

1 10 20 30 40

QUERY		
UniRef90_H9G5E6	L P S A D V Y R F A E P D S E E N I I F E E G I P I I K A G T V I K L I E	
UniRef90_F7D162	L R L P S P S V Y R F V V E D S E E N I I V F E D G I P L I K G G T V V K L I E	
UniRef90_M4AJM7	Q M R L P S A D V Y R F A E P D S E E N I I I F E E G I P P I I K A G T V I K L I E	
UniRef90_E2AK89	L R L P S P E V Y Q F A V Q D S K E N I I V L E A G V P L I K G A T L I K L I E	
UniRef90_Q7PVU9	L R L P S P D M Y K F A V P D G P S N I I V L E E G V P L I K G A T L C K L I E	
UniRef90_D2A5R8	L K L P P P S L Y K F A E P D S K D N I I I L E Q G V P L I K G A T L Y K L I E	
UniRef90_J9JL18	L L P S V E E Y R F V E P D S R S N I I I F E E G I P L I K G A I L L K L I E	
UniRef90_UPI00046D6102	L K L P P P Q M Y K F A E Q D S P E N I I V V E A G V P L I K G A T L V K L I E	
UniRef90_UPI00035982FE	P P A D L Y E F A E E D S D N N I I I F E E S Q P L I K G G K L F K L V E	
UniRef90_T2MDG6	Q L K T P D P S I Y I F A E E D S E K N I I L F E D D S A V I I K G G T L P K L I E	
UniRef90_G6D1P6	L R L P S P S L Y R F A E P D G P H N I I L L E H G H P L I K G A T L L K L V E	
UniRef90_F2TDQ6	E P A V P W F L N I D H E S E V F Y D N K V P T L I C G T L A G L V E	
UniRef90_U9UOT5	D K P W F L N Y D Y E P S E M I F N M E S Y V K G G T L N A L V E	
UniRef90_R9NZ48	R R K E D E V P W F L E P D Y M G D D I V I A Q D G S V K G A T L E A L L A	
UniRef90_M3B6B0	S E M P N Y Q L Q D H E G E I A Y D T K V P Q L R G G T L T A L V E	
UniRef90_A2R650	M R E P P E E T P W F L K T D H E G E V F Y D T K N D S L C G T L A G L V E	
UniRef90_G2RAZ1	Q P Q Q S P E E V P P P F L R L D H E S D L S W D Y K V P A V K G G S L L A L T E	
UniRef90_G2YJP8	R D A P D E T P D C L K L D H E D D I S Y D T K V P I L K G G T L V V A L V E	
UniRef90_M4FKU2	D D T P D F L R L D H E D D I S W D T K T Q T V K G G S L L A L V E	
UniRef90_I1CK15	A V S E R P P D F L Q Y D Y G P N D I V F N M E G H V K G G T L P A L V E	
UniRef90_R7Z5M8	A A D D V P E F L R L D Y E G E I A Y D A N P P Q L K G G T L T A L V E	
UniRef90_F2DPC5	D P R V Y L F E S P D T E S V I L F E E T P G V V K G A T I E K L I Q	
UniRef90_J0XNI5	L L P T S D Q Y R F A D Q D C D E N I F V E D G I P V V K H G T V L K L V E	
UniRef90_G0S419	Q Q L Q P P D T P D F L K L D H D K D L S W D M K V P A V K G G S L I A L V E	
UniRef90_UPI0001FE637B	E I E L D I P E G Y P F G Q K D D P S N I L V L E E G R V V V K Y A T L E K L V E	
UniRef90_L8GMV9	Q E K V P E P D P W F L A P E D E N E I Q Y A D K E K T I R G G K L E L L V V	
UniRef90_G1WYV7	T T P W F L E H N H E G R I V Y D D Q G Y L K A G T L M G L I E	
UniRef90_L0PC91	A T K P A F L M A D Y G P D D I S F N V D N Q I R G G T L K G L V I	
UniRef90_E3KSS7	UniRef90_UPI000328F197	M Q A D D T P A F L R Q D H E N D V S W D T K Q P A V R G G S L L A L V E
UniRef90_J5JGH6	Q M R L P G A E E Y R F A E P D S E E N V V F E E G I P I I K A G T V L K L I E	
UniRef90_H2N025	D P P A N W F L G P D Y D P A D L V L N A E G R V R G G T R E A L I I	
UniRef90_A0A058Z9C2	S P V S D T F L L G S D I P P G D I V F S P Q G T V K G G T L E A L V V	
UniRef90_A8Q248	Q Q Q P E P S R P W Y L E R D W N D E D L S F T M E N T I K G G T L R G L V I	
UniRef90_M7WNG7	L R L P A P S D Y R F A L E D S D E N I L L F E E G I P I I R G G T V L K L I E	
UniRef90_S4RG01	K L N A E Q K P W Y L R P N Y D Q S E I L I D P D G Q V R A G T P S A L V E	
UniRef90_UPI0004411162	UniRef90_F4PLU3	E E G I I F S E K M E I I K G G T T E K L I E
UniRef90_UPI0003513D55	Q L H H T A N K G Q R W L E N E S A L N L Y E T C K V R T I K A G T L E K L V E	
UniRef90_UPI0001FE537E	E V N I L W D E P D S D A N I L L E E G N R Q V R A A S F N K L V E	
UniRef90_UPI0003F49BFE	A S E T P W Y L G E D Y E P N E I I F D D K G A V K A G T L K A L I I A	
UniRef90_Q6FVA6	E L P W F L L P E Y E E D D L I Y D T K G K I R G G T K V A L I I E	
UniRef90_G7X6H0	L E K T Y A H E L L I F K D G Q I M G G S L R A L V E	
UniRef90_Q6BY66	SD A P W Y L E G D D E Y D L L D L K G N I K G G T K Q A L I I A	
UniRef90_F0ZK45	D D G I I Y N H G K L E I K G G T T E K L I I E	
UniRef90_F4Q1P0	UniRef90_UPI00033186AD	I I C G T V D A L V E
UniRef90_W3X0C4	R L L E K T Y A H E L M F N K E G Q V T G G S L P A L V E	
UniRef90_D2VY93	L L T E D S E K N Y V V E N N Q I K A A T L D K L I E	
UniRef90_T0KXK3	R M L E K T Y A H E L M F N K E G Q V T G G S L P A L V E	
UniRef90_TONKV6	Q A H H G A S K G Q R R L E N E S A L N L Y E T C K V R T I V K A G T L E K L V E	
UniRef90_Q4REE9	Y E T C K I R T I I K A G T L E K L V E	
UniRef90_Q54TK8	D L P W Y L E G D N E F D L L S D V K G N I V K G G T K E A L I I C	
UniRef90_G3B1Y4	E E Y I F S E P N S P S N I I W S N E P P P I R G A T L T K L V E	
UniRef90_B6HSV4	Q G D D G E N L L E K T Y A Q E L M F K D G Q V I I G G S L R A L I I E	
UniRef90_A0A058ZGB5	UniRef90_C5G885	G S L Y G F E E P D I Q D N I I I Y Q D S I I K A A T V P K L I I E
UniRef90_H8X5L3	UniRef90_H8X5L3	D T T P W Y L K P T Y D P T Q I M I N T D G G V R G G T L P A L V E
UniRef90_F0ZUW1	UniRef90_X8JIE8	D P E N W M Y S H D Y S I E D V A Y N S E G I L V G A T L E A L V E
UniRef90_K5X8A8	UniRef90_A7TRY3	D D T P W Y L R S S H E Q E L L Y D S K G Q I K G G T K E A L I I E
UniRef90_A7TRY3	UniRef90_F2Q1X8	D G D E D S L L E K T Y A H E L M F K D C Q V T G G S L R A L V E
UniRef90_U4KYV7	UniRef90_C5DQ14	E S H E S D L T F N K E G Q I T G G T L P A L I I E
UniRef90_V9K9F3	UniRef90_V9K9F3	D M P W F L M S D H E Q E L I Y D Q K G R I K G G T K D A L I I E
UniRef90_J7S9X6	UniRef90_Q5B8H1	Q V H Q A A N K G Q R W L E S E S A M S L Y E T C K V R T I I K A G T L E K L V E
UniRef90_M7UXQ5	UniRef90_M7UXQ5	H K R Q H N S D V P W F L Q T E H D Y D L I I Y D S R G Q I K G G P K E A L M E
UniRef90_G7Y030	UniRef90_G7Y030	R M L E K T Y A H E L L I Y D N N E S I V R A G S L A A L V E
UniRef90_G8BUU3	UniRef90_W4K929	D T N A A P F L S L D Y E D E V V Y E D D Q R T I K H A S I C G L L V E
UniRef90_J3PKN3	UniRef90_J3PKN3	E S D L E W Y L L K C D D E E N L F Y D S K G R V K Y G T K E A L I I E
UniRef90_UPI0003F1270C	UniRef90_E5R415	P W Y L L E K T F A H E L M F N K E G Q V T G G S L S A L V E
UniRef90_R9XCN2	UniRef90_R9XCN2	V H H A A N K G Q R W L E N E S A L N L Y E T C K V R A V K A G T L E K L V E
UniRef90_UPI0003C18BBD	UniRef90_S3C765	D L P W Y L D S Q Y E S Q L V Y D A N G N I R G G T K E A L I I E
UniRef90_S3C765	UniRef90_F7W9K0	L L P P G H T V S Q Y E T C K I R T I I K A G T L E K L V E
UniRef90_F7W9K0	UniRef90_E7EZM3	N M P W F L R S D H I T E L Y Q N G K I R G G T K D A L I I E
UniRef90_E7EZM3	UniRef90_M5ENC4	Y L R S F H G T D I I F S D Q G T V K G A T I E A L V I
UniRef90_M5ENC4	UniRef90_L8FSG0	Q L H Q T A S K G Q R W L E T D S A L S L Y E T C K V R T I I K A G T L E K L V E
UniRef90_L8FSG0	UniRef90_UPI00042C5F2B	D D A E S K L L E K T Y A H E L I F N K E G Q V T G G S L P A L V E
UniRef90_UPI00042C5F2B	UniRef90_F5H6U6	Q L H Q S A S K G Q R W L E T D S A L S L Y E T C K V R T I I K A G T L E K L V E
UniRef90_F5H6U6	UniRef90_M4AEW5	N M P W F L R S D H I T E L Y Q N G K I R G G T K D A L I I E
UniRef90_M4AEW5	UniRef90_E9BZM8	Y L R S F H G T D I I F S D Q G T V K G A T I E A L V I
UniRef90_E9BZM8	UniRef90_FOX753	E D D E S R V L E K T F A H E L I F N K E R Q V T G G S L P A L V E
UniRef90_FOX753	UniRef90_T1J9K9	L L P P G H T V S Q Y E T C K I R T I I K A G T L E K L V E
UniRef90_T1J9K9	UniRef90_Q4RPN7	L L P P G H T V S Q L E T C K I R S I R A G T L E R L V E
UniRef90_Q4RPN7	UniRef90_I2H4B1	E A P V R P V K G G T L V K L V E
UniRef90_I2H4B1	UniRef90_M5ENC4	
UniRef90_M5ENC4	UniRef90_L8FSG0	
UniRef90_L8FSG0	UniRef90_UPI00042C5F2B	
UniRef90_UPI00042C5F2B	UniRef90_F5H6U6	
UniRef90_F5H6U6	UniRef90_M4AEW5	
UniRef90_M4AEW5	UniRef90_E9BZM8	

50 60 70 80

QUERY				
UniRef90_H9G5E6	T Y H M Y A D P N F V R T F L T T Y R S F C K P Q E L L S L I I E R F E I P			
UniRef90_F7D162	R L T Y H M Y A D P N F V R T F L T T Y R S F C K P Q E L L S L I I E R F E I P			
UniRef90_M4AJM7	R L T Y H M Y A D P N F V R T F L T T Y R S F C K P Q E L L S L I I E R F E I P			
UniRef90_E2AK89	R L T Y H I Y A D P A F V R T F L T T Y R S F C S P Q E L L S L I I E R F E I P			
UniRef90_Q7PVU9	R L T Y H I Y A D P M F V R T F L T T Y R S F C S P K E L L S L I I E R F F Q I P			
UniRef90_D2A5R8	R L T Y H I Y A D P K F V K T F L T T Y R S F C S P H D L M D L L I E R Y K I P			
UniRef90_J9JL18	R L T Y H I Y A D P A F V R T F L T T Y R S F C S P Q E L L S L I I E R F E I P			
UniRef90_UPI00046D6102	R L T Y H M Y A D P R F L R T F L T T Y R S F C S P Q E L L I D L L I K R F D I P			
UniRef90_UPI00035982FE	R L T Y H K H A D P T F V R V F L T T Y R S F C S P V E L L D L L I E R F D I P			
UniRef90_T2MDG6	R L T Y H V H A D L N L V R T F L T T Y R S F C S P S E L L A L L I E R F D I P			
UniRef90_G6D1P6	H L T R H D K L D T S F N A T F L L T Y R S F T T A S E L F E M L V H R F T L L Q			
UniRef90_F2TDQ6	R L T M H D L L D S N F I A T F L L T Y R S F C T T D E F F D M L V K R F M I Q			
UniRef90_U9UOT5	R L T M H N S F D A S F N N T F L M T Y R S F T T T Q T L L D L L A Q R F R I I Q			
UniRef90_R9NZ48	R L T R H D R L D S P F N N T F L L T Y R S F T T G P E L F E L L V K R W N I I Q			
UniRef90_M3B6B0	Q L T R H D K L D A S F N N T F L L T Y R S F T T S A E E L F E M V T E R F N I I Q			
UniRef90_A2R650	Q L T R H D K L D P S F N N T F L L T Y R S F T T T A R E E L F E L L V K R F T I I Q			
UniRef90_G2RAZ1	Q L T R H D K L L S S D F N N T F L L T Y R S F T T N A R E E L F E H L V K R F Q V Q Q			
UniRef90_G2YJP8	Q L T R H D K L D S S F N N T F L L T Y R S F T T T A R E E L F E L L V K R F G I Q			
UniRef90_M4FKU2	Q L T R H D K L D S S F N N T F L L T Y R S F C A S S E D L L D L L E A R Y N L K Q			
UniRef90_I1CK15	Q L T R H D Y F D M M F N I L N T F L L T Y R S F T T T A R E E L F E L L V K R F G I Q			
UniRef90_R7Z5M8	Q L T R H D R L N S P F N N T F L L T Y R S F T T T A S E E L F E M L A K R W S I Q			
UniRef90_F2DPC5	R L T Y H K Y P D P E F V Y A F L L I Y Q R Y T T P K E V L N L L R M R Y N T P			
UniRef90_J0XNI5	R L T Y H L Y T D Y N Y V R T F L L T Y H S F C T S S E E L L Q L L I E R F Q V P			
UniRef90_G0S419	Q L T R H D K L D A N F N N T F L L T Y R S F T T T A R E E L F E L L V Q R F N I Q			
UniRef90_UPI0001FE637B	R L T S P S K P D P V F L D T F I L T Y H S F T T P Q K L L D A L I L R Y A V D			
UniRef90_L8GMV9	R L T H A R Y S D T T L V N M F L L T Y R S F V T S H D L L T L M A R F R V V P			
UniRef90_G1WVY7	N L T R H D S L D A D F N N T F L L T Y K S F T T T A S H F D L L T D R F N I Q			
UniRef90_L0PC91	H L T R H D L F D S L F N N T F L L T Y R T L I S A E D F F D L L V K R F M V A Q			
UniRef90_E3KSS7	K L T S H E G P D V P F L R V F L M T Y R T F T T S H D F L L I E R Y H Q Q			
UniRef90_UPI000328F197				
UniRef90_J5JGH6	Q L T R H D K L D S S F N N T F L L T Y K S F T T T A R E E L F E L L V K R F A I Q			
UniRef90_H2N025	R L T F H M Y A D P N F V R T F L L T Y R S F C K P Q E L L D L L I E R F E I P			
UniRef90_A0A058Z9C2	R M T L H D A P D T D M V Q S F L L T Y R T F M S A T D L L D L L I E R Y K I S			
UniRef90_A8Q248	Q L T R H D T F D T K Y T M A F L L T T Y T S F T T S E R E L L M E L L I D R F H L H			
UniRef90_M7WNG7	A A T S H E G R D S S Y L S A F F L M T Y R T F C S A H E L L D H L V E R Y L M P			
UniRef90_S4RG01	R L T Y H M Y A D P N F V R T F L L T Y R S F C K P Q E L L D L L I E R F K I P			
UniRef90_UPI0004411162	R L T A H E L G D P T F I K N F L L M T F K S F M T V D E L L F E L L T K R Y W I S			
UniRef90_F4PLU3	R L Y N K N I I G S D Y V V D T F F L L T Y R S F T T T S K Y V L E R L T K T Y N D N			
UniRef90_UPI0003513D55	Y L V S A F K N D S T Y V T F C T Y R A F A T T K Q V L D L L N R Y G K L			
UniRef90_UPI0001FE537E	Y L T D S K M A D L K F V K T F F L L T Y Q S F T T S P E R L L Q L L Q R Y D L P			
UniRef90_UPI0003F49BFE	R L T P H G H L D T A F F Q A F L L T Y R S F M T T T R E F F Y A L I Y R Y N L Y			
UniRef90_Q6FVA6	H L T C H S I I D A S F N V T L L M T F R S F M T T T R E F F Y A L I Y R Y N L Y			
UniRef90_G7X6H0	K L T A H Q T P D A M F V S T F Y L T F R L F A T P I E F A E T L V D R F N Y I			
UniRef90_Q6BY66	H L T H D Y F D S N S A F F L L T F A T I M P L G E F V D L L I N R F N L E			
UniRef90_F0ZK45	H L L Y N P E F V G S D Y Y E T F F L L T Y R S F T S P K K I M D V L T K T Y N E N			
UniRef90_F4Q1P0	A L T H H Q L S D P N F A E T F F L L T F K T F T T A D Y F L S R L T Y R Y E Q A			
UniRef90_UPI00033186AD	L L T A F G D N D F T Y I S I F L S T Y R G F A S T K E V L E L L L D R Y G D L			
UniRef90_W3X0C4	R L T T H E T P D A I F V S A F Y L T F R L F C S P R K L A E A L I D R F D Y V			
UniRef90_D2VY93	K I T S D K E T D P K F R D V F F L T Y R S F C S S H V L M D M K L I D R F N I A			
UniRef90_T0KXK3	R L T T H E T P D A T F V S T F Y L T F R L F C S P L K L A E T L I E R F H Y V			
UniRef90_T0NKV6	H L V A F Q G S D L S Y V T F C T Y R A F T T T Q Q V L D L L F K R Y G C I			
UniRef90_Q4REE9				
UniRef90_Q54TK8	L L Y N S E F I G S D Y F E T F F L L T Y R S F A S P K R V M D V L T K T Y N E N			
UniRef90_G3B1Y4	H L T H H D L F D S N F N T A F F L L T F A S I M S T S E L I N Y L I L R F N T E			
UniRef90_B6HSV4	K L T A H Q T P D S M F V S T F Y L T F R L F T T P L E F A E A L A E R F E Y I			
UniRef90_A0A058ZGB5	F I T P D V Y T Q N N S I F Q F L L T Y R T F A S P S Q L E L L V A R Y D I P			
UniRef90_C5G885	K L T A H Q T P D A L F V S T F Y L T F R H F A T P T D F A E A L M D R Y D Y I			
UniRef90_H8X5L3	H L T H D M F D S Q F N T A F F L L T F A T T M M P L G E L I R L L I E R F G I E			
UniRef90_F0ZUW1	H L C N I D Y T E E G Y S R Y F F A T Y Q S F I K A V E L L F Q L L C V R Y H I E			
UniRef90_X8JIE8	R L T M H D Q L D A T F I D A F L M T Y K S F T T T K E L F Q L L V E R F R I E			
UniRef90_K5X8A8	K M T P H D V V D P A F S V V F M T F R I F T S P T D L V D A I I A R Y N L V			
UniRef90_A7TRY3	H L T D H H N N V D V T F N I T M L L T F R S M F T T L L D F I I Y S L I Y R Y N L S			
UniRef90_F2Q1X8	K L T C H E T P D A L F V S T F Y L T F R H F T T P V E F S E V L I D R Y D Y I			
UniRef90_U4KYV7	R L T A D S T P D A V F V A T F Y L T F R L F S S P Q K F A E A L I D R F S A V			
UniRef90_C5DQ14	H L T N P E V V D A W F N V T M L L T F K S M F S T R E F I Y T L I Y R Y N S Y			
UniRef90_V9K9F3	Y L V S A F K N D S T Y V T F C T Y R A F A T T K Q V L D L L N R Y G N L			
UniRef90_J7S9X6	H L T S H E L I D P S F N V A M L I S F R S I M S T R D F I I Y S L I Y R Y N L Y			
UniRef90_Q5B8H1	H L T H P N K L D A S F N R I F L T T Y T Y F T S G T E L V Q L L I R R Y D C A			
UniRef90_M7UXQ5	R L T T H D T P D S M F V S T F Y L T F R L F A S P V E L L A T A L V D R F E Y V			
UniRef90_G7Y030	Q L T R H D R L D V S F N E T F L L M T Y P T F V C G R E L F E I L L Q R L N M P			
UniRef90_G8BUU3	H L T R H L K P D H Q F I F T M L L T F K S M F S T L E F L Y M L V Y R Y N I S			
UniRef90_W4K929	R L T A H E H Y T M F S K T F F L L T Y K S F T D L D T L F D L L V Q R F W I D			
UniRef90_J3PKN3	R L T T H E T P D A M F V S T F Y L T F R L F C T P M E L L A E S L V D R F D Y V			
UniRef90_UPI0003F1270C	H L V A F Q G S D L S Y V T F C T Y R A F A T T T Q Q V L D L L F K R Y G C I			
UniRef90_E5R415	Q L T T H E T P D V V F V T A F Y L T F R L F T T P L E L L T Q T L I D R F D Y I			
UniRef90_R9XCN2	H L T S H L V I D A S F N V T M L I T F R S M F T T T E L L S A L I L R Y N L Y			
UniRef90_UPI0003C18BBD	H L L A T A F G D N D F T Y I S I F L S T Y R A F A S T K E V L E E L L			
UniRef90_S3C765	R L T T H E T P D A M F V S T F Y L T F R L F C T P T K L T T E A L I E R F E Y V			
UniRef90_F7W9K0	R L T T H E T P D A M F V S T F Y L T F R L F C T P L K L A E A L I D R F N Y V			
UniRef90_E7EZM3	H L Y M V S A F K K D Y T Y V T F C T Y R A F A T T T Q Q V L D L L F K R Y G C I			
UniRef90_G4NDV0	Q L T T H E T P D A M F V S T F Y L T F R L F C T P V K L A E S L I D R F D Y V			
UniRef90_F0X753	R L T T H E T P D A M F V S T F Y L T F R L F C S P V K L A E A L I D R F E Y V			
UniRef90_T1J9K9				
UniRef90_Q4RPN7	Y M V S S F R K D S T Y V T F C T Y R S F A S T T K Q V L D L L H R Y A K A			
UniRef90_I2H4B1	F L T S H H G I D D E F V Q I F L L T F R S M L T T M E F F Y T L I Y R Y N L S			
UniRef90_M5ENC4	Q L T R H D Y F D H K F T S L F I F T Y R S F T T A E T F I G L L M D R F K I Q			
UniRef90_L8FSG0	R L T S H D T P D A I F V S T F Y L T F R L F C T P I T F S E A L I E R F N Y V			
UniRef90_UPI00042C5F2B				
UniRef90_F5H6U6	L L T A F G D N D F T Y I S I F L S T Y R G F A S T K E V L E E L L			
UniRef90_M4AEW5	L L T A F G D N D L T Y T S I F L S T Y R A F A S T Q T V L Q L L L D R Y G S V			
UniRef90_E9BZM8	R L T F Q S H P D P Q F T T A F L L T Y R S F T D P L K L L D L L I E R Y S T Q			

QUERY

UniRef90_H9G5E6
UniRef90_F7D162
UniRef90_M4AJM7
UniRef90_E2AK89
UniRef90_Q7PVU9
UniRef90_D2A5R8
UniRef90_J9JL18
UniRef90_UPI00046D6102
UniRef90_UPI00035982FE
UniRef90_T2MDG6
UniRef90_G6D1P6
UniRef90_F2TDQ6
UniRef90_U9UOT5
UniRef90_R9NZ48
UniRef90_M3B6B0
UniRef90_A2R650
UniRef90_G2RAZ1
UniRef90_G2YJP8
UniRef90_M4FKU2
UniRef90_I1CK15
UniRef90_R7Z5M8
UniRef90_F2DPC5
UniRef90_J0XNI5
UniRef90_G0S419
UniRef90_UPI0001FE637B
UniRef90_L8GMV9
UniRef90_G1WYV7
UniRef90_L0PC91
UniRef90_E3KSS7
UniRef90_UPI000328F197
UniRef90_J5JGH6
UniRef90_H2N025
UniRef90_A0A058Z9C2
UniRef90_A8Q248
UniRef90_M7WNG7
UniRef90_S4RG01
UniRef90_UPI0004411162
UniRef90_F4PLU3
UniRef90_UPI0003513D55
UniRef90_UPI0001FE537E
UniRef90_UPI0003F49BFE
UniRef90_Q6FVA6
UniRef90_G7X6H0
UniRef90_Q6BY66
UniRef90_F0ZK45
UniRef90_F4Q1P0
UniRef90_UPI00033186AD
UniRef90_W3X0C4
UniRef90_D2VY93
UniRef90_T0KXK3
UniRef90_TONKV6
UniRef90_Q4REE9
UniRef90_Q54TK8
UniRef90_G3B1Y4
UniRef90_B6HSV4
UniRef90_A0A058ZGB5
UniRef90_C5G885
UniRef90_H8X5L3
UniRef90_F0ZUW1
UniRef90_X8JIE8
UniRef90_K5X8A8
UniRef90_A7TRY3
UniRef90_F2Q1X8
UniRef90_U4KYV7
UniRef90_C5DQ14
UniRef90_V9K9F3
UniRef90_J7S9X6
UniRef90_Q5B8H1
UniRef90_M7UXQ5
UniRef90_G7Y030
UniRef90_G8BUU3
UniRef90_W4K929
UniRef90_J3PKN3
UniRef90_UPI0003F1270C
UniRef90_E5R415
UniRef90_R9XCN2
UniRef90_UPI0003C18BBD
UniRef90_S3C765
UniRef90_F7W9K0
UniRef90_E7EZM3
UniRef90_G4NDV0
UniRef90_F0X753
UniRef90_T1J9K9
UniRef90_Q4RPN7
UniRef90_I2H4B1
UniRef90_M5ENC4
UniRef90_L8FSG0
UniRef90_UPI00042C5F2B
UniRef90_F5H6U6
UniRef90_M4AEW5
UniRef90_E9BZM8

90 100 110 120

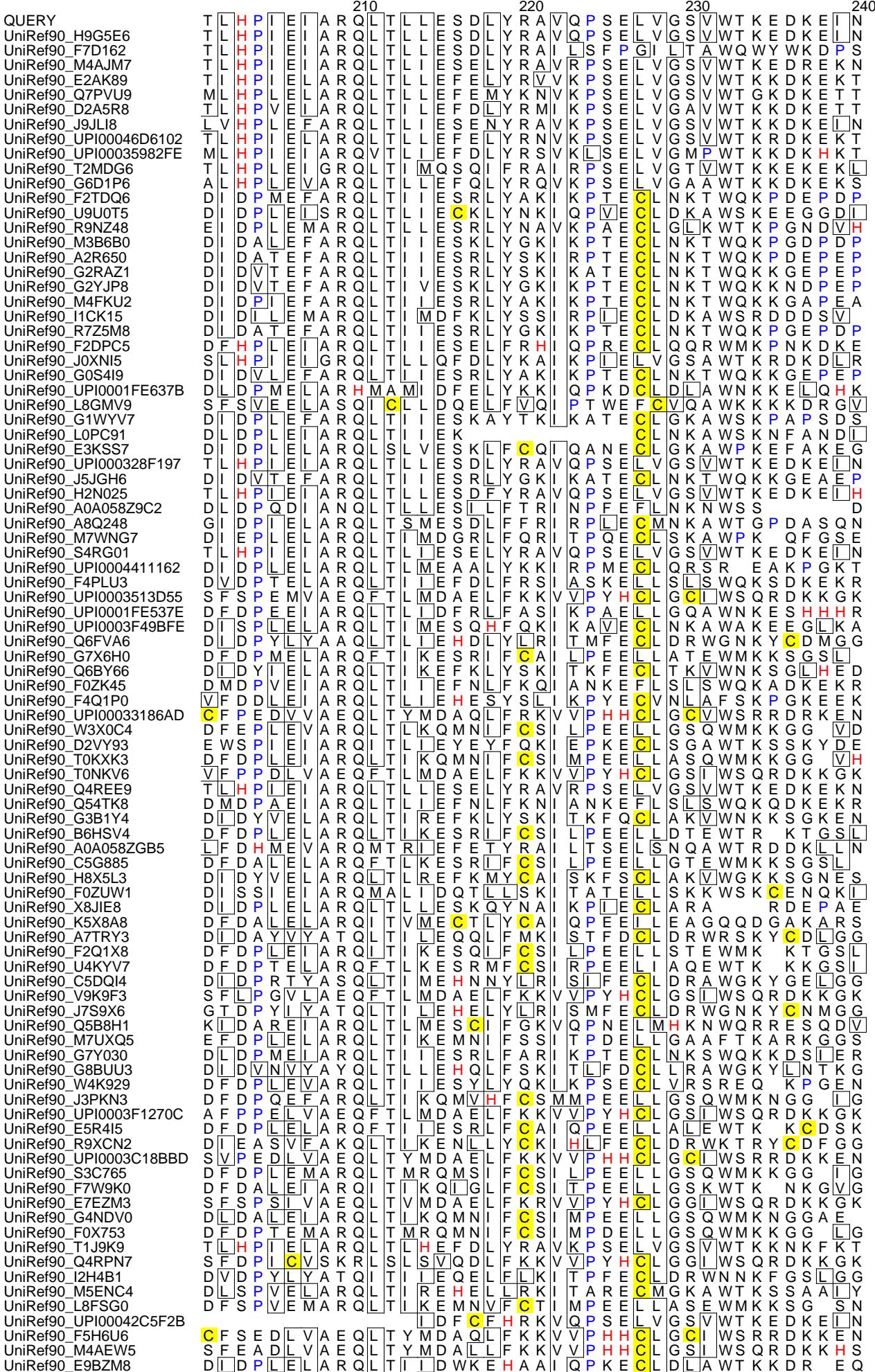
The alignment shows a highly conserved region between positions 90 and 120 across many different protein entries. Conserved residues are highlighted in yellow, red, and blue. The top row is labeled 'QUERY'. The alignment is color-coded by residue type and position.

130 140 150 160

QUERY	C R H W V E H H F Y D F E R D A Y	L L Q R M E E F I G T V R G K A M K K W V E	
UniRef90_H9G5E6	H W V E H H Y Y D F E R D Q E	L L D R L E T F I S T V R G K S M K K W V E	
UniRef90_F7D162	H W V E H H Y D F E R D A Y	L L Q R M E E F I G T V R A G K A M K K W V	
UniRef90_M4AJM7	H W V E H H Y D F E N N P D L	R V Q L E E Y I T K K L Q L R G K S M R K	
UniRef90_E2AK89	H W V E H H Y D F E R D R N	L L E R L L Q L F D T V S G K S M R K W V D	
UniRef90_Q7PVU9	H W V E H H Y D F E R D G E	L L E S L L E R F L E T V R G K S M R K W V D	
UniRef90_D2A5R8	H W V E H H Y D F E R D P T	L L V K L R D F L D A V N G K S M R K W V D	
UniRef90_J9JL18	H W V E H H Y D Y Q C Y P Y	L L D K L L Y E F F D S I N G K S I K K L T D	
UniRef90_UPI00046D6102	H W V E H H Y D F E R D K S L	L L D K L L D F F N C K S M R K W V D S V M K	
UniRef90_UPI00035982FE	H W V E H H Y D F E R D P E	L L E K L L N E F L R S I K G K A M R K M A D	
UniRef90_T2MDG6	H W V E D N H F Y D F E R D P E	L L I T L L E K F L L S R V V R S K T A R K W E	
UniRef90_G6D1P6	H W V E D Q H F Y D F Q R E E P E	L L A K L K S F L E A V D G K P M R K W V Q	
UniRef90_F2TDQ6	H W V E D Q H F Y D F E R E E P E	I M K N W F E N Y W M E P N D D V N I R Q R V Y A F V K D S V G K T K T P G S Q	
UniRef90_U9UOT5	H W V E D Q H F Y D F E R E E P E	I M K T W L E T Y Y I D G Q D S H C L E R M R E F A T T T M H E N M A F A A V	
UniRef90_R9NZ48	H W V E D M H F Y E G E D E P Y	V L K S W L E M H F Y E G E D E P Y L D Q V R R F A V E E M G E A P A M K A P S	
UniRef90_M3B6B0	H W V E D M H F Y E G E D E P Y	I M K S W F D N Y W M E P N D D E T S Q M Q R V Y Q F A K G T V Q S T S T P G A G	
UniRef90_A2R650	H W V E D M H F Y E G E D E P Y	I L K S W F E N F W M E P N D D E P H M L Q H V H A F T K D S I A T T K T P G S P	
UniRef90_G2RAZ1	H W V E D M H F Y E G E D E P Y	I I K S W F D T F W M E E P T E E N K Q L I R D V L T F A R E T I K S S D T P G G	
UniRef90_G2YJP8	H W V E D M H F Y E G E D E P Y	I L K S W F E L F W M E D Q S D D T K I A N V Y T F A R D T V K A T E T P G S G	
UniRef90_M4FKU2	H W V E D M H F Y E G E D E P Y	I M K N W F D N F W M E D Q S D D T K I A N V Y T F A R D T V R S T E T P	
UniRef90_I1CK15	H W V E D M H F Y E G E D E P Y	V L K N W L E L Y Y N E D D S V L L D R L M E F I E T H I R T T L K F S N G	
UniRef90_R7Z5M8	H W V E D M H F Y E G E D E P Y	I L K T W F D N Y W M E G S D S E A Q K Q R V N D F A K D H V A T A S T P G A G	
UniRef90_F2DPC5	H W V E D M H F Y E G E D E P Y	V L K A W L K S Y F V D F R D A E E V M F M I R D F M D L M R Q T G M E G S A D Q	
UniRef90_J0XNI5	H W V E D M H F Y E G E D E P Y	V I R Q W V N H N W Y D F E H N P I L L Q D L C S F L E E T D S H G K V I N Q Y	
UniRef90_G0S419	H W V E D M H F Y E G E D E P Y	I L K S W F D Q F W M E D Q S S E E T K Q L I R D F A K D T V K S T E T P G S T	
UniRef90_UPI0001FE637B	H W V E D M H F Y E G E D E P Y	A L R A W L N K S F D D F L E N P T L E V T F S R F T S T M A D D L K T A S T Q	
UniRef90_L8GMV9	H W V E D M H F Y E G E D E P Y	V R E A F I L N R F L A F L D E M S A V D D A Y L R G A A G P L K A K L T A K A T	
UniRef90_G1WYV7	H W V E D M H F Y E G E D E P Y	I L K S W F E N F W M E P R G E T E I L Q R V L D F A T A V V M A P S F P G A N V	
UniRef90_L0PC91	H W V E D M H F Y E G E D E P Y	I L K I W L E N H F M E S I D E N S K K L L N R I K E F T V N I L L S E S S I P V E	
UniRef90_E3KSS7	H W V E D M H F Y E G E D E P Y	V I R S W I E S H L S D E D A D S I Q R V L E F S A H D M G D T N L A R Q V	
UniRef90_UPI000328F197	H W V E D M H F Y E G E D E P Y		
UniRef90_J5JGH6	H W V E D M H F Y E G E D E P Y	I L K N W F D S F W M E E Y N D E S K Q L I R D D F A R D T V G S T E T P G A K	
UniRef90_H2N025	H W V E D M H F Y E G E D E P Y	V C R H W V E H H F Y D F E R D I H L L G Q L E D F I A S V R G K A M R K W V E	
UniRef90_A0A058Z9C2	H W V E D M H F Y E G E D E P Y	V I K S W L D T Y Y D D F S P A M M A V L E A F V D D P Q H G S H I V R Q Q R K	
UniRef90_A8Q248	H W V E D M H F Y E G E D E P Y	V M R L W L E Y H C D G L K D E K A L D L I E A F A N H A L I H R P V K G M R G	
UniRef90_M7WNG7	H W V E D M H F Y E G E D E P Y	V L K A W V R E Y M D N E D L D R D V L E R I R D F A L N T M A E K G Q S L Q	
UniRef90_S4RG01	H W V E D M H F Y E G E D E P Y	V C R H W V E H H F Y D F E R D P Q L L S T L E D F I E T H I R T T L K F S N G	
UniRef90_UPI0004411162	H W V E D M H F Y E G E D E P Y	T F R T M V T D D D I L E K E D M Y I L I I R M K E F A S D E E V V V N F A A A K Q	
UniRef90_F4PLU3	H W V E D M H F Y E G E D E P Y	F L K R W V D F F F H D F D T E L L Q E Y D T F I S N C K D E K L N N L L R R A	
UniRef90_UPI0003513D55	H W V E D M H F Y E G E D E P Y	Q L I S Y V R H N I P G S D L E R R A R I L L A Q F Q Q Q E Q S E T E A E G G M	
UniRef90_UPI0001FE537E	H W V E D M H F Y E G E D E P Y	A L K L W M E S P Q D F E G N E E L Q E A V L S F I R E T V S V D A P K L A K	
UniRef90_UPI0003F49BFE	H W V E D M H F Y E G E D E P Y	T V R N W L E N H Y L E E D N K L L D K F E S F S K K L S E N N S S I M S K	
UniRef90_Q6FVA6	H W V E D M H F Y E G E D E P Y	I M K T F L T Q Y W T P K Y N E S G V G V I V S F A K M A I S E K I P G S D I L	
UniRef90_G7X6H0	H W V E D M H F Y E G E D E P Y	F A S T T L M H N L P S A G K R L V E L A E K V S M V H G P V P R L S M G K T	
UniRef90_Q6BY66	H W V E D M H F Y E G E D E P Y	V I K L L I E R Y W A N S Y Y D E T V L S K L L S F P Q I K L F S V S K V L Q S	
UniRef90_F0ZK45	H W V E D M H F Y E G E D E P Y	K I C N F L K R W C D K H F Y D F Q D L V Q E F N I F V A N C R D H Q E V F Q	
UniRef90_F4Q1P0	H W V E D M H F Y E G E D E P Y	I I K M W I D K H F D F D K S P K L L D E L E N F V T G P L C E D M E K I L A Q	
UniRef90_UPI00033186AD	H W V E D M H F Y E G E D E P Y	I L R A W L D Q C A E D F W E P P G F P C L Q R L L A Y L R A A M P G S D P Q R	
UniRef90_W3X0C4	H W V E D M H F Y E G E D E P Y	F A D F K L S S L L P S A G K R L L A L V D R V S S T D G P L V P R L V S S M G	
UniRef90_D2VY93	H W V E D M H F Y E G E D E P Y	A V K M W V E K Y F H D F D N L L L V R L I Q F L D S V A N I K E F S S F C N K	
UniRef90_T0KXK3	H W V E D M H F Y E G E D E P Y	F A E Y E L G G V L P S A G R R L L E L A Q R V S N D V L V P R L V S S M G K T	
UniRef90_T0NKV6	H W V E D M H F Y E G E D E P Y	Q L V A Y V Q L N M P G S D L E R R A Q L L A Q L E H A D L	
UniRef90_Q4REE9	H W V E D M H F Y E G E D E P Y		
UniRef90_Q54TK8	H W V E D M H F Y E G E D E P Y	F L K R W V E K H F Y D F D Q D	
UniRef90_G3B1Y4	H W V E D M H F Y E G E D E P Y	I M K L L L E K Y W S D S Y Y N E S L I N K W A A F L Q S N L Y S I S K T L T S	
UniRef90_B6HSV4	H W V E D M H F Y E G E D E P Y	F A N T R I L M V D L P T A G K R L L D L A N K V S A V G G P L V P R L I S S M G	
UniRef90_A0A058ZGB5	H W V E D M H F Y E G E D E P Y	V L K T W V E K F F F D F Q H N D Q S L I Q D L I F C D T I S T R D S A H A E	
UniRef90_C5G885	H W V E D M H F Y E G E D E P Y	F A R S K I L M L V L P S A G N R L V D L A E K V S T H G P V P R L V I S S M G	
UniRef90_H8X5L3	H W V E D M H F Y E G E D E P Y	I M K L L I E K N W S P S Y F N E S A I K R W L S F A E S E A V Q S F S I S N E	
UniRef90_F0ZUW1	H W V E D M H F Y E G E D E P Y	L M G Y W I Q N H L T N F Q D D P R L L R N F N Q F I S N T L M L E K E T S A R	
UniRef90_X8JIE8	H W V E D M H F Y E G E D E P Y	I F R K M L L D P S I I D K E D G Y I L D N I K F A A E I M H D V P P A K Q I	
UniRef90_K5X8A8	H W V E D M H F Y E G E D E P Y	L I R Q W V E L Y W K P G V G D D P I L P T L M T F T R E G L W N F E L L E M R K	
UniRef90_A7TRY3	H W V E D M H F Y E G E D E P Y	F A S F A V I E N I Q G A P E L L Q I I K E K I I S N S S D G V N Q F D K I P G	
UniRef90_F2Q1X8	H W V E D M H F Y E G E D E P Y	F A R T K L L I T L P T A G K R L I D L V E K V V S S L Q G P V V P R L I S T V G	
UniRef90_U4KYV7	H W V E D M H F Y E G E D E P Y	F S K N A L K E A L P S A A M R L H D L A E K V S A A D R P L V P R L V C G M T	
UniRef90_C5DQ14	H W V E D M H F Y E G E D E P Y	I M K S L F S H Y W N P S Y Y D P G L A S V L N F A Q N A C N E N E L R I V I K	
UniRef90_V9K9F3	H W V E D M H F Y E G E D E P Y	H L S T Y I R Q M F P G S D L E R R S H N L L C A F Q T H N E A E L D P E V A D	
UniRef90_J7S9X6	H W V E D M H F Y E G E D E P Y	Y Y E P G L S S L E S F A N L A I S E K I S D E L L L R M K E N L V E S C L R T	
UniRef90_Q5B8H1	H W V E D M H F Y E G E D E P Y	E P K G P E T H E N L L N Q S F V R A L A S S T Q Q K L H E M T H C R L E	
UniRef90_M7UXQ5	H W V E D M H F Y E G E D E P Y	F A N D K L K A A L P A A G K R L S E L A Q R V S S M D G P L V P R L V I S S I G	
UniRef90_G7Y030	H W V E D M H F Y E G E D E P Y	I L K T W L E R Y W M E P P T E S T M D F L R H I H A H V Q P L A N V P T A S Q	
UniRef90_G8BUU3	H W V E D M H F Y E G E D E P Y	Y Y E D G L E E V V L D I A N V A V A D D I P G S S Q K L V E I I E K N N I I K S A	
UniRef90_W4K929	H W V E D M H F Y E G E D E P Y	T F K T M I L D T G F L E K E D A Y I L D R M K E M V S G E G V I H L A A A K Q	
UniRef90_J3PKN3	H W V E D M H F Y E G E D E P Y	F A N F K L S A V L P T A A A N V L R L T Q R A A S D D L V P R Q A S S M G K	
UniRef90_UPI0003F1270C	H W V E D M H F Y E G E D E P Y	Q L V A Y V Q L N M P G S D L E R R H S E P T E A E Q E D P T Q A L L P T P E L	
UniRef90_E5R415	H W V E D M H F Y E G E D E P Y	F A T G R L R T A M P A A G K R L A E L T S K V T E V R A G A L V P R L V C S I	
UniRef90_R9XCN2	H W V E D M H F Y E G E D E P Y	E E L V A F A Q L A S A E K I P D S D T L I D L I K K V V A Q K N D M Q G F V P	
UniRef90_UPI0003C18BBD	H W V E D M H F Y E G E D E P Y	K L L D Y L K Q T M P G S D P Q R A Q N L I E H F Q R Q E G A E	
UniRef90_S3C765	H W V E D M H F Y E G E D E P Y	F A E S R L L G L V L P S A G R R L L E I L T N R V S S S D G S L V P R L V S S M G	
UniRef90_F7W9K0	H W V E D M H F Y E G E D E P Y	F A E S R L K E V L P S A G K R L L G L A E K V A N S D G T L V P R L V C S I	
UniRef90_E7EZM3	H W V E D M H F Y E G E D E P Y	S L I S Y L Q L N F S G S D L E R R A R N L L E H F Q R Q C E	
UniRef90_G4NDV0	H W V E D M H F Y E G E D E P Y	F A T F K L E V L P S A G K R I L E L V D R V S A C G G G A L V P R L V S L M G	
UniRef90_F0X753	H W V E D M H F Y E G E D E P Y	F A E V R L S S M I L P S A G R R L L D L V E R V G D T D A T L V P R L V S T M A	
UniRef90_T1J9K9	H W V E D M H F Y E G E D E P Y	V L R H W V D H H F Y D F E R D P Q L L Y N L Q W F L G N I R G K S M R K W A D	
UniRef90_Q4RPN7	H W V E D M H F Y E G E D E P Y	Q L L S Y L H R H F L G S D L E R R A R N L L A H F L R R Q C E P D P D G M K	
UniRef90_I2H4B1	H W V E D M H F Y E G E D E P Y	I K T I M K R K L Q E K P N N S E N S R S S F D S C V P S D S G K A S I T	
UniRef90_M5ENC4	H W V E D M H F Y E G E D E P Y	V I K L W L E C Q L P L P D E V P V L D M I E E F T T N V A N S E W K G V A D	
UniRef90_L8FSG0	H W V E D M H F Y E G E D E P Y	F A G T T L L S V L P Q A G R R L S E L A E K V A A T E E P I T P R L L S S I G	
UniRef90_UPI00042C5F2B	H W V E D M H F Y E G E D E P Y	I L R A W L D Q C A E D F R E P P H F P C L Q K L L D Y L T R M M P G S D P E R	
UniRef90_F5H6U6	H W V E D M H F Y E G E D E P Y	R L M E Y L R K A L P G S E A L R R A E G L L E Q L Q G Q A	
UniRef90_M4AEW5	H W V E D M H F Y E G E D E P Y	A L K L W I N T N W D D F K S D D V L Q A R L K A F M S V D L D T A A Q H L R R	
UniRef90_E9BZM8	H W V E D M H F Y E G E D E P Y		

170 180 190 200

QUERY				
UniRef90_H9G5E6	S I T K I I Q R K K I A H N □ T F Q S S P P T V E W H I S R P G H I E T F D L L			
UniRef90_F7D162	S I A K I I R R K K Q V H S H N I T F E S P P P P I E W H I S R Q L E T F D L L			
UniRef90_M4AJM7	E S I T K I I Q R K K G H N I T F Q S S P T V E W H I S R P G H I E T F D L L			
UniRef90_E2AK89	W R K L Q I Q S N G V S H N I T F E S P P P P I E W H I C K A G Q I E N F E L M			
UniRef90_Q7PVU9	S V L K I V Q R K C E P S E Q R F E R S P P P I E N S I K I P E N N E E S G I L			
UniRef90_D2A5R8	S V M K I V Q R K N E S E D N H R Q I T F P P A I E H H L P L N G E N E F N L L			
UniRef90_J9JL18	S V L K I L H R K M E N D N Q R H I R F E P P P I E W H I P C T E E E Y G I L			
UniRef90_UPI00046D6102	S L I K I I H R K T Q K E I T F A F D S P P P A I E V H M D F N G N D K F N I L			
UniRef90_UPI00035982FE	I V H R R S N D S S E Q R P I T F S F E R S P P P I E W H L K V P E D E W G I L			
UniRef90_T2MDG6	F I S K S I I Q R R M E S C N T E R E F T Y Q E T P P K I E W H R K P E E F D L M			
UniRef90_G6D1P6	K I V N R R L E M V K V D P E T Y S F N T P P P P I E W H L T Q D F D K F T L L			
UniRef90_F2TDQ6	S D N E S L C S V S S G V S Y V F D R L P P A P L R H V A E P D R H D W H P L			
UniRef90_U9UQT5	Q L L S L I E Q R M R G Q D T S A K R L V P T I S G N A P P P K N M K K L K F L			
UniRef90_R9NZ48	S L I K V I E K R Q Q P K D A V F K T N S D R P P V P I L P K N I K K L K F L			
UniRef90_M3B6B0	Q H L Q R L V E R R Q G G E Q M I R K M P N S A P A P L P K N L K K L K F L			
UniRef90_A2R650	P L M T S I E Q R M R G H D A S N K R L V L T L N S Q A P Q P K N M K K L K F L			
UniRef90_G2RAZ1	Q L L A V I E Q R L R Q G D N T V K R L V P T Q A P T P I L P K N M K K L K F L			
UniRef90_G2YJP8	S G P L T A I I E Q R I N G K R M I Q T V N H N A P P P I M P K N M K K L K F L			
UniRef90_M4FKU2	S L M T L L E Q R L R Q G E A T A K R L V L T S T P Q P I M P K N M K K L K F L			
UniRef90_I1CK15	G S A P L M G L L D Q R L S R R L I Q N P N Q P T P P P I M P K N M K K L K F L			
UniRef90_R7Z5M8	Q L E S L I Q Q R K T K E G V A V E N M V L T L P D P P E P I L P K N R K R A K L L			
UniRef90_F2DPC5	P L L T A I E Q R S R G Q D M P K R L V P T T Q T P Q P I L P K H M K K L K F L			
UniRef90_J0XNI5	F E K L L I E Q Q D G T E K G T V H Q F N K L P E T P Y L P K N L G S R T L S I K			
UniRef90_G0S419	K K W C K S I K K R A D T I P S Y G P Q K P K I L W H I A E K G A I E T Y D L L			
UniRef90_UPI0001FE637B	P L M A I L D Q R L L N G K E V T S R R M V Q T V N Q N T P M P K S M K K L K F L			
UniRef90_L8GMV9	L E K L L K R Y K I Y G P V K E E T R A A A K N P P K S I L P A N L A S F T L L			
UniRef90_G1WVY7	Q L S L Q A Q Y S Q S Q D T S M S E Q A P Q S P Q S Q P Q A A S A P G S S M M			
UniRef90_L0PC91	L K K L V E M R I Q G R D P A F E V M I R T D K P A P I Y P K N M R K L K F L			
UniRef90_E3KSS7	N L I R I I D K R I K N E D E N H F R R L I L N L P P L P K N L K K F K L L			
UniRef90_UPI000328F197	A L T C E R R Q S R G G L N K M T P M Q P P G N P P P S I P P R N P R K I K F L			
UniRef90_J5JGH6	P L M T M L N Q R L S G T D A N P R R M I Q T S T P S P I M P K N M K K L K F G			
UniRef90_H2N25	S I T K I I Q R K K Q S H S I T F Q N S S P P P I E W H I C K P G N S E H F D L M			
UniRef90_A0A058Z9C2	S Q T G D Q R P A A A A V A A V T A S S T S A P T S F F N S W R I S R R R D I V			
UniRef90_A8Q248	M L L R L I D R R R Q G L E T I P R R F R P K S M P Q P L L P E D M V N P S L L			
UniRef90_M7WNG7	I C K S V D E K L Q G A S R R P V G N L A P G P L P Q P I V P R N L K K I K L V			
UniRef90_S4RG01	S I T K I I Q R K T Q A Q T Q P N G P S H P P V E W H I S R P N Q A D S F D V L			
UniRef90_UPI0004411162	L L I L I E R A Q R G G D A P I K T T N T P L A P P A P I M P K T S K K L K L L			
UniRef90_F4PLU3	L D K K V T G V N I T K L T T F G T K P P P L I I P K V P I V T F D			
UniRef90_UPI0003513D55	E H G G C T F Q L V E E N G V G D G K S D F L			
UniRef90_UPI0001FE537E	A L R N A M Q K A K L L G G A M R E R N F G C D D N A P E V K V P K N M N L N L			
UniRef90_UPI0003F49BFE	Q L S A I V Q R R R L G G E N D H S R R I V S P P A P I L P R P M G K T L R I T			
UniRef90_Q6FVA6	L S K I N E N I F G N D A Q T P L E G E N P L N S L Q V K L H S S M K S S D L L			
UniRef90_G7X6H0	N T A T A Q Y V H P D T P L P P P I L G K K E V N L L K Q W K N G E G T I T I L			
UniRef90_Q6BY66	H L Q S L L N H E K V C F E Q E P S I L P T S K P P P L I K G Y P P M K K T K L L			
UniRef90_F0ZK45	K V I N K I S G I V H S D D K T V L S P I F N S A P A S I L P K L P I Q S F E			
UniRef90_F4Q1P0	N I Q R T I Q R R L A G E Q K D I I I H G R I P P A I I P N L K N E Q I P T L F			
UniRef90_UPI00033186AD	R A Q A L L E Q F Q K Q D A D S D N G P L P C G L D G E D E L E V G G P E F S			
UniRef90_W3X0C4	K T S T S I S Q Y V P S D T P L P N P S L T K S Q Q H I L Q N W K L G G P S V L			
UniRef90_D2VY93	T L S N K L I K D N D K A V K H A K Q T D V P D P L I P E N F S E H V A F N I L			
UniRef90_T0KXK3	N T S I A Q Y V P A D T P H P P L A I T K S Q F S H L M S W K N G G S N P T I L			
UniRef90_TONKV6	T E T E P E E N G L S E E K P H L L			
UniRef90_Q4REE9	UniRef90_Q54TK8	H N □ T F E S P P P P V E W H I C R A G Q V E A F D L M		
UniRef90_G3B1Y4	F L Q K T L N K K L I P L S S S E L K L V F S T P T P A P I L P K T P I T C F E			
UniRef90_B6HSV4	H L N K L L R G E K V S I E R E P V I S S S R P P A P L I R S S I V K K L K L L			
UniRef90_A0A058ZGB5	K T N T S I A Q Y I H P D T P L P P P V L G K K E H N L L R Q W K N G E I T I L			
UniRef90_C5G885	R M R K L I T R K S T E H P P T I T L Q O L A R G E L P P L A D G V Q A W N P L			
UniRef90_H8X5L3	K T N T A V G Q Y V S P D V P L P P P L I S K N Q L N L L K Q W K A Q P I T L			
UniRef90_F0ZUW1	L K N L L A G K I Y T V E R Q P V I R N T K P P A P L T R G S T F V K K T K L L			
UniRef90_X8JIE8	R L I A L F N E T K K K H I D N K L S Q N A P K P I L P L R T P D G S D F T L L			
UniRef90_K5X8A8	M F V D R I Q T Q G D T L G R K Y T I T T L S T A P P S M L P K P G K R L K L L			
UniRef90_A7TRY3	H E M D M G G A K A N K S P L N K T L L V P S T S G P T S E I P R P N M V C T			
UniRef90_F2Q1X8	L D E E V V D R K K T I T S N T Q C S S N S S D S G P F Q S N L R S K K L K L L			
UniRef90_U4KYV7	K T N T S I A Q Y V S P D Q P L P Q P N M T K S Q L N L L K Q W K N G N V S I L			
UniRef90_C5DQ14	A N S A N F T V P E T P I L S P I I S R S Q M N T L K A A L A P G G P T C S I L			
UniRef90_V9K9F3	D I M A N N G R C P K G D F E D L G E Q I R S S P V S D T S S V R S A R K I K L L			
UniRef90_J7S9X6	Q S S C T F P M L E E N G F E E G K T D F L			
UniRef90_Q5B8H1	A K K T S S D N S S S D V S E N K K R S E S S S S G S L G S S L I R L K K M K L L			
UniRef90_M7UXQ5	P E G M R R P R S Q P S S I A T S S S S T A P K P I L P R K M K P N K L Q F L			
UniRef90_G7Y030	K T S T S L S L G Q Y V P A D V P V P V I V T K S Q A A V L R N W K M S N P S I L			
UniRef90_G8BUU3	L I T I I E H R L K G Q D I L K R Y M T P P S T V P K P L T P R N M K L K F L			
UniRef90_W4K929	S A D N I L K E K V Q E V V S S N P P A N N T A Q T L L T S K L F K S K K F R I T			
UniRef90_J3PKN3	L L V L V E R A Q N G D T V Q A K T T L S D P Q P T P I P K L S K K Q K L L			
UniRef90_UPI0003F1270C	T N T A N A G Y I P V D T P L P P S I I T K S Q A H A L A N W K A G S C P T I L			
UniRef90_E5R415	L P A P A P A P A P E I E S G P A L E P E P I L E A P A S S Q E K P N V L			
UniRef90_R9XCN2	G K S G A H S V F T S A D N N V P S P T I T K S Q L N A L R A S K E Q C S I L			
UniRef90_UPI0003C18BBD	R R I P F M V E N S V F F Q A G S S S Y A P S P P L P P P N H G L T A N K L K Q I			
UniRef90_S3C765	V D D N D N G C H G N F T S L T E E G E P G I D G S E D F L			
UniRef90_F7W9K0	K T S T S I S Q Y V P P D T P L P A S V L S K S L Q H S L A N W K I T A P I I M			
UniRef90_E7EZM3	K T S S S G S Q F I P A E T P L P S P N L S R G Q V H A L A N W K A G S P S I L M			
UniRef90_G4NDV0	V E I E G D L C S C P F A T P P E E S S L E D E F S P S H F M			
UniRef90_F0X753	K T S T S I P Q H N A V D S P F P T T L M S K A L Q N G L A N W K M S P S I L M			
UniRef90_T1J9K9	S I G K I I Q R R S E S S D D I C H G E R S P P K I E W Y L G R S I E K F D L L			
UniRef90_Q4RPN7	A G Q E R A N Q T A K K P R L C G R I C R K V N L I A K K R M G R E H I F S F I L			
UniRef90_I2H4B1	T I N S R V H N E K S L I D S A I K E K E P G A H A N T T R L K K I K L L			
UniRef90_M5ENC4	A V L R L V S R A R E G K T P F K T T G T N T P T P I L P I S R G D R L L L L			
UniRef90_L8FSG0	K T S T S I A Q Y I S P D T P L P S P S K S Q I N S L K T W K M G G S S P S I L			
UniRef90_UPI00042C5F2B	R A Q N L L E Q F Q K Q E V E T D N G L P N T I S F S L E E E E L E G G E F T			
UniRef90_F5H6U6	N M D E T D V G F Q G N S S F C L G E E E E V E I E V Q E D F L			
UniRef90_M4AEW5	L L E R K W T V G D I G R K F V F D S K L P T P L I H Q N I R Q S S Q I L T V L			
UniRef90_E9BZM8				



QUERY

UniRef90_H9G5E6
UniRef90_F7D162
UniRef90_M4AJM7
UniRef90_E2AK89
UniRef90_Q7PVU9
UniRef90_D2A5R8
UniRef90_J9JL18
UniRef90_UPI00046D6102
UniRef90_UPI00035982FE
UniRef90_T2MDG6
UniRef90_G6D1P6
UniRef90_F2TDQ6
UniRef90_U9UOT5
UniRef90_R9NZ48
UniRef90_M3B6B0
UniRef90_A2R650
UniRef90_G2RAZ1
UniRef90_G2YJP8
UniRef90_M4FKU2
UniRef90_I1CK15
UniRef90_R7Z5M8
UniRef90_F2DPC5
UniRef90_J0XNI5
UniRef90_G0S419
UniRef90_UPI0001FE637B
UniRef90_L8GMV9
UniRef90_G1WYV7
UniRef90_L0PC91
UniRef90_E3KSS7
UniRef90_UPI000328F197
UniRef90_J5JGH6
UniRef90_H2N025
UniRef90_A0A058Z9C2
UniRef90_A8Q248
UniRef90_M7WNG7
UniRef90_S4RG01
UniRef90_UPI0004411162
UniRef90_F4PLU3
UniRef90_UPI0003513D55
UniRef90_UPI0001FE537E
UniRef90_UPI0003F49BFE
UniRef90_Q6FVA6
UniRef90_G7X6H0
UniRef90_Q6BY66
UniRef90_F0ZK45
UniRef90_F4Q1P0
UniRef90_UPI00033186AD
UniRef90_W3X0C4
UniRef90_D2VY93
UniRef90_T0KXK3
UniRef90_TONKV6
UniRef90_Q4REE9
UniRef90_Q54TK8
UniRef90_G3B1Y4
UniRef90_B6HSV4
UniRef90_A0A058ZGB5
UniRef90_C5G885
UniRef90_H8X5L3
UniRef90_F0ZUW1
UniRef90_X8JIE8
UniRef90_K5X8A8
UniRef90_A7TRY3
UniRef90_F2Q1X8
UniRef90_U4KYV7
UniRef90_C5DQ14
UniRef90_V9K9F3
UniRef90_J7S9X6
UniRef90_Q5B8H1
UniRef90_M7UXQ5
UniRef90_G7Y030
UniRef90_G8BUU3
UniRef90_W4K929
UniRef90_J3PKN3
UniRef90_UPI0003F1270C
UniRef90_E5R415
UniRef90_R9XCN2
UniRef90_UPI0003C18BBD
UniRef90_S3C765
UniRef90_F7W9K0
UniRef90_E7EZM3
UniRef90_G4NDV0
UniRef90_F0X753
UniRef90_T1J9K9
UniRef90_Q4RPN7
UniRef90_I2H4B1
UniRef90_M5ENC4
UniRef90_L8FSG0
UniRef90_UPI00042C5F2B
UniRef90_F5H6U6
UniRef90_M4AEW5
UniRef90_E9BZM8

	250	260	270	280
S P N	L L K M I R H T T N L T T L W F E K C I V E T E N L E E R V A V V S R I I E			
S P N	L L K M I R H T T N L T L W F E K C I V E M T N F E E R V A V L S R I I E			
T P S	L T T V P R N V G N I E L F L E I C I V E T E N L E E R V A V V S R I I E			
S P N	L L K M I R H T T N F T R W L E K I V E M M N H E E R V A V L S R I I E			
S P N	L L K M I R H T T N F T R W I E K S I V E A E Q N F K E R V A I V S R A I E			
S P N	L L K M I R H T T N F S R W I E K T V V E C E N I E E R V A T V S R F I E			
S P N	L L K M I R H T T N F T R W L E K N I V E A E N F E E R V A I V S R A I E			
A P N	L L K L I H F S T K F T Y W L E L Y I V E T Q N L E E R V A V Y T R I I D E			
S P N	T L K L I R L S T L L F T Y W E L N I V E A H N F E E R V A V Y T R I I D E			
S P N	L F R I S K N T N F T R W I E K W V V E S E N V E E R A G V L S W C L			
A A N	V K A L I L H S N Q L T N N W V A E M I L H Q Q D V K R R V V V I K H F V L			
A A N	I K A M I V N S N Q I T G W V A E S V L N Q S E V K K R R C L Y I K H F V A			
A K G	I M E S N T H N R I S A W V A E T I L Q Q E D L K K R R A A L I K H F I V M			
A E N	V K A L I L H S N Q L T N N W V A E M I L N Q S D V K K R R V V V I K H F V N			
A S N	V K A L I L H S N Q M T N N W V A E M I L S Q T D V R K R R V V V I K H F V A			
A P N	V K A L I L H S N Q L T N N W V A E M I L T Q L D V K K R R V V V I K H F V L			
A P N	V K A L I L H S N Q M T N N W V A E M I L A Q S D P K K R R V V V I K H F V T			
A V N	I R A S E Y C N Q V T S W V S D V I L S Q Q D L K K R R S V M K Y W V Q			
A S N	V K A L I L H S N Q L T N N W V A Q M I L T Q Q D V K K R R V V V I K H F V N			
A T N	I L K M I R H F N Q V S N N W I T T E I L Q V E D D V S Q R A V M L N R F I V			
S P Q	L L K L I D H S T M L T Y W V A R C I V E T A S L D E R V Y Y M F S R V L E			
A P N	V K A L I L H S N Q M T N N W V A E M I L S Q T D V R K R R V V V I K H F V A			
A R N	N L A T I D R F S K V L S W V F T I L S E K D L Q K R R A V V L R M F L R			
M P C	L K I S A F N A R H A A A W I Q S E I V S G K T T R E R S A R L G H C R Q			
S P N	V K A M I L N S N Q L T N N W V A E M I L N Q P E V K K R R V V V I K H F I S			
A E N	I K S M I L K S N Q I T G W V T H S I L S Q S E V K K R R V D I I K H F I N			
T P N	I K A M I D M S N A L T R W V A E T I L L Q P E Q K K R A S T I K H F I L			
S P N	L L K M I R H T T N L T L W F E K C I V E T E N L E E R V A V V S R I I E			
A P N	V K A L I L H S N Q M T N N W V A E M I L A Q Q D V K K R R V V V V K H F V A E			
S P N	L L R M I R H T T N L T L W E K C I V E A E N D L E E R V A V V S R I I E			
A P N	I R A M I A Q T N R I T T W V I C T I L A E K D L R L T E C L K S F I K			
A G G	I V D V I S F H N R I T D W V S N N V I L M G E T A E Q R A I L M S H F I A			
A P N	I S A M I D M S N A V T R W V T E S I L A Q E D D L K K R R A A V V K H F V A E			
S P N	L L R M I R H T T N L T L W F E K C I V E A E N D L E E R V A V V M T R I I E			
A D N	I T T I Q L S N R I A N W V A E S V L A R E D S Q K R A R I V K H F I N			
S P N	L L K M I Y R F N E V S N W V V V T L V R E N N N V K K R R G Q H L K R F I K			
A P T	I R A T V S Q F Q N S V A N C V I A T C D R S L K P Q Q R A K V V E R W E			
A M N	V M A L I K R I N D V G S L V A T A I L V P K D P K T R A R A Y S T F I T			
A P N	V R W V I L T A N R M A G W V A L Q I L S S R D V K V R A G I I M K F F I T			
S P N	I T R F I A N A N S L T N Y V S F T I V K H A D V Q K K R A K L I Q Y F I T			
A V N	V R A M A T L S T D L T H L V A D S I L Q L E E P K K R A A I I K H W V			
I S S	I T N F I R T S N Q L T Y F V A Y M I L R K Q D I V K K R R V H L I T Y F V Q			
S P N	L L K M I Y R F N E V S N W V S T T V K E T N L L K K R A F Y L K R F I R			
A P N	W N I I K R S S N I P L W V A T E I V Q E E R L T K R A N I I K K F I S			
A P T	I R A T Q F N A L T Q C V I S T G A R E L R P P Q R A R L I E K K W I N			
S P N	V K A M S G L S T D I S N L V A D T I L Q Y P D V K K R A A V I K Q W I			
A P N	I A H L T D R W N K M T Q F V A C S I L S Q N D L K I R R R Y I K Q F I E			
A P N	V K A M S A L S T D I S N L V A E T I L Q Y P E V K K R A A V I K Q W I			
A P T	V R A T V T Q F N S V A N C V I A T C L G D R N V R D R A R V V E H W E			
S P N	L L R M I R H T T N L T L W F E K C I V E T E N L E E R V A V V L R V I E			
S P N	L L K M I R H T T N L T L W F E K C I V E T E N L E E R V A V V L R V I E			
S P N	I D S I S N F I K A S N Q L T N F V A Y M I L R K Q D I V K K R R V Q I I R F F V Q			
A V N	V R A M S T L S T D L A H L V A D S I L Y L E E P K K R A A T I K H W V			
S P N	I V A L I E R F N M V S S W V A T T I V F E E D L S K S R R D L Y I F F I R			
A V N	V R A M S T L S T D L A N L V A D T I L Q Q E E P K K R A V I I K Q W V			
I E S	I T K F I K Y S N Q L T N F V A Y M I L R K S D D P K K R V Q V I R Y F I Q			
C P N	I L T M I G I F N Q C S K W V S S E I V G E R S S K V R I L K K L K F F I K			
N D S	I S K T I I A T T N K I A S W V A F S I V L E K D E P R R R G N T I K H F I H			
N T N	I K A V S S L S T V I T G W V A E S I L D E R D L K R R T L L I K F F I K			
S E N	I S N F I S S A N Q F T N Y V S H S I V I T Q D V K K R A K R V Q Y F I S			
A V N	V R A M S T L S T D I A N L V A D S I L Q L E E P K K R A V I V K R W V			
A I N	V L A M S S L S T D L A H L V A E T I I L D V S D I K K R A V V I K H W V			
S S S	I T K F I I A S A N N L T N Y V S Y S T I V K Q P D A K M R A R L I M Y F I T			
A P S	I R A T V T Q F N R V T N C V I A T C D K T L K P Q Q R A K I I E R W E			
S A N	I S H F I I T N A N A L T N Y V S Y S I V R Q T E V K R R A H Y I Q F F I T			
A P N	V R A L I Q F F N Q L S G W V G A L V L A E S D L K P R T Q V I G H F I N			
A P N	V R A L I Q F F N Q L S G W V G A L V L A E S D L K P R T Q V I G H F I N			
C V N	V R A M S T L S T D L S N L V A D T I I L Q H D D V K K R A I I I K H W I			
T T G	V N A T I I L H S N Q L L A N W V G E M I L A H D E M K K R V S M I K Q F F V N			
S T N	I S D F I I S Y A N K L T N Y I S Y V I V T E R E P K E R A K I I E Y F V N			
N D N	I A T I E T T N K I A H W V A D T I V L S K E D S R K R A A I I V K Q F F I N			
A P N	V K A M S G L S T D L S N L V A D T I I L Q H Y N E V V K K R A T V I K Q W I			
A P T	I R A T V T Q F N S V A N C V I A T C L G D R N V M K D R A R V V E H W E			
S P N	I S N F I Q N S N H L T N Y V S Y M I V K Q T D L K R R V Q I V Q Y F I D			
A P T	I R A T I S Q F N S H L T K C V I S T M K E K E P Q L R A K I I E K W I D			
S P N	V K A M T A L S T D I S N L V A D T I I L Q Y S E E V K K R A G V I K Q W I			
A P N	V K A M S T F S N D L S S L V S D T I I L Q F D E I K K R A A V I K Q W I			
S P N	V K A M T A L S T D I S N L V A D T I I L Q H Y N E V V K K R A A V I K Q W I			
A P N	V K A M T A L S T D I S N L V A D T I I L T H A E V V K R R A A V I K Q W I			
S P N	L L K M I H H S T N F T L W L E K L V V E T E N Y E E R V A V V S R I I E			
A P T	I R A T V A Q F N S V T N C V I T T C N P A L K P R A R L L E R W I			
S E H	I T N F I I A N S N L L T N Y V S Y S I I V S T H D I K K R G R I I Q F F V T			
A K N	V V N V I G L Q N K L T S W V S N S I I L E E E H A P L R C L T L S F F I E			
A V N	V K A M S T L S T D L S N L V A D T I I L Q S E S D A K K R A V I I K H W I			
S P N	L L K M I R H T T N L T L W F E K C V V E A E N F E E R V A V L S R I I E			
A P T	I R A T I S Q F N S H L T K C V I S T M K E K E P Q L R A R V I I Q R W I D			
S P N	L L K M I R H T T N L T L W F E K C V V E A E N F E E R V A V L S R I I E			
A P H	I L A M I D L A T R L S F W V A S A I L S E D A V K A R A K V V A H F I M			

QUERY	290	300	310	320
UniRef90_H9G5E6	I L Q V F Q E L	N N F N G V L E	V S A M N S S P V	D H T F E Q I P S R Q
UniRef90_F7D162	I L Q V F Q D L	N N F N G V L E I	V S A M N S S P V	D H T F E A I P S R Q
UniRef90_M4AJM7	I L Q V F Q E L	N N F N G V L E V	V S A M N S S P V	D H T F E A I P S R Q
UniRef90_E2AK89	I M V V L Q D L	N N F N G V L A I	V S A L E S A S V	D H T F Q P L P T R L
UniRef90_Q7PVU9	V M M V L Q D L	N N F N G V L S S	V S A F Q G A A V	H R L K L T E D I P K R H
UniRef90_D2A5R8	I M V L Y E I	N N F N G V L G	S T C A S A S V	H R L K L T F A A L T Q Q N
UniRef90_J9JL18	V M M A L Y Q L	N N F N G V L A I	F S A M S S A A V	F R L K F T M Q S L N A K L
UniRef90_UPI00046D6102	I M M V L Q D L	N N F N G V L A I	V S A I F S A S V	F R L Q C T I Q Q M Q R R L
UniRef90_UPI00035982FE	I M Q V F Y E L	N N F N G V L E I	G A L I N S A S V	V F R L E H T K K D L P S K C
UniRef90_T2MDG6	I L M V F L S L	N N F N G M M E I	G A L I N S A P V	P R L Q K A V E L S P K R L
UniRef90_G6D1P6	L A V A L S D L	N N F N G V F A V	A C E S A P V	T F Q M L P R L
UniRef90_F2TDQ6	I A E R C R S M	N N Y S T L T S I	S A L G T A P I	H R L S R T W A Q V S A R I
UniRef90_U9UOT5	V A D K C R A L	N N F N S L T A I	S G L I N S A P I	H R L K R T W E M V N T K T
UniRef90_R9NZ48	I A D R C R A L	N N F S G M W A I	V S A L S T A P V	H R L R T W D A V S Q K H
UniRef90_M3B6B0	I A D K C R T L	N N F S C L T S I	I S A L G S A P I	H R L N R T W S Q V N A R T
UniRef90_A2R650	V A D K C R A L	N N Y S T L T S I	I S A L G T A P I	H R L G R T W A Q V S G R T
UniRef90_G2RAZ1	V A D K C R M L	N N F S T L T S I	I S A L G T A P I	A R L K R T W D Q V P Q R I
UniRef90_G2YJP8	V A D K C R A L	N N Y S T L T S I	I S A L G T A P I	H R L K R T W D Q V P A K T
UniRef90_M4FKU2	V A D K C R A L	N N F S T L T S I	I S A L G T A P I	A R L K R T W D L V T Q R T
UniRef90_I1CK15	V A E K C R M L	N N F S T L T C M A I	I S A F D N S S V	A R L K R T W E A V G A R T
UniRef90_R7Z5M8	V A D K C R S L	N N F S T L T S I	I S A L G T A P I	S R L N R T W G A V N A R T
UniRef90_F2DPC5	I A A K C L E L	H N F F C S L F A I	M G G L E T G P	H R L K R T W D L L P A K T
UniRef90_J0XN15	V M S V F E E L	N N F T G L V A L	Y S A L N S S S V	N R L K A C W E K I D R E K
UniRef90_G0S419	V A D K C R Q L	N N F S T L T S I	I S A L G T A P I	A R L K R T W D Q V P Q R I
UniRef90_UPI0001FE637B	T A E A C H E I	H N F F C S L F A I	M G G L E T G P	H R L K R T W D L L T A K E
UniRef90_L8GMV9	F P T K C Y V L	G D L N A V A T I	V S A L Q P A	S S M T A V W A G M A P Y P
UniRef90_G1WYV7	V A E K C R Y L	N N F S T L T A I	I S A L S T S P V	H R L K R T W E Q V P T R T
UniRef90_L0PC91	I A D R C R S L	N N F S T L T S I	I S A L G S A P I	H R L K R T W E L I N K K T
UniRef90_E3KSS7	V A D R C R S L	N N F S T L L M Q I	A G L I N S T P P	H R L K R T W E T I P Q K T
UniRef90_UPI000328F197	I L Q V F Q E L	N N F N G V L E V	V S A M N S S P V	H R L D H T F E Q I P S R Q
UniRef90_J5JGH6	V A D K C R T L	N N F S T L T S I	I S A L G T A P I	A R L K R T W D Q V P Q R T
UniRef90_H2N25	I L Q V F Q E L	N N F N G V L E V	V S A M N S S P V	H R L D H T F E Q I P S R Q
UniRef90_A0A058Z9C2	T A E C C L M L	S N F N S L M A I	I A L V S V P	H R L E R T W K S L P S K V
UniRef90_A8Q248	I A Q E C R L L	N N F S T M W A I	F S A L N C A S	F R L N A S W S L L N N K S
UniRef90_M7WNG7	I A E R C L A L	N N F S T L L I H	I A G L I N S T P P	H R L R T W E V V S Q K T
UniRef90_S4RG01	V A Q V F Q E L	N N F N G V L E V	V S A M S S A P V	H R L H T
UniRef90_UPI0004411162	V A D R C R I L	Q N F S T M T A V I	I S G L I N T P P	R R L K R T W E Q V N A K F
UniRef90_F4PLU3	L C E E L R K L	N N F N C C F V V	V S A L L S A S V	V N R L Q K T W S E V L S K Q Q
UniRef90_UPI0003513D55	V A R E C R L K	N F S S L R A I L	S A L Q C N A V	H R L K T W D E V L R E S
UniRef90_UPI0001FE537E	V A S H L F N M	N N Y S T C M A I	V G G I I N N S A	M R L K H T K K E I D K K L
UniRef90_UPI0003F49BFE	T A V E L R M L	N N F S S M A G I	V A G I I N S A P	T R L L K R T Q D L L S A K T
UniRef90_Q6FVA6	V A Q H C K E L	N N F S S M T A I	V S A L Y S S S P	Y R L K Q T W N L V P T E T
UniRef90_G7X6H0	I A N K C L E L	S N Y D S L M A I	I C S L I N S S M	V Y R L K R T W A A V V P K D Q
UniRef90_Q6BY66	V A E K C K Q Y N	N F D S S M T A I	I S A L Y S S S P	S R L L K R T W E Y V P K R Y
UniRef90_F0ZK45	V A E E F K K L	N N F N G V F V I	V S G L H S S A S V	H R L S R L K N T W G E I S K Q Q
UniRef90_F4Q1P0	I A D H C R N L	N N Y N A V M E I	I S G L N M T P	V Y R L K R T W E T I S R K Y
UniRef90_UPI00033186AD	I A H E C R V L	K N F S S L R A I	V S A L Q S N P	Y R L K R T W A A V V P K D Q
UniRef90_W3X0C4	I A H Q C L Q L	N N F D G L M A I	I C S L Q N S S I	I N R L K R T W E Y V P K R Y
UniRef90_D2VY93	L A N A L R D I	N N F F H G G L	S E I L S S G L S N V S	V Y R L K R T W A T V P T E Y
UniRef90_T0KXK3	V A H Q C L E L	H N Y D G G L	M A I I C S L N S S S T	S R L R K T W D A V V S P K R
UniRef90_T0NKV6	V A R E C R V L	K N F S S L Y A I	L S A L Q S N S	H R L K R T W E E V S R D S
UniRef90_Q4REE9	I L Q V F Q E L	N N F N G V F E V	V S A I N S V P	H R L K R T W E Y V P E R K
UniRef90_Q54TK8	L A E E L R K L	N N F N G V F V I	V S G L H S A S V	N R L K N T W A E I I S K Q Q
UniRef90_G3B1Y4	V A E R C R Q Y	N N F S S M T A I	I S A L Y S S S P	H R L R K T W K Y V S N D T
UniRef90_B6HSV4	V A E K C R A L	H N Y N S S M A A L	I A G L N S P P	V R L R K T W D I V V S Q K T
UniRef90_A0A058ZGB5	I A N K C L E L	N N Y D S L M A I	I C S L N L S M	S R L L K R T W D I V V S Q K T
UniRef90_C5G885	V A S K C L E L	N N Y D S L M A I	I C S L N S S S T	S R L R K T W E L V S H K T
UniRef90_H8X5L3	V A E K C R Q Y N	N F D S S M T A I	I S A L Y S S S P	H R L R K T W N F A S A D S
UniRef90_F0ZUW1	I A Q H C Y D M Q N	F N F N G L M L I	I S G L S C S S V	T R L R K T W D S V P A K F
UniRef90_X8JIE8	V A E K C R A L	H N Y D S L M A I	I C S L N S S S T	V R L R K T W K Y V S N D T
UniRef90_K5X8A8	V A D R C T S L	N N Y S T S R S I	I A A L D S S T I	A R L H Q T W A S V P H K S
UniRef90_A7TRY3	V A N H C R L L	N N F S V M T A I	I S A L Y S S S P	V Y R L K R T W Q L I P K E Y
UniRef90_F2Q1X8	I A A K C L E L	N N Y D T L M A I	I C S L N S S S T	S R L R K T W E I I V S P K T
UniRef90_U4KYV7	I A D R C L E L	N N Y D S L M A I	M C T L N A S T I	I R L R K T W E I I V S P K T
UniRef90_C5DQ14	V A Q Y C R E L	H N F S S M T A I	V S A L C S S P	F R L R K T W P L V N K E C
UniRef90_V9K9F3	V A R E C R I L	K N F S S L R A I	L S A L Q C N S V	H R L R R S R W D E V S R E N
UniRef90_J7S9X6	V A E H C K E L	N N F S S M T A I	I S A L Y S S S P	V Y R L K R T W K L L A R E I
UniRef90_Q5B8H1	V A N A C H D L	Q N Y S A V V S I	I S G L Q S A P	V Y R L K R T W A M V T Q R D
UniRef90_M7UXQ5	I A H E C L K L	N N Y D S L M A I	I C S L N S S S T	G R L R K T W D L V S Q K R
UniRef90_G7Y030	I A D N C R S L	N N F F A T M M S I	I S G L A T S P P	V Y R L K R T W T Q V S P K T
UniRef90_G8BUU3	V A D K C K E L	K N F S S M T A I	I S A L Y S S S P	V Y R L K R T W P Y I V S S E S S
UniRef90_W4K929	V A D R C R N L	N F S S M I A	V S G L N S P P	V R L R K T W E Q I N Q R S R S
UniRef90_J3PKN3	I A H Q C L E L	N N Y D A L M A I	I C S L N S S S T	T R L R K T W E F V S A R R S T
UniRef90_UPI0003F1270C	V A R E C R I L	K N F F S L H A V I	L S A L Q S N S N S	H R L R K T W E E V S R E S T
UniRef90_E5R415	V A G K C L E L	H N Y D S L M A I	I C S L N S S S M V	M R L R K T W E L V S A K T
UniRef90_R9XCN2	V A E T C R A L	N N F S S M T A I	T S A M L S S S	Y R L R K T W A M V H D N Y
UniRef90_UPI0003C18BBD	V A H E C R I M	K N F S S L R A I	V S A L Q S N P	V Y R L K R A K A W A S V S K D R
UniRef90_S3C765	I A H Q C Y E L	H N Y D A L M A I	I C S L N S S S T	T R L R K T W D M I S V K R
UniRef90_F7W9K0	I A H Q C Y E L	H N Y D A L M A I	I C S L N S S S T	K R L R M T W D T I S S R R S
UniRef90_E7EZM3	I G S Q F L A L	N N Y D G L M A V T	T C A L N D S S S	K R L R M T W D T I S S R R S
UniRef90_G4NDV0	V A R K C R I L	K N F S S L K A I L	S A L Q S N S A	H R L R R A W D D I V S R E S
UniRef90_F0X753	I A H Q C L D L	N N Y D A L M A I	I C S L N S S S T	T R L R K T W E A V S P R R
UniRef90_T1J9K9	I A H Q C A E L	Q N Y D A L M A I	I C S L N S S S T	A R L R K T W D L V S Q K R
UniRef90_Q4PRN7	V M I V L Q D L	N N F N G V L E V	V S A M N S S P V	V Y R L E H T F N G V S H K L
UniRef90_E7E4B1	V A R E C R I L	K N F S S L R A I L	S A L Q C N A I	H R L R K T W E E V S R E S
UniRef90_M5ENC4	V A Q F C R E L	K N F S S M T A I	I S A L Y S S S P	F R L R K T W D I I P Q Y V
UniRef90_L8FSG0	L G N Q C L I	N N F S S T M W G I	V S A L N T T C I	F R L R K T W A L L S A Q Q
UniRef90UPI00042C5F2B	I A N E C L I	N N Y D S L M A I	I C S L N S S S T	T R L R K T W D M I S P K R
UniRef90_F5H6U6	I L Q V F Q D L	N N F N G V L E I	V S A V N S V S V	V Y R L D H T F E A L V Q E R K
UniRef90_M4AEW5	I A H E C R I L	K N F S S L R A I V	V S A L Q S N S I	F R L R K T W D I I P Q Y V
UniRef90_E9BZM8	I A Q E C R I R	K N F S S L R A I V	V S A L Q S N P	F R L R K R V W A C V H K D S
	V A E A L		V S A L Q S N P	P N K V

QUERY

UniRef90_H9G5E6
UniRef90_F7D162
UniRef90_M4AJM7
UniRef90_E2AK89
UniRef90_Q7PVU9
UniRef90_D2A5R8
UniRef90_J9JL18
UniRef90_UPI00046D6102
UniRef90_UPI00035982FE
UniRef90_T2MDG6
UniRef90_G6D1P6
UniRef90_F2TDQ6
UniRef90_U9UOT5
UniRef90_R9NZ48
UniRef90_M3B6B0
UniRef90_A2R650
UniRef90_G2RAZ1
UniRef90_G2YJP8
UniRef90_M4FKU2
UniRef90_I1CK15
UniRef90_R7Z5M8
UniRef90_F2DPC5
UniRef90_J0XNI5
UniRef90_G0S419
UniRef90_UPI0001FE637B
UniRef90_L8GMV9
UniRef90_G1WYV7
UniRef90_L0PC91
UniRef90_E3KSS7
UniRef90_UPI000328F197
UniRef90_J5JGH6
UniRef90_H2N25
UniRef90_A0A058Z9C2
UniRef90_A8Q248
UniRef90_M7WNG7
UniRef90_S4RG01
UniRef90_UPI0004411162
UniRef90_F4PLU3
UniRef90_UPI0003513D55
UniRef90_UPI0001FE537E
UniRef90_UPI0003F49BFE
UniRef90_Q6FVA6
UniRef90_G7X6H0
UniRef90_Q6BY66
UniRef90_F0ZK45
UniRef90_F4Q1P0
UniRef90_UPI00033186AD
UniRef90_W3X0C4
UniRef90_D2VY93
UniRef90_T0KXK3
UniRef90_T0NKV6
UniRef90_Q4REE9
UniRef90_Q54TK8
UniRef90_G3B1Y4
UniRef90_B6HSV4
UniRef90_A0A058ZGB5
UniRef90_C5G885
UniRef90_H8X5L3
UniRef90_F0ZUW1
UniRef90_X8JIE8
UniRef90_K5X8A8
UniRef90_A7TRY3
UniRef90_F2Q1X8
UniRef90_U4KYV7
UniRef90_C5DQ14
UniRef90_V9K9F3
UniRef90_J7S9X6
UniRef90_Q5B8H1
UniRef90_M7UXQ5
UniRef90_G7Y030
UniRef90_G8BUU3
UniRef90_W4K929
UniRef90_J3PKN3
UniRef90_UPI0003F1270C
UniRef90_E5R415
UniRef90_R9XCN2
UniRef90_UPI0003C18BBD
UniRef90_S3C765
UniRef90_F7W9K0
UniRef90_E7EZM3
UniRef90_G4NDV0
UniRef90_F0X753
UniRef90_T1J9K9
UniRef90_Q4RPN7
UniRef90_I2H4B1
UniRef90_M5ENC4
UniRef90_L8FSG0
UniRef90_UPI00042C5F2B
UniRef90_F5H6U6
UniRef90_M4AEW5
UniRef90_E9BZM8

	330										340										350										360																																																								
K K I L E E A H E L S E D H Y K Y L A K L R S I N P P C V P F F G I Y L T N I	K K I L D E A V E L S Q D H F K Y L A K L K S I N P P C V P F F G I Y L T N I	K K I L E E A H E L S E D H Y K Y L A K L R S I N P P C V P F F G I Y L T N I	K K I L E E A V E L S Q D H F K Y L A K L K S I N P P C V P F F G I Y L T N I	E K A L E E A R E L N N D H F R K Y Q E K L R S I N P P C V P F F G I Y L T N I	Q Q V L A E C R E L N N S H F K Y Q E K L R S I N P P C V P F F G M Y L T N I	K K A L E E E C R A D D H F K Y Q D K L R S I N P P C V P F F G M Y L T N I	D K G L E E A R N L S I N H F K Y Q E K L R S I N P P C V P F F G M Y L T N I	D K A L T D A Q E L N I D H F R K Y Q E K L R S I N P P C V P F F G M Y L T N I	Q K Y L E E A S E L N N D H S K Y I E K L R S I N P P C V P F F G M Y L T N I	Q A L Q E A K D L T D D G H N V K Y M E K L R S I N P P C V P F V G V Y L T N I	L R A L D Q F R E L S S D H F R L Y Q E R L R S I N P P C V P F F G V Y L T K I	S A V L E E N M R R L M T K N F G E Y R E A L H L A N P P C V I P F F G V Y L T D L	I Q T L E E A L N K I M N K N F A E Y R E M L H S V N P P C V I P F L G V Y L T D L	V L V F E S L E Q L M S R N W A N Y R E M I H K L N P P C V I P F L G R Y L G D L	T Q S L E S M R K L M T K N F N E Y R E A L H K A N P P C V I P F F G I Y L T D L	S T V L E Q M R R L M T K N F G E Y R E T L H L A N P P C V I P F F G V Y L T D L	Q A T L E T M R K L M T K N F G E Y R E T L H A A N P P C V I P F F G V Y L T D L	L A V L E S M R R L M T K N F G E Y R E S L H L A N P P C V I P F F G V Y L T D L	Q T T L E T M R R L M T K N F G E Y R E A L H A S N P P C V I P F F G V Y L T D L	N Q I L Q Q I R K L M N R N F T E Y R A L I H S V N P P C V I P F L G I Y L Q D L	M T T L E N M R K L M T K N F A E Y R D T L H K A D P P C V I P F F G V Y L T D L	M E T F E E L N Q L M D N D F A L Y R T T L K D T T P P V V P Y L G V M L T D L	Q V W Y E K F K K L C P H W K E M I E R L K S N P P C V I P F F G H Y L S K I	Q T T L E N M R K L M A S T K N F G V Y L T D L	K E L F G T L S T L V T S N H A K Y R Q E I E S E P P C I I P F M G I Y L T D L	V E A F E S M K H V Q W S N F A S F Q D K L A T M T P T L P Y L Y T Y T S Q L	I G I L E S M R T L M T R N F G D Y R E M L H L V N P P C V I P F L G V Y L T D L	I N I F D S L N K I M D K N F S E Y R E L L H V I N P P C V I P F L G V Y L T D L	L T L F A Q L V M S P T K N Y A A Y R D T I R N M A P P C V I P F V G V Y L T D W	K K I L E E A H E L S E D H Y K Y L A K L R S I N P P C V I P F F G I Y L T N I	H A V L E T M R K L M T K N F G E Y R E A L H A A N P P C V I P F F G V Y L T D L	R R	T E R Y N Q M R Q L M N Y N F R N Y R E R L Q Q T P L P C V P F L G V Y L T D L	M G I L A E L N Q I T Q R N Y H Y Y R E L L C R I S P P C V I P F F G L Y T K D L	M I T L G M L N R L M K P N Y K E Y R D I L R K S A P P C V I P F L G V Y L T D W	Q S A M K S D L T L D S T K N F Q N Y K D M L K A I N P P C V I P F F G F Y L S M L	K E V L D D N L N S L M D S K R N F I K Y R R S V K D V A C C V I P F F G V Y L S D L	K T T L E Y L R G I V D R N Y Y V L R Q R L Q N R V P P C C L I P V G T Y L T D L	L R N M N K L M N S S R N F N E Y R D V L K F V G S E P C V I P F F G V Y L S D L	I K Q F E E F V A L T S P N F A A Y R L E L R Q S T G A R I I P Y L G V H L S D L	L A T F K H L N S L M A N N F K V Y R D V L H T K N P P C I L P F L G V Y L T D L	M L M F E E L L S D I F S D H D N H L T S R M K G V M Q G T V I P Y L G T F L T D L	R E M L K T L Q A I V E P S N N N K R A R L Q G H V P P C I L P F L G M F L T D L	L T L L Y E D L K K L C S Q E Q A N K N M R Q Q L C L P P C I L S M Y L K D L	R D M L R H L Q A I V E P S Q N N K R T R L H D H V P P C I L P F L G M Y L T D L	F R I F Q K L S E I I M N P K R A Q K R P K E T G V I Q G T V I P Y L G T F L T D L	R R V L E E A V E L S Q D H F K Y L A K L K S I N P P C V I P F F G I Y L T N I	Q Q K F E E F V A L T S P Q F A S Y R L E L R Q S T G A S I S P Y L G V H L S D L	L N H L E S M N K L M N S S R N F N E Y R D F I I G S E S C V I P F F G V Y L S D L	K T A L E Q L R S I I V D R N Y A V L R Q R L Q N H V P P C I L P F V G T Y L T D L	M A E F V D L S N L I E C N S L A M R N W L K Q V P P C V I P P Y L G M Y L T D D L	K I L L E Q L R E I V D R N Y A V L R Q R L Q G H V P P C I L P F V G T Y L T D D L	L K N M N K L M N S S R N F N E Y R D V L K F I G S E P C V I P F F G V F L S D L	R E K F D Q M E R F V N M E G N F K Q Y R M E I N G T P C I V I P V G L Y L M D L	T T D D V E A T L D S G R N F T A Y K Q R L K T V D A P C C I V I P F L G V Y L T V L	K T Q L E S L R K L H G R N Y H E Y R S R L R N T C P C A V I P F F G V F L S D L	N D I L K N L N T L M D S T K N F I K Y R Q S V K D V P C V I P F F G V F L S D L	R D T L S N L N S L M D S K R N F A K Y R S Q V K N V A C C V I P F F G V Y L S D L	K N L L E S L R E I V D R N Y A V L R Q R L Q N H V P P C I L P F L G T Y L T D D L	K A V L E N L R S V I D K N H A V L R A R L R S H V P P C I L P F L G T Y L T D D L	K E F L D E M M T L M D S T K N F I N Y R S R L R D V A C C V I P F F G V F L S D L	I R I F Q E L S E I I F S D D N N H Q Q K E L G V M Q G T I I P Y L G T F L T D D L	R D T L S N L N S L M D S K R N F A K Y R S Q V K N V A C C V I P F F G V Y L S D L	C D K L E P L Q A M M E Q N H Q T Y R N I L R R A I P P C C I I P F L G I F L K D L	K E T L K G L Q A I P E K N H A C L R R L H D H V P P C C I I P F V G T Y L T D D L	R K L L E D M Q S L M D K N F I K Y R E K L R A A G P P R I I P F L G T Y L T D D L	N A I L A E N S L T N S T K N F V K Y R R A V K N V A C C V I P F F G V Y L S D L	M T M A C E M T I D S N K N F S N Y R S L L A R I T P P C C V I P F I G V Y L T T T L	R E L L K Q M A V V E P S Q N N K R G R L H D H V P P C C I I P F L G M F L T D D L	V R I F Q K L S E I I M N P R R A Q K R Q R E L G V I Q G T V I P Y L G T F L T D D L	K A R L L E E L K A I T D R N Y A V L R Q R L Q N H V A P P C C I I P F V G I Y L T D D L	K E S L D K M N A L M D S A K N F S K Y R E S I G D C P C C V I P F F G V Y L S D L	M L M F E E L L S D I F S D H H N N Y Q L Q K E M G V M Q G T V I P Y L G T F L T D D L	R E T L K M L Q A I V E P S Q N N K R G R L H D H V P P C C I I P F L G M F L T D D L	K E T L R S L Q S I I S Q N H K A L R A R L A D Q V P P C C I I P Y V G M F L T D D L	Y R T F Q E L S E I I F S D D Q R R H Q Q Q R D M G V V Q G T I I P F F G V F L S D L	R E L L K Q L Q A I V E P S Q N N K V L R G R G H V P P C C I I P F F G I Y L T D D L	R D M L K T M Q A I V E P A Q N N K R G R L N G H V P P C C I I P F L G M Y L T D D L	I K A L E D S K E L H S D H Y K K Y Q E K L R S I N P P C C V I P F F G M Y L T N I	F R T F R E L S E I I F S D D D N N Y Q Q Q R D L G V M Q G T I I P Y L G T F L T D D L	R D S L A S L N R L M D S T K N F I N Y R Q S V S N V P P C C I I P F F G V F L S D L	R K K F E D M N K I T D R N Y H W Y R Q K L A D V L P P C C V I P F F G I Y L A K D L	K E M L K V L Q D I P T K N H A V L R Q R L Q G H V P P C C I I P F V G T Y L T D D L	R K I L L D D A V E L S Q D H F K Y L V K L K S I N P P C C V I P F F G I Y L T N I	M L M F E E L L S D I F S D H H N N H L T S R E L L M K E G T S K F A N L D S S K E	M Q T F E E L L S D I F S D H H N N Y Q L Q K E M G A M Q G T I I P Y L G T F L T D D L	R S S Y S E L K E L M Q Q N N F G R Y R Q V L H S I D P P C C I I P F L G I Y L T D D L

370 380 390 400

QUERY				
UniRef90_H9G5E6	L K T E E G N P E V L	K R H G K E L I N F S K R R K V A E I T G E I Q Q Y Q N Q		
UniRef90_F7D162	L K T E E G N P D F L	K R Q G K G L I N F S K R R K V A E I T G E I Q Q Y Q N Q		
UniRef90_M4AJM7	L K T E E G N P E V L	K R H G K E L I N F S K R R K V A E I T G E I Q Q Y Q N Q		
UniRef90_E2AK89	L H I E E G N P D F L	P G S P E L I N F S K R R K V A E I T G E I Q Q Y Q N Q		
UniRef90_Q7PVU9	L H I E E G N P D F L	P N T E L I N F S K R R K V A E I T G E I Q Q Y Q N Q		
UniRef90_D2A5R8	L H I E E G N P D C L	T N N P N Q L I N F N K R R K V A E I I E E I Q Q Y Q N Q		
UniRef90_J9JL18	L H I E E G N P D F L	P D S P E G I I N F S K R R K V A E I T S E I Q Q Y Q N Q		
UniRef90_UPI00046D6102	L K T E E G N P D F V	A N A P E G I I N F S K R R K V A E I T G E I Q Q Y Q N M		
UniRef90_UPI00035982FE	L R A E E G N P D F L	S S S P E G I I N F S K R R K V A E I T G E I Q Q Y Q N Q		
UniRef90_T2MDG6	L H I E E G N P D F L	F L S S S P E G I I N F S K R R K V A E I T G E I Q Q Y Q N Q		
UniRef90_G6D1P6	T F I E D G I P S L	T Q S H L I N F N K R A K T A E V I R D I Q Q Y Q N A		
UniRef90_F2TDQ6	T F I E D G N P N T L	K K K S R Q L I N F S K R M K T A E V I R E I T H Q S T		
UniRef90_U9UOT5	T F I E D G N P D R L	R L K E N D Q L I N F G K R Q K T A E V I R D I Q Q Y Q N V		
UniRef90_R9NZ48	T F I E D G N P D G I	P G I I K K T Q L I N F A K R A K T A E V I R D I Q Q Y Q N V		
UniRef90_M3B6B0	T F I E D G I P S S L	T P S E L I N F N K R A K T A E V I R D I Q Q Y Q N V		
UniRef90_A2R650	T F I E D G I P S V I	K K K T N T L I N F A K R A K T A E V I R D I Q Q Y Q N V		
UniRef90_G2RAZ1	T F I E D G I P S I I	I K K T T L I N F A K R A K T A E V I R D I Q Q Y Q N V		
UniRef90_G2YJP8	T F I E D G I P S I I	I K K T T L I N F A K R A K T A E V I R D I Q Q Y Q N V		
UniRef90_M4FKU2	T F I E D G I P S I I	I K K T N T L I N F A K R A K T A E V I R D I Q Q Y Q N V		
UniRef90_I1CK15	T F I E D G N S N E L	I K K N K E L I N F A K R A K T A E V I R E I Q Q Y Q S S		
UniRef90_R7Z5M8	T F I E D G I P S L I	K K K T D L I N F A K R A K T A E V I R D I Q Q Y Q N V		
UniRef90_F2DPC5	T F I L E E G N P E L I	P N T S L F N F A K A R L I S G V I R E M Q T W Q Q T		
UniRef90_J0XN15	F F Y E E G N S T F V	Q S E D L T M V S F V K C R I L A S I S D I Q M Y Q N E		
UniRef90_G0S419	T F I E D G I P S V I	K K K T N L I N F A K R A K T A E V I R D I Q Q Y Q N V		
UniRef90_UPI0001FE637B	T F I E D G N P D Y L	P Q Q P T V I N F R K R S Q Y A N V I N R L R Q Y Q H M		
UniRef90_L8GMV9	I W L E I H S S D S V	A G L V N F E K W Q A M A E I V I V L E I Q R M Q H S		
UniRef90_G1WYV7	T F I E D G N P D L I	K S T D L I N F A K R A K T A E V I R E I Q Q Y Q S V		
UniRef90_L0PC91	T F I E D G N P D M I	K N S K D L I N F S K R R L T A E V I R E I Q Q Y Q S V		
UniRef90_E3KSS7	T F I G D G N P D Q L	R E K P Q Q I N F N K R Q K A A E L I V Q I Q S Y Q S M		
UniRef90_UPI000328F197	L I K T E E G N P E V L	K R H G K E L I N F S K R R K V A E I T G E I Q Q Y Q N Q		
UniRef90_J5JGH6	T F I E D G I P S I I	K K K T N L I N F A K R A K T A E V I R D I Q Q Y Q N V		
UniRef90_H2N025				
UniRef90_A0A058Z9C2	T F N E E G N A D F	L R E G P D R L I N F D K R N R T A T L I R E L Q R Y Q S K		
UniRef90_A8Q248	T F I E D G N P D Q M Y S D T R	L I N F C K R F L I T D V I V E I R R F Q S T		
UniRef90_M7WNG7	T F I G D G N P D T I	R E K P H Q I N F Q K R Q K A S E L I L M I K H Q A T		
UniRef90_S4RG01				
UniRef90_UPI0004411162	T F I N D G A E D K	L A G K M I N F R K R Q K A A E V I Q D I K R W Q A K		
UniRef90_F4PLU3	T F I E E G N P D K L	E N G F T N F F K C R M V A E V I K E I Q R Y Q Q Q		
UniRef90_UPI0003513D55	V M L D T A M K D F L	D G G L I N F E K R R K E F E V I A Q I K L L Q S A		
UniRef90_UPI0001FE537E	T F L D D G N P N F I G	G L E L V N V E K R R L V F N I T D L I T F Q D K		
UniRef90_Q6FVA6	T F V E D G N K D I F	P S P S E P L I N F F K R S L S A E I L R D I Q Q Y Q S Q		
UniRef90_G7X6H0	T F T F A G N S D Y L	D G K T D I I N F G K R S K I A N I E G I L T F K K F		
UniRef90_Q6BY66	T F V D H G N Q A L T	D E G D M A V I N F D K H M K T A K I I S E L Q R F Q I		
UniRef90_FOZK45	T F V Y H G N P D Y L	M R S R I L N F A K R A K T C E I V T T G I D R F K S T		
UniRef90_F4Q1P0	T F V E E G N Q D R L	E N G F T N F F K C R L I A E Q I K Q I Q E F Q Q Q		
UniRef90_UPI00033186AD	T F L E E E G S P E	T L E E G G L I N M I K R T Q L A A V I Q E I Q Q F Q Q Q		
UniRef90_W3X0C4	T M L D T A L Q D Y V	E E G G L I N F E K R R R F E F V I A Q I K L L Q S A		
UniRef90_D2VY93	T F V D G N P S N A E	G E N G L T V V N F D K H T R T A K I G E L Q R F Q I		
UniRef90_T0KXK3	T F I N D G N P D Y	I R D G L I N V F K R R Q V S K I L E I R Q Y Q M Q		
UniRef90_T0NKV6	T F V D G N P A T	K N G G G L T V V N F D K H T R T A K I G E L Q R F Q I		
UniRef90_Q4REE9	V M L D T A M K D Y	L Y G R L I N F E K R R K E F E V I A Q I K L L Q S A		
UniRef90_Q54TK8	L K T E E G N Q D K L	E N G G Y T N F S K C R L I A E Q I K A I Q E F Q Q E		
UniRef90_G3B1Y4	T F V F H G N P D T	L L N R A R M V N F S K R A K T A D I L L Q G L D R F K S T		
UniRef90_B6HSV4	T F V D H G N Q S L	T D D S E M A V I N F D K H M K T A R I I S E L Q R F Q I		
UniRef90_A0A058ZGB5	M F T D S G N P D F L	P L P G T R L I N Y H C R L V S A V I Q D V Q Q Y Q Q T		
UniRef90_C5G885	T F V D H G N Q D T T	G D G S K L V I N F D K H M K T A K I I S E L Q R F Q I		
UniRef90_H8X5L3	T F V F H G N P D Y	L L N R T R M V N F A K R A K T C D I V S G I D R F K N A		
UniRef90_F0ZUW1	T F I D E G N P S Y I	I G V D L V N F V K K R L E A N I L I L R F L S F K N V		
UniRef90_X8JIE8	T F I Q D G N K D F I	S K E Q G I I N F G K R Q K A A E V I R E I Q S Y Q A K		
UniRef90_K5X8A8	T F C R E G N P S H	R V N S D K K L L N F N K Y H K L A R I V Q D M Q R F Q V		
UniRef90_A7TRY3	T F T S D G N P D F	I K G S S H I I I N F N K R T R I A D I L R D I M S F K V I		
UniRef90_F2Q1X8	T F V D H G N Q D T R	D E S S I L E V I N F D K H M K T A K I I S E L Q R F Q I		
UniRef90_U4KYV7	T F V D V D G N P S K I	E G S S T K Q L I N F D K H V K T A R I I S E L Q R F Q I		
UniRef90_C5DQ14	T F I C G G N P D F	L F L G G S S D I V V N F G K R A R T V D I L E G S M S F K K V		
UniRef90_V9K9F3	V M L D T A V K D	H L D G G L I N F E K R R K E F E V I A Q I K L L Q S A		
UniRef90_J7S9X6	T F T S A G N P D F L	H K N E N I I I N F G K R V K V V D I I E E I L S F K R V		
UniRef90_Q5B8H1	V F I E D G N P E	L T P D E R L I N F S R Y S M M A S T D T V Q H F Q E A		
UniRef90_M7UXQ5	T F V D A D G N P	S T K Q L D G T S V I N F D K H T R T A K I G E L Q R F Q I		
UniRef90_G7Y030	T F I E D G I P S H	T H T P P P N V M I N F S K R I K V A D I I L R E I E S C Q A V		
UniRef90_G8BUU3	T F T Q Y G N S D F	V F D G S T E L V N F S K R N I I A D I I F D I M R F K N Y		
UniRef90_W4K929	T F I Q D G A P N N	I P S S S A N L V N F R K R Q M A A E V I E E I K K W Q S K		
UniRef90_J3PKN3	T F V D I G N P S	T K Q S G L T V V N F D K H T R T A K I I G E L Q R F Q I		
UniRef90_UPI0003F1270C	V M L D T A M K D Y	L Y G R M I N F E K R R K E F E V I A Q I K L L Q S A		
UniRef90_E5R415	T F I D V G N G T T	R Q L P G D S V I N F D K H M K T A K I I G Q L Q S F Q V		
UniRef90_R9XCN2	T F F T A G G N P D	L Y K G T T G V I N F A K R A R I V N V L K E I D S Y Q R I		
UniRef90_UPI0003C18BBD	T M L D T A L P D Y	I L E G G L I N F E K R R R E F E V I A Q I K L L Q S A		
UniRef90_S3C765	A F N D D Q N Q N	S S S G S G L T V V N F D K H T R T A K I I G E L Q R F Q I		
UniRef90_F7W9K0	T F V D A G N P S	K T D T G L T V I N F D K H T K T A K I C I G E L Q R F Q I		
UniRef90_E7EZM3	V M L D T A M K D Y	H L E V G L I I N F E K R R K E F E V I A Q I K L L Q L T		
UniRef90_G4NDV0	T F V D I G N P A	I K Q L P G N T V I N F D K H A R T A K I I G E L Q R F Q I		
UniRef90_F0X753	T F V D I G N P A	T Q K Q E K G M A V I N F D K H M R T A K I I G E L Q R F Q I		
UniRef90_T1J9K9	L H I E E G N P D F	L P N A E G T I I I N F S K R R K V A E I T G E I Q Q Y Q N Q		
UniRef90_Q4RPN7	V M M D T A M K D Y	T E G G L I I N F E K R R K E F E V I A Q I K L L Q S N		
UniRef90_I2H4B1	T F T F A G N P L	P Y L H H G T T V I N F C K R A R I A N I L L S I Q K F Q E L		
UniRef90_M5ENC4	T F I E D G N A D K	L P A A P H L I I N F G K R Q M M G E V F M D I R R H Q A V		
UniRef90_L8FSG0	T F V D M G N P A	T Q K Q E K G M A V I N F D K H T R T A K I I G D L Q R F Q I		
UniRef90_UPI00042C5F2B	L K T E E G N N D F	L F L K K K G K D L I I N F S K R R K V A E I T G E I Q Q Y Q N Q		
UniRef90_F5H6U6	N Q K R T Q R	R L Q L Q D M G G L I I N F E K R R R E F E V I A Q I K L L Q S A		
UniRef90_M4AEW5	T M L D T A L P D	I V E G G L F I N F E K R R R E F E V I A Q I K L L Q S A		
UniRef90_E9BZM8	V M I E S G N K N F	I L K G T D L I I N F D K R R K I A S V I Q E I Q Q Y Q Q S		

410 420 430 440

QUERY	P Y C L R V E S D I K R F F E N L N P M G N S M E K E F T D Y L F N K S L E I E
UniRef90_H9G5E6	P Y C L R V E P E I R R F F E N L N P M G N I P E K E F T D Y L F N K S Q E I E
UniRef90_F7D162	P Y C L R V E S D I K R F F E N L N P M G N S M E K E F T D Y L F N K S L E I E
UniRef90_M4AJM7	P Y C L K V E Q D I R K Y F E N L N P M E N M S E K E F T D Y L F K K S L E I E
UniRef90_E2AK89	P Y C L S V E S K I R Q Y I E N M C P F D N M S D A N I G N Y L Y S K S L E I E
UniRef90_Q7PVU9	P Y C L K V D P S I R N F L E N L D P F K G M S I T E I Q N Y L Y E E S K R I E
UniRef90_D2A5R8	P Y C L S V E S K I R H F L E N L N P F G D L S D T E I S N Y L Y N K S M E I E
UniRef90_J9JL18	P Y C L N V E P K I K K F L E N L N P F D N M K D T D I N N Y L Y S K S L E I E
UniRef90_UPI00046D6102	P Y C L S I E P R I R R F I E N L C P F D E M S D A D I S T Y L Y N K S L E I E
UniRef90_UPI00035982FE	P Y C L K Q D I S I R D Y I S A L D P L R D L S E K E L E D H L Y K T S L E I E
UniRef90_T2MDG6	P Y N L Q V E P S I R R A Y L E S L D P L A G R S D S E L N D H L Y E M S L M I E
UniRef90_G6D1P6	P Y C L T L E P R T R A F L E N L D P F P G M D D N E V T N Y L Y G K S K E I E
UniRef90_F2TDQ6	P Y P F H P V P E L Q D Y V L S N M Q A A G D V H E M Y E R S L L E I E
UniRef90_U9UOT5	P Y N L A A V Q E I Q M F I K C H L Q D S R D V G D L Y D Q S L S M E
UniRef90_R9NZ48	P Y N L A A V P A L E K F I E L H V D A R S A D D Y E Q S L A L E
UniRef90_M3B6B0	P Y G L Q P V P E L Q E Y L R N M S S A G D V H E M Y E R S L Q V E
UniRef90_A2R650	P Y L L Q P V P E L Q D Y L S N L Q N A G D V H D M Y D R S S L E V E
UniRef90_G2RAZ1	V Y S L Q P V P E L Q D Y L S N M Q A A G D V H E M Y D K S L Q I E
UniRef90_G2YJP8	P Y G L Q P V P E L Q E Y L T N M Q A A G D V H E M Y E K S S L A V E
UniRef90_M4FKU2	A Y S L Q P V N E L Q D Y L S N M S A A G D V H E M Y D K S L Q V E
UniRef90_I1CK15	L Y Q L Q P V E E I Q E F I K S N L L S T R D E E Q L Y N E S S L K I E
UniRef90_R7Z5M8	P Y P L Q A V P E L Q D Y I L T N M Q S A G D V H E M Y E M S S L Q V E
UniRef90_F2DPC5	P F C L E P V W V I R D Y I K N F S V L T E D D L Y R K S S L Q C E
UniRef90_J0XNI5	S Y A L E V E P S V R H F F E T I N P L N G F D G K E S E T Y M W E Q S L K V E
UniRef90_G0S419	A Y S L Q P V P E L Q D Y I L S N M Q A A G D V H E M Y D K S L Q I E
UniRef90_UPI0001FE637B	P Y N F V L V R Q V G A F V S E I A T A G S E D E Y Y E L S L Q V E
UniRef90_L8GMV9	Q V R H Y L E N Y P V L S A Q R I A E L A Q Q E L S D E
UniRef90_G1WYV7	P Y A L E A V K P L Q E Y I L S N M Q A A K D V H E M Y E V S I I Q I E
UniRef90_L0PC91	S Y S F Q I V P E I Q T Y I F H C L K G M D T L G D M Y D L S L G I E
UniRef90_E3KSS7	P Y Q L S P M P M I V K F L E E S L E N P R D E K E L Y D L S L E L E
UniRef90_UPI000328F197	P Y C L R V E S D I K R F F E N L N P M G N S M E K E F T D Y L F N K S L E I E
UniRef90_J5JGH6	Y S L Q P V P E L H D Y I L S N M Q A A G D V H E M Y D K S L Q I E
UniRef90_H2N025	G Y D I D P Y A E V Q Q F L E R R L E A A G S N S E D L Y E K S L R L E
UniRef90_A0A058Z9C2	P Y S L A R V P A L I D F L E K Q M Q S G W D D D E R Y D R S S L L L E
UniRef90_A8Q248	T Y N L Q A V P A I A K L L Q D A L F P Q F L D P A N E D Q R L Y E I S L A L E
UniRef90_M7WNG7	P Y N F Q T V A S V L S Y L E E S F Q S Y Q D G V D Y G D Q F W N L S L
UniRef90_S4RG01	P Y N L Q S A P E V T A P L L N N H K I I T E S D C F K L S L V A E
UniRef90_UPI0004411162	C Y S F T Q E D H F V D W F H S L E R L S E A E S Y G L S C E I E
UniRef90_F4PLU3	P Y N F M P P E L K S M L I N F D V I N D K E L Y E Y S L K R E
UniRef90_UPI0003513D55	P Y N L A K C T P V Y N F I Q Q G L E Q V E K A G D L Y E T S L V L E
UniRef90_UPI0001FE537E	H Y K L K R L D D V Q T G I E E G L E G V P H I E K Q Y Q L S L Q I E
UniRef90_UPI0003F49BFE	P Y R L T E V P E L Q A W M Q N E L V I R V R S S G E K S L Q T F Y R R S L V L E
UniRef90_Q6FVA6	A Y N L Q E V A E V Q E Y L L S W F D K C P T I E E Q Y Q L S L N L E
UniRef90_G7X6H0	P Y N L S V V E D M L P F L N H K I P E S E C F N L S L I C E
UniRef90_Q6BY66	P Y S F T P V P I I R D F L L Q V Q G L Q E R A L Y K Q S K L I E
UniRef90_F0ZK45	P Y C M A P D P R F L H W F H R Q Q L L T E E E S Y T L S C E E
UniRef90_F4Q1P0	P Y R F T E V A D L Q E W F Q A Q I V R V K D Q E N N V Q V N Y Y R K S L L L E
UniRef90_UPI00033186AD	C Y C M A P D P R F L H W F H R Q Q L L T E E E S Y T L S C E E
UniRef90_W3X0C4	P Y Y F E T V D F I K R L I N Q I Q T V T L E D Y K V D E D T L W D R S S L E L E
UniRef90_D2VY93	P Y R L N E L P E M Q D D W M Q I V R V R E S D Q G Q N V Q V S Y Y R K S L L L E
UniRef90_T0KXK3	C N N Y S I S P E E H F E A W F R S M E R L S E T E S Y N L S C E L E
UniRef90_T0NKV6	P Y C L K V E H E I R R F F E N L N P M G N M G E K E F A D Y L F K M S L D I E
UniRef90_Q4REE9	P Y N L R E V E E M I P F I T H K A V P E S E C F N L S L I C E
UniRef90_Q54TK8	G Y N L L L V P E I Q K Y L D G W F D K C P T I E E Q Y Q L S L N L E
UniRef90_G3B1Y4	P Y R L T E V P E L Q A W M Q N E L V I R V R S N G E T T A Q T F Y R R S S L V L E
UniRef90_B6HSV4	P Y N L P A V E P P L A S L V I N L H T R S E D D C Y K Q S L K I E
UniRef90_A0A058ZGB5	P Y R L A E V P E L Q T W I Q D Q L V R V R S A G E K S F Q N Y Y R R S L V L E
UniRef90_C5G885	G Y N F L E V V E I Q K Y L D T W F E K C P S I E E Q Y Q L S L A L E
UniRef90_H8X5L3	P Y C F E P V A F I Q N M I L D S S P M S E K E L Y D K S V A I E
UniRef90_F0ZUW1	Q Y N L S V V D Q I Q T Y I E H A L A N V E E K A D Y W E T S M G L E
UniRef90_X8JIE8	P Y N L K A I L P E V Q D Y L L N M S F E N S K R S G D F Q D Y R R S L L V E
UniRef90_K5X8A8	H Y N L K P N E E I Q N Y I E H S L V G V P H I E K Q Y E L S L A E
UniRef90_A7TRY3	P Y R L R E V P E L Q T W I Q D Q L V R V R S A G E K S F Q Q Y Y R R S L V L E
UniRef90_F2Q1X8	P Y R I A E V N E M Q T W I D F Q I A R I H N S K A A D V Q H L Y R R S L L M E
UniRef90_U4KYV7	P Y R L T E V P E L Q A W M Q N E L V I R V R S N G E T T A Q T F Y R R S S L V L E
UniRef90_C5DQ14	Y Y K L K R Y E D I Q E L E E S L C N V P H I E K Q Y E T S L Q I E
UniRef90_V9K9F3	C N N Y S F T Q D H R F L E W F R S V E R L S E A E S Y N Q S C E I E
UniRef90_J7S9X6	H Y K L K R F D E V R T I L I E A S L E E V P H I E I Q Y Q L S L E I E
UniRef90_Q5B8H1	M Y C L Q P V P E L Q E Y L A T E L Q R A V N S E R L W D R S S L C E E
UniRef90_M7UXQ5	P Y R L A A E P E L Q D W L Q A Q I V H V S A S D N E N V Q Q Y Y R K S L L L E
UniRef90_G7Y030	G Y S L L P V P E I Q E F I V R N V Q A A G G D V E G M Y E R S L A L E
UniRef90_G8BUU3	N Y D L E P Q M E L Q N Y I K T S L E G I P H I E K Q Y E L S L L Q E
UniRef90_W4K929	P F N F A R V D T I Y D Y I Q E C L N K F N T I P D V S D L F W N L S L
UniRef90_J3PKN3	P Y R L A A E V P D M Q D W L Q A Q V V R V R E L E S N V Q V S Y Y R K S L L L E
UniRef90_UPI0003F1270C	C N N Y S I A P E E H F V A W F R A M E R L S E T E S Y N L S C E E
UniRef90_E5R415	P Y R L A A I P E M Q D D W M E S Q I Q R V R C S D Q A N V T S Y Y R R S L L L E
UniRef90_R9XCN2	S Y R L K R I T E I Q E F I D E R L L N V P N I E K Q Y E L S L R I E
UniRef90_UPI0003C18BBD	C Y C I T P D K K F I K W F H K Q Q H F T E E S Y N I S C E I E
UniRef90_S3C765	P Y R L T E V A D V Q D W V T N Q I S R V R E L E A N V Q V S Y Y R K S L L L E
UniRef90_F7W9K0	P Y R L T E V P D F Q E W I L S Q I E R A R E I E K T D Q L L H Y R Q S L L L E
UniRef90_E7EZM3	C Y N F S R N Q R F I D W F K R V E K L T E T E S Y S M S C D E E
UniRef90_G4NDV0	P Y R L T E V Q E L T E V Q E W I Q A Q I A R L R E L E T P N D N A Y Y R K S L L L E
UniRef90_F0X753	S Y R L T E V P D I Q E W I G E Q I S R V R E M D K T Q G D N Y Y R K S L L L E
UniRef90_T1J9K9	P Y C L S V E A N I R K F V E N L N P L E D R N E K E F N D H L Y G K S L E I E
UniRef90_Q4RPN7	N Y S F T P D S H F R E W F T G V E K L S E A E S Y N L S C E I E
UniRef90_I2H4B1	A Y D L K K S I D I T S Y I E S S M L D I P H I D K Q Y E L S L E I E
UniRef90_M5ENC4	P Y N L C K V D A L Q D F L T D Q M S Q S K S D E Y R F E R N F L L Y E
UniRef90_L8FSG0	P Y R L A E V P E L Q E W I Q A Q V I R V R S N D S N N V Q Q Y Y R K S L L L E
UniRef90_UPI00042C5F2B	C Y C L R I E P E M R R F F E N L N P M G N A S E K E F T D Y L F N K S L E I E
UniRef90_F5H6U6	C Y C M T P D Q K F I Q W F Q R Q Q L T E E E S Y A L S C E I E
UniRef90_M4AEW5	C Y C L T A D Q A F I L R W F K N Q P Q L S E E E S Y A L S C E I E
UniRef90_E9BZM8	P Y H L Q E V E P I A Q F I A N V P F M E S K D E M Y E K S L I L E

450 460

QUERY	P R N P K P [] P R F P K K Y S Y P [] K S P G [] R P S N P R
UniRef90_H9G5E6	P R N C [] Q P S R Y P R K T T Y S L K S P G I R P N A G R
UniRef90_F7D162	P R N P K P [] P R F P K K Y S Y P [] K S P G V R P S N P R
UniRef90_M4AJM7	P R N A R Q P A R F P R K T T Y S L K S P G L R P
UniRef90_E2AK89	P R K C [] K A P A R F P R K W P [] K L K S P G I K A S R S
UniRef90_Q7PVU9	P K N C [] R Q P [] K F P K K W P [] S L K S P G I K P S S R R
UniRef90_D2A5R8	P R G Q K Q [] V Q K F P R K W P H S L K S P G I K S K
UniRef90_J9JL18	P R N C K Q [] P K Y P R K W P [] N L K S P G L K P K S R
UniRef90_UPI00046D6102	P R G C R Q P A R V P R K W P [] N L K S P G I K A R S
UniRef90_UPI00035982FE	P R D G K [] N R Y P K R F D Y S L K S P G I K P S A N R
UniRef90_T2MDG6	P R N A K Q P A K F I R K T D I P L K S P G I K P
UniRef90_G6D1P6	P K G A K Q T H K F P R R Y P E L S L K P V K V S R R R
UniRef90_F2TDQ6	P R E
UniRef90_U9UQT5	P R
UniRef90_R9NZ48	P R E
UniRef90_M3B6B0	P R E
UniRef90_A2R650	P R E E D E K [] A S A R [] A S I L A S P
UniRef90_G2RAZ1	P R E E
UniRef90_G2YJP8	P R E E
UniRef90_M4FKU2	P R E E
UniRef90_I1CK15	P R E E E D E K [] T R L L Q E S G
UniRef90_R7Z5M8	P R E E
UniRef90_F2DPC5	P R N K M R R Y T H Y S S N S D S D S L R P G R R R
UniRef90_J0XNI5	P K D P D K M E F [] V P S R P [] H V L K S P G I K P P
UniRef90_G0S419	P R E E
UniRef90_UPI0001FE637B	P R E E A S
UniRef90_L8GMV9	P P G T A T I P G R F K R V T H P E V L A S N P
UniRef90_G1WYV7	P R E E
UniRef90_L0PC91	P R E E
UniRef90_E3KSS7	P R E E
UniRef90_UPI000328F197	P R N P K P [] P R F P K K Y N Y S L K S P G [] R P S N P R
UniRef90_J5JGH6	P R E E
UniRef90_H2N025	P R E E
UniRef90_A0A058Z9C2	P R E E T E D M K
UniRef90_A8Q248	P R [] S S T H S K P P [] V R Q N [] N
UniRef90_M7WNG7	P R E E
UniRef90_S4RG01	P R E E
UniRef90_UPI0004411162	P R E E S S
UniRef90_F4PLU3	P [] L S E S A S N T [] K A K K N
UniRef90_UPI0003513D55	P R E E
UniRef90_UPI0001FE537E	P R E E
UniRef90_UPI0003F49BFE	P R E E
UniRef90_Q6FVA6	P R E E
UniRef90_G7X6H0	P R E E V P Q A R M Q P E S S S S S
UniRef90_Q6BY66	P R E E
UniRef90_F0ZK45	P R E E S Q
UniRef90_F4Q1P0	P R E E
UniRef90_UPI00033186AD	A T S P K P R K S M V K R L S L L F [] G S D [] L A G S
UniRef90_W3X0C4	P R E T [] P R T P V E G P [] A T P T P
UniRef90_D2VY93	P R Q P Q Q
UniRef90_T0KXK3	P R E E A M R A P A E P Q T N T A T S Q R S G
UniRef90_T0NKV6	P P S E S A S N T [] K V K K N
UniRef90_Q4REE9	P R N C [] R Q P P R F P R K T V Y P [] K S P G I R P
UniRef90_Q54TK8	P R E S
UniRef90_G3B1Y4	P R E E A
UniRef90_B6HSV4	P R E E P S R S
UniRef90_A0A058ZGB5	P R S E S P S R
UniRef90_C5G885	P R E Q P [] L Q R S S P R E P N P A []
UniRef90_H8X5L3	K K N
UniRef90_F0ZUW1	K R H [] R K I [] A K K E N R E K N K [] T T S S V
UniRef90_X8JIE8	P R E E
UniRef90_K5X8A8	P K Q P A D T S D M R Q [] F N W A M R S Q S V A P A S
UniRef90_A7TRY3	A R E E A P
UniRef90_F2Q1X8	P R E R A V T P R S P T E P S P S []
UniRef90_U4KYV7	P R E E R P V V R T E V P T V V E E K Q A A V T P K T D
UniRef90_C5DQ14	P R E E P S N R S T
UniRef90_V9K9F3	P [] L A E S A S N T [] K A K K N
UniRef90_J7S9X6	P R S N H A A N S N P
UniRef90_Q5B8H1	P R G R W D R K R E R D T Y T A T
UniRef90_M7UXQ5	P R D V S A T K P S P [] V D S A V S F G S [] H G K D K
UniRef90_G7Y030	P R
UniRef90_G8BUU3	A R
UniRef90_W4K929	P R N T Q P A S R T P
UniRef90_J3PKN3	A P S E S A S N T [] K A K K S
UniRef90_UPI0003F1270C	P R E P Q H P T R G S P S [] D N S A Q S T
UniRef90_E5R4I5	P R Q
UniRef90_R9XCN2	P T S P K P R K S M V K R L S L L F [] G T E V L N S T P
UniRef90_UPI0003C18BBD	P R E T Q A A A K A V
UniRef90_S3C765	P K E V Q Q A P S S S N M F S W I R H S T H G [] P T S
UniRef90_F7W9K0	P P S E S
UniRef90_E7EZM3	P R E V T A T P Q T [] R
UniRef90_G4NDV0	P R E A Q A
UniRef90_F0X753	P R N C [] K Q P S K F V
UniRef90_T1J9K9	P [] L S E S A S N T [] R A K K N
UniRef90_Q4RPN7	P R E K T T S K V E P
UniRef90_I2H4B1	P R G K R M P
UniRef90_M5ENC4	P R M T Q K T S P
UniRef90_L8FSG0	P R N C [] K Q P P R F P R K S T F S L K S P G I R P N T G R
UniRef90_UPI00042C5F2B	A T S P K P R K S M V K R L S L L F [] G S D M I T S P
UniRef90_F5H6U6	P T L P K P R K S M V K R I S L L F [] G P S S T P S S P
UniRef90_M4AEW5	P R D G S T P A A A K Q P T N T I G R T G M R K N S
UniRef90_E9BZM8	P R D G S T P A A A K Q P T N T I G R T G M R K N S

UniRef90_W9VZZ3
 UniRef90_W5LBH4
 UniRef90_A8NSC9
 UniRef90_L8H1F9
 UniRef90_F0ZRY3
 UniRef90_S7Q4P6
 UniRef90_D3BBH4
 UniRef90_UP1000398FDB1
 UniRef90_UP10004622389
 UniRef90_I2G3B8
 UniRef90_L8GQN2
 UniRef90_J4I062
 UniRef90_UP10004449535
 UniRef90_UP10004414F8A
 UniRef90_J3Q9J6
 UniRef90_J4HT24
 UniRef90_UP10002C3D47C
 UniRef90_W7I085
 UniRef90_H0GXY6
 UniRef90_UP10003C88E2C
 UniRef90_E2AT28
 UniRef90_M5BU90
 UniRef90_S8BS54
 UniRef90_P0CF32
 UniRef90_I3M11
 UniRef90_D2VTE0
 UniRef90_E7F4B2
 UniRef90_M3CY49
 UniRef90_UP10004576117
 UniRef90_A4IJ06
 UniRef90_G3Q5Z8
 UniRef90_Q9Z1S3
 UniRef90_UP10002035EE5
 UniRef90_F7B9R2
 UniRef90_W4KLW8
 UniRef90_L8H734
 UniRef90_Q3UY15
 UniRef90_W1QL81
 UniRef90_X8JI23
 UniRef90_F2U0C8
 UniRef90_W4ZIM3
 UniRef90_W5KHW0
 UniRef90_A0A034V411
 UniRef90_F7AG79
 UniRef90_D3BOY3
 UniRef90_UP10002C3E311
 UniRef90_UP100033EDB0
 UniRef90_H2TBU5
 UniRef90_E2C840
 UniRef90_U6IMC8
 UniRef90_F1LM43
 UniRef90_M3WGI3
 UniRef90_UP10003F16572
 UniRef90_Q0UTD8
 UniRef90_L5K9X4
 UniRef90_Q55FD8
 UniRef90_A7TNK1
 UniRef90_F2UC42
 UniRef90_G3Q601
 UniRef90_B3MSA2
 UniRef90_UP10001E44F72
 UniRef90_B0EBI5
 UniRef90_UP100046C1420
 UniRef90_S0EE03
 UniRef90_I3JMQ8
 UniRef90_J9VVC5
 UniRef90_UP10003EDEC5B
 UniRef90_UP10003C4B506
 UniRef90_F1QJM6
 UniRef90_UP1000383F1F4
 UniRef90_UP10003940E7D
 UniRef90_K7IZN6
 UniRef90_H2KZX7
 UniRef90_M3ZSG0
 UniRef90_K1RBH7
 UniRef90_I4Y5P7
 UniRef90_UP1000446538
 UniRef90_L9LAB9
 UniRef90_UP1000350E31C
 UniRef90_E9H8K6
 UniRef90_B7QKE9
 UniRef90_G3WX37
 UniRef90_E9C5Q8
 UniRef90_UP100035034DF
 UniRef90_UP100045731A8
 UniRef90_Q8ST25
 UniRef90_E9BX06
 UniRef90_H2UP70
 UniRef90_UP100045D9CA8
 UniRef90_W5UI19
 UniRef90_UP1000443E512
 UniRef90_T1JM98

1 10 20 30 40

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

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

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

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

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

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

Y R T S K V R A L R A A H L E R L V W

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

This figure displays a multiple sequence alignment (MSA) of protein sequences from UniRef90. The sequences are aligned horizontally, and positions 50, 60, and 70 are marked at the top. Amino acids are color-coded: black for hydrophobic, red for polar, blue for acidic, green for basic, and yellow for aromatic. Yellow boxes highlight specific residues at certain positions across the alignment.

90 100 110 120

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

90 100 110 120

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

130 140 150 160

UniRef90_W9VZZ3	F A R E S L I G V L P M A G K R I L E L A E K V A T S H A P I V P R V V S A I G
UniRef90_W5LBH4	R V L D F L Q K A M P S S E P T R R A Q S L L E Q L Q S Q T S L E
UniRef90_A8NSC9	F I K T W V D T Y W R S G V D D P A L T P T L T F T R P A Q R I M E L L N M R R
UniRef90_L8H1F9	K T R V W L N D P Q G S G P D S P K L S Q C L S G E L E S T T S S E D V R K T P
UniRef90_F0ZRY3	F L K N W L E Q Q A P Q A A S E E K F L V R L S D F V D K Q I T N D G Y T K I V
UniRef90_S7Q4P6	F N R D A L S R M F P G P A Q R I Q D L I V A R S Q D R D L Q R D R L V D R S A
UniRef90_D3BBH4	A V I D V L K I F L R Y I I V D N T S L T N Y L R R S F I K K V L K V D I Q S K
UniRef90_UPI000398FDB1	I L Q A W L D Q C A E D F Q E P P D Y V C I L L K V L S Y L K K N M P G S D P E K
UniRef90_UPI0004622389	F I K T W V E G Y W R H A S D S V I I R Q R M N S S E N V S L S T G E R D R T R
UniRef90_I2G3B8	Q Q L I P L A E R W A K A G A I A G P A H R L A E L A R K R L L D G A T Q M T D A
UniRef90_L8GQN2	V L R K W I E E F E D E L S S T R L L R T L K T F L E T T L K P D G Y V V L A E
UniRef90_J4I062	I F K T M V T E D G I L E K E D M G I L G R L K E F A S R E D V V A N S A A K R
UniRef90_UPI0004449535	F I R M W L E S Y W R P A S D D S V L P V L R D F F P G P S Q R I H E T I T L R
UniRef90_UPI0004414F8A	I L T L M L K D G V L E K E D M H V L A R F K E F S K I L A Q E E I G A A A Q P L
UniRef90_J3Q9J6	V M K S W L E L H W R M E T D E I V L P V I M R W A N S Q L S T A L P V P A E R
UniRef90_J4HT24	Q T L L D F T R D A L A T M F P V P S Q R I L E L I G S W Q T M N E A S G N L K
UniRef90_UPI0002C3D47C	F V R T W L K N A W K D F E G K D E L I D K L I Q Q L I E R F K Q F S S K M G T N
UniRef90_W7I085	F A V N K L T P V L Q T P G Q E L V D K V L N L E T D T S L V P R E P A T L Q K
UniRef90_H0GXY6	I M A T F L R Q Y W F P S Y Y E P N I A T L N D E F A Q V T V K E N I P G S M E
UniRef90_UPI0003C88E2C	S D L G S I R T F L G W A A P L G A E A Q E A E K L L G G F L E E A D Q E Q K E
UniRef90_E2AT28	
UniRef90_M5BU90	F I K T W L D A H W Q H A A D S V A L A P L Q E F V S A T A S K M H H Q P E S E
UniRef90_S8BS54	F A I E K L R P S L P T P G E R L Q E L T D K V L H V A S D T S L V P R E P S T
UniRef90_P0CF32	I M T T F F K Q Y W F P G Y D E P D L A T L N L D Y F A Q V A I K E N I T K E V
UniRef90_I3M111	S V R L F L G W A A P G S A E A Q E A K L L E D F S E E P E G K Q Q
UniRef90_D2VTE0	V F
UniRef90_E7F4B2	E L C L V E L T E D I L R Q L M D L V F R L V C I N G E L S L A R V L
UniRef90_M3CY49	F A L H K L K P V L P Q A G D R L T E L T R R V S E G Y A Q G T L N G P L V S A
UniRef90_UPI0004576117	F I R Y W I T E F F W I M F K M D N S L S E A M E Q F Q Q L V R E N G E E C H S R
UniRef90_A4IJ06	F I R Y W V T E L W V M F K M D A K L T Q A M E E F F Q E L V R S K G E E L H W R
UniRef90_G3Q5Z8	M L C Y H R R R C F R R L A H T A E N L L K S L K E R G T G E W
UniRef90_Q9Z1S3	F V R Y W I T E F F W I M F K M D A S L T S T M E E F Q D L V K A N G E
UniRef90_UPI0002035EE5	I L R A W L D Q C S E D F R E P P S Y P C L L K L L E Y L Q R S M P G S D P E R
UniRef90_F7B9R2	V L R H W V S K H A Q D F E L N E L K M N V N L L E E V L R D P D L L P Q E R
UniRef90_W4KLW8	V L T L W L E D H D M L N Q D P D I P P R L Q E F L S L I H S P A S L T L T A K
UniRef90_L8H734	V V K T W V E S Y W Y D F E G L D A R Q M R L T Q F L T D K L A T D P H F T K
UniRef90_Q3UY15	N V R I F L G W A A P G G A E A R E A E K L L E D F L K E A K G E Q T E E E K R
UniRef90_W1QL81	Y S S S E L R T K W D V F V D S N N V D A K L I A Q L G R L V M A M K T Q
UniRef90_X8JI23	F I K L W L D L H W Q P A E D S V A L T P L R D F V S A T A S K M H P S I V Q
UniRef90_F2U0C8	V L K Q W V D K H F Y D F E S D K T L L R E L L Q F I Q R E V R S D A Q R E R Q
UniRef90_W4ZIM3	V I R H W V S K F S K N F E L N E G L R N R V L E F F E V A T N P N L L P S E
UniRef90_W5KHV0	V C R H W V E H H F Y D F E R D A Q L L C R L E E F I G M V R G K A M R K W V E
UniRef90_A0A034V411	E F N Y Q L V C A G Q L
UniRef90_F7AG79	V L V R V V D E L C L V E M T D E I L K L L M E L V F R L V C K G E L S L A R I
UniRef90_D3BOY3	L S V K L E D W M K S H S N N T L L N S V K K E
UniRef90_UPI0002C3E311	D K G I G V L P R I L D E F I K E N E A D P L I T G K I V T N R K M M V E T A M D
UniRef90_UPI000333EDB0	R I R V F L S W A A P G G A E A Q E A K K L L E D F L E E A D Q E Q K Q
UniRef90_H2TBU5	L L C A H L R H R L L C F R R L L Q T A E S L L K R F Q D E G K I D G C F S E Y L
UniRef90_E2C840	R L L D F T H R H L L G S E L E L K A R H R L H R F Q R E D Q I D
UniRef90_U6IMC8	F I K K W V S Y F K V D F A D N S S L K H R L E V F L S G I D A V P S L A E N V
UniRef90_F1LM43	V L R H W V T K H S Q D F E T D D L L K Y K V I C F L E E V M H D P D L L P Q E
UniRef90_M3WGI3	V L R H W V S K H S Q D F E T N N E L R G K V I S F E V M H D P E L L T Q E R K
UniRef90_UPI0003F16572	S V R T F L G W A A P L G A E A L E A E K L L G D F L E E A Y R E Q E E
UniRef90_Q0UTD8	F A T G K L R E S M P A A G R R L A D L T S K V N E V R V P R L V S S I S K A G
UniRef90_L5K9X4	T F F V L V R V V D E L C L V E L T E E I L K L L M E L V F R L V C S G E L S L
UniRef90_Q55FD8	L I K S W L E L E T T K N R E E V I T L L V Q N M P A Q S I E D D G L K E L T E
UniRef90_A7TNK1	F S K F W S T Y Y Y D K S Y M N Q N K D N L I F K F M E Y A V Y E K I P Q F F I
UniRef90_F2UC42	R Q L R E L Q A V V Y D L L Q L E H V D V A A A Y L E D L W V A I G E R R L D A Q
UniRef90_G3Q601	V I Q L L L E E H G E D F H E P P Q C Q A L Q M L C V H L R H R C F R R L A H
UniRef90_B3MSA2	Q L L S L L V E F V Y Q L V C S G Q L Y L A K L L R N K F V E K V T L Y K E P K
UniRef90_UPI0001E44F72	V I R Q W V N H H W Y D F E H N P I L L Q D L C S F L E E T D S H G K V I N Q Y
UniRef90_B0EBI5	F I R S W V N W R F S D F D D I D M R T T L L L I R M Y E T F K P K M A
UniRef90_UPI00046C1420	V L R H W I S K H A Q D F E N D H K L K N L T I E F L L D D I Y S P N L L P A E
UniRef90_S0EE03	F A S S L S S T Y P V L S Q R L M V S I Q R V R G H T M H K P C P T L V T S E A
UniRef90_I3JMQ8	Y S E D F R D P P L H P A L R L L D H L R I S S A V H D S M R S Q P N F C S L
UniRef90_J9VVC5	F L R T W L E F H W Q P E V D N V I S L P V M G E R L I N L V Q R K K E G R E D
UniRef90_UPI0003EDEC5B	V F R H W V E H H F Y D F E R D L E L L E R L E S F I S S V R G K A M K K W V E
UniRef90_UPI0003C4B506	F M R Y W I L E F P A E F N L D L G L I R L T E E F R E V J A S Q L G Y E K H V H
UniRef90_F1QJM6	L L C V H L R H R L L C C R R L V N Q A D A L L R K F Q T E D K Q
UniRef90_UPI000383F1F4	S V C N F L G W A A P S G A E A Q E A E K L L G D F L K E A K T E Q E E
UniRef90_UPI0003940E7D	
UniRef90_K7IZN6	I S D L D D N L L Q T L M E F V Q Q L V C S G D L T M A K
UniRef90_H2KZX7	D L I T S V T S F V Y R L I H D Q A L R L L C S H L R H R L C F R R L L S T A E A L L K R L Q E Q D C R R S V S
UniRef90_M3ZSG0	L I R V I D E L S R K E M D Q A T T Q K M M T L V F E L L C Q S D L M L A K V L L
UniRef90_K1RBH7	V M K S W L E H H F D D T R D D Y I S R I R Q F A D S D I P M T I V G P V R Y L
UniRef90_I4Y5P7	K V Q K F L G W A S P A G P E A Q E A K L L R E F L A E A E Q G G R E E D Q T
UniRef90_UPI0004446538	J R C W S P G D Q S H A H S P D P C T A A D T C L A C A V H R E A P S T C G Y L
UniRef90_L9LAB9	
UniRef90_UPI000350E31C	
UniRef90_E9H8K6	F S H Q L V E R G D L S L A R A L R A K V V E K W E A H A R L R S W
UniRef90_B7QKE9	G H L K D M I R R I A P C D E A Y W K R M N Q L L Q A L N Q K L A T L S H G Q E
UniRef90_G3WX37	
UniRef90_E9C5Q8	
UniRef90_UPI00035034DF	F L C A W M S Q Y P E E F S S L E T E K R Q Q L S R
UniRef90_UPI00045731A8	E R M M R N L K D M T H K I A T L D E L H R K T M H Q M T Q S L I R
UniRef90_Q8ST25	L F K V F L L H I D K Q S P L T N H I R S F S R K S R K G G S G S G S G S
UniRef90_E9BX06	S M L R V R G Q I F E F F D K V S T Q R G N Q N L L N M I K R A I E K K E I K V
UniRef90_H2UP70	F I R H W I R E F W M M F R L H S L S D S L E E F R E M I R E Q G Q E
UniRef90_UPI00045D9CA8	R N L K D L A H R I A S G E E Q T Y R K N V Q Q M M Q C L I R
UniRef90_W5UI19	
UniRef90_UPI000443E512	
UniRef90_T1JM98	

UniRef90_W9VZZ3
 UniRef90_W5LBH4
 UniRef90_A8NSC9
 UniRef90_L8H1F9
 UniRef90_F0ZRY3
 UniRef90_S7Q4P6
 UniRef90_D3BBH4
 UniRef90_UP1000398FDB1
 UniRef90_UP10004622389
 UniRef90_I2G3B8
 UniRef90_L8GQN2
 UniRef90_J4I062
 UniRef90_UP10004449535
 UniRef90_UP10004414F8A
 UniRef90_J3Q9J6
 UniRef90_J4HT24
 UniRef90_UP10002C3D47C
 UniRef90_W7I085
 UniRef90_H0GXYY
 UniRef90_UP10003C88E2C
 UniRef90_E2AT28
 UniRef90_M5BU90
 UniRef90_S8BS54
 UniRef90_P0CF32
 UniRef90_I3M11
 UniRef90_D2VTE0
 UniRef90_E7F4B2
 UniRef90_M3CY49
 UniRef90_UP10004576117
 UniRef90_A4IJ06
 UniRef90_G3Q5Z8
 UniRef90_Q9Z1S3
 UniRef90_UP10002035EE5
 UniRef90_F7B9R2
 UniRef90_W4KWL8
 UniRef90_L8H734
 UniRef90_Q3UY15
 UniRef90_W1QL81
 UniRef90_X8JI23
 UniRef90_F2U0C8
 UniRef90_W4ZIM3
 UniRef90_W5KHV0
 UniRef90_A0A034V411
 UniRef90_F7AG79
 UniRef90_D3BOY3
 UniRef90_UP10002C3E311
 UniRef90_UP1000333EDB0
 UniRef90_H2TBU5
 UniRef90_E2C840
 UniRef90_U6IMC8
 UniRef90_F1LM43
 UniRef90_M3WGI3
 UniRef90_UP10003F16572
 UniRef90_Q0UTD8
 UniRef90_L5K9X4
 UniRef90_Q55FD8
 UniRef90_A7TNK1
 UniRef90_F2UC42
 UniRef90_G3Q601
 UniRef90_B3MSA2
 UniRef90_UP10001E44F72
 UniRef90_B0EBI5
 UniRef90_UP100046C1420
 UniRef90_S0EE03
 UniRef90_I3JMQ8
 UniRef90_J9VVC5
 UniRef90_UP10003EDEC5B
 UniRef90_UP10003C4B506
 UniRef90_F1QJM6
 UniRef90_UP1000383F1F4
 UniRef90_UP10003940E7D
 UniRef90_K7IZN6
 UniRef90_H2KZX7
 UniRef90_M3ZSG0
 UniRef90_K1RBH7
 UniRef90_I4Y5P7
 UniRef90_UP1000446538
 UniRef90_L9LAB9
 UniRef90_UP1000350E31C
 UniRef90_E9H8K6
 UniRef90_B7QKE9
 UniRef90_G3WX37
 UniRef90_E9C5Q8
 UniRef90_UP100035034DF
 UniRef90_UP100045731A8
 UniRef90_Q8ST25
 UniRef90_E9BX06
 UniRef90_H2UP70
 UniRef90_UP100045D9CA8
 UniRef90_W5UI19
 UniRef90_UP1000443E512
 UniRef90_T1JM98

170 180 190 200

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

210 220 230 240

UniRef90_W9VZZ3	D F D P F E L A R Q I T L K T S K I F C S I L P E E L L G T E W T K R S S S L
UniRef90_W5LBH4	S F S A D L V A E Q L T Y M D A L L F K K V V P H H C L G S V W S Q R D K K E N
UniRef90_A8NSC9	D F D A L E L A R Q L T I M E C E L Y C A Q P N E V L E T G Q E G A A S
UniRef90_L8H1F9	D I E P V E L A R Q M T L L D Y A L F Q K R P S E Y N N V A W T K K N K E I A
UniRef90_F0ZRY3	D D E L F V A Q Q L T I R E Y D T F K R I Q A V E F L G Q S W S K A K L Q Y K
UniRef90_S7Q4P6	D F D P T E L A R Q L T L M E C N L Y C A R P E E L L E I G Q E G T T S
UniRef90_D3BBH4	T M P A D E I A K Q L T L I E F E I Y S K Q T S E F L N Q A W V K E K T K H L
UniRef90_UPI000398FDB1	L F Q E D L V A E Q L T Y M D A T L F K N V V P H H C L G C I W S R R D K Q E N
UniRef90_UPI0004622389	D F D A L E L A R Q L T T M E C T L Y C A L P A E E L L D S G G P A
UniRef90_I2G3B8	D F D P L E L A R Q L T L L D S K L Y C A Q P E E L L G S K F T K E T K A V G
UniRef90_L8GQN2	D I N D E E L A R Q L T L M E F E T F R A I R P S E E L L N Q V W N K P K Q R H R
UniRef90_J4I062	D I E P V E I A R Q L T L M E F A M Y M K K R P M E C L L R S K E T K P G R N
UniRef90_UPI0004449535	D F D S L E L A R Q M T T I M E C N L Y C V I S P E E V L E S G S G Q D K V G A R
UniRef90_UPI0004414F8A	D L D P I E L A R Q L T T I I E S R L F C K L R L M D C L Q R A K E Q Q S
UniRef90_J3Q9J6	D F D P I E L A R Q I T L M E S K V Y L A K P E E V I G Q L F N K K S G A
UniRef90_J4HT24	D F D C L E L A R Q L T T M E C I L Y C A R P E E V L T G Q D G V A S
UniRef90_UPI0002C3D47C	Q Y H P A E F A R Q I S Y L Q N N I F R K I P Y Y E F L G N G W T K K D K E T L
UniRef90_W7I085	E F D P H E I A K Q L T V K D Q D L F C Q A P H E E L L G K E W T K K E G S R
UniRef90_H0GXY6	A A D P I A F A T Q L T I L E H D I Y C E T I F D C L Q K I L K K K K P D D I
UniRef90_UPI0003C88E2C	D F S V D K V A E Q L T L L M D V E L F S R V R P C E C L G S V W S Q R D R P G T
UniRef90_E2AT28	T I H P V E L A R Q L T L L M D V E L F S R V R P C E C L G S V W T K D D K N E R
UniRef90_M5BU90	D F D A L E L A R Q L T T I L E H D I Y C E T I F D C L G K E W T K K Q D C R
UniRef90_S8BS54	D F D P L E V A R Q L T T I I D Q K I F C Q T P H E E L L Q K I W K N K K S Y G A
UniRef90_P0CF32	A V D P V L F A T Q L T I L E H E I Y C E T I F D C L Q K I W K N K K S Y G A
UniRef90_I3M11	D F S V G E V A E Q L T L M D V E L F S R V R S C E C L G S V W S Q R D R P G A R
UniRef90_D2VTE0	D I K E E E L A K Q I T F M D H N L Y R N I E A H E L L N C S W S K P K L R H R
UniRef90_E7F4B2	D F R S H E I A D Q I T L L D A E L F Y K I E I P E V L L W A K E Q N E E K
UniRef90_M3CY49	D I D A E E M A R Q I T I M M M T Y C E R P E E L L S M D W G N S N T T
UniRef90_UPI0004576117	H L E P G E L A E H L S Y L E F S R R S F S D Y Q N Y I M S S C V K D
UniRef90_A4IJ06	H L E P Q E L A E H L T Y L E F K A F R R R S F S D Y Q N Y I V S G C V K E
UniRef90_G3Q5Z8	D F A V R E V A E Q L T R L D A E L F F V R V K P F H C L G C V W S S Q R D K R Q N E
UniRef90_Q9Z1S3	H L E P E E L S E H L T Y L E F K S F R R S F S D Y Q N Y L V N S C V K E
UniRef90_UPI0002035EE5	V F V P N C G S R K K L F K K V V P H H C L G C I W S R R D K K E N
UniRef90_F7B9R2	T L S A M E L A E Q I T L L D H I V F R S I P Y E E F L G Q G W M K L D K N E R
UniRef90_W4KWL8	R M D P L D I A Q H L S V F E H R L Y A K I R A T E E C L T W T R K Q V G N D V K
UniRef90_L8H734	D L H P A E L A R Q M A L A E G F Y R K I Q P T E E C L D L R W S K Q Q E S
UniRef90_Q3UY15	D F S V D D V A E Q L T L L M D V E L F L R V R S C E C L G S M W S Q R D R P G A
UniRef90_W1QL81	D I D S M E F A R Q I T L I Q F E L F H K D K F D E L L A R S Y R K H S E P V G
UniRef90_X8JI23	D F D A L E L A R Q F T T I L E S S N L Y C R L P E E I L D V G L P S S A G E R K
UniRef90_F2U0C8	T L H P I E V A R Q L T T I I D S G L Y R A K P S E L V G Q Q W N K A D K E S K
UniRef90_W4ZIM3	R M S A L E L A E Q L S Y L E H K L R A P Y W E F L N Q A W M K Q G K A T R
UniRef90_W5KHV0	T L H P I E I A R Q L T L L E S D F Y R Y T H P P F L K E Q S E E R
UniRef90_A0A034V411	D L K S V E I A E Q M T L L D A D L F Q K E I P E V L L F A K E Q S E E R
UniRef90_F7AG79	D F H S L E I A E Q L T L L D A E L F Y K I E I P E V L L W A K E Q N E E K
UniRef90_D3BOY3	N Y T S I E I A Q T L T T L N H T Y F A K I D K R E F L G Q R W T K K
UniRef90_UPI0002C3E311	T L P I E Q F A H Q L T L L Y E F E M F K A I E A K E M L G N A W T K P D K T E R
UniRef90_UPI000333EDB0	D F S V D E V A E Q L T L L M D A K L F S K V R S C E C L G S V W S Q R D R P G A
UniRef90_H2TBU5	D F P V R D V A E Q L T R L D A E L F V R V V P F H C L G C I W S Q R D K K E N
UniRef90_E2C840	E V P Q R H F A E Q L T R M D A E V F K K L V A H Q C L G A V W S R K D R S H D
UniRef90_U6IMC8	N V H P L E L A R Q V T L L Y E W D L Y S R I E F N E V N G S E K N W G V N M R R
UniRef90_F1LM43	N H S A M E I A E Q L T L L D H L V F F K S I P Y E E F F G Q G W M K A D K N E R
UniRef90_M3WGI3	N H S A L E I A E Q L T L L D H L V F F K S I P Y E E F F G Q G W M K L E K N E R
UniRef90_UPI0003F16572	U R P C E C L G S V W S Q R D R P G A Q S E E L L A L E W T K K S D S K
UniRef90_Q0UTD8	D F D P L E L A R Q F T T I I E S R L F C S E I P E V L L W A K E Q N E E K
UniRef90_L5K9X4	D F H S H E I A E Q L T L L D A E L F Y K I E I P E V L L W A K E Q N E E K
UniRef90_Q55FD8	D M D E I A R Q L S L L T F P L Y S R I E T S E L L N Q R W S K P P G G
UniRef90_A7TNK1	D I D P F V F A T Q L T L I D E K L Y T K I S A F D C L H R V W R D I G S S S
UniRef90_F2UC42	A Y S T T E L A R E L C V M A N K L F G R I I S A R E L L A W R K K Q S A E N N
UniRef90_G3Q601	D F A V R E V A E Q L T R L D A E L F V R K P F H C L G C V W S Q R D K R Q N
UniRef90_B3MSA2	D L K S L E I A E Q M T L L D A E L F Q K I E I P E V L L F A K D Q C E E K
UniRef90_UPI0001E44F72	S L H P I E I G R Q I T L L Q F D L Y K A I K P I E L V G S A W T K R D K D L R
UniRef90_B0EBI5	S F S I K D I A Q T L T L M Q F D K F R R T V D E L L S Q M W T K K D N K T L
UniRef90_UPI00046C1420	T L S A L E I A E Q L T Y I D H Q I F I S I I S S E E F L G Q Q A W M T N D K T S R
UniRef90_S0EE03	A F N S I S F A H Q L I V N Q M G L F C S I K P T E L V G S G W M S T T A D S
UniRef90_I3JMQ8	D F S A A A I A E Q L T R V D S A L F A K V V P Y Q C L G C V W S Q R D K K E N
UniRef90_J9VVC5	E F D T L E L A R Q L T T I I V S K M F R Q L E P E E L V M T G K K T
UniRef90_UPI0003EDEC5B	T L H P I E I A R Q L T T L L E S D L Y R K V Q P S E L V G S V W T K E D K E I N
UniRef90_UPI0003C4B506	H L E P V E L A E H L T F L E H K S F R R I A F T D Y Q S Y V I H G C L D N N
UniRef90_F1QJM6	D F P A Q D I A E Q L T I I D A E L F F S K V V P F H C L G C I W S Q R D K K E N
UniRef90_UPI000383F1F4	D F S V D D V A E Q L T L L M D V E L F S R L R P F E C L G S V W S Q R D R P G A
UniRef90_UPI0003940E7D	S L S A I E L A E Q I T L L D H I V F R S I P Y E E F L G Q G F M K L D K T E R
UniRef90_K7IZN6	D F K S E Q I A E Q M T L L D A E L F F M K I E I P E V L V W A Q E Q N E E R K
UniRef90_H2KZX7	D F K S A E I A C Q L T F I D S Q L Y H R I E S A E L L W W A Q E Q N E E R K
UniRef90_M3ZSG0	D F P V R D V A E Q L T R L D A E L F V K V E P F H C L G C I W S Q R D K K E N
UniRef90_K1RBH7	F Y K S H D I A E Q M T L L D A E L F F Q K I E I H E V S L W A R E Q S E E L
UniRef90_I4Y5P7	D I D P L E M A R Q L T T I I E S Y T F N R I K P D E E C L I N K N W S G P E E K T H K
UniRef90_UPI000446538	D F S V D E V A E Q L T L L D A E L F F S R V R A C E C L G S V W S Q R D R P G S
UniRef90_L9LAB9	N H S A L E I A E Q L T L L D H L V F F K K I P Y E E F F G Q Q G W M K L E K N E R
UniRef90_UPI000350E31C	N H S A L E I A E Q L T L L D H L V F F K K I P Y E E F F G Q Q G W M K L E K N E R
UniRef90_E9H8K6	T L S A L E I A E Q M T V L D H A I L A S K S E E E L L G Q A W M K P D K L F R
UniRef90_B7QKE9	H F K S E L L A E Q M T L L D A H F H K D I S E E V L I W A K E Q N E E S K
UniRef90_G3WX37	C S D P Y T L A A Q Q L T H V E L R L S H G P E E F V Q A F V H K F S E Q N K
UniRef90_E9C5Q8	S L D A L E I A R Q I T L V D Y E L F R A V E P V E C L E Q A W S K K D K L T R
UniRef90_UPI00035034DF	A F Q A G H V A E Q L T S M E A S L F L R V V P Y E E C L G S V W S R R D K W N R
UniRef90_UPI00045731A8	C S D P Y T L A A Q Q L T H I E L E R L S H I G P E E F V Q A F A H K F S D L K K
UniRef90_Q8ST25	S L P A E E I A K Q Q L T L I E F E I F G K I Q S S E F L N Q S W A K E K T F H L
UniRef90_E9BX06	H S S D Y D I A I Q Q L A H M N A E L L K Q K M S E F R K L A W T K S D R S T K
UniRef90_H2UP70	H L E P E L A E H L T Y L E F K S F C R I S F L D Y Q N Y I R N C C M K D
UniRef90_UPI00045D9CA8	C N D P Y T L A A Q Q L T H I E L E R L N Y G P E E F V Q A F V Q K Y S E R K K
UniRef90_W5UI19	S S S K E V A Y Q M T L Y E W E L F N C V H E H E L I Y H T F G R Q H F K K A
UniRef90_UPI000443E512	C N D P F T V A A Q Q L T H I E L E R L S Y G P E E F V Q A F V H K F S D R K K
UniRef90_T1JM98	C P N P T V L A A Q Q L T H I E L E R L S N G P E E F V Q A F E T S F K D L K K

	250	260	270	280
UniRef90_W9VZZ3	A [V N V R S M S T L S T D I S N L V S D S V L Q E E P K K R A A I I K Q W V K			
UniRef90_W5LBH4	A P T V R A T T Q F N A V A G C G C V V S T V L H Q R H L R P R A R I I Q R W I D			
UniRef90_A8NSC9	P L N V R A V T S L S T V I T G W V A E S I L D E M D L K R R T L L V K F F V K			
UniRef90_L8H1F9	S P N L L R F I R R F N D V S I W V Q N T I L S G K S A K K R A A L V D N F A K			
UniRef90_F0ZRY3	A K N L L K M I E R F N K Y S T G V S T A I L S Q P K L K S R V K L I C R F I K			
UniRef90_S7Q4P6	H K N I K A V T S L S T V I T G W V A E S I L N E L D M K K R V G L V K F F I K			
UniRef90_D3BBH4	A M N I R A A I D R F N Q V T G W V A E S I L N E P D T K R R T A L V K F F I K			
UniRef90_UP1000398FDB1	A Q S I R A T I S Q F N A V T N C V V S T V T R E L K P R Q R A K I L E K W I R			
UniRef90_UP10004622389	P A S V K A L T S L S T A I T G W V A E S I L N E P D T K R R T A L V K F F I K			
UniRef90_I2G3B8	V S H V K S M S A M S T R I T G W I S E C C I L N E V D A R K R R T Q L L K F F I K			
UniRef90_L8GQN2	A P N V K M I R R F N E I S N W V A T S I V G S E K I R Q R V K V M T K F L R			
UniRef90_J4I062	S D N F S I I Q L S N K I A H W V A E S I L N E A D A K K R R A N I I K H F I K S K Q			
UniRef90_UP10004449535	P P N V R A V S S L S T V I T G W V A E S I L N E A D A K K R R T A L V K F F I K S K Q			
UniRef90_UP10004414F8A	T E G I K A V I T T H N A L S D W V I E T I I T S E D P K K R R A Q I L R F F I Q			
UniRef90_J3Q9J6	A [V N V R A M S A M S T K M T G W F T T E T I L N E D D L R K R R T Q I L K F L K K			
UniRef90_J4HT24	P V N I K A V T S L S T A I T G Y V A E S I L N E D D L R K R R T A L V K F F I K K			
UniRef90_UP10002C3D47C	T P Q I M R L V H S T Q R L F G Y V Q T T I L A V N D V S K R A I L L H Y F L V			
UniRef90_W7I085	A [V N V S A M T H L S T D M A H W V A F T I L N D A D P K R R A A V I K H W K K			
UniRef90_H0GX6	S S G L S G F I S F S N K L T N F I S Y S V V K E A D T K R R A K L L S H F I F			
UniRef90_UP10003C88E2C	A P T V R A T V T Q F N T V T G C V G S V L G A P G P S Q R A Q R L E K W I R			
UniRef90_E2AT28	S P N L L K M I R H T T N F T R W L E K I V D A Q N F K E R V A I V L R A I E			
UniRef90_M5BU90	G N S I R A M S T L S T A I T G W V T E I I L D E Q D T K K R R A A V I K H W K K			
UniRef90_S8BS54	A A N V L E M T K L S T Q M A L W I A F T I I L N D P D P K K R R A A V I K H W K K			
UniRef90_P0CF32	S P G L N E F I S F K L T N F I S Y S V V K E A D T K R R A K L L S H F I F			
UniRef90_I3M111	S P T V R A T V A Q F N A V T G C V G S V L G A P G L A Q R A Q R I E K W I R			
UniRef90_D2VTE0	S K H V L L S S E F F N K L S N W F S C Q I I T E D S L R E R R A K L T K L M K			
UniRef90_E7F4B2	S P N L T Q F T E H F N N M S Y W V R S I I I Q Q E K A Q D R E R K L L L K F I K			
UniRef90_M3CY49	A K H I R K M C L N T D L A N F V A D S I I L G P D D A K R R A N V I K H W A K			
UniRef90_UP10004576117	N P T T M E R S I V A L C N G I S Q W V Q L M V L S R P T P Q L R A E V F T K F I L			
UniRef90_A4IJ06	A P T V R A T I S Q F N A V T N R V I T S I I L C S P G L R R A R I V E G W I A			
UniRef90_G3Q5Z8	N P T T M E R S I V A L C N G I S Q W V Q L M V L S R P T P Q L R A E V F T K F I L			
UniRef90_Q9Z1S3	A P T T M E R S I V A L C N G I S Q W V Q L M V L S R P T P Q L R A E V F T K F I H			
UniRef90_UP10002035EE5	T P Y I M K T S Q H F N E M S N L V A S Q I M N Y A D I S S R A N A I E K W V A H			
UniRef90_F7B9R2	T P Y I M K T S Q H F N E M S N L V A S Q I M N Y A D I S S R A N A I E K W V A H			
UniRef90_W4KLW8	N M A A F C A T H N K L S D W V W K S I I L E I D G L S K R A S A V D F W I R			
UniRef90_L8H734	A P N V L E L I R R F N L M S A S V A M R I L R E K E L A Q R V R V M N F F I R			
UniRef90_Q3UY15	S P T V R A T V A Q F N A V T G C V G S V L A A P G L S Q R A Q R I E K W I R			
UniRef90_W1QL81	S K S I A N F V R N C N V I T H F V I Y M I L R Q R D I Q A R A E N I K Y F I I			
UniRef90_X8JI23	G S S I R A M S T L S T A I T G W V T E I I L D E Q D T K K R T G L L K F I K			
UniRef90_F2U0C8	S P N V L A F I R H F N H V S R W A I R T I I L E M S D L E E R R Q L V L Q S F I E			
UniRef90_W4ZIM3	A P N V L A V T R R F N E V S K L V S S E I R Q K S V A A R A L A I E R W A G			
UniRef90_W5KHV0				
UniRef90_A0A034V411	S P N L N K F T E H F N N M S F W A R S K I L T L G D A K E R E K H V V K F I K			
UniRef90_F7AG79	S P N L T Q F T E H F N N M S Y W V R S I I I L Q E K A Q D R E R L L L K F I K			
UniRef90_D3BOY3	A P N I Q L S T E H F N R I S Q F V I H E A I Q G K S S K H R A S I I T H L I A			
UniRef90_UP10002C3E311	S P N L C M L I D H F N S I T N W V I S T I V D E P S V K Q R G V I V K K F V S S R O			
UniRef90_UP1000333EDB0	S P T V R A T V A Q F N A V T G C V L G S V L V L G A P G L S Q R A Q R I E K W I S S R O			
UniRef90_H2TB05	A P T V R A T I S Q F N A V T N R V I T S I S L C P F A P S S P A R I I E E R W I D S S R O			
UniRef90_E2C840	A A T V L A T V N Q F N A V S L R V I S T I I L T D T T L K E R R A R I L E T W I D S S R O			
UniRef90_U6IMC8	S L D F S N K F L K W L I W S I M C H R A L E D R R V I V L Q R V L D S S R O			
UniRef90_F1LM43	T P Y I M K T T R H F N H I S N L I A S E I L R N E E V S A R A S T I E K W V A I			
UniRef90_M3WGI3	T P Y I M K T T R H F N H I S N L I A S E I I R N E D I N A R V S A I E K W V A I			
UniRef90_UP10003F16572	C P T V R A T V T Q F N T V T G C V L G S V L V L G A P G L P Q R A Q R I E K W I R			
UniRef90_Q0UTD8	A V N V K A M S T L S T D L A N L V A D T I L H E D A K K R R A A I I K Q W V K K			
UniRef90_L5K9X4	S P N L T Q F T E H F N N M S Y W V R S I I I L Q E K A Q D R E R L L L K F I K			
UniRef90_Q55FD8	G P N I M S V V G L F N K I S N W V S F T I V N Q P K L R D R A V V Y G K M V K T			
UniRef90_A7TNK1	S K S I S H F I S N A N K L T F V S Y I I V T Q P E V V K K R A K L I Q F W I T Q			
UniRef90_F2UC42	S P N V K M I E H F N H V S M W A A T C V V C T P K L K H R V K V M A K L I Q			
UniRef90_G3Q601	A P T V R A T I S Q F N A V T N R V I T S I I L C P S S P G R R I V E G W I A Q			
UniRef90_B3MSA2	S P N L N K F T E H F N K M S F W A R S K I L R L Q D A K E R E K H V N K F I K			
UniRef90_UP10001E44F72	S P Q L L K I D H S T M L T Y W V R C V E T A S L D E R V Y M F S R V L E			
UniRef90_B0EBI5	T P N V I A M Q M L T N K I S Y V V Q N I I L S L V K H R I F A I E F F I K			
UniRef90_UP100046C1420	A P H I L L M T K R F N D V S C L V A S E I I L R R P S L C A R V A A I E K W A A			
UniRef90_S0EE03	A P N V R A M I H F T N R L S Y V V I E T I I L Q C R A K T R R G H I I E Q W I K			
UniRef90_I3JMQ8	S P T T R A T I A Q F N A V T N Q V I G S C C R P T S P A Q R A R I I E K W I K			
UniRef90_J9VVC5	V P E L K A L S T H S N Q V T G W V A D S I I L N E G D A K R R A G L L K F F I K			
UniRef90_UP10003EDEC5B	S P N L L K M I R H T T N L T L W F E K P R K S T F S L K			
UniRef90_UP10003C4B506	N P T L E R S I A L F N G I S K W V Q L M V L S K P T P Q Q R A D V I T K F I N S S R O			
UniRef90_F1QJM6	V S T V R A T I A Q F N V T N C V I T S I I L C H R S S P T Y R A K I I E K W I S S R O			
UniRef90_UP1000383F1F4	T P T V R A T V T Q F N T V T G C V L G S V L V L G P G L P Q R A Q R L E K W I S S R O			
UniRef90_UP10003940E7D	T P Y I M K T T Q H F N D M S N L V A S Q I M T H T D V A S R A S S I E K W I A K W A			
UniRef90_K7IZN6	S P N L T R F T E H F N K M S Y W A R S R I R M E N E A K D R E K Y V V K F I K			
UniRef90_H2KZX7	S K N L V N F T E Q F N L L S F W V R T L I T Q G T Q K E R R H M M K F V K			
UniRef90_M3ZSG0	A P T V R A T I S Q F N A V T N R V I T S I I L C H A S P V H R A R V I E W W I A			
UniRef90_K1RBH7	S P N L T E F T E H F N K M S Y W C R T Q I I L T H D E A K D R E R Y F L K F I K			
UniRef90_I4Y5P7	A H N I R T M I Q L S N R L A A W V T H S I I G M K D D V K K R A S M I K W F I Y			
UniRef90_UP1000446538	S P T V R A T V T Q F N A V T G W V L G S V L V L G P G L A T R A L R L E K W I R			
UniRef90_L9LAB9	T P Y I M K T T K H F N D V S N L I A S E I I L R N E E I I N A R V S S I E K W V A			
UniRef90_UP1000350E31C	T P Y I M K N T K H F N D V S N L I A S E I I L R N E E I I N A R V S S I E K W V A			
UniRef90_E9H8K6	A P H I L L I T K R F N E V S R L V A S E V I R R P N L A A R L A V I E K W T A			
UniRef90_B7QKE9	S P N L T K F T E H F N K M S Y W A R S C L K Q N D A K E R R V V V K F I K			
UniRef90_G3WX37	T N N L E A Y V K W F N R L C Y L V A T E I C M P A K K Q R A Q V I E F F I D			
UniRef90_E9C5Q8	A P N V L A F I R F R F N D S L L V Y S C V L P D I K A R A L V L R K F M L			
UniRef90_UP100035034DF	C Q S V R E T V Q H F N R L S G A V T S S C D P Q L K P Q Q R A R I I E K W V R			
UniRef90_UP100045731A8	T S N L E A Y V E W F N R L S Y L V A T E I C M P V K K H R R A R V I E Y F I D			
UniRef90_Q8ST25	UniRef90_E9C5Q8	T P Y I M K T T Q H F N D M S N L V A S Q I M T H T D V A S R A S S I E K W I A K W A		
UniRef90_E9BX06	A P N V L A F I R F R F N D S L L V Y S C V L P D I K A R A L V L R K F M L			
UniRef90_H2UP70	T S H V L A M I E F F N R V S V W V A Y S I I L K E K K L K R R V T T M S K M V S			
UniRef90_UP100045D9CA8	T R N L E A Y V E W F N R L S Y L V A T E I C M P V K K H R R A R M I E Y F I D			
UniRef90_W5UI19	T A N L D L F R R F N E I Q L W V T E V C L C S T L S K R V Q L L K K F I K			
UniRef90_UP1000443E512	A S N L E A Y V D W F N R L S Y L V A T E I C M P V K K H R R A R V I E F F I D			
UniRef90_T1JM98	T K N L E S Y I Q W F N R L S Y F V A T E I C M H L K K K H R R A R V I E Y Y I E			

	290	300	310	320
UniRef90_W9VZZ3	I A N K C L D R N F D T V M A I V C A L D S T N I K R M K K T W E C V P Q K A			
UniRef90_W5LBH4	V A Q E C R I R K N F S S L K A I V S A L Q S S N P I Y R L K R A W A C V H K D N			
UniRef90_A8NSC9	L A D R C V T L Q N F S T S R S I L A A L D S S T I S R L R Q T W A G L P Q K Y			
UniRef90_L8H1F9	A A V A F R K L N N F G N V M Q I V S A M E G A A V H R L Q K T F E R V R P K S			
UniRef90_F0ZRY3	I A Q H C R E L N N F H L L T A F M A G I R N S N V I R L R L T W A K V P K K Y			
UniRef90_S7Q4P6	V A D R C S T L N N F S T S R S I L A A L D S S T I S R L H Q T W M G V P Q K N			
UniRef90_D3BBH4	V A K C L R S Y S N Y H T L M A I L S G L N E A P V F R L K H T F A E M K P K V			
UniRef90_UPI000398FDB1	I A R Q C R I L N N F S S L K A I V S A L Q S T S V Y R L K K T W A C V P K D I			
UniRef90_UPI0004622389	L A D R C V S L K N Y S T P R S I L A A L D S S T I A R L H Q T W V G L P Q K N			
UniRef90_I2G3B8	L G D R C E Q L N N F H T L M A I Q C A L N S S T I A R L K K T W D G L P T K Y			
UniRef90_L8GQN2	L A D I L R K M N N F N T M V A V A G I N A S A V H R L K W T K E E V M K G I			
UniRef90_J4I062	T A E N Y S S M A A I V S A G I V R Q P I R R L R T W E R V N A R Y			
UniRef90_UPI0004449535	V A D R C T M L N N F S T S R S I L A A L D S S T I S R L H Q T W A G V P Q K Q			
UniRef90_UPI0004414F8A	V A E Q C R N L H N L S S M T A I V A G I N S P A I R R L K R T W E L V T A R F			
UniRef90_J3Q9J6	L G A K L L E I Q N Y N A L M S V M S A L N S S T I L R L K R T W E G V G N K A			
UniRef90_J4HT24	V A D R C V S L N N F S T P R S I L A A L D S S T I S R L Q T W T G L P Q K N			
UniRef90_UPI0002C3D47C	V A D E M R K L N N F E G M K A V Y S A L M S T P I F R L K D T W D S I T T E D			
UniRef90_W7I085	V A D K L F E M A N Y N T L M A V M C S L N T S T I R L K K T W E L V S P R S			
UniRef90_H0GXY6	I A E Y C R R F N N F S S M T A I I S A L Y S S P I Y R L K E K T W L V V M P Q T			
UniRef90_UPI0003C88E2C	I A Q H C R E L R N F F S S M T A I I S A L Q S N P I Y R L K F R S W G A L S R E P			
UniRef90_E2AT28	I M V G L Q D L N N F N G V L A I F S A L E S A S V F W L K F S D K N E R S P N			
UniRef90_M5BU90	V A D H C D D L S N F S T L R S I L A A L D S S T I S R L S K T W M G L S A K N			
UniRef90_S8BS54	I A D K L F E M S N F N T M M A I I C A L N N S T I V R L K K T W E L V S P K T			
UniRef90_P0CF32	I A E Y C R K F N N F S S M T A I I S A L Y S S P I Y R L E K T W Q A V I P Q T			
UniRef90_I3M11	I A Q C C R E L R N F F S S M T A I I S A L Q S N P I Y R L K F R S W G A V S R E P			
UniRef90_D2VTE0	I A V A M F R L N N F N S L M A L N S V Y S S S G V F R L K Y A I G E I D E G T			
UniRef90_E7F4B2	I M K H L R K L N N F N S Y L A I I S A L D S A P I R R L E W Q K Q T S E G			
UniRef90_M3CY49	UniRef90_UPI0004576117	I A Q E C R Q L K N F N S S L R A I I S A L Q S N P I Y R L K R T W E L V S K K T		
UniRef90_A4IJ06	V A Q K L L Q K L Q N F N T L L M A V I G G L C H S S I S R L K E T S A C V P H E V			
UniRef90_G3Q5Z8	V A Q K L H Q L Q N F N T L L M A V I G G L C H S S I S R L K D T S A H V S H D V			
UniRef90_Q9Z1S3	I A Q E C R Q L K N F N S S L R A I I S A L Q S N P I Y R L K K T W A A V V G R E S			
UniRef90_UPI0002035EE5	V A Q K L H Q L Q N F N T L L M A V I G G L C H S S I S R L K E T S S H V P H E I			
UniRef90_F7B9R2	I A H E C R I L L K N F N S S L R A I I S A L Q S N P I Y R L K K T W A A V V P K D R			
UniRef90_W4KLW8	V A D I C R C L H N Y N G V L E I T S A L N R S A I Y R L K K T W A K V S K Q T			
UniRef90_L8H734	I A E K C K S L H N Y S S M T S I V A A L S S S L I S R L H F T W V H T A R E S			
UniRef90_Q3UY15	V A V E C Q K V Q N F N G M V E I L S A L Q S N P I Y R L K R S W G A V S R E P			
UniRef90_W1QL81	V A D Q R C R E L R N F F S S M T A I I S A L Q S N P I Y R L K K T W V L V P K H L			
UniRef90_X8J123	V A D H C H E L S N F S T L R S I I L A A L D S S T I S R L K D T W M G L S A K N			
UniRef90_F2U0C8	V L F E L R H L N N F N S L M A L K E A L R N S A I S R L K H T W A A V P R K M			
UniRef90_W4ZIM3	V A D I C R Q M H N F N S V L E I T S A L M N S S V Y R L K K V W E K V P K Q T			
UniRef90_W5KHW0				
UniRef90_A0A034V411				
UniRef90_F7AG79				
UniRef90_D3BOY3				
UniRef90_UPI0002C3E311				
UniRef90_UPI000333EDB0				
UniRef90_H2TBU5				
UniRef90_E2C840				
UniRef90_U6IMC8				
UniRef90_F1LM43				
UniRef90_M3WGI3				
UniRef90_UPI0003F16572				
UniRef90_Q0UTD8				
UniRef90_L5K9X4				
UniRef90_Q55FD8				
UniRef90_A7TNK1				
UniRef90_F2UC42				
UniRef90_G3Q601				
UniRef90_B3MSA2				
UniRef90_UPI0001E44F72				
UniRef90_B0EBI5				
UniRef90_UPI00046C1420				
UniRef90_S0EE03				
UniRef90_I3JMQ8				
UniRef90_J9VVC5				
UniRef90_UPI0003EDEC5B				
UniRef90_UPI0003C4B506	V A Q K L L H L Q N F N T L M A V V G G L S H S S I S R L K E T H S H L S S E V			
UniRef90_F1QJM6	V A Q E C H Q L R N F F S S L R A I I L S A L Q S N P I Y R L K K T W A V I S R E S			
UniRef90_UPI000383F1F4	V A Q R C R E L R N F F S S L R A I I L S A L Q S N P I Y R L K R S W G A V S R E P			
UniRef90_UPI0003940E7D	V A D I C R C L H N Y N G V L E I N A A L E G S A I Y R L K K T W A K V C K Q T			
UniRef90_K7IZN6	I M K H L R K L N N F N S Y L A L L L S A L D S A P I R R L E W Q K H I T E G			
UniRef90_H2KZX7	I M K H L R E M C N F N S Y L A I L S A I M S T P I A R L L E W S K N I K D			
UniRef90_M3ZSG0	V A Q E C R Q L K N F N S S L K A I L S A L Q S N A V Y R L K R T W A A V S R E S			
UniRef90_K1RBH7	I M K H L R K L N N F N S Y L A I L S A V D S A P I V R R L E W P R Q N L E A Y I			
UniRef90_I4Y5P7	V A E R C R S L L N N F S T M A G I I A G I N S P P I V R R L K R T W D Q V S Q K A			
UniRef90_UPI000446538	I A Q R C R E L K N F N S S L H A I L S A L Q S N P I Y R L K R S W G A V S R E P			
UniRef90_L9LAB9	V A D I C R C L H N Y N A V L E I T S S M L N R S A I F R L K K T W L K V S K Q T			
UniRef90_UPI000350E31C	V A D I C R C L H N Y N A V L E I T S S M L N R S A I F R L K K T W L K V S K Q T			
UniRef90_E9H8K6	V A D I C R C L H N Y N G V L Q C S A F T N S G I V F R L K K T W E K L S K T T			
UniRef90_B7RKE9	I M K H L R K I N N F N S Y L A I L S A L D S A P I V R R L E W Q R N I T E G			
UniRef90_G3WX37	V A R E C F N I G N F N S L M A I I S G M N M S P V I S R L K K T W S K V K T A K			
UniRef90_E9C5Q8	I A Q A L R E L Q N F N S L V I S V A A M N S S P I H R L R K T M E L V P E K V			
UniRef90_UPI00035034DF	V A E E C R S L R N F F S S V Y A I I T A L Q S T A V H R L K V W A E T S R E I			
UniRef90_UPI00045731A8	V A R E C F N L G N F N S L M A I I S G M N M S P V I S R L K K T W A K I K T A K			
UniRef90_Q8ST25	V A K N L R S Y N F H T L M A I I S G M N M S P V I S R L K F T Q Q E L K P K I			
UniRef90_E9BX06	I A C F L R D L N D F G Q V M S I I A G L S M A S I K R L K W T F R L M P R R T			
UniRef90_H2UP70	V A E C L H I H N Y N T L M A V V G G L C H S S I S R L K D T T S H V H S E V			
UniRef90_UPI00045D9CA8	V A R E C F N L G N F N S L M A I I S G M N M S P V I S R L K K T W A K V K T A K			
UniRef90_W5UI19	I A A H C K E F R N L N S F F A I I M G L S N P A V S R L K S Q T W E K L P S K F			
UniRef90_UPI000443E512	V A R E C F N L G N F N S L M A I I S G M N M S P V I S R L K K T W S K H Q M D P			
UniRef90_T1JM98	T A K E C F N L G N F N S L M A I I A G M N M S P V I S R L K K T W A K V N T A K			

	330	340	350	360
UniRef90_W9VZZ3	K T I F D E M C K I V D R N Y A V L R Q R I Q S Q L P P C L P F I G V Y L T D L			
UniRef90_W5LBH4	M Q V F E E L S D I F S D H N N Y L T S R E L L M M Q G T I P Y L G T F L T D L			
UniRef90_A8NSC9	K L Q M E S L R K L H S R N Y H E Y R S R L R N T A P P A V P F L G L Y L T D V			
UniRef90_L8H1F9	R T K Y A E L E L M S S S G S Y K F Y R E A A A T P P I V P Y M G M Y L T D L			
UniRef90_F0ZRY3	L H I L E D L E K I I M S M S F K E F R Q K M A E T I P P C I P Y L G V Y L K D L			
UniRef90_S7Q4P6	K L Q L E S L R K L H A R N Y H E Y R S R L R N T A P P A V P F L G L Y L T D D I			
UniRef90_D3BBH4	Q K L S S E L Q A M M T V E G N H D T Y R S T D P K H P C I P Y L G V F L K D I			
UniRef90_UP1000398FDB1	M L M F E D L S E I F S D C D H H C S A R L Q G V T Q G T V P Y L G T F L T D D L			
UniRef90_UP10004622389	K L Q L E S L R K L H A R N Y H E Y R S R L R N T A P P A V P F L G L Y L T D D L			
UniRef90_I2G3B8	R G M M D R Q R R A H T R N Y A G Y R A R L R N T T P P A I P F L G L F L T D D L			
UniRef90_L8QGN2	W P Q F A E C O E R L L M S N S Y K T Y R G A L F Q A R P P C I P Y L G V Y L T D D L			
UniRef90_J4I062	M T Q D C S T L D T N F N N Y R S T L A R I A P P A V P F L G V Y L T T D L			
UniRef90_UP10004449535	K L Q L D S I R K L H A R N Y R E Y R T R L R N T A P P A V P F L G L Y L T D V			
UniRef90_UP10004414F8A	I I T F D S M E K N L E K N F N S Y K V A M S K Q P P A V P F L G V Y L T A L			
UniRef90_J3Q9J6	R V Q F E N M N K A H Q R N Y A E Y R A T L R H A R T P P C I P F L G V Y L T D M			
UniRef90_J4HT24	K L Q L E A L R K L H A R N Y H E Y R T R L R N T R P P A V P F L G L Y L T D V			
UniRef90_UP10002C3D47C	K E I N G R L I S E L L C D Q N F S K L R E V M K I A V S P P C I P F L G S T M G D L			
UniRef90_W7I085	K A A L E K L R S V V D C N Y T E E L R N R L R N Q L P P C I P F L G T Y L T D M			
UniRef90_H0GXY6	R D L M H S L N R R L M D P K K N F I N Y R K E L H N V P C V P F F G V Y L S D L			
UniRef90_UP10003C88E2C	L S T F R K L S Q I F S D E N N H S S R E I K L P P G P I P Y L G T F L T D L			
UniRef90_E2AT28	L L K M I R H T T N F T S D R Y V R K Y K E V L Q L I P P C I P F L S I Y L I N I V			
UniRef90_M5BU90	K T R L E N L R K L H T R N H Y E Y R A R L R S V R G H A V P F L G L Y L T D V			
UniRef90_S8BS54	K A A L E K L R S V V P S R N Y N E L R T R T R N Q L P P C I P F L G T Y L T D M			
UniRef90_P0CF32	R D L L Q S L N K L M D P K K N F I N Y R N E L H S A P P C V P F F G V Y L S D L			
UniRef90_I3M111	L S T F R K L S Q I F S D E N N H S S R E I K L P P G P I P Y L G T F L T D L			
UniRef90_D2VTE0	K K D F T D A I A V M S N D S S S K R Y R T Y I K Q E A K P P Y L G I Y L T D L			
UniRef90_E7F4B2	L E E Y C T L I D S S S S F R A Y R A A L A E V E P P C I P Y L G L I L Q D L			
UniRef90_M3CY49	R A R L E E L N Q V I D I N Y T K L R R L D A P T S S C I P F L G I Y L T D D L			
UniRef90_UP10004576117	N K V L M T E M T E L S D I F S D H D N Y Q L Q K D M G V M Q G T V P Y L G T F L T D L			
UniRef90_A4IJ06	N K V L N E M T E L S C R N Y D N Y R R V Y N E C T N F K I I P I L G V H L K D L			
UniRef90_G3Q5Z8	M N T F D H L S E T F P N E N C C A G S E S R P S F S S G V V P Y L G T Y L T V L			
UniRef90_Q9Z1S3	N K V L G E M T E L S C R N Y D N Y R R V Y S E C T H F K I I P I L G V H L K D L			
UniRef90_UP10002035EE5	U N K V L M T E M T E L S D I F S D H D N Y Q L Q K D M G V M Q G T V P Y L G T F L T D L			
UniRef90_F7B9R2	K A L M D K L Q K T V E G R F K N L R E T L K N C N P P A V P Y L G M Y L T D L			
UniRef90_W4KLW8	H L E S L L K F N V P A G N Y S Y Y R S V L L D R V D G P C V P F I G M Y V K N M			
UniRef90_L8H734	R A V Y E D F A A F T N A N Y R V Y R E T V K C A E P P C L P Y L G I Y L S D L			
UniRef90_Q3UY15	L S V F R K L S Q I F S D E D N H L S S R P S K L P P G P V P Y L G T F L T D D L			
UniRef90_W1QL81	V A N F E K M D Q L M Y S E Y R S I L K F V N E D S E P C L P F L G M Y L S D L			
UniRef90_X8JI23	K T R L E N L R K L H T R N H Y E Y R A K L R S V R G H A V P F L G L Y L T D D L			
UniRef90_F2U0C8	E K F A A I E E V G G S N H A N L R A T I A Q A S P P C I P F L G L Y L T D D L			
UniRef90_W4ZIM3	K T L L D K L Q V L V D G R F K N M R D A L H R I D P P C V P Y L G F Y L T D D L			
UniRef90_W5KHW0				
UniRef90_A0A034V411	I K E Y C L L I D S S S S F R A Y R T T L A A T S P P C I P Y I G L V L Q D L			
UniRef90_F7AG79	L A E Y C T L I D S S S S F R A Y R A A L A E V E P P C I P Y L G L I L Q D L			
UniRef90_D3BOY3	M N S F E Y L Q K I V T P N Y I S L R H I M T T V Q P P C I P F L G T Y L K D L			
UniRef90_UP10002C3E311	M Q S L E R V T V P T G S Y Q V Y R A D I K A H Q N F P C I P F F G V Y L Q D L			
UniRef90_H2TBU5	L S T F R K L S Q I F S D E N N H P G C L S S K L P S G P I P Y L G T F L T D L			
UniRef90_E2C840	V A V F D Q L C Q T F P D E F C R T G L C R Q C L S S G G V V P Y L G T Y L T V L			
UniRef90_U6IMC8	H E L F R E L E R I F S E E N A W T Q A G N I Y G Q T I P Y L G T F L T D L			
UniRef90_F1LM43	R A H H R E L L A S P E D Y D Y Q Y H Q V H R I D P P A V P F I A V G Q T R L			
UniRef90_M3WGI3	K S L F D K L Q K L V D G R F K N L R E T L R N C D P P C V P Y L G M Y L T D D L			
UniRef90_UP10003F16572	K A L I D K L Q K L V E G R F K N L R E A L L K N C D P P C V P Y L G M Y L T D D L			
UniRef90_Q0UTD8	L S T F R K L S Q I F S D E N N H L S S R E I K L P P G P V P Y L G T F L T D D L			
UniRef90_L5K9X4	K T R L E E L K A I T D S S S S F R A Y R A A L A E V E P P C I P F V G I Y L T D D L			
UniRef90_Q55FD8	L A E Y C T L I D S S S S F R A Y R A A L A E V E P P C I P Y L G L I L Q D L			
UniRef90_A7TNK1	K D N L D T L E E L M S T Q M K N Y R A D L A A A S P P A I P F M G F H L S D L			
UniRef90_F2UC42	V E N L K A L N N L M M P F L N Y R E K V G S I Q P C V P F F G V F L S S D L			
UniRef90_G3Q601	Q G T L A R L Q E L M S M H S F L K F R Y Y C R Q L K P P V I P Y L G M Y L S D L			
UniRef90_B3MSA2	M N T F D H L S E T F P N E N C C F Q V Q P K S F S S G V V P Y L G T Y L T V L			
UniRef90_UP10001E44F72	V S S F C T L I D S S S S F R A Y R Q A I A E T N P P P C I P Y L G L V L Q D L			
UniRef90_B0EBI5	Q V W Y E K F K K L C N P H W E M I E R L K S I N P P P C I P F F G H Y L S K I			
UniRef90_UP100046C1420	I K L L T E F Q S L N N F K K L R E I T A L C E P P C I P F L G S T L G D L			
UniRef90_S0EE03	R Q T I E K L Q N I V D G R F R S L R D A L H R C D P P C I P Y L G L Y L T D D L			
UniRef90_I3JMQ8	L H D L E A L K G Q L P S H N F K C L R T S L R C S K L P P C I P F L G M Y L T D D L			
UniRef90_J9VVC5	V A A F D N L C E T F P D E N C C P L S R Q M S T S S G A V P Y L G T Y L T V L			
UniRef90_UP10003EDEC5B	K I L I E R L R G I I E H N A A Y R A R L R Q T P T P C I P F L G L I L T D D L			
UniRef90_UP10003C4B506	T K D W N E M T E L V N G N Y C N Y R K A F A D S V G F K I P I L G V H L K D L			
UniRef90_F1QJM6	M A V F E H L C D T F P D E N C S P T C K H M S S S G E V P Y L G T Y L T V L			
UniRef90_UP1000383F1F4	L S T F R K L A Q I F S D E N N H T G P S S K L P P G P I P Y L G T F L T D D L			
UniRef90_UP10003940E7D	K G L R D R L Q K I V E G R F K N L R E T L K N C N P P C I V P Y L G M Y L T D D L			
UniRef90_K7IZN6	L K E Y C A L I D S S S S F R A Y R Q A I A E T Q P P C I V P Y I G L V L Q D L			
UniRef90_H2KZX7	A L K E H T A V M D T A Q S Y K N Y R A L Q T A K P P C I V P Y I G I I L Q D L			
UniRef90_M3ZSG0	M T V F D H L C E T F P D E N C N G E I L V E S S C G V V P Y L G T Y L T V L			
UniRef90_K1RBH7	F Q A L K E F C Q L I D S S S F R A Y R Q A I A E T E P P C I V P Y I G L I L Q D L			
UniRef90_I4Y5P7	L N I H Q S L T I D S T K N F A N Y K Q L L R N I N P P C I V P F L G V Y L T Y L			
UniRef90_UP1000446538	L S A F K K L S Q I F E N N Y F S C R E I L S Q E E A A E G P Y L G T F L T D D L			
UniRef90_L9LAB9	K A L I D K L Q K L V E G R F K N L R E A L L K N C D P P C I V P Y L G M Y L T D D L			
UniRef90_UP1000350E31C	K A L I D K L Q K L V E G R F K N L R E A L L K N C D P P C I V P Y L G M Y L T D D L			
UniRef90_E9H8K6	R Q T I L D K L Q S I T D G R F R N L R D A L H R C D P P C I V P Y L G M Y L T D D L			
UniRef90_B7QKE9	L K E Y C A L I D S S S S F R A Y R Q A I S E T T P P C I V P F F S L L I K D I L			
UniRef90_G3WX37	F F I L E H Q M D P T G N F Y H R S L T A H S N R E K I V I P F F S L L I K D I L			
UniRef90_E9C5Q8	R Q Q F K A L E D I L V S S N Y K Q Y R T R L H N L D P P C I V P Y I G V Y L S D L			
UniRef90_UP100035034DF	L R S Y Q E M R E V F C E K D N Y A R M R E L L F Q P H D V P Y L G V F L T D D L			
UniRef90_UP100045731A8	F D I L E H Q M D P S S N F Y N Y R T T A H S S R E K I V I P F F S L L I K D I L			
UniRef90_Q8ST25	Q K I S S E L Q T L M N H E A Y R T E L S N V D P K Q S C I P Y L G V Y L K D L			
UniRef90_E9BX06	I K R L E D L E K E M E R S Y S V Y R A A L V G A Q G A R I P F L G V T L S D L			
UniRef90_H2UP70	T K V L N E M T D L S C R N Y D N Y R Q A Y N R C T G F K I P P F F S L L I K D I L			
UniRef90_UP100045D9CA8	F D I L E H Q M D P S S N F Y N Y R T T A H S S R E K I V I P F F F S L L I K D I L			
UniRef90_W5UI19	K K V Y V E Y E N L M D P N H R A Y R L T V A K L D P P I V P F M P L L I K D M			
UniRef90_UP1000443E512	S S N F Y N Y R T A L R G A T Q R S I T A N S S R E K I V I P F F F S L L I K D I L			
UniRef90_T1JM98	L E V L E H Q M D P T S N F M W R S E G A V D Q R E K I V I P F F F S L L V K D L			

370 380 390 400

UniRef90_W9VZZ3	T M V D S A N P S T T E G G G A P V I N L D K H M K T A R I I S E L Q K F Q I
UniRef90_W5LBH4	T M L D T A P D V E G G L I N F E K R R R E F E V I A Q I K L Q S A
UniRef90_A8NSC9	T F C C R E G N P S H R P N P N K K L I N F N K Y H K L A R I V Q D M Q R F Q V
UniRef90_L8H1F9	M T L D E V H K N M L E P S Q P T Y I N F T K R V Q I A S V M K K I L E Q Q S A
UniRef90_F0ZRY3	T F I E E G N P D T I N S L I N W S K K K L I F N I V S I Q R C Q Q V
UniRef90_S7Q4P6	T F C C R E G N P S H R A S P E K K L I G Q P T D G N L K Q S Q K V Y G V L K V I R N F Q K N
UniRef90_D3BBH4	T F F Q E S S I G Q P T D G N L K Q S Q K V Y G V L K V I R N F Q K N
UniRef90_UP1000398FDB1	V M L D T A L Q D Y L E G G L I N F E K R R R E F D V I A Q I K L Q S S
UniRef90_UP10004622389	T F C C R E G N P S H R K A P E K K L I N F N K Y H K L A R I V Q D M Q R F Q V
UniRef90_I2G3B8	T F C C H E G N A P T R S N P E K K L I N F D K Y I K I S R I V G E V Q R F Q V
UniRef90_L8GQN2	T F I E E D G N P D Y V N E L I N F S K R S I Y T V I A K I Q Q F Q L
UniRef90_J4I062	T F I H D G A E E D K L A G M I N F R K R Q K A A E I L Q D I K R W Q S K
UniRef90_UP10004449535	T F C C R E G N P S H R A S P D K K L I N F N K Y H K M A R I V Q D M Q R F Q V
UniRef90_UP10004414F8A	T F N Q D G A K D N I Q G H G P M L I N F Q K R H K A A E I L R E I K R Y Q A T
UniRef90_J3Q9J6	T F C C H E G N P T H R D P G V Q L I N F D K Y Q K M T K I M N E I E R F Q A
UniRef90_J4HT24	T F C C R E G N P S H R K S P D K R L L I N F N K Y H K L T R I V Q D M Q R F Q V
UniRef90_UP10002C3D47C	V F A D D G N K R V G E D K L I N W F K V R Q I G N I K E I M V K Q A V
UniRef90_W7I085	V F L V D G N P E K K P F P G P T G I N F T K Y L T M I K M I Q E L Q S F Q V
UniRef90_H0GXY6	T F T D S G N P D Y L I Q D E K K Y V I N F N K R L R L V D I L Q E I I Y F K K T
UniRef90_UP10003C88E2C	V M L D T A L P D M L E G D I N F E K R R K E W E I L A R I Q Q L Q R R
UniRef90_E2AT28	M H L E E G N R D Y L P E N P N L I N F N K W R K V A E I I G E I Q L Y Q N K
UniRef90_M5BU90	T F C C R E G N P D K R I D N S R T L L I N F D K Y R R L A A I A E D V Q R F Q V
UniRef90_S8BS54	V F F E D G N A A K K P L P G E D P V I N F T K W T L I T K M L E I Q H F Q V
UniRef90_P0CF32	T F T D S G N P D Y L V H D E K K Y I N F N K R S R L V D I L Q E I I Y F K K T
UniRef90_I3M111	V M L D T A L P D M L E G D I N F E K R R K E W E I L A R I Q Q L Q R R
UniRef90_D2VTE0	T M I E D G N P D V I K H P K T Q L I N W K K R Q L V A N T I S E V M Q Y K N P
UniRef90_E7F4B2	T F V H L G N P D F I L E G K V I N F S K R W Q Q F N I L D S M R R F Q Q V
UniRef90_M3CY49	T F V V A G N S K R R E G A V S V I N F D L Y M R M A K L V S H M Q R F Q A
UniRef90_UP10004576117	I S L H E A L P D Y V E D T K I N V N K L Q T L Y N H I N E L V Q L Q N T
UniRef90_A4IJ06	I A L H E A M P D F L E D S K I N V P K L H S L Y N H I N E L I Q L Q N I
UniRef90_G3Q5Z8	T M L D T A L T D T V E G G L I N F E K R R R E F E I L S Q I R Q L Q S S
UniRef90_Q9Z1S3	I S L Y E A M P D Y L E D G K V I N V Q K L L A L Y N H I N E L V Q L Q E M
UniRef90_UP10002035EE5	T M L D T A L Q D Y L E G G L I N F E K R R R E F E I L S Q I R A Q I K L L Q S A
UniRef90_F7B9R2	A F I E E G T P N F T E E G L I N F E K R R R E F E I L S Q I R Q F Q Q T
UniRef90_W4KLW8	L H I D A E H G D H I P G G H R A L I H F V K R Q W Y D I V T A I L R F Q G K
UniRef90_L8H734	T F I E E G N A N Y E G H D A P V I I N F E K R R R V A V A I V D L I N F Q R K
UniRef90_Q3UY15	V M L D T A L P D T L K G N I N F E K R R R E F E I L S Q I R A R I Q Q L Q Q R
UniRef90_W1QL81	R F L T D G N S D Y L H N N R N L V I N F G K R L S I Y R T I Q E V I K F N A K
UniRef90_X8JI23	T F C C R E G N P D K R Y D P T R T L V I N F D K Y R R L A A I A E D V K R F Q V
UniRef90_F2U0C8	T F C F M E D G S P D Y L S L D G S D I I N F S K R R L V G E T C M T I Q Q F Q N R
UniRef90_W4ZIM3	A F I E E G T P N I T D D R I N F S K M R M L A H V V R E I R H F Q H T
UniRef90_W5KHV0	
UniRef90_A0A034V411	T F V H V G N P D Y L K E G V N F S K R W Q Q Y H I I E N M K R F K K C
UniRef90_F7AG79	T F V H L G N P D H I D G K G V N F S K R W Q Q F N I L D S M R R F Q Q V
UniRef90_D3BOY3	T F I E D G N P S R I G E L V N F Y K Q R K I A E V E V F Q L H Q Y Q Q V
UniRef90_UP10002C3E311	T F I H E G N E D K K E N G D V I N F E K R R K E W E I L A R I Q Q L Q R R
UniRef90_UP1000333EDB0	V M L D T A L P D V L E G D G L I N F E K R R K E W E I L A R I Q Q L Q R R
UniRef90_H2TBU5	T M L D T A L T D T V E G G L I N F E K R R R E F E I L S Q I R Q L Q S A
UniRef90_E2C840	T M I D T A I P D T I A D G L I N F D K R R K E F E V L A R I R L L Q G N
UniRef90_U6IMC8	I H L E L K I N D Y L P G G S E P L I N F S K C H Q I A D L K E H Y L S F Q N I
UniRef90_F1LM43	A F I E E G T P N Y T E D G L I N F S K M R M I S H I I R E I R Q F Q Q T
UniRef90_M3WGI3	A F I E E G T P N Y T E D G L I N F S K M R M I S H I I R E I R Q F Q Q T
UniRef90_UP10003F16572	V M L D T A L P D M L E G D G L I N F E K R R K E W E I L A R I Q Q L Q R R
UniRef90_Q0UTD8	T F I D V G V N G T T R Q E D S V S V I N F D K H M K T A K I G Q L Q S F Q V
UniRef90_L5K9X4	T F V H L G N P D Y I D G K G V N F S K R W Q Q F N I L D S M R C F Q Q A
UniRef90_Q55FD8	V F I D E G N Q Q L C D S R I N F K K L E M Y K K T I A T L Q N F S L F
UniRef90_A7TNK1	T F V V A S G N P D F L D P R S T I I N F Y K R R R V V E I L S Q I R Q L Q S S
UniRef90_F2UC42	V F V H V G N P D Y V E N T S E K I I N F A K M H Q L Y N I C A A V E E Y Q S H
UniRef90_G3Q601	T M L D T A L T D T V E G G L I N F E K R R R E F E I L S Q I R Q L Q S S
UniRef90_B3MSA2	T F V H V G N Q D Y L S K G V I N F S K R W Q Q Y N I I V N M K R F K K C
UniRef90_UP10001E44F72	F F Y E E G T P N F T V Q S E D L T M V S F V K C R I A S I I S D I Q M Y Q N E
UniRef90_B0EBI5	V F T K E E G T P N F T Q D G L L N F S K M R M I A H V I R E I R H F Q Q T
UniRef90_UP100046C1420	S F I E E G T P N F T Q D G L L N F S K M R M I A H V I R E I R H F Q Q T
UniRef90_S0EE03	V F V D T A H P L V D P D S G Q V Y I H F S K C L K T A K I I R Q L Q N F Q T
UniRef90_I3JMQ8	T M L D T A L P D T V E G G L I N F E K R R R E F D V L S Q I R L L Q A S
UniRef90_J9VVC5	T F T S D G N P S T R P S N S A M L I N Y D K F A K L G K I A E F R R Y Q E
UniRef90_UP10003EDEC5B	
UniRef90_UP10003C4B506	I A V H V I F P D W I D E N K V N I V K M Q Q L S I T L N E L V S L Q T A
UniRef90_F1QJM6	T M L D T A L T D N V E G G L I N F E K R R K E F E I L S L I R Q L Q A S
UniRef90_UP1000383F1F4	V M L D T A L P D M L K G D G L I N F E K R R K E W E I L A R I Q Q L Q R R
UniRef90_UP10003940E7D	A C I E E G T P N F T E E G L I N F S K M R M I S H I I R E I R Q F Q Q T
UniRef90_K7IZN6	T F V H I G N S D L L P D G S G L I N F S K R W Q Q F N I V E N M K R F K K G
UniRef90_H2KZX7	T F V H A G N P D T I P S D R C H M I N F S K R W Q Q F N I L D S I R K L K K W
UniRef90_M3ZSG0	T M L D T A L T D T V E E N L I N F E K R R R E Y E I L S Q I R Q L Q C S
UniRef90_K1RBH7	T F I H I G N Q D L L P D G S G L I N F A K R W Q Q F N I L D N M R R F K K C
UniRef90_I4Y5P7	T F I T D G N P D F L D P E P G L I V N F E K R R K E F E I L S E I Q Q Y Q A T
UniRef90_UP1000446538	V M L D T A L P D T L E P E L I N F E K R R K E F E I L S E I Q Q Y Q A T
UniRef90_L9LAB9	A F I E E G T P N Y T E D G L I N F S K M R M I S H I I R E I R Q F Q Q T
UniRef90_E9H8K6	S F I E E G T P D F T E D G L I N F S K M R M V A H V I I R E I R H F Q Q T
UniRef90_B7QKE9	T F V H V G N T D Y I T D S G L I V N F E S K C W Q Q F H I I E P M R C F K K K
UniRef90_G3WX37	Y F L N E G C A N R L P N G H V N F E F K W L E L A K Q V G E F I T W K Q V
UniRef90_E9C5Q8	T F I E E G N S S K V E G G L I N F E K R R R E F D V V T S I Q S Y Q R H
UniRef90_UP100035034DF	V M L D S A I R D Q L E N G Y L I N F E K R R K E F E A L S Q I R I L Q S V
UniRef90_UP100045731A8	Y F L N E G C A N R L P N G H V I N F E K F W L E L A K Q V S E F M T W R Q V
UniRef90_Q8ST25	T F I Q Q D T N K G D G G L I N F E K F W L E L A K Q V I T I Q N F Q K N
UniRef90_E9BX06	T F I E E G N A D Y I D K N N I N F A K Q M M F Y D V V T S I Q S Y Q R H
UniRef90_H2UP70	I S V N E A M S D Y V E D S K V G L I N F E K F W L E L A K Q V S E F M T W K Q V
UniRef90_UP100045D9CA8	Y F L N E G C A N R L P N G H V I N F E K F W L E L A K Q V S E F M T W K Q V
UniRef90_W5UI19	T F T H E G N K T F V D S G L I N F E K F W L E L A K Q V R I R Y C R S Q
UniRef90_UP1000443E512	Y F L N E G C A S R L Q N G L I N F E K F W L E L A K Q V S E F M T W K Q V
UniRef90_T1JM98	Y F L N E G C A N R L P N G H V I N C E K F W Q L A K Q V S Q F I T W K Q V

410 420 430 440

UniRef90_W9VZZ3	P Y R F A E V S E L Q T W M Q D Q L I R V R S A G D K S F Q L H Y R R S L I L E		
UniRef90_W5LBH4	C N S Y C L S P D S A F L R W F K S Q S Q H T E E E S Y A L S C E I E		
UniRef90_A8NSC9	P Y N L K A I P E V Q Q Y L N L A F E R A K T H G D L Q D L Y R R S L L V E		
UniRef90_L8H1F9	D Y A L Q P I D C I Q E W F V A Q L D Q F G A T S E D A L F S M S L V A E		
UniRef90_F0ZRY3	P Y D F S L S Q L N Q A R S E M L L N Y F D T L P T A I D E L L Y K I S L N L E		
UniRef90_S7Q4P6	P Y N L K D I P E A Q E Y L H A A F E R S K S T G D L Q D L Y R R S L L V E		
UniRef90_D3BBH4	A Y T F E E N T K L R D C L T I L Q V L E E E E L Y S L S L L R E		
UniRef90_UPI000398FDB1	C Y C M T R D E K F L Q W F R R Q R H L S D E E S F H L S R E I E		
UniRef90_UPI0004622389	P Y N L K E I P E V Q A Y L R D A F D K S Q R R G D L Q D L Y R R S L L V E		
UniRef90_I2G3B8	P Y N L V I E V P E M Q K F L K G L D D V Q G A G G G R G A D D L Y R R S L L V E		
UniRef90_L8GQN2	P Y N F Y P I H Q I W E Y I K R F P S M E E A E L Y S T S L K I E		
UniRef90_J4I062	P Y N L Q A V A V S L S F L E E C V G K Y S D G V D Y A D Q F W N L S L		
UniRef90_UPI0004449535	P Y N L K E I G E V Q A Y L N Q A F E N A K H H G D L Q D L Y R R S L L V E		
UniRef90_UPI0004414F8A	P Y N L T P V T Q V I D L I E D S L R L S N M D R D K A W E T S L		
UniRef90_J3Q9J6	P F N F S E V P Q I A A Y I R L S M S N L M S Y Q D S A D E L Y Q R S L L K I E		
UniRef90_J4HT24	P Y N L K Q I P E V Q E Y L K D A F E K S K H R G D L H D L Y R R S L L V E		
UniRef90_UPI0002C3D47C	A Y P F R K Y D S L V E Y Y S G A P V L E D E E Q M Y D L S V S L E E		
UniRef90_W7I085	P Y P I Q E V P E F Q Y W L D Y Q M R T L R E S G F G D V Q K L Y R Q S L A V E		
UniRef90_H0GXY6	H Y D F V K D Q T A I E G I F S A L E D I P H I E K Q Y Q L S L V I E		
UniRef90_UPI0003C88E2C	C Q N Y C L N P C P P I L A A L R T Q H Q L S E E Q S Y R I S R V I E		
UniRef90_E2AT28	P Y C L S V E S K I R Q Y I E N M C P F D N M S E A N I S N Y L Y S K S L E I E		
UniRef90_M5BU90	P Y N L I E V P E V Q K Y L D Y V F E K V K K S G N D L H D L Y R R S L L V E		
UniRef90_S8BS54	P Y P V Q E V S E L L Q Y W I E Y Q M R T L K E S G F G D V Q K L Y R Q S L A V E		
UniRef90_P0CF32	H Y D F T K D R T V I E C I S N S L E N I P H I E K Q Y Q L S L I I E		
UniRef90_I3M11	C Y S L S P H P P V L A A L R A Q R Q L S E E Q S Y R V S R V I E		
UniRef90_D2VTE0	P Y N I Q Q V H Q I Q E L L K N T F E N H E M V E E K K L F E K S L I T E		
UniRef90_E7F4B2	H Y D L K R N D D I V S F F N D F S D H L A E E A L W E L S L K I K		
UniRef90_M3CY49	P Y R L Q A V P E L Q S W L E L Q L R R M R D G T D A M T N K F H R R S T M V E		
UniRef90_UPI0004576117	A P P L E A N K D L V H L L T L S L D L Y Y S E D E I Y E L S Y A R E		
UniRef90_A4IJ06	A P P L E A N M D L V H L L T L S L D L Y Y T E D E I M Y E L S Y A R E		
UniRef90_G3Q5Z8	R Y S L P V N A Q I T T W L Q A H T L L T D Q E S Y E L S R D L E		
UniRef90_Q9Z1S3	A P P L D A N K D L V H L L T L S L D L Y Y T E D E I Y E L S Y A R E		
UniRef90_UPI0002035EE5	C Y C M T P D Q K F I Q W F R R Q Q L L S E E E S Y S L S C E I E		
UniRef90_F7B9R2	A Y R I D Q Q P K V I Q Y L L D K A L V I D E D S L Y E L S L K I E		
UniRef90_W4KWL8	P Y S F A E N Q A T T N F I Q S Q M T S T T G K D E R W Y W S R S D E L L Q		
UniRef90_L8H734	P F A F E P L P K V R D F L E T T L A A E R E L G P S D D R L Y Q L S L E C E		
UniRef90_Q3UY15	C Y S L S P R P P I L A A L R A Q R Q L S E E Q S Y R V S R V I E		
UniRef90_W1QL81	A Y H F E K I D E L W T Y F Y D M W E Q L P D D D K L Y N I S L K I E		
UniRef90_X8JI23	P Y N L I E I P E V Q K Y L E Y A F E K V K K T G N D L H D L Y R R S S L L V E		
UniRef90_F2U0C8	T Y N L A T E P P V H E R A Q P L P D G S K A S I Q Q F E D I M Y E Q S L K I E		
UniRef90_W4ZIM3	N Y N L E P D K R V I S Y L L D T S L I M D D D E M Y A L S L E L E		
UniRef90_W5KHW0			
UniRef90_A0A034V411	E Y N F R R N E R I I R F F D N F E Y E L G E E E M W Q I S E S I K		
UniRef90_F7AG79	H Y E I R R N D E I I S F F N D F S D H L A E E A L W E L S L K I K		
UniRef90_D3BOY3	L Y D I P S N T V I R D Y F L T V P L I D E K K A I Q I S		
UniRef90_UPI0002C3E311	Y E Y Y R N P E I L A F I R K L N V R Y L A I G E K E L Y D K S L I I E		
UniRef90_UPI000333EDB0	C Y S L R P H P P V L A A L R A Q R Q L S E E Q S Y R V S R V I E		
UniRef90_H2TBU5	C Y S L P V N P L I T S T W V Q A H M L L T D Q E S Y E L S R D L E		
UniRef90_E2C840	A Y N F S T D P V F D R W F H S V L V L D D R E A Y K L S C Q I E		
UniRef90_U6IMC8	P F N L Q P P D P V I Q D F L K H L D P V G V K D E A E F E D L L M F Q Q S L C Q I E		
UniRef90_F1LM43	T Y K I E P Q P K V T Q Y L V D E T F V L D D E S L Y E A S L R I E		
UniRef90_M3WGI3	A Y K I E H Q V K V T Q Y L L D Q S F V M D E E S L Y E S S L R M E		
UniRef90_UPI0003F16572	C R N Y C L S A R P P I L A A L R A Q H Q L S E E Q S Y R V S R V I E		
UniRef90_Q0UTD8	P Y Q L Q L A A V P E M Q D W M E A Q I Q R V R S S D Q A N V Q S Y Y R R S L L E E		
UniRef90_L5K9X4	H Y D I R R N D D I I N F F N D F S D H L A E E A L W E L S L K I K		
UniRef90_Q55FD8	P Y Q F T P V P I I Q N Y F L D Y K I V A D K P Y E M S S L S A E		
UniRef90_A7TNK1	P Y K I N T Y E E V K E F I V N N T E N I P H I E K Q Y E L S L V I E		
UniRef90_F2UC42	P F K F Q S K E E I R Q C F D G F N H K T H D E L Y Q L S L E I E		
UniRef90_G3Q601	R Y S L P V N A Q I T T W L Q A H T L L T D Q E S Y E L S R D L E		
UniRef90_B3MSA2	A Y P F R R N E R I I R F F D N F K D F M G E E E M W Q V S E K I K		
UniRef90_UPI0001E44F72	S Y A L E V E P S V R V G K C T D M I V K E Y I E S F E E N E D K L F E K S V S L E		
UniRef90_B0EBI5	S F P F Y Y C K N L K E F I E Q F E Y E E N E D K L F E K S V S L E		
UniRef90_UPI00046C1420	P Y K I E L I P K V A N Y L L D S S L W M D D E E L Y N T S L E I E		
UniRef90_S0EE03	P Y Q L P E D P H I Q Q W I S S S M V E F D K S N T C N D T H Y E R S L L I E		
UniRef90_I3JMQ8	C Y S L G H Q P R I A A W L Q R H K L L T D Q E S Y E L S R H L E		
UniRef90_J9VVC5	P F N F H E L E A V Q T F L H T V L T E R G S G S I D A L Y R K S L M L E		
UniRef90_UPI0003EDEC5B			
UniRef90_UPI0003C4B506	T H H L E P N M D L I N L L T L S L D L Y H T E D D I Y K L S L V L E		
UniRef90_F1QJM6	C Y T L Q S H P R I I S W I N S S M S L S D Q K S Y E L S R E L E		
UniRef90_UPI000383F1F4	C Q S Y C L S P H P P I L A A L R A Q H K L S E E Q S Y R I S R V I E		
UniRef90_UPI0003940E7D	P Y R I E H Q P K V T Q F L L D K S L V I D E D T L Y E L S L K I E		
UniRef90_K7IZN6	T Y S F K K N E R I I T F F N N F S D F L C E E E A M W Q I S E S I K		
UniRef90_H2KZX7	N Y D I K K N D I V V Q Y F N G F K D C I D E E R T W Q L S H Q I K		
UniRef90_M3ZSG0	H Y S L S V N S D L T A W L Q A H T L L T D Q E S Y E R S R D L E		
UniRef90_K1RBH7	N Y Q I K R N E K L I N C F N N F D D Y L S E E S L W Q I S E K I K		
UniRef90_I4Y5P7	P Y N F T P I P Q I S K F V T Q Q L E E S D H A P D A F P I S L R I E		
UniRef90_UPI000446538	C R Q Y Q L R P H P G V L A A L R A Q R Q L S E E Q S Y R V S R V I E		
UniRef90_L9LAB9	A Y K I E H Q A K V T Q Y L L D Q S F V M D E E S L Y E S S L R I E		
UniRef90_UPI000350E31C	S Y K I E H Q P K V T Q Y L L D Q T F V M D E E T L Y E A S L R I E		
UniRef90_E9H8K6	S Y K I E H S S K V N S Y L L D V N N L L V D D E D L Y Q M S L E I E		
UniRef90_B7QKE9	P F S F K R N E Q I T D F F N N F E D Y L S E D A M W E L S E N I K		
UniRef90_G3WX37	E C P F E Q D P N I T H Y L H T A P I F T E D G L Y L A S Y E S E		
UniRef90_E9C5Q8	R Y N L V A I P A V I K L F S P D V S D E L G I N E D K A Y E N S L L C E		
UniRef90_UPI00035034DF	C Y R F H S D P Q F I T W F Q R L Q P I S E A E S Y Q L S C D E		
UniRef90_UPI00045731A8	E C P F E R D R K I L Q Y L L T A P V F S E D A L Y L A S Y E S E		
UniRef90_Q8ST25	P Y S F E F F P K I K E T L L N L P V W T E D N L Y R V S M Q R E		
UniRef90_E9BX06	A S Y T V E E A R F P V A E S I D L A N T E M N E S G L Y E Y S L L I E		
UniRef90_H2UP70	P P N L D A N K D L V H L L T L S L D L Y Y T E D E I Y E L S Y T R E		
UniRef90_UPI00045D9CA8	E C P F E R D R K I L Q Y L L T V P V F S E D A L Y L A S Y E S E		
UniRef90_W5UI19	P F N H E A P Q A T K N H Q D V R L Y V R Q I S V I D N Q R T L S Q L S H K I E		
UniRef90_UPI000443E512	E C P F E K D R K I L Q Y L L T A P V F T E D A L Y L A S Y E S E		
UniRef90_T1JM98	T C P F E N C P K V L T Y L T N P V F S E S A A L A L A S F E C E		

450 460

UniRef90_W9VZZ3	P R E P S R S P
UniRef90_W5LBH4	P T S P K S R T S M V K R L S L L F L G V D A T A A S S
UniRef90_A8NSC9	P K Q S A P T N D M R Q L F N W A R S Q P Q A T S S
UniRef90_L8H1F9	P R E
UniRef90_F0ZRY3	P R Q S T T T T T
UniRef90_S7Q4P6	P R Q P A D T P P A S
UniRef90_D3BBH4	P R N C K R S
UniRef90_UPI000398FDB1	A A S G R A Q K S A L K R F S L P F L G L G V S
UniRef90_UPI0004622389	P K Q S A E T P P S S D L F A W A S R S P S V A T T P
UniRef90_I2G3B8	P R
UniRef90_L8GQN2	P R
UniRef90_J4I062	P K M P A D T P P V T K L F N W T V R R S G S H P T T S
UniRef90_UPI0004449535	P R E
UniRef90_UPI0004414F8A	P K Q P A D T P P A S D L F N W T N R S Q H T T P T S
UniRef90_J3Q9J6	E K R G E M N S D L E K K I S K L K K
UniRef90_J4HT24	P K K R D P A V P P V P T P T I T I D P T V V V P S P
UniRef90_UPI0002C3D47C	P K P K K
UniRef90_W7I085	P P S C P S S P R I R R R I S L T K R
UniRef90_H0GXY6	P N K C K A P P Q F P R K W P I K L K S P G I K T S R S
UniRef90_UPI0003C88E2C	P R Q P T D S
UniRef90_E2AT28	P K K R D P P P A A P T L T I S T S D P A G L N A T S P
UniRef90_M5BU90	P K P R K
UniRef90_S8BS54	P P S C P T S P R V G R R I S L T K R S P G S S P G D P
UniRef90_P0CF32	P R S V Q R
UniRef90_I3M111	P R N I S R R R T
UniRef90_D2VTE0	P R R H V P A P E I H E D R S K L V V S
UniRef90_E7F4B2	P R N N K V P P A T P S K P P V V V W A T A I S P K P D
UniRef90_M3CY49	P R N H R A P P V T P S K P P V V A W A S G V S P K P D
UniRef90_UPI0004576117	P P V D P C P T S P S S W S S L L
UniRef90_A4IJ06	P R N H R A P P L T P S K P P V V V W A S G V S P K P D
UniRef90_G3Q5Z8	T T S P K P R K S M V K R L S L L F L G S E V T N S T P
UniRef90_Q9Z1S3	P R L P
UniRef90_UPI0002035EE5	P R S L V I A S V R G P P S T T T S S S G
UniRef90_F7B9R2	P P S C P S S P R I R R R I S L T K R S P G G S P
UniRef90_W4KLW8	P P
UniRef90_L8H734	P R Q P T D S
UniRef90_Q3UY15	P R G A A T A T A G E K L F Q K V C R D S I L S P H N P R
UniRef90_W1QL81	P R Q S T R M A K S
UniRef90_X8JI23	P R Q Q G K A K K
UniRef90_F2U0C8	P P S C P S S P R I R R R I S L T K R
UniRef90_W4ZIM3	P P V D P C P S S P N S W S S
UniRef90_W5KHV0	P P
UniRef90_A0A034V411	P R E G T T P P S A E S S M S R Q L T A T E L R
UniRef90_F7AG79	P K L P T
UniRef90_D3BOY3	P K L P T
UniRef90_UPI0002C3E311	P R Q Q G K A K K
UniRef90_UPI000333EDB0	P P S C P S S P R I R R R I S L T K R
UniRef90_H2TBU5	P P V D P C P S S P N S W S S
UniRef90_E2C840	P P
UniRef90_U6IMC8	P R D P Q
UniRef90_F1LM43	P R N I T R R K T
UniRef90_M3WGI3	P R N A
UniRef90_UPI0003F16572	P R
UniRef90_Q0UTD8	P R G A T
UniRef90_L5K9X4	P P V D P C P T S P S S W S S L L
UniRef90_Q55FD8	P R G R R P
UniRef90_A7TNK1	P T R N K
UniRef90_F2UC42	P R T S R L S T S A L G Q L S L S S K S
UniRef90_G3Q601	P R N T K Q
UniRef90_B3MSA2	P P L C S P P P W S Q R T L S M K L
UniRef90_UPI0001E44F72	P R G S E K L R S N V E K P N W L M
UniRef90_B0EBI5	P R N S K S Q P T S P T T P N K P V W A S G V L P K S D
UniRef90_UPI00046C1420	P P V D P C P S S P N S W S H R L
UniRef90_S0EE03	P R G G G K K P Q P
UniRef90_I3JMQ8	P S N R K S
UniRef90_J9VVC5	P P V D P C P S S P N S W S R R L L A
UniRef90_UPI0003EDEC5B	P R E
UniRef90_UPI0003C4B506	P P S C P S S P R I R R R I S L T K R S P G G S P G D P
UniRef90_F1QJM6	P K L P T
UniRef90_UPI000383F1F4	P K L P S
UniRef90_UPI0003940E7D	P R
UniRef90_K7IZN6	P R
UniRef90_H2KZX7	P T Q D T V T T S N P P K P K
UniRef90_M3ZSG0	G P E N H I E K E R W K T L R S T L L S
UniRef90_K1RBH7	P R N C K R S
UniRef90_I4Y5P7	P R N A K R
UniRef90_UPI0004446538	P K N C K A H P A T P S R P P F V D W A S G V A P K P D
UniRef90_L9LAB9	P R R P
UniRef90_UPI000350E31C	G P E N N M E K D R W K S L R S T L L S
UniRef90_E9H8K6	P A E N Q F E K E R Y K T L K A L M K S P G
UniRef90_B7QKE9	S P E N Q
UniRef90_G3WX37	P R A A S
UniRef90_E9C5Q8	P T Q D T V T T S N P P K P K
UniRef90_UPI00035034DF	G P E N H I E K E R W K T L R S T L L S
UniRef90_UPI00045731A8	P R N C K R S
UniRef90_Q8ST25	P R N A K R
UniRef90_E9BX06	P K N C K A H P A T P S R P P F V D W A S G V A P K P D
UniRef90_H2UP70	P R R P
UniRef90_UPI00045D9CA8	G P E N N M E K D R W K S L R S T L L S
UniRef90_W5UI19	P A E N Q F E K E R Y K T L K A L M K S P G
UniRef90_UPI000443E512	P A E N Q F E K E R Y K T L K A L M K S P G
UniRef90_T1JM98	P A E N Q F E K E R Y K T L K A L M K S P G

UniRef90_E4XR30
 UniRef90_E9G6Y1
 UniRef90_L8H8A0
 UniRef90_M5GAX2
 UniRef90_T1IPE1
 UniRef90_F4QDN8
 UniRef90_J9K5I2
 UniRef90_G1KRT5
 UniRef90_UPI0003332BBF
 UniRef90_B0ECX5
 UniRef90_UPI0003C371D2
 UniRef90_G6CN40
 UniRef90_K1P5B0
 UniRef90_B6K2L9
 UniRef90_F4QFA8
 UniRef90_I3JVX5
 UniRef90_B3RRB9
 UniRef90_R7TZ37
 UniRef90_G3UBD8
 UniRef90_B8NQX5
 UniRef90_D2UZY1
 UniRef90_D2VXZ1
 UniRef90_F2S6E0
 UniRef90_Q86G47
 UniRef90_B3RP44
 UniRef90_V4ALC1
 UniRef90_V2X1Z9
 UniRef90_G4TS50
 UniRef90_H9FHK1
 UniRef90_E1FQ52
 UniRef90_B3RF38
 UniRef90_Q875L6
 UniRef90_Q8IS16
 UniRef90_D3BBI3
 UniRef90_B0EJK5
 UniRef90_G3STJ7
 UniRef90_U6PT55
 UniRef90_S7ZCG1
 UniRef90_H2VDH1
 UniRef90_Q4SDT4
 UniRef90_F6XRQ1
 UniRef90_UPI0002652675
 UniRef90_W5JLH1
 UniRef90_F0ZVK5
 UniRef90_A0A017SE16
 UniRef90_C3YSL3
 UniRef90_U5EY05
 UniRef90_H2MST1
 UniRef90_UPI0002B48FAD
 UniRef90_F4PXZ9
 UniRef90_G6CNX6
 UniRef90_G7P733
 UniRef90_C9SQB9
 UniRef90_F7CJ17
 UniRef90_W5N0E9
 UniRef90_UPI0003316E3E
 UniRef90_UPI000333A3E9
 UniRef90_F7AE08
 UniRef90_U6IMK9
 UniRef90_UPI000328DEBB
 UniRef90_A9V9C9
 UniRef90_I3J8D5
 UniRef90_UPI00046C05F4
 UniRef90_C4LX81
 UniRef90_F0ZNK4
 UniRef90_UPI000180D182
 UniRef90_C4M2F2
 UniRef90_B0W7T1
 UniRef90_UPI000444682
 UniRef90_I3N190
 UniRef90_UPI0004421DCB
 UniRef90_H2L625
 UniRef90_R7U9E0
 UniRef90_C6HAS5
 UniRef90_G3VHI3
 UniRef90_UPI00020AECA6
 UniRef90_D3B370
 UniRef90_A0A058Z547
 UniRef90_S3CZA0
 UniRef90_E9HCV6
 UniRef90_H2ZZM7
 UniRef90_UPI0004560483
 UniRef90_T2MAQ3
 UniRef90_G8BZK5
 UniRef90_F1KRH4
 UniRef90_F6RKB0
 UniRef90_S9R9N9
 UniRef90_D6X394
 UniRef90_UPI0003D6E232
 UniRef90_I3JAM6
 UniRef90_UPI000440D164
 UniRef90_H9ITW6

1 10 20 30 40
 S E P D N S D E G L Q W E T K V R L L K A G S L E R L V D
 S E P D N S L V F Q D N N L V S G P L D A L L Q
 Q P K L S P G H V N W I K D D D E P A D V L L N P D E T V I G G T L P A L V K
 G N P Q V M G G S L K Q L V E

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

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

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

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

S D H L Q W E S K E R V I K A G T V E K L V E

D G P P I T S A S L D T L I Q

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

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

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

S K E S D Q G G L N F Q D G N L I S A S L D A L I Q

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

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

P S P T A A S L D E L I Q

L I Q

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

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

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

UniRef90_E4XR30
 UniRef90_E9G6Y1
 UniRef90_L8H8A0
 UniRef90_M5GAX2
 UniRef90_T1IPE1
 UniRef90_F4QDN8
 UniRef90_J9K5I2
 UniRef90_G1KRT5
 UniRef90_UPI0003332BBF
 UniRef90_B0ECX5
 UniRef90_UPI0003C371D2
 UniRef90_G6CN40
 UniRef90_K1P5B0
 UniRef90_B6K2L9
 UniRef90_F4QFA8
 UniRef90_I3JXV5
 UniRef90_B3RRB9
 UniRef90_R7TZ37
 UniRef90_G3UBD8
 UniRef90_B8NQX5
 UniRef90_D2UZY1
 UniRef90_D2VXZ1
 UniRef90_F2S6E0
 UniRef90_Q86G47
 UniRef90_B3RP44
 UniRef90_V4ALC1
 UniRef90_V2X1Z9
 UniRef90_G4TS50
 UniRef90_H9FKH1
 UniRef90_E1FQ52
 UniRef90_B3RF38
 UniRef90_Q875L6
 UniRef90_Q8IS16
 UniRef90_D3BBI3
 UniRef90_B0EJK5
 UniRef90_G3STJ7
 UniRef90_U6PT55
 UniRef90_S7ZCG1
 UniRef90_H2VDH1
 UniRef90_Q4SDT4
 UniRef90_F6XRQ1
 UniRef90_UPI0002652675
 UniRef90_W5JLH1
 UniRef90_F0ZVK5
 UniRef90_A0A017SE16
 UniRef90_C3YSL3
 UniRef90_U5EY05
 UniRef90_H2MST1
 UniRef90_UPI0002B48FAD
 UniRef90_F4PXZ9
 UniRef90_G6CNX6
 UniRef90_G7P733
 UniRef90_C9SQB9
 UniRef90_F7CJ17
 UniRef90_W5N0E9
 UniRef90_UPI0003316E3E
 UniRef90_UPI00033A3E9
 UniRef90_F7AE08
 UniRef90_U6IMK9
 UniRef90_UPI000328DEBB
 UniRef90_A9V9C9
 UniRef90_I3J8D5
 UniRef90_UPI00046C05F4
 UniRef90_C4LX81
 UniRef90_F0ZNK4
 UniRef90_UPI000180D182
 UniRef90_C4M2F2
 UniRef90_B0W7T1
 UniRef90_UPI000444682
 UniRef90_I3N190
 UniRef90_UPI0004421DCB
 UniRef90_H2L625
 UniRef90_R7U9E0
 UniRef90_C6HAS5
 UniRef90_G3VHI3
 UniRef90_UPI00020AECA6
 UniRef90_D3B370
 UniRef90_A0A058Z547
 UniRef90_S3CZA0
 UniRef90_E9HCV6
 UniRef90_H2ZZM7
 UniRef90_UPI0004560483
 UniRef90_T2MAQ3
 UniRef90_G8BZK5
 UniRef90_F1KRH4
 UniRef90_F6RKB0
 UniRef90_S9R9N9
 UniRef90_D6X394
 UniRef90_UPI0003D6E232
 UniRef90_I3JAM6
 UniRef90_UPI000440D164
 UniRef90_H9ITW6

50 60 70 80

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

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

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

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

H | L T A D Y Y P E K A Y I F T F L L S S R L F I E P R E L L A R V C H L C I

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

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

N | I V R V D I D N T L F I R S F L S T H A S I I S S G D L F S I L S S H Y

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

UniRef90_E4XR30 S N E E T A K T [L] S N 90
 UniRef90_E9G6Y1 Q N [L] A D
 UniRef90_L8H8A0
 UniRef90_M5GAX2
 UniRef90_T1IPE1
 UniRef90_F4QDN8
 UniRef90_J9K5I2
 UniRef90_G1KRT5
 UniRef90_UPI0003332BBF
 UniRef90_B0ECX5
 UniRef90_UPI0003C371D2
 UniRef90_G6CN40
 UniRef90_K1P5B0
 UniRef90_B6K2L9
 UniRef90_F4QFA8
 UniRef90_I3JXV5
 UniRef90_B3RRB9
 UniRef90_R7T7Z7
 UniRef90_G3UBD8
 UniRef90_B8NQX5
 UniRef90_D2UZY1
 UniRef90_D2VXZ1
 UniRef90_F2S6E0
 UniRef90_Q86G47
 UniRef90_B3RP44
 UniRef90_V4ALC1
 UniRef90_V2X1Z9
 UniRef90_G4TS50
 UniRef90_H9FHK1
 UniRef90_E1FQ52
 UniRef90_B3RF38
 UniRef90_Q875L6
 UniRef90_Q8IS16
 UniRef90_D3BBI3
 UniRef90_B0EJK5
 UniRef90_G3STJ7
 UniRef90_U6PT55
 UniRef90_S7ZCG1
 UniRef90_H2VDH1
 UniRef90_Q4SDT4
 UniRef90_F6XRQ1
 UniRef90_UPI0002652675
 UniRef90_W5JLH1
 UniRef90_F0ZVK5
 UniRef90_A0A017SE16
 UniRef90_C3YSL3
 UniRef90_U5EY05
 UniRef90_H2MST1
 UniRef90_UPI0002B48FAD
 UniRef90_F4PXZ9
 UniRef90_G6CNX6
 UniRef90_G7PT33
 UniRef90_C9SQB9
 UniRef90_F7CJ17
 UniRef90_W5N0E9
 UniRef90_UPI0003316E3E
 UniRef90_UPI000333A3E9
 UniRef90_F7AE08
 UniRef90_U6IMK9
 UniRef90_UPI000328DEBB
 UniRef90_A9V9C9
 UniRef90_I3J8D5
 UniRef90_UPI00046C05F4
 UniRef90_C4LX81
 UniRef90_F0ZNK4
 UniRef90_UPI000180D182
 UniRef90_C4M2F2
 UniRef90_B0W7T1
 UniRef90_UPI000444682
 UniRef90_I3N190
 UniRef90_UPI0004421DCB
 UniRef90_H2L625
 UniRef90_R7U9E0
 UniRef90_C6HAS5
 UniRef90_G3VH13
 UniRef90_UPI00020AECA6
 UniRef90_D3B370
 UniRef90_A0A058Z547
 UniRef90_S3CZA0
 UniRef90_E9HCV6
 UniRef90_H2ZZM7
 UniRef90_UPI0004560483
 UniRef90_T2MAQ3
 UniRef90_G8BZK5
 UniRef90_F1KRH4
 UniRef90_F6RKBO
 UniRef90_S9R9N9
 UniRef90_D6X394
 UniRef90_UPI0003D6E232
 UniRef90_I3JAM6
 UniRef90_UPI000440D164
 UniRef90_H9ITW6

100 S D S K E A Y S K S D C E A I K A S I L R 110
 Q K L T K E K L G R F C P H M V Q
 F W T A A Y F D S H I M N D D A N N L F F K F V N F T V Y E N I P G S S N L R D
 C L T E D Q A S T K A R Q S F S V L V R V V D E L C
 L F H S H S K T V T D R N D A S V I N R S R K K V I N V I L T W L E S C F I E G
 R Q Q L E A G P E K A K L K S F S T I V Q L L K E W T E A F P Y D F Q D E K V M
 M E F K I C L T I C N C S W

UniRef90_E4XR30
 UniRef90_E9G6Y1
 UniRef90_L8H8A0
 UniRef90_M5GAX2
 UniRef90_T1IPE1
 UniRef90_F4QDN8
 UniRef90_J9K5I2
 UniRef90_G1KRT5
 UniRef90_UPI0003332BBF
 UniRef90_B0ECX5
 UniRef90_UPI0003C371D2
 UniRef90_G6CN40
 UniRef90_K1P5B0
 UniRef90_B6K2L9
 UniRef90_F4QFA8
 UniRef90_I3JXV5
 UniRef90_B3RRB9
 UniRef90_R7TZ37
 UniRef90_G3UBD8
 UniRef90_B8NQX5
 UniRef90_D2UZY1
 UniRef90_D2VXZ1
 UniRef90_F2S6E0
 UniRef90_Q86G47
 UniRef90_B3RP44
 UniRef90_V4ALC1
 UniRef90_V2X1Z9
 UniRef90_G4TS50
 UniRef90_H9FHK1
 UniRef90_E1FQ52
 UniRef90_B3RF38
 UniRef90_Q875L6
 UniRef90_Q8IS16
 UniRef90_D3BBI3
 UniRef90_B0EJK5
 UniRef90_G3STJ7
 UniRef90_U6PT55
 UniRef90_S7ZCG1
 UniRef90_H2VDH1
 UniRef90_Q4SDT4
 UniRef90_F6XRQ1
 UniRef90_UPI0002652675
 UniRef90_W5JLH1
 UniRef90_F0ZVK5
 UniRef90_A0A017SE16
 UniRef90_C3YSL3
 UniRef90_U5EY05
 UniRef90_H2MST1
 UniRef90_UPI0002B48FAD
 UniRef90_F4PXZ9
 UniRef90_G6CNX6
 UniRef90_G7PT33
 UniRef90_C9SQB9
 UniRef90_F7CJ17
 UniRef90_W5N0E9
 UniRef90_UPI0003316E3E
 UniRef90_UPI000333A3E9
 UniRef90_F7AE08
 UniRef90_U6IMK9
 UniRef90_UPI000328DEBB
 UniRef90_A9V9C9
 UniRef90_I3J8D5
 UniRef90_UPI00046C05F4
 UniRef90_C4LX81
 UniRef90_F0ZNK4
 UniRef90_UPI000180D182
 UniRef90_C4M2F2
 UniRef90_B0W7T1
 UniRef90_UPI000444682
 UniRef90_I3N190
 UniRef90_UPI0004421DCB
 UniRef90_H2L625
 UniRef90_R7U9E0
 UniRef90_C6HAS5
 UniRef90_G3VHI3
 UniRef90_UPI00020AECA6
 UniRef90_D3B370
 UniRef90_A0A058Z547
 UniRef90_S3CZA0
 UniRef90_E9HCV6
 UniRef90_H2ZZM7
 UniRef90_UPI0004560483
 UniRef90_T2MAQ3
 UniRef90_G8BZK5
 UniRef90_F1KRH4
 UniRef90_F6RKB0
 UniRef90_S9R9N9
 UniRef90_D6X394
 UniRef90_UPI0003D6E232
 UniRef90_I3JAM6
 UniRef90_UPI000440D164
 UniRef90_H9ITW6

130 140 150 160

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

UniRef90_E4XR30
 UniRef90_E9G6Y1
 UniRef90_L8H8A0
 UniRef90_M5GAX2
 UniRef90_T1IPE1
 UniRef90_F4QDN8
 UniRef90_J9K5I2
 UniRef90_G1KRT5
 UniRef90_UP10003332BBF
 UniRef90_B0ECX5
 UniRef90_UP10003C371D2
 UniRef90_G6CN40
 UniRef90_K1P5B0
 UniRef90_B6K2L9
 UniRef90_F4QFA8
 UniRef90_I3JXV5
 UniRef90_B3RRB9
 UniRef90_R7TZ37
 UniRef90_G3UBD8
 UniRef90_B8NQX5
 UniRef90_D2UZY1
 UniRef90_D2VXZ1
 UniRef90_F2S6E0
 UniRef90_Q86G47
 UniRef90_B3RP44
 UniRef90_V4ALC1
 UniRef90_V2X1Z9
 UniRef90_G4TS50
 UniRef90_H9FHK1
 UniRef90_E1FQ52
 UniRef90_B3RF38
 UniRef90_Q875L6
 UniRef90_Q8IS16
 UniRef90_D3BBI3
 UniRef90_B0EJK5
 UniRef90_G3STJ7
 UniRef90_U6PT55
 UniRef90_S7ZCG1
 UniRef90_H2VDH1
 UniRef90_Q4SDT4
 UniRef90_F6XRQ1
 UniRef90_UP10002652675
 UniRef90_W5JLH1
 UniRef90_F0ZVK5
 UniRef90_A0A017SE16
 UniRef90_C3YSL3
 UniRef90_U5EY05
 UniRef90_H2MST1
 UniRef90_UP10002B48FAD
 UniRef90_F4PXZ9
 UniRef90_G6CNX6
 UniRef90_G7P733
 UniRef90_C9SQB9
 UniRef90_F7CJ17
 UniRef90_W5N0E9
 UniRef90_UP10003316E3E
 UniRef90_UP1000333A3E9
 UniRef90_F7AE08
 UniRef90_U6IMK9
 UniRef90_UP1000328DEBB
 UniRef90_A9V9C9
 UniRef90_I3J8D5
 UniRef90_UP100046C05F4
 UniRef90_C4LX81
 UniRef90_F0ZNK4
 UniRef90_UP1000180D182
 UniRef90_C4M2F2
 UniRef90_B0W7T1
 UniRef90_UP1000444682
 UniRef90_I3N190
 UniRef90_UP10004421DCB
 UniRef90_H2L625
 UniRef90_R7U9E0
 UniRef90_C6HAS5
 UniRef90_G3VHI3
 UniRef90_UP100020AECA6
 UniRef90_D3B370
 UniRef90_A0A058Z547
 UniRef90_S3CZA0
 UniRef90_E9HCV6
 UniRef90_H2ZZM7
 UniRef90_UP10004560483
 UniRef90_T2MAQ3
 UniRef90_G8BZK5
 UniRef90_F1KRH4
 UniRef90_F6RKB0
 UniRef90_S9R9N9
 UniRef90_D6X394
 UniRef90_UP10003D6E232
 UniRef90_I3JAM6
 UniRef90_UP1000440D164
 UniRef90_H9ITW6

170 180 190 200

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

	210	220	230	240	
UniRef90_E4XR30	H M S E S D I A K S L L A Y D V R F R R	V I P W Q C L G S V W S R R G T G A E			
UniRef90_E9G6Y1	C S S P L T L S Q Q L T H I E L E R L S F	G P E E F V Q A F E T S F K D M K K			
UniRef90_L8H8A0	D V P A L E I A R Q L T L I E F E R F K A	R A S E L F G Q A W S S A R N R H K			
UniRef90_M5GAX2	D F D P L E E L A R Q L S V M E N K L Y I A	Q P Q E E L L Q L G K S G A P P			
UniRef90_T1IPE1	S A S A I D L A E N M T Y L D H T I F I S	R S E E F L N Q G W M K I D K M T R			
UniRef90_F4QDN8	D F S P I D I C Q T L T I L N H L Y Y A K	D R R R E E L L N Q R W T K K K			
UniRef90_J9K5I2	T L S A L E I A E Q M T Y I D H Q I F I R	Q S Q E F F G R A W M K D D K N I K			
UniRef90_G1KRT5	H L E P E E L S D H L T Y L E F K S F R R	S F S D Y Q N Y I L M N G C V K D			
UniRef90_UPI0003332BBF	K V T P E E Y A G Q I T L M D V P V F K A I	Q P D E L L S S C G W N K K E K Y S S			
UniRef90_B0ECX5	K M D D Y E I A K Q Q L T M V D F G I Y K N V	M F A K D Q C E E K Y R			
UniRef90_UPI0003C371D2	D F K A M E I I A K Q M T L L D A E L F Q K I	E I P E V L			
UniRef90_G6CN40	T L S A L E I A E Q M T Y L D Y Q I F S A I	H S E E F F L S Q A W T K A D K A E R			
UniRef90_K1P5B0	D I S P L E L A A Q Q L T H I E L D R L S H I	G P E E F V Q A F E T T Y N D M K K			
UniRef90_B6K2L9	N L N P M E V A R Q L T L I E F R S F L N L	L T D G E C L M K M W D L K N G I S E			
UniRef90_F4QFA8	D I G A Q D M A T Q V T L V D N E L L L M A I	P L F Q F L H K A F T K Q D L			
UniRef90_I3JXV5	S S K D L A Y Q M T M F D W E L F S C	V H E H E L L Y H T F G R Q S F K R T			
UniRef90_B3RRB9	E I P V L E M A E Q M C L L H Y Y I Y A A I	G S G E I L L Q K S W M K G D R D T K			
UniRef90_R7TZ37	T I D N R F F A E Q L T Y I D S E E L F K R V	Q P H H C L G S V W S R R D K K G H			
UniRef90_G3UBD8	V F L A D H L A E Q L T L L D A E L F L K L V	P S Q C L G G L W G H R D R P G H			
UniRef90_B8NQX5	D I D P L E F A R Q L T I I E S R L Y S K I	P L E C L N K T W Q K P D E P E P			
UniRef90_D2UZY1	K V D A R D F A E T L T A M D H S L Y K K I	D M L G Q S W N K E K K K F M			
UniRef90_D2VXZ1	D I D G E E M A R Q L C L Y E F D M Y Y S I	I K F T E M L Q G S W N K E K K K F M			
UniRef90_F2S6E0	D I D P D E E F A R E V T R M D W I M Y S S F	R P R E L I R H V S L S G P N K G K			
UniRef90_Q86G47	D I H P V E I A R Q L T L I D Y E L F K K I	L S P T D F Y H V S L S G P N K G K			
UniRef90_B3RP44	S I P T A N F A E Q L T L L D A E L F R K V	V T P H Q C L G G L W A K R N K D D G			
UniRef90_V4ALC1	R V S P D D F A S Q I T L M D L P V F Q A I	Q P D E L T S C A W T T K T K L I R			
UniRef90_V2X1Z9	D I L E P L E L A R Q L T T L L E S S L Y Q R V	R R R V E C L Q R A Q Q N Q S M D G			
UniRef90_G4TS50	K W D S A D I A A N H T I M E T R L Y S R I	S R S T K G P A			
UniRef90_H9FHK1	V F L A D H L A E Q L T L L D A E L F L N I	I P S Q C L G G L W G H R D R P G H			
UniRef90_E1FQ52	K E N C V Q I A A E Q L T F W D A E L F K E I	L P Q Q C Q G C V W N K R N K P E T			
UniRef90_B3RF38	H L E A L E L A E H T Y L E Y R S F C K I	L L F Q D Y H S F V T H G C T V D			
UniRef90_Q875L6	D F D P L E L A R Q L T T L D S K L Y C A I	Q P E E L L G S K F T K E T K A S G			
UniRef90_Q8IS16	D I D E E E I A R Q L C C I D F A L Y E L I	K P S E F L I K G W T K P Q Y R N K			
UniRef90_D3BBI3	H I D D L E I A R Q L T L I E Y K L F R N I	P P P E F L V K V T P Y G D F Q Y S			
UniRef90_B0EJK5	E L S A E T I V G Q L S L L Y E L T L F T G I	E M K D F L G S A W T K K D K Y E R			
UniRef90_G3STJ7	A F P P E L V A E Q F T L M D A E L F K K I	V V P Y H C L G C I W S Q R D K K G K			
UniRef90_U6PT55	S E N C V Q I A E Q L T F W D A E L F R E L I	F R P R D L V R H V S I S K D K I K S			
UniRef90_S7ZCG1	D T S D E E F A R E L T R M D W I M Y N S F	Q P E E L L S S C G W N K K E K H S S			
UniRef90_H2VDH1	K V T P E Q Y A G Q I T L M D V R V F K A I	D Q E E F V Q A F V Q K D D Q K K K			
UniRef90_Q4SDT4	D P Y T L A Q Q L T H V E L E H L S H I	G P E E F V Q A F V Q K D D Q K K K			
UniRef90_F6XRQ1	D F H S H E I A E Q L T L L D A E L F Y K I	I E P E V L L W A K E Q N E E K			
UniRef90_UPI0002652675	C P H P H V L A Q Q L T H I E L E R L T N I	I G P E E F V Q S F I K Q N D G D K R			
UniRef90_W5JLH1	Q V S P A E L A S Q I T T L D F P T F N A I	Q P E E L L T G C G W T K K N K H T L			
UniRef90_F0ZVK5	L S A V E I A E Q L C I T L V D Y D L F T N	L R S D W V R L M Q G S V D P S T			
UniRef90_A0A017SE16	D F S D E D V A R E L T R L D W V M F N S F	R P R D L V R H V S P D K D K I K S			
UniRef90_C3YSL3	R I A P E D I A N Q L S L L D L L C F K S I	K P E E L T T C G W T K L N K L M V			
UniRef90_U5EY05	S P S P A V L A H Q L T H I E L E R L S Y I	G P E E F V Q A F E T S F K D M K K			
UniRef90_H2MST1	L M S S K D V A Y H T S Y D W E L F H C V	V H E L E L L I Y H T F G R Q H I N K T			
UniRef90_UPI0002B48FAD	UniRef90_F7AE08	D I P E D D I A E E E M T R I D W V M F S S I	R I R D F V R H V S L P I D K C R S		
UniRef90_G4TS50	C C D P L I L A A Q Q L T H I E L E R V S N I	I Y P E D L M Q D N H K C R G D V T K			
UniRef90_W5N0E9	C S D A L V F A A Q Q L T H I E L E K I R N I	Q P E D V I H L C N H K C C D S K K			
UniRef90_UPI0003316E3E	UniRef90_F7CE17	T L S A M E L A A E Q I T L L D H I V F R S I	P Y E C F L Q R G S G L W G K Q S R		
UniRef90_UPI000333A3E9	UniRef90_W5N0E9	T I P A L D I A A E E L T Y L D F H I F R S I	G P E E F V Q A F G H K D P L D S T		
UniRef90_G7PT33	UniRef90_A0V9C9	A F P P E L V A A E Q L L T R M D A E L F K K V	K T E E L L N Q V W M K D G K E T K		
UniRef90_C9SQB9	UniRef90_G7PT33	D F D D E E I I A R Q I T L L Y D F M L Y S A I	V V P Y H C L G S I W S Q R D K K G K		
UniRef90_F7CJ17	UniRef90_A0V9C9	D V P D F D V A R E L C L R D A E L L A A I	D P D E L T S C G W T K K E K K S K L		
UniRef90_W5N0E9	UniRef90_G7PT33	T L S A M E L A A E Q I T L L D H I V F R S I	T P Q D L R D Y V L Q G S V R G		
UniRef90_UPI0003316E3E	UniRef90_F7AE08	T L S A M E L A A E Q I T L L D H I V F R S I	P Y E C F L Q R G S G L W G K Q S R		
UniRef90_UPI000333A3E9	UniRef90_U6IMK9	T I P A L D I A A E E L T Y L D F H I F R S I	G P E E F V Q A F G H K D P L D S T		
UniRef90_G7PT33	UniRef90_UPI000328DEBB	A F P P E L V A A E Q L L T R M D A E L F K K V	K T E E L L N Q V W M K D G K E T K		
UniRef90_C9SQB9	UniRef90_UPI000328DEBB	D F D D E E I I A R Q I T L L Y D F M L Y S A I	V V P Y H C L G S I W S Q R D K K G K		
UniRef90_F7CJ17	UniRef90_UPI000328DEBB	D V P D F D V A R E L C L R D A E L L A A I	D P D E L T S C G W T K K E K K S K L		
UniRef90_W5N0E9	UniRef90_UPI000328DEBB	T L S A M E L A A E Q I T L L D H I V F R S I	T P Q D L R D Y V L Q G S V R G		
UniRef90_G7PT33	UniRef90_UPI000328DEBB	T L S A M E L A A E Q I T L L D H I V F R S I	P Y E C F L Q R G S G L W G K Q S R		
UniRef90_F7CJ17	UniRef90_UPI000328DEBB	T I P A L D I A A E E L T Y L D F H I F R S I	G P E E F V Q A F G H K D P L D S T		
UniRef90_W5N0E9	UniRef90_UPI000328DEBB	A F P P E L V A A E Q L L T R M D A E L F K K V	K T E E L L N Q V W M K D G K E T K		
UniRef90_UPI0003316E3E	UniRef90_UPI000328DEBB	D F D D E E I I A R Q I T L L Y D F M L Y S A I	V V P Y H C L G S I W S Q R D K K G K		
UniRef90_UPI000333A3E9	UniRef90_UPI000328DEBB	D V P D F D V A R E L C L R D A E L L A A I	D P D E L T S C G W T K K E K K S K L		
UniRef90_G7PT33	UniRef90_UPI000328DEBB	T L S A M E L A A E Q I T L L D H I V F R S I	T P Q D L R D Y V L Q G S V R G		
UniRef90_F7CJ17	UniRef90_UPI000328DEBB	T I P A L D I A A E E L T Y L D F H I F R S I	P Y E C F L Q R G S G L W G K Q S R		
UniRef90_W5N0E9	UniRef90_UPI000328DEBB	A F P P E L V A A E Q L L T R M D A E L F K K V	G P E E F V Q A F G H K D P L D S T		
UniRef90_UPI0003316E3E	UniRef90_UPI000328DEBB	D F D D E E I I A R Q I T L L Y D F M L Y S A I	K T E E L L N Q V W M K D G K E T K		
UniRef90_UPI000333A3E9	UniRef90_UPI000328DEBB	D V P D F D V A R E L C L R D A E L L A A I	V V P Y H C L G S I W S Q R D K K G K		
UniRef90_G7PT33	UniRef90_UPI000328DEBB	T L S A M E L A A E Q I T L L D H I V F R S I	D P D E L T S C G W T K K E K K S K L		
UniRef90_F7CJ17	UniRef90_UPI000328DEBB	T I P A L D I A A E E L T Y L D F H I F R S I	T P Q D L R D Y V L Q G S V R G		
UniRef90_W5N0E9	UniRef90_UPI000328DEBB	A F P P E L V A A E Q L L T R M D A E L F K K V	P Y E C F L Q R G S G L W G K Q S R		
UniRef90_UPI0003316E3E	UniRef90_UPI000328DEBB	D F D D E E I I A R Q I T L L Y D F M L Y S A I	G P E E F V Q A F G H K D P L D S T		
UniRef90_UPI000333A3E9	UniRef90_UPI000328DEBB	D V P D F D V A R E L C L R D A E L L A A I	K T E E L L N Q V W M K D G K E T K		
UniRef90_G7PT33	UniRef90_UPI000328DEBB	T L S A M E L A A E Q I T L L D H I V F R S I	V V P Y H C L G S I W S Q R D K K G K		
UniRef90_F7CJ17	UniRef90_UPI000328DEBB	T I P A L D I A A E E L T Y L D F H I F R S I	D P D E L T S C G W T K K E K K S K L		
UniRef90_W5N0E9	UniRef90_UPI000328DEBB	A F P P E L V A A E Q L L T R M D A E L F K K V	T P Q D L R D Y V L Q G S V R G		
UniRef90_UPI0003316E3E	UniRef90_UPI000328DEBB	D F D D E E I I A R Q I T L L Y D F M L Y S A I	P Y E C F L Q R G S G L W G K Q S R		
UniRef90_UPI000333A3E9	UniRef90_UPI000328DEBB	D V P D F D V A R E L C L R D A E L L A A I	G P E E F V Q A F G H K D P L D S T		
UniRef90_G7PT33	UniRef90_UPI000328DEBB	T L S A M E L A A E Q I T L L D H I V F R S I	K T E E L L N Q V W M K D G K E T K		
UniRef90_F7CJ17	UniRef90_UPI000328DEBB	T I P A L D I A A E E L T Y L D F H I F R S I	V V P Y H C L G S I W S Q R D K K G K		
UniRef90_W5N0E9	UniRef90_UPI000328DEBB	A F P P E L V A A E Q L L T R M D A E L F K K V	D P D E L T S C G W T K K E K K S K L		
UniRef90_UPI0003316E3E	UniRef90_UPI000328DEBB	D F D D E E I I A R Q I T L L Y D F M L Y S A I	T P Q D L R D Y V L Q G S V R G		
UniRef90_UPI000333A3E9	UniRef90_UPI000328DEBB	D V P D F D V A R E L C L R D A E L L A A I	P Y E C F L Q R G S G L W G K Q S R		
UniRef90_G7PT33	UniRef90_UPI000328DEBB	T L S A M E L A A E Q I T L L D H I V F R S I	G P E E F V Q A F G H K D P L D S T		
UniRef90_F7CJ17	UniRef90_UPI000328DEBB	T I P A L D I A A E E L T Y L D F H I F R S I	K T E E L L N Q V W M K D G K E T K		
UniRef90_W5N0E9	UniRef90_UPI000328DEBB	A F P P E L V A A E Q L L T R M D A E L F K K V	V V P Y H C L G S I W S Q R D K K G K		
UniRef90_UPI0003316E3E	UniRef90_UPI000328DEBB	D F D D E E I I A R Q I T L L Y D F M L Y S A I	D P D E L T S C G W T K K E K K S K L		
UniRef90_UPI000333A3E9	UniRef90_UPI000328DEBB	D V P D F D V A R E L C L R D A E L L A A I	T P Q D L R D Y V L Q G S V R G		
UniRef90_G7PT33	UniRef90_UPI000328DEBB	T L S A M E L A A E Q I T L L D H I V F R S I	P Y E C F L Q R G S G L W G K Q S R		
UniRef90_F7CJ17	UniRef90_UPI000328DEBB	T I P A L D I A A E E L T Y L D F H I F R S I	G P E E F V Q A F G H K D P L D S T		
UniRef90_W5N0E9	UniRef90_UPI000328DEBB	A F P P E L V A A E Q L L T R M D A E L F K K V	K T E E L L N Q V W M K D G K E T K		
UniRef90_UPI0003316E3E	UniRef90_UPI000328DEBB	D F D D E E I I A R Q I T L L Y D F M L Y S A I	V V P Y H C L G S I W S Q R D K K G K		
UniRef90_UPI000333A3E9	UniRef90_UPI000328DEBB	D V P D F D V A R E L C L R D A E L L A A I	D P D E L T S C G W T K K E K K S K L		
UniRef90_G7PT33	UniRef90_UPI000328DEBB	T L S A M E L A A E Q I T L L D H I V F R S I	T P Q D L R D Y V L Q G S V R G		
UniRef90_F7CJ17	UniRef90_UPI000328DEBB	T I P A L D I A A E E L T Y L D F H I F R S I	P Y E C F L Q R G S G L W G K Q S R		
UniRef90_W5N0E9	UniRef90_UPI000328DEBB	A F P P E L V A A E Q L L T R M D A E L F K K V	G P E E F V Q A F G H K D P L D S T		
UniRef90_UPI0003316E3E	UniRef90_UPI000328DEBB	D F D D E E I I A R Q I T L L Y D F M L Y S A I	K T E E L L N Q V W M K D G K E T K		
UniRef90_UPI000333A3E9	UniRef90_UPI000328DEBB	D V P D F D V A R E L C L R D A E L L A A I	V V P Y H C L G S I W S Q R D K K G K		
UniRef90_G7PT33	UniRef90_UPI000328DEBB	T L S A M E L A A E Q I T L L D H I V F R S I	D P D E L T S C G W T K K E K K S K L		
UniRef90_F7CJ17	UniRef90_UPI000328DEBB	T I P A L D I A A E E L T Y L D F H I F R S I	T P Q D L R D Y V L Q G S V R G		
UniRef90_W5N0E9	UniRef90_UPI000328DEBB	A F P P E L V A A E Q L L T R M D A E L F K K V	P Y E C F L Q R G S G L W G K Q S R		
UniRef90_UPI0003316E3E	UniRef90_UPI000328DEBB	D F D D E E I I A R Q I T L L Y D F M L Y S A I	G P E E F V Q A F G H K D P L D S T		
UniRef90_UPI000333A3E9	UniRef90_UPI000328DEBB	D V P D F D V A R E L C L R D A E L L A A I	K T E E L L N Q V W M K D G K E T K		
UniRef90_G7PT33	UniRef90_UPI000328DEBB	T L S A M E L A A E Q I T L L D H I V F R S I	V V P Y H C L G S I W S Q R D K K G K		
UniRef90_F7CJ17	UniRef90_UPI000328DEBB	T I P A L D I A A E E L T Y L D F H I F R S I	D P D E L T S C G W T K K E K K S K L		
UniRef90_W5N0E9	UniRef90_UPI000328DEBB	A F P P E L V A A E Q L L T R M D A E L F K K V	T P Q D L R D Y V L Q G S V R G		
UniRef90_UPI0003316E3E	UniRef90_UPI000328DEBB	D F D D E E I I A R Q I T L L Y D F M L Y S A I	P Y E C F L Q R G S G L W G K Q S R		
UniRef90_UPI000333A3E9	UniRef90_UPI000328DEBB	D V P D F D V A R E L C L R D A E L L A A I	G P E E F V Q A F G H K D P L D S T		
UniRef90_G7PT33	UniRef90_UPI000328DEBB	T L S A M E L A A E Q I T L L D H I V F R S I	K T E E L L N Q V W M K D G K E T K		
UniRef90_F7CJ17	UniRef90_UPI000328DEBB	T I P A L D I A A E E L T Y L D F H I F R S I	V V P Y H C L G S I W S Q R D K K G K		
UniRef90_W5N0E9	UniRef90_UPI000328DEBB	A F P P E L V A A E Q L L T R M D A E L F K K V	D P D E L T S C G W T K K E K K S K L		
UniRef90_UPI0003316E3E	UniRef90_UPI000328DEBB	D F D D E E I I A R Q I T L L Y D F M L Y S A I	T P Q D L R D Y V L Q G S V R G		
UniRef90_UPI000333A3E9	UniRef90_UPI000328DEBB	D V P D F D V A R E L C L R D A E L L A A I	P Y E C F L Q R G S G L W G K Q S R		
UniRef90_G7PT33	UniRef90_UPI000328DEBB	T L S A M E L A A E Q I T L L D H I V F R S I	G P E E F V Q A F G H K D P L D S T		
UniRef90_F7CJ17	UniRef90_UPI000328DEBB	T I P A L D I A A E E L T Y L D F H I F R S I	K T E E L L N Q V W M K D G K E T K		
UniRef90_W5N0E9	UniRef90_UPI000328DEBB	A F P P E L V A A E Q L L T R M D A E L F K K V	V V P Y H C L G S I W S Q R D K K G K		
UniRef90_UPI0003316E3E	UniRef90_UPI000328DEBB	D F D D E E I I A R Q I T L L Y D F M L Y S A I	D P D E L T S C G W T K K E K K S K L		
UniRef90_UPI000333A3E9	UniRef90_UPI000328DEBB	D V P D F D V A R E L C L R D A E L L A A I	T P Q D L R D Y V L Q G S V R G		
UniRef90_G7PT33	UniRef90_UPI000328DEBB	T L S A M E L A A E Q I T L L D H I V F R S I	P Y E C F L Q R G S G L W G K Q S R		
UniRef90_F7CJ17	UniRef90_UPI000328DEBB	T I P A L D I A A E E L T Y L D F H I F R S I	G P E E F V Q A F G H K D P L D S T		
UniRef90_W5N0E9	UniRef90_UPI000328DEBB	A F P P E L V A A E Q L L T R M D A E L F K K V	K T E E L L N Q V W M K D G K E T K		
UniRef90_UPI0003316E3E	UniRef90_UPI000328DEBB	D F D D E E I I A R Q I T L L Y D F M L Y S A I	V V P Y H C L G S I W S Q R D K K G K		

	250	260	270	280
UniRef90_E4XR30	I S T V K A T V K Q F N H V V Y I V L A T	V L S P C S L G Q R A K I V E K W I K		
UniRef90_E9G6Y1	T R N L E S Y I Q W F N R L S Y F V A T Q V C S N V K K Q R I K V I E Y W I E			
UniRef90_L8H8A0	A P H V V E M I I A F N D F C M W V S T T L L S S Y E R I K D R V K C M E T F A S			
UniRef90_M5GAX2	A V N V K A I T T L S T A I T G L V T E S V L S E Y D I K K R T N L L K Y Y I K			
UniRef90_T1IPE1	A P N I T L M H Q R F N N M S K L V V S R I I D E P D A K R V V I I E K W I N			
UniRef90_F4QDN8	A P N I Q A S T D H F N R V S Q L V V T E I V Q C K N S K S R A T V I A H F I A			
UniRef90_J9K5I2	A P H I L M T K R F N E L S Q L V A S E I M R K N N V A S R V I A I E K W A A			
UniRef90_G1KRT5	N P T M E R S I A L C N G V S Q W V Q L M V L N R P T P Q L R A E V F I K F I R			
UniRef90_UPI0003332BBF	A P N A V A F T R R F N H V S F W V V R E I L H A Q T L K I R A E V L S H Y I K			
UniRef90_B0ECX5	A P N V V C K M L A R R V D E I S H H W I G T M L M F P D V E M R A K L M N K F I S			
UniRef90_UPI0003C371D2	S P N L N K F T E H F N K M M S Y W V R S K L T L N C A K E R E K Y V E K F I K			
UniRef90_G6CN40	A P H I V V M M T G H F N K M S Y W V R S K L T L N C A K E R E K Y V E K W A A			
UniRef90_K1P5B0	T S N L E A Y V H W F N R L S Y F V T T E C S H L K K Y K N R V R I E Y F V D			
UniRef90_B6K2L9	N E G T R A V C F C S N Q L V S A I A E V E G K E L K R K D I L A F Y I C			
UniRef90_F4QFA8	S P Q F H H N M V S K F N E W A K W T S Y E I L G R E K L A D R V A A M S Y F I D			
UniRef90_I3JXV5	T A N L D L F L R R F N Q V Q L W V V T E V C L C G Q L S K R V Q L L K K F I K			
UniRef90_B3RRB9	A P N V L R A I H Y F N H T S R L V A T E I L N R S Q P A A R A A V I E K W A Q			
UniRef90_R7TZ37	A E S V Y K T V N Q F N A V S Y R V I A T V L K H P S M E E R A L V I D K W I E			
UniRef90_G3UBD8	C P S V R A T V T Q F N K V A G A V V S S V I R P L R P P Q R A R L L E K K W I R			
UniRef90_B8NQX5	U T A T V K A L I L H S N Q L T N W V A E M I L S Q S D V V K Q L T R L E A L K E			
UniRef90_D2UZY1	A P N I I S V T T L F N K V V S S Y V F Q I V V S E S N P M F R K K M I E T V I K			
UniRef90_D2VXZ1	S P N V L N M M N F F D N I S M W V A S L I C R G Q T T Y A R K H T Y K M I I			
UniRef90_F2S6E0	S S N V N R M I K S F N H L A F F V A S M V L L R D K A K H R A Q A L E K F M N			
UniRef90_Q86G47	V P N L I N F I N R S F N T V S Y W V A T E I L S S S N I K R V S V L K R F I T			
UniRef90_B3RP44	T G S V T A T Q K Q F N N V L F S V V T T I L N Y S S S N T P H L R G K I I S K W I D			
UniRef90_V4ALC1	A P Y V V A F T R R F N H V N F W V Q K E I I L N C Q T L K T R A E V L S H F I K			
UniRef90_V2X1Z9	U I G T V I Q T S N R I A D W V A N S V M S S D A P H Q R A I I V K H L I S			
UniRef90_G4TS50	V A N L A A F I G T S D R I A A W V K L S V L T C E S L G K R A D T I D H W I			
UniRef90_H9FHK1	C P S V R A T V T Q F N K V V A G A V V S S V I R P L R P P Q R A R L L E K W I R			
UniRef90_E1FQ52	V Y T V R A T I D Q F N A V V Q K V M T S I V P D C R P D F R A K I I A K W D			
UniRef90_B3RF38	N P V L E R F I S L F N S V S Q W V Q L M V L S K P T A P Q R A L V I T H F V H			
UniRef90_Q875L6	V T H V K S M S S M S T R I T G W I S E C I L G E S D A R K R T Q L L K F F I K			
UniRef90_Q8IS16	A V N L I N M M R R N D F T K W I A A S I I L N E Q N S K G R S K L L G R F L K			
UniRef90_D3BBI3	S P N L I A Y L N R S S D V S K W V A H T I I L S L D Q K K A R V K M I E K Y F K			
UniRef90_B0EJK5	C P R L C E F L E H F N A V V T N W V W S Y S I I L Q E S D I N A R A N L I S K F I D			
UniRef90_G3STJ7	U H F V A T I R A T V T Q F N A V V C V I T T C L G D R N M K D R A R V V E H W I			
UniRef90_U6PT55	A P T I V A F T R R F N Q T S F W V V R E I I L H A Q T L K I R A E V L S L Y I R			
UniRef90_S7ZCG1	L Q N V N R M I K Q F N H V A Y F V A S M I V P D C R P D F R A K I I A K W I D			
UniRef90_H2VDH1	A P N V V A F T R R F N Q T S F W V V R E I I L H A Q T L K I R A E V L S L Y I R			
UniRef90_Q4SDT4	S S N L E A Y V R W F N R L C Y L V A T E I C M P A K K Q Q R A Q V I E F F I D			
UniRef90_F6XRQ1	S P N L T Q F T E H F N A V V T N W V W S Y S I I M L Q E K A Q D R E R L L L K F I K			
UniRef90_UPI0002652675	T K N L E A Y V E W F N R L S F L V A T E V C M H I K K K Q R V R I I E Y F T D			
UniRef90_W5JLH1	A P N I V A F T K R F N H T T F W T V Q E I I L N G V S P K D R A E I I S H F I K			
UniRef90_F0ZVK5	A P S L S Q A L K K S T I W T Q W A M G E I I L S T E D K N Q R V A I I N L L V D			
UniRef90_A0A017SE16	L Q N V N R M I K Q F N H V A Y F V A S M I V P D C R P D F R A R L E R F M N			
UniRef90_C3YSL3	T S N L D L L R R F N R V S F W T V Q E I I L N G Q S P K V R A E T L A H F I K			
UniRef90_U5EY05	T K N L E S Y V H W F N R L S Y V V A T E I V K H P K K K Q R V R I I E Y W E			
UniRef90_H2MST1	S V N L D L F L R R F N E I Q F W V I T E I C L C S Q I S K R V Q L L K K F I K			
UniRef90_UPI0002B48FAD	U n F P G I M K F I A R F N Q I T N M I S Y T V V H G E S P Q I R A N K M E F W I			
UniRef90_G7PT33	X P C L E A Y V K W F N R L C Y L V A T E I C M P A K K Q Q R A Q V I E F F I D			
UniRef90_C9SQB9	L K N V N R M I N H F N H V A K W A N L L L R D K P K H R A Q M L E K F M A			
UniRef90_F7CJ17	T Y T L E A Y D N W F N Q L S M L V A T E I C C R V V K K K Q R T R M V F I D			
UniRef90_W5N0E9	T Q N V E A Y E N W F N Q L S T L V A T E I C C R V V K K K Q R T R I V E F F I D			
UniRef90_UPI0003316E3E	C P A L E G S V G L S N S V S R W V Q V M V L L S R P G P A Q R A Q V I D K F I H			
UniRef90_UPI00033A3E9	U n F P T S M D M L P G R M S N L V Q S Q I M N Y P D V I S R A S A I E K W V A			
UniRef90_F7AE08	K H S F I E Q V A R E N M N L F W V H R C V S Y P A K K Q Q R A Q V V E F F I D			
UniRef90_U6IMK9	A P H V M L V T K R F N E V S K L V V S E I I I S R P E V P D R A T C I E K W V A			
UniRef90_UPI000328DEBB	A P T V R A T V T Q F N R V T N C V I T T C L G D R S M K D R A R V V E H W I E			
UniRef90_A9V9C9	U n F P C S N I I A V T N H F N S V S R W A T L C R T E R L R R A K V L A K L V D			
UniRef90_I3J8D5	T S N L E A Y V S W F N R L S Y L V A T E I C C P M K K K H H R A R I I E F F I D			
UniRef90_UPI00046C05F4	S P N L T R F T E H F N K M S Y W A T R I I L T A E G K D V R E K Y F L K F I K			
UniRef90_C4LX81	C Q N I V Y A Q T F F N G L Q N H F T R M I L N E T T T Q R A A I I E R L V D			
UniRef90_F0ZNK4	V P H I I A F I S R F S N S V S Y W V A T E I L S S N N I K H R A C V I E K F I V			
UniRef90_UPI000180D182	U n F P V P V G M T Q R F N H T S F W V I R E I L N A S T L K I R A E V L I H F I K			
UniRef90_C4M2F2	T P H I V N M I K L S N K L I H V Q T E I V M Q P T Y A L R S L A L F Y F I T			
UniRef90_B0W7T1	T R N L E S Y V Q W F N R L S Y I V A T E I C K H S K K Q R A R V V I E Y W E			
UniRef90_UPI000444682	N P I L E R F I T T L F N S V S Q W I Q L M V L L S K P T A Q R A A V V S H F I R			
UniRef90_I3N190	U n F P C P T L E G S V G L T N S V S R W V Q V M V L V L S R P S Q R A Q V L D K F I H			
UniRef90_UPI0004421DCB	A P T I V R A T I A Q F N A V V T K C V I R T V L N G K E I L K Q R A K I I E K W I N H			
UniRef90_H2L625	N P A L E R S V V M M C N G V S Q W V Q L M V L S R H T A Q Q R A Q V F T K F I H			
UniRef90_R7U9E0	T A N L D F L R R F N E V Q Y W V A S E M C L T Q P V Y N K R V Q L L R K L I K			
UniRef90_C6HAS5	S C N V N R M I D Q F N H L A I F V A S M I V P D V I S R A S A I E K W V A			
UniRef90_G3VH13	C P T L E G S V G L T N S V S R W V Q V M V L V L S R P S Q R A Q V L D K F I H			
UniRef90_UPI00020AECA6	T S N L E A Y V K W F N R L C Y L V A T E I C C R V E K K K Q R T R V V E F F I D			
UniRef90_D3B370	U n F P A P N V L K M I D R F N N V S M W V A T M I I Q T Q K V K A R A R M M T R F I K			
UniRef90_A0A058Z547	A F G A T Q L T R W S T R I S H W V I T E I V H T S D L K A R A Q C Y E R F I V			
UniRef90_S3CZA0	C K S L K R M I S H F N H I A R W V S N M I L R D K K A K H R A P C L Q K F M D			
UniRef90_E9HV6	A P N V V A M T R H F N H V S F W T V Q E I I L N E A S V R P R A E V V S H F I R			
UniRef90_H2ZZM7	T S N L E A Y D H F W F N R L S T L V A T E I C C R V E K K K Q R T R V V E F F I D			
UniRef90_UPI0004560483	U n F P D T N V K S M S S M S T R I T G W V S E C I L G E A D A R M M T R F I K			
UniRef90_T2MAQ3	C P N V V N Y T K R F N H V S F W V I T R E V L L G S N T A K N R A E K I V Y F I K			
UniRef90_G8BZK5	S K N I S D F I C F A N T L T N F V S Y S I V V E K S D I K K R K K L I E F F I D			
UniRef90_F1KRH4	S P N L E R F C A F T E H F N K V S Y W V R T L V I Q P S E Q R L R E K Y L L K F I K			
UniRef90_F6RKB0	T L N S L L L Q R C N E V Q L W V I T R E V L L C N Q P G R V Q L L K K F I K			
UniRef90_S9R9N9	S E E S G T V Y Y I S N Q L V N F V A E T I V R E R D L R K R T H Y L G F F I Q			
UniRef90_D6X394	T A N L D V F L R R F N E I Q F W V T E I C M T T S L S K R V A L L R K F I K			
UniRef90_UPI0003D6E232	T F S L E A Y D N W F N C L S M L V A T E I C C R V V K K K H R T R M L E F F I D			
UniRef90_I3JAM6	A P T I V R A T I T Q F N A V A C V N T V L K H R Q L R P R A R V V Q R W I D			
UniRef90_UPI000440D164	A P N V V A F T R R F N R V S F W L V R E I I L T A Q T L K I R A E I L S H F V K			
UniRef90_H9ITW6	A P N V V A F T K R F N R V S F W T V Q E I I L N G Q S P K A R A E I L M A H F I K			

UniRef90_E4XR30
 UniRef90_E9G6Y1
 UniRef90_L8H8A0
 UniRef90_M5GAX2
 UniRef90_T1IPE1
 UniRef90_F4QDN8
 UniRef90_J9K5I2
 UniRef90_G1KRT5
 UniRef90_UPI0003332BBF
 UniRef90_B0ECX5
 UniRef90_UPI0003C371D2
 UniRef90_G6CN40
 UniRef90_K1P5B0
 UniRef90_B6K2L9
 UniRef90_F4QFA8
 UniRef90_I3JXV5
 UniRef90_B3RRB9
 UniRef90_R7TZ37
 UniRef90_G3UBD8
 UniRef90_B8NQX5
 UniRef90_D2UZY1
 UniRef90_D2VXZ1
 UniRef90_F2S6E0
 UniRef90_Q86G47
 UniRef90_B3RP44
 UniRef90_V4ALC1
 UniRef90_V2X1Z9
 UniRef90_G4TS50
 UniRef90_H9FHK1
 UniRef90_E1FQ52
 UniRef90_B3RF38
 UniRef90_Q875L6
 UniRef90_Q8IS16
 UniRef90_D3BBI3
 UniRef90_B0EJK5
 UniRef90_G3STJ7
 UniRef90_U6PT55
 UniRef90_S7ZCG1
 UniRef90_H2VDH1
 UniRef90_Q4SDT4
 UniRef90_F6XRQ1
 UniRef90_UPI0002652675
 UniRef90_W5JLH1
 UniRef90_F0ZVK5
 UniRef90_A0A017SE16
 UniRef90_C3YSL3
 UniRef90_U5EY05
 UniRef90_H2MST1
 UniRef90_UPI0002B48FAD
 UniRef90_F4PXZ9
 UniRef90_G6CNX6
 UniRef90_G7PT33
 UniRef90_C9SQB9
 UniRef90_F7CJ17
 UniRef90_W5N0E9
 UniRef90_UPI0003316E3E
 UniRef90_UPI000333A3E9
 UniRef90_F7AE08
 UniRef90_U6IMK9
 UniRef90_UPI000328DEBB
 UniRef90_A9V9C9
 UniRef90_I3J8D5
 UniRef90_UPI00046C05F4
 UniRef90_C4LX81
 UniRef90_F0ZNK4
 UniRef90_UPI000180D182
 UniRef90_C4M2F2
 UniRef90_B0W7T1
 UniRef90_UPI000444682
 UniRef90_I3N190
 UniRef90_UPI0004421DCB
 UniRef90_H2L625
 UniRef90_R7U9E0
 UniRef90_C6HAS5
 UniRef90_G3VH13
 UniRef90_UPI00020AECA6
 UniRef90_D3B370
 UniRef90_A0A058Z547
 UniRef90_S3CZA0
 UniRef90_E9HCV6
 UniRef90_H2ZZM7
 UniRef90_UPI0004560483
 UniRef90_T2MAQ3
 UniRef90_G8BZK5
 UniRef90_F1KRH4
 UniRef90_F6RKB0
 UniRef90_S9R9N9
 UniRef90_D6X394
 UniRef90_UPI0003D6E232
 UniRef90_I3JAM6
 UniRef90_UPI000440D164
 UniRef90_H9ITW6

330 340 350 360

Detailed description: This block contains a large sequence alignment of UniRef90 proteins. The alignment spans from position 330 to 360. The first 10 rows correspond to the UniRef90 entries listed above. The alignment is color-coded by amino acid: Red for A, T, Y; Blue for C, D, E; Green for G, S, P; Yellow for I, L, V; Purple for F, W, H; and Black for M, K, R. Positions 330, 340, 350, and 360 are specifically highlighted in yellow. The sequences show significant variation, with some positions being highly conserved across all entries (e.g., I at 330, L at 340, V at 350, F at 360) and others showing more divergence.

370 380 390 400

UniRef90_E4XR30	M M L D T A H T D L L K G	L I N F E K R R K E F E L L	T M I S L L Q M G
UniRef90_E9G6Y1	Y F L L N E G C A N R L P N G H	L I N F E K F W Q L L A K Q V	T E F M T W K Q V
UniRef90_L8H8A0	T F I I E D G N P D T I P R G L	I N F E K F W Q L L A K Q V	S E I S R Y Q Q N
UniRef90_M5GAX2	T F C C N G G N P S H R P S P D V Q L	I N F T K R R F L L F R V I	F D M Q R F Q K A
UniRef90_T1IPE1	T F I I E E G T P N Y T D D G L	I N F S K M R M I A H V I	R E I R H L Q Q T
UniRef90_F4QDN8	T F I I E D G N P P Q I G G	I N F Y K Q R K I S E V I	F Q I Q Q F Q Q V
UniRef90_J9K5I2	S F L E E G T P S L A D D G L	I N F S K L R M I A H V I	Q E I R R F Q Q T
UniRef90_G1KRT5	I S L Y E A M P D Y L E D N K	V N I H K L Y S L Y N H	N E L I Q L Q D L
UniRef90_UPI0003332BBF	T Y I I D S A Y P S T G S I L E	E N E Q R S N L M N N I L	R I I S D L Q Q S
UniRef90_B0ECX5	T F I I T E G N P K I K N E D G I S L I	N F E R Q E M C L T Q I	D D F L R F Q Q F
UniRef90_UPI0003C371D2	T F F V H V G N P D Y L K D G V	N F S K R W Q Q Y K I I	E N M K R F K T C
UniRef90_G6CN40	S F I I E E G T S N Y T P D G L	N F S K M R M I A H V I	R E I R N F Q Q T
UniRef90_K1P5B0	Y F L L N E G C S N K L P N G D	I N F E K F W Q L L A K Q I	S D F I T W Q Q A
UniRef90_B6K2L9	T F I L K D G N R D K L E N G L S	I N F E K R R W K F A N L L	N E I R R F Q S V
UniRef90_F4QFA8	T A I I E E A N D T Y T S G G L	I N E K F R R L L Y R I I	K E I S G Y Q Q P
UniRef90_I3JXV5	T F T H H E G N K T F L D N M V	N F E K M R I I A N T I	R Q V R H C R S Q
UniRef90_B3RRB9	T F M E E E A N P S E T D D Q L I	N F S K L R M I A H L I	E E I R I Y Q G T
UniRef90_R7TZ37	T M I D T A I K D C S E S G L I	N F D K K R K E F E Y L A Q I	K L L Q S Q
UniRef90_G3UBD8	V M L D A A S K D E L E N G Y I	N F D K R R K E F A V L S E L R Q L Q N K	
UniRef90_B8NQX5			
UniRef90_D2UZY1	L F A D D G N P T L V D G K	L N F Y K A I S Q Y A I I M Y N I L R F Q D R	
UniRef90_D2VXZ1	Q Y I I E E N H N D Y V K N N G V E L I	W I K R E S L F E V I K E I K H F Q N I	
UniRef90_F2S6E0	V S A E E E G N K T F V G A N N D R I	W R K F E V M G D V I L S I Q Q S Q K T	
UniRef90_Q86G47	Y F I I E E N P D Y L E N G Y I	N F E K M K M I S K V L I E I K R Y Q T E	
UniRef90_B3RP44	T M L D T A N V D M T E D K L I	N F E K K R R E F E V I A K V K L L Q A T	
UniRef90_V4ALC1	T I Y I I D V A H P H H G G L E S Q P R R	Q R M N N I L R V I A D F Q Q S	
UniRef90_V2X1Z9	L M A L P V F R D G P P H N P P N F I	E F K K R Q T A S Q V I D E L M H W Q D H	
UniRef90_G4TS50	V H A H E H H P D F M A T P P R P L I	N V M K L R R L G E I G Q M L K F V N K	
UniRef90_H9FHK1	V M L D A A S K D E L E N G Y I	N F D K R R K E F A V L S E L R R L Q N E	
UniRef90_E1FQ52	S M I D Q A N P D F T E E G L I	N F E K R R K E F E I I A K I R L F Q S A	
UniRef90_B3RF38	V A L Q L A L P D W L D P A R T R L L	N G A K M K Q L F S I I L E E L A M V T S L	
UniRef90_Q875L6	T F C C H E G N A A T R P C P S N K L	N F D K Y I K I S R I V G E V Q R F Q V	
UniRef90_Q8IS16	A F V I D E S N P D R I N N N	N L N K R R V I W R V I V N T M R Y Q P I	
UniRef90_D3BBI3	S F I I E T Q Q P P L M G L	N F V K R Q N L F N I V S K V E A Y Q Q T	
UniRef90_B0EJK5	T F I I D E G N P D K T E S G D V N F E K C	R R M M A N Q L L T I R P L Q N D	
UniRef90_G3STJ7	V M L D T A M K D Y L Y G R M I	N F E K R R K E F E V I A Q I K L L Q S A R	
UniRef90_U6PT55	T M I D Q G T Q D F T E E G L I	N F E K R R K E F E V I V A K L R L F Q S R	
UniRef90_S7ZCG1	V S A E E G N K T F I G E N K S R I	N W K F E V M G E V V I G I Q R S Q K C	
UniRef90_H2VDH1	T Y I I D S A Y P S T G S I L E	N F E K R R Q V I R I S D L Q R S	
UniRef90_Q4SDT4	Y F L N E G C A N R L P N G H V N F E K F	V E L A R Q V G E F M T W K Q V	
UniRef90_F6XRQ1	T F F V H H G N P D Y I D G K V N F S K R	W Q Q F N I D S M R C F Q Q A	
UniRef90_UPI0002652675	Y F L N E G C S N K M A N G Y I	N F Q K F W Q L A K Q V T N F I S W K T V	
UniRef90_W5JLH1	I Y I I D M H P S Q R G E E S H A R E	T K M N N V L R I L S S Y Q S S	
UniRef90_F0ZVK5	S Q I D Q K T P T T I D G N G N E F I N V E K L R S I F S I V V E I Q R L Q Q R		
UniRef90_A0A017SE16	V S A E E G N K T F I G E C K S R I	N W K F E V M G E V V L C I Q R S Q K T	
UniRef90_C3YSL3	T F T H H E G N K T Y Y D G L V N F E K M H	M I S S T I R T I R Q C G S E	
UniRef90_U5EY05	Y F L N E G C S N K L P N G H I N F E K F	W Q L A K Q V N E F I G W K Q A	
UniRef90_H2MST1	T F T H H E G N K T F I D N L V N F E K M R M I A K T V K I V R Y C R S Q		
UniRef90_UPI0002B48FAD	U F A Q E G G P T F D D N N L V N F A K M S R V S R L V R E V K C Y Q Q L		
UniRef90_F4PXZ9	T F I I E E G N P N I L P E H S L I N F S K Y T L M Y K I V S E V Q T Y Q W S		
UniRef90_G6CNX6	V Y I I D A H P S G S P Y R V A K M A V V L K A L E R Y Q T S		
UniRef90_G7PT33	Y F L N E G C A N R L P N G H V N F E K F L E L A K Q V G E F I T W K Q V		
UniRef90_C9SQB9	V S A E E G S K T F I G T D S D R I N W K K F E V L G E I L P I M K S Q S T		
UniRef90_F7CJ17	Y F L H K I H T N R L P N G Q I N F K K F W E I S R Q I H D F L T W K Q V		
UniRef90_W5N0E9	Y F L N K M H S D T L P N G H I N F K K Y W E I S R Q I S D F M I W R A V		
UniRef90_UPI0003316E3E	V S L L H E A Q P D R L I P D G R L H I N F C K M R M L A H V L Q E L A A L Q R Q		
UniRef90_UPI000333A3E9	A F I I E E G T P N F T E E G L V N F E K F L E L A K Q V G E F I T W K Q V		
UniRef90_F7AE08	Y F L N E G C A N R L P N G H I N F E K F L E L A K Q V G E F I T W K Q V		
UniRef90_U6IMK9	S F I I E E G A L D I T E H G L I N F C K M R M L A H V L M E I R R Y T Q T		
UniRef90_UPI000328DEBB	V M L D T A M K D Y L Y G R I N F E K R R K E F E V I A Q I K L L Q S A		
UniRef90_A9V9C9	T F F V H H G N P D F F D C E S R I V N F A K M Q H F H S I C S A V Q H F Q S E		
UniRef90_I3J8D5	Y F L N E G C A S R L P N G H I N F E K L W E L A K Q V S E F L V W R Q V		
UniRef90_UPI00046C05F4	T F F V H H G N S N L L P D G T I N F S K R W Q Q Y N I V E N M K K F K K G		
UniRef90_C4LX81	T F T T N F G N K T K E N E M V N F G K C	R Q I A H I L E Q V M F M H Q Q	
UniRef90_F0ZNK4	T Y I I E E V P S V L E N G Y I N F E K M R M I T K I L E I K K F Q T E		
UniRef90_UPI000180D182	T Y I I N S A H P D T G G L E S H D R T N K M N N I L R V I A E F Q Q S		
UniRef90_C4M2F2	T Y T S D G N K A S T N N K F N F Y K L R G I G N I K E I Q M K Q K T		
UniRef90_B0W7T1	Y F L N E G C S N K L P N G H I N F E K F W Q L A K Q V N E F I G W K Q V		
UniRef90_UPI000444682	T A V H V A L P D W A D K E K T R V I N L A K T Q Y A I L Q E L T L I Q T T		
UniRef90_I3N190	V S L H H E A P H D R L P D G R L H I N F C K M R M L A H V L Q E L A A L Q G Q		
UniRef90_UPI0004421DCB	T M L D T A L Q D Y V E G G L I N F E K R R R E F E V I A Q I K L L Q S S		
UniRef90_H2L625	T S L N E A M P D Y I L E E E K I N L S K L Q H L Y S N I N D L L L A I H S C		
UniRef90_R7U9E0	T F T H H E G N K T H F D G I N F E K M H M I A Q T R T I R F C R S K		
UniRef90_C6HAS5	V S A E E G N K T F I G P N N D R I N W R K F E I M G E V V L G I H N S Q R T		
UniRef90_G3VH13	V S L L H Q A M P D R L P D G Q I H V A K L N S L Y L R L Q E L R A L Q A Q		
UniRef90_UPI00020AECA6	Y F L N E G C A N R L P N G H I N F E K F L E L A K Q V G E F I T W K Q V		
UniRef90_D3B370	T F F M E N N M E V A P N R K V D L I N F T K R T L V F K V I S M V Q Q S Q Q L		
UniRef90_A0A058Z547	V F L L D G G A K N F L D E D K G V I N F L K H A T A S R Y I T S L L K H Q K L		
UniRef90_S3CZA0	V S A E E G S R T F V G P D G D R I N W K K F E I V L G E V V L P I M K S Q G T		
UniRef90_E9HCV6	N F I I D V A H P H H G G L E S Q R R Q L Q M N N I L R I L A N Y Q Q S		
UniRef90_H2ZZM7	T F F C Y E G N A P T R P C P D K K L L I N F D K Y V K L S I R I S D F M T W K Q V		
UniRef90_UPI0004560483	T Y I I N T H P S T G G L D Y Q R S N K M N E I R L I A D F Q Q S		
UniRef90_T2MAQ3	T F F I V T G N P D F L D H D Q L I L I N F Q K R S K I F D I T N E I I K F K K N		
UniRef90_G8BZK5	T F F V N V G N S D Y L I S P D H C Q L L I N Y G K R W Q Q F A L L D S V R R F K S W		
UniRef90_F1KRH4	T F F I E D G N P D Y L I S P D H C Q L L I N F D K Y V K L S I R I S D F M T W K Q V		
UniRef90_F6RKB0	T F F I H E G N K T F L D N I N F E K L H M I A D A V R S V R Y C R N N		
UniRef90_S9R9N9	T F F L K S G N K D T N K N I N F D K R M K A A K I L N E I Q Q F Q A V		
UniRef90_D6X394	T F F T H E G N K T S L D G I N F E K M H M L A Q T M R T I R F C R S R		
UniRef90_UPI0003D6E232	T F F L H K I H T N H L P N G H I N F K K F W E I S R Q I H E F M T W T Q V		
UniRef90_I3JAM6	T M L D T A L P D L V E G G L I N F E K R R R E F E V I A Q I K L L Q S A		
UniRef90_UPI000440D164	T Y I I D S A Y P A S G S I I E T E Q R T N Q M N N I L R V I S D M Q S C		
UniRef90_H9ITW6	V Y I I D A H P A G S P H R V T K M N I V L K A L E R Y Q Q S		

410 420 430 440

UniRef90_E4XR30	C E K H E K Q Q P S Q D F E Q F I S L I Q P L T D E Q G F E L S Q M A E
UniRef90_E9G6Y1	T C P F E K H P K V I H Y L Q T G T I L S E N G I A L S S F D C E
UniRef90_L8H8A0	A Y N L H P V P Q I Q S L T N F T M K K D E L Y D L S L Q R E
UniRef90_M5GAX2	Y N L L E I N E A Q H F L Q F A L R E S R T S G D H K D L Y R R S L L I E
UniRef90_T1IPE1	P Y K I D T K P E V I K F L L D Q N L I I R A E D V L Y E K S L H L E
UniRef90_F4QDN8	L Y N I T P N I T I R D Y L L A A P L L E E
UniRef90_J9K5I2	P Y K I D F H P R V A N Y L L D T S L L N E D E L Y T T R S L E I E
UniRef90_G1KRT5	G A P L E A N K D L V H L L T S L D L Y Y T E D E L Y E L S Y A R E
UniRef90_UPI0003332BBF	C Y D I P M L P H V Q K Y L N S V Q Y I E E L Q K F V E D D N Y K L S L K I E
UniRef90_B0ECX5	T F N F P I V Q P L N G Y L Q Q L T S L P E D L L Y R I S V I L E
UniRef90_UPI0003C371D2	S Y T Y R R N E R I R F F E N F E N F L G E E E M W Q I S E T I K
UniRef90_G6CN40	P Y K I D F H P K V C D Y L L E E S F I P P E E R Q F T L S L E L E
UniRef90_K1P5B0	E C P F P K N D K V I N Y L L T S P V F S E S T L A S F E C E A P E K S F E K E
UniRef90_B6K2L9	P Y A F E P V E H I Q E M I N K Q L E K A Y D A D K L Y A K S L A I E
UniRef90_F4QFA8	L F N T R T S E P I K N Y L M N L S N T L L D E K E L H A L S L K V E
UniRef90_I3JXV5	P F N P D I C Q P N K N Q A E V R G Y V R K L C V I D N Q R A L T Q L S Y R L E
UniRef90_B3RRB9	P Y R M R C L P K V W M K Y I L N A K P I N C D K Q L F E L S L Q L E
UniRef90_R7TZ37	L Y H M R A N H S F F D W F Y S I R I Y D D N E S Y E L S C E I E
UniRef90_G3UBD8	C Y D L Q P D P D I Q Q W L Q G L W P L T E A Q S H R V S C E V E
UniRef90_B8NQX5	
UniRef90_D2UZY1	D Y E I I P K E E I Q A A I D S Y K P R G E D E L Y N M S L K I Q
UniRef90_D2VXZ1	G Y K F V K V F Q I Q E L I R T M P F K A S T N H N L M I H S Y K A E
UniRef90_F2S6E0	S F P T Y T K H D I T Q W L I L E A K F A G D E E E L Y S R S M Q V E
UniRef90_Q86G47	Q Y W L K K I D A I E N I L K S V V L T D K D L Y K A S H M I E
UniRef90_B3RP44	A K N Y M I V A D K E F R R W L R S L D L T E D E S F C L S T D I E
UniRef90_V4ALC1	N Y E N L T V L E H V Q N Y L K S V R Y I E E L Q K F V E D D N Y K L S L K E
UniRef90_V2X1Z9	P F N F E V N P V I R D H I D E S L A A F I G K Q S S N E R L W A L S
UniRef90_G4TS50	P Y N L V E N P T M T S A I E Q Q I E L A V S K D A G F F W Q R S Q E L Q
UniRef90_H9FHK1	C Y N L Q P D H D I Q R W L Q G L R P L T E A Q S H R V S C E V E
UniRef90_E1FQ52	C Y K I P M D M A F C S W F C F L P A L D E N Q C F V R S L E V E
UniRef90_B3RF38	R P P V Q A N P D L L S L L T V S L D Q Y Q T E D E L Y Q L S L Q R E
UniRef90_Q875L6	P Y N L V E V P E M Q Q F L K G L E D V Q G A Q G G R G A D D L Y R R S L L E
UniRef90_Q8IS16	P Y Y F L K V H Q I S L F L T E L K T E S E Q
UniRef90_D3BBI3	Y Y N L Q P V H Q I S T F V N K L P K V S E T E L L E L S K K
UniRef90_B0EJK5	Q H S I Y K A L P F F K D F I L S I E Q H K N D D E K A Q Y D I S L Q I Q
UniRef90_G3STJ7	C N N Y S I A P E E H F V A W F R A M E R L S E T E S Y N L S C E L E
UniRef90_U6PT55	A Y H I P M D R V F C A W F H F L P C L S E K E C F N R S L E V E
UniRef90_S7ZCG1	P H P Q A Q R Y D D I E R L L D C K L S G D E E D L Y A R S L H L E
UniRef90_H2VDH1	C T Y D V P V L P H V Q K Y L N S V R Y I E E L Q K F V E D D N Y K L S Q K I E
UniRef90_Q4SDT4	E C P F E E D R A I L H Y L H T A P V F S E D G L Y L A S Y E S E
UniRef90_F6XRQ1	H Y D L R R N D D L I N F F E F N D F S D H L A E E A L W E L S L K I K
UniRef90_UPI0002652675	E C P Y P R D R Q A L N Y L L T A P V F S E E N S L N L A S Y E S E
UniRef90_W5JLH1	N Y S F I S P V Q P T L R Y L Q S R R Y I D E L Q N I F E E D D Q Y K K S L N L E
UniRef90_F0ZVK5	N Y T M K P T K L F I Q L Q D I T T V S L D E L A D L S L K C E
UniRef90_A0A017SE16	P Y S Q M H R Y D D I Q R I L L D I K L A G D E E E L Y A R S M H V E
UniRef90_C3YSL3	P F N F D P P P V V K N I Q E V R N Y V R S L N V I D N Q R T L T Q L S H K E
UniRef90_U5EY05	T C P Y E K N T K I I M F L Q T N S I L N E N T L A M A S F D C E
UniRef90_H2MST1	T F S E D A P L P S K H H P D V W T Y V R Q F N V I D N Q R I L T Q L S H G L E
UniRef90_UPI0002B48FAD	P Y T F Q I N D E V M C S L I N F G I S V D Q D E L Y N H S L L V E
UniRef90_F4PXZ9	D Y N L N L V P I Q T F I R E L N P P P E K D L Y S I S L Q K E
UniRef90_G6CNX6	E Y T I T P P V H V A N Y L N S V R Y I E E L Q K F L E D D Q Y K L S L K E
UniRef90_G7PT33	E C P F E Q D P S I T H Y L S T A P I F S E D G L Y L A S Y E S E
UniRef90_C9SQB9	A Y R I D P D P Q P K V T Q Y L L D K T L I D E D T L Y E L S L K I E
UniRef90_F7CJ17	E C P F E Q D P Q D H N I T H Y L H T A P I F T E D G L Y L A S Y E S E
UniRef90_W5N0E9	E C P F E I S K R I Q N Y L L T A P I Y T E E A L Y I A S F E S E
UniRef90_UPI0003316E3E	H P P G S A N Q D L L H L L T L S L D L F Y T E D E I Y E L S Y A R E
UniRef90_UPI000333A3E9	S Y R I D P D P Q P K V T Q Y L L D K T L I D E D T L Y E L S L K I E
UniRef90_F7AE08	E C P F E Q D P Q D H N I T H Y L H T A P I F T E D G L Y L A S Y E S E
UniRef90_U6IMK9	P Y M I E L R Q E V V D Y L L D P T R L L S D D Q T Y E A S L T I E
UniRef90_UPI000328DEBB	C N N Y S I A P E E L F V G W F R V M E R L S E T E S Y K L S C E L E
UniRef90_A0V9C9	K Y D Y K S R P E V Y S L F K D F E H L D D E A L Y Q L S L Q V E
UniRef90_I3J8D5	V C P F D R D R R I L Q Y L V T P I F T E D E L H L A S Y E S E
UniRef90_UPI00046C05F4	I Y T F K K Q E R I I Q Q F Q N F D D F I G E D A M W Q L S E S I K E
UniRef90_C4LX81	T Y A Q L I K N I E I Q A A I I S D S R Y E V T M S D K E A F D L S L K I E
UniRef90_F0ZNK4	E Y G L K K I D Q I E N L F K T S V S V L T D K D L Y K A S N M C E
UniRef90_UPI000180D182	K Y D H L Q E L P H I K N Y L N S V K Y I E E L Q K F L E E D D N Y K L S L K I E
UniRef90_C4M2F2	S F S F N I A P N V R D F I N S I Q V I S N E D Q L F N L S Q K H E
UniRef90_B0W7T1	S C P Y E K N P K I I I M F L Q T N S I L N E N T L A M A S F D C E
UniRef90_UPI000444682	P P N I E S N T D L L N L L T V S L D Q Y H T E E E I Y Q M S L Q R E
UniRef90_I3N190	H P P C S A N E D L L H L L T L S L D L F Y T E D E I Y E L S Y A R E
UniRef90_UPI0004421DCB	C Y C M T S D K K F I Q W F Q K Q R Q L T E E E E S Y A L S C E V E
UniRef90_H2L625	K P P F E A N K D L L H L L T L S L D L Y Y T E D E I Y E L S Y T K E
UniRef90_R7U9E0	S L D L E P P Q S L K N S Q E V K S Y A R T L K V I D N Q R V L T Q L S H K L E
UniRef90_C6HAS5	P F P C Y P K N E D D P Q R I L I D T K F P G D Q D E L Y N R S M Q V E
UniRef90_G3VH13	S P P G G V N Q D L L H L L T L S L D L F Y T E D E I Y E L S Y A R E
UniRef90_UPI00020AECA6	E C P F E Q D P S I T H Y L Y T A P I F S E D G L Y L A S Y E S E
UniRef90_D3B370	S Y N L Q P V H Q I Q E F L L N I S D Y K G Q S L D L Y Q D E L Y R E S L R R E
UniRef90_A0A058Z547	E Y T F E I L K K E I R D F I C T G L P I Q S E D E H Y N L S L Q C E
UniRef90_S3CZA0	P Y P D P L R K H Q A S R E M I L D C R M P M D E E E Y Q R S V Q V E
UniRef90_E9HCV6	D Y S F L P V K N H V M E Y L R S A K Y I E E L Q K F L L E D D Q Y K L S L K E
UniRef90_H2ZZM7	E C P F E K K K V Q N Y L L T A P V Y T E E A L F I A S F E S E
UniRef90_UPI0004560483	E P F N L V E V P E I Q S Y L R T L N D V T S G S G G L G A D D L Y R R S L L E
UniRef90_T2MAQ3	Q Y D I K E K S H I V T Y L N S V K Y I D E L Q K F M E D D N Y K L S L Q E
UniRef90_G8BZK5	Q Y N L S K V P E V Y N Y I Q S E D D I W E I S E T I K
UniRef90_F1KRH4	N Y S I Q R D D R I L Q F F G F R N Y L S E D D I W E I S E T I K
UniRef90_F6RKB0	Q F G N D L P Q K N E R Q E A K F Y S N H L H V I D N Q Q T L F E L S H R I E
UniRef90_S9RN9N	S Y K F D S L N D V Q E L V H E V V S K E R N P D I I Y N E S L L T E
UniRef90_D6X394	H L V L E P P S P K S E G E V K S Y I S C L R V I D N Q R V L T S M S Q K L E
UniRef90_UPI0003D6E232	E C P F E K D K K I Q S Y V T A P I Y S E E E S Y A L S C E I E
UniRef90_I3JAM6	C Y C L T A D P A F L R W F K G Q P Q L S E Y D D I W E I S E T I E
UniRef90_UPI000440D164	S Y D H L V T L P H V Q K Y L M S V R Y I E E L Q K F V E D D N F K L S L K I E
UniRef90_H9ITW6	E Y E I A P L P H V A N F L N S V R Y I E E L Q K F V E D D Q Y K L S L K E

UniRef90_I1FR61
 UniRef90_UPI00045E001F
 UniRef90_G9KKA7
 UniRef90_UPI0001D38D4F
 UniRef90_L8HKN6
 UniRef90_V9KNR7
 UniRef90_E9BWS7
 UniRef90_Q8R514
 UniRef90_P26674
 UniRef90_UPI00046C0CC7
 UniRef90_UPI0003332DA3
 UniRef90_C5PON5
 UniRef90_UPI00042C05C1
 UniRef90_D3BR51
 UniRef90_A0A016PEU4
 UniRef90_H3B5I2
 UniRef90_G1LDM2
 UniRef90_F0ZUX1
 UniRef90_D5GIT2
 UniRef90_S8FZ29
 UniRef90_L8H701
 UniRef90_H2T9G5
 UniRef90_I2H0B4
 UniRef90_X6NAI2
 UniRef90_UPI00034FF736
 UniRef90_L8HMQ5
 UniRef90_K5Y6Z8
 UniRef90_L8GTL9
 UniRef90_F7VPN2
 UniRef90_W9CDK5
 UniRef90_W5KBA9
 UniRef90_UPI00046C2783
 UniRef90_W5L5J0
 UniRef90_E0W133
 UniRef90_L8H736
 UniRef90_F1R763
 UniRef90_UPI0004410A64
 UniRef90_H9G7U1
 UniRef90_G1TEV7
 UniRef90_T1F8L2
 UniRef90_E9C867
 UniRef90_D3BUL2
 UniRef90_E7FFA1
 UniRef90_H2U1L4
 UniRef90_Q54C94
 UniRef90_W8BFY8
 UniRef90_W3X0T2
 UniRef90_F7GVD8
 UniRef90_UPI0003836B62
 UniRef90_H2RMP6
 UniRef90_UPI00026575EF
 UniRef90_V9FLX1
 UniRef90_UPI00044048C4
 UniRef90_T1G401
 UniRef90_B0CT61
 UniRef90_UPI00046B2833
 UniRef90_A7S271
 UniRef90_L8Y2T1
 UniRef90_H2LKK3
 UniRef90_Q4RNS0
 UniRef90_R7U0T8
 UniRef90_W9Y668
 UniRef90_M7XHF4
 UniRef90_E9Q813
 UniRef90_A0A058ZF86
 UniRef90_R7VBA4
 UniRef90_H2U1L6
 UniRef90_T1J310
 UniRef90_UPI0001A61F9A
 UniRef90_K3WPG2
 UniRef90_B4DGK9
 UniRef90_E0VNE1
 UniRef90_F1S5Q2
 UniRef90_D3BU27
 UniRef90_W2TH32
 UniRef90_V8P700
 UniRef90_H2MNG8
 UniRef90_Q4S379
 UniRef90_D3BT13
 UniRef90_X6MYZ8
 UniRef90_L8GHT4
 UniRef90_W3VIG2
 UniRef90_E4X995
 UniRef90_B0EBF0
 UniRef90_UPI0004419742
 UniRef90_UPI0003AB5F70
 UniRef90_L8GT69
 UniRef90_F7BXN2
 UniRef90_G6DKS9
 UniRef90_Q56TX1
 UniRef90_UPI000298A53F
 UniRef90_B8MGMM3

1 10 20 30 40

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

50 60 70 80

UniRef90_I1FR61	H L T V D Y Y P D R T Y I F T F L L S S R I F I P P H D L L V R V E Q I C L E Q
UniRef90_UPI00045E001F	L L F D H C E S D K D Y E S D F L Y L Y R F F I K P K T L L K K F I E L Y R K K
UniRef90_G9KKA7	
UniRef90_UPI0001D38D4F	
UniRef90_L8HKN6	
UniRef90_V9KNR7	
UniRef90_E9BWS7	
UniRef90_Q8R514	Y L L R T D I D S T F F T T I F L N T Y A S M I S S S D L F S I L G A H F R F I
UniRef90_P26674	C G D H I L N
UniRef90_UPI00046C0CC7	A L S H E K G H S K E E N M F F D T Y M L F T N V D T L I Q L L S E R F Y H T
UniRef90_UPI0003332DA3	H L C D C S L L E S W L L N F F F L N H S R Y G K L H S Q T N G E C
UniRef90_C5PON5	
UniRef90_UPI00042C05C1	L L T H E R G H S N E L F S L F D T Y L L F T K I P L V I E H L E Q R F L
UniRef90_D3BR51	R L T H D P V Q M R D F Q R A F F M T Y N S F A T A D E L F T L L E D L F H M E
UniRef90_A0A016PEU4	A L F H D D D M D P L Y V D L F L A A H R Y F I G P R D L L A R L Q D M Y V R V
UniRef90_H3B512	
UniRef90_G1LDM2	
UniRef90_F0ZUX1	
UniRef90_D5GIT2	
UniRef90_S8FZ29	
UniRef90_L8H701	
UniRef90_H2T9G5	
UniRef90_I2H0B4	
UniRef90_X6NAI2	
UniRef90_UPI00034FF736	L A T K G T K D F A Y Q E A F L A T Y R T W V S P S G L V A R L V R R A H H L
UniRef90_L8HMQ5	R L M A T N M E N K Q Y Q D I F L M S F R S F M T A D A L L F E I L M E Y Y N L P
UniRef90_K5Y6Z8	N L A S Q Q R M D H T Y V D S F L M T Y K T F T T P H M L L E K L L Q R Y T V P
UniRef90_L8GTL9	
UniRef90_F7VPN2	
UniRef90_W9CDK5	
UniRef90_W5KBA9	T C L Q S F D S E G N L L Q I T L T M H R V I I P S E D V L R K L I D L Y L D A
UniRef90_UPI00046C2783	H M T A E Y Y Y P D R A Y L F A F L L S S R L F I K P H E L L G E V C A L C
UniRef90_W5L5J0	
UniRef90_E0W133	A C I K A F D N D P S L V R M F L T M H P W Y L S S S D L A K K L L Q
UniRef90_L8H736	R L V D A G N F N E T Y R H A F L L T F K S F T T A E I F Y E L L E E R Y R M D
UniRef90_F1R763	
UniRef90_UPI0004410A64	
UniRef90_H9G7U1	
UniRef90_G1TEV7	
UniRef90_T1F8L2	
UniRef90_E9C867	K L T D V H Y R D D T L L D T F N L T H D Y F I S S T E Y V E R L F D L Y N K S
UniRef90_D3BUL2	
UniRef90_E7FFA1	Y L A P E K A F D P N F L K V F L Y T H S S F T T S E K L L K K L I Q R Y Q V P
UniRef90_H2U1L4	
UniRef90_Q54C94	
UniRef90_W8BFY8	
UniRef90_W3X0T2	
UniRef90_F7GVD8	H L L D P C C Q E Q D Y S C I M L S T Y R S F T S T N K L I E T L F Q R K N
UniRef90_H2RMP6	
UniRef90_UPI00026575EF	
UniRef90_V9FLX1	
UniRef90_UPI00044048C4	
UniRef90_T1G401	
UniRef90_B0CT61	R L I N N F N R D L E F R D T L T A C A D F T T P E D L F G I L A R R F H E A
UniRef90_UPI00046B2833	Y L Y S S D A F L E G Y V Q Q F L Y T F R Y F C T P Q D F L H F L L D R I N S T
UniRef90_A7S271	
UniRef90_L8Y2T1	
UniRef90_H2LKK3	
UniRef90_Q4RNS0	
UniRef90_R7U0T8	
UniRef90_W9Y668	
UniRef90_M7XHF4	
UniRef90_E9Q813	
UniRef90_A0A058ZF86	F L T S P Y H S S Q N F L N V F L L T L Q L F S S P S L F L E E K L V E R F N V P
UniRef90_R7VBA4	Y Q E A F L T T Y R T F I S S K E L I Q K L L Q R Y T R F
UniRef90_H2U1L6	H L L S F A M G D S S Y I S I F L S T Y R S F T S P K R V L D I L
UniRef90_T1J310	
UniRef90_UPI0001A61F9A	
UniRef90_K3WPG2	
UniRef90_B4DGK9	
UniRef90_E0VNE1	N L V S D D E L E S T Y I I N V F L A T Y R S F A T P K Q L L Q L L Q R F T Q F
UniRef90_F1S5Q2	H L T A D Y Y P E K A Y I F T F L L S S R L F I E P R E L L A R V C H L C I E Q
UniRef90_D3BU27	
UniRef90_W2TH32	
UniRef90_V8P700	
UniRef90_H2MNG8	
UniRef90_Q4S379	
UniRef90_D3BT13	
UniRef90_X6MYZ8	
UniRef90_L8GHT4	
UniRef90_W3VG2	
UniRef90_E4X995	K V L S Q N V K S D F I E A F L S S F R T F P L E N L I D Q L L Q R F T Q F
UniRef90_B0EBF0	K L T A F G S R A G I F V K A I C M F L T T P D K F F L K L M E R L D I P
UniRef90_UPI0004419742	
UniRef90_UPI0003AB5F70	
UniRef90_L8GT69	
UniRef90_F7BXN2	
UniRef90_G6DKS9	
UniRef90_Q56TX1	
UniRef90_UPI000298A53F	
UniRef90_B8MGMM3	

90 100 110 120

UniRef90_I1FR61	R Q Q L E A G P D Q A T L K S F S A I V Q F L K E W T E T F P Y D F Q E E K A M
UniRef90_UPI00045E001F	
UniRef90_G9KKA7	
UniRef90_UPI0001D38D4F	
UniRef90_L8HKN6	E A L P D K A S A E R I A E G
UniRef90_V9KNR7	
UniRef90_E9BWS7	
UniRef90_Q8R514	C S L N F G K I S F H E F Y R V S K R F L D I L L
UniRef90_P26674	I W F E S Y Y L V E E
UniRef90_UPI00046C0CC7	M V L A M H S W V L P S A D L A A R L L S S Y Q K A T K N E Q E M R Q L Q I C Y
UniRef90_UPI000332DA3	
UniRef90_C5PON5	
UniRef90_UPI00042C05C1	G K N N S P I I K Q K V L R F V Q R W V D R N W E D F N E K Q S A N L L E
UniRef90_D3BR51	S K F S L D D R N A L K N T I A S I L G A W L D Q Y S E D F R K P P D Y S C L K
UniRef90_A0A016PEU4	N A K T H V I K Q K V L S F S Q R W I E N C W N D F K S D D M I
UniRef90_H3B512	R P L A D A S Q E D L D
UniRef90_G1LDM2	P L T T R L S K K H K H L R S Q L L
UniRef90_F0ZUX1	L N Q W R E E K L E P M R R R V L F
UniRef90_D5GIT2	H I R L R V V T
UniRef90_S8FZ29	
UniRef90_L8H701	
UniRef90_H2T9G5	
UniRef90_I2H0B4	
UniRef90_X6NAI2	
UniRef90_UPI00034FF736	R A R P H D L R S T L S L T R V V A D L T M L D L D Y
UniRef90_L8HMQ5	
UniRef90_K5Y6Z8	T P E D L N V S E L E D W L E R G K R R T Q R R V L E
UniRef90_L8GTL9	V E H E P D V R S T I Q L Y T V N V L K K W L Q Y R A D F D K D M L D R L A E
UniRef90_F7VPN2	
UniRef90_W9CDK5	
UniRef90_W5KBA9	
UniRef90_UPI00046C2783	L E K K S G L C V K I C Y
UniRef90_W5L5J0	
UniRef90_E0W133	D S Q Q H L G G K D P P T R E R L G R F I P H F V Q L LA E W T E T
UniRef90_L8H736	
UniRef90_F1R763	H P P E L N D D Q F K S Q Q Q D C S A N R Q S Q I C H
UniRef90_UPI0004410A64	
UniRef90_H9G7U1	
UniRef90_G1TEV7	
UniRef90_T1F8L2	
UniRef90_E9C867	
UniRef90_D3BUL2	T E Q K C I D S P W R L A V I R Q L I S D N L K L R I S S Y E E N K Q L L Q L D
UniRef90_E7FFA1	
UniRef90_H2U1L4	
UniRef90_Q54C94	
UniRef90_W8BFY8	
UniRef90_W3X0T2	
UniRef90_F7GVD8	
UniRef90_UPI0003836B62	L A S V L D S I N Y P N S C L WT V L Q L W D E Y S E D F R D S P M H S S L R
UniRef90_H2RMP6	
UniRef90_UPI00026575EF	
UniRef90_V9FLX1	
UniRef90_UPI00044048C4	
UniRef90_T1G401	
UniRef90_B0CT61	E M V E V V R P E D R V A M Q Y N I F M
UniRef90_UPI00046B2833	L S R A H Q D P A S T F T K I Y K R S L C V L Q A W V E D C Y T V D F T R N T G
UniRef90_A7S271	
UniRef90_L8Y2T1	
UniRef90_H2LKK3	
UniRef90_Q4RNS0	
UniRef90_R7U0T8	
UniRef90_W9Y668	
UniRef90_M7XHF4	
UniRef90_E9Q813	
UniRef90_A0A058ZF86	P C P S H I N P V L Y Q I Q L I Q H L V P N V D Y Y P D N Q M R K I A P K I L Q
UniRef90_R7VBA4	S R A K D P K R K K L S K N A F S L L I R V V D E L C T E M D E T L V Q L L M Q
UniRef90_H2U1L6	
UniRef90_T1J310	
UniRef90_UPI0001A61F9A	
UniRef90_K3WPG2	
UniRef90_B4DGK9	
UniRef90_E0VNE1	V D K D Q E D L I Y Q Q H K K F I K L L S V C T L K N S F Y V L F L Q N I Y C R
UniRef90_F1S5Q2	Q Q L D Q P
UniRef90_D3BU27	
UniRef90_W2TH32	
UniRef90_V8P700	S Q N S T E T K T V L R N A I A S I L R A W L D Q C S E D F Q E A P H F L C L R
UniRef90_H2MNG8	P G D S E R S H I R Q A F N K A V C T
UniRef90_Q4S379	
UniRef90_D3BT13	
UniRef90_X6MYZ8	
UniRef90_L8GHT4	S P E N H S A D M A N W K K V H R V I Q L R V I I F F K R W Y Y P T D F Q E G D
UniRef90_W3VIG2	I P P N L T P S E I S C F R Q Q Y L A Q V R I R I Y W L R N H W E E D F A N E F
UniRef90_E4X995	
UniRef90_B0EBF0	S N Q N D Q N K V A L M R I C A
UniRef90_UPI0004419742	D T C A S A S G I P V Q L I R V V D Q L
UniRef90_UPI0003AB5F70	E D F E P E N K A T K D Q Y I S S K V A G V I K T W I D S F A I S Y D V T V K K
UniRef90_L8GT69	
UniRef90_F7BXN2	
UniRef90_G6DKS9	
UniRef90_Q56TX1	
UniRef90_UPI000298A53F	
UniRef90_B8MGMM3	

UniRef90_I1FR61
 UniRef90_UPI00045E001F
 UniRef90_G9KKA7
 UniRef90_UP10001D38D4F
 UniRef90_L8HKN6
 UniRef90_V9KNR7
 UniRef90_E9BWS7
 UniRef90_Q8R5I4
 UniRef90_P26674
 UniRef90_UP100046C0CC7
 UniRef90_UP10003332DA3
 UniRef90_C5PON5
 UniRef90_UP100042C05C1
 UniRef90_D3BR51
 UniRef90_A0A016PEU4
 UniRef90_H3B5I2
 UniRef90_G1LDM2
 UniRef90_F0ZUX1
 UniRef90_D5GIT2
 UniRef90_S8FZ29
 UniRef90_L8H701
 UniRef90_H2TG5
 UniRef90_I2HOB4
 UniRef90_X6NAI2
 UniRef90_UP100034FF736
 UniRef90_L8HMQ5
 UniRef90_K5Y6Z8
 UniRef90_L8GTL9
 UniRef90_F7VPN2
 UniRef90_W9CDK5
 UniRef90_W5KBA9
 UniRef90_UP100046C2783
 UniRef90_W5L5J0
 UniRef90_E0W133
 UniRef90_L8H736
 UniRef90_F1T763
 UniRef90_UP10004410A64
 UniRef90_H9G7U1
 UniRef90_G1TEV7
 UniRef90_T1F8L2
 UniRef90_E9C867
 UniRef90_D3BUL2
 UniRef90_E7FA1
 UniRef90_H2U1L4
 UniRef90_Q54C94
 UniRef90_W8BFY8
 UniRef90_W3X0T2
 UniRef90_F7GVD8
 UniRef90_UP10003836B62
 UniRef90_H2RMP6
 UniRef90_UP10002657EF
 UniRef90_V9FLX1
 UniRef90_UP100044048C4
 UniRef90_T1G401
 UniRef90_B0CT61
 UniRef90_UP100046B2833
 UniRef90_A7S271
 UniRef90_L8Y2T1
 UniRef90_H2LKK3
 UniRef90_Q4RNS0
 UniRef90_R7U0T8
 UniRef90_W9Y668
 UniRef90_M7XHF4
 UniRef90_E9Q813
 UniRef90_A0A058ZF86
 UniRef90_R7VBA4
 UniRef90_H2U1L6
 UniRef90_T1J310
 UniRef90_UP10001A61F9A
 UniRef90_K3WPG2
 UniRef90_B4DGK9
 UniRef90_E0VNE1
 UniRef90_F1S5Q2
 UniRef90_D3BU27
 UniRef90_W2TH32
 UniRef90_V8P700
 UniRef90_H2MNG8
 UniRef90_Q4S379
 UniRef90_D3BT13
 UniRef90_X6MYZ8
 UniRef90_L8GHT4
 UniRef90_W3VIG2
 UniRef90_E4X995
 UniRef90_B0EBF0
 UniRef90_UP10004419742
 UniRef90_UP10003AB5F70
 UniRef90_L8GT69
 UniRef90_F7BXN2
 UniRef90_G6DKS9
 UniRef90_Q56TX1
 UniRef90_UP1000298A53F

Q P Q D R

UniRef90_I1FR61
 UniRef90_UPI00045E001F
 UniRef90_G9KKA7
 UniRef90_UPI0001D38D4F
 UniRef90_L8HKN6
 UniRef90_V9KNR7
 UniRef90_E9BWS7
 UniRef90_Q8R514
 UniRef90_P26674
 UniRef90_UPI00046C0CC7
 UniRef90_UPI000332DA3
 UniRef90_C5PON5
 UniRef90_UPI00042C05C1
 UniRef90_D3BR51
 UniRef90_A0A016PEU4
 UniRef90_H3B512
 UniRef90_G1LDM2
 UniRef90_F0ZUX1
 UniRef90_D5GIT2
 UniRef90_S8FZ29
 UniRef90_L8H701
 UniRef90_H2T9G5
 UniRef90_I2H0B4
 UniRef90_X6NAI2
 UniRef90_UPI00034FF736
 UniRef90_L8HQ5Q5
 UniRef90_K5Y6Z8
 UniRef90_L8GTL9
 UniRef90_F7VPN2
 UniRef90_W9CDK5
 UniRef90_W5KBA9
 UniRef90_UPI00046C2783
 UniRef90_W5L5J0
 UniRef90_E0W133
 UniRef90_L8H736
 UniRef90_F1R763
 UniRef90_UPI0004410A64
 UniRef90_H9G7U1
 UniRef90_G1TEV7
 UniRef90_T1F8L2
 UniRef90_E9C867
 UniRef90_D3BUL2
 UniRef90_E7FFA1
 UniRef90_H2U1L4
 UniRef90_Q54C94
 UniRef90_W8BFY8
 UniRef90_W3X0T2
 UniRef90_F7GVD8
 UniRef90_UPI0003836B62
 UniRef90_H2RMP6
 UniRef90_UPI00026575EF
 UniRef90_V9FLX1
 UniRef90_UPI00044048C4
 UniRef90_T1G401
 UniRef90_B0CT61
 UniRef90_UPI00046B2833
 UniRef90_A7S271
 UniRef90_L8Y2T1
 UniRef90_H2LKK3
 UniRef90_Q4RNS0
 UniRef90_R7U0T8
 UniRef90_W9Y668
 UniRef90_M7XHF4
 UniRef90_E9Q813
 UniRef90_A0A058ZF86
 UniRef90_R7VBA4
 UniRef90_H2U1L6
 UniRef90_T1J310
 UniRef90_UPI0001A61F9A
 UniRef90_K3WPG2
 UniRef90_B4DGK9
 UniRef90_E0VNE1
 UniRef90_F1S5Q2
 UniRef90_D3BU27
 UniRef90_W2TH32
 UniRef90_V8P700
 UniRef90_H2MNG8
 UniRef90_Q4S379
 UniRef90_D3BT13
 UniRef90_X6MYZ8
 UniRef90_L8GHT4
 UniRef90_W3VIG2
 UniRef90_E4X995
 UniRef90_B0EBF0
 UniRef90_UPI0004419742
 UniRef90_UPI0003AB5F70
 UniRef90_L8GT69
 UniRef90_F7BXN2
 UniRef90_G6DKS9
 UniRef90_Q56TX1
 UniRef90_UPI000298A53F
 UniRef90_B8MGMM3

170 180 190 200

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

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

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

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

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

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

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

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

P P L S D S T E L S R R P V R L L H F

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

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

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

S K F R Y H M F M

L L

L I D T T Q I N S R D W S R K L T Q R I K P N T S K K R K V S L L F D
 F D V L

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

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

P H F I L

M V D I T

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

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

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

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

E E S N L N M E M R N F E F D N M E D F L

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

P S E Q R M A R L W L

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

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

K Y S L A F Q

N F E

M R N M S V R N P P S K N S T S S S P R V N L V F N
 P E I R L S K F Q W H Q F M

V T

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

F V M

V K L L S S Y Q L S T K S H T L L

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

I T

P W Q P R G M S R S L Q F D R G S R P W I L

P L P E E I Q V S P G D T E I H

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

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

K P M I Q R D D I L Q F V H S L Q P R E I Y S K S F L

I F

I F A T E E E T E I S G S E E F S

L L R I A E E L S E K A L L L D S R R D R S S F D S P P P N P S L F E P T S I L

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

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

L N V E K R K S E L V G G V S R T R L K S L R R R K E V E M L M D V Q T I D I L

P T L A K M K A G K G E V K L M F S E A T P K P R M P S K R P L R T V L
 L M

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

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

H N V A P H P E Q L G P S M G S W E S I L D F M

M P D I T

M

P D E M A P E L L R E S V V H F L

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

	210	220	230	240
UniRef90_I1FR61	D F D P E E I A R Q L T L I D F S L F A K I I K P A E L L N Q A W Q K P K Y R A R			
UniRef90_UPI00045E001F	C C D P L V L A Q Q L T H I E L E R V H N H P E D L M Q I L S H R Q G D Q T K			
UniRef90_G9KKA7				
UniRef90_UPI0001D38D4F	D F S V D E V A E Q L T L M D L E L F S K V R P Y E C L G S V W S Q R D R P G A			
UniRef90_L8HKN6	P L K P D Q C V E E M T F I E R S L F V A I Q P W E F L A V L W N S P E E M K R			
UniRef90_V9KNR7	T F T A E T V A G Q L T M I D S E L F M T V V P Y H C L G S V W S R R D K K G M			
UniRef90_E9BWS7	D F G I A E L A K Q W T I I D M G L F C K G H E E L S C A W T K K T K L T L			
UniRef90_Q8R514	H I E T E E L A A Q H L T Y L E F R S F S H I T P Q D L R G Y V L Q G S V R G			
UniRef90_P26674	L L P P R E I A K Q L L C I L E F Q S F S H I S R I Q F L T K I W D N L N R F S P			
UniRef90_UPI00046C0CC7	I S P E D F A S Q L T L L D L P V F L N I Q P D E L T S C A W N K K N K L T M			
UniRef90_UPI000332DA3	H I E T E E L A A Q H L T Y L E F R S F Q A I M P Q D L R G Y V L Q G S V H G			
UniRef90_C5P0N5	E I P D E D F A R E L T R I D W V M Y S A F R P R E L I R H V E N K E K P S S H			
UniRef90_UPI00042C05C1	A F S Q E M V A E Q F T L M D A E L F K K V V P Y H C L G C I W S Q R D K K G K			
UniRef90_D3BR51	D L K S H E I A R Q L S L I D Q S L I I K I T K H E L L D Y V Q S Q S N P P Q S			
UniRef90_A0A016PEU4	D I P A D D V A D E L T R I D W I M F S S I R I R D F V R H V S S Q K E R C K S			
UniRef90_H3B512	S F S P E M V A E Q F T L M D A E L F K K V V P Y H C L G C I W S Q R D K K G K			
UniRef90_G1LDM2	D F P P R L V A A E Q F T L M D A E L F K K L P H Q C L G S V W S K R N K P G S			
UniRef90_F0ZUX1	D L R P H E V A R Q L T I I D Q D L L S Q L T K Q Q I L D Y A V H Q T N			
UniRef90_D5GIT2	S I P D D E I A T E L T R I D W L E F S N I K C R D L V R H V S I L P A D Q K E K			
UniRef90_S8FZ29	R L E P M A V A R Q L L C L H E H R L Y A K I G P R E C M H W M T P G L A D G			
UniRef90_L8H701	D F H P L E V A R Q L L C L H E H R L Y A K I G P R E C M H W M T P G L A D G			
UniRef90_H2T9G5	G I N T W D V A A A L T H L D W T L F K S I H E Q E L A Y Y T L S H P P G A G H			
UniRef90_I2H0B4	D I T P I V Y A T E L T I M Q Q E L Y L R I G P N E C L D R V W G K T V D F G G			
UniRef90_X6NAI2	N L S P D E L A D Q I T L M D F R I F R K I G A R E C I G Q A W K K D N R V K			
UniRef90_UPI00034FF736	D F K A T E I A E Q M T L L D A A L F I R T T A E V V S W P R E Q S E E S			
UniRef90_L8HMQ5	D L H P L E V A R Q M T L L V E F N L Y Y K K I Q A C E L H H S A W T K G R			
UniRef90_K5Y6Z8	K I I E P S D I A E Q L T L M T L Y E S Y K K I Q P Y E C I V Y V A S S K G G N			
UniRef90_L8GTL9	D L E L A R Q L T L L D F E I Y Q R I Q			
UniRef90_F7VPN2	D I D P D L V A D E I T R I D W I M F S S I R I R D M V R H P A D Q K E K C R S			
UniRef90_W9CDK5	E I I S D D D L A D E M T R I D W V M F S S I R I R D L V R H V S N Q K E K C K S			
UniRef90_W5KBA9	G I N T W D I S V A L T T N L D W S L F F N S V H E Q E L V Y Y T F S R Q A S S G H			
UniRef90_UPI00046C2783	H L E P E E L S D H T Y L E F K S F R R I S F S D Y Q N Y I V N S C V K E			
UniRef90_W5L5J0	K V T P E E F A G Q I T L M D A P V F K A I Q P E E F L A S C G W N K K E K H S L			
UniRef90_E0W133	C A S P G L L A A Q Q L T H I E L E R L S Y I G P E E F V Q A F G T S F K D M K K			
UniRef90_L8H736	E L S A K E L A A Q Q L T L A D F K T F S R I S P S E Y F H Q N W V K H K E N			
UniRef90_F1R763	H L D A S T L A E H T Y M E Y K S F O K I L F Q D Y H S F V M H G C T V D			
UniRef90_UPI0004410A64	K I D A V V L L A A Q Q L T L Y E A R L Y S R V A S E C L A Y I T L K G D K G G G			
UniRef90_H9G7U1	G L Q A E D V A A H L T A T D A A L F L G V V P Q E C L G S L W S R R D K K G H			
UniRef90_G1TEV7	T F S P R K M A E Q L T L L D A E L F F Q K V V P F H C L G S V W T K S N K R G K			
UniRef90_T1F8L2	E L A A L D I A E Q M T Y I D H K I F S A I N S R E L L G Q A W M K P E K S C K			
UniRef90_E9C867	K M Q S S L V A R Q L L C L H E H R L Y D W D L F W V V H E Y E L L Y R T F G R H H F G K I			
UniRef90_D3BUL2	D S D S A E V S I Q A L L D E Q T F S A L I H V S E L L I N R F A K P A E			
UniRef90_E7FFA1	L M S S K D L A H Q M T L Y D W E L F F H C V H E H E L I Y H T F G R H H F K K T			
UniRef90_H2U1L4	G F P A V L V I A E Q L T K I E T E L F V R L V P Y H C L G S L W S Q R D K K G R			
UniRef90_UPI00046C2833	H I D E L E I A R Q M T L V E S K L F G A I P P P E F M V R V I G Y G E F Q Y N			
UniRef90_A7S271	S T K D L A F Y I T I Y D W D L F W V V H E Y E L L Y R T F G R H H F G K I			
UniRef90_W3X0T2	D T S D D D I A D E L T R I D W V M F S S I R I R D L V R H V S L N A Q Q K E N			
UniRef90_F7GVD8	C S D P Y T L L A A Q Q L T H V E L E R L R H I G P E E F V Q A F V N K D P L A S T			
UniRef90_UPI0003836B62	U F S I M G V A E Q L T R I D A D L F V K V V P F Q C L G C V W S Q R D K N E N			
UniRef90_H2RMP6	C S D P F T V A A Q Q L T H I E L E R L S Y I G P E E F V Q A F V Q K Y S D R K K			
UniRef90_UPI00026575EF	I S H G A I W F S I S R L E F F S Y R E F F L G Q A W M K P E K S C K			
UniRef90_V9FLX1	D L D P S I I A A Q Q I T L M Q H Y L F S K I K V S E V L A S K R N A E K			
UniRef90_UPI00044048C4	H L D P M E L A A H L T Y L E Y C S F C K I L F Q D Y H S F V T H G C T V D			
UniRef90_T1G401	K V S S E N F A Q S M T V M D M I I Q P E E L T T C S W T A K D K L T V			
UniRef90_B0CT61	D I T P R D L A I A L T L L E G D K Y K A I V P C D Y I A H L R R H A G			
UniRef90_UPI00046B2833	E Y S T H Q L F S Q L T L L Q Q E L F Q K C H P V H F L N S R A L G V M D K S T			
UniRef90_A7S271	D Q Q P E E I A A E Q L T Y L E F R M L R R I P F S D W K A Y S L T S K L E N			
UniRef90_L8Y2T1	V S A K A D L A A Q Q L T L D H D W N L F N S I H Q V E L I H Y V L G Q H L R D V T			
UniRef90_H2LKK3	C N D P Y T L L A A Q Q L T H V E L E H L S H I G P E E F V Q A F V Q K D D Q K K K			
UniRef90_Q4RNS0	L M S S K D V A C H M T S Y D W E L F F S C V H E F E L I Y H T F G R Q N F R K T			
UniRef90_R7U0T8	M L K P S E L A A E Q L T Y M E Y K A F R R I R F D F K H Y A T H A S L K D			
UniRef90_W9Y668	E T P V E E L A A H E I T R I D W T M F S A I R P R D F V R H A W L S T K E K S K			
UniRef90_M7XHF4	E V D A L E L A R Q L T I L E S R T Y C S I R A D E L L G S C A K G P V E A F K			
UniRef90_E9Q813	C S D P Y T L L A A Q Q L T H I E L E R L N Y I G P E E F V Q A F V Q K Y S E R K K			
UniRef90_A0A058ZF86	K T G P R S L A A H L T A I D A D L F R A I R L A E F T A I T D K Q			
UniRef90_R7VBA4	D F K P E Q V A A Q M T L L D A E L F L T I E P V L I Y S K N Q S E E H			
UniRef90_H2U1L6	G F P A V L V I A E Q L T K I E T E L F V R L V P Y H C L G S L W S Q R D K K G R			
UniRef90_T1J310	Q L N S V I E V A I A Q Q L T L L E D F S I F R Q I E P T E Y M D D L F E L K S K Y G			
UniRef90_UPI0001A61F9A	K V S S E E F A K Q I T L I E L S Y F K A I H R E E F A S L K W N G R E K H L C			
UniRef90_K3WPG2	U I D A S V I A A Q Q I T L F Q H Y L F S K I K V T E I L A S K K C V E K			
UniRef90_B4DGK9	R V E P E D V A A N H L T A F H W E L L F R C V H E L E F V D Y V F H G E R G R R E			
UniRef90_E0VNE1	V R D D Q Y V V G K I F A V V I N Y N V T S I N I L K I T M L S L I F L L L N L C			
UniRef90_F1S5Q2	C S D P Y T L L A A Q Q L T H V E L E R L R H I G P E E F V Q A F V N K D P L A S T			
UniRef90_D3BU27	D H H P H D I A A K Q L T L A E F S I F Q K I M P R E E L Y N K C W T V A K K F E T			
UniRef90_W2TH32	D F R S S D V A C Q M T C I D S Q L F F H L I E P S E L L W W S Q E Q D E L K			
UniRef90_V8P700	S F P E D L V A A E Q L T Y M D A T L L F K K V V P F H C L G C I W S Q R D K K G R			
UniRef90_H2MNG8	G F P S S L I A A E Q L T K I E T E L F V R L V P Y H C L G S L W S Q R D K K G R			
UniRef90_Q4S379	C D D A F V L V A A Q Q L T H I E L D R L S F I G P E E F I Q T F A M K D P R K R K S			
UniRef90_D3BT13	D I N A V E L A R Q F T I I S G H N F Y Q I Q P R E E Y L E I C W E R L S Q A P S			
UniRef90_X6MYZ8	A F D I L E K A A P C L I Q I T H E C F I Q Q P R E I F N S I K N K E D			
UniRef90_L8GHT4	Q V S P I E L A R Q L T L V E Y D I F A R I K P I E L L V E K A W M E P D K V K R			
UniRef90_W3VIG2	E V D D E V I A T E L T R L E W A Y F T A I P P R D L L R H I L V P H D K R D G			
UniRef90_E4X995	D Y T S D T F A Q H L C I D A D F Y R S I E P S E F V L A A M S E T Q D E Q K			
UniRef90_B0EBF0	D I D D D V I V S Q F T Y M E A S I F Y K I L E P S E F F G Q A W A K A K L R H K			
UniRef90_UPI0004419742	S S K D L A N Q F T E H D W N L F F K S I H Q V E L I Y Y V V G P Q K F P S T			
UniRef90_UPI0003AB5F70	T F P P R L L A A E Q L T L T D A E L F K K V E L Y E C L G S L W G Q R A K E G N			
UniRef90_L8GT69	S A K A K L A V V Q M T I L L D A D T F G E I K P E E M L L G N W T R P N K E E V			
UniRef90_F7BXN2	A F S P R D V A A E Q L T A I D A E V F K N V E P S E C L G S T W G K R N R P G H			
UniRef90_G6DKS9	Q L N A V E V A V A V Q L T L Q D F C I F R Q I E S T E Y V D D L F D L K S R Y R N A T			
UniRef90_Q56TX1	I S S K D L A H Q M T D N D W N L F F K S I H Q V E L I Y Y H T F G K Q R R N A T			
UniRef90_UPI000298A53F	T L L N T W D V A V A V Q L T Q D W A L F H S V I H E Q D D L V Y T F S R H S S S S S			
UniRef90_B8MGMM3	E I P D D D F A R E L T R I D W T M F T S F R P R D L V R H V S L S G S E K G S			

250 260 270 280

UniRef90_I1FR61	A Q N I L Q L V D R M N N L T L W V A S T I L F Q K D I K Q R A K R I Q G F I Q
UniRef90_UPI00045E001F	T Y S L E A Y D K W F N C L S M L V A T E V C R V V K K K Q R T R T V E F F I D
UniRef90_G9KKA7	N P T M E R S I A L C N G I S Q Q W V Q L M V L S R P T P Q L R A E V F I K F I Q
UniRef90_UPI0001D38D4F	S P T V R A T V A Q F N T V T G C V L G S V L G A P G L P Q R A Q R L E K W I R
UniRef90_L8HKN6	Q Q N Y N M W E E H K T R L E N W V A S E I L T R P D L T E R T L T L K K F I D
UniRef90_V9KNR7	A P T V R A T V R Q F N R L V E C V T S C C L R N M N L K Q R A R I L D K W I R
UniRef90_E9BWS7	T P N I V A F T Q R F N N V I Y W M S Q A V L T P S H E K D R A E L V S L F I K
UniRef90_Q8R514	C P A L E G S V G L S N S V S R W V Q V M V L S R P G P A Q R A Q V L D K F I R
UniRef90_P26674	K E K T S T F Y L S N S H L V N F V T E T I V Q E E E P R R R T N V L A Y F I Q
UniRef90_UPI00046C0CC7	A P N V V A F T R R F N H V S F W T V Q E I I L S G S P T P K Q R A E I L A F F V R
UniRef90_UPI000332DA3	C S A L E S S V S L S N S V S R W V Q V M V L S R P G P A Q R A Q V L D K F I R
UniRef90_C5PON5	L E N V N R M I K Q F N H L A Y F A A S M V L L R D K A K H R A Q A L E K F M N
UniRef90_UPI00042C05C1	A P T I R A T V S Q F N S V T N C V I A T C D R S L K P Q R A K V V E R W I E
UniRef90_D3BR51	I V N V T N R F N Y I S R W V A S E I T T C Y N L D K R I M L I F K F I N
UniRef90_A0A016PEU4	L R N V N R M I N H F N H I A K W V A N M I L L R D K A K H R A L I E K F M N
UniRef90_H3B512	A P T I R A T V T Q F N S I T K C V I A T C L G D K K P Q Q R A K I I E R W I E
UniRef90_G1LDM2	A P T V R A T V A Q F N G V V A K C V I T T C N P S M T A R D R A M V V E H W I K
UniRef90_F0ZUX1	S P P I Q K I I T D R F N Y L V L W V C S E V L S Q S F E K R V E T I F K F I L N
UniRef90_D5GIT2	Y P H V N R M I S H F N H V A Y W V A R V I L E K P K A K H R A R A L E K F M N
UniRef90_S8FZ29	I P N L A A F C M A R A R L A G W V R A S L L G V D G L S R S R A E M L E F F W I R
UniRef90_L8H701	S P V S Q K W I N H Y E Q G I N W V A T E I I V M T P N P K Q R A I V I Q R F I R
UniRef90_H2T9G5	T A A L S V L L Q R C N E V Q Q W V M S E V L M C V S L N K R V Q L L K K F I K
UniRef90_I2H0B4	S M N I T H F I I T S A N N L T N F V S Y S I V S N S S E K K R A N M I Q Y F I S
UniRef90_X6NAI2	S P N I L A M I Q F N M N L S T F V Q I H I L R E K T L R D R V K A I K R I I K
UniRef90_UPI00034FF736	S P N I L T R F T E H F N K M S Y W A R S R I L E Q V R L E K R E K Y A S K F L L
UniRef90_L8HMQ5	A P N V Q A I T E R F N K V C F W V A T E I I I T T E D H A T R I E V L S R F I Q
UniRef90_K5Y6Z8	A T N L R E F C A Y H D K L I G W V Q K T V L T A D F M R K R A E T I D Y W I K
UniRef90_L8GTL9	A V N A P A K R D R G Y T T L T A S G D Q A K V R S T I K V R V A I I T K L L N
UniRef90_F7VPN2	L K N V N R M V A H F N H I A Q W V S N M L I R D K A K H R A P C L E R F M V
UniRef90_W9CDK5	L A N V N R M I N H F N H I A K W V A N M I L M R D K A K H R A Q I I L E K F M T
UniRef90_W5KBA9	T V A L E Q L L Q R C N E V Q Q W V M S E I L L C P S L G K R V Q L L K K F I K
UniRef90_UPI00046C2783	N P T M E R S I A L C N G I S Q W V Q L M V L S R P T P Q L R A E V F I K F I H
UniRef90_W5L5J0	A P N V V A F T R R F N Q V S F W A V R E I I L T A Q T L K I R A E I I L G H F I K
UniRef90_E0W133	T R N L E S Y V S W F N R L S Y L V A T D V C K H V K K K Q R V R V M E Y W I E
UniRef90_L8H736	A R N L S A M I R W F N E V S L W V M T Q I V T G A E V K D R A K T I S K F V N
UniRef90_F1R763	N P I L E R F I L F N S V S Q W I Q T M V L S K P T A Q Q R A T V I S E F I R
UniRef90_UPI0004410A64	A P N L I J A F C A T N D K L A N W V K M S V L E R D G L G K R A D T I D H W I R
UniRef90_H9G7U1	C P S V R A T V A Q F N R V A T A V V F S C L A D T A L R Q R A R L L E K W I R
UniRef90_G1TEV7	A S T V H A T V Q Q F N C V T N C V V T T C L G H P S M K D R A R V V E H W I K
UniRef90_T1F8L2	A Q H V L L A S R L V V S E I I I R R Q T I N E R V A C I E K W A A
UniRef90_E9C867	S P N V M A M I D R F N H I A L L V T S E I I I R R E D A E R R A T I A K F V S
UniRef90_D3BUL2	S P C F Q A M V A S F N R W S S W V G S E I V V G A T S S S A R A A L F E R F I E
UniRef90_E7FFA1	T A N L D L F L R R F N E V Q L W V V T E V C L C P A L S K R V Q L L K K F I K
UniRef90_H2U1L4	C W S V R A T I H Q F N K L A N T V L A S C L C P T K L Q Q R A Q L L E K W I H
UniRef90_Q54C94	S P N L M T F V N R A T D V S R W V I H T V L N E R D K K N K M K M L D K F I K
UniRef90_W8BFY8	T A N L D V F L R R F N E L Q Y W I V T D I V S A S S M S K R V G L L R R K F I K
UniRef90_W3X0T2	S K N V N R M I N H F N H I A K W V A N M V L M R D K A K H R A Q M L E K F M N
UniRef90_F7GVD8	K P C L E A Y V K W F N R L C Y L V A T E I C L C P M A K K K Q R A Q V I E F F I D
UniRef90_UPI0003836B62	S P S V W A T I T Q F N A V T N R V I T S L S P T S T A S Q R A R V I K W V
UniRef90_H2RMP6	A S N L E A Y V E W F N R L S Y L V A T E I C L C P M V K K K H R A R V I E F F I D
UniRef90_UPI00026575EF	A P H I L L M T R R F N D V S R L V V S E I M R C P E M S K R V S I I E K W A A
UniRef90_V9FLX1	T P G Y Q R L R L L H N H I S I W V V S Q I L M R G D V D Q R A E I I L A Y F I R
UniRef90_UPI00044048C4	N P V L E R F I S L F N S V S Q W V Q L M I L S K P T A P Q R A L V I T H F V H
UniRef90_T1G401	A P N V V A F T R R F N Q V S F W A V R E I I S G T S V K A R G E I I M S H F I K
UniRef90_B0CT61	S N S V E V A C S V N N K I V L W V K Q S V L H Y D T A E L R T Q V L K F F I L N
UniRef90_UPI00046B2833	U N I K Y L L Q L L R N A D D I S T W V A A E I I V T S H T S K L Q V N L L S K F F L K
UniRef90_A7S271	T T Y L E R Y V S M F N G L S K W I Q A M V L N H T S A E D R A K C I E K F F Q K
UniRef90_L8Y2T1	T A N L L E R F M R R F N E L Q Y W V A T E I C L C P V P G P R A Q V L L R K F I K
UniRef90_H2LKK3	T S N L L E A Y V R W F N R L C Y L V A T E I C L C M P A K K K Q R A Q V I E F F I D
UniRef90_Q4RNS0	T V N L L D L F L R R F N E I Q F W V I T E M C L C S P L S K R V Q L L K K F I K
UniRef90_R7U0T8	N P R L E R S V A L F N G L S Q W I Q C M V L S K T T P Q Q R A D V I V K F V N
UniRef90_W9Y668	S H N I S A M V R H F N H I A L F V S G M I L L R D K A K H R A R A L E K F M A
UniRef90_M7XHF4	A C N V R K M S T L S T R L T G W I T T E I C L C M P V K K K H R A R M I E Y F I D
UniRef90_E9Q813	T R N L L E A Y V E W F N R L S Y L V A T E I C L C M P V K K K H R A R M I E Y F I D
UniRef90_A0A058ZF86	S P N L Q R L I T H T N Q L T N W V M R C L R V D L V E I R R K M I L C F F E
UniRef90_R7VBA4	S P H L T K F T A H F N K M S Y W C C T R I L E N E D P K E R E K Y Y V R F L K
UniRef90_H2U1L6	C W S V R A T I H Q F N K L A N T V L A S C L C P T K L Q Q R A Q L L E K W I H
UniRef90_T1J310	V P L L A K F I D L V N R E M F W V V T M V V N E H H P V I R R M K I I K Q F I K
UniRef90_UPI0001A61F9A	U N I P N I V A S T R W F N Q I N F W V Q K E I I L K Y S C V S K R T E M L S F F I K
UniRef90_K3WPG2	A P N I M A L I N M S N V A N W A T E I V V T T P H P K K R V E V L K R F I T
UniRef90_B4DGK9	S P N L V I A F T E H F N V N V S F W V R T L V I T P S N S K E R E K Y Y M L K F I K
UniRef90_E0VNE1	T A N L L E L L L Q R C S E V T H W V A T E I V L L C E A P G K R A Q L L K K F I K
UniRef90_F1S5Q2	F Y F I L I S T V N Q F N A V S F R V I S T I L M N S D T K D R A S I I S A W I D
UniRef90_D3BU27	K P C L E A Y V K W F N R L C Y L V A T E I C L C M P A K K K Q R A Q V I E F F I D
UniRef90_W2TH32	S P N I M A L I N M S N V A N W A T E I V V T T P H P K K R V E V L K R F I T
UniRef90_V8P700	T A N L L E L L L Q R C S E V T H W V A T E I V L L C E A P G K R A Q L L K K F I K
UniRef90_H2MNG8	A P T I R A T I A Q F N A V T K C V I R T I L L N G K E L K Q R A K I I E K W I N
UniRef90_Q4S379	C W S V R A T V R Q F N K L A N A V L A S C L C P T K L Q Q R A Q L L E K W I N
UniRef90_D3BT13	T S N L L E A Y V N W F N R L S Y L V A T E I C L C M P V K K K H R A R M I E F F I D
UniRef90_X6MYZ8	P W N I H N F L D H Y D D L V R F V S T E I V K H N Q V A R R A A T I E R F I D
UniRef90_L8GHT4	A P H V Q A M V Q R F N D L S N W V Q R E V L S E R D L K K R V S C V V F F I N
UniRef90_W3VIG2	A P N V M A L V S H F N Q A V Q W F I T Q I V N E E S A R K R E S V M D H I V K
UniRef90_E4X995	P V S R S A I S H F N Y M S N W V C S M I L A Q G Q V T H R A R M L E K F F N K
UniRef90_B0EBF0	T P N F S A A V N H F N S V S Y W T Q G L L S Q N S P G K R E R I L N N F F K
UniRef90_UPI0004419742	A P N I I A S T Q M F N F I S S F F V N M I L N T E S L E E R I T L V K K I L S
UniRef90_UPI0003AB5F70	T A N N V E R F L R R F N E L Q F W V T T E I C L C P D V I K R A Q L L R K F I K
UniRef90_L8GT69	A P T V H A T I H F N R L T N C V T S C N H G M R A D R A R V V E H W I K F I S
UniRef90_F7BXN2	A P T L T Y L A N Y F N Q W S Y W V S T E I L I A G G V N A Q V Q A V V E H W I K F I S
UniRef90_G6DKS9	T P M L S Q F A G I V N K E M F W V V T E I V V N E Q N I V R R S K I I K Q F I K
UniRef90_Q56TX1	T A N L L E R F M R R F N E V Q F W V A T E I C L C Q E E R R A Q L L K K F I K
UniRef90_UPI000298A53F	S S S L E L L L Q R C N E V Q L W V M T E V L L C P L L C K R V R L I K K F I K
UniRef90_B8MGMM3	S Q N V N R M I Q E F N H L A C L V A N M I L L R D K A K H R A K A M E K F M N

	290	300	310	320
UniRef90_I1FR61	I C N H L H L M N N F C T L M A L L N G L A H H S I	N R L T K T F G K L D R V L		
UniRef90_UP100045E001F	V A R E C F N I G N F N S M M A I I S G M N L S P V	A R L K K T W S K V K T A K		
UniRef90_G9KKA7	V A Q K L H Q L Q N F N T L M A V I G G L C H S S V	S R L K E T S S H V P H E I		
UniRef90_UP10001D38D4F	I A Q R C R E L R N F S S L R A I L S A L Q S N P V	P Y P L K R L R S W G S V S R E P		
UniRef90_L8HKN6	I A R F A Y K N G N L N C V H T I V T A L S S P A L	K R L R A K T W S N L P S K S		
UniRef90_V9KNR7	V A E E C R S L K N F S S A Y A I V S A L Q T N P V	H R L R R T W E E V S R E N		
UniRef90_E9BWS7	L A K H L L K R N N F S S L R A I L S A L Q C N S P V	F R L R S K T W A L V S K K R		
UniRef90_Q8R514	V A Q R L R Q M Q N F N T L M A V T G G L C H S A I	S R L R K D S H V H L S P D S		
UniRef90_P26674	V C D Y L R E L R N N F A S L F S I I S A L N S S P V	H R L R K T W A N L N S K T		
UniRef90_UP100046C0CC7	I A K K L Y D L N N L H S L F A M I S A L Q S A S I	Y R L R S K T W T C L S S K D		
UniRef90_UP1000332DA3	V A Q R L Y Q L Q N F N T L M A V T G G L C H S A I	S R L R K D S H A H L S S D S		
UniRef90_C5P0N5	I S L K L R Q L Y Y N Y N S L G A I I A G L N G T P V	Y R L R A Q T R A L V S H S V		
UniRef90_UP100042C05C1	V A R E C R I L K N F S S L R A I L S A L Q C N A V	H R L R K T W D E V S R E S		
UniRef90_D3BR51	I A L N C W V L K N F N S A I A I I A G M K H G A V	V L R L K S T W F Y N S K A N		
UniRef90_A0A016PEU4	I S L K L R Q L N N Y N G L A A V L A G V N G T A I	H R L R N Q T R A L V P A D I		
UniRef90_H3B5I2	V A R E C R I L K N F S S L R A I L S A L Q C N A V	H R L R K T W D E R N R E N		
UniRef90_G1LDM2	V A K A C Q T L R N Y N S S L H A I I L S A L Q S V S I	H R L R L D K T W E V V S R K R		
UniRef90_F0ZUX1	I A L N C W Y L K N F N S S I A I I A A M S K P S I	E K L L K T T W A F I K T T K		
UniRef90_D5GIFT2	V A W T L R H M M N Y N A L G A V I A G I N G T A V	H R L R S L T T R E L V N P N T		
UniRef90_S8FZ29	V A E E G C K E L C N F S S L S A I K A G L S D P A V	A R S Q F L W A H L P H G R		
UniRef90_L8H701	I I A E C C L S L N N F N G T I Q I S A L G T H F V	R L K T A W K G V P P K Y		
UniRef90_H2T9G5	I I A A H C K A Q R N L N S A F A I I M G L N T A A V	S R L L N Q T W E K C P G K F		
UniRef90_I2H0B4	V A Y H C K L L N N F S S M T A I V S A L Y S S P I	Y R L L K K S W A L V P E E T		
UniRef90_X6NAI2	M G E Q F R A S R N Y N S L C A L F G A L N C Q P I	H R L L K L A W E K V P E K Q		
UniRef90_UP100034FF736	V V M K A L R K M N N F N S Y J A L V S A L D S P P V	G W P R Y I		
UniRef90_L8HQM5	V A L Y L R S M N N F H G V M E I Y A S L N L G C V	Q R L K S T W R D V D K K Y		
UniRef90_K5Y6Z8	V A E K C C R T L H N I F A L S A L I T A L L T S T V	P L T W A H V V K G K S		
UniRef90_L8GTL9	I V K H L R S R F H N L H T L N G I W A G L E Q A S V	H D D A		
UniRef90_F7VPN2	I A Q G L R T R N Y N Y N G L A A V L A G I N G T A I	H R L L A Q T R N L V V S Q D V		
UniRef90_W9CDK5	I A L K L R Q L N N Y N G L A A V L A G I N G T A I	H R L L T Q T R N L V P A D V		
UniRef90_W5KBA9	I I A A H C K A Q R N L N S S F A I I M G L N T A A V	I S R L L N L T T W E V V P P G K F		
UniRef90_UP100046C2783	V A Q K L H Q L Q N F N T L M A V I G G L C H S S I	S R L L K E T S S Y V P H E V		
UniRef90_W5L5J0	I I A K K L L E L N N L H S L V S V A S A L Q S A P I	F R L L S K T W A L I S R K D		
UniRef90_E0W133	T A R E C F N I G N F N S L M A I I A G L N M S P V	A R L L K T T W S K I I Q S G K		
UniRef90_L8H736	A A K E M R A L L N N Y N G I M L L L S A L N N S S I	R R L L T A E W E S V V G P K A		
UniRef90_F1R763	V A E R L L Q L Q N F N T L M A V I V G G L S N S S I	A R L L K N T Q A L I S S S D T		
UniRef90_UP10004410A64	V A E E C F Q L L R N F S S L Y A V V S A L H S T P V	P L T W A H V V S R T N W		
UniRef90_H9G7U1	V A K E C Q C T L R N N V S S A H A I I L T A L Q T S P V	C R L L Q E T W G E V V S R K S T		
UniRef90_G1TEV7	I I A D I C R C I I N N F N G V L Q C A A F V N S S I	H R L L R K T W D K V P K Q T		
UniRef90_T1F8L2	V A E E C R A R K N F S S L Y A I I S A L Q S N P I	Y R L L R T W Q N T D R D A		
UniRef90_E9C867	T T E C L R Q L N N F Q T L H S V Q G Q L Q H P L V	P D L F T P R H R E I		
UniRef90_D3BUL2	I I A E N V A K L G N F N S L K A V T G Q C T P V	L A Y C K E Y Y N N L N A F F A I V M G L S N M A V	S R L L T Q T W D K I P S K F	
UniRef90_E7FFA1	I I A S N L L E L N D F H G S Y A I T M G L Q H Y A I	L Q L N L T W A K V A A D V		
UniRef90_H2U1L4	I I A A H C K E F K N L N S F F A I I M G L G N P A V	I R R L T L S W E K V V S R K S F		
UniRef90_Q54C94	V A E E C R A R K N F S S L Y A I I S A L Q S N P I	V C R L S Q T W E K L P S K F		
UniRef90_W8BFY8	T T E C L R Q L N N F Q T L H S V Q G Q L Q H P L V	H R L L R T W Q N T D R D A		
UniRef90_W3X0T2	L A A Y C K E Y Y N N L N A F F A I V M G L S N M A V	P D L F T P R H R E I		
UniRef90_F7GVD8	I I A L K L R Q L N N Y N G L A A V L A G I N G T A I	L Q L N L T W A K V A A D V		
UniRef90_UP10003836B62	V A R E C F N I G N F N S L M A I I S G M N M S P V	I R R L T L S W E K V V S R K S F		
UniRef90_H2RMP6	V A Q G C R E L K N F N S S L K A I I L S A L Q S N P I	V C R L S Q T W E K L P S K F		
UniRef90_UP100026575EF	V A R E C F N I G N F N S L M A I I S G M N M S P V	H R L L R T W Q N T D R D A		
UniRef90_V9FLX1	V A D I C R O H N L N G V L Q I C A A F V N S S I	P D L F T P R H R E I		
UniRef90_UP100044048C4	V A G V V L L S L Q N L D G F M A V M N A A N D S S I	F R L L K T W G R L P P Q A		
UniRef90_T1G401	V A E K L L E L Q N F N T L M A V V G G L S H S S I	S R L L K E T H S H V S P E T		
UniRef90_B0CT61	I I A K H L E L N N L H S L A I V S A L Q S A A V I	E R L L K R T K A D I S P T M		
UniRef90_UP100046B2833	T A H E C R K L R N Y G S L I A G I A L H S S P V	R Q S P A W R V L P A K I		
UniRef90_A7S271	I I A K S C Y E Q R N F A T A M Q I L G G L E H L A V	L Q T R E Y V S K D C		
UniRef90_L8Y2T1	V A Q S L K E L Q N F N G L L A V T T G G L N N S V I	S R L L S R L A H T W Q R L P H K V		
UniRef90_H2LKK3	L L A A H C K E Q K N L N S F F A V M F G L S N S A I	V S R L L K T W G K H Q M D P		
UniRef90_Q4RNS0	V A R E C F N I G N F N S L M A I I S G M N M S P V	V S R L L S L T W Q K L P S K F		
UniRef90_R7U0T8	I I A A H C K D Y R N L N G F F A V T M G L S N P A V	I S R L L S K T N A C L P S D T		
UniRef90_W9Y668	V A M R L R E I Q N Y N T L M A V V G G L T H S S L V	A R L L A T H E L I S P D V		
UniRef90_M7XHF4	L L A W K V R Q L N N Y N Y N S L G A I V A G I T G H E V	S R L L R K T W D G I I A P K Y		
UniRef90_E9Q813	V G E R L L A L L A N Y N A L F A V F T A L N S S T I	S R L L R K T W A K V V K T A K		
UniRef90_A0A058ZF86	V A R E C F N I G N F N S L M A I I S G M N M S P V	P L Q T R E Y V S K D C		
UniRef90_R7VBA4	V L Q E L Y L L K N F N S L F A I H C A L S H T S I	S R L L S R L A Q T F R G L R T R H		
UniRef90_H2U1L6	I I M K H L R K L S N F N S S L Y A I V L S A L Q S N P I	E W W Q K Q N A		
UniRef90_T1J310	V A E E C R A R K N F S S L Y A I I S A L Q S N P I	R R T W Q N T D R D A		
UniRef90_UP10001A61F9A	I I A R Q C K E C K N F N S M F A I I S G L G H G A V	I S R L L R N S W D K L P S K Y		
UniRef90_K3WPG2	I I S K K L V E F N N L Y S A M S I I S A L Q V E C V	Y R L L R H T W A G L G N K D		
UniRef90_B4DGK9	V A A V L L N L Q N L D G F M A V M N A T N D S S I	V S R L L R L K T W G R L S P Q A		
UniRef90_E0VNE1	I I A L C K Q N Q D L L S F Y A V V M G L D N A A V	I S R L L R L K T W E K L P G K F		
UniRef90_F1S5Q2	V A R E C F N I G N F N S L M A I I S G L Q S N P I	I Y R L L E K T W A A L S R D K		
UniRef90_D3BU27	I I A E Y C R K I I N N Y N T M M E I I S G L L N N C S V	V S R L L R D T W K S L P S R Y		
UniRef90_W2TH32	I I M K Q L R R L G N F N S Y L A L L S A L V S S P I	I S R L L R L E W S K A V T D A		
UniRef90_V8P700	I I A H E C R I L K N F N S S L R A I V V S A L Q S N S I	I Y R L L K S W A C		
UniRef90_H2MNG8	V A E E C R A R K N F S S L Y A I V V S A L Q S N P I	H R L L R R T W H D T D R E A		
UniRef90_Q4S379	V A Q E C F N I G N F N S L M A I I T G M G L A N P S V	V A R L L R L K T W N K V N T D K		
UniRef90_D3BT13	A A D K C L S Q S D F S S V F C I M Q G L A N P S V	V A R L L R L Q T E G R L P A K Q		
UniRef90_X6MYZ8	L A Q L L T K M G D F S S G C A V L T G G L G A N S P V	V S R L L R D T W K S L P S R Y		
UniRef90_L8GHT4	I I A Q C C R T L N N F N A V V Q E I I A A F S S A P V	I S R L L R L E W S K A V T D A		
UniRef90_W3VIG2	I I A S I L R H D N N Y G S L N S V L G G L S K T A V	I Y R L L K S W A C		
UniRef90_E4X995	I I L S H R L R K N N F N S Y F A V V A G V V S S K A V	V T R L H W K S S I L H E K		
UniRef90_B0EBF0	L L G I K A H I K N Y D L L Y S L V T G S L G D A A I	F R M K R T W E V V N Q D P		
UniRef90_UP10004419742	L L A A H L K D Q K N L N S F F A V M F G L S H S A I	I S R L L R L S R T W E K L P H K T		
UniRef90_UP10003AB5F70	V A R E C L S L N N F N S S V H A I V V S A L Q S N S I	H R L L R E T W A A V S S K S		
UniRef90_L8GT69	V L H H L F S L N N F N S L M A V V M S G L N R A S V	I S R L L R L K K V W A R V P K F		
UniRef90_F7BXN2	V A R E C R A I L R N I S S L H A V L S A L Q S V P V	H R L L R K T W G K V S R K S		
UniRef90_G6DKS9	V A R R H C K E C K N F N S M F A I I S G L G H G A V	V S R L L R M T W E K L P T K Y		
UniRef90_Q56TX1	L L A A Y L K E Q K N L N S F F A V M F G L S N T A V	V S R L L R S R T W Q K L P N K I		
UniRef90_UP1000298A53F	I I A A H C K A Q K N L N C F A I I M G L T A A I I S R L	V S R L L R Q T W E K I P G K F		
UniRef90_B8MGMM3	I I A L R R R L R N N Y N S L G A V V M A G I N G T P V	L Q A Q T R E L I P L S V		

UniRef90_I1FR61
 UniRef90_UPI00045E001F
 UniRef90_G9KKA7
 UniRef90_UPI0001D38D4F
 UniRef90_L8HKN6
 UniRef90_V9KNR7
 UniRef90_E9BWS7
 UniRef90_Q8R514
 UniRef90_P26674
 UniRef90_UPI00046C0CC7
 UniRef90_UPI000332DA3
 UniRef90_C5P0N5
 UniRef90_UPI00042C05C1
 UniRef90_D3BR51
 UniRef90_A0A016PEU4
 UniRef90_H3B512
 UniRef90_G1LDM2
 UniRef90_F0ZUX1
 UniRef90_D5GIT2
 UniRef90_S8FZ29
 UniRef90_L8H701
 UniRef90_H2T9G5
 UniRef90_I2H0B4
 UniRef90_X6NAI2
 UniRef90_UPI00034FF736
 UniRef90_L8HQMQ5
 UniRef90_K5Y6Z8
 UniRef90_L8GTL9
 UniRef90_F7VPN2
 UniRef90_W9CDK5
 UniRef90_W5KBA9
 UniRef90_UPI00046C2783
 UniRef90_W5L5J0
 UniRef90_E0W133
 UniRef90_L8H736
 UniRef90_F1R763
 UniRef90_UPI0004410A64
 UniRef90_H9G7U1
 UniRef90_G1TEV7
 UniRef90_T1F8L2
 UniRef90_E9C867
 UniRef90_D3BUL2
 UniRef90_E7FFA1
 UniRef90_H2U1L4
 UniRef90_Q54C94
 UniRef90_W8BFY8
 UniRef90_W3X0T2
 UniRef90_F7GVD8
 UniRef90_UPI0003836B62
 UniRef90_H2RMP6
 UniRef90_UPI00026575EF
 UniRef90_V9FLX1
 UniRef90_UPI00044048C4
 UniRef90_T1G401
 UniRef90_B0CT61
 UniRef90_UPI00046B2833
 UniRef90_A7S271
 UniRef90_L8Y2T1
 UniRef90_H2LKK3
 UniRef90_Q4RNS0
 UniRef90_R7U0T8
 UniRef90_W9Y668
 UniRef90_M7XHF4
 UniRef90_E9Q813
 UniRef90_A0A058ZF86
 UniRef90_R7VBA4
 UniRef90_H2U1L6
 UniRef90_T1J310
 UniRef90_UPI0001A61F9A
 UniRef90_K3WPG2
 UniRef90_B4DGK9
 UniRef90_E0VNE1
 UniRef90_F1S5Q2
 UniRef90_D3BU27
 UniRef90_W2TH32
 UniRef90_V8P700
 UniRef90_H2MNG8
 UniRef90_Q4S379
 UniRef90_D3BT13
 UniRef90_X6MYZ8
 UniRef90_L8GHT4
 UniRef90_W3VIG2
 UniRef90_E4X995
 UniRef90_B0EBF0
 UniRef90_UPI0004419742
 UniRef90_UPI0003AB5F70
 UniRef90_L8GT69
 UniRef90_F7BXN2
 UniRef90_G6DKS9
 UniRef90_Q56TX1
 UniRef90_UPI000298A53F
 UniRef90_B8MGMM3

330 340 350 360

370 380 390 400

UniRef90_I1FR61	A F L D N C S P N F H K D N	L I N F S K F R L I Y H Q I R D L I L R Q D K	
UniRef90_UP100045E001F	Y F L H K I H T N C L P N G Q	V V N F K K F W E I S R Q I H D F M T W T Q V	
UniRef90_G9KKA7	I S L Y E A M P D Y L E D G K	V V N V H K L L A L Y N H S E L V Q L Q E V	
UniRef90_UP10001D38D4F	V M L D A A L P D M L E G D	L I N F E K R R K E W E I L A R I Q Q L Q R R	
UniRef90_L8HKN6	S R L K E A K K D E S G D K A K	T V V D F T M L R R A T V V M Q E I Q G Y Q Q R	
UniRef90_V9KNR7	V M L D T A V K D Y T E D	G L I N F D K H R K E F E I I A Q I K L L Q S A	
UniRef90_E9BWS7	T Y V D S A F P D P A S P		
UniRef90_Q8R514	V S L Y E A H P D R L P D	G R L H L P K L N S L Y L R L Q E L A A L Q R Q	
UniRef90_P26674	T F L K T G N K D	N F Q N M I N F D K R T K V T R I L N E I K K F Q S V	
UniRef90_UP100046C0CC7	V Y I D M A H P	H S G G L E S Q Q R T L K M N N I L R V I S N Y Q H S	
UniRef90_UP1000332DA3	V S L H E A Q P N R L P D	G R L H L P K L N N L Y L R V R E L V E L Q G Q	
UniRef90_C5P0N5	S V A E E G N T R T F L G D	R I N W R K F E I M G D V I L G V Q Q S Q K T	
UniRef90_UP100042C05C1	N P K R A Q K R Q Q Q R E	M G G L I N F E K R R K E F E V I I A Q I K L L Q S A	
UniRef90_D3BR51	V G L T E G N K S T K S S D Q	I N N L L K Y E M L S K I L Q R V H L I Q S K	
UniRef90_A0A016PEU4	V S A E E G S R T F V G A E G D	R I N W W K K F D V L G E V L L P M M K S Q G T	
UniRef90_H3B512	V M L D T A M K D H L D E S Q F S	F S M R R K E F E V I I A Q I K L L Q S A	
UniRef90_G1LDM2	V M L D T A M E D Y L E G N E	I I N H A K R N K E Y H V I T K I M L L Q A E	
UniRef90_F0ZUX1	I A I Q N G N K S I V N E	Q F I I N M Q K Y D M M G K I I R S I T N A Q V K	
UniRef90_D5GIT2	V S A D E G N R T F L I A D G D K	I N W N K F Q V M G D V L M V L V K S Q A T	
UniRef90_S8FZ29	A Y V S E T F P D T V P S P D R S L I	H F A K R E K L Y G A V Q E M L R H Q A H	
UniRef90_L8H701	S A I D D R N A S F V S		
UniRef90_H2T9G5	T F L I H E G N K T F H D N	L D N L V N F E K L L N P Q H M I A D A V R M I R H C Q S D	
UniRef90_I2H0B4	T F T A T G N S D I L K G T Q D T	I N F G K R A R I F D I L E K I N T F K K V	
UniRef90_X6NAI2	V L I D D G H E D K K E L G G R K M V	N F S K S Q K M A D R I K N I Q M Y Q Q H	
UniRef90_UP100034FF736	T F V V H I G N Q D L L S D G S	I N F T K R W Q Q Y H I M E N M K R F H K E	
UniRef90_L8HQM5	T F F I E E V P S H L	K T G Q V N F E K M H L V S K V I S E V E R Y Q K T	
UniRef90_K5Y6Z8	A H I Q D Q Y I D K	E G M V S F Y K R K R F Y E V T S T M L R H Q K E	
UniRef90_L8GTL9	N E S A S D K E K I S Q A W P P N F I	D F E R R K A T Y E T I S E F L K Y Q Q R	
UniRef90_F7VPN2	V S A A E E G S R T F V G P N N D R I	N W K K Y E V L G E V V L L P I M R S Q G Q	
UniRef90_W9CDK5	V S A A E E G S R T F I G A N G D	R I N W K K F E V L S E V I L P I M K S Q T T	
UniRef90_W5KBA9	T F F I H E G N K T F H D N	L V N F E K L H M I A D T V R L I R H C Q T D	
UniRef90_UP100046C2783	I S L Y E A M P N Y I E D Q K	I N V H L Q S L Y N H I N E L I Q L Q E M	
UniRef90_W5L5J0	T Y I D S A Y P A S D S I I E T E Q R T N Q M N N L	R I I S D L Q M S	
UniRef90_E0W133	Y F L N E G C S N K L P N G H	I N F E K F W Q L A K Q V T E F I T T W K Q V	
UniRef90_L8H736	T Y I D E N D D T R D G M V N F N K M M M L G K V	M L E L N R Y Q N A	
UniRef90_F1R763	I A V H V I A L P D W I D P E K T R V N L T K T Y Q L Y A I L E E L A L I Q S T		
UniRef90_UP10004410A64	V H Y N D R F E D Y L T G P		
UniRef90_H9G7U1	V M L D A A T K N R L K N	G Y I I N F E K H R K E F E I M T Q L R L L Q A N	
UniRef90_G1TEV7	V M L D T V M G D S V H A D	V S F Q K L N K E I K V L Q E I Q L L Q A S	
UniRef90_T1F8L2	S F I E E G T P N V T E N	G L V N F S K M R M I A H V I Q E I K T F Q Q T	
UniRef90_E9C867	I Y T E Q F F D N V P Q S S S A S T V S P G K E Q R M A A T I	E S F Q H F Q R I	
UniRef90_D3BUL2	F A V G D A S P T T L K D N N Y T I L N L D K M R Q I Q S I L H L L Q S Y R Q S		
UniRef90_E7FFA1	T F T H E G N K T F T D R	L V N F E K M R M I A N T V R I I R Y C R S Q	
UniRef90_H2U1L4	T M L D T A V K D R L D N	G Y I I N F D K R R R F E V L A Q I R R L L Q S S	
UniRef90_Q54C94	A Q I E R D Q P S N M N N	L I N F T K R Q N L Y E I L L S K I G H Y Q F	
UniRef90_W8BFY8	T F A H E G N K T S L D G	L V N F E K M H M M A Q T M R T M R Y C R S R	
UniRef90_W3X0T2	V S A A E E G S M T F I G Q D G D	R V N W K K Y E I I L G E I I L P I I K S Q G T	
UniRef90_F7GVD8	Y F L N E G C A N R L P N G H	V N F E K F L E L A K Q V G E F I T W K Q V	
UniRef90_UP10003836B62			
UniRef90_H2RMP6	Y F L N E G C A S R L P D G H	I I N F E K F W E L A K Q V S E F M T W K K V	
UniRef90_UP100026575EF	D P P Y G L L I N F S K M R M I A H V I R E I R H F Q Q T		
UniRef90_V9FLX1	L A L Q E Y P D R V E G D	G L I I N F K K I R S I G G L I Q K I L S F Q K T	
UniRef90_UP100044048C4	V A L Q L A L P D W L D P T R T R L I N G A K M Q L F S I L E E L A M V T S L		
UniRef90_T1G401	I Y I D V A H P	N S S G G V E T E R R R V K M N N I L R M I T E F Q L S	
UniRef90_B0CT61	H S V L K Q N P I V V E D Q G H P L I N F Q R Y V K F M D R I	K E I L H Y K P P	
UniRef90_UP100046B2833	Q Q L E T G G F T M T N G A H	R R W S K L L R N I A K V V S Q V H A F Q E N	
UniRef90_A7S271	I A T H T A L S D T V N D	K L I N V H L V T L A G I I S K S I V C Q T T	
UniRef90_L8Y2T1	T F F I H E G N K T F T V E N	L I N F E K M R M M A R A V R M L H H C R S H	
UniRef90_H2LKK3	Y F L N E G C A N R L P N G H	V V N F E K F V E L A R Q V G E F M T W K Q V	
UniRef90_Q4RNS0	T F A H E G N K T F F V D N	L V N F E K M R M I A N T V K I L R H C R S Q	
UniRef90_R7U0T8	I L L N T A L G D K V E G	E L I N F R K M V Q L S L T F S Q L M Q V A T S	
UniRef90_W9Y668	T M A A S A N P T F I G T N	V V N W K K F E I L M G E V I V G L Q K S L Q E	
UniRef90_M7XHF4	I F V F E G N R A E R V D S S L Q L I N F D R Y H K M A R I I V G E L Q R F Q S		
UniRef90_E9Q813	Y F L N E G C V N R L P N G H	V V N F E K F W E L A K Q V S E F M T W K Q V	
UniRef90_A0A058ZF86	T F F M L E G N Q T L T	T K R R I I N W Q K C T L L G N V L L D I S R A Q A A	
UniRef90_R7VBA4	T F F I H I G N P D	N F A D G N I N F A K R W Q Q F H I L D S M R R F K M	
UniRef90_H2U1L6			
UniRef90_T1J310	T F F I H L G N D T Q V D G	L V V N F E K L R M I A K E I I R Q L N N M C S A	
UniRef90_UP10001A61F9A	T Y T N V A Q P R I I N G K P T A I	W F T K I N S I I D K I A Y F Q Q S	
UniRef90_K3WPG2	I A L Q E F P D R V E G D	L I N F K K I R S I G G L I S R F L S F Q K A	
UniRef90_B4DGK9	T F F L H E G S K T L V D G	L V N I I E K L H S V A E K V R T I R K Y R S R	
UniRef90_E0VNE1	T M I D T A I P D T V A E	G L I I N F D K R R K E F E V L A Q I K L L Q G N	
UniRef90_F1S5Q2			
UniRef90_D3BU27	N F L E D G N S N F V D S P Q Q Q Q I N F K K L T L L S N I K N L Q F F Q K H		
UniRef90_W2TH32	T F F V H A G N A D K L P S D R C G L I N F L K R W H Q Y A I L D S I R K M K R W		
UniRef90_V8P700			
UniRef90_H2MNG8			
UniRef90_Q4S379	Y F L N E G C A T R L P N G H	I I N F E V S R K L W E L A K Q V S E F L V W R Q V	
UniRef90_D3BT13	F F I I E T S S P K I L L Q G G	I I V N F F H Y R Q L S R K I I L F T Q Q L I A S G	
UniRef90_X6MYZ8	T M L F E T P S T K A	G G K L I I N Y S K A K M L G K Q I E Q M K M F Q N N	
UniRef90_L8GHT4			
UniRef90_W3VIG2	L S I S D G N P S K R A A D G	M I H W R K F S L M D E A V M A V A R C Q Q Y	
UniRef90_E4X995	Y Q V H L R E K P M K D G	M V N F E D R V M R I H K L L E Q T R R F R E S	
UniRef90_B0EBF0	T F F L D D G N P D M A G D K	I I N V D K K L R L F E C I N N V I R F K D T	
UniRef90_UP10004419742	T F F I H E G N R T I L V E N	L V V N F E K L R M A K A V R L V H H C R S H	
UniRef90_UP10003AB5F70	H R L D T A I P D D L D G N S	N K R R K E V R V L Q E M Q L L Q A M	
UniRef90_L8GT69	T F F I I N D G N E E R L P K P D V K L P	P N F E K M V L L G Q Q I L E L E A Y R K V	
UniRef90_F7BXN2	I M L D T A M E D Y V N	I I N H E K K K K E H K V V M M E I V Q L Q E A	
UniRef90_G6DKS9	T F F I H L G N D T K V E G	M V N F E K L R M I A K E V R T I T N M C S S	
UniRef90_Q56TX1	T F F L H E G N R S T L D N	L V V N F E K M R M I A K E V T Q M F H R C R S Q	
UniRef90_UP1000298A53F	T F F I H E G N K T F H D N	L V V N F E K L H M I A D A V R F L R Q C Q R D	
UniRef90_B8MGMM3	V S A E E G N K T F V G E N K D	R I I N W K K F E I M G E V V L A I Q R S Q R T	

410 420 430 440

UniRef90_I1FR61	S Y N F E E V P A L Q E S L L K F A F L D D	D T L Y E V S L Q R E	
UniRef90_UPI00045E001F	E C P F E K D K K I Q N Y L L T A P	I Y N E E A L F I A S F E S E	
UniRef90_G9KKA7	A P P L E A N K D L V H L L T L S S L D L Y Y T E	D E I Y E L S Y A R E	
UniRef90_UPI0001D38D4F	C Y S L R P H P P I R A A L Q A Q R Q L S	E E Q S Y R L S R V I E	
UniRef90_L8HKN6	G S P A L T S R P I L N K F L R Q Q H R S L P	D N V I Y Y F S L H C E	
UniRef90_V9KNR7	C Y A I E K D P E F L A W F Y W L Q S L S	E T E S Y Q L S C E I E	
UniRef90_E9BWS7	N Y G H I P I V I P V R E Y L L S I Q Y L D E	L R T F I E D D N Y K L S L E R E	
UniRef90_Q8R514	H P P C S A N E D L L H L L T L S L	D L F Y T E D E I Y E L S Y A R E	
UniRef90_P26674	G Y M F N P I N E V Q E L N E V I S R	E R N T N N I Y Q R S L T V E	
UniRef90_UPI00046C0CC7	D Y S H L T A I P H I Q D Y L N S I R Y I E	E L Q K F V E D D Q Y K L S L K L E	
UniRef90_UPI0003332DA3	H P P C S A N E D L L H L L M L S	L D L F Y T E D E I Y E L S Y A R E	
UniRef90_C5P0N5	P F P T F H I N E L V R R L V L E A K F E S D E E	E L Y T R S L Q V E	
UniRef90_UPI00042C05C1	C Y S F T Q E D R F V E W F H G V E R I L S	E A E S Y S L S C E I E	
UniRef90_D3BR51	T Y N L A S V G V I Q K F L N E L P Q L T E A Q L Y	E S V S K L	
UniRef90_A0A016PEU4	S Y P N L A K H D N A R	E L I L G C R M P T D E E D I Y Q R S V H V E	
UniRef90_H3B512	C Y N F T Q D D H F V Q W F R G V E R I L S	E A E S Y N R S C D I E	
UniRef90_G1LDM2	N Y S L E P E D P F W A W F Q A M E P L S	E A E S Y T L S C Q L E	
UniRef90_F0ZUX1	K Y N F T Q V G V L Q K Y L T D S P V F E	N E K D L H K E C C K I E	
UniRef90_D5G1T2	P Y R D L L A R N H I V E K L I T D A V V S M D D D E L Y E R S V Q L E		
UniRef90_S8FZ29	A Y D F P E D S Q T A E F V E		
UniRef90_L8H701			
UniRef90_H2T9G5	Q P G N E V I G V D S A E V R G S V Q Y L H I D	N Q Q T L F E L S H K L E	
UniRef90_I2H0B4	K Y R L K S V P D V N A F I E	S S L T D V P H I D K Q Y E L S L S V E	
UniRef90_X6NAI2	P Y T D K E N E V V Q R I L L E E F A K L K D V T E E D	D W D M S T E V	
UniRef90_UPI00034FF736	Q Y K F K K N E R I Q A M F N D F D D V L S E E A M W Q Q V S E S I K		
UniRef90_L8HQ5Q5	P Y K F Y P V V P I E E Y L E N V T T L	P E K E L Y D V A K K C E	
UniRef90_K5Y6Z8	P Y T F A S D D		
UniRef90_L8GTL9	A Y N F H P V P Q I Q A V L R K H L D R I D E W L K D M E D R	L M A M S R R I E	
UniRef90_F7VPN2	P Y P N L T K H E P S R E L I L D M K M P T D E E D I Y Q R S I T V E		
UniRef90_W9CDK5	P Y P N L T K N D P V R E L I L D C L I P T D D E A I Y Q R S L H L E		
UniRef90_W5KBA9	Q T G N E V A P T D S P D L R A S V H Y L H I D	N Q Q T L F E L S H R L E	
UniRef90_UPI00046C2783	A P P L E A N K D L V H L L T P L T P		
UniRef90_W5L5J0	C N Y Q G S H T S H I T H F D I N T V L F K S E L L Y F V Q E M F E L S L R I E		
UniRef90_E0W133	A C P F D K C T K V I T F L Q A S P V L T E N		
UniRef90_L8H736	T Y P F K P L P Q V Q S Y F L D R K P T E R R M R W M D E K G V Y D K S L V I K		
UniRef90_F1R763	P P N I E A N T D L L N	LL I V S L D Q Y H S E D D I Y Q L S L Q R E	
UniRef90_UPI0004410A64			
UniRef90_H9G7U1	C Y A L S P D P S L Q R W F Q G L P S L S E T Q S	Y L L S C A I E	
UniRef90_G1TEV7	K Y Y F K R D E E F G L W F R S V E F L T	E K E S Y A L S C Q L E	
UniRef90_T1F8L2	P Y K I E F Q R R V A D Y	L L D S S R L I D D D Q T F K F S L E M E	
UniRef90_E9C867	P Y A F P P I P E	I Q A L F L N T P H N S E E V N Y S A S S L A R E	
UniRef90_D3BUL2	S Y P M K S V S T L Q N K I L D R Q I L N D	D E M Y E K S L L E	
UniRef90_E7FFA1	P F D Q E P Q A T G K S H Q D V R T Y V R H I S V I D N Q R S S Q L S H R L E		
UniRef90_H2U1L4	C K N F T V D E C F M R R M W Y Q S V P T L T	E E E S Y R L S N V I E	
UniRef90_Q54C94	P Y N L Q I V H Q V A T F V N K L P K Y S E Y D L N L S E S L		
UniRef90_W8BFY8	T I S L D P P S P K S E G D A R S Y I C C L R S I D N Q R V L T A M S Q K L E		
UniRef90_W3X0T2	P Y P N L S K H D T A R E L I L D C L M P T D E E D I Y Q R S C Q V E		
UniRef90_F7GVD8	E C P F E Q D P S I T H Y L Y T A P I F S	E D G L Y L A S Y E S E	
UniRef90_UPI0003836B62			
UniRef90_H2RMP6	E C P F E K D R K I L Q Y L L T A P A F T	E D A L Y L A S Y E S E	
UniRef90_UPI00026575EF	P Y K I E E Q V P K V F N Y	L L D P G R L M P D E E L Y R L S L C L E	
UniRef90_V9FLX1	P Y L L P T D K R V L E H I C S T V P F M E	S D A C F A R S L K I E	
UniRef90_UPI00044048C4	Q P P V Q A N P D	L L S S L T V S L D Q Y Q T E D E L Y Q L S L Q R E	
UniRef90_T1G401	Q N Y D H L P T Y P N I Q T Y L N S V R Y I E E L Q K F V E D D N Y K		
UniRef90_B0CT61	D L E Q Y R H Q G Q L A Y L E N Q	L K G V Q P T A N T D D E L M E K S I A L E	
UniRef90_UPI00046B2833	P Y T F S P D P K L Q S Y		
UniRef90_A7S271	P P L V T P N M E L L N	M L R V S L Q P R L S E D E L Y E L S L A R E	
UniRef90_L8Y2T1	S V G S E P S L S T R S P A S T W A F V Q Q L K V I D N Q R E L S R L S R E L E		
UniRef90_H2LKK3	E C P F E E D Q A L L H Y L H T A P I F S	E D G L Y L A S Y E S E	
UniRef90_Q4RNS0	A F S P D S P P A G K N H S D V R A Y V R Q F N V I D N Q R T L T Q L S H G L E		
UniRef90_R7U0T8	S L P V E V N M D L V N	T I R L S L D L H Y T E D E I Y E L S L A R E	
UniRef90_W9Y668	H Y T F P Q R E E T V K L V L E T K L V D E P E D S A D R S E L Y D R S V Q V E		
UniRef90_M7XHF4	P Y P L V E V P E I Q A Y L S Q Q	L E G L K R G Q D A Q S L Y R Q S L L I E	
UniRef90_E9Q813	E C P F E R D R K V L Q Y L L S V P V F S	E D A L Y L A S Y E S E	
UniRef90_A0A058ZF86	S I S Y R N M L S L N L P R I L W E H I H G S S S D E L Y Q M S Y A L E		
UniRef90_R7VBA4	N Y N F K E N P K	L I A M F N N F E D Y I C E E S L W Q I S K V L K	
UniRef90_H2U1L6			
UniRef90_T1J310	P Y D L K M F E E A Q M V R R V K A Y L S N L K V I I D E E Q L H Q M S L D C E		
UniRef90_UPI0001A61F9A	E Y S F A V D E T L N A Y L C A Q R Y I E E L Q K F L E E D D N Y K T S L I L E		
UniRef90_K3WPG2	A Y Y L L P T D K R V L E H I C T S V Q Y	P D A D A C F Q R S L K V E	
UniRef90_B4DGK9	P L C L D M E A S P N H L Q T K A Y V R Q F Q V I D N Q N L L F E L S Y K L E		
UniRef90_E0VNE1	A Y N I L P Q D P F N C W F E S L L V L D D R	E A Y Q L S C Q I E	
UniRef90_F1S5Q2			
UniRef90_D3BU27	P Y H N F T T N L N A Q N F L D K D M L I L P E K E L Y D F S K F V E		
UniRef90_W2TH32	N Y D I T R D E K I L C F F D S F S T F L	T E E E T W A R S H E I K	
UniRef90_V8P700			
UniRef90_H2MNG8			
UniRef90_Q4S379	I C P F E R D R R I L Q Y L V T T P V F T	E D E L H L A S Y D S E	
UniRef90_D3BT13	L H Q F R A V P S I Q K V L S K	P Q Q E L F D D E V I R H Y S L I C E	
UniRef90_X6MYZ8	K W N F T C D P L L R Y I R S Q L	E Q P E V N E Q Q L Y K I S K L L E	
UniRef90_L8GHT4			
UniRef90_W3VIG2	D R Y I K P N A A V E R L I V D V P V M D D	E A L Y E R S L M V E	
UniRef90_E4X995	K Y D F Q K S A D I D R R F C G F Q S L	Q N D D K L W E M S Y L L R	
UniRef90_B0EBF0	K Y D I V A I P Q I I C F I K	Q N D D K L W E M S Y L L R	
UniRef90_UPI0004419742	P N I L P L S P L R S R P Q H L M E E A R A M R T S T C S E Q S L S T R S		
UniRef90_UPI0003AB5F70	N Y R L R P L E K F V T Y P F R M K Q L S D	K E S Y K L S C Q L E	
UniRef90_L8GT69	P Y T L E G D S A V A T A L R N A M Y F	D E D T L H R R S L E Q E	
UniRef90_F7BXN2	N Y N L E P Q E R F R A W F W D M E Q L S	E D E S Y S L S C Q L E	
UniRef90_G6DKS9	P Y D L K M F E E A Q M V R R V K A Y L N R M H V E T D E E R L H A L S L E C E		
UniRef90_Q56TX1	A Y C S E H S M T L R N P A T T W A Y I Q H M K V I D N Q K L M E L S R S L E		
UniRef90_UPI000298A53F	H M G N G I I Q K S S S E A R A H I D Y L H V I D N Q Q T L F E L S H R L E		
UniRef90_B8MGMM3	P Y P Y Q R N E E V Q R L V D A K M F D E E I E N		

450 460

P R A F S S P
 UniRef90_I1FR61
 UniRef90_UPI00045E001F
 UniRef90_G9KKA7
 UniRef90_UPI0001D38D4F
 UniRef90_L8HKN6
 UniRef90_V9KNR7
 UniRef90_E9BWS7
 UniRef90_Q8R514
 UniRef90_P26674
 UniRef90_UPI00046C0CC7
 UniRef90_UPI0003332DA3
 UniRef90_C5PON5
 UniRef90_UPI00042C05C1
 UniRef90_D3BR51
 UniRef90_A0A016PEU4
 UniRef90_H3B512
 UniRef90_G1LDM2
 UniRef90_F0ZUX1
 UniRef90_D5GIT2
 UniRef90_S8FZ29
 UniRef90_L8H701
 UniRef90_H2T9G5
 UniRef90_I2H0B4
 UniRef90_X6NAI2
 UniRef90_UPI00034FF736
 UniRef90_L8HQ5
 UniRef90_K5Y6Z8
 UniRef90_L8GTL9
 UniRef90_F7VPN2
 UniRef90_W9CDK5
 UniRef90_W5KBA9
 UniRef90_UPI00046C2783
 UniRef90_W5L5J0
 UniRef90_E0W133
 UniRef90_L8H736
 UniRef90_F1R763
 UniRef90_UPI0004410A64
 UniRef90_H9G7U1
 UniRef90_G1TEV7
 UniRef90_T1F8L2
 UniRef90_E9C867
 UniRef90_D3BUL2
 UniRef90_E7FFA1
 UniRef90_H2U1L4
 UniRef90_Q54C94
 UniRef90_W8BFY8
 UniRef90_W3X0T2
 UniRef90_F7GVD8
 UniRef90_UPI0003836B62
 UniRef90_H2RMP6
 UniRef90_UPI00026575EF
 UniRef90_V9FLX1
 UniRef90_UPI00044048C4
 UniRef90_T1G401
 UniRef90_B0CT61
 UniRef90_UPI00046B2833
 UniRef90_A7S271
 UniRef90_L8Y2T1
 UniRef90_H2LKK3
 UniRef90_Q4RNS0
 UniRef90_R7U0T8
 UniRef90_W9Y668
 UniRef90_M7XHF4
 UniRef90_E9Q813
 UniRef90_A0A058ZF86
 UniRef90_R7VBA4
 UniRef90_H2U1L6
 UniRef90_T1J310
 UniRef90_UPI0001A61F9A
 UniRef90_K3WPG2
 UniRef90_B4DGK9
 UniRef90_E0VNE1
 UniRef90_F1S5Q2
 UniRef90_D3BU27
 UniRef90_W2TH32
 UniRef90_V8P700
 UniRef90_H2MNG8
 UniRef90_Q4S379
 UniRef90_D3BT13
 UniRef90_X6MYZ8
 UniRef90_L8GHT4
 UniRef90_W3VIG2
 UniRef90_E4X995
 UniRef90_B0EBF0
 UniRef90_UPI0004419742
 UniRef90_UPI0003AB5F70
 UniRef90_L8GT69
 UniRef90_F7BXN2
 UniRef90_G6DKS9
 UniRef90_Q56TX1
 UniRef90_UPI000298A53F
 UniRef90_B8MGM3

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

1 10 20 30 40

UniRef90_B4N598
 UniRef90_L8H6C9
 UniRef90_UPI0003317828
 UniRef90_G1N8A6
 UniRef90_U6NV18
 UniRef90_L8HHG9
 UniRef90_UPI00033462A8
 UniRef90_L7JN11
 UniRef90_UPI0003EC2B3D
 UniRef90_W4VY64
 UniRef90_V5ESI7
 UniRef90_UPI00033375A8
 UniRef90_V8NT36
 UniRef90_H3CC15
 UniRef90_H2SL85
 UniRef90_I1GDM4
 UniRef90_A0A024GSH6
 UniRef90_UPI000383A80F
 UniRef90_F9FJC2
 UniRef90_M7SVT7
 UniRef90_UPI0003F153AF
 UniRef90_G7XPS6
 UniRef90_UPI0003C2AB1E
 UniRef90_L8GNM1
 UniRef90_I1FN70
 UniRef90_M5BM91
 UniRef90_H2Z6D0
 UniRef90_H3FA12
 UniRef90_U6IDB1
 UniRef90_UPI000333C2FF
 UniRef90_H3F985
 UniRef90_G8EB16
 UniRef90_A8NFV6
 UniRef90_A5DEC2
 UniRef90_M3HL86
 UniRef90_K1WP03
 UniRef90_K2GFL4
 UniRef90_UPI000440E762
 UniRef90_UPI0002C3CEB0
 UniRef90_K2RGTE
 UniRef90_W2RQZ5
 UniRef90_M2TKA5
 UniRef90_T1H058
 UniRef90_B6HCF6
 UniRef90_UPI0003ACCAB5
 UniRef90_W4YW56
 UniRef90_W2T5N0
 UniRef90_F6QNY0
 UniRef90_A2EWA8
 UniRef90_C4YMA9
 UniRef90_H0VRJ8
 UniRef90_UPI0003502C0E
 UniRef90_G2YPJ3
 UniRef90_P34578
 UniRef90_B4LPU3
 UniRef90_UPI00026541CF
 UniRef90_Q8VCC8
 UniRef90_Q3TYC0
 UniRef90_UPI000350D5C1
 UniRef90_I3M250
 UniRef90_B7P988
 UniRef90_M2RHP2
 UniRef90_UPI0002C67C8F
 UniRef90_G3JRC7
 UniRef90_Q874N2
 UniRef90_Q19770
 UniRef90_C4XXR1
 UniRef90_N1PM64
 UniRef90_G3AHE8
 UniRef90_UPI0002C445EA
 UniRef90_UPI0003341612
 UniRef90_UPI000273D858
 UniRef90_W4K8N1
 UniRef90_I1BJ06
 UniRef90_F0ZPA6
 UniRef90_U616L1
 UniRef90_A0A044TEW0
 UniRef90_UPI0002B42366
 UniRef90_K5WBZ9
 UniRef90_A5DL36
 UniRef90_UPI00032888ED
 UniRef90_W5P986
 UniRef90_F6QPP8
 UniRef90_W6MNJ8
 UniRef90_C5DUM5
 UniRef90_V9DEV0
 UniRef90_K7F7L9
 UniRef90_UPI0003293200
 UniRef90_UPI00026516DA
 UniRef90_UPI0003EA9821
 UniRef90_G8ZSG4
 UniRef90_UPI0003C11973

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

50 60 70 80

UniRef90_B4N598
 UniRef90_L8H6C9
 UniRef90_UPI000317828
 UniRef90_G1N8A6
 UniRef90_U6NV18
 UniRef90_L8HHG9
 UniRef90_UPI0003462A8
 UniRef90_L7JN1
 UniRef90_UPI0003EC2B3D
 UniRef90_W4VY64
 UniRef90_V5ESI7
 UniRef90_UPI0003375A8
 UniRef90_V8NT36
 UniRef90_H3CC15
 UniRef90_H2SL85
 UniRef90_I1GDM4
 UniRef90_A0A024GSH6
 UniRef90_UPI000383A80F
 UniRef90_F9FJC2
 UniRef90_M7SVT7
 UniRef90_UPI0003F153AF
 UniRef90_G7XPS6
 UniRef90_UPI0003C2AB1E
 UniRef90_L8GNM1
 UniRef90_I1FN70
 UniRef90_M5BM91
 UniRef90_H2Z6D0
 UniRef90_H3FA12
 UniRef90_U6IDB1
 UniRef90_UPI000333C2FF
 UniRef90_H3F985
 UniRef90_G8EB16
 UniRef90_A8NFV6
 UniRef90_A5DEC2
 UniRef90_M3HL86
 UniRef90_K1WP03
 UniRef90_K2GFL4
 UniRef90_UPI000440E762
 UniRef90_UPI0002C3CEB0
 UniRef90_K2RGT6
 UniRef90_W2RQZ5
 UniRef90_M2TKA5
 UniRef90_T1H058
 UniRef90_B6HCF6
 UniRef90_UPI0003ACCAB5
 UniRef90_W4YW56
 UniRef90_W2T5N0
 UniRef90_F6QNY0
 UniRef90_A2EWA8
 UniRef90_C4YMA9
 UniRef90_H0VRJ8
 UniRef90_UPI0003502C0E
 UniRef90_G2YPJ3
 UniRef90_P34578
 UniRef90_B4LPU3
 UniRef90_UPI00026541CF
 UniRef90_Q8VCC8
 UniRef90_Q3TYC0
 UniRef90_UPI000350D5C1
 UniRef90_I3M250
 UniRef90_B7P988
 UniRef90_M2RHP2
 UniRef90_UPI0002C67C8F
 UniRef90_G3JRC7
 UniRef90_Q874N2
 UniRef90_Q19770
 UniRef90_C4XXR1
 UniRef90_N1PM64
 UniRef90_G3AHE8
 UniRef90_UPI0002C445EA
 UniRef90_UPI000341612
 UniRef90_UPI000273D858
 UniRef90_W4K8N1
 UniRef90_I1BJ06
 UniRef90_F0ZPA6
 UniRef90_U616L1
 UniRef90_A0A044TEW0
 UniRef90_UPI0002B42366
 UniRef90_K5WBZ9
 UniRef90_A5DL36
 UniRef90_UPI00032888ED
 UniRef90_W5P986
 UniRef90_F6QPP8
 UniRef90_W6MNJ8
 UniRef90_C5DUM5
 UniRef90_V9DEV0
 UniRef90_K7F7L9
 UniRef90_UPI0003293200
 UniRef90_UPI00026516DA
 UniRef90_UPI0003EA9821
 UniRef90_G8ZSG4
 UniRef90_UPI0003C11973

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

	90	100	110	120
UniRef90_B4N598	P R G Y S R D Y Q L L		W R K H K L A P V Q N M V V H	
UniRef90_L8H6C9			N F C R E G R D R M F S H L I R	
UniRef90_UPI0003317828	Q N A N A V			
UniRef90_G1N8A6				
UniRef90_U6NV18	S P F A D T F K K R V S K N T F F V L V R V V D			
UniRef90_L8HHG9			M R V L N	
UniRef90_UPI00033462A8				
UniRef90_L7JN1				
UniRef90_UPI0003EC2B3D				
UniRef90_W4VY64				
UniRef90_V5ESI7				
UniRef90_UPI00033375A8	L S R A H Q D P T S T F T K I Y R R S C V L Q A W V E D C Y T V D R R A D G A			
UniRef90_V8NT36				
UniRef90_H3CC15	C Y H D N S L V S A S L E A L I Q H L V P T V D Y Y P D I R F R E V A P K L V Q			
UniRef90_H2SL85	P D L T D I D P D T V E I		D I I P I R L R V V H	
UniRef90_I1GDM4				
UniRef90_A0A024GSH6	A A D S D		D Y S R E F N H R M V L	
UniRef90_UPI000383A80F	Y N Q G N L A V W Q A T T S L L V R I		K R E K M K I N D N M A	
UniRef90_F9FJC2	M I R A I S N N S			
UniRef90_M7SVT7				
UniRef90_UPI0003F153AF	Y P N	F N P N E R E K A V E D M K R R F C S A Y K R R V Q E R V F A	K N T Q E L R R L Q I C H	
UniRef90_G7XPS6	E T K N E G D S I K H S H M T F S L L V R I T D E C A N E I			
UniRef90_UPI0003C2AB1E				
UniRef90_L8GNM1				
UniRef90_I1FN70				
UniRef90_M5BM91				
UniRef90_H2Z6D0				
UniRef90_H3FA12				
UniRef90_U6IDB1				
UniRef90_UPI000333C2FF				
UniRef90_H3F985	T S I N C S L S K I I K A R I V S I L S Y W S T T I L P L L P E K E K Q D A L K			
UniRef90_G8EB16	M S I D T T I S R S L R D Q I P K R F L Y W V T N V F P Q I P E S L R K A R T			
UniRef90_A8NFV6				
UniRef90_A5DEC2				
UniRef90_M3HL86				
UniRef90_K1WP03				
UniRef90_K2GFL4				
UniRef90_UPI000440E762				
UniRef90_UPI0002C3CEB0				
UniRef90_K2RG76				
UniRef90_W2RQZ5				
UniRef90_M2TKA5				
UniRef90_T1H058				
UniRef90_B6HCF6				
UniRef90_UPI0003ACCAB5				
UniRef90_W4YW56				
UniRef90_W2T5N0	Q N A D A V		N F C R E G R D R M F S H L L R	
UniRef90_F6QNY0				
UniRef90_A2EWA8				
UniRef90_C4YMA9				
UniRef90_H0VRJ8	F E N W L E W Y H P P Y I L T L T I S E A C M Q A K S H G V H L E P A I Q F A I			
UniRef90_UPI0003502C0E	L Q A W V E D C Y T V D F T R N V G L L E R L E D F I S S K I L P D R R P D G T			
UniRef90_G2YPJ3				
UniRef90_P34578				
UniRef90_B4LPU3	Q E C R G Q E E E L L R L L V H W L R I C P N D F R N E T L L Q			
UniRef90_UPI00026541CF				
UniRef90_Q8VCC8				
UniRef90_Q3TYC0				
UniRef90_UPI000350D5C1	L Q A W V E D C Y T V D F T R N A G G L L G R I L E D F I S S Q I L P L D G S A K H			
UniRef90_I3M250				
UniRef90_B7P988				
UniRef90_M2RHP2				
UniRef90_UPI0002C67C8F	L Q A W V E D C Y T V D F M R N T G G L L G R I L E D F I S S K I L P L D G S A E H			
UniRef90_G3JRC7				
UniRef90_Q874N2				
UniRef90_Q19770	H Q W L S D S L S L I T H F V N F Y Q E T R N V E Q R E A V C R			
UniRef90_C4XXR1				
UniRef90_N1PM64				
UniRef90_G3AHE8				
UniRef90_UPI0002C445EA	L Q A W V E D C Y A V D F T R N A G G L L G Q L Q S F I S S K I L T P L D G Y A E H			
UniRef90_UPI0003341612	Q Q P V L D K A R V Q M F G P K L L Q L X W T E P F P R D F Q			
UniRef90_UPI000273D858				
UniRef90_W4K8N1				
UniRef90_I1BJ06	N H C S E E G R I A Q L R V I R M M R N W K L Y W R D D T P S P V I K A L Q E			
UniRef90_F0ZPA6	L L E E T D E R R L I R I R T F V V I R H W L T H Y W T Y D F M N S R T L R F M			
UniRef90_U616L1				
UniRef90_A0A044TEW0	Q N A T A A		N F T K E G R T R T F R G I Y K	
UniRef90UPI0002B42366	L Q A W L E D C Y S V D F A V K A D L L C T L Q D F V S S K I A P G K H G S T F			
UniRef90_K5WBZ9				
UniRef90_A5DL36				
UniRef90_UPI00032888ED				
UniRef90_W5P986				
UniRef90_F6QPP8				
UniRef90_W6MNJ8				
UniRef90_C5DUM5				
UniRef90_V9DEV0				
UniRef90_K7F7L9				
UniRef90UPI0003293200	L Q A W L E D C Y S V D F A V K A D L L C T L Q D F V S S K I A P G K H G S T F			
UniRef90UPI00026516DA	R H K T D M K S R R A N R N A F F L L L R V A G D L I G Q T E D D I L K M L M E			
UniRef90UPI0003EA9821	L Q A W L E D C K Q V D F S P K S N L L N L E D F I V S K V V P L D Y P V P G			
UniRef90_G8ZSG4				
UniRef90UPI0003C11973	T L D L M Q A W V E D C H H D F A K M P E L Q D K I E E F I E P K G K C T F A			

130 140 150 160

UniRef90_B4N598	V V K C W I K E Q P C H F R T D P V L A A R M Q E F L E S H L T F H P L E K A F
UniRef90_L8H6C9	
UniRef90_UPI000317828	V L R H W V S K H S Q D F E L N N E L K M N V L N L L E E V L R D P D L L P Q E
UniRef90_G1N8A6	L C R E W V T S I P H D F R S E H M R T R L S E L L G M C A V D R T Y K Q R A A
UniRef90_U6NV18	E L C L V E L T E E I L K L L M E L V F R L V C G G E L S L A R V L
UniRef90_L8HHG9	
UniRef90_UPI0003462A8	V L R H W V S K H A Q D F E M D Q K L K T L T I E F L E D I N Y S P N L L P A E
UniRef90_L7JN11	A R G T D L E D P K E A E E D A R P F N A L C K R F S E D G I S R K S F P W R L
UniRef90_UPI0003EC2B3D	L L T E W T E T F P Y D F R D E R M M R C L K D M T H L V I A R G D E Y S W R A M
UniRef90_W4VY64	A L R L W L K F H P Q D F N S D S P L R G E M E S F L R G I E G E M G A C S K Q
UniRef90_V5ESI7	D A S D P N M H N L R R R L C I A G V W T G P G E
UniRef90_UPI0003375A8	
UniRef90_V8NT36	
UniRef90_H3CC15	
UniRef90_H2SL85	
UniRef90_I1GDM4	
UniRef90_A0A024GSH6	
UniRef90_UPI000383A80F	
UniRef90_F9FJC2	
UniRef90_M7SVT7	
UniRef90_UPI0003F153AF	L V R Y W M T K H P E T V H Q E P Q L E E V V S R F W A T V E Q E G N L A Q R S
UniRef90_G7XPS6	
UniRef90_UPI0003C2AB1E	F M R Y W V D H F F D Q D F K D K P A F Y E L V D F I N K N L P R E E A N K L K
UniRef90_L8GNM1	L S S Q A V A L I K E A E I T L I E F H M M L K D G N
UniRef90_I1FN70	I L D D W L E L Q A I E P K D R G F L L D Q D F I H E S F S G E P L D A R W S
UniRef90_M5BM91	
UniRef90_H2Z6D0	
UniRef90_H3FA12	
UniRef90_U6IDB1	F L L R W T R T P R F Y A H D F A G N P N N V E S T L I F P P M T M N V A E T G
UniRef90_UPI000333C2FF	D D K L I R S I T A F V Y H L I R Q D N I N L A R
UniRef90_H3F985	
UniRef90_G8EB16	
UniRef90_A8NFV6	
UniRef90_A5DEC2	
UniRef90_M3HL86	
UniRef90_K1WP03	L F H I F L Q R M K D Y G M K K Q V I L L E N Q M R R E V I V F L S P E N V N N
UniRef90_K2GFL4	D F L C V C D C
UniRef90_UPI000440E762	L L S Y G F R K I G E E L K A K L D K P S A R G K F R
UniRef90_UPI0002C3CEB0	
UniRef90_K2RGT6	
UniRef90_W2RQZ5	
UniRef90_M2TKA5	V L R H W V D N H F Y D F E K D P A I L D T L T E F L M H V Q E K P M K K W V D
UniRef90_T1H058	
UniRef90_B6HCF6	
UniRef90_UPI0003ACCAB5	
UniRef90_W4YW56	
UniRef90_W2T5N0	L C R E W V T S I P H D F R S E H M R T R L N E L L G L C S V D R N F K Q K A A
UniRef90_F6QNY0	
UniRef90_A2EWA8	
UniRef90_C4YMA9	
UniRef90_H0VRJ8	S E V E H L E P S K A Q T D G E A Q T P Q F A L D M C L E T P A P C Y Q Q H E S
UniRef90_UPI0003502C0E	P R G T D L E D P K E A E E D T R P F N A L C K R F S E D G I S R K S F P W R L
UniRef90_G2YPJ3	
UniRef90_P34578	
UniRef90_B4LPU3	E L R K H S A S K A L S A F L D R I S E S I D R L D A S Q R S
UniRef90_UPI00026541CF	
UniRef90_Q8VCC8	
UniRef90_Q3TYC0	
UniRef90_UPI000350D5C1	F M R Y W I L E F P A E F N L D L G L I R L T E E F R E L A S Q L G Y E D H I H
UniRef90_I3M250	L R S T D L E D P K E A E E D T R P F N A L C K R F S E D G I S R K S F S W R L
UniRef90_B7P988	L L Q N R L C E E G H D A L S D L V D P S R L P N F K D W T R C V S V R H
UniRef90_M2RHP2	
UniRef90_UPI0002C67C8F	L P K E A E E D T R P L N A L C K R L S E D G I S R K S F P W R L S R S N G L A
UniRef90_G3JRC7	
UniRef90_Q874N2	
UniRef90_Q19770	A V S F W I E K F P M H F D A Q P Q V C A Q V V R L K T I A E D I N E N I R N G
UniRef90_C4XXR1	
UniRef90_N1PM64	
UniRef90_G3AHE8	
UniRef90_UPI0002C445EA	L R G G D L D H P K E A E E D T W P L N A L Y K K F S E D G V S R K S F P W R L
UniRef90_UPI0003341612	E E X A I G H L K D M V G C N A P C D E A S G K R M Q Q L L Q A L R
UniRef90_UPI000273D858	L V R Y W I S A F P A E F D L N P E L A E Q I K E L K A L L D Q E G N L R H S S
UniRef90_W4K8N1	F I R G H V Y R D W P S A G P L D Q A L R C T R S R T S R T V H R L R E A P A
UniRef90_I1BJ06	L C T F L T Q L R T H P L N E R I V K S L R R V L K R Q R R F Y Q T S Q S R D S
UniRef90_F0ZPA6	
UniRef90_U616L1	
UniRef90_A0A044TEW0	L C L E W T Q S I P Y D F R D Q Q M Q R R L I E L L K R F
UniRef90_UPI0002B42366	V H K C E E E S E E G R K T L H S L C K K L S E D F Y W K L S K G M G P V A Q Y
UniRef90_K5WBZ9	V F E T W L V H H R M V E D D P P V A Q R L Q T W L N S L V E A S E N I A
UniRef90_A5DL36	
UniRef90_UPI00032888ED	Q V W Q Q
UniRef90_W5P986	L L M E L V F R L V R S G E L S L A R V L R K N I L D K V D Q K K L L R C T N
UniRef90_F6QPP8	
UniRef90_W6MNJ8	
UniRef90_C5DUM5	
UniRef90_V9DEV0	
UniRef90_K7F7L9	Q N Y N L N E W K E E E E N T K S L H S L C K K L S E E V S Q K S F N W K L S
UniRef90_UPI0003293200	
UniRef90_UPI00026516DA	L V F H S S A T V S S C W P R S S E T S P H Q I E N N K K A L T I S S S K H L W G
UniRef90_UPI0003EA9821	C C V S S M S M H D D D E T K S V H S L C K R K S F Q W R I S K G A E P Q V A L
UniRef90_G8ZSG4	
UniRef90_UPI0003C11973	F P C C S F N L E S I K N D D D T K S L H I R K S F N W K I Y R G S E S T T P R

170 180 190 200

UniRef90_B4N598	H Q L L Q Q Y I A A L K P T D P L R R V V I T P R V H S A V A T A T N W R L I D	F G I M
UniRef90_L8H6C9	F Q Y Y L K N N M E T E T L C S D E D A Q E L L R E S Q I S L L	
UniRef90_UPI000317828	R K A T A N I L R A L S Q D D Q D D T H L K I E D I Q M S E C P K P E C F E	
UniRef90_G1N8A6	E L E A S L R S T L S K L D R Y N K A V K N L Q K T L A E S T Q R P V Q S D I L	V L
UniRef90_U6NV18	R K N I L D K V D Q K K L L R C A N S D Q P L	A A R G V A A R P G T L H
UniRef90_L8HHG9	S V H P F I L	
UniRef90_UPI0003462A8		
UniRef90_L7JN11		
UniRef90_UPI0003EC2B3D		
UniRef90_W4VY64	H K A A T Q L L R L I T K E E T E S N K V D L K K L L T P P V I P S K E S I E	L L
UniRef90_V5ESI7	P R G N G L T L P H K E R Q Y T I A S A L P K P C F P Y A K A S E K G P Y F L T	
UniRef90_UPI0003375A8	C V F T T L G I N S H L F A C T K D T F P S L V P L P E E I Q V S P G D T E I H	
UniRef90_V8NT36	Q Q M T Q Q Y E E A V A A L N A V A L E R P A S L K N K Q A S G Q R S D I L S V	
UniRef90_H3CC15	L Q K L L Q G D R S S T L Q M M K R Q T S Q P I E P I K D N K F S I T	
UniRef90_H2SL85	Q M T Q Q Y T S T D T I E K K I H C D N H K T N F L V K G L S N E R A R L W I L	
UniRef90_I1GDM4	R S R V D P Q T P E L P K P L A L P G D P P A D P T D V L	
UniRef90_A0A024GSH6	S N K Y S A H L P F I L	
UniRef90_UPI000383A80F	S V H L P F V L	
UniRef90_F9FJC2		
UniRef90_M7SVT7		
UniRef90_UPI0003F153AF	L G D N S N L L S P G G P G P P P S M N S P S V G	K K C K V S I L L F D
UniRef90_G7XPS6	P E P L K T A G P E H V P F V L	
UniRef90_UPI0003C2AB1E		
UniRef90_L8GNM1	L A F V K S S G I K S I P M L S I G A P R S P T P R S A G Q S G P Q R T V Y I E	
UniRef90_I1FN70	L K F G Q L V R N A L V E K L N Q K A P E F P L S F A M C R K S G R P A S I N	
UniRef90_M5BM91	A L R E K L R G H L I N L N Q H P Y L V N K Q S A S K T I E A S H M E	
UniRef90_H2Z6D0	S K Q V S L S F D	
UniRef90_H3FA12	N E R G Q T A G H A K L V E S G N M H R K P G S L M P F L S P N S C S T I D L L	F D V L
UniRef90_U6IDB1	I L R K R L L D R I D R L N I C K Q S P G P L P V L P Q V T P R K K A D T I Y	
UniRef90_UPI000333C2FF	Q P N T N T A T T P K H S V H L P F I L	
UniRef90_H3F985	S H Q C S L S F D	
UniRef90_G8EB16	M M P N F Y I I C D Q S W V L S N Y R P N L L	
UniRef90_A8NFV6	I S E P S R K T S V H L P F V L	
UniRef90_A5DEC2	K	
UniRef90_M3HL86	I R L P F S Y L L N Q N K F K F I	
UniRef90_K1WP03	T S S S K L T Y S D N	T K L P L N F L L F N E P L D F I L
UniRef90_K2GFL4		H I P F I L
UniRef90_UPI000440E762	P K T M A P T A P Q Y G N R S S G G P A H I P F V L	
UniRef90_UPI0002C3CEB0	S V N K I V Q R K S E Q E E S Y K H I T F A F G N S P P A I E N P E N V L N L L	
UniRef90_K2RGT6	N C T D Q N P V I N L L P D H V P F I L	
UniRef90_W2RQZ5	P N P V K P L S K I Q W H Q F M	
UniRef90_M2TKA5	Y D W M R V I S V R N P S V R T N R K V S L V F N	
UniRef90_T1H058	D L Q S T L K S T I N R L E R Y D K A V K N L Q K T L S E N T Q R P M Q S D I L	
UniRef90_B6HCF6	C P C P G T V K S Q L T E E L P D I T	
UniRef90_UPI0003ACCAB5	Q L Q Y L L V K Q A S A S S L G R Q S S I K S L K R F A A N V Y K T D N V L S K	V F
UniRef90_W4YW56	S W V L S N Y R P N L L	
UniRef90_W2T5N0	A L Q P E P V A E P K P L L E R G K Q Q N P P S C L F S E T E D R S M Q E V L L	
UniRef90_F6QNY0	P R G N G L A L P H H K E R Q Y T I A S A L P K P C P Y A K A S E K G P Y F L T	
UniRef90_A2EWA8	P S G T S E A S R K T S V H L P F I L	
UniRef90_C4YMA9	Q L Q Y L L V K Q A S A S S L G R Q S S I K S L K R F A A N V Y K T D N V L S K	G S L G Y H D I R
UniRef90_H0VRJ8	D P Q E V H E L T P H P E Q L G P T L G S S E M L D L	
UniRef90_UPI0003502C0E	A L D I S S I P S Y D W M R R V T Q R K K I S K K G K A C L L F D	
UniRef90_G2YPJ3	T R G N G L T L P H H R E R Q Y T I A S A L P K P C P Y A K A S E K G P Y F L T	
UniRef90_P34578	P L T K H T R K V S L V F D	
UniRef90_B4LPU3	N P Q P E R P A S S P D E P R T V P A D P P E P T T H L P F V M	
UniRef90_UPI00026541CF	L P H H K E R Q Y T I A S A L P K P C F F E D F C G P Y A K A G E K G P Y F L T	
UniRef90_Q8VCC8	S V H L P F I L	
UniRef90_Q3TYC0	L D V S A L	H V K D V S S A M E F N L I
UniRef90_UPI000350D5C1	P S F A W L R A V S V R N P L A K Q T A F S L S F I V	
UniRef90_I3M250	T P H K D V S S A M E F N L I	
UniRef90_B7P988	E Q S W V L T N Y R P N L L	
UniRef90_M2RHP2	P A H M P F V L	
UniRef90_UPI0002C67C8F	S T W V L S N Y R P N L L	
UniRef90_G3JRC7	S K G N G L A L G P H K E R Q Y T I A S A L P K P C P Y A R V V S E K G P Y F L T	
UniRef90_Q874N2	H K L G T R G R A G P G P E G L M G T D K P I A Y Q T K P H A S V H R V L L S V	
UniRef90_Q19770	L I D I D S V P T Y K W K R Q V T Q R N P V G Q K K R K M S L L F D	
UniRef90_C4XXR1	L S S A E H A T K F Q Q L V A A L P N W T K P R S L H D M C Q R Y P S Q V S I D	
UniRef90_N1PM64	A L Q F T H S S W T N K L K D T F R E N L K Q H K F L S F I H S N Q S Q S L I L	
UniRef90_G3AHE8		
UniRef90_UPI0002C445EA		
UniRef90_UPI0003341612		
UniRef90_UPI000273D858		
UniRef90_W4K8N1		
UniRef90_I1BJ06		
UniRef90_F0ZPA6		
UniRef90_U616L1		
UniRef90_A0A044TEW0		
UniRef90_UPI0002B42366		
UniRef90_K5WBZ9		
UniRef90_A5DL36		
UniRef90_UPI00032888ED		
UniRef90_W5P986		
UniRef90_F6QP8		
UniRef90_W6MNJ8		
UniRef90_C5DUM5		
UniRef90_V9DEV0		
UniRef90_K7F7L9		
UniRef90_UPI0003293200		
UniRef90_UPI00026516DA		
UniRef90_UPI0003EA9821		
UniRef90_G8ZSG4		
UniRef90_UPI0003C11973		

210 220 230 240

UniRef90_B4N598	D I C P S C A A H Q L T A I E L E R L S H I G P E E F V Q A F T S S N D M K K
UniRef90_L8H6C9	L H K T R H I A R Q M A L I A F D L F A Q L P H D E L L N M R W K H Q P S T
UniRef90_UPI000317828	Q L S T V E V A T Q L S M R N F E L F R N I E P T E Y I D D L F K L K S K T S
UniRef90_G1N8A6	T L S A M E L A E Q I T L L D H I V F R S I P Y E E F L G Q G W M K L D K N E R
UniRef90_U6NV18	C D E P K V I A H Q L T H I E M E R F S M V G V D E I L D L A D L G R N R N G P
UniRef90_L8HHG9	D F E A E E L A H L A F K E Q Q R Y N K I T A L D L L V N I K R P V G
UniRef90_UPI0003462A8	D F H S H E I A E Q L T L L D A E L F Y K I E I P E V L L W A K E Q N E E K
UniRef90_L7JN11	A F D S Q I L A Q Q F T L L I E K D A L N E I D W K E L I D M R W K K A D R N T D
UniRef90_UPI0003EC2B3D	C S D P Y R L A Q Q L T L L V E L A P L R H I G P E E F V Q A F V N K D P L A S T
UniRef90_W4VY64	T L S A L E I A E Q M T Y L D H H I F I S I A S E E F L G Q A W M K T D K A T R
UniRef90_V5ESI7	D V E D E V I A T E L T R L E W A Y F T A I Q P R D L L R H I L V P H S E R
UniRef90_UPI0003375A8	E Y S T H Q L F T Q L T L L Q E L F Q K I C H P V H F L N S R A G V M D K S T A
UniRef90_V8NT36	R M E A D V A N H L T A F H W E L F W C V H E L E F V D Y V F H G E R G R R E
UniRef90_H3CC15	D M S A E E V A T Q L V V F D W E L F S C V H E V E F F L C Y V F H G E Q A R W R
UniRef90_H2SL85	C D A D F V L A Q Q L T H I E L D R L S F I G P E E F I Q T F A M K D P R K R K
UniRef90_I1GDM4	D A N T L E L A R Q Q L C I K Y F N L F N Q V Q L K E F S M L A W E S E R D Q E K
UniRef90_A0A024GSH6	E L D A M I L F A Q Q I T L L Q H C L F S R I K M S E F L A G K R D A T K
UniRef90_UPI000383A80F	V Y L A D H L A E Q L T L L D A E L F L N L V P S Q C L G G L W G H R D R P G H
UniRef90_F9FJC2	A F D S E I L A Q Q F T L L I E K D A L N E I D W K E L I D M N W K D F L R N S D
UniRef90_M7SVT7	A F D S E I L A Q Q F T L L I E K D A L N E I D W K E L I D M N W K D F L R N S D
UniRef90_UPI0003F153AF	H L E T E E L A Q Q H L T Y L E F R S F Q
UniRef90_G7XPS6	S C E S H V L A Q Q L T L V E M A A L S E V D W R D L V D M R W S S G S P T V L
UniRef90_UPI0003C2AB1E	Q P H R P R D C R C Y V L Q G S V R G
UniRef90_L8GNM1	D L S P S E I A I N L T A I E F A C F E K V R P E E L F H M N W Q K P E R E T L
UniRef90_I1FN70	D F D A S E V A K Q L T L L D A D Y F Y K I D V S E M L Y W A K E H N E E K
UniRef90_M5BM91	E L D S A T V A K Q L L A A I E S E L F F Q K I L P S D C A A R L K N I S D E E
UniRef90_H2Z6D0	T V S S L E I A Y H L C K H N W N L M N N H I L E F L F K T C G G H K F K W T
UniRef90_H3FA12	Q W S P E D L S N S L T H I D F K I L S R I T I A E L K Y V R E G K L R E
UniRef90_U6IDB1	Q I H P L E L A E Q V T L T Y E F L Y R R Q Y W E V S G L Q T D D
UniRef90_UPI000333C2FF	K V T P E E F A S Q I T L M D I P V F K A I Q P E E L A S C G W S K K E K H S L
UniRef90_H3F985	D F K S S I L A Q Q I T M L D A Q L F E K I E P P E L L W W A E E Q N E K K
UniRef90_G8EB16	A F D S D V L A Q Q F T L I E K D A L T E D W R E L T D M S W K H F A C N I D
UniRef90_A8NFV6	Q W S P E E I A V S L S H I D Y K A L F R I P I S E L K Q Y C D G N L S H
UniRef90_A5DEC2	D F N G L E I A K Q L T L L E S H I F C S I K P E E L L N E N Y T S K R A H L N
UniRef90_M3HL86	D F N G L E I A K Q L T L L E S H I F C S I K S N E E L L N Q N Y T T K K A H H L K
UniRef90_K1WP03	U H I D S Q V L A Q Q F T L I E K D A L N E I D W K D L I E M C W K D V S T E S R
UniRef90_K2GFL4	A F D S Q V L A Q Q F T L I E K D A L N E I D W K D L I E M C W K D V S T E S R
UniRef90_UPI000440E762	E I P F K D F S E Q L T C I T S Y Y F F R S I K L F E L L F L W N K C H D E
UniRef90_UPI0002C3CEBO	S F S A R D I A E Q L T R L D A D L F V K I V P L H C L G C I W S Q R D K K E N
UniRef90_K2RGT6	S I S P F N F A H E L T K I Q S E L F F D I S A F E L F K W N K E K G V
UniRef90_W2RQZ5	A F D S E T L A E Q F T I V E K D A L E E I D W K E L I E L R W K Q S S P Q I R
UniRef90_M2TKA5	A A D S Q V I A Q Q M T L I E K S A L S E I E W S D L V N M K W H D S S S K S D
UniRef90_T1H058	N E P E D A I A R E L T R I D W I M F S S V R P R D L V R H V S L N N D E K K R
UniRef90_B6HCF6	T L H P I E L A R Q I T T L L Q F E Y Y R N V K P S E L V G S Q W T K E D K Q I N
UniRef90_UPI0003ACCAB5	A C E S Q V L A H Q L T L I E M A A L S E I D W R D L V E M K W S N A S P L V T
UniRef90_W4YW56	D F P P Q L V A E Q L L T R M A A E L F K T L V P A H C L G S I W S E R D N R E R
UniRef90_W2T5N0	A A D S Q V I A Q Q M T L I E K S A L S E I E W S D L V N M K W H D S S S K S D
UniRef90_F6QNY0	C P D P K I V A Q Q L T H I E M E R F S M V G V D E I L D L A D L G R N R N G P
UniRef90_A2EWA8	T F P P R L L A E Q L T L I D A D L F K K V E L Y E C L G S I W G Q R H Q K G S
UniRef90_C4YMA9	Q S S P L I V A E H L S Y Y E L E I L N A M P A S E F I G T S W T K P D K W V L
UniRef90_H0VRJ8	D F N G L E I A K Q L T L L E S Y I F C S I K P D E E L L N Q N Y T T K R A H L K
UniRef90_UPI0003502C0E	A F S P K I L L A Q Q L M L M D A E L F K K V V P C D C L A S I W T Q R N K K G N
UniRef90_G2YPJ3	E Y S T H Q L F T Q L T L L Q Q E L F Q K C H P V H F L N S R A G V M D K S T A
UniRef90_P34578	A F D S R V L A Q Q F T L I E K D A L N E I D W K D L I E M R W R D A A T D T R
UniRef90_B4LPU3	L I D S Q E L A H Q L F L F H Q L L R S T D S N E L L Y Q V I G R E S F P L S
UniRef90_UPI00026541CF	C S N A F E L A H Q L Y A I E Y A Y L S Q I R L E E F I E L I D T G V F K T C M
UniRef90_Q8VCC8	E I I D S Q L I A E Q L T Q M E A D L F R K V I P Q H C L G S I W S R R D K K H G
UniRef90_Q3TYC0	V S A K A D L I A G Q L T D H D W N L F N R I H Q V Q E H R D V T
UniRef90_UPI000350D5C1	C S D P L V L A Q Q L T H I E L E R V I N S I R P E D L M Q D N H R C R G D M T K
UniRef90_I3M250	H L E P I E L A E H L T F L E H K S F R R I S F T D Y Q S Y V I H G C L E N
UniRef90_B7P988	E Y S T H Q L F T Q L T L L Q Q E L F Q K C H P V H F L N S R A G V M D T S G
UniRef90_M2RHP2	H L E A R E L A D H L T Y I E H K V M R R I T F L D F K Q Y A E Q G N L D K
UniRef90_UPI0002C67C8F	A Y D S D L L A Q Q F T I V E K D A L D E I D W K E L I E L R W K Q S S R T E E
UniRef90_G3JRC7	E Y S T H Q L F S Q Q L T L M Q Q E L F Q K C H P V H F L N S R A G V M D K S V A
UniRef90_Q874N2	A F D S D I L A Q Q F T L I E K D A L N E I D W K E L I E M N W K D F L R H S D
UniRef90_Q19770	I L N P L E I A K Q L T L L E S A L Y L K V K P F E I I N Y K P D K Q G S T D A
UniRef90_C4XXR1	Q A S P S D I S T S L S H I D Y R V L S R I S I T E L K Q Y V K D G H H L R S
UniRef90_N1PM64	D F N G L E I A K Q L T L I E S Q I F C A I Q P E E L L N G N F T A E K A H L K
UniRef90_G3AHE8	A Y E S E V I A E Q L T I I E K D A L D E V D W K D L V S L N W Q Q S A P Y V R
UniRef90_UPI0002C445EA	D F N G L E I A K Q L T L I E S Q I F C A I Q P E E L L N Q N Y T K R A H L K M
UniRef90_UPI0003341612	E Y S T Q Q L F T Q L T L M Q Q E L F Q K C H P V H F L N S R A G V T D K S T A
UniRef90_UPI000273D858	C S D P Y T L A E Q L T H V E L E R L R R I I G P E E F V Q T F A S K N A R S D K
UniRef90_W4K8N1	H L E P M E L A E H L T Y L E Y R S F C K I L F Q D Y H S F V T H G C T V D
UniRef90_I1BJ06	Q I D C D E L A R Q L T V W A S N L Y R S I V P E E F L R H Y Q H K H G C T C A
UniRef90_F0ZPA6	H Y R S E V I T Q Q F C L I E R D M L Q T V S W E E L V E L R W R K N E K Q S D
UniRef90_U616L1	F F P P E A I A R E L T I M E F E L I T A L N V S D I T S K N W N
UniRef90_A0A044TEW0	Q L S P E E V A I Q L T L D D F S V F R S I E S A E F V D K V F G L T S S T Q D
UniRef90_UPI0002B42366	C P N P T T L A Q Q M T L I E L E R L S M I G P D E I V Y A I D D D A K K R R
UniRef90_K5WBZ9	E C S A Q Q L C W Q L T L L Q Q E V F N K C H P V H F L N S C N L F L S K C Q
UniRef90_A5DL36	R V D P S L L A E N L C L Y E S R L F S K V I A P R E F L E W I N T R L G D P V A
UniRef90_UPI00032888ED	N Y D S K T V A E H F T F I E S D M L K D I D W K E L I E L K W S Q E L T P V N
UniRef90_W5P986	A F P P E L V A E Q L T L L D M V E L F K K V P H H C W P Q R H Q K G K E H V
UniRef90_F6QP8	D F H S H E I A E Q L T L L D A E L F K N V E L Y E C L G S I W G Q R H Q K G S
UniRef90_W6MNJ8	T F P P R L L A E Q L T L L D A E L F K N V E L Y E C L G S I W G Q R H Q K G S
UniRef90_C5DUM5	C Y D S K I L L A Q H F T Q I E K D A L Q E I D W S E L V E M K W N Q E V K P N
UniRef90_V9DEV0	Q I N A L E L A K Q L T L I E S Q L F L A V E P F E V D G N Y M K K H Y L G M
UniRef90_K7F7L9	A C D S Q I L A Q M T L V E K S A L C E V E W S D L V E M R W D S K N S N G N
UniRef90_UPI0003293200	E Y S V Q E L C C Q L T L L Q Q E M F C K C H P V H F L N S C N L F L P N C Q
UniRef90_UPI00026516DA	A F P P E L V A E Q L S L M D A E L F K K V V P H H C L G S I W H Q K G K E H V
UniRef90_UPI0003EA9821	E I T S Q E L A E Q M T I L D S V L F K Q I E I P E V L M W A K E Q S E E L
UniRef90_G8ZSG4	D L N P L E I A K Q L T L L I E S Q L F M K I E P T E L L D F K L G K K L Q L G L
UniRef90_UPI0003C11973	E Y H T H H I S Q Q L T L L Q Q E F Q K C H P V H F L N S R A L G V N D Y K Q

		250	260	270	280
UniRef90_B4N598	T R N L	E S Y V Q W F N R L S Y I T A S E	I V K Y P K K K Q R V R I I E Y W E		
UniRef90_L8H6C9	C P N V R Q L V D F F N M V A G Y V A T T	V M E R S M K P R V K M L E K W V D			
UniRef90_UPI000317828	C A N L K K F E E V I N Q E T F W V A S E	L R E T N Q L K R M K I I K H F I K			
UniRef90_G1N8A6	T P C I M K T S Q H F N D M S N L V A S Q	M N Y A D V V S S R A N S I E K W V A			
UniRef90_U6NV18	T G S I A F Y I E W F N R L S S F A A T E	V L R Q L K K K H R V E V I E Y F I D			
UniRef90_L8HHG9	L I T D F A K A S N K I S S W V A T E	V T A P D E K S R V A T I E A F I K			
UniRef90_UPI0003462A8	S P N L T Q F T E H F N N M S Y W V R S I	M L Q E K A Q D R E R L L L K F I K			
UniRef90_L7JN11	A R G V E V V I A R F N I M V K W C V S E	V L T Q D L E E R A R C L I K F I H			
UniRef90_UPI0003EC2B3D	D P N L E A D V K W F N R L S S L V A T E	V C M L S K K R R A Q L I E F F I H			
UniRef90_W4VY64	A P H I L L M T K R F N E V S Q L V V S E I	I R R S N M S A R V A A I E K W A A			
UniRef90_V5ESI7	S G P V A R S I S H F N Y I S N N W V C S M I	L A Q G K T K H R A R M L E K F F N			
UniRef90_UPI0003375A8	I P Y L L Q L R N A D D V S T W V A A E I	V T S H T S K L Q V N L L S K F I L L			
UniRef90_V8NT36	T A N L E E L L Q R C S E V Q H W V A T E	V L L C E S L G K R A H L L K K F I K			
UniRef90_H3CC15	P L N L E L V L Q R C S E V Q H W V A T E	I L Q C Q S L P K R V Q L L R K F I I			
UniRef90_H2SL85	T S N L E A Y I N W F N R L S Y L V A T E	C L P V K K K H R A R M I E F F I D			
UniRef90_I1GDM4	I P G L T A V K L F S R N L S K V V T E	T L L V D D E I E R Q S L I I S Y F I K			
UniRef90_A0A024GSH6	T P F Y D R L R K L H N H I T T W I V S H	I L T Y E D V D Q Q R A Q L L A Y Y I K			
UniRef90_UPI000383A80F	C P S V R A T V T Q F N K V A G A V V S S	V L L G A T S P P Q R A R L L E K W I R			
UniRef90_F9FJC2	A H G V E V V I A R F N I M V K W A I S E I	I V L T Q G L E E R V R C I T K Y I H			
UniRef90_M7SVT7	A H G V E V V I A R F N V M V K W V V S E I	V L T Q E A E E R A R C V I K F L H			
UniRef90_UPI0003F15AF		T I T V M V L S R P G P A Q R A Q V L I D K F I H			
UniRef90_G7XPS6	S W V I D L V V G R F N L M V R W V L S E I	V L T Q D D H E R A R T I A K F I H			
UniRef90_UPI0003C2AB1E	A P A L E R A V A L C N S V S Q W V Q V M V L S R P T A P Q R A R V L A Q F I R				
UniRef90_L8GNM1	A P N I S S L T Q R F N Q V S F W V A T E	V V T A P T P K Q R V D I L K K F I K			
UniRef90_I1FN70	C P R L T L F F T M H F N V N V S Q W T S R L L E K D L E W K K R E K L M S				
UniRef90_M5BM91	L L N I P R F F K N S Y R V E D W C L S L I	D A N E I E K R A Q A I T F L K R			
UniRef90_H2Z6D0	T S N L N V M A R R F N Q L A Y W P P T E I	C L C A N I N K R V Q L L R K F I K			
UniRef90_H3FA12	A P V L E R S I T V F N N L S N W V Q C M V L S K A T P A R A E I V T K F V K				
UniRef90_U6IDB1	A P N V T A I K I F S N Q F R N W L V H S I V S Q R N F D D R V V A V Q R V F D				
UniRef90_UPI000333C2FF	A P N V V A F T R R F N Q Q N A L G D G L P S C R H V G N S R E Q L L E A G Q R				
UniRef90_H3F985	S P N L A K F T E H F N K I S Y W V R T L I	I T R K D Q K E R E R M A N K L I K			
UniRef90_G8EB16	A Q G I D V V I A R F N I M V K W A I S E I	V L T Q Q V E E R A R C I I K F I H			
UniRef90_A8NFV6	T P F L E R S I S I F S N S L S N W I Q C M V L N K G T P V I E R A E M I T K F T H				
UniRef90_A5DEC2	A P N V R K S V L F T N S L S S Y V L E S I Q P K I N I K M R V N M V K T W L K				
UniRef90_M3HL86	A P N V R Q S L L F T N C L S G Y V L E S I L Q P N T H K L R M N T I K T W L K				
UniRef90_K1WP03	S W V V E V V I A R F N I M V K W A V S E I	V L T Q D L V E R V R C I I K F I H			
UniRef90_K2GFL4	C K T L L K C I K I F N A I Q N F F A I Q I	I L N K K N I F K R C K I L Q H I I D			
UniRef90_UPI000440E762	A P T V R A T I A Q F N A V T N W V I T S L L C P N S P A Q R A R I I E K W I S				
UniRef90_UPI0002C3CEB0	C K G V S A S V N F F N R L Q N F L I F E I I L D Q K N I E E R V K V V T H I I L				
UniRef90_K2RGT6	D W V V D V V I A R F N I M V K W A V S E I C V L T E D L G E R V R C I V K Y I H				
UniRef90_W2RQZ5	I T G V D L V I T R F N L V S V R W V R S E I V L T Q D L E E R A Q V I T K Y I H				
UniRef90_M2TKA5	C K N L E R M T E H F N Y I A L L V T N Y I	N K S T E R V A M V S R A L E			
UniRef90_T1H058	S P N N X X X X X X X X X X X X X X X X T				
UniRef90_B6HCF6	N W V I D L V V G R F N L M V K W I L S E I	I V L T R D I N E R A R T I I K Y I H			
UniRef90_UPI0003ACCAB5	A P T V R D S V M H D N T V A N C I L V T C D P S M T A Q D R A R V V E L W I R				
UniRef90_W4YW56	N L K L E R S I G L F N G L S L W I E C M V L S R H T P K Q R A E V I T K F V H				
UniRef90_W2T5N0	G G S I V S F Y V E W F N R L S S F A A T E V L R Q L K K K H R V E V I E Y L I D				
UniRef90_F6QNY0	A P T V C A T I T H F N R L T N C V T T S C L G D H S L Q D R A R V V E H W I K				
UniRef90_A2EWA8	A P N I M K M T E H F N T I T S Y V I V T C L S K E S P Q E R G E L I S R W I E				
UniRef90_C4YMA9	A P N V R L S L L F T N C L S G Y V I E S I Q P N T K L R I S M V K I W L K K				
UniRef90_H0VRJ8	A P T F W A T I S Q F N N V A H C V I S T C L A E P S M Q D R A K T V E H W I K				
UniRef90_UPI0003502C0E	I P Y L L Q L L R N A D D V S T W V A A E I V T S H T S K L Q V N L L S K F I L				
UniRef90_G2YPJ3	S W V V E V V I A R F N I M V K W A I S E I V T S H T S K L Q V N L L S K F I L				
UniRef90_P34578	M P F L D L L V R R F N E V Q H W S T T E I L L A T E E N R M E I L K K F I H				
UniRef90_B4LPU3	S Q T I I A A Y V Q W F N Q L C N L T A T E I L K A G K K S Q R V Q M V E F W I E				
UniRef90_UPI00026541CF	V M T V A A T V N Q F N D I T M K V M S T I L E E K S L R T R G L I I T K W I D				
UniRef90_Q8VCC8	T A N L E R F M R R F N D I L Q Y W V A T E I C L C P V P G S R A Q L L R K F I K				
UniRef90_Q3TYC0	N P T L E R S I A L F N G I S K W V Q L M V L S K P T P Q Q R A E V I T K F I N				
UniRef90_UPI000350D5C1	N P T L E R S I A L F N G I S K W V Q L M V L S K P T P Q Q R A E V I T K F I N				
UniRef90_I3M250	T K Y I L L Q L L R N A D D V S T W V A A E I M T S H T S K L Q V N V L L S K F I L				
UniRef90_B7P988	N P R L E R S I S Q F N G L S Q W T Q C M V L S R S L P Q Q R A E I V T K F V D				
UniRef90_M2RHP2	A R G V D V V I A R F N I M V K W V V S E I C L L T E N I Y E R A Q C I T K F I H				
UniRef90_UPI0002C67C8F	I P Y L L Q L L R S A D D V S T W V A A E I V T S H T S K L Q V N L L S K F I L				
UniRef90_G3JRC7	A H G V E V V I A R F N I M V K W A I S E I V T S H T S K L Q V N L L S K F I L				
UniRef90_Q874N2	T T N V K N I T N F T N Q L S Q Y V M N G I S M H I N D I T R T T I L K A W L R				
UniRef90_Q19770	C P M L E R S I S V F N N L S N W V Q C M V L N K T T P K E R A E I I L V I K F V H				
UniRef90_C4XXR1	A S N V R L S L L F T N C L S D Y V L E S I Q P Q I N H K I R V N I V K T W L K				
UniRef90_N1PM64	N W V I D I V I A R F N I M V K W C I S E I V L T D V P S E R A R T I T K Y I H				
UniRef90_G3AHE8	N W V I D I V I A R F N I M V K W C I S E I V L T D V P S E R A R T I T K Y I H				
UniRef90_UPI0002C445EA	A P N V R T S S L L F T N C L S S Y V E S T L Q P R I S D K L R V N I V K T W L K				
UniRef90_UPI000341612	I P Y L L Q L L R N A D D V S T W V A A E I V T S H T S K L Q V N L L S T F L L				
UniRef90_UPI000273D858	N P V L E R F I S L F N S V S Q W V Q L M V L S K P T A P Q R A L V I T H F V H				
UniRef90_W4K8N1	A Q S V Q A I T V Y H D A L T C W V L V I S E I C L C Q K D R V V R T K V R R T W I K				
UniRef90_I1BJ06	L K G V E L L I D F F N T C W V L V I S E I C V V R S R L L E T R V R V V E K F I R				
UniRef90_F0ZPA6	S V N I Q N L T T W F N R I S S W V S T K I I S K E T P E E R R A I I I E A F I I N				
UniRef90_U616L1	N P N L D A F A D L V N K E A Y W V P S E I C A E T N L Q K R V D M L K R F I K				
UniRef90_A0A044TEW0	M N N I R N Y I D W D S N R L T Y L T A T E I L R C S K R G Y R I H T I E Y F I D				
UniRef90_UPI0002B42366	D Q Y L L Q L L K N A D S I S T W V A A E I V T C H T T K W Q V S L L S K F I L				
UniRef90_K5WBZ9	N L L T F C N M H D K L G A W V K H S I L L T N N L A H R A D V V D L W V K				
UniRef90_A5DL36	S W G V N L V I S R F N L M V N W V I S E I C L C Q K D R V V R T K V R R T W I K				
UniRef90_UPI00032888ED	A P T V R A I I R Q V N L V A G C V I A T C D H S M K A R D R A R V V E H W I E				
UniRef90_W5P986	S P N L T Q F T E H F N N M S Y W V R S I C P P S V Q S S E V T A L P G V S R A				
UniRef90_F6QPP8	A P T V C A T I A H F N R L T N C V T T S C D H S M R A D R A R V V E H W I K				
UniRef90_W6MNJ8	S P G V N L V I S R F N L M S N W V I S E I C L L Q E P K A Q D R E K L L I K F I K				
UniRef90_C5DUM5	A P N V K A I I N F T N Q L S N Y V I E C L Y P N L P R E R T S R L R A W L K				
UniRef90_V9DEV0	I R G I D L V S T R F N L V V K W A L S E I V L T H D I H E R A R V V I T K Y I H				
UniRef90_K7F7L9	D K Y L L Q L L R N A D N I S T W V A A E I V T S H T S K L Q A N L L S K F I L				
UniRef90_UPI0003293200	A P T V R A V I S Q V N R V A N C V M A T C L G D P S M E D K A R V V E H W I E				
UniRef90_UPI00026516DA	S P N L T I F T E H F N K M S Y W V R S I C L Q E P K A Q D R E K L L I K F I K				
UniRef90_UPI0003EA9821	D P Y I L Q L L K Y A D H V S N W V S A E T V I C D T V K T Q T G L L S K F I L				
UniRef90_G8ZSG4	S P N V A A I I N F T N E L S N Y V M E S I L Y P S S Q K T R T A R V K A W L K				
UniRef90_UPI0003C11973	D Q Y L L Q L L R Y A D N V S N W I S A E I V T C G T S K F Q V N L L S K F I L				

	290	300	310	320
UniRef90_B4N598	T A R E C F N I G N F N S L M A	I A G L N L A P I G R L K K T W S K H Q M D P		
UniRef90_L8H6C9	I A N H S F K L Q D L T S T L A	V S G L G C A A V H R L K K T R Q N M S K S A		
UniRef90_UPI000317828	I A L H C R E C K N F N S M F A	I S G L N L A P V A R L R T T W E K L P N K Y		
UniRef90_G1N8A6	V A D I C R O C M H N Y N G V L E	T S A L N R S A I Y R L K K T W A K V S K Q A		
UniRef90_U6NV18	V A K E C C E C G N F N S L M A	V A G L S L P A V T R L K R T W S R V E K S K		
UniRef90_L8HHG9	V A Q C C C W E L N S F N T A M D	I S G L N S F S I S R L K Q W D S V S A R G		
UniRef90_UPI00033462A8	I M K H L R K L N N F N S Y L A	L S A L D S A P I R R R L E W		
UniRef90_L7JN1	I A A H C R R Y R N F A T M S Q	A I A L T S P E V S K L Q R T W A M V P A S D		
UniRef90_UPI0003EC2B3D	V A R E C F N I G N F N S L V A	V S G M N M S P G S R L K K T W A E V R T A		
UniRef90_W4VY64	V A D I N R V L H N Y N G V L Q	C A A F T N S S V Y R L K K T W D K V S K Q T		
UniRef90_V5ESI7	I A S I L H N N Y N G S L N S V	L S K T S V H R Q T R E L L K G K S		
UniRef90_UPI00033375A8	I A K K S C Y E Q R N F A T A M Q	E H P A V R Q S P A W R I L P A K I		
UniRef90_V8NT36	I A A V C K Q H Q D M L T F Y A	V S R L R L T W E D P C R N H		
UniRef90_H3CC15	I A A L C K Q Q Q D L L S F L A	V N Q L R L T W E G L P G K F		
UniRef90_H2SL85	V A Q E C F N I G N F N S L M A	D N P A V V N Q L R L T W E G L P G K F		
UniRef90_I1GDM4	S A E S C L Q L Q N N F E A V A A	I A G L T S E S A R T G T R G A W D F E I S T		
UniRef90_A0A024GSH6	V A A I C L S I Q N F D G F M A	M N A T N D T S I F R L Q K T W G R L L P Q S		
UniRef90_UPI000383A80F	V A E E C R L L R N F S S V Y A V V S A L	Q S S P I H R L R A A W G E A T R D S		
UniRef90_F9FCJ2	I A T H C R R Y R N F A T L A Q L	T I A L S S S N E V A R L L T K T W Q H V A P Q D		
UniRef90_M7SVT7	I A A H C R R Y R N F A T L A Q L	T S T E V A R L L S K T W A M I P P G D		
UniRef90_UPI0003F153AF	V A Q R L H Q L Q N F N T L M A	V T G G L C H S A I S R L Q A T W D L V P V S D S		
UniRef90_G7XPS6	T A A H A R R M C N Y A T M L Q	A I A L S S T D C S R L Q A T W D L V P V S D S		
UniRef90_UPI0003C2AB1E	V A Q S L R Q L Q S F N T L M A V V G G L	C H S A I A R L L K D T H A L L P P D G		
UniRef90_L8GNM1	S A Q K L R A L N N F N S V M E V V A G L	N N S S S V Q R L K D T H A L L P P D G		
UniRef90_I1FN70	L R E F G N F N A Y L A I L S A I	E S A P I V S R L D W S E K I L K T		
UniRef90_M5BM91	V A E E S L K I R S F S S A H I M S A L	T H A H I S G L E Y T W R L V D R R T		
UniRef90_H2Z6D0	W D T Y L K M Y H D M F G F M A V M I G I V	G N Q A V V S R L H D T W D K L P S K Y		
UniRef90_H3FA12	V G K C L K K Q H N Y N T L M A V I G G V T H S N I A R L G K T H A M L A S E I			
UniRef90_U6IDB1	L M Y I F D H F S N E Q G R L E S R G A L I S S S S V F R L L N K A L E A V S R A Y			
UniRef90_UPI000333C2FF	L G L K L L E L N N L H S L M S V V S A L Q S A P I V F R L T K T W A L L N R K D			
UniRef90_H3F985	I M K Q L R R L G N L H S Y L A I L S A L E S S G P I V R R L D S K T W E L V P E R D			
UniRef90_G8EB16	I A A H C R R Y R N F A T L A Q L T I A L S S N E V S R L S K T W E L V P E R D			
UniRef90_A8NFV6	V A K C L R R M M N F N T L M A V I G G V T H S N I A R L G K T H A M L A S E I			
UniRef90_A5DEC2	V A I S C L Y L R N F N S L A A I I T A L Q S H L V T R L D R I W V E L S D K Y			
UniRef90_M3HL86	V A I S C L Y L R N F N S L A A I I T A L E S H L I T R L S S I W F D L E S K Y			
UniRef90_K1WP03	I A A H C R S Y R N F A T M A Q L T V A L S T K E I S R L V K T W A H V P A A D			
UniRef90_K2GFL4	I A A Y C Y T L Q N Y N I V V C I V S L F S T S A I H R L K T F N N I V S S L H			
UniRef90_UPI000440E762	V A Q E C H Q L R N F S S L R A I L S A L Q S N S V Y R L K K T W A A V S R E S T			
UniRef90_UPI0002C3CEB0	I L E K C Y S L L F N F D A V V C I V T L F N S A A I H R L K N T F S H L T D K T			
UniRef90_K2RGT6	I A D H A R R L R R N Y A T M Y Q I T V G L L S A D C A R L T K T W E L V P A A D			
UniRef90_W2RQZ5	V A A H A R R L L H N Y A T M V Q I T I G L T S T D T T R L V Q T W E R V P A P D			
UniRef90_M2TKA5	I A R Q L R L K L L N N Y N M L G A V M A G I I K G T A V I R L H A T K D L V P Q A T			
UniRef90_T1H058	V F M V M I E L L N N F N G G L A I A A A I Q C T A V V H R L K H T L S G I S A R H			
UniRef90_B6HCF6	T A A H A R R I C N Y A T M Q I A I A L S S S D C S R L H R T W Q L I S L E D H			
UniRef90_UPI0003ACCAB5	V A E E C R G L G N F C S L H T I L S A L Q S P A I V A R L Q D T W G Q V S R E S T			
UniRef90_W4YW56	V A K R L R Q L Q N F N T L M A V V G G L S H S S L A R L R Q T T A H V V S S E T			
UniRef90_W2T5N0	V A K E C C E I G N F N S L M A V A G L S L P A V V S R M K R T P I K F Q D N L			
UniRef90_F6QNY0	V A R E C L R L N N F S S V H A I V S A L R S N P I H R L H K T W A A V V S S K N			
UniRef90_A2EWA8	I M V A N A L D I I S S F Q L V F E I F G A L C N P A I T R L S K S W D F V S Q E N Y			
UniRef90_C4YMA9	I A I S C L Y L R N F N S L A A I I T A L E S H L I T R L S I S W I K L E D K Y			
UniRef90_H0VRJ8	V A R E C L K L Q N F S S L H A I M Y A L Q T A S H R L I N K T W G E V P R K K			
UniRef90_UPI0003502C0E	I A K S C Y E Q R N F A T A M Q I L G G L E H L A V R Q S P A W R I L P A K I			
UniRef90_G2YPJ3	I A V N C R K Y R N F A T M Q I T V A L T S K D S R L T S T W A H V P A S D			
UniRef90_P34578	I A T I A R E Y R D L L T V F V A I T L G L S H T S I S R L T L T W S K L V P P A S T			
UniRef90_B4LPU3	T A L E C F N T G N F N S L M A I L T A L N M T A S R L K T W S K V Q T T K			
UniRef90_UPI00026541CF	V A Q S C R E L K N F S A L K A I I S A L Q S H P I H R L R R A W S S V V P K A S			
UniRef90_Q8VCC8	L A A H L K E Q K N L N S F F Q L V M F G L S N S A I S R L A H T W E R L P H K V			
UniRef90_Q3TYC0	V A R E C F N I G N F N S M M A I I S G M N L S P V I S R L K T W S K H H M D P			
UniRef90_UPI000350D5C1	V A Q K L L H L Q N F N T L M A V V G G L S H S S I S R L K E T H S H L S S E V			
UniRef90_I3M250	V A K S C Y E Q R N F A T A M Q I L G G L E N L A V R Q S P A W R M L P A K I			
UniRef90_B7P988	V A K N L L E L Q N F S S L M A V V G G L N H S A L A R L S Q T T G C I T G E T			
UniRef90_M2RHP2	I A N H A R R Y R N Y A T M Y Q I A I A L S N D I V R Q S P A W R I L P A K V			
UniRef90_UPI0002C67C8F	I A K S C Y E Q R N F A T A M Q I L G G L E H L A V R Q S P A W R I L P A K V			
UniRef90_G3JRC7	V A A H C R R Y R N F A T L A Q L T I A L S S N S N D V T R L T R T W A L V P A H D			
UniRef90_Q874N2	I A L S A L Y L R N F N S V A S I M T A L Q N H S I S R L T N V W H T L P K K D			
UniRef90_Q19770	V A K H L R K I L N N F N T L M S V V G G L T H S S I S R L K T W S K V Q T T K			
UniRef90_C4XXR1	V A I S C L Y L R N F N S L A A I I T S M Q S H L I T R L S K V W S D L S E K Y			
UniRef90_N1PM64	I A S H C H R L L H N F A S L Y Q I T L A L L S P E I T R L S R T W S L V A L R E			
UniRef90_G3AHE8	I A S I S C L Y L R N F N S L A A I I T A L Q S H L I T R L D G L W Q D L S E K Y			
UniRef90_UP10002C445EA	V A R E C F N I S N F N S L M A T V T S G M N M S P I V S R L K T W T V P A A E			
UniRef90_UP10003341612	V A R E C F N I G N F N S L M A I L G G L E H L V V R Q S P A W R I L P A K V			
UniRef90_UP1000273D858	V A E K L L Q L Q N F N T L M A V V G G L S H S S I V S R L K T W A E V S R D S			
UniRef90_W4K8N1	V A R R C Q K M R N F D S F Y A I G N A L S N S K A V A T L W K T Y D N L E Y H S			
UniRef90_I1JB06	I A F K C Y Q H R N Y S T L M Q I L L G L Q P A V T R L E K T W E R V D H H Q			
UniRef90_F0ZPA6	I A S F A K D I K N Y N C V M E I L G S L H S S S I S R L K T W S L V I P Q K A			
UniRef90_U616L1	I A K L C K D L R N F N T M F C I L V V G L H M S P V E R L R Q T W E R L P N K Y			
UniRef90_A0A044TEW0	I A K C E C I N G N F N S F M A V A A L S P L I A R L K K T W N R H Q F D P			
UniRef90_UP10002B42366	I A K C C Y E Q R N F A T A M Q I L G G L E H L V V R Q L P A W K I L P A K V			
UniRef90_K5WBZ9	V A E R C R E M H N F S S M S A I V			
UniRef90_A5DL36	I A Q H C Y A M Q N Y A S M M Q I L L A L T S E K I G H L K E T W K N L S P G D			
UniRef90_UP100032888ED	V A R E C R T L H N F S S A R A I L S A L E S H V I G R Q K K T W A E V S R D S			
UniRef90_W5P986	G L A C L R G G P G S G S A L G V A M L M D G A F S R Q G L A E Y C T L I D S			
UniRef90_F6QPP8	V A R E C L R L G N F N S V H A I L S A L R S N P I H R L H K T W G V S R C			
UniRef90_W6MNJ8	I G H H C K E L L Q N Y S T M Q I T L A L S S S K I S N L K E T W K D V Q L L L			
UniRef90_C5DUM5	I A L A T S Y F R N F N S L A A I M T A L Q N H S I T R L Q D V W D E L S D K E			
UniRef90_V9DEV0	V A A H R R L H N Y A T M L Q I T L S L T S T D C T L R S K T W A L V S S P D			
UniRef90_K7F7L9	V A K S C Y E Q R N F A T A M H I F R G L E N L L V R Q L P A W K I L P S K V			
UniRef90_UP10003293200	V A R E C R T L R N I S S A R A I L S A L E R H M I G H Q R K T W G E V S R A S			
UniRef90_UP100026516DA	V M K H L R K L N N F N S Y L A V L S A L D S D P V R S L E W			
UniRef90_UP10003349821	I A K L C Y E S R N F A T A M Q I L G G L E H L V V R Q L P A W K N L S A K V			
UniRef90_G8ZSG4	I A L S S S Y F R N F N S V A S I M T A L Q N H A I S R L G T V W D G L R K K D			
UniRef90_UP10003C11973	I S K S C Y E M R N F A T A M Q I L G G L E H L V V R Q L P A W K N L P S K V			

330 340 350 360

UniRef90_B4N598	T S N F N S Y R S T L K A A M W R S E G A T E E R E R I I I P F F S L F V K D L
UniRef90_L8H6C9	V K T L E A L T Q M S T R R R L R A L A E T M T P P G V P Y L G M H L V D L
UniRef90_UPI000317828	E K L F Q D L Q D L F D P S R N M A K Y R Q N L Q P P I I P L F P V I K K D L
UniRef90_G1N8A6	K V L M D K L Q K T V S S E G R F N L R E T L K K V C L P T Q H N Y V M L R
UniRef90_U6NV18	L E I L Q H Q L D P T G N F L S Y R A T M K A A Q W R I V I P F F V L L L K D L
UniRef90_L8HHG9	H E V L D G L V S G M D P N F R N Y R N H A E T L A P P M T P Y I A L V L R D L
UniRef90_UPI00033462A8	
UniRef90_L7JN1	L T T L Q Q L E A L V S P T R N F Y N L R S E M E N S G C I P F V G I Y T H D L
UniRef90_UPI0003EC2B3D	K R F I L E H Q M D P T G N F C N Y R P A H S S Q E K I V V P F L S L I K D I
UniRef90_W4VY64	K Q T I E R L Q H I V D G R F R N L R D A H R C D P P C I P Y L G L Y L T D L
UniRef90_V5ESI7	V N K A Y A S L V R L M S N E R S S A A Y R E N S D G P T I P Y V G V H L Q D I
UniRef90_UPI00033375A8	A E V M E E L K A V E V F L K S D S C L M E G R R F R A Q P T L P S A R M H I
UniRef90_V8NT36	K S Y R E V L S R M K P P I I P F V P L I L K D L
UniRef90_H3CC15	K K Q F Q Q F E S I P S R N H K S Y R E L I S S L R P P L I P F T P L L L K D L
UniRef90_H2SL85	F E I I L E H Q M D P S S N F T Q R S E T A H S S Q E K I V I P F F S L L I K D I
UniRef90_I1GDM4	L K S L Q Q E S V S K E G N Y Q R F H A K F K T L H L V P N I P L I D A I L S E V
UniRef90_A0A024GSH6	R E L L W H E L K K H T E N A A R T L N K A L R E A S P P T V P Y I G V V I Q N I
UniRef90_UPI000383A80F	L R V F S S L C Q I F S E E D N Y S Q P R S A S R G G G V V P Y L G T F L K D L
UniRef90_F9FJC2	L K T L Q D L E K L V T P M R N F Y N E M E V G S D Q G C I P F V G I Y T H D L
UniRef90_M7SVT7	A R T M S E E L S E F Y N L R A E M E S G G N S P D I G C I P F V G I Y T H D L
UniRef90_UPI0003F153AF	T K L E L T E L L A A H H N Y A C Y R R T W A G C T G F R L P V L G V H L K D L
UniRef90_G7XPS6	K R L L K D M E S L R N F H E L R L E M E M A N A Q D G C I P F V G L Y V H D L
UniRef90_UPI0003C2AB1E	A K A L A E L T E L V S C N F G P Y R R A Y G A C H G F R L P I V G I L L K D L
UniRef90_L8GNM1	
UniRef90_I1FN70	L E E P R A L I D S R G S F K N Y R Q A F S Q T K P P C I P Y I G L Y L Q D L
UniRef90_M5BM91	K E G L K H M S Q L L S N V E K Y K D K L D S D L Q S P S V P I L S I H L R D L
UniRef90_H2Z6D0	R K M V Q G F E G I P S R N H R N Y R L F V A S T E S T R I P Y F P L I M K D L
UniRef90_H3FA12	K K D L A S L S T L S M Q S N Y G Q Y R D C K K K L H I P C M G V H L K D L
UniRef90_U6IDB1	R K W V Q K L Q R E C R N S D R R S K K P A P Q R D T P S L P F F P I D V S R L
UniRef90_UPI000333C2FF	K T T F E K L D Y L M D N Y K R T R E Y I R S L K M V P S I P Y L G I Y L L D L
UniRef90_H3F985	
UniRef90_G8EB16	L Q T L H D L E I L V T P S R N F H N I R E E M T D R G C I P F V G I Y T H D L
UniRef90_A8NFV6	R K E L N H F T Q L L S S T S N F A S Y R Q E S S G S F C I P I M G V H L K D L
UniRef90_A5DEC2	T E L Y E Y L S G I V H P N K N Y N V Y R T N D Y N I P I V P Y F Q L F L Q D L
UniRef90_M3HL86	T E L Y D Y L S S I I H P N K L K N F L N L D N H S V P I V P Y F S L F L Q D L
UniRef90_K1WP03	K E T L R H E L L V T P T Q N F H S L R A E M E G Q G C I P V C I Y T H D L
UniRef90_K2GFL4	K N K F N E L I L G F A S P N K N W L I Y R K K V K H T A C V P Y I G L F L S D M
UniRef90_UPI000440E762	V A V F E Q L C E N F P D E N C R L S P R H T S C S T G E V P Y L G T Y L T A L
UniRef90_UPI0002C3CEBO	K S I L E M V S M V V S P Q S N W A Q Y R Q I S E Q K S V V P Y L G L F L S D V
UniRef90_K2RGT6	R R T L R E L E N L K N F H N L R L E M E T V N L D D G C I P F I G I Y T R D L
UniRef90_W2RQZ5	K S L L K N M E R L R N F H E L R L E I E Q A D F S D G C I P F I G L Y V H D L
UniRef90_M2TKA5	T Q D F W K L D I L L M S H S H A A Y R L A W D N S S G E R I P Y I P L L R R D L
UniRef90_T1H058	S K F L D E L N M L F D S H L K Y Q Q M L K L I N P P C V P F F G K Y L T N I
UniRef90_B6HCF6	K R L F K D M E C L I Q F N D L R V E M E T A N L Q E G C I P F I G L Y V H D L
UniRef90_UPI0003ACCAB5	S R T W K K W S V L K T A E R A R Q G A Q E R Q R Q Q G V V P S L V T F F H S L
UniRef90_W4YW56	Q K I S T E L S E M S A S N F S N Y R K A L A E A R G F K I P I N G V H L K D L
UniRef90_W2T5N0	N E F Q W K L E I L Q H Q L D P S G N F L S Y R N Q R I V I P F F V L L L K D L
UniRef90_F6QNY0	T K Y L K E L C K T Q E R N P Q R A Q M R L R R Q K K G V V P F L G D F L T E L
UniRef90_A2EWA8	K D N F Q E F T S P S R Q F A I Y M E R L K S T P V T C A I P Y I G P M L T N L
UniRef90_C4YMA9	T E L Y D Y L S S I I H P N F L N S P M G L E T P P I P V P Y F S L F L Q D L
UniRef90_H0VRJ8	F K L F T E L L C T K D T I N P Q R A Q M R Q W Q K K K G M V P F L G T F L T V L
UniRef90_UPI0003502C0E	A E V M E E L K A V E V F L K S D S C L M E G R R F R A Q P T L P S A R M H I
UniRef90_G2YPJ3	I Q T L N E L E E L V N F H N L R A E M E G S G A D Q G C I P F V G I Y T H D L
UniRef90_P34578	L K T F S E L E N L P T R N H R M Y R L L V I S K M S S P Y I P F V P L I L K D L
UniRef90_B4LPU3	F E G L E H Q M D P S S N F H N Y R S T M K A A I W R S I I P F F S L F L K D F
UniRef90_UPI00026541CF	M V L F E D L A N I F L D D N N F E T W R W H S K V I N G T V P Y L G T F L S D L
UniRef90_Q8VC88	R K L Y S A L E R L P S W N H R V Y R L A T K L S P P V I P F M P L L L K D V
UniRef90_Q3TYC0	S S N F C N Y R T A L Q G A T Q R S Q T A N S S R E K I V I P V F N L F V K D I
UniRef90_UPI0003505D5C1	T K L S L D L Y H
UniRef90_I3M250	A E V L E E L K A V E V F L K S D S C L M E G R R F R A Q P T L P S A R M H I
UniRef90_B7P988	R R T L A Q Y A T L S A G N F S N Y R K A L A D A R D F R I P I L G V H M K D L
UniRef90_M2RHP2	M L V M T E E A L V Q P M K N F H N M E T A S V E D G C I P F I G V Y T R D L
UniRef90_UPI0002C67C8F	A E V M E E L K A V E V F L K S D S C L M E G R R F R A Q P T L P S A R M H I
UniRef90_G3JRC7	L R T L A E L E A L V T P T R N F W Q E M E V G T D T G C I P F V G I Y T H D L
UniRef90_Q874N2	L L L F E Y L S R I I H P N N Y K V Y R Q I K S P V P V V P F F N L F L Q D I
UniRef90_Q19770	K K E L T Q L T N L L S A Q H N F C E Y R K A C N K K F R I P I L G V H L K D L
UniRef90_C4XXR1	T T L F E Y L S G V I H P D K N Y S V Y R S N E Y N I P V V P Y F S L F L Q D L
UniRef90_N1PM64	K Q M L E H L E Q L C N F Y T L R A E M E T A M P Q N G I I I P F I G L Y T H D L
UniRef90_G3AHE8	T E L Y E Y L S S I I H P D K N Y A V Y R S N D Y N I P I V P Y F S L F L Q D L
UniRef90_UPI0002C445EA	A E V M E E L E V F V L K S D S C L M E G R R F R A Q P T L P S A H L L A M H I
UniRef90_UPI0003341612	
UniRef90_UPI000273D858	
UniRef90_W4K8N1	I K
UniRef90_I1BJ06	R H D E K L L K A V T T W Q R F K V V R E A L K F D R A A V P P L A S Y Q R E I
UniRef90_F0ZPA6	R D L F D Q L K E L T K P F R N W K N V R E C M
UniRef90_U616L1	N E M F Q V L N N I L M N F R N Y R K Q L T T V A A S E P C I P Y L G L F L T D Y
UniRef90_A0A044TEW0	V K M S R D L A L V L D P S R N F A H Y R N G T H C L P L V P Y L P L V L K D L
UniRef90_UPI0002B42366	T A N F V S Y R S T L K A A I W R F N S A Q N E T D A I I I P F F G L L I K D L
UniRef90_K5WBZ9	A E I M E E L E V F V L K S D S C L M E G D R F K T L P T U P S A H V L A M H V
UniRef90_A5DL36	
UniRef90_UPI00032888ED	I L S L K N L E E L K N F L N I R L S I N Q I K P S K G C I P F V G L Y L S D L
UniRef90_W5P986	F C L F Q T L S E I F S T Q K R Q Q Q Q Q E R G A I Q G T V P W L G T F L T R F
UniRef90_F6QPP8	S S F R A Y R A A L S E V E P P C I P Y L G L I L Q D L
UniRef90_W6MNJ8	S H P A V E L C P P Q E R N P Q R A Q M R L R R Q K E G V V P F L G D F L T E L
UniRef90_C5DUM5	L D L Y K Y L A R V V H P N N F K V Y R K K L K K Y P V V P F F N L F L Q D L
UniRef90_V9DEV0	K S L L K H M E P L R N F H D L R T E M E S A D L N D G C I P F L G L Y I R D L
UniRef90_K7F7L9	S E I M E E L E V F V L K S D S C L M E G Q R F K T L P T U P S A H V L A M H V
UniRef90_UPI0003293200	Y R L F Q T L S G I V S T E I N S S Q R G E G G A I Q G T V P W L G T F L T R F
UniRef90_UPI00026516DA	C E I M E E L K A V Q V F L K S D N L C L M E G E Q F P T I P A A H I L T M H V
UniRef90_UPI0003EA9821	M E L L F E Y L S R I I H P N N N F K V Y Q Q G Q S P V P V V P F F N L F L Q D L
UniRef90_G8ZSG4	L H I L E E L K A V Q M F L K S D N L C L M E G D R F K R L P T I P C A H M H I
UniRef90_UPI0003C11973	

UniRef90_B4N598
 UniRef90_L8H6C9
 UniRef90_UPI000317828
 UniRef90_G1N8A6
 UniRef90_U6NV18
 UniRef90_L8HHG9
 UniRef90_UPI00033462A8
 UniRef90_L7JN1
 UniRef90_UPI0003EC2B3D
 UniRef90_W4VY64
 UniRef90_V5ESI7
 UniRef90_UPI0003375A8
 UniRef90_V8NT36
 UniRef90_H3CC15
 UniRef90_H2SL85
 UniRef90_I1GDM4
 UniRef90_A0A024GSH6
 UniRef90_UPI000383A80F
 UniRef90_F9FJC2
 UniRef90_M7SVT7
 UniRef90_UPI0003F153AF
 UniRef90_G7XPS6
 UniRef90_UPI0003C2AB1E
 UniRef90_L8GNM1
 UniRef90_I1FN70
 UniRef90_M5BM91
 UniRef90_H2Z6D0
 UniRef90_H3FA12
 UniRef90_U6IDB1
 UniRef90_UPI000333C2FF
 UniRef90_H3F985
 UniRef90_G8EB16
 UniRef90_A8NFV6
 UniRef90_A5DEC2
 UniRef90_M3HL86
 UniRef90_K1WP03
 UniRef90_K2GFL4
 UniRef90_UPI000440E762
 UniRef90_UPI0002C3CEB0
 UniRef90_K2RGT6
 UniRef90_W2RQZ5
 UniRef90_M2TKA5
 UniRef90_T1H058
 UniRef90_B6HCF6
 UniRef90_UPI0003ACCAB5
 UniRef90_W4YW56
 UniRef90_W2T5N0
 UniRef90_F6QNY0
 UniRef90_A2EWA8
 UniRef90_C4YMA9
 UniRef90_H0VRJ8
 UniRef90_UPI0003502C0E
 UniRef90_G2YPJ3
 UniRef90_P34578
 UniRef90_B4LPU3
 UniRef90_UPI00026541CF
 UniRef90_Q8VC8C
 UniRef90_Q3TYC0
 UniRef90_UPI000350D5C1
 UniRef90_I3M250
 UniRef90_B7P988
 UniRef90_M2RHP2
 UniRef90_UPI0002C67C8F
 UniRef90_G3JRC7
 UniRef90_Q874N2
 UniRef90_Q19770
 UniRef90_C4XXR1
 UniRef90_N1PM64
 UniRef90_G3AHE8
 UniRef90_UPI0002C445EA
 UniRef90_UPI0003341612
 UniRef90_UPI000273D858
 UniRef90_W4K8N1
 UniRef90_I1BJ06
 UniRef90_F0ZPA6
 UniRef90_U616L1
 UniRef90_A0A044TEW0
 UniRef90_UPI0002B42366
 UniRef90_K5WBZ9
 UniRef90_A5DL36
 UniRef90_UPI0003288ED
 UniRef90_W5P986
 UniRef90_F6QPP8
 UniRef90_W6MNJ8
 UniRef90_C5DUM5
 UniRef90_V9DEV0
 UniRef90_K7F7L9
 UniRef90_UPI0003293200
 UniRef90_UPI00026516DA
 UniRef90_UPI0003EA9821
 UniRef90_G8ZSG4
 UniRef90_UPI0003C11973

370 380 390 400

<img alt="Sequence alignment of UniRef90 proteins showing conservation across four positions (370, 380, 390, 400). The alignment is color-coded by residue type: A (green), C (blue), D (orange), E (red), F (yellow), G (light green), H (purple), I (light blue), K (dark blue), L (light orange), M (pink), N (light red), P (brown), Q (light purple), R (dark red), S (light pink), T (light blue-gray), V (light yellow), W (dark yellow), Y (dark red). The sequence starts with Y F | L | N | E | G | C | S | N | R | L | P | N | N | H | I | N | F | E | K | C | S | Q | L | A | K | Q | V | M | E | F | N | E | W | K | K | V | S | F | V | S | D | G | Y | T | P | F | L | D | W | G | D | K | T | C | V | H | W | Y | Y | H | C | M | N | A | L | V | I | K | E | G | F | I | K | T | T | F | L | H | E | G | N | D | S | K | V | E | G | L | V | N | F | E | K | L | R | M | I | A | K | E | I | R | H | V | G | R | M | A | S | V | T | V | H | K | Q | E | R | T | K | Y | E | Q | I | L | Y | G | T | Y | E | K | L | S | K | V | S | L | S | R | E | F | L | V | Y | H | G | S | L | R | T | L | P | N | G | H | L | N | F | V | A | F | S | Q | I | S | E | Q | L | R | S | V | V | Q | W | K | A | A | T | F | A | N | D | G | N | P | S | F | L | E | G | D | L | I | N | F | E | R | M | T | L | F | F | S | I | I | S | D | I | L | K | Y | Q |
 </div>

UniRef90_B4N598
 UniRef90_L8H6C9
 UniRef90_UPI000317828
 UniRef90_G1N8A6
 UniRef90_U6NV18
 UniRef90_L8HHG9
 UniRef90_UPI0003462A8
 UniRef90_L7JN1
 UniRef90_UPI0003EC2B3D
 UniRef90_W4VY64
 UniRef90_V5ESI7
 UniRef90_UPI0003375A8
 UniRef90_V8NT36
 UniRef90_H3CC15
 UniRef90_H2SL85
 UniRef90_I1GDM4
 UniRef90_A0A024GSH6
 UniRef90_UPI000383A80F
 UniRef90_F9FJC2
 UniRef90_M7SVT7
 UniRef90_UPI0003F153AF
 UniRef90_G7XPS6
 UniRef90_UPI0003C2AB1E
 UniRef90_L8GNM1
 UniRef90_I1FN70
 UniRef90_M5BM91
 UniRef90_H2Z6D0
 UniRef90_H3FA12
 UniRef90_U6IDB1
 UniRef90_UPI000333C2FF
 UniRef90_H3F985
 UniRef90_G8EB16
 UniRef90_A8NFV6
 UniRef90_A5DEC2
 UniRef90_M3HL86
 UniRef90_K1WP03
 UniRef90_K2GFL4
 UniRef90_UPI000440E762
 UniRef90_UPI0002C3CEB0
 UniRef90_K2RGT6
 UniRef90_W2RQZ5
 UniRef90_M2TKA5
 UniRef90_T1H058
 UniRef90_B6HCF6
 UniRef90_UPI0003ACCAB5
 UniRef90_W4YW56
 UniRef90_W2T5N0
 UniRef90_F6QNY0
 UniRef90_A2EWA8
 UniRef90_C4YMA9
 UniRef90_H0VRJ8
 UniRef90_UPI0003502C0E
 UniRef90_G2YPJ3
 UniRef90_P34578
 UniRef90_B4LPU3
 UniRef90_UPI00026541CF
 UniRef90_Q8VCC8
 UniRef90_Q3TYC0
 UniRef90_UPI000350D5C1
 UniRef90_I3M250
 UniRef90_B7P988
 UniRef90_M2RHP2
 UniRef90_UPI0002C67C8F
 UniRef90_G3JRC7
 UniRef90_Q874N2
 UniRef90_Q19770
 UniRef90_C4XXR1
 UniRef90_N1PM64
 UniRef90_G3AHE8
 UniRef90_UPI0002C445EA
 UniRef90_UPI0003341612
 UniRef90_UPI000273D858
 UniRef90_W4K8N1
 UniRef90_I1BJ06
 UniRef90_F0ZPA6
 UniRef90_U616L1
 UniRef90_A0A044TEW0
 UniRef90_UPI0002B42366
 UniRef90_K5WBZ9
 UniRef90_A5DL36
 UniRef90_UPI00032888ED
 UniRef90_W5P986
 UniRef90_F6QPP8
 UniRef90_W6MNJ8
 UniRef90_C5DUM5
 UniRef90_V9DEV0
 UniRef90_K7F7L9
 UniRef90_UPI0003293200
 UniRef90_UPI00026516DA
 UniRef90_UPI0003EA9821
 UniRef90_G8ZSG4
 UniRef90_UPI0003C11973

410 420 430 440

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

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

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

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

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

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

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

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

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

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

UniRef90_B4N598	P P E N T E E K D R Y K	450	460
UniRef90_L8H6C9	P A T N T L P K N P G D K K P V K S E T S P V A P R		
UniRef90_UPI0003317828	P R L P		
UniRef90_G1N8A6	P A E S N S E R E Q L K K L K		
UniRef90_U6NV18	P S A R K D A		
UniRef90_L8HHG9			
UniRef90_UPI00033462A8	S P E N H T E K E R W K S L R S S		
UniRef90_L7JN11			
UniRef90_UPI0003EC2B3D	P R S		
UniRef90_W4VY64	P R D T		
UniRef90_V5ESI7			
UniRef90_UPI00033375A8			
UniRef90_V8NT36			
UniRef90_H3CC15			
UniRef90_H2SL85			
UniRef90_I1GDM4			
UniRef90_A0A024GSH6	P R V T K R		
UniRef90_UPI000383A80F	T P G S G D P P		
UniRef90_F9JC2			
UniRef90_M7SVT7			
UniRef90_UPI0003F153AF	P R Y P K S L P P S P F K A P S V V W A P G V T P K P D R		
UniRef90_G7XPS6			
UniRef90_UPI0003C2AB1E	P R C P N T Q P P T P L K L P V V D W L P D V A L K P D		
UniRef90_L8GNM1			
UniRef90_I1FN70			
UniRef90_M5BM91	R K E K R		
UniRef90_H2Z6D0	P K R T		
UniRef90_H3FA12	P R T L L T F E P S S K S I V F A D W A S G V S A V P D R		
UniRef90_U6IDB1	P R S D T P S E S		
UniRef90_UPI000333C2FF	P G S S S P R L V S S K E	D L A G P S A G S S S A R	
UniRef90_H3F985	P R N		
UniRef90_G8EB16	P R T I L S F Q S S T K S V L F A D W A S G V S S T L D		
UniRef90_A8NFV6	P R E G Q		
UniRef90_A5DEC2	P R		
UniRef90_M3HL86			
UniRef90_K1WP03			
UniRef90_K2GFL4	P Q N G K		
UniRef90_UPI000440E762	P P V D P C P N S P S F W N		
UniRef90_UPI0002C3CEB0	K P S S K E L E R T E		
UniRef90_K2RGT6			
UniRef90_W2RQZ5			
UniRef90_M2TKA5	A Q G A N E K G R I A R		
UniRef90_T1H058			
UniRef90_B6HCF6			
UniRef90_UPI0003ACCAB5	P R		
UniRef90_W4YW56	P A E S A A E R E Q L K K L K		
UniRef90_W2T5N0			
UniRef90_F6QNY0			
UniRef90_A2EWA8	P		
UniRef90_C4YMA9	P R D		
UniRef90_H0VRJ8	P R		
UniRef90_UPI0003502C0E			
UniRef90_G2YPJ3	P K S A P K R N		
UniRef90_P34578			
UniRef90_B4LPU3	P S S A P S T P T M M K		
UniRef90_UPI00026541CF	P		
UniRef90_Q8VCC8			
UniRef90_Q3TYC0			
UniRef90_UPI000350D5C1	G A E P P L T L V R R L R R T S S A S D T S		
UniRef90_I3M250	E S A N S P S Q S		
UniRef90_B7P988	T A E Q T S E K E L Y R R L K		
UniRef90_M2RHP2			
UniRef90_UPI0002C67C8F			
UniRef90_G3JRC7	P R Q		
UniRef90_Q874N2	P K		
UniRef90_Q19770	P R D L S Q Q T		
UniRef90_C4XXR1			
UniRef90_N1PM64	P R D		
UniRef90_G3AHE8			
UniRef90_UPI0002C445EA			
UniRef90_UPI000341612			
UniRef90_UPI000273D858			
UniRef90_W4K8N1			
UniRef90_I1BJ06			
UniRef90_F0ZPA6			
UniRef90_U616L1			
UniRef90_A0A044TEW0			
UniRef90_UPI0002B42366			
UniRef90_K5WBZ9			
UniRef90_A5DL36			
UniRef90_UPI00032888ED	P P Q A Q Q P P E G S E P W S G D C Q G P D A E P S G S		
UniRef90_W5P986	P R N I A R R K T		
UniRef90_F6QP8			
UniRef90_W6MNJ8	P R		
UniRef90_C5DUM5			
UniRef90_V9DEV0			
UniRef90_K7F7L9			
UniRef90_UPI0003293200	P P Q A Q Q P P E G S E P W S G D R Q G P D A		
UniRef90_UPI00026516DA			
UniRef90_UPI0003EA9821			
UniRef90_G8ZSG4	P R		

UniRef90_K2MVM0
 UniRef90_T5BM39
 UniRef90_G8JWH1
 UniRef90_U6I3Z8
 UniRef90_G0VGN0
 UniRef90_UP10003C16635
 UniRef90_F7CDK1
 UniRef90_UP10002C3EA60
 UniRef90_UP1000203A4C6
 UniRef90_UP10003C27849
 UniRef90_L8FNC2
 UniRef90_A5E0J4
 UniRef90_UP10004418694
 UniRef90_A2F4Q9
 UniRef90_B0EGQ5
 UniRef90_F4Q4N3
 UniRef90_A0A044TXT6
 UniRef90_UP10002C3E378
 UniRef90_D4D080
 UniRef90_UP10002C30983
 UniRef90_L5KD89
 UniRef90_S8G1X3
 UniRef90_UP100046B1DF9
 UniRef90_X6MZ29
 UniRef90_UP1000462E471
 UniRef90_C4YJZ3
 UniRef90_S7QN09
 UniRef90_G0W339
 UniRef90_F2QVG9
 UniRef90_UP10001E461B0
 UniRef90_F0ZM13
 UniRef90_G7E6C7
 UniRef90_T0QQP9
 UniRef90_UP1000455D94E
 UniRef90_F1SCV4
 UniRef90_H2B1B9
 UniRef90_C5DG40
 UniRef90_V2XC99
 UniRef90_G8YSK5
 UniRef90_I2JUA6
 UniRef90_S6ETZ7
 UniRef90_UP1000274173F
 UniRef90_F2QVS1
 UniRef90_UP1000333E37D
 UniRef90_D6RKH6
 UniRef90_UP100045722DF
 UniRef90_UP10003ACAB0B
 UniRef90_H2WE19
 UniRef90_H2Q2T3
 UniRef90_B4MX03
 UniRef90_UP10003F0B927
 UniRef90_G7DTF4
 UniRef90_G1TH8
 UniRef90_UP10004413E60
 UniRef90_D6YW51
 UniRef90_A9VBN7
 UniRef90_UP100044232F1
 UniRef90_E6ZQH6
 UniRef90_B3NAS1
 UniRef90_S9VCC6
 UniRef90_B4JQM0
 UniRef90_M5FVA5
 UniRef90_Q9HF75
 UniRef90_Q171R1
 UniRef90_Q4P4A0
 UniRef90_I4YHN1
 UniRef90_C4M9W1
 UniRef90_J6NDY7
 UniRef90_H2L4S7
 UniRef90_W5L8W9
 UniRef90_UP10002738D1F
 UniRef90_F8LDH2
 UniRef90_A2DTE7
 UniRef90_A0A024JK02
 UniRef90_H0W5L1
 UniRef90_U4KX56
 UniRef90_UP10001A62B2D
 UniRef90_L8GL47
 UniRef90_L0PD10
 UniRef90_I1B13
 UniRef90_G3H9B9

1 10 20 30 40
 R | L P V A N | T A M T E M D S E A D | L I Y N E K G K V L Q A G T P | L G L M A
 E S G N | V S I T S G G V T E L I T
 R N L H A G T P | L G L M A
 R | L Q A G T P | L G L M A

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

R N | L R Q | I I L
 H A G T P | L G L M A

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

| V | P D P E H P E M P P | L E G E T | V | D | V | R | L | S | P | S G D M K A A S | L | T | A | L | R

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

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

R T | L | Q | P | D | T | K | E | M | L | L | D

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

G N G N | I | V | S | G | P | L | E | S | L | E

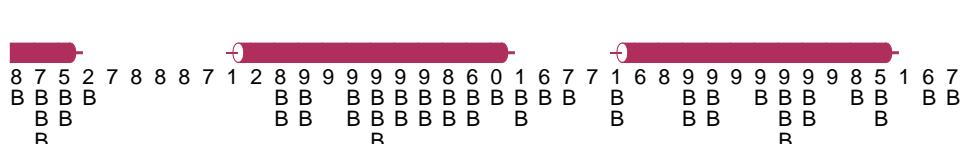
D N P | S | A | L | S | F | S | K | G | K | S | S | L | Q | A | G | S | P | L | G | L | M | A

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

lupas_21
 lupas_14
 lupas_28
 jnet
 conf
 sol25
 sol5
 sol0

8 9 8 8 7 7 7 7 7 7 6 6 6 7 7 7 7 6 3 5 8 8 5 4 7 8 5 5 8 7 3 4 6 5 8 9 9 9 9
 B B B B B B B B B B B B B
 B B B B B B B B B B

UniRef90_K2MVM0 M M T D P R N P Q R D F T R V V L L T Y R Q F A T P E E L L E Q L I E R Y E V P
 UniRef90_T5BM39
 UniRef90_G8JWH1
 UniRef90_U6I3Z8
 UniRef90_G0VGN0
 UniRef90_UP10003C16635 K C I Q S F D S D S Q M V N M T L M M H S W V V P S A E F A R K L L N I Y R Q P
 UniRef90_F7CDK1 H L Y S R N A F L D G Y V Q Q F F Y T F R Y F C T Q E D L L Q F L I D R I N C T
 UniRef90_UP10002C3EA60 R L Y N M N L N D P S Y T D M F L M T H K K F T D S E T V V L Q L V D A Y T A G
 UniRef90_UP1000203A4C6 Y L Y S R N A F L E G Y V Q Q F L F T F R Y F C S Q E E L L Q F L L D R I S I T
 UniRef90_UP10003C27849 Y L Y S R N A I L E G Y V Q Q F L Y T F R Y F C T Q E E F L Q F L L D R I Y N R
 UniRef90_L8FNC2
 UniRef90_A5E0J4
 UniRef90_UP10004418694 K L V Y D H R D E A Y S R I F L T M Y P S F T T S A K L F N I L Q G H F R G A
 UniRef90_A2F4Q9 K I T S E S N T D E L S K E F T K T F T L F N S P K Y L L A C L F A R Y F T N
 UniRef90_B0EGQ5 R L Y N M N L N D P E Y V D M F L M I H K K F T S S E E V L K R F S E V Y N N L
 UniRef90_F4Q4N3 R A T S D Y C Y D T S Y I Q D L L L T Y R C F S T P Q N L Y E L L T N R Y C T N
 UniRef90_A0A044TXT6 F A T Q P S G S L L Y Q E A F L T T Y R S F V E S D E L I Q K Q L I K R Y L Y M
 UniRef90_UP10002C3E378
 UniRef90_D4D080
 UniRef90_UP10002C30983
 UniRef90_L5KD89
 UniRef90_S8G1X3
 UniRef90_UP100046B1DF9
 UniRef90_X6MZ29 L G I G E Q Q R D D N L M E I L L M C H K Q F S T A E F R L C F F L I T Y T N L
 UniRef90_UP1000462E471 Y L Y S R N A F L E G Y V Q Q F L F T F R Y F C S Q E E L L Q F L L D R I S R
 UniRef90_C4YJZ3
 UniRef90_S7QN09
 UniRef90_G0W339
 UniRef90_F2QVG9
 UniRef90_UP10001E461B0 L L I P S H S Y S P E Y I F A A L L N I R F I S P P D L L Q K I L Q Q C V F K
 UniRef90_F0ZM13 N D E Q Q V V L F L I I Y R R F A A P A H V L K K L I E R Y E F V
 UniRef90_G7E6C7 Y L I A D K S M R L Q D M F A F V L N S A T Y M D M A S L L V L L
 UniRef90_T0QQP9
 UniRef90_UP1000455D94E Y L Y S S D A F L E G Y V Q Q F L Y T F R A H Q D P A S T F T K I Y R R S L C L
 UniRef90_F1SCV4
 UniRef90_H2B1B9
 UniRef90_C5DG40
 UniRef90_V2XC99
 UniRef90_G8YSK5
 UniRef90_I2JUA6
 UniRef90_S6ETZ7
 UniRef90_UP1000274173F
 UniRef90_F2QVS1
 UniRef90_UP1000333E37D
 UniRef90_D6RKH6
 UniRef90_UP100045722DF
 UniRef90_UP10003ACAB0B
 UniRef90_H2WE19
 UniRef90_H2Q2T3
 UniRef90_B4MX03
 UniRef90_UP10003F0B927
 UniRef90_G7DTF4
 UniRef90_G1TH8
 UniRef90_UP10004413E60
 UniRef90_D6YW51
 UniRef90_A9VBN7
 UniRef90_UP100044232F1
 UniRef90_E6ZQH6
 UniRef90_B3NAS1
 UniRef90_S9VCC6
 UniRef90_B4JQM0
 UniRef90_M5FVA5
 UniRef90_Q9HF75
 UniRef90_Q171R1
 UniRef90_Q4P4A0
 UniRef90_I4YHN1
 UniRef90_C4M9W1
 UniRef90_I6NDY7
 UniRef90_H2L4S7
 UniRef90_W5L8W9
 UniRef90_UP10002738D1F
 UniRef90_F8LDH2
 UniRef90_A2DTE7
 UniRef90_A0A024JK02
 UniRef90_H0W5L1
 UniRef90_U4KX56
 UniRef90_UP10001A62B2D
 UniRef90_L8GL47
 UniRef90_L0PD10
 UniRef90_I1B13
 UniRef90_G3H9B9



lupas_21

lupas_14

lupas_28

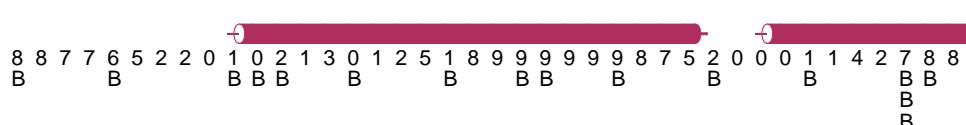
jnet

conf

sol25

sol5

sol0

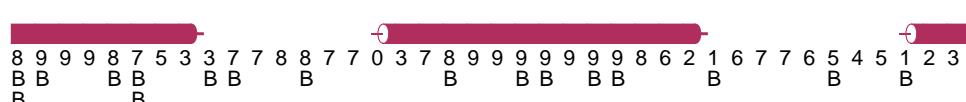


Sequence alignment of UniRef90 proteins from 130 to 160. The alignment shows multiple protein sequences with gaps indicated by dashes and residues highlighted in colored boxes according to their chemical properties.

Key residues highlighted in colored boxes:

- Red:** C, F, H, I, K, M, P, R, S, T, W
- Blue:** D, E, G, N, Q, V
- Yellow:** A, C, D, F, G, I, L, M, N, O, P, R, S, T, U, Y
- Green:** B, C, D, E, F, G, H, I, K, L, M, N, O, P, R, S, T, U, V, W, Y
- Grey:** A, C, D, E, F, G, H, I, K, L, M, N, O, P, R, S, T, U, V, W, Y

Residues shown in black are unhighlighted.



UniRef90_K2MVM0
 UniRef90_T5BM39
 UniRef90_G8JWH1
 UniRef90_U613Z8
 UniRef90_G0VGN0
 UniRef90_UPI0003C16635
 UniRef90_F7CDK1
 UniRef90_UPI0002C3EA60
 UniRef90_UPI000203A4C6
 UniRef90_UPI0003C27849
 UniRef90_L8FNC2
 UniRef90_A5E0J4
 UniRef90_UPI0004418694
 UniRef90_A2F4Q9
 UniRef90_B0EGQ5
 UniRef90_F4Q4N3
 UniRef90_A0A044TXT6
 UniRef90_UPI0002C3E378
 UniRef90_D4D080
 UniRef90_UPI0002C30983
 UniRef90_L5KD89
 UniRef90_S8G1X3
 UniRef90_UPI00046B1DF9
 UniRef90_X6MZ29
 UniRef90_UPI000462E471
 UniRef90_C4YJZ3
 UniRef90_S7QN09
 UniRef90_G0W339
 UniRef90_F2QVG9
 UniRef90_UPI0001E461B0
 UniRef90_F0ZM13
 UniRef90_G7E6C7
 UniRef90_T0QQP9
 UniRef90_UPI000455D94E
 UniRef90_F1SCV4
 UniRef90_H2B1B9
 UniRef90_C5DG40
 UniRef90_V2XC99
 UniRef90_G8YSK5
 UniRef90_I2JUA6
 UniRef90_S6ETZ7
 UniRef90_UPI000274173F
 UniRef90_F2QVS1
 UniRef90_UPI000333E37D
 UniRef90_D6RKH6
 UniRef90_UPI00045722DF
 UniRef90_UPI0003ACAB0B
 UniRef90_H2WE19
 UniRef90_H2Q2T3
 UniRef90_B4MX03
 UniRef90_UPI0003F0B927
 UniRef90_G7DTF4
 UniRef90_G1TH8
 UniRef90_UPI0004413E60
 UniRef90_D6YW51
 UniRef90_A9VBN7
 UniRef90_UPI00044232F1
 UniRef90_E6ZQH6
 UniRef90_B3NAS1
 UniRef90_S9VCC6
 UniRef90_B4JQM0
 UniRef90_M5FVA5
 UniRef90_Q9HF75
 UniRef90_Q171R1
 UniRef90_Q4P4A0
 UniRef90_I4YHN1
 UniRef90_C4M9W1
 UniRef90_J6NDY7
 UniRef90_H2L4S7
 UniRef90_W5L8W9
 UniRef90_UPI0002738D1F
 UniRef90_F8LDH2
 UniRef90_A2DTE7
 UniRef90_A0A024JK02
 UniRef90_H0W5L1
 UniRef90_U4KX56
 UniRef90_UPI0001A62B2D
 UniRef90_L8GL47
 UniRef90_L0PD10
 UniRef90_I1B13
 UniRef90_G3H9B9

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

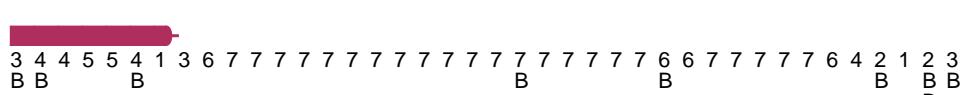
H E M S P R Q L L K R L Q N M S E E V L
 P A P A P T A E D K P C E E P P G I M
 N G L L A D S L Q K E W K R C K E R S K L H T Q E N D Y W S V E I P T N L N L Y
 S F N W K P S K R N E V I A P Y Q K D K Q P M I A S S L P K Q C H G E E Y F L T
 F N D A H I S F V L
 K M V H E V N
 P K Q Q F S Y Q S L T F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

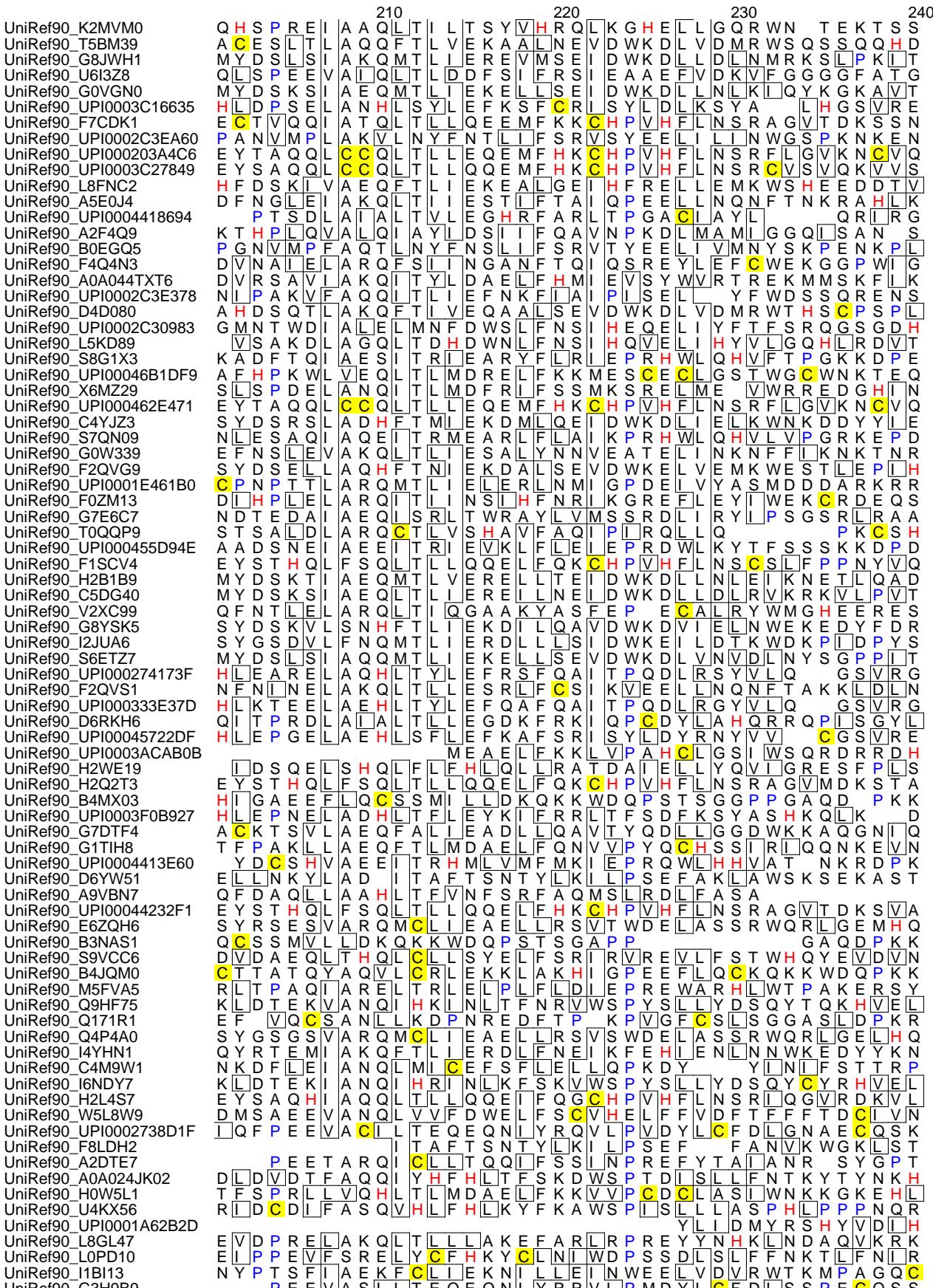
G Q V L N
 E Q N G N N C N Y Q Y P V S I I P P P T I S E Y L E V T
 A I A P P Q I P A N A S S I A S R L S V R P S T I I H Q S S N L L A T A I S L L
 G A P S P L Y A D L Y D H M T G M Y S V K P S Y D G A R A R V G R L N P M
 P M S E K V M L T K L R T L A M D V L
 R G N G L A L P H H K E R P Y T I A S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

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

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

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





lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
-12

Sequence logo showing the conservation of amino acids at each position of UniRef90_1K2MVM0 across various UniProt entries. The x-axis represents positions 250, 260, and 270. The y-axis lists UniProt entries. Colored boxes indicate conserved amino acids: yellow for hydrophobic, red for polar, blue for acidic, green for basic, and purple for aromatic.

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5

290 300 310 320

UniRef90_K2MVM0	V C D E L I K L R N L D M L V A V H G G I R V P A V K R L S R T W A S L S R D T
UniRef90_T5BM39	V A V H S R R L R N Y S A M L Q I T I A L C S V D C T R L T K T W E L V A D G E
UniRef90_G8JWH1	V A E H C R K F Q N Y N T V M E I V L A L N S V V V Q K F T D S W R L V E P A D
UniRef90_U613Z8	I A K L C R D L R N F N T M F C H M S P V E R L R Q T W E R L P N K Y
UniRef90_G0VGN0	V A Q Y C R E F Q N Y N T L M E I I L A L S S I V V Q K F T D A W R L I E P G D
UniRef90_UP10003C16635	V A Q K L R H L Q N F N T L M A V I G A L C H S S V S R L K E T
UniRef90_F7CDK1	V A K L C Y E Q R D F A S A M Q I L G G L E N L I V R Q L P A W K S L P S K V
UniRef90_UP10002C3EA60	M M K T F Q G M K D I H F L V A I T Y C L K T I D I D S I K T K K L S S E D N A
UniRef90_UP1000203A4C6	I A K C C Y E Q R N F A T T I Q I L N G L E H L V V R Q L P V W K S L P S K I
UniRef90_UP10003C27849	I A K S C Y E Q R N F A T A M Q I L V G L E N L M V R Q L P A W K I L L P S K I
UniRef90_L8FCN2	I A E H C R Q L G N Y A T L F Q L T V A V S N P V I A E L H E T W K H V P A P E
UniRef90_A5E0J4	I A I S S L Y L R N F N S L A A I I A A L Q S H L I T R D F L W A N L S Q K Y
UniRef90_UP10004418694	T A D D C L K L G G N F S A M M A I G R A L D S A A V M A V P G I R D Q I F K K N
UniRef90_A2F4Q9	I L L E L N K V N D F S G V F A V Y N G I T H P A V A R L K T T W K L I S F R T
UniRef90_B0EGQ5	F M K T I Q Q L K D I H F L V A L A Y T L P R L D D S I K S K K I S E E D K N
UniRef90_F4Q4N3	C A E R C L Q H G D F A S V F C I M E G L A N S A V E R L S D T F N
UniRef90_A0A044TXT6	I N L H L R I V G N Y N S L A I I L S A L D S G P I R R L D D W S K H I T D
UniRef90_UP10002C3E378	V G V R M M N D L L N N W S G L V E V T T A L D A F P V Y R L Q K L F L Q L D E N D
UniRef90_D4D080	I A V N A R K L R N Y A T M L Q M V I A L S S V D C T R L V K T W E R V P E T E
UniRef90_UP10002C30983	I A A Q R E A F L T F N D S D G L W A A L G F T T F R R G P H S D G M R P G K F
UniRef90_L5KD89	L A A H L K E Q K N L S S F F A V V M F G L S N S A I S R L A R T W Q R L P H K V
UniRef90_S8G1X3	V A E V L R V Q H N Y S A L R A F V A G I N S A T F L E I F Q T R T P D Q W K R
UniRef90_UP100046B1DF9	V A K E C L G L Q N Y S V G H V I L S A L K S S P I H R L H E T W R E V S R K S
UniRef90_X6MZ29	I G E H F L L N R N F N S L S C V I F K A L N S S A A I H R L K L A W
UniRef90_UP1000462E471	I A K C C Y E Q R N F A T T I Q I L N G L E H L V V R Q L P V W K S L P S K I
UniRef90_C4YJZ3	I A Q H C L K L Q N F A T L L M Q I I L A L T S Q R I Q K L K Q T W K D L I P G D
UniRef90_S7QN09	V A S H H L R R M M N Y S A L R A F V A G I N N S T F P G D E T M C L F K E K S
UniRef90_G0W339	I A L S S L Y L R N Y N S L A S I M T A L Q N S P I T R L Y Y L W D E L S E K D
UniRef90_F2QVG9	I A K H C Q S L Q N Y A T L L Q I V L A L N S T R I S R L K S T W E G I N A G D
UniRef90_UP10001E461B0	V A K E C I N V G N F N S F M A I V A A L S L P I A R L K K T
UniRef90_F0ZM13	T A D K L L S H Y D Y A G V F S I I I E P L C D S S I I E R L L S E T W K N V S P K I
UniRef90_G7E6C7	V A V R L R E T D N Y D A L M G L L A G L N C Q P L Y R L L E N T L D I K D R P L
UniRef90_T0QQP9	V A V Q C F F E F Q N F D S F I A I L Y A L Q S T A V F R L K R T M T Y L S T D T
UniRef90_UP1000455D94E	V A S K L R A H N N Y S A L R A F V A G I N G A C Y F E G D D T R E N I R T K S
UniRef90_F1SCV4	I A K S C Y E Q R N F A T A M Q I L G G L E H P A V V R Q S P A W K I L L P A K I
UniRef90_H2B1B9	V A E H C R K F Q N Y N T L M E I V L A L N S V T V Q K L V N A W R L I E P G D
UniRef90_C5DG40	V A E H C K L F Q N Y N T L M Q I V L A L S S L V V Q S Y R D A W R L V E P G D
UniRef90_V2XC99	V A T K C I E M M N F S C A N A I R A A L V S P P I Y H L Q E T L L M I N T Q Q
UniRef90_G8YSK5	I A Y N C Y A M Q N F S T T M Q I V L A L T S E K A S A L L K E T W K N L P P G E
UniRef90_I2JUA6	L G I V C K K K Q N Y A T M F Q V T A L A T A P I L K K L K S T W N A V D A G D
UniRef90_S6ETZ7	V A D H C K S F Q N Y N T L M E I V L A L N S T A V Q T F V E A W R L I E P G D
UniRef90_UP1000274173F	V A Q R L H Q L K N F N T L M A V T G G L C H S A I S R L K D S H T H L S L D S
UniRef90_F2QVS1	V G A S C L E L R N Y N S L A A I M T S L Q S F F L L T R I N E L I P S L S T K N S
UniRef90_UP1000333E37D	V A Q N L H Q M K N F N T L M A V T G G L C H S A I S R L K D S H A H L S P E S
UniRef90_D6RKH6	T A R N L L S E K F K K W L N E I
UniRef90_UP100045722DF	V A Q K L R Q L Q N F N T L M A V I G G L C H S A I S R L K E T
UniRef90_UP10003ACAB0B	V A E G C L G L R N F A S F H T I F S A L Q S P A I K R L K H T W G Q V S R E R
UniRef90_H2WE19	I T T H S Q E C R D L L T V F A I T L G L S H T V S R L S L T W A K L P P S T
UniRef90_H2Q2T3	I A K S C Y E Q R N F A T A M Q I L S G L E H L A V V R Q S P A W R I L P A K I
UniRef90_B4MX03	V A Q Y C L L V G N Y N S A T A I L E S L E S P A I S R L K I T
UniRef90_UP10003F0B927	V A L A W K S Y Q L S N L Q T M T Q I I H G L Q T D P V I R L R R T W H R L P G W E
UniRef90_G7DT4	V A K D D Q A H V A S K L H T C A C A P R S T G P A W A L Q L C F S P H N R K S
UniRef90_G1TH8	V A K Q L R L M Q H N Y S G L R C V L N G I N M S K V I S E L F K T R A K A S W K V
UniRef90_UP10004413E60	L A K Q L R M Q H N Y S G L R C V L N G I N M S K V I S E L F K T R A K A S W K V
UniRef90_D6YW51	L Q T K A V K Q G D L N T V A I I N S A L D S S S I F R L K K A W N D V P K K I
UniRef90_A9VB7N	M A D F L Q V L R D Y Q G F M A V M T A L Q L S H V A R L K H T W A R I D R F E
UniRef90_UP100044232F1	I A K S S Y E Q R N F A T A M Q I L G G L E H P A V V Q Q S P A W R I L P A K I
UniRef90_E6ZQH6	I A W K C Y L Q S N F S A L A Q I I F G L S T P W V E R L R T W N R V G Y F E
UniRef90_B3NAS1	I A Q Y C L L V G N Y N S A T A I I L E S L E S P A I A R L K I T V S L S S R T M
UniRef90_S9VCC6	T C K L L Y D L Q N Y E M S S A I L I G L T H P A V V K D L E R Q K Q L M D P Y A
UniRef90_B4JQMO	V A Q Y C L L V G N Y N S A T A I I L E S L E S P A I S R L K I T
UniRef90_M5FVA5	V G H E L R K L N F N S F N S V N G L T H S Y L N N Q Q I W N
UniRef90_Q9HF75	L G C K F E R L G D M V S W L A I A T V I C S I P V L R L T R T W Q Y V P D S Y
UniRef90_Q17IR1	A A Q Y C L L V G N Y N S A T A I I L E S L D M P P I A R L Q I T V K Y C Y K
UniRef90_Q4P4A0	I A W K C Y L Q S N F A S L A Q I I F G L N T P W V Q R L R T W S R V G Y F E
UniRef90_I4YHN1	L A F K C C Q Q N F N M T L M A I I L R G L E H P L V K R M A D A W P H V S K Q S
UniRef90_C4M9W1	L A I K C I E I K N F N S F N S V N G L T H Y A V I R M K T I A Q R T Q E E
UniRef90_I6NDY7	L G C K F E K L G D M V S W L A I A T I I I C S I P M L R L T K T W Q F V S D T Y
UniRef90_H2L4S7	I G K H C Y K W R N F A T A M Q V L G A L E N V I V R Q L P A W K H L T S K V
UniRef90_W5L8W9	T V V C C V N M M R L Y V K N T V P S T Q D Q A L T S V N R A S P K Y S K L K N
UniRef90_UP10002738D1F	I A K C C W N M G N Y N A V M E F L A G L R S R K V L K M W Q F M D Q S D I E T
UniRef90_F8LDH2	L Q T K A L E Q G D L N T V M V I Q S A F S G S S I V R L K K A W D Q V P K K L
UniRef90_A2DTE7	I A Q K L E E I N N Y E S I T W I V D A F D S D I I A N L S G F D S L L S E E S
UniRef90_A0A24JK02	L G N A L K N C G D M V G W L A I A T V I C S I S V L R L R S T W C Y V S R E W
UniRef90_H0W5L1	V A R A A S N I N R T K L Y G Q L K R G G T G G S N E K L K L F R K L C A K D T
UniRef90_U4KX56	V A Y L L K T K G D M A G Y L A I I M M A V L S P P I L R L R E T W S A M P Q E L
UniRef90_UP10001A62B2D	L A E R S S P L Y D L Y S S F A I I L G L Q N S S I T R L I H T W E R V P N R W
UniRef90_L8GL47	F A W E L F R M R N L H A L G A V V Q M L S P S D V N K L T E L A L L F H S S E
UniRef90_L0PD10	V S M H K L N Y G D M A G W L S I I I A L C S P S I V R L K L W S L V S S D L
UniRef90_I1B13	V C Q W C K K Y C N F S T L L I Q I L L G L Q S S S V S R L T K T W S M V N K R E
UniRef90_G3H9B9	V A K C C W N M G N Y N A V M E F L A G L R S R K V L K M W Q F M D Q S D I E T

lupas_21

lupas_14

lupas_28

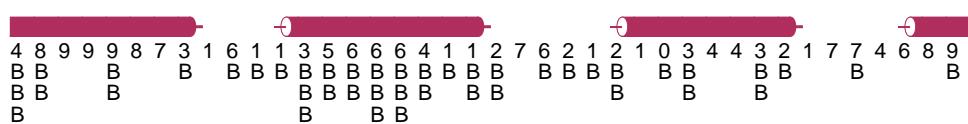
jnet

conf

sol25

sol5

sol0



UniRef90_Q2MVM0	330	340	350	360
UniRef90_T5BM39	A E L S T R L R K M S D A D Y K T L K E T M R K G S R L Q F P C I T I F L Q E M			
UniRef90_G8JWH1	K Q L K D M E T L R N F Q K L R L E M E S T N L Q Q D G C V P F V G L Y V Q D L			
UniRef90_U6I3Z8	M L T W K E K S I P N Y H N I R D M L N K I N P I N G C I P F L V V Y L S D L			
UniRef90_G0VGN0	V K M S R D L A L V D P S R N F A H Y R N G A Q C L P L V P Y L P L V L K D L			
UniRef90_UP10003C16635	M L L W E E L K H I P N Y S T I R N L L N S D P K K G C I P F I V V Y L S D L			
UniRef90_F7CDK1	S D I L E E L K A V E V F L K S D S L C L T K G D R F R T L P T I P S A C M H			
UniRef90_UP10002C3EA60	Y L L E M E Q L C T F Q K N Y K F L R Q Y M Q Q L E T P Y I P F I G V V S K D L			
UniRef90_UP1000203A4C6	L G I M E E L T A V E V F L K S D S L C L M E G E R F K T L P T I P S A H M H			
UniRef90_UP10003C27849	S E I M E E L E V F L K S D S L C L M E G E R F K T L P T I P S A H V L A M H			
UniRef90_L8FNC2	V Q S L R E F E A L I Q P A N N F H R L R D E M E K R A C L P Y L V V I Y A K D L			
UniRef90_A5E0J4	I D L H Q Y L A S I L S M E K N Y T T Y N K Q N A P I P I V P Y I N L F I S D I			
UniRef90_UP10004418694	R Y K A Q R L G L I D P K G E H A A Y H D S V R S A K Y C I P P W L E M H L Q R V			
UniRef90_A2F4Q9	K R E F G S I Q N I F Y N N F N A Y R Q A L L L V R I P P L V P F M G C Q K D W			
UniRef90_B0EGQ5	Y L N E I E E L C T F K Q N Y K Y L R A Y L S Q L E T P Y P F I G I L S K D L			
UniRef90_F4Q4N3	L L K E H S V V M D S S H S F K N Y R T L L G E S R P P C I P Y I G L V L Q D L			
UniRef90_UP10002C3E378	I E N L R R I K E M G S M D E L M M N D N G I I P G A C V P F I Q K Y L K K F			
UniRef90_D4D080	K E I L A M E F M I G L Q P I R N F H K L R S E M E Q D G C I P T F G L Y V Q D L			
UniRef90_UP10002C30983	K K L F S E L E S L T D P N H K A Y R D A F K K M K P P K I P F M P L L L K D V			
UniRef90_L5KD89	R K L L Y S A L E R L P S W N H R V Y R L A L T K L S P P V I P F M P L L L K D M			
UniRef90_S8G1X3	F Q S Y D H L L Q S V R S H Q K Y R M A L R N S K G A C I P A L E I H L S D L			
UniRef90_UP100046B1DF9	S E Q F Q V L S N K C Q M R Q R M L I A P M T P V A R S I V P F L D T F L A E L			
UniRef90_X6MZ29	L G I M E E L T A V E V F L K S D S L C L M E G E R F K T L P T I P S A H M H			
UniRef90_UP1000462E471	I L L L K N L E P L K N F L N I R L T I N Q I K P S K G C I P F V G L Y L S D L			
UniRef90_C4YJZ3	A Q N H K L Q S Y D I R S H R A Y R M A L R N T K G P C I P A L E V H I S D L			
UniRef90_S7QN09	M K L Y E Y L S K I I H P P N N Y K I Y R Q K I R P L P V V P F F N L F L Q D L			
UniRef90_G0W339	I L I L R S L E K I T Y F R N L R I E L D K V T A S K G C I P F G I Y L N D L			
UniRef90_F2QVG9	L S L F E Q L K S L C S K E N D H K K Y R E A D T K P P S I P N I Q L L L D E			
UniRef90_UP10001E461B0	F K K F K S L N R L M T R S F S A Y R M A L S T S R P F V I P Y I G C H L Q D L			
UniRef90_P0TM13	A E T L A K Y Q V Y T Q N G S R D M N R V M K T I L K P P C M P Y I G L Y L Q N V			
UniRef90_G7E6C7	P E Q Y K N L L S W D V L F Q R G S H H A Y N T K G A C I P A L E I H Q S D L			
UniRef90_T0QQP9	A E V M E E L K A V E V F L K S D S L C L M E G R R S R T Q P T L P S A H M H			
UniRef90_UP1000455D94E	H L L T W E E L K K I S C L D N N Y A T I R D V D P L V G C I P F V A V Y L S D L			
UniRef90_F1SCV4	L L L S W E S L K N V P B N Y Y N I R M L L N D I E P I K G C I P F I V V Y L S D L			
UniRef90_H2B1B9	K A R Y K V L E D Y F N G F D N Y G L Y R E K D K H Q P F I P I I G Q L I R D V			
UniRef90_C5DG40	I L I L K N L E E L K N F L N I R L A I N R V Q P S K G C I P F L G V Y L S D L			
UniRef90_V2XCK9	L L V L K E L S P A N N K D I R D Q M D V A V P S K G C I P F I A L D L S D L			
UniRef90_G8YSK5	L I T W G E L K K M P N Y A Y I R K L L N N I D P M K G C A P F I V V Y L S D L			
UniRef90_I2JUA6	T K E L A A L Q G Q H P P C S A N E D L L H L T L S L D L F Y T E D E I Y E L			
UniRef90_S6ETZ7	K E L Y D Y L I T I H P E K N Y S V Y R G K L R A F P I V P Y L S L F L Q D L			
UniRef90_UP1000274173F	T K L S L D L V S I L Y P M D D Y A A Y R S A L R E I H D P Q Y A D Y C I P W L E L H D Q L			
UniRef90_UP10003ACAB0B	S Y T F K K W C R L A T A Q R G R H R A Q E R Q R Q Q G V I P S L E M I F S Y L			
UniRef90_H2WE19	Q K Q F S E F E S L P T R N H R M Y R V L V S K M A S P Y I P F V P L I L K D L			
UniRef90_H2Q2T3	A E V M E E L			
UniRef90_B4MX03	F K K V K H L K F Q F C V			
UniRef90_UP10003F0B927	T K L F N N L K I L A S S S H D F R L L R L K H P S T A C I P F M G V A L R D L			
UniRef90_G7DTF4	A R K F Q R L C P A R E Q N S Q R T Q M R Q R L Q K K G A V P F L G T F I M Y L			
UniRef90_G1TIH8	F S S Y N A L L S S S K M H R A Y R T A L K H T D G P A I P D M E I I H T S D L			
UniRef90_UP10004413E60	A Q Q K R N A S Y T P E S S Y K A A R E F Q E G H P G G I P F M G I F L Q D L			
UniRef90_D6YW51	A K L A P L A E P G N G M Y N T I M D R V V E D P R G P C V P F L G S F L T G I			
UniRef90_A9VBN7	A E V M E E L K A V E V F L K S D S L C L M E G R R F R T Q P T L P S A H M H			
UniRef90_UP100044232F1	M R M W R D L N S F V G P R H N F R H L R R N A M L Q R G C I P F F G L Y V S D L			
UniRef90_E6ZQH6	P N N I Y L I C A I S F S P S S L N S I T A R T S T E M K Q P L I P I L S P I L N M L K K F Q Q N F			
UniRef90_B3NAS1	M F H Y H D L L F S T D R N H L I Y H R T L L H T A F F A I P C F E I H T S T I			
UniRef90_S9VC6	L K I I F K D W V P T I V Q L D R R Q M S S K S M N S V F I L A P P N L N D A F			
UniRef90_B4JQM0	T R M W R D L N S F V G P R H N F R H L R N A M S T R A C I P F F G L F V S D L			
UniRef90_M5FVA5	M R M L T T L K K F C S N A D N F S M L R H V G D I N G C I P F F I G I F L N D L			
UniRef90_Q9HF75	N E L L M F K L I D I Q G E I Q N S N Y S I S Y G K P A I P Y L K F F L K E M			
UniRef90_Q17R17	L K I I F K D W V P T I V Q L D R R Q M N D A F I L R D N V I P Y F G D L V			
UniRef90_Q4P4A0	L I E I L E E L R A V Q V F L K S D D L C L M G G Q R T H R R P T L P S A H			
UniRef90_I4YHN1	K F Y N L L E K F N N L W N Q V R S C K S P S D K V N K L L P A V L H N P F D L			
UniRef90_C4M9W1	M K D A M A Q H E S S S E Y K K V V N R A L N I P G C K V V P F C G V F L K E L			
UniRef90_J6NDY7	K Q Q K I N A S R I D T S L S Y S Y K A A R E F E L A N P K G I P Y A G I F L Q D L			
UniRef90_H2L4S7	R N M I T D L K E R Y G F T Y E E N V L K C Q K E G K P C V P N M R Y E M S I V			
UniRef90_W5L8W9	A P V F F D L E R R M M I S E T S R K S T Y H Y P K E R V V P F F G D L			
UniRef90_UP10002738D1F	A K S R N L L I K V S E D C A K E G D H A Q C Q W E L V M S Q S R G P			
UniRef90_H0W5L1	Q N T G C K A M R I L E R R R L N G R P D V W D F P C S Q G I P F F G H C M D E A			
UniRef90_U4KX56	R R I F F N D T K N H R T A R L W N D N K L N N T P R L P F L L I L K D L			
UniRef90_UP10001A62B2D	T E T L D G G G F E F S H S T K R G R D L Y Q T H S A C L P F L G T Y L H G M			
UniRef90_L8GL47	R S F I D N C A P I M N H L Q C C N Q Y N F E I S T E T P Y Y G E V L N C			
UniRef90_L0PD10	M R T L L R R L S T F T S P T K N W K H M T I K L P F G G C I P F L G I Y L S D L			
UniRef90_I1BI13	UniRef90_G3H9B9	M R S L K D M A Q H E E Y K K V V T R A L H I P G C K V V P F C G V F L K E L		

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol9

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0

UniRef90_2K2MVM0
 UniRef90_T5BM39
 UniRef90_G8JWH1
 UniRef90_U6I3Z8
 UniRef90_G0VGN0
 UniRef90_UPI0003C16635
 UniRef90_F7CDK1
 UniRef90_UPI0002C3EA60
 UniRef90_UPI000203A4C6
 UniRef90_UPI0003C27849
 UniRef90_L8FNC2
 UniRef90_A5E0J4
 UniRef90_UPI0004418694
 UniRef90_A2F4Q9
 UniRef90_B0EGQ5
 UniRef90_F4Q4N3
 UniRef90_A0A044TXT6
 UniRef90_UPI0002C3E378
 UniRef90_D4D080
 UniRef90_UPI0002C30983
 UniRef90_L5KD89
 UniRef90_S8G1X3
 UniRef90_UPI00046B1DF9
 UniRef90_X6MZ29
 UniRef90_UPI000462E471
 UniRef90_C4YJZ3
 UniRef90_S7QN09
 UniRef90_G0W339
 UniRef90_F2QVG9
 UniRef90_UPI0001E461B0
 UniRef90_F0PM13
 UniRef90_G7E6C7
 UniRef90_T0QQP9
 UniRef90_UPI000455D94E
 UniRef90_F1SCV4
 UniRef90_H2B1B9
 UniRef90_C5DG40
 UniRef90_V2XCK9
 UniRef90_G8YSK5
 UniRef90_I2JUA6
 UniRef90_S6ETZ7
 UniRef90_UPI000274173F
 UniRef90_F2QVS1
 UniRef90_UPI000333E37D
 UniRef90_D6RKH6
 UniRef90_UPI00045722DF
 UniRef90_UPI0003ACAB0B
 UniRef90_H2WE19
 UniRef90_H2Q2T3
 UniRef90_B4MX03
 UniRef90_UPI0003F0B927
 UniRef90_G7DTF4
 UniRef90_G1TIH8
 UniRef90_UPI0004413E60
 UniRef90_D6YW51
 UniRef90_A9VBN7
 UniRef90_UPI00044232F1
 UniRef90_E6ZQH6
 UniRef90_B3NAS1
 UniRef90_S9VCC6
 UniRef90_B4JQM0
 UniRef90_M5FVA5
 UniRef90_Q9HF75
 UniRef90_Q17R1
 UniRef90_Q4P4A0
 UniRef90_I4YHN1
 UniRef90_C4M9W1
 UniRef90_J6NDY7
 UniRef90_H2L4S7
 UniRef90_W5L8W9
 UniRef90_UPI0002738D1F
 UniRef90_F8LDH2
 UniRef90_A2DTE7
 UniRef90_A0A024JK02
 UniRef90_H0W5L1
 UniRef90_U4KX56
 UniRef90_UPI0001A62B2D
 UniRef90_L8GL47
 UniRef90_L0PD10
 UniRef90_I1BI13
 UniRef90_G3H9B9

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol9

450

460

UniRef90_K2MVM0
UniRef90_T5BM39
UniRef90_G8JWH1
UniRef90_U6I3Z8
UniRef90_G0VGN0
UniRef90UPI0003C16635
UniRef90_F7CDK1
UniRef90UPI0002C3EA60
UniRef90UPI000203A4C6
UniRef90UPI0003C27849
UniRef90_L8FNC2
UniRef90_A5E0J4
UniRef90UPI0004418694 A R G P P R R P S I V D R I R E S F D A P
UniRef90_A2F4Q9 Q Q N
UniRef90_B0EGQ5
UniRef90_F4Q4N3
UniRef90_A0A044TXT6
UniRef90UPI0002C3E378
UniRef90_D4D080
UniRef90UPI0002C30983 P R
UniRef90_L5KD89 P
UniRef90_S8G1X3
UniRef90UPI00046B1DF9 P P S
UniRef90_X6MZ29
UniRef90UPI000462E471
UniRef90_C4YJZ3
UniRef90_S7QN09 P R N
UniRef90_G0W339
UniRef90_F2QVG9
UniRef90UPI0001E461B0 P P
UniRef90_F0ZM13 P R
UniRef90_G7E6C7 P R
UniRef90_T0QPQ9 S R A S
UniRef90UPI000455D94E T R R I A P P D D P V E D E P G A R P P
UniRef90_F1SCV4
UniRef90_H2B1B9
UniRef90_C5DG40
UniRef90_V2XC99 A K S P R
UniRef90_G8YSK5
UniRef90_I2JUA6
UniRef90_S6ETZ7
UniRef90UPI000274173F
UniRef90_F2QVS1
UniRef90UPI000333E37D Q G E T K
UniRef90_D6RKH6
UniRef90UPI00045722DF
UniRef90UPI0003ACAB0B P R T R K I R L F F T D R K S H S S S H P G L
UniRef90_H2WE19 P K T A Q R R
UniRef90_H2Q2T3
UniRef90_B4MX03
UniRef90UPI0003F0B927 P R T S T S S P P T P T K P A F A D W A S G V N T P P
UniRef90_G7DTF4 P
UniRef90_G1TIH8 P
UniRef90UPI0004413E60 Q R E
UniRef90_D6YW51 P R N G S L P S V P R S R T S
UniRef90_A9VBN7 P
UniRef90UPI00044232F1
UniRef90_E6ZQH6 P P S I N Q Q T
UniRef90_B3NAS1
UniRef90_S9VCC6
UniRef90_B4JQM0
UniRef90_M5FVA5
UniRef90_Q9HF75 P
UniRef90_Q171R1
UniRef90_Q4P4A0
UniRef90_I4YHN1
UniRef90_C4M9W1 P N N
UniRef90_I6NDY7 P P S
UniRef90_H2L4S7
UniRef90_W5L8W9
UniRef90UPI0002738D1F P K D
UniRef90_F8LDH2 E E D S L S E G D D S R K N S L K D K
UniRef90_A2DTE7 P R A Q P R A K T
UniRef90_A0A024JK02 S P D A Q Q A K P L M R R A S A A V L E S E E T P Q T
UniRef90_H0W5L1 P
UniRef90_U4KX56 P
UniRef90UPI0001A62B2D P K
UniRef90_L8GL47
UniRef90_L0PD10 P
UniRef90_I1BI13 P
UniRef90_G3H9B9

```

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 6 5 4 5 6 7 7 7 7 7 7 8 8 9
B   B   B   B

```







