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M I D T E D Q V G V V T G L A W T E V G G E G E L L T I E A A S M S G K G
Y T L E K E E K D E V G V V T G L A W T E V G G E G E I L L T I E A T K M P G K G
Y K F G I S E K D Q V G V V T G L A W T E V G G D I L L T I E S S V M V P G K G
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Y R Y G M A E E D Q V G V T G L A W T E V G G D I L L V E V S S V M P G T G
Y Q L F K K K G G A I G R V N G L A V L G D S G I V L P I A E V T P S S E G
Y T N F T T E E N G V G I S T G L A W T S V V G G E T L S I E A S E I S D G K G
E E K N Q I G Q V T G L A W T S V V G G E L L F I E A A G V P G K G
D S A G V V T G L A W T Q V V G G D I L L F I E A S L S P G K G
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UniRef90_C1DXW6	N L I L T G S L G D V M K E S A K □ A Y S Y V K S K A Q E D F N K Y D I H V			
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UniRef90_S7WJ03	K L T L T G Q L G D V M K E S A Q A A F S Y I W N V D P D F H E K N D I H V			
UniRef90_M8D997	K L T L T G K L G D V M K E S A Q A A F S Y T R S R A P Q F H E K N D I H V			
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UniRef90_A6VW22	R H V K T G S L G D V M Q E S I Q A A L T V V R S R A T D F H E K T D I H L H V			
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UniRef90_R7ZZ66	K L T L S T G Q L G E V M K E S A M T A L S Y I R S R S H R V F D N Y D I H V			
UniRef90_D5MK75	S L S L T T G H L G E V M K E S A Q A A L S Y I R S R S A D L F T K Y D I H V			
UniRef90_Q3JAK0	K A T Y T T G Q L G E V M Q E S I I Q A A T T V V R H A R E W F Y Q N Y D I H V			
UniRef90_D0C910	K F I T T T G S L G D V M K E S I I T T A M T V V R T R A D E R F E E T D I H V			
UniRef90_UPI0003B715AC	N L Q I T T G K L G E V M Q E S V Q Q A A M S Y V V R S R A □ Q F Y R K □ D I H V			
UniRef90_D4L840	K I E L T T G S L G D V M Q E S A K T A I T C I R S H A S D F Y K N K D I H A			
UniRef90_Q9HJ89	N I I A T T G K L G D I A K E A V L N V S A V F K K L T T G K D I S N M D I H Q F			
UniRef90_K2BYH6	N L I L T T G Q L G D V M K E S G Q A A M S Y V V R S N Y A N F H K V D I H V			
UniRef90_J1FK41	K T L T S T G Q L G D V M K E S A M T A I S Y L K A H A Y R L F D Q Y D I H F			
UniRef90_H3NTS9	R H V R T T G S L G D V M M E S I I Q A A M T V V R S R S Q K Y H D S H D I H V			
UniRef90_R6G5U4	R L T L T T G N L G D V M K E S A M L A E Y I K A H N S L L F D N W N I H V			
UniRef90_B9Y854	K L I V T T G Q L G D V M K E S T E I A L D Y V K S K A P A F F D K H D I H V			
UniRef90_E3PWA4	K L E L T T G Q L G D V M K E S A K A G M S Y V V R S I A D R F Y K E K K D I H V			
UniRef90_A0A023NR36	R L V H T T G Q L G D V M K E S I I Q A A L S V V R A R A D R F H E R F D I H V			
UniRef90_A0A023Y6X0	Q L I L T T G Q L G D V M K E S A S A A A L S V V R S R A N E F L Q K H D I H V			
UniRef90_F5R747	A V Q R T T G S L G D V M K E S V E A A R S V V R S R A R R L F E K T D I H V			
UniRef90_UPI0003A5047D	R Q I K T T G S L G D V M Q E S I I S A A L T V V R S R S A A D F H E K H D I H V			
UniRef90_UPI00046F2E92	R I E K T T G S L G D V M K E S V S A A Y T V V R S R A P E C F E E K Q D I H V			
UniRef90_C0QKN3	E L S V T T G Q I G D V M Q E S A R A A A L T F T K A N M E R F E E K D I H V			
UniRef90_A6TM66	K L V L T T G Q L G D V M K E S A R A G L S Y I R K I D P D F H K K I D I H V			
UniRef90_W1U076	K M I L T T G Q L G D V M K E S A Q A A Y T Y V R H L A A D F Y R T I D I H L			
UniRef90_K0CDJ4	R V T T T G S L G D V M Q E S I I Q A A W T V V K S R S R M Q L E R N D I H V			
UniRef90_K0IXM3	K L A L T T G K L G D V M K E S A Q A A L S Y V V R S R D P D F Y Q T H D I H V			
UniRef90_D8DY53	K L T I T T G N L G D V M K E S V V I A M Q Y V K A H D Y K I F D Y W N I H V			
UniRef90_Q21KA7	R L V K T T G S L G D V M Q E S I I Q A A M T V V R S R S K F L H E K R D I H V			
UniRef90_B9MQT5	K L E L T T G Q L G D V M K E S A K A A V S I I R S R A Q N F Y K E C D I H V			
UniRef90_U1Q009	E V I A T T G Q L K E M A Q E A V S N V S A I I K K F S D E N I S E K D I H Q F			
UniRef90_UPI000361B84D	T L L L T T G K L G E V M R E S A Q A G V S Y I R S R A E D F H A Q K D I H L			
UniRef90_R9LZV8	K I E L T T G S L G D V M K E S F I R A H W E A Y G I E H D F Y K T K D I H V			
UniRef90_UPI000409A753	E L T L T T G K L G D V M K E S A Q A A F S Y I R S R S D D F H E K Y D I H V			
UniRef90_V4LLE3	K F T Y T T G Q L G D V M Q E S I I Q A A L T V V R S R A R K D F H R K N D I H V			
UniRef90_F8E7L2	Q L Q I T T G H I G D V M Q E S A R T A L S V V K S R A R R R F F K D F D I H V			
UniRef90_E6W559	N L M L T T G Q L G D V M K E S A H A A L T Y A K H L A T D I F S K R D Y H V			
UniRef90_F2ND14	Q L T L T T G H L G D V M K E S A Q R A R S Q L F N L S E D F Y E K L D I H V			
UniRef90_D1XZZ7	K L T I T T G N L G D V M K E S A I I A L E Y V K A H H I N K L L E Q W N I H V			
UniRef90_T1CHA8	K L T I T T G N L G D V M K E S A I I A L D Y I R A H A E T L F D Q Y Q L I H V			
UniRef90_L7VTH1	K L I L T T G K L G E V M Q E S A R A A V S Y L R S R A P D F S E K Y D I H V			
UniRef90_R5PZJ2	Q V L R T T G M L G D V M K E S V E A A R S V V R A R A K Q L F A N T D W H I H F			
UniRef90_W7ZNF2	K L T L T T G K L G D V M K E S A Q A A F S Y I R S R S T D F N D K T D I H V			
UniRef90_A7BW86	K S L Y T T G Q L G D I M Q E S I I Q A A M S V V R A R A S S Q F Y Q K Y D I H V			
UniRef90_Q1RID6	E I K T T T G K L G D V M K E S A M A A Y S C F R S R A Y E D Y Y K D F D I H V			
UniRef90_UPI0001746B88	G F I L T T G Q L G D V M K E S V R A A L S V R S R A P K E F E E T E V H I H F			
UniRef90_R5MSL0	K L E L T T G S L G D V M K E S A R T A Y S Y I R S R S T D F N D K T D I H V			
UniRef90_R5B2I2	K L T L T T G N L G D V M K E S A I I A L Q Y V K S H A D M F F E K Y Q L I H V			
UniRef90_E8REG0	K L L L T T G Q L G E V M K E S A Q A A L S Y C R S R N P E Y F D S V D I H V			

QUERY	130																		140																		150																		160																	
	V	K	G	E	V	L	P	V	G	G	V	T	Q	K	I	E	A	A	I	Q	A	G	L	K	K	V	I	P	K	D	N	I	D	D	V	L	L	D	A																																	
UniRef90_B6YU74	V	R	G	E	V	L	P	I	G	G	A	T	P	K	I	E	A	A	I	Q	A	G	L	K	K	V	I	P	K	S	N	E	K	D	V	F	L	S	K																																	
UniRef90_UPI00036FD4B6	L	R	G	E	V	L	P	I	G	G	L	K	E	K	L	L	A	A	Q	R	G	G	I	K	R	A	L	P	K	G	N	V	K	D	L	E	I	P	A																																	
UniRef90_UPI00047DEF8B	L	R	G	R	V	L	P	I	G	G	L	K	E	K	K	L	L	A	A	V	R	A	G	I	R	T	V	F	P	K	D	N	E	K	D	L	E	I	P	E																																
UniRef90_C1DXW6	L	T	G	K	V	L	P	I	G	G	L	K	E	K	I	L	L	A	A	K	R	A	G	I	K	N	V	I	L	P	K	G	N	V	K	D	L	E	I	P	E																															
UniRef90_F7VF98	L	R	G	R	V	L	P	I	G	G	L	K	E	K	K	L	L	A	A	V	R	A	G	I	R	T	V	F	P	K	D	N	E	K	D	L	E	I	P	E																																
UniRef90_C8WCH5	L	R	G	E	V	L	P	I	G	G	L	K	E	K	K	L	L	A	A	H	R	G	G	I	K	T	V	I	P	M	D	N	K	K	D	L	E	I	P	D																																
UniRef90_UPI0004639BD2	L	R	G	K	V	L	P	V	G	G	I	R	E	K	I	L	L	A	A	K	R	A	G	I	K	E	I	L	C	K	R	N	Q	R	D	I	E	I	D	D																																
UniRef90_UPI00041B5898	L	R	G	R	V	L	P	I	G	G	L	K	E	K	K	L	L	A	A	H	R	G	G	I	K	T	V	I	P	M	D	N	K	K	D	I	E	I	P	K																																
UniRef90_S7WJ03	L	R	G	K	V	M	P	V	G	G	I	R	E	K	I	L	L	A	A	K	R	A	G	I	K	E	I	L	C	K	R	N	Q	R	D	I	E	I	D	D																																
UniRef90_M8D997	L	R	G	R	V	L	P	I	G	G	L	K	E	K	K	S	L	A	A	H	R	A	G	I	R	T	V	I	L	P	K	D	N	E	K	D	L	E	I	P	E																															
UniRef90_UPI0003660D8A	L	R	G	D	V	L	P	I	G	G	V	T	Y	K	I	E	A	A	Q	A	G	I	K	K	V	I	I	P	K	S	N	E	D	D	V	L	I	E	E																																	
UniRef90_K4M9T6	V	R	G	R	V	L	P	I	G	G	V	K	E	K	F	M	A	A	Y	R	E	G	V	K	T	V	I	L	Y	P	H	T	N	E	K	D	L	V	E	I	P	D																														
UniRef90_B2KCC0	I	T	G	R	V	L	P	I	G	G	V	K	E	K	F	M	A	A	Y	R	E	G	V	K	T	V	I	L	Y	P	H	T	N	E	K	D	L	V	E	I	P	D																														
UniRef90_A6VW22	L	R	G	E	V	L	P	I	G	G	L	K	E	K	L	L	A	A	H	R	G	G	I	K	T	V	I	I	P	Q	E	N	A	R	D	L	V	E	I	P	D																															
UniRef90_H1Y7R6	L	R	G	K	V	L	P	V	G	G	I	R	E	K	I	L	L	A	A	K	R	A	G	I	K	E	I	L	C	K	R	N	E	K	D	L	E	I	K	E																																
UniRef90_F6CP87	L	R	G	R	V	L	P	V	G	G	I	R	E	K	V	I	L	L	A	A	H	R	A	G	I	R	T	V	I	L	P	K	D	N	R	K	E	L	E	I	P	D																														
UniRef90_Q2W31	L	R	G	R	V	L	P	I	G	G	L	K	E	K	K	L	L	A	A	L	R	G	G	I	K	T	V	I	I	P	K	E	N	E	K	D	L	E	I	P	D																															
UniRef90_D4Z321	L	R	G	R	V	L	P	I	G	G	L	K	E	K	K	L	L	A	A	L	R	G	G	I	K	T	V	I	I	P	A	E	N	E	K	D	L	E	I	P	D																															
UniRef90_D9RYS4	L	R	G	R	V	L	P	V	G	G	I	R	E	K	V	I	L	L	A	A	H	R	A	G	I	K	T	V	I	I	P	E	N	V	P	Q	D	L	E	I	P	D																														
UniRef90_G2TKT9	L	R	G	R	V	L	P	V	G	G	I	R	E	K	S	L	A	A	H	R	A	G	I	K	K	V	I	I	P	K	D	N	E	K	D	L	E	I	P	D																																
UniRef90_Q5FUR5	L	R	G	R	V	L	P	V	G	G	I	R	E	K	K	S	L	A	A	H	R	A	G	I	R	T	V	I	I	P	E	N	V	P	Q	D	L	E	I	P	D																															
UniRef90_UPI0003653875	L	R	G	E	V	L	P	I	G	G	L	K	E	K	K	S	L	A	A	H	R	A	G	I	R	T	V	I	I	P	E	N	V	P	Q	D	L	E	I	P	D																															
UniRef90_D5QHE4	L	R	G	R	V	L	P	I	G	G	L	K	E	K	K	S	L	A	A	H	R	A	G	I	R	T	V	I	I	P	E	N	V	P	Q	D	L	E	I	P	D																															
UniRef90_C0GEY9	L	R	G	R	V	L	P	I	G	G	L	K	E	K	K	V	L	A	A	H	R	A	G	I	K	T	V	I	I	P	A	E	N	K	K	D	L	E	I	P	D																															
UniRef90_Q0FZM3	L	R	G	R	V	L	P	I	G	G	L	K	E	K	K	L	L	A	A	L	R	G	G	I	K	K	V	I	I	P	E	E	N	A	K	D	L	E	I	P	D																															
UniRef90_K0C5L1	L	R	G	E	V	L	P	I	G	G	L	K	E	K	K	S	L	A	A	L	R	G	G	I	K	T	V	I	I	P	H	Q	N	E	K	D	L	E	I	P	D																															
UniRef90_D9PIP6	L	R	G	E	V	L	P	I	G	G	L	K	E	K	K	S	L	A	A	H	R	G	G	I	K	K	V	I	I	P	E	G	N	V	K	D	L	E	I	P	D																															
UniRef90_B9CX07	L	R	G	K	V	L	P	I	G	G	L	K	E	K	K	V	L	A	A	H	R	G	G	I	K	T	V	I	I	P	K	E	N	E	K	D	L	E	I	P	D																															
UniRef90_A0LDT2	L	R	G	R	V	L	P	I	G	G	L	K	E	K	K	V	L	A	A	H	R	A	G	I	R	R	V	I	I	P	E	D	N	V	K	D	L	E	I	P	D																															
UniRef90_C9RBL6	L	R	G	R	V	L	P	V	G	G	I	R	E	K	V	L	A	A	H	R	A	G	I	R	T	V	I	I	P	E	E	N	R	R	D	L	E	I	P	D																																
UniRef90_E0TBF5	L	R	G	R	V	L	P	V	G	G	I	R	E	K	V	L	A	A	L	R	A	G	I	R	T	V	I	I	P	E	E	N	R	R	D	L	E	I	P	D																																
UniRef90_UPI00028853E3	L	T	G	K	V	L	P	I	G	G	L	K	E	K	I	L	L	A	A	M	R	G	G	I	K	T	V	I	I	P	E	D	N	E	K	D	L	E	I	P	D																															
UniRef90_R6ASJ8	L	R	G	R	V	L	P	I	G	G	L	K	E	K	K	S	L	A	A	Y	R	M	G	I	D	T	V	I	I	P	E	D	N	E	K	D	L	E	I	P	D																															
UniRef90_T0L6G7	L	T	G	K	V	L	P	I	G	G	L	K	E	K	K	S	L	A	A	Y	R	M	G	I	D	T	V	I	I	P	E	D	N	E	K	D	L	E	I	P	D																															
UniRef90_E8RSG4	L	T	G	K	V	L	P	I	G	G	L	K	E	K	K	S	L	A	A	Y	R	M	G	I	D	T	V	I	I	P	E	D	N	E	K	D	L	E	I	P	D																															
UniRef90_C9KK8	L	R	G	N	V	L	P	I	G	G	L	K	E	K	K	S	L	A	A	M	R	G	G	I	D	T	V	I	I	P	E	D	N	E	K	D	L	E	I	P	D																															
UniRef90_R4KJ73	L	R	G	R	V	L	P	I	G	G	L	K	E	K	K	V	L	A	A	H	R	A	G	I	R	T	V	I	I	P	E	D	N	E	K	D	L	E	I	P	D																															
UniRef90_G8UYC0	L	R	G	V	L	P	I	G	G	L	K	E	K	K	V	L	A	A	H	R	G	G	I	K	H	V	I	I	P	E	E	N	V	K	D	L	E	I	P	D																																
UniRef90_G8QTJ9	L	R	G	E	V	L	P	I	G	G	L	K	E	K	K	V	L	A	A	H	R	G	G	I	K	Q	V	I	I	P	E	E	N	V	K	D	L	E	I	P	D																															
UniRef90_B8G736	L	R	G	K	V	L	P	I	G	G	L	K	E	K	K	V	L	A	A	H	R	G	G	I	K	Q	V	I	I	P	E	E	N	V	K	D	L	E	I	P	D																															
UniRef90_UPI000379C990	L	R	G	E	V	L	P	I	G	G	L	K	E	K	K	V	L	A	A	H	R	G	G	I	K	T	V	I	I	P	E	E	N	V	K	D	L	E	I	P	D																															
UniRef90_A4CD19	L	R	G	E	V	L	P	I	G	G	L	K	E	K	K	V	L	A	A	H	R	G	G	I	K	T	V	I	I	P	E	E	N	R	E	D	R	L	E	I	P	D																														
UniRef90_Q1MXG9	L	R	G	K	V	L	P	I	G	G	L	K	E	K	K	V	L	A	A	H	R	G	G	I	K	T	V	I	I	P	E	D	N	E	K	D	L	E	I	P	D																															
UniRef90_UPI0003B6B9D6	L	R	G	V	L	P	I	G	G	L	K	E	K	K	V	L	A	A	H	R	G	G	I	K	T	V	I	I	P	E	E	N	V	K	D	L	E	I	P	D																																
UniRef90_UPI00037E5047D	L	R	G	E	V	L	P	I	G	G	L	K	E	K	K	S	L	A	A	H	R	G	G	I	K	T	V	I	I	P	E	D	N	E	K	D	L	E	I</																																	

QUERY UniRef90_B6YU74 UniRef90_UPI00036FD4B6 UniRef90_UPI00047DEF8B UniRef90_C1DXW6 UniRef90_F7VF98 UniRef90_C8WCH5 UniRef90_UP10004639BD2 UniRef90_UP100041B5898 UniRef90_S7WJ03 UniRef90_M8D997 UniRef90_UP10003660D8A UniRef90_K4M9T6 UniRef90_B2KCC0 UniRef90_A6VW22 UniRef90_H1Y7R6 UniRef90_F6CP87 UniRef90_Q2W3I1 UniRef90_D4Z321 UniRef90_D9RYS4 UniRef90_G2TKT9 UniRef90_Q5FUR5 UniRef90_UP10003653875 UniRef90_D5QHE4 UniRef90_C0GEY9 UniRef90_Q0FYM3 UniRef90_K0C5L1 UniRef90_D9PIP6 UniRef90_B9CX07 UniRef90_A0LDT2 UniRef90_C9RBL6 UniRef90_E0TBF5 UniRef90_UP100028853E3 UniRef90_UP100036DD275 UniRef90_R6ASJ8 UniRef90_T0L6G7 UniRef90_E8RSG4 UniRef90_C9KK8 UniRef90_R4KJ73 UniRef90_G8UYC0 UniRef90_G8QJT9 UniRef90_B8G736 UniRef90_UP1000379C990 UniRef90_A4CD19 UniRef90_Q1MXG9 UniRef90_UP10003B6B9D6 UniRef90_UP100037E50E4 UniRef90_R7ZZ66 UniRef90_D5MK75 UniRef90_Q3JAK0 UniRef90_D0C910 UniRef90_UP10003B715AC UniRef90_D4L840 UniRef90_Q9HJ89 UniRef90_K2BYH6 UniRef90_J1FK41 UniRef90_H3NTS9 UniRef90_R6G5U4 UniRef90_B9Y854 UniRef90_E3PWA4 UniRef90_A0A023NR36 UniRef90_A0A023Y6X0 UniRef90_F5R747 UniRef90_UP10003A5047D UniRef90_UP100046F2E92 UniRef90_C0QKN3 UniRef90_A6TM66 UniRef90_W1U076 UniRef90_K0CDJ4 UniRef90_K01XM3 UniRef90_D8DY53 UniRef90_Q21KA7 UniRef90_B9MQT5 UniRef90_U1Q009 UniRef90_UP1000361B84D UniRef90_R9LZV8 UniRef90_UP1000409A753 UniRef90_V4LLE3 UniRef90_F8E7L2 UniRef90_E6W559 UniRef90_F2ND14 UniRef90_D1XZZ7 UniRef90_T1CHA8 UniRef90_L7VTH1 UniRef90_R5PZJ2 UniRef90_W7ZNF2 UniRef90_A7BW86 UniRef90_Q1RID6 UniRef90_UP10001746B88 UniRef90_R5MSL0 UniRef90_R5B212 UniRef90_E8REGO

170 180 190 200

E H E G K I E V I P V S R I N E V L E H V L E D G K K K N R L M S K F K E L E L
D K A E K I Q I F P V E T I D E V L E I A L E E S E K K R E L L R R I R E
N I K N K L E I L P V K W I D E V L S Y A L E R E P Q A
N V K G A L K I I I P V S T V D E V L K H A L T R K P K K K W T S S D E
Y V R K S V N L I I P V D H I D E V L K A L K D K K I E P E
S V K K D L E I I V P V S H V D E E V L A R A L V R Q P Q P E E V P E A V P G A E G
N I K K G L K I I I P V S H V D E E V L A L A L T E
N V K A E I K I C P V K W I D E V L K I A L Q D K E S K S T I K R P A K K K L K E
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UniRef90_G1WZB3	E K A P K L G V V V N G L	A W T A	V G G G V T L E	V A I P G K G
UniRef90_B5EDX8	Y E E E I V E R D R P G V V T G L	A Y S S G V V G G S V L F I	C S D Y P G N G	
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UniRef90_R7G9N0	REP Q C V G V A T G M Y Y T	P V G G D I L F I	V S V I M P G K G	
UniRef90_F2NQ82	R A G M A I G L	A W T N	F G G D T L L I I	E V A V L D G S G
UniRef90_M1GGP2	Y R I N E S E K P K I G V V T G L	A W T S	M G G A T L S I	E V T S P V E G S G
UniRef90_M1FIG9	G L V Y G G L	V V T G L	V G G G E T M P V E	N D R D E I G V A T G M V W S S N G G D V V A I
UniRef90_E1R378	Y D F G L A E Q D E I G R I T G L	A W T	Q V G G E I L L F I	E E A V N P G K E
UniRef90_J4G955	I K E E D S C V G M A T G L	A W T	E V G G E I L L T I	E E T S I L L S N G K G
UniRef90_C5M2W4	I Y D Q T P V G V V M G L	A W N A	M G G S T L Y I E	E E T A K V K D G K G
UniRef90_A9B3R2	E K A P K L G V V V N G L	A W T A	V G G G V T L E	V A I P G K G

50 60 70 80

UniRef90_A5FG89	A L T I T G N L G N V M K E S A T □ A L E Y □ K A N A K K □ F Q K Y N I H L H V	
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UniRef90_H1XTB7	Q L Q L T G K L G E V M K E S A S A A M S Y L R S N A D D F Y E K Y D T H H F	
UniRef90_M4V8Q4	K F T V T G Q L G D V M K E S C V A A M S Y L F N □ D K E F Y E N I D H H H F	
UniRef90_U5T620	R L Q N T G Q L G D V M K E S I H A Q T V M R S R A A D F H Q N H D V H H H V	
UniRef90_A5EFW3	R L T H T G Q L G D V M Q E S I R T A L S V V R S Y L N F R F D E Y D H H L V	
UniRef90_A5IYF2	G I R L T G Q L G D V M K E S A K □ A L S Y V R A N A E K F F D T T E H H V H V	
UniRef90_D3DFN1	N L L L T G S L G D I M K E S A Q A A L S Y I K S K A E D Y F S N F D V H V H V	
UniRef90_K2ASH6	K V T L T G Q L G D V M K E S A K A A Y S Y V R S H C Q E K I A K S D H H V H V	
UniRef90_M1ZF79	K L Q L T G Q L G E V M K E S A M A G I S Y I R A N S D N F Y K E M D H H V H V	
UniRef90_D3E4U3	K I I V T G K L G D V M K E S A M D S V Q N V S A I K K Y T Q V D I S N H D H V Q F	
UniRef90_T4VU31	K L I L T G K L G D V M K E S A Q A A L S Y I R S K D P D F H E K H D H V H V	
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UniRef90UPI0003B500D8D	E F I L T T G Q L G D V M K E S A Q A G I S F I R S V A P N F Y K E N D H V H V	
UniRef90R7JVK2	K L R T T G Q L G D V M K E S A N A I H T F A R S F A A K F F S D S I H V H V	
UniRef90I0Z147	Q V I L T T G Q L G D V M K E S A H A F T L I K V L I D D N K Y Y K Y N V H V	
UniRef90A6DA89	K L T L T G Q L G D V M Q E S G K A A L T Y A R S R A N K F Y E N C D H V H V	
UniRef90X0TDQ8	N I L R T G K L G D V M Q E S V S A A W S V V R S R A P D F Y E K N D H V H V	
UniRef90X2HG44	K L I L T G Q L G D V M K E S A Q A A L S Y I R S K F A E F E K T D H V H V	
UniRef90UPI0003747DB2	L V I S T G K L G D V M K E S A Q A A L S Y V R S R D Q F H M G V D H V H V	
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UniRef90B0S2N4	K T Q L T G K L G D V M K E S A M A A I S Y I R S N Q E E F Y K E K D H V H V	
UniRef90C2KUM8	K L T I T G Q L G N V M K E S A Q I A I S L V K S M F P E F F K E K N D H V H V	
UniRef90A8F811	D L I L T G R L G E V M R E S A R I A L S V A R S F C G Q D F Q Q S D H V H V H V	
UniRef90D1C135	N L T V T G Q L G D V M K E S S S Q A A L S V R A R A P D F F F K E S D L H V H V	
UniRef90UPI00036F856C	K M T A T G Q L G D V M Q E S A Q A A L T Y I R S R S H H F Y K N V D H V H V	
UniRef90C0D188	N L L M T G Q L G D V M K E S A Q T A L T F V R S R S I C N D Y F E K H D L H V H V	
UniRef90C4K4P0	K L L Y T G S L G K V M Q E S I Q A A L T V V R S I A S D F H E N R D L H V H V	
UniRef90E6QIP7	K L T T T G Q L G D V M Q E S A E T A Y T Y I R S K A D D F Y E T L D T H V H V	
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UniRef90R7CU51	H L I L T G Q M G D V M K E S A E T A Y T Y I R S K A D D F Y E T L D T H V H V	
UniRef90R7MT70	N I E V T G S L G D V M K E S A K L A V S Y S R S V A P D F Y K E N D H V H V H V	
UniRef90G5H588	A L T M T G N L G D V M K E S A T I A L Q W V K A H A R E K F E K N D H V H V	
UniRef90G4Q636	K L V L T G Q L G D V M K E S A Q T A F T Y I R S R A P D F N E K I D H V H V	
UniRef90S0G336	R I M V T G K L G D V M K E S S Q A A V S Y V R S R H E D F Y K D L D H V H V	
UniRef90U2LYC8	G F N L T G Q M G D V M K E S A A A L A M S W V R S F V I K F F T K N T V H V H V	
UniRef90W0EAQ4	H L T L T G K L G D V M K E S F V R A H V K Q L G I P E D F Y E K V D L H V H V	
UniRef90J0LBG9	G M K L T G K L G E V M K E S G I T A M S F I K S E E N A F A K Y D H V H V	
UniRef90V5WGW9	N F K L T G Q M G K V M Q E S A N I A Y T W V K N L E D F F F S E H T V H V H V	
UniRef90D2MQ74	G L V I T G Q L G D V M K E S A H I A L D Y V V K A H A N D F F E Q H D V H V H V	
UniRef90UPI00044121C4	G L Q L T G K L G E V I R E S A Q I A L S W V K S H A F Q F L S D R D V H V H M	
UniRef90C0BMT4	L M N L T G N L G K V M K E S A T A L E Y I K A H E E Y F E K Y N V H V H V	
UniRef90C8RYW9	R M K T T G N L G K V M K E S I E A S S F V R S I S P P K F E T I D H V H V	
UniRef90S0FYG4	K L E L T G H L G D V M K E S A R A A M S Y I R S Q C K E F Y E N R D H V H V	
UniRef90V2QGX6	K L I V T G H L G D V M K E S A N I A Y S V V K S T A S Y K F K D F D H V H V	
UniRef90C6W005	G L T L S G Q L G D V M K E S A V A A L S Y I K A N A Y R I F N H Y D L H V H V	
UniRef90W6S0C6	K L I L T G Q L G D V M Q E S A K A A F S Y V R A N C E D F Y K N K D H V H V	
UniRef90B5L78	G I K L T G R L G D V M K E S A N A F T Y V N S I H K S F E K Y M H V H V	
UniRef90V9HHN5	K L V L T G Q L G D V M Q E S A K I A F G F V V R A N A E E F Y K N T D H V H V	
UniRef90G1 RTP9	UniRef90F0K5P5	S L E V T G Q L G E V M K E S A R I A Y T F A R A F L M Q H A P T S H D H V H V
UniRef90UPI0003B35FFB	Q I I L T G Q L G D V M K E S A R I A L S V K S R L P F N F K E K D H V H V	
UniRef90UPI0003729D89	G L T L T G Q L G D V M Q E S A H I A L S Y I R S R G V E D L K D R G V H V H V	
UniRef90UPI000365CCA8	G V T L T G Q L G D V M K E S A Q I A L S Y I R S R G A E D L K D R G V H V H V	
UniRef90UPI00039C1391	V L T L T G Q L G D V M K E S A S A A F T Y V V K S H T D F A D K T D H V H V C	
UniRef90U5Q5T1	I L T T T T G N L G D V M K E S A V I A Y Q Y V V K A N Y R I F T E K D H V H V	
UniRef90L0H0K2	G Y K L T G Q L G D V M K E S A D I A Y G Y V V S R A P Q F F E K A F H V H V	
UniRef90F2F0L6	K L I L T G K L G D V M K E S A Q I A L S F V R S R G V E D L K D R G V H V H V	
UniRef90UPI0002554DF9	G L T L T G K M G D T M K E S A T I A M N L A R K M G N E W F E K N H D H V H V	
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UniRef90J2KKP0	A L T M T G N L G T V M K E S A T I A L E Y I K A K H Q D D I E K K N T D H V H V	
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UniRef90Q3A3X7	K L T V T G K L G E V M Q E S A K A A L S Y I R S R W K D F Y H K I D H V H V	
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UniRef90C3WCG9	E I S L T G S L G N V M K E S A Q V A Y T F V K A N Q E D F F E K K A F H V H F	
UniRef90G1WZB3	R L H L T G H L G K V L K E S A V E A V L T W V K S N A T D I L K N R S V H C	
UniRef90B5EDX8	D L L L T G S L G D V M K E S V R A A L S F V K A N C K K M F D E T T L H V H V	
UniRef90E6U8P0	K V E L T G S L G D V M K E S A M A A I S Y I R S I A H D F Y K T K D H V H V	
UniRef90R7G9N0	G L V L T G K L G D V M K E S A M A A L S F V R S H A T E L F T T D D H V H V	
UniRef90F2NQ82	Q L I L T G Q L G D V M K E S A R A A L S Y V V R S R S D M F H S E V D H V H V	
UniRef90M1GGP2	N V S T T G K L G E V M I E S A R A A L S Y V V R S R S D M F H S E V D H V H F	
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UniRef90J4G955	K L K L T G S L K D V M K E S A S L A Y S F A K Q F M V R Q P D N H D H V H V C	
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UniRef90A9B3R2	T T T L T G Q L G D V M Q E S A Q A A L S Y A R A S S R R F E K I D H V H V	

	90	100	110	120
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UniRef90_H1XTB7	P A G A I P K D G P S A G I T I F A A L Y S L Y A N K C V K V N N L A M T G E I T			
UniRef90_M4V8Q4	P D G A T P K D G P S A G I A L T T S I V S A M M K I P V R T V A M T G E I T			
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UniRef90_A5IYF2	P E G A V P K D G P S A G I V T F T A L I S A L F T E R P V R M D I A M T G E I T			
UniRef90_D3DFN1	P E G A V P K D G P S A G I T I A T A L I S A F T K K P V P K D I A M T G E I T			
UniRef90_K2ASH6	P E G A V P K D G P S A G I L A I T T A I I S A F T K K P V P K D I A M T G E I T			
UniRef90_M1ZF79	P E G A I P K D G P S A G I T M A T A A I S A L T N K P V N N N I A M T G E I T			
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130 140 150 160

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170 180 190 200

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

		50	60	70	80
UniRef90_UPI0003604E56	Q M K V T G N L R D V M K E S □ S A A S S F □ Q S R A P S □ F R H T D I H V H V				
UniRef90_E0TL74	D K L T G R L K D V M Q E S A Q □ A L T T Y V R A N A D F D F D N N Q I H H V				
UniRef90_D1C5L6	S L T T G R A G D V M Q E S A R A A L S Y A R S R A P D F Q E K H D D L H H V				
UniRef90_R6SGX0	K I E T G S L G D V M K E S A K I A L S R K Y E D P D F Y K N K D I H H A				
UniRef90_UPI0003B54B71	N L Q T G N I G D V M N E S A K T A L S V I K N R A D R F T T D F D I H H V				
UniRef90_B4PGE4	S L H T G N L G D V M K E S A Q □ A L T V A R N F L Y S F L E Q E H D L H V				
UniRef90_A0A0591V21	E I K Y T G K L G D V M Q E S I K A A Y S Y I R S N C □ L F F F Q N N D I H H V				
UniRef90_W6MS05	K V E T G Q L G D V M K E S S R I A Y S F S K M L N R F E K A K H V H C				
UniRef90_Q5BH58	R V Q T G K L G D V M K E S V E A L T T W V K A H S F E L M K N R S L H H V				
UniRef90_W4K258	K L L T G S L G A V I K E S G E I A L S S W V K T H A Y E L P N V I D V H H V				
UniRef90_W2EZX0	S V T T G Q L G D V M K E S A Q A L S Y L R S R G V E L L K D R S V H H V				
UniRef90_B4MXM0	A L N T G N L G D V M K E S A Q A L T V A R N F S N N F L E Q E H I H H V				
UniRef90_W5M5N0	S L E M T G Q L G D V M K E S A K I A Y T F A R Q P C N D F L V G S H L H H V				
UniRef90_B1GZQ6	S L V T G K L G D V M K E S A Q A A L T Y V R S S S Q N M F S N T D F I H H V				
UniRef90_R6VMC9	K L E L T G K L G D V M K E S A R A L T Y V R F V I D E D Y F E K H D I H H V				
UniRef90_S7Q811	R L K L T G S L G E V K E S G E I A L S W V K T H A Y E L P D P V D I H H V				
UniRef90_H6LC38	K L L T G Q L G D V M K E S A T A M S L I R S R L G F D Y F K N D T H H V				
UniRef90_R4V5Q0	R L V L T G Q L G D V M K E S A Q T A L S L I K A R A G E L Q S D D V H H V				
UniRef90_UPI00047CA67E	N L T L T G K L G E V M K E S A T A L T Y V K S N Y E K F F E A N D I H H V				
UniRef90_S7U6R3	R L T L T G Q L G D V M K E S A Q A A V S W A R S K A P K F S E K M D I H H V				
UniRef90_A4S6Y4	K L K T T G Q L G D V M K E S S T A H T F L K D P G N K Y L A D T S L H H V				
UniRef90_C0R248	N Q V T G Q L G D V M S E S V E I A Y S Y V K S V A K N Y F N D A M I H H V				
UniRef90_A7NPJ3	V L S L T G Q L G E V M R E S A Q A A L S F A R A N A P K R F E T T T D I H H V				
UniRef90_A0RPT8	S M Q I T G Q L G D V M K E S A Q M L A K D D K G K E M A V Y N S F D L H H V				
UniRef90_UPI00026590C0	Q L T T G Q L G D V M K E S A T A L N W R N A S R F M E G T D H H F				
UniRef90_U7FNS5	G F K L T G Q L G D V M K E S A E I A Y S Y V A S H □ L Q D Y L D N A F I H H V				
UniRef90_D5EEP5	D I L T G N L G N I M Q E S A Q T A L G F R A R S H □ I N W K N Q D I H H V				
UniRef90_Q1J1A4	L V L T G Q L G D V M K E S A T A L T Y V K A S N A E R F I D N S E I H H V				
UniRef90_Q11QT1	K L T L S G Q L G D V M K E S A A A L S L L R A N D H R V F D H F D I H H V				
UniRef90_W9VSL5	R V Q L T G K L G D V K E S V E I A V L T W V K A H S Y E L M E K R A I H H C				
UniRef90_K9TAR6	D L T L T G Q L G E V M Q E S A K L A Y S Y I W S N A D A L F K S N G I D H H V				
UniRef90_UPI00036F8DA5	E L L L T G Q L G D V M V E S A K A A Y S Y I L K A N S K D F P S K I D I H H V				
UniRef90_R4K8U5	Q L L T G Q L G D V M R E S A K I S Q S L I R S R L A F E F N K N D I H H V				
UniRef90_I1G5L4	G M T T T G Q L G D V M K E S T V I A Y T F A K S F L N D F L D K A K I H H V				
UniRef90_F2UKE7	S L K L T G S L G D V M K E S A T I A Y T F A K H Y S N T Y L K T A D I H H V				
UniRef90_R5XM44	K I Q V T G Q L G D V M K E S V Q I A V S L V K S M Y P E M W K E N D I H H V				
UniRef90_H2YQ97	S I E L T G R L G D V M K E S A R I A S T F A R G F H N S F D G A N I H H V				
UniRef90_Q1NNW5	E L T L T G K L G E V M K E S A T A A L T Y I R S H A K E L F A K S D F H H V				
UniRef90_I7LL12	R L T L T G Q L G D V M K E S A Q S L S L I R S R L P F D F F A S D F H H V				
UniRef90_D9R519	A V T L T G K L G E V M K E S A K I S L S L K P F N A F N F K E R D L H H V				
UniRef90_UPI00025572AC	G F K L T G Q L G E V M K E S A E I A Y S Y I S S N L K K F F D Q A F I H H V				
UniRef90_R5KED6	K L E L T G N L G D V M K E S A K I A L T Y V R S R L K Q E F E K Q D I H H V				
UniRef90_I5B4U6	G F K L T G K L G D V M Q E S A S I A L S H V Y G I S E N Y F D E A F I H H V				
UniRef90_UPI000363DD08	L T L L T G Q L G D V M K E S A Q I A L S Y L R A H G E R E L P G R R I H H V				
UniRef90_I5C1J2	K L T L S G Q L G D V M K E S A M T A L S Y L R S H A Y R F D R Y D I H H V				
UniRef90_H9JCE9	S L E L T G H L G D V M K E S A R I A L T V A H H P D N K F L N T S H I H H V				
UniRef90_I2GX13	H L Q R T G N L G D V M K E S S T L A Y S F A K K M Y E N R F F E K A A I H H C				
UniRef90_W5WY22	K L V L T G Q L G D V M Q E S A K I A L S L L K S R L M L D F S K K D I H H V				
UniRef90_M4FLY1	S L Q L T G T L G D V M K E S V E I A V L T W V K A H A Y E L M K N R S I H H C				
UniRef90_U7NZ18	G F K L T G K L G E V M Q E S A N I A Y S Y V L G H L A D F F D S A F V I H H V				
UniRef90_UPI0004204AC5	D L K L T G N L G N V M K E S A T T A L S Y L Q A N F P E L F K S R N I H H V				
UniRef90_S2J7E1	H L S K T G Q L G D V M K E S T S A Y T Y A H F P K N K F F D K A V H H C				
UniRef90_A0A017T170	D F I L T G Q L G D V M K E S G R A A L S Y A R A H A T R R L Q G H D V H H V				
UniRef90_H0URZ1	S V S F T T G N L G D I M R E S A Q A A V V G F L R K M G D V K W D Q V D I H H V				
UniRef90_R7KA88	E I L L T G S L G D V K E S A T A A I S Y L K S H D P E L F K T K D I H H V				
UniRef90_E5Y7Q1	N V A T T G K I G E V M S E S A K A A L S Y V R S R A P D F H S E I D I H H F				
UniRef90_UPI0002F4B8A7	R L I L T G Q L G D V M R E S Q A Q A L T L V K D I A P E I F E K S D I V H H V				
UniRef90_K2BYG7	K T T T Y T G Q L G E V M Q E S □ Q A A L S V V V R A R S D N F F E K H D L H H V				
UniRef90_S3UQL1	G I V L T G M I G K T M E E S S S I A L S Y I K N F S E D L F S E K T V H H V				
UniRef90_UPI00046A28BE	G L K L T G K L G E V M Q E S A N I A Y S S Y A Y D A E P G F F N E S F I V H H V				
UniRef90_UPI000380F94F	R L I L T G Y L G E I M K E S A Q A A L S Y I R S H A A N F Q G R D I V H H V				
UniRef90_UPI00025550EC	D L I L T G N L G D V M K E S A R A L S Y L Y D F K L T D I G K T D F I V H H V				
UniRef90_A8TCI3	K L T Q T G S L G D V M K E S I Q A M T V V R S R A E D F Y E K R D I H H V				
UniRef90_K9EKJ9	E V T T G Q L G D V M K E S G R A A L S Y A R A H A T R R L Q G H D V H H V				
UniRef90_E6QLC2	G F T M T G Q I G D V M Q E S M Q A L T W V R S R A F D T S T S D I H H V				
UniRef90_A8P307	N L Q L T G K L G E V I R E S A Q I A L S W V W K A H A R Y F T G Q D R D I M H M V				
UniRef90_C5E015	S F E R T T G Q L G D V M K E S S R L A Y S F T K M F Q N R F F E K A A I H H C				
UniRef90_Q4UJ10	K I K A T T G K L G E V L K E S I D A A M T C L K S S I D S K L K T H D I H H L				
UniRef90_V2ZB04	Q I V T T G Q L G D V M K E S A T I A V N S L F D K K I D F R D K D I H H V				
UniRef90_E4ZQ59	R V Q L T G K L G D V M K E S V E V A L T W V W K A H A F E L M K N R S I H H C				
UniRef90_UPI0003B3E080	H V V T T G Q L G E V M T E S A K A A L S Y V R S R A P R F H R K I D I H H V				
UniRef90_UPI0003A27DD3	S L T L T G Q L G D V M K E S A Q I A L T Y V V R S H L E P A V L D R N I H H F				
UniRef90_R5MHL2	E I I T T G S L G N V T I E V A I S Y I R S N K D Y F F D N R N I H H F				
UniRef90_U5D258	E L H L T G Q L G D V M K E S Q I A L T W V R A R A A N L L E G R D I H H V				
UniRef90_W5JW89	S L E L T G H L G D V M K E S A R I S L T V A R N F S N N F L E S S H I H H V				
UniRef90_I7K8Z2	S V R F N D T A G T M A K D S V F N A A S V I R R L T G D I S N Y D I H H V				
UniRef90_M1WS88	K L T L T G K L G E V M K E S A Q A A L S A R A R A P K F T E E M D I H H V				
UniRef90_F9XCF0	G L E R T T G N L K V M K E S T L I A Y S F A Q F P G N R F F E K A R I H H L H H C				
UniRef90_D8QI7Q	G L Q L T G K L G E V I R E S A Q I G L S W V K A H A Y P F L T D R D M H L H M				
UniRef90_U5LG0	S I N I T T G R R K S M A K G S I E N V L T V L K T M G V P A E D Y D I H V N F				
UniRef90_U7PSK3	R V Q L T G K L G D V M K E S V E V A L T W S W V K A H A F E L M R Q R S I H H C				
UniRef90_R5SN41	K L L L T G K L G D V M K E S A Q I A L T Y V R S Q T D S Y Y A E H D I H L H V				
UniRef90_S9RK0	S L E R T T G Q L G D V M K E S S E L S Y S F C K S F L S K S F P N N K F H M H C				
UniRef90_H3FLE5	G V Q I T T G N M G D V M K E S V R I A Q T V A T K W L A S F F E K N R V H H V				
UniRef90_G4ELN4	K I V I T T G N L K E T M K E S V S V A L G Y V K A N A K K F F E K I D I H H V				
UniRef90_UPI0003B5C4D7	S L V L T G Q L G D V M K E S A R I S L A L S W T R A N A D F E A F F E K R A I H L H H C				
UniRef90_A0A024J7K9	G L N R T T G Q L G D V M K E S E S N I A Y S F V R M F L N R F F E R A K I H L H C				
UniRef90_K0P0D2	R I N L S G H L G E V M K E S A M T A L S Y L K A N D Q Y L F E N Y D L H I H F				
UniRef90_T0K218	G L E I T T G N L K N V M K E S T L A Y S F A K F P D N H F F D K A K L H L H V				
UniRef90_L0R8P4	K Q L L T G Q L G D V M K E S A Q A A V S F A R L H A P K F H E E Q D L H L H V				
UniRef90_R5JZV8	Q L E L T G M V G D V M K E S Y V R S L K E C K L G N D F F E T H D I H L H V				
UniRef90_UPI000368A83D	R F T I T G R R K S M A R G S V E N V L T I L R R L G D P Y N Y D L H I N F				

	90	100	110	120
UniRef90_UPI0003604E56	P E G A T P K D G P S A G I A M V T A I V S A L S G I T V R K D I A M T G E V T			
UniRef90_E0TL74	P E G A V P K D G P S A G I T F T T A I I S A L A K K R V S S K D I A M T G E I T			
UniRef90_D1C5L6	P E G A I P K D G P S A G I T M A T A I I S A L T K H P V R S D I A M T G E I T			
UniRef90_R6SGX0	P E G A V P K D G P S A G I T M T T A I I S A L S G I P V R N C R I A M T G E I T			
UniRef90_UP10003B54B71	P E G A V P K D G P S A G I T M T T A I I S A L S G I P V R Q D V A M T G E I T			
UniRef90_B4PGE4	P E G A V P K D G P S A G I T M T T A I I S A L S G I P V R Q D V A M T G E V T			
UniRef90_A0A0591V21	P E G A V P K D G P S A G I G A V C T S I V S L M T N I P V N K N V A M T G E V T			
UniRef90_W6MS05	P E G A T P K D G P S A G I V T M T S S F L S L A N K P L S P T V A M T G E L T			
UniRef90_Q5BH58	P S G A I P K D G P S A G I L A H T I G L I S L F S G K A V P P K L A M T G E V S			
UniRef90_W4K258	P A G A Q K K D G P S A G I A M T C A F V S L L T G A C V P P H I A M T G E I T			
UniRef90_W2EZX0	P A G A V P K D G P S A G I V T M T T A I I S A L L L S G R P V R G D V A M T G E V S			
UniRef90_B4MXM0	P E G A T P K D G P S A G I C T I V T A I I S A L A L N K P V R Q D V A M T G E I T			
UniRef90_W5M5N0	P E G A T P K D G P S A G I C T I V T A I I S A L A L N K P V R Q D V A M T G E V T			
UniRef90_B1GZQ6	P E G A V P K D G P S A G I A L A T A L A S V C Y C M N K P I K K I A M T G E V T			
UniRef90_R6VMC9	P E G A T P K D G P S A G I I M T T A I I S A V T G K P V R A D I A M T G E V T			
UniRef90_S7Q811	P A G A Q K K D G P S A G I V A M A C A F V S L L T G A C V P T N V A M T G E I T			
UniRef90_H6LC38	P S G S T P K D G P S A G I V T L T T A I I S A L L L G K P V D S K L S M T G E I T			
UniRef90_R4V5Q0	P A G A I P K D G P S A G I A M Y N A L V S L L M S G R C I R E D V A M T G E I T			
UniRef90_UP100047CA67E	P E G A V P K D G P S A G I T M T T A I I S A L S S N K P V S R D L G M T G E I T			
UniRef90_S7U6R3	P A G A T P K D G P S A G I V T L V T A I I S A L T Q G Q G I C O S D T A M T G E I T			
UniRef90_A4S6Y4	P A G A T P K D G P S A G I V T L T T S L L S L A M N K P V K P N L A M T G E L S			
UniRef90_C0R248	P E G A T P K D G P S A G I T M A T A L L S L S M N K V I R N D T A M T G E L S			
UniRef90_A7NPJ3	P V I G A V P K D G P S A G I T M T A L I S A F T G R P V R R D V A M T G E I T			
UniRef90_A0RPT8	P E G A T P K D G P S A G I T M S T A L I A S I L S D T P V K S D V A M T G E I T			
UniRef90_UP100026590C0	P A G A V E P K D G P S A G I V T A C V L V S L F T Q R V A S D V A M T G E I T			
UniRef90_U7FNS5	P E G A T P K D G P S A G I V T M A S A I L S L L R N K R L P R K V A M T G E L T			
UniRef90_D5EEP5	P E G A I P K D G P S A G I T M A V V M L S A L S S R Q V L P G I A M T G E L S			
UniRef90_Q1J1A4	P A G A I P K E G P S A G I G A M V T S L I S A L S G I P V R H D V A M T G E M T			
UniRef90_Q11QT1	P A G A T P K D G P S A G I A L A Y T S L A S T F T Q R K I K P A L A M T G E I T			
UniRef90_W9VSL5	P A G A V P K D G P S A G I L A H T V A L I S L F S G K T V P T I A M T G E V S			
UniRef90_K9TAR6	P A G A I P K D G P S A G I V T M V V A I A S L L T N Q P V R T D T A M T G E I D			
UniRef90_UP100036F8DA5	P A G A T P K D G P S A G I T M A V V M L S A L S K N Q A V D Q E I A M T G E I T			
UniRef90_R4K8U5	P A G A I P K D G P S A G I V A L F T T I A S L V T G H K P V D P K V A M T G E I T			
UniRef90_I1G5L4	P E G A T P K D G P S A G I V T I V S A L L S L A M D R P I R Q N V A M T G E L S			
UniRef90_F2UKE7	P E G A T P K D G P S A G I C T M V T A F L S L A L N K P V R R Q D F A M T G E V S			
UniRef90_R5XM44	P A G A V P K D G P S A G I V T L T T A I I S A L S L V T G K A V S P Q Y A M T G E V S			
UniRef90_H2YQ97	P E G A T P K D G P S A G I C T M V T A I I S A L S L A I N Q P V R P D V A M T G E I T			
UniRef90_Q1NNW5	P E G A I P K D G P S A G I V A M V V S L V S Q L T G R A V S R E V A M T G E I T			
UniRef90_I7LL12	P S G G A T P K D G P S A G I V T L F T T L A S L V T G R A V V D P T I A M T G E V T			
UniRef90_D9R519	P S S G A V P K D G P S A G I A L F S A L A S L V T G N K P V D S R L A M T G E I T			
UniRef90_UP100025572AC	P E G A T P K D G P S A G I V T M A S A L S L A R N Q V P K G V V A M T G E L T			
UniRef90_R5KED6	P E G A V P K D G P S A G I T L A T A I Y S A A T G K R V R G D I A M T G E V T			
UniRef90_I5B4U6	P E G A T P K D G P S A G I T I A T A I V S L L A S G R E I E R P L A M T G E I T			
UniRef90_UP1000363DD08	P A G A V P K D G P S A G I V T M T T A I I S A L L S L S G R P V R P E V G M T G E V S			
UniRef90_J5C1J2	P A G A V P K D G P S A G I T M L T A I I S A L L S L M A S L Y T Q R R V A P K V A M T G E I T			
UniRef90_H9JCE9	P E G A T P K D G P S A G I V T I T S A L L S L A L G R A P R A D L A M T G E V S			
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UniRef90_UP100025550EC	P E G A G I P K D G P S A G I I T L L A A S L S T L C G L A P K P A I A M T G E L T			
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130 140 150 160

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170 180 190 200

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UniRef90_UPI0003B54B71	D V K S T T R F H F V E D I D E V L E T V L		
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M L L S E R P Q G V S G T C V S S V I E G I M A E V Q A L V T K T G F G
G K G

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

	50	60	70	80
UniRef90_U2CZA2	S L K I T G G R K S M A R C S V E N V L T V L E K V Y N L N C E K Y D I H V N F			
UniRef90_A0BE69	K F E I T G M K V Q E Q Q F G W I K A Y W P Q I K I L N I N F D A L D I H I H F			
UniRef90_P47481	E L I L T G N L K Q T M R E S A N V A L G Y V K A N A E R F F K K I D I H I H V			
UniRef90_G8Y3R4	G M H L T G S L K D V M K E S A S I A Y S F V K S C M A K K F P E N R I H V H C			
UniRef90_UPI0003B3C87C	C I Q I T G R R K S M A R G S V E N V I T V L R Q S T D L N P D A Y H L I H I N F			
UniRef90_Q6C0B5	R L S S T G N L G N V M K E S T N I A Y S F A N F P A N R F F E R A G I H V N F			
UniRef90_D3FWC8	T V N I T G R R K S M A K G S V E N V V T V L R R M G I P T Q D Y D V H V N F			
UniRef90_M7A9P4	R L Q L T G Q L G D V M K E S A Q I A L S Y V R S H A D P H A L E G T V H V H V			
UniRef90_U3JBF3	Q L T L T G Q L G D V M K E S A H L A I S W L R S N A K R Y L D N T D I H L H F			
UniRef90_I6YAX0	N L I L T G N L R D T M K E S A S V A L S Y I K A N E S E F W S D I D I H L H V			
UniRef90_E3E9Y7	S Y N I T G R R K S M A K G S V E N V L T V L R T L G L S P S N Y D L H I N F			
UniRef90_R5YP02	N I I T G T G L L G D V F K E S V K I A L S Y I K S N C F D M L N N I D H I H V			
UniRef90_K0KXE5	E L K V T G Q L G D V M K E S S N V S F A V A K K Y K N E F F K N H N I Y V H C			
UniRef90_F7NHK6	K F V V T V G R R K S M A K G S L D N V L T V L T G K Y G L E C N K Y D I H V N F			
UniRef90_D9SWV5	I I R I T G K R K S M A R C S I E N V L T A L D Y V F D I E T N S Y D I H V N F			
UniRef90_G7VA99	N I I L T G N L G E V M Q E S A R A A L S Y L K S H D E K W D E I D I H V H V			
UniRef90_V9KD21	Q L T L T G Q L G D V L K E S A H L A I S W L R S N A F D L L D N T D I H L H F			
UniRef90_W4CJ74	G G S R T L L R R K S M A K G S V E N V L T V L K A M G I R P N D Y D L H V N F			
UniRef90_UPI00041A9FDC	S I N I T G R R K S L A K G S V E N V I T V L K Y M G V D A S H Y D I H V N F			
UniRef90_D0WBG9	V I Q C T G Q L G D V M K E S V S A A W S V V R S R A P D F Y E K K D I H I H V			
UniRef90_V9HH65	T V K F N D T A G S M A K D S V F N A A S V I R R I T D K D I K D Y D I H V N V			
UniRef90_Q550C8	T V T T T G S L G L V M R E S I D I S Y S Y V K D F S N D Y F L K N S I H I H A			
UniRef90_A0A015KTE4	I F T I T G R R K S M A K G S V E N V I F T V L R R Y G L H P Q N Y D L H V N F			
UniRef90_I4DBL0	N L L V T V G R R K S M A R S S V E N V L T V L R R Q L G I E P G N Y N D L H V N F			
UniRef90_A0A017T793	N V V L T V G N M R N V M Q E S A T T A V S F V R S K A E R W L K E I D H V N F			
UniRef90_U2NHQ3	S I R F N E T A G S M A K D S V F N A A S V I R K I T N K D I K D Y D I H V N V			
UniRef90_F0JBZ4	Q L I L T G S L G E V L R E S A Q T A L S F C Y R S H A P E F Y A T S D I H V H I			
UniRef90_G0MCA6	K I V T T G H L G K V L V N E S I L V A K G W L G A N A E R F L E E N D I H V H I			
UniRef90_Q30T16	T M Q L T T G S L G E V M K E S A I I A Y S V V K T L I D T K Y K R Y D I H V H I			
UniRef90_V6MDL2	R V A M T G R R K S M A K G S I E N V L T V L H R M G V Q P Y D Y D I H V N F			
UniRef90_UPI000378835A	T I N I T G R R K S M A R G S I E N V I T V L R T M G V P A D Q Y D I H V N F			
UniRef90_U1X9A7	T I T I T G R R K S M A R G S L E N V L T V L R L Q G V N T L D Y T L H V N F			
UniRef90_UPI0002FB82FD	T I T T T G R R K S M A R G S I E N V V T V L R L S M G V P A D Q F D I H V N F			
UniRef90_E4LN68	T V R F N E T A G S M A K D S V F N A A A V M R R L T G R D L H D Y D I H V N V			
UniRef90_F0T2X1	T I R F N E T A G T M A K D S V F N A A A V I R I L T G E D L R D Y D I H V N V			
UniRef90_F2LXD2	K L L L T G S L G D V M K E S A Q A A L T F A R S R Y E M F Y E K Y D I H I H V			
UniRef90_G2HTZ4	N L S V T V G N L G D V M K E S S R I S Y S V V K V D S S E L Y K R Y D I H I H V			
UniRef90_X0PQV0	N A K R T A S G L D Y N R V S L I M A V L E K R A N L M L Q N Q D A Y L K A			
UniRef90_V718G9	M V R F N D T A G S M A K D S V F N A A S V I R S V T G K D M A D Y D I H V N V			
UniRef90_Q899Q7	Q V R F N D T A G S M A K D S V F N A A S V I R K I T K K D L R D Y D I H V N V			
UniRef90_I7J7E6	A F K V T G H L G K V M N E S S E I A L S F S R D F S N N F L E E A K I H L H V			
UniRef90_K8Z800	N A R R T S S G L D Y N R I S L I L A V L E K R S G L S L Q N Q D A Y L K A			
UniRef90_R4PQE5	N A K R T A S G L D H N R V S L I M A V L E K R A S L M L Q N Q D A Y L K A			
UniRef90_B114R2	R L I V T G R R K S L A K S A V E N V L T A L K S S V V R F N P E D Y Y I H I N F			
UniRef90_UPI000463B408	D L K V T G S L G D V M K E S S I S Y S V V K V L D I S E I Y K R Y D I H I H V			
UniRef90_L1QER3	E L K I S G K R K S T A Y S S V Q N V L T V L N N V F N L K C D E F D I H I N I			
UniRef90_F6DQT0	N I R F N D T A G S M A K D S V F N A A S V I R K I S G K D I S N Y D I H V N V			
UniRef90_UPI00047CB93F	K I L L D I E R G G A I H S K G V M I L S G F L Q R Y A K T R P F S V S A S L V F			
UniRef90_F9PR71	K I Q L T G Q L G E V M K E S A M T A I S F V R S K A D D F Y K E K D I H I H V			
UniRef90_X1T2V1	N L Q L T G Q L G D V M K E S A Q T A F S I V K A N A P D R F S K F D Y H I H V			
UniRef90_R7RSH9	T V R F N D T A G T M A K D S V F N A A T V I R Q L T G E D L S Y Y D I H V N V			
UniRef90_UPI000289B89E	G Y H I L V G V L P D N A I R E S S Y R I A A A L K N V G Y K F P G K K I T V N M			
UniRef90_U2Z519	I V D I V S L G Q P I H S K G V M I L T G F L S R Y A Q E F P L E I S A S I A L			
UniRef90_H1GUJ8	G Y H I L V G V L P D N A I K E S S Y R I A A A L K N N S Y K F P G R K I T I N L			
UniRef90_UPI00042271EA	V G K I S S N N K K V T R K S M E N V L T I L S N I F D I D C K K Y D I H V N I			
UniRef90_Q04GX8	N A Q R V T V T G V D R N R V S Q I L A V L E K H A N L L Q N Q D A H V R I			
UniRef90_H1D3B8	T I R F N D T A G S M A K D S V S T A A A V V R L V T G K D L S D Y D I H V N I			
UniRef90_S5C296	V V D I V I E V L G Q P I H S K G V M L L N G Y L N K Y A Q H F P L T L S A N I A L			
UniRef90_C4LCW0	S F K L T T G Q L G D V M K E S A E L A Y S F V V S S H L H E F Y D K A A V H I H V			
UniRef90_H8GKT5	K I V D I M R G A H H S K G V L I L S N F I A A R Y A R K S P F S M S A S L V F			
UniRef90_19MH61	K L T I T G R R K S M A K C S L E N V M T V L S N C Y K M D I H S Y D I H V N F			
UniRef90_C5D5L3	T I N I T G R R K S M A R G S V E N V I T V L R A M G V P A D R Y D I H I N F			
UniRef90_E9C316	S L V V T T G Q L G D V M S E S T K V A H S F A K S F M V R H F P S N D I H I H A			
UniRef90_G0QUC6	T F N S S S G N L Q Q V L Q E S K I N A F N F L N E E Q K K Q L S Q N N I H I H F			
UniRef90_UPI00046FE58D	I V N I V D M S G R I H S K G V M I L S A Y I G E Q Y A Q E I P A L T A N I T F			
UniRef90_M4RP16	V V D I V E V L G Q P I H S K G V M L L T G Y L H K Y A Q L F P L T L S A N I A I			
UniRef90_R6AGK3	S L R F N D T A G S M A K D S V S A S A A V V R Q L T D K R L L S D Y D I H I N V			
UniRef90_A6TRS0	A I I N I V I G L G D M A I R E S K E R V R A A I K N S G A S F P M K R I T I N L			
UniRef90_I1QDF3	A L V L T T G Q L G D V M K E S A Q I A H T V D K E P E N L F F A N S K V H I H V			
UniRef90_W0C9F4	N P R R M A T G I D H N R V S L I M A V L E K R T G L L Q N Q D A Y L K V			
UniRef90_K9IBM7	N A Q R T A S G L D R N R V S L I M A V L E K R A K L T L Q N Q D A Y L K A			
UniRef90_K2S3Z8	G F E R T G N L K N V M K E S T V I A Y S F A K S V M N R F F E H A K I H M H C			
UniRef90_X8LKP0	E F T D V E R E G G N I H A K G M M I M Q A Y L N Y E L K E Q P Q F S A S I V F			
UniRef90_L0AVH3	T L K V T G H L G T V M T E S S Q I A L T Y T Y C F Q P N N I F L D E A H I H V H V			
UniRef90_K9EPW0	N A K R T A S G L D Y S R V S L L M A V L E K R A G L L L Q N Q D A Y L K A			
UniRef90_F2I8N3	N A R R T A S G L D Y S R V T L L I M A V L E K R A H L M L Q N Q D A Y L K S			
UniRef90_M4B6H4	R L I T T G Q M G S V M E E S T K I A H M H A I D P G N K F F E E N E V H I H V			
UniRef90_D0KHA4	E F T D V E R K A E L A G N I H A K G M M I M Q A F L I T E L E P F S A S I V F			
UniRef90_UPI00036A1939	G T H L L N I S G D L A K H S I S L A S A P I E T K D S I D L T S K E I I Y I Q F			
UniRef90_K3WZ13	Q L Q L T T G K L G D V M K E S A Q L A L S W L R A N A K Q D L P S S D V H I H F			
UniRef90_C0EEN4	T P R R M C T G F D Y N R M S L I I A V L E K R A G Y F F G T L D T Y I N I H V			
UniRef90_W0EY32	E L H L T G N L G N V M K E S A T T A L T Y L K S N A E K Y F Q K K N H I H V			
UniRef90_UPI00036FEA14	V I N I S D L S G Q T H N K G V L I L G G Y L R K Y A Q N K P F S L S A S I A F			
UniRef90_A8H4L4	K V F D I E R G S I H S K G V M I L T A Y I A A I L G K T D K I P L S T H L T F			
UniRef90_UPI000225B865	N P R R M A N G L D N N R V P L L M A V L E K R V G M M L Q N Q D A Y L K V			
UniRef90_R6PXRO	H L Q V T G K R K S M A R S S V E N V I T V L E G Y G F D R S Q Y A V H I N F			
UniRef90_UPI0003B62DB6	I V D I V I S L G Q S I H S K G V M I L T G Y L S R Y A Q E F P L A I S A S I A L			
UniRef90_UPI000237D3FD	R F F L V G L P D N A V K E S Q Q R I E S V F K E T G H K W P G K R I V V N M			
UniRef90_W8ZYG1	D I A D V I E R G N I H A K G M M I M Q A F V A T A L D L D Q A L P Y S A S I V F			
UniRef90_S2XHM3	Y P K R M A S G I D Q N R I S L L M A V L E K R V G M L L Q T Q D A Y I K V			
UniRef90_K8EW50	N A K R T A S G V D H N R A S L I M A V L E K R A G L M L Q N Q D A Y L K A			
UniRef90_U7UIF6	Y F R F N D T A G S M A K D S M F N A A A V V R A V T G K E L A D F D I N I N F			

	90	100	110	120																																											
UniRef90_U2CZA2	P G G A P V D G P S A G I S T T A Y S A I T G Q L D N E V A M T G E I S																																														
UniRef90_A0BE69	P A G A T P K D G P S A G V A I T T A V S L L T G L K V K S D I A M T G E I T																																														
UniRef90_P47481	P G G G I P K D G P S A G A A L V T A I S S L T G K K V D P T V A M T G E I T																																														
UniRef90_G8Y3R4	P D G A I P K D G P S A G I S F A S S L S L A L N H P I D P F A M T G E I T																																														
UniRef90_UPI0003B3C87C	P G G M P L D G P S A G V A I A T A Y S A I K G K P V D H R L A M T G E I S																																														
UniRef90_Q6C0B5	P A G A I S K D G P S A G C A V V T G L S L A L N H P I D S S I V A M T G E I S																																														
UniRef90_D3FWC8	P G G G P V D G P S A G I A I A T A F S A I Q K Q K V D H E I A M T G E I T																																														
UniRef90_M7A9P4	P A G A V P K D G P S A G V T M V T A V S M A T G R K V R A D V G M T G E V T																																														
UniRef90_U3JBF3	P A G A V T K D G P S A G V T I V T C L A S L F S G R L V C S D V A M T G E I T																																														
UniRef90_I6YAX0	P T G G V P K D G P S A G I T I T T A L S A F R K V P I P S N I A M T G E M T																																														
UniRef90_E3E9Y7	P G G T P V D G P S A G I A M A T A A S A M R G I P V D H E I A M T G E I T																																														
UniRef90_R5YP02	P E G G A V V K K E P G S A G I A I T T A I S S L A L N K P L V P A I A M T G E I T																																														
UniRef90_K0KXE5	P E G G A I P K D G P S A G I T M T T A I S S L A L N K P L V P A I A M T G E I T																																														
UniRef90_F7NHK6	P G G G P D G P S A G I T V V A A A Y S A V V K G I P I D N T V A M T G E I S																																														
UniRef90_D9SWV5	P G G I P V D G P S A G V T M A C A Y S A I R K Q Y I N N N I V A M T G E I S																																														
UniRef90_G7VA99	P E G A T P K D G P S A G V A L A T V L Y S V V S G K R I R N N D V A I T G E T T																																														
UniRef90_V9KD21	P A G A V T K D G P S A G V T L V T C L A S L F S G R L V R S D V G M T G E I T																																														
UniRef90_W4CJ74	P G G G T P D G P S A G I A M A T A I T S A I Q R R P V D H E I T A M T G E I S																																														
UniRef90_UPI00041A9FDC	P G G A P V D G P S A G I A I A T A Y S A I H E I P V V D N E L A M T G E I S																																														
UniRef90_D0WBG9	P E G A T P K D G P S A G I A M T L A V S A F T K I P V R Q D I A I T G E I S																																														
UniRef90_V9HH65	V G G G K I D G P S A G A A I T T S I S A L L E K P I R Q D I A I T G E I S																																														
UniRef90_Q550C8	P D G S T Q K D S S A G I T I V S S L L S L A T G K L V K P D L A M V G E V																																														
UniRef90_A0A015KTE4	P G G T P V D G P S A G I A M L I A A S A I L G E P V D H K L A M T G E V																																														
UniRef90_I4DBL0	P G G G V P I D G P S A G I A I A T A T V S A I L Q Q K V D N Y V A M T G E I S																																														
UniRef90_A0A017T793	P K H G T P K D G P S A G V T M F T A V A S L L A G P V R S D V A M T G E I S																																														
UniRef90_U2NHQ3	V G G G N I D G P S A G V A I T T M C I S A L L E E K P I R Q D I A I T G E V																																														
UniRef90_F0JBZ4	P A G A V V S K E P G S A G V A I T T L A L S L L T G R P V R Q D V A S T G E I S																																														
UniRef90_G0MCA6	P A G S I N K D G P S A G T G L A C A V S L L A M G V P L V R S D A V A T G E I S																																														
UniRef90_Q30T16	P D G A T P K D G P S A G I A I A T A Y S A I R E V P V D H T V A M T G E V																																														
UniRef90_V6MDL2	P G G V P V D G P S A G I T I A T A Y S A I Y K I P V D H T V A M T G E V																																														
UniRef90_UPI000378835A	P G G I P I D G P S A G I A M A T G Y S A I Y K I P V D H T V A M T G E I S																																														
UniRef90_U1X9A7	P G G I P I D G P S A G I A M A T A Y S A I T N Q P I D N H V A M T G E I S																																														
UniRef90_UPI0002FB82FD	P G G I P I D G P S A G I A M A I G Y S A I Y K I P I D N T V A M T G E I S																																														
UniRef90_E4LN68	I G G G N I D G P S A G T A I L T A V S A V V T G A P I R Q D V A V T G E I S																																														
UniRef90_F0T2X1	V G G G K I D G P S A G L A I T T I A Y S A L L K E R P L R Q D V A V T G E I S																																														
UniRef90_F2LXD2	P E G A T P K D G P S A G I T I A T A I S C L T E T P V R H D I A M T G E I S																																														
UniRef90_G2HTZ4	P E G A T P K D G P S A G I T I M A L T A S V L S E K P I K P A D V A M T G E I S																																														
UniRef90_X0PQV0	T G G V K L N E P A I D L A M A V S A S S Y K D M G V L P T D C F I G E I S																																														
UniRef90_V718G9	I G G G A N I D G P S A G A A I T V C I S A L L N K P I R Q D V A V T G E I S																																														
UniRef90_Q899Q7	I G G G R I D G P S A G A A I T V C I S A L L D K P I K Q D I A I T G E I S																																														
UniRef90_I7J7E6	P E G A T P K D G P S A G I T I M A L A V S L A L K K S C P S L A M T G E I S																																														
UniRef90_K8Z800	T G G G V K L D E P A I D L A I A M A V S S Y K E Q E T Q S K D C F V G E I S																																														
UniRef90_R4PQE5	A G G G V K L D E P A I D L A I A V S V A S S Y R D Q Q T R P S D C F V G E I S																																														
UniRef90_B114R2	P G G M P V D G P S A G V A V A T A C S A V Y R V P V S N E V A M T G E V																																														
UniRef90_UPI000463B408	P A G A T P K D G P S A G L T M A L A A S V L S N R K I A D I A M T G E V																																														
UniRef90_L1QER3	P G G M P V D G P S A G A A I S I A V Y S A I T N S I I K N D V A I T G E I S																																														
UniRef90_F6DQT0	V G G G R I D G P S A G V A M M L A M L S A V Q D L P L P Q D I A V T G E V																																														
UniRef90_UPI00047CB93F	E Q S Y G P I E G D S A S V A E L S A I L S S L A D D L P I R Q S L A I T G S V																																														
UniRef90_F9PR71	P E G A V V P K D G P S A G L T M T T A I V S A L T N R K V N R Q F A M T G E V																																														
UniRef90_X1T2V1	P A G A I P K D G P S A G A A M F T S L V S L L L G Q K T R P D V A M T G E I T																																														
UniRef90_R7RSH9	I G G G N I E G P S A G L A I T T L A I L S A V E N R P I R Q D A I T G E I S																																														
UniRef90_UPI000289B89E	A P A D L R K E G A A Y D L S L A I G L S D Q K A P N I N E Y I I M G E I S																																														
UniRef90_U2Z519	E Q S Y G Y V D G D S A S L G E V C T L I S A L S R T P L K Q C F A I T G S I S																																														
UniRef90_H1GUJ8	A P A N L R K E G S A Y D L V A G L I A A S A N Q M S L Q E D Y I M G E I S																																														
UniRef90_UPI00042271EA	P G G S L V D G P S A G I A I A T A Y S A I K D M K V N K V A M T G E V																																														
UniRef90_Q04GX8	T G G G V K I D E P A A D L A I A L A V V A S S Y H E K A T N A S D V F L G E V																																														
UniRef90_H1D3B8	V G G G N I D G P S A G A A I T C A I V S A V E K I P L R Q D L A V T G E I S																																														
UniRef90_S5C296	E Q S Y G H I D G D S A S L G E L V A I S I A L S A T E L P C L Q T L A I T G S I S																																														
UniRef90_C4LCW0	P E G A T P K D G P S A G V T M A S A L L S L A L N R A P L K G F A M T G E I S																																														
UniRef90_H8GKT5	E Q S Y G H V D G D S A S L A E L C A I L S S L A R V P L R Q D I A M T G S V																																														
UniRef90_I9MH61	P G G G P V D G P S A G V T M A V A Y S A I K G I P V D N K V A M T G E I S																																														
UniRef90_C5D5L3	P G G I P I D G P S A G I A I A T G Y S A I Y Q L P V D C T V A M T G E I S																																														
UniRef90_E9C316	P S G A I K K D G P S A G I V L A S M L S I A L D T P V P S K F A L S G E I S																																														
UniRef90_G0QUC6	M S G A V P K D G P S A G I A I C T A Y L S L A M G I S V P A N L A M T G E I S																																														
UniRef90_UPI00046FE58D	E Q L Y S S G I E G D S A S S A E L Y A I L S S L A L E V P I K Q G I A V T G S V																																														
UniRef90_M4RP16	E Q S Y G H I D G D S A S L A E L V A I S A L T K M P V R Q D I A M T G S V																																														
UniRef90_R6AGK3	I G G G N I D G P S A G C A I T T C A I L S A I E K K P R Q D I A I T G E I S																																														
UniRef90_A6TRS0	A P A D T K K E G T H F D P I A L G I L S E Q Q I K M D M I F D F C V L G E I S																																														
UniRef90_I1QDF3	P A G S T P K D G P S A G C T M I T S M L S L A M G K P V K K D L A M T G E V	UniRef90_W0C9F4	A G G G L K L D E P A I D L A V A L S I A S S F R D K S T A P T D A V I G E V	UniRef90_K9IBM7	A G G G V K L D E P A I D L A L A I S I V S S F K N Q G T R P T D S F V G E I G	UniRef90_K2S3Z8	P E G A V V Q K D G P S A G I T M A T S L L S L A L D H P L D P T I A M T G E I S	UniRef90_X8LKP0	E Q S Y G E V D G D S A S L A E L C A I L S A L S L Q P I D Q I A V T G A V	UniRef90_L0AVH3	P E G A T P K D G P S A G I T M A V A L L S L A A K R L K P S I A M T G E I S	UniRef90_K9EPW0	A G G G V K L D E P A I D L S I A V S I A S S Y K E E T D P T D C F I G E I S	UniRef90_F2I8N3	T G G G V K L D E P A I D L S I A V A I A V A S S Y W E K E T Q A S D C F V G E I S	UniRef90_M4B6H4	P E G A T P K D G P S A G C T M V T A L L S L A M N K T V R P D L A M T G E I S	UniRef90_D0KHA4	E Q S Y S E V D G D S A S L A E L C A I L S A L S L Q P I V Q Q F A V T G S V	UniRef90_UPI00036A1939	S Q S Y S K I D G D S A T A A A C L I L S S L L D I P L K Q D F A I T G S L D	UniRef90_K3WZ13	P E G A I S K D G P S A G G A I V C A I L S S L L D I P L K Q D F A I T G S L D	UniRef90_C0EEN4	P E G A G L K L D E P A A D L S I A V A L I L S S L L R D P V E D T L I A F G E I T	UniRef90_W0EY32	P E G A T P K D G P S A G L T M T S I A S A L L G R K V K P Y L A M T G E I T	UniRef90_UPI00036FEA14	E Q A Y S G I D G D S A S S T E V Y A L L S S L A K R L P L R Q D I A V T G S L N	UniRef90_A8H4L4	E Q S Y Y G G V D G D S A T M A E L C A M L S S S F S G K G I R Q D I A I T G S M N	UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S
UniRef90_W0C9F4	A G G G L K L D E P A I D L A V A L S I A S S F R D K S T A P T D A V I G E V	UniRef90_K9IBM7	A G G G V K L D E P A I D L A L A I S I V S S F K N Q G T R P T D S F V G E I G	UniRef90_K2S3Z8	P E G A V V Q K D G P S A G I T M A T S L L S L A L D H P L D P T I A M T G E I S	UniRef90_X8LKP0	E Q S Y G E V D G D S A S L A E L C A I L S A L S L Q P I D Q I A V T G A V	UniRef90_L0AVH3	P E G A T P K D G P S A G I T M A V A L L S L A A K R L K P S I A M T G E I S	UniRef90_K9EPW0	A G G G V K L D E P A I D L S I A V S I A S S Y K E E T D P T D C F I G E I S	UniRef90_F2I8N3	T G G G V K L D E P A I D L S I A V A I A V A S S Y W E K E T Q A S D C F V G E I S	UniRef90_M4B6H4	P E G A T P K D G P S A G C T M V T A L L S L A M N K T V R P D L A M T G E I S	UniRef90_D0KHA4	E Q S Y S E V D G D S A S L A E L C A I L S A L S L Q P I V Q Q F A V T G S V	UniRef90_UPI00036A1939	S Q S Y S K I D G D S A T A A A C L I L S S L L D I P L K Q D F A I T G S L D	UniRef90_K3WZ13	P E G A I S K D G P S A G G A I V C A I L S S L L D I P L K Q D F A I T G S L D	UniRef90_C0EEN4	P E G A G L K L D E P A A D L S I A V A L I L S S L L R D P V E D T L I A F G E I T	UniRef90_W0EY32	P E G A T P K D G P S A G L T M T S I A S A L L G R K V K P Y L A M T G E I T	UniRef90_UPI00036FEA14	E Q A Y S G I D G D S A S S T E V Y A L L S S L A K R L P L R Q D I A V T G S L N	UniRef90_A8H4L4	E Q S Y Y G G V D G D S A T M A E L C A M L S S S F S G K G I R Q D I A I T G S M N	UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S		
UniRef90_K9IBM7	A G G G V K L D E P A I D L A L A I S I V S S F K N Q G T R P T D S F V G E I G	UniRef90_K2S3Z8	P E G A V V Q K D G P S A G I T M A T S L L S L A L D H P L D P T I A M T G E I S	UniRef90_X8LKP0	E Q S Y G E V D G D S A S L A E L C A I L S A L S L Q P I D Q I A V T G A V	UniRef90_L0AVH3	P E G A T P K D G P S A G I T M A V A L L S L A A K R L K P S I A M T G E I S	UniRef90_K9EPW0	A G G G V K L D E P A I D L S I A V S I A S S Y K E E T D P T D C F I G E I S	UniRef90_F2I8N3	T G G G V K L D E P A I D L S I A V A I A V A S S Y W E K E T Q A S D C F V G E I S	UniRef90_M4B6H4	P E G A T P K D G P S A G C T M V T A L L S L A M N K T V R P D L A M T G E I S	UniRef90_D0KHA4	E Q S Y S E V D G D S A S L A E L C A I L S A L S L Q P I V Q Q F A V T G S V	UniRef90_UPI00036A1939	S Q S Y S K I D G D S A T A A A C L I L S S L L D I P L K Q D F A I T G S L D	UniRef90_K3WZ13	P E G A I S K D G P S A G G A I V C A I L S S L L D I P L K Q D F A I T G S L D	UniRef90_C0EEN4	P E G A G L K L D E P A A D L S I A V A L I L S S L L R D P V E D T L I A F G E I T	UniRef90_W0EY32	P E G A T P K D G P S A G L T M T S I A S A L L G R K V K P Y L A M T G E I T	UniRef90_UPI00036FEA14	E Q A Y S G I D G D S A S S T E V Y A L L S S L A K R L P L R Q D I A V T G S L N	UniRef90_A8H4L4	E Q S Y Y G G V D G D S A T M A E L C A M L S S S F S G K G I R Q D I A I T G S M N	UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S				
UniRef90_K2S3Z8	P E G A V V Q K D G P S A G I T M A T S L L S L A L D H P L D P T I A M T G E I S	UniRef90_X8LKP0	E Q S Y G E V D G D S A S L A E L C A I L S A L S L Q P I D Q I A V T G A V	UniRef90_L0AVH3	P E G A T P K D G P S A G I T M A V A L L S L A A K R L K P S I A M T G E I S	UniRef90_K9EPW0	A G G G V K L D E P A I D L S I A V S I A S S Y K E E T D P T D C F I G E I S	UniRef90_F2I8N3	T G G G V K L D E P A I D L S I A V A I A V A S S Y W E K E T Q A S D C F V G E I S	UniRef90_M4B6H4	P E G A T P K D G P S A G C T M V T A L L S L A M N K T V R P D L A M T G E I S	UniRef90_D0KHA4	E Q S Y S E V D G D S A S L A E L C A I L S A L S L Q P I V Q Q F A V T G S V	UniRef90_UPI00036A1939	S Q S Y S K I D G D S A T A A A C L I L S S L L D I P L K Q D F A I T G S L D	UniRef90_K3WZ13	P E G A I S K D G P S A G G A I V C A I L S S L L D I P L K Q D F A I T G S L D	UniRef90_C0EEN4	P E G A G L K L D E P A A D L S I A V A L I L S S L L R D P V E D T L I A F G E I T	UniRef90_W0EY32	P E G A T P K D G P S A G L T M T S I A S A L L G R K V K P Y L A M T G E I T	UniRef90_UPI00036FEA14	E Q A Y S G I D G D S A S S T E V Y A L L S S L A K R L P L R Q D I A V T G S L N	UniRef90_A8H4L4	E Q S Y Y G G V D G D S A T M A E L C A M L S S S F S G K G I R Q D I A I T G S M N	UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S						
UniRef90_X8LKP0	E Q S Y G E V D G D S A S L A E L C A I L S A L S L Q P I D Q I A V T G A V	UniRef90_L0AVH3	P E G A T P K D G P S A G I T M A V A L L S L A A K R L K P S I A M T G E I S	UniRef90_K9EPW0	A G G G V K L D E P A I D L S I A V S I A S S Y K E E T D P T D C F I G E I S	UniRef90_F2I8N3	T G G G V K L D E P A I D L S I A V A I A V A S S Y W E K E T Q A S D C F V G E I S	UniRef90_M4B6H4	P E G A T P K D G P S A G C T M V T A L L S L A M N K T V R P D L A M T G E I S	UniRef90_D0KHA4	E Q S Y S E V D G D S A S L A E L C A I L S A L S L Q P I V Q Q F A V T G S V	UniRef90_UPI00036A1939	S Q S Y S K I D G D S A T A A A C L I L S S L L D I P L K Q D F A I T G S L D	UniRef90_K3WZ13	P E G A I S K D G P S A G G A I V C A I L S S L L D I P L K Q D F A I T G S L D	UniRef90_C0EEN4	P E G A G L K L D E P A A D L S I A V A L I L S S L L R D P V E D T L I A F G E I T	UniRef90_W0EY32	P E G A T P K D G P S A G L T M T S I A S A L L G R K V K P Y L A M T G E I T	UniRef90_UPI00036FEA14	E Q A Y S G I D G D S A S S T E V Y A L L S S L A K R L P L R Q D I A V T G S L N	UniRef90_A8H4L4	E Q S Y Y G G V D G D S A T M A E L C A M L S S S F S G K G I R Q D I A I T G S M N	UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S								
UniRef90_L0AVH3	P E G A T P K D G P S A G I T M A V A L L S L A A K R L K P S I A M T G E I S	UniRef90_K9EPW0	A G G G V K L D E P A I D L S I A V S I A S S Y K E E T D P T D C F I G E I S	UniRef90_F2I8N3	T G G G V K L D E P A I D L S I A V A I A V A S S Y W E K E T Q A S D C F V G E I S	UniRef90_M4B6H4	P E G A T P K D G P S A G C T M V T A L L S L A M N K T V R P D L A M T G E I S	UniRef90_D0KHA4	E Q S Y S E V D G D S A S L A E L C A I L S A L S L Q P I V Q Q F A V T G S V	UniRef90_UPI00036A1939	S Q S Y S K I D G D S A T A A A C L I L S S L L D I P L K Q D F A I T G S L D	UniRef90_K3WZ13	P E G A I S K D G P S A G G A I V C A I L S S L L D I P L K Q D F A I T G S L D	UniRef90_C0EEN4	P E G A G L K L D E P A A D L S I A V A L I L S S L L R D P V E D T L I A F G E I T	UniRef90_W0EY32	P E G A T P K D G P S A G L T M T S I A S A L L G R K V K P Y L A M T G E I T	UniRef90_UPI00036FEA14	E Q A Y S G I D G D S A S S T E V Y A L L S S L A K R L P L R Q D I A V T G S L N	UniRef90_A8H4L4	E Q S Y Y G G V D G D S A T M A E L C A M L S S S F S G K G I R Q D I A I T G S M N	UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S										
UniRef90_K9EPW0	A G G G V K L D E P A I D L S I A V S I A S S Y K E E T D P T D C F I G E I S	UniRef90_F2I8N3	T G G G V K L D E P A I D L S I A V A I A V A S S Y W E K E T Q A S D C F V G E I S	UniRef90_M4B6H4	P E G A T P K D G P S A G C T M V T A L L S L A M N K T V R P D L A M T G E I S	UniRef90_D0KHA4	E Q S Y S E V D G D S A S L A E L C A I L S A L S L Q P I V Q Q F A V T G S V	UniRef90_UPI00036A1939	S Q S Y S K I D G D S A T A A A C L I L S S L L D I P L K Q D F A I T G S L D	UniRef90_K3WZ13	P E G A I S K D G P S A G G A I V C A I L S S L L D I P L K Q D F A I T G S L D	UniRef90_C0EEN4	P E G A G L K L D E P A A D L S I A V A L I L S S L L R D P V E D T L I A F G E I T	UniRef90_W0EY32	P E G A T P K D G P S A G L T M T S I A S A L L G R K V K P Y L A M T G E I T	UniRef90_UPI00036FEA14	E Q A Y S G I D G D S A S S T E V Y A L L S S L A K R L P L R Q D I A V T G S L N	UniRef90_A8H4L4	E Q S Y Y G G V D G D S A T M A E L C A M L S S S F S G K G I R Q D I A I T G S M N	UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S												
UniRef90_F2I8N3	T G G G V K L D E P A I D L S I A V A I A V A S S Y W E K E T Q A S D C F V G E I S	UniRef90_M4B6H4	P E G A T P K D G P S A G C T M V T A L L S L A M N K T V R P D L A M T G E I S	UniRef90_D0KHA4	E Q S Y S E V D G D S A S L A E L C A I L S A L S L Q P I V Q Q F A V T G S V	UniRef90_UPI00036A1939	S Q S Y S K I D G D S A T A A A C L I L S S L L D I P L K Q D F A I T G S L D	UniRef90_K3WZ13	P E G A I S K D G P S A G G A I V C A I L S S L L D I P L K Q D F A I T G S L D	UniRef90_C0EEN4	P E G A G L K L D E P A A D L S I A V A L I L S S L L R D P V E D T L I A F G E I T	UniRef90_W0EY32	P E G A T P K D G P S A G L T M T S I A S A L L G R K V K P Y L A M T G E I T	UniRef90_UPI00036FEA14	E Q A Y S G I D G D S A S S T E V Y A L L S S L A K R L P L R Q D I A V T G S L N	UniRef90_A8H4L4	E Q S Y Y G G V D G D S A T M A E L C A M L S S S F S G K G I R Q D I A I T G S M N	UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S														
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UniRef90_D0KHA4	E Q S Y S E V D G D S A S L A E L C A I L S A L S L Q P I V Q Q F A V T G S V	UniRef90_UPI00036A1939	S Q S Y S K I D G D S A T A A A C L I L S S L L D I P L K Q D F A I T G S L D	UniRef90_K3WZ13	P E G A I S K D G P S A G G A I V C A I L S S L L D I P L K Q D F A I T G S L D	UniRef90_C0EEN4	P E G A G L K L D E P A A D L S I A V A L I L S S L L R D P V E D T L I A F G E I T	UniRef90_W0EY32	P E G A T P K D G P S A G L T M T S I A S A L L G R K V K P Y L A M T G E I T	UniRef90_UPI00036FEA14	E Q A Y S G I D G D S A S S T E V Y A L L S S L A K R L P L R Q D I A V T G S L N	UniRef90_A8H4L4	E Q S Y Y G G V D G D S A T M A E L C A M L S S S F S G K G I R Q D I A I T G S M N	UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S																		
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UniRef90_K3WZ13	P E G A I S K D G P S A G G A I V C A I L S S L L D I P L K Q D F A I T G S L D	UniRef90_C0EEN4	P E G A G L K L D E P A A D L S I A V A L I L S S L L R D P V E D T L I A F G E I T	UniRef90_W0EY32	P E G A T P K D G P S A G L T M T S I A S A L L G R K V K P Y L A M T G E I T	UniRef90_UPI00036FEA14	E Q A Y S G I D G D S A S S T E V Y A L L S S L A K R L P L R Q D I A V T G S L N	UniRef90_A8H4L4	E Q S Y Y G G V D G D S A T M A E L C A M L S S S F S G K G I R Q D I A I T G S M N	UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S																						
UniRef90_C0EEN4	P E G A G L K L D E P A A D L S I A V A L I L S S L L R D P V E D T L I A F G E I T	UniRef90_W0EY32	P E G A T P K D G P S A G L T M T S I A S A L L G R K V K P Y L A M T G E I T	UniRef90_UPI00036FEA14	E Q A Y S G I D G D S A S S T E V Y A L L S S L A K R L P L R Q D I A V T G S L N	UniRef90_A8H4L4	E Q S Y Y G G V D G D S A T M A E L C A M L S S S F S G K G I R Q D I A I T G S M N	UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S																								
UniRef90_W0EY32	P E G A T P K D G P S A G L T M T S I A S A L L G R K V K P Y L A M T G E I T	UniRef90_UPI00036FEA14	E Q A Y S G I D G D S A S S T E V Y A L L S S L A K R L P L R Q D I A V T G S L N	UniRef90_A8H4L4	E Q S Y Y G G V D G D S A T M A E L C A M L S S S F S G K G I R Q D I A I T G S M N	UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S																										
UniRef90_UPI00036FEA14	E Q A Y S G I D G D S A S S T E V Y A L L S S L A K R L P L R Q D I A V T G S L N	UniRef90_A8H4L4	E Q S Y Y G G V D G D S A T M A E L C A M L S S S F S G K G I R Q D I A I T G S M N	UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S																												
UniRef90_A8H4L4	E Q S Y Y G G V D G D S A T M A E L C A M L S S S F S G K G I R Q D I A I T G S M N	UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S																														
UniRef90_UPI000225B865	A G G G V K L D E P A I D L A V T I S I A S S F R D I P T R P D D I F I G E V G	UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S																																
UniRef90_R6PXRO	P G G M P V D G D S A G T A M F L A Y I A S A F T G Q A V P G D V A L T G E I S	UniRef90_UPI0003B62DB6	E Q S Y G Y V D G D S A S L G E V C A I L S A L S R A P L K Q S F V A I T G S I S	UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S																																		
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UniRef90_UPI000237D3FD	A P A D T R K E G S A Y D L P I A V G V L D E Q I T S S R I S D F M M M G E I S	UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S																																						
UniRef90_W8ZYG1	E Q S Y S E V D G D S A S L A E L C A I L M S A L L S S Q P I N Q E V A V T G A V D	UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S																																								
UniRef90_S2XHM3	A G G G V K L D E P A I D L A V A L T T I V S S F R D V A A S A H D C F I G E V	UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S																																										
UniRef90_K8EW50	A G G G V K L N E P A I D L A I A V S V A S S Y R E K E T R A K D C F I G E I S	UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S																																												
UniRef90_U7UIF6	I G G G N I D G P S A G T A I T T A I S A I T K V P V R Q D A A V T G E I S																																														

130 140 150 160

UniRef90_U2CZA2	L Y G N V K P I G G V N A K I I S A A V K A G A K K I I I P K D N W Q D S F A N I		
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UniRef90_E3E9Y7	I H G R V K P I G G V L A K V E A A F Q A G A K K V I I I P Q D N W Q A L F		
UniRef90_R5YP02	L R G N I L P V G G K I K E K I I G A S N N N I K V I L P K E N E K D V E L D E		
UniRef90_K0KXE5	L T G K V L R I G G L K E K L I A A Q R N G I S R V Y L P K K N E N D F E L D E		
UniRef90_F7NHK6	I R G L V K P V G G V P V K V A A A I Q A G A R R V I I I P K E N W Q E F Q S W		
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UniRef90_G7VA99	L R G M V L P V G G I R E K I I L A A K R Y G I K E V L L P E G N K V D V E M P Q		
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170 180 190 200

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UniRef90UPI0003B6D640	E I F L E E R T E G T S G S A V V A S L E G T L V E L I Q A L I A P T S Y A			
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UniRef90_K1BWT0	L V E T E G Q V V V G Q I N G L S V L E Y P G G E P A R I S C V V H L G D G			
UniRef90_F0IEW9	K I Y G G S A V V Y G V E A I T T I I E V N I D K G V G			
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UniRef90_E1JTL7	L I D T S G S K V G Q I N G L T V L D Y S F G K P T K I I T A N T Y S G K Q			
UniRef90_R7F3G3	T D G E M I I G Q I N G L T V I D S V D G E P A R I I T A T V H Y G D G			
UniRef90_A1S607	K V F G A A V Q Q G I L A T L V T I I V N C S K G I			
UniRef90_F5J1K2	M Y P S K E			
UniRef90_R6CSG1				
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UniRef90_R6Q6H2	UniRef90_R6Q6H2	V N G L E V T T V T I T V E S L N R G V		
UniRef90_10HYZ3	UniRef90_10HYZ3	I D T T G A V I G Q I N G L S V L Q L G F G Q P S R I I T A T V R M G R G		

50 60 70 80

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UniRef90_R5Y7K6	T P R R M C T G F D Y N R M A M I I A V L E K R A G Y F F N S M D A Y I N V			
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UniRef90_C0ZIE8	T P R R T A T G V D H Q R V A M I M A V L E K R M G M M L Q N Q D A Y V N V			
UniRef90_E1JTL7	Q L L L T G S L G D V L R E S A Q A A L S N I R S R A P D F F E K T D I H V H F			
UniRef90_R7F3G3	G I V N I I E R E V D L L S G S S H S K G V L V I Q K F Q A Q D F P L A L T A S I C F			
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UniRef90_A3XXN7	Y H L V G L P D N A I R E S N Y R I A A A I L Q N N G F K I P G K K I T I N M			
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UniRef90_R6MVZ9	N A R R M A T G F D Y N R V I L L A V L E K R A G Y Y F F S N N D A Y I L N I			
UniRef90_L8GW39	R I I T T G Q M G E V M Q E S C S I A Y T C A K I F W N K F F R D V T L H M H I			
UniRef90_G7IHX8	S T S R R V V N G I D T D R A N M I K C V L I K Q A G L H I P V N S V H L N V			
UniRef90_F8EK22	R F F M V G L P D S A V K E S E Q R V E A S L K Y F N Y R M P R Q K V V V N L			
UniRef90_R6Q6H2	Q Y H L T G L G D E A V R E S R D R I A A A I L Q Y S G F K F P V V A D I T I N M			
UniRef90_I0HYZ3	D V V N I E R E V N L S K G V L I L A S F I L N A R Y A T E Q P L A L S A S I V F			

	90	100	110	120
UniRef90_R9S540	E Q S Y G [V D G D S A S M A E A C A L I S A A T G L P V D Q S L A V T G S M N			
UniRef90_C6BZH3	E Q S Y G G I D G D S A S S T E L L Y A L L S S L A E V P I R Q D I A V T G S V N			
UniRef90_C4K9H6	E Q S Y A P V E G D S A S L A E L C A L L S A L T Q V P I Q Q R F A I T G S V N			
UniRef90_E8M8Q5	E Q S Y S E V D G D S A T L L A E L C S F V S A L S E F P I Q Q R F A I T G S V D			
UniRef90_B8GU75	E Q S Y G L V E G D S A S V A E L C A L L S V L A D A P I R Q S L A V T G S V N			
UniRef90_G0V3X8	A G G [K K I D E P A I D L G V L C S I A S S F K N L P I D N E V V I G E V			
UniRef90_R7JG81	A P A D I R K E G S A Y D L P A I G L L A G A E M I S S E K Q Y M L M G E L G E V			
UniRef90_Q1AUQ2	E Q S Y S G V E G D S A S S A E L Y A L L S A I S G V P L K Q S A V T G S V N			
UniRef90_B0TFI8	P G G [T P I D G P S A G I A I A T A I Y S A V K G V A I D N Q R L A M T G E L S			
UniRef90UPI000371F9FA	A G G V K L D E P A V D L S V I V S I A S S F K G A A V R G D D C F I G E V			
UniRef90UPI00047E670E	P E G A I P K D G P S A G V T M V T S M A S I F S G R R V K P R L A M T G E I T			
UniRef90D1BAB0	E Q T Y S G I E G D S A S S T E L Y C L S A I A G V P L R Q D V A V T G S V D			
UniRef90R6QXZ6	V G G L R L D E P A A D L L A V S M A L L V S S L K D I P V N D N V I A F F G E I G			
UniRef90R5Y7K6	I G G L R L D E P A A D L T V A M A L L V S S L K D I P V N D N V I A F F G E I G			
UniRef90J3QB54	P S G A V K K D G P S A G V A L V V A L V S S L S G L V V D N T V A V T G E I S			
UniRef90UPI0004754C5E	E Q S Y G E V E G D S A S L A E L C A L S A L A M Q P I N Q I A V T G S V D			
UniRef90F4PI05	P Q G G [P K D G P S A G V T M V T S L S L A L N E P V L N N L G M T G E L T			
UniRef90UPI0003179E48	E Q S Y G G V D G D S A S S M A E F C A V V S A F S K Q Q A N R Q D I A I T G S M N			
UniRef90X1PMU1	P A G A I P K D G P S A G I A M F T S L V S L L L G K A V V R P D V A M T G E I T			
UniRef90G8QQZ6	E Q S Y A E V V D G D S A S S E L Y A L L S A I G E L P I P Q E I A V T G S V N			
UniRef90R5VRE1	A G G M R L D D P S A D L G V F A L L V S S F K N R A I P P S D M V M F G E M G			
UniRef90UPI000333E1DC	P E G A T P K D G P S A G C T V T A L L S L A M G Q P V R Q N L A M T G E V S			
UniRef90C2U3B4	P G G [P I D G P S A G I A M A T G V Y S A V H R T Y V N N E V A M T G E I S			
UniRef90D8EYS0	A G G L K I D E P A A D L G I A I C L V M S S F L E K P V N R N L V V F G E V G			
UniRef90UPI0003B6D640	A G G V K L D E P A V D L G I A I C L V A S S F R N Q S T N P G D V M G E V G			
UniRef90B6ENH0	V G G V K V A E T S A D L A L I M A L L L S S F K D R P L P K D V V V F G E V G			
UniRef90D4W953	T G G V K L D E P A V D L A L I V A S I V V S S Y K D K M T P S G D V Y M G E V G			
UniRef90UPI0003B3BA99	E Q S Y G I V E G D S A S S A E L F A L V S A L S A L G P I Y Q G I A V T G S V S			
UniRef90U6NRD1	P E G A T P K D G P S A G V T V V S S L L S L A L N K P V V Q E M A M T G E L S			
UniRef90E4RK14	E Q S Y G G V D G D S A T C A E V V A L L S S S L S E P V R Q D I A I T G S M N			
UniRef90A6H004	A P A D L R K E G S A Y D L T L A I G L L S G Q I K S E E V D K Y I I M G E L S			
UniRef90K1BWT0	E Q S Y G E V E G D S A S S L A E L C A L V S A L S Q Q P I N Q Q I A V T G S V D			
UniRef90FOIEW9	A P A D M R K E G S A Y D L S F A I G L L A A N Q I Q C I E Q Y I I M G E L S			
UniRef90COZIE8	A G G V R L D E P A V D L A I A V S I A S S F R D H A T N P H D V V I G E I G			
UniRef90E1JTL7	P A A A I T K D G P S A G V T L F C A L L S L L T G R P A R C D A A A T G E M T			
UniRef90R7F3G3	P E Q L Y N G V D G D S A S S T E L Y A E Y C C L M S A I A E Q P I K Q S L A V T G A L L D S			
UniRef90A1S607	E Q S Y Q E I V D G D S A S L A E Y C C L M S A I A E Q P I K Q S L A V T G A L L D S			
UniRef90F5J1K2	S P A D I R K E G T A Y D L P L A I G L L S E G L K S N R L E N Y M I M G E L S			
UniRef90R6CSG1	I E G G G I P K D G P S A G T A L T T A I I S M L L K K S V P N T V A M T G E M T			
UniRef90UPI0004748D11	E Q S Y S E V V D G D S A S A E L C A L L S M L L K K S V P N T V A M T G E M T			
UniRef90UPI000477C82D	E Q S Y Y G G I V D G D S A S L A E L C A L L S A L S G A P I P N Q S I A I T G S V D			
UniRef90D4F3U8	E Q S Y Y G E V V D G D S A S L A E L C A L L S A L S G A P I P N Q S I A I T G S V D			
UniRef90J5HQI4	V G G V K V T E T S A D L A L I L A L I I S S F R N R P L P Q D L V V F G E V G			
UniRef90R6NDE2	V G G L R L D E P A A D L A V A M A L V V S S L K D V P V S E N A L A F G E I G			
UniRef90R5QR7	E Q S Y G G V D G D S A S S T E Y Y C M L M S A I A N K L P I L Q Y I A V T G S S I D			
UniRef90H2J7X0	E Q T Y S M L E G D S A S S L A E I L V L L S A I A S K I P L K Q Y I A V T G S S I D			
UniRef90D5BG18	P A D L R K E G S A Y D L T F A I G L L S G Q I K K A K N I S E Y I I M G E L S			
UniRef90B0TBT4	A G G L K I A E P A A D L A V V T A I I A S S W R N Q P A D P E A V V V I G E V G			
UniRef90H6L0A6	A G G L K V S D P A D M A V V A L L L S S L E D V A M P S N V C F A G E I G			
UniRef90R5XZ43	V G G L K L D E P A S D L S V A L A L I I S S L L K D T P I R D D V I A F G E I G			
UniRef90R9L989	V G G L R L D E P A A D L P V A I A L V S S N L L D R S V A D H I A A F G E I G			
UniRef90A0LE71	E Q S Y Y G M V D G D S A S S T E L Y V L L S A I A D V P I K Q G I A V T G S V S			
UniRef90S7V4N5	E Q S Y S G V V E G D S A S S A E L Y A L L S A I A D V P I K Q S L A V T G S V N			
UniRef90W1J9L4	E Q S Y G E V V D G D S A S L A E L C A L L S A L S Q Q P I D Q Q L A V T G A V D			
UniRef90A3XXN7	A P A D L R K E G S A Y D L T L A I G L L S Q Q I K K A E H L E D Y V I M G E L S			
UniRef90F4GJV9	E Q S Y A E V V D G D S A S S S E L F A L L S A I G E I P L R Q D I A V T G S V N			
UniRef90R9NSA2	E Q S Y T E L D G D S A S S L A E L C V L L S A L S A L A C P V S Q Q I A I T G S V N			
UniRef90UPI0003784524	E Q S Y G M I D G D S A S S C A E L F T L L S A I G G P I L R Q D I A V T G S L N			
UniRef90S3JTN5	V G G V K L T E T G A D L A V L L M V S S S F R N Y T L P K E L I A F G E V G			
UniRef90G4QG63	E Q S Y S G V V E G D S A S S S A E L Y A L L S A I A D V P I K Q S L A V T G S M D			
UniRef90B5YH54	E Q S Y Y E M I E G D S A T C A E L Y A L L S S T K L P I T K Q N I A V T G S M D			
UniRef90TON2Q0	E Q L Y G L V D G D S A S S V A E Y V C M I L S T K L P I T K Q N I A V T G S M D			
UniRef90UPI0003754CE0	E Q E Y N G V E G D S A S S C A E L F A L L S A L A G L P I S Q G I P I V A T G A L L N			
UniRef90R5EW24	S P A D I R K E G A A Y D L P L A V G I L A S D E K I E T G K E Y M L M G E L S			
UniRef90B9RQC6	V S G V T L T E T A G D L A I A A A C S S F L E F P I P N V A F I G E I G			
UniRef90UPI000464643F	E Q T Y S E I E G D S A S S S T E L Y C L M S A L S A N V P L R Q E I A V T G S V D			
UniRef90K2G544	A G G V K L D E P A I D L G V A V S I A S S F R D Q V P K A T D I L I G E V G			
UniRef90A8H3Y7	E Q S Y Q E I D G D S A S L A E Y C C L M S A I S E K P I R Q S L A A T G A V I G			
UniRef90X0ZHQ0	E Q S Y S F V V E G D S A S S S T E L F A L L S S L S E L P I K Q G I A V T G S V D			
UniRef90ROLE41	A G G V K L D E P A I D L A V A V A I A S S Y K D K P T N P Q E C F V G E L S			
UniRef90B3DYM6	E Q S Y S V V E G D S A S A A E L C A L L S A L S E Q P L W Q S I A I T G S I L			
UniRef90W0F4S8	A P A D I K K S G T A F D L P I A G I L A Q I E N A A A L A N Y V I M G E L S			
UniRef90T4W5I3	V G G I K I N E P S D L G V M A I A S S F R N I P D G N V A I T G E V G			
UniRef90F6DQI9	E Q L Y E G I E G D S A S S S A E L Y A L L S S L S L G V P I K Q S L A V T G S V			
UniRef90H8XPK0	P A D L R K E G S A Y D L S I A V G I L S G Q L K S E E I N N Y I I M G E L S			
UniRef90V9HUM2	E Q N Y G Y D G D S A S S S T E L Y L M F S S I A D I P I K Q Y I A V T G S V			
UniRef90G0L6Y1	A P A D I L R K E G S A Y D L T L A I G I L S N Q K S N D L D K Y I I M G E L S			
UniRef90F6CMD3	V G G V R L V E P A V D L G V M A I A S S F R D L P V N C R L A V V G E V G			
UniRef90W2C2P0	A P A D I K K E G S A Y D L P L A G I L A E L K T D G L L D R Y L L M G E L S			
UniRef90B9DKY6	A G G V R L T E P A V D L A I A A I A S S F K D Q P V N G M D C Y V G E V G			
UniRef90UPI00037BE4C1	A G G V R L T E P A V D L A I A A I A S S F K D Q P V N G M D C Y V G E V G			
UniRef90M1LPA3	E Q T Y G Q V E G D S A S V A E L C A L L S S S L A N V P I R Q S L A V T G S I L			
UniRef90W8EW95	E Q T Y G Q L E G D S A S V A E L C I C L S A L S R R G V P Q R N I A V T G S I L			
UniRef90D3RSB1	A P A D I R K E G S A Y D L P I G L I S Q Q L T T E R L A E Y V L M G E L S			
UniRef90UPI0003B5E4F7	V G G V R I A E T A A D L P V L A V L L S S Y R D R P L P L D L A F G E I G			
UniRef90W0SHC9	V G G A K T S E P A V D L A M A S I L S A L K G R A P R S S M V A M G E I G			
UniRef90R6MVZ9	E Q S Y G P V E G D S A S S S T E L C A L M S A L S G A P I D Q S L A S I T G S V			
UniRef90L8GW39	V G G L R L D E P A I D L A V A M A L I L S S L K D V P I D E N V V V F G E I G			
UniRef90G7IHX8	P E G A T P K D G P S A G I G M V S L S L G G T A L R Q D V A M T G E I G			
UniRef90F8EK22	V S G L K M T E T A G D L A I A A A C S S F L E Y P I P K G I A F I G E I G			
UniRef90R6Q6H2	A P A D I R K E G S A Y D L P I G L I N S N L I E D H L K E Y M M V G E I G			
UniRef90I0HYZ3	E Q S Y S G V E G D S A S S S T E L Y A L L S A I G R I P L K Q S L A V T G S V D			

		130	140	150	160
UniRef90_R9S540	Q H G E V Q S I G G V N E K [] E G F Y R L G R Q G V I I P R T N L I N L Q L D D				
UniRef90_C6BZH3	Q K G E V Q P I G G V N Q K C K H A G L T G N Q G V V M I P E P N V K D L M L R T				
UniRef90_C4K9H6	Q F G E V Q V I G G V N E K I E G F F D L G T Q G V V I P A A S V R H L M L R E				
UniRef90_E8M8Q5	Q F G R V Q A I G G V N E K I E G F F D T G R Q G V V I P A S N R P H L M L E A				
UniRef90_B8GU75	Q H G E V Q A I G G V N E K I E G F F D T G R Q G V V I P P K E N M K G L				
UniRef90_G0V3X8	L T G E V R G V N L I D K R I I L E A Q K L G F K K C I I P P Q Q N A R E A A				
UniRef90_R7JG81	L D G T L K P I K G V L P I A I K A R E A G F K G F I L P P Q S N V Q H L M L E A				
UniRef90_Q1AUQ2	Q H G D V Q A I G G V N E K I E G F F D T G E Q G V V I P P R S N V Q H L M L E A				
UniRef90_B0TFI8	V R G R V K P V G G I V T K V E A A R L A G A T R V L P A E N W L E R F				
UniRef90UPI000371F9FA	L T G E V R R V T K I E Q R L M E A S K L G F K R A F I P P D S S M K E L N I P				
UniRef90UPI00047E670E	L R G K V L A V G G I K E K I L A A K R A G I T E I V L S K E N R K D I E I K P				
UniRef90_D1BAB0	Q F G N I Q P I G G V N E K I E G F F D T G F K Q G V I P P V Q N V K N L M L E A				
UniRef90_R6QXZ6	L A G E I R S V S H A E E R V K E A A R L G F K K C I V P P K H N L D S I K L S K				
UniRef90_R5Y7K6	L A G E I R A V N N C E Q R V S E A S R L G F N K C V I P P F H N Y K G L L S K				
UniRef90_J3QB54	L R G Q V L P V G G G R E K V L A A S R A G I T Q I L I P A K N A K D V D A D E				
UniRef90UPI0004754C5E	Q F G N V Q P I G G A N E K I E G F F D T G K Q G V I P P T A N V R N L C L H P				
UniRef90_F4PI05	L T G K V L T I G G V K E K T I A A K R S G L T S I V V P S S N N K I D A E L P A				
UniRef90UPI0003179E48	Q F G E A Q P I G G V N E K I E G F F R S S A Q G V I P P K S S N V Q N L M L E A				
UniRef90_X1PMU1	L R G L V L P V V G G L K E K I L A A K Q A G I K T I I L P Q R N K K D I E V P T				
UniRef90_G8QQZ6	Q M G M I Q P V V G G I K E K I E G F F D T G K Q G V I P P Y Q N V K N L I L P Y				
UniRef90_R5VRE1	L S G E V R G V S G A E Q R V R E A A K M G F K T C I P P K S N M D N V K K M K				
UniRef90UPI000333E1DC	L T G K I L P V G G G I K E K T I A A R R A G V T C M V L P A E N R K D F D L A P				
UniRef90_C2U3B4	I H G E V K P I V G G V Y A K L K A A K K A G A K K V I I P A E N M Q P F L				
UniRef90_D8EYS0	L A G E I R G V S Q P D M R M K E I E K M G F T T C L L P K S S N L E G S				
UniRef90UPI0003B6D640	L T G E I R R I S R V E E R V K E A A K L G F S R A I P P S K N L L G G W T F P				
UniRef90_B6ENH0	L A G E I R P V P S Q G E R L M E A Y K H G F K R A I V P A A N M P K				
UniRef90_D4W953	L T G E I R R V S R I E E R R I K E A K K L G F T R A V I P P K K N L L G G W T P P				
UniRef90UPI0003B3BA99	Q K G D I Q P V G G G I N E K I E G F F K T G K Q G V I I P E A N V K E L M L E E				
UniRef90_U6NRD1	L T G K V L P V G G G I K E K V I I A A R R V G A K R V F L P A E N R R D Y D L P D				
UniRef90_E4RK14	Q K G V Q P I G G V N E K I E G F F K T G K Q G V I I P R R N L L D N L M L D D				
UniRef90_A6H004	L D G S L L Q P I I K G V L P I A I K A K E E G F K G F F L P K Q N V K E A A I V A				
UniRef90_K1BWT0	Q F G N V Q P I I G G V N E K I E G F F E A G S Q G V I I P A T N V R H L C L E A				
UniRef90_F0IEW9	L D G S L L Q P I K G A L P I A I Q Q A R K E G F K G F I I P M Q N A K E A A I				
UniRef90_C0ZIE8	L T G E V R G V S R I E Q R V R E A H K L G F K R V I I I P E K N I R G L D A P A				
UniRef90_E1JTL7	L A G R L L P V A G I I R E K C L A A K R A G I T T V V L P Q A N A P V V E L P A				
UniRef90R7F3G3	Q K G E I Q P I G G V N E K I E G F F Q D G S H S V I I P V Q N V R N L H L D D				
UniRef90_A1S607	Q F G N V Q A I I G G V N E K I E G F F N L G E Q G V I I P R A N M L Q L N L D K				
UniRef90_F5J1K2	L D G S I L P I I K G V L P I A I K A R E L G F K G L V L P R K N A R E A A				
UniRef90_R6CSG1	L T G K V L P I G G G L K E K S L G A Y Q A G V N K M F V P K L N E A D L S I P K				
UniRef90UPI0004748D11	Q F G R I Q P I G G G L N E K I V E G F F F R T G K Q G V I I P A A N V R H L S L D A				
UniRef90UPI000477C82D	Q F G Q V Q A V G G I V N E K I I E G F F N D A G N Q G V I I M P K A N L N Q L M L R Q				
UniRef90_D4F3U8	Q F G H V Q P I I G G V N E K I I E G F F E A G K Q A G V N K M F V I P A T N V R H L C L S D				
UniRef90_J5HQI4	L A G E I R P V P S Q G E R I S E A A K H G F K R A I V P P Y A N A P K				
UniRef90_R6NDE2	L A G E I R S V N H A Q A R V N E A S R L G F Q R C V L P Y H N L K S L S D E				
UniRef90_R5QR7	Q F G E V Q P I G G V N E K I I E G F F F D T G D Q G V I I P R T N V K D L M L R E				
UniRef90_H2J7X0	Q H G N I Q P V V G G I I E K V I E G F F Y Y T G N E G V I I P P H Q N I K N L V L N N				
UniRef90_D5BG18	L D G S L L Q P I K G A L P I A I K A Q Q E G F K Y F I L P Q Q N A K E A A I				
UniRef90_B0TBT4	L T G E V R A V G H L E K R M H E A L K L G F T R C V C P K Q N R K Y L K E D				
UniRef90_H6L0A6	L S G E I R S V Q R I E Q R I I Q E A N R L G F E K I Y V S K F N M K G I D				
UniRef90_R5XZ43	L G G E I R S I I G S C E Q R I I K E A A R L G F N R C I V P Y H N Y K N L N S D E Q				
UniRef90_R9L989	L A G E V R S V S N I Q Q R I V S E S Y R L G F T A C C I V P R H N L K G I D I R E				
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UniRef90_U2NTH3				
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UniRef90_R7ICX5				
UniRef90_C0QVP6				
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UniRef90_Q608V4				
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UniRef90_E7GLH6				
UniRef90_J0UPG6				
UniRef90_C9KP04				
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UniRef90_D5X9R4				
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UniRef90_R7JL94				

50 60 70 80

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UniRef90_K9YK53	K I T V V G L P D T A V Q E S R E R V K A A I K N S G F A F P V R K V T I N L		
UniRef90_U2MMZ4	L Y H F T G L G D E A V R E G R D R I A A A M Q N N G Y R F P V A D I T V N M		
UniRef90_U7UCP2	V P R R T A V G M D Y N R L I I L L A V L E K R V G L S L A A Q D V Y L T V		
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UniRef90_13IP48	I I D I V K L A G P I Y S K G V L I V S G Y L V N K Y M K K M S T L T A R V V F		
UniRef90_T0ZES2	K L Q H T G Q L G E V M Q E S I Q A A M T V V R S R A E E F Y Q K L D V H L H I		
UniRef90_A3QDY6	E V A D I E R K S E L L G G N I H A K G L M I L T S C L Y R I F G K L N A N I V F		
UniRef90_U6L2G9	S L K V T G Q L G G G V M N E S C E I A M T F S R G F I K K Q N P N N N I H V		
UniRef90_K7R7E1	I L S I V G L G G Q V F H K A V L T L A G Y L R R Y A E L G A L S A T V S L V F		
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UniRef90_UPI00037DD0B4	I L N I S G L S G E I H D K G I Y I I Q G F I Q T Y A T T F P L S I N A S I V G F		
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UniRef90_A8MHC9	N V N V V G L P D V A V I K E S K E R V A R A I K N S D L G F P L K R I T I N L		
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UniRef90_UPI00029A7B7A	K Y Y M V G L P D N A V K E S L Q R V E S A I H V A G F R M P R Q K I V V N L		
UniRef90_Q1PZ64	S T I I V G L P D T A V K E S R D R V K A A L N N S G Y R F P S N V I I N L		
UniRef90_R7KVY5	A P R R T S T G F D F S R L A I I I A V L E K R A G L F Y G S L D V Y V N I		
UniRef90_U2NTH3	M P R R T A V G I E N S R L S L I L A V L E K K K L K I P F Y K Y D V Y I N V		
UniRef90_L0AR87	N P R R T V T V G L E Q N R L A L L L A V L H R H G G L H M A D Q D V F V N		
UniRef90_R5Q150	D I D I E R G G P L H T K G V L I L S S F L A R Y S K N A P L S M E A S L V F		
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UniRef90_R9KZF3	A F E M V G Q L G N E V R E A R E R V K V A L K N A R V E I P A I H I T V S I		
UniRef90_M1Z3L7	V F N I V G L P D T S I I K E S K E R V R T A I K N S G F E F P L S R I T V N L A		
UniRef90_UPI0002559BF8	N P R R T V A V G L E Q N R L A M L L A V L N R H G G L M T G D Q D V F V N V		
UniRef90_A9KBN2	N P R R T V T V G L E Q N R L S M M L A T L H R H G G V P T Y D Q D V F V N A		
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UniRef90_N2A2D5	I P R R T A D G T D T N R V N L L M A V L E K R L N L R L S E C D A Y V N I		
UniRef90_R7ICX5	T P K R L S V G L D L Q R L S M L L A V L H R H A G V S C F D Q D V F V N A		
UniRef90_C0QVP6	K F D V V G L P D Q A V N E A K E R V I A A I N N S D R F F P P K R I T I N L		
UniRef90_R6T8W6	N P R R T S T N G F D Y N R A A M L L A V L E K R G G L R V S A C D A Y L N I		
UniRef90_D9R8W4	M P R R T A A G T D Y N R V N L L M A V L E K R C H Y D L S H F D A Y V N I		
UniRef90_E0RYQ1	F N M V G F M S G E V R E A G E R V R V A V L K N M G Y V I P A S K I T I N L		
UniRef90_F2L294	R A Y V A G V P G E G F G P S A Q V A L Y V A R L A G V S A A N Y T A L L R V		
UniRef90_V6DII3	Q F F I V V G L P D A A I K E S R Q R I Q T A L K N C S I K L P E R K I T V N L		
UniRef90_Q608V4	S P R R L V V G M E M N R L A M L L A V L H R H G G V P V A A Q D V F V N L		
UniRef90_H2AWH3	S I K S T G N L G N V L Q E S I D I L L G D V H K S N V E T F F T S E Y H L H A		
UniRef90_UPI0003637FE	Y F L V G L P D G A I K E S Q Q R I D S A I K S N G F R M P R I K I V V N M		
UniRef90_UPI0003FA34F5	T P Q R S S T G H D A K R L N M L L A V L E K R G G M R V G N Q D V F L N V		
UniRef90_UPI0004715BF0	N Y F I V G L P D S A V K E S L Q R I E S A I K N N N L Y M P R T K L V V N L		
UniRef90_F6D8L3	V V D I I I E M A G P I H S K G M L I L S G Y V R R Y M R Y R A L G F S A S I V I		
UniRef90_UPI00037928AE	N P R R T V A V G L D A Q R L A M L L A V L H K H G G L F T G D Q D V F V N V		
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UniRef90_UPI0002B48A48	D T H V N G I Q N R R A D M I I S V L M K Q V G L K L Q T S T I F I I N V		
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UniRef90_K2G271	N F C I V W L P D A A I Q E S K E R V R T A I I I N S W F F F P W T R I T V N L		
UniRef90_B8J0B4	I I D L A E L G G P I H T K A M M I I K S Y L T D F A R K K P L V L S G S L Y F		
UniRef90_E0NN72	K L T I V G L A D T A V K E S G E R V R S A I T T N S G Y S F P N E R V T V N L		
UniRef90_L8JSF2	F F M S G L P D S A V K E S E H R V E S A I K Y H G F A M P R N K V V V N V		
UniRef90_B5YGF5	M P R R N F I G V D Y Q R V N L L V A V L E K R G R I N L A G A D L F V N V		
UniRef90_R6RCZ8	L P P R R T S V G I D Y N R V N L L M A V L E K R A G L H L G D C D A Y V N L		
UniRef90_A1K678	N P R R R L S V G L E Q T R L A M L L A V L H R H A G I V C F D Q D V F V N A		
UniRef90_D5VC62	Q P R R R M A L G D Y Q R L S M L L A V M H R H G G I H T S G M D V Y V N V		
UniRef90_R5B9G8	Q R S R K L R R K G T A L V S A Q N A A L C F M T R T F G L D I S D Y D I T F N V		
UniRef90_F0JJ26	G I L D L E R E A Q L L G G P I H T K G M M I K S Y L V R L F A Q N K P S L I C F		
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UniRef90_UPI000409D6CF	T Y F V V G L P D N A V K E S M L R V E S A I N N S G Y T M P R Q K I V V N L		
UniRef90_E7GLH6	M P R R T A A G T D Y N R V N L L M A V L E K R C R Y E L S Q F D A Y V N I		
UniRef90_J0UPG6	A H V P N P R R L S V G L E S S R L A M A V M H R H A G V V T Y D Q D V F V N A		
UniRef90_C9KP04	P P R R T A D S V D I K R I Q L L A V L E K R V H L S V G V A C D V Y V K V		
UniRef90_UPI00047AAA76	T P R R M A T G A D P N R V S L I M A V L E K R L G L R I Q A L D A Y V N L		
UniRef90_D5X9R4	A P P R R M T K G I D H N R V S L L A A V L E K R V G L H L A N Q D I F V N V		
UniRef90_H3K103	T P P R R L S V G V D A Q R L S M L L A V L H R H A G V G C F D Q D V F I N A		
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UniRef90_B9MLF2	A G G F K V S E P S A D L A I V C A I A S S Y K G V P I G D T V L I G E V G			
UniRef90_F5SMH6	E Q S Y A H I D G D S A T L A E A C A L S A L A D T P I S Q S L G I T G S M N S			
UniRef90_V5GLF7	P E G A T P K D G P S A G C T I V T A L L S L A K S Q P I R Q D V A M T G E I S			
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UniRef90_UPI00036307E9	A G G V R L D E P A V D L A I V V S L A S S F R D V P A R P F D V V I G E V G			
UniRef90_F2WQ73	P E G G T P K D G P S A G V T L T S A L L S M A L D R P V N P D L A M T G E M T			
UniRef90_K9YK53	T P A D L R K E G P S F D L P I S I A I L S E Q I D P Y L L G D Y L F L G E M S			
UniRef90_U2MMZ4	A P A D L R K E G S S F D L P I A V A I L A A A N A S F E S A H E Y M M V G E L			
UniRef90_U7UCP2	V G G L K I T E T A A D L P I L L A I L S S C R D S V I D S N T V C L G E V G G			
UniRef90_UPI0002FBF1FD	T G G I R L K E T T S S N L A V I L M S I V S S Y K G K G I P N D V V F I A D I			
UniRef90_S3NBQ6	E Q S Y G Q V D G D S A T V A E L S A I L S A I I S Q L P I R Q S W A I T G S M N			
UniRef90_UPI00035EBCCA	E Q S Y G D I E G D S A S V A E T C A L L S A I A R I P I R Q S L A V T G S L N			
UniRef90_UPI0003071EB1	A G G M R V E D P S I D L G L A A A I I S S H E D M P V P Y K V C F A A E I			
UniRef90_13IP48	E Q S Y E G E G D S A S A A E L Y S L S A L A N I P I K Q G I A V T G S V N			
UniRef90_T0ZES2	P E G A T P K D G P S A G I G M C T A L V S A L			
UniRef90_A3QDY6	E Q S Y Q E D G D S A S L A E Y C A L M S A I A E Q P I E Q G I A A T G A I			
UniRef90_U6L2G9	P E G A T P K D G P S A G V T L A S A L L S L A L N L N P K P D L A M T G E L			
UniRef90_K7R7E1	E Q S Y G G I E G D S A G L A E L L V A L S A L S G L P L R Q D L A V T G A I			
UniRef90_UPI0002DA1E5D	E Q S Y C E V D G D S A S L A L E L C A F V S A L S Q Q P I L R Q D I A V T G S V			
UniRef90_UPI00037DD0B4	E Q S Y V E V D G D S A S S T E I Y V L L S A I G D P I L R Q D I A V T G S V			
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UniRef90_UPI000473D72E	E Q T Y G S D G D S A S S L A E L C A L L S A L A D T P L Q Q S L A V T G S I			
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UniRef90_A0A024PV5	V G G V K V L E T S A D L A V V L A V V S S L Q N R N I P R E L V A F F G E			
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UniRef90_A8MHC9	S P A D T K K E G S H F D L P I A L G I L S N Q L P M E E L E D T L V L G E			
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UniRef90_UPI0003B5B77D	E Q S Y G P I E G D S A S A A E L C V L L S G L A R L P I K Q S M A I T G S V			
UniRef90_Q2W9V7	E Q S Y G G I E G D S A S S T E L Y A L L S A L A E A P I Q R Q S L A V T G S I			
UniRef90_G0DZL9	E Q S Y S E V D G D S A S S M A E L C A L I S S A L A N V P I N Q S I A I T G S I			
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UniRef90_UPI00029A7B7A	UniRef90_Q1PZ64	A P A D I R K E G S A Y D L P I A I G V L S S G Q I P S E D L E N Y F I M G E		
UniRef90_R7KVY5	A P A D R K K E G P V F E L P I A V G I L L A A T Q G L E I S H E Y A I V G E			
UniRef90_U2NTH3	V G G F R L D E P A A D L P T A L A L Y S S L M D M P I N E K L V S F G E			
UniRef90_L0AR87	V G G L N I D G T T A D L G V A V A L L S S I K N K E V A P R V M L V G E			
UniRef90_R5Q150	V V G G V K V N E T S A D L A L V A A L V S S S L R N R P L P Q D L V I F G E			
UniRef90_K4KX80	E Q S Y G E I D G D S A S S S T E L Y V I M S A L S G V P I K Q S L A V T G S V			
UniRef90_H0WGY9	A G G L D V D E P A A D L A V I A S V I M S G I K D Q P L G N M A L I G E			
UniRef90_Y0KGU7	P A G A V M K D G P S A G V T I V T C L A S L F S G R L V R S D V A M T G E			
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UniRef90_M1Z3L7	S P A D L R K E G A S Y D L P I A I G I L V G L G L V I P K E N D T L I I G E			
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UniRef90_A9KBN2	V G G V K V L E T S A D D A L L A V V V S S F R N M A L S Q E L M V F G E			
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UniRef90_N2A2D5	A P A D I R K E G S A Y D L P I A I G I L Q D Q M Q G E R L A Q Y I I M G E			
UniRef90_R7ICX5	A G G I K M N E P A I D L G I V L A I I S S Y K E C C I D E K T I C F G E			
UniRef90_C0QVP6	V G G M K I A E P A T D L A V V L A I I S S I T R N R A L P K G L V V F G E			
UniRef90_R6T8W6	A P A D L K K T G S M Y D L P F A L G I L S Q V F F S D F M D K T I I L G E			
UniRef90_D9R8W4	I G L S L D E P A A D L A A V I A I L A S S Y Y L D T P V P G D L V A I G E			
UniRef90_E0RYQ1	T G G L R M N E P A I D L A I L M A I V S S M K D K A V D P K T I I F G E			
UniRef90_F2L294	S P A D I K K E N V I V D L P V A I G I L T A M G E I R E E T G V M L L G E			
UniRef90_V6DII3	T G L E A N V G G P S A S G Y I T A A L F A L M K G L P L R N D T A M T G I I			
UniRef90_Q608V4	UniRef90_Q608V4	A P A D L K K E G T V F D L P I A L A I L Q A A Q I V Q I D S D F F F L G E		
UniRef90_H2AWH3	V G G V R L T E T A G D L A I A C A V V S S F R D R P V P G E W V I F G E			
UniRef90_UPI0003637FE	P M G S I Q K D G P S A G M A I T M A L L S L A T G R P I D P T L C M T G E			
UniRef90_UPI0003FA34F5	A P A D I K K S G S A F D L P I A I G I L E Q I E N A D A L K D Y V I M G E			
UniRef90_UPI0004715BF0	A P A D I K K T G S A F D L P I A I G I L E Q I E P E R L S N Y V L M G E			
UniRef90_F6D8L3	A P A D I K K T G S A F D L P I A I G I L E Q I E P E R L S N Y V L M G E			
UniRef90_UPI00037928AE	E Q T Y D G I E G D S A S S S P E L Y A L L S A I A A Q V P M R Q D L A V T G S V			
UniRef90_E8RGJ8	V G G V K V L E T S A D L A V V L A V V S S S L Q N R A L P P R E L M V F G E			
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UniRef90_R6Z7U7	V S G V T L T E T A G D L A I A M A I C L S S S F L E S H I P N D I A F I G E			
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130 140 150 160

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UniRef90_UP100035EBCCA	Q H G E V Q A V G G V N E K F D V C R E A G A H G V V L L P G S N V E H L M L R R		
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UniRef90_R7ICX5	L A G E V R P A P R G Q E R L R E A A K L G F S R A I I P R A N R P K		
UniRef90_C0QVP6	L D G S V R E V K G I F S M L L N A K E L G I T N A I I P F N N M E E A		
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UniRef90_UP10003FA34F5	L D G T I Q P I I K G A L P I A I Q A R K E G F K G L I V P K Q N E R E A G M		
UniRef90_UP10004715BF0	L D G T I Q P I I K G A L P I A I Q A R K E G F K G L I V P K Q N E R E A G M		
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170 180 190 200

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UniRef90_G2DFT1	N P R R V T L G L E Q N R L S M I L L A V L H R H C G I G M F D Q D V Y V N V
UniRef90_R5QUL7	T L N M T G R L G E V L L E S G K I G L V F I K S M I Y D K F N N L D I H I H V
UniRef90_E8T4P4	V F H M V G Y L S S E V K E A A E R V R T A I K N S G F E Y P A K R T V V N L S
UniRef90_R5PF31	G I I I V G L P D S A V K E S K E R V R S A I T N S G F R F P G K K F T V N L A
UniRef90_F8C5K0	T P Q R A A T G F D Q R R L N M L L A V L E K R V G F K L M Q K D V F I N I
UniRef90_Q2LSJ5	G I T I V G L P D S S I K E S R E R I R S A I K N S G F Q F P M K K I T I N L
UniRef90_R5TZ95	T P R R T S I G V D S N R V S L L V A V L D R V C G L H L S S N D I F L N V
UniRef90_M2YBQ9	V F H M V G Y L S S E V K E A A E R V R T A I R N S G V S F P A K R T V N L A
UniRef90_X1AUW3	A V R M V G L P D T A L Q E S R D R V R A A V T N S G G T W P D S R V V L A L S
UniRef90_H8L3I2	S F N I V G L P D T A V Q E S R E R V R A A I K N S E F E F P M Q R I T V N L
UniRef90_M2C9M6	N P R R V T L G L E Q N R L A M L L A V L H R H G G V A A Y D Q D V F V N V
UniRef90_D6S9B3	G I I N I E R E A G L S G E P Y D K A H L I I T S L L R E K F S K I S A S I N C F
UniRef90_R5XP99	S F N I V G L P D T S I K E S K E R V R S A I E N T G I R F P V K R I T I N L
UniRef90_C0BN70	M F H M V G Y L S S E V K E A T D R V R T A I H N S E M E F P A K K T I I I N L A
UniRef90_K7UG89	G Y H L V G M P D N A V A K E S H Y R I A A A L L N N G Y R I P G K K I T I N M
UniRef90_K1UIR7	Y H R S G Q V V G I P Q S R A D V I I S V L I K Q A G L K L Q D N I V F L N V
UniRef90_R6GQ15	S F D V V G L P D T S V K E S R N R V K S A L K N C E F F P T S K I T I T I N L
UniRef90_UPI000421CEAB	N P R R V A L G L E Q N R L A M L L A V L H R H G G V V T G D Q D V F V N V
UniRef90_R1ARK9	S F N I V G L P D T A I I R E A K E R V R T A I K N S G Y E F P L N R I T I N L A
UniRef90_M1P8E8	M F T T V G L P D G S V R E S K E R V K A A I K N C G Y D F P P K R I T V N L
UniRef90_A0A024IF46	S P R R L S V G L E R D R L A M L L A V L H R H A G V A C L D Q D V F V N A
UniRef90_R7PAC3	V P Q R S A T G F D L R R L N M L L A V L E K R V G F K L A Q K D V F L N I
UniRef90_D8LGC2	F F S S T D L H L H V
UniRef90_L1N4Z2	E I V D V E R K N E L A G N H S K G I M A E A C L V N I L E P F S A S L V F
UniRef90_R6NL87	K F E I V G L L A D V A V K E A K E R V R P A I R N T N V N L V P K K V T I N L
UniRef90_R9C770	R I I D I H K E S R L S G K V H E K S I N L K G L L N N I I D P Y D F Y L S F
UniRef90_A6EJ04	K Y H I V G L P D N A I K E S L K R V E S A I Q S C G L G K M P R Q K I V I N L
UniRef90_D6TVJ1	N A R C T T N G I D H N R L L M L L A V L T K R V G L A V G S H D V Y A N V
UniRef90_R6DSU6	R P M R S S N G F D Y N R A S M L L A V L E K R G S L L K V S Q C D A Y L N I
UniRef90_Q8RTS3	M P R R M A T G F D Y N R F I L L L A V M E K R R L G L N F S N F D A Y V N V
UniRef90_E6U6X9	Y P T R I G E S L K R D Q I N T L V S I L E Q R A D I T L F D K N V I L K T
UniRef90_UPI0001C37615	A P R R M V T G F D F N R L N I I I A V L E K R L G I F M G T L D V Y L N I
UniRef90_J4WJP0	A F D I V G L L D T A V K E S R E R V R T A I K N T G V K L K P A R V T I N L
UniRef90_R6BX36	V F E M V G F L A S E V Q E A K E R V R T A I K N C G F A L P P K H I T I N F
UniRef90_K1ZJ66	R F Y I V G L P D A A V V S E S K Y R V L S A I R N T V G S F K Y G K I T T N L A
UniRef90_UPI000382C10A	A K F V I V G L P D N A V K E S Q Q R I D S A I R E I G L K I P G K R V I I I N M
UniRef90_R7L5B8	L P R R T A N G I D Y N R L T L L I A V L E K K L G F A L G N Q D V Y L N V
UniRef90_W0DBA8	Q F N I V G L P D K A I N E A K D R V R S A L K N V G F Q L P S K R I T V N L
UniRef90_UPI000364A518	T P K R V S V G L D Q N R L A L Q L A I H K H S G I J A T F D Q D V F I N V
UniRef90_S9QJW2	Y F S V V G L P E G A V R E S K V R V V S A L K N C G F E L P S K R I T V N L
UniRef90_R5RBD3	I P R R T A A G T D F N R V N L L M A V L E K R L G M N L S S S D A Y V N I
UniRef90_UPI000477FE53	Q P R R A T S G L D T A R V N M V M A V L E R R A G V H I A N A D V Y A S T
UniRef90_UPI0004032E7C	Y A V V V G L P D S A V R E S L H R T E S A I K N M G Y H M P R T K I I V N L A
UniRef90_A0L497	Q P R R N T V G I D T N R L A M L I A V L E K R L G L G L F N H D I F L N V
UniRef90_U2HR71	Q Y Y I V G L P D N A I K E S L Q R I E S A I L S I G C R M P R Q K I V V N L
UniRef90_UPI0003D02A9	Q P R R A T S G L D S S R V A M L L A V L Q R R A G V G L A S L D C Y V S T
UniRef90_UPI0003691F9B	V L S I A G L G G H I F H K A V V A L S G Y L R H Y A E V G S F S A T V S L V F
UniRef90_F5T3V9	I P R R T A N G M D Y N R L T M M L A V V E R N L G I E C S R F D A Y I N I
UniRef90_S7J1V2	N P I R K T S G F D P N R F S L L L A V L E K R A Q V K L C T S D V F V S I
UniRef90_UPI00034AFA59	S P R R S T T G I D Y N R L Q Q I L A V V L E K R V G V P P L S K L D A Y V A S
UniRef90_B1Y2H3	P R R L S V G L D R D R L A M L L A V L H R H A G V A C Y D Q D V F V N A
UniRef90_UPI00046D1D87	V V S V K L S G R I F D K S S F I I T G Y I N G T Y G F N K T L S F S A T L S F
UniRef90_R6CWV6	K F Y L V G L P D S A V K E S H E R I V S A L Q V N G Y K F P T C Q I V V N M
UniRef90_Q4T8U0	S L E V T G Q L G E V M K E S A K I A W T F A R A F R L M H F L Y A H L H V
UniRef90_UPI00047E70C0	S P L S N P R R V T V G L E G N R L A M A V L H R H G G I M T G D Q D V F V N V
UniRef90_D5CUJ5	V L N I V E M S G P I H D K G V L I L Q N Y L S A F S H N A P L A N A S I V F
UniRef90_I3BVK1	S F S I V V G L P E T A V K E S R D R V R A A L T N S G F S F P V R R I I T V N L
UniRef90_E0UGH0	S P R R S T T G V E Y Y N R L Q Q I L A V L E K R V G I P L S K L D A Y V A S
UniRef90_B0CG56	S P R R S T T G I E Y Y N R L Q Q I L A V L E K R L G I P L S K L D A Y V A S
UniRef90_W0E534	Y P S R I S E C L R R E Q L N T L V S I L E Q R G K I D L Y D K N V V I K T
UniRef90_R6G4Y8	N F N M I G Y L S N E V K E S K E R V R T A I L N N I G V L L P P K R I S V N F
UniRef90_J5VX48	T P Q R S T T G F N A K R L N M L L A V L E K R A G F R L L G S K D V F L N I
UniRef90_J7RK15	H V K A T G N L G A V L Q E S V R R L L N S G G I S D V R E F L R S E Y H I H V
UniRef90_H6REE3	T P Q R S R A T G Y N A K R L N M I L A V L E K R G F K L G A K D V F L N I
UniRef90_U1S8Z3	S P R R T T S G V D H A R V A M L L A V L Q A R L G A D C S G A D V Y V S T
UniRef90_F4LRW2	F N L P R R Q T S G I D Y N R A L L L I A V L E K K L G F M L A Q E D I F I N V
UniRef90_D4ZWV4	S A R R T T T G V D S S R L M Q I L A V L E K R V G I P L S K L D A I V A S
UniRef90_R5HWN7	C F T M V G F P S T Q V K E A Q D R V R T A I R N N G I S L P P K R V T V N L
UniRef90_D1A4B9	A P R R A T S G L D A S R V A M V L A V L S R R C Q I A M H D Q D V Y V S T
UniRef90_K9Z019	K T T V V G L P D T A V Q E S R E R V K A A I K N S G F A F P V R Q I T I N L
UniRef90_E6NOC2	A H G F T P K R L T V G L E Q N R L A M A V L N R H H G G I A C F D Q D V F L N A
UniRef90_E5Y9B9	G I D L E R E A E L G G P I H T K A M L I K H G S Y L V D Q F A R N K P S L L C F
UniRef90_Q6LUG7	N P R R L S V G Y D S N R L A M L I A V L A R H H G G V M L S D M D I F V F V N C
UniRef90_UPI0003B5E7B3	T P R R T V L G L D A N R V A L I M A V M E K R L L G M N L S G L D I F M N V
UniRef90_UPI00025B056	T P Q R S A T G F N V K R L N M L L A V L E K R A G F K L A A K D V F L N I
UniRef90_F9QC60	E V V D V E R K N E L A G N H G K G M M I S E A C L A G I L D P F S A S L V F
UniRef90_R7C076	L P S P K R L S V G L D Q Q R L S M I L A V L H R H A G I G C Y D Q D V F V N A
UniRef90_R5L0M1	R F D I V G L P D A A V K E S R E R V R A S I K N C K Y D F P V S R I T V N I
UniRef90_R9PT23	D F N D I L E R K A E L A G N V H A K S M M I H R G F L N Q L F A S E H H F I V F
UniRef90_H0R098	N P R R A V S G L D S A R V A M V L A V I Q G R M N F T E L G K C E V Y T S T
UniRef90_I4EE01	L P P R R T A N G G F D A N R L Q M L T A V L T K R V G L G L G Q Q D I Y V N I
UniRef90_U2ULC1	F E L V G L P D T S V K E S K E R V R T A I R N S G I Q L R Q E R V T V N L
UniRef90_G2WW8	G F Q P K R L T V G L E Q N R L A M L L A V A H R H A T V A C Y D Q D V F L N A
UniRef90_Q21QG1	S P R R L S L G L E R D R L A M L L A V L N R H H G G I Q T A D Q D V F V N A
UniRef90_C5E4N2	T I I S T G N L G N V L Q E S I N I A K S V V K V M L R Q E F L S S E Y H L H V
UniRef90_UPI0003B62131	T P R R A T N G V D P N R I A M L T A V L Y R H G R I N L D R D L Y V S T

	90	100	110	120
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UniRef90_UPI00035C9DB7	A G G L Y I T D P G I D L	A I L S A V L S S S L D L	P I S R E I C V T G E	V G
UniRef90_R7R7R8	S P A D M R K E G A A Y D L	P V A V G M L V S S L G H	A E R I Q D T L I V G E	L G S
UniRef90_K9Q2H7	A P A D L R K E G P S F D L	P M A I G I L A A T E Q V	D V L F L F L G E	L S
UniRef90_C6XY84	A G G I K V E D P A I D L	A I L V A I I I S S H E D	I F I S S K I C F A A E	V G G
UniRef90_G2DFT1	V G G V R I T E T A A D L	A V L L A V L S S F R D R	P L P E G L V A F G E	V G
UniRef90_G3AQE1	U P M G S I S K D G P S A G I	T M A L S F L S V L L N K	P V P S E F A M T G E	I T
UniRef90_R5QLU7	P A T T M R K H G A S F D L	P I A A A I L T A L Q I E	K P E K D C L I I G E	L S G G
UniRef90_E8T4P4	P A G V R K E G T N L D L	P I A L G I L A S L G V V	K G E N S Y L I A G E	L G
UniRef90_R5PF31	A G G I R V T D L A M D L	S V I A A V L S S N V D T	A I E Q G W C M A G E	V G
UniRef90_F8C5K0	A P A D L K K E G S G F D L	A I A V A L L S G M G I K	E T N K K A F L G E	L A G G
UniRef90_Q2LSJ5	A G G I R V D E P A A D L	G I V A A M A S S F L E	R P I D P G T V I F G E	V G
UniRef90_R5TZ95	P A N V R K R G A S F D L	P I A V A V M I A L G C	Q I G I R H T L F I G E	L L G
UniRef90_M2YBQ9	P A T L P K V G S V Y D L	A L A C A V L N E S I P P	E S V S R T I L L G E	L A S G
UniRef90_X1AUW3	A P A D I K K E G P I F E L	S I A L A I L S K Q V K P	D L L N E Y L I M G E	V G
UniRef90_H8L3I2	V G G I R V Q E T A A D L	P V L L A V L S S L R D R	P M P E H T V A F G E	V G
UniRef90_M2C9M6	E Q S Y S Y I D G D S A S C	A E F L A L I S A I G G F	E M R Q D L A V T G S	L S
UniRef90_D6S9B3	A P A N L R K E G S Q I D L	A I A M A I L S M G V V	E D F S E K K W A F I	G E
UniRef90_R5XP99	P A T I K K R G A A F D L	P I A V A I L T A L G Q Q	A S V E N I M M L G E	L S
UniRef90_C0BN70	A P A A L K K E G A A Y D L	T L A F G I S S Q L K G	V D S K D Y L I M G E	L S
UniRef90_K7UG89	V S G F K L T E T A G D L	A A S I C L L S F L E F	P I P D V A F I G E	V G
UniRef90_K1UIR7	T S I A S A I T Q R K V	R A N T A M T G E	I T S G S S G	I T
UniRef90_R6GQ15	A P A D V K K E G S I Y D L	S I L V A L L S S G Q L	D A N L E N V A F V G E	L S
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UniRef90_R1ARK9	P A N L K K E G S Q I D L	P A V G I L V E I	N K N N N L D N V S F V G E	L S
UniRef90_M1P8E8	A P A D I K K G G A G F D L	P M A L G I L A E L F K	P D L L D Q Y A V V G E	L S
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UniRef90_R7PAC3	A G G I R V T D P A I D L	S V I A S V L S S S N V D	T G I E P L T C M A G E	V G
UniRef90_D8LGC2	P A G G V V S K D G P S A G V	A L T S A L S L L L G R A I	D T A V A M T G E	I I
UniRef90_L1N4Z2	E Q S Y G E I D G D S A S L	A G F C V L L S A L S A	L P L P Q S I A I T G A I	I D
UniRef90_R6NL87	A P A D L R K N G S S L D L	P I A I A I L L E A Y G F	K D C C S D S L L A A E	L S
UniRef90_R9C770	E Q T Y G L I D G D S A S V	A E I I C L S A L S K K P	I R Q T I A V T G S	I T
UniRef90_A6EJ04	A P A D I R K E G S S Y D L	A I A L G I S S G Q L I	E N N E L Q D Y L I M G E	L S
UniRef90_D6TVJ1	I I G G F N L E E P S I D L	G V A A A I A S S Y R E	K N V P S D M V L I G E	V G
UniRef90_R6DSU6	I I G G L T L L D E P A A D L	A A V V A I A S S Y L D	K D K P V P S T M A A I G E	V G
UniRef90_Q8RTS3	T G G I K I K I Q E P A A D L	G V I A A S L S G G Y Y N	I P L P E D V V C F V G E	V G
UniRef90_E6U6X9	T G G L R L S L E N A V S	C L V I M S I V S S V F	H K G I A G D T L F I A D	V G
UniRef90_UPI0001C37615	V G G F K L D E P A G D L	P V A L A L Y S G I M D K Q	I D E E L I A F G E	I L
UniRef90_J4WJP0	A P A D I R K D S S S G L D L	P I A V G L L A A Y L P	A E R M E R A L F A A E	L S
UniRef90_R6BX36	T P A N I R K S G S G F D L	P V A V A V L T A F G Y Q	E M V R E Y F V A G E	V G
UniRef90_K1ZJ66	P A D L K K E G P G F D L	P I A L G V L H V L G H	C E V M S D S L F V G E	L S
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UniRef90_S9QJW2	A P A D I R K E G A A F E L L	P I A L G V L A K L M P E	P L S H Y L F G G E	L S
UniRef90_R5RBD3	A G G I R M N E P A I D L	G I L L A I V S S Y K D I	V I G D K V L V F G E	V G
UniRef90_UPI000477FE53	V G G V R L G E P S V D L	G L L A L A V A G S A K D	V A L P R G R G F I A F G E	V G
UniRef90_UPI0004032E7C	P A D L R K T G S G L D L	P I A L G L E Q L N H A Q	K L S E F V V M G E	L S
UniRef90_A0L497	A G G F R I N E P S A D L	A V T L S L Y A A L R N I	S L D P G M V V L G E	V G
UniRef90_U2HR71	A P A D I R K E G S A Y D L	T I A I G L L S S Q I S D	Q K L A D Y I I L G E	L S
UniRef90_UPI00030D02A9	V G G V R L T E P A T D L	A V C M A L A S A A Q D R	P L P Q R L V C F G E	I G
UniRef90_UPI0003691F9B	E Q N Y A S I E G D S A G L	A E L L A I L S A I G G V	P L R Q D L G V T G A V	V G
UniRef90_F5T3V9	T G G M R I S E P A V D L	A V I V A L A L S S Y R N I	N P I A E D L M V F G E	V G
UniRef90_S7J1V2	A G G L K I T E P A V D L	G V A L S V V S S L Y N R	F P L E N Y T F C G E	I G
UniRef90_UPI00034AFA59	V G G L G V G E P A A D L	G V A I S V I A S F R D R	V V D P R T V L I G E	V G
UniRef90_B1Y2H3	V G G V R I S E P A A D L	A V L L A I Q S S L R G R A	L P R G F I A F G E	V G
UniRef90_UPI000464D1D87	E Q S Y S M I D G D S A S V	A E V L A V I L S A L S G	G V E L K Q N L A I T G S	M D
UniRef90_R6CWV6	A P A D I K K E G S A Y D L	P L A I G I L L A A T G	T V S A E K R Y L I I G E	L S
UniRef90_Q4T8U0	P Q G A T P K D G P S A G	C T I V T A L L S L A T G	Q P V R Q N V A M T G E	V S G
UniRef90_UPI00047E70C0	V G G I R V Q E T A A D L	P V L L A V L S S S L R D	T P L A E K T I A F G E	V G
UniRef90_D5CUJ5	E Q E Y D G I E G D S A S C	A E L Y A I I S S S L S G	L P L K Q Q G L G V T G A	V G
UniRef90_I3BVK1	A P A D I P K D G G R F D L	P I A I G M L S N Q L P	T E R L Q E Y E F I G E	L S
UniRef90_E0UGH0	A G G L G V E E P A A D L	G V A I A V V A S F R D	R V V D P R T I I I G E	V G
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UniRef90_W0E534	T G G L Q L K E Q A V N L	A V I V I S I V V S S V	K D V P I P G D S V F V A D	V G
UniRef90_R6G4Y8	A P A D F R K C G T S F D I	G V A A A I L M D F V P	P E T Y I K D T L F V G E	L S
UniRef90_J5VX48	T G G I S V D D P S T D L	G V A M A I L S S N E D	V A I P P K T F C F A A E	V G
UniRef90_J7RK15	P M G A I S K D G S S A G V	A I T L G L S S A A I H A	P I H S C M T G E	I T
UniRef90_H6REE3	T G G I N V D D P A I D L	A V V A A V L V S S N I D	I S D K S M C F A A A E	I G
UniRef90_U1S8Z3	V G G A R T T E P A I D L	A M A V A I V S S L K G V	P P R A Q M V A V G E	I G
UniRef90_F4LRW2	A G G I K I K E E P G A D L	A V E L A V A S S F K N R	P V M E D T V I I I G E	V G
UniRef90_D4ZWV4	V G G L K V D E P A A D L	G V A I A I V A S F R D R	L V D P R T I I I G E	V G
UniRef90_R5HWN7	A P A D L R K E G A G F D L	P V A A A V L S G F L E	P E K Q L N G A M L M G E	I S
UniRef90_D1A4B9	V G G V R L A E T S V	D L A V A L A V A G S T	V P L Q S P N V I A L L G E	V G
UniRef90_K9Z2019	S P A D L R K E G P I F D L	P I S I G L L S E Q V D	P T Y L E Q F L F L G E	V G
UniRef90_E6NOC2	V G G V K I G E P A A D L	A V I A M L S S F R N R P	M P E K T V V F G E	I G
UniRef90_E5Y9B9	E Q N Y G G I E G D S A S G	A E L A A L S A L S G V	P L K L S L A I T G A V	V G
UniRef90_Q6LUG7	V G G I K I K E E T A A D L	L A V V L S I F S S F K	N P I P Q D V L V F G E	I G
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UniRef90_UPI00025B056	T G G I S V D D P A I D L	A V I A A I L S S N A D I	P I P E K G T C F A A E	V G
UniRef90_F9QC60	E Q S Y G E I D G D S A S L	A I F S V L I S A L D P	L P Q N I A I T G T I D	V G
UniRef90_R7C076	V G G V K I T E P A S D L	A V M L A I A G S I L G N	R A M P A G L V V F G E	A G
UniRef90_R5L0M1	A P A D I K K E G P L Y D L	P I L I A V L A A T G Q	I K A S I D Y A F V G E	L S
UniRef90_R9PT23	E Q S Y H E I D G D S A S L	A S A L A L L S A I S K	L P I Q Q N T A V T G A L	D D
UniRef90_H0R098	V G G M R V T E P A A D L	S I A L A V M S D F S K	R M I K P H T V I I G E	L G
UniRef90_I4EE01	V G G L R I A E P A V D L	G V A V A V V A S S Y L E	Q V A D P K T V V I G E	I G
UniRef90_U2ULC1	A P A D V R K D S S G L D L	P I A V G L L A S Y G M	V P A V Q S A L F S A E	L S
UniRef90_G2WW8	V G G V K I S E P A A D L	A V I A I V S S L R N R P	L P L P E K L V V F G E	V G
UniRef90_Q21QG1	V G G L R I S E P A A D L	A V I S I Q S S L R S T A L	P Q G F L S F G E	V G
UniRef90_C5E4N2	P A G A I S K D G P S A G A	A I A L A L S I V A L K K	P V E P T I C M T G E	L T
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130 140 150 160

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UniRef90_K9Q2H7	L D G T L R T V A G V L P I A A A A K R L G I K R M V P K S N A E E	
UniRef90_C6XY84	L S G E I R A V N R I E Q R I S E A E K L G F E R I F I S N Y N R K G L V V E P K	
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UniRef90_Q4T8U0	L T G K I L P V G G I L K E K T I I A A R R A G V T C I I L P A E N R K D F S L P E	
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UniRef90_I3BVK1	L G G Q L R P V R G V L P T A F A A L Q A G R A L I V P Q E N A A E A S L I	
UniRef90_E0UGH0	L G G Q V R L V S Q M E L R L K E A A K L G F K R A I V P K G Q T Y	
UniRef90_B0CG56	L G G Q V R S V S Q T E L R L K E A A K L G F K R A I V P K G Q S S	
UniRef90_W0E534	L T G E L K K V P A L E A R I R E L D R M G F K K Y A I P K D T L K K S	
UniRef90_R6G4Y8	L N G Q I C P I S G V L P I V V A A S K R G I K R C I V A Q E N V A E A A F	
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UniRef90_R7C076	L A G E I R P A P R G Q E R L K E A G K L G F E S K A L I P R A N A P K	
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UniRef90_R9PT23	Q K G N V L A V G G I N E K I I E G Y L R V A Q I R V V I P E A N L N Q L N L S Q	
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UniRef90_I4EE01	L S G E I R S V N Q L D R R L N E A A K L G F R R A V I P A T L S R G R I	
UniRef90_U2ULC1	L D G N C C P I S G I L P M A I T A R E H G L T E F Y V A P S N A D E A L L I	
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UniRef90_C5E4N2	L R G K I L P G G I K E K L L G A R I I Y G M H K V L V P L A N R S D L V E A V	
UniRef90_UPI0003B62131	L T G Q V R P V R L T H R L S E A A R L G F T T A V V P R H R S S S S D T	

170 180 190 200

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UniRef90_K9Q2H7	S V V E G L A V Y G C N D L K E V V E L L A D P K A H K P I Q S D M R Q		
UniRef90_C6XY84	R Y K I E L I A V V S K I E D V F S Q L F G		
UniRef90_G2DFT1	R A P E G V R V V V A V E R L A E V L D A I		
UniRef90_G3AQE1	E Y S R S I E V G E V I D Q N L I N D L L K D N E E H E F K		
UniRef90_R5QLU7	E M E I V G A A T L Q E A V E A M Q N R R K R K K I Q N K		
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UniRef90_M2YBQ9	V D G I D I Y G A G T L A E V V L W L R G D G P		
UniRef90_X1AUW3	E L K V F P V N S L C E V I E F L		
UniRef90_H8L3I2	G K L G D L E V I G R L A Q A I D A		
UniRef90_M2C9M6	E V K G K F N W T I K T I G E G K L L S G L Q E E V Y T W M Q R L E E F		
UniRef90_D6S9B3	V K G I E K V C V E S I L D E I I I R I L L N G E Q E T K V L D D I		
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UniRef90_K7UG89	P L D I D I E L P C S N L K Q L I N T V F R P Q		
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UniRef90_R6DSU6	G L E L L P V A N I S R A L Q L L		
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UniRef90_E6U6X9	H E S L H I Q V I R C T V K Q V I A V A F		
UniRef90_UPI0001C37615	Y D I D I I P A S T L K Q A F A A L		
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UniRef90_W1U3E6	L T G D V R R V P Q I E K R L Q E L S K M G F K T V F L P A A N Y A A L K
UniRef90_B9KHP2	L S G E I R S V A N V G P R L R E A C K L G F T G A I V P A A A T R D L K T P
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UniRef90_A0A058ZDV5	L G G K L L A I G G V K E K I V A A H R L N V R C V V L P E A N R P D W K L D D
UniRef90_K0UJB7	L D G R V P I K G V L P A V L A A Q R Q G W P A V V P L A N V A E A S L
UniRef90_V9R5R3	L S G E V R A V K G V L P A A L A A R K G R T V V P R A N A E E A C L
UniRef90_R7GOT5	L E G K I R G V S G V L P I V M E A K N Q G C T A C I L P E E N E E G
UniRef90_X1MG12	L T N R L L P V G G V K E K V L A A H R N K M T H V V M P E L N R K D I E L P G
UniRef90_E1IBD6	L D G R R H T D G V L S M A S V A R N H G M K T F L P A E D A A E A A L I A
UniRef90_Q3A9N2	L T G E I R P V L G V D K R L R E A E R L G F K K A F L P K Q S
UniRef90_X1F791	L D G K L R K V N G I L P I C L M A K E R G I N T I F V P K P N A K E A R L I
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UniRef90_B1C8K3	L C G E I R K I I N N I F K R I K E A N S L G F K K A I I P R N S L D E H E D I S
UniRef90_Q3B4E3	L S G E L R A I S D S E R R I R E A A H L G F Q R I V L P E A N T R E L K P A
UniRef90_K6DKC0	L N S E I R P S S G V L P M V I K A K S E G I R H L I V P K E N V Q E A L L
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UniRef90_S0JE77	L N G E L R P A A G I L P M V L A A R E A G K H T V C I P R G N V K E A
UniRef90_B9AA76	L D G K I R S I K A V L P A I A L A K E E I K F A I V P F E N L E E A S L I A
UniRef90_A0A015M3X8	L N G E V R P V P G V L P M V D K A R Q R G I K F R V L P A T N A A E A A L I
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UniRef90_R6QND7	L N G E L R P V R G V L P M V I N W C K G G R Q M V V L P R E N A M E A A A
UniRef90_L8N8K7	L D G S L R P V S G V L P I A A A A Q R L G M M G I V V P K E N A Q E A A L I
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UniRef90_H2G7D0	L A G E I R P V P N I Q R R L M E A Q R L G Y K R A I I V P V S D P S E
UniRef90_N1UW24	L A G E V R P V P G I G R R I Q E A G R L G F T H A V V P A S H S G A G K L P
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UniRef90_R6HN51	L T G E I R V R S G T E R R I R D A A N L G F T K F V V P K G E K L N M
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UniRef90_H3NLK4	L T T G E L L K R V P D I E K R L L E D R L G F T K A Y I A K G N Y D L S K L
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UniRef90_UPI000477AE6B	L D G S L S V A G V L P I A S A A Q K L G I A G L V V P A D N A Q E A A L
UniRef90_X1M496	L R G L V P V G G L P K E K I L A A K Q A G I K T V I L P I P A G N A R E A A
UniRef90_E8X2E8	L D G S L R S V Q G M L P I A A L A A R G I K N L V I P A G N A R E A A
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UniRef90_U6MH11	L T G K V L K V G G I K E K V I A A K R E N I Q P E A N K P R
UniRef90_UPI000429AEB3	L S G E I R S V N G V L P M V L A A K E A G I S N V L V P F V N R H E A A
UniRef90_R5QDS0	L S G E C R A V S R L E W R V R E A A R L G F R R I Y A P R G A S A I K A P
UniRef90_UPI00047DEDFO	L G G E V R A V Q R I E N R I A E A E K L G F K E I Y V S K Y S L K S I P P
UniRef90_TOXNP4	L A G E V R R I P G L H D R M V E A A R L G F A H M I G P P L P T G K S R N P P
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UniRef90_C7RSN3	L A G E I R P A P R Q G E R L K E A A K L G F T R A M I P E A N K P R
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UniRef90_W9GBY4	L A G E V R R V T G L Q R R L A A A R L G F R H A L V P S G S L A D V T V P
UniRef90_R7F6J1	Y N G N I N S V K G V L P R C L S A Q K N G F K R V Y I P N S N I N E A R L L
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UniRef90_R6WDG5	L L G G A V Q K I S G I L P I V K R A K E C K G F K H I Y V P K E N V T E G A L L
UniRef90_L7LP69	L D G R V P V R G V L P L L A A R E A G F E R A V P A E N V A E A A A L L
UniRef90_K0N9R8	Q K G E I Q A I G G V N E K I E G F F D T G V Q G V M I P S S N V K N L M L R K
UniRef90_V2YCF3	L T G E I R A A S A L G Q R L S E V K R L G F T K C M I P K R T Q G K L T A P A
UniRef90_X8JA0	L T G N L R A V R N A D R I A S E A A R L G Y E A I I L P K G N I K G A K P G
UniRef90_P9WPR0	L D G R V P V R G V L P A V L A A K R D G W P A V V V P A D N L P E A S L A
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UniRef90_UPI0003B4A5A1	Q H G N V L A I G G I N Q K I E S V A R L D A V T V L M P E A N Q I N L M L S D
UniRef90_W4DZS6	L D G S L R P V N G V L S M A Q A A R Q A G I H A V L V P P G N A A E A A A L A
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UniRef90_X0YA03	L S G E I R V S R L L E K R L A A E A K L G F K F C I L P P L H A E Q R M P P E
UniRef90_K2A636	L D G R L R H I N G I L P I T I F A K E G K G Y K N I F L P E V N A P E A S L I P
UniRef90_D6ZG91	L D G R V I G I R G I L P S V I G A M N T G K T K I L V P P Q A N L Q A E A S L V P
UniRef90_M9M6H6	L D G S T R P V P G I L P L A D E A R K Q G F K R L L V P P S D N A E E A A L A
UniRef90_S6EPB5	L T G E I R P I S A C D R L I K E A E K M G F K N A I F L P P L H A E Q R M P P E
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UniRef90_I5B4Q5	L D G Y L R P V K A A L P F A L A A R D N G F K G I I L P K E N G A Q A A L A
UniRef90_X1KA63	L D G R L R P I K G V L S F A L T K E K G F T E L I L P K G N A A E A G L I
UniRef90_R6U2Y0	L S G E I R P V Q G V L P M T I M A Q K M G L S E I Y V P T D N V R E A
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170 180 190 200

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UniRef90_J3AEL4	D I T V L P A S N L E E A V N Y			
UniRef90_K1XGX2	E Y V P G I F I Y P V N T F N Q I V G Y F L E			
UniRef90_W1U3E6	E K P D H L Q V P L K H L R E L R Q K I L K			
UniRef90_B9KHP2	I E V R E V A H I R E L L			
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UniRef90_Q3A9N2	N F K T E M E I T T F A N L K E A I F K L F			
UniRef90_X1F791	Q G V E V I P V Q S L A E L F A S L			
UniRef90_S7TUV0	E V A G Q F A I W P V E S I E Q A L E L L			
UniRef90_B1C8K3	N L N I E I E I S T L K E C V F K L F N N			
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UniRef90_B9AA76	G G M E L F A L R H D Q L			
UniRef90_A0A015M3X8	L G L E L L E A S R I T E A L V L A L G D G			
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UniRef90_R6QND7	V K G L A V Y G L Q S I T E V G D F L A N P N K Y Q P V V I D			
UniRef90_L8N8K7	G G I N V Y A L R H L Q E L I Q L			
UniRef90_V9G4J6	E I I E I F A V Q S I A E M I H I L			
UniRef90_R5I3H2	P V P K D I E L I P V S T L R E A I K I G L V R G K			
UniRef90_X1MHE7	T K L E G L E L R F V N H I R D V L			
UniRef90_UPI0003673FEF	E V V G S F S I I W P V Q S I E E A L E L L F P H G S L M R R A D E R L K T L A E			
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UniRef90_B9M101	T K V A G I K V I Q V Q S D I R E A L D V A			
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UniRef90_UPI0003464698	E Q K T S G I V Q A A T L E E A L N A I F N			
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UniRef90_K9YCL3	V D G I N V F T A H H L S E I V R H L			
UniRef90_G4Q8M1	A G R F G I R L V P V R K V E E A F R H L F S K G R E			
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UniRef90_E8X2E8	V V Q D V N V Y P L T D F H E A V S F L K N E L I I E P F T V D L F			
UniRef90_E1V4T6	T E Q F Q I Q I H P V S K L D E I F E R L F			
UniRef90_U6MH11	R G L T Y H P V T D L R A A L A F L E K Q I G K K E V L F			
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UniRef90_M6W1Z3	S I K G K F Q I F T C S H V E E L I P E V F G			
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UniRef90_R6WDG5	V E G V R I L G A D T L L A V C R Y L K G E E E			
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UniRef90_X0YA03	I E P I A A S S L S Q A I R L G L E G Q			
UniRef90_K2A636	E G I K V T P V K D L K Q L I L H F K G E K			
UniRef90_D6ZG91	G V D V V G V H H L G Q V I E L L L			
UniRef90_M9M6H6	V E G L D I Y P M N I I G V S N I R E V I S K I F			
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UniRef90_U2EJ54	V K D I E V L A P D H L T Q V V N F L			
UniRef90_I5B4Q5	K G I K V I Y G V E S L L K E T D Y L			
UniRef90_X1KA63	S V V E G I K Y G V R S L R E L L V F H			
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1 10 20 30 40

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

50 60 70 80

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

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UniRef90_UPI0003815B74	A P A D K R K A G S G Y D L A L A L G L L G A S G V I S T E Q G W V F V G E L S			
UniRef90_UPI00047607CC	P A T L R K V G S A Y D L A L A S A V L S A H T K W A R L E K T V L L G E L A			
UniRef90_M1N340	A G G Y R I S E P A A D L A V A A A L V S S L A N I P L P T H Y V Y F G E I S			
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UniRef90_K9P5H5	A P A D L P K A G P G F D L P I A L G L L S Q Q L A P A L V E G L W S A G E L G			
UniRef90_K2F781	V G G I R A S E P A A D L A V C L A I A S S F K D K E L G K D L V V F G E V G			
UniRef90_UPI00037887A6	E Q Q Y H G V E G D S A S C A E L Y T L L S A L S G L P L K Q G I A V T G A V N			
UniRef90_E4UD02	A G G Y R I S E P A A D L A V A A A L S S I F C I P L P S S C I Y F G E I S			
UniRef90_U1FKS2	S P A D M R K E G A G F D L A I A L A V L S G T D S F S D S P S V L V M G E L E			
UniRef90_B1MGX8	V G G M R M T D P S A D L A I L M A V A S A Y T D I A L P A N M V F I G E V V			
UniRef90_G8RN54	S P A T L P K M G S V Y D I A L A M A V A M S A H G K W N R L E K T V L L G E L L			
UniRef90_H8GGM8	A P A D L P K E G G R F D L A I A L G I L S G Q I P L S L L S E V E C I G E L S			
UniRef90_C4GBK0	P A S I K S G T G F D L P V A I A I L A A I G V I G Q E R L A D I T V G E L G			
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UniRef90_M7A6A5	V G G M K V T E P A G D L A I A L S V C A S M R N S P I P R T T A V V G E V			
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UniRef90_UPI00036652F9	V G G I K V T E P A A D L S I A L A V A S A G L N L A I S P R L T A I G E V			
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UniRef90_B7IF76	S G G L K I T D P A S D L A I A A S I I L S S L Y N T F L G K V V I I G E V			
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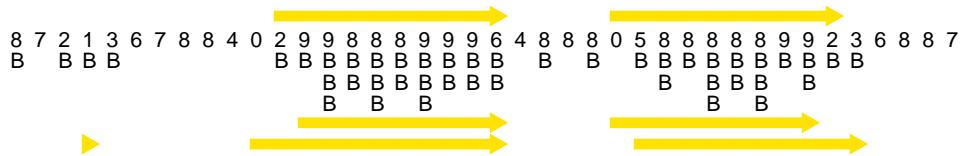
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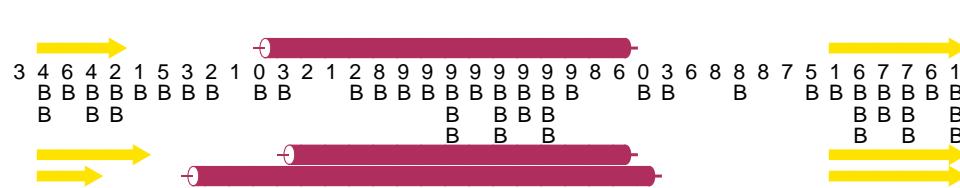
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UniRef90_R5EA58	S F T I V G L P D T E V K E S R D R V R A A L Q N C G F D M P A R R I T A N L
UniRef90_W0V8Y4	K F E K T G L G D R E A K E S I E T A F R Y F K A N S R N T N K D Y L M H I Q D
UniRef90_S6EM37	I R I P V E L G G A I H S K G V L I I S S F L A R Y A Q D R P L S L S A S L V F
UniRef90_X1SZW7	N D T D Q A I T T A K G P D G G A V I G V V L A G D Y K F P F E I
UniRef90_XOTQV9	R G G A G P A P P P P R R A V S G L D G S R V A M I T A V L Q K R D I F T A S
UniRef90_UPI00040E4E00	A F I L L G L P D A S L R E S Q D R I R S A A K N T G C D L P A R R I T V N L
UniRef90_E3J8M0	V H M T G R V D A V M K E A R D R I R A A I T N S K R P W P Q G R I I L G L A
UniRef90_A0A010NE95	T P R R A V S G V D T N R I A M L T A V L Y R H G G L N L A K D L Y V S T
UniRef90_UPI00037F9175	A F S L V G L P D S S T L Q A R E R V R A A A R S G A G L A P R R I T V N L
UniRef90_S4HRB9	I P Q P R R A V S G L D Y N R V A M V L A V L Q S R G R V F L G K H D V Y A A T
UniRef90_C7MB83	F P N H R I T V N L
UniRef90_U5EBC5	R L D I V G L P G K A V S E A G E R V R A A V K F A G Y E W P V S R V T I N L
UniRef90_R7FSZ6	
UniRef90_R8VSJ1	



	90	100	110	120
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UniRef90_C8X158	G G G L R L Q E P G L D L G V A V L S S F Y D R P L P A G M F W G E L V D A			
UniRef90_UPI000466730E	A P A D M R K K E G S Y A D L P A L A L A D A F P A E A T Q G F F L A G E L S S			
UniRef90_F5XA1	V G G A R V A D P S A D L A A A I A V A S S A L N I S M T R C I A I G E V G S			
UniRef90_H0UPN0	A P A D V P K E G A L L D L P M G L A M M D A A G C Y C R L P L K G A V F I G E L L S S			
UniRef90_K4IM2	S P A S K P K H G S S H D L A I A I S V L E G A L P T E G L D H T I I L G E L N N			
UniRef90_K0IC94	E Q E Y S G V E G D S A S C A E Y A L L S S L S G L P L R Q G I A V T G A L N N			
UniRef90_A0A010ZL69	V G G A R V T E P A G D L A V A L A V A S A A R D Y A L P P D L V A I G E L L G			
UniRef90_UPI00037820D7	A P A D L P K E S G R F D L P I A V A L L D G Q L P L D V L S G Y E L A G E L L G			
UniRef90_X0X4P0	A P A N L R K E G S G F D L P I T L S L L C G L G I V D Q D R E F A I C G E L L S S			
UniRef90_E6WXW5	A P S D Y R K S G T H F D L P I A L L L A L N K E S I D Q E D L Y V F G E L L G			
UniRef90_A5CCP0	A G G L K I T E P A V D L A V A A S L I V S A A S N Q P L P L H S I F G E L L G			
UniRef90_W5W0V7	K I S L S D V G G P S A G L M F A L A I V D K L T P D G L D N G Q W I A G T G E			
UniRef90_R6Q7M0	Q D L Q G I G M T G K L A L P T L I A L C S I A L G K P V Q S S L V V L G E I S			
UniRef90_X5DPK3	V G G M K I N E P G A D L A L A L A L A S T A S G K A L P T G L V A V G E V G G			
UniRef90_UPI0003F4F193	V P A S L P K R G S A F D L A I V M A A L E A A G D V R R T G R T V F L A E L G			
UniRef90_K5BKC4	D F N L A N I G G P S A G L I F S L A V I D K L T E G N L A D G R F V A G S G T			
UniRef90_D3RMV3	A P A D L P K E G G R F D L P I A L G T L G A T Q G L R T E R H Y E C G E L A			
UniRef90_I0IHV4	A P A D V K K V G P R Y D L P M A I G L L H R Q Q V I R T H G G L L F A G E L L A S			
UniRef90_C3X5M2	A P A D L P K E S G R F D L P I A L G I L S G Q I R K E Q L N R Y E Y A G E L L G			
UniRef90_Q00RT5	V G G M K L E D P S T D V A V A I A I A S S F V E K A L P A D M A F F G E V G G			
UniRef90_S2VPL4	T I H L E N V G G P S A G L M F T L G I I D K F T G G D S T G G I A G T G A I G G			
UniRef90_A0A021VP30	S P A A L P K A G A A F D L A V A V A T L A G A G V C Y C D P H R A A T H L G E I L G			
UniRef90_W7E331	A G G L R I S E P A A D L A V A A A L V S A L T R Q P T S P G S V F F G E I L G			
UniRef90_D7FFEF0	S P S D L P K S G S H F D L P I A L G I L A L Q O K E L A F W F A G E L L G			
UniRef90_B9XR16	A P A D V K K E G P S F D L P I A V G I L S E Q I E T D Q L D N F V M V G E L L A S			
UniRef90_E2ZB53	A P A D M K K E G A A F D L P I A V A V A L L S G Q I A P E S C E D S V F I G E L L A S			
UniRef90_R5EA58	S P A D I R K A G N G F D L P V A A G I L D G I K T D M L E S S V I G E L L S S			
UniRef90_W0V8Y4	A P A D L P K E S G R F D L P I A L G I L S G Q I P G E R F H E Y E F A G E L L S S			
UniRef90_S6EM37	V N G V G M T S S L S A A I I A M C S G A L N K P V Q S Q L A V L G S V S S S			
UniRef90_X1SZW7	Y Q E V E G D S A S S A E L Y A L L S S L S G I P I K Q S I A V T T G S V N N			
UniRef90_X0TQV9	E Q S Y N Q V E G D S A S L A E L C A L I S V L A D A P I R Q S L I A V T T G S V N N			
UniRef90_UPI00040E4E00	D I S I G D I G G P S A G L I F S L A L I D K L T P G A L T G G V A G T T G T I G G			
UniRef90_E3J8M0	V G G V K L H E P A A D L A V A L A M V S S A Q D R G V P S D L I A L G E V G G			
UniRef90_A0A010NE95	L P A S L P K S G S V L D L A I L M S A W A A D G R V Q G T A E I V F L A E L L G G			
UniRef90_UPI00037F9175	P A D M P K T G S G C D A L A V A V M A A E G K V S A R H L G H T F L G E I L S S			
UniRef90_S4HRB9	I A G A L A K E P A C Y D I A I V A A L A S A A K K P L P T C T I A L G E I L S S			
UniRef90_C7MB83	T P A W R R K H G S F D L A I A M A V L D A Q G E V H V P S D L V L G E I L S S			
UniRef90_U5EBC5	V G G M R L V E P T A D L A I A L A I A S A E A D I A P A G W V I L G E V G G			
UniRef90_R7FSZ6	A P A E L K K E G A M L D L A I A V A L V K S T G E S A D I A P A G W V I L G E V G G			
UniRef90_D9V5U4	A P A E L V E P C Y D I A I V A A L A S C O S C O L A P P D A F I A L G E I L S S			

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm

	130										140										150										160									
UniRef90_UPI00016B25BA	L	D	G	S	L	R	P	I	R	S	A	I	T	A	E	V	A	K	N	H	K	I	K	S	V	F	V	P	A	Q	N	A	E	Q	A	S	L	V	P	
UniRef90_C8X158	L	N	G	Q	V	R	P	V	M	A	Q	D	K	R	W	N	Q	A	R	R	G	Y	R	P	I	F	C	P	H	Q										
UniRef90_UPI000466730E	L	T	G	E	L	R	P	V	P	G	I	L	P	L	A	A	R	R	E	G	A	R	G	I	T	V	V	P	R	G	N	A	R	E	A	A				
UniRef90_F5XFA1	L	A	G	E	L	R	R	V	P	G	H	R	R	L	A	E	A	R	R	G	F	T	E	A	V	V	P	S	D	S	H	A	A	E	Q	L	S			
UniRef90_H0UPN0	L	D	G	R	L	R	G	V	R	G	A	L	P	A	A	L	L	A	R	G	Q	V	P	L	F	L	P	A	D	N	A	P	E	A	A	M	I			
UniRef90_K4IMI2	L	D	G	T	I	L	P	I	N	G	L	L	P	I	L	M	Q	A	R	Q	G	I	T	R	A	F	V	P	A	D	N	L	D	E	A	R	L	V	P	
UniRef90_K0IC94	Q	H	G	E	V	L	P	V	G	G	I	N	E	K	I	E	G	W	F	R	A	G	T	H	G	V	L	I	P	A	R	N	Q	R	H	L	M	L	D	A
UniRef90_A0A010ZL69	L	S	G	D	V	R	R	V	G	A	V	E	R	L	R	A	E	A	R	G	F	R	R	A	L	V	P	T	G	S	I	E	A	S	L					
UniRef90_UPI00037820D7	L	G	G	E	L	R	P	V	R	G	A	L	M	V	A	A	A	R	S	S	G	R	R	F	I	L	P	R	S	S	A	I	E	A	S	L				
UniRef90_X0X4P0	L	D	G	R	L	K	E	L	K	G	A	P	I	S	L	G	L	R	E	K	A	V	D	K	L	V	L	P	K	N	L	A	E	V	S					
UniRef90_E6WXW5	L	D	G	R	V	K	S	S	Q	L	F	P	L	I	L	S	L	R	Q	G	I	R	A	R	V	V	P	R	E	A	M	Y	L	S	H	I				
UniRef90_A5CCP0	L	S	G	E	I	R	K	S	T	Q	S	D	L	R	V	N	E	A	V	K	L	G	F	K	N	I	F	C	A	D	Y	S	N	N	S					
UniRef90_W5W0V7	I	D	G	N	V	K	P	I	G	G	I	P	F	K	M	I	A	A	R	E	T	G	A	T	V	F	L	A	P	A	A	C	S	E	A	K	Q			
UniRef90_R6Q7M0	I	S	G	T	M	K	V	D	E	L	A	S	T	L	Q	V	C	L	D	S	G	A	K	R	V	L	I	P	S	T	F	V	D	A	T	V	P	P		
UniRef90_X5DPK3	L	G	G	E	V	R	R	V	P	D	L	R	Q	R	L	A	E	A	G	R	L	G	F	T	T	A	V	V	P	D	S	T	R	G	A	D	R	T		
UniRef90_UPI0003F4F193	L	D	G	R	L	R	P	V	R	G	V	L	P	A	V	M	A	V	R	G	H	E	F	V	V	V	A	E	D	N	V	R	E	A	L	V	P			
UniRef90_K5BKC4	I	D	G	K	V	G	A	I	G	F	I	N	H	K	M	L	A	A	R	E	A	G	A	T	V	F	L	V	P	A	E	N	C	A	E	A	K	A		
UniRef90_D3RMV3	L	S	G	A	L	R	P	I	Q	G	V	L	P	I	A	L	A	A	R	A	A	G	R	A	L	I	L	P	Q	A	N	A	E	A	A	I				
UniRef90_10IHV4	L	D	G	R	I	R	P	I	R	S	G	V	I	N	M	A	L	L	A	R	R	G	A	G	V	V	V	P	R	E	N	A	E	A	A	A				
UniRef90_C3X5M2	L	S	G	E	L	R	P	I	R	G	A	L	A	M	A	F	A	I	K	K	G	K	E	K	A	F	L	P	A	E	N	A	D	E	A	A	F			
UniRef90_Q00RT5	L	G	G	E	L	R	P	V	M	Q	A	E	R	R	I	A	E	A	A	M	G	F	K	R	V	L	L	P	E	S	G	S	P	D	M					
UniRef90_S2VPL4	Y	D	G	E	V	Q	P	I	G	G	I	V	Q	K	M	Y	G	S	K	R	D	G	A	Q	W	F	L	A	P	K	S	N	C	D	E	V	V	G		
UniRef90_A0A021VP30	L	D	G	R	L	R	P	V	R	G	V	L	P	A	V	A	S	V	A	G	R	A	T	V	V	V	P	H	G	N	V	A	E	A	R	L	V	P		
UniRef90_W7E331	L	S	G	E	V	R	P	Q	V	P	Q	A	D	L	R	V	K	E	A	H	K	G	F	D	E	I	L	P	R	V	A	R	G	N	T	K	L	S		
UniRef90_D7FEF0	L	D	G	K	I	K	P	N	P	N	I	F	P	M	L	D	I	A	K	H	P	H	A	K	V	I	A	P	K	A	N	E	L	F	S	L	I	P		
UniRef90_B9XR16	L	T	G	A	R	S	V	K	G	I	L	S	I	A	Q	A	R	D	A	G	K	G	I	L	V	P	A	E	N	A	A	E	A	A	A					
UniRef90_E2ZB53	L	D	G	L	I	R	P	T	V	G	V	L	S	M	V	I	A	K	E	R	G	M	R	T	V	Y	V	S	P	E	N	G	D	E	A	L	L	C		
UniRef90_R5EA58	L	D	G	S	V	N	A	V	R	G	V	L	I	N	C	V	A	K	A	Q	M	G	F	K	R	C	I	V	P	S	C	N	I	C	E	G				
UniRef90_W0V8Y4	L	S	G	Q	L	R	P	V	R	G	A	L	A	M	T	F	A	M	Q	G	G	D	A	R	A	F	I	L	P	Q	A	N	A	D	E	A	L			
UniRef90_S6EM37	L	G	G	T	I	N	K	V	E	D	L	A	N	T	L	Q	V	C	F	D	A	G	K	K	I	L	L	P	M	V	N	A	D	I	P	L	P			
UniRef90_X1SZW7	Q	K	G	E	V	Q	A	I	G	G	V	N	Q	K	I	E	G	F	Y	E	N	G	H	G	V	V	I	P	S	S	N	V	Q	N	L	M	T	R		
UniRef90_X0TQV9	Q	G	L	V	P	Q	I	G	G	V	N	E	K	I	E	G	F	F	D	S	G	Q	V	L	I	P	S	N	V	K	H	L	M	L	E	A				
UniRef90_UPI00040E4E00	P	D	G	Q	V	G	P	I	G	G	I	E	Q	K	M	I	A	A	R	R	G	A	T	V	F	L	T	P	E	G	N	C	A	A	A	V	K			
UniRef90_E3J8M0	L	T	G	E	I	R	S	V	S	G	I	E	R	R	L	A	A	A	R	R	G	F	R	R	A	L	V	P	R											
UniRef90_A0A010NE95	L	D	G	R	L	R	P	V	R	G	V	L	P	A	V	A	A	Q	A	G	A	Q	T	V	V	V	A	M	E	N	A	Q	E	A	A	V	L	V	P	
UniRef90_UPI00037F9175	L	D	G	R	L	R	P	V	R	G	V	L	P	A	V	V	A	K	N	R	G	L	T	H	V	P	V	E	N	V	R	E	A	A	V	L	P			
UniRef90_S4HRB9	L	T	G	Q	V	R	P	V	P	R	L	E	P	R	L	R	E	A	V	R	I	G	Y	R	R	A	I	V	C	Q	M	R	K	K	G					
UniRef90_C7MB83	L	D	G	R	V	R	P	I	P	G	V	L	P	A	L	L	A	A	R	D	H	G	V	T	R	A	V	V	P	A	E	N	L	H	E	A	R	L		
UniRef90_U5EBC5	L	A	G	E	V	R	K	V	T	G	S	R	L	A	E	A	R	L	R	G	F	T	A	L	V	P	P	G	S	E	K									
UniRef90_R7FSZ6	L	D	G	K	I	R	P	V	N	G	I	L	P	M	L	I	S	A	K	Q	R	G	F	E	V	V	I	P	A	E	N	A	K	E						
UniRef90_R8VSJ1	L	T	G	A	L	R	P	V	S	G	V	L	S	M	L	L	A	A	R	D	A	G	L	R	R	Y	V	P	A	D	N	A	A	A	A	A	A	A		

lupas_21
lupas_14
lupas_28
jnet
conf
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sol0
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ipssm

Multiple sequence alignment of UniRef90 proteins. The alignment shows conservation of amino acids across various species. Conserved residues are highlighted with colored boxes: red for hydrophobic, blue for polar, and yellow for polar/hydrophobic. The alignment includes sequences from UniRef90_UPI00016B25BA up to UniRef90_R8VS1.

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm

UniRef90_UPI00016B25BA
UniRef90_C8X158
UniRef90_UPI000466730E
UniRef90_F5XFA1
UniRef90_H0UPN0
UniRef90_K4IMI2
UniRef90_K0IC94
UniRef90_A0A010ZL69
UniRef90_UPI00037820D7
UniRef90_X0X4P0
UniRef90_E6WXW5
UniRef90_A5CCP0
UniRef90_W5W0V7
UniRef90_R6Q7M0
UniRef90_X5DPK3
UniRef90_UPI0003F4F193
UniRef90_K5BKC4
UniRef90_D3RMV3
UniRef90_I0IHV4
UniRef90_C3X5M2
UniRef90_Q00RT5
UniRef90_S2VPL4
UniRef90_A0A021VP30
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UniRef90_D7FEF0
UniRef90_B9XR16
UniRef90_E2ZB53 Q A
UniRef90_R5EA58
UniRef90_W0V8Y4
UniRef90_S6EM37
UniRef90_X1SZW7
UniRef90_XOTQV9
UniRef90_UPI00040E4E00
UniRef90_E3J8M0
UniRef90_A0A010NE95
UniRef90_UPI00037F9175
UniRef90_S4HRB9
UniRef90_C7MB83 S A
UniRef90_U5EBC5
UniRef90_R7FSZ6 K
UniRef90_R8VSJ1

lupas_21
lupas_14
lupas_28
jnet
conf 8 8 9
sol25
sol5
solo
jhmm
jpssm