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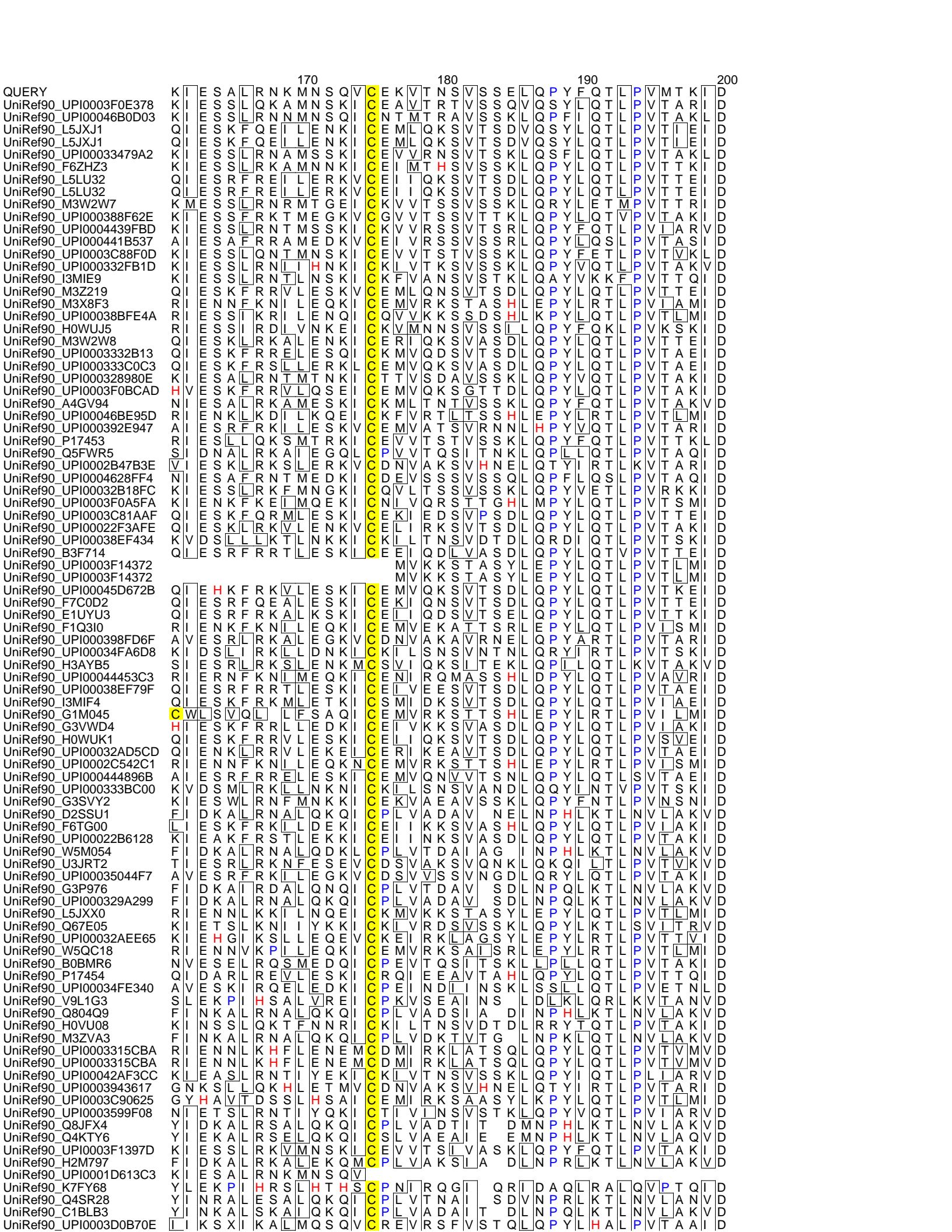
1 10 20 30 40

This sequence alignment shows a homologous protein region across multiple UniRef entries. The sequence is presented in four columns (10, 20, 30, 40), with positions 1, 10, 20, 30, and 40 indicated at the top. Residues are color-coded according to their conservation or similarity across the alignments, with darker shades indicating higher conservation. The alignment highlights significant variations and conserved motifs.









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QUERY  
UniRef90\_UPI0003F0E378  
UniRef90\_UPI00046B0D03  
UniRef90\_L5JXJ1  
UniRef90\_L5JXJ1  
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S F A S I D Y S L M E A P R A T A  
N V A G V D Y S L L A P P T V T A  
K V A W D Y S L V A P L R V T A  
S F A G I D Y S L M E A P R A A A  
S F A G I D Y S L M E A P R A A A  
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K V A G I D Y S L V A P P A A T A  
N V A W D Y S L V A P P I V T A  
R T A S I D Y S L V G P P V A T S  
N V A G I D Y S L V A P P K A M A  
A V A G I D Y H L V A P V T V T  
A V A G I D Y R L V A P P I T T A  
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G V A G I D F R L V K P P I I T  
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H V A A I D Y S L T G P P T V T A  
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Q V A G I D Y S L L V G A P Q V T S  
D V I T S V D Y S L L A P L T T T  
Q F A G I D Y S L V G A P Q V T  
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Q Y A E I E Y S M V G S P V I S  
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K Y A E I E Y S M V S S P Q S  
A F A Q I D Y S L V N S P G I  
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T V A G V D Y S L V A F P V A T A

1 10 20 30 40

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P G C K I R I T S K A L E L V K Q E G M R F L E Q E L E T I T I P D D L R G K  
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M Y P G I K A R I T S K Q R A L D Y A V Q A G L E M I D E M I K E K K L P D D L N G S  
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N P G F L A R I T K K G L E Y A Q Q Y A V T T L K K E E L S T T R L P D D L S G S  
N P G C R I R I T S K G L Q F V K Q E G L R F V E E E H I I P D D L S G K  
Y P G I K A R V T Q R A L D Y G V R A G M E M M E Q M V K E K H I S D D L K G S  
N P G V V A R I T Q K Q G L D Y A C Q Q G V T I L Q K E L L E K I T I P P F S G S  
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50                  60                  70                  80





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170                  180                  190                  200

Detailed description: This block contains a large number of UniRef90 entries, each consisting of a short identifier followed by a multi-line sequence. The sequences are aligned horizontally. Specific positions are labeled at the top: 170, 180, 190, and 200. A prominent yellow box highlights a conserved sequence motif centered around position 180 across many sequences. The sequences include various insertion and deletion points indicated by dashes (-) and question marks (?). Some sequences begin with a red 'H' or blue 'P'.

210

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 N Y T L V D F S L V G P P E I T  
 S V A G V D Y R L [REDACTED]  
 K V A S L D Y R L V G A P Q V T S  
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 N F T L L D Y S L I S P P E I T  
 N V A G I D Y S L V A P P K A M A  
 K F S E I N Y S L V Q K P A P T A  
 N Y T I L D Y S L I S F P E V  
 A V A G I D Y S L V A P P T A T A  
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 P V A R L  
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 K K F L L D Y S L I S S P S F S  
 K Y V G I D Y S L L S D P K V M S  
 N Y T L L D Y S L I S S P E I T  
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K V L S F D V P L T G D P D [REDACTED] A  
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 Q Y I E L D Y L L V S L P E V T  
 N T F T L D Y S L V Q N P H F  
 S F I Y L D H S I E A T P L I T  
 S D S M L Y F G I S E  
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 E H I S I D Y S L L S H P V V S  
 D L A E I D Y S L L N S L P A V  
 G I A E V D Y S L V S G P T F  
 D M F K F D Y S L L V Q S P S F  
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 G A I G V D I S L A S F P V I K A  
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 T V A G I D Y T V V A P P T A T

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 I A A E V S N S G L D F L K N L L V E K A E S S I I P L Q I P R I E K S S  
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 I S A V I S N K G L D F A K D L L I E K A V S S M I P L Q L S D I E K S S  
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 Y P G I R A R L L N Q R A F Q Y A S G M I A D V L N Q E I K K A R I P P I T Q C  
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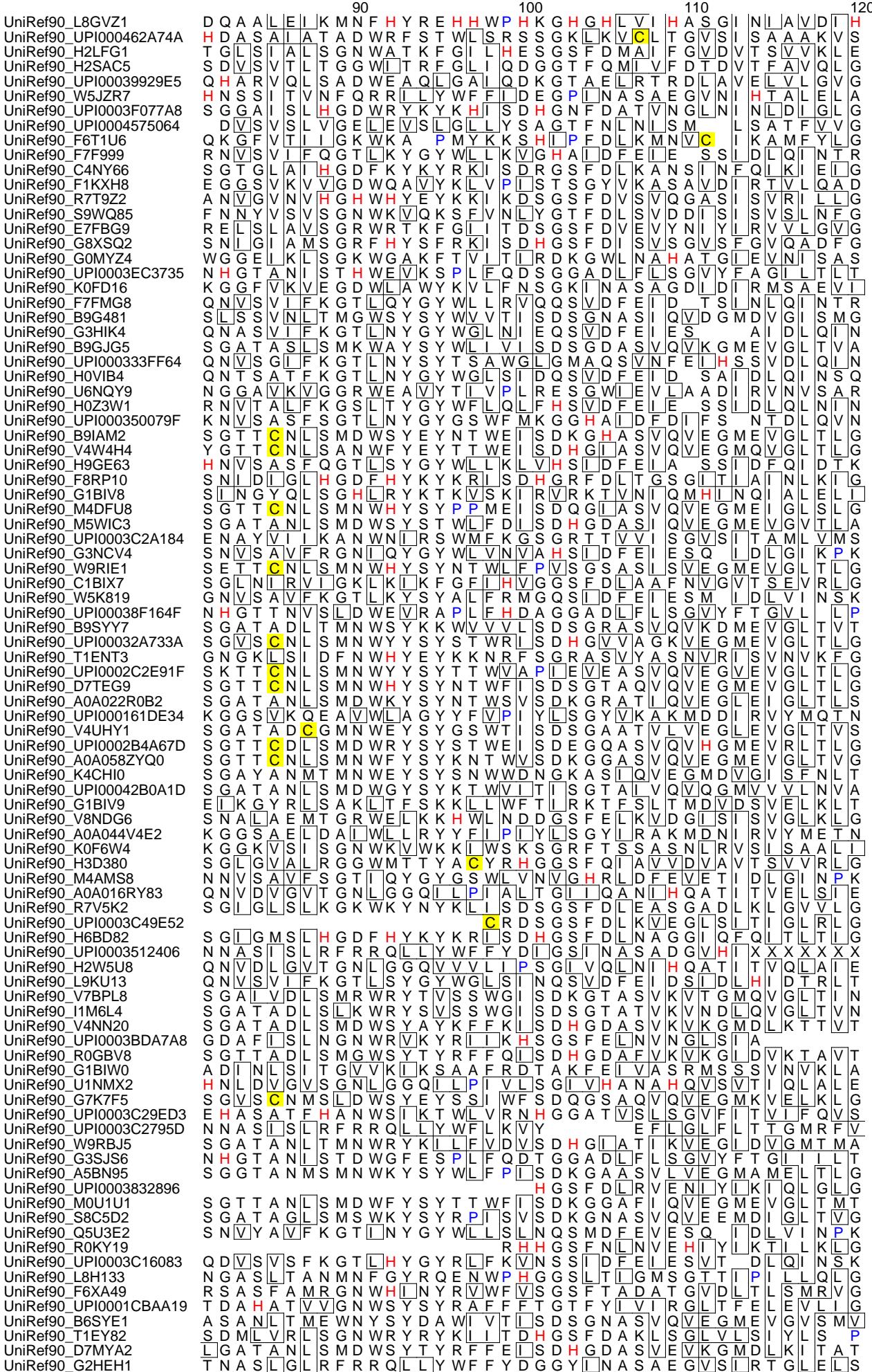
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 G I V C R I T K P A L L V L N Q E T S K V I Q T A F Q R V N Y P D I K G E  
 I S G V I S D K G L E Y A K E L L I E K G I A S I V M L Q L P E I E N S  
 I S V V I S D K G L D F A K D I L I D Q A V A S I V V Q S Q L P Q I E K T  
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130 140 150 160

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U n i R e f 9 0 \_ L 8 H 1 3 3 R D R N G R P T I S S S S C S A D I G N M T R V S G G S S L S F L Y N I L L R  
U n i R e f 9 0 \_ F 6 X A 4 9 S D E L G Q P T L D T G A C L A T L D S L D I E L T G G K S W L Y S L F S G  
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UniRef90_G7K7F5	D H S S L   N V T F V   N N
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UniRef90_UPI0003C2795D	E H V G I   D Y S   L L S D P V V T
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UniRef90_G3SJS6	N Y T   L L D Y S   L I S S P E I T
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UniRef90_S8C5D2	E D A A L   N V T F V   G D P K L S
UniRef90_Q5U3E2	G G I   G V   D I S   L V T S S P V I K S
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UniRef90_L8H133	G   L   E   L D Y S F V A P P T
UniRef90_F6XA49	T T T S   D   L   A   L S R P P T T A S
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UniRef90_T1EY82	S S L T F D Y Q L   H D A P A I
UniRef90_D7MYA2	D A A A V   N L T F T G N P V
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10 V N L S E S G L S Y V K D V L L E Q I L E E V T P L V L P D M K T R

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

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

P G F K A R I T Q K G L D F F R D I G M E T I Q K H I R E M H I P S Q H G S

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

T Q N G L D Y V R K L G V P F I E K E L L S L S I P D V K G T

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

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

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

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Y P G I R A R L N P R T F Q Y A S G L I A E L L N Q E I K R A R I P P I T

V T L S E S G L T Y A K E M L V N Q L L E E I T P L M L P D I K T

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

P G I R A R A N A R A F Q Y A S A L A A G I V S S Q Q I G R A Q I P D I S Q C C

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

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

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

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

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

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

P G A V V R L N Q E A L D Y G S R I A P D V L R K V L N K A S F E N L E D K

P G V R A R V T Q H G M D L V A R L V I T D G L M Q V V P G I D I P D I T A S R

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

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

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

Y P G F K V R V N K R A F D Y T S A L V Y Y V L D Q Q I P S S I P D I N Q T

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

D P G A L L R L G M D I M N Q V Q S A M D E S H L E K M A A E A G K K Q

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D P G A L L R L G M D I V N H E V Q S A M E E S L E K M A A E A

D P G A L L R L G M D V M N H E V Q S A M D E S H I L E K

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P S T V V R I N Q A A L S Y V S D V G K A T L Q Q A L R V T V P P L L D

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M K D V G V S W A M K R V R D I K L P D V S D S

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

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50            60            70            80

E G S F Y Y N I S E V K V S E L Q L T S S E L H F Q P E Q E L M L Q I

[IN] S P I G R [L] D V E V S H N E L S W A N V S R S D V V L G K K G I T V F V  
[AR] S P V G T I F Y E L E N I K L S N [K] I P T Y S M K P G T S G L T I S L  
[IK] E V F G E A T I C N H V S N Y R S P Q I N I F P A P P N H I V L N L  
[A] S P I G P D Y D A T N R I V S F G L P A S V D P N I P S K G L A L H V  
[V] D S P I G T I D T R I S H E L S G A N V S Y S D V D L G K T G I T V F A  
[AK] T P V G S I S Y E I T S A I K N V L I P K S N L T V S A E S G L T V Q C  
[Q] A K F H Y N I S N V K V T H L Q L N F S E L H F Q P E H F L A F H I  
[K] G H F Y Y N I S D V R V T Q L H L I S S E L H F Q P D Q D L L L N I  
[IN] I P F I G G I E A T L S N I T L L E I N V S S T Y I R P G D T G V V I V A  
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[KS] S L A F V G K I I Y G L D N Q L Q T H N Y I S K Y W P P E Y S L E L I E P N M F S W T M  
[I] D T G E V A I H N A Y I S K Y W P P E Y S L E L I E P N M F S W T M  
[P] I E N G E V S I Y N L Q M S K Y W A P Q Y A L D M S E P S T F A W S M  
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[HT] D S P L G R V D M E I S H I E L S G A N V S Y S D V D L W K T G I T V F A  
[LP] K L N G C V Q I Y N L Y I S R Y R R P Q V V Y P A P P N R I V L Q A  
[VP] Q V N G C V R V Y N M Y I A Y Y R C P N V A I Y P M P Y G R I V F S I  
[TQ] P M I E G C I V L Y N A Y V S R Y R C P Q R V V V F K A P N H L V L Q V  
[V] D A G Q V S S Y I Y D A I V T K Y W A P P E Y S E L E L T P P S M F S W S M  
[VR] V P F L G G I R V A V S N T L F H L D V G E D S A I R P G D S A L V I V A  
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[K] G H F Y Y N I S D V R V T Q L H L I S S E L H F Q P D Q D L L L N I  
[IE] T G Q V S I Y D A Y V S K Y W S P P E Y S L E L S P P D M F T W S M  
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[PE] V N G C A F L T N I L I T N Y R C A Q H V L F P V S H N E I A L S I  
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[L] R E V N G Y A H L T N I M I I N Y Q C P H I E L F P I S H N Q I G L K I  
[GE] V P Q V T R I Q M L S V H V P S L H L Q F I P E F G V H L S A  
[KG] E G L R Y K L T N V K I T N F M K P T F D I N L K E G T T I A V Y L  
[VE] Q A S A E V T I C N I Y V S N Y R S P D C V I Y P A A P N L I V F S I  
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[VE] W P I G L V D V E L K N I V I V Y A N V S S S N V D L G N T G I W F N A  
[KA] V L L L G Q V Q Y R L H N I Q I N H L S I A S S Q V E L V E A K T I D V S I  
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[E] G H F F Y N I S E V K V T E L Q L T F S E L H F Q P D Q E L V L Q I  
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[MV] M V A S G I V L H G V A V D D S T V A V G D D G I V V A A  
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90                    100                    110                    120

	T	D	A	S	L	G	L	R	F	R	R	Q	L	L	Y	W	F	M	K	I	M	R	T	H	G	S	F	R	V	N	V	K	G	L	S	A	S	V	G	L	K	G																																							
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130 140 150 160

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L N

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10                    20                    30                    40

P G **L**E F R **I**N S K G F **L**Y A S **L**LA G P **I**D D E **I**R R **I**K L M P S K Q **C**  
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50            60            70            80

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

90            100            110            120

UniRef90_E1GM86	Q N L D E I   R G N I N G E □ G P   N L N T V Y T R F H Q V S A T V Q L T V H		
UniRef90_B9SSH9	S G T T C N L S M M N W Y Y Q Y S T W E I A D K G R A S V Q V E G M Q V G L S L G		
UniRef90_UPI000443B233	A N F T F E V R A K K P L E L K M P V A L M A D M Q V F Q S A I		
UniRef90_G3W1C5	A H V N M K V F L K K N L L K L Q V G V N I S A D V V I S Q A T I		
UniRef90_UPI000328AE51	A N F T L K V F R G A E P L G L T L P V G L L A D A R V A R A S I	R L Q T K F I	
UniRef90_A0A044T2G5	D R M D I A L A G R F A G T V A L I P P V T G S V T G D L R Q M S		
UniRef90_Q8C1E1	A N F T L K V F S V P E P M E L V L P V D L L A D V H V A R D S	S A T I Q L T	
UniRef90_A0A044RJP9	R N L D F E M K A N V D G E I G M I P V I I N N T V V S V G V H Q		
UniRef90_F6T1T6	K H F G F S L Y R E R N L Q K L R V G I T T E A D I V I S Q Q A A		
UniRef90_A8WFJ7	T N I N V T L L A S F S L L T T Q G E I T G N V P L S F D K T N V E L L L W T G		
UniRef90_UPI0003C2A123	G Q F N L K V T G L S I S V R L Q L G		
UniRef90_H3G1F1	Q N Y D V G I N A N V A G Y □ N M M I P S G L L R I D V H G M V L E V E I S V E		
UniRef90_D2W3N8	P S A H A D M H C N W K Y K K H F V S D H G S A D A H I T I A I S L G		
UniRef90_A0A016S0F6	E N M D I S L N G A F Y G N G G P F Q V E G F V D G S I V G M T V A L T A E F A		
UniRef90_Q17654	L S G Y A Q V S A E W A V E S Q F L H M E G Q I H A Q M T G L I S E I A M Q I T		
UniRef90_H3G1G0	E D I G Y R V T G N I A G R V N V I I P C G I V E N I H G L N L G V E I E I E		
UniRef90_S4RH72	K D L E I V V Q G K V S I Y E Y R S W L L S R L S W Q L E I K S R S S K Y I V P		
UniRef90_A0A016S074	E N M D I S L N G A F Y G N G G P F Q V E G F V D G S I V G M T V A L T A E F S		
UniRef90_T1FM16	M S E S A S I S G R W K Y N Y R F N F F T G S F I G L I E N I E M S L K M N V E		
UniRef90_UPI000328DDF9	S T G M T I T G K S F M G G N M E I T V V L N I T A T D R L L		
UniRef90_UPI000443C24D	Q N F G F T L N F D A S I N L Y F V E P G T S R E F I F T G A A V N M E V G L A		
UniRef90_H3DXU7	E N M A I S L A A A N F H G T A Q H N L F K V E G T I N G L T I A L T S E L Q T T		
UniRef90_A7RVS9	K D A S L H V S A N W A Y R E Q P W P H S G T C D I S V V G G L S L G M L F D I S		
UniRef90_Q23365	E N L D I G L G S E F T A N A V P I V E G S L V G Q I T G M T V A L T T E L L		
UniRef90_K713C1	Q N V D L G V T G N L G Q Q V V V L I P S G L V Q L N I H Q A T I T V Q L A I E		
UniRef90_I3MWD6	S T G M T I T G K S F M G G N M E I I I V L N I T A T D R L L		
UniRef90_G3HE82	A N F M V K V F R V P E P M E L V L P V A L L A D V H V A R D S I		
UniRef90_UPI0003314844	A N F T F R I F R G P E P L E L K L P V E I M A D A Q V T Q S S I R	P	
UniRef90_A8Q2E6	K G G S V K Q E A V W L A G Y Y F V V P V S S Y N		
UniRef90_D2H8Z3	S T G M T I T G K S F M G G N M E I I I V V L N I T A T N R L I		
UniRef90_Q18869	Q N M D I G L L G D L S G S V N I I V V I P T G Q V E I L A Q G L T F H L E S S I E		
UniRef90_G5BR74	Q N V S V V F T G T L N Y G Y T S A W G		
UniRef90_A8PPQ6	K N L N I G L I G S L S G E V N I M K L E G E A E V L A Y G V N F Q L E S A L E		
UniRef90_UPI0003C2B236	Q N L K A S F K G T L N Y G Y T G A W P Q A V A R F T H A C V W V F P P L T V G		
UniRef90_F6WP45	M R G Q W S V N Y R V W F T G S F T A D A S G V D L T L S M R V G		
UniRef90_UPI0003F0934D	A N F N F R V L R V P E S V T L T M P V I L S A D V Q V T Q G P I Q		
UniRef90_U6P216	S N L N V T V L A S F H L D T P T G E L T G S S P L S F D R T N V E L L L W T G		
UniRef90_UPI0002739B21	S T Q I T I T G K S F I G G T M E I I I V V V N I T A T N R L S		
UniRef90_Q93796	S L A S F R A S A Y A E I S V F V W S Y E G D F T A E L R E L S I E S E L H F		
UniRef90_L5JXN9	A N F T F K V F R V P E P L E L V L P V V L V A D A R V A P D S I R		
UniRef90_U1LS92	E G G S V K V V G D W Q A V Y K L V V P A D I D V D G K		
UniRef90_B4E209	A D T R V T Q S S I R		
UniRef90_A0A044T7R7	K N L N M G L I G N L S G E □ N I I K L E G Q A E V L A Y G V N F H L E S A L E		
UniRef90_F7FB16	S T R I T I T G K S F I G G T M E I I T V V V N I T A T N R L Q		
UniRef90_A0A016V7R7	T D S R V K R K A K W V E M E M K Q I W T S G W V N V Q T S D I R L N V S G K		
UniRef90_UPI000393CBAB	Q R A R V X E F V N L T G D G L C R P L W A G G W D A N V T G K P T I T		
UniRef90_K7VGG3	S G I T A N I S M H W S Y C Y D S W E I T D S G T A S I L V Q G M E V G I T M V		
UniRef90_UPI00046E0A17	T G D S D N V D A S V Q V I E C M E V G V T L V		
UniRef90_F2UG12	T G V I I L A N M N W R Y H D G L I K I H G T A K D V F N Q T S L N I A L A L T		
UniRef90_D2W423	S N A Q A S L H C N W H Y R E D S W P H S G S A D A S V A I D I T L T A Q I V		
UniRef90_UPI000462CE0F	G S S I S L D I R V G		
UniRef90_V6TQ26	R D G L M Q L S V R L E A K I T G I S G T V D C T F T L K D F G A D I S L R L G		
UniRef90_J9EQ40	R N F D I E I K G D I N G E I K P I K L N G T V Y T R I H Q I S T T V Q L T I H		
UniRef90_A0A016SAP9	S N L N V T V L T S F H L N T P S G E L T G S S P L S F D R T N V V E L L L W T G		
UniRef90_D2V2V7	Q N A Q L T I N A N W A Y R Q Q S W P H S G S G T V V V S T N T I Q I T V L I T		
UniRef90_J91ID3	V N L D F A M Q F N L Q S K P A W I Q D K G Q G T I S I K D L T I A V V S L A		
UniRef90_V6TG75	R D G L M Q I S L R L K A V I T G L T G V D C I F T L K D F G A D I S L R L G		
UniRef90_T1YEY83	S N G S I S L G T N W A Y G T K K K V F A D G N V K I E A K Q I N L E L L V K		
UniRef90_W2T0X1	H S G Y A Q V T A E W E L K S E L L H L R F P L N G T V L M Q M T G L I S E V G G		
UniRef90_V6U3N7	R D G S M Q L S V R L E A T T G I S G T V D C I F T L K D F G A D I S L R L G		
UniRef90_U1M4R8	I G G S A K L N G K Y H A V Y K T V R E G Q F T V Q M E N F D V N L R I K F A G		
UniRef90_V6TJ35	R D G L M Q I S M R L K A T I T G I T G T V D C I F T L K D F G A D I S L R L G		
UniRef90_U6PES4	E N M D I S L A G A F Y G T G G P F Q V E G F V D G S I T G M T V A L T A E F A		
UniRef90_UPI0003941625	K D M N F S L E I Q R E A K V P F T Q I E G T T T L T A E G V T A T I T V R M N		
UniRef90_U6P4R0	P F N L T Q A E V Q A E G L S V Q L D S A M E		
UniRef90_E1EXE6	R D G L M Q L S M R L K A T I T G I T G T V D C T F T L K D F G A D I S L R L G		
UniRef90_U1LUD5	R N L N I G M I G D L S G E V N I I V V P E G Q V E V L A E G V D F R L E S A L E		
UniRef90_A0A059BLJ1	M N W Q Y S Y S T W P I S D E G S A F V Q V K D M E V G L T T L D		
UniRef90_R9QR36	S G L N A T V T A V Y R V D S P S G Q S T G H V P L S F D T N V V E L L L W T G		
UniRef90_I3NAVO	A N F T V K V F C V P E S L E L M V P V T L Q S D L R V T Q S S I		
UniRef90_UPI0003501A02	E S S L H I K G I L L F A N V D I K V D S G I T A D V S V T		
UniRef90_A0A016SW12	K N L D L G F I G D L S G A V N I F N L T G Q A E V Q A E G L S V H L D S S I T E		
UniRef90_A0A044SP55	S H L N L S I G T F F K F S S P T G D F Y G S A I L Q I D S A K I K S Y F V A		
UniRef90_J9EI55	H G G S A Q L S S S Y R A V Y R T I R E G Y L E A N M S S F V I T L K L K I V A		
UniRef90_J9EM00	S G G S I A I S G S W N A A Y R L W T M Y I S G D L S V K I S G I K T L T R V N		
UniRef90_M0YZP7	S G I T A N I S M A W S Y S Y Y S W Y F S D S G T A S I L V Q G M E V G T T M E		
UniRef90_A0A016UKL7	Q N M N L S V S A V G S G R V D D V P V N G V I D I R T N R F Q L D V N I E I K		
UniRef90_UPI0003D0DBBE	L T K I T I L A G R S F L G G N M E I S L V A N M T A K N K L S		
UniRef90_E1F6A6	R D G L M Q L S M R L K A T I T G I T G T V D C T F T L K D F G A D I S L R L G		
UniRef90_A0A044QUA1	H G G S A Q L L S S Y R A V Y R T I R E G H L E A N L S S F V I N L K L K I A		
UniRef90_M1C018	S G A Y A N T M M W E Y S Y S T W T D N G K A S I Q V E G M D I G I S F N L T		
UniRef90_G0MRR3	T L A S F R A S A F A K I E F I T Y D G D F T V Q I K E L S I Q S E L H F		
UniRef90_R0J938	N N A S I S L R F R R Q I L Y W F Y D I G S I N A S A D G V H X X X L R P G		
UniRef90_L9L793	S T G M T I I T G K S F M G G N M E I I I V V L N I T A T N R L L		
UniRef90_J9JAQ5	Q D I S G S I S G T F K F K V L F I T A T G K F K V R L D G C T M S M K V P L I		
UniRef90_E5S3J1	Q N L N I D Y V G T L T A R Y H S E Q Q T V N M V A N I P D L S F N V V V R V		
UniRef90_J9JAB4	Q D I S G S I I R G N F R F K M L F I T A K G K F K V R F D A C T M T M K V P L I		
UniRef90_V6TV81	R D G L M Q L S M R L T A I I T G I S G T V D C I F T L K D F G A D I S L R L G		
UniRef90_L8GY12	A D G G A K I A A N F A Y G I P L V N L N G T G T A K I A V S K L S V Q L Q L G		
UniRef90_V6T7A8	R D G L M Q I S M R L N A T I I R I N G T V D C T F T L K D F G A D I S L R L G		
UniRef90_UPI0003EBF3FB	K E M T F S L E I Q R E A K V P V F K I N G S T T L I A E G T S A T L I V K M N		
UniRef90_U3I6G4	L V R M T I A G R S F I G G N M E I K V A A T A S A R L A		

UniRef90\_E1GM86  
 UniRef90\_B9SSH9  
 UniRef90\_UP1000443B233  
 UniRef90\_G3W1C5  
 UniRef90\_UP1000328AE51  
 UniRef90\_A0A044T2G5  
 UniRef90\_Q8C1E1  
 UniRef90\_A0A044RJP9  
 UniRef90\_F6T1T6  
 UniRef90\_A8WFJ7  
 UniRef90\_UP10003C2A123  
 UniRef90\_H3G1F1  
 UniRef90\_D2W3N8  
 UniRef90\_A0A016S0F6  
 UniRef90\_Q17654  
 UniRef90\_H3G1G0  
 UniRef90\_S4RH72  
 UniRef90\_A0A016S074  
 UniRef90\_T1FM16  
 UniRef90\_UP1000328DDF9  
 UniRef90\_UP1000443C24D  
 UniRef90\_H3DXU7  
 UniRef90\_A7RVS9  
 UniRef90\_Q23365  
 UniRef90\_K713C1  
 UniRef90\_I3MWD6  
 UniRef90\_G3HE82  
 UniRef90\_UP10003314844  
 UniRef90\_A8Q2E6  
 UniRef90\_D2H8Z3  
 UniRef90\_Q18869  
 UniRef90\_G5BR74  
 UniRef90\_A8PPQ6  
 UniRef90\_UP10003C2B236  
 UniRef90\_F6WP45  
 UniRef90\_UP10003F0934D  
 UniRef90\_U6P216  
 UniRef90\_UP10002739B21  
 UniRef90\_Q93796  
 UniRef90\_L5JXN9  
 UniRef90\_U1LS92  
 UniRef90\_B4E209  
 UniRef90\_A0A044T7R7  
 UniRef90\_F7FB16  
 UniRef90\_A0A016V7R7  
 UniRef90\_UP1000393CBAB  
 UniRef90\_K7VGG3  
 UniRef90\_UP100046E0A17  
 UniRef90\_F2UG12  
 UniRef90\_D2W423  
 UniRef90\_UP1000462CE0F  
 UniRef90\_V6TQ26  
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 UniRef90\_D2V2V7  
 UniRef90\_J9I1D3  
 UniRef90\_V6TG75  
 UniRef90\_T1YE83  
 UniRef90\_W2T0X1  
 UniRef90\_V6U3N7  
 UniRef90\_U1M4R8  
 UniRef90\_V6TJ35  
 UniRef90\_U6PES4  
 UniRef90\_UP10003941625  
 UniRef90\_U6P4R0  
 UniRef90\_E1EXE6  
 UniRef90\_U1LUD5  
 UniRef90\_A0A059BLJ1  
 UniRef90\_R9QR36  
 UniRef90\_I3NAVO  
 UniRef90\_UP10003501A02  
 UniRef90\_A0A016SW12  
 UniRef90\_A0A044SP55  
 UniRef90\_J9EI15  
 UniRef90\_J9EM00  
 UniRef90\_M0YZP7  
 UniRef90\_A0A016UKL7  
 UniRef90\_UP10003D0DBBE  
 UniRef90\_E1F6A6  
 UniRef90\_A0A044QUA1  
 UniRef90\_M1C018  
 UniRef90\_G0MRR3  
 UniRef90\_R0J938  
 UniRef90\_L9L793  
 UniRef90\_J9JAQ5  
 UniRef90\_E5S3J1  
 UniRef90\_J9JAB4  
 UniRef90\_V6TV81  
 UniRef90\_L8GY12  
 UniRef90\_V6T7A8  
 UniRef90\_UP10003EBF3FB  
 UniRef90\_U3I6G4

130                    140                    150                    160

UniRef90\_E1GM86  
 UniRef90\_B9SSH9  
 UniRef90\_UPI000443B233  
 UniRef90\_G3W1C5  
 UniRef90\_UPI000328AE51  
 UniRef90\_A0A044T2G5  
 UniRef90\_Q8C1E1  
 UniRef90\_A0A044RJP9  
 UniRef90\_F6T1T6  
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 UniRef90\_H3G1F1  
 UniRef90\_D2W3N8  
 UniRef90\_A0A016S0F6  
 UniRef90\_Q17654  
 UniRef90\_H3G1G0  
 UniRef90\_S4RH72  
 UniRef90\_A0A016S074  
 UniRef90\_T1FM16  
 UniRef90\_UPI000328DDF9  
 UniRef90\_UPI000443C24D  
 UniRef90\_H3DXU7  
 UniRef90\_A7RVS9  
 UniRef90\_Q23365  
 UniRef90\_K713C1  
 UniRef90\_I3MWD6  
 UniRef90\_G3HE82  
 UniRef90\_UPI0003314844  
 UniRef90\_A8Q2E6  
 UniRef90\_D2H8Z3  
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 UniRef90\_A8PPQ6  
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 UniRef90\_F6WP45  
 UniRef90\_UPI0003F0934D  
 UniRef90\_U6P216  
 UniRef90\_UPI0002739B21  
 UniRef90\_Q93796  
 UniRef90\_L5JXN9  
 UniRef90\_U1LS92  
 UniRef90\_B4E209  
 UniRef90\_A0A044T7R7  
 UniRef90\_F7FB16  
 UniRef90\_A0A016V7R7  
 UniRef90\_UPI000393CBAB  
 UniRef90\_K7VGG3  
 UniRef90\_UPI00046E0A17  
 UniRef90\_F2UG12  
 UniRef90\_D2W423  
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 UniRef90\_V6TQ26  
 UniRef90\_J9EQ40  
 UniRef90\_A0A016SAP9  
 UniRef90\_D2V2V7  
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 UniRef90\_V6TG75  
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 UniRef90\_W2T0X1  
 UniRef90\_V6U3N7  
 UniRef90\_U1M4R8  
 UniRef90\_V6TJ35  
 UniRef90\_U6PES4  
 UniRef90\_UPI0003941625  
 UniRef90\_U6P4R0  
 UniRef90\_E1XE6  
 UniRef90\_U1LUD5  
 UniRef90\_A0A059BLJ1  
 UniRef90\_R9QR36  
 UniRef90\_I3NAVO  
 UniRef90\_UPI0003501A02  
 UniRef90\_A0A016SW12  
 UniRef90\_A0A044SP55  
 UniRef90\_J9EI5  
 UniRef90\_J9EM00  
 UniRef90\_M0YZP7  
 UniRef90\_A0A016UKL7  
 UniRef90\_UPI0003D0DBBE  
 UniRef90\_E1F6A6  
 UniRef90\_A0A044QUA1  
 UniRef90\_M1C018  
 UniRef90\_G0MRR3  
 UniRef90\_R0J938  
 UniRef90\_L9L793  
 UniRef90\_9JJAQ5  
 UniRef90\_E5S3J1  
 UniRef90\_J9JAB4  
 UniRef90\_V6TV81  
 UniRef90\_L8GY12  
 UniRef90\_V6T7A8  
 UniRef90\_UPI0003EBF3FB  
 UniRef90\_U3I6G4

170            180            190            200

This sequence alignment displays a set of UniRef90 protein entries. The alignment is centered around positions 170, 180, 190, and 200. The sequence is shown in two-line notation where each row represents a different protein entry. Most positions are highly conserved, with many entries sharing the same amino acid at each of these four positions. A few positions show more variation, such as at position 170 where some entries have 'C' and others have 'P'. Position 180 shows a mix of 'C', 'P', 'S', and 'T'. Position 190 is mostly 'C' or 'P'. Position 200 is mostly 'P' or 'C'. The alignment highlights the structural or functional significance of these positions across the diverse set of proteins.

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UniRef90\_E1GM86  
 UniRef90\_B9SSH9  
 UniRef90\_UPI000443B233  
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UniRef90_E5RYB4	M N M G P F S G E I L D G K V E K F K E G N V Y I Q P V E P N G L A V E M		
UniRef90_W2TQ45	H R L P G D Q G V I Y I S R V K I S S F I G D L S G A V N I V V		
UniRef90_U6P0A6	V T F P S L P T A G L A S M Q L R L F D I P E F D I S T A P P N L V I V G L		
UniRef90_UPI0001E47BFB	F S A S L T N E V T F G L I S T R A I G Y D I F K S R L F I A P G Q G I I W M G		
UniRef90_A0A016UIH7	D T M L D Y K V S D I F L E D F Q I P K S G V S F K D N N G I H L L V		
UniRef90_UPI0003F10D30	T L R I V E L T L P R I N L K L V P G I G V H L D L		
UniRef90_H9G8T7	R G L L S S S T I I T G L H L E R S W L P T L S I A L L P G I G M Q L V		
UniRef90_F1P1Y2	W S G G V F Q P		
UniRef90_W9XC10			
UniRef90_UPI00044224A7	D P S L Q I F S G E I L D G K V E K F K E G N V Y I Q P V E P N G L A V E M		
UniRef90_A0A024N6P7	N I T N A T I S E F I S P N L K L K P K S P H G I V I E A		
UniRef90_UPI00033309F0	L G Y G G I F G V V Q Q L S G L K V E E L T L P Q V S L K L L P G V G V Q L N L		
UniRef90_A0A016VXV8	D T M L D Y K V S N I A L N D I S I P K S G V S F E D N N G V H L R M		
UniRef90_A0A016VXV8	D T M L D Y K V S N I A L N D I S I P K S G V S F E D N N G V H L R M		
UniRef90_T5A6Y1	V N K L F K Y K V W N G H F E H F S I P K T G V T F E N N N G V H L R I		
UniRef90_U6NHH9			
UniRef90_G1PUL9	X K S I G K L T Y G L T D I Q I S N L S I E N N E V D F K E D D A V D L A I		
UniRef90_UPI0003D087E6	Y H G M D I N I N S I Q I V D F I V P K L E V E R L S E T K F R F F T		
UniRef90_U6PVQ2			

90                    100                    110                    120

UniRef90_G3MWR2		M G G N M E I	I V V L N I T A T N R L L
UniRef90_H3FYG8	V I P R A F I M G Q A T F H F I T D L Y N D H F Q L T I E N K T V T I E S D F S		
UniRef90_UPI0003B45BE2	Q N F G F T L H F D T T F N L C L F Q L R T A P E F I L R G A A A A N M E V G L V		
UniRef90_G1N6M8	S V R L D L S G N C L T D L L S E V I V I S L D V	T I T T N I L K C S	
UniRef90_H3F316	R N V D I G L I G D L S G N T N I V V P T G E A E I L A E G L D L T I E S E I E		
UniRef90_UPI00038334AC	G A K L E L G G N C L V G L L S E L I D V L V D V	A V E V N I T A N I K C	
UniRef90_UPI0003D0A84F	Y T F G I R V A L N G K S L L G F L D I A V E V N I T A R V R L T		
UniRef90_J9ICG7	S D L K G T V S G T F L Y K F L F L Q T K G K F N V R I D Q G A C T L K I K L I		
UniRef90_A8XD57	E N L D I G L G S D F T A N A V P I V V E G N L M G T I S G M T V V A L T T E L L		
UniRef90_J9AH01	K G G S T K Q E A V W L A G Y Y F V P I Y L S G Y V K A K M D D I R V Y M Q		
UniRef90_A0A016RTX5	R G V Q F R A S V R G R V R K W I R I A R M S G N I I A K T D S A T M D I K L V		
UniRef90_J9IPM9	E D I S G S V S G T F K F T M L F I T A S G K F N V R V D G C T M G T K M P F I		
UniRef90_T1FSB2	N D I G V Q S L G D W K Y N L G L L S D R G T Y E L S M M G M A F Q F S A N I V		
UniRef90_F0YLS2	S N L K L S V Q G H V Y V G P I P S L S G E A S T N A D G T S A S V A L S		
UniRef90_UPI00038BDC18	A N F T V K V V F C V P E S L E L M V P V T L Q S D L R V T Q S S L		
UniRef90_R7V9N8	A G F G V S A E G N W R Y K Y R K I R D S G R Y R A S A G G V A L S T T V A D		
UniRef90_W5HSY3	M A W S Y S Y Y S W Y F S D S G T A S I L V Q G M E V G T T M E		
UniRef90_UPI000223F3AD	S T K I F I S G K S F T G G K M E I S L V L N I T A T D R L L		
UniRef90_U6NZV9	E N M D I S L A G A F Y G T G G P F Q V E G F V D G S I T G M T V T A E F A T S		
UniRef90_E1GNNS	D R M D I A L A G R F A G T V A L L P I T G S V T G D L R Q M S V R L Q T K F N		
UniRef90_A0A016U0Z1	K G V Q F G A S I K G R V G K W V R I A R M S G E I K A K S E S V N L D V V L A		
UniRef90_A0A016SDFT	N V N F G I A T N L V L R A W I I P F Y A S V R A W S E H A S L D I K L V		
UniRef90_UPI0002B4B302	T K A T A N M S M K W R Y T Y N T W L F E I I S D E G D A T V Q V I Q L		
UniRef90_UPI000388A54D	N T Q V L I E G K S L L A K V L N L Q V D V N I A A R A R L A		
UniRef90_UPI000388A54D	N T Q V L I E G K S L L A K V L N L Q V D V N I A A R A R L A		
UniRef90_H2L3Y0			
UniRef90_UPI00042BF87E	Y T Q V L I E G K G L L G K V L S L Q V D V N I T A R A R L A		
UniRef90_UPI00042BF87E	Y T Q V L I E G K G L L G K V L S L Q V D V N I T A R A R L A		
UniRef90_A0A016V5A1	K N V Q F H A S V R G R V G K W V R I A R M S G D I K A S S D N A G M D I K L V		
UniRef90_E5SB21	D D F D F S F T I S V S T S L R N C P V V T F V H L H C T F S Q S I Q L K L S		
UniRef90_UPI000388A390	R N I S V S T S A I L S G E L R G I K L Q D N V T F R T P S L R L D V A I R I V		
UniRef90_A8XPC9	Q N V A V L F K G T I I Y Y S Y W L L S L H Q S V V D F E I E S Q A D L Y L S V N S		
UniRef90_V9KU71	T I P R A K I E G A A R V A L G F L Y Y N E R I K L T I E N A T V T I E M H F S		
UniRef90_H3ES75	S T G M T I T G K S F I G K N M E I T V V L N I T A T N R L L		
UniRef90_L5K018	K V R N L D F S L R I T V V S S N M I G L R Q T F S V F A S N V G F N I G L S L S		
UniRef90_E5SB11	T H P D I H V D G H W E Y H T L S F Q D D G Q A H V I L S G I H V G L I I R S H		
UniRef90_M2Y3H2	D L Y T R V A L N G K S R R S L L G L L D I A V E V N I T S D V R L T		
UniRef90_K7FIU1	R D G L M Q L S M R I G T T L G T L S G A A D A I F S L H G F G A D L S A R I I G		
UniRef90_V6T8Q9	T G G S L N V G V E Y F H Y L L F T E K G R A N V S F T D I R T N V L A T I S		
UniRef90_H3F492	R D L N F A L Q L Q R E K N V Q F F K K F G T T I F G E G V R A M I L V R M N		
UniRef90_UPI000394260E	K D A S A A F T A K W S Y K P R S E R L S G D F T A I F D E F T Q K L S F M L S		
UniRef90_E5SLV8	R G G L M Q L S M R V G A T L N S L S G A A D A V F S L H G F G A D L S A R I I G		
UniRef90_E1F8H5	K L I N Y H L H T H V R F G F W F I A I S W D I D I Y L K D V F L E N G F T I T		
UniRef90_J9IF65	S G G S V K I K S Q F D A K W A L F K K T G I I D F T A T D L R T S V Q A T		
UniRef90_H3F495	Y T K V A L E G N S L L G F L D I I L V E V N I T A R A R L T		
UniRef90_F6YIX8	H T K V G L H G S G P L G G L L Q L A A E V N V S S R V A L G		
UniRef90_G1T8B0	Q N F D V G I N G Y F D M T T P L V G E S A S G V V K I D L Q G V L L T L E L A		
UniRef90_H3G1F5	G A K L Q L R G N C L V G L L S E L I D I L V E V N I T A N I K C T		
UniRef90_H0Z7K8	L T K V G L H G S G P L G S L L Q V A A E V N V S S R V A L G		
UniRef90_F7FBG2	S M A S W S P P V L F G F L D I A V E V N I T A K V V R L T		
UniRef90_UPI00032892B4	Y T R V A N G K S I I I G F L D I A V E V N I T A V R L T		
UniRef90_G3SPR4	E N L D I G L G S E F I A N A P I V V E G S L D G S I S G M T L A L T T E M L		
UniRef90_K7HC34	S T G M T I T G K R G G A G G G E W P S C I I L T F R L S D W P R T E E A S		
UniRef90_F7IFJ3	E H L H A R L H G L Y R H N V L F I H N T G D F E L S I R D L N A T L G P L L P		
UniRef90_A0A016T8R6	A A E L E L R R G N C L V G L L S D L I D I S V A V N I T A N I K C T		
UniRef90_UPI000398FA54	S T G M T I T G K R G R R R M A F L L A		
UniRef90_F7ID66	V K F R A S I N G K V E V G K T F W G K Y I P L I W M S G G I T V T L D V N L V		
UniRef90_A0A016RUX7	A G L S I Q C A L D W G L S V P L L P A G G S A N A V V N N S K L A L T L Q L Q		
UniRef90_L8HAN2	Y T Q L L V D G N G A A G G L L Q L Q V E A N I T A R V R L V		
UniRef90_U3I5S1	T D F D F V V T G Q L S T I T I L N I P I T G N V I V T G R S I G V S A L L D		
UniRef90_Q20380	T K V G M H C S G P L G G G L L Q L V A E V N V S S R V A L G		
UniRef90_F7H7W0	R N L N M G L I G S L S G E V N I I M K L E G E A E I L A Y G V N F Q L E S A L E		
UniRef90_E1FHT7	V N A S I T V D V D F S V Q K Y V S C S G V V S A F V G G V S V S L D V A I		
UniRef90_G0TTV6	R D G L I Q L S M R V K A K I N S L S G T A D V F V S L Q D F G A D L S A R I I G		
UniRef90_C6LQ68	P Q L N A R G E Y S L K A S S Y F F S V N G P F W M N I T R I H V S C L A E L T		
UniRef90_T1J1N0	D K F S V N F S A N F R Q S L W F I P I T G F C R V T M N D S K L R V G V K L T		
UniRef90_J9I602	H N V S A T T D Y T C K L P C F L A F F G S S V N G K V R G T N A T V F V E V L		
UniRef90_F9WRJ2	Q N V S T D V P L T R F T T T G G F S C D G V F I A K L V N S S L S V T M E V T		
UniRef90_G0TTV5	A G I S T K C K G K Y N L G G F G S D V V I A S V G N S D T P T L H L Q V G G L S		
UniRef90_K0RAM3	T D F D A G Q L G G T I S I I Q L P V V G R V Q V T G V G I S V A A L F D I		
UniRef90_U6P9T1	H G G S A Q L S S S Y R A V Y R T I R E G H L E A N M S N F L I N L K L K I A		
UniRef90_E1GPK0	Y Q G E V K I S I L E S I T T N M I V A		
UniRef90_V8PA17	K N L E I H L S T N I R G P K R D G V A K T E L K N V N G E F V F T		
UniRef90_E5RYB4	P F N L T G Q A E V Q A E G L S V H L D S S I E		
UniRef90_W2TQ45	Q N S T I S V T A T G T G H V D D V P L N G P L E I R V N R F Q M E V G V E V K		
UniRef90_U6P0A6	S H L N L S I G T L F K F S S P A G D F Y G S A V L Q I D S A K V K S F F V V A A		
UniRef90_UPI0001E47BFB	T G L Q F R A T A K V A V G V S R P L K A G M K G D V R V N C D Y A E L D L K L E		
UniRef90_A0A016UIH7	H T K V G L H G S G P L G G G L L Q L E V E V N V S S R V A L G		
UniRef90_UPI0003F10D30	Y T R V A L N G K S F L G L L D I A V E V N I T A V V R L T		
UniRef90_H9G8T7	V T V H L D L S G N C L M G I L S E V I A I S L D V T I T S N I K S T S F E L		
UniRef90_F1P1Y2	Q D L G F W I R G H A G L V H F A D E G I A S F Y L D E R G M D I T L D L E I G		
UniRef90_W9XC10	T S V P E P L H L M L P M A L L A N T P V N Q G S I		
UniRef90_UPI00044224A7	T N G S L K S H S F F T T F L P F K T V T V T G E A D V N A S N F I V K L E M D S		
UniRef90_A0A024N6P7	H T K V G L H G F G P L G G G L L Q L A A E V N V S S R V A L G		
UniRef90_UPI00033309F0	UniRef90_A0A016VXV8	R N I K F R A V A T I E V G V S V F K A G L K G D V K V N C D N A E L D L V L N	
UniRef90_A0A016VXV8	R N I K F R A V A T I E V G V S V F K A G L K G D V K V N C D N A E L D L V L N		
UniRef90_T5A6Y1	A D V G Y W V R L H W G L L R T M D E G L V S F N L D E R G M D I A L D I E I G		
UniRef90_U6NNHH9	K G F G G S V Q A R L Y L G G K L A R V R V S G D V K V K S S N A E L D V I L N		
UniRef90_G1PUL9	T K V G L E G S G T L G G L L Q L Q A A E V N V S S R V A V G		
UniRef90_UPI0003D087E6	Q N L K A S F K G T L N Y G Y T I C K H G G G M R Y L G L Y S T V Y K T K R E G Q F E A I L D D I R V Q L D V D		
UniRef90_U6PVQ2			

	130	140	150	160
UniRef90_G3MWR2	Q D E E T G <b>L</b> P M F K S E G <b>C</b> E I I L V S	V K T N L P S N M <b>L</b> P K M V N		K
UniRef90_H3FYG8	R D P K E D <b>P</b> V K I N H C F I S D N F	V R A I F D G S I T S W	G P A H S	
UniRef90_UPI0003B45BE2	R N Q N G G L A A D M R V C Q T S A D Q I S V T T L L G N L E E K A R R L A A			
UniRef90_G1N6M8	S F E S G A V Q V I A D D C F C <b>C</b> V L G A	V R I K L L P G	L L S L S V H D	
UniRef90_H3F316	R S P E G S A R V S T L Y C A S S I R A V E V N H N G G V F G L A V T V F K A			
UniRef90_UPI00038334AC	K N F E S G T V Q V V T E D C L C I L G A I R I K L L S G L L S L S V N E			
UniRef90_UPI0003D0A84F	M D G T G Y P K L R V E N C D A L L G N I K V X L L R G L L P I V D N L L A R			
UniRef90_J9ICG7	G Q S V N G R P G I D V G Y F N L H I S K I H V D L S G S V L A D I S D T F V A			
UniRef90_A8XD57	T D V T G K M N A V V R N C S A L I A N S H I T I N P G P M G I F V K T F E P			
UniRef90_J9AH01				

UniRef90_A0A016RTX5	W D D F K F I P T V T M N S	N V R V D F T H N L K R W L	N F L R S	
UniRef90_J9IPM9	I Q N Q D G R P G I D V V D F E F E I N K I H I D L S G G F I A D I A D P F I A			
UniRef90_T1FSB2	K V P G E A F D L Q L G D C N F T R G Q P D L Q F G G S P G C M L L Q I F Q D			
UniRef90_F0YLS2	V T A A N G V P A L G L G S C S A D V Q I A D I A V N V G V L D G L V E V I A D			
UniRef90_UPI00038BDC18	G T P K I S I S T F F P H F G R A T V L D D N K K Q G P L L Q T F S P			
UniRef90_R7V9N8	V D E N G K I S L R Q T A C A G N V D G L R M K L R G G A S W L Y N M F L K			
UniRef90_W5HSY3	I K N Y N G S L A L N A T Q C G C S V K D L V I S L D G G A S W F Y Q G F I N			
UniRef90_UPI000223F3AD	M D N D T G L P V L Q S E G C V V V L V S V K T N L P S N M L P K M V N K			
UniRef90_U6NZV9	L D G T M G V Q D F R L V D			
UniRef90_E1GNNS	R A H D G L I E V K V V G C S T I V P Y S H F S I S			
UniRef90_A0A016U0Z1	W N D F K F V P T V N M D S	N V R V D F T H H L R N L N F L R S		
UniRef90_A0A016SDFT	W N D F K L I P Y V S M H S	S V H I H I N H G L L N L M R R		

UniRef90_UPI0002B4B302	Q D D M G A P K L I V E D C K T Q L V N V R L L N V F P V R P A V L N			
UniRef90_UPI000388A54D	Q D D M G A P K L I V E D C K T Q L V N V R L L N V F P V R P A V L N			
UniRef90_H2L3Y0	<b>L</b> Y C G K G K V A A D T S D C Y L R F H K L R L H L Q G D K P N W L K K L F T D			
UniRef90_UPI00042BF87E	Q D D M G A P K L I V E D C K T Q L V N V R I L H N V L P L H P L G N L F P G			
UniRef90_UPI00042BF87E	Q D D M G A P K L I V E D C K T Q L V N V R I L H N V L P L H P L G N L F P G			
UniRef90_A0A016V5A1	W D D F K F T P S A T M D S N V H I S F T H	N L K R Y L N F L R G		
UniRef90_E5SB21	T S K Q I Q V T A D Q C S F R F A T S D V E V A E Y D C K K L T N I R N			
UniRef90_UPI000388A390	T D Y S A G V S Q V V I E D C Q S L L G P F D I R R L L S G L L P I S V N G L			
UniRef90_A8XPC9	M K N S G G N P A L K M E S C K I I N N Q G I K L V T K P M D P R N G K S I A D			
UniRef90_V9KU71	<b>L</b> A C D R G R V A V T I S D C F L N F D K L L I R L Q K D E T S W I Q Q L F T D			
UniRef90_H3ES75	R D P K A N L M K K E H C S I N E P R L T A E F D G R G I N W F R T F I N K			
UniRef90_L5K018	Q D E E T G L P V F K S E G C E V I L G S V K T N L P S N M M P N V I N K F L D			
UniRef90_E5SB11	S D S E G N L N L Q V G D C Q F A M R K V T L V D E V K G L R I F S N I A R S			
UniRef90_M2Y3H2	L E Q E Q E L P H L G V R K C I V S V G E V R F R F A G T K A S W L Y N L L S T			
UniRef90_K7FIU1	M D G T G Y P R I L V L E N C D T L L D G I K I R V L R G L L P I V D N L L A R			
UniRef90_V6T8Q9	E D F D C G L F E F A N Q V S K L L D V D A V G L D T I G N V V A M A L Q T M A P			
UniRef90_H3F492	T N M S R P H F D I P W C E A K L G K S E I R A W L S R R L H			
UniRef90_UPI000394260E	Q N P K G H L N V E I G K E D C K I N A D S I R T K S T G F V G K V L D			
UniRef90_E5SLV8	R H T D G S I I Y A S N M Q C N F T S K K I K F S L L G R G S L I N R L N K N			
UniRef90_E1F8H5	E D P D C F H F G L F E F A N Q V Y I S R L D A D V I G S V V A T V L Q T M V P			
UniRef90_J9IF65	G N S H T G A P S L T L Y E T S L E L G D S Y Y R M S G N F I M W F T N L L L K			
UniRef90_H3495	V R N K N S R P Q I E V K H C A N N V G R A			
UniRef90_F6YIX8	Q E A S G V P R L V I D D C E M L L G G I N V R L L R G L L S G I L D G L V G			
UniRef90_G1T8B0	M S P R G T P T L V L K R C S T L L G H I S L L G S G L L P A P L F G			
UniRef90_H3G1F5	M E R R A R G P K L T V T A T C S S H D K I D V S M E K G G G G S A A F L K R			
UniRef90_H0Z7K8	N F E S G T F Q V V T E D C L C I L G A I K I V L S G L L T L S V N E L			
UniRef90_F7FBG2	V S P K G T P L I V I K V S C S T L L G H I S L L G S G L L P A P L F G			
UniRef90_UPI00032892B4	M D R T G Y P R L V I E R C D T L L G G I K V K L L R G L L P N L V D N			
UniRef90_G3SPR4	M D R A V S S A D V R C D T L L G G I K V K L L R G L L P N L V D N			
UniRef90_K7HC34	T D I N G R M S A V V R N C S A L I S N S Q V T L N P G P M A I F V K T F E P			
UniRef90_F7IFJ3	G S G R G W G S V K L D C Y S P H T V T V L L S L K Y H I M L P K V V N			
UniRef90_A0A016T8R6	A N I I G G I P Y L N E I S C S C I S H T E D K I I A R G G I L R W L A K K			
UniRef90_UPI000398FA54	N F E S G T V Q V V I E D C L C I L G A I K I N L L S G L L S L S V N E			
UniRef90_F7ID66	F Y L S H G T S L T R V S L C P V R K P A L V H L F T Y C P S S M L P K V V N K S			
UniRef90_A0A016RUX7	W K N K F K T P T V K M D S N V I I G F T S S L W M L Y F L K S			
UniRef90_L8HAN2	K D A D G L A S A A N L T T C T P K I V V S S I E F Q G D F S T F L D L L R T			
UniRef90_U315S1	Q D K S G A L K L V V E N C K T L L G D V N I R V G L L P R P K V P L V E K S			
UniRef90_Q20380	L Q K T N D Q P Y L R F N E C R I E I V S A R V A N M G L L T D T I N Q K F G S			
UniRef90_F7H7W0	M S S R G T P L T L K R C S T L L G H I S L T I K R L K G T Q L S P K Q			
UniRef90_E1FHT7	Q S E T G A A R V S T I F C R T T I Q L M N I E I Y N G G S S K V			
UniRef90_G0TTV6	R V I S Q D G H I N L V V D N S S L L I N K F G L T F M M K S W C M I L M L L Q N			
UniRef90_C6LQ68	D D P D C F H F G L F E F A N Q V Y I G K L D D A I G N V V A T L F Q T M I P			
UniRef90_T1J1N0	S D E A A G R F L I S A V H V N L D I G D L K L H F E N G T W E K L S S N N I I N			
UniRef90_J9I602	T Q K F K D R T I A S L Q V I D A E F N R L T F D L G G G F M A D F I E I F I P			
UniRef90_F9WRJ2	R R D D G R P T I R V D N V S V E L G E V H T S D K S S P L G K I V D A V V W			
UniRef90_G0TTV5	A L T S G R V N T S I S N V T I A V G G L Q M G F E L L G L C W A S S M F Q Q			
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UniRef90_U6P9T1	Q K S V N D E P Y L R M T A C Q I D G G G R V R V A D V G L L T D T I N G K Y Q E			
UniRef90_E1GPK0	T T F A G K L L V S E T I G			
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UniRef90_E5RYB4	M Q P S N G S L H V E M T H C Q A R T N L V H I H Y N N D K D V I V I R P F R			
UniRef90_W2TQ45	R A P N G S A H V S T L S C H S T I R A V D V I N H N G G L Q R L I R L H			
UniRef90_U6P0A6	K N T R G N P G L K V V F C E V			
UniRef90_UPI0001E47BFB	I N V D G H L R T D L Q K C T L S P G N V V M N F S E T D P L L L A N Y Y			
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UniRef90_H9G8T7	M D G T G Y P R L V I D H C D T D G G L L G G L L D G G L L G E E G K T D H L			
UniRef90_F1P1Y2	G T V H T V T D D C F C I L G A V K I K L I S G L L S L S V H D			
UniRef90_W9XC10	R E K L E Q I L T L R G V K V H I H K L D Y K L R K S K L S W L G W L F K P			
UniRef90_UPI00044224A7	G N P V V S I S G C F S L F D R A I V D G H N S T A P V L L A L L Q N			
UniRef90_A0A024N6P7	V L T R N L H P L I K I R K C A M N I R N S V Y H S N S N I L S T M K N			
UniRef90_UPI00033309F0	M S P R G T P I L V L K R C T T L L G R T S L L S G L L P A P P V F G			
UniRef90_A0A016VXV8	V G D Y K I T P V I K M K A G L Q F E F T E S L R A A N L F E S S			
UniRef90_A0A016VXV8	V G D Y K I T P V I K M K A G L Q F E F T E S L R A A N L F E S S			
UniRef90_T5A6Y1	R D R I D E I V S L R R V R V R I H H L D Y K L R Q S K F A C L A W L F K P			
UniRef90_U6NNHH9	W N D F T F T P V I S M S S N L R I D F T R H R R F N A R G			
UniRef90_G1PUL9	I S S R G T P I L V L K R C S T L L G H I T L F S G L L P T P L L G			
UniRef90_UPI0003D087E6	E E R V A A D T S S C Y L T F H K L I E P G W L K R L F M D			
UniRef90_U6PVQ2	F S D E D E H I T V I E K K C I A R I E E V L V Q L I P P M P T Q I V N L L R E			

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 UniRef90\_W5HSY3  
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 UniRef90\_UPI0003D087E6  
 UniRef90\_U6PVQ2

170            180            190            200

The alignment shows a highly conserved region between positions 170 and 200. At position 170, a yellow box highlights a 'C' residue. At position 180, a yellow box highlights a 'P' residue. At position 190, a yellow box highlights a 'C' residue. At position 200, a yellow box highlights a 'P' residue. The sequence is approximately:

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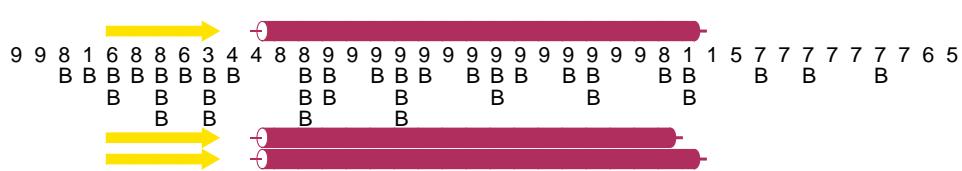
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  R | I E S K I N S E I S D L I C Q T A V N E L L L L V V K Q P | L K D V P E V V S
  F | F I L S N A R | T A T L P G L L C P V I D T V F N V V N I Q Q L | S T L D V V I P V G
  T | V L S H L T A T L P G L L C P V I D T V F N V V N I Q Q L | S T L D V V I P V G
  G | I G E N V R S M L E R I I C K E | K K Y V D D D L N T K I L A E V Q T K S P L S
  I | V L K Q L T A T L P G L L C P V V D I V V N L V N I Q Q L | G T I L N A V I P V G
  V | L N G L L P G L L C P V V D I V V N L V N I Q Q L | G L V N S L V P L G
  L | F K S L I M G K I T D A V D H S V P A I I K S K A N A K I M A T N G F A S L F
  M | I N D S V R Q R I P E I F C S R L Q N L V E K N I S K L F E F I T K I N L E D
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  UniRef90_A0A016RTX5
  UniRef90_J9IPM9
  UniRef90_T1FSB2
  UniRef90_F0YLS2
  UniRef90_UPI00038BDC18
  UniRef90_R7V9N8
  UniRef90_W5HSY3
  UniRef90_UPI000223F3AD
  UniRef90_U6NZV9
  UniRef90_E1GNNS
  UniRef90_A0A016U0Z1
  UniRef90_A0A016SDF7
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  UniRef90_UPI000388A54D
  UniRef90_UPI000388A54D
  UniRef90_H2L3Y0
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  UniRef90_UPI00042BF87E
  UniRef90_A0A016V5A1
  UniRef90_E5SB21
  UniRef90_UPI000388A390
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  UniRef90_K7FIU1
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  UniRef90_H3F492
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  UniRef90_E1F8H5
  UniRef90_J9IF65
  UniRef90_H3F495
  UniRef90_F6YIX8
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  UniRef90_G3SPR4
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  UniRef90_C6LQ68
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  UniRef90_UPI0003D087E6
  UniRef90_U6PVQ2
  
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210

UniRef90\_G3MWR2 Q M G T V|Q Y V L T S V P T T T  
 UniRef90\_H3FYG8  
 UniRef90\_UPI0003B45BE2 L D L G I D Y T L T R D I Q V T A  
 UniRef90\_G1N6M8 L K G T V H Y H L A G P P F T S  
 UniRef90\_H3F316 N A V R L N  
 UniRef90\_UPI00038334AC T A G T I H Y Q L A S L P F T S  
 UniRef90\_UPI0003D0A84F I L G S V Q Y T V S S L P L V T  
 UniRef90\_J9ICG7 D D L S V D F T F T Q L P V I T  
 UniRef90\_A8XD57 Y F P K M D K S  
 UniRef90\_J9AH01  
 UniRef90\_A0A016RTX5 G Y T E Y D I  
 UniRef90\_J9IPM9 G D L F G D F T F T S P A V I T  
 UniRef90\_T1FSB2  
 UniRef90\_F0YLS2 D G A V L D Y H L A A P P  
 UniRef90\_UPI00038BDC18 P E S Q C Y Y M M N P P S I T  
 UniRef90\_R7V9N8  
 UniRef90\_W5HSY3  
 UniRef90\_UPI000223F3AD N V T A L N M T F V N D P Q  
 UniRef90\_U6NZV9  
 UniRef90\_E1GNNS5  
 UniRef90\_A0A016U0Z1 G Y T Q Y D I  
 UniRef90\_A0A016SDF7 N Y T D Y D I  
 UniRef90\_UPI0002B4B302 V V G D L Q Y T L A S L P V V S A  
 UniRef90\_UPI000388A54D V V G D L Q Y T L A S L P V V S A  
 UniRef90\_UPI000388A54D G D I S V D I G V T T A P A I T A  
 UniRef90\_H2L3Y0 V V G N L Q Y T L A S L P V V S  
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 UniRef90\_A8XPC9 G N V A I S T A L I S D P V L T  
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 UniRef90\_L5K018  
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 UniRef90\_M2Y3H2 V L G S L Q Y A V S S L P L V T  
 UniRef90\_K7FIU1 R N I Y L N Y T A D V D P V F T  
 UniRef90\_V6T8Q9 R Q L D L D Y S L S S D I A V T S  
 UniRef90\_UPI000394260E D P L Y L N A A L Q K N P L V  
 UniRef90\_E5SLV8 G Y S Y I C Y P G T D T P A  
 UniRef90\_E1F8H5 D S L V V D I T L P E N P Q F  
 UniRef90\_J9IF65 S A I A F N Y S  
 UniRef90\_H3F495 I I G S I Q Y T V S S L P I V T  
 UniRef90\_F6YIX8 I L G S V Q Y T F S S L P L V T  
 UniRef90\_G1T8B0 K L A A I  
 UniRef90\_H3G1F5 T A G T I H Y Q L A S I P Y T S  
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 UniRef90\_G3SPR4  
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 UniRef90\_F7IFJ3 G H H Q I C L T F T P T T T A  
 UniRef90\_A0A016T8R6 E A I T V S Y L L S G Q P  
 UniRef90\_UPI000398FA54 T A G T I H Y Q L A S L P F T S  
 UniRef90\_F7ID66 E M G T I K Y V T F T P T T T A  
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 UniRef90\_W9XC10  
 UniRef90\_UPI00044224A7 P E S Q V P Y S M D T P T I T  
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 lupas\_14  
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 conf  
 sol25  
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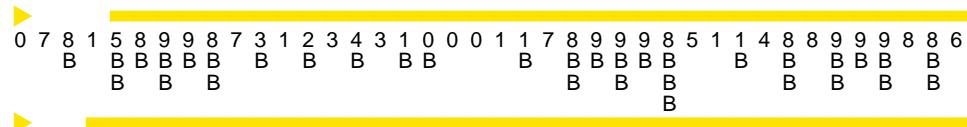
The figure displays a sequence alignment of UniRef90 entries. The top row shows positions 50, 60, 70, and 80. The bottom row shows positions 50, 60, 70, and 80. The UniRef90 entries listed on the left are: UniRef90\_U6PMF2, UniRef90\_17M813, UniRef90\_U1GP70, UniRef90\_W2U156, UniRef90\_A0A016SDB6, UniRef90\_A0A016VH3, UniRef90\_UP100042C85B4, UniRef90\_E1VHU0, UniRef90\_Q57VX9, UniRef90\_U6NYH2, UniRef90\_V5GC16, UniRef90\_D2V8G5, and UniRef90\_UP100038700E3. The alignment highlights conserved regions with black boxes and mutated residues with yellow boxes. A red box highlights a specific mutation at position 50 in UniRef90\_UP100042C85B4.

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lupas\_14  
lupas\_28  
jnet  
conf  
sol25  
sol5  
sol0  
jhmm  
incsm

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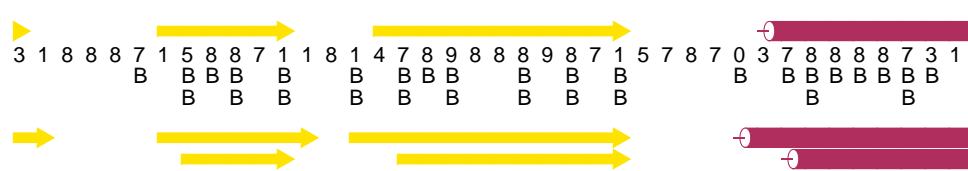
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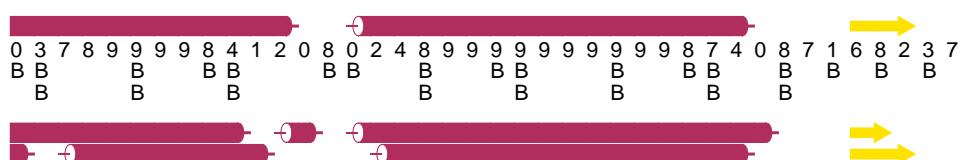


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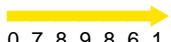
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