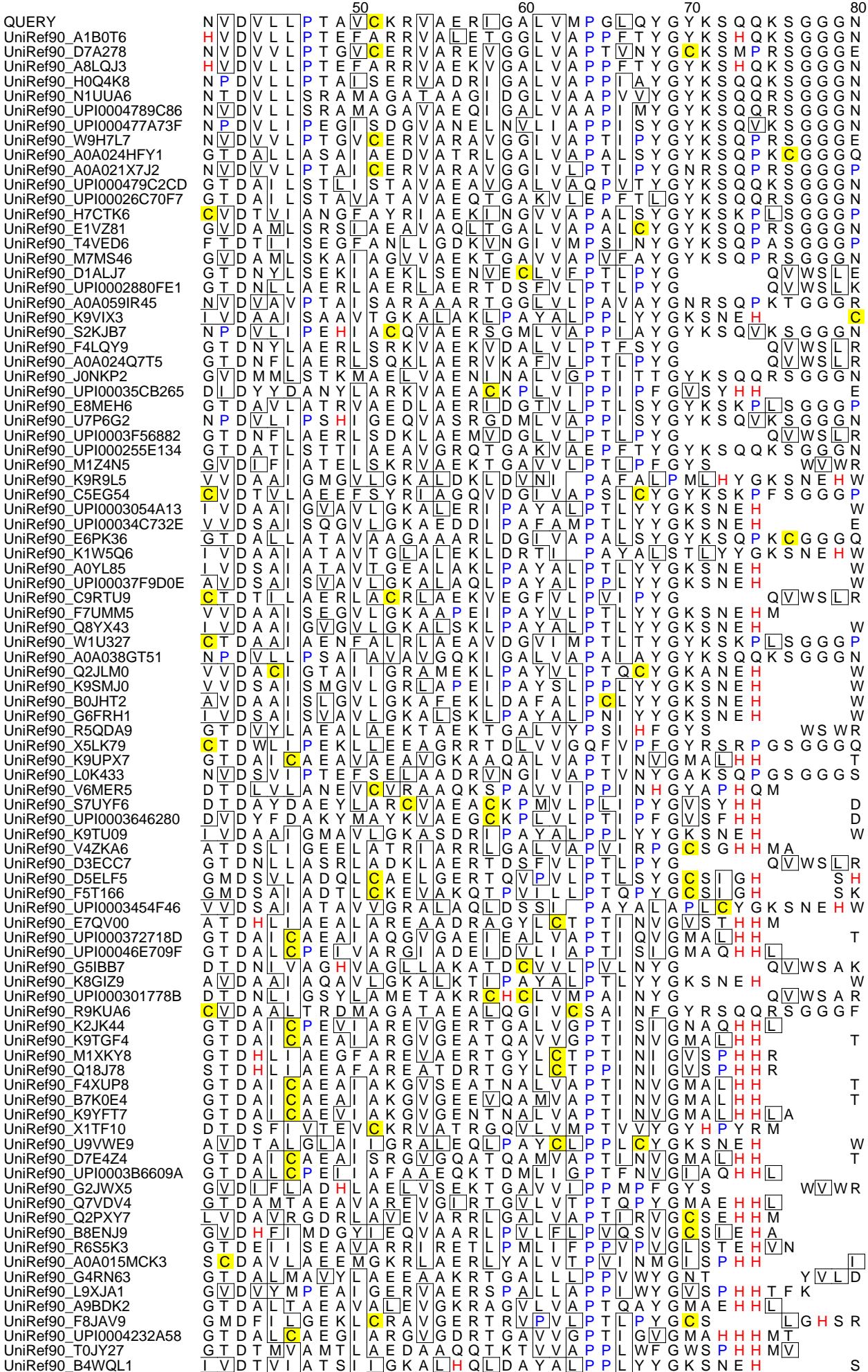


QUERY	1	10	20	30	40
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UniRef90_A8LQJ3	S V R L D E S	W P E F K A K V	A A G A P V L L	P L G S T E Q H G P H L P L	
UniRef90_H0Q4K8	S V Y M E D L	D A F T Y R E R I	A Q D N A V V L	P V G S M E Q H G P H M P M	
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UniRef90_W9H7L7	E T V R M D Q L	S W V E Y A R R V	R E D A T V V L L	P C G A T E Q H G P H L P L	
UniRef90_A0A024HFY1	N S V F W G E M	T W A E I A E K V	A S G A P V F L	P L G A T E Q H G R H M A V	
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UniRef90_UPI000479C2CD	R T V R L A T M	T A R E E E W V	G G G S A V A L	P T G A F E Q H G P H L P L	
UniRef90_UPI00026C70F7	E N V K M E N M	T W R E F A K K K D	D V I I L	P I G S T E Q H G P H L P T	
UniRef90_H7CTK6	S V F I D E L	D A Q T Y A E H V A	R T G S T I I	P A G A T E Q H G P H M P L	
UniRef90_E1VZ81	L M A M N M T	W Y E F N E R	K N K D V V I	P V G S V E Q H G P H L P L	
UniRef90_T4VED6	S V F L E D L	D A E T Y S A I	V A E E G S T V I	P T G A T E Q H G P H M P L	
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UniRef90_K9VIX3	N S V K I A E M	D W M T Y R D K V	Q D G A C K I L L	P V G A I E E Q H G P H M S L	
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UniRef90_F4LQY9	V E F Q N E N S	F E I K E K M N	Q S Q I V I L	P I G A V E A H G P H L P I	
UniRef90_A0A024Q7T5	V Q D D P V M L	I Q K E M N Q S Q	I V I L	P I G A V E A H G P H L P I	
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QUERY	90	100	110	120
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UniRef90_A8LQJ3	Q F P G T T S	L D A N T F A L V V R D V I R N L V R Q G V R R L V V V N G H Y E		
UniRef90_H0Q4K8	H M P G T T S	L D G A S L V N A L V K D V V K E F V R H G V R R I C I V N G H F E		
UniRef90_N1UUA6	H L P G T T S	L D A S T V I S I A K T L V L E F A R H G A R K I A F I N G H F E		
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UniRef90_H7CTK6	H R V G T T S	L G G T S L S L M V E D V I A S F I S Q G F A H V V I L N G H F E		
UniRef90_E1VZ81	L F P G T I D	L N G T T L I N L V K D I I E E L I S Q G F D N V V L L N G H F E		
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UniRef90_A0A024Q7T5	H I G S F G D	A A T V I G I C R T F V R E F A R H G L K R I A F I N G H Y E		
UniRef90_JONKP2	D F K G T I S	V S N D A L S K F V Y D I G M S L A Q N G I K K L I I I N G H G D		
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UniRef90_K9R9L5	H F P G T I T	D M N G V T V I N Q M H D V L S E L I A D G F T K L V V M N A H F E		
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UniRef90_UP100034C732E	G F A G T I S	L S A N T T L Y S L I E E T A I S I Y Q A G F R K L L I L M N S H G G		
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UniRef90_K1W5Q6	H F P G T I T	T L S T E T L I S V L M E V G E S I Y R A G F R K L V F I N A H G G		
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UniRef90_Q2JLM0	H F P G T I T	T L L S A Q T T L M A V L T E V A E S I Y R A G F R K L V F L N S H G G		
UniRef90_K9SMJ0	H F P G T I T	T L L S S Q T T L A A V L T E T A E S I Y R A G F R K L V L M N S H G G		
UniRef90_B0JHT2	S F P G T I T	T L L S S A T T L L T L I Q E I A E S I Y R S G F R K L V L M N S H G G		
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UniRef90_V6MER5	D F P G V I S	I S S A T F I S Y V D T V C R S L A H Q G F K R I L L L N G H G S		
UniRef90_S7UYF6	D F R G T V S	D N D T L S R L V Y D I G M S V A R N G F R K L V I I N G H G G		
UniRef90_UP10003646280	D F K G T L S	I T N D A L S K F V Y D I L G M S L A K N G V K K L I I L N G H G D		
UniRef90_K9TU09	H F P G T I T	L S A S T T L L A T I V E V A E S I Y R A G F R K F V L M N S H G G		
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UniRef90_UP100046E709F	G F P G T I T	L L R P A T T L L A V V R D V V Q S L V R H G F E H C Y F L N G H G G		
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UniRef90_F4XUP8	A F P G S I S	L L K P S T T L I Q V I K D Y L T C L T R A G F T K F F F I N G H G G		
UniRef90_B7KOE4	A F P G T I S	L L R P T T L I Q V I L D Y L T C L T R A G F T K F F F I N G H G G		
UniRef90_K9YFT7	F P P G S L S	L R P T T L I Q V I Q D I T S S L A S S G F R R F F F I N G H G G		
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130 140 150 160

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170 180 190 200

QUERY				
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210 220 230 240

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UniRef90_Q2PXY7	G R V Q V F D M H R V F S E G F R A V T P N G I L D S R S G A T S A I G E S C I		
UniRef90_B8ENJ9	F V P E S V A I F N E F N W L R Q D L S E T G A M G D A G G A T A R K G E A C A		
UniRef90_R6S5K3	G I P R K F M G N R S I T W E T E D G T P I G I G G D P R G A T A E K G E Q I Y		
UniRef90_A0A015MCK3	G D I Q E G K W R K L R Y Y Y E E M T R N G C L G D A T K A S R E I G E E I V		
UniRef90_G4RN63	A D E W V E A K Y R V Y G R E V Y E I S R K A V Q G Y P S R A S A E K G R A I L		
UniRef90_L9XJA1	V D P P V E S G W S L T A E D M D E L T P T G N I L G D P T V A T A E K G E A L V		
UniRef90_A9BDK2	E P A P A G P I Y D Y Q D F R Q R Y P D G R M G D P F L A K P D H G E I F L		
UniRef90_F8JAV9	S D D P D R T D N V F A H P V N R T S E N G V T G K P S L L A T V E D G Q K L L F		
UniRef90_UPI0004232A58	P I A P S G R F Y D A A D Y R R F P D G R I G S N P G L A T P E H G R Q F Y		
UniRef90_TQJY27	N P V L K N S L Y S C D P S F I G D T A A G G T T G K P S K A S A E K G E K Y H		
UniRef90_B4WQL1	E F P K A F P P G S L L S W T M K D L S R S G V V G D A T A T S E K G E A I L		

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QUERY	
UniRef90_A1B0T6	E V C V Q G I A D A I R E E F P P
UniRef90_D7A278	E V C T K G I V A A L R A E F
UniRef90_A8LQJ3	A D Y V T R I S A A M R K E F
UniRef90_H0Q4K8	E V C T A G I V N A L Q T E F
UniRef90_N1UUA6	K V C V D G I S R E L A R A F D
UniRef90UPI0004789C86	E R A S A G M A A A L N H E F P
UniRef90UPI000477A73F	K R A S S S M A D A I S H E F
UniRef90_W9H7L7	D V C V D G I A K S I R S H F
UniRef90_A0A024HFY1	D D H V E R I A S A V R A E F
UniRef90_A0A021X7J2	M D I C E G I A A A I R T E F
UniRef90UPI000479C2CD	A D C E S R I V D I L R Q E F
UniRef90UPI00026C70F7	H Q V V E S L T S D L V S E L S P
UniRef90_H7CTK6	T Q T V A D L A A E L R T E L
UniRef90_E1VZ81	D D V I P N I I E I I D K A F
UniRef90_T4VED6	E T V T D Q V A Q A L K G E L
UniRef90_M7MS46	E E A L N K M I G I V K K E F
UniRef90_D1ALJ7	D A V T T Q V A A A L D G E L
UniRef90UPI0002880FE1	D T A V K N M S D I I K K
UniRef90_A0A059IR45	E A S L A A M T R I L N D A
UniRef90_K9VIX3	A D C A A G I V E M I E R E F
UniRef90_S2KJB7	E S L S D G W A Q V I K D V Y
UniRef90_F4LQY9	D E C I E K I S R
UniRef90_A0A024Q7T5	D V I A V E T I L V K I L E K
UniRef90_JONKP2	E T A L E N M V K I I E
UniRef90UPI00035CB265	D S I L V S G I T D A I R G R F
UniRef90_E8MEH6	D I M I A H L V K F V E E
UniRef90_U7P6G2	E A C V D A V A E I C A E E F
UniRef90UPI0003F56882	E E C I S G I V A H L
UniRef90UPI000255E134	D I A L K N M V Q L I E A A
UniRef90_M1Z4N5	D Q V V A D L S Q E I S A E L
UniRef90_K9R9L5	N I F V V N N M S N C L M E A Y
UniRef90_C5EG54	E S V S D G W V K V I K D I Y
UniRef90UPI0003054A13	E D V V V S N I S D F I R R E F
UniRef90UPI00034C732E	E S V S D G W V Q V I K D I Y
UniRef90_E6PK36	D S L A Q G G W V K V I K D V Y
UniRef90_K1W5Q6	Q E L T E R L V A A I R A E F
UniRef90_A0YL85	E S V V D S W V K A I A D I Y
UniRef90UPI00037F9D0E	E S L A E S W V K V I T D I Y
UniRef90_C9RTU9	A A L V T G W I Q V I T D I Y
UniRef90_F7JUMM5	E T A L D K M A Y M L R R A
UniRef90_Q8YX43	D C L A D G O R Q A I E A V Y P P
UniRef90_W1U327	E S V S D G W V E V I K E I Y
UniRef90_A0A38GT51	D N V I P E L V K I C N K E F
UniRef90_Q2JLM0	E V C V A G I S R A L N E A Y D
UniRef90_K9SMJ0	E S M S D G W V R L I R D
UniRef90_B0JHT2	E S L A D G W A E L I K D I Y
UniRef90_G6FRH1	E S V A N G W V Q V I A D V Y
UniRef90_R5QDA9	E S I L A N G W V Q T I K D I Y
UniRef90_X5LK79	E Q F T E N I I S A V I E E
UniRef90_K9UPX7	E W M V D R L V A I L D E E F
UniRef90_L0K433	D L A V K D L T A G Y L E
UniRef90_V6MER5	D D V L L E T L A Q G I H D E W
UniRef90_S7UYF6	A A A V D G L V E F I Q
UniRef90UPI0003646280	T I M I A H L T A F V E E E
UniRef90_K9TU09	D L M I L H M I R F V E E
UniRef90_V4ZKA6	A S V A D G W V R V I A D I Y
UniRef90_D3ECC7	E T I I A D T Y A A D V R
UniRef90_D5ELF5	E R S L E V V M A D M V L R A
UniRef90_F5T166	E T M L T T L V E R V E R E T P P
UniRef90UPI0003454F46	S W M C E D L S Q L V M K E Q P P
UniRef90_E7QV00	A S L A D G W V K A I G D I Y
UniRef90UPI000372718D	E F A A T E Q L V Q L L
UniRef90UPI00046E709F	Q L A V K E I S R
UniRef90_G5IBB7	A A A V E D V I E D Y R R F I A P
UniRef90_K8GZ9	D N W M R Q M C R L V T D
UniRef90UPI000301778B	E S L A N G W I R T I Q D I I Y
UniRef90_R9KUA6	E S S I Q S A V R L I N E I I P
UniRef90_K2JK44	D V A V R N M V A A I E N E F
UniRef90_K9TGF4	E A S A S D V I E D Y R R
UniRef90_M1XKY8	D L A V Q E L T R S Y L E
UniRef90_Q18J78	E A A T E Q L V K L L
UniRef90_F4XUP8	E S A T E Q L V K L C R
UniRef90_B7KOE4	E L A V K E E S
UniRef90_K9YFT7	E L A V K E E L S N S Y L E
UniRef90_X1TF10	E R A V K A L S E
UniRef90_U9VWE9	N A M V E G L R K I I I D
UniRef90_D7E4Z4	A D V A A G W V T V L E E I Y P P
UniRef90UPI0003B6609A	D L A V E E L S E F V K E E
UniRef90_G2JWX5	E S A A S S L A R V F R
UniRef90_Q7VDV4	E L F A E K M T A L L L E G Y
UniRef90_Q2PXY7	D K A A S A L S N D L I D
UniRef90_B8ENJ9	A H A A D G I V A A L E
UniRef90_R6S5K3	D Y G A T A F V E L L Q D
UniRef90_A0A015MCK3	Q S F V G S I V D G L K E
UniRef90_G4RN63	E T A L D R L A R A V K D V L
UniRef90_L9XJA1	E A A V E E L V A L V E D
UniRef90_A9BDK2	D T A V S E L C R L V
UniRef90_F8JAV9	D K A A I A L T E D L
UniRef90UPI0004232A58	S W M V D D L S Q T I E K E A P P
UniRef90_T0JY27	D A A V E A I A
UniRef90_B4WQL1	K H L V N H I Q V I

	1	10	20	30	40
UniRef90_M0M0L9	M Y [■] A D R T W P E [■] G E Y [■] V A	N E S L [■] A V V P [■]	G S T E Q H G P H [■] P [■]		
UniRef90_A0A011UIH0	K R F W A D Y S S R D F A A L D R Q R [■] L I A V L P [■]	G A V E Q H G P H [■] P [■] M			
UniRef90_L8MXV4	M [■] L H [■] S T W Q E V E A Y L K R S P A V I I P [■]	G S T E Q H G P H [■] T G L I			
UniRef90_M0HD1	M Y V A D Q T W P E [■] G E Y [■] V A E S S L A L P [■]	G S T E Q H G P H [■] L P L			
UniRef90_U7FJA2	Y W Q D M T T [■] D F Q S Q G V E D W I A V L P [■] V A A I E Q H G P H [■] L P L				
UniRef90_W6IKD0	R Y W Q D M S W P E [■] A A L D K Q A A I A V L P [■] V A A I E Q H G P H [■] L P L				
UniRef90_X1EC58	K [■] T W P E V E E Y L K T N D V I L F P [■] T G S T E Q H G K H I A E				
UniRef90_UP100046CD8D9	T V L M H E M T W P R F E E I I R A G R P [■] F L A V G A T E Q H G F H [■] L P L				
UniRef90_UP100034862BE	R F F A Y L T W T A I R D M A H K D T V V L V Q P [■] V G A I E Q H G P H [■] L P L				
UniRef90_UP10002F7033E	R Y F P Y L T W T D I E A M S D R E N V V I V Q P [■] M G A I E Q H G P H [■] L P L				
UniRef90_E6P9C5	I [■] L W A E K S S P E L G E L C S Q K R V A I F P [■] I G S T E Q H G P H [■] L P L				
UniRef90_UP10002E5AFDF	Y R Y E K L T W P E L N D A V D [■] G K C I [■] P [■] C G A V E Q H G P H [■] L P L				
UniRef90_D3AKA2	W R N L T W P E A K E A V E E M P V C L L P [■] G A I E A H G P H [■] M K L				
UniRef90_UP10004714016	R S W R L Q L W T W P E V E R Y L E H N K G V I V P L G S T E Q H G P T G A I				
UniRef90_UP1000464CA65	K S R W W W D L T T R D F A E L D S E R M V A I L P [■] V G A I E Q H G P H [■] L P V				
UniRef90_C6IXJ8	M I F Q Y E N A Y D I A E K I K R M P C A I L P [■] I G A V E A H G P H [■] L P L				
UniRef90_UP10003A08CB4	R F L P Y L S W T D I I D A L E D K K A N T V I V L P [■] V G A I E Q H G P H [■] M P C				
UniRef90_L3QGJ8	K K V M L N E L T G R E I R E L L Q S G K L T A I V N F G S C E N H A D H L P L				
UniRef90_B7KGR0	M L L Q L S T W P E V E T Y L Q E S T G I P I G S T E Q H G P I G L I				
UniRef90_W5WDR8	P R E L A D L T S A Q V L D R V A G G T V V W P L G A T E Q H G P H [■] L P L				
UniRef90_K6D8D4	N K Y L L T E M T W E E V R D A L N T V K L A I P I G A H E Q H G P H [■] M V E				
UniRef90_U2BHT6	W E N M T R D E I A A L L D K D K S I V L L P T S A T E Q H G A H L P V				
UniRef90_M0MFE4	S V R L A E H T W P E I E A A L L D D G T T A V V A V G S V E Q H G P H [■] L P V				
UniRef90_UP10003039C58	S S R F W S E L S L R D F R S H D M S G V I A V L P V V A A V E Q H G P H [■] L P L				
UniRef90_C7NS54	M Y L I A D A A W P D L S S Y F E S E S I A L I P L G S T E Q H G P H [■] L P E				
UniRef90_K9RUQ2	M L L H L S T W P E L V E T Y L Q T S T G I I L P I G S T E Q H G P T G L I				
UniRef90_H0P080	M Q L H L S T W P E V E N E Y L Q S S S G I I F P I G S T E Q H G P T G L I				
UniRef90_Q1ARN1	K P V L W E L T S P E I E L I N R I N A A I P F G A V E Q H G P H [■] M P L				
UniRef90_K2P9C7	R P F F W S E L T T T D F A G L S P D T T I A I L P I A S T E Q H G P H [■] L P I				
UniRef90_W7Q634	L T E M T W P E V E N A L K T A R M A I I P V G A H E Q H G P H [■] M N E				
UniRef90_X1R1C9	R E I W L E R M T W P D V K E A I N E G Y D T V V L V L G A I E Q H G P H [■] L P L				
UniRef90_U1Y4R8	L Q Q M T W P E I E K A L E R A R L A I V P I G A H E Q H G P H [■] M V E				
UniRef90_C5A4C5	V R I L E E L S W P E F D R I K D K V V I A V I L P V G S V E A H G R H L P L				
UniRef90_C6XCC1	T M Q W S E T T W D E L P A K L A A A S G T A M L P I G A T E Q H G P H [■] M G C				
UniRef90_W0JPW0	M Y L P N L T W P D L R E Y V E N G S L A V V P L G S T E Q H G P H [■] L P E				
UniRef90_H4FC1D	K P F F W N E L T G D F A H L P V D R T I A I L P I A S T E Q H G P H [■] L P I				
UniRef90_M0MPJ6	M Y F A D R T W P E I D D I E E R S L A V V P V G S T E Q H G P H [■] L P I				
UniRef90_L9XDM5	M D L S E A T W T E V R E L E T D D L A V V P V G S T E Q H G P H [■] H A P L				
UniRef90_W7SVF9	R T H R L A D L T W P E I D E L R P H A P V A I V P L G A T E Q H G G [■] G M A Q				
UniRef90_D4M727	E K H E L Y R M T W K E V E N A F K K D P V I L I P L G S T E Q H G P H [■] T P T				
UniRef90_B0BYZ9	S P M Q L H C T W L E V E T Y L Q R S Q G I I M P I G S T E Q H G P T G L I				
UniRef90_UP10003804896	K R F W T E L S W T D F A Q G D T E N W I A V L P V A A V E Q H G P H [■] L P V				
UniRef90_B6YXJ6	M R M E E L T W P D F E E A K K S I D T V L I P V G S V E A H G R H L P L				
UniRef90_UP100037BBC7	S P L L W A N R T W D E I P G D L A A V A V A A I P V G A T E Q H G P H [■] L G T				
UniRef90_Q123Z5	S T R F W S D L K S P D F A R L L D K T R C I A V L P V V A A I E Q H G P H [■] L P L				
UniRef90_K5B9U4	M N W G E K A W P E L S A G V A G G A E V G L V P V G A I E Q H G P H [■] L P V				
UniRef90_UP100038116E5	N S S L M K E M S W T E F R E R K A K T D L V I L P V G A F E V Y G P H [■] L P L				
UniRef90_K4H7C0	R F L P F L S W T D V A A L P D K S N T V I V L P T G A I E Q H G P H [■] L P C				
UniRef90_J1SV59	R F L P F L S W T D V A A L P D K S N T V I V L P T G A I E Q H G P H [■] L P F				
UniRef90_K9SX81	R Y F A Y L S W Q Q V A A M P N K E N V I I F Q P M G A I E Q H G G H [■] P [■]				
UniRef90_UP10002002B0A	I R L Q L R S W P E V E A Y L T Q K K G V I I P L G S T E Q H G P T G A I				
UniRef90_H0EAD9	L M S E M T W P E V D A A A R A G A V A L W S V G A T E Q H G P H [■] L P L				
UniRef90_UP10003B45822	M R F D R L T S S E A V A A L A A R P V A L L G A I E N H G E H [■] P [■]				
UniRef90_N9XPZ0	Q N M T W P M V K E R L E V C S T A V P I G S T E Q H G Y H [■] L G T				
UniRef90_W0J0N0	S P V F W S A L T W P E I A A L P A A G M D A V L L P C G A T E Q H G P H [■] L G T				
UniRef90_UP10004645F39	P R D W A D L S W P E I D A A E P A R W I A V L P L A A T E Q H G P H [■] L P L				
UniRef90_D8J622	M E L A A Q T W P E L G S Y F E T E S L A L V P L G S T E Q H G P H [■] L P E				
UniRef90_A0ADR5	R Y G D L T S P E V P R A L R G A T L V W P V G G L E Q H G P H [■] L P L				
UniRef90_C5CR58	R S R F W S A L T S E E F S R L D R E R L I A V L P V G A T E Q H G P H [■] L P M				
UniRef90_G2TD62	M R L Q L S T W P E V A D Y L S T R R G V I I P I G S T E Q H G P S G L I				
UniRef90_X4ZHX3	T Y L L T H M T W P E V E E A L K T V K I A I P L G A H E Q H G P H [■] M A E				
UniRef90_B9KON3	R S F Y W V D H S T Q T F A E R D L S K T V V V L P I A A V E Q H G P H [■] L P V				
UniRef90_E1QQV1	M R W W E L T W P E F E K V D K T V A L L P T G I V E A H G P H [■] L P L				
UniRef90_E8RKF4	V H L A F S T W P E I E A R L K T S K T V I I P I G S N E Q H G P M G L L				
UniRef90_E5WC57	L T K M T W K E V E K S L S D T V E F A I I P V G A H E Q H G P H [■] M A E				
UniRef90_UP100036C78E7	P R F W A D W V I S A D F A R L L D K D R A I A V L P V V A A I E Q H G P H [■] L P L				
UniRef90_G2MK44	Y R L A D M T W Q Q V E A A V E E T Q T M L L P V G S T E Q H G H H M P L				
UniRef90_X1G3V9	L L I Q E M K W P E V K D Y L A K D D R V I I P V G S T E Q H G C W L P M				
UniRef90_D1C9R4	R L I A D L H W P D V R A L L D S G T R T V T A A G S M E Q H G P Q L P F				
UniRef90_W9ATU1	R E V R I E R M T S N E V A A A I E K G A C T A I P L A A V E Q H G P H [■] P [■]				
UniRef90_W5X9F7	M K L A E L T W M D D V E V L S R D V V V L I P T G S L E E Q H G P H [■] L P L				
UniRef90_C4WPS6	K E V E W A R M T A P D L R E I A G K P G A L A I L P V G S L E E Q H G P H [■] P [■]				
UniRef90_D0L197	H R L E L C T W S E V E D Y L T R E R A V V P I G S T E Q H G P H [■] I G I				
UniRef90_UP100037E0470	E P M F L D R A T L P E V E E Y L K E N D L L V L F P T G S T E Q H G P H [■] P T				
UniRef90_X1SLZ3	P E V E E Y L K E N D L L V L F P T G S T E Q H G K H I A I				
UniRef90_UP100046FBD7D	R F L P Y L S W K Q V A E L P D K E N T V I V L P A G A I E Q H G P H [■] L P C				
UniRef90_I3E1P9	F L G R L G T S K Q V E E L P K Q K A L V I V L P I G A V E Q H G P H [■] P [■]				
UniRef90_UP100037AC87	E E R L L T R L L S S R E V G D M P K D D A V V L V P L G A V E Q H G P H [■] P V				
UniRef90_E1R2Q3	F Q H K T Y K E I E K E A S S L I A I Q P I G S T E Q H G S H [■] P [■]				
UniRef90_U5Q6Q3	W E E L T S S E E F A K A V K L S E S G V C I I P I G V I E K H G Q H [■] P [■]				
UniRef90_A4YL52	P R D W T E I S W P D L E T P D A S S W I A V L P L A A T E Q H G P H [■] L P L				
UniRef90_UP100035C16C4	L P W D T T G D A G A R R S D V A I L P P I G S F E Q H G P Y L P L				
UniRef90_R9MG17	W L Q D M S W E E A E K S I L Q K A K G V A I L P V G S V E Q H G Y H M P L				
UniRef90_V4XUY5	E T A R V A E M T W Q E I E S A L L A E T R T L L P V G S T E Q H G H H L P L				
UniRef90_UP100047CE0E0	E K R F L P R L T T E E V K E L S K E D A L I I L P I G A I E Q H G P H [■] P [■]				
UniRef90_R4W9W0	M V S P E I E A A I E D G T R T A V V A V G S I E Q H G P H [■] P [■]				
UniRef90_UP1000360FFB5	E K R F L A R L S T E E V K Q L P K D D A L I V V L P I G A V E Q H G P H [■] M P L				
UniRef90_UP100036EB5BB	M L L H T S T W I E G Q F L E R S R T V V I P I G S N E Q H G P T G L L				
UniRef90_12BLG7	K R F Y W N E L T S P E F S A L D A E K T I A I L P I A S T E Q H G P H [■] P [■]				
UniRef90_UP1000360F063	K R H W H E M T T C D F E A D T V S E W I A V L P V V A A I E Q H G P H [■] P [■]				
UniRef90_E2CJ14	M I I E E M T M P E F E Q G L A R S R T V L I P F G S V E E H G P H [■] P [■]				
UniRef90_A1APX6					

50 60 70 80

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UniRef90_X1R1C9			
UniRef90_U1Y4R8			
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UniRef90_E2CJ14			
UniRef90_A1APX6			

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UniRef90_L8MXV4	G F A G T I S L K P S T L T L V I H D V V R S L A K H G F K R F F F L N G H G G			
UniRef90_M0HD1	Q F H G T M W V D A P Q F R D Y V E S M T R N L A Y H G I D R V V Y V N A H G G			
UniRef90_U7FJA2	P G T L T L A W D T V T R A W L E L G E S V A R A G G F R R K L V L I N S H G G			
UniRef90_W6IKD0	A F P G T L T L S A D T L L A V L R D L G A S V A R A G G F R R K I V I M N G H G G			
UniRef90_X1EC58	K F P G T I T L T F D T L L V D V Y K E V C E S L I S H G F R K I V I M N G H G G			
UniRef90_UP100046CD8D9	H R I G T I G I S A S C L S N L V A E V I V E L A R D G V R K I V I M N G H G G			
UniRef90_UP100034862BE	Q F P G T I S L T A Q T L I A T L M E G E S V Y Q A G F R K L V L M N G H G G			
UniRef90_UP10002F7033E	H F P G T V T L S A E T L L R V I H D V A E S I Y R A G F R K L V L L M N A H G G			
UniRef90_E6P9C5	P M P G T I S L S S E T L K A I I R D V A D S L S R Y R G I R H L V I V S G H A G G			
UniRef90_UP10002E5AFDF	P M P G T I S L N Q D F E H F M H H D I T K S L A Y H G F K I I L L N G H G G			
UniRef90_D3AKA2	R F P G T L T L S Y H T L I A V I K D L L Y S F R K R G F E L V F I H S H H Y G G			
UniRef90_UP10004714016	G F P G T I S L L Q P S T L L A L L R D V V V S L A R H G F E R V Y V I N G H G G			
UniRef90_UP1000464CA65	F P G T L T L S H E T T L A R M W Y E L G E C V H R A G G L R K L L F L N S H G G			
UniRef90_C6IXJ8	N F P G S I N V S N E A L I R M L Y D I G E S V Y R Q G L R I Y V M L N A H G G			
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UniRef90_L3QGJ8	A Y P L A V T L R Y E T N I A L A E D I F I S L L H H G I R R I L V I N G H D G G			
UniRef90_B7KGR0	A F P G T I S L R P S T L I Q V V L D Y I T C L A K S G F T H F F F N G H G G			
UniRef90_W5WDR8	S F P G T V H V G G D T L L V R F L R E A L Q S L F R L P L G R L V V V N G H F E			
UniRef90_K6D8D4	N F P G T I T L K P T T L I A I E D M V T S L K H H G I H N F L F L N S H G G			
UniRef90_U2BHT6	G F A G T I T F G T Q T Y Y S L L H D I A T A I C A S G F K K L V L F N S H G G			
UniRef90_M0MFE4	F P P G T I T I A P E T L M D L V R S Y C E S L I D E H G F E H V V L V P T H G G			
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UniRef90_K9RUQ2	E F P G S I S L R P S T L I I V I R D Y L V G L V R A G F T K F F F I N G H G G			
UniRef90_H0P080	F F P G S I S L R P S T L I Q V V M D Y V S S L A N A G F S R F Y F I N G H G G			
UniRef90_Q1ARN1	D F P G T I S L R P E T F L A V V E D I V N W L Y H S G V R Q F I L L N G H A W			
UniRef90_K2P9C7	P G S L S F G P E I L I P A W T A I L G S K V A E A G I R K L V I V N S H G G			
UniRef90_W7Q634	F P G T I S L R P E T T L L A L L R D M V G S L K R H G I T R V L F L N G H G G			
UniRef90_X1R1C9	F S G T I T L T T E T F K A T L R E Y V Y S L V Y H G F R R I V V F S S H G G			
UniRef90_U1Y4R8	F P G T I S L Q P E T M V S L L R D I T S S L K Y H G I V N F L W L N A H G G			
UniRef90_C5A4C5	A Y P G T I N V R P E S S L R M Y V G D V L A E L A A E G F K K I V L L N G H G G			
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UniRef90_W0JPW0	Q F H G T M W V D A P V F R D Y V E S L S R N L T Y H G I D R I V F V N A H G G			
UniRef90_H4FCD1	H G P G T L S L G A E I L I P A W T A I G K V A E A G V R K M V I V N S H G G			
UniRef90_M0MPJ6	Q F N G T M W V D P P A F R D Y V E S L S R N L T Y H G I D R I V F V N A H G G			
UniRef90_L9XDM5	Q F P G T M W V S E D T F R S Y V R E S V E S L A N A G F S R F Y F I N G H G G			
UniRef90_W7SVF9	F P P G T L T L S P V T L Q Q I V V E L V T S L H R H G W R R I F V L T G H G G			
UniRef90_D4M727	G F P G S V S L Q P K T F I S L M E D I C C F L D H G I K R I M F F N G H A G G			
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UniRef90_Q123Z5	R F A G T I T L L K A E T I I Q L W T A I A E S V A A T G V Q K L V L L N S H G G			
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UniRef90_K4H7C0	H F P G T L T L S G D T L L H T L L E I A A E S L I Y R A G F R K L L M I N G H G G			
UniRef90_J1SV59	G T K T L P F D T A V K R W L D I A E N L S K L G I K F V M L N A H G G			
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UniRef90_UP10002002B0A	G F A G T M S L Q P S T L L A V L H D D I I S L A R H G F E R I I Y V I N G H G G			
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UniRef90_E1R2Q3	F F P G T V C M Q V V E T L I R I L S D I G A S L Q R S G F R K L V F L N G H G			
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UniRef90_UP100036EB5BB	D V T G T Q T L T Y G E A I E R W L G I A E K L A R Q G I R K F V M L N A H G G			
UniRef90_I2BLG7	G F P G T I S L R P S T F I A A I G D W V R S L A G H G F E K L L F L N G H G			
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UniRef90_E2CJ14	P G T I T L S S W E T L T R N W L E I G E C V A R A G G L R K L V I I N A H G G			
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130 140 150 160

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UniRef90_L8MXV4	N I A V L K N A F T E I A N E L P D T S F R L G N W W A S N E I Y K L		
UniRef90_M0HID1	N I Q H L R E V G R R L R D D G T M Y A I E W M W D E S I P D L		
UniRef90_U7FJA2	N V P V L D I V A R E L L R V K H D M F V T A T N W L R F G Q P D G		
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UniRef90_E6P9C5	H L G Q S I D T Y R L N L S Y P V Q S L R V H N I S P Y N T V P V E R L		
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UniRef90_W5WDR8	N E P F L F E A L D Q V R Q E G L I G D R E V F A F S W W S L V Q D S W L		
UniRef90_K6D8D4	N Q S T L N V A A T T L A T E H E V E I Y F A K T T A S		
UniRef90_U2BHT6	N T D M L N M I S R D L R I D L G L D V F V F D W W F T P F W N E G		
UniRef90_M0MFE4	N F A P V N T V A P E I A R E I D A N V I A I A D L D E N M R L M N		
UniRef90_UPI0003039C58	N S A L I S T A A D L R A R H G V L A V T C S W A R F G Y P D G L		
UniRef90_C7NS54	N I T H L R E V G R R L R D E G T V F A V E W M W D E S I P E Q		
UniRef90_K9RUQ2	N I A T L K A A F A E T Y A T V A D L G L P Q A N V V Q C Y L A N W F M V G A V		
UniRef90_H0P080	N I A T L K A A F S E T Y H H L G S H G Q D V R C Q V G N W F M A R G V Y Q L		
UniRef90_Q1ARN1	N G A P L Q V C A E K I R T R Y D D V R V R A L D Y V D M Y P P		
UniRef90_K2P9C7	N V D V M S I V A R E L R V R H Q M V V V S T Q W G R F G N P E G		
UniRef90_W7Q634	N Q S T L S I A C S T F T Q E L G V A C Y F A K T T A A		
UniRef90_X1R1C9	N V F A M D E L M P I L A A E L P D V V F L T T P N R E D L M R E E R		
UniRef90_U1Y4R8	N Q S T L S I A C Q K L S V E L D V T I Y Y A E L Y A K T T A S		
UniRef90_C5A4C5	N V Y P L T E A A E D V A E L Y P D V E V Y L I N W W L D F R E D I L		
UniRef90_C6XCC1	N A A P L R C A L E M L R S E H D D M M V A V I N T A T M S P		
UniRef90_W0JPW0	N V A H L R E V G R R L R D D G T A Y A V I E W M W D E S I P D L		
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UniRef90_Q123Z5	Q V G L L D V V A R D L R A R L G M L V Y S V N W F S L P L V D E Q		
UniRef90_K5B9U4	N A A S L G V A T D R I R L E R K D V R V G V Y D W Y S A		
UniRef90_UPI00038116E5	N V P M I S Q I A Y S L R E R P D I R K A Q I D V W R F M Q R V		
UniRef90_K4H7C0	Q P Q I L Q I A C R E M R L R H G D F I A I P H D V F N V P N		
UniRef90_J1SV59	N S P L M T I V A T E A R V R F N M L A V A T S W T R F G L P E G		
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UniRef90_UPI0002002B0A	N I A T C K A A F A Q A Y G T A A A R G L P N A A R L R C K L A N W F M T S E		
UniRef90_H0EAD9	N V N L L H E G I E L A R E A G D L E R P R V M L I E R V F N A F S E A E M A F		
UniRef90_UPI0003B45822	N L D A M K L A A R Q L H D E H D M T V L T L T Y P G T A A V		
UniRef90_N9XPZ0	N G A S M K Y A I R D I Q D T T S V K I L G M F Y P G L Q P I Y D K		
UniRef90_W0J0N0	N A A P L R C A L E I L R S R H D G F M V A V L D T A E V		
UniRef90_UPI0004645F39	N S A A M M L V A Q E L R A S L G L L V V T T S W S R F G A P		
UniRef90_D8J622	N I T H L R E V G R R L H D R E E A Y A I E W M W D E S I P T L		
UniRef90_A0ADR5	N E G L L F E A I D G C A P G T V F P D T E V V A F S W W S L V T E D W L		
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UniRef90_B9KON3	Q M A L M D I V C R D I R I F L G M L A V S C S W F R I A P V E D L		
UniRef90_E1QQV1	N A D A L N M A A K D V A K E T N L V I I I N W W I D		
UniRef90_E8RKF4	N V A S I E A A F S E I Y S Q W S W K G T R P F A L K L S N W W D L P G I S P L		
UniRef90_E5WC57	N Q S T L N L A A M T I T K E L E V E V Y Y A K T T S S		
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170 180 190 200

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UniRef90_M0HD1	V R E L F	D H [] G P H G G P K E T A M I M H I	R E D R L E D
UniRef90_U7FJA2	L Y A D A E F T Y	G I [] H G G D I E T S L M L H L	R P D L V R M E L A T D
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UniRef90_W7SVF9	R K S V F D D P K T S A H G A E P L T S M T W Y L N P E D M R M E L L P E	V R L P D R L V R	
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UniRef90_UPI0002002B0A	Q E Q V L E A R E R W H G T Y F H A D E M E T S S M L M L H L P E G V R M E L A E A	Q E Q V L E A R E R W H G T Y F H A D E M E T S S M L M L H L P E G V R M E L A E A	
UniRef90_H0EAD9	Y M E S P T W G G M F H A C E F E T S L M L S A R E E L V H M D L L A R A	Y M E S P T W G	
UniRef90_UPI0003B45822	S P R V R A A F F A D A Q D W H A N Q A E T A L M M A R A P H F V R S D L C R T	S P R V R A A F F A D A Q D W H A N Q A E T A L M M A R A P H F V R S D L C R T	
UniRef90_D8J622	Q G L F S D E E L R H G [] H G G A V E T S I S M M L A R F A E H V R I D K I A N D	Q G L F S D E E L R H G [] H G G A V E T S I S M M L A R F A E H V R I D K I A N D	
UniRef90_A0ADR5	V S E L F F E Q N G P H G G P K E T A M I Q H L A G E L V R E D R L E D	V S E L F F E Q	
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UniRef90_B9KON3	A K D V V M D R L I D S R L Y G H S C E R E V S E A L Y L A P W L V R Q D K L A S	A K D V V M D R L I D S R L Y G H S C E R E V S E A L Y L A P W L V R Q D K L A S	
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UniRef90_UPI00035C16C4	L F S A D E L R H G H G G A V E T S I S M L A R H P Q L V R G N A I A D	L F S A D E L R H G H G G A V E T S I S M L A R H P Q L V R G N A I A D	
UniRef90_R9MG17	V E T P S H S D M H A G E V E T S I S L L H D C P E L V R P G H M T S	V E T P S H S D M H A G E V E T S I S L L H D C P E L V R P G H M T S	
UniRef90_V4XUY5	K E I V K V E L G F G A V G H A E E I E T S H M M Y R Y P D L V N L K L A K D	K E I V K V E L G F G A V G H A E E I E T S H M M Y R Y P D L V N L K L A K D	
UniRef90_UPI00047CE0E0	F A E V V A A E I R T G E V S F H A S E F E T S I M L E L F P D L V S M D R A T A	F A E V V A A E I R T G E V S F H A S E F E T S I M L E L F P D L V S M D R A T A	
UniRef90_R4W990	T R E Q K F G I H G G D V E T S I S M V L D F K N N W V H P D K P E D	T R E Q K F G I H G G D V E T S I S M V L D F K N N W V H P D K P E D	
UniRef90_UPI000360FFB5	D G L A K A G I D Y Q Q D V I H A G A A E T A I V L V A I D E G L V R T E E M E P	D G L A K A G I D Y Q Q D V I H A G A A E T A I V L V A I D E G L V R T E E M E P	
UniRef90_UPI00036EB5BB	L T D L I P E K E W V F G I H G G D V E T S I S M V L D I K G N W V N M E Q P E D	L T D L I P E K E W V F G I H G G D V E T S I S M V L D I K G N W V N M E Q P E D	
UniRef90_I2BLG7	V I S P E E K A I D L H G G D I E T S V M M L A L H P D K V D M S K A E N	V I S P E E K A I D L H G G D I E T S V M M L A L H P D K V D M S K A E N	
UniRef90_UPI000360F063	A Q R Q F P V G H G S H A T P S E I A V T Q W A Y P D A I K S A E Y S P	A Q R Q F P V G H G S H A T P S E I A V T Q W A Y P D A I K S A E Y S P	
UniRef90_E2CJ14	M I S D E E R T Y G I H A G E V E T S I S M M L H L H P D L V R T D Q L R D	M I S D E E R T Y G I H A G E V E T S I S M M L H L H P D L V R T D Q L R D	
UniRef90_A1APX6	A R D E G R G L I E T P G D A H A G E I I E T S R I L H S H P H V K G S A P R E	A R D E G R G L I E T P G D A H A G E I I E T S R I L H S H P H V K G S A P R E	

	210	220	230	240
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UniRef90_M0HD1	A R D G Y R E H G A R T F Y D S I E N S D N G V F G D Q T A A T P E A G A K L F			
UniRef90_U7FJA2	F P S E Q Q T Y L Q E F K W K A Q D L N V T G A L G N A S L A T A E K G R Q S L			
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UniRef90_D3AKA2	D Y P K F P E D F D S T P T Y W D E V T S T G V V M G D A K A G T K E K G K V L T			
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UniRef90UPI0003A08CB4	H Y P P P F P C P T L A A W T A R D F G P T G V V G D P T G A T P E Q G A Q L L			
UniRef90_L3QGJ8	Q I P V F A D Y G V N R I W D I G E S A T G A T G D P R C A T A E K G G Q R L L			
UniRef90_B7KG0R	E V A S G F P I Y G A V N F R R H Y P D G R M G N P A L A T P E H G Q Q F Y			
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UniRef90UPI00046FBD7D	S P V P N I A C P T L M A W C A R D F G P T G V I G D A R G A T E E Q G E A L L			
UniRef90_I3E1P9	E I M Q F P M K I K Y F A W K M E D I S N T G I L G N A R K A T K E K G E K I I			
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UniRef90_V4XUY5	V D P P N A V G W S L T A A D M E A L T P A G N I G D P T V A T E E T G Q A L I			
UniRef90UPI00047CE0E0	T K H L Y L K G T S Y F A W V I N D I S T T G V V A G D A T Q A T I E K G M E I N			
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UniRef90_E2CJ14	F P S A Q Q D F L R D F K W M A K D L N P E G A L G N A A N A S A D K G R Q S L			
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250

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UniRef90_M0HD1	E A A T D Q L V Q [L] V E
UniRef90_U7FJA2	D H A A R G F I E L L E D
UniRef90_W6IKD0	E H [L] A S Q F V S L L H
UniRef90_X1EC58	K A V V D E I S A F I E D
UniRef90_UPI00046CD8D9	D D T L N L C L R S V R A A F P P
UniRef90_UPI00034862BE	E S L T E G W V Q A L T A A Y P P
UniRef90_UPI0002F7033E	G S L A S G W V T A L T D I Y
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UniRef90_UPI0002E5AFDF	E E A V K Q L V R F V T W W
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UniRef90_UPI0003A08CB4	E Q L S S Q W A Q A I T E
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UniRef90_B7KGR0	D L A V K E L S N
UniRef90_W5WDR8	S H V I E Q A V A M I R D
UniRef90_K6D8D4	E E A L E N L A R S I E E V L
UniRef90_U2BHT6	D Y A C C K L L D I L N E
UniRef90_M0MFE4	E R I A T A Y A E R I D A E
UniRef90_UPI0003039C58	D Y W A T A F I E L L R D
UniRef90_C7NSS4	D A A S D E L V A L A E W L D
UniRef90_K9RUQ2	E L A V T E L S K S Y R Q
UniRef90_H0P080	E V A V K E L S E S Y Q R
UniRef90_Q1ARN1	E T M A R A I A A A V N E P W P
UniRef90_K2P9C7	R H Q V A G F I E L L R D A Y P
UniRef90_W7Q634	E E A L E G L T A A V R E
UniRef90_X1R1C9	E F A A D I T V R
UniRef90_U1Y4R8	E T A L D R L E E E I R
UniRef90_C5A4C5	Q I V S E S I A R I I
UniRef90_C6XCC1	A W M V E D L S E L I R R E Q P P
UniRef90_W0JPW0	E A A T D Q L C A L L E
UniRef90_H4FCD1	R H Q A K G F I I D L L E D
UniRef90_M0MP6	E A A A D Q L V Q L L E
UniRef90_L9XDM5	E L A A D A L D R I L L E
UniRef90_W7SVF9	D A V V D R V C D F L
UniRef90_D4M727	D E V I R R N A C K L V E K W
UniRef90_B0BYZ9	E A A V E S I A K D Y Q K
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UniRef90_UPI00037BBC7	G W M V E D L S A L V L R E T P P
UniRef90_Q123Z5	G A A G R S L A A Q L L E E
UniRef90_K5B9U4	R L I A A E A V A D R I R R E E P P
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UniRef90_K9SX81	Q S L A T G W I Q V I K D I Y
UniRef90_UPI0002002B0A	D V A A T G L V A D L E R
UniRef90_H0EAD9	A L I V D R L T A A I S E A L D P
UniRef90_UPI0003B45822	E A A V E A I V A L I G H A
UniRef90_N9XPZ0	E E F A A K A A D L I T R
UniRef90_W0J0N0	R Q I V T D L S R L V R R E R P P
UniRef90_UPI0004645F39	E H G A R A F V E L L I E D
UniRef90_D8J622	E A A T E Q L C E L L C E
UniRef90_A0ADR5	W H L V D G I V E L L
UniRef90_C5CR58	D H V G R R F V E L L Q E
UniRef90_G2TD62	E V A V D Y I I A
UniRef90_X4ZHX3	E T A V S R L A A A A R E L I E P
UniRef90_B9KON3	D R A A D G L V S L I
UniRef90_E1QQV1	E A A V N E V V Q L I N D
UniRef90_E8RKF4	E A A V P A L L K D I A K
UniRef90_E5WC57	E E A L D N L S A
UniRef90_UPI00036C78E7	E A V G Q G L L A S L L Q E
UniRef90_G2MK44	E D A V T N V T N L V
UniRef90_X1G3V9	E H L V S R L V E V I I E Q
UniRef90_D1C9R4	A A L A D M L A A Y F R E R
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UniRef90_W5X9F7	E A A V A G A T E E L R
UniRef90_C4WPS6	D L H A R E L V K L I R
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 M L W Q N L N Y K G I A D I L V K T N G T A M P I G A T E Q H G P H L G C
 S E V Q W N R L T A A Q I R A L A A Q D A V V L L P V G A T E Q H G P H L P T
 Y E W M T W P E I I A A A A A D A P V V V A V G A T E Q H G P H L P V
 Y W A E L K T T E F Q T L S Q D C I A V L P L G A T E Q H G P H L P L
 M I L G E M S W P E I E K G L K T R T V L P V G A V E E H G P H L P V
 R R V W W G D Y R T T E Y A S I D P E A T I A V L P V A A I E Q H G P H L P V
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 P R D W T A I R W P E M A G A D P A R W I A V L P M A S T E Q H G P H L P L
 R S W N I A D L T Y V D I N E Y L A E K D I V L V P V G S T E Q H G P H L P L
 M L E R I S W W K A R E L F Q R T K V A L V P V G S T E Q H G P H L P L
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 S I R L A L R S W P E V D D Y L N H C K G V I I P L G S T E Q H G P T G A I
 K S R Q W E N H T W E E I R D L V A S G M D A A I L P V G A T E Q H G P Q L T I L
 M Q L H L L T W Q E V E K Y L T H S N G I I I P I G S T E Q H G P T G L I
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 M L L E E L T T M P Q V E A A L A A G C I R T V Y I P F G A L L E E H G P H L P L
 W A E L S S P A I A A L D K T R L V A V L P V A A V E Q H G P H L P L
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 K K V Y L N E F T T E E L K N R F D K G E D S A I T I F G S C Y E S H G P H L P L
 K R H W A E M T W Q D F S A P G R E H W I A V L P V A A V E Q H G P H L P L
 M L F A D L N Y P A I R E Q A G S A V V V L P L G A I E Q H G P H R M A V
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 M S K M K W Q Y A E E E L K D K V V I L P I G A L E A H G S H L P L
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 K T V F L E E L T W T E L R S Q I Q A G K T T I L I P G A T E Q S G P D V A L
 N S R N L A F L S W P E A S E A A S K E G S T L V W P F G A C E Q H G P H L P L

50 60 70 80

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

	90	100	110	120
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UniRef90_UPI000464E51E	P G T L T T L P P A T L I D A W T E L L G L S I A R A G V R K L V I V N S H G G			
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UniRef90_C7NSB4	F S G T L S L R P D T A I D V L V D I G Q S V A A S G V H R L V I F N S H G G			
UniRef90_N6WS10	G F P G T I K I M P Q T Y Y L M M R D V M E S L I H W G F K N F M F I N M H A G			
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UniRef90_Z5XGN9	R F S G T L S L S P E T L L A V L R E I G A S V A R A G I E R L V L F N G H G G			
UniRef90_Q1GMT9	G F P G T V S V G F N A L R D Y V Y D I L L G F H E S N F R Y V M V L S G H G Q			
UniRef90_A0B995	H A P G T L T L P A T T L I E A W T E L G L S I A R A G V R K L I V V N S H G G			
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UniRef90_U2FZW6	G K P G T L T F R F E T Y M A I R D D I A E S L S G W G K A V Y V L S G H G S			
UniRef90_Q2CAE5	F A G T G M S L S P S T Y V L V L T E L I Q G L M K H F K R I L F V N G H G G			
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UniRef90_U2SET4	G M P G T I T L N Y E T N M A L L H D I I A S A S N V G Y N K F I M L V A H G A			
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UniRef90_A6X5S0	R Y P G T L T F S A E T I I R M W C E I G A C V C V A A S G V R K M A L L N S H G G			
UniRef90_A5G3E3	G P G T I S I T T A T L K A L L K D I V R S F H S H G M R N F I V L T G H G A			
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UniRef90_W6MDH9	G F A G T G L S L L D A E T L A A V V D C A R R M V A W G V R H L I V L S A H G G			
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UniRef90_D1C3W9	F P G T I T L S T E T F V Q V L V E V I A S L H H G F E R F L I V N G H G G			
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UniRef90_L0K6W2	N F P G S I S L L Q T E T L L I S I D E I D A I S L E R H K V Q C L V V V N A H F G			
UniRef90_E3FTW2	F P P G T L S L R T G T L R A V L E D L L A S C Q R H G F E R A F L F S G H G G			
UniRef90_W3RN86	A F P G T L T L P T E I A L Q N W S A L G A S L A R A G I R K L V M V T S H G G			
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UniRef90_W4Q726	G H P G T M T L L S A T T L L Q Q V I L D I G K S A K A S G F R R I V L F N T H G G			
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UniRef90_B8ICW9	F P G T L S L S G D L M L K M I S E V G K Q L S E M G F Q R L V F F N A H G G			

130 140 150 160

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

170 180 190 200

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UniRef90_U2FZW6	A R A E L P E K E R E L G M H A G T A E T A I M W A L I E R T V K M D R A V C		
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UniRef90_A5G3E3	R E L V E T A G D A H A G E I E T S S R I M H S H P H Q L V N G T G E R E		
UniRef90_Q8TYV8	E T D W G G H A D E I E T S V M L Y L H P E L V G E E R K V D		
UniRef90_W6MDH9	A I A E Q D G I P L S A L G L H A G E G E T S E L L H L S P E Q V R M D L A V P		
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UniRef90_U1N3X0	P S M G H A G P I E T S S L L H T R P E S V H T D R L E E		
UniRef90_X5LIQ7	G A A D S V A S L G A N V G G H A D I A E T S V M L A H P Q K V R T D R F V R		
UniRef90_J7TVW4	E N F F R E W N G L G H G G E G E S S I T A A V C P D L C D L S K A V R		
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UniRef90_D1C3W9	A N R Q F P T G H G V H A T P S E I A V T Q W A L P H T I K D A D Y A P		
UniRef90_F2LIY9	A H S L F D S G R F P G W E L E H A A L T E T S L M M H L A P H L V R E E L I P G		
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UniRef90_W3RN86	L D R L F P E G F P G T E L E H A S L L E T S L M L L V R D D L V D M S K V P N		
UniRef90_UP100022601DF	E D Y L S F D A G W H A N I G E T A A V V M A I N E G L D L S E T P Y		
UniRef90_B9LMC5	G H G G P A E T A V V M R H H P E L V R E D R T D T		
UniRef90_Q3IU83	G H G G P A E T A V V M R H H P E L V R E D R T D T		
UniRef90_B1LYR6	L F P A D E I A H G I H A G G I E T A L M L A L R P D L V R T D R V A D		
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UniRef90_K0I9Q4	A G R F S A Q E H R F G I H A G E I E T S S M M L H L A P A T V R M E Q A Q N		
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UniRef90_I8S7X0	I K E N G G P Y D T P F I H A D E V E Q S W S L A L F E L C K Q E Y A V A		
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210 220 230 240

UniRef90_UPI00045E64F3	E Y P T Y P A H F D S A P V R W D A [V S S T G V F G D A T A A T A D K G E R [V V]		
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UniRef90_UPI00036E9F8D	Q I A L N G P [R D A L D Y R A R F P D G R I G S D P A Q A S P E K G Q Q I I		
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UniRef90_Z5XGN9	D A P A R N V P W D V L P I D P S M S T A S G I L A S A T Q A T A I K G K L L A		
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UniRef90_Q2CAE5	D Y P P V P A E Y G K S E L S M G Q L [M E S G V F G D P T V V A S A E K G R R W L		
UniRef90_W5WXC2	F Q P T V V A K H W P M S P Q L F R E T F P D G R M G N P S L S S S K H G E V L F		
UniRef90_J2K6M2	A V G P D P S E A I H V P R S F R K V T S S G V V A G D A R S A T A E K G E A L L		
UniRef90_UPI000262576B	G P P P F Y G S G V V S R W V S F K E V S A N G V I V G N P S V A T V V A K G E L L L		
UniRef90_K0HY70	N Y P P V F D S P L L S P L S P W S A R D F G P S G I V G D P L P A T A E Q G H A L L		
UniRef90_B9R3S7	F R S S Q E D G P H A F G W K A Q D L [N P A G T V G D A S I A T A E K G K A S L		
UniRef90_UPI00034A4330	F T P A S I A A E R F K W Q A E D L [H P S G A I V G D A R G A S A E [G R Q L I		
UniRef90_UPI0003673090	H T P A F L P K Y F Q F P M D H H E F V D N G I I G N P M R A T K A K G E E A F		
UniRef90_H5SN11	A A R G A S E [Y A T L P L D T I D F S Q S G A T L D P R E A S Q E A G Q K I F		
UniRef90_U2SET4	G D P K W K M A P G E A S H R W Q F Y G A E G V I G N P T K A T K E K G D K L L V		
UniRef90_A2CCF1	E P A P A G P P H G E P D F R R R H P D G R M G N P Y L A K P E H G A S L L		
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UniRef90_K9YZJ2	S V I A T G H P I Y G A K N F R E C Y P D G R M G N P A L A T P E H G K Q F Y		
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UniRef90_V6JFD7	G S T A T R R G H P A L T V G Y D R L S A N G V L G D P R R A T A A A G Q Q A I I V		
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UniRef90_B3E1R3	Y P T F P T G I L V R D K R R Y W P G G V V W G D P A K A T A D K G A R I E		
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UniRef90_A6X5S0	F R T L T E T F A S D F Q W Q I Q D I N P Y G A A G D A T L A T A E K G R A T I		
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250

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UniRef90_C7NSB4	R S A R D E L V T L L E D
UniRef90_N6WS10	A H F A R A L A T T I R E A
UniRef90_U2DHA4	R K C V D K I A A F M M S E F
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UniRef90_G0JP29	K W M V S D L E K I I R K
UniRef90_H2JL74	S G C A R A L A D I I L R D
UniRef90_Z5XGN9	E R I V D H I V S I L D T E F E P
UniRef90_Q1GMT9	A S A G R N F A R F L A E
UniRef90_A0B995	E M A V R G V L E A L D E
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UniRef90_U2FZW6	E L L I D A W T R A I
UniRef90_Q2CAE5	E T G G Q R S A E L
UniRef90_W5WXC2	N L A V N A I S R R L E
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UniRef90_K0HY70	D S L A V S W A A A I T E
UniRef90_B9R3S7	D H A A R G F V E L L Q D
UniRef90_UPI00034A4330	D H G A R A F C D L L A D
UniRef90_UPI0003673090	H R F S T H V S K G V L E
UniRef90_H5SN11	H T A C E R L R A I V Q
UniRef90_U2SET4	E A V V E G Y S E L L I K E
UniRef90_A2CCF1	E T A A T A L S E D L
UniRef90_B5JR56	Q E L H T T L S A L I K K E T P P
UniRef90_K9YZJ2	E L A V K E L T A S Y Q D
UniRef90_Q21BU2	A H G A R A F C E L L E D
UniRef90_V6JFD7	D T A V S R I V A F V K E W D
UniRef90_UPI00046FB002	N A Q V E Q L I
UniRef90_B3E1R3	E L V A R K V V E L V R
UniRef90_A7IIN7	E F G A R A F I E L L R D
UniRef90_A6X5S0	D F A A E R L V E V L A E
UniRef90_A5G3E3	Q L V T A K V V D L A R
UniRef90_Q8TYV8	K T V V E R L V D I V E E
UniRef90_W6MDH9	V A Q T A C Y E T A L R Q W
UniRef90_K9H0G9	D H I A R Q L V E L I V E A F P
UniRef90_UPI00034973CC	T A I V D R V T D Y V E E W
UniRef90_UPI00037EC31E	D S L T T S F A A S L
UniRef90_U1N3X0	A E A T D E L C L L
UniRef90_X5LIQ7	D A V T S L I A D Y A R
UniRef90_J7TVW4	D A I L T D L V V E S I E
UniRef90_J5PMR3	D H A A H A F V D L L R E
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UniRef90_UPI0003651EDE	E L I V A G T V E A I
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UniRef90_UPI00046913B0	D S A A R N F A A F L L E
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UniRef90_E3FTW2	E V W V D V L V G A Y R A A
UniRef90_W3RN86	D H G A R A F C D L L Q D
UniRef90_UPI00022601DF	D D H T R L L A E A I S K E F
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UniRef90_Q3IU83	E K A A A A L V E L L
UniRef90_B1LYR6	D H G A R A F V A L L R D
UniRef90_A8MA36	E S A I N E L T Q L I N D
UniRef90_K0I9Q4	D A A A Q Q L V A L L Q E
UniRef90_UPI00036B2BBE	D Y Q A T A F V E L L E E
UniRef90_Q12D43	D M I V D K S V Q S I R E A
UniRef90_I8S7X0	E R T L N Y L E K L V N D E
UniRef90_W4QN99	L R L G S K I A S T L Q
UniRef90_W0K0W1	E A A S D Q L V Q L C E
UniRef90_K1Y9A5	G P C I D R V S S V I E D
UniRef90_UPI0002F2DD0D	E H G A R A F C E L L A D R F D P
UniRef90_R6RZV3	K A T A D F C V D F I K K
UniRef90_V4Y9Y4	E K L A D E V A S L L V D A
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UniRef90_B8ICW9	A H G A R A F V E L L R D
UniRef90_X5DK74	N E K V E Q L V E M I K
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UniRef90_Q21S07	A A A G L G L A R L L A E
UniRef90_C6D7D0	E T A G P L L A E A L
UniRef90_A9D1T2	D H A V A G L C E L L D D
UniRef90_I3TM81	E R I A A L L V A G F A E D D P
UniRef90_A5ET42	A H G A R A F C T L L E E
UniRef90_UPI000468902B	H D V G G L L A N F F R
UniRef90_Q0ATQ8	S F A K Q A L J A
UniRef90_UPI00036D7469	K A C A E N I G E F L V D
UniRef90_K9HC08	D I A V T E
UniRef90_UPI000361954B	K A Y V K T L A E V I R
UniRef90_A8TVT3	A A V I E D Y A A F M K E A
UniRef90_A5GUD1	Q G L V G G W C E L M R S D W P
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UniRef90_D4GQV9	R E H E	W A G L T A A E V R E V G A K P G S I L V I	P V G S I E Q H G E H L P	V	V
UniRef90_A9D9C3	R K I L	W W G D F T T R E F D D	I D P D A T I A L V L P P I A A I E Q H G P H L P	V	V
UniRef90_UP100036FED01	M L L G	D G M T W P D F H R H I P D G Y	A I V P P V G A L E P H G P H L P	L P	L P
UniRef90_UP10002DAB76C	M H L H	S T W Q E V E S Y L L R S Q G I	I I I I P I G S T E Q H G P H N G L	I	I
UniRef90_C7NZ26	M H L S	E A T W T D A A D L	D T D L A I L P P V G S T E Q H G P H G P	L P	L P
UniRef90_X1D7T4			S T C I P F G V L E E K H G P H L P	L P	L P
UniRef90_D5RHA9	H R W E R	L T A P E L R A	L A A R D A L V L L P P V A S L E Q H G P H L P	V	V
UniRef90_L9XK64	S A S D I	A S V G E T D G S V L V V	P P V G S I E Q H G E H L P	V	V
UniRef90_G9ZY92	V R W E R	R T A P E L R A	L A E R D A L V V L P P V A S M E Q H G P H L P	V	V
UniRef90_Q0QKQ3	R F D H	L S W P A A T A A M M Q Q P G A T	V W P F G A C E Q H G P H Q L P	L P	L P
UniRef90_B7CC95	Y Q E L	T R L E M E Q V D R E N T A I V L I P L G A L E Q H G N Q A P	L P	L P	
UniRef90_A8RNQ0	P Y R W D N L	N R E E L R K L A E E N T L V L I P L G A T E Q H G P H L P	A	A	
UniRef90_UP1000262744	M Y L K H	L T W R E T E Q Y L Q Q K Q I I I I M P I G S H E Q H G P H N G M	I	I	
UniRef90_L9ZTM9	L L J A E	R T T D A A D E L E A A E V A V L P P T G S T E Q H G P A L	L P	L P	
UniRef90_G8PQI9	W L T M H	W P G V A A E N A A N W I A V L P P L A A T E Q H G P H L P	L P	L P	
UniRef90_A3WRZ3	T W E D L R	G V R M A F L P P V G S L E Q H G P H L P	L P	L P	
UniRef90_F6CLE3	E T V F	W P K K R W C D M I S R Q F R	H E T V A I L P P V V A A V E Q H G P H L P	V	V
UniRef90_K7SZ11	T T E D I R A	R R P T M A V L P P I G S F E Q H G T F L P	L P	L P	
UniRef90_UP100036AE98F	D L T R K E	M E M A V D K D S T I V M P L G A I E Q H G S Q A P	L P	L P	
UniRef90_W3AQ77	R R L D	W A Q Y R T T E F A A M D P A A T I A I L P T C A I E Q H G P H L P	T	T	
UniRef90_A0A059IJ41	K P Y I L A	E T N W K N V K D E H Y E I A I L P W G A T E A H N Y H L P	Y	Y	
UniRef90_D5BB75	M S R L	N D S D M E A A L A K I P V L L L P P I G A V E S H G D H L P	A	A	
UniRef90_UP10004650811	W L D L	T T A E V R A R D M S R A I A V L P P V A A V E Q H G P H L P	F	F	
UniRef90_J3HT09			W P E L T D V E F A S I I E Q H G P H L P	P	P
UniRef90_UP100034BA2DC	U	S A R T I A A V G G T D G S V L V V P P V G S I E Q H G A H P	V	V	
UniRef90_X1K7Y4	U	L P R A T T A D V R E R G A R V A V L P P V G A T E Q H G P H L P	V	V	
UniRef90_C8VVK2	K R Y W L E	M T S P E H A V L P K N T V A V L P P V G S I E Q H G P H L P	V	V	
UniRef90_E4NW18	V E W A R	M T A P E L R A L A A R A N A L V V L P P V G S F E Q H G P H L P	V	V	
UniRef90_UP1000367D39F	M E L M	T T A T S T D I A R A K P R I A V L P P V G S F E Q H G D H L P	L P	L P	
UniRef90_K0K3E2	L G Q R S W P D	L D G K T I T L V V P L G S V E Q H G P H L P	L P	L P	
UniRef90_I4Z253	R L S D	L T T E Y A E L A E Q A T V A L I P V G A N E E Q H G P H N G M	M	M	
UniRef90_H6RAD1	M R V D	R M T M T E F E Q A V R T V R V A L V P P F G S V E E H G R H L P	L P	L P	
UniRef90_M3VDE4	P R D W T A	I K W P D V D P A A A G Q W I A V L P L A A T E Q H G P H L P	V	V	
UniRef90_UP100047AD80D	V E L Q R L	T W P E I R D A V V R A G Y D T I I I I P V G G T E Q S G P Y I A V	V	V	
UniRef90_UP100046CED9A	M Y L A S	L T W K K L E E K I T T E E T V A L I P L G S V E Q H G P H L A P	L P	L P	
UniRef90_K8NK22	M L L H	H S T W Q E V D D Y L T R S K A I V I P I G S T E Q H G P T G L	I	I	
UniRef90_UP100047E6CB1	M I I E	T M T M V F E E G L R A T R T V L P P F G S V E E H G S H L P	P	P	
UniRef90_D5EC89	S L L L A	E Q A W P D L E G R R P L V I V P P F G S C E Q H G P H L P	P	P	
UniRef90_X5MLP2	R Q R R Y E	Q L A W P E I I Q R L A N G E G S T L I W P P F G A C E Q H G P H L P	P	P	
UniRef90_D7AJE9	M L L M	E Q T W P D V R A Y L E R C R T I I I I P L G S V E Q H G L A L P	L P	L P	
UniRef90_A4FCB6	S L L L A	E Q A W P D L E G R R P L V I V P P F G S C E Q H G P H L P	P	P	
UniRef90_Q0QKF2	R P Y I L A	E N N W K N L K T E R F E L A V L P P W G A T E A H N Y H M P	Y	Y	
UniRef90_F3Z1P1	M D L A	D H T W P D V G E Q L G S A S T A I V P P L G S T E Q H G P H L P	V	V	
UniRef90_S2DT08	R S H W W E E	L T S T Q L A D R L A A D D C V A L I I P T G A C E I Y G P Q L P	M	M	
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UniRef90_L0J1A0	U	M S G K Q Y M K R L V E R A N W I V V L P L G A Y E Q H G P H L P	F	F	
UniRef90_D7GQ72	U	U E A T W T D V S D L A G E T N L A F I P P V G S T E Q H G P H A P	P	P	
UniRef90_L0EWG6	K T V Q L	E D T W T E L R D E I I R A G K T T I I I I P I G G T E Q S G P Y V A L	L P	L P	
UniRef90_E4NTW5	M R L S	E A T W T D V S D L A G E T N L A F I P P V G S T E Q H G P H A P	L P	L P	
UniRef90_UP1000346A36A	K T D Q P	Y P D D I R A Y L G K H D T I L I I I I P V G A V E Q Y G A H L A T	L P	L P	
UniRef90_K4TQD7	M D L Q	T E T W T D M A A V E T S L A L L P P V G S T E Q H G P H A P	L P	L P	
UniRef90_G0I0E7	M L P S	T T S H E V A Q T N P D V A V L P P V G S F E Q H G G H L P	L P	L P	
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UniRef90_F7YYX3	M R W E K	F T T T V E E R D R G A D V A L L P P V G S F E Q H G P H L P	S	S	
UniRef90_UP10002F6DF3E	T F T T	V E E R D R G A D V A L L P P V G S F E Q H G P H L P	S	S	
UniRef90_UP1000477FA56	K A L I L	E E L I W P E L K Q V L P E I E L A V L V P P V G A C E Q H G P N T T F	F	F	
UniRef90_C0D8Y1	S R R L	D F L H W P D A A S G L K A H R S T L V W P P F G A L E Q H G P Q L P	L P	L P	
UniRef90_A4CS33	R L L A	E M T T L E A A R S A E A G T V V V I P V G A F E Q H G A G L P	L P	L P	
UniRef90_E9UYM7	R F W H E	M T T A E F S G S D T R N W I A V L P P V G A V A I E Q H G P H L P	V	V	
UniRef90_UP10003607614	K P V M L	A D L T W S E L T A R V N D S V F V L P I G A I E A H G P H L P	L P	L P	
UniRef90_A3YYU7	M G Y A E E T C F T L G K R I A A D V P I L P P V G A V E A H G P H L P	L P	L P		
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UniRef90_UP1000365DFC1	M R L A	D A D L T W P Q V A G R A G P V L L A V L P P G A T E Q H G P H L P	H	H	
UniRef90_H6QZJ1	R R L G M	L T T D E I A A I S K A D A L V L Q P I G A T E Q H G P H L P	C	C	
UniRef90_A2BVJ3					
UniRef90_UP1000475CA47					
UniRef90_UP1000423E64E					
UniRef90_UP10003804EC0					
UniRef90_UP10003740BE1					

		50	60	70	80
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UniRef90_Q82M68	A T D T L V A C A I A R E V A A A Y P V H L P P V T I T S C S H E H A W				
UniRef90_V4HDY6	G T D T L L A A E A V A R G V D R D D A V V L L P T P V G V P V G L S T E H K				
UniRef90_R5Z4A6	G T D A I I A K A M C E T I Q T E M P M L V F P V L P V G L S T E H K				
UniRef90_V5E5D3	G P D L F V P T E V A K Q A Q R L D T L V L P G V P Y G T S M H Y N				
UniRef90_UP10003B5EDC3	G T D T M V V A A V A E D A A K K A R V P V A P P L W F G W S P H M V				
UniRef90_M0MWZ0	G T D R L T A R A V A R S A A D G E E T V V V A P A I P V G I A E E H R				
UniRef90_V6L209	V T D T A I A C I I G K E I A D S Y P V Q L L P P V T I A C S H E H E A W				
UniRef90_UP100047BCAA0	G T D D I Y E A D Y I S A E G A R K A W V V V M P T I P F G V N T G Q S				
UniRef90_M0CWN2	G T D A L T A E A V A D A G V E A Y H V V V A P T I P V G V A E E H R				
UniRef90_E8WQJ0	S T D T I T E A Y E V G K R A A E R I P L F V A P P V H Y G C R S T S S				
UniRef90_L0HL67	N T D M I Q P L W L A E E I I A K R M N A I L P P I H Y G C R K G L S				
UniRef90_W7QC60	G T D A I C P E T V A W E L G E R H D V L V G P T Q S L G M A Q H H H A				
UniRef90_M0MJC3	A T D T L L A D A V A K A G A E H V P V D V L T P P V W A G Y S P H H R S				
UniRef90_L9XF82	G M D H M A A E G F A H T V S D R E D A V A L P T P V G V S E H H R				
UniRef90_M0EA10	A V D S Y Q A R D L A E I A A A G V L T A P L I P Y G D A S H H L V				
UniRef90_UP10002E5513A	C M D A D H A D A I A A A R L A R H L G T L I A P T I K V G C S A H H L V				
UniRef90_UP1000370B623	G E D T F L V T R M A E L V A K R T G C T V S Q P L W W G S H P Y H H M				
UniRef90_M0LAH5	G T D V T L T A E A V A D A G C E R S D V L R A P A I P V G V A E E H R				
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UniRef90_A0A022MIY2	G V D D L L A A E V C R R A A A H T R V V V A P S L W A G L A E H H V				
UniRef90_F5XEU5	G V D A Y V A I T L A E D A A K Q T G A L V A P P P V W Y G D S S H H				
UniRef90_M0NBA3	M T D T L L A N S V A K R V V D E I P V L V A P P P V W T G Y S P H H L S L G				
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UniRef90_A9D9C3	S T D S A I M Q G M L D T V I A Q T P A R I L P I Q P V G K S N E H Q				
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UniRef90_UP10002DAB76C	G T D S I C P T A I A S H A A L Q S D L L V G P T L A L G T A Q F N L				
UniRef90_C7NZ26	G T D V L T A E A V A D A G C E R S D V L R A P A I P V G V A E E H R				
UniRef90_X1D7T4	G T D L I D V R E V A L R A A R A E Y T I V F P E Y Y F G Q I L E G R				
UniRef90_D5RHA9	W T D S L I G H A A C L R A A A D L P V V V L P P M W G L S E H H L P				
UniRef90_L9XK64	M T D T L L A N S V A K R V V D E I P V L V A P P P V W T G Y S P H H L S L G				
UniRef90_G9ZY92	W T D S F I G H A C A L E A A A D V P V A I V L P P L W T G M S E H H L P				
UniRef90_Q0QKQ3	A T D A L F A E R I L D A V V L L G D P L L P V Q A I P V G L S E H A S				
UniRef90_B7CC95	G T D T L I A G A M C D Y I E K E L N L V L F P V I P V G L S T E H K				
UniRef90_A8RQN0	G T D S M L A E A A C D I A A K K L D A V I A P T V T I S N S L H G S				
UniRef90_UP10002626744	G T D I I C P V R V A E D L S Q K T G L I G P S I E V G M A Q H H L V				
UniRef90_L9ZTM9	G M D F M A A E A F A H T A T D R E D T V V L P T I P V G V S G H H R				
UniRef90_G8PQI9	G V D T Y I N Q G M C A R A P E A L D F R I L P L Q C I G K S D E H				
UniRef90_A3WRZ3	T T D V L I A E A Y I A K V R E D I P A T F L P V Q P V G S T E H M				
UniRef90_F6CLE3	G T D G I I G Y A L Q G Q A V A K K M G A L V A P V I R P A L S F E H A				
UniRef90_K7SZ11	Y V D A C I N E M L L D K A L E A L P S T V P A T A L P I Q P Q A V G K S E E H V				
UniRef90_UP100036AE98F	T T D T V I A C T I A R E V A A G R P V Q V L P P L T V S C S H E H A A W				
UniRef90_W3AQ77	G T D T M I A E A M P E Y V K R E L P M L I F P V I P V G L S I E H S				
UniRef90_A0A059IJ41	G T D T M I A E G M L A E L P D D L N I L L P V Q A V G K S N E H				
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UniRef90_UP100034BA2DC	G T D T L I A E G V S R L V P A P L D V L L P V Q A V G K S N E H				
UniRef90_X1K7Y4	G T D T I I G Y A L Q G Q A V A K K M G A L V A P V I R P A L S R H H				
UniRef90_C8VVK2	S T D S L I A N G L A T K L A G K F N S Y L P L F P F T S S F E H				
UniRef90_E4NW8	A T D T L L A E R V V A T A S A K R I P I L L V A P S V R P G Y S P H H L P V G				
UniRef90_UP1000367D39F	G T D C L I N N G I V V A A L E R L P A V V L P I Q P V G A S Q E H L V				
UniRef90_K0K3E2	V T D T V V A C A L E R I A E H P V L L P P I T I S C S H E H A A W				
UniRef90_I4Z253	I T D S S A A I I R A A Q L V V A D D I P V A V L P G L W L G M S E H L P				
UniRef90_H6RAD1	A T D T I I A C I L A R A L A D A Y P L F L L P P V T I S C S H E H				
UniRef90_M3VDE4	D A D T R I A A A V A D G V C D G T D V L R A P D L N Y G A S G E H				
UniRef90_UP100047AD80D	G L D W R V A V E I D R V A A E V A A V V T P P P L P F G L S A H H L S				
UniRef90_UP100046CED9A	C T D T L Q V W Q V A L E A R R V P F L V C P P V H Y G Y C R S T R				
UniRef90_K8NK22	G T D T L I A Q A Y L A R V P A Q I P A S F L P T Q S I G F S I E H				
UniRef90_UP100047E6CB1	G K H N V R A E A L A D R I A R S L G A L V A P V I A Y G L S P R T S H M				
UniRef90_D5EC89	G T D Y F I P E E F A K R V E A A Y P I M V L P T M P Y G V C P Y H A S				
UniRef90_X5MLP2	G T D A L C P E I S H E A Q K D A D I L V G P T F N V G C A Q H H S T S E				
UniRef90_D7AJE9	S T D T I Q A Y E V G K K A A R I L P I P F V A P P V H Y G S C R S T S E				
UniRef90_A4FCB6	D T D S S I A T A V A R E L A D G D T V L L A P T Q H Y T A S G E H				
UniRef90_Q0QKF2	V T D A F A Q A M Q A M Q A E A G R T Q R L V A P I L A P G M S L Y V H M				
UniRef90_F3Z1P1	G T D A F A Q A M Q A M Q A E A G R T Q R L V A P I L A P G M S L Y V H M				
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UniRef90_V4ZM98	A T D H L I A E A L A T A A A D E T G I P R T P T V D I G V S P H H R				
UniRef90_L0J1A0	G T D T I I A T A L A D A A A G Q K A V V L P P L A F G S F F H G S R H				
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UniRef90_E4NTW5	G T D A F T A E A V A D A G S E A Y D V V V V A P T I P G V A A E H R				
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UniRef90_G010E7	G T D T L D A E A V A E R G A E R Y D D P V V V A P A V P V P V G V A E E H R				
UniRef90_F4CTD3	T T D A L I A T A I A E R V A T E H G L L L P A I T F G C S H E H A				
UniRef90_F7YYX3	G E D T F L V T R M A E Q V A L R T G C T V A E P I W Y G Y H P Y H H I L				
UniRef90_UP10002F6DF3E	D T D A K I G A H F L A R D E A L G V L V I L P Q V A P V C C S H E H E A W				
UniRef90_UP1000477FA56	T T D T V V A C T I A R G I A A E H P V L L P P V A L S C S H E H E A W				
UniRef90_C0D8Y1	N T D T A R Y G F S K M I G E R F G V G V C P P V P Y G I S V H H M A				
UniRef90_A4CS33	A T D A L F A E Q I L N R V L E S L P A W S L P P Q S I G L S P E H R				
UniRef90_E9UYM7	A T D Q I R A E A L A E V A A A L P V V I G P G V P V G V S P H Q A				
UniRef90_UP10003607614	W T D T A I A E G Q I A R L P F E L P V P T F L P V Q Q I G K S N E H I S S				
UniRef90_A3YYU7	G T D A I F A E R V L Q A V L E R I L P A W R L P F Q L G F S P E H G				
UniRef90_I0IQU2	G T D H L I A G A L A K A L G D E T G I L V A P T M A Y G M S H H H L A				
UniRef90_UP1000365DFC1	G V D T F I M E G Y I A K V I V E R I L P V P V F L P V Q T C G C S I E H R				
UniRef90_H6QZJ1	S V D T D I A V A C L C E G L A D R A D V V V A P P L S F G V S G E H A				
UniRef90_A2BJV3	A T D S I F V D E I I C E V L K E T P I K K L P T Q Y I G F S P E H K				
UniRef90_UP1000475CA47	E T D N L L A A R Y A R R L A A L V N G L V L P T I P F G V Q V F S L G				
UniRef90_UP1000423E64E	G V D T F I M E G Y I A K V I V E R I L P V P V F L P V Q T C G C S I E H R				
UniRef90_UP10003804E0C	S V D T D I A V A C L C E G L A D R A D V V V A P P L S F G V S G E H A				
UniRef90_UP10003740BE1	L T D A L L A Q A A A E R A V A Q L P V W L L P W Y G K S T E H L				

	90	100	110	120
UniRef90_I0GKS5	S F H G T I S S P T T L N Y L K D Y T S L H K H G F R N F F F V N G H G G			
UniRef90_Q82M68	P G T V S S S V T L H A V V R D I A D S L R R S G V E T L V L V N A H G G			
UniRef90_V4HDY6	Q F D G T L W A E P E T F E A Y V G E I V A S V A A H G V R K V V V A N G H G G			
UniRef90_R5Z4A6	D F C G S I T L K P M T Y Y H V L Y D L C E S L A H H G F K K V V L L V C H G G			
UniRef90_V5E5D3	A N P M A I T L R F E T I V I A L L A E D M F E S L I Q Y G K H F V L N G H D G			
UniRef90_UP10003B5EDC3	L P G T I T V R P E L L A E L C F D I I S S L S R H G F E N F V L I N G H I V			
UniRef90_M0MWZ0	Q F T G T L W V S P D S F R K Y V R D V L T S L A S H G W R K I V V V N G H G G			
UniRef90_V6L209	P G T V S I S A R T L V A V I E D V R S S L R L R S G I P K L V I V N G H G G			
UniRef90_UP100047BCAA0	D I Y L D I N L N P S T Q L I I Q D I L E V L N R Q G L K K F L I V N S H G G			
UniRef90_M0CWN2	Q F A G T L W V S E D T F R D Y V R E T V A S L A H H G W D R V V V V N G H G G			
UniRef90_E8WJQ0	R H P G T I S I S T G T L K A L L K D I V R S L H A Q G V M N F I A L T G H A G S			
UniRef90_L0HL67	S F P G T I S V G F E T F L K N L V L D I L K E V V K H G G R K I I V L S G H A S			
UniRef90_W7QC60	F P G S I S L R P S T L I A V L H D T V T S L A R H G F T H V F F L N G H G G			
UniRef90_M0MJC3	F G G T I T R E H G S L R E T L E E I A D A A L D N G F D A L L L L N G H G G			
UniRef90_L9XF82	Q F D G T L Y V G P E T F E D Y V R E T I S S L A N H G V R K A V V V N G H G G			
UniRef90_M0EA10	G F P G T I S L S T E T V V V S V L T D V Y V A S L A G H G F A N V I T V N G H R I			
UniRef90_UP10002E5513A	F P G T I S I R P E T F E S I C L D Y C T S L A R H G F R R L L L F S G H I G			
UniRef90_UP1000370B623	G M P G T V I L P E E I F I G V L K S V M A G Y W N T G F R K M I L L N G H G Q			
UniRef90_M0LAH5	Q F P G T M W V S E G T F R D Y V R E S V E S L F Y H G I D R V V L V N G H G G			
UniRef90_M0LND2	Q F P G T M W V S P D T F R S Y V R E S V E S L F S H G F D R V V L V N G H G G			
UniRef90_A0A022MIY2	A F G G T F T L S L P T Y H A L L R D L C R S V L R A R H G F D K I I V I N G H K G			
UniRef90_F5XEU5	A F P G T L T R P G T L S M L V T D I C S S L A R H G F D K I I V I N G H K G			
UniRef90_M0NBA3	G T L T A D F E T L L D V L R D V A D A G L L A N G F D A L V L V N G H G G			
UniRef90_D4GQV9	F G G T L S L D F E T I R A T L E D I A H T G L Q N D F D A V L F V N G H G G			
UniRef90_A9D9C3	H A P G T L T I P A T T L I E H W V E L G H S I A R A G V I R K L V I V N S H G G			
UniRef90_UP100036FED01	F P G V I S I S G T T F L H L V G D V L S S L A G S G V R K V V V N S A I D			
UniRef90_UP10002DAB76C	K F P P G T I S L R P S T L M R V V E D Y V L S L A S Q G F Q Q F Y F I N G H G G			
UniRef90_C7NZ26	H F A G T L W V G E D T F R D Y V R E T V A S L A S H G W D R V V V V N G H G G			
UniRef90_X1D7T4	H Q P G T I A Y S T R I I W D L L Q E T C D E L A R R N G I K K I I V N G H G G			
UniRef90_D5RHA9	F G G T I S L D Y D A M H R V L R G V C R S L K A Q G F G R L F L V N S H G G			
UniRef90_L9XK64	G T L S A G F E T L L N F V R D T A D S G L E N G F D A L L L V N G H G G			
UniRef90_G9ZY92	F G G T I S L D Y S T F H N V L R G I C R S I L A G G F K R R L L V N S H G G			
UniRef90_Q0QKQ3	F P G T I S L L P A D D L I A L V D R V G E Q L P A D Q G V I R L V L F N A H G G			
UniRef90_B7CC95	D F C G S I T F K P M T Y Y H M L Y D I C E S L A H H G F K K A F L V C H G G			
UniRef90_A8RNQ0	Y P G T I S L D P R L Y M D Y L T S I A R G I V S H G F R N I C C V N G H G G			
UniRef90_UP10002626744	G F A G S I T V R P T T L I S I I E D Y V K S S L A K H G F T H F L F L N G H G G			
UniRef90_L9ZTM9	Q F D G T L Y V S A A T F E R Y V E E T I A S S L A D H G V R K T V V V N G H G G			
UniRef90_G8PQ19	G F P G T R T L L T N E A A L R A W T A L G E E V A R R G I K K I V M V S S H G G			
UniRef90_A3WRZ3	D F P G T R T L L T N E A A L R A W T A L G E E V A R R G I K K I V M V S S H G G			
UniRef90_F6CLE3	G F P G C V S L K V T T I A S I I S D V V E S L A F S G I K K L V I V S S H G M			
UniRef90_K7SZ11	A Y P G T L T L S A Q T L T Q V L I E I G E S V A R S S G V K R L V L L N S H G G			
UniRef90_UP100036AE98F	F S G G S I S F K P D T Y Y H M L Y D I A E S S L H A H H G F K K L V F L I C H G G			
UniRef90_W3AQ77	H A P G T L T L S A Q T A L A A W T E I G L S V A R A G I I R K L V I V N S H G G			
UniRef90_A0A059IJ41	D I P F C M N L N P S T Q Y A I L K D V A Q V L H R S G I K N L V I F N S H G G			
UniRef90_D5BB75	E A A G S F G V S N E T V S N T I T E I A E S A A G K G I R T V V V V N A H L G			
UniRef90_UP10004650811	G T K S L Q F D E A V N R W I E I G K T L V Q Q G I S K L I M L N A H G G			
UniRef90_J3HT09	F T G T L T L T A A T A L A A W T E I G L G A S L H R A G G C T K L V I V S S H G G			
UniRef90_UP100034BA2DC	D F P G T I T L R M K T F V K V L E E Y C Q S L R H H G F K N V V L F V S H G G			
UniRef90_X1K7Y4	G F P G S V S L K V S T I A A V I E D I L D S L E F S N I K C V I V N G H Q G			
UniRef90_C8VVK2	G T L S A G F E T L L D L L R D M A E T G L D N G F D A L V F V N G H G G			
UniRef90_E4NW18	D Y A G S I L A H P A P D L M Q S W T R V L D C A V R S T L N R L I F N S H G G			
UniRef90_UP1000367D39F	F T G T L T L T A A T A L A A W T E I G L G A S L H R A G G C T K L V I V S S H G G			
UniRef90_K0K3E2	UniRef90_I4Z253	F G G T I S L D Y D A Y H G I R S S I V R S L K A L G F K R R L L V N G H G G		
UniRef90_H6RAD1	Q F P G T I S L L S H T T L T A V I T D I R A S L L A R T G I T A L V L I N A H G G			
UniRef90_M3VDE4	G F P G T I S I I G H D A L L K A M L V E Y G R S A C R W A R R I L F V N G H G G			
UniRef90_UP100047AD80D	F F A G T L S I I G A D A F R A V L T D V V L S L R H W H G I E V V F F V N G H R G			
UniRef90_UP100046CED9A	D H P G T L S I I R P S T L L R I A F D L V E S L H R H Q G V R G V I L A S S G H A G			
UniRef90_K8NK22	D Y P G T V T L P P Y H V A I R H W M S L G E S V A R S S G V K K I V M V T S H G G			
UniRef90_UP100047E6CB1	R F P G T I T V S P A V F E G L L R S A A D S F R V I Q G F H T V A F I A D H G G			
UniRef90_D5EC89	F P G T I D M G I E I L S E V M T R I A M S L M D T G I K K M I F L N G H G G			
UniRef90_X5MLP2	G F A G S M T L R P S T M I A A I H D W V S S L A V H G F E R V L F F N G H G G			
UniRef90_D7AJE9	C H P G T I S I I T T G T L L K S L M K D I V R S L Y Q Q G L R N V I I L T T G H A G			
UniRef90_A4FCB6	G F P G T V S I I G C D A L H L L V V E L G R S S L S G W C G R V L I V N G H G G			
UniRef90_Q0QKF2	F P G T I S L S S D D L L I A V V V Q L G E Q L L A A M G W R R L V L F N A H G G			
UniRef90_F3Z1P1	D F P G T I S I M P D T Y T A M I R D C V A S L H R H G F R N F L L V N G H G G			
UniRef90_S2DT08	D I Y L D I N M N P S T Q M A I I R D I L T V L N R Q G V K K F L I V N S H G G			
UniRef90_V4ZM98	Q F P G T L W V D P P Q F R D Y V E N F T R N L L A Y H G I D R V V Y V N A H G G			
UniRef90_U0J1A0	A G T V A F S G E T A A N A W L V A E A C V D N G F R R L L F V N G H V G G			
UniRef90_D7GQ72	F P C T F A M P R K I L E D W L D W L V G K L I K D G A K N F V I T G H A G			
UniRef90_L0EWG6	I Q G T K T F S Y V E A I E R W L G I A Q Q V R N L G I R K F V I L N A H G G			
UniRef90_E4NTW5	Q F P G T L W L S P D T F R D T V R E T V A S L H G F D R V V V V N G H G G			
UniRef90_UP1000346A36A	R F P G T I T V P D D V F E K T L E S A A N F S K V H G F T N L V F L G D H G G			
UniRef90_K4TQD7	D Y P G T L L S V E M R T I E D Y L K E I G D S F L A G Q G F R H F F F I N I H A G			
UniRef90_G0I0E7	A F T G T L W T S E S T F R S Y V R D I V R S L A S H G W D H V V L V N G H G G			
UniRef90_F4CTD3	D F A G T V S V R A T T L Y A I V V N D V A E S L R A A G V G K L V V V V N A H G G			
UniRef90_F7YYX3	G M P G T V P V K D E A F I D Y L V S V I A G F W N T G F R K Q I L L N G H G Q			
UniRef90_UP10002F6DF3E	E F A G T L S R H E T F L A Y V G D I E S V V R H G F R N L V L F N S H G G			
UniRef90_UP1000477FA56	P P G T V S I I S A A T L Y A V V R D V A A S L R R S G V P R L V L V N G H G G			
UniRef90_C0D8Y1	F P P G T V T L R C E T Y I N L L T D I A V A L S L K H G I R I V F L N G H G G			
UniRef90_A4CS33	G F P G T L S L S A D D L L I R L V V E V G E Q L L A D Q E V E K R L V L F N A H G G			
UniRef90_E9UYM7	F A G T V S L R P T L F A A V V R E Y V E S L A A H G W R R F L V I T G H G G			
UniRef90_UP10003607614	F P G T L T L S W E T I L T R A W I D I G E S V A R A G I R K L V L I N S H G G			
UniRef90_A3YYU7	A F P G T L S L P A E V L L Q V V M A V G A D L A R A G F Q R L V L F N A H G G			
UniRef90_I0IQU2	F P P G T A S L R P E T L I M M T T D I I S S F A R N G F S R F F F V N G H G G			
UniRef90_UP1000365DFC1	A F P G N A G I R A T T L M A L L D V M R A A Y Q Q G A R R F L I L Q A H Y A G			
UniRef90_H6QZJ1	G F P G T L S L S G A A A L E L L I V L E D C R S A T D S F D R I V L V N G H G G			
UniRef90_A2BJV3	G F D G T I S L S S N L I T L M I K E V G S Q L A D M G F K R L V L I N A H G G			
UniRef90_UP1000475CA47	D F P G S L S L S S N E T L T R I V V E L G E G G L Y R Q G V R I F V L F S A H L G			
UniRef90_UP1000423E64E	D F P G A L S L S A K T T L R V W T E L G E C V H R A G G C R K L V V L L N S H G G			
UniRef90_UP10003804EC0	G F P G T L S L G T E A L T T H V L V E L A R S A T D T F G R V L F V S G H G G			
UniRef90_UP10003740BE1	G R P G T V S M S A Q T L V S V C L D L G R S L A A S G F R K L A F V N G H G G			

130 140 150 160

UniRef90_I0GKS5	N I A P L R C A F D E L A N T L	T N S K F L V T S W W M E E L K E L	
UniRef90_Q82M68	N Y V L G N V V Q E S A G S G T R M A L F P A P E D W D A A R E R A G		
UniRef90_V4HDY6	N R D A L S R M A R R L R D D G V A F A P Q W T W W S S		
UniRef90_R5Z4A6	N T P V A Q L I S R E I R S D F G C P F V L S A G A F D D P S V Q A T		
UniRef90_V5E5D3	N I A A L E I A Q R K V K A R H K E V V F A F L P A W W S I L G D R L G		
UniRef90_UPI0003B5EDC3	N I T W L Q I A A E R A K R E L G V	H E E A Y A V P F T W F D A I G A	H P V I F D P A Y
UniRef90_M0MWZ0	N V G A L R E V C A D V T R	H E E A Y A V P F T W F D A I G A	
UniRef90_V6L209	N Y V L S N V V Q E A N V D G P C V S L F P L S S D W Q R A R D D G G		
UniRef90_UPI00047BCAA0	N N F Q P M L R E L G L K	F P D M M L F T C N W F	
UniRef90_M0CWN2	N V A P L R E V C G R I T R	H D D A Y A V P L T W F D A V R D W T G	
UniRef90_E8WJQ0	G S H R M A L Q D A G E E L I Q E L P E I N M A V V T E Y	D L	
UniRef90_L0HL67	T N H M A A L R L A C E E M A G N G V K I M L L		S D Y Y
UniRef90_W7QC60	N I A T V N A F A F E I Y S E L R S D G Q S S G A L H L T L S N W F A G P R		
UniRef90_M0MJC3	N A S L I D S A V S T I G V D	Q P D S E V L G L T Y F E L A E P F D	
UniRef90_L9XF82	N S G A L R R A A R R	L R E E R T A F A P P W N W W D A V D E L A	
UniRef90_M0EA10	A N L P A I K T A M Q R S S A Q H P D T S F A A I D P R L G T T A H N Q		
UniRef90_UPI0002E5513A	N F P A L Q D M L P R L R S A V P A D V E I D A Y C D A V A W E A W R		
UniRef90_UPI000370B623	E Y V I P T A I H Q F A K T Y Q V P M V V C N V N W Y H A I Q D Q F K		
UniRef90_M0LAH5	N V A A L R E V G A R L T R D G N E E T Y A V P F T W F D A V G D H		
UniRef90_M0LN2	N V D A L R E A G A R L T R D G N E E T Y A V P F T W F E A V G D H		
UniRef90_A0A022MIY2	N M S A L N A L T N E L T V E L G T P	I A F A N Y F G A G	
UniRef90_F5XEU5	S N L P A L T T A V R E L H D R E L P G V L F A V A D P H L A R S A A P		
UniRef90_M0NBA3	N T P L I D A A V S E I G H E	H P E A E V L G L T Y F E L V T E L	
UniRef90_D4GQV9	N G P L I G S V V S T V G V E	T D A E V L G T T Y F E L A T D R E	
UniRef90_A9D9C3	N E E I M G I V A R E L R V R A R	M L V A K T S W M R F G F P E G	
UniRef90_UPI00036FED01	N I S F L C E A A R V F T	E H V P D A R V V I V A W W D V V G E R F R	
UniRef90_UPI0002DAB76C	N L A T F R S A F Q E I Y T R L N V N K S A V P R C R L R S W W Q Y P E T N A L		
UniRef90_C7NZ26	N V D A L R E V C G R V T R D G T	A Y A V P L T W F D A V D A P	
UniRef90_X1D7T4	N S H F L R F F C	Q A Q L G K R S D Y A I T Y L F S P K D D P D V Q K K	
UniRef90_D5RHA9	N I D P L A V A A R E L C A E F A	M P V V A G T V F R L D	
UniRef90_L9XK64	N T P L I G I G A A V S E L I G R E	H P E T E I L G V T Y F E L V T D F V D	
UniRef90_G9ZY92	N I D P L A V S A R E L C V E F G P	V V A T T I F H V S G P	
UniRef90_Q0QKQ3	Q I A L L Q V A A R Q L R V R	C P Q M A V L P C F L W S G V D G L S G	
UniRef90_B7CC95	N T P I A N L I S R E V R S D F K V Y P F V L N S G A F D H P D V K A T		
UniRef90_A8RNQ0	N G T P T D M A V M D I V T R Y G I H I S W V P Y Y V G C N		
UniRef90_UPI0002626744	N I A T V K A A F A E I H A E A S L G R A P V L E L V L H N W Y Q G R R V T E M		
UniRef90_L9ZTM9	N T D A L R R A A R T L R N E	E T A F T P P W N W W D S V D D L A	
UniRef90_G8PQ19	N L D L I G I V A R E L R	I R S K M L V G K C H W S S F G A P E G	
UniRef90_A3WRZ3	N S A A M S M V A Q D I R A R H R	M L A V S T A W S R F G V P D G	
UniRef90_F6CLE3	N H L L R N V Q E L N Y P R P R V L L L P S R H W E R A Y R V A G		
UniRef90_K7SZ11	Q P Q I L L D I V A R T L R R	T H G M F V V C V G W S R F G V P D G	
UniRef90_UPI00036AE98F	N Y V L R N V V Q E S A G R G V R M A L F P G	S A D W D A A R T R A G	
UniRef90_W3AQ77	N R P M A D M I L S R Q L R H D F G M F V F V L A S G A F D P K V Q A T		
UniRef90_A0A059IJ41	N L D L V S I L S R E L R V R A	G M L A V K C Q W G G F A K P E G M	
UniRef90_D5BB75	N F K Q M I R E L S I E F P T I F T C T L N W F		
UniRef90_UPI0004650811	N A V A I R D A Q R R L R E K G	I M L A N F F Y P G A G P V	
UniRef90_J3HT09	N S P L M T I V A T E L R V R F N	M L A V A T S W T R F G L P A G	
UniRef90_UPI00034BA2DC	N S A L I D L V A G E L	R G R H G M V A V T T S W S R L G	
UniRef90_X1K7Y4	N S D A L N A F I P S I A K K V A	P D I R L L V V Y P L E K N V K S	
UniRef90_C8VVK2	N H F L R N V V Q E L N R F G P R V L L T P S K S A W D I A Y Q E A G		
UniRef90_E4NW18	N T S L I D A A V S E I L G R E	H P D R E I L G L T Y F E L V A D L A A	
UniRef90_UPI000367D39F	Q S G L L I A A V A	L D Q R V R H N V L G A Y A T W F D A G Y	
UniRef90_K0K3E2	N Y V L S N V V Q E A E G L A L	F P E R S D W H A	
UniRef90_I4Z253	N I D P L A V A V R E L A V T F S	M P I V A T T P W M A S D E A	
UniRef90_H6RAD1	N Y V L N N I A Q E A N I T G R H V L I Y P G R D D W N Q A R Q A A G		
UniRef90_M3VDE4	N T R T L I E A V S L L R Y E G R D A A W F P C A		
UniRef90_UPI00047AD80D	N E N V L G V L T T E L	A Y T H G V E A A S F W M T Q	
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UniRef90_Q0QKF2	Q I A L L Q V A A R E L R Q R	C P A M A V L P C F L W S G V E E G	
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UniRef90_S2DT08	N D F K T M L R E L G L E	F P E M L L M T C N W F	
UniRef90_V4ZM98	N V S H L R E V G R R L H	Q A G D M Y A I E W M W D E S I P E L	
UniRef90_L0J1A0	N A A S L W I A C D R F R R E F	P Q L R I G V M Q W W D T P D I A	
UniRef90_D7GQ72	N V D T V N Y I G K K Y M N E	H D I K L V Q I D W W R F T N A N G S	
UniRef90_L0EWG6	N S A I I S I V I T E A R V R F S	M L A A A T S W T R L N D N E G	
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UniRef90_G010E7	N I D A L R E V S V G K I T R	H D E A F A V P F T W F D A V G D H	
UniRef90_F4CTD3	N Y V L G N V V Q E A N A G E I R M A L F P Q S A		D W A D
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UniRef90_UPI000477FA56	N H V L G N A V Q E	S G G G M A L F P A E A D W E D A R A A A G	
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UniRef90_A4CS33	Q I G G L L Q T A A R E L A V R A	P S M A V L P C F L W S G V P G L E A	
UniRef90_E9UYM7	N N A T L G T L A Q E L L R D	R P D L E L A W T P V T T L	
UniRef90_UPI0003607614	N V P I I D I V A R E L R S H E	M L V T A T A W S R F G Q P E G	
UniRef90_A3YYU7	Q I A L L Q V A A R Q L R A A H P R L A V M P C F L W S G P P G V A A L		
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UniRef90_UPI000365DFC1	N T A F I V E A V T D F I D Y A	P G A T V M A A S W W E L T S E L T R	
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UniRef90_A2BVJ3	Q I S L L N T A A R E L R S I A	P K L S V F P C F L W S G V D G	
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170 180 190 200

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UniRef90_UP10003804EC0	S G D A H A G R A E T S I L L H L D P R R V R L E L A E P			
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210 220 230 240

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 Y | E Y | L S W T E | L G N F A S Q K R S T I W P | F G A V E Q H G P H L P L
 T H F W A E M T W T D F Q T N P M Q D | V I A V L P | V A A T E Q H G P H L P L
 R Y W C D | L S G P E L A A I A N D A S V A I L P | V A A V E Q H G P H L P L
 L D R A T W P D V P | T S A G F V L V P | V G S T E Q H G P H L P L
 W W Q D | L T S A A I A D L A T R D A V A I L P | L S A I E Q H G P H L P L
 F | L P R F S T K E | E S I E K E K G V V I L P | I G S I E R H G N H L P V
 R P Y | I L A E S N W K S | V K D A G F D L A V L P | W G A T E A H N Y H L P Y
 M I I E D M T M P E F I A G L E K T R T V Y I P | F G A T E E H G P H L P L
 R R H | W W A E Y R T T E F D G L L D P | E R V I A L P | T A A I E Q H G P H L P T
 K R Y W S D Y T S E E F S R L D R E S I V A V L P | V G A T E Q H G P H L P L
 T T T D I R A L N P | R | V A V L P | P V G S F E Q H G D F L P L
 L E S T T W P Q V G W T D V E A R L T R P | T V A V L P | L G A V E Q H G A H L P L
 R N | L F Y Q N W T T A S R N I | R E S E G V | W L L T L | G S V E E H G L P L
 M | L I G D M T W P D L N P | G P D T H V I I P | V G A L E P H G P H L P L
 M | L G R A T W R E L M D D R P | L L V L P | L G S T E Q H G P H L P L
 M R | L A N | L T W P K A E R Y F K E N D M V | P | V I G S I E C Y G R H L P L
 N S V L F E K H | T W T E I | Q S G V A A G V | T T I I I P | V G G T E Q S G P Y I A V
 M Q | L E T S S W T D V E D A P T T A L L P | V G S T E Q H G P H A P V
 R T A R | L G Q Y A W P Q V T P A E | L T L L V P | I G S V E Q H G P H L P L
 M R T D Q H | T Y D D I R A Y L R E R D T V | L P | V G A V E Q Y G A H L A T
 M | L L A D | L T W T E | L T G R A P T V V V P | V G S V E Q H G P H L P L
 K R R F D Q L | A W P E A E K A A K Q A G A T V V W P | F G A C E Q H G P Q L P L
 M R | L S E | V A W T D V R D A D | V D A F L P | V G S T E Q H G P H A P L
 S R | L W A D W T T D F Q T Q A | L D R L I A V L P | V V A A T E Q H G P H L P L
 M | H | L T E S T W R D A D A M E T S L A V L P | V G S T E Q H G P H A P L
 M R | L P | V S T W P D | E A W L T K S K T I V I P | I G S F E Q H G P N G F I
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 M Y | L A H | L N W Q Q A K R A F A K D D | L V A I I P | I G S T E Q H G P V G P L
 H | T V A V L P | V G S F E Q H G P Y L P L
 T H R | L A E | L T T E E A A R A V T A S P | L V L V P | A G A F E Q H G P G L P L
 T W M E | I E S A I D R G V K T I L V P | P A G S V E Q H G P H L G I
 S R Y W T D | L T T V D F R D L D R S R V I A V L P | L A A I V E Q H G P H L P V
 M T W P | E A S K A A S E N G S T L V W P | F G A C E Q H G P H L P L
 T V L | E D | L T W T E | I R D Q V Q A G K T T I I I P | I G G T E Q S G P G I A V
 R F L | P | R Y T A A D I P | S I V S Q D | P | V V I I I P | I G S T E Q H G P H L P L
 K T V K | L E E | L N E H S F Q K E A G V D | K V I L A I G S T E S H G A H L P F
 L W K M T A H Q V K E G N F K K A V L A V A V G A C E A H G Q H L P A E
 K S G S | V L V L P | V G S T E Q H G K H L P V
 T R R F A D | L T T A E | V G T A L S R D S V L V L P | T G A V E P H G P H L P M
 R R | L E W M S W P E | I Q E A A S Q P G S T V I W P | F G A F E Q H G P Q L P L
 M T S P | E L A A A V A Q D | P | V V I L P | L A A I E Q H G P Q L P L
 M N | L G D | L R S P | E F A D R I G R T V L A V P | L G A T E Q H G P H L P L
 P | R E | L G N S T S R Q L H D A H A | H M P T L V V P | V G S T E Q H G P H L P L
 S S | V M L | E E | L T S T E L R S R I D H G A T T V L V P | I G G V E Q S G P Y I A L
 M R | L S K I T W P T A E R Y F K E N D M V | I L P | I G S T E Q H G R H M P L
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S T D L V V A E S L A R D A G A C D L W L P A L A Y S K S N E H A W S				
C T D S V Q P E Y V V A D A V A K L I G G I V A P P I R Y A H H S S T K				
D T D A V I G A A F L D S L E A R A G V L I L P Q V K V C C S E H H M				
D T D T R I A S A V V T R I R T D L A T L V I A P P L A Y G A S G E H E				
D T D T L I A E G I V E R R L P A N L P V T F L P T E P V G Y S E H M				
I T D V A V A A V R A A R L V A E D V P L A V L P G L W L G M S E H H L P				
G I D T F V A T G I V E D E A A T R M G A L C A P P M W F G D S P H H L A				
G T D V M L N A G C L D R L P E S M D V R V L P I Q E V G K S N E H L W A R				V
G V D D F L C S E V C R C R T A A E L S V V V A P T V W C G L A D H H D				D
S T D V T I A E G Y L A R L A E D L D I L V L P V Q S I G K S D E H				
T T D T L I A C A V A S R I A Q D H G F W L L P P V T V S C S H E H A A W				
A M D A L T A H K L A L G V A E R M E V F V L P P T F F G F S Q H Y W				
G T D A L F A D R V V N A V L E R L P I W R L P L Q S L G F S P E H Q				
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D T D G R I A V E V A T R A A P P V D A L T A P S I A Y G A S G E H E				E
G T D N M L A E S V T I E A A S K A W P I V L P V V P F G V N T G Q L D V S L				
G V D S M H N A R A L E L V R H D V R V L A L P P L D I G V S C E H G				
G T D A L I G Q A L L A R A L G H L A V Y V A P P L L V G K S T E H R S				
S V D A D L N A G I L L A R A P D D L P V L A L P P M Q E I G K S N E H Q A				
A T D A L F S E R I L I S E L A P N A P I W S L P S Q S I G F S P E H S				
A T D A V I A T T I A D A L A A A Y P V L R L P P I T I G C S H E H A D W				
G T D R L T A R A V V A A A G A E R T E V V V A P T I P V G I A E E H R				
G T D W I A V S E I S R R V A L E L N A L L I P A I P F S M S E C H G P L E				
G T D F L V P Q H L A D R V S G K K N V I V A P A I P F G V C P Y H M S				
G T D T F I A C A I A T A I S Q H D H V F Q L P P I T F G C S H E H A A				
G D Y M L T D V L V A G K I A E K S G A I A A P L P M F G Y A D Y F R T				
E T D T L I A D G I M M R R V A E A L P V T I L P A E P V G Y S E H M D V K				
F T D S M I L G E V V R R A P V A T K C L F A P L Q W L G N S H H H L				
V T D T L L V E A M V D T A V E R L P V V V T P P I W S G F S P H H L S				
A T D T I V A Q V I A E R I A Q R Y D L F L L P P T I L T S C S H E H				E
G T D L L V A K R I A E L V A E E T D A L I A P T I E A G E S S A L A S				
G S D L L I K V R E W A A R A T K K E Y A V V F P D Y F Y G Q I N E A R E				
I T D A F F A E R M L V E V L E R L P A W M L P A Q S L G F S P E H E				
G T D A F S A I C L A E D A S E E T R V I V A P P I W F G C S A H M A L S				
S T D L S I M E G M L A E L P D D L D V R F L P I Q A V G K S D E H				
A T D L T I G E G L Q A A M L E K L D V I C L P P I A V G A S D E H A N				
G V D T V L V A D G I V A L P A E L P P V L F P T Q Q I G L S P E H A				
A T D S I L F V D E I V N D V P E D D L P P L L K I P T Q Y I G F S P E H L S				
G V D T F L M E E I T N R L P D D L P P V Q N C G L S V E H L				
S T D V T I G E G L L A G A L E H P V F V L P T L A V G A S L E H T				
T T D T A I A T A V S D M V A R Q L P T V V A P P I A Y G N S G E H A				
S T D T D I V T Q L A L J A E K A L P D T V L P T L P F G S S H H H L A				
E T D Y R I G I G L L Q Q A A Q D D L P L A V L P P L A I A T S T E H T				
D T D T R I A T A V V A R T V T A R L H A E D L P I L M A P A I A Y G A S G E H Q				
Y T D T L I A E G L L E H L K K E D S I W L L P P I P Y G K S T E H L				
G T D T L I I A E E V A R R V A K L H V G L L P P I W Y G Y T W S L R				
A T D N I L A E N I A A E A A R I A L A W P V V L P N I P F G V N T G Q L D I R L				
S T D T L I Q A K A V G Y R L A E R R P I F V A P A V S Y G V C R S T S				
G T D T M I M D A L C A A L P E D L N I R I L P Q A V G K S N E H I				
S V D S A I V S A M V A T V E R L P A L P Q P I G K S N E H A				
T T D T L I A S A I A R R I A D D Y G L F L L P P I T F S C S H E H A S				
H T D T T I A V A V A H G V A E R L C A V V T P P V A M G S S G E H Q S				
L T D T L I A T A I A D S I S L R H N V F Q L P A L A F G C S H E H S				
T V D A D L A L G V A R A I D P L D A L L P A M P Y G D A W N N A R				
G T D T L I A H A F A Q E I C E R E D M Y Y P C I T Y G Q V A T P G Q R L G G T				
G S D T M I S D H F A H R L A A A V A G H V A P P S I G Y G V A T P G Q R L G G T				
M T D C I L S H D V A V I S A A Y G V N C M V M P P I G M G S Q N P G Q R				
D T D T R V A S A V A H G L A D R L P L L I G P V M P Y G A S G E H A				
G T D T I P D R I L E I E A K N D I L M A P T I P Y G A C Q S L A				
G K H N E R A A Y L A E K I A E K T G T L V A P V V A Y V P E G G T S P R S H M				
G T D T I I A R A I V A E T A D G E A D S V V L P A I P V G V A P Y H G				
D T D T R I A V A V A T A A R S E L P V T V A P E I A Y G A S G E H E				
G T E L R I C E G I A T E A G E R A G L A V T P V P V N Y S A M F L				
G T D T L I F A S V L A A A L H D A D P E L V L P A I A Y G A A G E H E				E
A T D A L F A D R I L I N S V L I E H P I W R L P L Q S I I G F S P E H Q P				
G T D A L I N A V A V A D R D A A R G E V A V A P P I R I G V A E E H R A				
S V D T D L D V L V G V Q H L P A D L P A L F L P T Q N V G L S P E H A				
G T D A L I T A E A I A A E A V E R V D V A V A P T V P V G V A A E H R				
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G T D T L I P D Y F A K Q I E K R T E V L I V P T V P F G I A T H H				
G T D T L I A T A I A S A I N Q H H N V F Q L P P V A F S C S H E H A A				
A T D S I I R A E R V V A D L V A T A L A A V V G P P L P V G V S P H H				
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UniRef90_R4UTV6	F P G T I S I S	A T T L T A I I	A D I L G Q S L	A A H G T R G L I
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UniRef90_Q018M8	G F P G T L S L	S S S G L L T Q	L I L E V G K Q L	C T Q G V V K R L
UniRef90_R4SMJ9	P G T V S I S A	T A L Y A V V N	D V A A S L R R S G	V P K L V L V N A H
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UniRef90_UPI00047DD90E	H Q P G T F A L P	E R V V W D M I	E A S C D E I A	R N G F N K I V I
UniRef90_A2C7R9	A F P G T L S L S	A N R M F Q L V I	E V G Q Q L A A M G	V R K L L F N A H
UniRef90_X1FWZ5	G T I R P E V L	I F L Y D E I E S	L A R H G F K K F	I I N G H I A
UniRef90_UPI00037B03A5	H A P G T L S L P	A N M L V E A W T	E L G A S V A R T G	I R K F V F V T S H
UniRef90_L9U9U3	F P G T L S L P A	P L A I A T L E	A Y G D S S L A H A	G I R R L V L I N S H
UniRef90_J3CAV6	R F A G T L T L S	S A E T T L I R M	W K E I G A G V A R	G V K K L V L F N A H
UniRef90_UPI0002FFD7D0	F D G T L S I S S	D D L I K S I E	I G K Q L S E M G F	K R L I L L N G H
UniRef90_B2IIIN3	D F P G T L S I S	S P D I L L R A	W G E I L G A C H	R A G G C R K L V
UniRef90_U2FU89	G F A G T L S I A	P E T A I L T T I	E S I G A S L A A A G	I R R R L L F N S H
UniRef90_10H4K3	G F P G T M S I G	Y E A L R T V V I	E T V R S L A L W A R	R I R V L I N G H
UniRef90_UPI00036EF885	F G G G T M S I A	P E L Y T Q V V I	I D L V Q S L V L G G H	Q R I V V L L N G H
UniRef90_UPI00036ECB7D	G F A G T L T R P	E T A L A T L R D	I G D S V A R S G L R	R R L L L Y N T H G
UniRef90_P9WP58	R F A G T I S I G	T E A L T M L L V	E Y G R S A A C W A R	R R L L V F V N G H
UniRef90_X0R975	G H P G T F S I S	A T T L L Q Q V I	I D L L A K S V Q L S G F K	R R L L L Y N T H G
UniRef90_A8AAB9	H D G T V S I E A	E N L A K F V E D	L V T L P S P R I P	R R L L I I N G H
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UniRef90_Q3A422	Q H P G T L T I T	T G T L K A L I T	C D I V A S L Y K H G L	R K R N F I L L L T G H G
UniRef90_A8LJ96	H A P G T L T L E	A E T A L G A W R	E T G L S V A R A G	G L R K V C N S H G
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UniRef90_D3D5N2	Y P G T V S I S A	R T L I A L I D D	T I T A S S V L S A S G	V D R L V I V N G H
UniRef90_UPI000360BB7D	F P G T V S I G T	A V L R Q V L V E	I V R S V R T W A D	R R V L L V N G H
UniRef90_W4HUV0	U F S G T V S I S	G A T T L L N S	V A D L I D S S L N R Q G T R	G L V I I I N A H G
UniRef90_E3EYB3	A Y P G T L T S I	S P A T L R A A I	T I D I G K G L Q E M G	V S S L I I L N G H F
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UniRef90_D9W4M6	F P G V I S I T	G A T T L T A L V	T E I L T A L A D H G Y	R R R L I L L N S A D
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UniRef90_W0QJ91	H F P G T L S V S	S S E T T L R S Y V	R D V L E S L S A S S	V E T T V V F V N G H
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UniRef90_UPI0001FFE6D7	G F P G T V S I G	E E A L R T V L V	E Y G R S A C R W A S	R R L L V L V N G H
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UniRef90_M0EY80	F D G T M W V S P	E T F R A Y V R E	A E S L V S H G V D	R R V V F V N G H G
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UniRef90_F8I3C3	G F P G T I S L S	A E T T M H V L K	D I A S S L H Q F G V	K R I L F L N G H G
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UniRef90_U2KSV7	F P F T L T L Q Y	D T V T Q V I Y	D I V E S V L R N G I D T	L T M I I N G H D G
UniRef90_M0LVX2	G T L T G E F D D	L L D L C H G I A	S T G L E N E F D A L	V F V N G H G G
UniRef90_G7GLH2	E L P F G T M W T	R A T T F F E T I L	V D I G A S I V G T P	A R R L L V I N A H G
UniRef90_B1X5T5	E F P G T L S I S A	E L V M L V E Q V	G R Q L A K G F K R L	I F N A H G G
UniRef90_W0DLV8	G F P G T L S I S E	P E T A L A V I Q	Y G Q G A A V V A G N G	V R R L L L W N S H G
UniRef90_UPI0004674249	G F P G T L S I G	H R A L E L L V E L	V R S A D D F A G V	V V L V N G H G
UniRef90_A4T1T8	G F P G T I S I G	T P A L A E L L V E	F V R S A C R W T P R	V A F V N G H G
UniRef90_A0A031GIP6	R F A G T I S I P	P A A F E A V L E	G A A S L R Q H G F R D	I I F L G D H G
UniRef90_R7PM67	D Y P G T I D I D S	D V L Y Q Y V Y Q	I V D G L Y K H G A R K	L V L V N G H G
UniRef90_R5D5T2	P Y P G T I D I D G	E V L Y Q F C R H I	F L S L Y R H G A R K	F V F L N G H G

130 140 150 160

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UniRef90_R9T4R6	S S H I N A L R Q G C A E V A E K R A V K I M L L S D Y D L V D E F P I		
UniRef90_Q1YGT7	N Q A I G Q V L L E E F G A S H R D C R I V M L T W W R L A G P E		
UniRef90_H5TFY4	N A T T L V D A V R L L R Y E G R D V A W C P C A F V		
UniRef90_W8IBU3	N S P L M T I V A T E A R V R F G M L A V A T S W T R F G Q P D G		
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UniRef90_M3US11	N A M A L A T A V R L L R Y E G R D V A W W P C A		
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UniRef90_H5SKT7	N F V L E P V I Q E L N R E Y P F F T V V M P A E V W A V A E D G E A		
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UniRef90_G8RWX6	N A V L T N V V Q Q A N Q A T P I N V G L Y P S R E D W T E		
UniRef90_K2LLX5	N Y P L I D Q V I R K I K R E K G L L I P C L N M W R L I P A E M		
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UniRef90_L9U9U3	N K A V M D L A G L T I R R Q H G M R V V K A T Y T R L P P L E G A		
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UniRef90_UPI0002FFD7D0	Q I S L L N T A A R E L R K I T P S L N I F P C F I I W S G V K G		
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UniRef90_M0LVX2	N T P A L I D A V V S E V G K T H P E V E V L G L T Y F E L V T D L V E		
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UniRef90_R5D5T2			

Sequence logo showing the conservation of amino acids at each position of the protein sequence. The x-axis represents positions 170, 180, and 190. The y-axis lists UniProt IDs. Colored squares indicate the frequency of each amino acid at a given position: black for A, blue for C, red for D, green for E, yellow for F, purple for G, brown for H, pink for I, orange for K, grey for M, white for N, light blue for P, dark blue for R, light green for S, and light orange for T.

210 220 230 240

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UniRef90_H5TFY4	R A P I A T L L P T M R D G G V I A V V S V N G V L G D P T T A S A R D G A V L V		
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UniRef90_G2TG89	M I P E P V D E N V K E L W D F S E L T D Y G A T G A P E K A T R E K G Q A M Y		
UniRef90_B5ILL5	G L A G G P A P P E G W S A W L S S D L S R S G V I G D S T A A S A E L G A R L F		
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UniRef90_W2US13	G E A K Q F A L W V T T Q R K W T S V T K D T G V G N P E K A T A A K G A A Y F		
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UniRef90_W01YW7	A W P A Q L D D P G T F A W T T E D I S P T G V M G D A T R A T A E K G A R W		
UniRef90_K2J364	F P S R Y R D L A A G F A W M T Q D L N A S G A I G N A A L A D A E K G R L I V		
UniRef90_Q018M8	G D A T P P P G W S L T A W L T D L S N S G V I G D S R A A S I E C G E A L V		
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UniRef90_M0MY42	A Q D G A S E T W G E W V F D A A E F T D S G A V G D P G E E S A R G E E L L		
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UniRef90_E1R4M8	M A P V H P T G E V R M A R D T K E L A S N G W F G D P R G S T K K F G Q D M M		
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UniRef90_J3CAV6	F D S T S R Q R A A D Y		
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UniRef90_B2IIN3	F S S A S E S L E R D F T W L R T G R P T G F G W M S Q D L S S A E K G E P C L		
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UniRef90_Q0BLVX2	G A D L L V V G G P V S V Y R P F E Q Y S E S S G A I G A P E V A N P E T G D R L L		
UniRef90_G7GLH2	S V I A D A V A G C E R F G W L S T D F S E S G V I G D P T G A T A A I G Q V L F		
UniRef90_B1X5T5	G I P P L Q P P I G W T A W L S S D L S F T G V I G D S R D S D N S V L G E Q L F		
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UniRef90_A0A031GIP6	G P K P G V A D G V R G D A S R A T A E L G Q Q I G I		
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250

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UniRef90_R9T4R6	E F V V N R L V E E I K K S F
UniRef90_Q1YGT7	E A V T E Q L L A V V R D
UniRef90_H5TFY4	E H L V S T L S A A I R R W
UniRef90_W8IBU3	A H A V T G V I E L L T D
UniRef90_UP10004678DF8	A L H A R E V A K L I
UniRef90_D2RV80	E T A V D A L V S F L E R
UniRef90_A1RDL8	E H I V D R L C E V I
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UniRef90_UP10004772DBB	D A L A R A F R A H L
UniRef90_G2TG89	D V L V D Y L V A Y L T K R
UniRef90_B5ILL5	E R L V D G W V R L L T S T W P P
UniRef90_R4UTV6	D H L G R N A A A L I
UniRef90_M3US11	D E N S R D L A A S L E S W
UniRef90_W2USI3	K A T S D A I A E F L I D
UniRef90_C1EA00	E S S A R G L A R L I E E
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UniRef90_R4SMJ9	E D A T T A L V T L L E
UniRef90_M0MY42	A A Q V Q A I V R F A R Q A F
UniRef90_H5SKT7	D V C V E F I S E F I E E
UniRef90_E1R4M8	D H L G R N A A A L I
UniRef90_G8RWX6	S Y L V E Y C A D F I R H
UniRef90_K2LLX5	D H A V A G V L E L L E D
UniRef90_K2QCW7	A H F A A G V V A Y L I E R
UniRef90_UP100016C5023	S V I G D E L A A L M
UniRef90_G010C4	D S I L T W S F S A L L
UniRef90_UP1000362A188	E A C L A R I L K F I K A Y Y
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UniRef90_A2C7R9	D H W V N L L I S L M G S Q W P P
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UniRef90_UP10002FFD7D0	E H W Y K L F L S L M S S D W P
UniRef90_B2IIIN3	D Y A A T A F I I E L L Q D
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UniRef90_I0H4K3	E A V V N T T L R R I R
UniRef90_UP100036EF885	D Q A L A A L V Q F L E K T W P
UniRef90_UP100036ECB7D	E H Y A G H L A A T I R D A
UniRef90_P9WP58	A A M V D D C V R R V A R W M P
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UniRef90_A8AAB9	E V A A E E L A
UniRef90_UP10003740367	K T I I T E K V A A V L L E
UniRef90_Q3A422	R L V V D A L E R F V D K
UniRef90_A8LJ96	A H Q V G G M I D L L R K
UniRef90_A0A011UA90	D H A A G R L V E L L A E
UniRef90_D3D5N2	A G L S S A F
UniRef90_UP1000360BB7D	A A M V E E V L D G V L E R
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UniRef90_E3EYB3	E
UniRef90_UP100046FBB11	E L I C R E L Q E Q I R
UniRef90_D9W4M6	D Q V A A Q L A D A V L R E F
UniRef90_R5UX37	E A V A E K Y A R L F D E
UniRef90_19KNE8	D A Y V D N A V E R L L S W
UniRef90_A0A011A755	Q T T A D Y V V D L I E E
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UniRef90_H6N1Y6	T R V V D D L T R A L G E W
UniRef90_H0F6Y5	N D A V A Y L S D A
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UniRef90_UP100030FB8AC	E A S G R A L A Q L L T E I L P P
UniRef90_U1QQ02	D L A S D R L A S L L
UniRef90_Q0BWG4	A V A A K C V L E E V A R
UniRef90_M0DSM2	G R A S D
UniRef90_R6MPE7	V A L L D Y I V D F V N E
UniRef90_X8AL23	D H L A D T L I E L L
UniRef90_H0K1C9	D A I V G R I V D F A E E W L
UniRef90_D8JCZ5	T R L V S A F S E R I R T E
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UniRef90_UP10003B76587	T A I L V D Y L V D F V T R
UniRef90_U2KSV7	K I L L E Y C T K T M R
UniRef90_M0LVX2	D G A T T A L A N L L Q E
UniRef90_G7GLH2	A D R V T E L V A A L G E
UniRef90_B1X5T5	T L L V N G W S A L L D S S W P P
UniRef90_W0DLV8	A Y Y G D A L A R V I R E A F P
UniRef90_UP10004674249	E R W T E S L V A A V A E R F
UniRef90_A4T1T8	A E M V D A C A A R V V I R W E P
UniRef90_A0A031GIP6	K L Q V D T S V A A I K Q
UniRef90_R7PM67	Q T T A D Y I L D L I E E
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UniRef90_R7KK86	M Q L A H L N W R Q A Q E K L A D P N T V V V I	P V G S T E Q H G P H I G P L		
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170 180 190 200

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250

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UniRef90_K1JFY5	G T D W L I P Q E L C R L D G R M E L L I A P V I P F G V A T H H I	
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UniRef90_UPI000380DCAA	S T D L D I A E A A L Q A I A D P A R A V L L P A M A V A L S T E H A	
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UniRef90_R7ZZ50	G T D V F E A D A I G A A A A G K I A W V M I L P T I P F G V N T G Q A D I Y L	
UniRef90_D7I9K8	L T D C I L S H D I A V D A A L K A W C M V M P F V S M G S Q N P G Q R	
UniRef90_R4TOZ3	G T D P L I S R G M C E R A A A R L A V L L P E V P Y G V T R F A A	
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UniRef90_B9CY80	G V D T L I V P E A L A Q R I E K Q T E I L V L P A L P F G S C D Y L R	
UniRef90_U2NRA1	L T D C I L S H D I A V D A A E R H G V M V M P P V T M G S Q N P G Q R	
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UniRef90_M0QJZ4	A F A G T V S I G L A E A L G L L L E Y G R S A C R W A D R I V F V N G H G G			
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UniRef90_UP1000362CE4C	D F R G T I T S V A P E T L I S A W T D I G A S V A R A G G R K I V L V N S H G G			
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130 140 150 160

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N N F K P L V R E L G K F P D M F I C F S N W F
N A H A I A A A V V T L R S E G R D A A W L P C V V A V A W F G C A S P G A
N G R T L L S A V S Q L R T E G R E Q V S V L D I V A R E L R S R C N L I V Y S S S W F N L P C P P E L
N S F K N M I R D L A V D Y P H F L I V V S D W F
N G R P L V D A V G R L R G E S R D V A W F P C V L Q V G L M D V V A R D L R A R L G M L V Y S V N W F G L P L M A A D
N Q V G A L D L V A R D L R N R L G M L V V S V N W F A L P L G D D
N D F K Q I I R E L Q P T T R V M L V Q I N N W T V
Y Q T Q L K Q A A D T L N T A W R G T G A K A L Y V R A Y Y D V L P H Q Y
Q V S V M D I V A R E L R T R C D L I V Y G A S W F S L P L P D A V
Y Q K S L D K V A T Q L N K E W F G Q A Q A L Y V K Q Y Y S V I P H Q Y
N I J A L R S A R R I L A G E G R P V F L W A P V A
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Y Q T F M G K V V Q D L N R S W K G Q A A A L W L H D Y Y T V I P H Q Y
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Y Q S F M A Q V A Q E L N R A W K G Q A V V L Y L R D Y Y E V V P H Q Y
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170 180 190 200

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UniRef90_UP1000362CE4C	F V P A T V G M E S E F S Q L R A S A P A G		
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UniRef90_UPI00037F3061	K H P G T L T L K P G T F L A I V V S D V I E S L S R A G F Q N I I L V L N G H G		
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UniRef90_X7F740	G F P G T V S L K L A T Y A A L V R D I L D S L H A T G F R R V L I V N G H G		
UniRef90_B5GB34	F A A A L T L S A H T L G L V L D E I L D S L A T G H G R R V L V V N G H G		
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UniRef90_UPI0003F80ED8	Y P G S I S L R T E T Y I R L V R D I L D G M R A Q G F R R I I L I V N G H G		
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UniRef90_B8KH97	G F P G T V S L T M S T Y E L V R E V L D S L Y T H G F R R V L I V N G H G		
UniRef90_U1QXN6	F D G T L W V S P E T F R A F V R E T V K S L S F T H G V D R A V L V N G H G		
UniRef90_UPI0003723414	F A A A V S L R A S T L Q A V L L D D V L D S L A T S G Y R V L I V N G H G		
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UniRef90_UPI0003803199	Q F P G T V T L S Q D T Y R D A V V D V G A S L A E H G V D R I I L L N C H G		
UniRef90_U1R2N0	Q F P G T V T L S Q D T Y R D A V V D V G A S L A E H G V D R I I L L N C H G		

130 140 150 160

N D E I M R L A V K	R F A L R A Q V T V A A C S Y W T	C S Y W T	V
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UniRef90_M0L1W4	N V A L L Q V A L R E I R K R F G L K T	S L G A L M V A A R E L T E E T G D R	S L G A L M V A A R E L T E E T G D R
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UniRef90UPI0004645543	N V P T L A K A V Q R L R Y E G R D A A W W T	N A E P A S A A L R V L R T E A P G S A S A W F P R A G V L A A	N V P T L A K A V Q R L R Y E G R D A A W W T
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UniRef90_A6C1P6	N I A P C L G M W G Q F Q Q R L E I N L H F S E Y W N L L P E E V A	N D E I M R L A V K R L A L R A E V T A A A C S Y W S L G E P A A D	N I A P C L G M W G Q F Q Q R L E I N L H F S E Y W N L L P E E V A
UniRef90UPI0003F80ED8	N Q P A G A L A I E W M A D N P D T A I K F H N W W A A P A T M G K	N I A P C L G M W G Q F Q Q R L E I N L H F S E Y W N L L P E E V A	N Q P A G A L A I E W M A D N P D T A I K F H N W W A A P A T M G K
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UniRef90_B8KH97	N S P V Q A A C A Q W V S D N P G T A C R F H D W W R A P K T W A A	N H Y P A A A A M R N V R R K T G V I M A S L N P G S I Q A D L	N S P V Q A A C A Q W V S D N P G T A C R F H D W W R A P K T W A A
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170 180 190 200

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UniRef90_UPI00037EA71	V Q E I D P K A S H A S W M E N F P W T R L P G R P V P		
UniRef90_E6JD92	V E D P T D T H A G H A E T S L L L H L P D L V R V D L A A P		
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UniRef90_N9XQ70	L F E E E E P S E H G L L D I H A G A F E T A V L L Y Y F C P E L V D L E T A E Q		
UniRef90_B3T9L2	E H E F D H A G F V E T S L M L T I S D K V K M K D N L S K		
UniRef90_F7VAZO	M P H I M G K E K A A L S G G G H A N P L T S I G M H L L P E C I K P E R L I T		
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UniRef90_G2GBU3	V E T S L T D M H A G E I E T S I L L H T H P E L V R P G Y E T S		
UniRef90_D3L4R4	P V D R E D S L E T H F V H A D E S E T S V A Q L L F P D M I D M K Y V Q D		
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210 220 230 240

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UniRef90_M3JN15	F S N A Q S D G P H A F G W K M Q D L N T E G V A G N A A A A T A E A G E K I L
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UniRef90_K2MLW8	F A S A Q T R G P H A F G W M M S D L S P E G V A G N A A A A S A E A G H R I I
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UniRef90_N9XQ70	L V S S S L N E K G M E K W L I R E A A P L G Y A G N P A G A V A K H V A E M L
UniRef90_B3T9L2	L E Q S A A K K L S T Q E G G F P Q V A K N G V W G D P T S A T K K D G E K F L
UniRef90_F7VAZO	P A S G K T A W G L K V V D F G T V D L N G V K G N P H L C S A E D G E R L T
UniRef90_UPI0003B68508	V D H V N F G S T R V F W S T W H Y S P S G L L G D P T P S S A E T G R V L I
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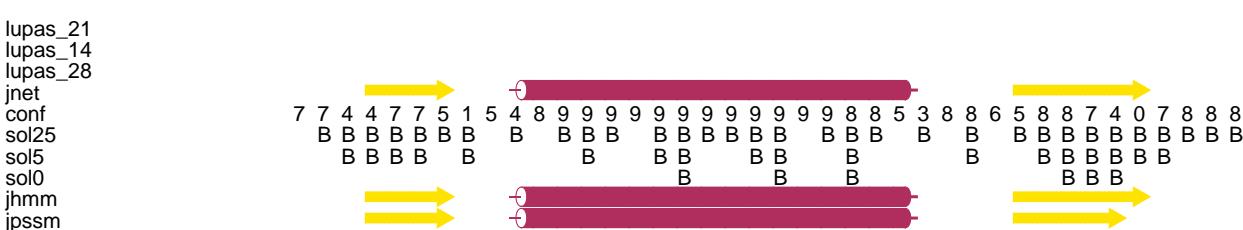
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H I H M P V D H L P A D V L V E N E H L P D I L V E K E	E R D E L L E G D L K P V L R K A K R L N I D A A V I V N G H G G T V E T G V F Q R V M T A W L T M V A D Q G C Q V A V V T G L A G T	N I V E D V C L G L A K W G F D K I V I I C A H G E M L D E I L D S L A A T G H R R V L V V N G H G G	M E E D G I R K V V L L N G H G G M I V V N A H G G	110 L V I I C A H G E R V L V V N G H G G	120 V T G L A G T N G H G G
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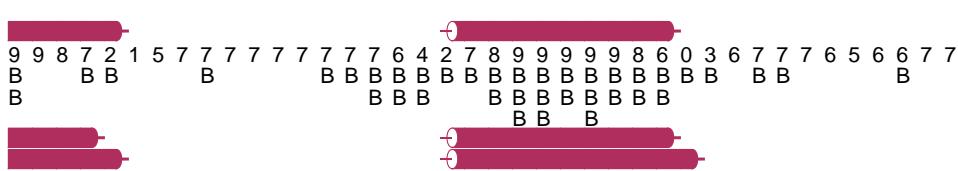
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lupas_21
 lupas_14
 lupas_28
 jnet
 conf
 sol25
 sol5
 sol0
 jhmm
 jpssm



UniRef90_X0T705 UniRef90_X7XPS0 UniRef90_W0EKU5 UniRef90_D9PWM7 UniRef90_UP1000200030A UniRef90_A9WK41 UniRef90_F6D4Q8 UniRef90_K6UAN4 UniRef90_K2QDY9 UniRef90_E3GWT5	A R V E N P S 170 M H G G E S E T S R Q M Y V R P E G V D T S K L A D A R T A A G V T S S N H D D M H A G E L E T S I L L A A H P D Y L R D G W A S S C K G E H P E W D F H A G E W E T G L I L L R H P E L V D Q E E L I K E I E G P H A G S G E V S A G I I L G I A D L T R L G E E H A A L V P G H A G W Y E T S L M L A A H P G L V R T P V P A R E L V D G T M H D R G A L W E T S L M L A L R P D L V D L T R V V G A E H A A L V P G H A G S G E V S A G I I L G I A D L T R L G E E L V D G T M H D R G A L W E T S L M L A A H P G L V R T P V P A R M G A V L G F L D E S K L D E H C N F Q K Y P E M V G L N E A R E M G V V L G M A D E S S L N E H C Q F D E Y P E V G M V G L L E A L K L I F N N K I V E I E G P H A G T G E L S M G V I I G M A D E S R L S E E I E G P H A G S G E T S L G Y V I G I A D V E R M N E
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lupas_21
 lupas_14
 lupas_28
 jnet
 conf
 sol25
 sol5
 sol0
 jhmm
 jpssm



UniRef90_X0T705 F G R G T P D P R I R W V R P W H L H Y P V S A G G D A R K S T V E K G K A L V
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 UniRef90_E3GWT5 L D F E K K Y P E I C G M V G L K S A P V E K F C V K I N P K I G P K L I

Host	jnet	conf	sol25	sol5	sol0	jhmm	ipssm
lupas_21	7						
lupas_14	7	B					
lupas_28	7	B	B	B	B		
jnet	7						
conf	6	B	B	B	B		
sol25	3	B	B	B	B		
sol5	0	B	B	B	B		
sol0	4	B	B	B	B		
jhmm	6	B	B	B	B	B	
ipssm	7	B	B	B	B	B	B

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UniRef90_D9PWM7	D D A I E S V I S D V R E	
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UniRef90_A9WK41		
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UniRef90_K6UAN4	E T A V C D I I R D I E	
UniRef90_K2QDY9	E N A I C D I I N D I K	
UniRef90_E3GWT5	N I A I N D I I N D I K H	

A horizontal bar chart comparing the number of nodes for various system components. The y-axis lists the components: lupas_21, lupas_14, lupas_28, jnet, conf, sol25, sol5, sol0, jhmm, and ipssm. The x-axis represents the count of nodes, ranging from 0 to 9. Each component has a corresponding red bar. The data is summarized in the following table:

Component	Number of Nodes
lupas_21	9
lupas_14	9
lupas_28	9
jnet	9
conf	9
sol25	9
sol5	9
sol0	9
jhmm	7
ipssm	4