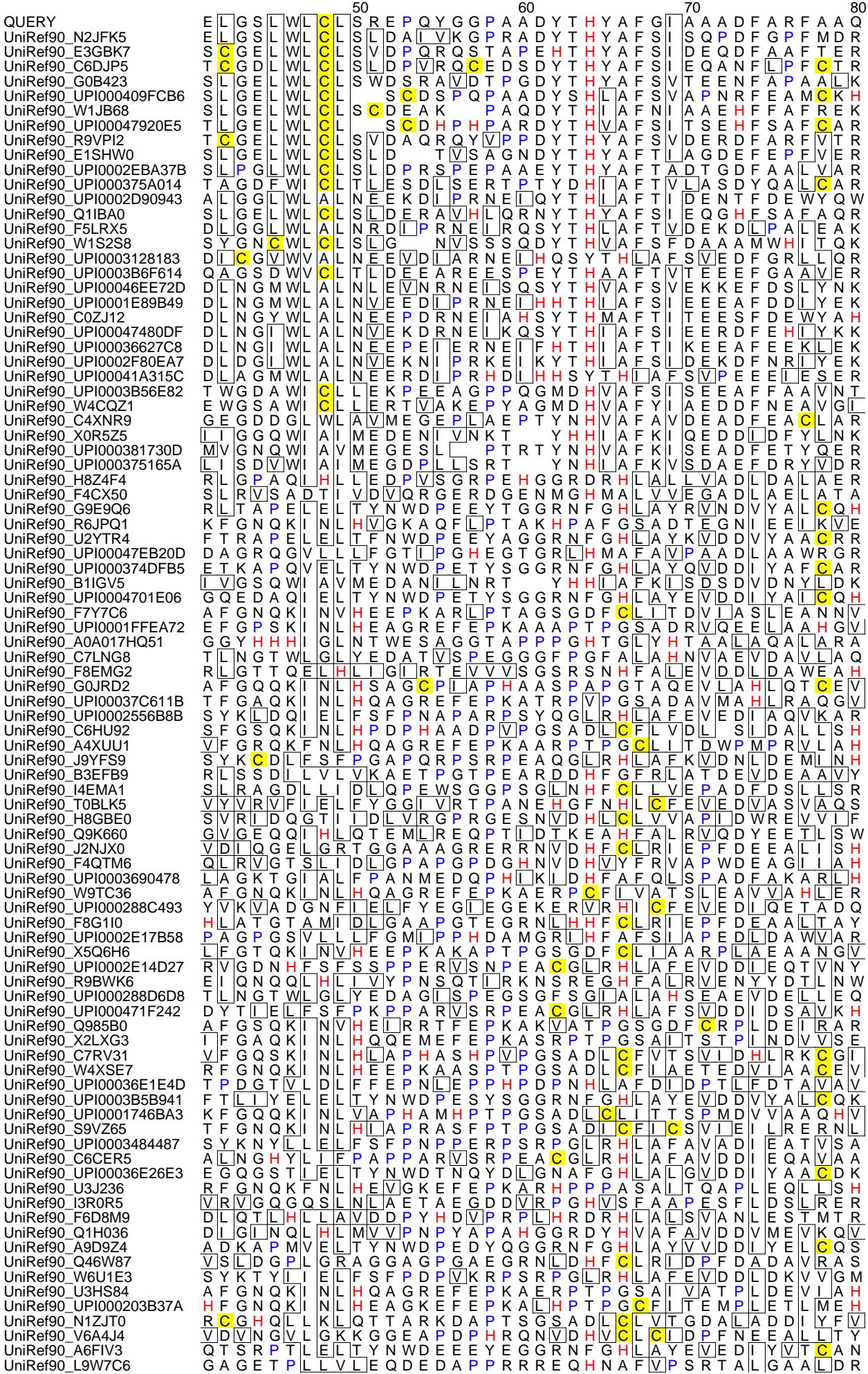


1 10 20 30 40

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



90 100 110 120

QUERY	UniRef90_N2JFK5	UniRef90_E3GBK7	UniRef90_C6DJP5	UniRef90_G0B423	UniRef90_UPI000409FCB6	UniRef90_W1JB68	UniRef90_UPI00047920E5	UniRef90_R9VPI2	UniRef90_E1SHW0	UniRef90_UPI0002EBA37B	UniRef90_UPI000375A014	UniRef90_UPI0002D90943	UniRef90_Q1BA0	UniRef90_F5LXR5	UniRef90_W1S2S8	UniRef90_UPI0003128183	UniRef90_UPI0003B6F614	UniRef90_UPI00046EE72D	UniRef90_UPI0001E89B49	UniRef90_C0ZJ12	UniRef90_UPI00047480DF	UniRef90_UPI00036627C8	UniRef90_UPI0002F80EA7	UniRef90_UPI00041A315C	UniRef90_UPI0003B56E82	UniRef90_W4CQZ1	UniRef90_C4XNR9	UniRef90_X0R5Z5	UniRef90_UPI000381730D	UniRef90_UPI000375165A	UniRef90_H8Z4F4	UniRef90_F4CX50	UniRef90_G9E9Q6	UniRef90_R6JPQ1	UniRef90_U2YTR4	UniRef90_UPI00047EB20D	UniRef90_UPI000374DFB5	UniRef90_B1IGV5	UniRef90_UPI0004701E06	UniRef90_F7Y7C6	UniRef90_UPI0001FFEA72	UniRef90_A0A017HQ51	UniRef90_C7LNG8	UniRef90_F8EMG2	UniRef90_G0JRD2	UniRef90_UPI00037C611B	UniRef90_UPI0002556B8B	UniRef90_C6HU92	UniRef90_A4XUU1	UniRef90_J9YFS9	UniRef90_B3EFB9	UniRef90_I4EMA1	UniRef90_T0BLK5	UniRef90_H8GBE0	UniRef90_Q9K660	UniRef90_J2NJK0	UniRef90_F4QTM6	UniRef90_UPI0003690478	UniRef90_W9TC36	UniRef90_UPI000288C493	UniRef90_F8G110	UniRef90_UPI0002E17B58	UniRef90_X5Q6H6	UniRef90_UPI0002E14D27	UniRef90_R9BWK6	UniRef90_UPI000288D6D8	UniRef90_UPI000471F242	UniRef90_Q985B0	UniRef90_X2LXG3	UniRef90_C7RV31	UniRef90_W4XSE7	UniRef90_UPI00036E1E4D	UniRef90_UPI0003B5B941	UniRef90_UPI0001746BA3	UniRef90_S9VZ65	UniRef90_UPI0003484487	UniRef90_C6CER5	UniRef90_UPI00036E26E3	UniRef90_U3J236	UniRef90_I3R0R5	UniRef90_F6D8M9	UniRef90_Q1H036	UniRef90_A9D9Z4	UniRef90_Q46W87	UniRef90_W6U1E3	UniRef90_U3HS84	UniRef90_UPI000203B37A	UniRef90_N1ZJT0	UniRef90_V6A4J4	UniRef90_A6FIV3	UniRef90_L9W7C6
L R A H G V R E W K Q N R S E G D S F Y F L D P D G H R L E A H V G D L R S R L	L K T H D V D V W K D N R S E G D S F Y F L D P D G H K L E L E H V G T L A T R L	L E R H G V V I W K K N K S E G A S Y Y F L D P D G H K L E E V H V G T L A Q R L	L M A E N I P V W K T N R S E G D S F Y F L D P D G H K L E E V H V G D L Q Q R L	L R Q A G V K E W K N N R S E G E S L Y F L D P D G H Q L E E I H G G D L A S R L	L S F S L S Y W K E N Q S E G D S L Y L L D P D G H K L E E I H A G D L T S R L	L L I A G I R Q W K D N R S E G E S I Y F L D P D G H Q L E E I H V G S L A S R L	L R Q T G T D E W K T N R S E G E S F Y L K D P D G H Q L E E I H V G N L E S R L	L E Q A G V V S W K V N K S E G D S W Y F L D P D G H K L E A H V G N L A R R L	L R A A G V T E W K R N K S E G K S F Y F L D P D G H R R L E I H D G D L E S R I L	L R A A G V R E W R D N R S E G A S F Y F L D P D G H K L E E A H V G D L A S R L	L M D A G A Q Q W Q E N H S E G D S F Y F L D P D G H K L E E I H V T E L E S R I L	L K D N N V N V N L L N R D I R D K K S I Y F T D P D G H K L E L H T G T L Q D R L	L R E R D V P L W K Q D R S E G D S L Y F L D P D G H Q L E A H V G G L A S R L	L A A C G A P G R E D S R D K K S S L Y F E D P D G H K F E F H T G T L Q D R L	D G F P S V T Q W Q K N T S E G D S L Y L E D P D G H K F E F H S G S L T T R L	N K V H I L Q G R E R D D V R D C Q S L Y F I D P D G H K F E F H S G T L Q D R L	L R A A G A G C W Q E N H S E G K S F Y F V D P N G H K M E L H V G T L E S R M	L E K K L E V N I L T G R S R D E R S I Y F T D P D G H K F E F H T G T L Q D R L	L E K K L L N V N I L S G R P R D E R S I Y F T D P D G H K F E F H T G T L Q D R L	L Q V H I L P G R P R D D R D K K S I Y F T D P D G H K F E F H T G T L Q D R L	L K V N I L S G R E R D E R D K K S I Y F T D P D G H K F E F H T G Q L E D R L	L E F L K V N I L P R D E K D K K S I Y F T D P D G H K F E F H T G T L Q D R L	E R L H I L P G R E R S N R D R E S V Y F T D P D G H K F E F H T G T L K E R L	L R E K G V P L V R E P R G G G W S V Q F T D P D G L V L E L F T G D L Q K R M	L Q K H H V E R G P V Q R G T G W S V N F L D P D G I Q L E L H T S T L D E R M	V Q A L G L T F R P P R A G E G R S L Y F Y D H D N H L F E L H T G T L P E R L	I I A Q H Q R P P R K R I K G E G Y S I Y F Y D Y D Q N N L F E L H T G T L N Q R L	I R K L G K P P R P R V D G E G R S L Y F Y D F D N N H L F E L H T G T L S Q R L	V H A L N R E G R S R F A E E G R S L Y F Y D Y D N H L F E L H T G T L E Q R L	L Q G A G V G F T R T S K S G R A I F C R D P D G N A L E L F T G D L Q K R M	H G V E G P R S L F G A R Q G Q R G I L R D P D G N G V E L R T	L L D N G V T I N R P P R D G H M A F V K S P D G I S V E L Q K G D	V E S K G I L E Q R Q G A Q G A I R S I Y F R D P D G N L I E V S T	L M D G G V V I N R P P R D G N M A F V R S P D G I S I E L Q E G E	L A E A G V P G E M A W P R G G T S L Y F Y D P D G H V I E L A T P G L	L Q D K G V T I N R P P R D G Y M A F V K S P D G I S I E I Q K G E	I K T L N K P P R R R V S G E G Y S I Y F Y D Y D N N L F E L H T E T L E K R L	M M E R G V T I N R P P R D G R M A F V R S P D N I S I E L Q K G D	V V E L G P V E R T G A R G P M M S V Y F R D P D G N L V E V	A V E E G P V E R T G A R G P L R S V Y L R D P D G N L I E I	L R A G V K L D G H A D H G V S E A V Y F R D P D G N G I E I Y R D R P E S E	A V A A G V K P G Q K V F W G G Y S G Y F R D P D G F L W E V A C	F K A N A A T Y R P P R K F D G V R Q L F L Q D P D G Y W I E F F S	A L E A G P V P R T G A T G P I I S V Y F R D P D G N L L E V A T Y D H S D H	T V I E E G P V M R T G A T G P I R S V Y F R D P D G N L I E V	L E Q Q G I P L R I D P Y T Q R Y F T F F S D P D G L P L E L Y Q T D	C A E L G P V Q R T G A T G P L V S V Y I R D P D G N L I E L S T G T S A	L D D L G V H T R P A Q R R E G R A F F V M D P D G N L I E F Y S M R L	L Q S L G V T T R R Q G A F G Y G I S I Y I R D P D G H G I E L H Y G D P R	L T K A G A P L D I P P Q Q G N Y Q C W T H D P D G N R I E F M Q I H P D S P Q	T V D E G P V P R F G A R G T G Q S I Y V R D P D G N V V E L H V E Q K K D R	L Q K H N Y R E N R T S R S G F A Q I F C L D P D G N Q I E L H V E Q K K D R	L Q S F G L K P E F G A E G N G L S I Y C F D P D G N Q V E E L T T L V V E E G	L S A H G I I N R Y G A D G V G P S I Y L T D P D G N R L E E L Q M N P E S	Y T Q L G I V Y H F Q D H H Y F H S L Y T K D P D G H T V E L T T L V V E E G	Q I I E G P V Q R T G A T G P I R S V Y L R D P D Q N L I E E F M E M N P E S	L K K N G V H L E V E T Q G K Y Q F W I K D P D G N W I E L A T P G L	L Q A A G V K E K R Y G A E G E G L S I Y C F D P D G N Q V E E L	V I E V G P V E R V G A R G A M M S V Y F R D P D G N L V E V	L Q S K G V E V E N D E M T G K R F T F F K D P D N L P L E I Y N V D	L K Q N N V N V N L L E K P Y G G F A Q I F C A D P D G N L I E L	A V A A G V K P G Q K V F W G G Y S G Y F A D P D G Y L W E V	L E N H A V R C E I D P Y T E R R F T F F S D P D G L P L E Y	L E A N G P V E R I G A R G P M M S V Y F R D P D G N L V E V	I L Q A G I P I V E G P T G E I M S I Y I R D P D G N L I E V	L Q Q N V T H G P V S R P T G R G I L Y F Y D P D G F L I E R C	F V T E G P V P R T G A M G L I T S V Y F R D P D L N L V E V A V	P I E L G P V E R T G A K G R I E S I Y L R D P D M N L I E L	L A L K G V K T E D E Y T G K R F T F F S D P D G L P I E L Y	L N A A G V N C E P V R D G R F T F F A D P D G L P I E L Y	L I K A L G R E A G P V K G G K T Q I A F I T D P D G Y Q I E L	L K A C G V I I E E G P V G P I T S I Y F R D P D E N L I E V	S D E S I N F R D T D T S L L Y F T D P D G N E L E V T C W R E	L A E H K I A Y K V S Q S G R A L F C R D P D G N A L E F Q K G E	L D Q A G V A Y T M S M S G R A A L F C R D P D G N V V E F Y	L D S K G E P R V D E F T G K R F T F F I S D P D Q L P I E F Y	L E A H G P V K R T G A T G P I R S V Y L R D P D F N L I E L	L K A C G V K I E E G P M G P I R S V Y F R D P D Q N L L E I	E I I A G P V T K S G A N G Q M T S I Y L N D P D G N L I E E I	L R S Q G I E S R Y G A E G D G P S I Y F S D P D G N R V E E I	L Q A A G V V I N R P P R D G Y M A F I R S P D G I S I E E I	I R E H W Q L D G A S D H Y V S E A L Y L T D P E D N G I E I Y T D R P A E E									

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UniRef90_A8U389	R I G A N T L A L A T P S R T A A D A P I P S Q L A F K V I P V V D V D R C A H E			
UniRef90_F3KJU1	G N N H I K L C L Y E D P L M K P R G G I A H F G F H V E N F N D I L D I C K S			
UniRef90_A7IN00	Q A D V A E I E L T Y N W D P E P Y G E G R N F G H L A F E V D I Y A T C E R			
UniRef90_B8GRK4	S F G T Q K I N L H Q E P K A H R P T P G S A D L C L L I D T P L E T A I R H L			
UniRef90_Q3B206	R I N S D L L V L V K A E T P G T R E A R D D H F G F S N H E V D D A A A Y L E			
UniRef90_N6Z067	D K I D A V M A L R A P G A A E R P V H H G I T H L C F D V E D V D A V Y E K			
UniRef90_K9WT63	S Y K N T Q I E L F S F P N P P Q R V V N N C G L R H L A F A V E D I E Q S V V Y			
UniRef90_U2RMK1	Q L G P V T L G L V S H G R T A A P G P F D E H R H L S L A V P D T A V L R A W			
UniRef90_I0ANK6	G G Y H H H I A L N T W A G E G A P Q P P K G T T G L Y H T R K D L A Q V F K K			
UniRef90_A4CY14	E S E S T V L E L T H N W D T A E Y D L G S G Y G H I A L G V D D I Q A T C A G			
UniRef90_UPI000347D75F	D L F Y E P T L P P H P D P Q Q Q F T R A N H L A F D I D P A H F N Q A V A C			
UniRef90_H2IMJ7	E Y G Q Q K I N L H Q L G S E F E P K A R H V Q A G S A D L C F I I D G E L E S			
UniRef90_Q8YD82	S F G Q H K I N L H Q A G S E F L P K A A S P T R G C L I S S I P L D E V I A H			
UniRef90_U5SAA5	K L G D S E I E L F S F P E P S K R P T Q P E A V H L C F Y V D N F D E T I Q E			
UniRef90_A81R6	W I G P E M I H L M E D P L T G R P E H G R D R H F C V G V A S I E P L V E K			
UniRef90_UPI0004622FC	D I G [] N Q L H L M V P N P Y S E V V H P A H Y H V A F S V D D V L P I T A A			
UniRef90_W8HHE6	L F G R S K I N L H Q H G N E V E P N A R H A Q P G S A D V C L I V E E S I D V			
UniRef90_B5ILV3	Q W P G S G E G L A L L S P S Y T A A G P H V A L H F Q H R D E V D A V H A A			
UniRef90_A0A024YPK8	G E P V L T L W Q Q A D G P F V P T A A G L H H L A L A G T V E E V R A Y E E R			
UniRef90_B8G4E6	M V Y H H H I G L N T W R G E G I P P A P V V N A I G L R W F E V V L D E A L T P			
UniRef90_UPI000375BCD1	E M D E P A L H F S L N V R P F E K N G V L N H L G F Q N N T E D V L A M G E R			
UniRef90_F2PD99	S Y D N S Q L E L F S F P D A P A R P S Y Q G L R H L A F V V E D I H S V V D Y			
UniRef90_F4HF44	Q F G Q Q K I N L H Q L G K E F E P K A K Q V Q A G S A D Q V L D Y L K E Q H L			
UniRef90_T1AI88	D V V A Q S A L A G A P D D V S G V H R N L D H L C L I I E P F D T D G L A A Y			
UniRef90_G7DML9	G G Y H H H I G L N T W P P P P G T T G L F H T A I L Y P T R P A L A D A L H R			
UniRef90_A0A021W262	Q L R D G K I G R M G G A A P G E E G E R N M D H L C L R A E P F D R A A I V A H			
UniRef90_UPI00038C17B7	C F G D Q K F N L H E V G K E F E P K A A H P I P G C L I T E A P L E E V I R R			
UniRef90_J9FD07	S Y K A D C I E L F S F P N P P A R L S Y P G L R H L A F E V E H I D E A I L Q E			
UniRef90_C1D4F1	E D R A S V I E L T H N W D T A Q Y D L G T A F G H L A V E V D D A A T C E A			
UniRef90_U1WZA5	Q F G E Q K I N L H E E P K A A R P T P G S A D L C F I T D T P L Q Q V I A Y			
UniRef90_W1NCS3	T L G N D N L S L S R A Q A T G P Q R L D H F G F V V D Q R E D V D A W Y A W			
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UniRef90_A7HCX0	G P E S E H A A L E L T H N W D T P A Y D N G F G H V A V E V A D A R A A C D E			
UniRef90_A9A586	G A P S I K L C L Y E D P Q V T P T G G I A H F G F H V E N F D D I M Q K			
UniRef90_W4MBK5	Q A G H Q A L D L F S R P D F V E K P I G M D H L C L I M D V D S V D A L I E H			
UniRef90_D3A4Q9	E A D H T V L E L T H N W D T E S Y D L G D A Y G H I A I E V D D A Y A A C E R			
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UniRef90_UPI00041DF50E	E L T Y N W P D E N G E S E T Y T G R N F G H I A I Q V E D I Y A A C Q H			
UniRef90_H2BY16	R W F S L D L Q L H L V I K D N T D G V K L H K A I H F A L T V S N F D A F V N Y			
UniRef90_U2FZZ3	N F G S Q K I N L H R F E G E F L P A A K H P T K G S A I V E D D I E D V R L E			
UniRef90_W1S7T4	D A G N A R I E L F S F P S P P R P P S R C G L R H L S F M V A D I D A E V A R			
UniRef90_D7VWD6	L W V G E G K E F M L G L W E Q K E N L Q T R H F A F S S S K E D V L N Y Y N F			
UniRef90_C5QZ92	UniRef90_UPI000262CF2E	N E L N H S Y T H V A F S I D E E D F Q K W I Q W		
UniRef90_UPI000262CF2E	Q H K A P L L E L T Y N W D P E D Y T G G R K F G H L A Y R V N D I Y G L C D H			
UniRef90_V6J4N1	S Y K L D Q I E L F S F P N P P S R P T R C G L R H L A F A V P D V D A A A R E			
UniRef90_Q7FB13	Y K Y G M G I H L L Q R P T R P L P A I N P M G M N H V S F Q C S D M A V M K A R			
UniRef90_K4DBK1	G A W L F H L L Q S E D P N N M P K I N I N D N H I S F Q C E S M T M V E N R			
UniRef90_Q01WI3	D A G G Q T M L L L F G V I P P H D G S G R L H V G F A I G V E E L P E W A A H			
UniRef90_W7QCD9	T L N G T W L G L Y Q A G A V I S G G F A G F S L A H N V S S E D E V D Q V M S Q			
UniRef90_B6ELB0	S F G H Q K I N L H Q S G N E F E P K A Q Y A D L C F I T D T P I I E V K A H I			
UniRef90_UPI0002D39FD7	P L G P A T V T L P G G T I P P H D G Q Q P L H V G L G V A A E D M A A W E A R			
UniRef90_C7BHS7	E S E G A V I E L T Y N W G V D S Y E I G N A F G H V A L G V D D V A T C E C			
UniRef90_UPI0003B613DD	R V G D Q K I N L Q T L G Q E V R N R A C I G S G D L C S D V I D R L T A A G I			
UniRef90_I6ZCQ1	E A H N S V L E L T H N W G V D S Y E L G T G Y G H I A L E V E D V Y K A C E D			
UniRef90_J3IS17	R L D N Q V S L D F Y D N D P P I A S Q H Y A F L L I G D D D F D R A F I R			
UniRef90_L9PHK2	Y T E H A E L E L T Y N Y G Q T S Y E L G T A Y G H I A I S A D D I H S A C T A			
UniRef90_UPI00036BF001	R Y G T Q K I N L H L A P H A Q P T A G S A D L C F L V L P P L E K V L A H			
UniRef90_V9HMZ4	E S D T T V L E L T H N W D T P T Y D L G N A F G H I A V E V E V D D A Y A A C D A			
UniRef90_F9ZDK4	E A S G T V L E L T H N W D T S S Y N L G E G F G H I A I E V E V D D A Y Q A C E S			
UniRef90_K9SZF5	D L F W E P D L S P P D P D P K R A F T R A N H L A F D I D P T L F D R A V E V			
UniRef90_K8P7J9	R C G D L Q L H F E L D E D S V P V Y V Q H F A L D V D D F H A A Y E K			
UniRef90_E6TTE9	S A D G E T V L L S I E Q P K D R T T G L Y H F A I L L P E R S R D L A N F V Q H			
UniRef90_B4RBW8	V T L L D G P L G R M G G A G P G A E G R N L D H F A L Q V R P Y D A Q A I K D H			
UniRef90_F9RZH5	E S Q G A V I E L T Y N W G T S E Y D L G N A F G H V A I G V D D I Y A T C D V			
UniRef90_V7FRZ5	V Y L R I T E E V F L E N D R A P G W N A N G V N H M C L T I D N L D S F C P A			
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UniRef90_U3A481	S Y K L D Q I E L F S F P D A P K R P S F Q G L R H L A F E V E D L I D N V V A Y			
UniRef90_G5HKM4	R F G N Q K I N I H R K A A E F L P A A R N V T Y G I E G S I E E A M F E E L R R			
UniRef90_I4B5K7	S F D N L Q L R L D T T L E P Y A K V P V L S F L L D V D D F T E A L Q E			
UniRef90_C7RD00	E K D N T V L E L T Y N W D T D D Y D M G N A F G H I A I A V E V D D V Y E A C E K			
UniRef90_UPI000379199A	E K D G A V I E L T Y N Y G V D K Y E L G T G F G H L A V A V P D A Y A A C A E D			
UniRef90_C1DE5	E E E N S V I E L T Y N W G V D G Y E M G N A F G H I A I A V E D D A Y K A C D D			
UniRef90_UPI0002F9BEFE	V S L D G P I G H A G G A G P G V E G R N L D H F C L R I D P F D A D E I F A H			
UniRef90_R5TVM4	E P W N Q F L E L F Y G G E N Y T E Y N N I G F S H C L E V S D I H E I A E R			
UniRef90_H8Z5Q3	T L K G S W L G L Y G R P A D G S G F T G F T I A H N V D S E A A V D E L M E Q			
UniRef90_UPI0001E899D7	E S D E T E L L E L I Q G Y N D D L P V E G K V H H I A L T U D D V D A E H E R			
UniRef90_Q3AMA0	E A G E G R D G L A L L G P D Y K A A G P H F A F H R D R A E V D V I H D R			
UniRef90_A1RLD8	I F G D Q K I N L H Q A G A E F E P K A A L A T P G S A D V S H N L E A V I T H			
UniRef90_Q5YSZ7	F A F A L V L T L W A Q S D G T F S A R T P G L H H L S F Q V G D M D R V R A I			
UniRef90_G8PJU9	H F G Q Q K I N L Q P I D V S Q S E P E Q M P G T A D L C F L V E S L D A A I A R			
UniRef90_F2EZY4	T A D G Q T S L V S L V E P Q N A Q P L K Q G F A G L Y H S F R V K G I D E L K R F			
UniRef90_B1WWW4	T P D G L I L D L F W F E P D L F P P H T D P N H L A F H I D A E L F D Q A V N K			
UniRef90_D7U0Z0	G A W L F S Y G L D P E N M P K K T E I N P K D N H I S F Q C E S I D A V E K N			
UniRef90_B6A2M5	R A L E E R G H H C I V L K K S G K A E A R D L G F K V F G D E D L D K A A A H F			
UniRef90_U1LUB6	V F L E E H H Q I V L S L P V Q S R R S V E S P V D H I S F R V K G I D E L K R F			
UniRef90_W9AFE5	S Y Q I E L F S F N G A P K R Q S Y P E A Q G L R H L A F A V V D D I A V T V G Y			
UniRef90_A9HQV0	D K H A P L V E L T H N W N Q E I Y T G G R N F G H I A L E V P D I Y A Q C Q R			

90 100 110 120

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UniRef90_C1DM18	L A E H G I E S R Y G A E G S G P S L Y I T D P E G T L V E E L		
UniRef90_X5XYF0	L E A N G V A I E V G P R G T M M S V Y F R D P D S N L V E E V		
UniRef90_UPI000466DBEA	A Q A A G A T I L K P V F W G G Y S G Y F A D P D G H V W E V		
UniRef90_A8U389	L L Q H G V A L L S P P T D G H R T L F F R D P D G N L L E E I F A D		
UniRef90_F3KJU1	L G V K I F Y D G P V Q F E K S R S V Y I S D P S G Y D I E E L □ Q K G G		
UniRef90_A7IN00	L M A G G V T I N R P P R D G Y M A F V R S P D N V S V E E L		
UniRef90_B8GRK4	E R C E G P V Q R T G A T G P I L S V Y F R D P D S N L I E I		
UniRef90_Q3B206	S K G V H L V T R P S N R R E G R A F F V M D P D G N L V I E F Y S		
UniRef90_N6Z067	M A A A G I R F H S P Q D F G K A T Y G R D P D G N V F E L		
UniRef90_K9WT63	L N S H N I E L R I D E L T G Q K F T F F K D P D N L P L E I Y		
UniRef90_U2RMRK1	E A R L G E N S G I V R G A T G A L I A F R D P D N I A L E F Y T		
UniRef90_I0ANK6	W E E K Y P I E G A S D H G V S E S V Y L K D P D G N G V E L Y A D		
UniRef90_A4CY14	I A G Q G G R V V R E P G P M K H G A F V E D P D G Y K I E E L		
UniRef90_UPI000347D75F	L H H Q V P Q G P V S R P T G R G I Y F Y D P D G F L L E I R C D		
UniRef90_H2IMJ7	A M Q H G P V N R T G A L G P I T S F Y F R D P D G N L I E E L		
UniRef90_Q8YD82	L E T E G P V A R T G A M G P I R S I Y F R D P D G N L V E E I L H		
UniRef90_U5SAA5	L N Q K G I E T E P V R Y T G G R F T F F R D P D D L P L E E L H		
UniRef90_A81R6	L E A A G V S Y T K S M S G R A A L F F R D P D M N C L E E F		
UniRef90_UPI00046F22FC	L D S A G V E Y T M S M S G R A A V F C R D P D G N A L E E F		
UniRef90_W8HHE6	P V E V G P V Q R H G A R G □ M T S V Y I R D P D G N L I E E L		
UniRef90_B5ILV3	L T A A G H R C G H D H R D G T A S F Y L R D P E G N W L E		
UniRef90_A0A024YPK8	L R G L G V T F A H E G H G E G T G I F F H P D G I R L E I S V P A G A E G A		
UniRef90_B8G4E6	V L E R V Q A A G I A C E Q H P T G W H V D P F G H R V V L T T		
UniRef90_UPI000375BCD1	L R Q S E L L T I D E M N T T C D K V W V Y D P D G N A W E I F Y		
UniRef90_F2PD99	L V A Q G V E V E D I R I D E G K A F F F S D P D G L P L E E L Y		
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UniRef90_G7DML9	V L T A G I L D G A S D H G V S E A L Y L R D P D Q N G V E L Y W D K P K E		
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UniRef90_J9FD07	L D A K G V A H E P D E Y T G K R F V F F S D P D G L P I E E L Y		
UniRef90_C1D4F1	V R T R G G K V V R E A G P M K H G A F V E D P D G Y K I E F		
UniRef90_U1WZA5	L H S A G I E L E E G P V G P I E S V Y I R D P D N N L I E I		
UniRef90_W1NCS3	L S E S G T R E P H D H A D G G R S F Y C L D P D G N S V		
UniRef90_UPI000372654F	L V A K G I T A E M V W P Q G G E S L Y F N D P D G H V V E L A T		
UniRef90_A7HCX0	I R R R G G V V T R E A G P M K H G A F V Q D P D G Y K I E E L		
UniRef90_A9A586	C K E L G V E V L Y D G P V D F E S V Y I K D P T G Y D I E E L R V D S L		
UniRef90_W4MBK5	L E Q A E V E W G P V V E R K S S T S V Y Y D P D G V H I E E F		
UniRef90_D3A4Q9	V K E M G G K V V R E A G P M K H G A F V E D P D G Y K I E F		
UniRef90_UPI00040A27D2	L N D N G Y P T G A D D H G V S E A L Y L N D P D G N G V E E L Y W D K P R E		
UniRef90_UPI00041DF50E	L Q D N G V V I N R P P R D G Y M A F V R S P D G V S V E L □ Q K G D		
UniRef90_H2BY16	L E E N K I P Y S D W L G E A G K Q V Y V Q D P D G H W I E E I		
UniRef90_U2FZZ3	E I E L G I V E R N G T L G T M K S L Y I Y D F D G N L I E E L Y		
UniRef90_W1S7T4	L A A H G V T C E P D E Y T G Q R F T F F T D P D G L P L E E L Y		
UniRef90_D7VWD6	L K N G S V E P M V F A W M P A L A I Y F N D P D G N Q L E E F		
UniRef90_C5QZ92	L K E N Q V N L L P R D I K D K K S I Y F T D P D G H K I E E L H T G T L K D R M		
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UniRef90_Q7FB13	L R A M D R E F V V R K V W D G E T V F F F H D P D G N M I E E I		
UniRef90_K4DBK1	L K E M E T E Y I K C R V E E G D Q I F F H D P D G T M I E E I		
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UniRef90_UPI0003B613DD	A I V E G P V Q K S G A R G A I T S V Y F N D P D G N L I E E I		
UniRef90_I6ZCQ1	I R S R G G K I T R E P G P M L H G A F V E D P D G Y K V E L □ S P T R K D		
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UniRef90_L9PHK2	V K A N G G A V T R E P G P V K G G A F V T D P D G Y K I E E L		
UniRef90_UPI00036BFF01	L L Q T L G V P P R T G A T G P L V S I Y I R D P D G N L I E S V		
UniRef90_V9HMZ4	V R A K G G K V T R E A G P M K H G A F V E D P D G Y K I E F		
UniRef90_F9ZDK4	T R K M G G K V T R E A G P M K H G A F I E D P D G Y K I E F		
UniRef90_K9SZF5	L K Q N Q I A R G P V T R P T G R G I Y F S D P D G F L L E I R C		
UniRef90_K8P7J9	A K A I G A L D F N E L I P D G C V Q M Y L R D P A G N L V E E I		
UniRef90_E6TTE9	Y S K F G L Q L A S S D H L V S E A L Y F S D P D G N G I E E I		
UniRef90_B4RBW8	L A A H G V A P R Y G A D G D G W S I Y L Q D P E G N T V E E I		
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 UniRef90_A0A038GRS6 T D G F R M I T L W Q T A K S N F D I H T A G L H H L A F Q V E T A E D L Y K V
 UniRef90_D8J4N0 Q M R A G R S L I D L E S Q G P S A G R N M D H L C V R V I E P F D A D A L R E H P
 UniRef90_F4AN35 R L V P M D L E L W E P Q L G L A D A H G G A H V D L G F D A A D P E R A V D P
 UniRef90_F2R2T5 E D S N T V L E L T H N W D Q D S Y D M G T A Y G H I A L G V D D V Y Q V C T Q
 UniRef90_K9QQP4 S V R I D E G T V I D L F S R P R G E S N V D H I C L V V D P L D W Q E V L D A R
 UniRef90_K5BZ99 D I P N P A L N L T L N T N S V Q T G G A L S H L G V Q E S T T D D V K S A I K R
 UniRef90_UP1000348248F F R C G Q Q V L L V F D P P R H G T A G E G H F C F Y A R D K S E V D G W K A H
 UniRef90_1QSH8 Q L C F T Q H R D C F K A L F D H R R A G V D H V A F Q V S V A D L E A W E D R
 UniRef90_UP100037AA927 G L G P N T L A L A K P G R T A T D A P V P H R L A F K V S A A E V D A C A D E
 UniRef90_B9HH47 E R E T P L L E L T Y N W D T E D Y Q G G R N F G H L A Y E V D D I Y A T C Q D
 UniRef90_I0KDE3 S C Y G I G I H L L Q M P K I T K I N P K D N H F S F Q C E S M A M V E L E E M
 UniRef90_UP100035F2B66 S Y K Q Y V I E L L F S F P N P P G R P S R P G L R H I A F V V D D I E E S I R L
 UniRef90_UP100035B5B1F8 A N S W V I M N P G G G P T D K P D V S V V D Y E M N L R V A D I D A V Y R E
 UniRef90_L0LEL8 E T E T T V L E L T H N W D C S E Y D L D G N G Y G H L A I E T D D I Y A T C E K
 UniRef90_D6XWH6 T F G N Q K I N L H Q A G H E F E P K A E W P T P G S A D S T T L L D D I I A H H
 UniRef90_A0A018B2J2 P G Q F I E L F H G G R V H V E T A P G T I G F N H L C V E V T D M A A L V R H
 UniRef90_U5T5Z5 S D R A P M E L T Y N W D P E T Y S G G R N F G H L A Y R V D D I Y G L C Q H
 UniRef90_E8U4E7 G H P A Q P L L L L T E Q P G A Q P A R P Y H F A V L L P T R A D L A R W V Q H
 UniRef90_UP1000381B712 F A F T I R L T L W Q Q S D G A F S T R S P G L H H L S F Q V D T V E A A L K E
 UniRef90_L9X8S9 A A G E T D L V L R R P E G V P R G G L H T H Y A L S I P A D E Y D E W W D R
 UniRef90_V6SXD6 T A D G E T V L L S I E P K K G R T T G L Y H F A L L P H R T D L A K I L K H
 UniRef90_F1W059 A F F D L G D N Q L A A P S A N T P A W V N H I A M R V D S V E Q L E A M K T R
 UniRef90_A0A031GX81 K F G A Q K I N L H E A G K E F L P K A C F I A V P L D V F I A H L A A L G I
 UniRef90_A3YBJ5 R S Y K I D L A L P E G P A R P S L P E A Q G L R H L A F V V D S V A A Y K D Y
 UniRef90_J3JN21 D D P D Y E L E L T Y N Y G H E A Y D L G N G Y G H I A V G V D D L E A T H K A K
 UniRef90_A1U3R6 E D K A P M I E L T Y N W D P E E Y T G G R N F G H L A Y R V D D I Y A L C E K
 UniRef90_UP1000476BF72 G V E G R V L V H E V A G A V A P P P S S P G L S H F A P L V A D V A R F A Q R
 UniRef90_J3CQL0 R A E A C H H S L V L V Q S Q G G E Q T C K R I G F R V F F E E D L D S A Y A F
 UniRef90_UP10004168A88 E L N G Q Y T V I F P D P D R V S R P E A C G L R H L A F G V Q D I G K A A E D
 UniRef90_D0D7Q5 G T A D V E L T Y N W D G D D G L P S D S R H F G H L A Y S V P N I Y E T C Q L
 UniRef90_C8WWI3 P G Q T A Q L E L I E G Y A D R L P D E G Q V H H V A I T V D D I E A E V A R
 UniRef90_W9RWM6 E D S H F V I E L T Y N Y G V D K Y D I G T G F G H F G V A E D V V A K T V E L
 UniRef90_Q0RCM7 V A P G V I I D L D A R T P R S G P G R N V N H F C L V I E P C D L A E L A T F
 UniRef90_Q1N6S9 E D K T A V L E L T Y N W D T E S Y E D L D G E G Y G H L A I G C E D I Y K T C D L
 UniRef90_D8I1G6 A F N D H D L G L F E A A D S G A G R T S V G L Y H L A W E V D D L E R L A A R
 UniRef90_F8GUP9 K F G E Q K I N L H F E P K A H L P V I P G A L D L C F A I P L D D V I A A R G A
 UniRef90_UP100035D4E7E Y P E Q A E I E L T Y N Y G V E E Y E M G T A Y G H I A I G V P D A Y E A C A K
 UniRef90_A0A024HA56 A L G D V Q L E L F S F P P G A P S R P S Y Q G L R H L A F A V D D L E S A V A E
 UniRef90_K7AUT1 S F K L D Q I E L F S F P N S P D R P S F P G L R H L A F N V E S V E S V K A Y
 UniRef90_W9QS95 W V G S E M I H L M E L P N P D P L T G R P Q H R T C I A I R D V S K I L K A I
 UniRef90_A0R236 A L E H G V T L D Y A Q V G E S E E I R P Q H Y A F L V S E D D F D A I Y G K
 UniRef90_F8D392 H N Y Y V T I I Q F A H D P D G D E E I E P S G I V H L A I L V D D L D E T L E R
 UniRef90_E6NUC5 G A W L Y H L L Q S E D P D N M P T E I N P K D N H I S F Q C E S M G A V E K K
 UniRef90_K9R8U0 K F G E Q K I N L H Q E P K A L Y P K S G S A D L C F I S S K P L S Q I K K H
 UniRef90_D7CBS0 T L A N Q V S L D Y D Q L D D F E P H H Y A F I V S E Q E F D A A L A R
 UniRef90_A0A009ZI94 K F G S Q K I N L H Q A G H E F P K A A F P T E G S A I S E T P I E H I L Q Q
 UniRef90_S9SF58 E S E Q T V V E L T Y N W D T P S Y D L G A G F G H L A L G V P D I Y A A H C D A
 UniRef90_A1SIC7 D L G L F G V G P A A P P K R R G G I G L Y H L A W Q L D T I E E L A A A H Q A
 UniRef90_D0CX49 E D A P I E L T Y N W D G D D G L P S D S R H F G H I A Y G V D N I Y E T C Q H
 UniRef90_UP100046E9CD7 V I P M D G P A I V L D S K I F T M E S V L N T P L F H L N T G D I D A A Y D F
 UniRef90_L9VS59 R F G E Q K I N L H P D I V A R E P T P G G D F C L V T E T E D V E R Q L R E
 UniRef90_M1Z963 L I V K T S N N V S L D F L Q I T E T I D T Q H Y A F L V S E P E F D Q I F G R
 UniRef90_H5WR27 D F F G H Q L S L H L G T P F G E H W V P M P H L G L V L A L P D W Q A L A A R
 UniRef90_R4VMM2 E D K A P M I E L T F N W D P E S L S G G R N F G H L A Y R V N D I Y G L C Q R
 UniRef90_A8L8L8 S S G R T H E L L D A A A L P P G R R V G L Y H F G D S D D L R E A L E R
 UniRef90_D9SZZ9 S T N D H D L G L F E A G A S Q A G R A T V G L Y H L A W E L D T L D E L A E R
 UniRef90_C4SAU0 Q Y T I E L F S F P S P T P R P S R P E A C G L R H L A F Q V D D I E Q A V N E
 UniRef90_D0CQI3 F R V G A S V L L F N P D Q T E Q P P T N G H V C L I T R D Q I A L M R K H
 UniRef90_C9ABZ5 R F G E S E I E L F V V I E N P P A R P S F P G L R H L A F A V E N I E A V V A K
 UniRef90_U2S366 P N S N Y E L E L T Y N Y D H D S Y D L G N G Y G H I A I S V D N L E K L H T K
 UniRef90_A0A059FN25 S L N I P M I E L T H N W D E K D Y E G G R N F G H L A Y Q V E D I Y A A T Q R
 UniRef90_X6GGK2 Q M V T T E N G A N L D Y M D T D G E I T P Q H Y A F L V S E A E F D E I F G R
 UniRef90_L0SYY3 G T Q I E L F S F P P R P S R P E A C G L R H L A L R V V D D L D A A V A V A H
 UniRef90_UP10003792300 G T N E N F I A L K E Q P K P P N T R G L Y H F A I L L P S R R D L A A M Y K R

90 100 110 120

This figure displays a large-scale multiple sequence alignment of protein fragments from the UniRef90 database. The alignment is organized into four columns labeled 90, 100, 110, and 120, representing positions along the sequence. The sequences are composed of amino acid residues, with hydrophobic residues (black) and polar residues (white) being the most abundant. Specific residues are highlighted in yellow, including C, H, P, and Y, which likely represent catalytic or structural centers. Conserved regions are indicated by yellow boxes. The alignment spans approximately 300 positions and includes fragments from over 100 different UniRef90 entries.

UniRef90_UPI0004651818
 UniRef90_H1SDW6
 UniRef90_A4A8V6
 UniRef90_L5N7G5
 UniRef90_X0MV18
 UniRef90_UPI000411DE2F
 UniRef90_D1C913
 UniRef90_L8JQC8
 UniRef90_B0C116
 UniRef90_U2T8C2
 UniRef90_UPI000374F53F
 UniRef90_S6HC69
 UniRef90_UPI0003B56EF6
 UniRef90_UPI000466DAA4 P LE P K E P W A S M
 UniRef90_L9WDJ5
 UniRef90_Q3JC13
 UniRef90_Q11AR2
 UniRef90_C6DK32
 UniRef90_F9RX60
 UniRef90_I1KH31
 UniRef90_S1NXW4
 UniRef90_W4QNS7 H R Y T E G P A C G
 UniRef90_X5L2Y7
 UniRef90_X0S8A7
 UniRef90_L8NIY4
 UniRef90_M2TUG6
 UniRef90_UPI00034D8D4F
 UniRef90_UPI00037863C5
 UniRef90_A0A038GRS6
 UniRef90_D8J4N0
 UniRef90_F4AN35
 UniRef90_F2R2T5
 UniRef90_K9QQP4
 UniRef90_K5BZ99
 UniRef90_UPI000348248F
 UniRef90_I2QSH8
 UniRef90_UPI00037AA927 R K A P A E P W LS M
 UniRef90_B9HH47
 UniRef90_I0KDE3
 UniRef90_UPI00035F2B66 A E K R P E D LP G
 UniRef90_UPI0003B5B1F8
 UniRef90_L0LEL8
 UniRef90_D6XWH6
 UniRef90_A0A018B2J2 N Y Y K E T K P H M T F
 UniRef90_U5T5Z5 A LP A R E P W A S M
 UniRef90_E8U4E7
 UniRef90_UPI000381B712 A P N G A A P T C G
 UniRef90_L9X8S9
 UniRef90_V6SXD6
 UniRef90_F1W059
 UniRef90_A0A031GX81
 UniRef90_A3YBJ5
 UniRef90_J3JNZ1
 UniRef90_A1U3R6
 UniRef90_UPI000476BF72 A LP A R E P W A S IE
 UniRef90_J3CQL0 A C P R E Q W Q
 UniRef90_UPI0004168A88 D H Y
 UniRef90_D0D7Q5
 UniRef90_C8WWI3
 UniRef90_W9RWM6 A LP E Q E P W A S M
 UniRef90_Q0RCM7 N F Y E K A F G M E
 UniRef90_Q1N6S9
 UniRef90_D8I1G6
 UniRef90_F8GUP9
 UniRef90_UPI00035D4E7E
 UniRef90_A0A024HA56
 UniRef90_K7AUT1
 UniRef90_W9QS95
 UniRef90_A0R236
 UniRef90_F8D392
 UniRef90_E6NUC5
 UniRef90_K9R8U0
 UniRef90_D7CBS0
 UniRef90_A0A009ZI94
 UniRef90_S9SF58
 UniRef90_A1SIC7 G E Y E N A P IE H L
 UniRef90_D0CX49 P LP P A E P W VS M E
 UniRef90_UPI00046E9CD7
 UniRef90_L9VS59
 UniRef90_M1Z963
 UniRef90_H5WR27
 UniRef90_R4VMM2 P LP A Q E P W T S M
 UniRef90_A8L8L8
 UniRef90_D9SZZ9
 UniRef90_C4SAU0
 UniRef90_D0CQI3
 UniRef90_C9ABZ5
 UniRef90_U2S366
 UniRef90_A0A059FN25 P Q A P Q E P W A S A
 UniRef90_X6GGK2
 UniRef90_L0SYY3
 UniRef90_UPI0003792300

1 10 20 30 40

UniRef90_UPI0003668E21	I T R I H H I A I L T D R Y E E S K K F Y T E I L G F S I I N E T Y R K E R D	
UniRef90_UPI00036FF181	L T S V D H I H V Y V P D G E A L R W Y E Q T L N F R P R H W Y D E G G P L	
UniRef90_A1S6N6	M S Q I L H T M V R V A N L E E K S I A F Y T E V L G M T L L R T S E N P E Y R	
UniRef90_A3TGN2	I D H I G I T C A D L D A A K R F Y D A V L G T L G H R R M D F D V A V	
UniRef90_Q07MH7	H T M L R V R N L D L A L K F Y A D A L G L K E V R R I D N D Q S Q	
UniRef90_D3Q6Z7	T L I V A D L P R S V M F Y T E L L G L G L V I E I D R A P D A V L L	
UniRef90_UPI0003A02013	L F H I A F P V R D L A E A R R F Y G D L L G C P E G R S S D E W V D F	
UniRef90_Q607V5	R I L L H T M L R V G D L L Q K S L W F Y T E V L G M R L L R Q M E F G Y G D	
UniRef90_D5RRL5	M S S F L H T M I R V G D L L E R S V D F Y T R L L G M K E L L R R N D V P D G K	
UniRef90_D8FEX0	I P R V T T I T L G V S D L L N E S T E F Y K S V L G D E P N T S Y D G V T F I	
UniRef90_W6UO1P1	L N H I A V Y V T D L A K S T A F Y K D V F D L E I I P E P R H T W F S	
UniRef90_R9C5L6	V N R I H I A I I C S N Y E V S K Q F Y V N L G K P L N E V Y R E E R L	
UniRef90_UPI00036DEDEEE	R G L H H T A L V S S D V R R T I E F Y Q G V L G F P L T E L I E N H F F F	
UniRef90_UPI00039C38E3	R L L H T M L R V T D L Q K S I S F Y T E I L Q M K L L R R K D F P D F L	
UniRef90_G3IV12	I D S L D H L V L T V K N E A T S V F Y S K V L G M E V V T F G S G R K A L	
UniRef90_UP10002DBC071	M S I S F N H T I V A T H D K H A S A A F G L P D P Q F G H F M V V	
UniRef90_A9G3M7	H I S L N I S N D A S V A F Y E R A F G V R A T K R R P G Y A K F	
UniRef90_K8WEL8	L N K I H V A I I A S N F E V S K D F Y C R I L G L N L L E E H F R P E N N	
UniRef90_N1WPY2	M Q P R I N M I T L G V N L E K T V R F Y E E G L G F P K M K F E G N I A F F	
UniRef90_U2B2M9	L D T I H H V A L I C S D Y Q A S R H F Y V D L G F E I I R R G D Y K L D L	
UniRef90_L8Y4A3	L I N R L D H V M T V K S I R D T T F Y S K T L G M E I A T F K G D R K A L	
UniRef90_E3HDE2	M K Y K L E H G C I R V M D L D K S D F Y K N A L G L K E V R R K D F P E H D	
UniRef90_U3H318	L I N G L R H L A I V V P N L E E C E R F Y V D I L G M Q V L N R R N E D L V Y L	
UniRef90_UP10004665812	I S G I H V A I I A S D Y Q R S R F Y T E I L G L E I V A E V D L R M P D	
UniRef90_M0IB3	T T G L D H V S I I G S N V E D T A F Y R D V L G M H L F F D T G D G R M L	
UniRef90_D8FJZ0	L K R L G H V A I C V K D I D K A A E F Y Q N L G M E L A W K D A D W A Y L	
UniRef90_Q9PB40	M I S C I D H I V I T T R D L K V C S D F Y T R I L L G M E L I Q F G D N R I A F	
UniRef90_H0E167	M T T G L D F I A I P S Q D A E R S R S F Y V D T L G L R P D D R A R F E F W V	
UniRef90_UP100047D6D6C	V G Q I E I K V S K I E R S S R L R F Y Q D I L G F S I L E K G E D K V L L	
UniRef90_UP100036A28E1	H I L A F P V S D L K E T H T F Y T E I L G C S T G R S S D Q W I D F	
UniRef90_F4AXG4	I N H V A I S V Q D V A V S I A F Y Q K V F G L T E I E N T A S V S P T	
UniRef90_W9W8Q1	K S D H F V L T V R D I A A T I Q F Y G E V L G M Q P T D P N I T R H A L	
UniRef90_R5VQI2	M I K N V L I V V K V D I E R S K K F Y K D I F G L D V I L D N E G N V I L	
UniRef90_R2RBG0	I S H I T F I V H D L D K A T L F F E T I F D A K E I I Y S S G A D T Y F	
UniRef90_F4BZY3	M E A R L N I V T L G V R D L D K A I R F Y R D G L G W P M S S V S A G D F A I	
UniRef90_UP100046909E1	I V N L D H F V L I V K D L K Q S V D F Y H N V I G L P I I S D Q T N D D N F A	
UniRef90_F4CKN2	G H V G V N V T D L A R S T A F Y Q Q V G F E V I A G D Q T G D R P	
UniRef90_R5TSG1	M K F T F A H N N L N V L D L K S A F Y K E A L D L T E V R R K D A E D Y L	
UniRef90_A5GP25	I E A L D D V A L T V S D P Q R S M R W Y E T M L G F K P A A R V A E G N Y L	
UniRef90_UP10003483911	N R I N H V A I I C S D Y K Y K S K F F Y T E V L G F S I I N E A Y R K E R D	
UniRef90_L7EXX0	R G I H H T A L I A A D V R R T V D F Y Q G V L G F P L T E V F E N R D Y P	
UniRef90_UP1000422A20F	R R L L H V V Y R V G D L D K T I K F Y T E C L G M K L L R K R D I G Y G P	
UniRef90_K7URD8	H T M V R I S N V D D S L K F Y C N L L G M K E V R R Y D S E K G R	
UniRef90_A8TIU7	UniRef90_UP100046FEFF3	M F E R I D T V F V R V P D L D A A K T W Y M E V L G L A L K W D N D H I A V L
UniRef90_H3SCC6	L L G I D H V V I R A R D P V A M E R F Y V E V L G C T V E R R Q D N V G L V	
UniRef90_B0T559	V Q R L I N H A V L Y Y V R D V A R S V A F Y T D T G F R T V V I E L P G G Q G A	
UniRef90_UP10001FFE437	M I K G L Y E A H L P V T N L Q V S I E F Y Q K L L K L Y K H T S K V A F F W I	
UniRef90_I8IZF5	I L L K A V H H I A I I C S D Y E K S K H F Y T D L G F E I E R R D S Y K L D L	
UniRef90_UP10003FB64A5	I Q R L G H I V F N T P D A A R A I E F W R D V L N F R E S D S L G E F V T F	
UniRef90_W6X5U5	T F I F V R D E K A T M F F E Q I F D A K E V Y S S G K E K F F	
UniRef90_W7CIE4	UniRef90_G9NGZ0	R M N H T M I R V K D P Q K S L K F Y Q D V L G M S L F R T N E S P Y F L
UniRef90_UP100046AD37F	L D R L D H L V L T V V A S I P A T V A F Y Q D V L G M F E T S T G E I R Q A L	
UniRef90_H6C231	V K S L D H L V L T V T D L N A A I E F Y Q D L G M Q H T S F T A P R H A L	
UniRef90_C4LE98	M N P H I T V L T L G V A D L E R S V A F Y R D G L G F K T Q E S E N G A V A F	
UniRef90_UP100036D38AE	V T R L G H V G L F T D P E V M L E F Y S G F L G M T V T D R D E R R V F L	
UniRef90_F7NGX0	M N F K F Y H V N N F N V L D L Q R S L D F Y S E A L G L T E V R R K E Q P G F I	
UniRef90_S5EMF5	I N R V V E T V L Y V K D I E R A G A F Y Q Q V L K L P V M V A N E R F R A Y	
UniRef90_D3B644	R F L H T M L R V G D L D R S I D F Y T N I L G M K L L R K S E N A E Y D	
UniRef90_E1V6T8	M L T P F H L A V Q V R D L A E A R F Y G E L L G C D E G R S S D T W A D F	
UniRef90_G8PF08	I R E I D H I T L T V D L A R S E R F Y H E V F D M P I N A E Y A G V R C G	
UniRef90_UP100045EBF24	L I G L H H I A V I G S D Y P R S R D F Y H R I L G L P I V S E T W R E E R Q	
UniRef90_UP100035DCAA	I A H L G H V E L L T P K M E S L S F F K D V L G M Q E L T R K G N S V Y L	
UniRef90_R0FVN7	V G V V F F V K D V K A C E R F Y C E N F G V P S D R Y P E R G A F	
UniRef90_D5W763	I R E I D H V V I R A T H V E T L A R F Y C D V L G C S V E K E Q R E L G L T	
UniRef90_A3YVU0	V Q R L I D H V A V R V Q D M A R A K A F Y E A L G L R V T W D A D D W A Y L	
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50 60 70 80

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Y S L A F V I	E L T W N W D T D K Y E L G T G F G H I A I G K A D I Y K A C E D		
G Y G S E G P	D F W L A K P E V E G P N R E S H L A F A P D V E T V H A F H A A		
G R G A P L V	E L T H N W D E E Q Y G E D R F F G H L A Y E V D D I Y A T C D R		
E A G F G R V	L L W R R D D A P G A G G D P V M H L T F E V G D I D A A Y E S		
N F H G H Q V	V A H L A P D E L G P A V P V R H F G A I L P M A E W E A L A G K		
E A H D A V I	E L T Y N W G V S K Y E L G T G F G H I A L G V D D I H A A V E R		
Y T I L V F V I	E L T Y N Y G V E K Y E L G N A F G H L A I G V P D I Y A T C D A R		
E L P G A W I	S L L Y D V P T N Q R E F S G V T L A H N A Q S R E D V I S I I E R		
I G P A G H L	H L I Q G A K A G V E H D K N E H L C F S V P S V D V K K I E F E		
V N D I Y Q I	E L F S F P D P K E R P S Y P G L V E V N N I E E T I Q Y		
D I G N Q N L	L A F F D F P G L D L G P Y A H H V A I S V D P D R W E R L R E A		
G Y G P E H L	E L T H N W E T S S Y E M G N A Y G H I A L E V E D V Y D A C E K		
L F G S Q K	Q K N L H E E P K A W L P A P G S A D L C F I T S V P L S E V I K H L		
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D L A S P S	S L N L T M Q E A P R T G V N A S H F G I Q V A S T E D V L E A K S R		
SW K H Y Q I E L	F S P P A R L S Y P E A T G L R H L A F S V V D D L D K W V A Y		
T L I N G T W F A L	Y P V P E K G D G F R G F T F S Y N G Q S K E E V D Q V I A K		
R L L G D C E	L E L F A L P G S P A R P S Y C G L R H L A F H V S C I E D T I R E		
C F G N Q N K F	N L H E E P K A A H P V P G S L D L C I T E V P L E E I Q H		
E N N N Y E I E L	T Y N Y D T E K P Y D I G N G F H F A L T V E E L E S H K R		
T C G N D N L S	L G R S D V P S S G M Q A V D H Y G F V V I D S D E L R A W Y D Y		
G A Q I E L F S F	P S P P P R T S R P E A C G M R H L A F R V T N L D T A V E A G		
T F F V E D G	R E T N A G R L R T P L G G V H V A F R Y E P E R L E E T R A G		
K A G D D G L	A L L L S P S Y N Q A G P H F G F V F D R A E M E A A Y N Q		
K F G Q Q K Q K I	N V H E Y G K E I E P K A H D I C L I S S Y S I D E I K K V L E K		
G E T C C G I	W E P D R V G R T F A P Q R N G H L A L G V D D V A A A R A E		
T A D G K K P	P L I T H P K E E R T T G L Y H I A I L L P Q P S D L G A I L K K		
N M W G H Q V	V V A H L S P E E D G K G V P V R H F G V I I D M D E W E A L A E R		
R R W L A L G D S	L L H I P R P G E T V I T N K A V H L A L A T A D L A S F I S H		
R F G S Q K I N L	H Q S G K E F E P K A Q N V Q P G L C F L V E D V E V L K S		
G L V L Q D Y S	Y T D F D I A P V I S H N N A C E L Y F E E P D I E A F A L K		
L I G E L W I A I	M Q G D S L P S K T Y N H I A F K I E E E Y D Y Y M E K		
F F P R E L L A L	D A N V R D P G G F G G I T L A H N V A T R E E V D L V L S Q		
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Y V F E L V V T L	W Q Q S A G E F P T D R P G L H H A F L V D D I D A A E E R		
G D G T T P H L L E L	T L T W L R D M D C P Y N N E I H L A F E V D D F D A A H K K		
N L F P A D S A E L K P V P D H S T V A M R H V A F R I T Y A C	L D D V Q K K		
G D H A A Q I E L T H N W D P E T Y T G G R N F G H V A Y E V S D I Y A A C E R Y			
S Y N F D Q L E L	F S F P D S P K R P S Y C G L R H I S F E V D S I E N T V E Y		
G S T H F F F D V G D L G R Y A E V L G G L H H A I S M A L D Q W R A A K S R			
E D S H F V V E L T Y N Y G V E S Y N I G T G F G H F G I A V E D V A K T V E L			
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H H S Y T H L A F S V A E A D F E D M L N K			
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F L Q D H D L A L F G I G D S Q A G R G T V G L Y H L A W E V D T L A E L A Q K			
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K Q R I Y F V T S K E Q P A F K P D T T S I G S V D L C I L A K D M D S I V N H			
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K L G D C E I F S A P K R P S Y P E A C G L R H L A F A V E N I E E V V A E			
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UniRef90_R5VQI2	Y D I H Y V N R L M T H S W G Q R V I R F Y D P D G N L I E V G T		
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UniRef90_UPI0001FFE437	L Q E A G A L A G A S D H G T T K A L Y A H D P D G L E F E V		
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UniRef90_UPI00046AD37F	T I E D G P V P R T G A A G P L V S I Y I R D P D Q N L I E I S V		
UniRef90_H6C231	R G I T V L E G G Q V V E R T G R S V Y V R D P D G N L I		
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UniRef90_UPI00036D38AE	I V E R K Y S I D H I N H G N A G C Y F R D P E D N R V E V Y W H T		
UniRef90_F7NGX0	H K K M G C I C Y E N P T M G I Y F I S D P D G Y W L E I I V T		
UniRef90_S5EMF5	L T T Q G I E I E M S W D H G G E S I Y F R D P D G H L M E L V T		
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UniRef90_G8PF08	L L K S Y G P A K H E A T H G T V N S I F I K D P D G N L I E I Y		
UniRef90_UPI00045EBF24	L S A E G I A I R I D E V T G Q R F C F F A D P D G L P I E L Y		
UniRef90_UPI00035DCAA	D A G A G I L G W T E G D V V G H G R T F Q F R G P D D G H L L E L Y Y E S		
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UniRef90_L9X381	M R A I D H I N V D V D D L E E T T Y P F Y R D E L G L S V R R P P E D F D M F
UniRef90_K9ZPT6	M I I G L T H I A L P V S N L E E Q S I E F Y A T Y A Q M Q V V H R R I D W L T D
UniRef90_UPI00029AE3AC	H L A I P V S N L E E N R V F Y R E V L G C E E G R S S D H W V D F
UniRef90_UPI0002DAF861	V I R L S H T C L N V A D L A A S K A F Y T T I L G L Q V T D E D D N R V Y L
UniRef90_UPI0004692C39	V K S I D H V V L T C R N L P A T I N F Y T Q R L G M R H E V F T S K G H A L
UniRef90_F9XC72	K G L G H V N I Y V R N A E R S R A W Y E D L L G L H T Y D F T P G R A A F
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UniRef90_UPI0003B2F2D2	M S R I L H T M L R V G N L D T S I D F Y T N V L G M K L L R T S K N E Q Y D
UniRef90_F4Q970	M S V E L N H T I V H A R N D E E S A R F L A H I G L E V G P R T G P F L L
UniRef90_A8L9F8	I I R C A R T V L H V T D L E A S R K F Y V D T L G F I E T E S D S E N L Y L
UniRef90_UPI00037A0F18	V G E V N I K V K N L D Y S V T F Y Q N I M G F L V S E K T D R K A I L
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UniRef90_L1IY03	M H H V A L I V A D Y A R S K R F Y T E I L G L E I S W K L D L G S D G
UniRef90_G9ZJ08	L N H V S R L C K N V E K S V E F Y T K V L G F V L I E R P Q D G A W L
UniRef90_M1A970	L S G V V E T G I L Y V D D L P R A R G F Y E R V L G L R P M A D E R F C A Y
UniRef90_UPI00035F92E2	L V L G V S D L E I S E R F Y R D V L G L P T Q R S G D T V T V
UniRef90_E6PHW6	M L G G A R R L A L E V K Y P D R V Q A F Y E A F L D C P V R R E T D R G V T L
UniRef90_U1P3H0	M T V T F N H I I V V S A D R D A A A D F Y R D L F E L D E G P A W G P F R N L
UniRef90_G7H6H1	V K T L D H L V L T C S D V I A T V I A F Y T T H G M R A T E F V S P R R A L
UniRef90_J5J6C9	L R Q L D H V V L R A L D P A A L E D F Y C R V L G C T V R R Q E A I G L V
UniRef90_UPI00047C7491	I I H A I T G S D Y E K P K T H F Y V E I L G F E V I E R E D Y K I D V
UniRef90_F3BBDD4	V N H I A V H V S D L K G M D F Y Q D V L Q L I E D P F N D A I H A W
UniRef90_UPI0003FBAB21	L I S H L D H L V L T V A S I I E Q S C A F Y T A V L Q M D E I T F K G R K A L
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UniRef90_F0ZUI6	R L L H T M L R V G D L Q R S I D F Y T R L L G M K L L R Q V E N T E Y K
UniRef90_A6SV14	M L R V G D L E K S L D F Y T R V L G M K L L R R K D Y G Y G P
UniRef90_S9P5H6	L Q G H H V A V I C S D Y Q A S K H F Y S Q I L K L T V L A E N Y R Q E R D
UniRef90_E8MA89	MA K A H S M I R V L L D E E R S L S F Y E K A F G L K V A E R L A F E V Y L
UniRef90_W7ZZ21	U N H G L N V K N L E E S K E F Y R K F F S M D P V K V K E G Y V K F
UniRef90_I4YKR7	M Q P R I S L I T L A V D D L E R S L S F Y R D G L G L P R E F E H G A V A F F
UniRef90_U5DLX6	M M K I D N M I L K V K D I D K M T A F Y E K V L G M K V R K R D S E R T E L
UniRef90_A4XT06	V L R V A Y M E L Q V T D L A A S R K F Y V D V L G L H V S H E D D N E I Y L
UniRef90_Q0BF91	R V N H V N I L A R D L T R S V D F Y R R I L G A S Y C Y N L G P K K V V
UniRef90_D1AK90	M K K I D N M I L K V K D I D K M T A F Y E K V L G M K V R K R D S E R T E L
UniRef90_UPI0003B70DED	U N R V A Y M E L Q V T D L A A S R K F Y V D V L G L H V S H E D D N E I Y L
UniRef90_S9S4A1	M S V H L D H T I V H A T D K F A S A R F L A E L A G L D E P T G F G P F A A V
UniRef90_L8EDY1	M I R G L Y E A H P V S N L K K S I E F Y K G L G L K L A I R Y E K T A F F
UniRef90_Q1YNM1	R L L H T M L R V G D L Q R S I D F Y T K V M G M T L L R T S E N A A H
UniRef90_UPI000478E6BC	M I R G L Y E A H P V S N L K K S I E F Y K G L G L K L A I R Y E K T A F F
UniRef90_I0HUU7	R L L H T M L R V G D L Q R S I D F Y T K V M G M T L L R T S E N A A H
UniRef90_M4WZ34	M I R G L Y E A H P V S N L K K S I E F Y K G L G L K L A I R Y E K T A F F
UniRef90_UPI000348E683	M I R G L Y E A H P V S N L K K S I E F Y K G L G L K L A I R Y E K T A F F
UniRef90_UPI00036E6645	M K V N L N W I T L R V R D L E A S L I N F Y H S I P I D R R F E S R G R Q
UniRef90_G8QCD8	H L S L S V S D P E V S A R W Y A D V L G M H E S A R G E S W M A F
UniRef90_C5CT29	R I D H I A L W T T D L E R C K F R Y V D Y F G A T C F L S L G D G A R I
UniRef90_D3QHB2	T H V T N I T L N V A D L A K M T F Y S T I L G F S I K T R S E E R T I L
UniRef90_F8JEV2	S G V L E T V L Y A P D L G A Q D F Y G R V F G L E P F A V A E G R H V F
UniRef90_F0NT00	I I A L D H F V I T V T D L N K S K N F Y H E I L G L P V V D E Q N G F V S L
UniRef90_Q31ND8	L K R L G H V A I C V K D E A A A F Y Q G L G L E L V W Q D A D W A Y L
UniRef90_R6REV0	R L R N V L I V V K D M E R S I K F Y H D L F G L D T V V D Q D G N V I L
UniRef90_H0HK80	A L Y V T D L D A A E A F Y R E V L G L E V I A R A E G R H L F
UniRef90_U4TA96	M L R V T D L E R S I H F Y T E M L G M K L L R R T D N E Q Y R
UniRef90_UPI00034CC29E	L R K V H H I A L N V N Q N M T A S R H F Y G H I L G L H E L T G E E V P N F V
UniRef90_M3G352	M T V E L N H T I V Q S P D K R E S A E F L A H V L G L D A G A D W G P F V
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UniRef90_M0KST0	G H I A I L W T T D L E R C K F R Y V D Y F G A T C F L S L G D G A R I
UniRef90_K0V4S4	U N R V A Y M E L Q V T D L A A S R F Y Q A V F D T I P A G E G D D Y F
UniRef90_M1X6C7	M S G T L D H V M I V R E F D E S L D W Y T T H G F D A A H R G G P A F A S
UniRef90_L9UPW8	M S G T L D H V M I V R E F D E S L D W Y T T H G F D A A H R G G P A F A S
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UniRef90_W4C7S5	M I L G L Y E A H P V S N L H Q S I E F Y S K L G L E L A W R D E D T A F F
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UniRef90_Q7MQ53	U N R V A Y M E L Q V T D L A A S R F Y H E V F D M P V I E D Q E H E H V V
UniRef90_B9XBN4	M I L K R I D H I Q L A A P E E E K A R E F F G D I L G M E E V G K P D S L R K N
UniRef90_K2GNN4	M I T G L D H I T V N M A D R E A S F T Y E E V L G L E K M Y D V D M G Y F Y
UniRef90_N9W500	U N R V A Y M E L Q V T D L A A S R F Y H E V F D M P V I E D Q E H E H V V
UniRef90_W7YPB9	M V G Q V N I N V T N L E R S L Q F Y Q E V I L G F K I L E R F E N Q A I L
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90 100 110 120

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UniRef90_UPI00035C4FF6	L E R H G V A L L N D R P W G R R T A A F A D P A G H V W E I		
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UniRef90_K0PQ22	V E R A G G T I V K P I F P G G R R F H F T D P D G Y E L A V W T		
UniRef90_A9M6R0	F R E L L G F K V G G N L V D F R A R F F F V E D P D G Y K I E V		
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UniRef90_M5DM06	L K A E N I L P Y G S G H N D G G R G V Y F R D P G G H L L E M L T V D		
UniRef90_UPI00046951C9	M A T T G Y V D N I E R G P G R H G I Y V L D P D G H R I E I Y C S D Y Q		
UniRef90_F1YK72	R V L P L W G P G R H G P G D N T F S Y F A D P G G L V C E Y T S G V A Q D R C		
UniRef90_F9QAA6	F T T R G I V C E P L Q V D E L T G M F L R D P D D L P I E L Y Q V D		
UniRef90_K1JAB6	L Q G H G I E V E P V R V D E K R F T F F A D P D G L P I E L Y L Q K G G		
UniRef90_V7ELD6	L Q A N G V V I N R P P R D G R M A F V R S P D N V S I E L		
UniRef90_N2J627	L N E Q G I M L T E G P H P P G P A L F I R D P D G N V L E E F		
UniRef90_V5EV51	F E D K G V K F Q K K L T D G K M K A F I L D P D N Y W I E I		
UniRef90_J2PJ21	L K A A G L L D V G V T D H A F K S I Y F H D P S G H R I E T C E T M S D E T		
UniRef90_I3R1L7	I R D G A T L L S G A S D H L V S E A L Y L R D P E G N G V E I Y R D R P R E E		
UniRef90_M5F494	L V A Q G V S F V S P P R D Y P W R V Y F T D P D E N L W E I Y S W L D G K R		
UniRef90_R5XGH6	M N S M G Y T D I I S P N P K T K F F Y V N D P D G L K I Q L		
UniRef90_UPI0002F4FA6C	L L D A G V T I N R P P R D G H M A F V R T P D N V S I E L L Q A G D		
UniRef90_G7K3N3	L K D K G I E T F E T T N G N I I K R V F F Y D P D G N E L E E V F		
UniRef90_R6RI2	H E E M G C I C Y E N P D M G I L Y F I S D P D G Y W I E I M C		
UniRef90_UPI00036D5EF0	G R R T S V E P F V R P N Q G N A S V Y F D D P D G N S L E E L M C		
UniRef90_UPI000380D8F4	L E G N V D F L I E P Y P G E Q A T M F F T D P S G N A I E I K A F A D M S R L		
UniRef90_N6Z323	L E H K G A V L Y R S P I T T G R A A I L V D P F G C T I G L N Q G N A R S R		
UniRef90_A0A011MM12	A L A K G I K I I D E W E T G C K S F Y F E D P E G N V L E I		
UniRef90_I0YT66	V Q T A G I D F I L E P H G E Q W T M F F K D P S G N S L E F K A M T N P E N L		
UniRef90_UPI00026265C1	L V E R G I L E H W A D H G H G R G V Y F K D P A G H H A I E L L T		
UniRef90_W9GQS4	F A A A G T K P A V E A E W G G Y S G Y G A D P D G H L W E V		
UniRef90_I4B2D1	A A A K I V K P A A E T F W G G Y A G Y F Q D P D G H L W E V		
UniRef90_UPI0003681A1A	G P N I E R G P G R H G L S N A F F L Y L R D P D G H R I E L Y N G D		
UniRef90_D5WS28	G E V D F E G V P E D Q P W G Y R A V S L T D P D G N R L Y F		
UniRef90_W5TEN7	L C E R G I E H W A D P Q H G G R G V Y F M D P A G H G I E M I T		
UniRef90_Q39366	V R A K G R E P G P V K G G G S V I A F V K D P D G Y T F E L		
UniRef90_M7NZ91	L E D A G V E V T R V A A G E G E A I R F Q L P S G H P F E I Y Y		
UniRef90_B9JP01	L K A R N V Y D F E V Q Y H S S K S V Y F F D P N G Y K I E I		
UniRef90_A5UX94	L I A A G Y T P E D T I A I P G R R F F C D P R P F G N R I E F T T		
UniRef90_H3SX8	I L S L G S V E L I D Q P N G S R Y F F F K G P D G E W L E F F H T T		
UniRef90_UPI0002E2F23C	I E A A G V E W L D D V P H G R A Y R F T G P F G H S M T L H		
UniRef90_A0A059CEV8	I K A K G G T V T R E P G P G T T V F V K D P D G Y I F E L R V G D L E R A I		
UniRef90_H6CA80	R K A R G I P F W S I N H G P T T S L Y Y R D P D G N K L E		
UniRef90_B8K729	L N R H N F A E R Y G A Q G F G R S V Y L T D P E G N I V E I		
UniRef90_B5SAJ0	L R A A G I D F I I E P H G E Q A T M F F L D P S G N A M E I		
UniRef90_Q1WRL6	M K E I G I E P E G E P I Y F E K S V Y F K D P D G T N L E E L		
UniRef90_UPI000479497A	L L Q D L G Y T I N R P P R D G H M A F V R S P D L I S I E L L Q R D G		
UniRef90_UPI0003803843	L L A K G V D V G M H D G V F V R S I Y F K D P D G V L V E F A A W T R R D R P		
UniRef90_E3HR08	L Q S H G V E V V G P T D H H F R S I Y F F D P N G I R L E E L		
UniRef90_F8JD60	I A A A G Y Q M T H D G K P F G T F F F I D D P D G Y K I E E V		
UniRef90_A2BQD3	L E N N G C K I T T K P K T M K N S A F V E D P D G Y K I E E V		
UniRef90_A2C048	L K K Q G I K V G H D H R D G T S S F Y L K D T E G N W L E		
UniRef90_A0A016QQB8	A A T L G L R L G T G D H L V S E A I Y L Q D P E G N G I E E V Y		
UniRef90_Q484D9	C K K T D I E F S P E P N G D G P T I H I R E P S G N R I E F A V		
UniRef90_A5V752	V K A N G V K I V Y G P G R H P P S L Y F L D P D G M T V I E Y S F G M E E F P E		
UniRef90_I0KXD7	A G A E V T Q P A R E T F Y G G Y A G Y F A D P D G H V W E I		
UniRef90_F9RNJ1	L H Q H D I Q T E Y G A Q G F G R S L Y I R D P E G N I V E L		
UniRef90_F3YAE0	H K K A G F T V T D L K G L P G T G S Y F T D P D G Y K I E E V		
UniRef90_UPI00038FB072	L R E K K I P F V K E P H W G H R V A Y L R D P A G N L I E E L N A G		
UniRef90_Q7EYX8	L N E M G I E Y M K R T I N E E E G L F F K D P D G F M I E I		
UniRef90_D8UCG2	L K E K D V K F V I E P H G E Q W T L F F T D P S G N A L E F K A M T N P E N L		
UniRef90_B4WFB3	A L A H G A R D E R A Y H P G Y Y A A F V L D P D G N N I E A V H H G E A R R S		
UniRef90_S3FMP9	L I E Q R I E V G Q G D H L V S E A F Y L N D P E G N G I E L Y A D R P R E Q W		
UniRef90_S2YP21	L R H H G I T P E W G P G R H G P G S Y F T D P T G L V C E Y T S E V A Q I V E		
UniRef90_G4L988	U N E M G I E Y M K R T I N E E E G L F F K D P D G F M I E I		
UniRef90_Q0BSS3	H A A A G F T E L K G L P G V P P S Y Y F K D P D D Y K I E E V		
UniRef90_UPI00037C9AA1	M S K A G L E P L Q H D R L V G K F F I K D P D G Y L I E E V		
UniRef90_J6RR30	H Q A A G Y T V T D L K G L P G H Y Y F V T D P D G Y K V E E V		
UniRef90_A0A037ZDA9	A R A L G Y R V T R E A M Q H G R S V F L E D P D G Y K V E E L F E Y T		
UniRef90_HOTFH2	I R G Q G V E L T D K S C D D T W Q A W T A D P N G T R I E E V F		
UniRef90_UPI000408F368	L V I A K G I E P P T D Q P F G H R T Q F F R D P D G N L L E E V		
UniRef90_D9V2D4	V T E A G R E M Q H D G K P L A R F F F I T D P D G Y K I E E V		
UniRef90_UPI0003737BA4	L R A E G V A F M T A P Q T G R R W V Y G K D P W G V I V E L		
UniRef90_C2KXX2	I K N M E R G P G R H G I T N A F F F Y L R D P D G H R I E E L Y T G D		
UniRef90_UPI0003456CAC	H E K M G C I C F E N H G M G I Y F E D P D G Y W I E E I S Y G		
UniRef90_S5UST7	A R I E G V L I K E P H H P V G Y W A F L R D P D G H T I E L		
UniRef90_F4EHD2	L A A H G V P M T D V G H G S F G T F Y F R D P D G N V I E		
UniRef90_UPI00037D409B	H K E L G Y P T T D I P G S P G R Y Y F V T A P D G Y R V E V		
UniRef90_A8V4G5	A V A A G I K P A E E V F W G G Y S G Y F R D P E G H Y W E V A Y		
UniRef90_N9XA1	M K K Q G V E L I V F Q P N P T R F F F I H D P D G V N L E E V		
UniRef90_UPI0003710F08	H K E M D C V C Y E N H S M G L Y F I I D P D G Y W I E		

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 UniRef90_A9M6R0
 UniRef90_W9W079 A A T E
 UniRef90_S2WDK2
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 UniRef90_W5WF52
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 UniRef90_W5TE61
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 UniRef90_V7ELD6 A K E P E P W K S M
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 UniRef90_J2PJ21 R A
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 UniRef90_UP10003803843 E D V A H E P
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 UniRef90_S3FMP9 E Y
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 UniRef90_F0L5M3
 UniRef90_M7NIJ6
 UniRef90_Q948T6
 UniRef90_UPI00035EE652
 UniRef90_UPI000408866E

1 10 20 30 40

Detailed description: This figure displays a sequence alignment of approximately 40 UniRef90 proteins. The alignment is presented in a grid where rows represent individual proteins and columns represent specific amino acid positions. Key positions are highlighted in yellow: 10, 20, 30, and 40. Amino acids are color-coded based on their chemical properties: Red for acidic (Aspartic Acid, Glutamic Acid), Blue for basic (Lysine, Arginine), Green for hydrophobic (Alanine, Valine, Leucine, Isoleucine, Methionine, Phenylalanine, Tryptophan), Yellow for polar (Serine, Threonine, Cysteine, Tyrosine, Asparagine, Glutamine), and Black for conservative substitutions (Proline, Glycine, Histidine, Aspartate, Glutamate, Alanine, Valine, Leucine, Isoleucine, Methionine, Phenylalanine, Tryptophan, Cysteine, Tyrosine, Asparagine, Glutamine). The alignment shows significant variation at position 10, with many proteins starting with a different amino acid than the reference sequence. Positions 20, 30, and 40 show more conserved patterns, particularly at the yellow-highlighted positions.

50 60 70 80

UniRef90_T0Z822	C A G G A C I A L L A N A R D	D P D T C P P R H F C F R T D K E G F A R A L D E		
UniRef90_UPI0003054E99	A F F E L P N Q P D M G K D P N T	P A W V Q H L A F E V E S E A E L V A A K A H		
UniRef90_B4RDX1	D F R G H Q I V A H L A P D E	V G H R V P V R H F G V I L T L P E W H E L A E T		
UniRef90_UPI00029A458D	E F L N N W I L L V T G G E P T	P D K P E V F F H S F T I R V N D C E K T Y A L		
UniRef90_W4M6J7	K S E R H R L P F G F P G A W F	D L P N K Q Q D V H F A L R V R D Y N S M L K I		
UniRef90_A5VBT7	L L N S P P M N I A L N E	H S R V V P S P G H F G I Q L A T E D V A A I E P H		
UniRef90_UPI00040443E1	UniRef90_C0QPV8	M R D G S Y I A A F F D E P P E P S P N T P R W V Q H F A M E V P D L A D V L A Y		
UniRef90_UPI0003810950	R W L S I G E G L H L I P R P D A E I K T N K A I H F A S T A N F E S V I E H			
UniRef90_C4L6W9	V I H M K L N D L I L E I F S F K E T K I I G V K H F A L R V K D I Q K A K K F			
UniRef90_UPI00046CDADA	F Y P L D E L A K D V S P N L N S	H R S G F S G I T L A H E V D T V L A L A R S		
UniRef90_K9ZBZ3	G G F W L Q V G D R S V H V G A E D E R Q K T K A H I A Y A V T D L D Y W K E A			
UniRef90_B8H6H4	W A D E L F V S T A D S E A A Q G K	L T G R H H L A F Q A R D R T M V D A F H K		
UniRef90_W7KMK1	R V I N N Q L T F D F D N R E N F E	S H H Y A F H V T D Q E F D A I F A R		
UniRef90_F7XCC2	R C W G D Y Y R Y S L V I T E G P E A S	L G R M A W R T N S Q A A L E A A A Q R		
UniRef90_D2BFU2	L L E D P G L N F T L N L T A E	V S G N Q V G H F G F Q V E N Q E E V F F H H		
UniRef90_UPI0003B5B824	I L G A G L T L A L W E R S H I E S	H T D V R V P V G S A S A V A D I D V L Y A D		
UniRef90_A7IEV9	Q S P Q G E A A P E V G G L R T G Q E	V R A G G P F I L L Y S T D L D R S V E A A		
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UniRef90_D6TS95	Q D G R L T G G F T T T G P V R A G G P L	I I I Y A D N L E E S L T K		
UniRef90_W5XDJ3	C I L F G Q T S L T L F S T E E G K Y F E P R	H A M F N F F V S N A E E A Y Q H		
UniRef90_KOKOY4	F D D D N L V L T L M K A G Q V S Y P G T F	H Q G F V Q E S E E V N E I Y Q R		
UniRef90_A4WW02	F W S G G P L F E E H S P L P E G G R F G R L	H Y A F E V T R D R L E E A V A H		
UniRef90_G8NDF4	W L P D V Q L V L C A P E M G R S S P Q D A E	V V R T L M F Q V W D D L D A T F E R		
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UniRef90_UPI0003616DAE	N F F G H Q I S L H L G E P F G E H L V P M P H L G V I L P L E E W Q T L A D R			
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UniRef90_M0ATE6	G L V L Q D K A I W K S F I D K I P E N N A C E L Y F E E K D L E G F V K K			
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UniRef90_UPI0003687C2C	S A Y H H H I G L N T W E S Q G A P P P S N A V G L R F Y T L Q L A E L E R I			
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UniRef90_TOT2B4	F L W V D T G M L G L W E T G T R P L K M R L H I A F R M T A A G V L Q A P T L			
UniRef90_F0L5M3	K S P Y T A H E L E L T W L R D W D R P Y N N E F H L A F A Y V V D D Y E A A L K K			
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UniRef90_Q948T6	R A W G D F E H H T L S I R A G E E S R L D H V A W R T K R P E D V D A F A E V			
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90 100 110 120

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UniRef90_UPI00029A458D	L N K R G A E F L T P P L R H G T R C [] F F R D P D G H L F E I		
UniRef90_W4M6J7	H K S D R R V K V E I G P M G D Q Y Y I T D P D N H I I E		
UniRef90_A5VBT7	Y E V E T E M S V Q C C Y A R Q D K F W A T D P D G N R W E F V		
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UniRef90_F7XCC2	K E R R E E M D V T C C Y A T Q D K F W V T D P D G N E W E F F Y		
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UniRef90_M3A351	K A K A E D V V G P T D H D F K S I Y F F D P S G H R L E L A A W T T T P E T		
UniRef90_W812K3	W A K N G I L E V L E D G E G R L R S V Y C R D P D G N L V E		
UniRef90_W4ATC6	V E A A G G K I L Q P P F P G G R R F H F A D P D G Y E L A V W S A Q		
UniRef90_D6TS95	L K D H G V R V D T I L E Y G A T Y F T F Y D L D D N C L E V		
UniRef90_W5XDJ3	L K D D G F E M K P P E R S H A W T F Y V Q A P G G F L V E		
UniRef90_KOKOY4	V R E R G V T V Y G P T Y F E W K S Y Y F D P D G N L L E W W S P D P A		
UniRef90_A4WW02	I R A T G A E V V Q V E P I D Q F Y G V R F R D P S G N Q L R F		
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UniRef90_U2M5H2	L E D L K V N W K K R L T D G R M V A F V L D P D N Y W V E I		
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UniRef90_J5M5U1	H A K H E P R L W P E Y H P G Y Y G A F V R D P D G N N V E		
UniRef90_D0IXL8	L R K L G V K L L N D R P W G R R T A A F A D P S G H V W E V		
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UniRef90_I7BUM5	K V Q V L N D R N G E D E A D P A H A L Y F Y D P A G N V V E F		
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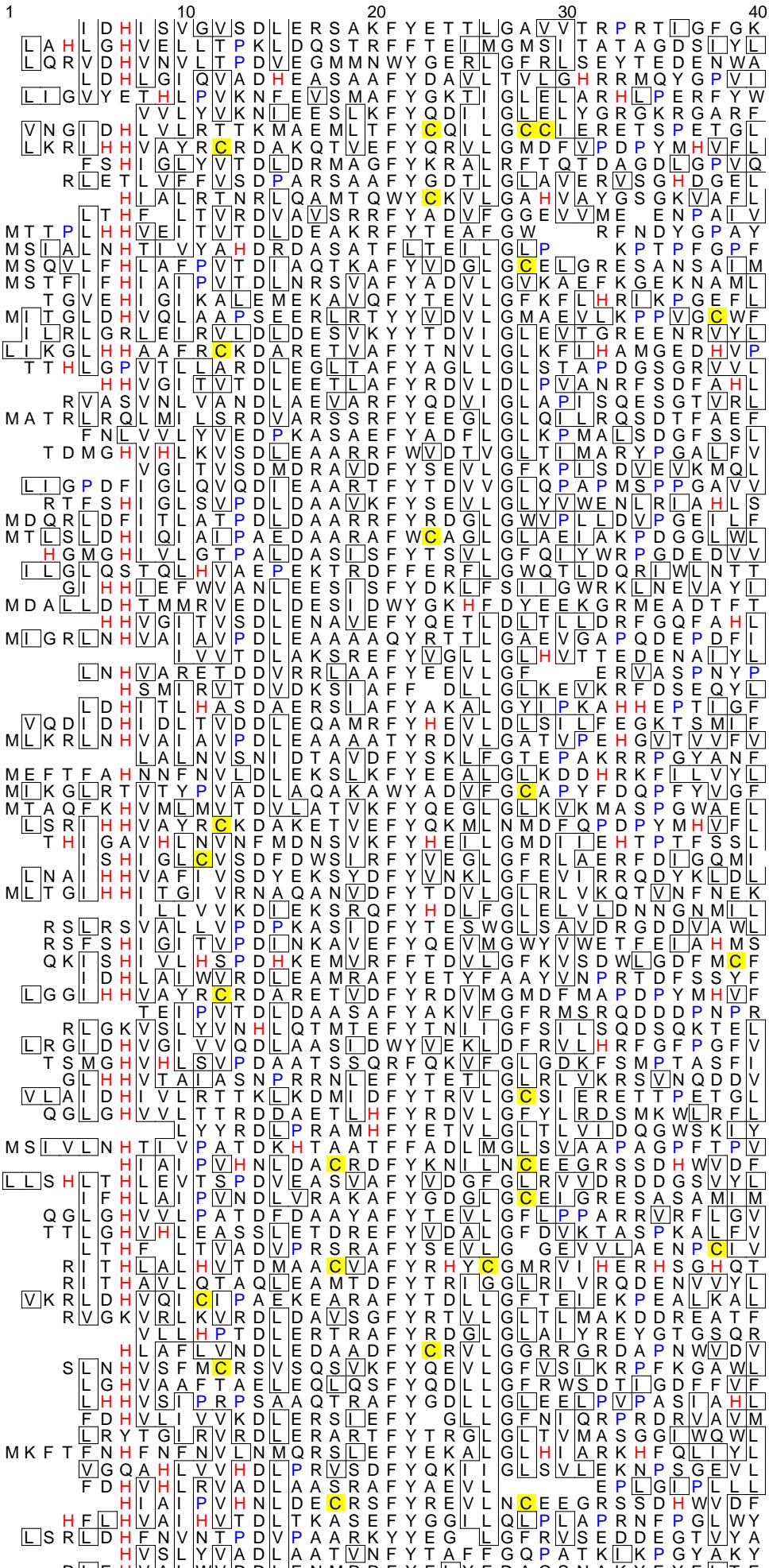
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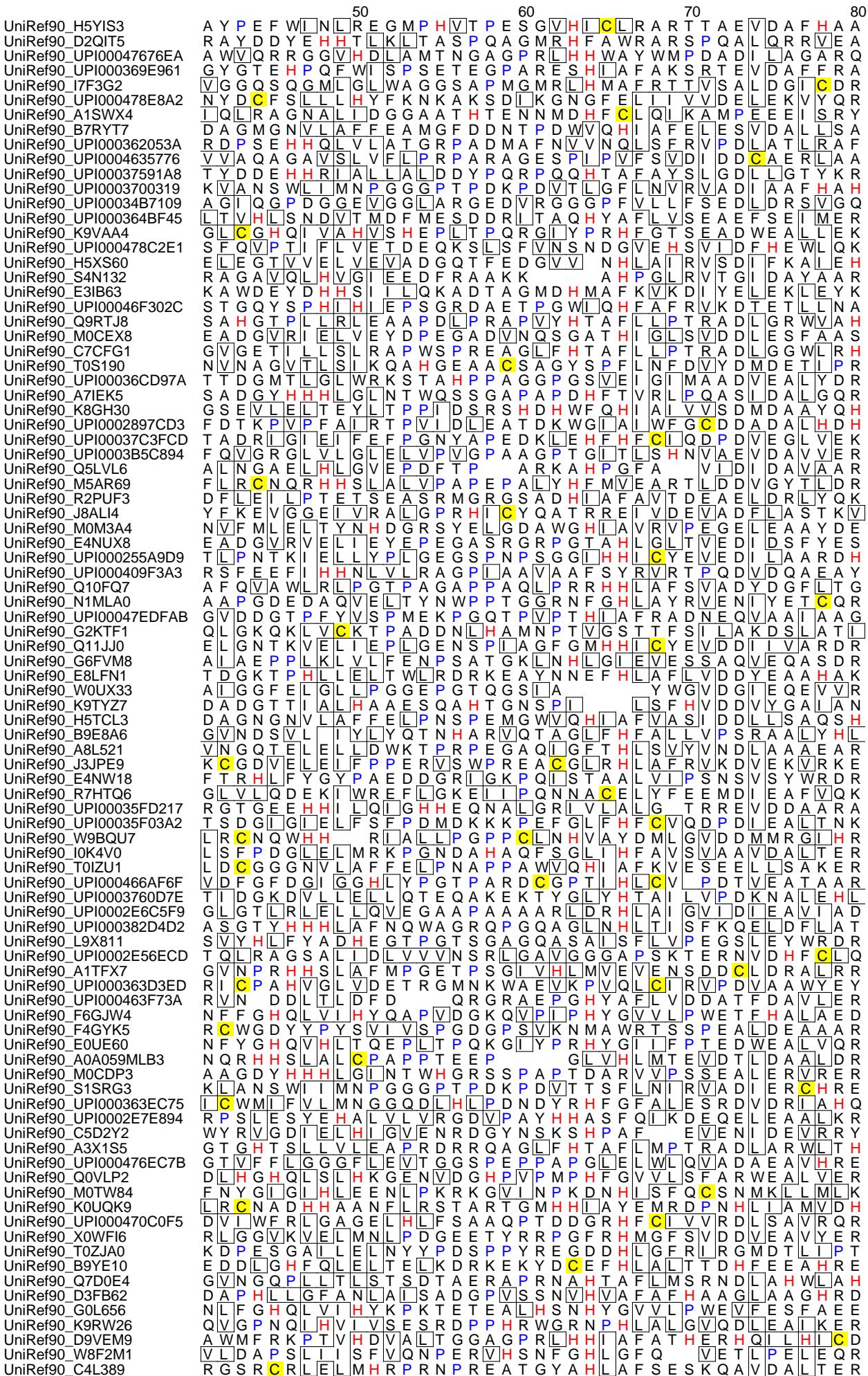
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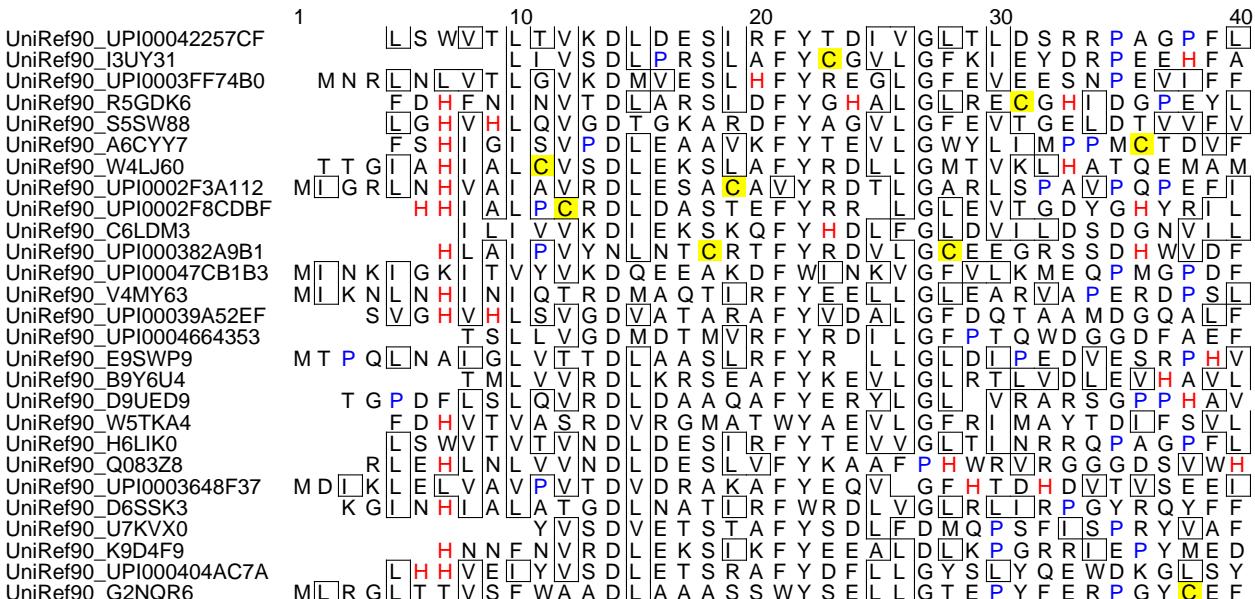
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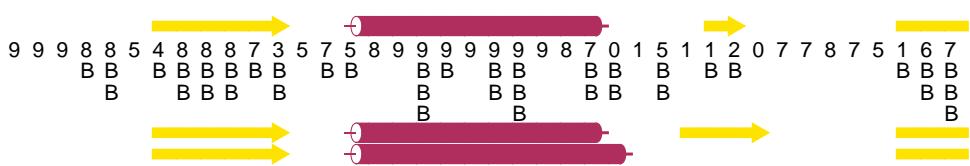
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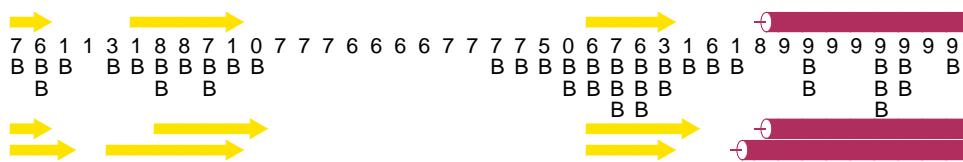
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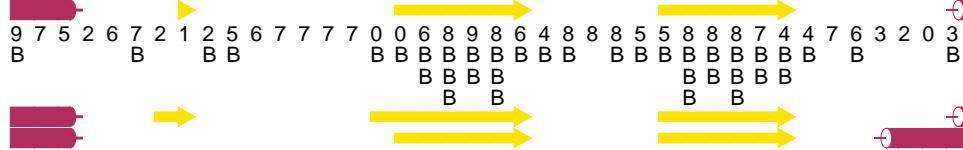
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