

1 10 20 30 40

QUERY	N	K Y C	L V I L	N Q P	L D N Y F R H L	W N K A L L	R A C A D G G A N R	L Y D I
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UniRef90_K4FSL4	N	L K Y C	L L I L	N Q P	M D D Q F Q R L	W S K A A L	R A C A D G G A N E	L H H H
UniRef90_F6RJH9	N	L K Y C	L L I L	N Q P	D R Q F H H L	W S K A L L	K A C A D G G S N R	L Y D I
UniRef90_F7EK85	N	L R F C	L L I L	N Q P	D D H L H H L	W S K A A L	K A C A D G G A N R	L H Q I L
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UniRef90_H3A1B2	N V R I C	L V I L	N Q P	L D D H F Y V L	W S K A V L	R A C A D G G A N W	L Y Q L	
UniRef90_H2RL1	K I C	L I I L	N Q P	L D N Y L N I L	W R K A I L	K A C A D G G A N H	L Y S I I	
UniRef90_UP10000D9A9F3					S A L L	R A C A D G G A N R	L Y D I	
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UniRef90_UP10003F06B05	D V R I A	L L V L	N Y T V	W K K L E K I L	W N M A E V	K A C V D G G A N Q	L Y E C	
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UniRef90_M0WYV9	Y A V V V L	N Q R L	P	R F A P L L	W D R A Q	V R V C A D G G A N R	V F D G	
UniRef90_K3XTY1	Y A L V V L	N Q R L	P	R F A P L I	W A R A R	V R V C A D G G A N R	V F D G	
UniRef90_K7KGB3	S L K Y A L	V V L N Q S L	P	R F A P L	L D W D H A Q	V R V C A D G G A N R	V Y D E	
UniRef90_UP1000440AA73	K R A L I	V L V N Q P	F	S S L F D R L	W S S T Q H H F	C A D G G A N R	V H D L	
UniRef90_Q9RM5-2	N L K Y C	L V V L N Q P	L	D A R F R H L	W K K A L L	R A C A D G G A N H	L Y D L	
UniRef90_A0A023FP32	K N A V	V V L N Q P	L	P L L S S F L K N V	W S Q A F K A I	C I D G G A D R F R T A		
UniRef90_P41888	D Q K F A	V V L L N Q P	I	P I D D R F R T L	W K R A S I	R V C A D G G A N Q	L R N Y	
UniRef90_M5VLQ1	Y A L V V L N Q S L	P	R F A P L L	W K H A Q L R L	C A D G G A N R	V Y D D		
UniRef90_S8ERN4	H A L I L L N Q P	F S P L L R R L	W E A C S W R	C C A D G G G N R	R L H D L			
UniRef90_S2JEW1	K F C	L I V L N Q P	I	P K D A F H R L	W N N A T F R V	A V D G G S N R	L Y D A	
UniRef90_B9SAN6	S L N Y A L	V V L N Q P H L	P K F T P L I	W K H A K I	V R V C A D G G A N R	V Y D E		
UniRef90_L7LZG3	D V S N A L	V V L N Q P L	S A F L K K V	W R K A S V	K M C V D G G V D R F R T A			
UniRef90_UP100034F98F5	S L R Y A V	V I I L N R P	I S Q F M K N F	W E K A T L	R I T V D G G A L R W D Q F			
UniRef90_F4P4P7	R R A L I	I I L N Q P L	C N Y F E T L	W L Q N V S	V R I C A D G G A N R	L Y D T		
UniRef90_S9VXJ6	N Y K Y A I	I I L N R S I S	D N R F H H L	W D N A S L	R I C A D G G S N R	L L K N Y		
UniRef90_V4U5S6	S L T Y A L	V V L N Q R L	P R F A P L L	W Q H A K L	R I C A D G G A N R	V Y D E		
UniRef90_F0WTV0	R I A V	V I I L N Q S S	R E I F C H M	W S N A Q V T I L	C A D G G A N C	C L Y D V		
UniRef90_M4ENZ2	R Y A L I	V I I L N Q N I	P C F T P L L	W E H A K I R L	C A D G G A N R	I I Y D E		
UniRef90_UP100032905E4	N L K Y C	L V I I L N Q P	I N E C F H H L	W N K A I L K A	C A D G G A N R	L Y D I		
UniRef90_K5X5T3	Y A L L M	N Q P I	N E A F V L S	Q H A S Y I I	C A D G G A N R	L Y D M		
UniRef90_E62IH3	R R A L I	I I L N Q P F S P	P L L L R V	W K V C Q W R A	C A D G G A N R	L Y D T		
UniRef90_A1DCM8	R I C	L I I L N Q P	F S P L L Q R L	W N S T Q W H C C A	C A D G G A N R	H D A		
UniRef90_R7S1L9	F A L L V L	N Q P I	I N E R F A V L K K H A C	T I C A D G G A N R	F Y D M			
UniRef90_D8SZC8	R A L V V L	N Q P F S G	G L L D R L	W S S A Q W R C C A	D G G A N R	L H D L		
UniRef90_S7RGF4	Y V L V I	L N Y R P	L P S L A A L L	W Q R A R L R M C A	D G G A N R	L Y N E		
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UniRef90_H6BPA9	Y V L V V L	N R N L P	R F T P L L W K H A Q L R I	C A D G G A N R	L Y D E			
UniRef90_F2SL33	Y A I I I I L N Q P	I N K A L D A V I D H A D	H D L L V	C A D A G A D R L Y K Y				
UniRef90_A7SPK3	F A L L I I L N Q P	V N H A N R L L K H A C	F I I C	A D G G A N R	R Y Y H V			
UniRef90_V5FHP8	K F A L L I I L N Q P	C F K K F L P I L W R K A V F T V	C V D G A A N H L H T H					
UniRef90_S8CB1	F A L L V L N Q P	I N E R F A A I L K K H A C	F T V C A D G G A N R	Y Y D L				
UniRef90_U6DT32	Y A L V I L N R S L P	R F T P L M W K R A K L	R L C A D G G A N R	L F D E				
UniRef90_G5AAQ5								
UniRef90_J4UJ31								
UniRef90_A0A017SNW5								
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UniRef90_W7TS68								
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UniRef90_E5A6S0								
UniRef90_R0K3V5								
UniRef90_V9D0B2								
UniRef90_UP10004413FB5								
UniRef90_A9THE5								
UniRef90_UP100047B6596								
UniRef90_M1AT14	M K V C	I V L N Q S I	P K F T P L L	W K H A K V H I	C A D G G A N R	V F D E		
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UniRef90_W9VGQ7	F A L L I I L	N Q P I	P E F I K T L	W T K A Q I R G L V	D G G S N R	W L D F		
UniRef90_M1VXJ3	Y A I I I L	N C R I N	R Q I L N L	W S H A K L R V	T V D G G T E	K W L N W		
UniRef90_K7J2E2	A L I I V I	N G G L I S	C F D H L	W E K A R F T V	C A D G G A N K	L Y D Y		
UniRef90_E4XQZ8	L L I I L	N Q P I A	A D F F S R L	W Q H S G F R V	C A D G G A N R	L Y D M		
UniRef90_UP100046229FF	Y A I I I V	N Q P V N	E R A L D V	I G S A S L L V	C A D G G A N R	L Y K C		
UniRef90_R7YNX5	R N A L I I I L	N Q P F S P	P L L R R L	W Y S S A W H A C L R V	C A D D G G A N R	L Y D E		
UniRef90_UP10001F2ADC8	M K V C	I V L N Q S I	P K F T P L L	W K H A K V H I	C A D D G G A N H	T Y N M		
UniRef90_K0R6K6	L T Y A L	V I I L N Q S I	P K F T P L L	W K H A K V H I	C A D D G G A N R	V F D E		
UniRef90_C7Z8R2	A L I I V I	N G G L I S	C F D H L	W E K A R F T L	C A D D G G A N K	L Y D Y		
UniRef90_L1J938	F A L L I I L	N Q P I A	D F F R R L	W K H A G Y R L	C A D D G G A N R	L H D L		
UniRef90_G7XGS5	D Y K F A	I V V L N Q P I	H E Y V L S L	W E K A Q V T V	V T D G G T N	Q W M D Y		
UniRef90_V5HZ89	F A L L I I L	N G G L Y S	T F Q K Q L	W T Q S S Y R H V I A	D G G L N T	L Y D L		
UniRef90_C5FPA6	R N A L I I I L	N Q P F S P	L L D R V	W H A S R W H A C L R V	C A D D G G A N R	L H D L		
UniRef90_R6SQV0	F A L L I I L	N Q P I A	D F F R R L	W K H A G Y R L	C A D D G G A N R	L Y D I		
UniRef90_B3S8K4	F A L L I I L	N Q P I A	D F F R R L	W K H A G Y R L	C A D D G G A N R	L F D A		
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UniRef90_N4UKT4								
UniRef90_T1JED9								
UniRef90_V4BWT2								
UniRef90_I7LHP6								
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UniRef90_E3PSW2								
UniRef90_Q7QD56								
UniRef90_E3N076								
UniRef90_P30636								
UniRef90_UP100037A4615								
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	Y A L	V L N R P I	H D R L L R M W R Q A R	V T V T V	D G G T H R W T K Y			

QUERY

UniRef90\_UPI0003338766

	50	60	70	80
T E G E R E S F	L P E F	N G D F D S	R P E	G C E
UniRef90_E1C3Q1	P E F I	N G D F D S	R P E V	L I
UniRef90_K4FSL4	P D Y I	S G D F D S	R P E V	S T P D
UniRef90_F6RJH9	P H	S G D F D S	R P E V	A T P D
UniRef90_F7EK85	P D Y I	S G D F D S	R P E V	E T M D
UniRef90_F1RB9	P D Y I	S G D F D S	R P E V	E T P D
UniRef90_H3A1B2	P D Y I	S G D F D S	L P E V	M E T P D
UniRef90_H2RLL1	P D Y I	S G D F D S	K P E V	E T A D
UniRef90_UP10000D9A9F3	P D Y I	S G D F D S	T A E V	L I
UniRef90_K1QJS1	P E F I	N G D F D S	R P E V	S T P D
UniRef90_F2D2R0	F K D D L	D A F	T G D F D S	P T P D
UniRef90_UP10003F06B05	M D E V	R T K P D A I	E G D M D S	I D D H
UniRef90_Q0JMW0	A Q K E A Y K F	I P D I	A G D M D S	M V N T P D
UniRef90_M0WYV9	M E S T R K R Y	I P D I	K D K V	D K S H
UniRef90_K3XTY1	M P E V	R S R Y K P D	G D M D S	S H
UniRef90_K7KGB3	M P H	R T R Y K P D	M D S	E S H
UniRef90_UP1000440AA73	L R E A C S K Y	L P D L	K G D	T D E D
UniRef90_Q9RM5-2	T E G E R E S F	L P E F	V S G D F D S	I S T P D
UniRef90_A0A023FP32	M A T C A Q E	L I P D Y	T G D F D S	V V H T P D
UniRef90_P41888	D S S	L K P D Y	V G D F D S	T E H Y K S K G S K V
UniRef90_M5VLQ1	M P D V	R K R Y K P D	V G D M D S	M G V N I
UniRef90_S8ERN4	L R D Q R E	L Y R P D L	K G D M D S	V F D P C
UniRef90_S2JEW1	F K H D Q Q Y	I P D E	R G D L D S	V R E Y Y A S H G V P V Y D P D
UniRef90_B9SAN6	M P D V	R Q R Y K P D	V G D M D S	I T K V S D
UniRef90_L7LZG3	M A T C T E E	L V P D Y	T G D F D S	M N V E I
UniRef90_UP100034F98F5	L T R L	P E E L I P D	T G D F D S	H T P D
UniRef90_F4P4P7	L G T D R K R Y	L P D	C I C	D P S
UniRef90_S9VXJ6	D P	T L K P D	V G D F D S	T K V S D
UniRef90_V4U5S6	L P D	R R R Y K P D	K G D M D S	V E C H D
UniRef90_F0WTV0	R V E A E S T F	I P K Y I	K G D M D S	H D P D
UniRef90_M4ENZ2	L P L I	R R R Y K P D	K G D M D S	E S H
UniRef90_UP100032905E4	T E G E Q E N F	I P E F	N G D F D S	I S T P D
UniRef90_S8B5V9	M K A Q G K E F	T P D K	I G D L D S	M V G V Q I
UniRef90_UP10004407565	L Q A D S D A F	I P D L	K G D L D S	H D P D
UniRef90_K5X5T3	F S E L R H T Y	L P D	K G D L D S	V Q D D D
UniRef90_E62IH3	C I Y H T A D F	L P D Y	S G D F D S	E T A D
UniRef90_A1DCM8	M H G R E S Q E	L P N L	I G D L D S	M E D P D
UniRef90_R7S1L9	L P A A R R R Y	I P D L	V K G D F D S	R H D E D D
UniRef90_D8SZC8	L P I V R E R F	I P D A I	I G D L D S	T S Q G A S V V H
UniRef90_S7RGF4	L L P A	R K R Y K P N	I G D L D S	E D E D
UniRef90_A0A022S401	F L	P E F	S G D F D S	I D S H
UniRef90_H6BPA9	H Q T R P H	I R L P D A	V G D L D S	I S T P D
UniRef90_F2SL33	M R G L E K T E	L P N A	V G D L D S	K D P N
UniRef90_A7SPK3	F F S D E	L D F V	T G D F D S	E T P D
UniRef90_V5FHP8	M K S Q E T S D	L P S A I	L G D L D S	H D P D
UniRef90_S8CB11	L D A V R K S F	K P D V	K G D M D S	D S H
UniRef90_U6DT32	F L	P E F	S G D F D S	I S T P D
UniRef90_G5AAQ5	G V A L E H L	V A P H Y	K G D L D S	P T P D
UniRef90_J4UJ31	S P S E R E	I M L P T	I G D L D S	V Q L Q D P
UniRef90_A0A017SNW5	M R G L E S T	I L P D C	I G D L D S	I Q D P D
UniRef90_UP1000350713F	F L	P D Y	S G D F D S	E T M D
UniRef90_W7TS68	G K M E R E D F	V P M A	N G D L D S	G Q V V K N A D
UniRef90_E0VZ06	E Q N C E N	I L Q P D	F D F I	P T P D
UniRef90_J3JUK3	L L Q A H E S D	I A P D	T G D L D S	I H T P D
UniRef90_W4HEM3	I K R D K K N Y	I P Q Y I	K G D L D S	K D P D
UniRef90_E5A6S0	F G G D R E Q Y	L P D	H G D L D S	S R D P D
UniRef90_R0K3V5	F F Q G Q R E R Y	L P D	V H G D L D S	S R D G D
UniRef90_V9D0B2	E H D N G H H R	L P D A I	V G D L D S	R D P D
UniRef90_UP10004413FB5	L L K D H R H	Y T P D L	K G D L D S	V R D E D D
UniRef90_A9THE5	L P Q V R L R H	K P D V	V K G D L D S	I Q S H D
UniRef90_UP100047B6596	H L	P D Y	V G D L D S	I K F P K
UniRef90_M1AT14	L P G I	R K R Y K P Y	A I K G D M D S	E S Q D
UniRef90_A0A024UQL3	I K R D A K N F	V P Q Y I	K G D L D S	I Q D P D
UniRef90_W9VGQ7	E R D Q V S S R	I P D A I	V G D L D S	R D P D
UniRef90_M1VXJ3	S S F Q G K F A N	L Q A I	I G D L D S	I H D E D
UniRef90_K7J2E2	W N G T S D N Y	L P N L	V G D M D S	I Y T P D
UniRef90_E4XQZ8	D K E S P S V F	I P H C	V S G D F D S	Q E T P D
UniRef90_UP100046229FF	G K D K R H	Y T P D L	K G D L D S	V R D E D D
UniRef90_R7YXN5	F V G M R D R Y	L P S I	V H G D L D S	I S K D P D
UniRef90_UP10001F2ACDB	M K A H E S	I D P D L	I G D L D S	V H D E D
UniRef90_K0R6K6	V E S A R R R H	T P D V	T G D L D S	V H V E D D
UniRef90_C7Z8R2	S S F H G K Y S	N L Q P	I G D L D S	V H D A D
UniRef90_L1J938	F E E D R S K Y	I P E Y I	R G D L D S	H D T D
UniRef90_G7XGS5	M K G R E D V	H P T T	I G D L D S	I Y H H D
UniRef90_V5HZ89	M G S Q A E Q F	I P D Y I	T G D F D S	V H T P D
UniRef90_C5FPA6	M K G L E G T E	L P N V	V G D L D S	V H F P K
UniRef90_R6SQV0	V E S G R Y G	P D W	V G D L D S	V H K N P D
UniRef90_B3S8K4	L D D D R N K Y	I P D V	C I G D L D S	V H K S D D
UniRef90_D8LGC8	F H Q D D R A R	F V P D	V G D L D S	I K L R D D
UniRef90_N4UKT4	I I E T T E S S	S Q P D	V G D L D S	I Q D P D
UniRef90_T1JED9	L L G H N P D D	F L P D	V S G D F D S	I C T P D
UniRef90_V4BWT2	F D S D R C	Q Y L P D	T G D F D S	V E C T P D
UniRef90_I7LHP6	G	I I P N F L	I G D F D S	G V E V I R Y P E
UniRef90_M2M174	L Y G E S K W	I P P D L	H G D L D S	V T Q D T D
UniRef90_Q0AV58	V V P S M	I G D L D S	R P E V	M R K Y P R
UniRef90_E3PSW2	G	V P D Y I	V G D L D S	K F P K
UniRef90_Q7QD56	V K G N	N S E H P D	V T G D F D S	V H T P D
UniRef90_E3N076	T K R H E S V	E W P H A	C I N Q E A M E Y	V E Q L K C T I V H
UniRef90_P30636	K S F V	E W P H	I G D F D S	V H L P D
UniRef90_UP100037A4615	K M N	M P N Y	I G D L D S	V F F K T Y P S
UniRef90_A0A026W525	L E N E H R Q Y	V P D L	T G D M D S	V E T P D

QUERY UniRef90\_UP10003338766

	90	100	110	120
Q D H T D F T K C L K M L Q K K I E E K D L K V D V I V T L G G L A G R F D Q I				
Q N H T D F T K C C L Q V L Q G R I R A S Q V D V V V T L G G L A G R F D Q T				
UniRef90_E1C3Q1				
UniRef90_K4FSL4				
UniRef90_F6RJH9				
UniRef90_F7EK85				
UniRef90_F1RBJ9				
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UniRef90_F2D2R0				
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UniRef90_M0WYV9				
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UniRef90_A0A023FP32				
UniRef90_P41888				
UniRef90_M5VLQ1				
UniRef90_S8ERN4				
UniRef90_S2JEW1				
UniRef90_B9SAN6				
UniRef90_L7LZG3				
UniRef90_UP100034F98F5				
UniRef90_F4P4P7				
UniRef90_S9VXJ6				
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UniRef90_UP10004407565				
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130                    140

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UniRef90_UPI0004696726	Y A L L I L	N Q P I H N H I K R L W N N A I F H I A A D G A A N C L H D A			
UniRef90_E5L9E5	M K R V N L L	L A G G P I E Q W A P E L Q K P T Q I W V T A D R G T W R L L			
UniRef90_T0N4X7	N G N Y A C I	V L N R S L H D I A T N I W Q N A K I R C L V D R G A N C W K E F			
UniRef90_W4V217	R V V I	I G G G P S E K I E R Y L G E N S T I A A D S G A D I L Y N Y			
UniRef90_G2SPG0	Y A L I	V C N G S I I D Y H K K F F E E A D F I V C A D G G A L H L			
UniRef90_J7J2S9	M K I A V L	A N G A W D E W G R Q A L K D V H F L I C A D G G A N N A A L S			
UniRef90_A0A034WR54	K I A V L	D I A K N I W Q N A K I R C L V D G G A N C W K E F			
UniRef90_A0A023F011	Y A L I I L	N R P I P D E M M T L W R E A T L R S T V D G G T T R W F E F			

80

	50	60	70	
UniRef90_A4XLZ1	G	F   P D L I L G D F D S V   D K D V L E Y F R S K N V   K I M E F P E		
UniRef90_L0KAY1		K   T P D L I I G D L D S L S S E I I K H Y Q N Q G V N F E K F P E		
UniRef90_S0FFL3	G	I   P D V L L G D F D S A N K E D I E Y F Q T R G I K A E Q F P E		
UniRef90_UPI000258F115	L   Q G N H K T Y V P H I T G D M D S C S P   I I L E K L K N M G S I I I E T P D			
UniRef90_UPI0003DF4B8C	L   K E Q H N E Y V P N L I T G D M D S C S P   I I L E K L K N M G S I I I E T P D			
UniRef90_UPI00047CF46B	D   T P N L L V G D L D S I A K E D L A W M K K G V E V K K F P R			
UniRef90_F6DLY4	G	I   V P Q V V V G D M D S A R P E E L E Q   L A Q D V E L I K Y P E		
UniRef90_K0NEP5	N   L P H V M I G D F D S V   P N D K Q F F K E Q N V K I L P F P P			
UniRef90_T0RJH8	W R G K D E P W I P Q Y V K G D L D S L R P D V S A F F E A R G T V I M K D P D			
UniRef90_U6IHG2	Q   F K D S H F P N M V S G D F D S I R P E E V K E F Y E S K N V Q V I N T P D			
UniRef90_UPI00028830BE	N   L P D A V V G D F D S I K P E V R K K L P N S K L F H V K E			
UniRef90_S3DBH3	P   K G S E L G H D D V V I G D L D S L V T P Q V R S Y F E E H T P E I V H D D D			
UniRef90_U7Q1X0	A   E T A G Q D F K L D V I I G D L D S L R A D V Q Q Y F E T H K T E I I H D T D			
UniRef90_UPI0003B35E1C	I   H A D G L G L K P D L I V G D F D S C D S E T L A R W K D S C E T V R L P R E			
UniRef90_T0E4P7	D   I P H Y I L G D L D S L E E H I E F Y K R K K V E F K K F P S			
UniRef90_Q0UQM9	F   V D Q R E R Y I P D L I H G D L D S L R D D V R A Y Y A S H G V D V S Q D H			
UniRef90_F0K5X8	E   L R P D M L L G D F D S I D E E V F N Y F K E F H I N T I K F P E			
UniRef90_W2T8Z0	M A R N Q E L S F P D V V V G D M D S I L T T V T E N L R H R S L L I H T P D			
UniRef90_Q0CIR8	M K A H E S T E L P S R I I G D L D S I H A D V R A H Y E R L G V P V I Q D D D			
UniRef90_W5JJV2	V K D Q S K L K P P D L V T G D F D S C N Q E A M K Y V E Q L N C T I V R T P D			
UniRef90_C5EIY7	G   L E P D M I V G D F D T V K P G I L E Y Y R Q K E H I I W H Q P E			
UniRef90_M3DAQ8	L   C K H Y Q H A L P N A I H G D L D S L R D E V R R E Y E K L H V P I T R D P D			
UniRef90_B6FYZ8	G M T P G Y I I G D L D S S V N P E I V E Y Y K E K G V E F K K F P E			
UniRef90_L7ENS6	N   I P D I I L G D F D S I D R E V I N Y F R E K K C K I I S Y P E			
UniRef90_G3APQ0	F   E E L R D K F I P D Y I V G D F D S I E P E I G Q Y Y Q S R G T R L I Q Q S S			
UniRef90_W5N7B1	P   F F S T P R F L P D Y I S G D F D S I K P E V K E F Y K E K K C K I I E T E D			
UniRef90_A8Q5X3	V   K N E N Y V I P D L I S G D F D S I T V I A A R K F F E S E V E I V E T P D			
UniRef90_V4FHR1	G I K P D V V I G D M D S I D P V Q L E S Y S A Q G I K I I K Y S N			
UniRef90_R7B207	E   Q K I I P D Y S V G D F D S I V S E S E F R I I Q E K S K Q C K A Y E E			
UniRef90_I3PU27	T A G Q Q D S F L P D Y I S G D F D S I T A E V K A F Y T E K K C R L I E T A D			
UniRef90_X0SEU4	G F   L P D V I I G D F D S I T T E A Q Y Q R R Y E K L G A K I I K Y P E			
UniRef90_M5E1V3	E   I L P D L I I G D L D S I T E Q N K E Y Y Q Q N N V E L L K F P E			
UniRef90_E7GT31	H   I V P D E V V G D L D S I V D P L V L R E Y K K D N P S V A I H K P E			
UniRef90_G2FUR4	S   G C R P N L L I G D L D S I L P E N L K Q C A N A G C E I E R Y P E			
UniRef90_A6LHR6	E   K G I I H P D A I V G D L D S I P A G L R E R Y A D R I H H V E D			
UniRef90_C1BN17	H   I S P N A V V G D L D S I T D K K V L E E Y Y Q N Q P D I E H K P E			
UniRef90_M3A610	V G G R T D L P E P D L I C G D F D S I S S D T L E F F T S R R S V V V E T P D			
UniRef90_A8X3A0	L L K H Y P H A L P S A I H G D L D S I N E D V R L K Y E Q L G V P I T H D P D			
UniRef90_S5LFH8	L   K R K E S V E W P H V I C G D F D S M E A G I D T R N A K L L H L P D			
UniRef90_R5JH7	G I L V P T V A M G D F D S L S K E E L A H L K T K V A D V H E F P P E			
UniRef90_T4VX06	Q R   G A P D Y I V G D L D S I D K E S L T F F I G K G T E F K K Y P S			
UniRef90_R6CGJ4	K   V V P D Y I I L G D L D S I E L K V K N Y F K E K G V N F K K F P P E			
UniRef90_M9LUT4	A Y C S S I N V I P D L V L G D F D S Y S G K V S P K C E I L R Y P E			
UniRef90_A0A059NZU5	F   A F D A D L P L P H A I L G D L D S I I L P S T Q F F E S K G V A V H K R P S E			
UniRef90_M7NP5	V E Q G I T P D I A I G D F D S V T E E S L K E I K N R S H R I H I Y P E			
UniRef90_I0I2V3	Y K D N   L D L P D F I I G D M D S I S S C A L E A Y S S K G V K I I K N F D			
UniRef90_C0D9C4	G   H A P H V V V G D L D S I P A E L V E R L A A Q G V R I E R H P E			
UniRef90_D9S2G3	G   L T P D M I V G D F D T V K P E V L I E K F R Q M E H I V V H Q P E E			
UniRef90_T2VXJ2	G   V P H L V V G D M D S V T E E D R G K I C E Y N I K L Y T F P E			
UniRef90_S6EHS3	G   K M E I M P D Y I I L G D L D S L R D D V Y Y A Y E S H G V I I L R Q R T			
UniRef90_Z4WUK2	T S Q   P D A V V G D L D S V S P A L K D L L G Q R I H R F P D			
UniRef90_F4LRT8	G   V V P D L L V G D M D S I S P A D M E K V Q K W G V K K Q N F P E			
UniRef90_C4Y634	F D K E R S D Y I P Q F I T G D C S D S I T T Q V R E Y Y E Q H G T R V I P Q Y S E			
UniRef90_A8AUQ9	I E Q G V T P D L A V G D F D S V S Q Q E F E L I Q K Q A K E V L C Q P E E			
UniRef90_M1MFA7	N   I V P D V L L G D F D S I N R G V L N N V K A Q V K E I L Q F P P E			
UniRef90_UPI00046FA955	G   D E Q R T L H V P D L V A G D F D S I R P G V R F Y N S Q R T V V E H D N D			
UniRef90_A0A024JM41	N   I N P D Y L I G D F D S I S K Q T L E Y F C T Q G C K V E K Y S E			
UniRef90_U2D950	G   L V P N V I V G D L D S I D K E T L E Y Y N K L K V Q F H K F P E E			
UniRef90_K0B1W6	A G K N G D H D F D D L I I G D L D S I T T R T Y F T T H Q T A I I H E P S			
UniRef90_Q7S3S3	T A G D R D N F L P D Y I S G D F D S I T P E V K A F Y A D K G C E L I E T A D			
UniRef90_UPI0004448D2B	N   V I P D L V I G D F D S I T E S E L N F F K K Q G V T I R K Y P E			
UniRef90_B8CWU1	H   I L P K E L W G D L D S T P P S I L Y E K W E K Q G C E I F K F P E			
UniRef90_I3DKH6	F K D D R A M Y I P D Y I I G D F D S L K P E T E E Y Y K A G V V V I K Q Q T			
UniRef90_G8ZM31	N   I I P D L L L G D F D S A K K E I L I D N M K L K V K E V L I E F P E			
UniRef90_A6LSK6	G   I V P D V L I G D L D S I S D E D L D Y L V S M N V K I M K Y P Q			
UniRef90_G8M0Q1	G   V V P M E I W G D F D S V P E N I L L E K Y E K S G V I I K R F P D D			
UniRef90_C3WAL0	G K M P E V I I G D L D S V E K N V L E Y Y K S K N I L I K K F P D			
UniRef90_UPI00036B9BE4	T E G E Q E S F L P E Y I S G D F D S I R P E V K E Y Y K V			
UniRef90_UPI000273BF60	E   I M P N I I L G D F D S I S E E K L K K I E E K Q V E I I K F P E			
UniRef90_B1R2W4	E   K G I Q P H E A V G D F D S V S K E Q L E K I T S A V D I V H H N E E D			
UniRef90_F9DPF4	L V I N N N E L K S P D F I T G D F D S I L E E T M T Y F K E N S P E I V N T P D			
UniRef90_T1GT15	Q K R S N D V H W P H I V C G D F D S I L D K Q I D V K S A K L V H L P D			
UniRef90_H2VMB1	G   I E P D L F V G D Y D S S K K P K T Q N E L I A L N P I			
UniRef90_R5MX14	V Q H G Y T P D L A L G D F D S V T L E E L I R S V S R E T V T Y D D			
UniRef90_C6CUU7	F G A A A S V H L P N A I L G D L D S I R P D T Q K F F E S K G V A V H T R P S E			
UniRef90_V5EZU3	G   L L P D A V V G D F D T V S P D V L A E Y R K M E Q V A I H Q P E D			
UniRef90_G5IG21	K K E I I I P K C I I G D L D S I S Q V A R T Y Y P P R R T N V I Y Y R D			
UniRef90_A0E0S0	G   I V P D V I M G D M D S I S S E A R A F F E S K G V A F E G F P S S			
UniRef90_W8T4S0	F G Y D C Q M P L P H A I V G D L D S I R P E V K S F F A E Q G V E I I L R P S S			
UniRef90_UPI00045615C9	V K S W D T F Q R P T L I C G D L D S I S A D T H K F F V D L G V C V K R I A S			
UniRef90_A8Q3F7	F   V G E K K F L S P D V I V G D L D S I R P E V Q H E F E S T G S Q I Y K I N N			
UniRef90_A2FHA9	A G I H S D P S F D D L I I G D L D S I S Q V A R T Y Y P P R R T N V I Y Y R D			
UniRef90_B2AC65	Q K G I V P T V A V G D F D S I T P A E R Q V Q E Q V G D I R V Q A E			
UniRef90_UPI0004696726	Q K S N E S V N L P E F I T G D F D S I T Q E T R K Y F N S P D I R Y P H T P D			
UniRef90_E5L9E5	G   Q R L G I K P D V L L G D F D S I L E D K H L E Y Y K E Q N V E I F K F P E			
UniRef90_T0N4X7	E   A G I K P I L S I G D F D S S T N R E R Y L V D V M S K E V M T S P E E			
UniRef90_W4V217	L   R M P D Q V I G D F D S I S P E N L S R C K D S G C V I E R Y P E			
UniRef90_G2SPG0	U I H K S N E S L L P E Y I T G D F D S I T Q E T R K Y F N S P D I R Y P H T P D			
UniRef90_A0A034WR54	L K Q H K L D V T P D I V S G D F D S I S P S L L K T C E E H G V Y V E R T V D			
UniRef90_A0A023F011				

90                    100                    110                    120

UniRef90_A4XLZ1	K D K T D T Q I A V E Y L V E R G	F D E I V M L S C T G R R I D H V		
UniRef90_L0KAY1	K D K T D T E L L L D K L I T K	D Y D E L I I F A G L G D R F D H T		
UniRef90_S0FFL3	K D M T D S E L A I E R A V E K G A	D E I I F I G A M G S R V D H S		
UniRef90_UPI000258F115	Q D K T D Y T K A L L Q L G Q Y A K T E N	I K L N G Y V F V D S S G R L D H I		
UniRef90_UPI0003DF4B8C	Q D H T D Y A K A L F Q L G Q Y V K M K N	I K L N R I Y V F T D F S G R F D H I		
UniRef90_UPI00047CF46B	K D F T D S E L A L E Y A L E	L N P L R V T I I G G V G S R W D H S		
UniRef90_F6DLY4	K D E M D T E L A L M E A V K R G A T S	V L L G C S G G R L D H T		
UniRef90_K0NEP5	K N Q T D S E L C V S Y A L E K N A T	D I T L L G V T G T R L D H T		
UniRef90_T0RJH8	Q D T N D L D K C L A L L E S L Q A S M P	G K E D K V L M L G A M G G R F D Q E		
UniRef90_U6IHG2	Q N E T D F T K A I L L M V E N V Q T N	L D Y I V G L Y G S G G R L D H E		
UniRef90_UPI00028830BE	Q D T N D A D K A V R H C L K R E C T E	I H I L G A E G S R N D Q F		
UniRef90_S3DBH3	Q Y S T D F T K A V K Y V R E R Y L G I D	V V A I G G L G G R I D Q G		
UniRef90_U7Q1X0	Q Y S T D F T K A V K L V Q D R H P G I D	V V A I G G L G G R I V D Q G		
UniRef90_UPI0003B35E1C	K D D T D T L F A V K L A L E R G Y S	D F L L L G A M G G R F D H A		
UniRef90_T0E4P7	K N E T D T Q L C V H L A D E L G	V E E L H L L G A L G G R V D H T		
UniRef90_Q0UQM9	Q Y S T D F D G K T M Q K L S S R S P S A S Q R	D V L V L G T L L A G R V D D Q G		
UniRef90_F0K5X8	K D F T D T E L A F R E A L K	L S A D E I C F I G C T G T R L D H I		
UniRef90_W2T8Z0	Q D K T D L T K C L E Y I I A E D F N R	D A S H V V L L G G T S G R F D H T		
UniRef90_Q0CIR8	Q Y S T D F T K C L T Y I I R R H A A G G A E T	C L D I L L I G G L G G R V D Q A		
UniRef90_W5JJV2	Q N A T D F T K S L K V L R S Q T N E	V A R V L T L C E S S G R L D Q I		
UniRef90_C5EIY7	K D E T D T E L A L L I K A Q A T G C T Q	I V I L G A T G G R R M D H M		
UniRef90_M3DAQ8	Q Y T T D F D G K A I K K I V E	S R S S V T D V L V L G S L G G R V D Q G		
UniRef90_B6FYZ8	K N E T D S E L C I I L A D M	L S S K E V D L Y A A L G G R I D H T		
UniRef90_L7ENS6	K N F T D T E A A L K E A I K M S P	D S I I L F G C T G S R L D H T		
UniRef90_G3APQ0	Q Y S T D F T K S I Y T I Q L H F K T K D Q L P	I Y T I G G I G G R F D Q T		
UniRef90_W5N7B1	Q D L T D F T K C L H I M V E E I K N K R	L Q L D A I V T L G G L A G R F D Q T		
UniRef90_A8Q5X3	Q D Y T D M C K A L Q I I A D R M R N R K	L D I S K V I V L L G G L F G R F D H V		
UniRef90_V4FHR1	K D F T D T E L A L D Y A L	N I N P E E I F I L G A L G G R V D H T		
UniRef90_UPI00041CD778	K D E T D L E L A L E H A L E Q N P T	T I Y F F G V T G G R L D H A		
UniRef90_I3PU27	Q E L T D F T K C L A I M V E E I K R Q Q L Q	D M R H R L G V N T G		
UniRef90_X0SEU4	K D E T D G E L A L Q Y C Q E R G	F N N I I I I I G F A G G R L D Q Q		
UniRef90_M5E1V3	K D Q T D S E I A V D Y C L K N G K K	I F L T A A L G G R V D D Q Q		
UniRef90_E7GT31	K D E T D T E L A L L T A A K C G Y N S	V D L L G A L G G R R M D H A		
UniRef90_G2FUR4	K D E T D L E L A L K R A E E Q P A R F V G Q T D	I W L Y G A T G K R I D H F		
UniRef90_A6LHR6	Q E I N D L T K S V R F A H T Q G Y R E	V V L I L G A T G L R E D H T		
UniRef90_R7B207	K D E T D T E L A L L T A A R Q G C E A	V D D I L G A L G G R R M D H A		
UniRef90_C1BN17	Q D Y T D F T K C L M E V K K R R P E	L K T F F T L V Q N S G R L D Q I		
UniRef90_M3A610	Q Y S T D F D A K A V K T I I A A K M P Q	V R D V L V L G S L G G R V D H G		
UniRef90_A8X3A0	Q D H T D L T K T I Q W C L E Q L S E N Q W K F	E G I L V L L G G L N G R F D H T		
UniRef90_S5LFH8	K D E T D T E I G L S W A M E Q N P	D K I R I F G A T G G R R L D H E		
UniRef90_R5JIH7	K N E T D T E L A I W I A R D L G A Q S	I D L Y G A L G G R R I D H E		
UniRef90_T4VX06	Q D Y T D F T K C L H I A L A K G L G I V D	D L L G A L G G R R I D H T		
UniRef90_R6CGJ4	K D D T D T M L A V K E A I R R G Y Q E	I L M V G M L G G R R L D H T		
UniRef90_M9LUT4	Q Y A T D L Q K T I Q Q V E D H E D S G D E H	T L I I I Y G G L A G R I L D Q S S		
UniRef90_A0A059NZU5	K D E T D L E L A I L R K A Q A I G S	D E I A V L G A T G G R R M D H S		
UniRef90_M7NP5	K N S S D F G K S M D L I	N S I N L S V T D V I A L G T F S G R V D Q S		
UniRef90_I0I2V3	K D Q T D I E L A I E R A L E D G A	D E V L L I G A L G G R R L D Q T		
UniRef90_C0D9C4	K D E T D T E L A L L R K A Q A I G S	D E I A V L G A T G G R R M D H M		
UniRef90_D9S2G3	K D F T D T E L A L E A A L K K G V R E A	K D F T D T E L A L E A A L K K G V R E A		
UniRef90_T2VXJ2	K D E T D T E L C L F L A K T L K A N H	H I D F F G A L G G R R I D H T		
UniRef90_S6EHS3	Q N S T D F S K C L D A I S H W H S P E F I N L N	I L L A L G G I N G R F D Q T		
UniRef90_Z4WUK2	Q D T N D L T K T M N F V H R S M G R R S	I T L L G A S G G R E D H F		
UniRef90_F4LRT8	K D F T D T E L A V C E A L K L G	A D E A L L G G L G N R P D H S		
UniRef90_C4Y634	Q Y S T D F M K S V K L V S L Y H E F P D P R P T N I	I Y V A G G I D G R F D Q T		
UniRef90_A8AUQ9	K D D T D L E L A V T A A F E H Y P N A N	V T I F A A F G G R I D H T		
UniRef90_M1MFA7	K D Y T D T E I A I N E A I K R G A R E	I Y L F G A L G S R R M D H A		
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130                    140

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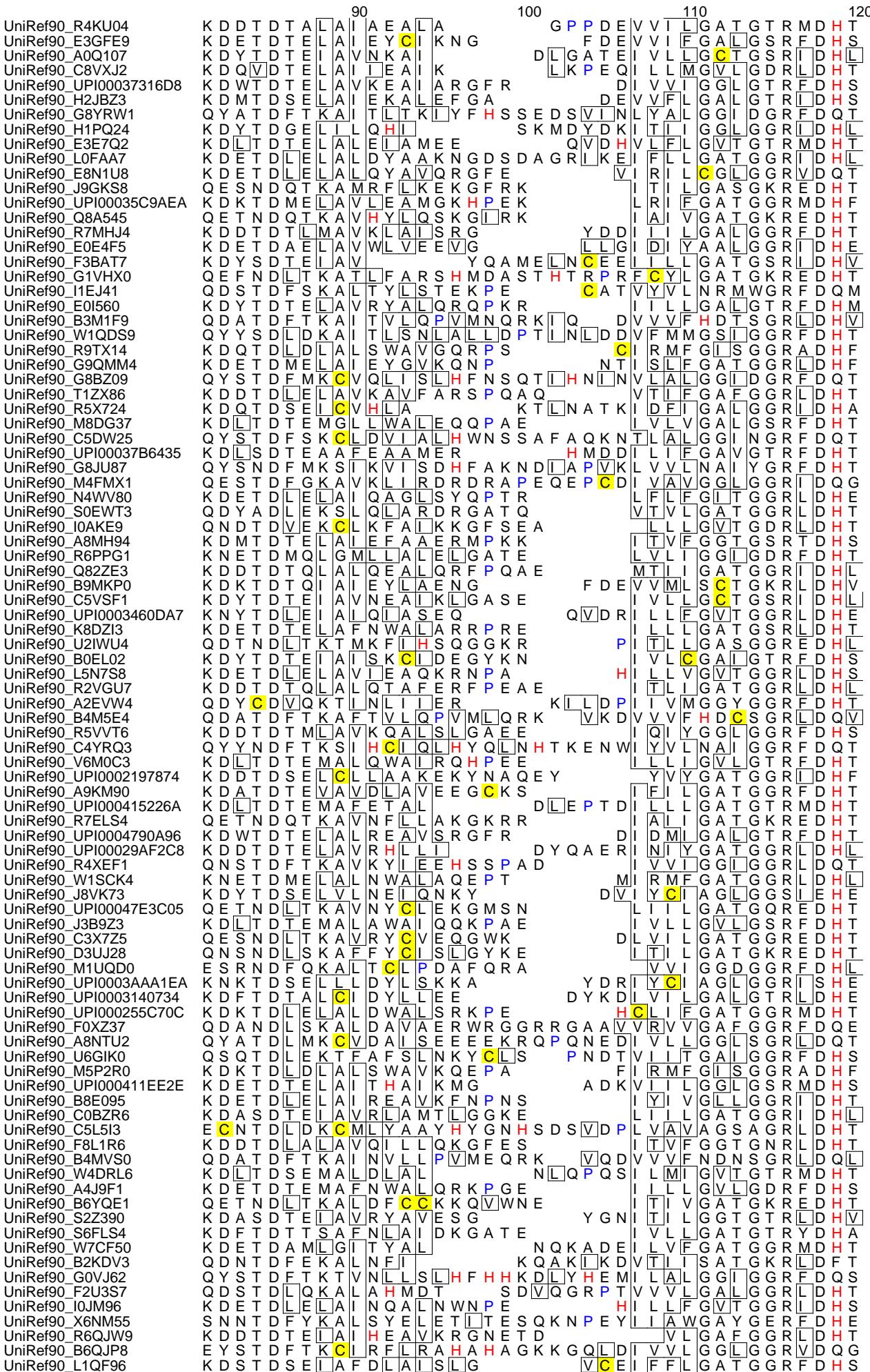
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50            60            70            80

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D	F P D Y I I G D L D S I K T V A L N Y Y K N R K V S I L Q Y P E
K	I P Q M L I G D F D S I A E S T L E K F L S A G S Q V K R Y P E
T	R Q G R A P H L A V G D F D S I S Q N E L D L V R S A A A E T L A F D D
G	N P D I L I G D F D S I A N S Q D L D Y Y V N K G I N V S K F P E
F	E S E R S S F I P H F I V G D L D S I R S D V Q S Y Y E R K G T K V I P Q T S
G	I L P L E I W G D L D S I V T K E I I E K Y R N N K V T I K K F P D
I	E H G I T P H V S V G D F D S I T S E E Q E Q V K S A S Q R M I A C D P
E	S E G Y L P D A L V G D L D S I K E E N L E I C R Q Q G I R I L S Y P E
G	W R P H V V I G D F D S I S A E I L N H L E R E G V L L L R Y P E
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E	H G L V P R T A V G D F D S I P P S E W R K Y K E K I P D I K T F P E
G	C H A Q K L E I A P D V I L G D G D S I L L P E Y K K R F S S I I L Q I S D
C	H A Q K L E I A P D V I L G D F D S I D Y K G E L N Y D V E I R C S P Q
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G	L Q P H I C G D F D S I I D K A H A S Q L F P A A E I V V A P N
G	N V Y P D L L V G D L D S I D S L S L K W I Q D G D I Q L E K F P N
G	I T P D Y I V G D F D S I S R E E Y H F V Q E T T E T L I I Q A P E
E	A D L P L Q L A V G D F D S I L S R E E Y H F V Q E T T E T L I I Q A P E
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D	I F P Q L I I G D L D S I N N T A L N Y Y K N R N T S I I E Y P E
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I	E N G R Q P D L A I G D F D S I V T P T E F A L I R Q A S K Q C S C D P
T	D K L P D A V V G D L D S I V S S G L K D L L D G R I H H F L D
K	P L F I V G D M D S I V S Q E T I K H F K N V K Q I Q F R C D
I	E Q G I K P D L A I G D F D S I V S L E V R R I Q A S A E T R I L Y P D
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I	D I I P K E V Y G D L D S I Q D D V K E F Y Q E K N V K F I K F K E
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M K I L I V S G G P S K E L L M E Q V K D S S L L I G A D R G C Q V L  
M E I N L L V G G P I S E W P E E L L K K D D I I W V G A D R G A L R L  
K K A I V V S G G E L D E E L T V S I Q E D R C V I G V D K G M E F L Y  
A V V L A D G P S H P Y P L S L L E Q S P T V V C C D G A A E S Y F A H  
K K I V I V S G G E L E E F V L S E L E D S Q F I I G V D K G M E F L Y H  
R V L I F A G G R I D P T L V Q E I R D D D Y I I G A D R G A L F L  
M K R A V I I S S G G K I Q T D F A L A F Q T W D Y V I G A D K G V I F C H  
M K K A I L W A N G P S K R I I G Y L I R A Y N K I C A D D G G A N S A R K L  
R N A L V I L N Q S L T G I V P R L W S N T E L H V C A D D G G A N Q L Y D Y  
M K A T V I S G G K K L D P T I I K R E I K N S Y I I C A D S G I K N L R D L  
I V R A L L D E I R E G D F I I G A D R G A L F L  
K R T V I V S G G V L E E E F A A A I E K T E F I I G V D R G L I F L Y  
M K V I L F A G A E I K E F C K K Y I E N T D I I V C C D G G I G H T R A L  
M K T H I M V G G P P E S E L P I T Y D K T I P W I G V D R G A I R L  
H A V I V S N G P K T E L L Q Q E A Q H S D L L I G A D D G G G N R I L  
R H V I C A G G I L D A S L L S V C N E A D V V I G A D R G A L A L  
M K T C I I S S N G E F N D Y I R K I I N N C D Y V I C A D D G G A N I A Y K L  
K V L V I C G G P P S Q E L L A E I I S S Q Y V I A A D K G G E V L Y K Y  
M K C I V A S G G G D P Q L I K N I C D T G D F I I C A D D G G A K H A K L  
I L I V G A G E I I E G L C K L Y S K S D Y V I C V D G G S K V F K K F  
K T C L V I I L N Q K I P R V F E K L W D N T Y L R V C A D D G G A N Q L L S F  
A V V V G G G D T P N L M R K W L E H H P R L V C C D G T A N Q W  
M N R C A I F A G G D D L K Y M D S F W Q K Y N Y F I C A D C Y G Y  
M K I G L I V T G G I L D D F A G R F L E N F D K I I A V D G G L A A L  
M K T V V I C A G G P I D E L A P Y K L S D E V V F I G A D K G S V Y L L N  
M K T V V I C A G G P I E E L L Q S L K S S E D I F I G A D K G S M Y L L N  
I I N I L A G G P V E P D L T D Y A A D N T I L W V G V D R G V F H L L  
M K T L I V T G G N I I E E D F A L S L M K K D Y L I G V D R G M E F C Y K Y  
K T C L V I I L N Q E I P E L F E R I W G N C E L R I C A D D G G D R L L E Y  
M K I A Y L F F N G Q K L K F Y S N L I I E K Q E D I Y C A D D G G A N I V Y Q L  
H G L V L L N Q P I I T E L F K Q A W T F C E R R I C A D D G G A N R L F D A  
L I V L N Q E I H S I L E G L W R N T K L H C A D D G G A N R L F D E Y  
V I L A N G D F P T H P L I P L Q N N Q E R L I C C D G A A N D L L  
M S K T V I I S S G G M L D E G F A E K V L E A N Y I I A V D K G L E Y L Y N  
K R T V I V S G G L I L E E F V L D V L K E T E F I I V A A D R G L A F L Y  
I I F T N G T Y Q D F Y Q Q Y I A K T D Y I I C A D D G G A N Y A R E L  
M T K A F I F L N G D F P D F Y S N L N I N T E H L F C A D D G G A K K A L E L  
L I T T G G S I N C A F A G A F R E F D M V I A V D G G L A A V K S L  
V V L A A G D F P E V P L A I L R K A K E L Y V C D G A L A E L I E Y  
T C L I T T G G S M D L A F A R Q F R R Y G C V I A V D A G L E R A S A L  
V A G G P L L A L L S I Y K D K V D L W I G A D C Y G A N Y L L N Y  
M K K C A I I A G S E I K E W V K S H F D E E T F C I Y C D G G  
M K K A T I I I N G N S K E I F Y I T G D I I I A V D G G A N E L R  
A V V V L A N G P T N P L P L K V L A E A P Y V I C C D G G A D E Y I H R  
M K T L H I M V G G P E S E L P D I S K Y D K T W I G V D R G A V R L  
F A L I V L I N Q P I I N Q H V Y V R L V L N K H D G G A N H L Y N L  
U n i R e f 9 0 \_ R 2 T 1 G 8  
U n i R e f 9 0 \_ F 9 P R 0 1  
U n i R e f 9 0 \_ F 8 X 3 G 3  
U n i R e f 9 0 \_ D 3 I D 7  
U n i R e f 9 0 \_ F 9 D I T 5  
U n i R e f 9 0 \_ K 4 K Y E 6  
U n i R e f 9 0 \_ D 4 M M E 3  
U n i R e f 9 0 \_ F 9 H F R 7  
U n i R e f 9 0 \_ A 3 C Q N 0  
U n i R e f 9 0 \_ H 8 X 0 4  
U n i R e f 9 0 \_ R 7 J X F 8  
U n i R e f 9 0 \_ E 4 R L T 2  
U n i R e f 9 0 \_ U 4 T U N 4  
U n i R e f 9 0 \_ E 1 L 3 9 7  
U n i R e f 9 0 \_ F 0 V T 5 8  
U n i R e f 9 0 \_ R 7 H 4 J 9  
U n i R e f 9 0 \_ K O D E D 9  
U n i R e f 9 0 \_ R 6 Y T 4 5  
U n i R e f 9 0 \_ R 5 D 3 Y 1  
U n i R e f 9 0 \_ U P I 0 0 0 4 7 8 5 F 1 F  
U n i R e f 9 0 \_ J 6 H 3 L 8  
U n i R e f 9 0 \_ D 7 U V H 6  
U n i R e f 9 0 \_ I 6 T A 1 1  
U n i R e f 9 0 \_ R 9 L V B 4  
U n i R e f 9 0 \_ D 7 G X 2 4  
U n i R e f 9 0 \_ U P I 0 0 0 4 7 C 5 6 2 E  
U n i R e f 9 0 \_ J 4 G S T 9  
U n i R e f 9 0 \_ I 0 X 6 W 9  
U n i R e f 9 0 \_ S 3 F X 6 9  
U n i R e f 9 0 \_ G 9 P Y Q 9  
U n i R e f 9 0 \_ U P I 0 0 0 4 1 F 0 8 B C  
U n i R e f 9 0 \_ U P I 0 0 0 2 4 9 0 5 5 9  
U n i R e f 9 0 \_ R 6 K Q D 1  
U n i R e f 9 0 \_ R 6 W 1 B 6  
U n i R e f 9 0 \_ U P I 0 0 0 3 7 2 A 4 8 1  
U n i R e f 9 0 \_ C 8 P 9 4 0

50            60            70            80

UniRef90_H1XX43	Q Q N L Q P H Y I I G D L D S I N Q E W K D Q F K N S K M M Y I A D
UniRef90_W7D1P2	Q G I M P Q T A L G D F D S L S T K E L V F V R E Q V T T V K Q Y P E
UniRef90_D4L7W1	G H I T P N L V V G D F D S M T P S E R E Q T L A Q L P R V V S K P E
UniRef90_H1X8F1	N H K D R N F L D P D T I I G D F D S M S P N L F K Y F E D N G T E I I T D G D
UniRef90_G2XY31	E N G F T P D Y A L G D F D S I G E E Y K D I L D K I K V E K F N P E E
UniRef90_H7CXD0	R D I H P S I V F G D F D S V A K D D L H K I K K E N I E I Y T Y P E
UniRef90_UPI0002FC3CB7	K L I E K E N I E E V D Y I I G D F D S S T K P D L S R V I S L N P I
UniRef90_C2CHD5	I E Q G I I P D I I V G D G D S I N S A Y Q K Q Y K D R L H L I A D
UniRef90_UPI0003780158	N I S P N Y I I L G D F D S A D K D I I K A M E V S G C E K I K Y K E
UniRef90_V9HEQ2	I E N G I F P N Y I I M G D F D S I D E E A Y K K L R D L K I E M I E F P E
UniRef90_U2NR94	I Q N G I Q P T I A I G D F D S S T K A E Q D L I R E N S K K V Y T K P E
UniRef90_J1F1D7	Q H Q F M P D Y I I V G D F D S V R E E I R D Y Y K N E A H V P V R N P V
UniRef90_R9N6W1	G H R P E A I V V G D G D S L S A A S K R K F A E K L V I V D E
UniRef90_S8GP16	H K I L P S Y I I V G D F D S V D Q K I G D Y Y C N E T K V P I R N P V
UniRef90_R6SON4	I Q H G I Q P N L A V G D F D S V S Q E E L A V I R D N S G E F T N C D D
UniRef90_UPI00036CA633	K N Q I M P T H V G D F D S A G E T E Y E Y F Q K N T D V P I K N P V
UniRef90_R6BKR8	F E A D R Q Q Y I I P Q F I V G D F D S I T D D N L N Y F S D K S E I I K L N R
UniRef90_I7A7G8	N F V P D V I I G D L D S I L R D D V R D Y Y E R K G A R I I P Q Y T
UniRef90_A3LVK7	K I K P D D L L G D F D S I E D L D R K K L E D K E I E I L K F P E
UniRef90_U7UKP8	I E H G V H P D L A V G D F D S V T S D D M S R I H A S A K Q V V E C D D
UniRef90_V9G914	E H N I I P D Y I I V G D F D S A P A E V I I A Y Y K E E T K V P I R N P V
UniRef90_F0YUR7	I L T P D Y I I L G D F D S C K K E D L Q Y Y K K N L N I P I K T V P H
UniRef90_N1Z9K9	A N H G I C P D V A I G D F D S V T E D E R N Q I R S C S K H Y Q D F D D
UniRef90_W7DAP2	E K G I R P H I V I G D M D S F E K P E N P G F E V I Y E P D
UniRef90_UPI000367E80F	I E R G I T P I S A M G D F D S L S R T E L E H L K T I T T V T E F P A E
UniRef90_H3SBS8	K R C S S V V P N I I I G D L D S I D E E D D L K W F D R F N V P I K D F P K
UniRef90_D9TNQ4	N L S A D L Y L G D F D S T T T E N H Y M L N H S K K V L E F P E
UniRef90_D9SLA9	V R E D E Q K Y I P K Y I I V G D M D S L T E E T K N Y Y L S T G K V I V K T S S
UniRef90_UPI000478B915	Q D S W Q E P W Q I V G D G D S I A P A V H E K Y K D I I T I Y P E
UniRef90_U2JXG0	R H A V K L G I L P D L I V G D F D S F G G D L P R G V E V L R S P E
UniRef90_C4R3E5	S R L H L K P D A I V G D F D T V S E D V L A Q Y K C S R E E I T H K P E
UniRef90_J9GUX4	E G I I I P T V A V G D F D S L S S S E E F L D L T N R V A S V K V A S D D
UniRef90_W7UL13	E G I I I P N V A V G D F D S L S T E E F S T L G K R V A I V K V A S D D
UniRef90_D9R246	K R N I K P E I A F G D F D S V T S T E E L L F I E G Q V A E M K R Y P E
UniRef90_UPI0003005405	G I C P D Y I I V G D F D S L T E N I L N W Y R E N S Q V P I R N P V
UniRef90_UPI0004249235	S H G K T E S Y L P H Y I I I G D L D S I L S D G T K K F Y E D R G V T V K Q Q W S
UniRef90_K6DTJ2	N L I P K E I Y G D L D S I K D E V R D F Y I K K N V K F I K F K E
UniRef90_R5RAQ0	L K T D E E R F L P D V I V G D F D S I L R D N V R Q W Y E D H G V L V K H D T S
UniRef90_W6MU90	W K K H Q E E F V P D F I V G D F D S L K A D V V Q Q F Y E Q H G C I V I P Q Y T
UniRef90_D4CWZ4	E H K I T P Q R I I I G D C D S L S L K N Q Q Q Y Q E I I T K I I P D
UniRef90_Q6C536	H K I E P Q Y I I V G D F D S I D P K V I D Y Y R K E T N I P I R N P V
UniRef90_G3BAV0	E H Q I I L P D Y I I V G D F D S T P K E V V V S Y Y R E T K I P I R N P V
UniRef90_G6F1B8	K L K P D L I I L G D M D S I N E E T K A F Y R E T T F L S F P T Q
UniRef90_R6MGM1	N Y I P K E V W G D F D S L D Q I S L D L L K S S N N V T I K K F N D
UniRef90_N2AXG3	N I R P D A I V V G D F D T V K G E L L E E Y R R V G G I A Q H Q P E
UniRef90_H6LBH4	G L E P T A V I V G D G D S I S P S L R E R Y K E I L Y H Q F D E
UniRef90_U7VDG6	G I T P D E L V G D L D T V D R R L F E S Y R Q Q P V E L I H R P E
UniRef90_R5TC10	N I D I D I A I G D F D S V S D Q I K N R I K H N S N I Y K E Y P E
UniRef90_H1Q4E8	Y H E E K I L G V K P D L I I I G D F D S H P V P E T E V E L I K L P E
UniRef90_D4MT95	G H K R K I Y P N V V I G D M D S I S E G L L K E Y K E K E I E C I V Y P E
UniRef90_W4VEP8	G H V P D V I I G D G D S I L S S E E N R E K Y G H I I H R L S D D
UniRef90_UPI00040A4169	M R G K E S T E I P D A I V G D L D S I I L P E V R K H Y E D L H V P V I H N P D
UniRef90_H9UBC5	Q H D F P L D L A I G D F D S L S V K E K E V I R K E A T H F I Q A P E
UniRef90_E6SSR7	N L I P N E I W G D L D S I N K D I L N F Y K V N V I I K E F S D D
UniRef90_W7BNM8	S R I E H G L V P H A I V V G D C D S L L P Q A L K E Q Y Q D I I H R I P E
UniRef90_A6R2H9	R M G I E P E V I V G D G D S V S T A T K V K Y Q S I F H T I V E
UniRef90_R2T1G8	D R R M G I E P D V L I I G D L D S I T K E N L E K C I A A K T T V K Q Y P E
UniRef90_F9PR01	D K A L Q A G I K P D L I I L G D F D S I E N P L P D N I E T M R S P A H
UniRef90_F8X3G3	R E I D P D L I A V G D F D S V T Q D E F Q R I I Q E K A G A I I Q Q P E
UniRef90_D3IDH7	E Q G Q V C P D L I A V G D F D S V S K E E L L R I K D N A K E V V Q H P E
UniRef90_F9DIT5	F A N D Q E R Y Q L P N Y I I V G D F D S L R D D V R G F Y K S G K G V K I I P Q Y G
UniRef90_K4KYE6	R L K L P V H Y F M G D F D S V T P Q I L E S Y R N E A C E W V R Y P E
UniRef90_D4MME3	D I I V P Y S I I I G D L D S I S E H T K K F F V I D Q G V E I I K K Y P E
UniRef90_F9HFR7	E R G I T P V T A V G D Y D S L K P A E R H R V E H A V H D M R Y P P E
UniRef90_A3CQN0	Q I T T P D I I F C G D S D S V S E A A A T W A H E H A A Q S I D L P E
UniRef90_H8X804	K N Q L P L D L A V G D F D S V S K E E L Q M I Q E E A G D F I I K A P E
UniRef90_R7JXF8	G Q H H I P M L M A V G D F D S I E D D E L E I L E T H N Q I V H V K A E
UniRef90_E4RLT2	I R L G L R A D V V L G D F D S V T S P D L W D D A I C E K L T Y P P E
UniRef90_U4TUN4	H Q I M P S Y I I V G D F D S V D Q T I A T Y Y R D E T D V P I R N P V
UniRef90_E1L397	T D R E N D I V P D H A L G D F D S V S P A L K D L L A G R I Q H F P D
UniRef90_F0VT58	Q N N F P L D L I A I G D F D S L S V D E K K Q V E Q A T N E L I Q A P E
UniRef90_R7H4J9	G V R P D L A V G D F D S L G G P V P G G I I P V Q K V P A E
UniRef90_K0DED9	A V C E E L G L V P D L A V G D F D T F G L E R M E E L R K K W A T D V H K P E
UniRef90_R6YT45	K R N I S P S I I A F G D F D S V S T E L K Y I E E R V T E L K K Y P E
UniRef90_R5D3Y1	Q P D P R H L Y L P D L I K G D L D S L R D D V R Y R Y Y A S Q G V P I V L D H D
UniRef90_UPI0004785F1F	K R L S F T P D V V I I G D F D S Y S G S E G D A D I R T H K I I K L S R D
UniRef90_J6H3L8	G M K P D L L V G D F D S F T G T V P E E A V R Y P S E
UniRef90_D7UVH6	G I I P R R L V G D C D S A S A E S W R W A A D N G V P V E R Y S D
UniRef90_I6TA11	G E N R I T P S C A F G D F D S I T R T E K E T I E A R G I T T F V Y P D
UniRef90_R9LVB4	K Q G I V P S I A V G D F D S I N E S E Y K L V R S Q K E I K A F P E
UniRef90_D7GX24	G T D L E P D V A V G D F D S L S A E G A K Y M E T K H T E I R R L P E
UniRef90_UPI00047C562E	UniRef90_J4GST9 K H G L P L D L A I G D F D S V T E E E F E Q I R Q L A S E M I Q A P E
UniRef90_I0X6W9	E W G I L P A A A V G D F D S T S P A E F A Q V Q R L A E I E T F P P
UniRef90_S3FX69	UniRef90_G9PYQ9
UniRef90_UPI00041F08BC	UniRef90_C8P940
UniRef90_UPI0002490559	UniRef90_R6KQD1
UniRef90_R6W1B6	UniRef90_UPI000372A481
UniRef90_C8P940	UniRef90_C8P940

90                    100                    110                    120

UniRef90_H1XX43	Q Y S T D L E K A L T L A	E S L Q P H R L	R V L N A T G R R G D H T
UniRef90_W7D1P2	K D Q T D A M I G V L Y A L A Q Q P	D E I L I F G A T G G R R M D H L	
UniRef90_D4L7W1	K D D T D T M H S V D L A L E K	R F D E I A L I G A L G G R F D H S	
UniRef90_H1X8F1	K D E T D T E L L D I V V	E R E L Q P D L I I C L G G L G G R R V D Q A	
UniRef90_G2XY31	Q Y S T D F T K A V R Y V K T F E Q P V D P R P L D	I C L G G L G G R R V D Q A	
UniRef90_H7CXD0	K D N T D T E I A F F K A V E	R F D E I A L I G A L G G R F D H S	
UniRef90_UPI0002FC3CB7	K D D T D L G L A V E W A L E Q K P	D H H Y G S T G G R F D H M	
UniRef90_C2CHD5	K D Y T D T V A A I E F A R K K G Y T N	V I Y G G L G G R E S H T	
UniRef90UPI0003780158	Q E T N D L T K T V T Y L S S Q G	F D D T I L G A T G K R E D H T	
UniRef90_V9HEQ2	K D F T D T E I A F N L A V E K G A K E	V I Y G G L G G R E S H T	
UniRef90_U2NR94	K D F T D T S E L A F E K A I E L G A T E	V I Y G G L G G R E S H T	
UniRef90_J1F1D7	K D D T D T E L A L K I I F K S F Q D	V I Y G G L G G R E S H T	
UniRef90_R9N6W1	K D A S D T E M A I R L A M T L G S K	I S R D T I L G A T G G R I D H L	
UniRef90_S8GP16	Q E T N D L S K A M R F L R R H G F Q K	V A I V G A T G K R E D H T	
UniRef90_R6S0N4	K D A S D T E I A I R L A M T L G A S E	I Y L G A T G G R I D H L	
UniRef90UPI00036CA633	K D L T D T E L A F D L A I R L L P Q E	V L M G V I G T R M D H T	
UniRef90_R6BKR8	K D Y T D T D V A L R L A L E L G A E E	T I L G G T G A R I D H T	
UniRef90_I7A7G8	Q N D T D V E K A L K Y S I K K	K F D E L I I I G A T G S R L D H S	
UniRef90_A3LVK7	Q Y S T D F S K A I A T V R L Y Y Y S K Q E Q T V R	Y I L S G I G G R F D Q T	
UniRef90_U7UKP8	K D G T D T E M A L E E A I K R G	F D Q T L I L A M S G T R L D H T	
UniRef90_V9G914	K N L T D T E L A M E L A I E K S P E S	D L R R Q N L I L L G G T G T R L D H V	
UniRef90_F0YUR7	K D A S D T E I A L R L I C L	V E T C H V L G A F G L R M D H S	
UniRef90_N1Z9K9	K D E T D M E L G L D F A I E L G A	N D V I F G G I G S R F D H T	
UniRef90_W7DAP2	K N E T D T E L G L Q W A L L K Q N P E	T R I F G A T G G R I D H L	
UniRef90UPI000367E80F	Q E T N D L E K A L R L A D K G	V E T C H V L G A F G L R M D H S	
UniRef90_H3SBS8	K D Y T D T E L A F H T A L A W K P A Q	T I L L G A T G T R L D H T	
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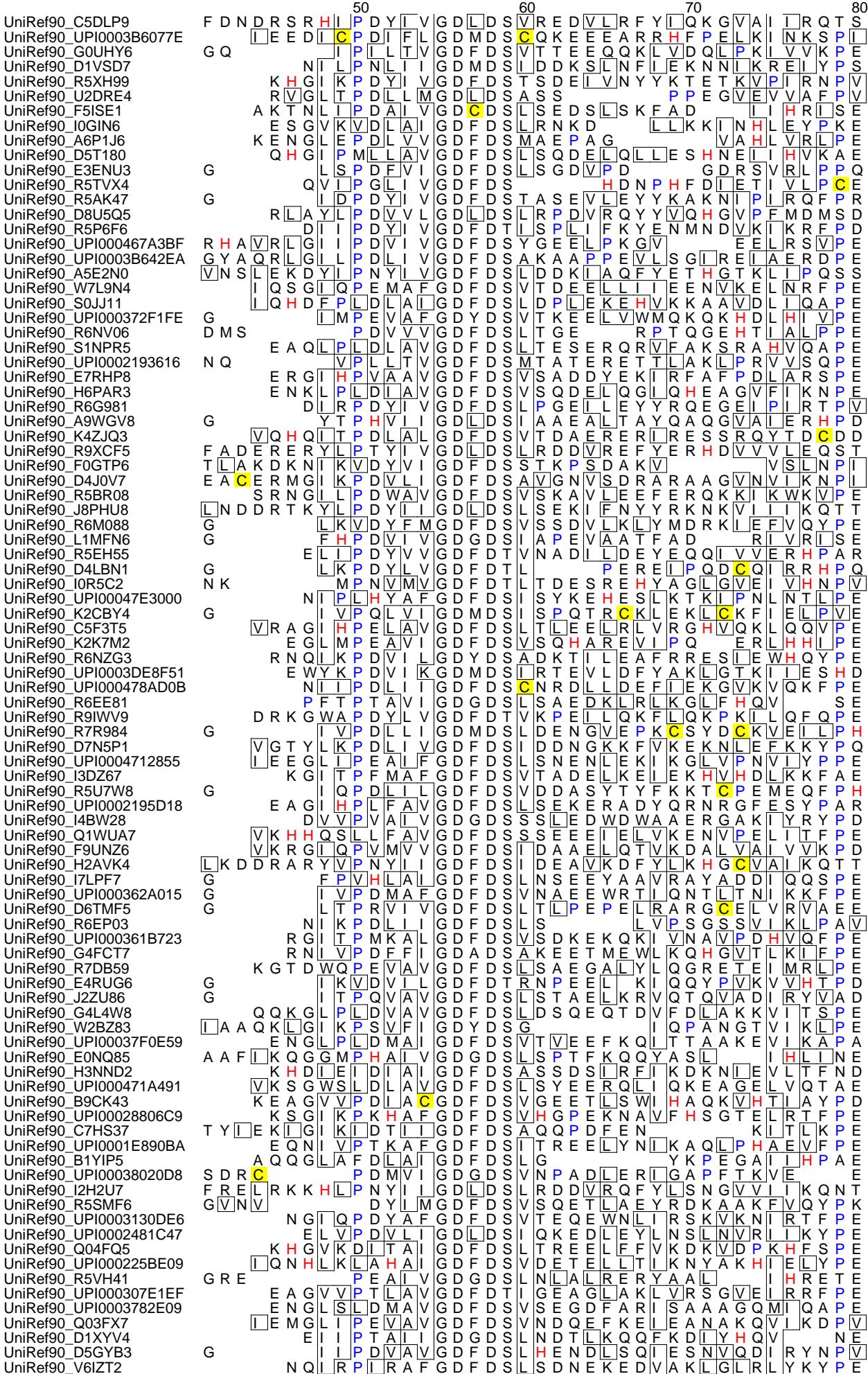
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 K C V I I S A G S F P E V E I D L R E G D F C I A A D A G F  
 K T A L L I L N Q E I H I D L I S L W K Q S D V V I C A D G G A N R L Y Q Y  
 I I N I L A G G P D D L P D L S N T G A I W V G V D R G V L T L L  
 I I L V A G G S P K P E W A L K E K Y D Q Y I G I D R G A L Y L L  
 I I L V A G G P V E C W F S K Y E S E K I V W A A V D R G V Y H L L Q F  
 N S N T C V I F A A G E Y Y S D T P I V P S G A F I I A A D G G L D H A R A L  
 M K L L I V V G G G S P K T W P D K L T D F D F Y I L G V D R G S L Y L L  
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 M T K V A V F A G G Q L S D F S T G F D V F V G V D R G S L F L L  
 M K T L I I T G G M I E D F A L S F I R K P D Y I L G V D K G L Q F C Y E Y  
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 C V I S G G N I S D F A L D F L N R D V L L I A A D R G L E F C  
 L L I L N Q K I D P L F Y K I W K L H D L K V C A D G A A N R L Y D Y  
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 A I I T G G D I D L S S L E S Y N R Y A T V I S V D A A V K K L E E I  
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 L I I I S G G H L D D D F A A S Y M K F A L T I A V D A G I E F F  
 M N K C I V G A G E F D I D N W S C E K D D Y V I A A D A G W M I L E Q L  
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 I I L L G G G P E E L L P D L Q N Q G N L W V G V D R G V Y T L L S  
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 I V N L L V G G G P T A N Y P A D L T I P G P W V G A D R G A L R L  
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 T A I V V A H G D L Y E D A L R L I V E V A Q H I V V C D G A L E R Y L E L  
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 K I I I F S G G G K Y D I A F I K Q Y K S F D T V A C A D S G L E A A H A V  
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90 100 110 120

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UniRef90_V6IZT2	K D K T D L E L A L D W A L S Q N P E R C L L F G V T G G R Q D H A		

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UniRef90_R5XH99	W A N V Q S L K I A K D A G A E A C L M D
UniRef90_U2DRE4	L A N L Q S L Y A L K R Q G
UniRef90_F5ISE1	I A N I S L L C D Y M K
UniRef90_I0GIN6	L F N L S I L Y R I F K E G K S A K I L
UniRef90_A6P1J6	L A N L Q L L A W L S R R G
UniRef90_D5T180	L S N L W L L A K F E S I V E K T H I I D
UniRef90_E3ENU3	I A N M Q L M A L L A S H G
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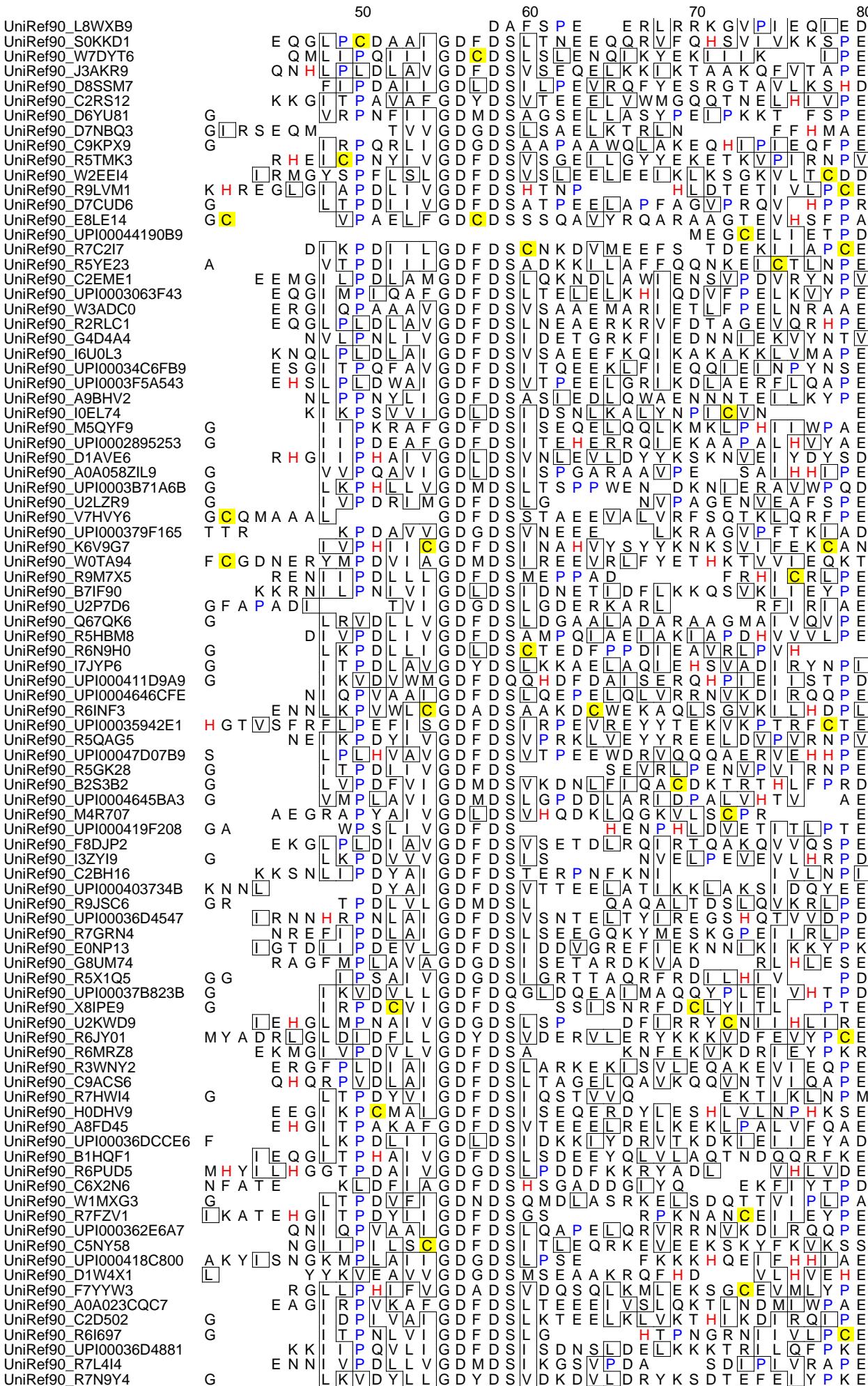
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130                    140

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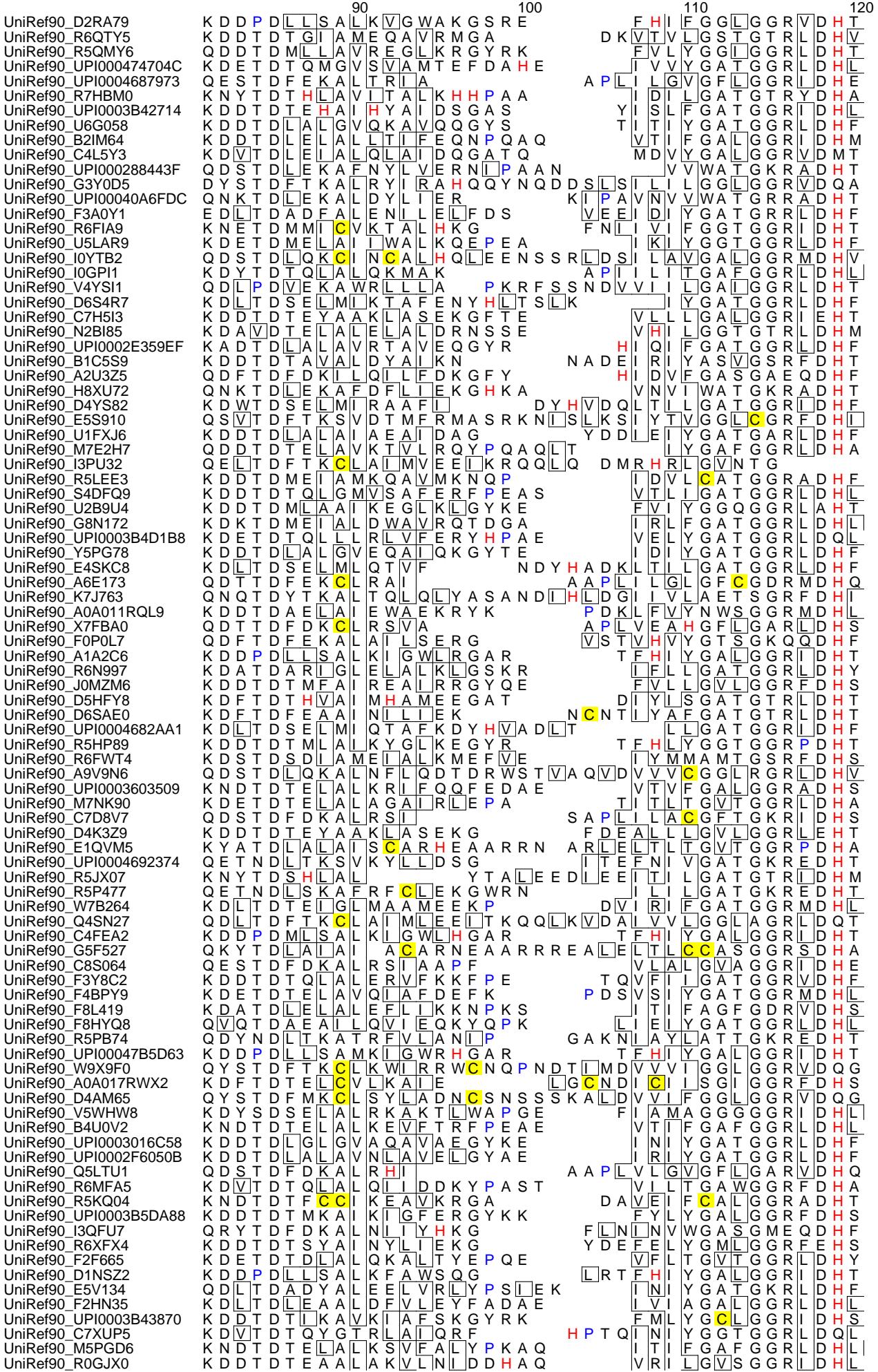
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 M K A A L F I N G Q P P N F F I D L I A Q Y D L I H C T D G A I N Y L  
 D A R T C V I F G A G D Y Y D E T P A I P D A F V V A A D D G G L D H A R A F  
 M N T V L I C G G F L E E T A K A R L A K E I D C I G I D K G L E F C Y  
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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

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UniRef90_R5HP89	L A N L Q A L
UniRef90_R6FWT4	F A N L G L L C K A N D A G A K A Y I I
UniRef90_A9V9N6	L Q S L N S
UniRef90_UPI0003603509	L S N I F L
UniRef90_M7NK90	Q S A M H A V Y R L Q E K H P
UniRef90_C7D8V7	L A V L T A L M T A Q E Q L C V V V G E
UniRef90_D4K3Z9	L A N L C T
UniRef90_E1QVM5	L A V V G Q L A R N A D A S P R I V
UniRef90_UPI0004692374	L G N I S L I M D Y M N M G A N V R M Y T D
UniRef90_R5JX07	L A N L G L L
UniRef90_R5P477	L G N I S L L M D Y
UniRef90_W7B264	L A N L M M L T K P E F R Q A V P L V I I D
UniRef90_Q4SN27	M A S V E T L H H A L S M T Q L P L I I I Q
UniRef90_C4FEA2	I S N I Q L M A L L A R H G
UniRef90_G5F527	L A V V G Q L A S A A D A R P R L V
UniRef90_C8S064	L A V L N V L A R R P D I G P E D V V F
UniRef90_F3Y8C2	L A N L W M P L E T R F K P Y A E Q I K I Q D
UniRef90_F4BPY9	L N N I Y M I F Q P K L L N H A A K I L I D
UniRef90_F8L419	L S N L V L L S R Y P
UniRef90_F8HQY8	L H N I L M F A K L K R I A D Q C R I I D
UniRef90_R5PB74	L G N I S L M P F Y K E E F D I P T L I T D
UniRef90_UPI00047B5D63	I I A N I Q L V A
UniRef90_W9X9F0	F S Q I H H L Y M A P N L L Q G R I Y L L S E
UniRef90_A0A017RWX2	L G N V A A L L H F I K E K G A N G Y I
UniRef90_D4AM65	F A Q I H H L F C T T T S A S E Q I Y L I S E
UniRef90_V5WHW8	M A N I R L
UniRef90_B4UOV2	L S N V F L
UniRef90_UPI0003016C58	M G V I Q L L L K P E Y I N
UniRef90_UPI0002F6050B	M G A V Q I L L T K P E F L A D I K I S L I D
UniRef90_Q5LTU1	L A T F N A M V R H A D R P C A L I G A T E
UniRef90_R6MFA5	F S T I F S F N G M L N K N F C G C I
UniRef90_R5KQ04	L S N I V N L E Y C L R N N I P A S I I S E
UniRef90_UPI0003B5DA88	I S N I Q A L V Y I K R H G G K G Y I M
UniRef90_I3QFU7	L G N L S T A L K Y K K K
UniRef90_R6XF4	L A N I Q V L A K I G K L G L N G K I Y S S D
UniRef90_F2F665	E A T L R S V F L M Q Q Q H P
UniRef90_D1NSZ2	I S A L Q T V A L V A E H G G A A I L
UniRef90_E5V134	F G N I F L L
UniRef90_F2HN35	L T N A Y L A T R P K Y Q V L A P K M
UniRef90_UPI0003B43870	L A N I Q T L L F I K H H G G N G Y I M
UniRef90_C7XUP5	L A N L F M P Q F R D Y L D R I R L I D R E
UniRef90_M5PGD6	M S N L F L
UniRef90_R0GJX0	L A N V L M V L E A R R R F A E Q I T L I D

1 MK A I V T G G D I D S S L A D Y I E K S K I I I S V D A A I T N L  
 MK F T V V S G A P C Y L C D G D F P A D V R D R L M S C D V V V C C D G A A S S F M R F  
 R C V I F A G G D A A E N V S A E V I N G A F V I C A D K G I  
 10 20 30 40

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

50                    60                    70                    80

E K I N V L P D I M V G D F D T L A D D E R E K Y A S L D V E I V H D P I	G K P D L I V G D F D S A S Y P D Y N C E I I K L P E	R P E F V V G D M D S L P E N L R Q E L A D Q V F P V G E	A L A E I L G I K A D L V L G D F D S L N Y K P E G E N V K V Y P E																																																															
S R D L A N N L D V I I G D L D S F T A S S A E F Y S P S P P Q V I K I T E	H G I T P C L A V G D F D S S T A Q E I A M V Q Q Q K R T V I D P Q	E N K L P L D L A I G D F D S V S E Q E F S N I K K K A K K I I T A P E	G R M P D A V I G D L D S V S D E A R A R I P P E R I H H V A E																																																															
G L N A N E I I G D F D S S E E P D F K N K I K L K K E K	G V K P D L V I G D L D S I N P N L R A N L N T V Y L P D	G I M P E A V I G D F D S L S A R A R R E I P Q E R L H R I D E	G E S G I L P A R I I G D G D S A T K E A W T W G E A L A I P M D R F P E																																																															
G H I N H G A K I D V A V G D F D S I S S E L E K I Q K N V S R I I K S P V	V P D A V V G D L D S I D A E T R A R L D P A T V H F S G D	I E E N L P L T Y A V G D F D S V S E S E L S R I K M R A K H M V Q S P E	G K P D L V V G D F D S A P A A V L D Q I P Q S R L H R I D E																																																															
UniRef90_F3B6K8 UniRef90_R5XUT1 UniRef90_R5I882 UniRef90_E9SER1 UniRef90_L714X2 UniRef90_M5J5U7 UniRef90_UPI0003683C57 UniRef90_UPI0003B3F720 UniRef90_UPI0002F7951E UniRef90_U4PCK8 UniRef90_A3SM3 UniRef90_U2UJK8 UniRef90_UPI00046A6862 UniRef90_A3VMP7 UniRef90_E4L2W9 UniRef90_UPI00046A964B UniRef90_B5Y9K5 UniRef90_U3QAF3 UniRef90_R6H9H6 UniRef90_B9DVS9 UniRef90_UPI00038172EA UniRef90_F9VA49 UniRef90_C7MNZ5 UniRef90_D3QDH1 UniRef90_A4WQW8 UniRef90_R7I533 UniRef90_F4LMP9 UniRef90_A3V6R2 UniRef90_J4K9S7 UniRef90_H0UBJ1 UniRef90_R8BM66 UniRef90_K2CRS5 UniRef90_R4RIT7 UniRef90_V6Z2E1 UniRef90_A9B136 UniRef90_R7BC39 UniRef90_R8W4V5 UniRef90_R6E9U8 UniRef90_I2ES63 UniRef90_UPI00035CF95D UniRef90_UPI000414F3A4 UniRef90_W5CA55 UniRef90_D2MQH8 UniRef90_E3D0Q1 UniRef90_E6YX10 UniRef90_G9ZBZ4 UniRef90_F5Y8J2 UniRef90_UPI000365F1E1 UniRef90_UPI00037AF51D UniRef90_N1ZVE2 UniRef90_L1MVV2 UniRef90_W9XSP1 UniRef90_UPI0003DEB462 UniRef90_E0RSM8 UniRef90_UPI0003B51FB2 UniRef90_C4G9D7 UniRef90_UPI00037E8F99 UniRef90_D2RMT9 UniRef90_R6TNA7 UniRef90_R6GYH6 UniRef90_F2NYA4 UniRef90_R5BJR0 UniRef90_U2U3I0 UniRef90_UPI0003B72DD7 UniRef90_UPI000361B15B UniRef90_B7GQC1 UniRef90_M1NYY4 UniRef90_Q7RE71 UniRef90_A3PL95 UniRef90_R4K4C9 UniRef90_UPI0003B4B106 UniRef90_G5JK47 UniRef90_J3XA20 UniRef90_S1P0J7 UniRef90_G2Z1P5 UniRef90_K2PIJ2 UniRef90_G5GPH1 UniRef90_J2V1N5 UniRef90_R5Z4J2 UniRef90_F0RVW6 UniRef90_R6QH23 UniRef90_D0WF23 UniRef90_A3W4T0 UniRef90_C4Z5R1 UniRef90_U2Z3V6 UniRef90_C8W753 UniRef90_UPI00047D65C5 UniRef90_F4XEH2 UniRef90_X5LUP6 UniRef90_G5KH1 UniRef90_E4KY6 UniRef90_D1REL5	H Q D L H I T P D L I V G D F D S V S K E E F D K L S E A A H E L V K L P E	R G L T P D L V V G D F D S L G Y V P E T E N I L R F P E	V E H G I N P V Y S V G D F D S V S E H E R Q Q L I E K L D I H P V K A E	G R L P Q A V I G D M D S L S H E G R E A L R G R V H H L P E	L T P Q L V V G D F D S M P P A M R P D V P T L T L P E	A Y G A A Y G F V P D L I I G D M D S L R E P D L R L A R Y G N S R V K R F A D E	G I A P I A V I G D L D S V S T Q A R A A F A D C L W H I P E	E K I N V I P H I M V G D F D T L S D E K L K K Y E N L N V E I V H D P I	E G G M I P H I A V G D F D T I Q E E G L R L L Q E A G I A I K K F S A	D V I I G D L D S L D D H V R Q Y Y D G R R T E I K H I A D	S Q V L D Y K I T P L I I G D F D S I D L A L L E T I K N K R I T V I H D T N	H G I T P Q V A L G D F D S T P A P L L Q R L E E R G L S L T T F P P E	E K G F P L D W A V G D F D S I S D D E R N R V A F S G A K V Y S S S E	H G V T P H V I I G D L D S I Q P A T L E I M Q A R K V E I Q R F P A	G I K P D L I I G D F D S S D V P D T D I K T I I L P V R	H C H P D L I I V G D F D S S V C P D I D C E R I Q L V P E	N V E P D L I I G D F D S M S E Q V E Q L Q Q T V P E K I C R L P E E	G I I K V D V L L G D F D R D I N L Q E I E Q S Q Y P I E I V Y T P D D	R Q N I I P D Y I L G D G D S A A P D T W N W G K S L G V P V E E F P A D	T I G D L L Q N D I L T T P F F D Q L Q Q I I D D S H D	R G I F M K L A I G D F D S T D A L D E I R N F A E E V I V L P T L	R A G W L P R L V L G D R D S A S P A D W D W V S A G G E R L F C K D D	C V V P E L W L G D F D S S Q D L Q K Y N H I A Q E F F P S D	G I A A E D A G I K P G W I I G D M D S L D D L G R L A K Y P P G I I R R F P D S	G V K P D A V I G D L L D S I E E T S K V Q I E D D R H F V S S	K A Q L K P Q M V L G D L D S V S T T A I A W A E K N K V L V E K N P N	G L V P D L A I G D F D S L S K K F E L A E L E N S V P D I R Y N P I	N Q V P T H L I G D G D S A N P T A W G W A E E Q N T E I H T F P E	Q F G H R S N I L P D A I I G D L L D S L S P A V E E Y Y R G R G V T V A R D P D D	L K E Q H N E Y V P N L I T G D M D S C S P I I L E K L K N M G S I V I E T P D D	G L T P H L F V G D L D S L P D R S V L H A F P R T E V R I F P R D D	G V L P D L I V G D F D S L S E Q G E M A I R D L M E I E E N D P D	G L R P D Y L I G D F D S I D D E R Q A L V R W Q L P L S V L P H	G I K P H I I G D L D S V L P S L L Q D T A F I H L P E	G L V P G F L Y G D R D S A A P G A W E E F A R K G A R V K T Y P N	E D G I T P D L V M G D F D S L G E N P T G D N V L T F P E	K T E V I P D L L L G D F D S L S A Q P D F P N I L L R V P E	A E A F G E D F A P N L I L G D M D S L K N L S L L E K Y K N A K R E L F P S D	D L E P D L L V V G D F D S Y H G K I T P G I E I L D L P T M	G I K P D A F C G D D D T A S P A T C D W A R S V A R T S L L Y P T	G V R P A A V I G D M D S V S V I A A R G A L A D V L H V V A E	G I K V D V L L G D F D P A A D L D L I R H Q Y P L E V V H T P D	G I V P D V V V G D F D S L S E L E G R P P R T D V R T I A L P A	N V M P E L W L G D F D S S D Q A L R D K Y R H V P C E V F S S D	K F K H Y P K I I L P D L I C G D F D S I N I N V Y N F Y K K K N N V L F E K C T D	G H M P R A V I G D M D S L S S E G R A T L A G R V H H L A E	G I I P D V V A I G D F D S L Q A K D L S R I E K T V K D I R Y N P I	N Q Q R E I R L T P D V L I G D I D S G V Q A E T Q A K Q T V Q E W V G Q T D	E H D I T P F F S V G D F D S V N E V E R K L L Q E Q L N I K P V K A E	G I T P D L A L G D F D S L K K A D L A K I E S N V K D I R Y N P V	G I K P D L V V G D F D S L T L A E K E L V I Q K A D E V L T A A E	E E Q H H L D L A V G D F D S V N A K E F A R I S E D A A E L F K L P E	R L P P V H L I G D G D S A D C G A W T W A K E S G A Q V H A F P E	G I S P D L T L G D F D S L G F D F D S T S P E L E T Q Y A H V P R Q V F P A A	G I S P D L T L G D F D S L G F D F D S F P S E I Q S K A H E R S L R D	Q K C V K L N I K P N L I I G D F D S S T K P D T D I E T I V L P V R	R A G I R P D A V V G D F D S F A P D V P D A V V H P A R	G Q T P Q A V I G D M D S L G A A A A R Y V D R L H E I A E	G V V P Q L A L G D F D S A S L E T V T W L K E Q Q V P C M K F A D	N N F D I M H I L Y G D F D S V S E L E L K L Q E K L D F E I S P A E	G A P P D L V V G D F D S L G R R P N H P N V I Q L P V	N V V P E L W L G D F D S S Q Q A L K S K Y A D I P R E I F P P D	K N G L S L D Y A I G D F D S V S S D E F S N I K E K A N F L L V A P E	G Q T P Q A V I G D M D S L G A A A A R Y V D R L H E I A E	D L G A D L L L G D L D S I G D D A L T Y I K E H K I E V K K F P K	N V H P Q L I I G D L D S I H T P I L E S Y P Y L H L P D

90                    100                    110                    120

UniRef90_F3B6K8	K D F S D S E L A V D R A V E A G	I K D I A V F G A M G K R F D H A	
UniRef90_R5XUT1	K D D T D T F Y C V K E A I K R G	A D V I E I Y C A L G G R R M D H S	
UniRef90_R5I882	Q E S N D L S K A F R W I C S M G K G R T	A D V I E I Y C A L G G R R M D H S	
UniRef90_E9SER1	K D D T D L M L A V R T A L G M G Y R E	F F I Y G A C G G R R L D H M	
UniRef90_L7I4X2	Q E S T D F S K A V T H I R S R T D K	P S D I V A I G G L G G R R V D Q G	
UniRef90_M5JU7	K D D T D T E M A L R Y I R H Y F P	G V T Q V N I F G A T G A R R M D Q L	
UniRef90_UPI0003683C57	K D D T D T E L A L K T I F A M D A S A E	V T I F G A F G G R R L D H L	
UniRef90_UPI0003B3F720	Q D S T D F T K C L R R I	R A P L V M A V G F A G L R L D H N	
UniRef90_UPI0002F7951E	D E T D L Y A A I N I A V K K G F K K	I I I Y G G L G G R R I D H T	
UniRef90_U4PCK8	Q D Y C D F S K A M A H L	K T V K L L P S I V T G I I G G A I D H I	
UniRef90_A3SM3	Q D S T D F D K A L R H I E	A P L I L G V G F L G A R I L D H Q	
UniRef90_U2UJK8	K D L T D T Q L A I R I A N D A G F A A A	A P L I L G V G F L G A R I L D H Q	
UniRef90_UPI00046A6862	K D Y T D T E L S L I E I L K K D V T E N	I I I Y G A T G G R R I D H L	
UniRef90_A3VMP7	Q D T T D F D K A L L A I D	A P L V L G A G F M G R R L D H E	
UniRef90_E4L2W9	K N D T D T E L A L K T I V F G D Y P E A E	V T I F G A F G G R R L D H E	
UniRef90_UPI00046A964B	Q D T T D F D E K A L A R I	D A P V I V G V G F M G G R I D H Q	
UniRef90_B5Y9K5	K D F T D G E R A L Q L S E S V	P V V F I L G T W G K E L D H L	
UniRef90_U3QAF3	Q R Y T D F D K A L N I V Y D K G	F L N I N V W G A N G V E Q D H F	
UniRef90_R6H9H6	K D F T D M D L A I G H A E Q Q G F E E	L V I C D A F T G R R L D H S	
UniRef90_B9DVS9	K D D T D T E L A L K T V F E R F P D A Q	V T L F A A F G G R R L D H M	
UniRef90_UPI00038172EA	K D F S D L E S I L K A I T M N P K E	I I I L A V T G N Y F D H S	
UniRef90_F9VA49	K D Q T D L D E A G L D Q V L S R F P D A E	I M I G A L G G R R L D H H	
UniRef90_C7MNZ5	K D E S D M E L A I A H A C K A	D A D E I V L Y G C L S R R L L D H T	
UniRef90_D3QDH1	K D D T D L A G L V E Q A V A H G	Y T D F I Y G A T G G R R L D H F	
UniRef90_A4WQW8	Q E T T D F D K C L R S I R A P R	V L A L G V A G A R I L D H G	
UniRef90_R7I533	K D D T D L V C L H E G R K R G Y T E	F I L A G A I G G R R F D H T	
UniRef90_F4LMP9	K D Y T D T D E L A L K E A Y A C I D R S G G G A A D	V T L I G G D G G R R I D H L	
UniRef90_A3V6R2	Q D T T D F D E K A L T R V T A P F	V I A L G F T G G R R M D H A	
UniRef90_J4K9S7	K D F S D S E L A V D R A V K	D D I K N I A V F G A L G K R R F D H A	
UniRef90_H0UBJ1	K N A T D T E L A V E I A M E A A R E H P D H R F K I I M Y G A V G S R L D H S		
UniRef90_R8BM66	Q Y S T D F A K A V A H I R S T Q P R	P V D I V A M G G L G G R R V D Q G	
UniRef90_K2CRS5	Q N T T D L E K A L N Y L C D K Q P N S	V S I C H A T G K R R L D H T	
UniRef90_R4RIT7	K D Y T D T Q L G V K R A F L	D Y Q P D W V N I Y G A T G G R R L D Q L	
UniRef90_V6Z2E1	K N D T D T E L A L K H V F A E M P T A Q T T	V F G V F G G R R V D H L	
UniRef90_A9B136	K N E T D L E L A L L L A A E R G	A D Q I R I L A A L G G R R P D M H	
UniRef90_R7BC39	K D D T D F T F A V K Y A I K Q G	F N D L V I L G G I L G S R F D H T	
UniRef90_R8W4V5	K D D T D T M H A L Q V V I D R G C T S	V W I A C A T G G R R L D H L	
UniRef90_R6E9U8	K D D T D M L A A I K R G L E L G	Y N D F R I Y A A T G G R R F D H T	
UniRef90_I2ES63	Q D K T D L E K A F D F L I N R G F P A A N	V V W A T G R R A D H A	
UniRef90_UPI00035CF95D	K D D S D M M A A V R F A W E K G I R E F E F	F G V F G G R R M D H S	
UniRef90_UPI000414F3A4	K D L T D T Q L A L T K M E K	A P A I I I T G A F G G R R F D H L	
UniRef90_W5CA55	Q D T T D L N K C I S F I T K N L P G P D N S N	V H R W F L L G G G G R A D Q F	
UniRef90_D2MQH8	K E D T D S A A S L K V L K Q K G	F F I L Y G A L G G R R V D H T	
UniRef90_E3D0Q1	K D A T D F Q L A L Q E L A E I D P R	Y D S I I I L W G A M G G R R M D H E	
UniRef90_E6YX10	K D A T D S A L A C L C E R A L Q E G A Q R	P Q V L L T G A F G G R R L D H L	
UniRef90_G9ZBZ4	K D E T D A E L A L A L A Y V S R H F P Q	A R V V Q I I G A A G G E A D H A	
UniRef90_F5Y8J2	K D Y T D T D E L A L N I L W E K G	C D E T W L V G G G G R R L D H L	
UniRef90_UPI000365F1E1	Q D D T D F E K S L N R I	N A P L I I I G V G F L G D R V D H Q	
UniRef90_UPI00037AF51D	K D D T D F K I L L D R I V K D N P	N D I I L C T G V F A G R F D H L	
UniRef90_N1ZVE2	K D L T D S E L M I K V A F E D Y Q V E D L T	I L G A T G G R R I D H Y	
UniRef90_L1MVV2	K D F T D T E L A L Q I A A D Q Y T H	P L V I L T A A F G G R R L D H L	
UniRef90_W9XSP1	Q Y A T D F T K C L K W I R K W T E L K Q D M		
UniRef90_UPI0003DEB462	Q D H T D Y A K A L		
UniRef90_E0RSM8	K D Y T D T E L A I E A L R E R G	V H R W F L L G G G G R A D Q F	
UniRef90_UPI0003B51FB2	K D D T D T I M A V K I G L E K G Y R K	F F I L Y G A L G G R R V D H T	
UniRef90_C4G9D7	K D D T D T E A A E R R I M D L K E A G E Y Q	K I D F I G I L G A T G S R R L D H V	
UniRef90_UPI00037E8F99	Q N S N D Y Q K T M A Y L H E N	N L I P S I I V G I N G G Y L D H V	
UniRef90_D2RMT9	K D D T D L S L V L Q D I	P G N R T V L A T G W G G R R A D H L	
UniRef90_R6TNA7	K D D T D T M L A I K E A L R R G Y E K	I Y I S G A V V G G R R L D H T	
UniRef90_R6GYH6	K D D T D T M L A V K T G L E R G E T E	F H I Y G G M G G R R T D H T	
UniRef90_F2NYA4	K D F T D T E L A L S T A R E I G K T A S	V V L V G G G N G G C L D H L	
UniRef90_R5BJR0	K D D T D T L A A I R Y A L E H	D Y K D L T L Y C A F G G R R F D H L	
UniRef90_U2U3I0	K K Y T D L A A L K S A T H E A A R R N S	N L R L T L S C S G G R Q D H Q	
UniRef90_UPI0003B72DD7	Q E S T D F D K A L R H I A A P F	V L G L G C L G G R R V D H E	
UniRef90_UPI000361B15B	Q N K T D L E K G I E Y L M A R G H S A	V N I V W A T G R R A D H S	
UniRef90_B7GQC1	K D D P D M L S A L K V G W S A G C R E	F H I Y G G L G G R R I D H T	
UniRef90_M1NYY4	K D M T D C A L A C E R A L Q N G A K K	L I L C G A L G G R R S D H S	
UniRef90_Q7RE71	Q N N T D L D K C I D K I K H Y V K K N	D K I F I L L G A T G N R F D Q T	
UniRef90_A3PL95	Q E S T D F D K C L R	N I R A P F V L A L G V A G A R I I D H G	
UniRef90_R4K4C9	K D W T D S E I M V Q T V F	K D Y L I A D K L I I I L G A S G G R I D H F	
UniRef90_UPI0003B4B106	K D Y T D G Q L I A V D Y A L Q E Y	G C Q R I I I Y G G L P R E T D H F	
UniRef90_G5JK47	K A D T D L A A L A V E K A V A L G	F D E L T V Y G A T G G R R L D H F	
UniRef90_J3XA20	K D L T D S E L M L H T V F E D Y R I N S L N		
UniRef90_S1P0J7	K D D T D T Q L A L V S V F S K Y P K A K	V T L I I G A S G G R R L D H L	
UniRef90_G2Z1P5	Q N K T D L E K A F D Y L I A A Q F T A	V N V V W A T G R R A D H N	
UniRef90_K2PIJ2	K D Q T D L E A G L E L V R S R F P E A E	V T I I I G S G G R R L D H H	
UniRef90_G5GPH1	K D F T D T E L A L Q I A A E N F I T R P L	V I L T A A F G G R R L D H L	
UniRef90_J2V1N5	K D M T D G E L A L N E A Y R L G A T E	V V L V C G A F G G R R T D H T	
UniRef90_R5Z4J2	K D Y T D T M I A V M E A I K L G	Y T D I R I Y G G T G G R R A D H T	
UniRef90_F0RVW6	K D E S D T E L A I K K V L S K G F Q Q	Y L L I I G G G G F R M D H L	
UniRef90_R6QH23	K D D T D T L S A V K E A I K R G	Y N D I I I I L G G I G N R F D H T	
UniRef90_D0WF23	K D E S D L F L A C E Q O A L A H G	C G T I A L L G A L G G R R L D Q T	
UniRef90_A3W4T0	Q N T T D F E K C L A A I S	A P L I I G L G F C G D R L L D H Q	
UniRef90_C4Z5R1	K D Y T D T H I A I I N A L K A G A S	V I I Y I L G A T G T R M D H T	
UniRef90_U2Z3V6	Q D S T D F D K A L R	N I D A P L V L A I V G F T G G R R L D H E	
UniRef90_C8W753	K Y D T D L A L K S A E H E A I R R N S K	L S L T V V S T S G G H L D H Q	
UniRef90_UPI00047D65C5	K D F T D S E L A L K A L A E A G Y T S	I D V Y G A L G G R R I D H E	
UniRef90_F4XEH2	K D D T D M V Y A L R E G L E R G Y R R	F V L L G G V G G R R L E H T	
UniRef90_X5LUP6	K D M T D S A L A C E R A L Q K G A E K		
UniRef90_G5KHK1	K N D T D T E L A I K T I F K Y T P D A K	L I L C G A F G G R R S D H S	
UniRef90_E4KY6	K D F T D T E L A L S Y L V D E G	M T F G A F G G R R I D H M	
UniRef90_D1REL5	Q A S S D Y Q K A M Q Y L	Y K D I V I L G A L G T R R L L D H E	
		S D N N L L P A I I V G V N G G F L D H I	

130                    140

UniRef90_F3B6K8	F A N   V L T   L   Q K Y K K   <b>L</b> G		
UniRef90_R5XUT1	L S N I   I A L   K Y <b>C</b> L   D S G V D A   V I		
UniRef90_R5I882	L G N I   S L L   A D F A E		
UniRef90_E9SER1	I G N I   A C L   A M I A D N G G R G V I   I G D D		
UniRef90_L7I4X2	L S Q M   H H I   C I   F Q S Y G Q G R V Y   L V S E		
UniRef90_M5J5U7	L A N L		
UniRef90_UPI0003683C57	M S N I   F   L		
UniRef90_UPI0003B3F720	L A A L   T A M   V		
UniRef90_UPI0002F7951E	V A N I   K I M E E   F K K K G		
UniRef90_U4PCK8	L Q N I   N F F   L   S T D S   F   Y M P		
UniRef90_A3SM3	L A A C   N T L   V R H   A E A   R V I L T S		
UniRef90_U2UJK8	Y S T A   F T A A H A   P   S   C V L A D		
UniRef90_UPI00046A6862	M A N   L F F   I L K		
UniRef90_A3VMP7	L A C Y   N A L   V R W   D R R   C   I L V G D		
UniRef90_E4L2W9	L A N L   Y   L		
UniRef90_UPI00046A964B	L A A L   H G   L   A F A D   R P   C   V L L		
UniRef90_B5Y9K5	L G N L   A L L   K I A Y S F N K   P   A V		
UniRef90_U3QAF3	L G N L   S T A L K Y K D K		
UniRef90_R6H9H6	L G N L   Q L L I   Q A A A R G T   C   V W G I   G E		
UniRef90_B9DVS9	M S N I   F   L		
UniRef90_UPI00038172EA	Y A S I   I N L   F R N R Y N G A   I K   I		
UniRef90_F9VA49	L T N V   Y L   P   L   Y F S		
UniRef90_C7MNZ5	L A N I   Q V M R S   C   A Q S G		
UniRef90_D3QDH1	M G A L   Q I L   L K		
UniRef90_A4WQW8	L A V M   N V L   V R   R T E   P   V   C   L L		
UniRef90_R7I533	L S   C   L   Q   F   A		
UniRef90_F4LMP9	L S   V L   N   V M A R   M   P   D R R   V   F   L   V		
UniRef90_A3V6R2	F A N I   L I L   L   Q K Y K K   I   G V D   I   T   I		
UniRef90_J4K9S7	L A N L   S   L L   K K A   H   R E G Q N   R   V M   L   L   S   D		
UniRef90_H0UBJ1	L S Q L   H H   L   Y   L   F   Q   E		
UniRef90_R8BM66	L Y N L   R   L L   K R F   H H   Q   L   N   Q   L   K   I   T		
UniRef90_K2CRS5	L S S N   L   Y L L   E E   F   Q   P   Y   L   D   R   L   R   L   I   D		
UniRef90_R4RIT7	L S N I   F   L		
UniRef90_V6Z2E1	M A N   Q   L   L   L   T   H   P   A   L   I   G   R   D   V   A   L   L   D		
UniRef90_A9B136	Y   C   N   V   L   A   L   N   Y   C   F   E   R   N   V   K   A   V   L   I		
UniRef90_R7BC39	L S N L   S   L   C   E   Y   A   W   E   R   G   C   T   C   R   I   L   D		
UniRef90_R8W4V5	L A N I   Q   C   L   Y   L   K   N   H   G   A   V   G   Y   L   V   D		
UniRef90_R6E9U8	I   T   N   M   T   N   I   V   R   Y   K   S   K   L   S   I   V   M   I   D   D		
UniRef90_I2ES63	L A N I   Q   T   A   K		
UniRef90_UPI00035CF95D	Y   S   L   L   F   S   C   A   H   Q   Q   T   P   C   I   L   S   D		
UniRef90_UPI000414F3A4	M G N I   N   V   L   Y   R   F   S   N   T   R   I   I   L   L   S   D		
UniRef90_W5CA55	L V N I   G   L   L   Y   R   Y   P   G   I		
UniRef90_D2MQH8	W S   L   L   H   S   F   L		
UniRef90_E3D0Q1	L S   H   M   T   Q   A   V   A   M   A   E   K   G   I   S   V   L   L   T   S		
UniRef90_E6YX10	F A N   L   W   V   L   P   R   F   A		
UniRef90_G9ZBZ4	L A		
UniRef90_F5Y8J2	M A V   Q   T   A   L   V   K   H   Y   N   K   K   I   L   I   G   E		
UniRef90_UPI000365F1E1	W S   L   F   N   Y   V   V   A   Y   Q   N   K   Y   K   R   R   I   I   L   V   D		
UniRef90_UPI00037AF51D	L V   N   L   L   M   M   L   R   P   S   R   K   F   I   E   K   V   T   L   I   D		
UniRef90_N1ZVE2	T   S   T   A   S   V   A   H   A   P   I   P   C   V   L   A   D   E		
UniRef90_L1MVV2	UniRef90_W9XSP1	UniRef90_UPI0003DEB462	L   G   I   V   S   L   C   M   R
UniRef90_E0RSM8	I   A   N   I   Q   T   L   N   F   I   R   N   H   G   A   K   G   Y   I   M		
UniRef90_UPI0003B51FB2	F   G   A   V   A   I   L   L   K   A   R   A   G   R   G   I   P   A   C   I   L   D		
UniRef90_C4G9D7	L   N   N   I   N   F   M		
UniRef90_UPI00037E8F99	F   G   N   L   Y   T   L   L   A   Y   A   R   R   G   G   S   A   F   M   A   D   D		
UniRef90_D2RMT9	V   A   N   I   Q   S   L   I   F   A   V   K   L   G		
UniRef90_R6TNA7	V   A   N   F   Q   A   L   L   Y   L   A   R   R   G		
UniRef90_R6GYH6	I   S		
UniRef90_F2NYA4	M   G   N   V   Q   A   A   M   Y   A   V   S   Q   G   A   V   V   R   M   V   S   H   D		
UniRef90_R5BJR0	L   G   V   W   G   N   L   A   A   Y   V   N   A   C   P   H   I   V		
UniRef90_U2U3I0	L   A   A   L   S   V   L   V   Q   R   R   D   V   P   C   L   L   I		
UniRef90_UPI0003B72DD7	I   T   N   M   T   N   I   V   R   Y   K   D   Q   I   K   L   V   I		
UniRef90_UPI000361B15B	I   S   G   I   Q   L   M   A   L   L   A   R   H   G		
UniRef90_B7GQC1	L   S   H   M   T   Q   A   V   M   M   E   K   G   I   S   V   L   L   T   S		
UniRef90_M1NYY4	C   A   N   I   S   S   L   Y   K   K   T   L   K   N   N   I   Y   L   I   G   E		
UniRef90_Q7RE71	L   A   V   M   N   G   L   V   Q   R   P   D   V   T   C   L   L   V		
UniRef90_A3PL95	L   I   N   L   L   M   W   L   N   N   Q   F   A   Q   R   V   E   I   I   D		
UniRef90_R4K4C9	L   G   N   L   K   L   M		
UniRef90_UPI0003B4B106	F   G   A   V   Q   L   L   K		
UniRef90_G5JK47	L   I   N   L   L   M   L   L		
UniRef90_J3XA20	L   A   N   I   W   L		
UniRef90_S1P0J7	F   T   N   I   S   N   I   V   R   Y   R   E   Y   L   K   I   V   I   L   D   D		
UniRef90_G2Z1P5	L   T   N   V   Y   L   P   L   N   F   A   N		
UniRef90_K2PIJ2	M   S   T   A   A   V   A   A   H   A   I   P   C   V   L   A   D   E		
UniRef90_G5GPH1	L   H   L   T   M   A   T   A   H   A   A   Q   G   R   K   I   L   S		
UniRef90_J2V1N5	F   A   N   I   Q   T   L   L   Y   G   A   K   K   G   A   D   M   R   M   V   D   S   D		
UniRef90_R5Z4J2	F   A   T   F   A   L		
UniRef90_F0RVW6	Y   Y   N   V   L   V   L   N   F   C   F   D   R   N   I   K   A   V   L   I		
UniRef90_R6QH23	Y   A   T   L   Q   T   L   V   R   L   S   H   R   G   I   R		
UniRef90_D0WF23	L   A   V   C   N   A   L   T   R   H   S		
UniRef90_A3W4T0	F   T   N   I   C   N   M   K   A   A   L   D   S   D   V   P   C   F   I   C   D		
UniRef90_C4Z5R1	L   A   A   F   H   V   L   A		
UniRef90_U2Z3V6	L   V   V   L   G   L   L   A   A   W   A   K   T   G   K   A   K   V   R   V   V   E		
UniRef90_C8W753	L   I   N   I   Q   L   L   K   N   P   Q   L   R   E   L   N   I   R   L   I   D   D		
UniRef90_UPI00047D65C5	L   A   N   L   Q   A   L   A   W   L   T   T   Q   G   A   R   G   V   L		
UniRef90_F4XEH2	L   S   H   M		
UniRef90_X5LUP6	L   S   N   L   F   L		
UniRef90_G5KHK1	L   N   N   I   N   F   M   A   T   D   C   L   L   Y   S   P   P   I		
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UniRef90_D1REL5			

1 10 20 30 40

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

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

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

K G I L I C A G Y P F P L R K E D L I I A V D G G F R Y C  
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 I L L G G E I T D R L R H A I S G S R F I A A A D D G G M R H A A A L  
 I L L G G A L S D R L R D A V R E S R F I A A A D D G G M R H A A A L  
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UniRef90\_UP10004670745 G V E P E L W L G D F D S T S G A L K E K Y A H V P Q R A F P A

UniRef90\_K9CE73 S V P P S L L I G D G D S A D H A A W S W A V E R G T K A R R Y P E

UniRef90\_H3RNK5 E H G I V P E Y A A G D F D S S T P E Q L A R V K A A V Q K V I Y P P E

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UniRef90\_R7K3B9 G I V P D L I A G D F D S F K P E T G K L L C L P V

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UniRef90\_R5D189 R A G V E P Q L L L G D F D S L A E V P A L P H V E R V P V

UniRef90\_UP100026C7B54 G V Q P Q L I T G D L D S V H P E L L E T Y P F L H V A D

UniRef90\_A5VSA6 G V E P E L W L G D F D S A S A E L Q A Q Y A H L P Q K R F P S

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UniRef90\_A3X4K9 A H A V A Q N H L P S A V I G D F D S I P S H I L A Q I P Q D R Q F R V A E

UniRef90\_R9L202 E Q A E I N T D L V I G D F D T L N A I P Q H P N V I S L S T E

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UniRef90\_K9EE99 G Y P L D L L A L G D F D S L T Q Q E L K E V D A Y A N Q R Y V K P D D

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UniRef90\_B7A5J1 G L P L E L W L G D M D S S P P W L Q E A L P A P R V L L P P E

UniRef90\_Q0G290 G L K P E L W L G D F D S A E T S I R S A S A I E T R S Y P T

UniRef90\_I7IVS2 G V H C D L A V G D F D S L K A N E L N I V E N S V I D I R Y H P I

UniRef90\_UP100035F6E0E G L M P D I W I G D F D S S T S E F F D E Y Q S V E K V P H S S N

UniRef90\_Q11CU9 G L R P E L W V G D F D S H P D R L I E A F P D V T R E I Y P A D D

UniRef90\_S3K150 A C A H R F G Y K P D L I V G D M D S L V P A S A L D E Y P D E K I L R F K R D

UniRef90\_R5WK88 G I V P D V I V G D F D S A S S V V V G V Y R K M A D K I D L D T H

UniRef90\_F9Y9G0 R H G L Q P D L V I G D L D S L G D A A R A A F Q D R L V Q V N E D

UniRef90\_M1P073 G V V P E I W L G D F D S S D K I L L K K Y G D V H R E I F P S D D

UniRef90\_I7T7P0 G V I P E L W L G D F D S S D E D L L Q K Y R D V P R E A F P S D D

UniRef90\_A0A024KHC4 E A G L V P D A I I G D M D S I S D P E G W P E A T R V F R I A E

UniRef90\_V6TGZ5 L G A A K F I S V G D Y D S M T P R T V E F L E T Y G I A R N H V P E

UniRef90\_H0UK87 G Q N I P D L R A I G D F D S L D P Q S I E W L A G H P E R A A R F P E

UniRef90\_U4KRA3 G Q N I P D L R A I G D F D S L K D H S G V P R Q A F P E

UniRef90\_F7YGT6 G L V P E L L W V G D F D S V P A N L P D D L A A V P R Q T F P E

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UniRef90\_Q2CIV6 G M P E A V I G D M D S L S A A A A A R L E G R L H R V A E

UniRef90\_A9D871 G L K P E L W V G D F D S T A D D L L A R H S G V P R Q A F P E

UniRef90\_D0J8H6 G I Q I D Y L S G D F D S L L K K D I P L G R D F F E T N D

UniRef90\_A0A016QNR5 G V K V D A W V G D F D S S A G L T L N A P R E V H P T A

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UniRef90\_W3ANF6 G T P D L I V G D F D S M H D A E K A E Y I H H R E L V I D P V

UniRef90\_UP1000403983C D V A A D I V I G D F D S V Q G G I P D D G R T L R L P A

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UniRef90\_B7CB31 L K I I D Q D L P I K M A V G D F D S L N E E D L K R I T C P I E R H P M

UniRef90\_C6AZX1 G I I T P E L W V G D F D S T P D D L A G A F P D V P K Q P Y P A A

UniRef90\_F5RMJ3 G I I L P N R L I G D G D S A S I F P K M F A K L Q G V Q I D S F P E

UniRef90\_B9JUG1 G L T P E L W V G D F D S S D D L P A D R F P D I P R L P Y P A R

UniRef90\_W6W9X2 G V T P E L W V G D F D S S D A A L I E Q F P H V E R Q T Y P P A

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UniRef90\_Q9RW3 G V K V D L W V G D F D S S D G L E L D A P R E V H P V A

UniRef90\_UP100035E0612 G L M P E L W L G D F D S A P A E L D P A F A A V P R E V F P A E

UniRef90\_A0A021X335 G V V P E L W V G D F D S T S P E L V A A W P Q V E R Q P Y P A A

UniRef90\_L0NJR4 R I E P E L W V G D F D S T P P A L I E A Q S G V P R Q P Y P A A

UniRef90\_E7MM16 A R S G K R M L L A I G D F D S V E E S D L S C I K E Y S D A F I Q N T I

UniRef90\_UP10004632A8F G L V P E L W T G D F D S V D A A L D A A H P D I P R E I F P P A

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UniRef90\_UP100037C2F46 G V R V D V W V G D F D S S A G V H L D A P R E V H P A A R

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UniRef90\_UP100041248FF A R L A A A G F A P D W A V G D F D S A P P P A V C A N V L R L P E

UniRef90\_M2ND00 N R Q H I S P L I A I G D F D S L E D Q N L L I N T N I I R Y P S H

UniRef90\_A3K0G3 M P E A V F G D M D S L S G D I Q A R L A P G V L R P V P E

UniRef90\_C2KWW2 G G D G D S L P D L R R R Y R A L V H R E A E

UniRef90\_R7GE74 Q E E G I T P S L I L G D L D S L R A E F L S E S F F Q G I P L K Q L P V

UniRef90\_H1GWLO Q N N I Y V N L A I G D F D S V T K D E L L I Q E K S K V I K L N P I

UniRef90\_UP100034D2475 G M A C D L F C G D A D S V S P E G A A R V T A E H V V R Y N P H

UniRef90\_W5X8F8 N K R I E A G V P P D T T I G D L D S I R S V L P F R R L I Q D P D

UniRef90\_G2IGY9 I K A G V K P S K I L G D L D S I K G N T L D V F S L K I P M L I S Y W D

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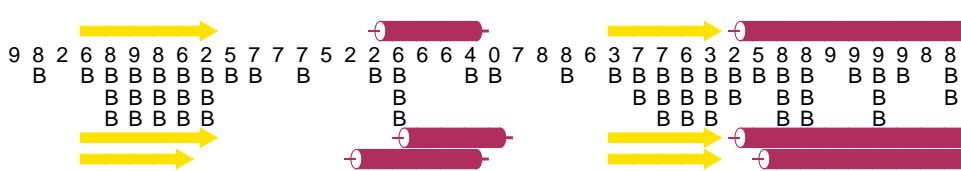
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40	K C I L V G A G D F F G L P F P I G K T D Y L I A A D A G Y L H L K A L																																														
N K E R F T I L L G G D V T D R L K R A V V N S R V I A A D G G M R H A T P L																																															
M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

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



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

Sequence alignment of UniRef90 proteins (90-120 residues) showing conservation. Conserved residues are highlighted with colored boxes (yellow for C, red for H, blue for P).

UniRef90 ID	Sequence (90-120)
UniRef90_B9XZ91	Q N S N D L S K A F F Y A L N K G C
UniRef90_A0A016S7T5	Q D K T D L T K C L E Y I A Q D F K K
UniRef90_A0A014NUK5	K D M A D G E I A V H K A L Q S G A R N
UniRef90_U4KMY2	K D V S D A F S A L E Y A F S N
UniRef90_U2UCY8	K N D S D L L A A C R I G L K K G F R E
UniRef90_F5J761	K A V T D G E I I A V S E A L S R G A H S
UniRef90_U2S876	E I E T D A D F A L R K I H S I C K N I K I N I
UniRef90_R3U9V3	E K D D T D T L I A L G L A I Q S F P E S E
UniRef90_UPI0003A80B57	K N E T D G E I I A T A E A V A R G A R R
UniRef90_UPI00036346B6	K D E T D F T H A Y R Q C D D
UniRef90_S8RAA9	A Q V T
UniRef90_U4QAW5	K A V T D G E I I A V S E A L A R G A G
UniRef90_D0YPB5	K D L T D S E A A I D L A F E R G F R
UniRef90_UPI000477B47F	Q E T T D F E K A L D R L
UniRef90_U6B4Q6	K D L I D G E I A V N Q S I K L G A K K
UniRef90_A0A023BA66	E N S T D F H K A L D H G R R D P G Q G G G R P R W V I
UniRef90_UPI00041D64CB	K D D P D L L S A L K I G W R H G A R E
UniRef90_H3FLZ8	D N R T D L L S A C L D L L R A A N A P S P T
UniRef90_A0A022XMJ7	Q Y S T D F M K C L S Y L A D N Y S N N S S K A L D
UniRef90_E7GD89	K D D T D T A L A I K Y A I A K G
UniRef90_A9E2C2	Q E S T D F E K A L T R I D T
UniRef90_UPI000400E028	K N A T D G E M A V E A A L S R G A T S
UniRef90_UPI00034C1B74	K D Q T D A E L A V S L A R E K G A G E
UniRef90_13XEC1	K N A T D G E I A V E A A L A R G A S
UniRef90_R6R9P9	K Y M T D T E A A V S Y M Q K
UniRef90_R4U1Y4	K D Y L D A E L A V Q A A K L N P H Q
UniRef90_F9PAQ2	E K T T
UniRef90_G9WLP5	K N D T D L H A A V K L S L E M G
UniRef90_Q6E1P2	K D Y L D G E I A I L F E A K K I S S T A N

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

UniRef90\_B9XZ91  
 UniRef90\_A0A016S7T5  
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 UniRef90\_U4KMY2  
 UniRef90\_U2UCY8  
 UniRef90\_F5J761  
 UniRef90\_U2S876  
 UniRef90\_R3U9V3  
 UniRef90\_UP10003A80B57  
 UniRef90\_UP100036346B6  
 UniRef90\_S8RAA9  
 UniRef90\_U4QAW5  
 UniRef90\_D0YPB5  
 UniRef90\_UP1000477B47F  
 UniRef90\_U6B4Q6  
 UniRef90\_A0A023BA66  
 UniRef90\_UP100041D64CB  
 UniRef90\_H3FLZ8  
 UniRef90\_A0A022XMJ7  
 UniRef90\_E7GD89  
 UniRef90\_A9E2C2  
 UniRef90\_UP1000400E028  
 UniRef90\_UP100034C1B74  
 UniRef90\_I3XEC1  
 UniRef90\_R6R9P9  
 UniRef90\_R4U1Y4  
 UniRef90\_F9PAQ2  
 UniRef90\_G9WLP5  
 UniRef90\_Q6F1P2

130                    140

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

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

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

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

