

1                    10                    20                    30                    40

QUERY	A R Q S A	I A A A R E A R G T Y	R N G L V T P T A G V A	P G M T Q A N	L I A L P
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UniRef90_J0K5I0					

50            60            70            80

QUERY	R D W A Y D F	L L Y A Q R N P K A C P   I L   D V S D A G S P T T	L L A E G S D   R
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UniRef90_A8FA09	K E L A F D F	F L F C Q R N P A A C P   I L   D V L E P G D P V P K S A P K A D   I	R
UniRef90_A1WS32	V D L A S D F	M R F C Q S N P K P C P   I L   A V G Q A G D P L T L G R D   D   I	R
UniRef90_Q6FH8	Q D W A Y D F	L L L Y T Q R N P Q S C P   V L   D V I D A G Q F Q S R L I Q D H   D   I	R
UniRef90_D2Z6X5	K D W A Y D F	L L V F A Q R N P T P C P   I L   D I T E P G D T E R I M A P G S D   I	R
UniRef90_A0A024UW11	K E L A F D F	L L F C Q R N P K P C P   I L   E V S D D P G C D L R R F A P N S D   I	R
UniRef90_V6MMX1	R D W A F D F	L L L Y A Q R N P K S C P   V L   D V C E A G S Y R T L L A E S A D   L	R
UniRef90_F7NG28	K A L A Y D F	F L L F A Q R N P K P C P   I L   D V T D V G S P E P K V A P G A D   I	R
UniRef90_Q28HB9	K S L A D D F E	E K F C N A N S G P L P   L   Y R S A P G E W C P L L S K D S D   I	R
UniRef90_G9PXT5	K E W A Y D F	L L V F A Q R N P K P C P   I L   D I T E L G Q W E A K L A P G S D   V	R
UniRef90_E4KY28	K K Y A Y D F	F L F Q A Q R N P K P C P   I L   E V L D E G S P T K I M A D G A D   I	R
UniRef90_V9KBE8	R D L A D D F E	E R F C Q A N S G P L P   L   Y R S K L E G W S P L L S H A S D   I	R
UniRef90_Q4L9U2	S K Y A Y D F	L L K F C F R N P K T C P   I L   D V S E V G A H S P Y Y G P Y A D   I	R
UniRef90_UP10003733CC1	Q D L A Y D F	F L F C Q R N P K P C P   I L   G V S E T G D P M P A I G R N   D   I	R
UniRef90_C8WJT6	K E Q A Y D F	F L F C Q R N P K P C P   I L   E V T E V G A R E A A I A T D C   D   I	R
UniRef90_A0A011A466	E E L A W D F	F L F C Q R N P K A C P   I L   E V S D A G S R S P L T A E G S D   I	R
UniRef90_UP100036C53E7	R D W A F D F	L L L Y A Q R N P K S C P   V L   D V T D A G S V S T L L A P G A D   I	R
UniRef90_N8ZUT4	K E W A Y D F	L L L Y A H R N P Q S C P   V L   D V L E E G I Y N T K L A Q D S D   I	R
UniRef90_A9ILF0	A D V A G F D L	R F C Q R N P K P C P   I L   A V S E P G D P L P S L G H D   D   V	R
UniRef90_R7WP88	Q K Y A F D L	F L F A Q R N P K S C P   V L   D V L E P G E L A G P L L P G G D   I	R
UniRef90_Q4ZZ54	R E W A Y D F	L L L F A Q R N P Q A C P   V L   D V T E P G S H T T L L A E Q A D   L	R
UniRef90_X1FLF1	Q K L A F E F	F L F C Q R N P K P C P   I L   D V T E V G D P E P K L A P G A D   I	R
UniRef90_UP10002F94766	G A L L A H D F	R F C Q R N P K P C P   I L   A V S E P G D P M P T L G R D   V   D I	R
UniRef90_Q12CN0	A D E A N D F L	R Y C Q R N P K P C P   I L   A V S E P G H A L P T L G A D D   L	R
UniRef90_F7NXW9	Q S W A A E F L	F L F C Q R N P K A C P   I L   A V S E P G Q Q F L P E L G Q D   L	R
UniRef90_UP10002626C4C	K R Y A Y D F	L L L F C I R N P K S C P   I L   E V T D E G M P V P K T A P D A D   L	R
UniRef90_D4M7E8	R D L A Y D F	L L V F A Q R N P K P C P   I L   D V T E P G E T E P R L A P G A D   I	R
UniRef90_UP100046356A1	K E Y A Y D F	F L F Q A Q R N P K P C P   I L   E V L D A G S Y E P K I A P G A D   I	R
UniRef90_UP10002F12677	A S V G F D F	F L F C H R N P K P C P   I L   D V T E V G N P E A R Y A P T S D   L	R
UniRef90_M7NEF5	K E D A F E F	F L F C Q R N P K S C P   I L   D V T D I G S A V P A A A P P G A D   I	R
UniRef90_R7JVH0	K K Y A Y D F	F L F T Q R N P R S C P   I L   E V G D M G D P L K T M A P G C   D   I	T
UniRef90_UP10002490CED	K S Q A Y D F	F L L F A Q R N P K P C P   I L   E V A D A G S R L R T F A Q D   V   D L	R
UniRef90_Q4FSQ4	K N L A Y D F	F L L F A Q R N P K S C P   I L   D V T D V G S S E P R L A K G A D   L	K
UniRef90_J0K5I0	E V Q A G D F	R F C Q R N P K P C P   V L   A V S E P G Q F T P S L G E G   D   I	R

QUERY	90	100	110	120
UniRef90_Q5KY48	T D I P M Y R W R D G K L A E E V S D A T Q A W A E H D D M V A F L I G C S F			
UniRef90_R5DBD7	V D L P K Y R V Y R N G E L T E E R T D I I D L W D K D M V G F L L G C S F			
UniRef90_UP10004789CEE	K D F P K Y R I Y K K G E L V G E Y T D I E E F W Q D D F V S F L I G C S F			
UniRef90_I4BYP1	T D L P K Y R V W K D G E L I D E P T D I V S Y W R D D L V A F L L G C S F			
UniRef90_W4F0H9	K D I P R Y R I Y R D G V F T E E V T D V T D Y W E D D M V C F L L G C S F			
UniRef90_E5WMK5	T D L P K Y R V Y K N G E L L A E E V T D I S P L W E E D M V G F L L G C S F			
UniRef90_UP100037E0CEE	Y D I A K Y R V Y R K G E F V E E V S N L E A Y W T K D M V G F L L G C S F			
UniRef90_D5DEN1	T D I P K Y R I Y E N G E L V K E E V T D I T D Y W T E D M V A F L L G C S F			
UniRef90_R7M0D1	Y D I P K Y R I Y R H G E L T D E E V T D L S G Y W R D D L V A F L L G C S F			
UniRef90_G7MBF7	K D I P K Y R V Y E D G I L T G E Y T N I D H L W R D D F V S F L I G C S F			
UniRef90_UP1000255BF32	T D L P K Y R I Y R H G E L V H D I L E Y W E D D M V A F L L G C S F			
UniRef90_R6QAZ7	K D F P K Y R I W K N G V L E K E E V T D I T D Y W R D D F V Y F L I G C S F			
UniRef90_J0USB7	N D F P R Y R I Y R N G I F T D E E V T S V A D Y W Q D D L V S F L I G C S F			
UniRef90_V6LZD8	T D I P K Y R V Y R N G E L T E E T T S I V E H V W Q D D M V A F L L G C S F			
UniRef90_Q2BME6	R D V P R Y R I Y R D G V L T E E V Q V D S E V W R D D L V T F V I G C S F			
UniRef90_R6IXA7	N D I P K Y R V Y E N G V M T G E Y T S V E H L W R D D F V S F L I G C S F			
UniRef90_T0CK09	T D L P K Y R I Y R H G E L T D E E V H D I L E Y W E D D M V A F L L G C S F			
UniRef90_K6P280	T D V P R Y R I W E N G V L K A E E V T D I R D Y W R D D L V G F L L G C S F			
UniRef90_A1HPE6	Y D I P K Y R V Y V K G Q L V E E V L D L E R Y W Q D D F V S F L I G C S F			
UniRef90_R5E3N5	T D I P K Y R I Y R N G E L L A E E V T D I R D Y W K Q D D F V T F L I G C S F			
UniRef90_T0Q343	T D L P K Y R I Y E H G Q L T A E E V T D I R D Y W K D D F V T F L I G C S F			
UniRef90_UP100047D39DD	R D I P K Y R V F E N G E L L K G E E Y E N V N A F W R D D L V S F L I G C S F			
UniRef90_UP10003834080	T D C L Q Y R I Y E H G V C T G S L E S L R E Y S E Q L K N M V T F Y I G C S F			
UniRef90_R7ABD2	T D L P K Y F I Y R D G V K V D E V T D V S S Y W K E D S V A F L I G C S F			
UniRef90_A4VN63	T D F P R Y R I Y R N G E L D Q E V Q D I T P F W E D D M V A F L I G C S F			
UniRef90_UP100037B97D2	K D I P K Y R V Y E N G I L R G E Y E D V E E F F W Q E D F V S F F I I G C S F			
UniRef90_B0K9K2	T D I P K Y R I Y K K G V L E A V N D I R D Y W R D D L V A F L L G C S F			
UniRef90_L5NEJ8	K D L P K Y R I Y I K K D G V L S E V T T D I T N A W T Q D M V G F L L G C S F			
UniRef90_UP10002492B2F	R D F P K Y R I Y E H G D M V K E V N D I T D F W R D D L V S F L I G C S F			
UniRef90_S2Y203	T D L P R Y R V Y R N G E V V D E P T D I K E Y Y W T D E M V G F L L G C S F			
UniRef90_R6ZXBO	A D I P K Y R I Y E N G V M T G E Y T N V E E K F W R E D L V S F L I G C S F			
UniRef90_UP100047A718F	K D I P K Y R I Y K K G Q L E K E V E D I T E Y Y W S E D M V S F L I G C S F			
UniRef90_UP10003681E70	T D L P A Y R V W R D G E L V D E P G D I T G Y W A D D L V T F L I G C S F			
UniRef90_H0USC6	T D I P R Y R V Y E N G G L A R E V T D A S P F W R E D L V A F L L G C S F			
UniRef90_R5MKJ8	T D I P K Y R I Y E K G V M T G E Y D S V E Q F W R D D L V A F L L G C S F			
UniRef90_R5L4R4	T D F P K Y R I W K N G V L T E E A H D I S D L W Q D D F V Y F L I G C S F			
UniRef90_I0XAL7	R D V P K Y R I W K N G Q L A G E Y T D V S E F W R D D L V T F V I G C S F			
UniRef90_UP1000376A413	Y D I P K Y R I Y K Q G V L V D E V L N L E N Y W R A D L V A F L L G C S F			
UniRef90_UP10004736335	T D L P K Y R I Y R E G V L T E I A D I T S L W E E D M V G F L L G C S F			
UniRef90_B1QZK0	T D I P K Y R I Y V E E D G L M T G E Y T N I K D F W R D D F V S F L I G C S F			
UniRef90_UP10004796F58	R D I P R Y R I F K D G Q L Q G E V D D V V I D Y W R D D L V S F L L G C S F			
UniRef90_G1KJE6	T D C P Q Y R I K Y E H G E C T G I L T S L E E Y S R Q L K D M V T F Y I G C S F			
UniRef90_H0Q293	F D V P R Y R I V W R K G E L V A E P T A I I D E L W Q P D F V T F V I G C S F			
UniRef90_A0A023DJV1	T D L P K Y R I I Y Q N G R F I K E V T D I V D I W R D D F V A F L L G C S F			
UniRef90_UP100047ED477	F D L P R Y R I I Y F R H G E L L I E E V T D I K E F W R G D F V A F L L G C S F			
UniRef90_UP10004786314	T D L P K Y R I W K E G Q L V A E E P E D I R E Y W R D D L V A F L L G C S F			
UniRef90_R5CL16	T D I P R Y R I I Y E K G I L T R E V E D A S P Y W R D D L V S F L I G C S F			
UniRef90_R5R889	T D I P Q Y R I I Y E N G E L T G M Y T D V S S F W R E D D L V S F L I G C S F			
UniRef90_W1GN73	T D I P R Y R I V W R D G E L L A K E E V T D A R E I W Q S H P D L V T F L I G C S F			
UniRef90_UP100028A15BB	T D V P K Y R I V Y I R G K L T D E P T D I C A Y W R N D F V T F L I G C S F			
UniRef90_F9DPVP8	T D V P K Y R I Y K D G V F T E V L D A S D Y W E E D M V C F L I G C S F			
UniRef90_J1H5P7	R D I P K Y R I Y R D G V M Q G E Y E D V S S F W R D D L V S F L L G C S F			
UniRef90_B1VIF7	T D I P K Y R I Y R D G E L L A G E Y P D V T E F F W R D D L V S F L I G C S F			
UniRef90_B9E7M1	T D V G E Y Y V Y R D G V H V E T R H D I K D L Y R E D M V A F I I G C S F			
UniRef90_UP100047C21F9	T D L P S Y K L F E N G E F T K E V T D I K E Y W R D D L V T F M L G C S F			
UniRef90_A7Z1F3	T D F P K Y R I Y R H G V L T E E V T D I T P Y W K D D D V G F L I G C S F			
UniRef90_B2A15	T D L P R Y R I Y R D G V K V S A E E V T D I N K Y W T Q D L V S F L L G C S F			
UniRef90_C7MLY7	T D F P R Y R I Y R D G E L T D E E V T D I A H L W R D D L V S F V I G C S F			
UniRef90_A8FA09	T D F P K Y R I Y R K G I L Q E E V S D I S A Y W E D D M V A F L L G C S F			
UniRef90_A1WS32	T D V P A Y R V Y R D G V L V G E V V D D L K A L W R D D F V A F V L G C S F			
UniRef90_Q6FH8	T D F P R Y R I W E Y G Q C V D V N D A T S I L W N N H P D L V T F L I G C S F			
UniRef90_D2Z6X5	R D I P R Y V W E N G V N I D E P T D V S S Y W R D D L V G F L L G C S F			
UniRef90_A0A024UW11	T D L P K Y R I I Y K H G V M T D E E V V D I K D Y W R D D L V T F L I G C S F			
UniRef90_V6MMX1	T D I P L Y R V W E N G K L A D E I T D A T K I W E Q H P D L V T F L I G C S F			
UniRef90_F7NG28	F E I P K Y R I Y V Q N G V L T A E E V T D I A A Y W R D D L V A F L L G C S F			
UniRef90_Q28HB9	T D C L Q Y R I K Y E N G V F S G N L N S I L E S Y T E Q L R D M V T F Y I G C S F			
UniRef90_G9PXT5	T D I P K Y R I V W E N G E L V D E P A D V K K Y W K E D L V A F L L G C S F			
UniRef90_E4KY28	T D V P R Y R I Y V K G E F V E E V K D L K D V W Q D D F V T F V I G C S F			
UniRef90_V9KBE8	T D C L A Y R R Y E E D G R L T G T M T S L R E Y T E Q M R D M V T F Y T G C S F			
UniRef90_Q4L9U2	T D V P K Y R I I Y E H G Q L I K E V D D I T D L Y T E D M V S F L I G C S F			
UniRef90_UP10003733CC1	T D L P R Y R I V W Q K G E L V A E E P Q S V E D D W W R D D L V S F V I G C S F			
UniRef90_C8WJT6	T D F P R Y R I I Y E H G K L V A E E V E N V E D D Y W R D D L V S F L I G C S F			
UniRef90_A0A011A466	R D I P R Y R I V Y E Y G A C T G E Y T D V S E L F E E R G K L V S F L I G C S F			
UniRef90_UP100036C53E7	T D L P L Y R V W R D G K L A E E V A D A S A A W A E H S D L V A F L L G C S F			
UniRef90_N8ZUT4	T D F P R Y R V W K D G E M V D E I N D A T E I Y N A H P D M V T F L I G C S F			
UniRef90_A9ILF0	S D I P R Y R V W R D G Q L A G E P T D V R D L W R D D L V A F L L G C S F			
UniRef90_R7WP88	T D L P A Y R V Y V D G E Q I A E V P D A T D Y W R S D L V A F L L V G C S F			
UniRef90_Q4ZZ54	T D L P L Y R V W R D G Q L A E E L S D V S H I W A Q H T D L V S F L I G C S F			
UniRef90_X1FLF1	T D I P K Y R I V Y E Y G E L K R E A T D I R P F W Q S D S V A F L L G C S F			
UniRef90_UP10002F94766	T D V P R Y R V W R D G E L V D E P T D I R D L W R D D L V A F L L G C S F			
UniRef90_Q12CN0	T D L P R Y R V W R H G E V V D E P A D I S A L W R K D L V T F V I G C S F			
UniRef90_F7NXW9	T D L P S Y R I F K Q G E L V D E V Q D I R A L W R H D L V S F L I G C S F			
UniRef90_UP10002626C4C	T D L P K Y R I Y K N G E K V D E V T D I S D H W S D D F V S F I I G C S F			
UniRef90_D4M7E8	T D I P R Y R V W E K G K C V D E P T D I T K Y W K R D D L V G F L I V G C S F			
UniRef90_UP100046356A1	T D I G R Y R I W R D G E L A D E T C D D I R D V W D E H R D D F V G F L I G C S F			
UniRef90_UP10002F12677	T D L P R Y R V W R H G E M V E V T D V K H L W R D D F V G F L I G C S F			
UniRef90_M7NEF5	T D V P K Y R I Y R N G E L A D E P T D L N E Y W T E D M V A F L L G C S F			
UniRef90_R7JVH0	K E I P Q Y R I Y K N G E L Q G E Y P E I S G F W R E D L V S F L I G C S F			
UniRef90_UP10002490CED	K D F P K Y R I Y E N G K M V S E P T D V A D L W R D D L V S F L I G C S F			
UniRef90_Q4FSQ4	S D V P M Y R I V E F G E L V A E E V S D L T D Y W R E D L V C F L I G C S F			
UniRef90_J0K5I0	S D V P L Y R I W R H G E L A E E V T D I K A F W R A D L V T F I G C S F			

QUERY	T	F	E	T	P	L	Q	E	A	G	I	V	R	H	T	D	G	C	N	V	P	M	Y	R	T	N	R	A	C	R	P	A	G	R	L	H	G	E					
UniRef90_Q5KY48	T	F	E	H	A	L	V	N	N	G	I	P	P	R	H	T	D	G	C	N	V	P	M	Y	R	T	N	R	A	C	R	P	A	G	R	L	H	G	E				
UniRef90_R5DBD7	T	F	E	S	A	L	S	A	L	E	A	G	P	P	R	H	Q	E	N	C	N	V	P	M	Y	K	T	N	I	P	A	C	T	P	A	G	R	F	E	G	P		
UniRef90_UPI0004789CEE	T	F	E	E	Q	A	L	L	N	N	G	I	P	P	R	H	E	E	K	R	N	V	P	M	Y	Q	T	N	I	P	C	C	I	P	A	G	R	F	K	G	P		
UniRef90_I4BYP1	T	F	E	S	A	L	D	A	G	G	I	P	P	V	R	H	E	C	G	C	N	V	P	M	Y	I	T	N	I	Q	C	C	I	P	A	G	R	L	S	G	P		
UniRef90_W4F0H9	T	F	E	T	P	L	L	A	S	G	I	P	P	V	R	H	E	E	G	G	N	V	P	M	Y	K	T	N	I	P	C	C	E	K	A	G	I	F	E	G	P		
UniRef90_E5WMK5	T	F	E	E	D	A	L	K	N	N	G	I	P	P	V	R	H	E	E	N	R	V	P	M	Y	K	T	N	I	P	C	C	V	G	A	R	F	E	G	P			
UniRef90_UPI00037E0CEE	S	F	E	T	A	L	L	K	N	N	V	I	P	P	V	R	H	E	E	G	C	N	V	P	M	F	I	T	N	I	P	C	C	T	P	A	G	V	F	S	G	P	
UniRef90_D5DEN1	T	F	E	H	A	L	N	N	D	I	P	P	V	R	H	E	E	N	E	C	N	V	P	M	Y	K	T	N	I	S	C	A	E	A	G	I	F	H	G	S	P		
UniRef90_R7M0D1	S	F	E	G	P	M	L	D	A	G	L	D	V	R	H	E	E	N	H	N	V	P	M	Y	I	T	N	I	P	C	C	I	T	P	A	G	V	F	H	G	P		
UniRef90_G7MBF7	S	F	E	S	L	L	E	A	G	I	P	P	V	R	Q	E	E	E	C	C	N	V	P	M	F	K	T	N	I	E	C	C	E	P	A	G	V	F	S	G	P		
UniRef90_UPI000255BF32	S	F	E	Q	A	L	L	E	N	N	V	I	P	P	V	R	H	E	E	N	K	N	V	P	M	F	T	I	N	K	Q	P	S	G	K	F	H	G	N	P			
UniRef90_R6QAZ7	S	F	E	S	E	L	L	E	A	D	I	P	P	V	R	H	E	E	N	K	N	V	P	M	F	T	N	I	K	L	Q	P	S	G	K	F	H	G	N	P			
UniRef90_J0USB7	S	F	E	S	E	L	I	A	A	G	I	E	I	P	R	H	E	E	G	V	N	V	P	M	Y	I	T	N	I	P	C	C	E	P	A	G	V	F	S	G	P		
UniRef90_V6LZD8	T	F	E	R	A	M	L	E	N	G	I	P	P	V	R	N	E	E	Q	D	C	N	V	P	M	Y	I	T	N	I	A	C	K	P	A	G	R	F	H	G	K	P	
UniRef90_Q2BME6	S	F	E	E	A	L	I	A	D	G	L	E	P	V	R	N	E	E	T	G	V	N	V	P	M	Y	R	T	N	I	A	C	E	P	A	G	V	F	H	G	K	P	
UniRef90_R6IXA7	S	F	E	S	E	L	I	A	A	N	V	P	I	P	R	H	E	E	G	R	N	V	P	M	Y	I	T	N	I	E	C	E	P	A	G	V	F	H	G	K	P		
UniRef90_TOCK09	T	F	E	Y	P	L	M	N	N	G	I	S	I	P	R	H	E	E	H	C	N	V	P	M	Y	K	T	N	I	Q	T	V	K	A	G	R	F	E	G	P			
UniRef90_K6P280	T	F	E	A	A	L	L	E	A	G	I	P	P	V	R	H	E	E	N	E	C	N	V	P	M	F	V	T	N	R	P	C	T	P	A	G	V	F	H	G	P		
UniRef90_A1HPE6	T	F	E	T	G	L	L	D	A	G	I	P	P	V	R	H	E	E	N	E	C	N	V	P	M	Y	I	T	N	R	Q	C	I	P	A	G	V	F	H	R	G	P	
UniRef90_R5E3N5	S	F	E	G	E	L	L	D	A	E	V	P	I	P	R	H	E	E	Q	G	R	N	V	P	M	F	I	T	N	I	P	C	E	P	A	G	V	F	H	G	N	P	
UniRef90_T0Q343	S	F	E	G	E	L	E	N	A	G	L	R	P	V	R	H	E	E	K	K	C	N	V	P	M	Y	I	T	N	I	P	C	D	P	A	G	V	F	S	G	P		
UniRef90_UPI00047D39DD	S	F	E	D	E	L	M	K	A	G	I	P	P	V	R	H	E	E	G	K	N	V	P	M	Y	I	T	N	I	E	C	C	P	V	A	G	V	F	S	G	P		
UniRef90_UPI0003834080	S	F	E	E	A	V	K	N	N	G	I	P	P	V	R	H	E	E	G	K	N	V	P	M	Y	K	T	N	I	A	C	C	V	S	T	F	C	C	G	P			
UniRef90_R7ABD2	S	F	E	E	A	L	M	K	A	G	I	P	P	V	R	H	E	E	N	G	C	N	V	P	M	Y	I	T	N	R	Q	C	I	P	A	G	V	F	H	G	N	P	
UniRef90_A4VN63	S	F	E	A	A	L	L	A	N	G	V	P	P	V	R	H	E	E	D	G	H	N	V	P	M	Y	R	T	N	I	A	C	Q	P	A	G	G	L	S	G	P		
UniRef90_UPI00037B97D2	S	F	E	S	E	L	I	K	N	R	I	P	P	V	R	H	E	E	E	C	N	V	P	M	Y	K	T	N	I	E	C	K	A	G	I	F	K	G	N	P			
UniRef90_B0K9K2	T	F	E	K	A	L	E	N	N	D	I	P	P	V	R	H	E	E	G	K	N	V	P	M	Y	I	T	N	I	E	T	R	P	A	G	V	F	H	G	K	P		
UniRef90_L5NEJ8	T	F	E	Q	A	L	L	E	N	N	G	I	P	P	V	R	H	E	E	N	R	V	P	M	Y	R	T	S	I	E	C	V	P	A	G	N	F	H	G	P			
UniRef90_UPI0002492B2F	S	F	E	E	E	L	L	Q	A	G	I	P	P	V	R	H	E	E	S	C	V	N	V	P	M	Y	D	T	N	I	P	L	K	S	A	G	R	F	H	G	N	P	
UniRef90_S2Y203	T	F	E	D	A	L	I	K	N	G	V	P	M	R	H	N	E	E	G	V	N	V	P	M	Y	K	T	S	I	E	T	S	P	A	G	K	F	A	G	P			
UniRef90_R6ZXBX0	S	F	E	S	E	L	L	D	A	G	I	P	P	V	R	H	E	E	T	M	G	C	N	V	P	M	Y	I	T	N	I	E	C	E	P	A	G	V	F	H	G	K	P
UniRef90_UPI00047A718F	T	F	E	N	M	E	A	G	V	I	P	P	V	R	H	E	E	E	S	A	G	S	N	V	P	M	Y	R	T	N	I	E	C	V	P	A	G	V	F	N	G	P	
UniRef90_UPI0003681E70	T	F	E	T	P	L	V	A	A	G	I	P	P	V	R	H	E	E	S	A	G	S	N	V	P	M	Y	R	T	N	I	E	C	V	P	A	G	V	F	H	G	P	
UniRef90_H0USC6	S	F	E	W	A	L	I	E	Q	G	G	I	P	P	V	R	H	E	E	N	V	V	S	M	Y	V	T	N	I	P	C	C	K	P	A	G	V	F	H	G	P		
UniRef90_R5MKJ8	S	F	E	S	E	L	D	S	G	I	P	P	V	R	H	E	E	H	K	N	V	P	M	Y	I	T	N	I	P	L	K	P	A	G	V	F	H	G	P				
UniRef90_R5L4R4	S	F	E	A	E	L	I	E	A	G	I	P	P	V	R	H	E	E	N	H	N	V	P	M	Y	I	T	N	I	E	T	N	P	A	G	V	F	H	G	P			
UniRef90_10XAL7	S	F	E	A	P	L	I	A	A	G	I	P	P	V	R	H	E	E	N	H	N	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P			
UniRef90_UPI000376A413	T	F	E	S	P	L	D	A	N	I	P	P	V	R	H	E	E	S	E	K	C	N	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P		
UniRef90_UPI0004736335	T	F	E	D	A	L	N	N	G	I	P	P	V	R	H	E	E	N	E	K	C	N	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P		
UniRef90_B1QZK0	S	F	E	S	D	L	E	E	N	G	I	P	P	V	R	H	E	E	N	E	K	N	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P		
UniRef90_UPI0004796F58	S	F	E	K	A	L	Q	E	S	A	V	I	P	P	V	R	H	E	E	N	H	N	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P		
UniRef90_G1KJE6	T	F	E	K	A	L	Q	E	S	A	V	I	P	P	V	R	H	E	E	N	H	N	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P		
UniRef90_H0Q293	S	F	E	Q	A	L	L	D	A	G	I	P	P	V	R	H	E	E	N	E	H	N	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P		
UniRef90_A0A023DJV1	T	F	E	E	A	L	I	N	Q	H	V	P	V	R	H	E	E	N	E	G	V	N	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P		
UniRef90_B2A15	S	F	E	S	F	F	L	Q	R	G	V	I	P	P	V	R	H	E	E	N	E	G	V	N	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P
UniRef90_C7MLY7	S	F	E	S	E	L	I	E	A	G	I	P	P	V	R	H	E	E	N	H	N	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P			
UniRef90_A8FA09	T	F	E	H	A	L	M	L	N	D	I	P	P	V	R	H	E	E	N	E	G	V	N	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P	
UniRef90_A1WS32	S	F	E	H	G	L	I	E	A	G	I	P	P	V	R	H	E	E	N	E	G	V	N	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P	
UniRef90_Q6FH8	S	F	E	S	A	L	L	N	N	G	I	P	P	V	R	H	E	E	N	D	N	V	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P		
UniRef90_D2Z6X5	S	F	E	A	L	M	E	A	N	I	P	P	V	R	H	E	E	N	R	N	V	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P			
UniRef90_A0A024UW11	T	F	E	D	A	L	Q	N	A	G	V	P	M	R	H	N	E	E	G	K	N	V	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G	P		
UniRef90_V6MMX1	T	F	E	T	P	M	L	E	A	G	I	P	P	V	R	H	E	E	Q	G	T	N	V	P	M	Y	I	T	N	I	E	C	V	P	A	G	V	F	H	G			

QUERY		170	180	190	200
UniRef90_Q5KY48	M	V V S M R P I P A D R V A E A S A I	S G R H G A P V H G E P G R L G N D L		
UniRef90_R5DBD7	M	V V S M R P I P H K D V V R A V Q V T S R H G A P I H G D P K L I G G H D I V			
UniRef90_UP10004789CEE	M	V V S M R P I P N D Q V K S A L I T G E H G A P I Q G N P E A I G G S D I V			
UniRef90_I4BYP1	M	V V S M R P I P E E Q V R A V Q V T S R H G A P V H G D P S I I G G K D D V			
UniRef90_W4F0H9	M	V V S M R P I P M K H A D A I R A V Q V I T S R H G A P I H G D P S R I I G G T D D V			
UniRef90_E5WMK5	M	V V S M R P I P T E K E A I R A V Q V V T S R H G A P V H G N P E A I G G R D D L			
UniRef90_UP100037E0CEE	M	V V S M R P I P E K M V V R A V Q V T S R H G A P V H V G S P E S I I G G R D D L			
UniRef90_D5DEN1	T	V V S M R P I P Q Q D V V R A A Q V T S R H G G P V H G D P A A I G G E D D L			
UniRef90_R7M0D1	M	V V S M R P I P T P K A A I R A I Q V T S R H G A P I H F G D P A A I G G Q D D V			
UniRef90_G7MBF7	M	V V S M R P I P H E Q V V K S V M V T G V H G T P I H I G F G N P A Q I G G K D D V			
UniRef90_UP1000255BF32	V	V V S M R P I P T E K Q A I R A V Q V V T S R H G A P I Q I G G N P E A I G G S D D L			
UniRef90_R6QAZ7	M	V V S M R P I P N D L V V K A V S M P R V H G A P I Q I G G N P E A I G G K D D V			
UniRef90_J0USB7	M	V V S M R P I P E N Q V V T A V N V T A V H G A P I Q I G G D P K S I I G G T D D I			
UniRef90_V6LZD8	M	V V S M R P I P H E Q V V R A V Q V V T S R H G A P V H I G G D P S V I I G G Q A I			
UniRef90_Q2BME6	T	V V S M R P I P K A A D A I R A V Q I P S V H G A P L H I G G D P S V I I G G S D I			
UniRef90_R6IXA7	M	V V S M R P I P Y D K I V T A V A M P K V H G A P I L I G G D P S V I I G G K D I			
UniRef90_T0CK09	M	V V S M R P I P H E D V I R A V Q V V T S R H G A P V H I G G D P A A I G G V D I			
UniRef90_K6P280	M	V V S M R P I P Q E Q V V R A V Q V T S R H G A P V H I G G D P E A L G G R D D L			
UniRef90_A1HPE6	M	V V S M R P I P E E Q V V K A V Q V T S R H G A P V H I G G D P A A I G G K D D L			
UniRef90_R5E3N5	M	V V S M R P I P Y Q K V V R A V A M P K V H G A P V H I G G D P A L I G G K D D L			
UniRef90_T0Q343	L	V V S M R P Y K P A D A I K A A M I T G R H G S P V H M G S P A D I G G A D D V			
UniRef90_UP100047D39DD	M	V V S M R P I P Y E L V P K A V L V T G E H G A P V H V G G D P K A I G G S D D L			
UniRef90_UP10003834080	L	V V T M R P I P E S Q L D A A V L A T S E H G A P I H I G D P G L L G G Q D D L			
UniRef90_R7ABD2	M	V V S M R P I P T P E N A Q K A K E I T D R H G G P V H Q I G G D P A A I G G K D D L			
UniRef90_A4VN63	M	V V S M R P I P A N K V V R A V Q V T S R H G A P V H V G G D P R L L G G A D D L			
UniRef90_UP100037B97D2	M	V V S M R P I P Y D Q M I K A V Q F P K V H G T P I H I G G D P K I I G G K D D I			
UniRef90_B0K9K2	M	V V S M R P I P Q N L V V R A V Q V V T S R H G A P V H I G G D P K A I G G A S L			
UniRef90_L5NEJ8	M	V V S M R P I P M K Q A D A I R A V Q V T S R H G A P V H I G G D P G K I G G K D D L			
UniRef90_UP10002492B2F	M	V V S M R P I P E E Q V V T A V R R M P K V H G A P I Q I G G D P E Q I G G N D D I			
UniRef90_S2Y203	T	V V S M R P M K E A D V I R A V Q V V T S R H G A P I H I G G N P E S I I G G K D D I			
UniRef90_R6ZXBO	M	V V S M R P I P Y D Q I V K A V Q V M P R V H G T P I H I G G D P S V I I G G K D D I			
UniRef90_UP100047A718F	M	V V S M R P I P K E L V E R A I E V T S V H G A P V H V G G S P K E I I G G L N D L			
UniRef90_UP10003681E70	M	V V S M R P I P A D R V A D A V R I S G V H G A P V H I G E P A A L G G S D D L			
UniRef90_H0USC6	M	V V S M R P I P H H M V S R A V L C T G R H G S P V H I G G D P W A I G G K D D L			
UniRef90_R5MKJ8	M	V V S M R P I P R D Q I V K A V N I T S V H G T P I Q I G G S P E E Q I G G K D D I			
UniRef90_R5L4R4	M	V V S M R P I P Y D L V V K A V N V T A V H G A P I H I G G A P E V I G G K D D I			
UniRef90_I0XAL7	M	V V S M R P I P Y N Q I V K A T T I T A R H G A P I H I V G G D P E E V I G G K D D I			
UniRef90_UP1000376A413	T	V V S M R P M S E K D A I R A I Q I T S R H G A P L H I V V G G D P K E I I G G Q Q D I			
UniRef90_UP10004736335	T	V V S M R P M P S R D V P R A V Q V T S R H G S P L H I G G S P K E I I G G Q Q D I			
UniRef90_B1QZK0	M	V V S M R P I P Y S E I V K S V L I S G V H G A P V H I G G D P N I I G G K D D I			
UniRef90_UP10004796F58	L	V V S M R P I P Y Q Q V V K A V V T I T S V H G A P V H I G G D P A L I G G Q D D I			
UniRef90_G1KJE6	L	I V T M R P I P Q D K L E V V V Q T T H R H G A P V H I G G N P G L L G G K N D I			
UniRef90_H0Q293	L	V V S M R P M T A A N A I R A I Q V V T S R H G A P V H I F G D P A E I I G G A D D I			
UniRef90_A0A23DJV1	M	V V S M R P M T P K D A I K S V Q I T S S H G A P V H I G G R P E D I G G Y Y N L			
UniRef90_UP100047ED477	L	V V S M R P L S P A D A I R A V Q I T S S H G A P V H I G G D P S A I I G G A D D I			
UniRef90_UP10004786314	L	V V S M R P I P H S L V P K A V L C T G R H G A P V H I G G D P A A I I G G A D D I			
UniRef90_R5CL16	M	V V S M R P I P Y E L V P K A V L I T G V H G A P I H I G G D P S H I G G A D D I			
UniRef90_R5R889	M	V V S M R P I P Y A L V P K A V Q V T G V H G A P V H I G G D P K V I G G H D D L			
UniRef90_W1GN73	L	V V S M R P V P A H Q V V A D A V T I T A R H G A P V H I G G E P Q A L G G Q D D I			
UniRef90_UP100028A15BB	L	V V S M R P M T E K Q A I R A V Q V T S R H G A P V H I F G N P E K I I G G H D D L			
UniRef90_F9DVP8	M	V V S M R P M T Y E N A I R A V Q I T A V H G A P I H I G G D P S Q I G G Q D D I			
UniRef90_J1H5P7	V	V V S M R P I P H E K V V K A V R M P Q V H G T P I H I G G D P E Y I G G R D D I			
UniRef90_B1VIF7	L	V V S M R P I P A S Q I L A D A V R V T S R H G A P V H I V G G D P A A I I G G S D D L			
UniRef90_B9E7M1	T	T V S M R P M T M A Q A I R A S E I T G A H G A P L H I G G D P A A I I G G K D D I			
UniRef90_UP100047C21F9	M	V V S M R P F L A A D A I R A T Q I P S V H G A P V H I L G G N P Q S I G G S S D D L			
UniRef90_A7Z1F3	M	V V S M R P I P E R L A V A R A Q V T S R H G A P V R I I G G S P E K I G G K D D L			
UniRef90_B2A15	M	V V S M R P I P E N K L T E A I Q I T S R H G A P V H I G G D P T V I G G K D D L			
UniRef90_C7MLY7	M	V V S M R P I P A E Q V V L A C Q I S G V H G A P V H I G G D P A M I G G A N V			
UniRef90_A8FA09	M	V V S M R P I P A H Q I T R S V Q V T S R H G G P I H I G G D P A M I G G A N V			
UniRef90_A1WS32	M	V V S M R P M K A A D A I R A V Q V T A R H G A P V H I G G D P A L I G G A D D I			
UniRef90_Q6F9H8	M	V V S M R P I P A A Q V S Q A V Q I T A V H G A P V H I G G D P K S L I G G A D D I			
UniRef90_D2Z6X5	M	V V S M R P I P A R Q V P K A V L C T G R H G A P V H I V G G D P E A I I G G K D D I			
UniRef90_A0A024UW11	M	V V S M R P F S P A D A I L A S V I T S R H G S P V H I G G D P D A I I G G A D D I			
UniRef90_V6MMX1	L	V V S M R P I P A N R I A D A V M I S G R H G S P V H I G G S P D A I I G G N D D I			
UniRef90_F7NG28	M	V V S M R P M P A S Q V V R A V Q I T S R H G A P V H I G G D P A V I I G G R D D I			
UniRef90_Q28HB9	L	V V T M R P V P Q D K L N A V V K I T H C H G A P V H I G G H P G L I G G E D D I			
UniRef90_G9PXT5	M	V V S M R P V K H A Q V P K A V L S T G R H G A P V H I G G D P A A I I G G K D D V			
UniRef90_E4KY28	T	V V S M R P V P Y K D V V K A T T V T A R H G A P V H I G G D P S V I G G K D D V			
UniRef90_V9KBE8	M	V V T M R P I P E E K L D T V V R V T H V H G A P V H I G G H P G L I G G E D D I			
UniRef90_Q4L9U2	I	T V S M R P M T M T Q A I K A T E I T S V H G T P I H I G T P E E L I G G T D D I			
UniRef90_UP10003733CC1	V	V V S M R P M S P K D A V R A V E I T S R H G S P I H I G G D P A Q I I G G A D D I			
UniRef90_C8WJT6	M	V V M S R P I P Y D Q V V K A V Q I S G V H G A P V H I V G D P D A I I G G V R D I			
UniRef90_A0A011A466	L	V V S M R P M P Y H Q V S G A V S M P K V H G A P V H I G G Y P E A L I G G K D D I			
UniRef90_UP100036C53E7	L	V V S M R P I I A P E R V A D A M I S G R H G S P V H I V G A P E R L I G G R D D I			
UniRef90_N8ZUT4	M	V V S M R P I P S H Q I T E A V R M P S V H G A P V H I G G N P Q D L I G G Q D D I			
UniRef90_A9ILF0	L	V V S M R P L K A A D A I R A I Q V T S R H G A P V H I L G D P A Q I I G G A D D I			
UniRef90_R7WP88	T	V V S M R P I P A S L V V A D A V R Y P G V H G A P V H I L G D P A A I I G G D D D L			
UniRef90_Q4ZZ54	M	V V S M R P I I A A D R V A E A A R I T G R H G A P V H I V G G E P E L I G G N D D L			
UniRef90_X1FLF1	M	V V T M R P I I P E K R V V Q A I Q I T A R H G A P V H I I G K P E S I I G G S N D L			
UniRef90_UP10002F94766	M	V V S M R P I I T A A Q A I R A V Q V T S R H G A P V H I H G D P A A I I G G A D D I			
UniRef90_Q12CN0	M	V V S M R P F K A S D A I R A I Q I T S R H G A P V H I M G D P A Q I I G G A D D I			
UniRef90_F7NXW9	M	V V S M R P M K P A D A I R A I Q I C S R H G A P V H I F G G N P Q A I I G G S D D L			
UniRef90_UP10002626C4C	M	V V S M R P M K P A D A I R A V Q I T S R H G A P V H I I G D P D A I I G G N D D L			
UniRef90_D4M7E8	M	V V S M R P I P H A Q V P K A V L C T G R H G A P I H I I G D P A A I I G G A D D I			
UniRef90_UP100046356A1	M	V V S M R P I Q P S Q V A Q A R I P G V H G A P V W V G D P A G I I G G G D I			
UniRef90_UP10002F12677	L	V V S M R P I I S P A D A I K S V Q I T S R H G A P V H I H W G D A A K I I G G N D D L			
UniRef90_M7NEF5	M	V V S M R P M G S G D V V R A V Q V T S R H G A P V H I I G N P E E I I G G R N D L			
UniRef90_R7JVH0	M	V V S M R P I P Y Q Q V V S K A V M V T G V H G A P V H I G G A P E Q I G G S D D L			
UniRef90_UP10002490CED	Y	V V S M R P I I P E S Q V V K V V A T I T E R H G A P V L Q I I G G D P A A I I G G T D D L			
UniRef90_Q4FSQ4	M	V V S M R P I P Y P L I T R A V Q A T S R H G A P V H I I G D P S V I I G G T D D L			
UniRef90_J0K5I0	M	V V T M R P M P A A D V I R A V Q V T S R H G A P V H I G D P S L I I G G A D D I			

QUERY		210	220	230	240
UniRef90_Q5KY48	S R P D F G D A V S I K P G E V P V F W A C G V T P Q A A V M A S G V P F A I T				
UniRef90_R5DBD7	Y K P D F G D P V T I R E G E T P V F W A C G V T P Q A V A M E V K P D I M T				
UniRef90_UP10004789CEE	M K P D F G D S V T I N E G E V P V F W P C G V T P Q A V A M N V K P D I V T				
UniRef90_I4BYP1	P T P D F G D A V T I N D G E V P V F W A C G V T P Q A A L M A S K P P F A I T				
UniRef90_W4F0H9	N T P D F G D A V T I K E D E V P V F W A C G V T P Q A V A M E S K P A I M T				
UniRef90_E5WMK5	Q R P D F G D P V T I R P G E V P V F W A C G V T P Q A V A M H V K P E I M T				
UniRef90_UP100037E0CEE	N K P D F G D A V T I R P G E V P V F W A C G V T P Q A V A M N T K P E L M T				
UniRef90_D5DEN1	H S P D F G D A V S I K E G E V P V F W A C G V T P Q A V A M E T K P S I M T				
UniRef90_R7M0D1	S K P D F G D P S T I R E G E V P V F W P C G V T P Q A V A M A V K P E E F M T				
UniRef90_G7MBF7	M S P D F G D S V E I K E G E V P V F W A C G V T P Q S V I M N V K P K I V T				
UniRef90_UP1000255BF32	A H P D F G D P V P I K P G E I P V F W P C G V T P Q A A V M N S K P E I A T				
UniRef90_R6QAZ7	T K P D Y G D S V T I N E G E V P V F W A C G V T P Q N A I M Q V K P E F V I T				
UniRef90_J0USB7	S K P D Y G D P V T I K P G E I P V F W P C G V T P Q N A I M Q V K P E F V I T				
UniRef90_V6LZD8	D R P D F G D P V T I R D G E V P V F W A C G V T P Q A V A M Q S K P E I M T				
UniRef90_Q2BME6	N K P D F G D A V T I K E G E L P V F W A C G V T P Q A A I E Q A K P E F C T				
UniRef90_R6IXA7	S K P D F G D A V T I P N G E V P V F W P C G V T P Q S A L M S T K P P I A T				
UniRef90_T0CK09	T K P D F G D S V S I R P N E V P V F W A C G V T P Q A I A M Q V K P D L M T				
UniRef90_K6P280	A K P D F G D P V T I R P G E V P V F W A C G V T P Q A V A M S A K P E F M T				
UniRef90_A1HPE6	S T P D F G D A V T I R P G E V P V F W A C G V T P Q A V A M T V K P E E L M T				
UniRef90_R5E3N5	T H P D F G D C V E I Q D G D V P V F W P C G V T P Q A A I M A A K P E L A I T				
UniRef90_T0Q343	N K P D Y G D A V T I R D G E V P V F W A C G V T P Q A V L A S R P A F A I T				
UniRef90_UP100047D39DD	N K P D F G D S V E I R D G E V P V F W P C G V T P Q A V V M N S K P D F C T				
UniRef90_UP10003834080	S K P D Y G D P V H I H P G D I P V F W A C G V T P Q A V E A I N C R A P L A F T				
UniRef90_R7ABD2	S K P D Y G D P V E I P V F W A C G V T P Q A A I E N A K L P L V I T				
UniRef90_A4VN63	A K P D F G E P S E L R E G E V P V F W A C G V T P Q A V A M Q A R P E L V I T				
UniRef90_UP100037B97D2	N N P E F G D S V T I K K D G E V P V F W P C G V T P Q S V V M N V K P S I V I T				
UniRef90_B0K9K2	D K P D F G D P V E I K K A G E V P V F W A C G V T P Q A V A M K S K P E I M T				
UniRef90_L5NEJ8	N S P D F G E S V T I H R D E V P V F W A C G V T P Q A V A M Q Q K P D I M T				
UniRef90_UP10002492B2F	D H P D Y G D A V T I K P G E V P V F W P C G V T P Q N V I M Q T K P D F V I T				
UniRef90_S2Y203	Q H P D F G D A V T I K D G E V P V F W A C G V T P Q A I A M H M K P P L M T				
UniRef90_R6ZXBO	Y K P D F G D A V P I K E G E V P V F W C C V T P Q S V V M S V K P S F C T				
UniRef90_UP100047A718F	D Q P D F G D A V T I K K E G E V P V F W A C G V T P Q A A I M R V K P E V V I T				
UniRef90_UP10003681E70	S T P D F G D A V E I K P G E V P V F W A C G V T P Q A A I M A S R P P F A I T				
UniRef90_H0USC6	A K P D F G D P V T I K K D G E I P V F W P C G V T P Q A V A M A S G L P F M S T				
UniRef90_R5MKJ8	N K P D F G D A V T I V K P G E T P V F W A C G V T P Q S I M M N S K P D F C T				
UniRef90_R5L4R4	F S P D Y G D A V T V N D G E V P V F W P C G V T P Q S V V M N S K P P M A I T				
UniRef90_I0XAL7	S K P D F G E P S T I K K A G E V P V F W C C V T P Q S V V M N S K P D F C T				
UniRef90_UP1000376A413	N K P D F G D S V T I K K P G E I P V F W A C G V T P Q A V A M A V K P E I M T				
UniRef90_UP10004736335	D H P D F G D A V T I H E G E V P V F W A C G V T P Q A V A M E V K P S I M T				
UniRef90_B1QZK0	N K P D H G D R V T I K K E G E V P V F W P C G V T P Q S V I M N V K P K I V I T				
UniRef90_UP10004796F58	S K P D F G D A V R I L P G E V P V F W A C G V T P Q A A V I R S K P S F V I T				
UniRef90_G1KJE6	S S P D Y G D A V Q A H P G D V P V F W A C G V T T G I E A V C N C K S S L A F T				
UniRef90_H0Q293	A K P D F G D P V E I L P G E V P V F W A C G V T P Q A A V M E A K P E L C T				
UniRef90_A0A023DJV1	D K P D F G D P V T I K K E G E V P V F W A C G V T P Q A V A I E S N C K F M I T				
UniRef90_UP100047ED477	N S P D F G D T V T I R E G E I P V F W A C G V T T Q T A I V Q A K P E I A T				
UniRef90_UP10004786314	R Q P D F G Q A V P I H E G E T P V F W A C G V T P Q A A L M A S R P P F A T				
UniRef90_R5CL16	D H P D Y G D R V T I R E G E V P V F W P C G V T P Q N V I M Q S K P D Y V I T				
UniRef90_R5R889	U K P D F G D A V T I K K E G E V P V F W P C G V T P Q A V V M A S R V P F A V S T				
UniRef90_W1GN73	N K P D F G D P V T L R P G E I P V F W A C G V T T Q A V I V Q A K P E I A T				
UniRef90_UP100028A15BB	S H P D F G D A V T I K P G E I P V F W A C G V T P Q A A V M A S R P E I A T				
UniRef90_F9DVP8	D K P D F G D S V T I K D G E I P V F W P C G V T P Q A V A M Q S K P S I M T				
UniRef90_J1H5P7	H H P D F G D P V T I K K E G E V P V F W A C G V T P Q A V V M N V K P P F V I T				
UniRef90_B1VIF7	A S P D Y G D A V E I P D G H I P V F W A C G V T P Q A A V M E T K P S L A A T				
UniRef90_B9E7M1	N T P D F G E A V E I R D G E V P V F W G C G V T P Q S V C L N V K P E L M T				
UniRef90_UP100047C21F9	N V T D F G D P V T I H E N E E L P V F W A C G V T P Q V A L E Q A K P P F C T				
UniRef90_A7Z1F3	H Q P D F G D A V T V H E N E E L P V F W A C G V T P Q A V I M E A K P D I V I T				
UniRef90_B2A15	D S P D F G N R V N V E S G E I P V F W A C G V T P Q A V I M N Y R P E F V I T				
UniRef90_C7MLY7	S Q P D F G D A V D I N P G E I P V F W A C G V T P Q A V V M N V K P H F A I T				
UniRef90_A8FA09	D Q P D F G E T S V I K E G E V P V F W A C G V T P Q A V V M H T K P E I A T				
UniRef90_A1WS32	T Q P D F G D A V R I A P D E L P V F W A C G V T P Q A V V M A A K P A L C T				
UniRef90_Q6F9H8	S K P D F G D F P R I L D G E I P V F W A C G V T P Q A A V M R S K V P F A I S T				
UniRef90_D2Z6X5	S K P D F G D S V T I R P G E I P V F W G C G V T P Q A A L M A S K P P F A I T				
UniRef90_A0A024UW11	S K P P N Y G D A V T I R P G E I P V F W A C G V T P Q N V L L A S K P A F A I T				
UniRef90_V6MMX1	M S P D F G S P V R I E E G E I P V F W A C G V T P Q A A V M R S G V P F A L S T				
UniRef90_F7NG28	M K P D F G D S V T I H P G E T P V F W A C G V T P Q A V A M T V K P E I M T				
UniRef90_Q28HB9	Q K T D Y G D P V Q L H P G D I P V F W A C G V T T G A E A V S S C K S S L A F T				
UniRef90_G9PXT5	G K P D F G D A V E I I R E G E T P V F W A C G V T P Q A V L M K S K P P F A I T				
UniRef90_E4KY28	D K P D F G E R S E I K K E G E V P V F W A C G V T P Q A V A M A S K P E I M T				
UniRef90_V9KBE8	S S P D F G D A V E A H P G D I P V F W A C G V T T G M E A V Q S C G S P L A F T				
UniRef90_Q4L9U2	D K P D Y G E A V T I I K P N E M P V F W G C G V T P Q S V A L D A K P E L M T				
UniRef90_UP10003733CC1	D K P D Y G D A V S I V R A G E I P V F W A C G V T T P Q A A I A R V K P E F C T				
UniRef90_C8WJT6	M H P E F G D P V E I I R D G E I P V F W A C G V T P Q S I V M N S K P P F A I T				
UniRef90_A0A011A466	C K P D F G D P V T I I Y D G E I P V F W P C G V T P Q A A V V M N S R P P F V I T				
UniRef90_UP100036C53E7	A R P D F G D P V R I E E G E I P V F W A C G V T P Q A A V V M A S G V P F A I T				
UniRef90_N8ZUT4	A Q P D F G D A S R I E Q G E I I A V F W A C G V T P Q A A V V M N S K I P F A I S T				
UniRef90_A9ILF0	N R P D Y G D A V E I I R P G E I I P V F W A C G V T P Q S V V A A V R P K F C T				
UniRef90_R7WP88	A R P D Y G E A V T I I R P G E I I P V F W A C G V T P Q A A V V T A S K P P F A I S T				
UniRef90_Q4ZZ54	A N P D F G D A V T I I R P G E I I P V F W A C G V T P Q A V V V M A S R V P F A I S T				
UniRef90_X1LFL1	S Q P D F G D A I R I I K P D E I I P L F W V C C G V T P Q A V A Q N A K L P L L I S S				
UniRef90_UP10002F94766	G K P D Y G D P V E I I R P G E I I P V F W A C G V T P Q S V I E H A R P P F S I T				
UniRef90_Q12CN0	A R P D Y G D A V T I I R P G E I I P V F W A C G V T P Q A A I A Q A R P E F C I T				
UniRef90_F7NXW9	R S P D Y G E A V S I I L P D E I I P V F W A C G V T P Q V I V K Q A K P D F C I T				
UniRef90_UP10002626C4C	S K P D F G D Q V A I I H A D E V P V F W A C G V T P Q S V V M E S D I E M M T				
UniRef90_D4M7E8	T K P D F G D A V D I I R R G E T P V F W A C G V T P Q A A I I M A A C P P F A I T				
UniRef90_UP100046356A1	A H P D Y G D A P V L I I Y D S E V P V F W A C G V T P Q A A V V M A S R V P F A I T				
UniRef90_UP10002F12677	D K P D F G D A V T V I R E G E T P V F W A C G V T P Q S V A M H A K P S L M T				
UniRef90_M7NEF5	T K P D Y G D A V A V L I M P G E I I P V F W A C G V T P Q S A I I L H A Q P A F C I T				
UniRef90_R7JVH0	D R P D F G D M V T I R P G E I I P V F W P C G V T P Q N V I M E S K P D F C T				
UniRef90_UP10002490CED	D H P D F G D A V D I I H P G E I I P V F W A C G V T P Q Q V V V M Q S K P E F V I T				
UniRef90_Q4FSQ4	H S P D F G D A S L I I K P G E I I P V F W A C G V T P Q S I A M T S K P E L M T				
UniRef90_J0K5I0	T K P D Y G D A V A V L I M P G E I I P V F W A C G V T P Q S A I I L H A Q P A F C I T				

QUERY	H	S	P	G	Y	M	F	I	T	D	V	P
UniRef90_Q5KY48	H	A	P	G	H	M	F	I	T	D	L	
UniRef90_R5DBD7	H	A	P	G	H	M	L	I	T	D	V	
UniRef90_UPI0004789CEE	H	A	P	G	H	M	L	I	T	D	V	
UniRef90_I4BYP1	H	A	P	G	H	M	F	V	C	D		
UniRef90_W4F0H9	H	G	P	G	C	M	F	I	S	D	L	
UniRef90_E5WMK5	H	A	P	G	H	M	F	I	T	D	L	
UniRef90_UPI00037E0CEE	H	A	P	G	Y	M	F	I	C	D		
UniRef90_D5DEN1	H	A	P	G	H	M	F	I	T	D	I	
UniRef90_R7M0D1	H	A	P	G	H	M	F	I	T	D	V	
UniRef90_G7MBF7	H	S	P	G	H	M	L	I	T	D	I	
UniRef90_UPI000255BF32	H	A	P	G	H	M	F	I	T	D		
UniRef90_R6QAZ7	H	S	P	G	H	M	F	I	T	D	I	
UniRef90_J0USB7	H	A	P	G	H	M	L	V	T	D	I	
UniRef90_V6LZD8	H	A	P	G	H	M	F	I	T	N	L	P
UniRef90_Q2BME6	H	S	P	G	H	M	L	I	T	D	L	
UniRef90_R6IXA7	H	S	P	G	H	M	L	I	T	D	V	
UniRef90_T0CK09	H	A	P	G	H	M	L	I	T	D		
UniRef90_K6P280	H	A	P	G	H	M	F	I	T	D		
UniRef90_A1HPE6	H	A	P	G	H	M	F	I	C	D	I	
UniRef90_R5E3N5	H	A	P	G	H	M	F	I	T	D	V	
UniRef90_T0Q343	H	A	P	G	H	M	F	V	T	D	V	P
UniRef90_UPI00047D39DD	H	S	P	G	H	M	F	I	T	D	V	
UniRef90_UPI0003834080	H	S	P	G	C	M	F	I	T	D	L	
UniRef90_R7ABD2	H	A	P	G	H	M	F	I	T	N	V	
UniRef90_A4VN63	H	A	P	G	H	M	F	I	T	D	L	
UniRef90UPI00037B97D2	H	S	P	G	H	M	L	I	T	D	I	
UniRef90_B0K9K2	H	S	P	G	H	M	F	I	T	D	L	
UniRef90_L5NEJ8	H	A	P	G	H	M	F	I	T	D		
UniRef90_UPI0002492B2F	H	A	P	G	H	M	L	V	T	D	V	
UniRef90_S2Y203	H	A	P	G	H	M	F	I	T	D	L	
UniRef90_R6ZXBO	H	A	P	G	H	M	L	I	T	D	I	
UniRef90UPI00047A718F	H	A	P	G	H	M	F	I	T	D	V	
UniRef90_UPI0003681E70	H	A	P	G	H	M	F	V	T	D	V	P
UniRef90_H0USC6	H	S	P	G	H	M	F	I	C	D	V	
UniRef90_R5MKJ8	H	A	P	G	H	M	L	I	T	D	V	
UniRef90_R5L4R4	H	A	P	G	H	M	F	I	T	D	V	
UniRef90_I0XAL7	H	A	P	G	H	M	L	I	T	D	I	P
UniRef90UPI000376A413	H	A	P	G	Y	M	F	V	S	D	L	
UniRef90_UPI0004736335	H	A	P	G	H	M	L	I	T	D	I	
UniRef90_B1QZK0	H	A	P	G	H	M	L	I	T	D		
UniRef90UPI0004796F58	H	A	P	G	H	M	F	I	T	D	I	
UniRef90_G1KJE6	H	S	P	G	C	M	F	I	T	D		
UniRef90_H0Q293	H	A	P	G	A	M	L	I	T	D	L	
UniRef90_A0A023DJV1	H	A	P	G	H	M	F	V	S	D	L	
UniRef90UPI00047ED477	H	A	P	G	H	M	F	I	T	D		
UniRef90_UPI0004786314	H	S	P	G	H	M	F	L	C	N		
UniRef90_R5CL16	H	A	P	G	H	M	F	I	T	D	V	
UniRef90_R5R889	H	A	P	G	H	M	L	V	T	D	V	
UniRef90_W1GN73	H	A	P	G	H	M	F	I	T	D	I	P
UniRef90UPI00028A15BB	H	A	P	G	Y	M	F	I	T	D		
UniRef90_F9DPVP8	H	A	P	G	C	M	F	I	G	D	I	
UniRef90_J1H5P7	H	A	P	G	H	M	F	I	T	D	M	
UniRef90_B1VIF7	H	A	P	G	H	M	L	V	T	D		
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UniRef90_Q6F9H8	H	A	P	G	Y	M	L	I	T	D	V	P
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UniRef90_F7NG28	H	S	P	G	H	M	F	I	C	T	D	
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UniRef90_E4KY28	H	A	P	G	Y	M	L	I	L	D		
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UniRef90_Q4L9U2	H	S	P	G	H	M	F	I	T	D	I	
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 D P A T M T P E Q A R A A F R A G T V | A P T S G W A T G F T Q T N L | I A V P  
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UniRef90_UPI000371FFF4	T F E E W A L A A A G V P L R H D Q G T N V P M Y A T T R A C R A A G R L H G P	
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UniRef90_F4GUZ2	L V V S M R P M K A S D A I R A V Q I T S R H G A P V H L G D P A L I G Q N I				
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UniRef90_K9R974	L V V S M R P L S A S D V V R A V Q I T S R H G T P I H F G S P E D I G T N L				
UniRef90_Q1N2J9	M V V S M R P F K P A D A I R M I Q C S R H G S P V H F F G N P E D I G S N I				
UniRef90_U1ENX1	T T V S M R P M T V A Q A L K A T E I T D V H G T P L H F G D P E T I G K N I				
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UniRef90_U4KJ01	M V V S M R P F L A A D A I R A I Q V T S R H G A P V H I G D P K L I G D D I				
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UniRef90_A6TSF6	L V V S M R P I P A H L V D K A V E T A P H G A P V H I G L P E A I G K D I				
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UniRef90_G4RBR2	M V V S M R P F T P A D A I R A I V L S S A H G A P V H L G D P S A I G A D I				
UniRef90_S5SXE6	Y V A S M R P M K P A E A I R A I E I T S R H G A P V H F G D P S A I G A D I				
UniRef90_J3CZE3	M V V T M R P L K A A D A I R A I Q V I T S R H G A P V H I G D P A A L G S D I				
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UniRef90_K1DY39	L V V S M R P M P A E Q V A T A V R V T S R H G A P V H I G D P E M I G R D I				
UniRef90_UP1000405DCFD	T V V S M R P F K Q S V V D D V I R T S M H G G P V H A G D P E M I G K D I				
UniRef90_UP10003B57ACB	L V V S M R P Q P A N R V A D A V R I T S R H G A P V H V G D P A G I G A D I				
UniRef90_UP10002E77EA0	L V V S M R P V P A Q V A D A V R I T S R H G A P V Q V G G N P G A I G A D I				
UniRef90_L9PDX2	M V V S M R P M K A A D A I R A I Q V I T S R H G A P V H L G D P S L G A D I				
UniRef90_C3PED1	M V V S M R P I L A N Q V S D A V R I T S R H G A P V H V G D P A A I G E D I				
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UniRef90_B7RWR5	M V V S M R P F K A A D A I R A I Q V I T S R H G A P V H M G D P G L G D N L				
UniRef90_A4YR32	M V V S M R P F K P A Q A I R A V Q I T A V H G A P V H L G L P E Q I G A D I				
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UniRef90_UP10003C83FB8	L V V T M R P V P K D K L E R L Q V Q I S G E Q G Q P V H I G D P G L L G K D I				
UniRef90_Q28P75	M V V T M R P I P E A M V D K A H G I T S R H G A P V H I G D P P A L G A D I				
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210            220            230            240

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UniRef90_Z5XP66	N K P E F F G D A V T I K N G E V P V F W A C G V T P Q I A I A N A A P D F C   T T	
UniRef90_UP1000371FFF4	D A P D F G D P V A R E P G D V P V F W A C G V T P Q A A V M A S R P P F A   T T	
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UniRef90_F5SIQ9	N R P D Y G D A V T V R P G E L V P V F W A C G V T P P Q A V A M A S R P E W M   T T	
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UniRef90_F7QKV6	A K P D Y G D A V S I Q P D E M P V F W A C G V T P P Q S V I L Q S R P S F A   T T	
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UniRef90_H1LEB5	N H P D Y G D S V T I N P G E Q P V F W P C G V T P P Q N V I M Q T K P P L V   T T	
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UniRef90_W5N6H3	S R P D Y G D A V E L Q P Q G D V P V F W A C G V T G V E A V R S C K S P L A F   T T	
UniRef90_K4KMV5	D T P D Y G D A V T I K P D E V P V F T A C G V T P P Q A A I M Q A K P D F C   T T	
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UniRef90_S3AZK7	S R P D F G D P V E M R P G D V P V F W A C G V T P P Q A A V M A S R P P F A L   T T	
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UniRef90_UP1000316C788	S S P D F G D P V T I K D D E I V P V F W A C G V T P P Q L A I A N A R P P I A   T T	
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UniRef90_A6TSF6	N K V D F G E P P N I K E G E I V P V F W A C G V T T P Q M A L K N A R P E L V   T T	
UniRef90_A8HRQ8	S K P D Y G D A V E I L E G E I V P V F W A C G V T T P Q S V I S A A K L E Y A   T T	
UniRef90_M5ITS4	Q Q P D Y G D A V P V G S D E I L P V F W A C G V T T P Q A V A Q A K P Q L C   T T	
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UniRef90_S5SX6	T N P D Y G D P V P I R E G E V P V F W A C G V T T P Q V A L A N A K P P I A   T T	
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UniRef90_W4L5R4	H A P G Y M F I S D
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UniRef90_K0Q010	H A P G H M L V T D M
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UniRef90_R6IQB4	H A P G H M L I T D   P
UniRef90_F5SIQ9	H A P G H M L I T D M
UniRef90_A1AYU1	H A P G Y M F I T D   V P
UniRef90_I2BBK2	H A P G H M F I T D   P
UniRef90_F7QKV6	H A P G F M L V T D V
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UniRef90_H5XIQ4	H A P G H M A I T D
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UniRef90_W5N6H3	H S P G C M F L S D
UniRef90_K4KVM5	H S P G C M L V T D   P
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UniRef90_UPI00037311C3	H A P G H M L V T T D V P
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UniRef90_E9V0C6	T F E A G L T D A G I P I R H Q E L G R N V P M Y R T S R A C A P A G R L R G D
UniRef90_UPI00037105FA	T F E E A A L Q E A G I P I A H D Q Q G V N V P M Y R T S V P C E P A G R L S G P
UniRef90_R9LWC7	S F E E A L M K A G I E I R H I A T G R N V P M Y K T N I Q T V K A G P F E G P
UniRef90_D7WE71	T F E E D A L I A E G I P P V A H I E Q G R N V P M Y L T T I E T E P A G V F G G P
UniRef90_UPI000255D0BF	T F E E T P L R A G I P L R H Q Q L G I N V P M F R T T R C A P A G M L S G P
UniRef90_M2XA29	T F E E A A L L E A G I L P L R H Q D Q G V N V P M Y R T S I P A G S A G R L H G P
UniRef90_K0K724	T F E E S A L A R A G V P P L R H V D Q G R N V P M Y V T D R E C R P A G R L H G P
UniRef90_D9WJK3	T F E E T A L A A A G V P P L R H I E Q G R N V P M Y V T D R Q C R P A G R L S G P
UniRef90_K6YCM2	S F E E A L I A A G I P E I R H N S E A K N V P M Y K T N I D T Q G V A Q F T G K
UniRef90_J9IT33	S F E E S A L I Q Q A G I L P I R H E E H K N V P M Y K T N I P C K P A G I F H G N
UniRef90_UPI00034CB159	T F E E H A L L E A G I P I R H L E E G H N V P M Y M T N I P A A D S G Q F S G N
UniRef90_D1NW77	T F E E F P L M D H G I A V R H D A K R N V P M Y N T S I P C E P A G D F H G N
UniRef90_B3RAC1	S F E E Q A L L A A N V P L K H N L G R N V A M Y R T A I E T R P A G R L S G K
UniRef90_B2TBH5	S F E E M L R R E G I E E Q V N V P M Y R T R E R N V A A G V F G G N
UniRef90_UPI00034AE5DE	T F E E S Q L V K N G I R I R H I D C N K N V A M Y K T N I E T T P A G P F K G P
UniRef90_K6WW19	T F E A P M M A A G I P I A H V D Q G R N V P M Y R T S V R A E S A G R I G G P
UniRef90_E3BHH5	S F E Q L L Q R S G L G I E I R H N E E K K N V S M Y R T N I P Q C A S A G P F A G N
UniRef90_A0Z268	S F E E A L L L A G G L E I R H S E G V N V P M F R T N Q P C A S A G P F A G N
UniRef90_UPI00046B03E8	S F E E H A L L M E A G V P P L R H I A M S R N V A M Y R T S V I D T I G T S R L A G K
UniRef90_UPI00047630A2	T F E E H G L L E A G V P P V R H L E A G R N V P M Y R T N Q R C I P A G R F D G P
UniRef90_T2BDJ4	S F E E A L L L E K G L L E I R H I S N K C N V P M Y K T N I I A C K S V G V F S G E
UniRef90_Q8EL49	T F E E A L L I E K G L L R L L H Q E Q E R V V P M Y K T N I P C E K A G R F E E G N
UniRef90_W7UBN6	S F E E A L K A L I E N G I L S V R H L E E G G R N V P M Y K T N I P C R P A G P F Q G N
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UniRef90_W5K3D8	S F E E Q A L E K A N V P V R H V Q Q Q G R N V S M F R T S V P C V R A G P F H C P
UniRef90_C5C6R6	T F E E S A L V A E G I P V R H I M A Q D A G V N V P M Y R T T R C A S A G R L S G P
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UniRef90_A0A031G4C6	S F E N A I I L N A G I E I R H I T A R R N V P M Y K T N I P T V Q N G P F K G N
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UniRef90_UPI00037B0882	T F E E S A L M D A G L P L R H I D S G C N V S M Y K T N I I A C K P K G V F S G N
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UniRef90_UPI00047954B1	T F E E S I L Q Q E G I P L R H I E E N K N V A M Y V T D R P T K A T T M F H G P
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UniRef90_UPI0002375405	S F E E Q M L L R A G I A L R H V A Q H K N V A M Y R S Q I P N K A A G P F F G G Q
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UniRef90_C3KLZ6	S F E E S A I L T R A G I V D I R H V S A N R N V P M Y A T N L P T S P A G P F A G S
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170 180 190 200

L V V S M R P   P A G L V D Y A A R I   S G V H G G P   V H F G N P K A L G   A D L		
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L V V S M R P   P P E D K L D A T A Q C   T H A H G G P   V H F G D P K L L G   R D D L		
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M V V S M R P   L R A A D A I R A I Q   T T R H G A P   V H F G D P S L I G   Q D D V		
M V V S M R P   F N G A D A I R A I Q   T G R H G A P   V H F G D P S L I G   A D D V		
L V V S M R P   M K A A D A I R A I Q   T G R H G A P   V H F G D P S L I G   A D D V		
L V V T M R P   P S D L V P K A V T V   T G V H G A P   V H F G N P E R L G   R D D L		
M V V T M R P   L K S R D V A K V V E   S G R H G A P   V H F G N P E A I G   T D D L		
T V [C] S M R P   M T R E Q A A L A Y K I   T A V H G A P   V H F G K P E E I G   A D I		
M V V S M R P   L R A A D A I R A V Q   T S R H G A P   V H F G D P A L I G   R S I		
M V V S M R P   M S Q A F A I R A S L V   T S V H G A P   V H F G D P A A I G   E T I		
M V V S M R P   F S P A N A I R A I Q   C S R H G A P   V H F M G D P A A I G   A D I		
I T V S M R P   M T M Q Q A I K A T E   T N V H G T P   V H F G N P S E I G   E N I		
L V V S M R P   M L P M Q A L A A S K I   C E R H G G P   V H F V G D S S A I G   H D		
L V V S M R P   M S A A H A I R A I Q   T R V H G A P   V H F G D P A L I G   S D I		
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UniRef90_D7WE71	M V V S M R P   I P V N R V A D A V R   V T S R H G A P   V H F V G D P A A I G   K D D L	
UniRef90_UPI000255D0BF	L V V S M R P   I P A E Q V A D A V R   V T P G V H G A P   V H F V G D P A A L G   G D D L	
UniRef90_M2XA29	T V V S M R P   L P G S M V A D A V R   V T S R H G A P   V H F V G D P A A I G   E D D L	
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UniRef90_K6YCM2	M V V S M R P   L K P E D V N K A I E   I C S V H G A P   V H F V G K P S E I G   S S D I	
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UniRef90_UPI00034CB159	I T V S M R P   M T M Q Q A I K A T E   I T S R H G T P   M H I G A P S E I G   S S N I	
UniRef90_D1NWV7	M V V S M R G   P G S Q V A Q A V Q Y   P S V H G A P   V H F V G D P S A I G   S D I	
UniRef90_B3RAC1	L V V S M R P   L K A A D A I L A T E   I T A R H G A P   V H F I G D P R L G   E D I	
UniRef90_B2TBH5	R V V S M R P   M K A A D A I R A I Q   I T S R H G A P   V H F I G D P S L G   R D D L	
UniRef90_UPI00034AE5DE	L V V S M R P   I K N K D L D L A K A   I T N M H G G P   V H F H A G D P L L G   E N I	
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UniRef90_E3BHH5	T V V S M R P   F T A S D A I R A I Q   I T A R H G A P   V H F I G D P A L G   N N I	
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UniRef90_UPI000370EC32	M V V S M R P   I P A S Q V A D A V R   V T S R H G A P   V H F V G D P A A I G   G D D L	
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UniRef90_F7Z9W7	M V V T M R P   I P Q A Q V D Q A R E   S R R H G A P   V H F I A V G D P A Q I G   P D D L	
UniRef90_UPI0003B3A6FA	V V V S M R A   M P A A D A I E A V Q   C A R H G A P   V H F I L G D P S R I G   A D I	
UniRef90_B5FEB2	Y V V S M R P   F T S I D A I R A I Q   I T T R H G A P   V H F I F G D P S L I G   N D I	
UniRef90_W5K3D8	M V V S M R P   I P Q D K L D S A A Q C   T H H H G G P   V H F I I G H P A L L G   K D D L	
UniRef90_C5C6R6	L V V S M R P   I P A D R V A D A V R   I T S R H G A P   V H F V G D P A G L G   T D D L	
UniRef90_I3K0U3	L V V T M R P   V P A A L L D S A A V K   V T A H A H G A P   V H F V G D P A L L G   Q D D L	
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UniRef90_B8KSD3	M V V S M R P   M K P A Q A I R A I Q   I C A R H G A P   V H F I F G Q P E A I G   N D I	
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UniRef90_F6CX38	UniRef90_UPI000364DCF7	T V V T M R P   Y T P K E A I R A I Q   I T T R H G A P   V H F I F G T P Q D I G   H D D L
UniRef90_UPI0002FC3E8C	T V V S M R P   L K A A D A I R A V Q   I T A R H G A P   V H F I I G D P A L L G   A D D L	
UniRef90_E7RDW4	UniRef90_UPI00047954B1	L V V S M R P   V A E Q D I V R A V Q   V T S R H G A P   V H F I I G H P E T I G   T D D L
UniRef90_F2JVD6	L V V S M R P   V P Q K L V Q K A S E   V T A S H G A P   V H F I A G N P S V G   A D I	
UniRef90_UPI0002D3E9F1	T V V T M R P   Y T P K D A I R A I Q   V T T R H G A P   V H F I F G D P S S I G   N D D L	
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UniRef90_UPI0003945103	L V V S M R P   I P E S K L G A A V S A T   I S T A S H G A P   V H F I F G D P G L L G   Q D D L	
UniRef90_UPI000307FEB1	L V V S M R P   F D E S E V E T V R   I T T G Q H G G P   V H F Y G S P H E I G   R D D L	
UniRef90_UPI000380A7B3	L V V S M R P   L N T D D T I K A I Q   I S S R H G A P   V H F I L G D P A Q I G   K D D L	
UniRef90_M9RAF5	M V V T M R P   I P A T Q V A R A T E   I P H A H G A P   V H F I A V G D P A Q I G   A D D L	
UniRef90_A7IFF8	M V M S M R P   L V P A H A I R A I Q   I T T R H G A P   V H F I I V G L P E L G   V K D D L	
UniRef90_C3KLZ6	T V V S M R P   A F R P A D A I Q A I R Y   P L A H G A P   V H F I I G D P A E I G   K E I	
UniRef90_UPI0001FFD2B	L V V S M R P   V P A H L V D T A V S   I T A R H G A P   V H F I I G S G R A L G   T D D L	
UniRef90_UPI00047AF135	L V V S M R P   V P A A Q V A D A V R   I T S R H G A P   V H F I I G N P D E L G   S D D L	
UniRef90_A0LNRR4	L V V T M R P   I P N D L V M R A V R   I T S R H G A P   V H F I F G D P G A L G   R D D L	
UniRef90_A4EY53	T V V S M R A   V P E A R V A E V A E   I S R H G A P   V H F I I W G D P A E I G   E D D L	
UniRef90_UPI00020357EE	L V V T M R P   I P E S K L E A A V L A T   I S T E N G A P   V H F I I G N P G L L G   R D D L	
UniRef90_I3TK22	UniRef90_UPI000443EAEF	M V V S M R P   F R A A D A I R A I Q V   I T S R H G A P   V H F I L G D P V E I G   T D D L
UniRef90_UPI0003343CC9	L V V T M R P   V P K D K L E R L V Q S   C S V Q Q G A P   V H F I I V G D P E L G   K D D L	
UniRef90_UPI0003C13AC7	M V V S M R P   M T A A H A I R A I Q   V T S R H G A P   V H F I I L G D P A Q I G   A D D V	
UniRef90_W0HAZ1	T V V S M R P   M T P A Q A I R A V Q   V T S R H G A P   V H F I I L G D P S Q I G   R D D V	
UniRef90_UPI000443EAEF	L V V T M R P   V P A G L L D A A V E   V T H Q H G A P   V H F I I V G D P A L L G   L D D L	

210      220      230      240

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UniRef90_UPI00035CA445	D A P D F G D R P V S E K G D   V P V F W A C G   V T P Q A M V M Q S R P E L A   T	
UniRef90_UPI00036600C3	A K P D F G D P A D L R P G E   V P V F W A C G   V T P Q A A I L A S K V P P F A   T	
UniRef90_UPI000306BCAA	A A P D F G E P P V L H D D D   V P V F W A C G   V T P Q L A I E Q A K L P L V   T	
UniRef90_UPI0004767A0E	M S P D Y G D A V P I P D G T   V P V F W A C G   V T P Q A V V A A S K P S F A   T	
UniRef90_D1C8Z9	A H P D W G D P P V I E P G D   V P V F W A C G   V T P Q A V A M N A R P E L M   T	
UniRef90_UPI000176061E	S R P D Y G D P V D A R P A D V   V P V F W A C G   V T P Q A M V M S S K P P L A   T	
UniRef90_A4QGU3	N N P D F G D A P L S E P G D   V P V F W A C G   V T P Q S V I A A S K P A F A   T	
UniRef90_B8IJ89	A K P D Y G D P V R I G A D E   I P V F W A C G   V T P Q A M V M S S K P P L A   T	
UniRef90_UPI00036DC8C3	T R P H Y G D A V P V E A D E   L P V F W A C G   V T P Q A A I V A S R V P P F A   T	
UniRef90_E4PKG9	N Q P D F G D P V T I R P G E   L P V F W A C G   V T P Q L A L E N A R L P P F A   T	
UniRef90_UPI00037512BD	A A P D F G D P V A I L P D E M   P V F W A C G   V T P Q A V A M A A K P A L C   V	
UniRef90_UPI00046D7D24	G A P D F G D P V E I R P G E   V P V F W A C G   V T P Q V A L R N A R P E L A   T	
UniRef90_J2TWR2	S R P D Y G D A V D I K D D E V P V F W G C   G V T P Q W V A Q K S R L S M C   T	
UniRef90_R5BBR5	M R P D Y G D S V E I R E G E V C   V F W P C   G V T P Q A A I E N A K P P   I   T	
UniRef90_C5CRV9	A D P D Y G D A V E V M P D E L P V F W A C G   V T P Q A A L A A A R L P P F A   T	
UniRef90_W7ZB71	Q E P D F G G R V T I K E G E V P V F W A C G   V T P Q A A A M A S K P D L M   T	
UniRef90_B8KFP9	H A P D Y G D P V S I I R D G E I P L Y W A C G   V T P Q V A L E N A A P P M A   T	
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UniRef90_UPI0002FF8BA6	T K P D Y G D P V D I R P G E L P V F W A C G   V T P Q A A L M R A K L P P F A   T	
UniRef90_UPI00046A8DC7	N T P D F G D A P T L E T G D L P V F W A C G   V T P Q L A L E N A Q L P P L A   T	
UniRef90_UPI0003B6C6F5	N R P D Y G E A V T V R N G E V P V F W A C G   V T P Q A A L E A S G I E L A   T	
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UniRef90_A0A010PHC5	G A P D F G D P V Q I P A G W T P V F W A C G   V T P Q A A V M E S R P E F A   S	
UniRef90_UPI000478986D	D K P D F G D P P Y M E E G D I P V F W A C G   V T P Q L A L R N C G A D I A F   T	
UniRef90_UPI000255E092	S R P D F G D P V Q V P E G H L P V F W A C G   V T P Q A A V M E S R P P L A   T	
UniRef90_C1B762	G A P D F G D P V N L E P G D V P M F W A C G   V T P Q A A V M A S R P P F A   T	
UniRef90_E9V0C6	A A P E F G D P P E V R D G E V P V F W A C G   V T P Q A A I M A S R P P F A   T	
UniRef90_UPI00037105FA	G A P D Y G D A V Q I P D G H V P V F W A C G   V T P Q A A V L E S G V P P F A   T	
UniRef90_R9LWC7	M K P D Y G E A V E I R E G E I P V F W P C   G V T P Q A A I E A A K P P I V   T	
UniRef90_D7WE71	G A P D F G D P V D I P A G T I I P V F W G C   G V T P Q S V V M S S K P E L A   C	
UniRef90_UPI000255D0BF	UniRef90_M2XA29	A A P D F G D A V D I P D G W L P V F W A C G   V T P Q A A V M E S R P P L A   S
UniRef90_K0K724	S R P D Y G D A V E I P D G W L P V F W A C G   V T P Q A A I A A S G V P P F A   T	
UniRef90_D9WJK3	D Q P D F G D A T T P H D G D V P M F W A C G   V T P Q A A V M A S A P P F A   T	
UniRef90_K6YCM2	S G P D F G D S V E F R T G D L P V F W A C G   V T P Q A A V M A S R P P F A   T	
UniRef90_J9IT33	T Q P D F G E A V T I I N A G E E P V F W A C G   V T P Q L A I A N A K P N I C   T	
UniRef90_UPI00034CB159	S K P D Y G D S I T I H E D E V P V F W A C G   V T P Q N V I T Q A K I P I L   T	
UniRef90_D1NW7	N K P D F G E P V E I K N N E V P V F W G C   G V T P Q S V A L D A K P E I M   T	
UniRef90_B3RAC1	A H P D Y G D E P I L E P S D V P V F W A C G   V T P Q A V V M A S Q P E F A   T	
UniRef90_B2TBH5	E S P D Y G D A V P L D A D E I P V F W A C G   V T P Q A V I R E A R P E I C   T	
UniRef90_UPI00034AE5DE	A S P D F G D A V E V R S D E L P V F W A C G   V T P Q A A I E S A R L P P F A   A	
UniRef90_K6WW19	E H P D Y G E F V E I I K E D E T P V F W A C G   V T P Q A A A I E A K L P I M   T	
UniRef90_E3BHH5	A E P D F G E A V E I I P D D G T I P V F W A C G   V T P Q A A V M E S R P P I A F   G	
UniRef90_A0Z268	T Q P D Y G D A V T I I Y P D E L P V F W A C G   V T P Q V A I E N A K P P I A   T	
UniRef90_UPI00046B03E8	Q Q P D F G D A V S I Q P G E D V P V F W A C G   V T P Q V A L E N A K L P L A F   T	
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UniRef90_B5FEB2	E K P D Y G E F V E I I A E D E V P V F W A C G   V T P Q A A A T E A K L P L M   T	
UniRef90_W5K3D8	A R P D W G D A V E I I K A G E V P V Y Y W A C G   V T P Q N V L D A G L P I C   T	
UniRef90_C5C6R6	UniRef90_I3K0U3	S T P N Y G D A V E I I K P N E V P V F W G C   G V T P Q N V I R Q S R P P F C   T
UniRef90_A0A031G4C6	S Q P D Y G D S V E E C Q P E D V P V F W A C G   V T G A E A V Q S T K P A L A F   T	
UniRef90_C7PW40	S A P D F G D A V E L V P Q G H I P V F W A C G   V T P Q A A I M E S R P P L A   T	
UniRef90_B8KSD3	UniRef90_I3K0U3	S R P D Y G D A V E L V P Q G D V T V F W A C G   V T A I E A I L S S K P P L A F   S
UniRef90_UP100037B0882	Y N P D F G D A P V I I R E G D I I L G F W A C G   V T P Q M A I Q Q A N V D I A   T	
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UniRef90_UP10003771E70	D A P D Y G E A A E I P R G E I V P F W A C G   V T P Q Q A I R S A R L P P F A   T	
UniRef90_UPI00034CB86F	A K P D Y G D A V T V E A D E I P V F W A C G   V T P Q A V I A A A K V P P F A   T	
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UniRef90_F6CX38	N H P D Y G D A V S V K P G D I V P F W A C G   V T P Q V A I R N A K P P F C   T	
UniRef90_UP1000364DCF7	D K P D F G D A V S V K P G D I V P F W A C G   V T P Q A A V T Q A V I R N A K P P F C   T	
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UniRef90_UP100047954B1	D N P D Y G D R V T I I K E G E V P V F W A C G   V T P Q A I A A H I K P S F M   T	
UniRef90_F2JVD6	E A P D F G D K I I H R D N E L V P F W A C G   V T P Q M A A M E S R P R L P F M   T	
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UniRef90_UP10003945103	Q R P D Y G D A V E V L P D E T P V F W A C G   V T P Q E A I R S A R L P P L A   T	
UniRef90_UP1000307EB1	S K P D Y G D P V H L H P G D I P V F W A S G V T P Q V E A I I N S R A P L A F   T	
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UniRef90_A7IFF8	S R P D W G D A V E I I R A G E I I P V Y Y W A C G   V T P Q N V L D A G L A   C	
UniRef90_C3KLZ6	M K P D Y G D A V E V L I D N E L V P F W A C G   V T P Q S V I A E A K P S F A   T	
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UniRef90_A0LN4	G T P D F G E A V R I I P E G H L P V F W A C G   V T P Q A A V M R S R P P L A   G	
UniRef90_A4EY53	D R P D F G D P V T V K D G E T P V F W A C G   V T S S L A V L S A E P E L C   T	
UniRef90_UP100020357EE	A R P D W G D P A P V G A G E V P V F W A C G   V T P Q A A L E T A R L P I C   T	
UniRef90_I3TK22	S K P D Y G D P V H L H P G D I P V F W A C G   V T G L E A V I N C R S P L A F   T	
UniRef90_UP10003343CC9	S R P D Y G D P V V C Q P G D V P V F W P S Q L T S L E A V V S S C K T P P L A F   T	
UniRef90_UP10003C13AC7	D R P D F G E P M A L R P G E I P V F W A C G   V T P Q Q A I R S A A L P P F A   T	
UniRef90_W0HAZ1	D S P D F G E R S I I C G E I P V F W A C G   V T P Q Q A I R S A R P S F A   T	
UniRef90_UP1000443EAEF	T R P D Y G D P V E L R P G D V P V F W A C G   V T S I E A I L S S K P P L A F   S	

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 UniRef90\_A4EY53 H K P G Y M L I T D V  
 UniRef90\_UPI00020357EE N S S G C M F I T D L  
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UniRef90_F3KZQ8	1	10	20	30	40						
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UniRef90_UPI000328843F	T P Q T L R H M I S N K E I T H T S G L A K D Y I Q A N V I L P	S V V R S L I L Q K K L G I R N T S G M A P G L R P A S V V V L	G K Q F L Q Q A N I V A L P								
UniRef90_G5JJY5	A S P A E V R R L C R A G E S G P T A G M A A G Y I Q A N V I L P	A S P A E V R R L C R A G E S G P T A G M A A G Y I Q A N V I L P	V V V L								
UniRef90_A9H2B4	S A L A V R Q A A R A G L A G Q T A G V A P G M T Q A N V I L P	S A L A V R Q A A R A G L A G Q T A G V A P G M T Q A N V I L P	P P								
UniRef90_A6W5D4	M K P K E L R E K I R R G E F S H T S G V C H N Y V Q A N A I V P	M K P K E L R E K I R R G E F S H T S G V C H N Y V Q A N A I V P	V M L P								
UniRef90_UPI000367770E	R L K T S S L A E L R A A I R S G A Y R H T A G L G Q G Y L Q Q A N I V A L P	R L K T S S L A E L R A A I R S G A Y R H T A G L G Q G Y L Q Q A N I V A L P	M I L P								
UniRef90_UPI0003B718D9	S S T S P A Q A R A L F R A G T S V P T A G W A S G F A Q T N I A V	S S T S P A Q A R A L F R A G T S V P T A G W A S G F A Q T N I A V	P								
UniRef90_W4QA54	S E S A S T I S P L A L R H A I R R S G K H R T T T G Y A S G Y L Q Q G N I A I L	S E S A S T I S P L A L R H A I R R S G K H R T T T G Y A S G Y L Q Q G N I A I L	P								
UniRef90_M3C4F1	H D L A S L S P L E L R R L I R R G D Y G H T S G L G Q R H L Q A N I V I L Q	H D L A S L S P L E L R R L I R R G D Y G H T S G L G Q R H L Q A N I V I L Q	H								
UniRef90_H1S183	R S C L P S A R R C M L L Q K K S N I R N T S S M P G G L W P A S M V V L P	R S C L P S A R R C M L L Q K K S N I R N T S S M P G G L W P A S M V V L P	P								
UniRef90_Q5LUE3	A A T P G G A R A G I R S G R Y G N T S G M A P G H G Q G N I M I L	A A T P G G A R A G I R S G R Y G N T S G M A P G H G Q G N I M I L	P								
UniRef90_W5WEC8	A L T P A E A R S R F R E G L R A P T A G W C R G W T Q A N I L A L A V	A L T P A E A R S R F R E G L R A P T A G W C R G W T Q A N I L A L A V	P								
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UniRef90_A0A024PJ00	R S C L P S A R R C M L L Q K K S N I R N T S S M P G G L W P A S M V V L P	R S C L P S A R R C M L L Q K K S N I R N T S S M P G G L W P A S M V V L P	P								
UniRef90_W5ILD0	P L K L R Q Q I R A G N F T S T S G L C S G Y V Q C N I V I L E	P L K L R Q Q I R A G N F T S T S G L C S G Y V Q C N I V I L E	P								
UniRef90_M3Y9G7	M A S R F V Q V N I V I L E	M A S R F V Q V N I V I L E	P								
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UniRef90_H0X9Z5	D L Q H A E P I E A W R A N R A N A W R P T S G I C H G F V Q A N I V I L M P	D L Q H A E P I E A W R A N R A N A W R P T S G I C H G F V Q A N I V I L M P	P								
UniRef90_UPI0001423E3C	M T A A D A R A R F R S G L V I T P T A G L A P G H T Q A N I L I A V	M T A A D A R A R F R S G L V I T P T A G L A P G H T Q A N I L I A V	P								
UniRef90_A3JF21	A S D V R Q A I R R G G L D T D T I G W A G R H A Q A N L V A V	A S D V R Q A I R R G G L D T D T I G W A G R H A Q A N L V A V	P								
UniRef90_Q1ATE1	F K T G A K L R E E V R A A R F R G Q T A G Q A P N F L Q G N V V I L P	F K T G A K L R E E V R A A R F R G Q T A G Q A P N F L Q G N V V I L P	P								
UniRef90_A0A034U0T3	R D P G D L T A A Q A R A L F R G G L D T D T I G W A G R H A Q A N L V A V	R D P G D L T A A Q A R A L F R G G L D T D T I G W A G R H A Q A N L V A V	P								
UniRef90_UPI0002378C2A	L T P E Q A R R R L R D G Y T G T T S G W C D G W A Q A N L L A V	L T P E Q A R R R L R D G Y T G T T S G W C D G W A Q A N L L A V	P								
UniRef90_W7STB3	R P C L S A V R N L T L Q K K S I R N T A S M A G G L R R A S L V V L H	R P C L S A V R N L T L Q K K S I R N T A S M A G G L R R A S L V V L H	H								
UniRef90_A3W3H1	R S C F P S A T K S L I L S K K A I R K A S G M A G G L C R A S I V V V L H	R S C F P S A T K S L I L S K K A I R K A S G M A G G L C R A S I V V V L H	H								
UniRef90_E0MNJ7	R A C F P S V I R S F I L Q R N S A I R N M S G M A T G P Q P A S V V V L H	R A C F P S V I R S F I L Q R N S A I R N M S G M A T G P Q P A S V V V L H	H								
UniRef90_UPI00034D9BE7	S A L S P A Q A R R H I R S G D W S T T A G L A N G F A Q T N V A I P	S A L S P A Q A R R H I R S G D W S T T A G L A N G F A Q T N V A I P	P								
UniRef90_H8G7V9	A V R A A I R S G A Y G H T A G L A P G K L Q T N V I L P	A V R A A I R S G A Y G H T A G L A P G K L Q T N V I L P	P								
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UniRef90_I3XUQ9	K E S L L R T V E S L R K S I R S G E M D S T S G L V P G L V Q A N I V I L P	K E S L L R T V E S L R K S I R S G E M D S T S G L V P G L V Q A N I V I L P	P								
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UniRef90_A9D6M5	R S C L P S A I R S N N I S T S G M A E G F V Q A N L V V L P	R S C L P S A I R S N N I S T S G M A E G F V Q A N L V V L P	P								
UniRef90_F2L7D3	P T S G L A P G L A Q A N L V I L P	P T S G L A P G L A Q A N L V I L P	P								
UniRef90_B1KND9	R S L L P S A I R S N N I S T S G M A E G F V Q A N L V V L P	R S L L P S A I R S N N I S T S G M A E G F V Q A N L V V L P	P								
UniRef90_E2CL53	R S C L P S A I R S N N I S T S G M A E G F V Q A N L V V L P	R S C L P S A I R S N N I S T S G M A E G F V Q A N L V V L P	P								
UniRef90_U7FNB6	V	V	P								
UniRef90_G8AQ82	A T T E S V R A Q I R S Q A Y R H T A G L G G N T L Q Q A N L V I L P	A T T E S V R A Q I R S Q A Y R H T A G L G G N T L Q Q A N L V I L P	P								
UniRef90_G8RXH5	R S L L P S A I R S N N I S T S G M A E G F V Q A N L V V L P	R S L L P S A I R S N N I S T S G M A E G F V Q A N L V V L P	P								
UniRef90_UPI00023796D3	R S C L P S A I R S N N I S T S G M A E G F V Q A N L V V L P	R S C L P S A I R S N N I S T S G M A E G F V Q A N L V V L P	P								
UniRef90_F6U2F1	R S R L P P T I R N L T L Q K K F N I R N T S G M A E G F V Q A N L V I L H	R S R L P P T I R N L T L Q K K F N I R N T S G M A E G F V Q A N L V I L H	H								
UniRef90_D4A9W3	R S C L P S A I R S N N I S T S G M A E G F V Q A N L V V L P	R S C L P S A I R S N N I S T S G M A E G F V Q A N L V V L P	P								
UniRef90_S4AFE7	V	V	P								
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UniRef90_G3WIZ8	R S R L P P T I R N L T L Q K K F N I R N T S G M A E G F V Q A N L V I L H	R S R L P P T I R N L T L Q K K F N I R N T S G M A E G F V Q A N L V I L H	H								
UniRef90_B9QRV7	R S R L P P T I R N L T L Q K K F N I R N T S G M A E G F V Q A N L V I L H	R S R L P P T I R N L T L Q K K F N I R N T S G M A E G F V Q A N L V I L H	H								
UniRef90_UPI0001CBA9D9	A S P L E V R L K I R S K E L P P T T G M C A G F T Q A N L V I L H	A S P L E V R L K I R S K E L P P T T G M C A G F T Q A N L V I L H	H								
UniRef90_C7NLX9	K Y A L P S K L R A S V A A G V Y G P T S G A C P G Y L Q Q A N V V I M P	K Y A L P S K L R A S V A A G V Y G P T S G A C P G Y L Q Q A N V V I M P	P								
UniRef90_F2U5K1	S P S E F R E A V R S G K F P T N G V C Q Q M Q C N V M V L H	S P S E F R E A V R S G K F P T N G V C Q Q M Q C N V M V L H	H								
UniRef90_B5YMQ5	D □ A A L T P A R A R E R F R A G E R V A T S G W C P G F T Q A N L I A V	D □ A A L T P A R A R E R F R A G E R V A T S G W C P G F T Q A N L I A V	P								
UniRef90_D2W218	M T V K E F R E K I A K G E F K P T A G Y C S G H V Q A N M V V L P	M T V K E F R E K I A K G E F K P T A G Y C S G H V Q A N M V V L P	P								
UniRef90_A1SCV3	P C A V R N L I R S N N I S T S G M A E G F V Q A N L V V I M H	P C A V R N L I R S N N I S T S G M A E G F V Q A N L V V I M H	H								
UniRef90_UPI00046AD790	K S P D P A L P R A F R Q K V R D G Y L T P T N G A C P G F L Q Q C N V I L P	K S P D P A L P R A F R Q K V R D G Y L T P T N G A C P G F L Q Q C N V I L P	P								
UniRef90_V8NV52	M T P A E L R A L V T A N K F K P T A G F C P G Y V Q A N L V V L P	M T P A E L R A L V T A N K F K P T A G F C P G Y V Q A N L V V L P	P								
UniRef90_KOV511	D □ A P L S L T Q V R R A M E R N Y G P T A G L C D G R L Q C N V M V L H	D □ A P L S L T Q V R R A M E R N Y G P T A G L C D G R L Q C N V M V L H	P								
UniRef90_B7G3F9	K S R L P S A L R S L I L Q K K P N I R N M S S M A R G L K P D S V V V L H	K S R L P S A L R S L I L Q K K P N I R N M S S M A R G L K P D S V V V L H	P								
UniRef90_V4J293	H F R S P A E L R Q L I R Q P R I S T T T G L A N G Y Q Q A N V V I L H	H F R S P A E L R Q L I R Q P R I S T T T G L A N G Y Q Q A N V V I L H	P								
UniRef90_A3SMW2	A N P N E V R R S I R R G Y T G Y T A G L P A G F V Q A N C I C	A N P N E V R R S I R R G Y T G Y T A G L P A G F V Q A N C I C	P								
UniRef90_B6J68	L P S A I R S L I L W K T P D I R N M S S M A G G L R P A S M V V L H	L P S A I R S L I L W K T P D I R N M S S M A G G L R P A S M V V L H	H								
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UniRef90_G3NB29	R T H L P P V I R S L V L Q K N F N A R N I S S M S G E P K Q A S V V I L P	R T H L P P V I R S L V L Q K N F N A R N I S S M S G E P K Q A S V V I L P	P								
UniRef90_D5V4P4	F K S P G E A R L F F R K S E T A P T A G L C P E Y I Q A N L V I L S	F K S P G E A R L F F R K S E T A P T A G L C P E Y I Q A N L V I L S	S								
UniRef90_M3VWX1	E □ A Q G P A R A T R E A I R A G R W T G T T G L A R G H V Q A N L A I V P	E □ A Q G P A R A T R E A I R A G R W T G T T G L A R G H V Q A N L A I V P	P								
UniRef90_A8LPN3	V	V	P								
UniRef90_F7G523	A T P L T P H D V R L A C R K G T W K S T A G I C E G Y V Q V A N L L I L P	A T P L T P H D V R L A C R K G T W K S T A G I C E G Y V Q V A N L L I L P	P								
UniRef90_A0A010YDF1	K Q S T S P A H E F A R L L S R H N I T N T S G I P A N Y N L L Q Q A N L L I L P	K Q S T S P A H E F A R L L S R H N I T N T S G I P A N Y N L L Q Q A N L L I L P	H								
UniRef90_S9REV3	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	P								
UniRef90_UPI00037D5DA6	M	M	P								
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UniRef90_K8VYZ9	E Q L R A I I R S G E Y G Q T A G L S K N M L Q T N I I S V P	E Q L R A I I R S G E Y G Q T A G L S K N M L Q T N I I S V P	P								
UniRef90_A0A017HCI9	D □ A G L D P Q A L R R V F R D G G Y R H T A G L A P G R L Q C N V I L H	D □ A G L D P Q A L R R V F R D G G Y R H T A G L A P G R L Q C N V I L H	H								
UniRef90_C3Y363	E □ L A A M S P K E F R G I V R R G E W G E R S G A C R N Y V V S N I A I V P	E □ L A A M S P K E F R G I V R R G E W G E R S G A C R N Y V V S N I A I V P	P								
UniRef90_X1LHC5	T A H Q V R L L G R Q N H I T N T S G I P A G P G Y L Q Q A N L L I L P	T A H Q V R L L G R Q N H I T N T S G I P A G P G Y L Q Q A N L L I L P	H								
UniRef90_B8N0NO	A T P A A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	A T P A A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	P								
UniRef90_A0A014LV13	A D P R T V R E R N A R N L D R N T S G M C R G Y M Q A N V I L D	A D P R T V R E R N A R N L D R N T S G M C R G Y M Q A N V I L D	P								
UniRef90_W9ALA2	K S C L P S A V R S L I L Q K K P N I R N M S S I M A G G L X P A S V V V L H	K S C L P S A V R S L I L Q K K P N I R N M S S I M A G G L X P A S V V V L H	H								
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UniRef90_B6HHP7	UniRef90_M7X7T8	UniRef90_V513U9	UniRef90_A0A017S7K8	UniRef90_I7KIM2	UniRef90_UPI0003F49A2E	UniRef90_UPI0003B776D8	UniRef90_F0YBN7	UniRef90_UPI000333F787	UniRef90_S6EML2	UniRef90_U4KZG6	UniRef90_F7G7U1
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UniRef90_C3Y363	K Q S T S P A H E F A R L L S R H N I T N T S G I P A N Y N L L Q Q A N L L I L P	K Q S T S P A H E F A R L L S R H N I T N T S G I P A N Y N L L Q Q A N L L I L P	H								
UniRef90_X1LHC5	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	P								
UniRef90_B8N0NO	R D Q L L L S A Y D G R I S Q T G P Q P A S V V V L H	R D Q L L L S A Y D G R I S Q T G P Q P A S V V V L H	H								
UniRef90_A0A014LV13	T T P V D F R L L C R R G F S N T S G I L P S Y M Q A N L V V V L H	T T P V D F R L L C R R G F S N T S G I L P S Y M Q A N L V V V L H	P								
UniRef90_W9ALA2	UniRef90_M7X7T8	UniRef90_V513U9	UniRef90_A0A017S7K8	UniRef90_I7KIM2	UniRef90_UPI0003F49A2E	UniRef90_UPI0003B776D8	UniRef90_F0YBN7	UniRef90_UPI000333F787	UniRef90_S6EML2	UniRef90_U4KZG6	UniRef90_F7G7U1
UniRef90_UPI0002C6640C	A H A L R L A R T A T H T P T A G Y A P G H I Q Q A N L L I L P	A H A L R L A R T A T H T P T A G Y A P G H I Q Q A N L L I L P	P								
UniRef90_B6HHP7	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	H								
UniRef90_M7X7T8	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	P								
UniRef90_V513U9	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	H								
UniRef90_A0A017HCI9	A H A L R L A R T A T H T P T A G Y A P G H I Q Q A N L L I L P	A H A L R L A R T A T H T P T A G Y A P G H I Q Q A N L L I L P	P								
UniRef90_C3Y363	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	H								
UniRef90_X1LHC5	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	P								
UniRef90_B8N0NO	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	H								
UniRef90_A0A014LV13	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	P								
UniRef90_W9ALA2	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	H								
UniRef90_UPI0002C6640C	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	P								
UniRef90_B6HHP7	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	H								
UniRef90_M7X7T8	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	P								
UniRef90_V513U9	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	H								
UniRef90_A0A017HCI9	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	P								
UniRef90_C3Y363	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	H								
UniRef90_X1LHC5	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	P								
UniRef90_B8N0NO	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	H								
UniRef90_A0A014LV13	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	P								
UniRef90_W9ALA2	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	H								
UniRef90_UPI0002C6640C	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	P								
UniRef90_B6HHP7	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	H								
UniRef90_M7X7T8	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	P								
UniRef90_V513U9	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	R S R L P S A L R L L V A D G R W T P T A G L L D G Y Q Q A N L L I L P	H								
UniRef90_A0A017HCI9	E S R L L A R T N K I T N T S G F S P T H L Q Q A N L L I L P	E S R L L A R T N K I T N T S G F S P T H									

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50                    60                    70                    80

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UniRef90_G5JJY5	T E V A Q Y H I Y Q N G V L I D Q P T D I L D W F N D D L V S F L I G C S F			
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UniRef90_M3C4F1	T D L P R Y R V W R D G R P V A E P T D V A D V W R D D L V A F L I G C S F			
UniRef90_H1S183	T D V P R Y R V W R H G E L V E E R D D I A A L W Q D D F V G F V L G C S F L			
UniRef90_Q5LUE3	T D V P A Y N V Y R D G R L D S V S A D I V T E D W R D D L V V F A L G C S F			
UniRef90_W5WEC8	T D L P R Y R V W R D G E L V I E T G H V L D H W R A D L V A F S I G C S F			
UniRef90_K2MKK1	T D L P G Y R V F R G T I D F E S V S D L T A V W R D D L V T F V L G C S F			
UniRef90_D2B2X9	T D L P R A Y Q V Y E R G R A V A D V A D A R D V W R E D L V A F L L G C S F			
UniRef90_A0A24PJM0	T D L P R Y R I Y R E G Q L S E E V L N I E G V W Q D D F V T F L I G C S F			
UniRef90_W5ILD0	S D V P L Y R V Y R R G Q P H R E T S D I G E L W E A D F V A F A I I G C S F			
UniRef90_M3Y9G7	T G H P Q F R K Y E F G A C T G S L T S L E E H R E L L K D M V A F C L D C S F			
UniRef90_UPI0004655462	R D V P G F N V Y R D G L L V I E Q P D D L T E I W R D D L V V F A L G C S F			
UniRef90_H0X9Z5	I S C P Q F Q K Y E F G T C T G S L T S L A E H S E Q L K D M V A F L L D C S F			
UniRef90_UPI0001423E3C	T D I S K Y R L F K K G I M V S E Q T D I K A D W S R N F V S F L L G C S F			
UniRef90_A3JF21	R D V P S Y R V Y R N G K F A S T Q N D V A D V W R D D L V T F A L G C S F			
UniRef90_Q1ATE1	T D V P R Y R V Y E R G K L V I E E P A D I L P R W R G D L V C F L L G C S F			
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UniRef90_UPI0002378C2A	T D L P K Y S V Y R E G A L V I E E R S D V V D L W T D D M V A F L L G C S F			
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UniRef90_F2LD73	R D L P R Y R V W R D G V L V D E P R E I I A S L W R D D F V G F V I G C S F			
UniRef90_B1KND9	T D I P E Y C V F V G G V K T E V K K D I S D L W Q D D F V V F A L G C S F			
UniRef90_E2CL53	S D V P S Y R V F K D G E L E T E V A D I S A L W R S D L V T F V L G C S F			
UniRef90_U7FNBN6	T D V P A Y N I Y R D G R L E G S V T D I S A M W S D D L V A F A L G C S F			
UniRef90_G8AQ82	T D F P R Y R V Y R D G R L L A E E P E D L L S V W R D D L V A F A I G C S F			
UniRef90_G8RXH5	T D L P R Y R V F R D G R L V I D E P T D I A Q F W R S D L V A F L L G C S F			
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UniRef90_F6U2F1	T D C P Q Y R K Y E F G V C T G H L A S L E E Y A E Q L K D M V T F Y L G C S F			
UniRef90_D4A9W3	T I C P Q F Q K Y E F G T C T G I L T S L E E Y S E Q L K D M V T F I M D C S F			
UniRef90_S4AFE7	T D L P G Y R V W C D G E L V I E E P T D V L A H W R D D L V S F L I G C S F			
UniRef90_UPI0002558A65	K D V P R Y L V H R A G Q P A E E V T D I S A L W R D D L V T F A L G C S F			
UniRef90_G3WV8Z	U N G L R Y K N Y E F G S C T D N L T S L E G Y S E Q L K D M V T F Y L D C S F			
UniRef90_B9QRV7	T D A A R Y N I Y R H G K L D Q V S S D L N M D Y K K E M E E M C T F Y V G C S F Y			
UniRef90_UPI0001CBA9D9	T D L P A Y R I I W R D G R V V E E V P D A A D H W T D D A V A F L F G C S F			
UniRef90_C7NLX9	T D V S M Y R V V E N G K F T K S V G S L K D M V T F Y L G C S F			
UniRef90_F2U5K1	Q N I P A Y E V F R N G K H E G R V G N I K D I F T Q D M V T F Y V G C S F			
UniRef90_B5YMQ5	T D I P K Y C I Y R N G K L E S E V V G D V K A Y W P E K S V A F L I G C S F			
UniRef90_D2W218	K D I P K Y R V F K K G K L I E T R D V T K Y W R D D L V T F L I G C S F			
UniRef90_A1SCV3	T D L P G Y R V Y E E G R L V A E E T G D A R E H W R E D M V A F L I G C S F			
UniRef90_UPI00046AD790	T N E L P S Y D I E N G E K V K S V V K S I E E Y Y K D D F V F F L I G C S F			
UniRef90_V8NV52	S D C L Q Y K K Y E H G I S T E V T V N L I K E Y S E Q F K D M V T F Y L G C S F			
UniRef90_KOY511	T D L P R Y R V L H R G I C T D E P A D I S R Y W R P D L V G F F L L G C S F			
UniRef90_B7G3F9	T D V P K Y A I Y R N G K L E Q E V T D A T S F W P E N S V A F L I G C S F			
UniRef90_V4J293	T D I S R Y H I W L D G E C A E T V P S L H G I D T T D V V F F L L G C S F			
UniRef90_A3SMW2	U N I P L F F F V Y R P G Q T V E R R Q D I S A L W R D D F Q A F A I G C S F			
UniRef90_B6JJ68	T D V P R Y Q F R N G E F T E V T D I R S H W R D D L V T F A F G C S F			
UniRef90_UPI00042C464D	R A V P P F W K X E F G T C T G S L T S L E E S S E Q L K D M V A F L L C S S F			
UniRef90_G3NB29	T D I S Q Y H V Y E E G C L V K T V S S S L Q S Y C A Q W S D M V C F Y L G C S F			
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UniRef90_F7G523	N D C L K Y K K Y E F G S C T D N L M S L E G F S E Q L K D M V T F Y L G C S F I			
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UniRef90_S9REV3	S D L S R Y V I Y R D G Q R A E E V P D L R E H W R D D L V A F A M G C S F L			
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UniRef90_W4WY49	T D V A A Y N V F V N G E F S E T V P D L L K F G D Q L N D F C F Y F G C S F			
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UniRef90_C3Y363	T D V I Q Y R V H R D G T L T E K V G D L L E F T E Q L K D M V T Y Y V G C S F			
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UniRef90_B6HH7P	T D F P T Y R V Y S A G R C I E S R R D L S D V W N E D H V G F L I G C S F			
UniRef90_M7X7T8	T D A P Q Y N V Y L N G K L V E T K R D I K N E W K E D S V G F L I V G C S F			
UniRef90_V513U9	T D F P R Y R I Y Q D G K C L S S V P S L L D V W T P D H V G F L I G C S F			
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UniRef90_U4KZG6	T D L P R Y R Y N A G K L V E S I T D L K S H W T N D H V A F L I G C S F			
UniRef90_F7G7U1	M S R P Q F W K Y E S G A C T G S L T S L E Q F S E Q L K D M V A F L L G S S F			

130                  140                  150                  160

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UniRef90_UPI000328843F	S L E G A L E R V G L P   R R D P A G H G H A G A Y K T T V   P C S S V A G F C C P
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UniRef90_UPI0003B718D9	T F E E H A L L A E G L P   V R H   V A A G T N V   P M Y R T S L   A C T P   V G P F S G G
UniRef90_W4QA54	T F E E S Q L V K E N I V P   L   K H   E Q N K N V   A M Y I T N I E T N E A G L   F K G P
UniRef90_M3C4F1	T F E E G A L R A A G V P   L   R H   V E Q G R N V   A M Y V T N R Q C R P   A G R L   R G P
UniRef90_H1S183	T F E E D A L E R A G L P   V R H   V D E G K I V   P M Y R T S I Q T T R V G A F H G P
UniRef90_Q5LUE3	T F E E H A V M R A G V A L W H   V D N D R T V   P M F R S N I E T V   P A G P F S G K
UniRef90_W5WEC8	T F E E T A L A A E G I P   L   R H   V A Q G R N V   A M Y L T D Q   P C R P   G G R L   H G P
UniRef90_K2MKK1	T F E E A A I T R S G V V P   L   R H   H M D A N R N V   P M Y V T N I   A T T P   A G R F H G P
UniRef90_D2B2X9	T F E E D A L L R A G G V P   V R H   E A G T N V   P M Y L T S L   P C R P   A G S L   S G P
UniRef90_A0A24PJMO	T F E E K A L L D G G G I P   L   F H   Q Q K K V   P M Y D T T I   P L E E S G I   F K G R
UniRef90_W5ILD0	S F E E Q A L Q D E G I A L   R H   E E Q G R N V   A M Y R T H I A N T P   S G R L A G H
UniRef90_M3Y9G7	S P E E A A L E K V G G L P   R R D S P   G H G L S G A Y K T T V   P C A S M A G F C C P
UniRef90_UPI0004655462	S F E E Q M L S D A G I G   L   R H   V D E G V N V   P M Y R T A I H N H R S G P F G G R
UniRef90_H0X9Z5	S L E G T M E K V G L P   G R D P A G P   H I G A Y K T T V   P C V T H A G F S C P
UniRef90_UPI0001423E3C	S F E E A L I A N N L E   T R N V   S E N   V N V   P M F I T N I   E C A A T E K F H G K
UniRef90_A3JF21	S F E E H A L L Q N G V P   V R H   E E G R N I   P M Y K T S I   P L Q P A G G F S G N
UniRef90_Q1ATE1	T F E E R A L L A A G L P   R L A H V   E E Q G R N V   P M Y V T N R R C A P S G P F A G P
UniRef90_A0A034U0T3	S F E E A M L Q A G L N V R N I   D Q Q   C N V S M Y D T N I   A C Q P A G R F H G N
UniRef90_UPI0002378C2A	S F E E H   L L D A G L P   I R H   D Q G   L N V   P M Y V L S N R E C V   P A G Q F R G K
UniRef90_W7STB3	T F E E S A L L A A N I P   L   R H   G T N V   P M Y I T N R P   C R P   T P R L   R G P
UniRef90_A3W3H1	T F E E N A L V A A G I P   V R K H   E R D T T V   P M Y N S N I   Q L T P   A G P F S G T
UniRef90_E0MN7J	T F E E E A L M S H G Y P   V R H   E Q G R N V   P M F K T N I   D T M P G G I   F H G P
UniRef90_UPI00034D9BE7	T F E E L A L M E A G V P   V R H   E E G V I D P   M Y V T N R P   T R A A G A L S G P
UniRef90_H8G7V9	S F E E R A L T E A G I E M R H T T A G R T V   P M Y R T T I   A C E P   A G V F S S S
UniRef90_UPI0003C8EE3D	S P E E G A L E K V G L P   R R H   S A D P   G H M G A Y K T T L   P C M A T A G F C C H
UniRef90_13XUQ9	S F E E T A L I E N G M A L   R H   V D E Q K N V   A M Y R T N V   A L K P   V G G F S G E
UniRef90_UPI00038EE872	S L E E A L E K A A L S S R D P   A G H S H   A A A Y K T T V   P C A A V A G F C C P
UniRef90_UPI0003F181F1	S P E E A A C K E V G G L P   S R D A A G Q R N A G A Y K T T V   P C S T I   A G F G C P
UniRef90_UPI00036F45AA	S F E E E A L L A D G V P   L   R H   V E Q G S   V   P M Y R S T I   P L V   A S G P F G G S
UniRef90_A9D6M5	T F E E R A L I E D G I P   M R H   S Q D K T V   P M F R T T V   E T Q P   A G A F R G G
UniRef90_F2LD73	S F E E H A L E Q A G G L P   V R H   V D E R K V   P M Y R S A I   P T V   P V G P F R G P
UniRef90_B1KND9	S F E E Y A L Q Q A G G L S   I A N L E S N S N V   S M Y E T N V   P T K S V G   V F Q G N
UniRef90_E2CL53	T F E E E A L I S S N G Y P   V R H   E A E Q N V   P M F R T S L   E T M P G G I   F Q G G P
UniRef90_U7FNBN6	T F E E H A L I E A G I D L W H   V S N N   V T V   P M Y R S N M E T T P   A G P F R G A
UniRef90_G8AQ82	S F E E E A L L A A G L P   I R H   E R G   C N V   P M Y V T D R D   C V A V   P P F A G R
UniRef90_G8RXH5	T F E E W A L A A A G L P   I   A H Q   A Q G V   N V   P M Y V T N R R C I   S A G R F D G P
UniRef90_UPI00023796D3	T F E E H A L Q Q A K V P   L   W H   E N D R T V   P M F A T S I   Q T V   K S G P F E G P
UniRef90_F6U2F1	S F E K A I I Q E A G I P   R R D L T G S G   H A G A Y K T A V   P C A T I   A G F F C C P
UniRef90_D4A9W3	S I E E A L E Q A G I V P   R R D L T G S G   H A G A Y K T T V   P C S T V   G S F N C K
UniRef90_S4AFE7	T F E E W A L A A A G V P   L   R H   V E Q G R N V   A M Y V T D R Q   C R E A G R L   R G P
UniRef90_UPI0002558A65	S F E E E A L I A S G L E   L V R N I   V E G R N V   P M Y R T D K E   C V A E G R F H G K
UniRef90_G3WV8Z	S P K E A M K K V G I P   V R S K E   S H E N V   S I   Y K T T V   P C S T V   G S F C C P
UniRef90_B9QRV7	T F E E N A L L R   L A G V P   M R H   D   D R T V   P M Y R T S I   E T H K S G P F G G G
UniRef90_UPI0001CBA9D9	S F E E K A L M M A G G V P   V R N V   E E S   V T V   G   V F D S N I   R   C Y P   V G S F N C K
UniRef90_C7NLX9	G F E E A A L Q G A G G V P   V R N I   E Q G R N V   A M Y R T H R P   L V   P A G R L   H G E
UniRef90_F2U5K1	S F E E Q A L T R A G V P   V R N I   E Q G   C N V   S M Y R T S R D   C D Q V   G P F K G K
UniRef90_B5YMQ5	S Y D G A L G T E A G I P   L   R S V   E Q G K N V   P M Y K T N I   P C R S A G S L   H G N
UniRef90_D2W218	S F E E K A L Q A H G I E   I R N I   T E K R N V   S M Y K T N I   L   C K T Q   P N F S   P
UniRef90_A1SCV3	T F E E R A L L E S G G V P   V R H   L T A G T N V   P M Y R T N R A C R P   A G R L   H G P
UniRef90_UPI00046AD790	T F E E T S L L Q N G I S   L   R H   V D   L   K T N V   T M Y D T N I   E   L E P   V D M F K G N
UniRef90_V8NV52	T F E E K A L Q K A G I P   V R N V   E Q K   C N V   S M Y K T A V   P C C   D T G   C F H C N
UniRef90_KOY511	T F E E W A L E A E G L P   L   R H   Q   M Q G   V   N V   P M Y I T D R P   C R A A G P F D G P
UniRef90_B7G3F9	S Y D G A L M E A G I P   L   R S A E   E Q G K N V   P M Y R T S L   K   C R S A G K   L   H G N
UniRef90_V4J293	S F E E E A L V D A G I H   L   R H   L D E   H K N V   A M Y R T S I   P   L   V   P K G   V F Q G T
UniRef90_A3SMW2	T F E E H A L M R E G I G   M R H   I E E D   V T V   P M Y R T D I   T V   P S G   V F S G P
UniRef90_B6JJ68	S F E E E A L Q D D G P   L   R F L   A N N N V   A G   V   V   S T M   P T E A A G P F E A P
UniRef90_UPI00042C464D	S L E G A W E K G G G L P   R R D S A D   H   G H M   R A Y R A E   A P   C A T   I A G F C C P
UniRef90_G3NB29	F E E G R   L   R K A G V P   V   R N   V   E Q G T Y V   S M Y R T A V   L   C V P   A S   V F P   C T
UniRef90_D5V4P4	T F E E T S L I N S G I L   L   R H   V   E E K K N V   A M Y D T N I   K   L N K   V G   F E G N
UniRef90_M3VWX1	S L E E A A L E K V G L P   R R D S V   G   H G H V   G A Y   E T T A P   C A T   I A G F C C H
UniRef90_A8LPN3	T F E E H A L L R A G I P   V R N I   A T N T T V   P M Y Q T N   R E T R S A G P F A G P
UniRef90_F7G523	S S N G A M K K V G I P   V R N K   E S   H   C N V   G   I   Y K T A V   P C A T   V   G S F C C P
UniRef90_A0A010YDF1	T F E E A A L V N A G I P   R K H   Y   E E N K R V   P M Y D T N I   A C A P   T K F F G N
UniRef90_S9REV3	S F D Q V   L   V L E N G L D   V   A H   R   R G G R I   A   V   Y T S G I   E   C A P   A G P F A G P
UniRef90_UPI00037D5DA6	T F E E D A L L N N G I R   M A H   N D Q G   V N V   P M Y R T N R R   C A S A G S L   S G P
UniRef90_W4YW49	S F D E A L L L A G G I P   L   R N   L   E Q N T N V   A M Y K S N V   Q   C H   G C G   C F H G N
UniRef90_K8VYZ9	S F E S Y L M K V G I K   M   H   I   D A G K N V   P M Y R T N I   E   C E P   T E K   L   K G H
UniRef90_A0A017HCI9	T M E E A A L L K A G F P   M R H   I   E R D   V T V   P M Y R S T I   E T T P   A G P F F G G A
UniRef90_C3Y363	S F E D T V M S A G G V P   I   R N   V   E Q G V   N V   S M Y E   S   N   V   H   C H   P   V G P F K C K
UniRef90_X1LHC5	S F D W A L R A A N I H   Y   R K   I   G   A   H T T   T   I   P   C   L   P A G R F H G P
UniRef90_B8N0N0	S F E D A L L S D A G L K   P   R   H   Q   D T   G   T   V   A M Y K T R I   P   L   A S G   I   F K G T
UniRef90_A0A014LV13	T F E E G P L R A A G V P   V   R Y A   P   E S   A   P   V   Y   V   T D   V   A T R   P A G R L   S G P
UniRef90_W9ALA2	S F E H   L   S D A G L P   I   R   H   E   Q   R   I   D   A   P   M Y   I   T   S   R   H   C   T   P   A G R F G G E
UniRef90_UPI0002C6640C	S L E G A L E K V R L P   R   R   D   L   A   G   H   G   P   A   G   A   F   K   T   A   V   P   C   A T   M   A G   I   C C P
UniRef90_B6HHP7	S F E D A L L T A A G L P   P   R   H   Q   K   T   G   T   V   A M Y R S N I   P   L   P   A G   I   F G G H
UniRef90_M7X7T8	S F E E A A L V E G G Y T P   R   Q   I   E   L   K   R N   V   P M Y K T K V   P   L   C   A A G   A L S G N
UniRef90_V513U9	S F E D A L L T A A G L Q   P   R   H   Q   K   T   N   T   V   A M Y K T N I   P   L   P   A G   V   F T G K
UniRef90_A0A017S7K8	S F E D A L L E S A G G L K   P   R   H   Q   E   T   G   T   V   V   P M Y R T N I   P   L   P   A G   I   F S A T
UniRef90_I7KIM2	T F E E A P L R A R A G I P   L   A   H   V   E   Q   D   R   T   V   P M Y R T S R R   L   E   P   A G   S   L   G G P
UniRef90_UPI0003F49A2E	S F E H A L L D A G L T   M   R   H   R   E   Q   G   T   V   A M Y V S   Y   K   S   I   P   L   N   A   A G   P   F S G A
UniRef90_UPI0003B776D8	T F E E H S L L R H G F T   I   E   L   N   E   N   K   V   V   P M Y K T N I   K   N   R   K   C   G   P   F G G N S
UniRef90_F0YBN7	S W E G R L E A A G L T   P   R   H   V   E   Q   Q   R   N   V   P M Y R T A V   P   N   A   R   A G   P   F G G G S
UniRef90_UPI000333F787	S P E E E A C K A A G G L P   G   R   D   P   A G   H   W   L   A   A   A   Y   K   T   T   V   P   C   S   P   S   A   G   F   G   C   P
UniRef90_S6EML2	S F E G A L L I N A G L T   P   K   N   I   T   R   H   Q   N   V   S   M   Y   K   T   T   K   C   L   D   A   A   G   I   F   K   C
UniRef90_U4KZG6	S F E G A L E A A G L T   P   R   H   V   V   K   K   C   N   C   V   S   M   Y   K   T   T   L   P   L   C   P   A   G   V   F   T   G   T
UniRef90_F7G7U1	S V E E A L E A A G L P   R   R   D   P   A G   H   S Q   T   T   V   P   C   A T   M   L   A   C   Y   P

		170	180	190	200
UniRef90_F3KZQ8	M	V	S M R P   L S V A H T I R S I Q   C	R H G A P   H F G N P K D I   G   D D I	
UniRef90_A8LLX6	M	V	S M R A I P E D R V A E A V E   S R R H G A P   H W G D P A G L   G   T D D L		
UniRef90_UPI000328843F	L	V	T M R P   P K D K L E R A C S   Q G E R G Q   H I G D P D L L   G   K D D L		
UniRef90_G5JJY5	I	T V	S M R P   M T M S Q A I K A T E   T N V H G T   H I G S P E F L   G   S D D I		
UniRef90_A9H2B4	V	V V	S M R P   F R S H H A I R A V Q   S S A H G A P   H I G F P E E I   G   A D D I		
UniRef90_A6W5D4	L	V V	S M R P   V P A D R V A D A V A   T G R H G A P   H V G D P A A L   G   A S D L		
UniRef90_UPI000367770E	M	V V	S M R P   L A P A H A I R A V Q   C T R H G A P   H L G D P A A I   G   D D D L		
UniRef90_UPI0003B718D9	M	V V	S M R G Y P P E L V E R V S E L   T G R H G G P   H V G D P A E I   G   A D D I		
UniRef90_W4QA54	V	V V	S M R P   I K N E L V Q K A I A   T S M H G A P   H V G N P M E I   G   V E N L		
UniRef90_M3C4F1	L	V V	S M R P   V P A G L V E T A H R   T A V H G A P   H A G D P A E L   G   A D D L		
UniRef90_H1S183	M	V V	S M R P   Y T P E Q Q A A I A S R L   P G A H G A P   H M G D P A A I   G   A D D I		
UniRef90_Q5LUE3	M	V V	S M R A V P E D R V A E V A E I   P L A H G A P   H Y W G D P A G L   G   A D D I		
UniRef90_W5WEC8	L	V V	S M R Y I P A G M V E D A V Q M   P A V H G A P   H V G A P A A L   G   R D D L		
UniRef90_K2MKK1	L	V V	S M R S F K P S D A I R A I L Y   S D R H G A P   H I G D P A S I   G   S D D L		
UniRef90_D2B2X9	M	V V	S M R P   V P A S L V P A A V R V   T A R H G A P   H V G D P A E I   G   A D D L		
UniRef90_A0A24PJM0	M	V V	S M R A V P N N H F   V D R A L E I   S H R H G S   H V G T P E E I   G   K D D L		
UniRef90_W5ILD0	M	V V	S M R P   L K A A D A V R A S Q   T G R H G A P   H I G D P A L   G   A D D L		
UniRef90_M3Y9G7	L	V V	T M R P   I P E D K L E R A S C   S M G T K G Q   H I G D P E W L   G   K D D L		
UniRef90_UPI0004655462	L	V V	S M R P   M S G A D A V R A V Q   T S R H G A P   H L G C P E A L   G   A N D L		
UniRef90_H0X9Z5	L	V V	T V R A V P E D K V Q A S C   S L G E R G Q   H I H L G D P T K I   G   N N D L		
UniRef90_UPI0001423E3C	M	V V	S M R P   F K S F E V T K V Q E I   T R V H G E P   H L G D P S L   I   G   A N D L		
UniRef90_A3JF21	M	V V	S M R P   F K A A E A I R A I Q   I T T R H G A P   H L G D P S L   I   G   A N D L		
UniRef90_Q1ATE1	L	V V	S M R P   Y R P E E V P R A V S Y   P A M H G A P   H V G R P E A L   G   K D D L		
UniRef90_A0A034U0T3	M	V V	S M R P   F T P A D A I R A I Q   V T T R H G A P   H F G T P D A I   G   E D I		
UniRef90_UPI0002378C2A	L	V V	S M R P   M P P D R V A E A V T   L T H V H G G P   H I G S P E K L   G   D N V		
UniRef90_W7STB3	L	V V	S M R P   I P S E L V P A A V L   M P A V H G A P   H V G D P S A L   G   S D D L		
UniRef90_A3W3H1	M	V I	T M R P   I P R T R T V D D A I R I   S A Q H G A P   H V A V G D P A D V   G   A D D L		
UniRef90_E0MNJ7	L	V V	T M R S P   F E H Q I P A I F D L   P H A H G T   H I Y W G D P K K I   G   T D D F		
UniRef90_UPI00034D9BE7	L	V V	S M R P   I P A H L V T T A V R I T   D R H G A P   H V G D P A A L   G   A D D L		
UniRef90_H8G7V9	M	V V	S M R G V P A S R V P D A V R   I C A R H G A P   H I G D P A S I   G   T D D L		
UniRef90_UPI0003C8EE3D	L	V V	T M R P   V P K D K L E R A C C   S E G E Q G Q   H I I G D P E L   L   G   K E E L		
UniRef90_13XUQ9	M	V V	S M R P   I K K E K V V A D A C   C V T S H H G S   P I H V G Y P E M   G   Q D D I		
UniRef90_UPI00038EE872	L	V V	T M R P   I P K D K L E R T C   S M A G E Q G Q   H I I G H P E L   L   G   K E E L		
UniRef90_UPI0003F181F1	L	V V	T M R P   I P K D K L D R S C   S T G G E Y G Q   H I I G D P G L   L   G   K D D L		
UniRef90_UPI00036F45AA	A	V V	S M R P   M P P A A A I R A I Q   I T S V H G A P   H H I A R P D L   I   G   D D D L		
UniRef90_A9D6M5	L	V V	S M R P   I R R E L V E R A S A I T   S A R H G A P   H H I G D P A V L   G   K D D L		
UniRef90_F2LD73	T	V V	S M R P   P Y T A E Q T A I A F E V   F C   H V G A P   H V G D P A A I   G   A D D V		
UniRef90_B1KND9	V	V V	S M R P   F T P A Q A I K A I Q   I T S Q H H G A P   H I I G K P E M   G   N S D L		
UniRef90_E2CL53	L	V V	T M R S Y P S E Q I P A I Y N Y   P H A H G T   P V Y W G A P E A I   G   K D D L		
UniRef90_U7FNB6	M	V V	S M R M   P D E R V R D A V A I   S A R H G S   P V H I G D P V A I   G   S D D L		
UniRef90_G8AQ82	M	V V	S M R P   M T P A Q A E R A A A V   T G R H G A P   H H I G D P A A L   G   R D D L		
UniRef90_G8RXH5	L	V V	S M R P   F A P D V I S H V V D I   S A R H G A P   H H I G D P E E   G   D D D L		
UniRef90_UPI00023796D3	M	V V	S M R A   P N A R V D E V V E I   P L A H G G G   P V H W G D P A I   I   G   A D D V		
UniRef90_F6U2F1	H	L	F T W R R V P N D I L R I P S S C   P F P N Q R P   L M M K D P S M L   G   R D D L		
UniRef90_D4A9W3	L	V V	T M R P   V P K D K L E R T H S L   G G Q Q G Q   P H I I G D P E L   L   G   K P L		
UniRef90_S4AFE7	M	V V	S M R P   V P P P G G L A A A I R L   P A V H G A P   H H C G D P G G L   G   A D D L		
UniRef90_UPI0002558A65	L	V V	S M R P   F S G N A T E Q A C   I S G R H G A P   H F S G D A A A L   G   E D D L		
UniRef90_G3WIZ8	L	V V	T M A P   I P E D K L E A V Y L   T R G V P G E P   H I I G C P E L   L   G   E D D L		
UniRef90_B9QRV7	M	V V	S M R P   I A K E R I D E V Y E I   C R K H G A P   H V G N P A E I   G   L T I		
UniRef90_UPI0001CBA9D9	Q	V L	S M R P   P K N L I E T A F Q V T H V H G A P   H H I G D P A M I   G   D D H		
UniRef90_C7NLX9	L	V V	S M R P   M P V G L V P L A S A V P L A H G S   P V H A G D P A G L   G   G D D L		
UniRef90_F2U5K1	M	V V	S M R P   V K K D H I S T A V S A T A P H G V   P F H T V D H R   L   K T T R L		
UniRef90_B5YMQ5	V	V V	S M K P   I S C M D I A K E V E   I T S K H G G P   L C V G S P E S I   G   T D D L		
UniRef90_D2W218	M	V V	S M R P   V P K D Q V E L A K A I   T E Q H G G P   L H C G D P K E I   G   E D D L		
UniRef90_A1SCV3	M	V V	S M R A V P A D Q V A A A V V Q   V T S R H G A P   V H V G D P A A L   G   E D D L		
UniRef90_UPI00046AD790	M	V V	S M R P   I I K K E R V A D A C   V Y T S H H G T   P I Q V G Y P E M   G   K D D V		
UniRef90_V8NV52	L	I	V T M R Q   I P K D K L K L E C V Q   T H S H G A P   V H V I G S S   G   K D D L		
UniRef90_KOY511	M	V V	S M R P   L P R C D V A R A I E V   T A R H G R P   V H V G D P A A L   G   A D D L		
UniRef90_B7G3F9	V	V V	S M K P   I P A L Q I S R H V E I   T S K H G G P   V C I G R P D V   G   F D D L		
UniRef90_V4J293	M	V V	S M R P   I A T H R V E D A V A I   T G R H G A P   V H I G T P A E   G   A D I V		
UniRef90_A3SMW2	A	V V	S M R P   V R E D Q V D R V A E   P H A H G A P   V H I G D P A T   G   Q D D V		
UniRef90_B6JJ68	L	V T	M R S F T P Q N A I R A I Q   I T S R H G A P   V H I G D P A Q   G   Q D D V		
UniRef90_UPI00042C464D	L	V V	T M R P   V P K D K L E A C C S M G G E Q G Q   P V H I G D P E L   L   G   K D D L		
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UniRef90_D5V4P4					
UniRef90_M3VWX1	M	V V	S M R P   I K K D L I D T A V E   I T S K H G A P   V H I G Y P E M   G   E D D I		
UniRef90_A8LPN3	L	V V	S M R P   I P K N K L I E R A S C   S P G S K H G P   V H I G D P E W L   G   K D D L		
UniRef90_F7G523	L	V V	A M I P   I P K D K L E D I Y Q T G D   V Q R E P   H I I G C P D L   L   G   E D D L		
UniRef90_A0A010YDF1	Y	V V	S M R P   I K K D L I D T A V E   I T S K H G A P   V H I G D P S K I   G   T N D V		
UniRef90_S9REV3	M	V V	S L R P   I P K D Q L D R V I D V T R H G A P   V H I G D P A E I   G   H D D V		
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UniRef90_K8VYZ9	M	V V	S L R A M P S G Q I A L A S D V   T S H H G S   P V H V S N P A E   G   T D D I		
UniRef90_A0A017HCI9	V	V V	S M R P   V H R D R I D E V R D L   T A R H G A P   L H V G D P A A I   G   P D D L		
UniRef90_C3Y363	M	Y L	A M R P   I P R D K L D V V H Q M P D   L H G A P   V H I G D P A M   G   V P D D L		
UniRef90_X1LHC5	M	Q V	S C R L V K S Y D A S R A V Q   I S S R H G A P   V H I G D P A A I   G   K D D L		
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UniRef90_A0A014LV13	L	V V	S M R A I P A R L Q I T L A V Q   T D S H G A P   I A I G Y A E Q L   G   A D D L		
UniRef90_W9ALA2	L	V V	T M R P   L P A D Q I T L A V Q   T D S H G A P   I A I G Y A E Q L   G   K D D L		
UniRef90_UPI0002C6640C	L	V V	A M R P   I P R T K L E R G C S M G G E E G Q   P V H I G D P E L   L   G   K D D L		
UniRef90_B6HHP7	C I	V S M R P   Y R P E H I D R V R G   I T S T H G E P   V A W G W D G A L   G   L D D V			
UniRef90_M7X7T8	M	V V	S M R P   Y P P S A I E T V R D L   T R P H G E P   V A W G P E A A L   G   V D D P		
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UniRef90_UPI0003B776D8	M	V V	S M R P   F K K N Q V N N V M N   C K S H G K P   I H Y G S P D E I   G   V G D D L		
UniRef90_F0YBN7	L	V V	S M R P   Y A E R D V A A V A A T A P H G A P   V H W G D P A D I   G   V G D D L		
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UniRef90_S6EML2	Y	V V	S M R P   Y K K K D L D A V R S V   T A T H G E P   V D W G D G A D L   G   A D D L		
UniRef90_U4KZG6	F V	V S M R P   Y K K E D V E R V R D I   T R P H G E P   V A W G W E G A L   G   E D D V			
UniRef90_F7G7U1	L	V V	T M R P   K D K L E R S C S L E S E Q R Q   V H I G D P E L   L   G   K D D L		

	210	220	230	240
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UniRef90_A9H2B4	D S P D Y G D P T E V A D D E L P V F W A C G V T P Q A V L A A S K P E F A I T			
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UniRef90_UPI000367770E	A R P D Y G E A V T V A D D E L P V F W A C G V T P Q R A L E R A G L P F A I T			
UniRef90_UPI0003B718D9	M T P D F G D P P V L E D D G D V P V F W A C G V T P Q A V V L D A K P E L A I F			
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UniRef90_K2MKK1	M K P D F G D E P V V N E G D I P V F W A C G V T P Q M A I R N V L P D L A I T			
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UniRef90_W5ILD0	Q A P D Y G E P V A L A A D E L P V F W A C G V T P Q A V L A A E P E L F I T			
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UniRef90_B1KND9	N R P D E G E P T E I R A G E Q V P V F W G C G V T P Q A A V I E A R P P I C I T			
UniRef90_E2CL53	S N P S F G D S V E I N E D H I P V F W G C G V T P Q V V I S N A K I P M F I T			
UniRef90_U7FNBN6	S A P E Y G D P I Q V P E G E T T P V F W A C G V T P Q A A I S R A K P D F C I T			
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UniRef90_C7NLX9	R K P D W G N D A V T F N E D E V P V F W S C G V T T A N A I A S A G S P L A F T			
UniRef90_F2U5K1	G R P D F G E A T E L E P G D V P V F W A C G V T P Q V V L E A S R P P W A I T			
UniRef90_B5YMQ5	E T P D Y G D A V D V R G D E V P C F W C C G V T C L E A V K S A N L P V I T			
UniRef90_D2W218	S L P D W G D S D V D V L P G E L V P V F W A C G V T P Q Q V L M D S G V P F A I T			
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UniRef90_V8NV52	Q N P D Y G D A V E I L K D D E I P L F W P C C G V T P Q N V L R E V K L P F A I T			
UniRef90_KOY511	S S P E Y G N A V Q A H P G D V P V F W A C C G V T G I E A V I N C			
UniRef90_B7G3F9	D V P D F G G G P V A P D E G D V P V F W A C C G V T P Q V V A I Q R A R L P L A I F			
UniRef90_V4J293	E R P D W G E A I D L G P D E V P V F H A C C G V T P Q A V L M D S K V P F A I T			
UniRef90_A3SMW2	T R P D Y G E Y V E I H E G E T P V F W A C C G V T P Q Q V I Q R A R L P L A V S			
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UniRef90_M3VWX1	T K P D Y G D S I E I K E D E I P V F W P C G V T P E N V L K N V K L P F A I T			
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UniRef90_M7X7T8	A K P D F G E P Q I F F E G E I P V F W A C C G V T P Q I A V E A A K I E L V F A G			
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UniRef90_I7KIM2	Q K P D F G E A P V V R E D E V P V F W G C G V T P Q I A V E S A G D K L V F A			
UniRef90_UPI0003F49A2E	A E P D F G E P V D I P D G T I P V F W A C C G V T P Q A A V M E S A P E L A I C			
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 UniRef90\_I3MDL9

50                    60                    70                    80

This figure displays a sequence alignment of UniProt proteins. The alignment is presented in a grid where each row represents a different protein sequence. The columns represent amino acid positions, with positions 50, 60, 70, and 80 specifically highlighted in yellow. A vertical bar is positioned at column 50, indicating a highly conserved residue across all the aligned proteins. The sequences are color-coded by residue type, and gaps are represented by dashes. The UniProt identifiers for the proteins are listed on the left side of the alignment.

	90	100	110	120
UniRef90_A7EDN4	T D I P K Y M V Y E N G E L L G H L D D I	K A Y W T E D H V A F L I G C S Y		
UniRef90_H0VGE7	T G H P Q V W K Y E S G A C T G Y L S S L	E E S E K L K D M V T F V S G C S F		
UniRef90_G3B873	T D L P K Y N I Y K D G K F V G E K S D V	T Q E W T E D H V G F L I G C S Y		
UniRef90_W9CE72	T D A P K Y M V Y K D G A E L V G H D D I	K T H W T E D H V A F L I G C S Y		
UniRef90_V2WWP4	T D L P R Y N I Y R D G K F V E A K D S I	E K E W K S D S I A F L I G C S Y		
UniRef90_UP10002B426BE	T D F P Q Y R V Y Q S G R H I A S R K D L	I D T T S S L A D Y N W N D L V T F Y L	G C S F	
UniRef90_B0Y1Y0	T D F P Q Y R V Y Q S G R H I A S R K D L	K E V Y T P D H V G F L I G C S F		
UniRef90_K9EE11	T D I P R Y R M W R D G E L E E T T D A	T E A W A E H P D L V A F L I G C S F		
UniRef90_H1HTK8	T D F P R Y R V F L N G E V S E V R E V	K A L W N I G S V G F L L G C S A		
UniRef90_K0VM11	T D V P R Y R V W K D G A L A A E T G D I	N D L W S D D L V A F A I G C S F		
UniRef90_E4XTM2	T D V P G Y E V Y T D G S R G S M Q K Y P	A R Y E N L R P F Y L G C S F		
UniRef90_W6MQT9	T D I P K Y C V Y H G G D L V S V E K N I	V E Q W K E E N Y V G F L I G C S F		
UniRef90_D5KY42	K D A P G Y N I Y V N G K A T Q D V P N I	D S L W T E D S V A F L I G C S F		
UniRef90_C4Y250	K D F P S Y N V Y E K G T L V A S P S D I	S D L W N K Q S V A F L I G C S F		
UniRef90_Q5RBX1	M G H P Q F W K Y E F G A C T G S L A S L	E Q Y S E Q L K D M V A F L L G C S F		
UniRef90_C3ZCM2	T D G V Y S V C K N G R I L P E A G T L	L Q Y T E E M K D M V T F Y T G C S F		
UniRef90_M2UGP5	T D C P N F N V Y Q N S K L T K E C P D I	K E Q W T S D H V A F L I G C S Y		
UniRef90_UP10002C56C8B	T G C P Q F Q K Y K F S A C A G S L T S L	E D Y P E P L E D M V A F F I V D C G F		
UniRef90_UP10003F49638	T D C A R Y N I Y E D G K R I A N K T D I	I D E W Q P D S V A F F I G C S Y		
UniRef90_G5E6X1	T G C P Q F Q W K Y E F G I C M G S L A S L	E E Y S Q Q P K D M V A F V L G C S F		
UniRef90_W0TD44	T D F P Q Y C I Y H K G K L Q G Q T A N N C	L D Y P W E D M V T F Y I G C S Y		
UniRef90_L8FUI7	T D V P L Y M V Y D D G K L V K S C S D I	A K E W T D D H V A F L I G C S Y		
UniRef90_W9YUT0	N D I S K Y M V Y E N G N L T K S C H N V	E A E W T E D D H V G F L I G C S Y		
UniRef90_A7RIU4	T D L L K Y I V N E D G K E T S T L T N L	L D Y P W E D M V T F Y I G C S Y		
UniRef90_S9PKX6	T N L P F Y C E Y I N G K F K T P T T I	S N Q W S S S Y V G F L I G C S F		
UniRef90_C7YQ58	T D A P R Y M V Y K D S R L Q K N C N D I	M A E W T D D H V A F L I G C S Y		
UniRef90_G1XD92	T D I P A Y N V F K D G K L V S R R S N I	M D E W T D D H V G F L I G C S Y		
UniRef90_I9WCG7	R D T G G Y M V F R D G E L V D T P R D A	S P M W R D D L V A F V L G C S F		
UniRef90_X6GH02	T D A P Q Y N I Y H F G E L T R R R T D I	I D L W Q D D F A A F A L G S S L		
UniRef90_V9DQW6	Q D F P K Y M V Y E N G V L T K S C L S V	E A E W T E E H V G F L I G C S F		
UniRef90_Q09674	T D I P F Y C E Y I N G K F S R E L E N I	S K E W T E E D Y V G F L I G C S F		
UniRef90_W9W6A3	Y D F P K Y M L Y Q D G E L V K S C G D V	G A V W T E D H V G F L I G C S Y		
UniRef90_G0REE7	R D A P R Y M V Y K D S K L E K S C E E V	T A E W T D D H I A F L I G C S Y		
UniRef90_W2S5M4	T D H P A Y N V Y E N G K L L A T K S D I	K D E W T D S S V A F L I G C S F		
UniRef90_Q6CSP0	T D F P Q Y H I Y Y K G K L Q S K A N D C	L K E W K D G Y V G F L I G C S Y		
UniRef90_I1G6L1	T D I P R Y I I F S H G R Q V H D M L D L	H G F D W K D C V S F Y I G C S F		
UniRef90_W1QL35	T D F P S Y N I Y E N G E L R L T K D V	R D E W S S N H I G F L I G C S H		
UniRef90_J9VPR6	T D A P G Y N I Y K D G K L A K D V R D C	K E W W A E D S V A F L I G C S F		
UniRef90_L2FFY0	H D A P R Y R V Y E N S K H V S E P V N V	A D Q W T D G D H V G F L I G C S F		
UniRef90_UP1000372C81C	T D V G G Y T V F R D G E P V A T P V S I	A D L W R D D L V A F V L G C S F		
UniRef90_M7BRP2	T D C L L Y I R I Y E Y G A C T G T L T S L	K D Y F D Q L K D M V T F Y I G C S F		
UniRef90_C5DS11	T D I P K Y H I F Q G G R L Q E K S N D C	R M Y W R D N Y V G F L I G C S Y		
UniRef90_R8BPN8	H D F S R Y M V Y K D G K L A H E A E D I	A A E W S E D H V G F L I G C S F		
UniRef90_W9XQB5	H D F P K F M V Y E N G D L T K H C L N	V E A E W T E D H V G F L I G C S Y		
UniRef90_E3QMC8	H D F P R F R V Y E D S R H V A E P V D	A D R W L D G D H V G F L I G C S F		
UniRef90_A0A010R1M2	H D S P R Y R V Y E D S K H V P E P V S	E D K W L D G D H V G F L I G C S F		
UniRef90_G7XD62	T D C P A Y R V Y K H G K C L A N K R D L	L L D L W S T N D D Y T A F L L G C S Y		
UniRef90_UP10003C1AF85	T D A P Q Y S I F C Y G E F M H A T H I	V D L W R Q D F S A F A L G S S L		
UniRef90_W5N9H5	T L Y P E Y F K Y E Q G N L T S R L P S L L	D Y S E E L A N M V T F Y I G T A M		
UniRef90_H2Y4B5	T D V P P V I Y Q V V E K G T K T K	F E W S D M V T F Y F G C S F		
UniRef90_S3C7R6	T D L P R Y R V W E D G G L V A E P S H	V T G H W R D D L V P F L L G R P L		
UniRef90_C5KDN0	T D A S K Y T V Y D N S G K V E V L R A	D R S V P K N V E A L T G F V F G C S F		
UniRef90_M7TRV9	R D A P R Y N V Y K D G V L A E H A D	V D H W T D D H V A F L I G C S Y		
UniRef90_J4WA43	T D I P A Y M V Y R D R A V L V K S C R D	I L E E W T A S H V A F L I G C S Y		
UniRef90_C9S6Z9	T D C P R F N V Y Q N A R L A Q N V P D I	L R H W T D D H V A F V I I G C S Y		
UniRef90_A0A052IBI6	M X X Y R V W R D G K L V D E P L D V	R G L W R D D L V A F F I I G C S F		
UniRef90_L9JHX6	M G A Y K F Q K Y E F G T C T G S L T S L	E D J K E Q L E D M V A F V I I G C S F		
UniRef90_L1K122	T D I P L Y R V F K D G K M T E Q	E S I E E Y Q E N K L V S F L L G C S F		
UniRef90_U1J646	T D I P R Y R V F K Q G Q L I E D V H	D H I S P I W Q S D L V T F A L A S Y L		
UniRef90_M3A475	K D A P K Y M V Y Q D G K L V D H C P D	V H D I S P I W Q S D L V T F A L A S Y L		
UniRef90_G9NDD9	R D A P H Y M V Y K D S K L E K S C D D	V A E W T P D D H V A F F I I G C S Y		
UniRef90_S3CPA9	T D C P R Y N V Y D G S R L V S A V A T	D E D W T D D H V A F F I I G C S H		
UniRef90_UP100044154B5	T D A P R Y M V Y Q D G V L V E S L P D V	K E Y W T Q N H V A F F I I R C S Y		
UniRef90_J3NME6	H D F P A Y T V Y R D G V L T A Q R T D I	A A E W T A D H V G F L V G C S Y		
UniRef90_J6ETM3	T D V P G Y N V Y S R G K L V Q K N N C	S E F C G Q Q P L I S V T F A L A S Y V		
UniRef90_C5DDC5	T D F P R Y N V Y S R G K L V Q K N N C	V N E W S S D H V G F L I G C S F		
UniRef90_H2Y4B2	T D A P A Y Q I Y K P L T K K C Y T V S D	D C S D M V T F Y I G C S Y		
UniRef90_A7RRQ9	K D M Q L Y S I F V K G E L Q G T I G D V	S H I P W D E M V S F Y M G C S Y		
UniRef90_X0PC07	N D F P K Y R V Y R Q G S L T S E V T S V	A D I W Q E D F V S F L I I G C S F		
UniRef90_V411L4	S D V P K Y R V L K D G Q L V D E V T N I	T K I W R T D F V T F A L A S Y V		
UniRef90_W3WUI1	H D A P R Y M V Y R D A R V A R S V L D	V A A E W T P D H V A F L V G C S Y		
UniRef90_X1NZB8	T D L P K Y R V V E Y G E L K R E S T D I	R P F W Q S D D S V A F F I I G C S L		
UniRef90_X1GN24	T D L P G Y Q I Y L E N G K V V A E P T D	R E Y W K Q S D D S V A F F I I G C S L		
UniRef90_G9P8D0	R D A P R Y M V Y K D S K L E K S C D V	T A E W T S D D H V A F F I I G C S Y		
UniRef90_X0PMS2	T M I L P R Y R V W Q H D T L V A E P T D	L I T Y W R D D A V A F A L G C S H		
UniRef90_H2S9X4	T D I S E Y N V Y E N G K L V K T I S N L	Q S Y S S D I R S M V S F Y L G C S F		
UniRef90_B8MPE1	T D I P S Y H T F R N G V L I E T K P T L	S D W T T E H A F L I G C S F		
UniRef90_U1KWC7	T D I P R Y R V I L K H G Q L T E V S D I	K Q L W R D D L V T F A I A S Y L		
UniRef90_K2S8Q6	T D A P R Y M V Y K D G A L I E S I P T	K Q L W R D D L V T F A I A S Y L		
UniRef90_H7FF82	T E V A A Y R I Y Q Y G E L I E T C A N V	V Q D I T P H W T P D H V L F L I G C S Y		
UniRef90_UP100030B0A1C	T D A P A Y Q I V A N K T R T I V D N L	E F D W S D M V T F Y I G C S F		
UniRef90_H2ZD46	T D A P A Y Q I V A N K T R T I V D N L	E F D W S D M V T F Y I G C S F		
UniRef90_G4NHG7	H D F P A Y R V Y R D G A L A G K K T D	E A E W T A E H V G F L I G C C S E		
UniRef90_V7EL26	H D L P L Y R P F R D G A A L P V T P D I	A A L W T A D L V P F A I I G C C S E		
UniRef90_UP10003EDFA97	T G C P Q F Q K Y E F G A C T G S L T S L	E D Y T E P L E D M V A F F I V D C G F		
UniRef90_F9XB27	T D A A R Y N V Y V D G K L K E S I M D I	K S H W D D S D H V A F F I I G C S Y		
UniRef90_F6QFQ6	S Q L T C P L T N K H H C L Y T L P N S E	Y D W S D M V T F Y I G C S F		
UniRef90_UP100034F715C	H G F P Q F W K Y K S G T C T G C L S S L	E E Y S E Q L K D M V T F V L D F S F		
UniRef90_B2GHI7	T D V P Q Y V V Y E N G V E V A R P H D I	T P Y W R E D L V T V M L G C S F		
UniRef90_X0QR55	N D F P K Y R L Y R H G K M T K E V T S V	A D V W Q A D F V S F I I I G C S F		
UniRef90_UP10002194116	T D F P K Y R L Y R G K M V D E Y L S V V	D F W R E D L V S F L I I G C S F		
UniRef90_I3MDL9	T V C P Q F Q K Y E F G D C T G S L I S L	G E Y S E Q L K D M V T F I I D C S F		

130                  140                  150                  160

UniRef90_A7EDN4	S F E G A L I D G G L M P Q H I R Q R R N V P M Y K T N I M L C P A G V F Q G T
UniRef90_H0VGE7	S L E E A L E K A E L S R R D P A G H S H T A A Y E T A V P R A T V A G F C C P
UniRef90_G3B873	S F E N E L S A Q G F T P K H Q K E G K N V S M Y I T T K Y L N A A G V F K C P
UniRef90_W9CE72	S F E D A L K T G G L I P R H T K Q S R N V P M Y K T N I S L C P A G V F Q G T
UniRef90_V2WWP4	S F E A A L C T S G L T P R H V E I G R N V P M Y K T Q V S L M P A G V F S G R
UniRef90_UP10002B426BE	S F D D K L I A C C G I K L K N L G K I V A M Y V S N I D C V S V P P F S T K
UniRef90_B0Y1Y0	S F E D A L C E A G G L P P R H Q L T G R L V A M Y R T T V P L M P A G V F S D A
UniRef90_K9EE11	T F E V G L H A A G I E I R H Q T L G R N V P M Y E T S I P C A P T G R L R G N
UniRef90_H1HTK8	S F D G A L L A A G L P V R H V E E H R A M P I Y Q T K L I R T C P A G P F R G P
UniRef90_K0VM11	S F E E A L A S N G I K L R H V S E G H N V S M Y R T N I E C V P A G P F S G P
UniRef90_E4XTM2	G F E Y A L Q R N G V P V R N V E Q K R N V S M Y R S N I E M T A C G P F G G P
UniRef90_W6MQT9	S F E G G A L H K A G F P S R Y R I K G T V V S M Y K T N I K L C P S G V F K G Y
UniRef90_D5KY42	S F E E G T L A T A G G L I P R H T E L G I N V P M Y R T K A A L L M P S G V F G G N
UniRef90_C4Y250	S F E E H A L A Q A G G L P A K N S V L K K N V S M Y K T S K M L D S A G I V F N V P
UniRef90_Q5RBX1	S L E E A L E K A G L P R R D P A G H S Q A G A Y K T T V P C A T H A G F C C P
UniRef90_C3ZCM2	S F E G A F L E A G V P L R N V E Q K L D V G I F R T S I R C Q P F N S F D C E
UniRef90_M2UGP5	S F E S A L L S A A G L V P R H F V M D R N V P M Y R S N I P L N P A G V F K G T
UniRef90_UP10002C56C8B	S X E E A A L E K V G L P R G Y L A R H G L V G A Y K T T V P C V A M A G F C C P
UniRef90_UP10003F49638	S F E D A L I K G G F G L R H Q E L N N M T P C Y R T S T V P L M R S G P I K G K
UniRef90_G5E6X1	S P E E A L K E A G L P S R D S G H G Y G S A Y K I T V P C S T T A G F C C P
UniRef90_W0TD44	S F E E G A L I E A G L P P P K N M I R G T N V T M Y K T S K I I M D P A G V F G C P
UniRef90_L8FUI7	S F E E A A L T A A G G L P P R H T V M G R N V P M Y A T N I I P L C A A G G V F G G T
UniRef90_W9YUT0	S F E T A L T A A G G L L L P A H T A H G R N V P M Y R T K I I P L C P A G V F H S T
UniRef90_A7RIU4	S F E D A M I A S G I P I K N I Q E K K N V S M F Q T N I I S C P A G K F S C P
UniRef90_S9PKX6	S F E E A A L V A A N L V P R H L P S G N P P M F T N L I L C P S G V F S G T
UniRef90_C7YQ58	S F E E A E L T V A G L P P R H A V L G R N V P M Y R T T V P L C P S G V F G G T
UniRef90_G1XD92	S F E T A L K E A G G L E P M C S K K N M A V P M Y V T N I I P L N S A G V F S G Y
UniRef90_I9WCG7	S F E S I L Q S H G V H L R H L A E G N V S A M Y Q T N H M T T P V G P F A G Q
UniRef90_X6GH02	T V E A A L A A E K K L L S R I G C G K A S P K F R T R I Q T C R V G P F G G E
UniRef90_V9DQW6	S F E T A L A A A G G L V P P H M A H G R N V P M Y R T S L I P L C P A G V F R S T
UniRef90_Q09674	S F E E A A L V A E N F I P R H L P T G D A P P M F I T N I I P L C A S G V F T G T
UniRef90_W9W6A3	S F E E A A L A T E G G L A P P H M A H G R N V P M Y R T T L I P L C P A G V F S S T
UniRef90_G0REE7	S F E T A L V E A G G L A P R Q V Q G R N V P M Y R T T M G L C A A G G V F R G T
UniRef90_W2S5M4	S F E E S A L C K A G G L T P R N I I D L G R N P P M F T T S S R L N P A G I I F T G T
UniRef90_Q6CSP0	S F E E N A L I E A A G V P P K N I S E G R N V S M F K T N R I I M D P A G I I F D C P
UniRef90_I1G6L1	S F E E K P L D A G G L S I S H L K D K K L V S I Y V S G I D C Y D V G R L R G K
UniRef90_W1QL35	S F E E H E L C E N G L V P I R H L T L G R G V P V Y K T K R L I D P S G V F N C T
UniRef90_J9VPR6	T F E Q A L V D A G G L T P R H Q E L E R N V P M Y R T N I I P L C P S G I I F S G T
UniRef90_L2FFY0	S F E E R A L H E A G G L T P Q H M T H N R N V P M Y R T N I I P L C A A G G V F T G T
UniRef90_UP1000372C81C	S F E E A V L Q R A G V R L R H L D E G T V S A M Y V T G L Q T E A A G P F A G P
UniRef90_M7BRP2	S F E E K A V H K V G G V P L R N F E Q K Q N I S M Y K T D I C C R V A S F C C N
UniRef90_C5DSI1	S F E E G S L I S A G G L P P P K N A V L Q G N V S M Y K T T K Y I M D A S G I I F R C P
UniRef90_R8BPN8	S F E E S A L A Q A G G L A P R Q Q A Q G R N V P M Y R T T I I P L C P A G I I F H T T
UniRef90_W9XQB5	S F E N A L L A S A G G L I P A H T A H G R N A P M Y R T N I I P L C P A G I I F H T T
UniRef90_E3QMC8	S F E E R A L L C E A G G L A P R H Q L H N R S V A I Y R T S M P C A A G G V F S G T
UniRef90_A0A010R1M2	S F E E R A L N E S G L I T P R H M T H D R N V P M Y R T N I I P L C A A G G V F K G T
UniRef90_G7XD62	S F E E A A L C N A P L T P R H Q V T N T L V P M Y R T S L I P L S P A G I I F T N T
UniRef90_UP10003C1AF85	N F E P T L V E K G V R L R H G G I S G P V P K Y R T G I V R S R A I G P F G G K
UniRef90_W5N9H5	S D H Q K L Q R A E V P P R P G D K K H A V S I Y Y T S S V P C C G V G N F Q C K
UniRef90_H2Y4B5	S F N Q L I L L E N K M L T P N A R N V S M Y M R T N I I D C Y S C G E F Q C K
UniRef90_S3C7R6	S L D A R L A A A G G V P L R H L E Q G R S L P L F V T N R S C R P A G R L S G P
UniRef90_C5KDN0	S W E D K L A E A A G V P P R H M V Q G K N V S M Y M R T N I I P N K T A G P F G G N
UniRef90_M7TRV9	S F E S A L L S A A G G L T P R H T V L G R N V C M Y M R T T V P L C P A G V F T G T
UniRef90_J4WA43	S F E T A L L A A A G G L P A R H V A T G R N V P P M Y R T T R A L I P L N P S G V F T G T
UniRef90_C9S6Z9	S F E E S A L A A A Q G G L P P R H A L L D R N V P M Y R S N I I P L N P S G V F T G T
UniRef90_A0A052IBI6	S F E E E A M L E N G G L P V R H I E Q G Q C N V P M Y R T N I I A T H P A G P F S G P
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UniRef90_L1K122	S W E G M L T E A G T T L S I S S H R N V P M Y I T N I I P N R T S G P F G G F
UniRef90_U1J646	S Y D Y A L D C V G L K S T A I N P L H G L P L Y I S S L I P C Q S A G I I F S G F
UniRef90_M3A475	T F E R A L L T A A G G L P P R N I T D K R N V P M Y M R T K T P L L N P S G V F N G T
UniRef90_G9NDD9	S F E T A L A T A G G L P P R Q L L L G R N V P M Y M R T K L R L C P S G V F Q G T
UniRef90_S3CPA9	S F E E S A L E C A G G T V R H S V Q D R T V P I Y R T S V P L L N P S G I I F T G T
UniRef90_UP100044154B5	C F E E S A L E C A G G T V R H S V Q D R T V P I Y R T S V P L L N P S G I I F T G T
UniRef90_J3NME6	S L E E A A L S R A G G L P P R H T V L G R V V P M Y R T A V P L L C P A G V F G G T
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UniRef90_UP100034F715C	S L K E A L E K A K L L S R R D P A G H S Q T A V P C A T V A G F C C H
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170            180            190            200

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UniRef90_K0VM11	M V V S M R P L V P A D A I R A V Q I T S R H G A P I H I G L P G S I G I V N I	
UniRef90_E4XTM2	M V V S M R P Y I P K E K L L A V A A S C T S S H G S P I W I G S P K A I G I K D I	
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UniRef90_Q5RBX1	L V V T M R P I P K D K L L E R C C S L V G G E R G Q P I H I G D P E L L G I K E L	
UniRef90_C3ZCM2	V V V S M R P Y L P A D K L L E T A F R I T S H S H G A P I H I G D P A V I G I S D L	
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UniRef90_UP10002C56C8B	L V V T M R P I P E D K L L E R L V Q A S C S M G Q P I H I G D P E W L G I K D L	
UniRef90_UP10003F49638	M V V S M R P Y P L E K V V P E V R I T K P H G E P I V G W G P E E L G I E D V	
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UniRef90_I9WCG7	L V V S M R A L S P T D A I K A T L S A R H G S P I V S L G L P Q D L G I A D L	
UniRef90_X6GH02	M V V S M R P I S R C D I V D R V A V T A T H G E P I H I G D P T V I G I A D L	
UniRef90_V9DQW6	Y V V S M R V Y R R E D I E R I R D V T A T H G E P I D W G W D A V L G I K D I	
UniRef90_Q09674	F V V S M R P Y P E K D D L E R I R K I T S C H G E P I V A W G W D G A I G I K D C	
UniRef90_W9W6A3	Y V V S M R P Y Q R K D D V Q K V R D V T A T H G E P I D W G W D A A L G I R D I	
UniRef90_G0REE7	Y V V S M R P Y R K G D D V V R E V T R R H G E P I V D W G W D A V L G I G D I	
UniRef90_W2S5M4	M V V S M R P Y R P E D I E R V V R E I T R P H G E P I V A W G W N A E L G I R D I	
UniRef90_Q6CSP0	Y V V S M R P Y K K E C I A K V R E V T A T H G E P I D W G F D A R L G I E N L	
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UniRef90_W1QL35	Y V V S M R P Y K P E D V P K V R K I T S S H G E P I V D W G Y D E R L G I P D L	
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UniRef90_U1J646	N V V S M R A F T P N E I V K A V Q V G S P H G I P V H F G T P A D I G I T D L	
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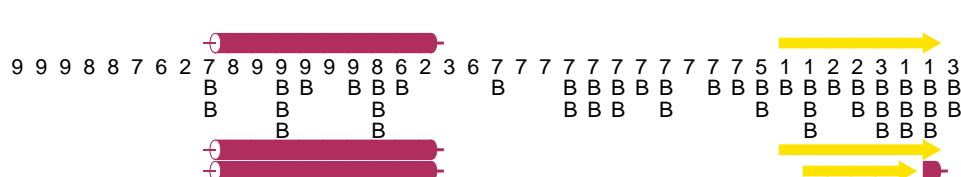
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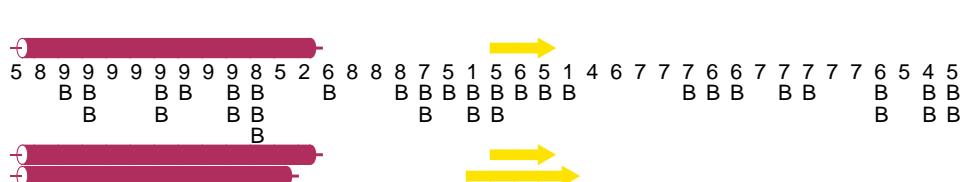
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A C P R T | I T T E

The figure displays a sequence logo for a protein sequence. The x-axis represents the positions of the amino acids, with labels at 1, 10, 20, 30, and 40. The y-axis lists UniProt identifiers for each sequence entry. Each position is represented by a vertical stack of colored bars, where the height of each bar corresponds to the frequency of that amino acid at that position. The colors represent different amino acid groups: yellow for hydrophobic (I, L, V), blue for polar uncharged (G, A, S, C, T, D, E, N, Q), red for acidic (D, E), green for basic (R, K, H), and purple for aromatic (F, Y, W). The sequence logo shows a highly conserved N-terminal region (positions 1-10) and a less conserved C-terminal region (positions 20-40).

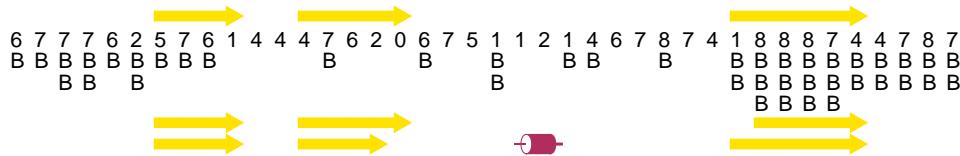


Sequence logo showing the conservation of amino acids at each position of the protein sequence. The x-axis represents positions 50, 60, 70, and 80. The y-axis lists UniProt IDs. Colored boxes indicate conserved amino acids: blue for hydrophobic, red for polar, green for acidic, and yellow for basic.



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UniRef90_UPI0002C4425A				
UniRef90_D9QUX7	T G C P Q F G E C E F S M Y T G S L P S L E E S S E Q   L K D T V T F L L   G G S F			
UniRef90_W5PPG5	T A L P K Y R I F K N G K M I D E P N N I L N Y W R E D D L V T F F L   G C S R			
UniRef90_X1UVG5	T D F P R Y N V Y S R G K L V Q Q K N N C V N E W S S D H V G F L I   G C S F			
UniRef90_C5DH09	G G I P Q F W K Y E F R V G T G S L A L L K E Y L E Q L E D M A	D M V T F Y I   G C S F		
UniRef90_UPI00045E417B	V D I P L Y R I Y K N G E L I T E E Q D I T K Y W N S E L V S F L L   G C S F			
UniRef90_F6Z0B9	P Q F Q F G D C T G S L I S L G E Y S E Q   L K D M V T F I I L   D C S F			
UniRef90_X1PW13	T D C N R Y R V Y K D G E I I D E P T D V M K Y W R D D L A S F L L   P C S F			
UniRef90_I3N9T0	T D A S R Y M V Y S D G K L V K Q C Q D I L D D W T E D H V G F L I   R C S I			
UniRef90_X1TAN6	T D L P K Y R I Y E G K D A K E V L D I K N E W K E D L V T F F L   G C S F			
UniRef90_T5BWD7	T D I P R Y M V Y K D S E L V A S V T D V K D H W T D D H V A F L I   G C			
UniRef90_F7G7Z7	T D V A L F H L Y Q Q G Q E V A C R S L S E A D W H T D F V L F A F			
UniRef90_X6NF79				
UniRef90_E9EWH9				
UniRef90_L8D4U8				

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

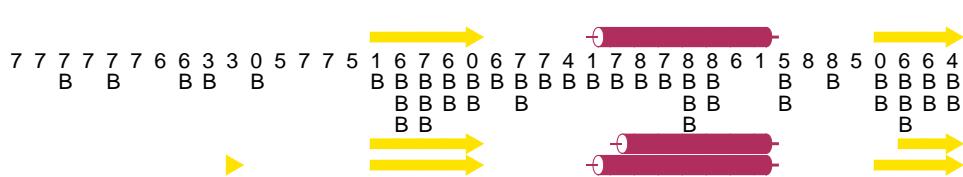


lupas\_21  
lupas\_14  
lupas\_28  
jnet  
conf  
sol25  
sol5  
sol0  
jhmm  
inssm

Sequence alignment of UniRef90 proteins showing conservation across 200 entries. The alignment highlights identical residues in blue and similar residues in red. Key motifs include a central yellow box around positions 170-180 and various red boxes indicating conserved regions like the N-terminal domain and C-terminal domain.

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

UniRef90\_UPI00033145E4      210      220      230      240  
 S R P D Y G D A | V A C Q P G D | V P | V F W P S Q | L T C | L E A | V S S C K T P | L A F T  
 UniRef90\_UPI0003F113A1  
 UniRef90\_UPI0003D6FECE  
 UniRef90\_U1LEG6  
 UniRef90\_G3I395  
 UniRef90\_R1GN52  
 UniRef90\_UPI00038BE28A      210      220      230      240  
 S R P D Y G S Y | V E C | R P E D | V P | V F W P S P | L T S | L E A | V S S C K A P | L A F A  
 S K P N F G E P | L T C | K E G Q L | P | V F W G S S | L T A Q L A | L A K A A | P E F C | M  
 P | L A F S  
 N | V P | D W G D A | P  
 UniRef90\_F6PPG5  
 UniRef90\_H3BZE1  
 UniRef90\_D5G7V5  
 UniRef90\_H0YB62  
 UniRef90\_UPI000372FA3A  
 UniRef90\_UPI0003F07534  
 UniRef90\_UPI00036C6564  
 UniRef90\_W718V1  
 UniRef90\_F6IWK1  
 UniRef90\_B6QUA5  
 UniRef90\_E9QDC8  
 UniRef90\_F1SDA2  
 UniRef90\_G1S5F0  
 UniRef90\_W7RV10  
 UniRef90\_UPI00016C3B13  
 UniRef90\_UPI000442238C  
 UniRef90\_W8FM22  
 UniRef90\_F3FKQ8  
 UniRef90\_E1BNA5  
 UniRef90\_XOTUM2  
 UniRef90\_UPI0002C4425A  
 UniRef90\_D9QUX7  
 UniRef90\_W5PPG5  
 UniRef90\_X1UVG5  
 UniRef90\_C5DH09  
 UniRef90\_UPI00045E417B  
 UniRef90\_F6Z0B9  
 UniRef90\_X1PW13  
 UniRef90\_I3N9T0  
 UniRef90\_X1TAN6  
 UniRef90\_T5BWD7  
 UniRef90\_F7G7Z7  
 UniRef90\_X6NF79  
 UniRef90\_E9EWH9  
 UniRef90\_L8D4U8  
 P      Y | L | K | H | A | K | V | E | Q | G | K | I | R | V |      P | S | P | M | T | W | Q | R | L | I | S | V | L | R | P | S | T | C | I | L



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

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