

QUERY	1	10	20	30	40																																														
UniRef90_P02104	V	N	F	T	A	E	E	K	T	A	V	L	N	G	L	W	S	K	V	N	V	E	E	V	G	G	E	A	L	G	R	L	L	V	V	Y	P	W	T	Q	R										
UniRef90_G5BS34	V	H	F	T	A	E	E	K	A	A	I	T	S	L	W	R	K	V	N	V	E	E	E	T	G	G	E	E	T	L	G	R	L	L	V	V	Y	P	W	T	Q	R									
UniRef90_UPI0003331BBB	V	H	F	T	A	E	E	K	A	A	I	T	S	L	W	R	K	V	N	V	E	E	E	T	G	G	E	E	T	L	G	R	L	L	V	V	Y	P	W	T	Q	R									
UniRef90_P86391	V	H	W	T	A	E	E	K	Q	L	I	T	C	L	W	G	K	V	D	V	A	T	I	G	G	E	S	L	A	G	M	F	V	M	Y	P	W	T	Q	R											
UniRef90_Q28932	V	H	L	S	A	E	E	K	A	H	I	N	A	I	W	S	K	V	D	Q	T	G	G	A	E	S	L	G	S	R	L	L	I	V	Y	P	W	T	S	R											
UniRef90_P02052	V	H	L	S	A	E	E	K	A	A	V	T	G	L	W	S	K	V	D	L	E	K	V	G	G	E	S	L	G	S	R	L	L	I	V	Y	P	W	T	Q	R										
UniRef90_F7GH03	V	N	W	T	A	E	E	K	H	A	V	S	T	I	W	A	K	V	D	I	E	K	L	G	A	H	T	L	S	R	L	L	V	V	Y	P	W	T	Q	R											
UniRef90_UPI000395D7C5												P	G	L	W	G	K	V	N	V	A	E	C	G	G	E	A	L	G	R	L	L	V	V	Y	P	W	T	Q	R											
UniRef90_M3YFH4	V	H	L	S	A	E	E	K	A	A	V	S	S	L	W	G	K	V	N	V	D	V	G	G	E	A	L	G	R	L	L	V	V	Y	P	W	T	Q	R												
UniRef90_UPI0003F0D5A0	V	H	L	S	D	A	E	K	A	A	V	N	G	I	W	S	K	V	D	V	D	K	L	G	G	E	A	L	G	C	L	L	I	V	Y	P	W	T	Q	R											
UniRef90_Q98905	V	H	W	S	C	A	E	E	K	A	F	I	T	S	L	W	A	K	V	N	V	E	E	V	G	G	E	A	L	A	R	L	L	I	V	Y	P	W	T	Q	R										
UniRef90_G3SBL4	V	H	F	T	E	E	D	K	A	T	I	T	S	L	W	G	K	V	N	V	E	D	A	G	G	E	T	L	G	R	L	L	V	V	Y	P	W	T	Q	R											
UniRef90_W5MMC3	V	H	W	S	D	E	E	R	K	A	I	T	S	L	W	G	K	V	D	V	E	S	A	G	H	Q	A	L	V	R	L	L	I	V	Y	P	W	T	Q	R											
UniRef90_P18436	V	H	F	T	A	E	E	K	A	I	T	S	L	W	A	K	V	N	V	E	E	T	G	G	E	A	L	G	R	L	L	V	V	Y	P	W	T	Q	R												
UniRef90_P82316	V	H	F	S	D	A	E	R	D	A	I	T	S	L	W	G	K	I	H	I	D	E	I	G	P	Q	A	L	A	R	V	L	I	V	Y	P	W	T	Q	R											
UniRef90_B6SEZ2	V	H	W	T	A	E	E	K	A	A	I	T	S	L	W	S	K	V	N	V	E	Q	D	G	H	E	A	L	T	R	L	L	V	V	Y	P	W	T	Q	R											
UniRef90_J3SCF9	V	H	W	T	P	E	E	K	Q	L	I	T	A	L	W	S	K	V	D	V	P	E	I	G	S	A	E	L	G	K	L	L	V	V	Y	P	W	T	Q	R											
UniRef90_M7AYD8												T	A	T	W	D	K	L	N	V	E	E	I	G	S	A	E	L	A	R	L	L	I	V	Y	P	W	T	Q	R											
UniRef90_P24292	V	H	M	T	D	A	E	K	K	L	V	T	T	M	W	G	K	L	D	V	D	A	A	G	S	A	E	L	G	R	V	L	V	V	Y	P	W	T	Q	R											
UniRef90_UPI00046B3AEC	V	Q	F	T	A	E	K	A	A	V	A	S	L	W	G	K	V	N	V	E	E	I	G	G	E	A	L	G	R	L	L	I	V	Y	P	W	T	X	R												
UniRef90_E3TCM4	V	S	W	S	Q	S	E	K	A	A	V	V	D	L	W	G	K	I	N	V	D	E	I	G	P	Q	A	L	A	R	V	L	I	V	Y	P	W	T	Q	R											
UniRef90_I3MW48												D	V	L	W	G	K	M	N	V	D	E	V	G	G	E	A	L	G	R	L	L	V	V	Y	P	W	T	Q	R											
UniRef90_Q9PVL8	V	H	W	T	A	E	E	K	A	A	I	S	S	V	W	K	V	D	V	E	S	D	G	Q	E	A	L	A	R	L	L	I	V	Y	P	W	T	Q	R												
UniRef90_Q9YGF4	V	V	W	T	D	E	E	R	A	A	I	S	D	I	F	S	K	L	N	V	D	D	V	G	P	K	C	L	A	R	L	L	I	V	Y	P	W	T	Q	R											
UniRef90_Q6S9E2	V	H	W	T	D	A	E	R	H	I	A	D	L	W	G	K	I	N	H	D	E	I	G	G	Q	A	L	A	R	L	L	I	V	Y	P	W	T	Q	R												
UniRef90_P02007	M	A	L	T	Q	A	E	K	A	A	V	T	T	L	W	A	K	V	A	E	S	I	G	L	E	S	L	E	R	L	F	A	S	Y	P	Q	T	K	T												
UniRef90_Q7LZC2	V	E	W	S	T	S	N	E	R	S	T	I	T	S	L	W	G	K	I	N	N	A	E	I	G	Q	V	A	L	A	R	V	L	I	V	Y	P	W	T	Q	R										
UniRef90_P13787	M	S	L	T	K	A	E	R	T	M	V	V	S	I	W	G	K	I	S	A	D	A	V	G	T	E	A	L	Q	R	L	F	S	S	Y	P	Q	T	K	T											
UniRef90_P10060	V	H	W	T	A	E	E	K	H	L	I	G	S	L	W	A	K	V	D	V	A	D	I	G	G	E	A	L	A	R	L	L	V	V	Y	P	W	T	Q	R											
UniRef90_B5FX70	V	N	W	T	A	E	E	K	Q	L	V	T	T	L	W	G	R	V	N	V	D	E	C	G	A	E	A	L	A	R	L	L	V	V	Y	P	W	T	Q	R											
UniRef90_UPI000334155E	M	S	L	T	K	T	E	R	T	I	V	E	S	M	W	S	K	V	S	V	D	S	I	G	T	E	T	L	E	R	L	F	N	S	Y	P	Q	T	K	T											
UniRef90_UPI00035A227A	V	H	L	T	D	A	E	K	A	L	V	T	G	L	W	G	K	V	D	V	P	V	I	G	A	E	S	L	A	R	M	L	I	V	Y	P	W	T	Q	R											
UniRef90_F6VE37	V	Q	L	S	G	E	K	T	A	I	L	T	A	L	W	G	K	V	N	E	E	E	I	G	A	E	A	V	S	R	L	L	I	V	Y	P	W	T	Q	R											
UniRef90_UPI000273A1C1	M	S	L	T	K	T	D	K	A	L	I	A	A	I	W	A	K	V	N	S	A	D	C	I	G	T	E	A	L	E	R	L	F	I	S	Y	P	Q	T	K	T										
UniRef90_P02139	V	E	W	T	D	A	E	K	S	A	I	T	A	L	W	G	K	L	N	P	D	E	L	G	P	A	E	L	A	R	L	C	L	I	V	Y	P	W	T	Q	R										
UniRef90_P02076												T	G	F	W	G	K	V	K	V	D	E	V	G	A	E	A	L	G	R	L	L	V	V	Y	P	W	T	Q	R											
UniRef90_P07433	M	G	L	T	A	H	E	K	Q	L	I	T	G	S	W	G	K	I	N	A	K	A	I	G	K	E	A	L	G	R	L	L	N	T	F	P	W	T	Q	R											
UniRef90_Q10733	H	W	T	A	E	E	R	H	Y	I	L	S	M	W	D	K	I	N	V	A	E	I	G	G	E	S	L	A	R	M	L	I	V	Y	P	W	T	Q	K												
UniRef90_UPI000444024C	M	S	L	T	T	N	E	R	T	I	L	J	A	M	W	D	K	I	N	E	S	E	E	I	G	R	E	T	L	D	R	L	L	T	V	F	P	Q	A	K	T										
UniRef90_I3IZ27	V	E	W	T	D	A	E	R	S	A	I	T	S	L	W	G	K	I	D	V	G	E	I	G	P	Q	A	L	T	R	L	L	I	V	Y	P	W	A	Q	R											
UniRef90_Q6DQK4	V	Q	W	S	D	S	E	R	K	T	I	A	S	V	I	W	S	K	I	N	V	D	E	I	G	P	Q	T	L	A	R	V	L	V	V	Y	P	W	T	Q	R										
UniRef90_Q8AYQ6	V	T	W	T	D	F	E	R	A	T	I	A	S	D	I	F	S	K	I	D	Y	D	I	V	G	P	D	A	L	S	R	C	L	I	V	Y	P	W	T	Q	R										
UniRef90_UPI0003BCF535	V	K	W	T	E	L	E	R	S	T	V	K	A	L	W	E	K	I	D	I	D	E	I	G	S	Q	I	W	A	R	V	L	I	V	Y	P	W	T	E	R											
UniRef90_W5QCCX0												T	V	E	E	K	D	T	V	I	A	F	W	S	W	V	R	V	D	E	V	G	A	E	T	L	G	R	L	L	V	V	Y	P	W	T	Q	R			
UniRef90_UPI0003955C04																								P	V	S	L	P	R	L	L	I	V	Y	P	W	T	Q	R												
UniRef90_P83131	M	V	L	T	A	G	D	K	K	A	N	V	K	T	V	W	S	K	V	H	L	E	E	Y	G	S	E	T	L	E	R	L	F	V	V	Y	P	S	T	K	T										
UniRef90_I1Y926	M	V	L	T	A	E	D	K	K	L	I	Q	Q	T	W	G	K	L	G	E	E	E	I	G	A	E	S	L	W	R	M	F	H	S	Y	P	P	T	K	T											
UniRef90_Q8UW93	V	E	W	T	E	F	E	R	T	I	Q	D	I	F	S	K	M	N	Y	D	V	V	G	G	Q	S	L	A	R	C	L	L	V	V	Y	P	W	T	Q	R											
UniRef90_W5LAM7	V	E	W	T	D	F	E	R	A	T	I	Q	D	I	F	S	K	M	N	Y	E	S	V	G	H	N	A	L	A	R	C	L	L	V	V	Y	P	W	T	Q	R										
UniRef90_P02004												V	L	T	A	E	D	K	S	L	I	Q	Q	T	W	G	K	L	G	E	E	E	I	G	A	E	S	L	W	R	M	F	H	A	Y	P	S	T	K	T	
UniRef90_Q7ZT86												M	L	T	A	E	E	K	S	L	I	Q	K	V	W	E	K	T	G	E	R	D	E	I	G	G	E	S	L	Y	R	L	F	T	S	Y	P	S	T	K	T
UniRef90_Q8UV18	M	S	L	S	A	D	D	K	K	T	V	K	A	F	W	A	K	A	S	A	D	D	I	G	A	D	A	L	G	R	L	L	M	V	Y	P	Q	T	K	T											
UniRef90_Q63910	M	V	L	S	E	E	D	K	N	N	I	K	K	A	W	V	K	I	H	A	A	E	I	G	A	E	T	I	G	R	L	F	I	V	F	P	S	S	K	T											
UniRef90_B8K130	M	S	L	T	K	S	E	R	T	I	M	S	L	W	D	K	V	S	S	E	A	I	G	T	E	A	L	E	R	L	F	L	S	F	P	Q	T	K	T												
UniRef90_UPI00032ADC07												L	S	P	E	E	K	A	A	V	T	A	L	W</																											

QUERY	F	F	D	S	F	G	D	L	S	N	P	G	A	V	M	G	N	P	K	V	K	A	H	G	K	K	V	L	H	S	F	G	E	S	V	H	H	L	D	N			
UniRef90_P02104	F	F	D	S	F	G	D	L	S	N	P	G	A	V	M	G	N	P	K	V	K	A	H	G	K	K	V	L	H	S	F	G	E	S	V	H	H	L	D	N			
UniRef90_G5BS34	F	F	D	N	F	G	N	L	S	S	A	S	A	I	M	G	N	P	K	V	K	A	H	G	K	K	V	L	T	A	F	G	E	S	V	H	H	L	D	N			
UniRef90_UPI0003331BBB	F	F	D	S	F	G	N	L	S	S	P	C	A	V	M	G	N	P	K	V	K	A	H	G	K	K	V	L	T	S	F	G	E	A	V	K	N	M	D	H			
UniRef90_P86391	L	F	D	S	F	G	N	L	S	S	P	T	A	I	C	G	N	P	K	V	K	A	H	G	K	K	V	L	T	A	F	G	D	A	V	K	N	L	D	N			
UniRef90_Q28932	F	F	D	H	F	G	D	L	S	S	A	K	G	V	M	G	N	A	K	V	K	Q	A	H	G	A	K	V	L	T	A	F	S	F	G	D	A	V	K	N	M	D	N
UniRef90_P02052	F	F	D	S	F	G	D	L	S	S	P	S	A	V	M	G	N	P	K	V	K	R	A	H	G	K	K	V	L	T	S	F	S	D	G	L	V	N	H	L	D	N	
UniRef90_F7GH03	Y	F	S	N	F	G	N	L	S	S	P	I	A	I	D	M	G	N	P	K	V	K	R	A	H	G	K	K	V	L	T	S	F	G	E	A	V	K	N	L	D	N	
UniRef90_UPI000395D7C5	F	F	A	S	F	G	N	L	S	G	A	T	A	I	V	G	N	P	K	V	K	Q	A	H	G	K	K	V	L	T	S	F	G	E	A	V	K	N	L	D	G		
UniRef90_M3YFH4	F	F	D	S	F	G	D	L	S	S	P	D	A	I	M	S	N	G	K	V	K	A	H	G	K	K	V	V	N	S	L	I	N	G	L	K	N	L	D	N			
UniRef90_Q10003F0D5A0	F	F	D	S	F	G	D	L	S	S	A	D	A	I	I	K	N	P	K	V	K	A	H	G	K	K	V	L	T	S	F	S	E	A	V	K	N	L	D	N			
UniRef90_98905	F	F	S	S	F	G	N	L	S	S	P	N	A	I	L	H	N	A	K	V	L	A	H	G	K	K	V	L	T	S	F	S	E	A	V	K	N	L	D	N			
UniRef90_G3SBL4	F	F	D	S	F	G	N	L	S	S	A	S	A	I	M	G	N	P	K	V	K	A	H	G	K	K	V	L	T	G	A	F	S	D	G	L	V	N	H	L	D	N	
UniRef90_W5MMC3	Y	F	S	S	F	G	N	L	S	S	A	A	A	I	L	G	N	P	K	V	K	H	H	G	K	K	T	V	L	T	A	L	G	D	A	V	K	N	M	D	N		
UniRef90_P18436	F	F	D	N	F	G	N	L	S	S	A	S	A	I	M	G	N	P	K	V	K	A	H	G	K	K	V	L	T	S	L	G	E	A	V	T	H	M	D	N			
UniRef90_P82316	Y	F	S	K	F	G	D	M	S	S	V	A	I	S	G	N	P	K	V	K	A	H	G	K	K	V	L	T	S	L	G	A	L	E	K	G	S	V	K	N	L	D	N
UniRef90_B63E22	Y	F	S	S	F	G	N	L	S	S	N	V	T	A	I	S	G	N	A	K	V	K	A	H	G	K	K	V	L	T	A	V	G	L	N	S	I	K	N	H	L	D	D
UniRef90_J3SCF9	F	F	A	H	F	G	N	L	S	G	P	S	A	I	C	A	N	P	L	V	R	A	H	G	K	K	V	M	N	S	F	A	E	A	V	K	H	M	D	N			
UniRef90_M7AYD8	F	F																																									

QUERY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
UniRef90_P02104	L	K	G	T	F	A	A	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	N	V	L	A	L	V	V	A	R	H	F	G	K																																																																																
UniRef90_G5BS34	L	K	S	A	L	A	K	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	N	V	L	L	V	L	A	K	H	F	G	N																																																																																	
UniRef90_UPI0003331BBB	L	K	E	A	F	A	K	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	N	M	L	V	I	V	L	A	K	H	F	G	K																																																																																
UniRef90_P86391	L	K	D	T	F	A	K	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	K	V	I	L	V	L	A	G	H	Y	G	K																																																																																	
UniRef90_Q28932	L	K	G	T	F	A	K	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	N	I	L	V	L	C	A	E	H	F	G	K																																																																																	
UniRef90_P02052	L	K	G	T	F	A	K	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	N	V	L	V	R	V	L	A	C	N	F	G	P																																																																																
UniRef90_F7GH03	V	K	T	I	F	D	N	L	S	E	L	H	C	S	E	K	L	H	V	D	P	Q	N	F	R	L	L	G	D	N	L	I	E	L	A	T	A	L	G	K																																																																																
UniRef90_UPI000395D7C5	I	K	N	T	F	S	A	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	D	I	L	V	V	V	L	A	T	A	H	F	G	K																																																																															
UniRef90_M3YFH4	L	K	G	A	F	A	K	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	N	V	M	V	C	I	A	R	H	F	G	K																																																																																	
UniRef90_UPI0003F0D5A0	L	K	G	T	F	A	Q	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	N	V	I	V	R	V	L	A	R	H	F	G	S																																																																																
UniRef90_Q98905	L	K	K	T	F	A	Q	L	S	E	L	H	C	E	K	L	H	V	D	P	E	N	F	R	L	L	G	N	I	L	V	L	V	L	A	T	H	F	P	K																																																																																
UniRef90_G3SBL4	L	K	G	T	F	S	Q	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	N	V	L	V	C	I	A	R	N	F	G	K																																																																																	
UniRef90_W5MMC3	I	K	A	T	F	S	K	L	S	E	L	H	C	S	E	K	L	H	V	D	P	E	N	F	R	L	L	G	E	T	L	V	I	V	L	A	R	Q	F	G	A																																																																															
UniRef90_P18436	L	K	D	A	F	A	H	L	S	R	L	H	C	D	E	L	H	V	D	P	E	N	F	R	T	P	G	K	R	A	V	I	V	L	A	H	H	F	G	R																																																																																
UniRef90_P82316	V	K	A	T	Y	S	N	L	S	R	L	H	C	E	K	L	N	V	D	P	D	N	F</																																																																																																	

QUERY	D	F	T	P	E	L	Q	A	S	Y	Q	K	V	V	A	G	V	A	N	A	L	A	H	K	Y	H		
UniRef90_P02104	E	F	T	A	E	M	Q	A	S	W	Q	K	L	V	A	G	V	A	N	A	L	A	S	H	K	Y	H	
UniRef90_G5BS34	E	F	T	P	E	V	Q	A	S	W	Q	K	L	M	A	G	V	A	N	A	L	A	S	H	K	Y	H	
UniRef90_UPI0003331BBB	E	F	T	P	D	V	Q	A	A	W	Q	K	L	V	A	G	V	A	N	A	L	A	G	N	K	Y	H	
UniRef90_P86391	D	F	T	P	A	V	Q	A	A	Y	Q	K	L	V	N	V	A	H	A	L	A	A	R	R	Y	H		
UniRef90_Q28932	D	F	T	P	A	V	Q	A	A	W	Q	K	L	V	A	G	V	A	T	A	L	A	A	R	K	Y	H	
UniRef90_P02052	E	F	T	P	Q	V	Q	A	A	F	Q	K	V	V	A	G	V	A	N	A	L	A	A	H	K	Y	H	
UniRef90_F7GH03	D	F	T	P	E	A	Q	A	A	W	Q	K	L	V	G	V	V	A	S	A	L	A	S	R	Q	Y	H	
UniRef90_UPI000395D7C5	D	F	T	P	E	C	Q	A	A	W	Q	K	L	V	R	V	V	A	H	A	L	A	S	R	K	Y	H	
UniRef90_M3YFH4	E	F	T	P	Q	V	Q	A	A	V	F	Q	K	V	L	T	G	V	A	N	A	L	A	A	H	K	Y	H
UniRef90_UPI0003F0D5A0	E	F	T	P	Q	A	Q	A	A	F	Q	K	V	L	T	G	V	A	N	A	L	A	A	H	K	Y	H	
UniRef90_Q98905	E	F	T	P	A	S	Q	A	A	W	T	K	L	V	N	A	V	A	H	A	L	A	L	G	Y	H		
UniRef90_G3SBL4	E	F	T	P	Q	A	Q	A	A	Y	Q	K	V	V	A	G	V	A	N	A	L	A						
UniRef90_W5MMC3	E	F	T	P	A	V	Q	A	A	W	Q	K	L	L	A	V	S	I	S	A	L	S	K	Q	Y	H		
UniRef90_P18436	E	F	T	P	Q	V	Q	A	A	W	K	K	L	M	S	A	V	A	I	A	M	G	H	K	Y	H		
UniRef90_P82316	A	F	T	P	E	L	Q	N	A	W	H	K	F	L	S	V	V	A	A	L	S	S	R	Y				
UniRef90_B6SE22	A	F	T	P	Q	V	Q	A	A	W	E	K	F	L	I	N	V	V	A	A	L	S	H	G	Y	H		
UniRef90_J3SCF9	E	F	I	P	S	T	H	A	A	F	Q	K	L	T	N	V	V	A	H	A	L	A	Y	R	Y	H		
UniRef90_M7AYD8																												
UniRef90_P24292	E	F	T	P	Q	V	Q	A	A	Y	Q	K	V	V	A	G	V	A	N	A	L	A	H	K	Y	H		
UniRef90_UPI00046B3AEC	E	F	T	P	Q	M	Q	A	S	W	Q	K	L	T	T	A	V	V	A	N	S	L	A	S	H	K	Y	H
UniRef90_E3TCM4	A	F	T	P	E	I	Q	A	T	W	Q	K	L	A	V	V	V	A	A	M	S							
UniRef90_I3MWA8	D	F	T	P	E	A	Q	A	A	F	Q	K	V	V	A	G	V	A	N	A	L	S	H	K	Y	H		
UniRef90_Q9PVL8	A	F	N	P	Q	V	H	A	A	W	E	K	F	L	A	G	V	S	T	A	N	A	L	S	R	N	Y	H
UniRef90_Q9YGF4	A	F	T	P	E	Y	Q	A	S	F	Q	K	F	L	S	V	V	V	V	A	A	L	S	R	Q	Y	H	
UniRef90_Q6S9E2	S	F	T	P	E	V	H	E	T	W	Q	K	F	L	N	V	V	V	A	A	L	G	K	Q	Y	H		
UniRef90_P02007	D	F	T	P	E	V	H	A	A	W	D	K	F															

	1	10	20	30	40																																				
UniRef90_H3A6U9	V	H	W	T	E	T	E	R	A	T	I	E	T	V	Y	Q	K	L	H	L	D	E	V	G	R	E	A	L	T	R	L	F	I	V	Y	P	W	T	T	R	
UniRef90_P18978	V	L	S	P	A	D	K	T	N	V	K	G	T	W	S	K	L	H	L	S	A	E	Y	G	A	E	A	L	E	R	M	F	I	N	F	P	S	T	T	K	T
UniRef90_P24291	V	L	S	A	A	D	K	A	N	V	K	A	L	W	E	K	A	N	V	G	E	K	Y	G	G	E	A	L	D	R	T	F	L	S	F	P	T	T	K	T	
UniRef90_W5LAT4	M	S	L	T	A	A	D	K	M	A	T	V	K	T	L	W	G	K	I	S	S	D	E	I	G	A	E	A	L	G	R	L	L	T	V	Y	P	Q	T	K	T
UniRef90_P01955	V	L	S	D	N	D	K	T	N	V	K	A	T	W	S	K	I	V	H	A	S	D	Y	V	A	E	A	L	E	R	M	F	F	S	F	P	T	T	K	T	
UniRef90_P02141	V	D	W	T	D	P	E	R	S	A	I	V	G	L	W	G	K	I	S	V	D	E	I	G	P	Q	A	L	A	R	L	L	I	V	S	P	W	T	Q	R	
UniRef90_UPI000328F10D	M	S	L	T	T	K	A	E	R	T	I	V	S	M	W	G	K	I	A	A	D	A	I	G	T	E	A	L	E	R	M	F	A	S	F	P	W	T	K	T	
UniRef90_C1BW51	M	S	L	T	S	A	K	D	K	A	N	V	K	S	I	W	T	K	I	K	S	D	D	I	G	E	Q	A	F	S	R	M	L	V	V	Y	P	Q	T	K	T
UniRef90_P83134	M	L	T	E	D	D	K	Q	L	I	Q	H	V	W	E	K	V	H	Q	S	E	D	F	G	A	E	A	L	E	R	M	F	I	V	Y	P	S	T	K	T	
UniRef90_Q98SE6	M	L	T	A	K	D	K	Q	T	V	K	A	F	W	A	K	V	S	S	E	D	I	G	A	A	A	V	L	E	R	M	L	V	V	Y	P	Q	T	K	T	
UniRef90_G8G8X6	M	G	L	N	D	K	D	K	A	A	V	K	A	L	W	A	K	I	S	A	D	T	I	G	S	N	A	L	T	R	M	F	T	V	Y	P	Q	T	K	T	
UniRef90_UPI000329B181	M	S	L	S	G	K	D	K	A	V	V	R	N	F	W	A	K	V	S	P	A	E	I	G	G	E	A	L	E	R	M	L	T	A	Y	P	Q	T	K	I	
UniRef90_H3ABR1	M	L	S	A	N	D	K	T	L	I	S	S	T	W	N	K	V	N	A	E	D	I	G	A	E	A	L	E	R	L	F	L	A	H	P	Q	T	K	I		
UniRef90_UPI0004545EE9	V	H	F	T	A	D	E	K	A	A	I	T	S	I	W	D	K	V	D	L	E	K	V	G	G	E	T	L	G	R	L	L	I	V	Y	P	W	T	Q	R	
UniRef90_P85081	M	S	L	T	S	T	K	D	K	E	I	V	K	D	L	W	G	H	I	S	A	D	A	I	G	A	D	A	L	G	R	L	L	V	V	Y	P	Q	T	K	I
UniRef90_UPI000350E148	M	L	T	A	E	D	K	K	L	I	T	Q	L	W	E	K	V	H	Q	E	E	F	G	S	E	A	L	E	R	Q	R	M	F	L	A	Y	P	Q	T	K	T
UniRef90_P08422	M	T	L	T	D	S	E	K	A	A	V	V	A	L	W	S	K	I	A	P	Q	A	I	G	A	E	A	L	E	R	L	F	L	S	Y	P	Q	T	K	T	
UniRef90_UPI00045412ED	M	L	T	S	A	D	E	K	K	E	V	T	A	L	W	G	K	A	H	S	G	E	E	Y	G	A	E	A	L	E	R	L	F	L	S	F	P	Q	T	K	T
UniRef90_M3ZD78	M	S	L	S	A	K	D	K	A	T	V	K	T	F	W	A	K	I	S	S	E	E	I	G	T	D	A	L	S	R	M	L	V	V	Y	P	Q	T	K	T	
UniRef90_P02130	S	F	D	A	H	E	R	K	F	I	V	D	L	W	A	K	V	D	V	A	Q	C	G	A	D	A	L	S	R	M	L	I	V	Y	P	W	K	R	R		
UniRef90_G3PL33	L	S	T	K	D	K	E	V	V	K	A	F	W	A	K	V	S	G	E	E	I	G	T	D	A	V	L	A	R	M	L	R	V	Y	P	Q	T	K	T		
UniRef90_Q802A4	M	S	L	S	R	T	D	K	E	A	V	K	A	F	W	A	K	M	S	K	D	V	I	G	A	E	A	F	G	R	M	L	I	A	Y	P	Q	T	K	I	
UniRef90_G3WE91	M	V	L	S	G	A	D	K	T	N	V	K	A	V	W	S	K	V	N	A	G	A	Y	A	G	E	A	L	T	R	T	F	L	S	F	P	T	T	K	T	
UniRef90_P14521	V	E	L	T	E	A	Q	R	G	A	I	V	N	L	W	G	H	L	S	P	D	E	I	G	P	Q	A	L	A	R	L	L	I	V	Y	P	W	T	Q	R	
UniRef90_UPI0003ABC90C																																									
UniRef90_P01935	V	L	S	P	A	D	K	T	N	V	K	A	A	W	G	K	V	H	A	G	Z	Y	G	A	E	A	L	E	R	M	F	L	S	F	P	T	T	K	T		
UniRef90_P02011	S	L	S	A	S	E	K	A	A	V	L	V	I	V	G	K	I	G	S	Q	A	L	G	S	E	A	L	T	R	L	F	L	S	F	P	Q	T	K	T		
UniRef90_C8YNR8	V	E	W	T	E	F	E	R	D	A	I	L	K	D	I	F	S	K	I	D	Y	D	V	V	G	P	A	A	L	T	R	C	L	V	V	Y	P	W	T	R	R
UniRef90_P02000	V	L	S	E	E	D	K	S	H	V	K	A	I	W	G	K	V	H	L	E	E	Y	G	A	E	A	L	E	R	M	F	C	A	Y	P	Q	T	K	I		
UniRef90_G5CUP5	V	Q	W	S	D	A	E	R	A	I	T	S	W	W	E	K	I	D	V	N	E	I	G	P	Q	A	L	T	R	L	L	I	V	Y	P	W	T	Q	R		
UniRef90_UPI00029D92B9	H	F	T	E	E	D	K	A	T	I	T	S	L	W	G	K	V	N	V	E	D	A	G	G	E	T	L	G	R	L	L	V	V	Y	P	W	T	Q	R		
UniRef90_Q4RHD1	S	L	S	T	K	D	K	E	T	V	R	A	F	W	A	K	V	N	R	E	E	I	G	A	S	A	L	C	R	L	L	S	V	Y	P	Q	T	K	T		
UniRef90_Q6GPP8	M	L	F	S	D	A	E	K	T	A	I	V	S	L	W	A	K	A	S	A	D	A	L	G	A	E	A	L	E	R	L	F	L	S	Y	P	Q	T	K	T	
UniRef90_UPI00042BEF40	M	S	L	T	K	A	E	K	T	I	L	S	M	W	A	K	V	S	A	D	A	I	G	T	E	A	L	E	R	L	F	A	S	Y	P	Q	T	K	T		
UniRef90_Q6F3D1	V	H	L	T	A	E	E	R	K	D	V	G	A	T	L	G	K	V	N	V	D	A	L	G	G	Q	C	A	L	R	L	M	C	V	Y	P	W	S	R	R	
UniRef90_A0EZW4	V	E	W	T	D	F	E	R	A	T	I	Q	N	L	F	S	K	M	D	Y	E	L	V	G	P	A	A	L	S	R	M	C	L	V	V	Y	P	W	T	Q	R
UniRef90_P83623	S	L	T	D	K	D	K	A	T	V	K	A	L	W	G	K	I	S	A	D	A	V	G	A	D	A	V	L	G	R	M	I	V	V	Y	P	Q	T	K	T	
UniRef90_J9P710	M	S	L	T	K	A	E	R	T	I	L	S	M	W	G	K	I	S	A	D	A	I	G	T	E	A	L	E	R	L	F	A	S	F	P	Q	T	K	T		
UniRef90_W5KLY8	M	S	L	S	A	K	D	K	S	L	V	K	S	F	W	A	K	V	K	A	D	A	I	G	H	D	A	L	A	R	M	L	S	V	Y	P	Q	T	K	T	
UniRef90_UPI00004F418F	V	K	L	T	F	K	E	K	F	S	F	M	F	L	W	S	K	M	R	L	D	E	V	G	V	E	T	L	G	K	L	V	V	Y	P	W	T	Q	K		
UniRef90_Q8HY34	M	V	L	S	A	A	D	K	T	N	V	K	A	A	W	S	K	V	N	S	G	A	Y	M	G	E	A	L	Y	R	T	F	L	S	F	P	P	T	K	T	
UniRef90_A4ZQ34	M	A	L	S	Q	S	D	R	A	L	V	L	A	L	W	K	M	N	V	G	I	Y	A	T	E	A	L	E	R	T	F	V	A	F	P	S	T	K	T		
UniRef90_P80726	M	S	L	T	A	K	D	K	S	L	I	T	G	F	W	Q	K	I	S	A	D	D	L	G	A	E	A	L	S	R	M	I	V	V	Y	P	A	T	K	V	
UniRef90_Q9PRL9	V	L	T	D	E	D	K	A	R	V	R	A	S	W	V	P	V	N	A	E	L	Y	G	S	E	T	L	T	R	M	F	A	A	H	P	T	T	K	T		
UniRef90_L5LQX1	M	V	L	S	A	A	D	Q	A	A	V	R	A	L	W	K	N	V	G	V	Y	T	T	E	A	L	E	R	T	F	V	A	F	P	S	T	K	T			
UniRef90_P01946	M	V	L	S	A	D	D	K	T	N	I	K	N	C	W	G	K	I	G	G	E	Y	G	A	L	Q	R	M	F	A	A	F	P	T	T	K	T				
UniRef90_G3WER9	M	A	L	S	A	A	D	K	C	N	V	R	E	F	W	E	K	L	N	T	K	V	Y	G	T	E	A	V	G	R	T	F	L	C	F	P	E	T	K	T	
UniRef90_P84205	S	L	S	T	K	D	K	A	V	V	K	G	F	W	S	K	I	S	S	D	E	I	G	T	E	A	V	G	R	M	L	T	V	Y	P	Q	T	K	A		
UniRef90_Q5EEZ5	M	S	L	S	A	K	D	K	A	Q	V	K	A	L	W	A	K	A	E	S	A	D	L	G	A	E	A	L	G	R	M	L	V	S	Y	P	Q	T	K	T	
UniRef90_G5BXY5	M	S	L	T	N	S	E	R	A	T	I	T	I	W	D	K	M	S	A	D	V	I	G	T	E	T	L	E	R	L	F	S	S	Y	P	Q	T	K	T		
UniRef90_L5LSF0	M	S	L	T	R	A	E	R	N	L	I	V	S	M	W	G	K	I	A	A	D	A	I	G	T	E	T	L	E	R	L	F	A	S	Y	P	Q	T	T	T	
UniRef90_P01984	V	L	S	S	H	D	K	S	N	V	K	G	L	F	G	K	V	H	L	E	E	Y	C	A	E	T	L	A	R	M	F	A	A	Y	P	Q	T	K	T		
UniRef90_Q5BJC7	M	S	L	T	A	K	D	K	A	V	I	K	G	F	W	A	K	I	A	D	S	I	G	Q	E	A	M	G	R	M	L	T	V	Y	P	Q	T	K	I		
UniRef90_UPI00038EA702	M	S	L	S	D	E	D	K	A	Y	L	R	F	A	W	K	F	E	P	G	Q	H	S	P	D	A	V	Y	R	M	F	L	S	F	P	S	T	K	T		
UniRef90_W5MM27	M	L	S	Q	E	E	K	D	L	V	S	I	W	E	S	I	D	A	E	E	I	G	A	E	A	L	L	R	M	F	T	C	F	P	K	T	K	T			
UniRef90_P23740	L	T	A	A	D	K	T	L	I	K	S	I	W	G	K	V	E	K	E	A	I	G	V	E	A	L	V	R	L	F	K	C	F	P							

	50	60	70	80
UniRef90_H3A6U9	Y F K S F G D L S S S K A I L A S N A K V T E H G L K K V M N K L T E A I V H N L D H			
UniRef90_P18978	Y F S S H F D L G H A S N A Q I V K M G H G K K V A D A D A L T L K A V G H L M D N			
UniRef90_P24291	Y F P H M D L T P G S A Q I V K M G H G K K V A D A D A L T L K A V G H L M D N			
UniRef90_W5LAT4	Y F A H W A D V S P G S A Q V V K K A H G K K T I M G A V L T G E A V G S K I L E D D			
UniRef90_P01955	Y F P H F D L G H G S A Q V V K K A H G K K V I G E A L T Q A V G V G H L D D D			
UniRef90_P02141	H F S T F G N L S T P A A I M G N P A V V K A H G K K T V M H G L T D R A V G Q N L D D D			
UniRef90_UPI000328F10D	Y F S H M D L S H G S A Q V V K A H G K K V A D A D A L T L A V G N H L D D D			
UniRef90_C1BW51	Y F S H W A D L K P G S A Q V V I K H G D T I M N K I D E C H M E D D			
UniRef90_P83134	Y F P H F D L H H D S E Q L R H H G K K V V G A L G D A V K H I D N			
UniRef90_Q98SE6	Y F S H W P D Q S P G S A A A R K H G I T V M V G V G D A V T K I D D D			
UniRef90_G8G8X6	Y F S H W T E L T P G S V P K N H G K K V M N G I G L A V A K I D D D			
UniRef90_UPI000329B181	Y F S H W S D L S P G S A Q V V K K H G A T I M A A I G D A V A S K I D D D			
UniRef90_H3ABR1	Y F S H M D L S P G S S M L R A H G K K V M G T I E G S I Q N I D K			
UniRef90_UPI0004545EE9	Y F D K F G N L S S A T A I M G N P R I R A H G K K V L T S L G L A V K N M X L			
UniRef90_P85081	Y F L H W P D L S P G S A Q V V K K H G K K N I M S G I A L A V T K I D D D			
UniRef90_UPI000350E148	Y F P H F D L S H P G S E Q V R G H G K V P A A A L G N A V K S L D N D			
UniRef90_P08422	Y F S H F D V S H P G S A D L Q N H G K V V N A L G E A A K H L D N D			
UniRef90_UPI00045412ED	Y F P H F E L S Q G S A Q V V K A H G K K V A D A D A L T T A V A K H L D D D			
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UniRef90_UPI0003ABC90C	F F E S F G D L S S P D A V M G N P K V K A H G K K V A G A F S B D G L N H L D N			
UniRef90_P01935	Y F P H F D L S H G S A Z V V K G H G K K V A K A L S B A V Z H L D D D			
UniRef90_P02011	Y F P H F D L T P G S A D L V N T H H G K K I I N A L L A G A A N H L D D D			
UniRef90_C8YNNR8	Y F G N F G A L Y N A E A I M G N E M V A N H G K K V L H G L D R A V K N M D H			
UniRef90_P02000	Y F P H F D M S H N S A Q I R G H G K K V F A A L H D R A V N H I D D			
UniRef90_G5CUP5	H F A T F G N L S T N A A I L G N P L V A E H G K T V M G G L D R A V K N M D D			
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UniRef90_Q6GPP8	Y F N L S S G S Q D L Q V H G K K V L G A I L G G E A T K S H L D N D			
UniRef90_UPI00042BEF40	Y F P H F D L R P G S A A H L R T L G A K V A A A L G G E A T V K S I L D N			
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UniRef90_P83623	Y F S H W P D L A P S H H K T H G K T V M T G I L A V S K I L D D D			
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UniRef90_P80726	Y F S H W P D L L G P G S P S V K K H G K V I M A A V G D A V G K M N D			
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UniRef90_P18978	L	P	D	A	L	S	E	L	S	D	L	H	A	Y	K	L	R	V	D	P	V	N	F	K	L	L	S	H	C	L	L	V	T	L	L	A	C	H	L	G	A																																							
UniRef90_P24291	L	P	G	A	L	S	K	L	S	E	D	L	H	A	Y	K	L	R	V	D	P	A	N	F	K	L	L	S	A	H	C	L	L	V	V	V	G	M	M	F	P	T																																						
UniRef90_W5LAT4	L	P	S	A	L	S	A	L	S	D	L	H	A	H	K	L	R	V	D	P	V	N	F	K	L	L	S	A	H	C	L	L	V	T	L	S	S	H	Q	P	T																																							
UniRef90_P01955	I	K	N	T	Y	T	A	L	S	V	M	H	S	E	K	L	H	V	D	P	D	N	F	R	L	L	A	D	C	C	L	I	T	V	C	A	A	K	L	G	P																																							
UniRef90_P02141	L	P	G	A	L	S	T	L	S	E	D	L	H	A	H	K	L	R	V	D	P	V	N	F	K	F	L	S	A	H	C	L	L	V	T	L	A	C	H	L	P																																							
UniRef90_UPI000328F10D	L	V	P	F	L	S	S	L	S	E	L	H	A	T	K	L	R	V	D	P	A	N	F	K	F	L	A	H	C	L	L	V	V	A	V	L	G	A	Y	L	P																																							
UniRef90_C1BW51	L	S	A	T	L	S	E	L	S	N	L	H	A	Y	N	L	R	V	D	P	V	N	F	K	L	L	S	A	H	C	F	Q	V	V	L	G	A	H	L	G	R																																							
UniRef90_P83134	L	K	E	G	L	K	E	L	S	Q	L	H	A	F	T	L	R	V	D	P	A	N	F	K	I	L	S	H	C	L	I	L	V	V	M	A	V	M	F	P	T																																							
UniRef90_Q98SE6	L	V	C	G	L	L	E	L	S	E	Q	H	A	F	Q	L	R	V	D	P	S	N	F	K	I	L	S	H	C	L	I	L	V	E	L	A	T	T	F	P	G																																							
UniRef90_G8G8X6	L	T	G	G	L	S	A	L	S	E	L	H	A	F	K	L	R	V	D	P	A	N	F	R	I	L	S	H	C	N	I	L	L	C	M	G	M	F	F	P	A																																							
UniRef90_UPI000329B181	L	A	T	V	L	S	R	L	S	D	M	H	A	Y	N	F	M	V	D	P	V	N	F	K	L	L	S	Q	C	L	I	L	V	A	L	A	T	Q	L	M	A																																							
UniRef90_H3ABR1	K	H	I	F	F	H	V	N	S	L	R	N	F	S	F	L	C	F	L	P	Q	N	F	K	L	L	G	N	M	L	V	I	V	L	S	S	H	L	G	K																																								
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UniRef90_P85081	L	S	Q	A	L	S	E	L	S	N	L	H	A	Y	N	L	R	V	D	P	V	N	F	K	F	L	G	H	C	F	L	V	V	V	A	I	H	H	F	P	A																																							
UniRef90_UPI000350E148	L	D	A	A	L	S	T	L	S	D	L	H	A	Y	N	L	R	V	D	P	G	N	F	K	L	L	S	H	T	I	Q	V	T	L	A	V	H	F	Q	K																																								
UniRef90_P08422	L	D	S	T	L	S	A	L	S	D	L	H	A	H	K	L	R	V	D	P	I	N	F	K	L	L	A	S	H	C	L	L	V	V	L	A	R	H	C	R	G																																							
UniRef90_UPI00045412ED	L	T	S	G	L	L	S	L	S	E	L	H	A	F	T	L	R	V	D	P	S	N	F	K	I	L	S	H	C	N	I	L	V	V	L	A	I	M	F	P	T																																							
UniRef90_M3ZD78	I	K	G	H	F	A	N	L	S	K	L	H	C	E	K	F	H	V	D	P	E	N	F	K	L	L	G	D	I	I	I	V	L	A	A	H	H	P	E																																									
UniRef90_P02130	L	K	G	G	L	L	N	L	S	E	L	H	A	F	T	L	R	V	D	P	A	N	F	K	I	L	S	H	C	N	L	L	V	V	M	A	T	M	F	P	N																																							
UniRef90_G3PL33	L	T	C	G	L	R	E	L	S	E	R	H	A	F	T	L	K	V	D	P	A	N	F	R	L	L	A	H	C	L	I	L	V	T	A	I	M	F	P	K																																								
UniRef90_Q802A4	L	P	G	T	L	S	K	L	S	D	L	H	A	H	K	L	R	V	D	P	V	N	F	K	L	L	S	H	C	L	L	V	T	L	A	C	H	L	S	K																																								
UniRef90_G3WE91	I	K	G	T	Y	A	A	L	S	T	I	H	S	E	K	L	H	V	D	P	D	N	F	R	L	L	A	E	S	F	T	V	S	V	A	M	K	L	G	P																																								
UniRef90_P14521	L	K	G	T	F	A	Q	L	S	E	L	H	C	D	K	L	R	V	D	P	E	N	F	K	L	L	G	N	V	L	V	C	V	L	A	A	H	H	F	G	K																																							
UniRef90_UPI0003ABC90C	M	P	N	A	L	S	S	L	S	S	B	L	H	A	H	K	L	R	V	B	P	V	B	F	K	L	L	N	H	C	L	L	V	T	L	A	A	B	F	P	S																																							
UniRef90_P01935	L	A	G	N	L	S	S	L	S	D	L	H	A	Y	N	L	R	V	D	P	G	N	F	P	L	L	A	D	H	I	I	Q	V	V	L	A	T	H	F	P	G																																							
UniRef90_C8YNR8	I	K	E	S	Y	C	E	L	S	Q	L	H	S	D	Q	F	H	V	D	P	D	N	F	R	L	L	A	D	C	L	A	I	A	I	A	T	Q	W	G	S																																								
UniRef90_P02000	L	A	G	A	L	C	R	L	S	D	L	H	A	H	N	L	R	V	D	P	V	N	F	K	F	L	S	Q	C	I	L	V	V	F	G	V	H	H	P	C																																								
UniRef90_G5CUP5	I	K	N	V	Y	T	K	L	S	V	K	H	S	E	K	L	H	V	D	P	D	N	L	R	I	F	A	Q	I	I	S	V	C	V	A	A	K	F	G	R																																								
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UniRef90_Q4RHD1	L	K	T	G	L	F	N	L	S	E	L	H	A	F	T	L	R	V	D	P	A	N	F	K	L	L	A	Q	C	M	M	V	V	I	A	I	M	Y	P	A																																								
UniRef90_Q6GPP8	L	D	T	A	L	S	K	L	S	D	L	H	A	Y	N	L	S	V	D	P	G	N	F	G	L	L	S	H	T	I	Q	V	T	L	A	A	H	F	P	D																																								
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UniRef90_P83623	L	T	N	G	L	L	E	L	S	E	E	H	A	Y	K	M	R	V	D	P	A	N	F	K	I	L	S	H	C	M	L	V	V	I	A	T	M	F	P	K																																								
UniRef90_J9P710	V	A	G	A	L	S	R	L	S	E	L	H	A	Y	I	L	R	V	D	P	V	N	F	Q	L	L	S	H	C	L	L	V	T	L	A	S	H	F	P	A																																								
UniRef90_W5KLY8	L	V	G	G	L	L	T	L	S	E	L	H	A	F	Q	M	R	V	D	P	A	N	F	K	I	L	S	H	C	N	I	L	V	V	L	A	V	N	Y	P	N																																							
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UniRef90_Q8HY34	L	A	T	A	L	S	A	L	S	D	L	H	A	H	N	L	K	V	D	P	V	N	F	K	F	L	C	H	N	V	L	V	T	L	A	S	H	L	G	K																																								
UniRef90_A4ZQ34	L	P	G	S	L	S	A	L	S	D	L	H	A	H	K	L	R	V	E	D	P	A	N	F	Q	F	F	N	H	C	L	L	V	T	L	A	R	H	Y	P	G																																							
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UniRef90_Q9PRL9	V	A	G	T	L	S	K	L	S	D	L	H	A	Q	K	L	R	V	D	P	V	N	F	K	L	L	A	H	C	L	L	V	T	L	A	A	H	N	G	G																																								
UniRef90_L5LQX1	L	P	R	A	L	S	A	L	S	D	L	H	A	H	K	L	Q	V	N	D	P	V	N	F	K	L	L	G	H	C	L	L	V	T	L	A	R	H	Y	P	G																																							
UniRef90_P01946	L	P	G	A	L	S	T	L	S	D	L	H	A	H	K	L	R	V	D	P																																																												

	130													140												
UniRef90_H3A6U9	Q	L	T	P	D	V	Q	A	T	W	E	K	F	L	S	V	V	V	A	A	L					
UniRef90_P18978	D	F	T	P	S	V	H	A	S	L	D	K	F	L	A	S	V	S	T	V	L	T	S	K	Y	R
UniRef90_P24291	D	F	T	P	S	A	H	A	S	L	D	K	F	L	A	S	V	S	T	V	L	T	S	K	Y	R
UniRef90_W5LAT4	D	F	S	P	E	V	H	V	S	L	D	K	F	L	Q	N	L	A	W	C	L	A	S	K	Y	R
UniRef90_P01955	E	F	T	P	E	V	H	A	S	L	D	K	F	L	S	N	V	S	T	V	L	T	S	K	Y	R
UniRef90_P02141	A	F	S	A	D	T	Q	E	A	F	Q	K	F	L	A	N	V	V	S	A	L	G	R	Q	Y	H
UniRef90_UPI000328F10D	D	F	T	P	A	V	H	A	S	M	D	K	F	M	A	G	V	S	T	V	L	V	S	K	Y	R
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UniRef90_C83134	E	Y	T	P	Q	V	Q	V	A	Y	D	K	F	L	A	A	V	S	A	V	L	A	E	K	Y	R
UniRef90_Q98SE6	D	F	T	P	E	V	H	V	S	L	D	K	F	L	A	A	V	S	L	A	L	A	E	K	Y	R
UniRef90_G8GX6	E	F	T	P	E	A	H	V	S	Y	D	K	F	L	S	N	V	S	L	A	L	S	E	R	Y	R
UniRef90_UPI000329B181	D	F	T	P	E	V	H	V	S	V	D	K	F	L	Q	N	L	A	L	A	L	S	E	K	Y	R
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UniRef90_M3ZD78	D	F	T	P	E	A	H	G	A	F	Q	K	F	L	A	V	V	V	A	S	L	R	K	Q	Y	H
UniRef90_P02130	D	F	S	V	E	C	H	A	A	F	Q	K	L	V	R	Q	V	A	A	A	L	A	A	E	Y	R
UniRef90_G3PL33	D	F	T	P	E	V	H	V	S	M	D	K	F	L	A	A	V	S	L	A	L	A	E	K	Y	R
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UniRef90_G3WE91	D	L	T	P	E	A	H	A	S	M	D	K	F	F	A	S	V	A	T	V	L	T	S	K	Y	R
UniRef90_P14521	S	F	N	A	E	T	Q	H	A	L	A	K	F	L	A	E	V	V	S	A	L	G	K	Q	Y	H
UniRef90_UPI0003ABC90C	E	F	T	P	Q	V	Q	A	A	Y	Q	K	V	V	A	G	V	A	N	A	L	A				

	1		10		20		30		40																																		
UniRef90_I3KUU4	M	L	S	K	R	E	K	D	L	I	K	E	I	W	E	R	L	T	P	A	E	I	G	A	D	A	L	L	R	M	F	A	S	Y	P	G	T	K	T				
UniRef90_G3ICM6	V	H	F	T	A	D	E	K	A	A	I	T	S	I	W	D	K	V	D	L	E	K	V	G	G	E	T	L	G	R	L	L	I	V	Y	P	W	T	Q	R			
UniRef90_C1BYA0	M	L	S	K	D	E	K	A	I	A	Q	I	W	E	K	M	I	P	S	E	I	G	S	E	S	L	H	R	M	M	T	T	F	P	G	T	K	T					
UniRef90_J3S8W7	M	V	L	S	D	E	D	K	K	V	R	A	A	W	V	P	V	N	A	E	M	Y	G	S	E	T	L	N	R	M	F	A	A	H	S	T	K	T					
UniRef90_UPI0003D07C9F	V	H	L	T	D	A	E	K	A	T	V	N	G	L	W	G	K	V	N	P	V	E	I	G	A	E	S	L	A	S	L	L	I	V	Y	P	W	T	Q	R			
UniRef90_UPI000383CDF0					A	E	R	K	A	V	Q	A	T	W	A	R	L	N	C	E	D	V	G	V	A	I	L	V	R	F	F	V	N	F	P	S	A	K	Q				
UniRef90_P07409	V	H	W	T	G	E	E	K	A	L	V	N	A	V	W	T	K	T	D	H	Q	A	V	V	A	K	A	L	E	R	L	F	V	V	Y	P	W	T	K	T			
UniRef90_UPI0003D0DAE4	V	Q	W	S	A	E	E	K	Q	L	I	T	S	I	W	G	R	I	N	V	E	E	V	G	G	D	A	L	A	R	L	L	I	V	Y	P	W	T	Q	R			
UniRef90_Q6DEW1					T	E	S	E	R	G	V	I	K	E	T	W	A	R	V	N	C	E	D	V	G	V	S	I	L	I	R	F	F	V	N	F	P	S	A	K	Q		
UniRef90_H3D5V1	M	I	T	E	K	E	K	E	L	R	K	V	W	N	S	L	I	P	E	D	I	G	S	D	S	L	L	R	L	F	T	T	V	P	G	S	K	T					
UniRef90_I3N507	V	H	L	S	D	G	E	K	N	A	L	S	T	V	W	G	K	V	D	V	D	A	V	G	A	E	A	L	G	R	L	L	I	V	Y	P	W	T	Q	R			
UniRef90_UPI00042BE50A																																											
UniRef90_UPI0004421465	M	V	L	N	A	E	D	R	R	L	L	Q	A	S	I	S	K	L	D	R	E	E	L	G	G	D	A	L	C	R	L	F	I	V	Y	P	Q	T	K	T			
UniRef90_O42425	M	S	L	S	S	K	Q	K	A	T	V	K	D	F	F	S	K	M	S	D	D	I	L	G	A	E	A	L	S	R	L	V	A	V	Y	P	Q	T	K	S			
UniRef90_P02020	M	R	F	S	Q	D	D	E	K	I	K	E	A	W	G	K	L	H	I	P	N	A	G	E	A	L	A	R	M	F	S	C	Y	P	A	T	K	S					
UniRef90_P02014	M	K	L	S	A	E	D	K	H	N	V	K	T	T	W	D	H	I	H	E	E	A	L	G	A	E	A	L	F	R	M	F	T	S	L	P	A	T	R	T			
UniRef90_P02200	M	E	L	S	D	Q	E	W	K	H	V	L	D	I	W	T	K	V	E	S	P	E	H	G	H	E	V	I	R	L	L	Q	E	H	P	E	T	Q	E				
UniRef90_M3WAU3	M	L	S	A	Q	E	R	A	H	V	A	Q	V	W	D	L	I	H	E	A	A	F	G	A	E	L	L	R	L	F	T	V	Y	P	S	T	K	I					
UniRef90_H3B2L7	M	L	T	E	A	K	Q	N	I	R	G	I	W	K	T	V	N	A	E	E	N	G	R	T	I	V	I	R	L	F	E	K	Y	P	E	T	K	V					
UniRef90_S7Q7N2	M	G	L	S	D	G	E	W	Q	L	V	L	N	A	W	G	K	V	E	A	D	G	Y	G	Q	A	V	L	I	S	L	F	T	G	H	P	E	T	Q	Q			
UniRef90_I3M6D6	M	G	L	S	D	A	E	W	Q	L	V	L	N	A	W	G	K	V	E	T	D	G	H	G	Q	Q	V	L	I	S	L	F	F	K	G	H	P	E	T	L	D		
UniRef90_H3D213					L	T	E	K	E	K	V	R	I	Q	D	S	W	A	K	V	S	C	D	D	A	G	V	A	L	V	R	F	F	V	N	F	P	S	S	K	Q		
UniRef90_Q7LZM7					V	L	T	E	D	D	K	T	H	V	K	T	L	W	G	H	V	H	A	E	E	I	A	A	D	A	L	T	R	M	F	L	A	H	P	T	S	K	T
UniRef90_V5N6Q4					L	S	G	V	E	R	T	I	V	Q	D	T	W	A	R	V	S	C	E	D	V	G	V	A	V	L	V	R	F	F	V	N	F	P	S	A	K	Q	
UniRef90_P83113									D	D	R	S	H	I	L	A	I	P	S	V	H	G	A	D	Y	G	G	E	A	L	V	R	L	F	L	S	N	P	Q	T	K	T	
UniRef90_S9YCX3	M	V	L	A	A	E	D	R	A	A	V	R	A	L	W	R	K	L	N	V	H	V	Y	T	T	E	A	L	E	R	T	F	L	A	L	P	S	T	K	T			
UniRef90_Q45XH4																																											
UniRef90_D5L2Y3	M	G	L	N	D	Q	E	W	Q	V	L	T	M	W	G	K	V	E	S	D	G	H	G	H	A	V	L	M	R	L	F	Q	D	H	P	E	T	M	D				
UniRef90_L5KH54	M	V	L	S	A	S	D	T	A	A	V	R	A	L	W	K	K	L	N	V	G	V	Y	T	T	E	A	L	E	R	T	F	L	A	F	P	S	T	K	T			
UniRef90_Q8UUR3					S	L	T	E	E	D	V	C	A	V	I	Q	D	T	W	K	P	V	Y	A	D	N	A	G	V	A	V	L	R	F	F	T	N	F	P	S	A	K	Q
UniRef90_UPI00027F7E11	V	H	F	T	A	D	E	R	A	E	I	S	K	T	F	Q	G	T	D	M	K	T	V	V	T	Q	A	L	D	R	M	F	K	V	Y	P	W	T	N	R			
UniRef90_Q9YGW1	V	H	W	T	Q	E	E	R	D	A	I	S	K	T	F	Q	G	T	D	M	K	T	V	V	T	Q	A	L	D	R	M	F	K	V	Y	P	W	T	N	R			
UniRef90_Q6TAD0					S	L	K	D	A	E	K	S	T	I	S	A	V	W	G	K	V	D	I	N	E	V	G	P	L	A	L	G	R	V	L	I	V	Y	P	W	T	Q	R
UniRef90_Q575S6					L	S	D	T	E	R	E	M	I	S	A	D	W	G	H	V	N	C	E	D	V	G	V	S	I	L	I	R	F	F	V	N	F	P	S	A	K	Q	
UniRef90_S9YMZ9	M	S	L	T	K	A	E	R	T	I	V	V	S	M	W	G	K	I	A	A	D	V	I	G	M	E	A	L	E	R	L	F	S	S	F	P	Q	T	K	T			
UniRef90_UPI0003D0F472																																											
UniRef90_K4FTL2					T	E	A	D	K	E	N	I	H	F	I	W	E	K	L	N	P	E	E	N	G	K	T	I	V	L	R	M	F	T	S	Y	P	E	T	K	M		
UniRef90_Q6F3D2	V	P	L	S	A	G	D	K	A	N	V	K	A	V	W	D	H	V	H	E	E	A	F	G	A	D	A	L	H	R	C	F	K	I	D	C	Q	T	Q	T			
UniRef90_P20246	V	S	L	T	D	E	E	T	R	L	I	Q	H	I	W	S	N	V	N	V	E	I	T	A	K	A	L	E	R	V	F	Y	V	Y	P	W	T	T	R				
UniRef90_V5N4H6					L	M	E	E	E	R	V	T	L	I	N	T	W	A	K	V	N	K	E	A	A	G	V	A	V	L	I	R	L	F	T	S	F	P	S	T	K	Q	
UniRef90_H2ZWU1	M	A	L	S	D	A	E	V	Q	T	A	R	D	V	W	G	Q	I	N	A	E	E	N	G	T	I	L	V	R	M	F	T	E	H	P	D	T	K	S				
UniRef90_P20244					V	L	S	E	G	N	K	K	A	I	K	N	L	L	Q	K	I	H	S	E	V	L	G	A	E	A	L	A	R	L	F	E	C	H	P	Q	T	K	S
UniRef90_UPI0003C1633B																																											
UniRef90_UPI0001E86EA0																																											
UniRef90_C8YNP6	M	L	S	K	Q	E	K	E	L	I	I	E	I	W	T	R	L	T	P	D	R	I	G	A	E	A	L	L	R	M	F	T	S	Y	P	G	T	K	T				
UniRef90_A9L8X8																																											
UniRef90_Q92025																																											
UniRef90_M1V8U2																																											
UniRef90_P02143	V	H	W	S	E	V	E	L	H	E	I	T	T	T	W	K	S	I	D	K	H	S	L	G	A	K	A	L	A	R	M	F	I	V	Y	P	W	T	Q	R			
UniRef90_S4R971					L	S	A	A	E	K	A	I	T	D	S	W	K	V	V	D	Y	E	A	A	G	K	A	I	L	I	K	F	F	T	S	N	P	G	V	Q	D		
UniRef90_UPI0002A4954C					W	T	D	A	E	R	S	A	I	T	S	L	W	G	K	I	D	V	G	E	I	G	Q	Q	A	L	T	E	H	L	I	M	Y	P	W	T	Q	R	
UniRef90_UPI0002C62FF6					L	S	A	Q	E	R	A	Y	V	A	Q	V	W	D	L	I	A	G	Q	E	A	G	A	E	L	L	W	F	T	M	Y	P	S	T	K	I			
UniRef90_H2V2A8																																											
UniRef90_W5KM17	M	L	S	Q	R	E	R	E	L	L	V	E	L	W	D	R	L	T	P	E	D	I	G	S	E	A	L	L	R	M	F	T	T	F	P	K	T	K	T				
UniRef90_Q8JH45																																											
UniRef90_B3RYV6	S	L	T	E	E	Q	K	A	I	I	R	E	N	W	Q	D	V	N	M	S	E	V	G	L	Y	L	F	S	K	L	F	T	I	A	P	E	Y	R	E				
UniRef90_K7FYQ5					L	T	D	A	D	K	K	S	I	H	H	I	W	S	K	L	N	P	E	E	N	G	K	I	V	I	R	L	F	K	D	Y	P	E	T	K	A		
UniRef90_UPI0004440508	M	A	L	S	A																																						

	50	60	70	80
UniRef90_I3KUU4	Y F	S H L D I S P N S S H L L A H G K K I V L T S A I A E G A Q D I L S Q		
UniRef90_G3ICM6	F F D K F G N L S	S A T A I M G N S R I L R A H G K K I V L T S A I L G L A V Q N M D S N		
UniRef90_C1BYA0	Y F	S H L D I R P M G N S Q R M L S H G K K I V L T S A I L G L A V Q N M D S N		
UniRef90_J3S8W7	Y F P H F	S L N L S P G S S D L K T A H G K K I V I D A L T D E A V V N N L S D D		
UniRef90_UPI0003D07C9F	Y F S K F G D L S	S V S A I M G N S P Q V L R K A H G K K I V I N A F L T D D G L K H L L D N		
UniRef90_UPI000383CDF0	Y F S Q F K H M E E	P L E M E R S P Q L R K A H G K R V M S G A L T N T V V E N L H D D		
UniRef90_P07409	Y F V K F	N G K F H A S D S T V Q T		
UniRef90_UPI0003D0DAE4	F F S N F G N L S	S P T A I S G E P		
UniRef90_Q6DEW1	H F S Q F K H M E D	P L E M E R S V Q L R K S H A R R V M G A V S V V E N L G D D		
UniRef90_H3D5V1	Y F	S H L D I S P R S P H M L S H G R K I V L T S A I A E G A Q D I L S Q		
UniRef90_I3N507	F F D S F G D L S	S A S A V M G N A K V L R K A H G K K I V L T S F S N G L K H L L D N		
UniRef90_UPI00042BE50A	Y F K H L G V C P D E	A Q L L T H G Q R V L E A V G V A V Q H L L D H		
UniRef90_UPI0004421465	Y F P H F N M	G A G S K D V L R H G G E K V A K A L G S A L V N K H L L D D		
UniRef90_Q42425	Y F S H W K D A S P	G A G S A P V R K H G G I T T M G G V L Y D A V G K I D D D		
UniRef90_P02020	Y F P H F G H D F S A	N S N E K V L K S H H G K K V V D A I L G Q G V A Q H L L D H		
UniRef90_P02014	Y F P A K	D L S E G S S F L H S H G K K V M G A L S N A V A H L L D D		
UniRef90_P02200	R F E K F K H M K T A	D E M K S S E K M K Q H G N T V F T A L G S N I L K Q K G N		
UniRef90_M3WAU3	Y F K H L G V C P D E	A Q L L T H G Q R L L E A V G V A V Q H T D H		
UniRef90_H3B2L7	Y F K N F K N I S T	M E M K K N E D I R I L G L R V M N S L N Q V I Q N I K G Q		
UniRef90_S7Q7N2	K F E K L K N L K S E	D E M K A S E D L K K Q G A T V L T A L G G V L K K K G Q		
UniRef90_I3M6D6	K F D K F K H L K S E	D E M K A S E D L K K H A G T T V L T A L G G I L L K K K G Q		
UniRef90_H3D213	F F K D F K H M E E	P E E M Q S V Q L R K H A H R V M T A L N T L V E S L N N		
UniRef90_Q7LZM7	Y F A H F D F S P N	S A N I K A H G K K V A N A L N Q A V N H L L D D		
UniRef90_V5N6Q4	Y F S Q F R E M D D	P E E M E R S S Q L R K H A H R V M N A I N T V V E N L H D D		
UniRef90_P83113	Y F P	N F D F H K D S P Q I K A H G K K V V D A L T E A S K H L L D D		
UniRef90_S9YCX3	H F H H	L D L R P R S A Q V K A H G E K V A F A L T E A L H L L D D		
UniRef90_Q45XH4				
UniRef90_D5L2Y3	R F D K F R G L K T	P D Q M R G S E D M K K H G V T L Q L G K I L K Q K G H		
UniRef90_L5KH54	Y F L H	L D L S P G S T Q V K A H G Q K V A D A L T L A V D K Q K G		
UniRef90_Q8UUR3	Y F E H F R E L Q D P	A E M Q Q N A Q L K E H G Q R V L N A L N T L V E N L R D D		
UniRef90_UPI00027F7E11	Y F E S F G N L G S D	C V I X G N P R V K A H X K K V L I S F R N A V T L M D D		
UniRef90_Q9YGW1	Y F Q K R T D F R S S	L H A G I V V G A L Q D A V K H M D D		
UniRef90_Q6TAD0	Y F G S F G D V S T A	A A I M G N S P K V A A H G R V V Y C G A L D K A V K N M G N		
UniRef90_Q575S6	Y F S Q F Q D M E E	P E E M E R S S Q L R H A H C R V M N A L N T V V E N L H D D		
UniRef90_S9YMN9	Y F P H F	D L H P G S A Q L R A H G G G G S G R K A P G		
UniRef90_UPI0003D0F472	Y F P H	L D L K P G S S Q V K A H A Q K V A D A L T L A A H H L D D		
UniRef90_Q4FTL2	Y F Q H F K N I S T	L E E M K K S P Q I K R H G K I V M S A L N K I A I A N L D N		
UniRef90_Q6F3D2	Y F P G K	D L N E S A F L H S H G K K V M S A L T N A V A H I L D D		
UniRef90_P20246	L F T S F N H N F K A	S D K Q V H D H A V N V S N A I S A A I G D L H D D		
UniRef90_V5N4H6	Y F S E F R H M E D T	Q E M Q S A Q L Q K H A V L V M N A L V E S V D D G E K		
UniRef90_H2ZZWU1	Y F G N F K G M G S A	A E M Q S A Q V R T H G K K I F S A L N D M I Q D L D S		
UniRef90_P20244	Y F P K F S G F S	A N D K R V K H H G A L V L K A L V D T N K H L L D D		
UniRef90_UPI0003C1633B	Y F R H L G D H P	D E V Q L L S H G Q R M L Q A V G V A V R Y I L D N		
UniRef90_UPI0001E86EA0	Y F L H	L D L N P G S A Q V K A H G R K V A D A L T V A V D R L D D		
UniRef90_C8YNP6	Y F	S H L D I T P R S A H L L S H G Q K I F L A L A E G S K D I A N		
UniRef90_A9L8X8				
UniRef90_Q92025	H F S T F G N L S T	P A A I M G N P A V A K H G K V M H G L D R A V Q N L L D D		
UniRef90_M1V8U2	Q F S T F G N L G F	A D A I C H N A K V L A H G Q K V L A S I V D G L K H P E N		
UniRef90_P02143	Y F G N L K E F	T A C S Y G V K E H A K K V T G A L G V A V T H L G D		
UniRef90_S4R971	F F P K F K G L D S	A D Q L S C S A A V R W H A E R I N A V N D A V V A L D D		
UniRef90_UPI0002A4954C	H F A S F G N L S T	N A V I L G N P K V G Q H G K V V X S G L E S A V K N M D N		
UniRef90_UPI0002C62FF6	Y F K H L G A C P D X	V Q L S R X R I L L A A V G V A V Q P L D A V Q H L L D N		
UniRef90_H2V2A8	Y F A G F G N L Y N	A E A L K N N P N I A K H G V T V L H G L D R A V K N M D N		
UniRef90_W5KM17	Y F T H	L D L S P H S E P L R S I G K K V V E A I A E G T R H I G Q		
UniRef90_Q8JH45	Y F A H W K D Q S P	N S A S A K K H G I T I M N A V G D A V T K I D D		

		90	100	110	120																																						
UniRef90_I3KUU4	L	T	V	T	L	A	P	L	Q	T	L	H	A	Y	Q	L	R	I	V	D	P	R	N	F	K	L	L	S	H	S	M	L	V	S	L	A	C	Y	L	G	D		
UniRef90_G3ICM6	L	K	E	T	F	A	H	L	S	E	T	L	H	C	D	K	L	H	V	D	P	E	N	F	K	L	L	S	H	C	L	I	V	T	L	A	A	H	M	G	S		
UniRef90_C1BYA0	M	M	V	T	L	A	P	L	Q	T	L	H	A	Y	Q	L	R	I	V	D	P	Y	N	F	K	L	L	S	H	C	L	I	V	T	L	A	A	H	M	G	S		
UniRef90_J3S8W7	V	P	G	A	L	S	K	L	S	E	L	H	A	H	K	L	R	V	D	P	V	N	F	K	L	L	S	H	C	L	E	I	T	M	A	V	H	N	G	G			
UniRef90_UPI0003D07C9F	L	K	G	T	F	G	S	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	Y	F	K	L	L	S	G	V	I	L	E	V	I	A	E	E	F	A	N
UniRef90_UPI000383CDF0	P	E	S	V	L	S	L	V	G	K	A	H	A	L	K	H	K	V	E	P	V	Y	F	K	L	L	S	G	V	I	L	E	V	I	A	E	E	F	A	N			
UniRef90_P07409	V	K	P	H	F	V	E	L	S	K	K	H	A	Y	E	E	L	H	V	D	P	E	N	F	K	L	L	S	G	V	I	L	E	V	I	A	E	E	F	A	N		
UniRef90_UPI0003D0DAE4	P	R	K	C	P	A	R	P	G	V	S	W	G	F	G	G	T																										
UniRef90_Q6DEW1	P	E	T	V	L	S	L	V	G	K	S	H	A	L	K	H	K	V	D	P	V	Y	F	K	L	L	S	G	V	I	L	E	V	I	A	E	E	F	A	N			
UniRef90_H3D5V1	L	A	V	S	L	A	P	L	Q	T	L	H	A	Y	Q	L	R	I	V	D	P	T	N	F	K	L	L	S	H	C	L	L	V	S	L	A	C	H	M	G	D		
UniRef90_I3N507	L	K	G	T	F	A	S	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F																				
UniRef90_UPI00042BE50A	L	R	A	A	L	S	P	L	A	D	L	H	A	Q	V	L	R	V	D	P	A	N	F	P	L	L	I	Q	C	F	Q	V	V	L	A	S	H	L	Q	G			
UniRef90_UPI0004421465	I	R	G	A	L	S	H	L	S	E	L	H	A	Y	N	L	R	V	D	P	V	N	F	R	L	L	A	K	C	F	H	V	V	L	A	I	H	L	R	A			
UniRef90_O42425	L	K	G	G	L	L	S	L	S	E	L	H	A	F	M	L	R	V	D	P	V	N	F	K	L	L	A	H	C	M	L	V	C	M	S	M	I	F	P	E			
UniRef90_P02020	L	S	S	C	L	H	T	L	S	E	K	H	A	R	E	L	M	V	D	P	C	N	F	Q	Y	L	I	E	A	N	I	M	T	T	I	A	A	H	Y	G	E		
UniRef90_P02014	I	D	A	L	A	C	K	L	S	E	K	H	A	Q	D	L	M	V	D	P	A	N	F	P	K	L	A	H	N	I	L	V	M	G	I	H	L	K	A				
UniRef90_P02200	H	A	E	V	L	K	P	L	A	K	S	H	A	L	E	H	K	I																									
UniRef90_M3WAU3	L	R	A	A	L	S	P	L	A	D	L	H	A	Q	V	L	R	V	D	P	A	N	F	P	L	L	I	Q	C	F	H	V	M	L	A	S	H	L	Q	G			
UniRef90_H3B2L7	L	N	E	V	S	H	L	P	L	A	K	R	H	A	Y	Q	L	R	I	V	D	V	H	N	F	K	L	I	F	G	V	I	K	I	L	K	E	A	L	G	A		
UniRef90_S7Q7N2	H	E	A	E	L	K	P	L	A	Q	S	H	A	T	K	H	K	V																									
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UniRef90_H3D213	V	A	S	V	L	K	S	V	G	R	A	H	A	L	K	N	V																										
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UniRef90_V5N6Q4	P	E	K	V	S	S	V	L	G	K	A	H	A	V	K	H	K	V	E	P	M	Y	F	K	L	L	S	G	V	I	L	E	V	L	S	E	D	L	G	N			
UniRef90_P83113	I	N	G	A	L	S	K	L	F	D	L	H	A	F	E	L	R	V	D	P	G	N	F	P	L	L	I	G	H	H	I	N	V	T	I	A	E	V	M	F	P	D	
UniRef90_S9YCX3	L	P	R	A	L	S	A	L	R	V	L	H	S	H	K	L	R	V	D	P	V	N	F	K	L	L	G	H	C	L	L	V	T	L	A	Q	H	Y	P	G			
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UniRef90_Q8UUR3	A	D	K	L	F	N	Q	M	S	K	S	H	A	L	R	H	K	V	D	P	V	Y	F	K	L	L	A	G	V	I	L	E	V	L	V	E	A	F	P	Q			
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UniRef90_S9YMZ9																																											
UniRef90_UPI0003D0F472	L	P	G	S	L	S	A	K	M	A	R	L	H	A	R	L	S	L																									
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UniRef90_Q6F3D2	L	E	A	A	L	S	K	L	I	D	K	H	A	N	D	L	M	V	D	P	A	N	F	V	L	L	N	H	H	I	L	A	V	L	A	M	H	L	P	Q			
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UniRef90_V5N4H6	T	A	S	V	V	E	K	V	A	K	S	H	A	R	K	H	K	V	E	P	V	N	F	K	I	L	A	G	V	I	L	E	V	L	V	E	V	F	P	E			
UniRef90_H2ZWU1	T	D	A	L	L	G	P	L	G	K	K	H	A	T	Q	L	K	V	D	P	K	N	F	K	I	L	C	N	I	L	L	Q	V	L	D	E	K						
UniRef90_P20244	L	P	H	H	L	N	K	L	A	E	K	H	G	K	G	L	L	V	D	P	H	N	F	K	L	F	S	D	C	I	A	V	T	L	A	A	H	L	Q				
UniRef90_UPI0003C1633B	L	R	A	V	L	S	P	L	A	D	L	H	T	Q	V	L	R	V	D	P	T	N	F	P	L	L	I	Q	C	F	Q	V	V	L	A	S	H	L	Q	G			
UniRef90_UPI0001E86EA0	L	P	R	A	L	S	A	L	R	E	L	H	T	Q	R	L	R	V	D	P	V	N	F	K	L	L	G	H	C	L	L	V	T	L	A	R	H	Y	P	G			
UniRef90_C8YNP6	L	M	T	N	L	A	P	L	Q	T	Y	H	A	Y	Q	L	R	I	V	D	P	N	N	F	K	L	F	S	H	C	M	I	V	T	L	A	C	F	M	G	D		
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UniRef90_M1V8U2	L	K	A	H	Y	A	K	L	S	E	K	H	S	E	K	E	L	H	V	D	P	A	N	F	Y	R	F	G	D	V	L	I	T	L	A	R	H	F	H	E			
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UniRef90_H2V2A8	I	K	E	T	Y	K	E	L	S	E	L	H	S	E	K	L	H	V	D	P	D	N	F	K	L	L	S	D	C	L	T	I	V	V	A	T	K	M	G	S			
UniRef90_W5KM17	F	T	A	N	L	S	F	N	S	R	F	H	A	Y	Q	L	R	I	V	D	P	T	N	F	K	L	F	N	H	C	L	L	V	T	L	A	C	Y	L	G	E		
UniRef90_Q8JH45	L	K	A	G	L	S	F	N	S	E	L	H	A	F	T	L	R	V	D	P	A	N	F	K	L	F	S	Q	C	M	M	V	I	A	L	L	F	P	A				
UniRef90_B3RYV6	F	S	E	L	Q	S	A	L	S	T	L	G	Q	F	H	H	R	I	K	F	E	N	F	Q	A	V	G	Q	A	L	I	Q	T	L	S	D	K	L	Q	E			
UniRef90_K7FYQ5	W	K	Q	A	L	E	H	V	A	E	K	H	K	N	T	H	H	V																									
UniRef90_UPI0004440508	L	P	D	A</																																							

		130		140
UniRef90_I3KUU4	E F T P	V A H A A M D K Y L	S A F A A V L	A E K Y R
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UniRef90_P07409	UniRef90_UPI0003D0DAE4	E F T P E V	Q A A W S K F S N V V V D	A L S K G Y H
UniRef90_Q6DEW1	E F T P S	C Q A T W Q K L V G V V A	H A L A R K Y H	
UniRef90_H3D5V1	D F T P D	V Q L A W N K L R S H L	Y S H V L S A Y	
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UniRef90_UPI0004421465	E Y N A C	T C L A W D K F F E M V G E T M C	E K Y R	
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UniRef90_P02020	K F T P E	I N C A A E K C L G Q I V H V L T S	L Y R	
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UniRef90_H3B2L7	T F T E E I	C T S W Q K M L S F T Y D Y L V S C Y H		
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UniRef90_Q7LZM7	H L K A S L	I V S L D K F L E E V C K V L V S K Y R		
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UniRef90_P20246	K F T P Q Y	H K A A L K L F E V V T E A L S C Q Y H		
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UniRef90_H2ZWU1	F G G D A R	A G F E K V T D V L C T H L N H A Y		
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UniRef90_H2V2A8	K F T P E I	Q A T F Q K F L A V V V S A L G R Q Y H		
UniRef90_W5KM17	D F S P N A	H A A T D K Y L S A Y S A I L A E K F R		
UniRef90_Q8JH45	E F T P E V	H V A F D K F M A C L A L A L A E K Y R		
UniRef90_B3RYV6	N F T P E V	H E A W S K T F D M I T A A M K S G		
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UniRef90_M7B1Z7	D	C K A S F E K V T N E I C T R L N N A Y		
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UniRef90_UPI00029DD19B	E F T P A V	H A S L D K F L A S V S T V L T S K Y R		
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UniRef90_Q8BYM1	D F S G E K	D A C L L G H V S		
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UniRef90_K7GQP8	D F N P S V	H A S L D K F L A N V S T V L T S K Y R		
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UniRef90_M7BMA4	D F G A D S	Q A A M K K A L E L F R N D M A S K Y		
UniRef90_UPI0004573CF2	K W T A E V	J E A W K G L F H Y L T S V M K K G Y		
UniRef90_K7FYS7				
UniRef90_UPI00021A6F7E	Q Y T P E	V A E A W S K T L D G V		
UniRef90_V8PAM9	Q F T D D A	Q L A W E K F F L I L R E E I E A A Y		
UniRef90_F7A3H3	N F P A E T	Q R A W K V R S L I Y T H V T A A Y		
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UniRef90_UPI0003D71B9E				
UniRef90_P56692	T F R P K E	H A A A Y K F F R L V A E A L S S N Y H		
UniRef90_P02206	D M T G P M	Q E S F S K V F T V I C S D L E T L Y		

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UniRef90_W4XLX6	M F P F G E N L S Y S Q L V V Q N P T L R A H H G K R V M E T I I G Q T V V G S L L D D D			
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	90										100										110										120										
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UniRef90_W4XLX6	L	D	I	L	V	P	I	L	R	D	L	R	H	V	G	Y	S	V	T	R	Q	H	F	F	E	G	P	P	K	E	V	M	S	T	T	Q	K	R	L	I	
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UniRef90_W4YI83	L	E	S	V	V	P	L	L	Q	E	L	R	H	I	A	Y	G	V	T	K	Q	H	F	M	A	T	I	G	C	C	F	S	I	T	C	Y	N	S	I	V</	

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

[illegible]

		90	100	110	120																																				
UniRef90_O97382	S	E	H	L	I	R	Q	L	K	D	L	F	H	T	R	L	G	M	T	R	S	H	F	D	N	F	A	T	A	F	L	S	V	A	Q	D	I	A	P	N	
UniRef90_U3J239	L	P	C	L	E	E	Y	L	C	N	L	K	H	Q	A	I	G	V	K	V	E	S	F	S	T	V	G	E	S	L	L	Y	M	L	E	K	C	L	G	A	
UniRef90_E9FXJ5	Q	E	L	L	A	S	Q	L	N	S	L	G	H	Q	A	R	G	A	T	P	I	M	F	E	Q	F	G	E	I	L	T	G	V	L	A	E	K	L	G	S	
UniRef90_K1RJ02	P	E	K	L	Q	S	L	M	H	E	L	G	H	V	N	Y	S	A	K	Y	D	F	I	D	M	V	G	G	Q	F	V	H	A	I	K	P	H	L	Q	D	
UniRef90_K1RMF6	S	V	N	I	L	T	V	M	G	E	R	H	A	G	Y	N	V	R	P	E	M	F	K	L	L	W	P	A	I	R	D	T	F	K	E	K	L	E	D		
UniRef90_UPI000248E5F7	L	E	A	L	V	P	A	V	Q	N	L	G	K	N	H	L	G	V	K	N	E	H	Y	D	T	V	G	S	A	L	L	Y	T	L	E	T	G	L	G	D	
UniRef90_P0C227	P	D	K	M	V	G	L	L	C	K	N	D	H	P	R	G	V	K	Q	Q	Y	K	E	L	F	S	T	L	M	N	Y	M	Q	S	L	P	G	A			
UniRef90_Q64372	L	K	G	T	F	A	S	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F																		
UniRef90_R7TL54	V	T	T	V	F	V	N	L	G	K	R	H	I	H	L	K	S	L	E	D	P	D	F	F	R	V	F	S	G	A	L	M	Y	V	W	R	S	T	I	G	P
UniRef90_B0BL37	G	D	K	L	F	Q	Q	M	G	K	S	H	A	L	K	H	K	V	D	P	L	Y	F	K	I	L	A	G	V	I	L	E	V	L	V	E	A	F	P	Q	
UniRef90_V4JDM3	L	E	A	I	V	Q	V	K	N	M	G	A	R	H	Y	G	V	N	P	G	D	Y	D	K	V	A	A	A	L	L	W	T	L	G	Q	G	L	G	D		
UniRef90_A0A034WB94	I	Q	E	I	W	G	V	A	K	S	H	V	E	R	H	N	I	A	K	P	S	Y	F	E	L	R	E	A	I	V	E	V	L	S	E	A	C	N	L		
UniRef90_O17824	E	E	A	L	G	K	S	M	S	R	V	A	H	I	K	W	N	V	Q	R	N	H	V	I	H	M	I	E	P	V	L	E	V	V	K	E	C	N	G	Y	
UniRef90_H2ZPV1	P	E	E	L	D	S	L	L	T	K	L	G	H	A	R	L	Q	V	D	P	G	S	F	E	Y	V	A	P	V	I	L	A	V	I	G	G	H	L	N	L	
UniRef90_W2T026	E	N	D	L	A	L	Q	M	R	K	A	H	I	K	W	N	V	H	R	K	H	V	I	H	M	L	E	P	V	L	D	L	V	E	E	C	N	D	G		
UniRef90_B9ENY2	H	A	A	T	L	K	S	L	A	T	T	H	A	N	K	H	K	V	P	L	K	N	F	T	L	I	T	N	I	I	C	K	V	M	G	E	K	A	G	L	
UniRef90_F2Q9X0	L	Q	Q	L	L	Y	D	T	G	K	S	H	L	R	H	S	V	K	P	E	Y	F	D	A	L	G	N	V	L	M	K	G	L	T	A	V	L	G	K		
UniRef90_G1LAM5	L	S	S	L	L	A	G	L	G	M	A	R	A	V	G																										
UniRef90_I1FJ81	L	V	E	A	L	V	D	L	G	M	A	H	A	M	O	G																									
UniRef90_V5YM44	K	S	T	V	F	N	A	I	S	D	N	F	H	G	M	K	G	I	K	K	E	H	Y	N	Q	L	R	D	I	M	L	E	T	V	A	G	A	C	T	L	
UniRef90_O24521	E	D	T	T	L	Q	Y	L	G	S	I	H	L	K	S	G	V	I	D	P	H	F	E	V	V	K	E	A	L	L	R	T	L	K	E	G	L	G	E		
UniRef90_V8P9P7	I	R	G	T	L	S	Q	L	S	D	L	H	A	Y	N	L	R	V	D	P	V	N	F																		
UniRef90_A5EIC9	S	T	D	I	L	G																																			
UniRef90_H2U9M3	Q	D	R	L	E	A	L	A	V	E	L	G	H	Y	F	Y	N	A	P	P	K	Y	Y	Q	Y	V	G	A	E	F	V	C	A	V	P	L	I	K	E		
UniRef90_Q9Y0D5	R	E	K	L	F	V	K	L	S	Q	D	H	I	E	F	H	V	D	P	Q	Y	F	M	L	L	E	D	E	V												
UniRef90_E7BQB8	M	I	A	V	K	G	S	I	D	A	L	R	H	T	G	Y	G	A	K	K	A	H	F	G	P	A	G	P	C	L	L	A	A	L	A	E	V	C	G	G	
UniRef90_M3YM80	V	S	G	E	N	G	Q	S	Q	K	T	H	A	Q	H	H	R	Q	E	P	W	N	T	E	K	F	I	S	D	A	L	I	Q	V	L	Q	S	K	H	A	G
UniRef90_F7A367	P	E	E	L	L	N	G	L	G	E	T	H	A	G	H	N	V	E	P	E	D	F	E	Y	L	A	P	V	M	L	A	V	I	G	Q	G	L	N	L		
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UniRef90_M5UN87	L	E	T	T	L	Q	A	L	G	K	K	H	A	V	E	Y	E	V	P	E	S	Y	A	T	V	G	E	A	L	I	W	T	L	G	Q	G	L	G	D		
UniRef90_UPI0002B43077	K	E	T	T	L	Q	Y	L	G	S	V	H	A	L	R	N	G	V	I	D	P	H	F	E	V	V	K	E	A	L	L	R	T	V	K	E	G	M	G	E	
UniRef90_S4RRY3	E	C	V	L	E	Q	L	I	V	E	R	K	H	Y	K	Y	N	A	S	P	K	Y	Y	S	F	V	G	I	E	F	I	A	T	V	Q	P	F	L	Q	E	
UniRef90_S6AMN0	L	E	S	I	I	G	M	V	K	E	R	R	H	V	G	Y	G	V	H	K	A	E	H	F	D	T	V	G	N	A	L	I	W	T	L	G	Q	G	L	G	A
UniRef90_U6PGL3	E	D	E	L	E	V	Q	M	K	R	K	A	H	V	K	W	N	V	H	R	S	H	V	E	N	M	L	D	P	A	L	E	V	L	K	E	C	N	D	G	
UniRef90_M5DTJ7	L	E	K	L	V	P	V	L	Q	Q	L	G	H	V	K	Y	G	V	T	V	D	D	Y	T	P	V	G	N	A	L	V	A	T	L	K	K	G	L	G	D	
UniRef90_UPI0003C168BE																																									
UniRef90_A3WZM3	L	V	P	T	I	E	D	L	G	R	R	H	A	Q	F	G																									
UniRef90_F6ZKU9	P	E	E	L	L	T	S	L	G	E	S	H	A	R	R																										
UniRef90_G6D625	P	E	V	V	S	A	M	M	N	G	A	K	H	A	T	Y	P	G	F	Q	V	S	H	T	V	F	N	K	A	L	L	E	V	W	S	A	I	G	E		
UniRef90_K1QMA9	F	H	Q	A	L	L	M	L	G	K	G	H	A	T	Y	P	G	F	Q	V	S	H	T	V	F	N	K	A	L	L	E	V	W	S	A	I	G	E			
UniRef90_UPI00033415F5	L	E	E	Y	L	A	G	L	G	K	K	H	R	A	V	G																									
UniRef90_E7FIH2	Q	E	L	T	A	N	Q	I	N	A	L	G	K	P	R	G	A	T	P	I	M	F	E	Q	F	G	A	V	T	E	E	V	L	A	E	E	L	G	S		
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UniRef90_C1BLX7	L	T	V	T	L	A	P	L	Q	T	L	H	A	Y	Q	L	R	I	D	P	I	N	F	K	V	V	F	Q	S	Y	L										
UniRef90_I1LJ11	V	T	V	R	E	S	N	L	K	R	L	G	A	T	Q	F	K	V	A	A	E	H	F	E	V	T	K	L	A	L	L	E	T	I	K	E	A	V	P	E	
UniRef90_Q4RLN3	Q	E	A	L	A	V	E	L	G	K	S	H	Y	H	Y	S	V	R	P	Q	H	F	S	F	S	Q	Y	V	F	I	C	A	V	Q	P	I	L	K	E		
UniRef90_C3Y0P3	V	D	Y	V	I	Q	L	L	K	K	I	G	M	H	L	E	L	K	P	D	D	M	W	K	L	E	Q	P	F	L	A	A	V	A	E	C	L	E	D		
UniRef90_B6ZIV8	P	E	I	V	A	A	M	T	K	L	G	Q	M	R	R	R	Q	I	K	E	L	H	E	L	R	V	I	V	K	L	F	I	D	V	L	R	L				
UniRef90_K0T1L2	M	G	E	L	L	Q	G	L	G	E	K	H	A	K	E	W	K	V	K	R	E	H	Y	A	P	V	G	A	S	L	L	W	T	L	E	T	G	L	G	E	
UniRef90_V4C2N0	P	E	C	M	V	G	L	I	R	K	R	N	K	S	R	G	I	G	K	S	R	F	E	Q	L	R	G	I	F	G	N	F	L	D	T	S	L	G	G	E	
UniRef90_S9QGF4	L	A	P	L	P	T	I	R	Q	L	G	A	S	H	L	G	V	R	P	E	F	D	L	V	G	R	I	L	L	Q	T	L	V	E	A	A	G	E			
UniRef90_D8QX12	D	P	T	L	A	A	K	L	L	E	M	G	H	T	H	K	V	I	D	E	H	F	D	V	V	K	Y	A	L	L	E	T	L	K	E	A	L	K	D		
UniRef90_C1C1M6	K	V	I	A	L	V	D	A	L	K	R	L	A	T	N	H	S	V	L	R	E	Q	F	Y	P	A	C	R	I	L	L	E	Y	L	A	Q	A	L	G	T	
UniRef90_B4WU25	P	E	E	I	L	S	K	V	Q	A	L	G	H	Q	G	Y	G	V	K	A	E	D	Y	E	A	I	G	A	T	L	L	R	T	I	E	E	A	V	G	E	
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UniRef90_Q2LC33	H	A	A	I	L	Q	P	L	A	T	T	H	A	N	K	H	K	I	A	L	N	N	F	R	L	I	T	E	V	L	V	K	V	M	A	E	K	A	G	L	
UniRef90_L8D543	L	D	A	L	I	P	V	L	Q	T	L	A	A	R	Y	G	V																								

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UniRef90_A5EIC9 Q W T A E V E Q A W R K V Y E I I S Q R M I A
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UniRef90_K0T1L2 A W T E D T A D A W T W V Y G V I A D T M A
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UniRef90_C1C1M6 H L S T E G A L A W K R F L G T F V E L M Q E G Y
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UniRef90_A7RWR6 A W D F Q V E E A W N R L F D S I T A M I
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UniRef90_T1KR38 Q M D S K A T T A W T K V L N V I T E T V K R
UniRef90_A9U5F4 L W S P A L K Q A W A D A Y D A L A T T L K N E M H
UniRef90_V4ABF4 D W T P E V E D A W E D F F K L L I Y F M K E A
UniRef90_G6D626 D E S A L V S W N K T I D F I Y K H I
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UniRef90_V8PEV3 E F S P E V Q R A W T K M R S L I Y T H V T A A Y
UniRef90_W5KPG1 S W T S E L E E A W K T L F L Y L T Q M M R L G Y
UniRef90_Q07S70 E W T P D L A E A W T A A Y G T L S G Y M I E Q
UniRef90_I0JWE7 E W T K E L E Q T W I K A Y E A L A Q V M I E
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UniRef90_V4BDN7 K W T P E L E A A W S D L F K H V A Y I I K R A
UniRef90_F4APZ0 D F T P D V E Q A W N E A Y G A L A E V
UniRef90_Q6CHJ2 S F T L E M E T A W I K I Y S Y L A N K L
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UniRef90_A0A044U5A6 R Y T D N M Q S I Y K T V I V I I L S E L E K G
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UniRef90_E0VN13 Q W D E E L D D A W T H L F K I I E F V M V S
UniRef90_U1KXH3 E F T P D I E Q A W R E A Y A L L A D V
UniRef90_B1ZVJ7 E F T P V K A A W T Q F Y V V L A N A M L D G A H
UniRef90_O80405 K W S E E L S T A W E V A Y E G L A S A I K K A
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UniRef90_Q7SID0 D G G A E F E K L F S I I C I L L R S A Y

	1	10	20	30	40																																				
UniRef90_UPI0003F59B4B	MT	EDQ	VK	LV	QES	FS	SK	V	A	PA	QA	AV	T	F	Y	DR	L	F	E	V	A	P	G	V	K	A															
UniRef90_B8C6B7	MG	L	S	P	E	D	L	S	L	V	Q	T	S	W	A	K	V	V	P	I	A	S	V	A	A	F	Y	T	K	L	F	E	L	D	P	E	L	R	P		
UniRef90_UPI0002557E95				E	I	T	L	V	Q	S	S	F	A	K	V	V	P	I	A	S	V	A	A	E	I	F	Y	A	D	L	F	D	T	A	P	E	V	K	P		
UniRef90_E9HNB1				A	A	V	Q	S	T	W	A	V	I	K	S	D	T	F	A	P	Q	F	Y	V	A	L	I	T	A	H	A	P	E	Y	Q	A					
UniRef90_R4YTV2	M	L	S	N	E	H	I	Q	L	V	K	S	T	V	P	L	L	E	A	S	A	I	T	D	Y	F	Y	N	R	L	F	T	H	N	P	E	A	Q	N		
UniRef90_Q9M3U9	MS	F	S	E	E	E	E	A	L	V	K	E	S	A	W	E	K	E	D	I	P	A	L	S	L	Y	F	F	T	Q	V	L	E	I	A	P	A	A	K	G	
UniRef90_W9QKN7	MG	F	G	E	K	E	S	L	V	K	E	S	W	E	K	P	N	V	A	D	L	S	V	C	F	F	T	N	I	L	D	I	A	P	A	A	K	G			
UniRef90_K9WVS1		L	V	P	S	Q	V	D	L	V	Q	S	S	F	A	K	V	K	P	D	K	A	A	E	I	F	Y	N	R	L	F	E	L	A	P	S	F	R	P		
UniRef90_F2Q9X2	MS	L	S	A	A	D	K	K	L	V	Q	E	S	W	D	K	V	S	K	A	D	A	G	E	R	V	F	L	K	L	F	R	R	N	E	S	T	K	A		
UniRef90_UPI0004025BFE		M	L	S	A	E	Q	K	A	V	I	Q	Q	T			V	P	L	L	E	S	G	G	E	A	L	T	R	H	F	Y	E	I	M	L	R				
UniRef90_B8CU80		M	L	S	E	K	H	I	S	I	V	K	S	T	I	P	L	L	E	S	A	A	I	T	E	H	F	Y	K	R	M	F	S	Q	N	P	E	L	K		
UniRef90_H0TDW5		MT	P	A	Q	I	A	L	V	Q	D	S	F	A	K	V	A	P	D	Q	A	A	I	T	E	Y	D	R	L	F	E	V	A	P	Q	V	R	A			
UniRef90_B3SDK5				Q	E	R	Q	A	I	I	D	S	W	N	A	I	S	T	E	K	Y	G	T	L	L	F	L	K	L	F	E	L	V	A	P	Q	V	R	S		
UniRef90_Q94FT7	V	R	F	T	E	E	Q	E	A	L	V	L	K	S	W	A	K	D	S	A	N	I	G	H	R	F	F	L	K	I	F	E	V	A	P	S	A	R	H		
UniRef90_E3QQD2	MG	L	T	Q	D	Q	I	N	I	V	K	S	T	A	P	K	V	H	G	E	T	I	T	T	L	F	Y	K	D	M	I	D	T	H	P	E	L	K	N		
UniRef90_B7QHN5		L	S	K	R	D	T	K	L	I	R	N	S	W	A	K	Q	H	P	K	A	D	Q	L	I	F	K	A	L	F	T	K	H	P	E	D	F	M	A		
UniRef90_V6SE91		MT	T	E	Q	K	E	L	I	K	A	T	I	P	I	L	L	Q	A	E	A	L	T	A	H	F	Y	N	R	M	F	T	H	N	P	E	L	K	N		
UniRef90_F0YDX2																																									
UniRef90_UPI000361056E		M	L	T	Q	A	Q	E	Q	I	I	A	A	T	A	P	V	V	H	L	N	T	I	T	A	R	F	Y	P	L	M	F	E	R	Y	P	E	V	K	S	
UniRef90_F0SHM8		M	L	S	A	K	T	I	E	I	V	K	A	T	T	P	L	V	N	A	E	T	I	T	R	C	F	Y	Q	R	M	F	T	A	N	P	E	V	K	A	
UniRef90_UPI000347738D		M	L	S	A	Q	T	I	A	L	V	K	A	T	V	P	V	L	H	G	E	A	I	T	R	H	F	Y	P	L	M	F	R	Q	Y	P	E	V	K	A	
UniRef90_A8FPP7	MS	L	T	Q	K	Q	I	L	L	V	K	S	T	A	P	S	Q	V	E	P	E	Q	A	D	I	F	Y	G	A	L	F	E	D	P	S	L	K	P			
UniRef90_V4LI57		MT	A	E	E	I	T	L	V	R	S	W	A	E	L	S	P	K	H	A	A	D	I	F	Y	R	L	F	E	T	Y	P	E	V	R	H					
UniRef90_C5BMY1		M	L	T	P	S	Q	M	A	I	V	K	A	T	A	P	L	V	K	A	G	D	I	T	A	H	F	Y	P	M	M	F	A	R	Y	P	Q	V	I	Q	
UniRef90_UPI0003441CFC	MG	L	S	D	G	E	W	Q	L	V	N	V	K	V	E	A	D	L	A	G	H																				
UniRef90_J5JNA3	MA	L	T	Q	S	Q	I	D	L	V	K	S	T	A	A	I	L	K	G	D	R	I	T	R	I	F	Y	V	N	M	L	T	A	H	P	E	L	K	N		
UniRef90_G5BXY4																																									
UniRef90_G2Q0W7		MA	L	T	Y	Q	S	K	L	V	K	D	T	I	P	V	L	R	E	E	Q	I	T	T	T	F	Y	R	N	M	L	R	D	H	P	E	L	R	N		
UniRef90_A0A024JF60	V	S	F	S	S	W	E	I	A	E	I	R	Q	S	W	A	S	M	R	D	D	Q	V	G	T	A	S	A	F	F	C	Q	Q	F	Y	E	N	L	G		
UniRef90_Q1R0E4		M	L	T	S	A	Q	E	S	V	I	A	A	T	T	V	V	H	I	E	A	I	A	Q	R	F	Y	P	L	M	F	A	R	Y	P	E	V	K	T		
UniRef90_V5YNF6		L	T	Q	A	Q	E	I	D	I	V	K	R	T	W	A	V	A	K	P	A	D	S	G	E	I	L	Y	T	F	L	E	R	F	P	E	A	Q	Q		
UniRef90_A0A059MV11	M	P	L	S	A	E	S	K	E	V	V	R	A	T	L	P	A	V	G	A	G	D	I	T	P	L	F	Y	K	K	M	F	A	A	H	P	E	L	E	R	
UniRef90_UPI0003620E6C		M	L	S	E	Q	S	A	P	V	I	R	A	T	L	P	A	V	G	A	G	E	I	A	E	R	F	Y	H	R	L	F	T	N	H	P	E	L	L	R	
UniRef90_B3DUZ1		MT	R	E	E	I	K	M	I	Q	K	S	W	L	R	V	K	M	D	E	A	G	L	L	F	Y	R	R	L	F	D	V	E	P	K	V	R	P			
UniRef90_K1PSK3		L	T	E	E	V	I	A	V	E	D	S	W	S	M	L	H	R	K	E	N	G	V	K	L	F	M	N	L	Y	S	L	H	P	A	T	I	E			
UniRef90_D2AQM5				D	I	G	L	I	R	R	S	W	S	L	V	E	P	D	Q	V	T	Q	H	F	Y	G	R	L	F	A	N	Y	P	H	I	R	E				
UniRef90_C7PYV8				D	P	H	L	L	I	R	T	S	W	A	K	V	A	Q	E	Q	V	P	L	F	F	Y	G	H	L	F	L	S	H	P	E	V	R	A			
UniRef90_E9EAF5	MA	L	T	A	Q	Q	I	A	T	V	K	S	T	A	P	V	V	K	Q	K	T	I	T	T	T	F	Y	K	N	M	L	S	A	H	P	E	L	K	N		
UniRef90_UPI0001CBB478		L	T	V	E	Q	K	R	L	I	D	S	W	K	E	L	H	I	D	R	I	G	M	L	M	F	Q	N	L	F	A	A	Y	P	E	T	R	Q			
UniRef90_UPI00034D7B38				Q	I	E	L	V	E	Q	S	F	A	K	I	E	P	Q	A	F	A	A	S	F	Y	M	G	M	F	G	T	H	P	Q	T	R	E				
UniRef90_T5AGV5	MA	L	T	V	E	Q	I	A	L	V	K	S	T	A	P	V	I	H	G	K	A	I	T	T	T	F	Y	R	R	L	L	G	A	H	P	E	L	K	N		
UniRef90_B0UPW9		MS	P	E	D	Q	I	R	L	V	Q	D	S	F	E	S	V	S	P	I	A	A	T	A	A	F	Y	D	R	L	F	T	I	A	P	D	L	R	P		
UniRef90_UPI000350F47E	V	V	F	S	E	E	Q	E	A	L	V	L	N	S	S	S	Q	K	Q	N	P	S	N	Y	S	V	L	F	Y	T	I	I	L	Q	K	A	P	T	A	K	A
UniRef90_P02232	MG	F	T	E	K	Q	E	A	L	V	N	S	S	S	Q	K	Q	N	P	S	N	Y	S	V	L	F	Y	T	I	I	L	Q	K	A	P	T	A	K	A		
UniRef90_E4NEA9				D	P	T	L	I	K	S	S	F	A	A	V	E	H	A	V	T	A	Y	F	Y	T	H	L	F	E	H	N	D	V	R	K	P					
UniRef90_I9CP50		MT	P	D	Q	V	R	L	V	Q	D	S	F	A	K	V	R	P	I	A	G	T	A	A	F	Y	G	R	L	F	E	I	A	P	E	V	R	P			
UniRef90_W0RCT4				S	I	V	R	S	T	W	A	K	P	H	A	L	S	I	G	L	H	F	Y	E	R	L	F	E	L	D	P	S	L	R	P						
UniRef90_UPI00036F013B				D	P	R	L	I	K	E	S	F	E	A	V	E	P	D	K	V	A	G	Y	F	Y	A	R	L	F	I	E	N	P	G	V	R	E				
UniRef90_Q2MCN9				L	T	K	S	Q	K	V	A	L	I	A	W	S	I	V	K	K	D	T	H	G	R	N	I	F	V	M	F	E	E	Y	P	Q	Y	L	D		
UniRef90_R7T5E2	V	D	L	T	E	Q	K	K	T	L	I	A	N	G	W	A	K	N	L	K	Q	N	G	A	D	A	F	I	L	L	F	T	M	K	P	A	Y	Q	D		
UniRef90_P27199		F	T	E	K	Q	E	A	L	V	N	S	S	Y	E	K	A	N	V	P	Q	Y	S	V	V	F	Y	T	S	I	L	E	K	A	P	A	K	A			
UniRef90_UPI00047EE4C7				S	A	A	Q	V	A	I	V	Q	R	S	F	A	T	V	Q	A	D	T	A	E	L	F	Y	G	R	L	F	D	I	A	P	Q	V	R	S		
UniRef90_M7CUM7	M	L	S	P	E	S	R	S	I	I	D	A	T	L	P	A	V	H	A	N	D	I	T	D	V	F	Y	P	L	M	F	E	R	Y	P	E	V	K	A		
UniRef90_A5EFK6	MT	P	S	Q	I	T	L	V	Q	E	S	F	A	K	V	A	P	D	Q	A	A	V	L	F	Y	D	R	L	F	E	V	A	P	V	A	R	A				
UniRef90_P42511		F	S	E	K	Q	E	S	L	V	K	E	S	W	E	K	Q	N	V	P	H	H	S	A	V	F	Y	T	L	I	L	E	K	A	P	A	Q	N			
UniRef90_U5D7L0				Q	V	Q	L	L	E	T	S	F	E	K	V	K	P	E	E	F	A	S	S	F	Y	E	N	L	F	A	D	Y	P	D	A	K	P				
UniRef90_V4R4D1	MT	P	G	D	I	E	L	V	K	T	S	F	Q	A	I	V	P	E	A	A	A	L	F	Y	K	R	L	F	E	D	P	A	L	R	D						
UniRef90_R7TS60		L	T	D	E	E	I	L	K	A	S	W	N	D	L	N	D	S	I	G	K	R	V	F	L	Q	A	F													

[illegible]

	90	100	110	120																																							
UniRef90_UPI0003759B4B	L	P	S	V	L	P	A	A	S	A	L	R	H	V	G	Y	G	A	R	P	E	H	Y	P	V	V	G	A	L	L	W	T	L	L	E	R	G	L	G	E			
UniRef90_B8C6B7	L	E	A	L	L	Q	D	L	G	R	R	H	A	K	Y	Y	K	V	T	P	S	P	M	F	E	D	T	G	A	S	L	L	D	T	L	L	E	E	K	L	G	E	
UniRef90_UPI0002557E95	I	P	A	L	L	P	V	A	A	D	L	L	H	A	K	H	Y	Q	T	P	S	A	H	F	E	A	V	G	A	S	L	L	R	T	L	L	E	E	K	L	G	E	
UniRef90_E9HNB1	P	G	A	L	N	G	K	L	V	D	L	Q	H	K	Q	R	G	T	T	R	A	H	F	D	N	M	A	T	V	H	L	L	R	G	F	L	A	A	T	L	G	S	
UniRef90_R4YT2V	V	E	Q	L	L	S	M	V	E	R	I	K	H	T	S	L	N	I	Q	P	E	H	F	D	L	V	V	G	A	S	L	L	R	T	L	L	E	E	K	L	G	E	
UniRef90_Q9M3U9	G	E	S	T	L	K	Y	L	G	S	V	H	L	Q	K	G	V	I	D	P	A	H	F	A	V	V	V	K	E	G	V	L	R	T	V	L	E	K	E	V	G	E	
UniRef90_W9QKN7	K	G	E	V	L	K	H	L	G	S	V	H	L	K	N	R	V	V	S	V	H	F	E	V	V	V	K	E	A	L	L	R	T	I	L	K	E	A	V	L	G	E	
UniRef90_K9WVS1	I	L	P	A	V	K	K	L	G	R	N	H	A	G	Y	G			V	K	A	E	Y	D	I	V	G	E	A	L	L	W	T	L	L	A	Q	G	L	G	E		
UniRef90_F2QX2	S	G	D	E	A	V	K	K	V	G	R	M	H	K	G	L	G	M	S	N	E	Q	I	D	Q	M	K	G	A	L	L	E	V	L	L	A	D	A	G	F	G		
UniRef90_UPI0004025BFE	L	T	E	A	L	G	P	L	V	G	Q	N	K	H	V	S	L	Q	V	Q	P	E	H	Y	P	I	V	G	T	H	L	L	E	Q	A	M	R	E	V	L	G	E	
UniRef90_B8CU80	L	T	G	A	V	E	R	I	A	H	K	H	T	S			F	N	I	Q	P	E	H	Y	P	I	V	G	G	A	L	L	E	W	T	L	L	E	K	G	L	G	N
UniRef90_H0TDW5	L	P	S	I	L	P	A	A	S	A	L	A	T	R	H	Y	G	A	K	A	E	H	Y	P	I	V	V	G	G	A	L	L	E	W	T	L	L	E	K	G	L	G	D
UniRef90_B3SDK5	K	E	S	L	F	K	L	G	S	R	H	H			F	Y	D	L	S	E	F	L	D	V	I	P	E	C	H	L	L	E	T	I	K	K	G	C	H	L	G	E	
UniRef90_Q94FT7	R	D	T	T	I	K	R	L	G	S	T	H	F	K	N	G			V	S	D	T	H	F	E	V	I	A	R	F	A	L	L	E	T	I	K	D	G	I	P	A	
UniRef90_E3QQD2	L	K	A	A	V	E	R	I	A	H	K	H	A	S			L	Y	I	R	P	E	Q	Y	D	I	V	G	T	H	L	M	K	A	I	L	G	E	V	L	G	S	
UniRef90_B7QHN5	P	A	G	V	V	A	L	L	R	K	N	H	T	T	R	K	G	N	V	Q	P	E	H	F	E	A	M	L	N	V	L	E	V	L	E	D	K	L	G	S	E		
UniRef90_V6SE91	L	I	G	A	L	K	S	M	G	T	K			H	R	S	L	N	I	Q	P	E	H	Y	Q	I	V	G	N	H	L	I	H	S	L	A	E	V	V	G	E		
UniRef90_F0YDX2	L	D	A	L	L	K	G	L	G	K	R	H	P	H	P	P	Q	V	L	Q																							

		130	140
UniRef90_UPI0003F59B4B	A	W T P E T A A A W T A A Y G T L	S G Y M A E A Y
UniRef90_B8C6B7	G	W D E E H K E A W T L V Y G V L	S K T M
UniRef90_UPI0002557E95	D	F T P E V K A A W V T A Y T T L	S G A M
UniRef90_E9HNB1	A	F T P E A K Q A W T S T M Q G I N T V V E A	
UniRef90_R4YTV2	Q	F T A D V E E A W T V A Y Q A L A A	
UniRef90_Q9M3U9	K	W S E E M K G A W S E A Y D Q L A A A I	
UniRef90_W9QKN7	K	W S D D M A S A W G Q A Y D E L A A A I K	
UniRef90_K9WVS1	D	F T T P V R K A W E A Y T F L S E I M K E A	
UniRef90_F2Q9X2	D	Y K G A W G K L W D R F M A V	
UniRef90_UPI0004025BFE	E	V T A A V L E A W G A A Y Q Q L A D I L I E A	
UniRef90_B8CU80	A	F T P E V I E A W G A A Y G V L A G I F I E R Y H	
UniRef90_H0TDW5	A	W T P E V A E A W S A A Y G T L S S Y M A E A Y	
UniRef90_B3SDK5	N	W S N E T A D A W K	
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UniRef90_UPI00032ACC7B	K	G	T	V	V	A	T	L	G	A	V	H	V	K	G	V	V	D	P	H	F	V	V	V	K	E	A	L	L	Q	T	I	K	A	A	A	G	D				
UniRef90_S0QZE0	L	G	G	L	L	K	Q	I	L	H	K	H	V	A	L	R	V	K	R	E	H	H	P	P	G	T	C	L	L	R	A	I	R	E	V	L	G	P				
UniRef90_K9QZY1	M	D	E	L	L	L	Q	A	L	G	E	K	H	A	K	E	W	K	R	E	H	H	A	P	V	G	T	G	A	S	L	W	T	L	G	L	G	E				
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UniRef90_E9GCI5	Q	E	A	A	Q	F	N	L	L	G	S	A	Y	Q	P	R	G	V	T	P	A	M	F	E	E	F	S	V	I	L	E	Q	V	L	E	T	L	G	S			
UniRef90_UPI00037D16A9	L	A	P	F	L	H	E	L	G	R	D	Y	Q	R	K	F	D	A	R	P	P	A	M	F	E	A	V	T	A	L	A	A	L	K	R	W	L	D	D			
UniRef90_I3SX86	K	G	K	V	L	K	F	L	G	Y	V	H	A	Q	R	R	V	L	D	P	P	H	F	L	V	L	K	E	A	L	L	K	T	L	K	E	A	M	G	D		
UniRef90_E3HL11	P	S	V	L	M	P	V	V	T	R	L	V	H	K	H	L	G	I	R	P	P	E	H	Y	Q	I	V	G	K	H	L	L	A	S	I	S	E	V	L	G	D	
UniRef90_W4CVN4	L	L	P	V	V	K	Q	I	A	E	K	H	R	A	L	G	V	L	P	P	E	H	Y	P	I	V	G	K	E	T	L	L	A	A	I	V	G	Q	V	L	G	D
UniRef90_K6VH56	D	F	G	P	V	M	R	R	I	A	K	H	V	S	L	G	I	R	A	Q	E	Y	T	I	V	G	H	H	L	L	K	K	A	V	K	T	V	L	G	D		
UniRef90_P02213	P	D	D	L	V	C	V	V	E	K	F	N	H	I	T	R	K	I	S	A	A	E	F	G	K	I	N	G	P	I	K	K	V	L	A	S	K	N				
UniRef90_R5X6P8	L	E	A	I	L	P	A	V	V	K	K	S	V	H	I	N	S	Y	V	K	P	E	H	Y	P	I	V	G	K	N	L	L	A	I	K	E	V	L	G	D		
UniRef90_W4RPS1	L	E	A	I	L	P	V	V	N	Q	I	A	H	K	H	L	G	I	L	P	P	E	H	Y	P	I	V	G	K	H	L	L	I	A	I	K	E	V	L	G	D	
UniRef90_C7RZV6	L	S	H	A	V	E	R	I	A	Q	K	H	V	S	L	F	I	K	P	E	Q	Y	Q	I	V	G	K	T	H	L	I	G	A	I	K	E	V	L	G	S		
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UniRef90_UPI00046B07CD	D	A	P	D	F	S	P	V	M	R	R	I	A	H	R	H	V	I	S	A	R	Q	Y	T	I	V	G	R	Y	L	A	A	V	D	D	V	L	G	D			
UniRef90_U1NPG6	D	E	A	I	K	E	K	I	T	S	I	A	H	K	K	W																										

		130	140
UniRef90_UPI00032ACC7B	T W S E E	L N T A W E	L A Y D G L A
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UniRef90_K0SYV1	A W T E D	T A D A W T	W V Y G V I A D T M A
UniRef90_UPI000359DC2C	M W S P D	V Q C A W Q	G L F A V V N F H L Q S G
UniRef90_E9GCI5	T F N V I	E A R K A W N K	G M V A I I A G I S K
UniRef90_UPI00037D16A9	A W T P E	V E R A W A E A	Y T L V A R S M A E E Y R
UniRef90_I3SX86	K W S E E	V S N A W G I A	Y D E L A G V I K K G
UniRef90_E3HL11	A A T D E	L I A A W A A A	Y G Q L A D L L I A
UniRef90_W4CVN4	A A T P E	I I D A W A K A	Y G V I A D A F A E K Y R
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UniRef90_P02213	F G D K Y	A N A W A K L V	A V V Q A A L I
UniRef90_R5X6P8	A A T E E	V L N A W A E A	Y E V I A K V F I E
UniRef90_W4RPS1	A A T D E	I N N A W A E A	Y G V I A D A F I S
UniRef90_C7YZV6	A L T T E	I K E A W I A A	Y G Q L A D
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UniRef90_UPI00034F65C9	R Y T A N	V E N I Y K L T I	K F I L E N L V K G Y
UniRef90_UPI0002486154	A V T P E	V A E A W T E V	Y W L M A D V L I A A
UniRef90_UPI00046B07CD	A I T P A	V H A A W D E V	Y W L F G C S L I A
UniRef90_U1NPG6	N D P E	V N D A W T V F	I I T L A D L I D E
UniRef90_UPI00023766A7	T F T P A	T R E A W T A M	Y S H V A R T M
UniRef90_K9VX73	D W T T E	V K Q A W I D A	Y G A I T A L M
UniRef90_D5WLY5	A A T D D	I I S A W A Q A	Y G N L A D V L
UniRef90_Q7UIY1	A A T P E	I V E A V S E A	Y G F L A D
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UniRef90_UPI00035C8477	A V T E E	V A N A W S E V	Y W T M A D V L I A
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UniRef90_U1EBY4	T D D S E	V I Q T W G K A	Y Q A I A D A
UniRef90_V5YME5	W N A A A	S Q A W D K M Y	F V V F S A L
UniRef90_H9JFD7	R Y T P N	V E N I Y K I T I	K F I L E T L I E G Y
UniRef90_T1VK30	E W T D E	V D S A W R N A	L A T I S A A M
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UniRef90_A4SIV2	E V T D E	V L D A W G K A	Y G V L A S
UniRef90_E9FVR4	R Y T D N	I E N I Y K V S I	N L V I E T L V E G Y
UniRef90_I7D426	K W T A E	V E S A W T S A	Y G L I A K A M R E A
UniRef90_D8Q402	A L T Q D	I H D A W A A A	Y W Q L A N I M I A R
UniRef90_P11582	D Y T A A	V E A A W D A F	F G A V F A K M
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UniRef90_X1XCE5	R F T E N	I E T I Y K I T I	K L I I E T L V K G Y
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UniRef90_V5YNC2	L T A D A	E N A W N K A F	E
UniRef90_A1VLU1	E I T D E	V I A A W A A A	Y Q Q L A D I L
UniRef90_F4XUI8	A A T E E	V I A A W T E A	Y Q I L A D V F I N R E H
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UniRef90_R0EEF5	D I T D A	V I D A W G A A	Y G Q L A D I L
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UniRef90_B3QH91	A V T P E	V A A A W S E A	V M A L
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UniRef90_E5SY64	D W T P E	V K Q A W E D A	L A A I A A Q M
UniRef90_UPI000349B039	L W T R E	V K D A W V G A	Y G V V A Q A M
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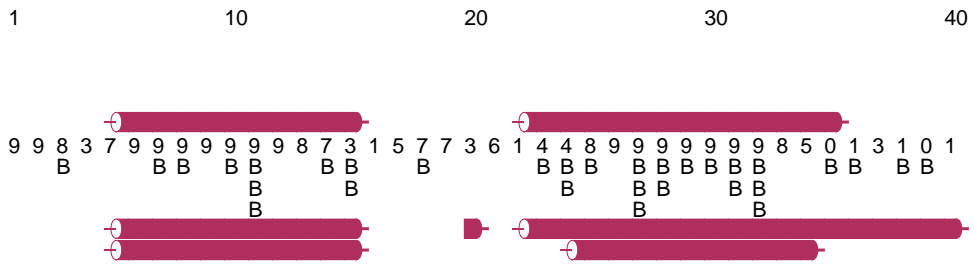
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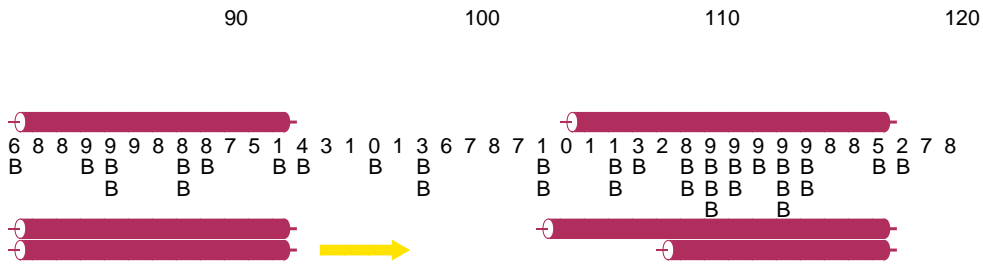
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UniRef90_UPI000374B524	R	P	D	A	M	L	T	R	I	A	H	K	H	A	S	L	G	V	T	A	D	Q	Y	K	L	V	H	T	H	L	F	A	A	I	A	D	V	L	G	D		
UniRef90_G7H6Y4	E	K	W	L	A	S	T	L	G	S	L	G	A	R	H	M	G	V	T	P	M	Y	A	A	V	T	E	C	M	V	A	A	M	S	E	I	G	D				
UniRef90_UPI0003B49674	F	T	P	V	M	Q	R	I	A	H	K	H	V	S	L	G	I	S	A	P	Q	Y	L	I	V	G	H	Y	L	L	G	A	V	A	K	I	L	G	D			
UniRef90_V4HS65	N	P	T	V	L	A	H	A	I	D	R	I	N	K	H	N	I	L	P	E	H	Y	P	I	V	G	T	H	L	L	A	T	L	Q	E	M	F	P	N			
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UniRef90_G3B6W4	L	N	E	Y	L	E	S	L	G	K	R	H	S	R	I	L	G	I	E	P	S	M	F	E	L	M	G	E	A	M	I	Q	T	F	H	E	R	F	G	T		
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UniRef90_J3NLL3	L	G	K	L	T	H	A	V	S	R	I	A	H	K	H	L	N	I	R	P	E	Q	Y	D	L	V	G	E	H	L	I	Q	T	I	G	E	V	L	G	D		
UniRef90_K8YWN8	L	S	A	A	V	S	L	I	A	H	K	H	A	S	L	H	N	I	V	L	P	E	H	Y	P	M	V	G	E	C	L	L	A	A	I	A	Q	V	L	G	P	
UniRef90_A3QDN6	V	K	P	K	L	E	E	L	G	R	K	H	L	D	Y	G	V	N	I	S	Q	F	E	V	V	R	A	L	L	L	S	I	Q	D	C	L	R	D				
UniRef90_B8MAY8	L	G	P	A	V	E	N	I	T	N	K	H	A	S	L	Y	I	K	P	E	Q	Y	K	I	V	G	T	Y	L	L	A	A	M	G	Q	V	L	G	D			
UniRef90_H0QLK9	P	E	A	V	L	S	R	I	A	H	K	H	A	S	L	G	I	T	E	P	Q	Y	Q	V	V	Y	E	H	L	F	A	A	I	A	D	D	L	A	E			
UniRef90_K1QVD6	F	G	P	L	L	I	G	L	G	K	Q	H	V	E	F	G	G	F	K	P	E	Y	W	D	V	F	T	E	A	M	L	Y	V	W	E	K	E	L				
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UniRef90_D2Q0K7	V	V	P	F	L	Q	Q	L	G	R	D	H	R	R	F	S	V	I	A	E	H	Y	S	A	V	G	A	S	L	L	A	T	L	R	C	H	F	L	G	A		
UniRef90_C4RGE3	P	E	S	F	D	E	Y	L	R	S	L	D	H	R	K	Y	H	V	D	A	A	H	Y	E	T	M	G	V	A	L	L	D	A	L	R	S	T	A	G	D		
UniRef90_B4EE07	L	G	G	A	V	S	R	I	S	H	K	H	A	S	L	N	I	R	P	E	H	Y	P	I	V	G	E	N	L	L	A	S	I	V	E	V	L	G	D			
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UniRef90_P81044	I	H	S	A	L	S	K	L	S	E	L	H	A	Y	I	L	R	V	D	P	V	N	F	K	L	L	S	H	X	F	L	V										
UniRef9																																										

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UniRef90_UPI00047B57D0	A A T D E L V A A W A A A Y G Q L A D L L I A		
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UniRef90_K9T8Q6	D W T P E L K Q A W I D A Y G S V T Q L M L E G		
UniRef90_C5C8V0	A V T P E V A E A W T E V Y W L M A D A L I K		

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