UniRef90_UP10003B6FF92 UniRef90_A5GVT8 UniRef90_E1QLM8 UniRef90_D5MHP0 UniRef90_Q2JWR6 UniRef90_C6J208 UniRef90_M7WNW1 UniRef90_B1YK97

	50	60	70	80
V T S T F H R F [L P Y G V S G V V I] S E S H [L T H T W P E Y G Y A A I D L F				
I G S S F H R F [L P Y G V S G V V V] S E S H [L T H T W P E Y G Y A A I D L F				
R E V A F H K F S P Q G V S G V V V] S E S H [L T H T W P E [L G Y A A V D L F				
V K S V F H T F N P P W G V S G V V V] Q E S H [L T H T W P E Y G Y A A V D L F				
R E V A F H K F S P Q G V S G V V V] S E S H [L T H T W P E Y G Y A A V D L F				
R E V A F H K F S P Q G V S G V V V] S E S H [L T H T W P E F G Y A A V D L F				
V K S V F H M F N P P W G V S G V V V] Q E S H [L T H T W P E Y G Y A A V D L F				
R E V A F H K F S P Q G V S G V V V] S E S H [L T H T W P E [L G Y A A V D L F				
V N S V F H P Y P Y G V S G A V I S E S H [L A H T W P E Y G Y A A S V D V F				
R E S V F H K F S P Q G V S G V V V] S E S H [L A H T W P E [L G Y A A V D L F				
V D S T F H T F S P Y G V S G V V V] A E S H [L T H T W P E Y G Y A A V D L F				
I N S T F H H F S P Y G V S G V V V] Q E S H [L A H T W P E Y G Y A A V D L F				
V G S H F H T F N P Y G V S G V V I A E S H [F T H T W P E Y G Y A A I D I F				
L D V A F R Q F A P P Q G V S G V V V] S E S H [L T H T W P E Y G Y A A I D L F				
V E S V F H H F N P Y G V S G A V I A E S H [L T H T W P E Y G F A S V D V F				
V E V V F H K F S P Y G V S G V V V] S E S H [L A H T W P E Y G F A A A D L F				
R E Y V F H K F S P Q G V S G V V V] S E S H [L A H T W P E [L G Y A A V D I F				
V Q S V F H R F S P H G V S G V V V] S E S H [L A H T W P E F G Y A A I D L F				
V D V A F R K F E P Y G V S G V V V] S E S H [L A H T W P E [L G Y A A V D L F				
R E V A F H K F S P Q G V S G V V V] S E S H [L A H T W P E [L G Y A A V D L F				
V D S S F H R F [L P H G I S G V V V] A E S H [L A H T W P E Y G Y A A I D L F				
I C V K T H K F C P Q G V T G V A V L A E S H [L A H T W P E Y G Y A A L D I F				
I N T G F H H F S P Y G V S G V V V] Q E S H [L T H T W P E Y G Y A A S V D I F				
R E V I F H K F N P Q G V S G V V I S E S H [L T H T W P E [L G Y A A V D V F				
L K E V S Y Q F E P Y G V T A L A L A E S H [I S H T W P E E N G Y I A V D V F				
V E S V F H H F N P P W G V S G A V I S E S H [L T H T W P E Y N Y A A V D L F				
V E S C F H T F N P P Y G V S G A V I S E S H [L T H T W P E Y G Y A S V D V F				
R E F V F H K F S P P Q G V S G V V V] S E S H [L A H T W P E [L G Y A A L D V F				
V G S N S H T F S P Y G V S G V V V] A E S H [L T H T W P E [L G Y A A L D L F				
V E K S F H M F S P Y G V S G V V V] S E S H [L A H T W P E Y R Y A A V D L F				
I N S T F H H F S P P W G V S G V V V] Q E S H [L A H T W P E Y R Y A A V D L F				
V T Q T F H H F S P Y G V S G A V I V A E S H [L A H T W P E Y G Y A A V D V F				
I S S S F R T F E P F G V S G V V I V A E S H [L A H T W P E Y G F A A V D F F				
V T S T F H R F [L P H G V S G A V I V S E S H [F A H T W P E Y G Y A S V D I F				
R Q V A F H K F A P P Q G V S G V V V] S E S H [L T H T W P E [L G Y A A V D V F				
L N L F V H E F S P P Q G V T G V A V L S E S H [H L S H T W P E H G Y V A A D V F				
I S S H N F H K F S P Y G V S G V V V] A E S H [H V A H T W P E Y N Y A A V D I F				
I G K S F H R F E P Y G V S G V V V] S E S H [L T H T W P E E H G Y A A V D I F				
I T D T F H S F S P H G V S G V V V] A E S H [H V A H T W P E E W G F A S I D L F				
I N L T F H H F S P Y G V S G V V V] Q E S H [L A H T W P E Y G Y A A V D I F				
V E K S F H M F S P Y G V S G V V V] S E S H [L A H T W P E E N G Y I A A D V F				
I N S T F H Y F S P Y G V S G V V V] Q E S H [L A H T W P E Y R Y A A V D L F				
V Q S C F H K F N P P W G V S G A V I Q E S H [L T H T W P E F G F A S V D L F				
I C I K T H K F S P P Q G V T G V A V L A E S H [H I S H T W P E [L G Y A A I D V F				
I N S T F H H F S P I G V S G V V V] Q E S H [H I S H T W P E Y G F A S V D I F				
I S S V F H H F S P F G V S G V V V] Q E S H [H I S H T W P E Y R Y A A V D L F				
L S V Q S K Q F E P Q G A T V L V L L S E S H [H I S H T W P E E K G F A A L D C Y				
V Q S A F H T F N P P W G V S G A V I Q E S H [L T H T W P E F G Y A A V D L F				
L S S E L T H F E P Y G V T G V A V L A E S H [H I S H T W P E Y G Y I A V D I F				
L S S Q K Q F E P P Q G A T V L V L L S E S H [H I S H T W P E E K G F A A L D C Y				
I D F C V H Q F S P H G V T A T A T L A E S H [H I S H T W P E Y G Y F A A D V F				
L S V Q A K Q F E P P Q G A T V L V L L S E S H [H I S H T W P E E K G F A A L D C Y				
L Q E T C H R F E P Q G V T A L A L A E S H [H I S H T W P E E S G Y A A V D V F				
L D K I A H Q F T P Y G V T A L A L A E S H [H I S H T W P E E N G Y I A A D V F				
I N S T F H F I S P P Y G V S G V V V] Q E S H [L A H T W P E Y G Y A A V D L F				
R E V V F H R F E P P Q G V S G V V V] S E S H [L T H T W P E [L A Y A A V D I F				
L N V A F H H F T P P Q G V S G V V V] S E S H [L S H T W P E Y G Y A A L D F Y				
I L K T S F H K F A P P Q G V S G V V V] A E S H [F T H T W P E Y G Y A A L D I F				
L R T A F Q D F N P P Q G V S G V V V] A E S H [L T H T W P E [L G Y A A V D I F				
R E V V F H R F E P P Q G V S G V V V] S E S H [L T H T W P E E Y G Y A A V D I F				
V E S C F H H F N P P Y G V S G A V I S E S H [L T H T W P E E H G Y A S I D L F				
V E S C F H H F N P P Y G V S G A V I S E S H [L T H T W P E E H G Y A S I D L F				
R E V A F H K F A P P Q G V S G V V V] S E S H [L T H T W P E H G Y A S I D V Y				
V Q K C F H M F S P H G V S G V V V] S E S H [L A H T W P E [L G Y A A V D I F				
L S V Q A K Q F D P P Q G A T V L V L L S E S H [H I S H T W P E E K G F A A L D C Y				
UniRef90_UP100040DD174	R E V A F H K F A P P Q G I S G V V V I S E S H [L T H S F P E H G Y A S I D V Y			
UniRef90_R6P129	V Q K C F H M F S P H G V S G V V V I S E S H [L A H T W P E [L G Y A A V D I F			
UniRef90_UP10004684F56	L S V Q A K Q F D P P Q G A T V L V L L S E S H [H I S H T W P E E K G F A A L D C Y			
UniRef90_F8ANY0	I C V K T H K F S P P Q G V T G V A V L A E S H [H I S H S W P E [L G Y A A M D I F			
UniRef90_B3CB32	V Q E N F H K F A P P M G V V S G V V V I Q E S H [L T H T W P E C R Y A A V D L F			
UniRef90_K9RE67	L R E E L T H Q F E P Y G V T A L A L A E S H [H I S H T W P E E K G Y I A V D M F			
UniRef90_K9S7N8	K S S Y F F K F S P T P G V S G V V V I A E S H [H I S H T W P E E N G Y A A V D V F			
UniRef90_F8IG85	L G E L A H Q F D P P Q G V T A L A L A E S H [H I S H T W P E E H G Y A S I D V Y			
UniRef90_M1ZL14	R E V A F H K F A P P Q G V S G V V V I S E S H [L T H T W P E E K G F A A L D C Y			
UniRef90_D4ZX61	L D I C V H Q F S P H G V T A T A T L A E S H [H I S H T W P E E Y G Y F A A A D L F			
UniRef90_C5A3H2	K S S Y F F K F S P T P G V S G V V V I A E S H [H I S H T W P E E K G Y A A L D V Y			
UniRef90_B5Y128	T S V N F H E F N P P F G I S G V V V I A E S H [H I S H T W P E E Y G F A A V D V F			
UniRef90_UP1000362D62D	V G D F A N K Y D G E G V S Y I L V V I K E S H [H I S H T W P E [L G Y A A V D I F			
UniRef90_A0A010YU62	V E S V F H T F F S P P W G V S G V V V I E E S H [H I S H T W P E E Y K Y A A V D L F			
UniRef90_UP1000225B9FE	R E V V F H H Q F S P P Y G I S G V V V I A E S H [H I S H T W P E E K G Y A A V D V Y			
UniRef90_UP1000315C91A	R E V A F H K F A P P Q G V S G V V V I S E S H [L T H T W P E E H G Y A S I D V Y			
UniRef90_UP10002002432	L H L I S H H F Q P P Q G V T G L V V L L A E S H [H I S H T W P E E S G Y A A V D V F			
UniRef90_UP10003B6FF92	L S V Q S Q Q F E P P Q G A T V L V M L S E S H [H I S H T Y P E E K G F A A L D C Y			
UniRef90_A5GVT8	L N L I T H Q F E P P Q G V T G L V V L L A E S H [H I S H T W P E E A G Y A A V D V F			
UniRef90_E1QLM8	I K P Y F H Q F A P P Q G V S G M I I I S E S H [F S H T W P E E A G Y A A V D V F			
UniRef90_D5MHP0	V D T S F H E F N P P F G V S G V V V I A E S H [H I S H T W P E E Y R Y A A V D I F			
UniRef90_Q2JWR6	L G E L C H P F E P P Q G I T A L A L L G E S H [H I S H T W P E E A G Y A A V D V F			
UniRef90_C6J208	L S I Q S R Q F E P P Q G A T V L V M L S E S H [H I S H T Y P E E R G F A A I D C Y			
UniRef90_M7WNW1	R E V A F H K F A P P Q G V S G V V V I S E S H [L T H S F P E E H G Y A S I D V Y			
UniRef90_B1YK97	R E V A F H K F A P P H G V S G V V V I S E S H [L T H S F P E E H G Y A S V D V F			

The figure displays a grid of amino acid sequence alignment for various UniRef90 entries. The columns represent positions 90, 100, and 110. The rows are labeled with UniRef90 identifiers. The grid is color-coded: yellow for the first column, blue for the second, red for the third, green for the fourth, and black for the fifth.

QUERY
UniRef90_A8F585
UniRef90_I3VWI2
UniRef90_M1Z8J7
UniRef90_A9BI06
UniRef90_A1HTK1
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UniRef90_Q5N0Y1
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UniRef90_I3GE6
UniRef90_D7CRQ2
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UniRef90_R6P129
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UniRef90_B5Y128
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UniRef90_C6J208
UniRef90_M7NWN1
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 UniRef90_J9ZCC7
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 UniRef90_D4W5P2
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 N S L G R H I L V V E F Y G G S A E V L N D V L L I E T N M L R A A K E S G A T I
 K Q I G T H I L V V D A W E S P T D L L N D P E R I R G A L V D A V S A G G A T L
 V G R H I L V E M F E C D G R L L D S L E V V K S A L L D A A V A S N S T V
 N T L G R H I L G D L W N C D V S C L E D I D Y V E K L F V R A A L K A G A E V
 E I V G K H O I L E L Y D C D V E T L K N P M Y I E K S M N E A A I E A K A T I
 N Q L G K H I L V E Y Y N C D K E V L K N P M Y I E K S M N E A A I E A K A T I
 E T L G R H I I A E L W E C N I D M L N D I E R L E R T F V N A A L K A G A E V
 P V G T H O I L E L Y E C P T D L L N L V F R D S L Q E A A K R A K S T L
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 E I M G R Q L I A E L W D C N I D T L N D I E L I E R I F V D A A L K A G A E I
 T M G R H I I A E L W E C N I P Q I L N D I E Q V E R M M V N A A L E A G A E I
 T I G R H I I S E L W G C V E K L N D I N L E Q T F V D A A L K A G A E I
 V G T H I L V V E A W Q A P E E I I L N D P E Q I R S A L V E A V S A G G A T L
 K T L G V H I I V A D L Y G C D P E I I L K S A E K M A E V F E G A V R H A N L N K
 S T F G N H I I L V E Y F D C E P E V L I D D A S A L E D A M Q R A E E A A Q A S I
 S T S G R H I I L L D L W G V F D F A I L I D D R F L K I C E N M I I A G N K C G A N V
 K T L G L H I I A D L Y G V N P D I L I D D R E E D I R H I L L E N S V K A G E L T K
 K G L G R H I I L E L T G C D Q R L L S D V D F L I D D L L T K A A V A S A G A T I
 N T V G V H O I I L E L Y G C P S H D D E Q F I I E T M V S A S Q R A M S T L
 S T F G R H I I V D M W G I I D T A L L N D C E F F I L Q Q H L V T A A N V C G A T I
 K T L G L H I I A D L Y G V N P D I L I D K V E D I R H I L L E S A V K V A G L T K
 K H L G K H I I M E L L W D C D K Q A L D N Q A G V E K M L E D A T N S C G A T I
 E T M G R H I I S E L W G C C D E T L N V N A I E R I F V N A A L K A G A E I
 K F L G T H I I I A E L Y G C D P V L L D V E F I T S T L I K S A E K V R V T V
 K T L G L H I I A D L Y G V D F E K I D H V E D V K A L L E G A V K Y A N L S K
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 V G K H O I I L E L Y G C D Q Y K L N D E A F V R T S L T A A S K I A G A K L
 E V L G C H I I L E L K D C N P K L L N D L S Y I I R H A M I E T A Q D V G A T I
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UniRef90_B1YD10	V E V N S W K F D K E G V S V I A L V L E S H I A I	H T W P T Y N Y A T V D V Y		
UniRef90_UPI0004639E30	I T Q A F H F F S P P M G V V S G A V I I A E S H I L A I	H T W P E Y Y R Y A A V D V F		
UniRef90_K6CE0	L L Y S Y F H Q F S P T G V V S G V I I I A E S H I F S V	H T W P E E G Y Y A S L D F Y		
UniRef90_A0Z4C7	I K Y F F H Q F S P T G V V S G V I I I A E S H I F S V	H T W P E E N N F V A V D I Y		
UniRef90_E6UOK6	R E V V F H K F A P Y G I S G V V I I I S E S H I L T I	H S F P E H K Y A S I D I Y		
UniRef90_UPI000237B31C	C Q M I A K R F E P Q G V V T V L A L L S E S H I S V	H T Y P E D G S I F I D V F		
UniRef90_UPI0002F3C0CB	I N L V S N K F E P F G V V T A I A L L A E S H I L S I	H T W P E S Q Y A A I D I F		
UniRef90_D5U0K8	L D V K A W K I N P G V S I V G I I I L E S H I S V	H T W P E Y E F A T I D V Y		
UniRef90_G4RJF0	V S V N T Y K F G N G G L T V F A I V A E S H I S V	H T W P E H A F A T V D V Y		
UniRef90_N0ATA6	L L A Y F H S F S P Q G V V T G I I A I S T S H I F S V	H T W P E Y Y G Y V A L D L Y		
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UniRef90_UPI0002FFAF09	L S V S E Q Q F E P Q G A T V I L L L S E S H I L S V	H T Y P E E K G F A A L D C Y		
UniRef90_E2CIP4	L H I H L H P F E P T P G V V S G V A V L A E S H I S V	H T W P E V G Y A A F D V F		
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UniRef90_A8AA41	L D V K S W K M G E G V S V V A I V L E S H I H I T	H T W P E E F A F A T V D V Y		
UniRef90_C0QIV0	F G K E T D V S G F T M T L P K S T A L V S G I I S R A S S A A Y I D I F			
UniRef90_C0QIV0	F G K E T D V S G F T M T L P K S T A L V S G I I S R A S S A A Y I D I F			
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UniRef90_K5XUH9	L H H H F H F E P P Q G V V S G V V V L A E S H I S V	H T W P E E R N F A A L D V F		
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UniRef90_D3TCM4	I I S S D Y Y Q F R P E G A S G I V L I I A E S H I L S F H T W P E E Y N Y A T V D V Y			
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UniRef90_A3YUN5	L N L I T H R F E P P Q G V V T G L A A L A E S H I S I	H T W P E E S G Y A A V D V Y		
UniRef90_UP1000378E849	I I G E H Y Y R F D K G G F S Y V L F I A E S H I S I	H T W P E E Y G Y A A L D I F		
UniRef90_X1PE4	I I L K T V V H K F E P P Q G V V T G V V L L A E S H I A I L	H S W P E E Y K Y L A I D I F		
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UniRef90_Q97BP8	I I S S D Y Y Q F R P P Q G A S G V V L L A E S H I L S F	H T W P E E Y G L V T L D I Y		
UniRef90_A3DLU8	I I E V K S W K L E K G G V V S V I A L V L E S H I A I	H T W I E N Y R Y A T V D V Y		
UniRef90_G0EEQ2	I I L D V K S W K I I G E G V V S V V A V I L E S H I T I	H T W P E E Y R F A T V D V Y		
UniRef90_E8R718	L D V K A W K I N P G V V S V V G I V L E S H I S V	H T W P E E Y S F A T V D V Y		
UniRef90_A7FYV9	V A K A F H K F H P P Q G F S G A L I I I S E S H I T I	H T W P E E D A Y I G L D I F		
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UniRef90_D6Z9V7	L D I T S K R F D P P Q G V V T V L A L L S E S H I S V	H T Y P E E V G S A F M D V F		
UniRef90_K7SHE3	L H S H F H H F T P P G G V V S G V I V L L A E S H I I S I	H T W P E E R N Y A A V D V F		
UniRef90_Q46W25	I V D A R F Q H F G P P G G V V T G V V L L L K E S H I I S I	H T W P E E Y G F A A V D I F		
UniRef90_E0SPJ0	L D I K S W K I G K G V V S I I I G I V L E S H I I S I	H T W P E E Y G F A T V D V Y		
UniRef90_UP1000364C1D8	L D V V A H R F E P P Q G V V T V L A L L A E S H I S V	H T W P E H A Y P E A G A A F V D V F		
UniRef90_UP10002488B15	L D V V R L H A F G P P Q G V V T G V V A L L A E S H I S V	H S W P E E A G Y A A I D F F		
UniRef90_UP10002627ABD	R E V V V G H R F E P P Q G V V T V L A L L A E S H I S V	H T Y P E E L G A V F A D V F		
UniRef90_E3SPW1	L N T M T H K F Y P Q G V V T V L G I V M L A E S H I I S I	H T W P E E E G K A A V D V Y		
UniRef90_T0M1X0	I I S S D Y Y Q F Q P P Q G A S G V V V L L A E S H I L S F	H T Y P E E H G L V T L D I Y		
UniRef90_H8G2D0	I I K H Y F H Q F K P W G V V S G I V L L E S H I F T I	H T W P E E Y D Y A A V D L F		
UniRef90_A8MBV3	V D V K V W R F D K G G V V S V I A L V L E S H I I A I	H T W P E E A Y N Y A T L D V Y		
UniRef90_A3XAP3	L H I H T H K F S P P Q G V V S G V A V L G E S H I I A V	H T W P E E I G Y G A F D V F		
UniRef90_E1QV36	V E V K S W K F D K E G V V S V L A L V E E S H I V S I	H T W P E V Y R F A T V D V Y		
UniRef90_D5RQJ3	L H G H F H H F S P P G G V V S G V V L L A E S H I V S I	H T W P E E R S Y A A L D I F		
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UniRef90_X1QU20	I I N S N F H K F S P H G V V S G V V V I I S E S H I F S I	H T W P E E Y G Y C A L D I F		
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90 100 110 120

UniRef90_E6Q203	T C G D H T D P W L A C E H A A R V L G A G S M L T T E V K R G L Q S
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UniRef90_C7JFW3	M C G A C D P H L S I P V M Q R L F Q A K R L E V D E E R R G R V
UniRef90_H6SSF5	M C G N A Q P L R A V P V F R E A F K A G Q A N L S E H K R G M I
UniRef90_C7MZ90	T C G E R A D P E H A V R L L A K A L G T E P V S M S T I T R G R
UniRef90_H2C856	T C G E D S D P Q A A F N H I V E N L K P K R Y Q M F F A D R
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UniRef90_M1E7X1	T C G E K A Q P E K A V E F I L Q A F R V R H A H I T E V Q R G V K D E
UniRef90_F4BA44	S C G A K S D P K K A F A Y I V K E L G A K R Y S M N E A D R
UniRef90_H5SPK6	S C G P R M D L G A G L E V L K R Y F E P G R V Q V V E V R R G I V P
UniRef90_G8AGC4	M C G D A Q P M K A I P V E R A F K P T G V K C D E L L R G E T G S
UniRef90_UPI00047E5A53	M C G A C D P H L A I P V M Q R L F N A G R I V V D E Q R R G K V
UniRef90_G6EXF5	M C G A C D P Y T S I P V L Q R F F K P E R I V L D E Q R R G K
UniRef90_V6F6C6	M C G D C D P Y K A V P I L K E V F T P D Y V T L A E N K R G L T P
UniRef90_B1YD10	T C G E H S D P M A A F R Y I V I S Q L A P K R F T V N Y S D R
UniRef90_UPI0004639E30	T C G E A A D P S L A V D T L A K A L R C R Q L T L T A L L Q R G
UniRef90_K6CE0	T C G G K Q D L D R E V E F L L K Q G L S S K K A M V Y S I L R G
UniRef90_A0Z4C7	T S G E V M K P D I A I A F L Q D A F N A Q R V E V F R V T R G Q I E
UniRef90_E6UOK6	T C G D L D P H V A A N Y I M G S L E A K S T Q S L E L S R G I G P
UniRef90_UPI000237B31C	T C G H T A Q P E R A V Q L L A E A L P K A S Q N V Q T I Q R G H
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UniRef90_D5U0K8	T C G S T S D P I K A F K Y I I K E L K A K K Y S M K V S S R D Y E E M
UniRef90_G4RJF0	T C G N T D P E A A F N Y I I A K E L G A Q R V E V F R G D R
UniRef90_N0ATA6	T C S T N D A W P A L L K R V L G K M G A R R V C M Y E I T R G I E G Q V
UniRef90_D8I113	T C G E R A D P E H A L R L L A T S L H A A S V H L S V L H R G
UniRef90_UPI0002FFAF09	T C G D K V D P E V A I H Y L L S V L K P K T Y D V K K L I R G V G E M I E E
UniRef90_E2CIP4	M C G D A M P E K C V D V L N E A F K P G R S A V S E L L R G K E V E
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UniRef90_UPI0003F58FA3	T C N K S F D L E E G I L L W I K E Q F K S K R L E K N S S Q R G F L E K I
UniRef90_A8AA41	S C G S H T D P R K A F E F I V R N L E A K K V V G G N A D R S L V E G D G V
UniRef90_C0QIV0	S C N F Y E P R Q V A E A S L A W F K A S N Y K L H L A L R
UniRef90_C0QIV0	S C N F Y E P R Q V A E A S L A W F K A S N Y K L H L A L R
UniRef90_UPI0002FEC0D4	T C G R N R M K P K L A S Q F L I E S L E A S N Y L L K T I A R
UniRef90_19MGY0	N Y S D A S Q P D N A S K V L K F L K P E K I K I T N I K R G D F G S I S
UniRef90_E3S1G3	T C G D T T A P Q D G V E Y M K D Q L K A T D I I C N E F E R
UniRef90_UPI000370C52E	S C G A H T D P K K A Y L Y I V E Q L G A K R Y T I K E A D R
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UniRef90_F5R7E3	M C G D A E A M A A A S L I G A R L R A E R I E V R E C L R G T A G A E G
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UniRef90_W5W1R5	T C G D R A D P G M A V R L L A T A L G A A D S R V T S L R G
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UniRef90_D3TCM4	T C G D P K Q A E L A Y E Y I K E R L N P S R V D L V R L E R G
UniRef90_UPI0003791D6D	T C G E H S D P Q K A F D L I V S A L R P E R Y Q M F Y A D R
UniRef90_H2C9D8	S C G S H T D P K R A F Y Y I V E Q L K A K R F N V R E A D R
UniRef90_A3YUN5	T C G D H T M P E R A
UniRef90_UPI000378E849	T C G E K A K P W E A F N F I I Q N L K V E K I N I M E L K R G I L D K
UniRef90_X1PEJ4	T C C G D K S T P Y K A L D Y L K K E L A P E K V V L K E V E R G
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UniRef90_Q97BP8	T C G D P K T A D D A F E Y L T R E L K P T S V T T R K I V R G D L
UniRef90_A3DLU8	T C G E K S D P W R A F N Y I V E K L P K E Y T V N Y A D R
UniRef90_G0EEQ2	S C G K H T D P Q R A F Q Y I V S V K L R P R H I E V G A A D R
UniRef90_E8R718	T C G V K G D P V K A F K Y I V H A L K A R R H T L K V A S R
UniRef90_A7FYV9	T C S K C F D P R K I V A Y L K E N L I F K K V E I K E I L R G K I D
UniRef90_UPI0004671642	M C G D A Q P W R A V D V L A R A F N T A D V R V R Q L R R G V V A E A G I P
UniRef90_D6Z9V7	T C G R R A D P E R A A R L I A E A L K A P V V Q L K A I R G
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UniRef90_R8G7T9	20	S T F G K H I I V D L W G V D F S L L D D I H F L E Y H V N A A N C S G A H V
UniRef90_R5FG89	30	R Q L I V D L G C R T S C I D D V D S I K N V I H M V C Q C I G A G I
UniRef90_UP1000464ABB3	40	E F T G W H V L A E F G G V D A G L C D D R E Q L E A A L R K S L V A A G V T I
UniRef90_G4CTV7	1	G S H G L L D L Y G C D A A M L R D E A C L K S L L H Q A A A A A G A T V
UniRef90_M4QTD5	10	R H I L F T L K G C P Y G L L D D E A H I R N V L S N A A T L S E S T L
UniRef90_H1CZG5	20	N Y I G K H L L I D C Y S C S P D T L E D S K T T L Q T L S D A A G K I G M E V
UniRef90_F5S8N4	30	G Q H G L L D L Y D C D A A I L C Q P S S L Q R A L H Q A A Q S V G A T I
UniRef90_H6L7N5	40	M V N A A L E A Q A T V
UniRef90_UP1000365B7EC	1	M A V Q L I A D L Y G C S E I I N D T E A I K R A A H R A I E Y V G A D I
UniRef90_R6C2X7	10	G L H L I A E L Y D C R C E F L D D V A T L Q E T C L A V C S T P G L T P
UniRef90_C7RMS0	20	N A M G K Q V T L D L Y H C A E N L L Q D K Q A L K D I I Q K A M S A G D M P A
UniRef90_UP1000371F9C8	30	K I L L A R H L T A D L F N C Q N H Q L D D N E L I L D M L K I L Q D L E L Q L
UniRef90_UP10004791D3	40	A A G L H L T G D L Y G C D P R L M T D A A Y L E A F C K Q A V A D A G L T T
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UniRef90_UP100036EB68	10	K I L L A R Q L T V D M Y D C K N K D L S N Y E D L R E S L D M A M N M A G Y T P
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UniRef90_UP1000364DA5B	30	G L H L T A D L L Y E C R P Q L L A D A G A L R E L C L A V C A T P G L T P
UniRef90_A0A011P171	40	K P T G T H I V A E F Y I C S K K I L L N N K K I L V N I L E Q G L K Q L N I E L
UniRef90_X1MSN0	1	M A V Q I T A D F Y G C D E K I L D S E V E I C N I A R D A I K S I K A E I
UniRef90_UP1000415F33D	10	K S I G T Q I A D M Y N C S D L L L S D A S G V Q A T I Q S A A A D F A M Q P
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UniRef90_Q2LR72	20	F G P H M V D G Y D A N Y E V L A S V E A V T N F L D E L P K E I G M T K
UniRef90_B5YF21	30	K P T G N Q I L A E F F R C S A N I L L N D S D A L E R I L A G G I E A C G L G L
UniRef90_F4CX94	40	L G P H L V L D L Y G C P K E K L E D V K F I Y D L L D E L P E Q I G M K I
UniRef90_UP10004797154	1	P V G L H V L A D L D R I D P A V L D D A A G L R T A L L A D A L T A A G A T V
UniRef90_UP100036CE89	10	E A V A R H L L V E I V G S Q L L N D A A Q R V E A F F R D L A A T Y G K E I
UniRef90_T0EYW6	20	E F Y G R H L M T D F V G C Q I D L D D A E Q I A K D M E E A I V S I G A T I
UniRef90_X1ECY9	30	R P I G Y H F T G E M R F T S K E I L L M D N K T I F Q A F L D S L T S A E L T V
UniRef90_UP10003B51B2C	40	M A R H L V A D L Y G C T D M I D D P E A I K E A A H K A I D F V G A E I L
UniRef90_UP1000477D3E1	1	G L H L T A D L Y G C R C E L M T D A A V L A D M C R A V Q A S G L T T L
UniRef90_E6W3R8	10	A L A K H I I V E F Y N C N P Q I I G D V V L I Q Q H V E G A I T F S T S S I L
UniRef90_R7CS01	20	N Y I L G K H L L V D C Y G C R P S S I D S S P D L L A A M I D A A E K I G M T L
UniRef90_F2BC16	30	G R H G L L D L Y G C D E N I L R D A A R L Q T I L E Q A A A A R A T V
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UniRef90_Q2FT12	40	F G V H L M V D G Y G C D P V G L Q D M S L I Y S F L D E Y P V Q M D M T K
UniRef90_D2ZV10	1	G T H A L L D L Y G C R C E L M T D A A V L A D A P A L Q A L L Q R A A D A A G A T T
UniRef90_W1U3E1	10	G L H L I A D M Y R C T A D L L C D Q S K L E K L C V D A C M N A G L T P
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UniRef90_Q5P5U4	10	F G Q H L M L D G Y G C P Y D Y L T D D R I Y E F N L Q C P D V I H M T K
UniRef90_UP100041EC66F	20	G L H L T A D L Y G C R T A A A L T E R E A L E T L C V T Q C R E A G L T P
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UniRef90_UP1000399803B	40	F G Q H L I I L D G Y G C N R E K L M D I D F I L S N Y P A E I E M T K
UniRef90_N6XMA1	1	F G P H L M I D G Y G N A N A E K L A D F E L V R R V L D E L P T E M G M T V
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UniRef90_U2H1V3	20	K I L L A R H L T A D L F N C Q N N Q L N D N D L I L D M L K I L Q D L E I K L
UniRef90_A1TVY3	30	S F G A H V L A D L A G I D A A L L R D A A R L E T L L T E A A R Q A G A R V
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 L N V S T K E F H P H G V T V L V L L S E S H I S H I S H T Y P E E Q N F A A I D C Y
 V E E C Y H K F P M G V T V L A L L S E S H I S H I S H T Y P E E S G D I F V D V F
 C D V V H K K F E P M G V T V L A L L S E S H I S H I S H T Y P E E H G F A A L D I F
 L G G H F H R F G E G G V T G V L L L A E S H I S H I S H T W P E E H G F A A L D I F
 L D I S S H K F D P H G V T A I A L L A E S H I S H I S H T W P E E N G M A V C D V F
 K D T F F H E S E D E I T A A A Y G P K S H I C H W Y P H A Y A A V D I Y
 L F D H F H F G G G G V T G V L L L A E S H I S H I S H T W A E E H R F A A A D I F
 I N A T F H H F S P Y G V S G V V V I Q E S H I L A I H T W P E E Y G Y A A V D I F
 L H I H T Y K F S P Q G V S V A V L A K S H I S H I S H T W P E E Y G Y A A F D V
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 V A Q A F H Q F E P A G A T G A V I L A E S H I L A V H T W P E E V R A V T L D I F
 L V D Y M H S D T H T D F S I V A L L C V G G H V T A H S Y P R L G F I A V D I F
 M S F S A E A L D N G H N A L M L T A D G H I T L H M Y P E E M K Y V A L L D V F
 V G S L F H S F E D S G V T G V V V L L A E S H I L S L H T W P E E D G Y V T L D V F
 I N S H F H T F G G G G V T G V L L L A E S H I S H I S H T W P E E H A Y A A L D I F
 I E V R A Q L W N E E Q A I V F I I L L Q E G H A V V R T Y P K L K Y V A S D V F
 V S Q L V H P F P P G G V T A T V L L A E S H I L C H V T W P E E L G A V T L D V F
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 L G E S F H Q F N P Q G V S G V V V I A E S H I L F I H T W P E E Y G Y V A A D I F
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 L G V Q K H K F P Q G F T A V Y M L A E S H I H F S I H T W P E E K G I A A C C D I F
 I M P P Y V K P Q D W G L S G F V L I I A E S H I S H I S V H T F P E E K G Y L S I D I F
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 L G A Y F Y Q F D E G V T G T V V V L L A E S H I H V S L H T W P E E T G D V T L D V F
 I S H T E T P V N D H H V F M L I L N E G H I T T Q I Y P Q L K Y V A M D I F
 I G A H F H F G E H G V T G V V V L L A E S H I S H I S V H T W P E E H R F A A V D A F
 V G R L F H S F P P G G V T A T V L L A E S H I S H I S V C H T W P E E R R A V T L D V Y
 E D T F F H E D E E E I T L A A Y G K K A H V C C H A Y P Q L G Y A A V D I Y
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 I T S S V E K I S E D H Y A A M I L F R E G H I T T M H V Y T A L K Y V A M D I F
 I Q P Y V F R Y E D E G I T G V V V I I A E S H I S H I S V H T Y P K K N F V I D I F
 L H S H F H A F G P G G V T G V V V L L A E S H I S H I S V H T W P E E H G F A A A D I F
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UniRef90_M1X4S9	C G T L I K K F E P T G I T L V I L L S E S H I S I H T Y P E K Q A L F L D I F
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UniRef90_K2AV90	S C C K K F N T K K V T D Y F K E I F K T Q D V E F Y I E T R G K		
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UniRef90_W4QG13		G I E W I V E A Q G C R A A D L R S I A L Q E L F A A I T R D L D L H V		
UniRef90_X1IBC8		N A D R L T D I I L S E V V D I I G A N I		
UniRef90_Q1IV9				
UniRef90_F7P0Q9				

	50	60	70	80
UniRef90_W7QNA4	L N I A R Q D Y E P Q G A S V T M L I S E S H I C V H T Y P E S H R A D I E V S F			
UniRef90_D3PVB6	L K D S H V V F P N G A I T L V L I L A E S H L S L H T W P E E N L V A D I D L F A			
UniRef90_C6D384	L N I A K Q D Y V P Q G A S V T I L I S E S H L T V H T Y P E Y H R A D I D V A			
UniRef90_J7LEP3	L L E A P A G Y P D H G V T H M M A L A E S H L V V S T W P E H R A A Q I D L V F			
UniRef90_E8N4E7	F G E I I V D F G E D G Y S L V Q L I E T S N I T G H F A N Q S N A A Y I D I F F			
UniRef90_R5BKV2	L N V A K Q D Y D P Q G A S V T I L I S E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_R6ICN7	L N I A K Q D Y E P Q G A S V T I L I A E S H L T V H T Y P E Y N R A D I D V S			
UniRef90_B0LIZ0	L G E A S H V F P N G A V T A I L L S A S H L S I H T W P E F S L A N V D L L V			
UniRef90_W0E8D3	L N I A Q D Y D P Q G A S V T M L I A E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_G5H271	L Q T T I T D V Q E N G H I S L M A L L P D G H L A L H V H P D L R H V S L D I V Y F			
UniRef90_H8KUL7	V G E V Y H N F E N G G F T A V I C L T E S H L S I H T W P E F N L A T F D V F S S			
UniRef90_Q1JVZ6	L N I S S Q D Y D P M G A S V T V L I A E S H L S I H T W P E T D R V D V D I F F			
UniRef90_G4E176	L E V R L H G F G E G G V T G V A L I A E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_UP100047EACB	L D I S R Q D Y D P Q G A S V T M L I S E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_L7VRK2	L N I A K Q D Y D P Q G A S V T M L I S E S H L T V H T Y P E C H R V D I D V S S			
UniRef90_UP100047BF898	L H V S K Q D Y D P Q G A S A T V L I A E S H L A V H T Y P E C H R V D I D V S S			
UniRef90_Q3K5V8	L Q H L V Q P G P G G A S V A L L L P Q S H L C V H T W P A Q R G V T L D V Y S			
UniRef90_F3P520	L N I A S Q N Y E P Q G A S V T I L I S E S H L T V H T Y P E C H R V D I D V S T			
UniRef90_UP100018514B8	V S S T H H R F K P Q G L S A V V I L S E S H L A A H T W P E S G T G Y V T L T D V A S			
UniRef90_D2Z4N0	L N I A K Q D Y D P Q G A S V T I L I S E S H L T V H T Y P E Y H R A D I D V S S			
UniRef90_Q97FX4	L N I A K Q D Y D P Q G A S V T A H L D K S H L T V H T Y P E Y H R A D I D V S S			
UniRef90_R6MQB0	L N V S S Q D Y D P Q G A S V T I L L A D S H L T V H T Y P E Y H R V D I D V S S			
UniRef90_E6U8R3	L N I A K Q D Y D P Q G A S V A L L I C E S H L T V H T Y P E Y H R V D I D V S S			
UniRef90_G4KX47	L N I S K Q D Y D P Q G A S V T F L I S E S H L T V H T Y P E Y H R V D I D V A S			
UniRef90_Q0A6F1	L N I A R Q D Y E P Q G A S V T I L I S E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_V6M9Y0	L N I A K Q D Y V P Q G A S V T M L I S E S H L T V H T Y P E Y H R A D I D V S S			
UniRef90_R7PR89	I K T E E S L T E E V I L A G F G L R S Q V C I H A Y P Q L N Y V A A D I D V S S			
UniRef90_H8YXR8	L N V A R Q D Y D P Q G A S V T M L I A E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_B7G8L6	L S Y H C H A L L P T G V S C V G V L L E S H L S F H T W P K S G V I A L D L F			
UniRef90_B8BT52	L S Y H C H S L H P A G V S C V G V L L E S H L S F H T W P D E G V I T L D M F			
UniRef90_M5E030	L N V A R Q D Y E P Q G A S V T I L V A E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_UP1000372FB79	L N V A K Q D Y V P Q G A S V T V L I S E S H L T V H T Y P E Y H R A D I D V S S			
UniRef90_UP10003766B75	L K E S H V L F P N G A I T L V L I A E S H L S V H T W P E E N L A A D L F F			
UniRef90_UP100016C0C44	L N I A K Q D Y E P Q G A S V T I L V S E S H L T V H T Y P E Y H R A D I D V S S			
UniRef90_UP1000302F603	L N I A K Q D Y D P Q G A S V T C L I A E S H L T V H T Y P E Y H R V D I D V A S			
UniRef90_F9MPN0	L N I A S Q D Y D P Q G A S V T I L I S E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_UP10001E2D89E	L N I S S Q D Y E P Q G A S V T M L I S E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_UP10003B3C999	L G V H V T F E N M G V T G I A L L A E S H L S I H T W P E T G E A A V D L Y F			
UniRef90_D3LSK1	Y S W Q D Y H C D G E F I C S A I T D H G H I T I Y Y D V L A Y A A V D I Y F			
UniRef90_T1A4E3	L H C S R Q D Y D P Q G A S V T M L I S E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_D5BY53	L N V A R Q D Y E P Q G A S V T M L I S E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_I4B4H3	L N I A S Q D Y D P Q G A S V T M L I S E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_I3BT86	L N V A R Q D Y D P Q G A S V T I L V S E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_E3CXX2	L N V A Q D Y D P Q G A S V A V L L I S E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_W6M3G7	L N V A R Q D Y E P H G A S V T L L I A E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_I7KZ15	F G E Q I H F G P N G F S M T Q L I E T S L V S G H F A N E T N A A Y L D I F F			
UniRef90_UP100035EADAF	V G H A A H F Q P S G V T L T L L A E S H L C L H T W G E Q Q T V T L D V Y F			
UniRef90_F4HDA0	I G F L S H K F T G E G V T G I F L S E S H L S Y T Y P E K N Y L S I D I Y F			
UniRef90_F2J183	L N I A K Q D Y D P Q G A S V T I L L I S E S H L T V H T Y P E Y H R A D I D V A F			
UniRef90_W4T521	V G I T N H I F D N Q S F T A A I C L K E S H L C I H T W P E Y Y K Q L T F D V F F			
UniRef90_UP1000369D7FC	L N V A R Q D Y D P Q G A S V T I L V S E S H L C C H T Y P E S H R A D I E V S F			
UniRef90_UP10003766FA7	F D T L L V D F G E D G F S M T Q L I E T S L I S G H F A N L T N A A Y I D I F S S			
UniRef90_19MLF2	L N I A K Q D Y D P Q G S S V T M L I S E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_UP1000380DA5D	L N I A K Q D Y E P Q G A S V A M L I A E S H L T V H T Y P E F H R V D D V A S			
UniRef90_M1Z4D8	L N I A N T D Y D P Q G A S V T M L V A E S H L T V H T Y P E T H R A D I D V S S			
UniRef90_T1CK18	Y Q F P I G A S G I L L S E S H L S F H T W P E Y G I T L D L Y F			
UniRef90_A9G7C3	L E M A V V P F S P Q G I T A C V A V G E S H V A V H S W P E S G R L F V D V A S			
UniRef90_UP10002DE7B6E	I S I Q F E R V S Q N G T V L I A L K E G R V T L H L Y P E Q N L L C L D V L F			
UniRef90_F9DST8	L N V S K Q D Y D P Q G A S V T L M I S E S H L T V H T Y P E Y H R V D I D V S S			
UniRef90_G4Q4W7	L H F Y L D E D P D E G L I F T V P V K G G H V I R V C E F G Y A G L D I M S F			
UniRef90_L0F6E3	L N I A K Q D Y D P Q G A S V T M L I A E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_T0ITW1	L N I A K Q D Y D P Q G A S V T I L I S E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_UP100037EC578	L N I A R E D Y E P Q G A S V T L L I S E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_B1QWD9	L N I S K Q D Y D P Q G A S V T I L I A E S H L T V H T Y P E Y H R V D I D V A S			
UniRef90_G5MDM2	L N I A R Q D Y D P Q G A S V T M L I S E S H L T V H T Y P E S H R A D I E V S S			
UniRef90_UP100035DF223	L N I A K Q D Y D P Q G A S V T V L I S E S H L T V H T Y P E Y H R A D I D V S S			
UniRef90_C9LUF8	L S I S K Q D Y D P Q G A S V T F L I S E S H L T V H T Y P E F H R V D I D V A S			
UniRef90_UP10004225355	V G F T K Y V F D N Q S Y T V A F C L M E S H V I C I H T W P E S H R V D I D I Y F			
UniRef90_C7PT30	L G E V Y H N F S P S G Y T G V C L S E S H V I T V H T Y P E H G K I N I D I Y F			
UniRef90_Q607L0	L N I A R Q D Y E P Q G A S V T M L I S E S H L T V H T Y P E S H R A D I D V S S			
UniRef90_C0EEX1	L S I S K Q D Y D P Q G A S V T F L I A E S H L T V H T Y P E Y H R V D I D V A S			
UniRef90_F5SME7	V G S A V H E F G Q G I T L T L A E S H L C L H T W G E Y Q T V T L D I Y F			
UniRef90_R7H3W9	L N I S K Q D Y E P Q G A S V N V L I A E S H L T V H T Y P E S H R V D I D V S S			
UniRef90_A6TS03	L S I S K Q D Y D P Q G A S V T M L I A E S H L T V H T Y P E T H R A D I D V S S			
UniRef90_D0WM26	V D S V T H L F S P Q G I S A L L S E S H V A M H T W P E E G G G Y V S L D I Y F			
UniRef90_A0MN23	I D C K H F V F P N E A S S G V C L G E S H L S W H Y W I D E G Y V S L D I Y F			
UniRef90_F8L8D0	I I S Y T E H Y F D D G A Y T I L V L E E S H A T L H S H P E C K A C F V D I Y F			
UniRef90_U2KLI0	L N I A K Q D Y D P Q G A S V T M L I A E S H L V T V H T Y P E Y H R V D I D V A S			
UniRef90_B2V2S2	L N I S K Q D Y D P Q G A S V T I L I A E S H L V T V H T Y P E Y H R V D I D V A S			
UniRef90_R6S735	L L N L S K Q D Y D P Q G A S V T L L I A E S H L I T V H T Y P E Y H R V D I D V A S			
UniRef90_J1H4H5	L N I S I S T Q D Y D P Q G A S V T F L I A E S H L V T V H T Y P E Y H R V D I D V A S			
UniRef90_Q1QZ38	L N I S R Q D Y E P H G A S V T I L I A E S H L V T V H T Y P E S H R L D I D V A S			
UniRef90_UP100023791E7	L G E L P V L F Q P H G T T C V L V L A E S H L V T V S T W P E H Q L A H L D V F F			
UniRef90_A7BRD0	L N N V A R Q D Y D P Q G A S V V A H L D K S H L T V H T Y P E S H R V D I D V S S			
UniRef90_U2EMZ9	L N I A R Q D Y E P E G A S V T I L I A E S H L V T V H T Y P E Y H R V D I D V A S			
UniRef90_UP1000370698C	L N I A R Q D Y D P Q G A S V T M L I S E S H L V T V H T Y P E T N R A D L D V S S			
UniRef90_X1QU24	F G E Q V N F G E D G Y S M V Q L I E T S L I S G H F A N K S N S A Y M D I D V F F			
UniRef90_W4QG13	L N V S K Q D Y V P Q G A S V T I L V S E S H L T V H T Y P E Y H R A D I D V F F			
UniRef90_X1IBC8	V G T I I K R F G K G Y S A M Q F I K T S S L T A H F D E E N N R A F I D I F F F			
UniRef90_Q1IV19	V G E M R W H Q F P G G V T G F A L L S E S H L A V H T F P E E H Q S L C L N L F F			
UniRef90_F7P0Q9	L N I A R Q D Y D P Q G A S V T I L V S E S H L C V H T Y P E V H R A D I E V S S			

90 100 110 120

UniRef90_W7QNA4	T C G I I S P L K A L N F L I H S F D S D V V T L D Y R V R G F T R D I
UniRef90_D3PVB6	S C G A I E G R I V I D R L T E S F G L G E V P V R E I D R G
UniRef90_C6D384	T C C G E I S P L K A L N Y L I H S F D T D I M T I D Y R V R G F T R D I
UniRef90_J7LEP3	S C R A D T D P E N A L E P L S L F G P G R T T I R H I P R W N P K A A P V P
UniRef90_E8N4E7	S C C K K F D P E K A A I F T E T F G A G K A K G T F F N R
UniRef90_R5BKV2	T C C G Q I S P L K A L N Y L I H S F D S D I I S D Y R V R G F T R D V
UniRef90_R6ICN7	T C C G E I S P L K A L N Y L I H S F D T D I M T I D Y R V R G F T R D I
UniRef90_B0LIZ0	A Y G R L N G E R M M Q S V E L G L S P T R I N V T R M L R
UniRef90_W0E8D3	T C C G E I S P L K A L N Y L M T S F C S D I V T V D Y R V R G F T R D I
UniRef90_G5H271	L C C E D A A L D P I A H V M R N I F Q P E K I K S T H L R R G D F R A P S E
UniRef90_H8KUL7	L S N F K Q V N N H K V K A I L D F F G G S E M N K H E I A R
UniRef90_Q1JVZ6	T C G K I S P L K A L N H L I E S F E S D I V L M D Y K V R G F T R D V
UniRef90_UPI0002631648	L C A P T H D L H A G L D A I V R R L E A T V A R C Y C T V V E R
UniRef90_G4E176	T C C G R I S P L R A L N Y L I H S F E S D I V I M D Y R V R G F T R D I
UniRef90UPI00047EABC	T C C G E I S P L K A L N Y L I H S F D S D I M Y V D Y R V R G F T R D V
UniRef90_L7VRK2	T C C G E I S P L N T L N Y L I I S S F D S D I I T M D Y R I R G F T R D I
UniRef90UPI00047BF898	L A S S S A K A R G L M D A L V Q R F A P E W T E Q R S L D R G
UniRef90_Q3K5V8	T C C G V I S P L K A L N F L I H Q F D S D I V T V D Y R V R G F T R D V
UniRef90_F3P520	S C R T P V Q E A V G E T V R Q R L Q A Q Q V
UniRef90UPI00018514B8	T C C G E I S P L K A L N Y M I Q S F E T D V M V I D Y R V R G F T R D V S
UniRef90_D2Z4N0	T C C G R I S P L R A L N Y L I H R F N P D I A C D Y R V R G F T R D I
UniRef90_Q97FX4	T C C G M I S P L R A L N Y L V H S F E A D I M T M D Y R V R G F T R D I
UniRef90_R6MQB0	T C C G E I T P L S T L D Y L I G N F D S D I I T M D Y R V R G F T R D V S
UniRef90_E6U8R3	T C C G E I T P L K A L H Y L I N S F E A D I M T I D Y R V R G F T R D I
UniRef90_G4KX47	T C C G E I T P L S T L D F L I G S F D S D I I T M D Y R V R G F T R N M
UniRef90_Q0A6F1	T C C G V I S P L K A L N Y L I H S F D S D I V T M D Y R V R G F T R D V
UniRef90_V6M9Y0	T C C G E I S P L K A L D Y L I S S F D T D I M T I D Y R V R G F T R A I
UniRef90_R7PR89	T F E V G F N P T Q A I Q I M R K T L A A E K I R A T S I R R G N I D
UniRef90_H8YXR8	T C G I S P L K A L N Y L I H S L E S D I V I M D Y R V R G F T R D V
UniRef90_B7G8L6	T C G
UniRef90_B8BT52	T
UniRef90_M5E030	T C G L I S P L K A L N Y L I H S F D S D I V T V D Y R V R G F T R D V
UniRef90UPI000372FB79	T C C G E I S P L K A L G F L I H S F D T D I M T I D Y R V R G F T R D I
UniRef90UPI0003766B75	S C G A I D G L A I V D R L V D A L D L R G A R V Q E C E R G
UniRef90UPI00016C0C44	T C C G E I S P L K A L N Y L I H C F D A D I M T I D Y R I R G F T R D I
UniRef90UPI000302F603	T C C G E I T P L S T L D Y L I G S F D S D I I T M D Y R V R G F T R N V
UniRef90_F9MPN0	T C C G R I S P L N A L N Y L L D N F E S D I V T L D Y H V R G F T R D V S
UniRef90UPI0001E2D89E	T C C G R I S P L K A L N Y L I H S F D S D I I T I D Y R V R G F T R D I
UniRef90UPI0003B3C999	V C G K D V D A E A G L A L I L K S F S S A V A V R K H K I E R
UniRef90_D3LSK1	I F N S N R S L N R M M G A L K R L F Q S D R I K A T A V R R G F G V I
UniRef90_T1A4E3	T C G R I S P L R A L N Y L I H S F E S D I V T V D Y R I R G F T R D I
UniRef90_D5BY53	T C C G R V S P L R A L N Y L I H S L E S D I V T M D Y R V R G F T R S V
UniRef90_I4B4H3	T C C G Q I S P L K A L N Y L L H S F S P D I V M S D Y R V R G F T R D V
UniRef90_I3BT86	T C C G R I S P L K A L N Y L I H S F E S D I V I T D Y R V R G F T R D V
UniRef90_E3CXX2	T C C G R I S P L K A L N Y L L H T F S P D I A I M D Y R V R G F T R D I S
UniRef90_W6M3G7	T C C G R I S P L K A L N Y L M Q C F A A D I V V L D Y R V R G F A R D E
UniRef90_I7KZI5	S C K E Y E P S R A A E F C R N F F G A Q S A T Y Q V L F R
UniRef90UPI00035EADAF	V C N V T E D N S D K A E A L L N I F A P A Q Y H S Q Q V I R
UniRef90_F4HDA0	T C G N E C F S A V E E I E A K L K V Q K I S H R Y I E R G H I P E I
UniRef90_F2J183	T C C G E I S P L K A L N Y L I H C F D A D V M T L D Y K V R G F A R D I A
UniRef90_W4T521	L C N Y T Q D N E R I A D D V I K Y F K A I T I Q E H K I N R
UniRef90UPI000369D7FC	T C G V I S P L K A L N Y L I H K L E S D I V T I D Y R V R G F T R D V H
UniRef90UPI0003766FA7	S C K Y Y D P Q V A A D F T Q K Y F Q A K E M K I H Y V L R
UniRef90_I9MFL2	T C C G E I S P L K A L N Y L I L N S F S S D I A I L D Y R V R G F T R D V
UniRef90UPI000380DA5D	T C C G E I T P L K T L D Y L I S S Q F D S D I I T M D Y R V R G F T R D V H
UniRef90_M1Z4D8	T C C G E I S P L K A L N Y L I T S F E P D I A M I D Y R V R G F T R D V
UniRef90_T1CK18	T C G D P S K A E M A Y E W I Q K K L M P T T V R T R R I E R G Q M
UniRef90_A9G7C3	S C S T L E S V R R A V A A I G S A L
UniRef90UPI0002DE7B6E	S Y K K S C O N P K L I I N T I V A I L Q P D Q V R I R E V N R G D Y
UniRef90_F9DST8	T C G E I S P L N A L D Y L I G S F D S D I I T A D Y R V R G F T R S V
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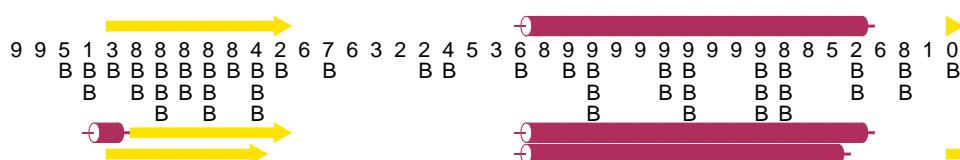
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UniRef90_J1APY2	F	G E T V V V H F G P A G Y S M T Q L I	E T S S L G A H F A N D E T N A A Y I D I F		
UniRef90_G2G1X5	L	N I A K Q D Y D P Q G A S V T M L I	S E S S H V T V H T Y P E S H R A D I D V S		
UniRef90_UPI00036AE73F	L	N V A R Q D Y D P Q G A S V T I L V	H I C V H T Y P E P E V H R V D I D D V S		
UniRef90_K6C4H8	L	N V A S Q D Y F E P A G G F S V T V L V	S E S S H V T V H T Y P E P E V H R V D I D D V S		
UniRef90_V6IVS9	L	N I S K Q D Y D P Q G A S V T I L I	A E S S H V T V H T Y P E P E F H R V D I D D V S		
UniRef90_R6RL45	L	N I S K Q D Y D P Q G A S V T I L I	S E S S H V T V H T Y P E P E Y H R V D I D D V S		
UniRef90_I7M065	C	D K R V K V F P D G Q G V S L I F L	M S F H S W P E E K C A T V D F Y		
UniRef90_H7GFZ7	D	S S V V Y K F P B Q G L S A A V V I S P	V A V M I H T W P E D N A A T L D L Y		
UniRef90_UPI0003741D5A	L	N I A Q Q N Y Q P Q G A S V T L M M S E S H	I C V H T Y P E R D R I D L D V S		
UniRef90_UPI000469BF31	L	N I A H Q D Y E P Q G A S V V A H L	D K S S H I C V H T Y P E P E S H R V D I D E V S		
UniRef90_H6LIF7	L	N V S K Q D Y D P Q G A S V T F L I	A E S S H V T V H T Y P E P E F H R V D I D D V S		
UniRef90_R7Q0M6	Y	G E P Y V V V F E P Q G Y S L C Q I	E T S S M I S G H F A E D T D R C F L D V F		
UniRef90_I2GE49	V	G E A Y H I F P N G G F T A V V C L	T E S S H V S I H T W P E L G L A T F D V F		
UniRef90_R5V666	L	N I S K Q D Y E P Q G A S V N I L I	A E S S H V T V H T Y P E P E S H R V D I D D V S		
UniRef90_UPI0004678568	L	N V S K Q D Y E P Q G A S V N I L I	H I T V H T F P E F H R V D I D D V S		
UniRef90_R5GN43	L	N I S K Q D Y D P Q G A S V N I L F	A E S S H V T V H T Y P E P E F H R V D I D D V S		
UniRef90_UPI00047C50E4	V	A S V H H R F Q P Q G I S A V L V	A E S S H I A I T W P E E R T A H V T L T		
UniRef90_A2SSK6	F	G E Q I I H F G P N G Y S M T Q L I	E T S S L S A H F A N D E T N A A Y I D I F		
UniRef90_B0KV0D	V	V D R K L T E F K G G G M T V S F I L A N S N L	S T A H T W P E Q N G S I H D C Y		
UniRef90_Q3EY20			T F V L L S E S S H V T V H T Y P E P E F H R V D I D D V S		
UniRef90_B0TI92	L	N I A K Q D Y D P Q G A S V T M L I	S E S S H V T V H T Y P E E T R A D I D V S		
UniRef90_J7ISN2	L	N I A K Q D Y D P Q G A S V T M L V	S E S S H V T V H T Y P E E T R A D I D V S		
UniRef90_G2Z5D6	V	G V I V L H H F E N E S F T I V A V C L	C M H T W P E F N Q L D I D V Y		
UniRef90_R7HW71	L	N I S K Q D Y E P Q G A S V N V L I	K E S S H V T V H T F P E F H R V D I D D V Y		
UniRef90_UPI00046844A8	V	G V I S E H F E N N N S F T I V A I C L	C I H T W P E F N Q L D I D V Y		
UniRef90_C7NC13	L	N I S K Q D Y E P Q G A S V N V L I	A E S S H V T V H T F P E Y H R V D I D D V Y		
UniRef90_A0A011Q1A9	V	G V L L C H Q D F E P A G A T G A V V L	A E L H L D K S S H I T A V H T W P E A Q A V T Y D D L Y		
UniRef90_B8FA21	F	G E Q V V H F G E D G Q G M V Q L I	E T S S L S A H F A N S A N A V Y D D L Y		
UniRef90_UPI00037A4D00	L	N I A S Q E Y T P Q G A S V T L M M S E S H	H I T V H T Y P E E T R A D I D E L S S		
UniRef90_D3QZK3	L	N I S K Q D Y E P Q G A S V N V L I	A D S H V T V H T Y P E E T R A D I D E L S S		
UniRef90_I3CFQ8	L	N S V S T Q D Y E P Q M G A S A T F L I	A E S S H V T V H T Y P E E T F R V D I D D V A		
UniRef90_E1VNW7	L	N S V S A H Q D Y D P E G S S V A M L I	G D S S H V T V H T Y P E E T S R V D I D D V A		
UniRef90_V6S5N0	V	G V L V T H D F D N D S F T I V A V C L	K E S S H V T V H T Y P E P E F Q Q L T D L Y		
UniRef90_Q8K9T6	L	N V F H Q D Y E P Q G A S V T A H L	D K S S H I C V H T Y P E P E S H R V D I D D V Y		
UniRef90_K2CNH3	V	V D T K I T E F F K G K G F T F V Y V L	S N S N L H I T V H T W P E H N A F H V D D L I		
UniRef90_D5UDB6	V	G E A V H R F A P Q G L S L A V V L	A E S S H V T V H T W P E H N A F H V D D L I		
UniRef90_UPI0003660EEA	R	S H L V E P F Q P H V T C Q I	V T S T V H T W P E H R L T I D F L I		
UniRef90_I6S756	L	N E V E H K F E P Q G Y T G L W L	A E S S H F A I T F P E Q G Y T Y I D E L S S		
UniRef90_B5JXZ3	L	N I I A M Q D Y E P Q G A S A A I L I	S E S S H L T V H T Y P E E S H R V D I D D V Y		
UniRef90_F2NMH4	Q	S T K S Y K F H P Q G L S A V V S P V	V A V M I H T W P E D D A A T L D L Y D F V F		
UniRef90_V9TC53			V A V M I H T W P E D D A A T L D L Y D F V F		
UniRef90_R9JCV4	L	N V S R Q D Y E P Q G A S V T F L I	A E S S H H I T V H T Y P E E Y H R V D I D D V A		
UniRef90_A0A010YF05	L	N I S K Q D Y D P Q G A S V T I L I	S E S S H V T V H T Y P E E Y H R V D I D D V A		
UniRef90_D9PEW5	F	G P I I V N F G E D G Q G Y S L T Q L I	E T S S L S I S G H F A N K T N S A Y I D I F		
UniRef90_D1JF14	Y	G D C V V C V R F G E G G Y S A V Q L I	E T S S I S A H F V D T T W P E H R L L L V D V L		
UniRef90_Q134C0	I	G S Y E V R Y V P H G L T I A L F I	E T S S I S A H F V D T T W P E H R L L L V D V L		
UniRef90_UPI0003B34546	F	G E Q V V H F G E E G F S M V Q L I	E T S S I S A H F V D T N A T Y L D D V F		
UniRef90_F8EY19	V	V N V T T Q D Y D P D R G A S V V A V L I	N E S S H I T A H T Y P E P F D R V D I D D V S		
UniRef90_D8JTZ2	K	S L H L D R V A G G G V S G V A L L I	L S S S G H I T A H T Y P E P F D R V D I D D V S		
UniRef90_H8XNP6	V	G E V L V H F F E N K S F T A T F C L	K E S S H I T A H T Y P E P F D R V D I D D V S		
UniRef90_H8I4Z3	Y	G C Y V E R F G A E G L S M F Q F I	C I S G H F P S T R S A Y I D N V F		
UniRef90_K2AZC4	Y	G P H F G H A D P S G Y S L V Q L I	E T S S I S A H F V D T T W P E H R L L L V D V L		
UniRef90_D6PB4J	V	H A H V E Q F D P P G Y A A V V L L I	E T S S I S A H F V D T T W P E H R L L L V D V L		
UniRef90_X5K172	V	G V I L S S Y V F D N K S F T A A V I	H C I T A H T Y P E P F D R V D I D D V S		
UniRef90_F0S461	V	Y P P I E Q F E D S G V S G V S I W L E	H C T I H T W P E E K F F S L D A Y		
UniRef90_K9WST7	V	G E L A F A F F Q P Q G V S A V V L L	H C T I H T W P E E A K V T I D I H		
UniRef90_UPI000474CDB4	F	P D V V R F G A Q G Y S L A Q L I	E T S S L S I S G H F A E D T D R A F I D I F		
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UniRef90_UPI000381613D	I	E H F G H D D P S G Y T L V Q L I	E T S S L S I S A H F V D T T W P E H R L L L V D I S S		
UniRef90_SOFZH5	F	D T Q V V H F G E D G F S M V Q L I	E T S S L S I S A H F V D T T W P E H R L L L V D I S S		
UniRef90_W0RQU0	V	A P A W H A F P P G V T G V L L I	H C I T A H T Y P E P F D R V D I D D V S		
UniRef90_M4ZHA4	L	G S P C E P F E D G G V T G V I V V L I	H C A I T W P L Q S Q F V D I D F V F		
UniRef90_K8GL68	V	N E A A F T F Q P Q G V S A V V L L I	H V A I F W P L E K G K I T V D I H		

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UniRef90_I0KG59	L	S N F R H D N A A K V E A F L R Q F E G T E H T K H Q I R R			
UniRef90_UPI000468CA4D	L	C G A A R A D E A V D A I A G A L A A R I A Q R R R I E R G G A A P P			
UniRef90_M1ZKS0	T	C G T I S P L N A L D Y L I G S F D S D I I T I D Y R V R G F T R D V			
UniRef90_E7GBG8	S	C K Q N I I P D N I F S Y I R N F F E T E D I T Y H T L F R			
UniRef90_UPI0003827C6A	T	C G V I S P L K A L N Y L I D S F E S D I V T M D Y R V R G F T R D V			
UniRef90_B8CF11	T	C C G			
UniRef90_T0GLY4	S	C K G Y D P K V A A E F T R E F F K G D A M R L T V T N R			
UniRef90_V7I875	T	C G G T I S P L K A L D Y L I G S F D S D I I T I D Y R V R G F			
UniRef90_R6CSG7	T	C G K I T P L T A L D Y L I G S F D S D I I T M D Y R V R G F T R N I			
UniRef90_K4KX44	T	C G Q I S P L K A L N Y L I T S F E P D I A I I D Y R V R G F T R D V			
UniRef90_U2MB20	T	C G V I S P L K A L N Y L I L Q L E S D I V T I D Y R V R G F T R D V			
UniRef90_U4TLC1	T	C G L I S P L K A L N Y L I D S F E C D I A T V D Y R T R G F T R D I			
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UniRef90_Q2FRG2	S	C K E Y A P Q L T A E F C R E F F G A D K V I T V H I A F R			
UniRef90_F0T1R5	T	C G E I S P L T A L N Y L I E S F T S D I A I V D Y R V R G F T R D I			
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UniRef90_F5B479	T	C G Q R S S E D I A N Y F A S C L			
UniRef90_U1Q950	T	C R P I S D G L I A S H F I Q S T F G A A D V R			
UniRef90_W8EU80	L	S N F R R D N A D R A R E L L A F F E A T E Q S K T E V R R			
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UniRef90_A4BPG1	T	C G L I S P L K A L N Y L I H S F D S D I V T M D Y R I R G F T R D V			
UniRef90_U2EC14	T	C G M I S P I K A L D Y L I K S F D S D V I T I D Y R V R G F T R D V			
UniRef90_U1JDB8	T	C G V I S P L K A L N F L I H S L E S D V V T I D Y R V R G F T R D I S			
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UniRef90_R6PFT9	T	C G E I T P L S T L D Y L I G A F D S D V I T M D Y R V R G F T R S			
UniRef90_R7L1Q7	T	C G E I T P L K S L D Y L I G S F D S D I I T D Y R V R G F T R D E			
UniRef90_J1APY2	S	C K A Y G P K Q M A E F C K K F F G A S S M T T H V L F R			
UniRef90_G2G1X5	T	C G K I S P L T T L N Y L I V D S F S P D I A I V D Y R V R G F T R D			
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UniRef90_K6C4H8	T	C G E I S P L K A L H Y L I R A F E T D V M T I D Y R V R G F T R D			
UniRef90_V6IVS9	T	C G E I S P L N T L N Y L I G S F D S D I I T A D Y R V R G F T R D V			
UniRef90_R6RL45	T	C G E I S P L N A L D Y L I G S F D S D I I T D Y R V R G F T R D V G			
UniRef90_I7M065	N	C G Q N F N C R T V E E Q L C N A F G W E C C T S N I I N R G			
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UniRef90_UPI000469BF31	T	C G V I S P L K A L D Y L I H Q L E S D I V T I D Y L I R G F T R D V			
UniRef90_H6LIF7	T	C G E I T P L S T L D Y L I G S F D S D I I T M D Y R V R G F T R D V S			
UniRef90_R7Q0M6	S	C R E F P P E K T A K Y V Q K Y F G A K K M E Y S V S F R			
UniRef90_J2GE49	L	S N Y L R D N S A K A R Q V L T Y F A A T E E L S K Q E L T R			
UniRef90_R5V666	T	C G E I S P L N T L D Y L I R S F D S D I I I T D Y R V R G F T R D V			
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UniRef90_UPI00047C50E4	S	C R D			
UniRef90_A2SSK6	S	C K E Y A P S V A A E F C R K F F G A K R M N N T V F F R S			
UniRef90_B0KVD0	S	C S P I F N K S E L Y L T L K K Y F E T D K I D V F F V E			
UniRef90_Q3EY20	T	C G T T V P Q I A I D Y I V N I L K P E R M H I K R L I R G G E			
UniRef90_B0TI92	T	C G M I S P L K A L N Y L I N S F S S D I I V I A D Y R V R G F T R D V S			
UniRef90_J7ISN2	T	C G K I S P L T A L N Y L L T S F S S D I I A I I D Y R I R G F T R D			
UniRef90_G2Z5D6	L	C N Y Q K D N S H L V Q S I A E Y F E A T I I K D I E I N R			
UniRef90_R7HW71	T	C G K V S P L K A L N Y L I G S F D S D I I I T D Y K V R G F T R D			
UniRef90_UPI00046844A8	L	C N Y L Q D N T Q K V K D I I S Y F E A K I L K E F E I N R			
UniRef90_C7NC13	T	C G E I S P L N T L N Y L I D S F D S D I I I T D Y R I R G F T R D I S			
UniRef90_A0A011Q1A9	V	C N F S Q E N Q			
UniRef90_B8FA21	S	C K A Y N P Y L V R Q F A V N Y F K G G D S S F Q V S M R			
UniRef90_UPI000374A0D00	T	C G I I S P L K V L D Y V I E A F S A D V I D I D Y R V R G M T R D			
UniRef90_D3QZK3	T	C G G T V S P L N I I D F L I S S F D S D I M T I D Y R V R G F T R E E			
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UniRef90_E1VNW7	T	C G G L I S P L K A L N Y L I H S F D S D I I V T V D Y R V R G F T R D I			
UniRef90_V6S5N0	L	C N Y L Q D N S A K V R A V I D Y F S A V I I K D F E I N R			
UniRef90_Q8K9T6	T	C G I I S P L N A L N Y L I H Q L E S D I V T V I E Y R V R G F T R D I H			
UniRef90_K2CNH3	T	C S P I F D K P S L P K T I S D L F S T D S V E V N F I E			
UniRef90_D5UDB6	T	C R R			
UniRef90_UPI0003660EAA	T	C R A D L D P G R A I E P I L G I I E P			
UniRef90_I6S756	S	C S S G F K Q K M F L K M L K K			
UniRef90_B5JXZ3	T	C G K I S P L K A L N Y L L H E F E S D V V T I D Y R V R G F T R S E			
UniRef90_F2NMH4	F	Y R G D V N P D E V L E E G L A R A F G A K R			
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UniRef90_R9JCV4	T	C G E I T P L S T L D Y L I G S F D S D I I I T M D Y R V R G F T R N V			
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UniRef90_D1JF14	S	C K Y Y R P E D A F T F S K N F F E A K Y A R Y N H L L R			
UniRef90_Q134C0	L	C N P E M D F N R V L A E V K R C V C P D E M T V H H V P R			
UniRef90_UPI0003B34546	S	C K A Y D P E K V R A F A Q E Y F G G S L S K I N V T Y R			
UniRef90_F8EY19	T	C G M I S P L R A L H Y L I D C F D S D V V V I D Y R V R G F T R D			
UniRef90_D8JTZ2	G	C A G V K P E V A L L A D A F G A R E A V I Q R K R A Q A D			
UniRef90_H8XNP6	L	C N Y S A D N T E K V R V I I R F F E A S V V K Q I E I Q R			
UniRef90_H8I4Z3	S	C S S D F P E A V K K F T E K F F G A H D S R M L V N P R			
UniRef90_K2AZC4	S	C A P F D A K K T T A F C K K F F R A K R V K L H L I K R			
UniRef90_D6PB4J	T	C G G A D P N L L A D E I H S E L			
UniRef90_X5K1Z7	L	C N Y K Q D N Q H K V E D I V A F F E G E I V Q Q D K I Y R			
UniRef90_F0S461	S	C K D F D P M V A F E L T I K W F D V E Y A S F V D V E R Y I G G P			
UniRef90_K9WST7	S	C K E Y P P N E T A E Y C K K Y F G A K E V D Y S V T F R			
UniRef90_UPI00047CDB4	S	C N L D F			
UniRef90_B3JH01	S	C R R F D A E T A L R F T A D W F G S H G A R Q T I I V R			
UniRef90_UPI000381613D	S	C K A Y D P E V V R E F S Q T S F G G S F S R I S V T H R			
UniRef90_S0FZH5	C	C C			
UniRef90_W0RQU0	C	C D F Y Q D N Q P K A K K L A R I L E			
UniRef90_M4ZHA4	C	C R K F N P S V V V D L V S R A F M T K S L R T T D L			
UniRef90_K8GL68	C	C C			

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UniRef90_R6CSG7
UniRef90_K4KX44
UniRef90_U2MB20
UniRef90_U4TLC1
UniRef90_I7MB26
UniRef90_Q2FRG2
UniRef90_F0T1R5
UniRef90_K8LZW8
UniRef90_F5B479
UniRef90_U1Q950
UniRef90_W8EU80
UniRef90_UPI00046CF3D7
UniRef90_UPI00037C4228
UniRef90_D5U7R7
UniRef90_A4BPG1
UniRef90_U2EC14
UniRef90_U1JDB8
UniRef90_G2H0S7
UniRef90_R6PFT9
UniRef90_R7L1Q7
UniRef90_J1APY2
UniRef90_G2G1X5
UniRef90_UPI00036AE73F
UniRef90_K6C4H8
UniRef90_V6IVS9
UniRef90_R6RL45
UniRef90_I7M065
UniRef90_H7GFZ7
UniRef90_UPI0003741D5A
UniRef90_UPI000469BF31
UniRef90_H6LIF7
UniRef90_R7Q0M6
UniRef90_I2GE49
UniRef90_R5V666
UniRef90_UPI0004678568
UniRef90_R5GN43
UniRef90_UPI00047C50E4
UniRef90_A2SSK6
UniRef90_B0KVD0
UniRef90_Q3EY20
UniRef90_B0TI92
UniRef90_J7ISN2
UniRef90_G2Z5D6
UniRef90_R7HW71
UniRef90_UPI00046844A8
UniRef90_C7NC13
UniRef90_A0A011Q1A9
UniRef90_B8FA21
UniRef90_UPI00037A4D00
UniRef90_D3QZK3
UniRef90_I3CFQ8
UniRef90_E1VNW7
UniRef90_V6S5N0
UniRef90_Q8K9T6
UniRef90_K2CNH3
UniRef90_D5UDB6
UniRef90_UPI0003660EAA
UniRef90_I6S756
UniRef90_B5JXZ3
UniRef90_F2NMH4
UniRef90_V9TC53
UniRef90_R9JCV4
UniRef90_A0A010YF05
UniRef90_D9PEW5
UniRef90_D1JF14
UniRef90_Q134C0
UniRef90_UPI0003B34546
UniRef90_F8EYI9
UniRef90_D8JTZ2
UniRef90_H8XNP6
UniRef90_H8I4Z3
UniRef90_K2AZC4
UniRef90_D6PBJ4
UniRef90_X5KI72
UniRef90_F0S461
UniRef90_K9WST7
UniRef90_UPI000474CDB4
UniRef90_B3JH01
UniRef90_UPI000381613D
UniRef90_S0FZH5
UniRef90_W0RQU0
UniRef90_M4ZHA4
UniRef90_K8GL68

This figure displays a sequence alignment of UniRef90 proteins across 40 positions. The alignment is organized into several distinct regions, each characterized by a unique pattern of highlighted amino acids (red, yellow, blue). The highlighted residues likely represent conserved positions or specific mutations across the dataset.

- Region 1 (Positions 1-10):** Features a mix of red, yellow, and blue highlights, indicating a diverse set of mutations at these positions.
- Region 2 (Positions 10-20):** Shows a transition in highlighting patterns, with more blue and yellow residues appearing.
- Region 3 (Positions 20-30):** Dominated by blue and yellow highlights, suggesting a cluster of conserved or functionally important residues.
- Region 4 (Positions 30-40):** Shows a mix of red, yellow, and blue highlights, similar to the initial region.
- Region 5 (Mid-Sequence):** A large block of sequences showing a mix of red, yellow, and blue highlights, indicating a significant region of divergence or conservation.
- Region 6 (Bottom):** A final group of sequences showing a mix of red, yellow, and blue highlights, similar to the initial region.



		50	60	70	80
UniRef90_B0SBV9	L S V S A Q D Y D P V G A S A M V L [REDACTED] H L T V H T Y P D A A R V D D I S				
UniRef90_S5MVB2	[REDACTED] A P L W I E Y C D T G I S Y V Q V L Q D S H S S A H F C D [REDACTED] V G D F Y F D C F				
UniRef90_U4WJ70	F G E H C Y R F G D G G L S A V I I Y T S S T L H T N D L H R E G Y L D V E L S				
UniRef90_UPI000347AF37	[REDACTED] N F T E H Y F S P H G Y T C L W L L G E S H H L A I H T F P E K G L C Y I E L S				
UniRef90_D8PB83	Y G C Q I V N F G E G G Y S M V Q L I I E T S L I S G H F A N D T N S A Y L L D D I L S				
UniRef90_A6FGR6	[REDACTED] N F V E H Y F Q P Q G Y T A L W L A E S H H A A V H T F P E E G K S Y V E L I S				
UniRef90_A6G5K1	L S V S A Q D Y D P W G A S S L V L M S D S H H C A H T Y P D V Q R I D L D V E L S				
UniRef90_E8U7B5	D A T A T V Y A V P G G L S G V I T A G D A H I A V H A F P S H A T F S A D I V F				
UniRef90_K9W5N2	M G E V S V E F Q P Q G I S A V I L L S E S S H V A L H [REDACTED] W P E H K K I C I D I H				
UniRef90_W4V7C3	U E D D S S H T E S P G P L T V L A H L D K S H I T V H T Y P D V Q R I D L D V E L S				
UniRef90_J3CPW2	V G I T N H I F E N Q S F T S A V V C L K E S H L C I C I H T W P E I N T L T M D V Y F				
UniRef90_UPI0004794878	V G N T S F V F E N G S F T I A Y V C L K E S H L C I C I H T W P E I N T L T M D V Y F				
UniRef90_K8YRB4	V H S H V V V L S P P G F T G I C L I D E S S H V S A H C Y S E K G W L A L D V F				
UniRef90_UPI000475F75C	L R F T A H N F K P Q G Y T A L W L L S E S S H F A V H T F P E Y G K T Y E L S				
UniRef90_R6XEJ8	I T V I K D K V E N S N F S G I I I I A Q S H L S I I H Y D Y Q K K H A Y F D I F				
UniRef90_R6XEJ8	I T V I K D K V E N S N F S G I I I I A Q S H L S I I H Y D Y Q K K H A Y F D I F				
UniRef90_W7Y1P2	L D Y S S H Q F P V N G F S A F W L L A E S S H L A I I H T F T N S G W C Y V E L I S				
UniRef90_TOVYV3	L N V A R Q D Y D P Q G A S V T M L I S E S S H I T V H T Y P E T H R A D I I D D V S S				
UniRef90_H2CC30	F G E I I V H F G A D G Y S L V Q L E T S S L V S G H F A N L T N R I Y L L D I F				
UniRef90_UPI00024864CA	C Q G P I T T Y G N R G L T G V I I I I H C Y W D E E G L M Q L V E L Y F				
UniRef90_G8RZ76	I A G P L V A T E E G G G K S A V V I I L A E S S H A A I H T Y P H L R E I F V V N V F				
UniRef90_UPI0004796750	F G E C C F R F G E G G L S A V Q L I I Y T S S H I T L H T N D L H R E G Y L D V F				
UniRef90_B8BSH6	S Y H C H S L V P I G V S C A G V L L E S S H V A F H T W				
UniRef90_X0UQM3	C D L H F W D Y E P E G G V S A I Q F I I I I H T L D K M N R V Y L N I Y				
UniRef90_UPI0002E68A19	L Y T H F R R Q P Y G I M G T I I G A F S H C M S V F V S A K Q Q Y I T L D F L				
UniRef90_X0UVY8	C E L Y F W D D E G K G V S A V Q F I I L T S S I V I H T L E L L E A A Y V N I F				
UniRef90_C4QR6	I A V A S E D G P P H G K S A V V I I L A E S S H A A I H T Y P G L R E V F L N I F				
UniRef90_UPI000371C7E0	L N Y S E H Y F E P E G W T A L W L L G E S S H L A I V H T F P E H G T S Y L E L S				
UniRef90_UPI000248F26A	V H F T E H H F D L Q G Y T C F W L L A E S S H L A I V H T F P E N N T T Y L E L S				
UniRef90_R5V2S8	L K S T P N H P K Y L S A I I I I A Q S H I I A L H Y D Y Q T K K I Y A D I F				
UniRef90_R5V2S8	L K S T P N H P K Y L S A I I I I A Q S H I I A L H Y D Y Q T K K I Y A D I F				
UniRef90_R6UM37	I T I K D K V E N P D Y L S G I I V I A Q S H I I S I H Y D Y K T Q H A Y F D I F				
UniRef90_R6UM37	I T I K D K V E N P D Y L S G I I V I A Q S H I I S I H Y D Y K T Q H A Y F D I F				
UniRef90_E4U6H1	L S A S E Q D Y E P Y G A S A L L L S D S H I I A A H T Y P D F A R V D E L S S				
UniRef90_UPI00038F56B0	N V V L Q I D K S H I T V H T Y P E F H R A D I I D E V S S				
UniRef90_K4IA27	V L F N E H H F T A Q G Y T C F W L L G E S S H L A I V H T F P E S G K S Y V E L V S S				
UniRef90_TOHX40	G P D S S Q S L V G H L D K S H I T V H T Y P E N H R A D I I D E V S S				
UniRef90_S4XZE6	V M P P F V V A E D C G I S A F V L L L G G H L T I H T F S F R E C F F A D L V				
UniRef90_S4XZE6	V M P P F V V A E D C G I S A F V L L L G G H L T I H T F S F R E C F F A D L V				
UniRef90_UPI000304C6A8	L N F V E H Y F Q P Q G Y T S L W L L A E S S H A A V H T F P E E D K A Y V E L S S				
UniRef90_UPI0002557F92	L Q F S E H Y F P G Q G Y T C F W L L G E S S H L A I V H T F P E S N K S Y D V				
UniRef90_UPI0002628AF4	L I G S F S V Y S N Q G L T N V T L I E T F F H T V H V W D E V S P A L I D V				
UniRef90_KORN37	V T T Q C Y S Y E G G K V Y C G G F I Q D S Q F A I V H T A P G S G K M S F D I F				
UniRef90_R7RAQ2	H L S N H N D E I V A H L D K S H I T V H T Y P E Y H R V D I D V A				
UniRef90_A1ZWV0	L N F M E H F F Q P Q G Y T A I W L L G E S S H F A L H T F P E E N K T Y I E L S				
UniRef90_X0V6C5	L G P E V V K G C P E G W T G F V I I D K S H I S V H T F P E E G S R V S V D F				
UniRef90_W0RLX2	H T P V V V R A L P G G V V G L F A L E G C H M A V H T F P E R G G V L L D V				
UniRef90_X1SF52	E D L H F W D Y D G S G T S A I Q F I T T S N I V I H T L D L L G A V Y V N I F				
UniRef90_X0WTH0	C D L H F W D Y E P H G T S A V Q F I S T S N I V I H T L D L L G A V Y V N I F				
UniRef90_I0GZJ5	I A G P L V A T E E G G G K S A V V I L A E S S H A A V H T Y P H L R E V V L N V F				
UniRef90_U1H146	L G F L S H K F T G E G V T G I F L L S E S S H L S Y H T Y P E H R Y L Y L E V S				
UniRef90_X1WM28	Y F S D S H I C V H T Y P E S H R A D I I E V S				
UniRef90_C4FLT0	[REDACTED]				
UniRef90_A4ABZF7	V L F N E H H F T E Q G Y T C F W L L G E S S H L A I V H T F P E S K S Y V E L S				
UniRef90_UPI00023751F0	M L L A E S H L C V H T W P E Q R A V T L D V Y				
UniRef90_Q3EY21	L N V S K K E F Q P Y G V Y C I S V I H T F P E S K S Y V E L S				
UniRef90_R1EM75	V H S K L V L I T P P G F T A A V V L L D E S H A T A H C Y S E H G W L A V D V F				
UniRef90_UPI00035DE43B	I L F N E H H F P K Q G Y T C F W L L G E S S H L A I V H T F P E S E K S Y I V D				
UniRef90_W1YLJ0	M H L D K S H L T V H T Y P E S H R A D I I E V S				
UniRef90_A1WEC8	A T L A Q S H L C A H T W P E Q R A V T L D V Y				
UniRef90_UPI00036B1B0C	A Y D F F T L S A H R G V I G A V I M A D D L H I V V R T F P E R D A V N V D L Y				
UniRef90_W1FCL7	[REDACTED] N I A R Q D Y E P Q G A S V T V L V S E S H H I C V H T Y P E S H				
UniRef90_D7CW59	T L T L T H R A R D G L S V G V A L P P E S H H I C V H T Y P E S H				
UniRef90_H6RM68	L E P V T H R S D L Y G W A G W I H W E T S G A H F Y A W E Q P R F F S V D I Y				
UniRef90_R4LSY5	I D P V T H V S E R Y G W A G W I H W E T S G A H F Y S W E R F F S V D I Y				
UniRef90_B8CCU2	L S T A V K A S D E G G A S L A I A M K E G Y V L A E T W P E A K Y V K L D I H				
UniRef90_K2EL58	Y S D P I I E K E N Q G F D A F V P L I D S G I A A Y I W S S H K F F V I V Y				
UniRef90_A0A021VT99	L E P V T H Q S P L Y G W A G W I H W E T S G A H F Y P R L F F S V D V Y				
UniRef90_D8UGD2	Y V F E P C G Y S M N G I D G T G G L I T I H V T P E A H Y A S V E F S				
UniRef90_W9RS05	R A L I C Y A F D P C G Y S M N G I V L V A D R Y S T I H V T P E D G Y S Y A S F E				
UniRef90_R1E5F7	I Y H K I Y I F P N K D I T F G I L I S T S H V I S S Y T E D D G I Y I D I W				

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
inssm

Sequence logo showing the conservation of amino acids across UniRef90 entries. The x-axis represents positions 90, 100, and 110. The y-axis lists UniRef90 entries. Colored boxes indicate the most frequent amino acid at each position: yellow for C, blue for D/E, red for H, green for G, purple for A/S, and black for others.

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
ipssm

UniRef90_B0SBV9
UniRef90_S5MVB2
UniRef90_U4WJ70
UniRef90_UPI000347AF37
UniRef90_D8PB83
UniRef90_A6FGR6
UniRef90_A6G5K1
UniRef90_E8U7B5
UniRef90_K9W5N2
UniRef90_W4V7C3
UniRef90_J3CPW2
UniRef90_UPI0004794878
UniRef90_K8YRB4
UniRef90_UPI000475F75C
UniRef90_R6XEJ8
UniRef90_R6XEJ8
UniRef90_W7Y1P2
UniRef90_T0YVY3
UniRef90_H2CC30
UniRef90_UPI00024864CA
UniRef90_G8RZ76
UniRef90_UPI0004796750
UniRef90_B8BSH6
UniRef90_X0UMQ3
UniRef90_UPI0002E68A19
UniRef90_X0UVY8
UniRef90_C4RQR6
UniRef90_UPI000371C7E0
UniRef90_UPI000248F26A
UniRef90_R5V2S8
UniRef90_R5V2S8
UniRef90_R6UM37
UniRef90_R6UM37
UniRef90_E4U6H1
UniRef90_UPI00038F56B0
UniRef90_K4IA27
UniRef90_TOHX40
UniRef90_S4XZE6
UniRef90_S4XZE6
UniRef90_UPI000304C6A8
UniRef90_UPI0002557F92
UniRef90_UPI0002628AF4
UniRef90_K0RN37
UniRef90_R7RAQ2
UniRef90_A1ZWV0
UniRef90_X0V6C5
UniRef90_W0RLX2
UniRef90_X1SF52
UniRef90_X0WTH0
UniRef90_I0GZJ5
UniRef90_U1H146
UniRef90_X1WM28
UniRef90_C4FLT0
UniRef90_A4BZF7
UniRef90_UPI00023751F0
UniRef90_Q3EY21
UniRef90_R1EM75
UniRef90_UPI00035DE43B
UniRef90_W1YLJ0
UniRef90_A1WEC8
UniRef90_UPI00036B1B0C
UniRef90_W1FCCL7
UniRef90_D7CW59
UniRef90_H6RM68
UniRef90_R4LSY5
UniRef90_B8CCU2
UniRef90_K2EL58
UniRef90_A0A021VTH9
UniRef90_D8UGD2
UniRef90_W9RS05
UniRef90_R1E5F7

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm