

QUERY	1	10	20	30	40																																				
UniRef90_U4LFD4	T	Y	T	T	R	Q	I	G	A	K	N	T	L	E	Y	K	V	Y	I	E	K	D	G	K	P	V	S	A	F	H	D	I	P	L	Y	A	N	E	Q	K	
UniRef90_R1E142	T	Y	T	T	R	K	V	G	A	P	N	T	L	E	H	R	V	I	F	I	E	K	D	G	V	P	V	S	P	F	H	D	V	P	L	Y	A	N	E	Q	K
UniRef90_S9PRL7	F	T	A	R	R	V	G	A	P	N	T	L	E	H	R	V	I	F	I	E	K	D	G	V	P	V	S	P	F	H	D	V	P	L	Y	A	N	E	Q	K	
UniRef90_UPI0001CBA0E2	Y	S	T	R	Q	V	G	A	L	N	T	L	D	Y	Q	L	Y	I	E	K	N	G	S	P	V	S	P	F	H	D	V	P	L	Y	A	N	E	Q	K		
UniRef90_UPI0003D084E1	S	Y	T	I	V	E	R	G	A	P	N	S	L	D	Y	R	I	F	F	K	G	P	N	G	I	V	S	P	F	H	D	I	P	L	H	A	D	A	E	K	
UniRef90_K0KSU5	Y	S	T	V	E	Q	R	G	A	N	S	L	D	Y	R	L	F	F	K	N	D	G	Q	Y	I	S	P	F	H	D	I	P	L	Y	A	D	A	G	K		
UniRef90_T5A3Z6	V	Y	T	A	R	Q	I	G	A	K	N	T	L	D	Y	R	V	Y	I	E	K	N	G	S	P	V	S	P	F	H	D	V	P	L	Y	A	N	E	Q	K	
UniRef90_G4TGG9	S	Y	S	L	R	K	V	G	A	L	N	T	L	E	H	R	V	I	F	I	E	K	D	G	Q	P	I	S	P	F	H	D	I	P	L	Y	A	N	Q	E	Q
UniRef90_I3KGP0	V	Y	T	S	T	R	P	V	G	A	N	T	L	E	Y	R	V	I	F	I	E	K	N	G	Q	V	V	S	P	F	H	D	I	P	L	F	A	D	R	N	E
UniRef90_C4JZQ2	S	F	T	I	E	E	K	G	R	P	N	T	Q	E	Y	R	V	Y	F	K	N	E	G	K	Y	I	S	P	F	H	D	V	P	L	Y	A	N	E	A	E	
UniRef90_F4RQR7	S	Y	S	V	R	K	I	G	Q	P	N	T	L	D	F	R	A	Y	V	E	K	D	G	V	P	V	S	P	F	H	D	I	P	L	Y	A	N	E	Q	K	
UniRef90_E5EVW5	H	T	T	R	L	I	G	A	P	N	T	L	E	H	R	V	I	F	I	E	S	N	G	K	A	I	S	A	F	H	D	I	P	L	F	A	D	E	A	E	
UniRef90_W5N4G4	Y	I	V	E	E	R	G	S	P	Y	T	P	D	Y	R	V	F	F	K	D	E	G	G	P	I	S	P	M	H	D	I	P	L	F	W	A	D	K	A	Q	
UniRef90_H3BBG9	Y	Q	T	E	E	R	G	R	P	N	T	L	D	Y	R	I	Y	F	K	S	E	G	K	Y	I	S	P	F	H	D	I	P	L	F	K	N	E	A	E		
UniRef90_D4AWD2	S	Y	S	T	E	E	R	G	S	N	T	L	D	Y	R	L	F	I	E	K	N	A	G	K	Y	V	S	P	F	H	D	I	P	L	Y	A	D	E	A	K	
UniRef90_Q4RJE1	A	Y	T	V	R	N	V	G	A	L	N	T	L	D	S	W	R	A	Y	I	E	K	D	G	V	P	I	S	P	F	H	D	I	P	L	Y	A	D	E	A	K
UniRef90_M5ENH3	Y	Q	T	E	E	R	G	H	P	N	C	P	E	Y	R	I	Y	F	K	S	E	G	K	Y	V	S	P	F	H	D	I	P	L	I	A	Q	S	E	Q		
UniRef90_B7P6R8	Q	T	R	V	I	G	A	P	N	T	L	D	Y	R	V	I	F	I	E	S	K	G	K	Y	I	S	A	F	H	D	V	P	L	F	A	D	E	A	N		
UniRef90_UPI000441207C	A	F	S	T	V	E	R	G	S	P	N	S	L	D	Y	R	V	Y	F	R	Q	G	K	Y	I	S	P	F	H	D	I	P	M	F	A	D	P	A	K		
UniRef90_U5H4G5	S	F	A	P	R	Y	I	G	A	N	T	L	E	H	R	V	I	F	I	E	H	N	G	T	P	V	S	A	W	H	D	I	P	L	F	A	D	Q	N	Q	
UniRef90_K1X233	Y	N	T	R	Q	I	G	A	N	T	L	E	Y	R	V	I	F	I	E	K	D	G	K	V	I	S	P	F	H	D	I	P	L	F	A	N	D	T	K		
UniRef90_G3PZZ1	Y	S	V	R	K	V	A	A	N	T	L	E	H	R	I	F	I	E	K	D	G	V	P	I	S	P	F	H	D	I	P	L	Y	A	N	E	Q	K			
UniRef90_UPI0003D08A94	Y	Q	T	E	A	R	G	R	P	G	S	P	D	Y	R	V	Y	F	K	T	E	G	K	Y	I	S	P	F	H	D	I	S	L	K	K	N	E	S	E		
UniRef90_G3NCL1	Y	G	S	E	P	R	G	P	P	R	S	A	Q	H	R	L	Y	F	K	N	E	G	K	Y	I	S	P	F	H	D	I	P	L	F	A	N	G	S	E		
UniRef90_E9BWT1	S	V	T	T	E	E	R	G	R	P	N	T	R	D	Y	R	V	I	F	K	N	E	G	K	Y	I	S	P	F	H	D	I	P	L	Y	A	N	E	S	G	
UniRef90_Q17G60	A	Y	T	A	V	E	S	G	S	P	Y	S	D	K	R	V	F	I	K	N	E	G	K	V	I	S	P	F	H	D	I	P	L	Y	A	N	A	E	K		
UniRef90_W5MCZ5	Y	T	T	V	E	R	G	A	P	N	S	T	D	Y	R	I	Y	F	I	K	E	D	G	Q	S	V	S	P	L	H	D	I	P	L	Y	A	N	D	A	K	
UniRef90_W9W2E3	S	F	T	I	E	E	R	G	N	P	N	T	S	Y	R	V	F	L	K	D	S	G	K	Y	I	S	P	F	H	D	I	P	L	Y	A	N	E	T	Q		
UniRef90_H0VMM1	T	Y	T	L	H	K	H	G	S	P	R	T	S	E	F	R	V	F	F	K	K	D	G	I	P	I	S	P	F	H	D	I	P	L	H	A	D	M	E	K	
UniRef90_F1QDB6	Y	R	T	E	E	R	G	Q	P	C	S	Q	D	Y	R	L	F	F	K	N	A	G	H	Y	I	S	P	F	H	D	I	P	L	K	V	A	D	S	C		
UniRef90_R7UU43	Y	L	T	E	Q	R	G	R	P	N	S	T	D	Y	R	I	Y	F	I	E	K	N	G	K	Y	I	S	P	F	H	D	I	P	L	K	V	A	D	S	E	
UniRef90_U5ES97	S	Y	T	A	V	E	K	G	E	L	N	S	L	D	Y	R	I	Y	F	K	N	S	G	V	A	I	S	P	F	H	D	I	P	L	K	V	A	G	K	E	
UniRef90_V5G7A2	Y	Q	I	V	E	R	G	V	K	N	S	L	D	Y	R	V	F	F	K	N	G	V	P	I	S	P	L	H	D	I	P	L	H	A	N	E	A	K			
UniRef90_UPI000388A160	A	Y	S	V	I	E	R	G	S	P	F	T	C	D	Y	R	V	Y	I	K	D	N	G	P	I	S	P	L	H	D	I	P	L	V	A	D	E	N	K		
UniRef90_UPI0003F08B9E	S	T	E	Q	R	G	R	P	H	S	P	E	Y	R	L	Y	F	K	N	E	G	K	Y	I	S	P	F	H	D	I	P	L	F	A	G	S	K	E			
UniRef90_UPI000359D1CF	Y	T	C	Q	H	H	G	S	A	Y	T	S	D	Y	R	F	L	R	N	E	A	G	L	I	S	P	F	H	D	I	P	L	L	V	Q	G	E	N			
UniRef90_UPI000333EC28	Y	C	T	E	E	R	G	Q	P	H	S	S	D	Y	R	V	F	F	K	N	A	G	H	Y	I	S	P	F	H	D	I	P	L	R	N	D	D	Y	E		
UniRef90_J9K1H7	Y	S	T	V	E	R	G	S	P	N	T	D	N	Y	R	V	F	F	K	N	E	G	A	V	V	S	P	F	H	D	I	P	L	V	V	D	R	E	K		
UniRef90_H3CT97	R	T	E	E	R	G	R	L	G	S	Q	D	F	R	V	F	F	K	N	A	G	H	Y	I	S	P	F	H	D	I	P	L	K	V	A	D	A	E	K		
UniRef90_E0W2T1	T	Y	Q	I	E	E	R	G	S	P	N	T	I	D	Y	K	L	Y	I	E	K	N	E	K	G	I	V	S	P	F	H	D	I	P	L	L	A	D	N	T	G
UniRef90_E3MLZ4	S	F	S	V	E	E	R	G	N	P	N	S	L	K	Y	R	L	F	F	R	N	E	G	K	H	I	S	P	F	H	D	I	P	M	F	A	D	E	S	Q	
UniRef90_UPI0003317391	Y	S	T	V	E	K	G	C	L	Y	T	N	D	Y	R	I	Y	F	N	N	K	D	G	P	I	S	P	F	H	D	I	P	I	Y	A	N	S	S	K		
UniRef90_B3RW07	A	Y	Q	A	I	E	R	G	S	L	Y	S	L	D	Y	R	V	F	I	K	G	P	Q	G	I	V	S	P	W	H	D	I	P	I	F	A	D	K	K		
UniRef90_F7CY62	Y	Q	A	V	Q	V	Q	E	Y	D	F	S	Y	R	V	Y	F	R	N	Q	D	G	E	Y	I	S	P	F	H	D	I	P	I	Y	A	A	K	E			
UniRef90_F1L719	Y	S	I	E	E	R	A	A	P	Y	T	S	L	E	Y	R	L	F	K	N	K	G	E	Y	I	S	P	F	H	D	I	P	I	F	A	A	E	K			
UniRef90_W2T4J3	Y	S	V	E	E	K	G	S	L	Y	T	D	Y	R	V	F	F	K	G	P	N	G	Y	I	S	P	W	H	D	I	P	L	F	A	D	E	A	K			
UniRef90_F6RT10	Y	E	T	I	E	R	G	S	L	Y	G	L	D	Y	R	V	F	I	K	G	P	D	G	V	L	S	P	W	H	D	V	P	L	Y	A	D	A	N	K		
UniRef90_T1PFP3	Y	Q	I	V	E	K	G	A	P	N	S	T	N	Y	S	I	Y	F	K	T	A	G	K	G	V	S	P	L	H	D	I	P	L	Y	A	N	E	E	K		
UniRef90_UPI00034F6D51	Y	E	A	V	E	R	G	S	P	Y	T	T	D	Y	R	V	Y	F	R	N	A	S	G	P	I	S	P	F	H	D	I	P	L	R	V	N	D	D	E		
UniRef90_W4X6I9	S	Y	T	T	V	E	R	G	A	L	N	G	T	D	Y	R	V	Y	V	E	N	D	G	V	P	I	S	P	M	H	D	V	P	L	F	A	N	E	D	N	
UniRef90_E2QRM6	Y	H	T	E	E	R	G	Q	P	C	S	Q	N	Y	R	L	F	F	K	N	T	G	H	Y	I	S	P	F	H	D	I	P	L	K	V	N	S	K	E		
UniRef90_UPI000392DAF6	S	F	T	T	V	F	R	G	A	E	N	T	L	E	S	R	I	F	F	K	N	D	G	Q	I	V	S	P	F	H	D	I	P	L	F	A	G	S	K	E	
UniRef90_E4XXJ8	T	F	T	T	E	R	G	R	P	Y	S	L	E	S	R	I	F	F	K	R	G	D	T	Y	V	S	P	F	H	D	I	P	L	Y	A	S	D	N			
UniRef90_I1FIF8	F	E	T	I	A	K	G	N	I	N	S	P	D	Y	A	L	Y	F	K	N	G	N	V	I	S	P	M	H	D	I	P	L	Y	A	N	D	D	K			
UniRef90_B4KQ66	Y	A	S	A	Q	V	G	S	R	F	S	S	Y	K	N	Y	A	S	D	E	N	K	I	V	S	Y	F	H	D	I	P	L	S	L	D	V	J	E	K		
UniRef90_C4YBD4	F	S	S	E	E	R	A	A	F	T	L	E	Y	R	V	F	L	K	N	E	G	Q	Y	I	S	P	F	H	D	I	P	L	Y	A							

QUERY	N	I	E	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	I	T	K	E	E	T	L	N	P	I	I	K	Q	N	T	K	G	K	L	R	F	V	R	R			
UniRef90_U4LFD4	T	L	L	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	S	K	E	E	T	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_R1E142	T	I	L	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	S	K	E	E	T	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_S9PRL7	T	V	L	N	M	V	V	E	I	P	R	W	S	Q	G	K	L	E	E	T	T	K	D	A	T	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_UPI0001CBA0E2	T	T	F	N	M	V	V	E	I	P	R	W	S	N	A	K	L	E	E	T	A	T	T	A	T	K	M	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R	
UniRef90_UPI0003D084E1	N	I	L	F	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	A	T	T	K	D	T	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R	
UniRef90_K0KSU5	K	I	L	N	F	V	V	E	I	P	R	W	S	N	A	K	L	E	E	T	S	K	E	E	Q	K	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R	
UniRef90_T5A3Z6	G	I	L	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	S	K	E	E	T	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_G4TGG9	G	I	L	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	S	K	E	E	P	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_I3KGP0	N	I	L	F	H	A	I	V	E	I	P	R	W	T	N	A	K	L	E	E	A	T	K	E	D	F	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R	
UniRef90_C4JZQ2	T	I	L	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	Y	S	K	E	E	P	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R	
UniRef90_F4RQR7	T	V	L	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	Y	S	K	E	E	P	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R	
UniRef90_E5E VW5	R	L	V	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	S	L	G	E	A	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_W5N4G4	T	L	F	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	A	T	K	D	A	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_H3BBG9	N	I	L	F	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	A	T	K	D	A	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R	
UniRef90_D4AWD2	T	V	L	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	S	K	D	D	A	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_Q4RJE1	G	L	F	N	M	V	V	E	A	P	R	W	S	N	A	K	L	E	E	T	A	T	K	D	F	L	N	P	I	I	K	Q	D	T	K	K	L	R	F	V	R	R			
UniRef90_M5ENH3	G	I	L	N	F	I	V	E	I	P	R	W	T	N	A	K	L	E	E	T	S	K	E	D	A	F	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_B7P6R8	R	V	Y	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	A	T	K	E	A	F	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_UPI000441207C	N	I	L	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	C	K	E	E	A	F	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_U5H4G5	T	V	L	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	S	K	E	E	T	F	N	P	I	I	K	Q	D	T	K	K	R	L	R	F	V	R	R		
UniRef90_K1X233	T	I	L	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	S	K	P	D	E	F	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_G3PZZ1	V	L	F	N	M	V	V	E	I	P	R	W	S	N	A	K	L	E	E	T	A	T	K	E	P	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_UPI0003D08A94	V	V	F	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	A	T	K	E	P	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_G3NCL1	N	I	L	F	H	A	I	V	E	I	P	R	W	T	N	A	K	L	E	E	A	T	K	D	F	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_E9BWT1	T	I	L	N	V	I	V	E	I	P	R	W	S	N	A	K	L	E	E	T	D	T	K	S	P	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_Q17G60	T	V	Y	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	S	L	A	E	G	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_W5MC25	N	I	L	F	H	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	A	T	K	D	A	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R	
UniRef90_W9W2E3	Q	I	L	F	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	S	R	S	D	V	I	N	P	I	I	K	Q	D	K	T	G	P	L	R	F	V	R	R	
UniRef90_H0WMM1	N	L	F	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	A	T	K	E	P	L	N	P	I	I	K	Q	D	K	N	G	K	L	R	F	V	R	R		
UniRef90_F1QDB6	D	C	F	N	M	V	V	E	I	P	R	W	S	N	A	K	L	E	E	T	A	T	K	E	P	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_R7UU43	N	V	F	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	S	T	A	E	T	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_U5ES97	N	V	Y	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	S	L	G	E	G	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_V5G7A2	K	I	L	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	T	M	K	E	I	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_UPI000388A160	D	V	F	N	M	V	V	E	I	P	R	W	S	N	A	K	L	E	E	T	A	T	K	E	P	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_T2MDH1	N	V	Y	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	C	T	K	S	K	L	N	P	I	I	K	Q	D	T	K	G	A	L	V	R	F	V	R	R	
UniRef90_UPI0003F08B9E	N	I	L	F	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	A	L	E	E	P	L	N	P	I	I	K	Q	D	K	N	G	K	L	R	F	V	R	R	
UniRef90_UPI000359D1CF	G	V	F	N	M	V	V	E	I	P	R	W	S	N	A	K	L	E	E	T	C	K	E	E	S	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R		
UniRef90_UPI000333EC28	D	L	F	H	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	A	T	E	E	P	L	N	P	I	I	K	Q	D	M	K	G	K	L	R	F	V	R	R		
UniRef90_J9K1H7	K	V	F	N	M	V	V	E	I	P	R	W	S	N	A	K	L	E	E	T	I	N	T	K	S	A	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R	
UniRef90_H3CT97	N	V	F	H	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	D	C	N	K	R	A	L	V	N	P	I	I	K	A	R	K	K	G	K	L	R	F	V	R	R
UniRef90_E0W2T1	K	L	F	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	I	N	L	K	E	P	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R	
UniRef90_E3MLZ4	S	I	L	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	M	A	T	K	E	P	L	N	P	I	I	K	Q	D	K	K	G	V	A	R	F	V	R	R	
UniRef90_UPI0003317391	D	V	E	H	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	I	A	T	K	D	P	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R	
UniRef90_B3RW07	T	I	L	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	I	A	T	K	D	K	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R	
UniRef90_F7CY62	N	V	F	H	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	I	A	T	K	D	P	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R	
UniRef90_F1L7Y19	K	V	Y	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	M	A	T	K	E	P	M	S	P	I	I	K	Q	D	K	K	G	A	V	R	F	V	R	R	
UniRef90_W2T4J3	K	I	L	F	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	M	A	T	K	E	P	M	N	P	I	I	K	Q	D	K	K	G	L	P	R	F	V	R	R	
UniRef90_F6RT10	D	V	F	H	M	V	V	E	I	P	R	W	S	N	A	K	L	E	E	T	I	A	T	K	D	P	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R	
UniRef90_T1PFP3	T	V	Y	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	I	A	T	K	D	N	P	L	N	P	I	I	K	Q	D	K	K	G	K	L	R	F	V	R	R
UniRef90_UPI00034F6D51	N	L	L	H	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	T	I	A	T	E	E	P	L	N	P	I	I	K	Q	D	K	H	G	K	L	R	F	V	R	R	
UniRef90_R4V1P3	K	I	L	F	N	M	V	V	E	I	P	R	W	T	N	A	K	L	E	E	I	N	L	K	E	V	L	N	P	I	I	K	Q	D	K	K									

QUERY	N	C	F	P	H	H	G	Y	I	90	N	Y	G	A	F	P	Q	T	W	E	D	P	N	V	S	H	P	E	T	K	A	V	G	D	N	N	P	I	D	V	120
UniRef90_U4LFD4	N	C	F	P	H	H	G	Y	I	H	N	Y	G	A	F	P	Q	T	W	E	D	P	N	V	S	H	P	E	T	K	A	V	G	D	N	N	P	I	D	V	
UniRef90_R1E142	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	N	T	V	H	P	E	T	K	A	K	G	D	N	D	P	I	D	V	
UniRef90_S9PRL7	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	N	V	V	H	P	E	T	K	A	K	G	D	S	D	P	I	D	V	
UniRef90_UPI0001CBA0E2	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	N	H	V	D	A	H	T	S	C	C	G	D	N	D	P	I	D	V	
UniRef90_UPI0003D084E1	N	V	F	P	Y	K	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	N	H	K	D	E	N	T	S	C	C	G	D	N	D	P	I	D	V	
UniRef90_K0KSU5	N	V	F	P	H	H	G	Y	I	H	N	Y	G	A	F	P	Q	T	W	E	D	P	N	Q	S	H	P	E	T	K	A	K	G	D	N	D	P	I	D	V	
UniRef90_T5A3Z6	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	N	V	V	H	P	E	T	K	A	K	G	D	N	D	P	I	D	V	
UniRef90_G4TGG9	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	N	Q	V	H	A	E	T	K	A	H	G	D	N	D	P	I	D	V	
UniRef90_I3KGP0	N	V	F	P	H	H	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	N	H	K	D	S	D	T	G	C	C	G	D	N	D	P	I	D	V	
UniRef90_C4JZQ2	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	F	P	R	T	W	E	D	P	N	V	V	H	A	E	T	K	A	K	G	D	N	D	P	I	D	V	
UniRef90_F4RQR7	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	N	H	T	H	P	E	T	K	A	K	G	D	N	D	P	I	D	V	
UniRef90_E5EVW5	N	V	F	P	H	R	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	N	P	S	H	T	D	P	E	T	G	A	R	G	D	N	D	P	I	D	V	
UniRef90_W5N4G4	N	I	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	N	H	T	D	K	D	T	G	C	C	G	D	N	D	P	I	D	V	
UniRef90_H3BBG9	N	V	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	G	H	K	D	C	N	T	G	C	C	G	D	N	D	P	I	D	V	
UniRef90_D4AWD2	N	C	F	P	H	K	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	N	V	H	V	H	P	E	T	K	A	K	G	D	N	D	P	I	D	V
UniRef90_Q4JDE1	N	I	F	P	Y	K	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	N	H	V	D	K	D	T	K	C	C	G	D	N	D	P	I	D	V	
UniRef90_M5ENH3	N	S	F	P	H	K	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	S	F	T	H	P	E	T	K	A	N	G	D	N	D	P	I	D	V	
UniRef90_B7P6R8	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	G	H	T	D	N	N	T	N	C	K	G	D	N	D	P	I	D	V	
UniRef90_UPI000441207C	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	S	V	T	H	A	E	T	K	A	N	G	D	N	D	P	I	D	V	
UniRef90_U5H4G5	N	C	F	P	H	H	G	Y	I	M	L	N	Y	G	A	L	P	Q	T	W	E	D	P	N	Q	M	H	S	E	T	K	A	N	G	D	D	D	P	I	D	V
UniRef90_K1X233	N	C	F	P	H	K	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	N	V	T	H	P	E	T	K	A	K	G	D	N	D	P	I	D	V	
UniRef90_G3PZZ1	N	I	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	N	H	T	D	K	E	T	G	C	C	G	D	N	D	P	I	D	V	
UniRef90_UPI0003D08A94	N	I	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	N	H	T	D	N	S	T	G	C	C	G	D	N	D	P	I	D	V	
UniRef90_G3NCL1	N	V	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	N	H	K	D	S	D	T	G	C	C	G	D	N	D	P	I	D	V	
UniRef90_E9BWT1	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	H	H	V	T	P	E	T	G	A	K	G	D	N	D	P	I	D	V	
UniRef90_Q17G60	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	N	P	D	H	L	D	P	E	N	T	G	C	K	G	D	N	D	P	I	D	A
UniRef90_W5MCZ5	N	V	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	G	H	K	D	D	D	T	G	C	C	G	D	N	D	P	I	D	V	
UniRef90_W9W2E3	N	R	F	P	H	H	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	H	Y	V	D	K	D	T	N	A	R	G	D	N	D	P	I	D	A	
UniRef90_H0WMM1	N	I	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	H	R	K	D	K	E	S	T	N	C	C	G	D	N	D	P	I	D	V
UniRef90_F1QDB6	N	V	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	K	H	T	D	K	E	T	M	C	C	G	D	N	D	P	I	D	V	
UniRef90_R7U043	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	T	H	T	D	E	H	T	S	M	K	G	D	N	D	P	I	D	V	
UniRef90_U5ES97	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	N	P	D	H	L	E	P	S	T	G	C	K	G	D	N	D	P	I	D	V	
UniRef90_V5G7A2	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	N	P	E	H	L	D	D	G	T	G	C	K	G	D	N	D	P	I	D	V	
UniRef90_UPI000388A160	N	I	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	N	H	K	D	K	D	T	G	C	C	G	D	N	D	P	I	D	V	
UniRef90_T2MDH1	N	V	F	P	Y	K	G	Y	P	W	N	Y	G	A	L	P	Q	T	W	E	D	P	N	L	I	D	E	H	T	N	A	F	G	D	G	D	P	I	D	V	
UniRef90_UPI0003F08B9E	N	I	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	H	Q	I	D	Q	S	T	D	G	C	C	G	D	N	D	P	I	D	V
UniRef90_UPI000359D1CF	N	I	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	Y	E	D	P	N	H	V	T	P	E	T	D	T	N	G	D	S	D	P	I	D	V	
UniRef90_UPI000333EC28	N	V	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	H	Y	R	D	P	N	T	G	C	C	G	D	N	D	P	I	D	V	
UniRef90_J9K1H7	N	V	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	N	P	E	L	L	D	E	H	T	G	C	K	G	D	N	D	P	I	D	V	
UniRef90_H3CT19	N	V	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	S	H	K	D	G	D	T	G	C	C	G	D	N	D	P	I	D	V	
UniRef90_E0W2T1	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	N	P	S	H	L	D	D	S	T	G	C	K	G	D	N	D	P	I	D	V	
UniRef90_E3MLZ4	N	I	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	N	H	V	V	P	D	T	G	A	K	G	D	N	D	P	I	D	V	
UniRef90_UPI0003317391	N	L	F	P	Y	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	G	H	N	D	K	H	T	G	C	C	G	D	N	D	P	I	D	V	
UniRef90_B3RW07	N	I	F	P	H	H	G	Y	M	W	N	Y	G	A	F	P	Q	T	W	E	D	P	N	H	V	D	A	N	T	S	C	C	G	D	N	D	P	I	D	V	
UniRef90_F7CY62	N	V	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	A	H	K	D	Q	H	T	G	C	C	G	D	N	D	P	I	D	V	
UniRef90_F1L719	N	V	F	P	H	H	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	A	H	V	D	K	E	N	T	N	K	G	D	N	D	P	I	D	V	
UniRef90_W2T4J3	N	I	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	N	H	V	V	P	D	T	G	A	I	G	D	N	D	P	I	D	V	
UniRef90_F6RT10	N	L	F	P	Y	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	G	H	N	D	K	H	T	G	C	C	G	D	N	D	P	I	D	V	
UniRef90_T1PFP3	N	C	F	P	H	K	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	N	P	D	H	I	E	P	S	T	G	C	K	G	D	N	D	P	I	D	V	
UniRef90_UPI00034F6D51	N	V	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	H	H	K	D	K	E	S	T	G	C	C	G	D	N	D	P	I	D	V
UniRef90_R4V1P3	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	N	P	E	V	L	D	E	S	T	G	Y	K	G	D	N	D	P	I	D	V	
UniRef90_K7F800	N	V	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	Y	P	G	H	K	D	E	N	T	G	Y	C	G	D	N	D	P	I	D	V	
UniRef90_W4X6I9	N	C	F	P	H	H	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	N	P	D	V	L	D	E	A	T	G	C	K	G	D	N	D	P	I	D	V	
UniRef90_E2QRM6	N	I	F	P	Y	K	G	Y	I	W	N	Y	G	T	L	P	Q	T	W	E	D	P	H	E	K	D	K	S	T	N	C	C	G	D	N	D	P	I			

QUERY	L	Q	G	E	T	I	A	Y	T	G	Q	V	K	E	V	K	A	L	G	I	M	A	L	L	D	E	G	E	T	D	W	K	V	I	A	I	D	I	N			
UniRef90_U4LFD4	C	E	G	E	L	V	S	P	G	Q	I	K	K	R	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N			
UniRef90_R1E142	C	E	G	E	L	V	S	P	G	Q	I	K	K	R	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N			
UniRef90_S9PRL7	C	E	G	E	A	R	G	Y	S	G	Q	I	K	K	R	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_UPI0001CBA0E2	C	E	G	H	R	V	A	N	R	G	D	V	I	S	V	K	V	L	G	T	M	A	M	I	D	E	E	E	E	T	D	W	K	M	I	A	I	D	E	N		
UniRef90_UPI0003D084E1	C	E	G	S	K	V	C	A	N	R	G	D	V	I	S	V	K	V	L	G	T	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_K0KSU5	C	E	G	E	A	V	G	Y	T	G	Q	V	K	K	R	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_T5A3Z6	C	E	G	E	L	V	G	Y	T	G	Q	V	K	K	R	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_G4TGG9	C	E	G	E	Q	L	V	G	Y	T	G	Q	V	K	K	R	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N	
UniRef90_I3KGP0	C	E	G	N	K	V	C	A	N	R	G	D	V	I	S	V	K	V	L	G	T	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_C4JZQ2	C	E	G	E	L	V	G	Y	T	G	Q	V	K	K	R	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_F4RQR7	C	E	G	E	A	V	G	Y	T	G	Q	V	K	K	R	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_E5E VW5	I	E	G	E	R	V	A	S	R	G	D	V	I	P	Q	V	K	V	L	G	T	L	A	M	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_W5N4G4	C	E	G	S	K	V	C	A	N	R	G	D	V	I	S	V	K	V	L	G	I	L	A	M	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_H3BBG9	C	E	G	S	K	V	C	A	N	R	G	D	V	I	S	V	K	V	L	G	T	L	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_D4AWD2	C	E	G	E	L	V	G	Y	F	P	G	Q	V	K	K	R	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N	
UniRef90_Q4JDE1	C	E	G	E	T	Q	V	G	Y	F	P	G	Q	V	K	K	R	V	K	V	L	G	I	L	A	M	I	D	E	E	E	E	M	D	W	K	V	I	V	D	E	N
UniRef90_M5ENH3	V	E	G	E	Q	V	G	Y	T	G	Q	V	K	K	R	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_B7P6R8	C	E	G	F	R	V	A	K	R	G	D	V	I	Q	V	K	V	L	G	I	M	A	L	L	V	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_UPI000441207C	C	E	G	E	Q	V	G	Y	T	G	Q	V	K	K	R	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_U5H4G5	C	E	G	E	A	V	G	Y	T	G	Q	V	K	K	R	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_K1X233	C	E	G	E	L	V	G	Y	F	P	G	Q	V	K	K	R	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N	
UniRef90_G3PZZ1	C	E	G	E	T	Q	V	G	Y	F	P	G	Q	V	K	K	R	V	K	V	L	G	I	L	A	M	I	D	E	E	E	E	M	D	W	K	V	I	V	D	E	N
UniRef90_UPI0003D08A94	C	E	G	S	K	V	R	S	S	G	E	I	V	Q	V	K	V	L	G	V	L	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N			
UniRef90_G3NCL1	C	E	G	N	K	V	C	A	N	R	G	D	V	I	S	V	K	V	L	G	T	L	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_E9BWT1	C	E	G	E	A	V	G	Y	T	G	Q	V	K	K	R	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_Q17G60	L	E	G	S	R	I	A	K	R	G	E	V	I	Q	V	K	V	L	G	T	V	A	L	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_W5MC25	C	E	G	S	K	V	C	A	N	R	G	D	V	I	S	V	K	V	L	G	T	L	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_W9WZ2E3	V	D	I	S	Q	H	I	S	Y	T	G	Q	V	K	K	R	V	K	V	L	G	I	L	G	L	I	D	E	G	G	E	T	D	W	K	V	I	V	D	E	N	
UniRef90_H0WMM1	C	E	G	S	K	V	L	S	R	G	E	V	I	H	V	K	V	L	G	I	L	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N			
UniRef90_F1QDB6	C	E	G	S	K	V	C	V	T	G	Q	V	K	K	R	V	K	V	L	G	I	L	G	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_U7UUB4	C	E	G	G	F	K	V	H	K	R	G	A	V	V	Q	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_R43U03	C	E	G	G	Y	R	V	A	K	R	G	D	V	M	Q	V	K	V	L	G	T	I	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_U5ES97	L	E	G	G	Y	R	V	A	K	R	G	D	V	I	Q	V	K	V	L	G	T	I	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_V5G7A2	C	E	G	G	Y	R	V	A	K	R	G	E	I	L	Q	V	K	V	L	G	T	I	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_UPI000388A160	C	E	G	G	T	K	V	H	Y	P	G	E	I	L	Q	V	K	V	L	G	I	M	A	L	L	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_T2MDH1	I	E	G	G	Y	K	V	A	E	R	G	S	V	I	Q	V	K	V	L	G	V	L	A	M	I	D	N	G	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_UPI0003F08B9E	C	E	G	S	K	V	H	F	S	R	G	D	V	I	H	V	K	V	L	G	V	L	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_UPI000359D1CF	C	E	G	G	Y	K	I	F	H	E	R	G	A	V	I	Q	V	K	V	L	G	I	M	C	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N	
UniRef90_UPI000333EC28	C	E	G	S	K	V	L	S	R	G	E	V	I	P	Q	V	K	V	L	G	V	L	A	L	I	D	Q	Q	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_J9K1H7	L	E	G	G	Y	K	V	A	K	R	G	E	V	I	K	V	K	V	L	G	I	F	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_H3CT197	C	E	G	G	S	R	V	C	A	N	R	G	E	V	I	K	V	K	V	L	G	I	L	A	M	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N	
UniRef90_E0W2T1	L	E	G	G	S	K	V	A	K	R	G	E	V	L	K	V	K	V	L	G	I	L	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_E3MLZ4	I	E	G	G	S	K	V	A	G	R	G	A	V	I	Q	V	K	V	L	G	T	L	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_UPI0003317391	C	E	G	G	S	R	V	A	G	D	R	G	E	I	L	R	V	K	V	L	G	I	L	A	M	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N	
UniRef90_B3RW07	C	E	G	G	Y	K	V	C	G	K	R	G	E	I	K	Q	V	K	V	L	G	V	M	A	M	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N	
UniRef90_F7CY62	C	D	I	G	S	K	V	C	S	R	G	E	V	I	K	V	K	V	L	G	I	L	A	M	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_F1L719	V	E	I	G	S	K	V	H	K	R	G	D	V	I	Q	V	K	V	V	G	T	L	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_W2T4J3	V	D	I	G	S	K	V	Q	K	R	G	A	V	I	Q	V	K	V	L	G	T	L	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_F6RT10	C	E	G	G	G	K	V	C	A	N	R	G	E	I	I	G	V	K	V	L	G	I	L	A	M	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N	
UniRef90_T1PFP3	L	E	I	G	G	R	V	A	K	R	G	E	V	V	Q	V	K	V	L	G	T	I	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N		
UniRef90_UPI00034F6D51	C	E	G	G	S	K	V	L	S	R	G	E	V	V	P	Q	V	K	V	L	G	V	L	A	L	I	D	Q	Q	E	E	T	D	W	K	V	I	V	D	E	N	
UniRef90_R4V1P3	L	E	I	G	G	Y	R	V	A	K	R	G	E	V	L	K	V	K	V	L	G	T	I	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N	
UniRef90_K7F800	C	E	G	G	S	K	V	C	A	N	R	G	E	V	I	K	V	K	V	L	G	T	L	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N	
UniRef90_W4X6I9	L	E	I	G	G	Y	R	I	A	K	R	G	E	I	L	K	V	K	V	L	G	T	V	A	L	I	D	E	E	E	E	T	D	W	K	V	I	V	D	E	N	
UniRef90_E2QRM6	C	E	G	G	S	K	V	L	S	C	G	E	V	I	H	V	K	V	L	G	I	L																				

QUERY	D	P	L	A	P	K	L	N	D	I	E	D	V	E	R	K	Y	F	P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_U4LFD4	D	P	L	A	P	K	L	N	D	I	E	D	V	E	R	H	L		P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_R1E142	D	P	L	A	P	K	L	N	D	I	E	D	V	E	R	H	L		P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_S9PRL7	D	P	L	A	P	K	L	N	D	I	E	D	V	E	R	H	L		P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_UPI0001CBA0E2	D	P	L	A	S	Q	L	N	D	I	D	D	I	K	K	Y	M		P	G	F	I	E	A	T	T	R	E	W	F	K	I	Y	K	I	P	D	G	K	P	E	N	
UniRef90_UPI0003D084E1	D	P	E	A	A	K	Y	N	N	I	D	D	V	R	R	M	K		P	G	Y	L	E	A	T	I	D	W	F	R	R	Y	K	I	V	P	D	G	K	P	E	N	
UniRef90_K0KSU5	D	P	L	A	P	K	L	N	D	I	E	D	V	E	R	H	L		P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_T5A3Z6	D	P	H	A	D	K	L	N	D	I	E	D	V	E	R	H	L		P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_G4TGG9	D	P	L	A	P	K	L	N	D	I	E	D	V	E	R	H	L		P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_I3KGP0	D	P	E	A	G	S	F	N	N	I	D	D	V	R	R	L	K		P	G	Y	L	E	A	T	V	D	W	F	K	R	Y	K	I	V	P	D	G	K	P	E	N	
UniRef90_C4JZQ2	D	P	L	A	N	K	L	Q	D	I	E	D	V	E	R	H	L		P	G	L	M	R	A	T	D	E	W	F	R	I	Y	R	S		R	M	G	R	P	E	N	
UniRef90_F4RQR7	D	P	L	A	P	K	L	N	D	I	E	D	V	E	R	H	L		P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_E5EVW5	D	P	E	A	N	E	K	L	N	D	I	Q	D	V	E	T	L	F		P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	V	P	D	G	K	P	E	N
UniRef90_W5N4G4	D	P	D	A	P	T	L	N	S	I	E	D	V	R	K	Q	R		P	G	H	L	E	A	T	V	D	W	F	R	R	Y	K	V	P	D	G	K	P	E	N		
UniRef90_H3BBG9	D	S	E	A	S	K	N	Y	N	D	I	E	D	V	R	G	L	K		P	G	Y	L	E	A	T	V	D	W	F	R	R	Y	K	I	V	P	D	G	K	P	E	N
UniRef90_D4AWD2	D	P	L	A	P	K	L	N	D	I	E	D	V	E	R	H	L		P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_Q4RJE1	D	P	E	A	K	K	L	N	S	L	E	D	V	C	R	T	R		P	G	H	L	E	A	T	V	D	W	L	R	K	Y	K	M		P	D	G	K	P	E	N	
UniRef90_M5ENH3	D	P	L	A	P	K	L	N	D	I	E	D	V	E	K	H	L		P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_B7P6R8	D	P	L	A	N	E	L	N	D	V	E	G	D	I	E	K	H	M		P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	P	D	G	K	P	E	N	
UniRef90_UPI000441207C	D	P	L	A	D	R	L	N	D	I	E	D	V	E	R	H	L		P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_U5H4G5	D	P	L	A	P	K	L	N	D	I	E	D	V	E	R	H	L		P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_K1X233	D	P	L	A	P	K	L	N	D	V	E	D	V	E	R	H	L		P	G	L	L	R	A	T	D	E	W	F	R	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_G3PZZ1	D	P	D	A	K	S	L	N	S	I	E	D	V	R	K	S	R		P	G	H	L	E	A	T	V	D	W	F	R	K	Y	K	V	P	D	G	K	P	E	N		
UniRef90_UPI0003D08A94	D	P	E	A	E	K	I	H	D	I	D	D	V	R	K	H	K		P	G	Y	L	E	A	T	V	D	W	F	Q	L	Y	K	V	P	D	G	K	P	E	N		
UniRef90_G3NCL1	D	P	E	A	A	G	F	N	D	I	D	D	V	R	R	L	K		P	G	Y	L	E	A	T	V	D	W	F	K	R	Y	K	I	P	D	G	K	P	E	N		
UniRef90_E9BWT1	D	P	L	A	E	K	L	N	D	V	E	D	I	E	K	H	M		K	F	I	E	A	T	N	N	W	F	K	I	Y	K	I	P	D	G	K	P	A	N			
UniRef90_Q17G60	D	P	V	A	D	Q	L	N	D	V	E	D	I	D	K	V	F		P	G	L	L	K	A	T	V	E	W	F	K	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_W5MCZ5	D	P	E	A	K	E	L	N	D	I	D	D	V	R	R	L	K		P	G	Y	L	E	A	T	V	D	W	F	R	K	Y	K	V	P	D	G	K	P	E	N		
UniRef90_W9W2E3	D	R	R	A	A	E	L	H	D	I	D	D	V	D	R	L	M		P	G	Y	L	T	A	T	R	E	W	F	R	L	Y	K	V	P	D	G	H	Q	N			
UniRef90_H0WMM1	D	P	E	A	S	K	F	N	D	I	D	D	V	K	K	F	K		P	G	Y	L	E	A	T	L	N	W	F	R	F	Y	K	V	P	D	E	G	K	P	E	N	
UniRef90_F1QDB6	D	P	E	D	S	S	S	L	N	S	I	E	D	V	R	K		K		P	G	H	L	E	A	T	V	D	W	F	K	K	Y	K	V	P	D	G	K	P	E	N	
UniRef90_R7UU43	D	P	M	A	E	K	L	N	D	I	N	D	V	E	T	H	M		P	G	F	I	E	A	T	T	E	W	F	R	I	Y	K	I	P	A	G	K	P	A	N		
UniRef90_U5ES97	D	P	L	A	D	Q	M	N	D	I	E	D	V	E	K	H	F		P	G	L	L	K	A	S	V	E	W	F	K	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_V5G7A2	D	P	L	A	D	Q	L	N	D	V	A	D	I	E	K	H	F		P	G	L	L	K	A	S	V	E	W	F	K	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_UPI000388A160	D	P	E	A	Q	K	I	H	D	I	D	D	V	K	K	H	K		P	G	Y	L	E	A	T	A	E	W	F	R	L	Y	K	V	P	D	D	K	P	E	N		
UniRef90_T2MDH1	D	P	L	A	S	K	L	N	D	I	D	D	V	K	E	V	M		P	G	L	L	E	A	T	L	E	W	F	K	I	Y	K	M		P	G	G	D	P	E	N	
UniRef90_UPI0003F08B9E	D	P	E	A	S	K	I	H	D	I	D	D	V	R	K	Y	K		P	G	Y	L	E	A	T	L	N	W	F	R	V	Y	K	V	P	D	E	G	K	P	E	N	
UniRef90_UPI000359D1CF	D	P	K	A	D	S	I	N	D	I	D	D	V	E	K	Q	F		P	G	L	L	K	A	T	Y	E	W	F	K	Y	Y	K	V	P	D	D	K	P	E	N		
UniRef90_UPI000333EC28	D	P	E	A	H	K	F	H	D	I	D	D	V	K	K	F	K		P	G	Y	L	E	A	T	V	H	W	L	R	F	Y	K	V	P	D	E	G	K	P	E	N	
UniRef90_J9K1H7	D	P	L	A	P	E	V	N	D	I	K	D	I	E	K	H	F		P	G	L	L	K	A	T	V	E	W	M	K	V	Y	R	I	P	D	E	G	K	P	E	N	
UniRef90_H3CT97	D	P	E	A	K	D	L	N	N	I	S	D	V	K	R	L	K		P	G	Y	L	E	A	T	V	D	W	F	K	W	Y	K	V	P	D	G	K	P	K	N		
UniRef90_E0W2T1	D	P	L	A	G	Q	V	N	D	I	K	D	V	E	I	F	F		P	G	L	M	K	A	T	V	E	W	F	K	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_E3MLZ4	D	E	N	A	D	Q	L	N	D	I	S	D	V	E	K	V	Y		P	G	L	L	T	A	T	V	E	W	F	R	N	Y	K	I	P	A	G	K	P	A	N		
UniRef90_UPI0003317391	D	P	D	A	A	N	F	N	D	I	D	D	V	K	R	L	K		P	G	Y	L	E	A	T	V	D	W	F	K	R	Y	K	V	P	D	G	K	P	E	N		
UniRef90_B3RW07	D	P	L	A	D	K	I	N	D	V	E	D	D	I	P	K	Y	M		N	F	L	E	A	T	H	N	W	F	R	D	Y	K	I	P	A	G	K	P	E	N		
UniRef90_F7CY62	N	P	D	A	A	S	Y	S	N	I	E	D	V	R	K	L	K		P	G	Y	L	E	A	T	V	E	W	F	R	K	Y	K	V	P	D	G	K	P	E	N		
UniRef90_F1L719	D	P	A	A	A	E	I	N	S	T	E	D	V	E	K	H	F		P	G	L	L	R	A	T	Q	E	W	F	R	V	Y	K	I	P	T	G	K	P	A	N		
UniRef90_W2T4J3	D	P	L	A	D	Q	M	N	D	I	G	D	V	E	R	H	F		P	G	L	L	K	A	T	V	E	W	F	R	L	Y	K	I	P	T	G	K	P	E	N		
UniRef90_F6RT10	D	P	D	A	A	N	Y	M	N	D	I	S	D	V	K	R	L	K		P	G	Y	L	E	A	T	V	D	W	F	R	R	Y	K	V	P	D	G	K	P	E	N	
UniRef90_T1PFP3	D	P	L	A	E	K	M	N	D	I	G	D	V	D	K	Y	F		P	G	L	L	R	A	T	V	E	W	F	K	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_UPI00034F6D51	D	P	E	A	D	K	F	H	D	I	D	D	V	Q	K	F	K		P	G	Y	L	E	A	T	V	H	W	L	R	F	Y	K	V	P	D	E	G	K	P	E	N	
UniRef90_R4V1P3	D	P	L	A	D	E	L	K	D	V	A	D	V	E	K	H	F		P	G	L	L	K	A	T	V	E	W	F	K	I	Y	K	I	P	D	E	G	K	P	E	N	
UniRef90_K7F800	D	S	E	A	A	N	Y	N	N	I	D	D	V	R	K	M	K		P	G	Y	L	E	A	T	V	D	W	F	R	K	Y	K	V	P	D	G	K	P	E	N		
UniRef90_W4X6I9	D	P	L	A	D	Q	M	N	D	I	S	D	I	E	K	H	F		P	G	L	M	K	A	T	I	E	W	F	K	I	Y	K	I	P	D	G	K	P	E	N		
UniRef90_E2QRM6	D	P	E	A	S	K	F	H																																			

QUERY	Q	F	A	F	S	G	E	A	K	N	K	K	Y	A	L	D	I	I	K	E	T	H	N	S	W	K	Q	L	I	A	G	K	S	S	D	S	K	G	I	D	240				
UniRef90_U4LFD4	Q	F	A	F	S	G	E	A	K	N	K	K	Y	A	L	D	I	I	K	E	T	H	N	S	W	K	Q	L	I	A	G	K	S	S	D	S	K	G	I	D					
UniRef90_R1E142	Q	F	A	F	S	G	E	C	K	N	K	K	Y	A	M	D	I	V	R	E	C	A	E	A	W	E	R	L	I	T	S	G	K	S	T	D	P	R	G	E	I	S			
UniRef90_S9PRL7	S	F	A	F	S	G	E	Y	K	N	S	K	Y	A	E	E	V	V	R	E	C	A	E	A	W	E	R	L	I	V	N	G	K	T	T	D	A	K	S	G	E	F	A		
UniRef90_UPI0001CBA0E2	Q	F	A	F	D	G	E	A	K	D	K	D	F	A	L	Q	I	V	I	N	O	T	H	E	Y	W	K	A	L	V	S	T	K	K	T	D	E	D	G	E	I	A	N		
UniRef90_UPI0003D084E1	Q	F	A	F	N	E	E	F	K	D	K	D	F	A	L	K	V	I	R	E	N	T	H	E	Y	W	K	A	L	V	S	T	K	K	T	T	D	E	D	G	E	I	A	N	
UniRef90_K0KSU5	Q	F	A	F	S	G	E	A	K	N	K	K	Y	A	E	E	V	I	R	E	N	T	H	E	Y	W	K	A	L	V	S	T	G	G	K	T	T	Q	P	D	G	E	I	S	S
UniRef90_T5A3Z6	H	F	A	F	T	G	E	C	K	N	K	S	Y	A	M	E	D	I	V	R	E	C	A	E	A	W	E	R	L	I	V	S	A	P	A	K	T	T	Q	N	Y	E	I	L	S
UniRef90_G4TGG9	T	F	A	F	S	G	E	A	K	N	K	K	Y	A	T	E	L	I	V	H	C	H	E	A	W	R	K	L	V	S	A	P	A	K	T	T	Q	N	Y	E	I	L	S		
UniRef90_I3KGP0	Q	F	A	F	S	N	G	E	F	K	D	R	D	F	A	I	E	T	V	K	S	T	N	E	F	W	K	A	L	V	S	A	A	K	M	T	S	N	A	G	E	I	L	N	
UniRef90_C4JZQ2	Q	F	A	F	S	G	D	A	T	R	T	G								K	C	S	H	E	A	W	E	R	L	I	M	A	G	K	S	Q	R	G	D	M	S				
UniRef90_F4RQR7	Q	F	A	F	S	G	E	A	K	H	K	N	Y	A	T	E	V	I	M	E	C	S	H	E	A	W	K	R	L	I	V	S	G	N	K	V	P	D	A	T	G	I	N	S	
UniRef90_E5EVW5	K	F	A	F	D	G	E	A	K	N	K	N	A	E	F	A	Y	K	V	D	E	S	V	H	E	F	W	K	S	L	I	S	G	N	K	V	P	D	A	T	G	I	N	S	
UniRef90_W5N4G4	Q	F	A	F	N	G	Q	F	K	D	K	D	F	A	I	T	V	I	K	S	T	H	H	K	H	W	R	A	L	I	S	G	Q	K	Q	A	N	D	G	G	A	I	L	S	
UniRef90_H3BBG9	Q	F	A	F	N	G	K	F	K	D	K	D	F	A	I	T	V	I	K	S	T	H	H	D	D	W	N	S	L	M	A	G	K	T	S	N	D	G	G	A	I	L	S		
UniRef90_D4AWD2	Q	F	A	F	S	G	E	C	K	N	S	K	Y	A	M	D	V	V	H	E	C	A	E	A	W	E	K	L	M	S	G	Q	K	S	P	A	G	G	I	L	S				
UniRef90_Q4RJE1	K	F	G	F	S	N	E	Q	F	K	D	K	D	F	A	V	E	I	K	S	T	H	E	A	H	W	R	A	L	I	V	A	G	Q	K	Q	S	N	A	G	S	I	L	K	N
UniRef90_M5ENH3																																													

QUERY	L	T	N	V	T	L	P	D	T	250	P	T	Y	S	K	A	A	S	D	A	260	P	P	A	S	P	K	A	D	A	270	D	K	S	I	I	D	K	W	F	F	280
UniRef90_U4LFD4	T	T	N	V	T	L	G	H	S	P	A	R	V	D	P	S	S	Q	P	P	I	P	A	G	E	N	L	S	P	A	P	I	D	P	S	I	I	D	K	W	F	F
UniRef90_R1E142	L	A	N	T	T	L	G	Q	S	P	D	R	V	D	P	S	S	L	N	I	P	A	G	E	N	Q	Y	P	A	P	I	D	P	S	I	I	D	K	W	F	F	
UniRef90_S9PRL7	L	A	N	T	T	V	S	G	S	V	S	H	D	A	A	V	A	Q	T	I	P	A	A	N	E	L	P	P	A	P	I	V	D	P	S	V	H	K	W	F	Y	
UniRef90_UPI0001CBA0E2	C	E	N	I	S	V	A	G	S	P	F	I	T	S	G	E	D	A	Q	S	A	V	D	Q	S	A	P	P	A	P	I	S	S	E	V	D	K	W	H	Y		
UniRef90_UPI0003D084E1	C	T	N	A	T	V	S	D	S	P	F	Y	C	C	K	A	T	V	E	A	V	P	P	C	G	V	A	N	P	I	P	P	E	V	D	K	W	F	Y			
UniRef90_K0KSU5	L	T	S	T	A	L	P	N	V	A	S	Y	E	E	A	A	K	E	V	P	A	G	E	D	L	R	D	A	P	I	D	K	S	I	I	D	K	W	F	F		
UniRef90_T5A3Z6	I	A	N	M	T	V	A	H	S	T	S	Q	D	R	S	K	L	P	P	L	P	P	H	E	D	V	P	E	K	I	D	S	S	I	I	D	K	W	F	F		
UniRef90_G4TGG9	T	L	N	V	T	I	P	E	T	A	G	Y	T	R	P	E	Y	A	A	L	P	N	A	T	R	D	P	P	K	P	I	D	P	S	I	I	S	K	W	F	F	
UniRef90_I3KGP0	C	M	N	T	S	V	S	D	S	P	F	Y	C	C	S	A	G	D	A	E	A	V	V	K	S	A	C	A	E	E	P	I	P	S	S	V	D	K	W	F	F	
UniRef90_C4JZQ2	L	A	N	V	S	V	E	G	S	A	D	R	A	S	K	I	E	S	I	P	A	G	Q	D	L	R	P	A	P	I	D	G	S	V	D	K	W	F	F			
UniRef90_F4RQR7	L	A	N	T	T	V	E	G	S	S	A	R	V	P	T	A	D	V	L	P	A	D	S	R	K	D	P	A	P	I	D	P	S	I	I	S	K	W	F	F		
UniRef90_E5EVW5	K	M	N	V	S	V	S	G	S	V	D	R	A	S	E	A	A	V	L	A	K	A	P	G	Q	P	A	A	I	P	Q	T	V	D	K	W	H	F				
UniRef90_W5N4G4	C	K	N	V	S	V	C	D	S	P	F	K	C	E	A	I	K	I	V	H	S	A	P	E	Y	G	K	A	E	P	L	P	P	E	V	N	K	W	H	F		
UniRef90_H3BBG9	C	T	N	T	S	I	S	N	S	P	F	L	C	T	E	A	A	A	L	N	I	V	D	Q	T	P	P	C	A	I	P	A	E	S	I	D	R	W	W	Y		
UniRef90_D4AWD2	L	C	N	S	T	L	E	N	N	R	A	D	P	A	K	V	E	A	V	I	P	C	A	N	L	P	P	A	P	I	D	P	S	I	I	D	K	W	F	Y		
UniRef90_Q4RJE1	C	K	N	V	T	C	C	N	S	P	F	K	C	S	A	E	E	A	V	H	S	A	P	A	F	G	S	P	H	P	I	D	P	P	E	V	D	K	W	H	Y	
UniRef90_M5ENH3	L	E	N	S	T	V	E	G	S	K	A	Q	V	D	A	V	V	A	S	I	P	T	A	N	P	Q	P	A	P	I	D	P	S	I	I	D	K	W	F	F		
UniRef90_B7P6R8	C	S	T	V	T	L	E	G	N	H	I	L	S	D	E	A	N	S	I	V	A	S	T	P	E	P	D	A	G	R	E	A	I	V	D	K	W	H	F			
UniRef90_UPI000441207C	I	T	N	L	T	V	D	R	S	P	G	Q	V	R	P	G	D	A	A	I	P	L	D	S	H	K	P	P	A	P	I	D	P	S	I	I	S	K	W	F	H	
UniRef90_U5H4G5	V	T	N	L	T	Q	D	G	T	P	S	G	K	V	D	A	A	Y	S	S	L	P	A	D	S	R	A	A	P	I	D	P	S	I	I	N	K	T	F	F		
UniRef90_K1X233	T	T	N	L	T	V	A	K	S	P	S	R	V	S	P	D	Q	L	P	P	A	H	E	N	L	A	P	A	P	I	D	P	S	I	I	D	K	W	F	F		
UniRef90_G3PZZ1	C	K	N	I	S	C	N	E	S	P	F	K	C	S	A	E	E	A	D	V	V	S	S	A	P	A	L	C	A	P	V	S	P	A	V	D	K	W	H	F		
UniRef90_UPI0003D08A94	C	T	N	V	L	V	C	D	S	P	F	C	C	S	E	E	D	A	R	L	I	V	Q	S	A	P	P	P	V	P	I	S	T	S	E	V	D	T	W	F		
UniRef90_G3NCL1	C	M	N	T	S	V	S	E	S	P	F	C	C	S	A	G	D	A	Q	A	V	A	S	A	F	G	A	E	D	P	I	P	S	S	V	D	T	W	F	Y		
UniRef90_E9BWT1	C	V	N	T	T	V	A	G	S	P	F	T	V	S	E	A	E	A	E	K	I	Q	P	A	A	G	P	A	N	A	L	P	E	G	V	D	K	W	Y	Y		
UniRef90_Q17G60	C	L	N	T	T	V	E	G	S	P	Y	A	S	D	A	E	E	V	L	A	K	S	A	S	G	G	N	E	P	H	T	D	A	I	H	K	W	H	F			
UniRef90_W5MCZ5	C	T	N	T	C	I	S	D	S	P	F	C	C	S	E	A	E	A	Q	A	V	I	D	A	T	C	P	E	P	L	P	S	T	S	T	V	E					
UniRef90_W9W2E3	R	T	N	T	T	L	E	S	S	P	F	R	V	D	P	G	K	L	H	F	P	E	G	E	D	L	P	P	A	P	I	D	P	K	H	V	E	E	W	F	F	
UniRef90_H0WMM1	C	T	N	V	Q	V	C	D	S	P	F	H	C	T	Q	E	E	A	R	S	L	V	E	S	S	L	P	C	N	N	E	S	P	Y	S	K	W	Y	F			
UniRef90_F1QDB6	C	O	N	N	S	S	L	C	D	S	P	F	K	C	S	D	E	E	A	S	V	T	A	E	Y	G	E	P	L	P	V	S	P	E	V	D	K	W	F	F		
UniRef90_R7UU43	C	E	N	T	T	V	L	G	S	P	Y	I	S	A	D	E	S	K	Q	I	L	E	A	A	P	A	V	T	A	P	L	E	Q	I	V	D	Q	W	H	Y		
UniRef90_U5ES97	C	L	N	T	N	V	E	G	S	P	Y	L	S	V	D	A	E	E	V	L	Q	K	S	S	E	G	G	D	A	P	L	P	E	T	L	D	K	W	Y	F		
UniRef90_V5G7A2	C	O	V	N	T	T	L	D	G	N	S	F	I	S	V	E	E	A	L	E	V	I	N	K	T	P	E	P	N	P	V	E	P	I	V	D	K	W	H	Y		
UniRef90_UPI000388A160	C	M	N	I	L	V	H	D	S	P	F	R	C	S	E	E	D	A	R	L	I	V	Q	S	A	P	P	P	A	S	G	D	S									
UniRef90_T2MDH1	C	E	N	V	T	L	E	S	S	P	F	I	S	H	K	D	A	D	S	I	C	A	P	P	R	S	A	C	A	P	I	P	A	E	V	D	A	M	F	Y		
UniRef90_UPI0003F08B9E	C	T	N	V	Q	V	C	D	S	P	F	H	C	T	E	E	A	R	S	L	V	D	S																			
UniRef90_UPI000359D1CF	R	K	N	V	S	V	E	D	S	P	F	R	I	D	A	E	K	V	V	E	E	S	A	A	V	G	P	A	A	A	E	S	Q	D	I	N	K	W	Y	Y		
UniRef90_UPI000333EC28	C	I	N	A	Q	V	C	D	S	P	F	R	C	R	S	L	V	E	L	V	S	P	A	S	P	S	K	E	S	N	G	E	E	Q	V							
UniRef90_J9K1H7	C	V	N	T	I	L	N	N	A	S	T	I	D	D	E	K	V	Q	A	I	L	S	E	S	L	E	S	P	L	L	P	E	V	D	K	W	H	F				
UniRef90_H3CT97	C	K	N	T	C	V	S	D	S	A	Y	C	C	S	Q	D	E	A	K	T	A	V	C	E	T	C	P	E	E	P	I	P	S	S	V	D	K	W	F	Y		
UniRef90_E0W2T1	C	K	N	L	T	V	N	K	S	H	K	I	D	S	E	A	K	E	T	V	Q	K	A	P	G	P	A	E	V	D	P	S	I	E	K	W	H	F				
UniRef90_E3MLZ4	V	P	E	A	V	H	Q	A	T	D	E	A	V	T	A	A	V	E	S	T	P	E	H																			
UniRef90_UPI0003317391	C	M	N	T	T	V	S	E	S	P	F	K	C	D	P	D	A	K	A	I	V	D	A	L	P	P	P	C	E	T	P	T	D	V	H	K	W	F	H			
UniRef90_B3RW07	R	A	N	T	T	T	N	N	N	H	K	I	S	T	D	E	A	Q	K	E	I	D	A	Q	P	S	S	P	A	S	I	D	Q	S	V	N	K	W	Q	Y		
UniRef90_F7CY62	C	T	N	T	T	V	E	G	S	P	F	K	C	S	M	E	S	A																								
UniRef90_F1L719	V	D	G	A	A	H	P	S	S	Q	E	A	W	K	I	V	D	S	Q	P	A	I																				
UniRef90_W2T4J3	T	Q	C	F	V	E	G	A	V	H	A	T	R	E	S	I	V	Q	A	A	V	D	A	S	A	V	P	A	A	P	I	P	T	D	V	D	K	W	F	F		
UniRef90_F6RT10	C	M	N	T	T	V	S	E	S	P	F	K	C	R	A	I	V	D	V	L	P	P	C	E	S	A	C	T	V	P	T	D	V	D	K	W	H	F				
UniRef90_T1PFP3	R	L	N	T	T	V	T	D	S	P	F	L	T	T	E	E	A	E	K	I	I	S	E	A	P	E	G	G	E	E	V	T	D	I	V	D	K	W	H	F		
UniRef90_UPI00034F6D51	C	T	N	A	Q	V	C	D	S	P	F	R	C	T	Q	E	E	A	R	S	L	V	E	S	V	S	P	A	A	P	S	K	E	S	E	Q	A	W	H	F		
UniRef90_R4V1P3	C	A	N	V	T	N	A	E	S	P	F	I	E	Q	K	D	A	E	D	I	L	A	K	S	P																	
UniRef90_K7F800	C	A	N	T	T	V	S	D	S	P	L	C	A	K	A	T	V	E	A	V	P	P	L																			
UniRef90_W4X6I9	C	S	N	V	T	V	E	G	S	P	F	I	T	T	E	V	A	Q	K	I	L	D	K	A	P	E	S	V	E	P	V	E	P	I	V	D	K	C	Y	F		
UniRef90_E2QRM6	C	O	T	N	V	Q	I	S	D	S	P	F	R	C	T	Q	E	E	A	R	V	E	S	V	S	S	P	N	K	E	S	N	E	E	Q	V	W	H	F			
UniRef90_UPI000392DAF6	C	T	N	V	L	V	N	G	S	P	F	C	C	S	E	E	D	A	R	L	V	Q	S	A	P	M	H	G	E	S	V	S	P	E	V	D	S	W	H	F		
UniRef90_E4XXJ8	I	E	N	V	S	V	D	G	S	K	A	K	L	S	A	A	E	A	Q																							

QUERY	I
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UniRef90_R1EI42	I
UniRef90_S9PRL7	I
UniRef90_UPI0001CBA0E2	V
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UniRef90_K0KSU5	I
UniRef90_T5A3Z6	I
UniRef90_G4TGG9	I
UniRef90_I3KGP0	
UniRef90_C4JZQ2	I
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UniRef90_W5N4G4	L
UniRef90_H3BBG9	
UniRef90_D4AWD2	I
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UniRef90_T1GBX8

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T Y T T K Q V G E T G S L E Y R V F F L K D N K Q V I S S F H D V P L K V D S Y D
F S S E E R A A P F T L E Y R V F L K N E G Q Y I S S F H D V P L W V N K E K
F S Q V T Q G A K Y G P N F R Q Y L Q A N G E V A S Y F H D I P L E L K T E Q
Y E T E E R G S L Y T L E Y R L F F F K G P Q G Y I S P W H D I P L Y D D E S K
S Y T T K A E G Q E S T L E Y R L F F E K D G Q R V S P F H D I P L A V D A E K
A L S L R T V G G R N T L D W R V W L E K D G H P I S F W H D V P L Y D E D N
A L S L R E V G A R N T K N W R I W L E K D G D P I S F W H D V P L W P D E S N
T E T K G A A D T E E F R I F F E K D G N T I S P W H D I P L K A D P
A L S L R E V G G R N T L E G W R I W L E Q N G Q P I S F W H D V P L W P D E S N
T Y L T R K L L S Q N P E D V W Y Y F E K N G Y W I N P L H D I P L Y V D K Q K
F S T V R Q G I K Y T P T F K Q Y L Q M N N E V G S Y F H D V P L E F S R E G
F H S A S V G T K Y T S D Y K K Y L K P N G E I G S Y F H D V P L N L N E S E
S L T L R E V G A R N T L E W R V W L E K D G Q P I S F W H D V P L Y P E K G N
F H N V T I G S K Y S A S F K Q Y L Q D N G E I G S Y F H D V P L G L D V A K
S Y K T R T N G R L Y T K D F K L Y I E N E G D P I S A F H D I P V Y P D P K S
S Y R T E E R G R P R S P G Y R L F F Q N A G H Y I S P F H D I P L K V D S T E
Y S V V E E G A A G S L E Y R V F F D K S G K T I S P W H D I P L Y A G D
Q G T K Y T A T Y A N Y A T T D G K I S Y F H D I D L G L D L V A
A L S L R E V G G R N T L E W R V W L E H K C Q P I S F W H D V P L Y P D E S P
S L S L R E V G A R N T L E D W R I W L T K D G D P I S F W H D I P T W P D S D R
A L S L R T V G A R N T L D W R I W L E H N K Q P I S F W H D V P L Y P H P P R
A L S S V V S G T R N S P S F K T Y L R K D G K I G S F F H D V P L G L D K Q K
A F S S V T L G T K Y T A D F R Q Y L K P N G E I G S Y F H D I P L E L N E T D
A Y S T V R V G K K Y S P S F K V Y V T Q D G K I V S P F H D I P L Y M S G N R
D G K Y I S P F H D I P L Y A G S K E
E K S N A F I S P W H D I P L F A N E K E
T Y T K V E R G E A N T F D F R I F L Q E K G K D T S A W H D V P L Y L D G
S L T L R E V G A R N T V D W R V W L E Q D G N V I S F W H D I P L Y P D E K Q
V Q E E G A E S L D Y R V F F D G S G K K V S P W H D I P L T L G D
F E V H E S A A P F S L E Y E A L L K N E K Q Y I S P L L V I P L F A G K
A Y G R R T T G N K Y S A Q Y Q V Y V T L E D K I I S P F H D I P V Y A D Q
A Y S V E E K G P K D S L E Y R M F F K Q G A K E V S C W H E I P L Y A G D
A Y G K D E K G D Y P S L D Y R I F F K D G E K A I S P W H D V P L Y N A D
I E Q G P T N T T E Y R V F F E R D G D K A S P W H C I P L H A G D
Y Q V R E Q G E A Q S G Y R A F L L A N G K T L S P W H D V P L K S P L G G
F R S K I T G K L N T P D F R V Y C Y K N N K P I S F F H D V P L T S D K
V Y T T K Q V G A K D T V D S R V Y V N A S T E V M S P W H D I P L H G E N R S
F L T R F K G K P H T P E F R A Y C Y N K E K P V S F L H D V P L F S K E
S L S L R E V G A R N T L D W R V W L E Q D G N P I S F W H D I P L F P G N V S
A Y T S K Q I G S K Y S S S F K A Y I L K D G K V V S P F H D I P L M V D G S F
H T V R R E G Q P G T L D C R Y F F Y D K G R K Q S P W H H V P L Y A R S S L
R E S G E E G T L D Y R L F F A H S Q Q V I S V W H D I P L Y A E K C T
F G K I E T G K K Y T E S Y K V F I T E G N K I I S P F H N I N L Y S E S A K
F L V K V V G E Q S P A G S R I F F E E E G R R I S P W H D I P L Y V D Q G K
Y R T E F L G H P Q Q D Y R L F F K H A G H Y I S P F H D I P L K A D C
S F T S V G T F G R P D Y K L Y F K N D G E K I S P W H D I P L H P S K D N
T R E E G E V H T P S Y R V Y F R D E E R Q V S P W H D I P L Y V R Q P V
L E E A G E F G T T D Y S M T F K S A D K V M S P W H D A P L K L E G
T K V Q E G E F D T V D Y R V H L D H N Q E R I S L W H E L P L F A A K P T
E T E A V G A F S P E F F R V N F Y H T G Q Q I S P W H D I P L Y N P D
T V K D E G Q P Q T L D Y R V F F D K S G K K V S P W H D I P L Q L G N
T R E E V G T K D S L E Y R L F Y K N D G Y K I S P W H D V P L W F S E T P
I K E E G Q I F T P S Y R V Y F K N L V R Q I S P W H D I P L W V R D P V
Y S T Q T I G E K Y S K D Y T V Y I T H N N K R I S P F H Y I D L H Q H P S E
R E V G T P D T P G Y R V F F Y N E G K K I S P W H D I E P G T R I E Q
H G D E N T T E Y R I K V D K A G K P I S L W H D V T L V H D R P T
H T V R K M G E P E T A E C R Y F F D R M G R K Q S P W H H I P L A A V P H G
F S T E E R A A P F S L E Y R V F L K N E G Q Y I S P F H D I P I Y A D K
E R G A N T T D Y R V H V L D S T K E L S L W H D V P L A P E S S T
E E G E I F T P S Y R I Y F K D H V R P V S P W H D I P L R V C D P A
Y Q T E E R G R P N S S D Y R I Y F K S D G K Y I S P F H D I P L I A N G D Q
Y S C E E R A M L F S L K Y R V F L K E K G Q Y I S P F H D I P M Y S D K
K E Q G L P E T L D Y R V F L D G G G R K V S P W H D V P L R A G D
H T V R R C G L H G T L D C R Y F F Y D D N E K Q S P W H H V P L F A G N A I
T L R T H K E G A E N A S K F R I Y F E Q D G K K I S P W H K L P A F V D K
H S I R R I G S A D A S T A C R Y R F Y D Y K E Q V S P W H D I P L R C E N S D
Y R T E E R G Q L Y S P D Y R L F F K N A G H Y I S P F H D I P L K V D E H E
Y S V I E E R G P N T A E Y R L F F K N D G K F I S P F H D I P L H A R A E Q
I R E E G E M F T P S Y R V R F T L E E R E V S P W H D I P L F V H D T T
V Y N T T E E G P A G S K A W R M F Y K A T D T I V S A W H G L P L Y A G A S A
S F Q V V G T F G Q P D Y K L F F F Q D T N K K I S P W H D I P L R I P E K
T Y V A E E R G S P S P D Y R V F F R D A G P V S P L H D I P L W A D R G A
H T N A D G T F G T A P F Q L G F T D T A K P A S P W H D V P L D P G L G D
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V S P W H D V A L R Y N E D
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W A I K E V G M M G S H A W R M H F T E D G V V T S A W H D L P L Y P S V D K
G A K V S P W H D I P L Y V N A S
S F L S F T K G N L G T K E W R L F L K N N G H F V S A W H D I P R C P V Y C G
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UniRef90_E3QTQ8	Q I V N L V E I	P R W Q D G K V E I	K R D E P L N P I	V H D S N D A P R F V E	
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UniRef90_Q8SR69	E I V S V V N E I	P R F E N G K F E I	N K E E A F N P I	K Q D K K G W P R F V K	
UniRef90_G1N310	V L F N M V V E I	P R W T N A K M E I	A T E E P L N P I	K Q D K K G K P R Y V A	
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UniRef90_UPI000331731E	K I Y N M I C E I	P R W T N A K M E I	G T K L P L N P I	R Q D K K G K M R F V D	
UniRef90_I0YY91	G L V S F V C E I	P K E S S A K M E I	A T D E E L N P I	K Q D K K G K L R H Y	
UniRef90_UPI00035A1343		P R W T N A K M E I	A T E E P L N P I	K H D K K G K L R Y V A	
UniRef90_G9N4J5	N I V N I Y I E I	P R W T D A K I E T	K R D K P M N P I	F H D D K D D L R Y V A	
UniRef90_Q1K8W4		P R W S Q T K F E I	S R S L P L N P I	V Q D R P N Q P R F V P	
UniRef90_Q9LXC9	G V F N F I V E I	P K E S K A K M E I	V A T D E D F T P I	K Q D K K G K G N F	
UniRef90_F7DH82	D E F H M V V E I	P D W S N A K L Q I	A T N D P L N P I	K Q Y N K G N F R Y V A	
UniRef90_L7JT90	D H I N V V N E I	P R F E N A K F E I	A T K E K M N P I	M Q D K N G K P R Y V A	
UniRef90_Q93Y52	G H L H Y I C E I	P K E T S A K M E I	A T D E P R T P I	K Q D K K G K L R	
UniRef90_C1MYT5	G T C N F I C E I	P K E T K A K M E I	V A T D E P L T P I	K Q D T K K G K L R D Y	
UniRef90_A0A059LQW6	G A F T F V S E I	P K E T S A K F E I	V A T K E R R N P I	K Q D K K G K L R H Y	
UniRef90_D8QMR6	G I F H F V T E I	P K E S S A K M E I	V A T D E P F T P I	K Q D K K G K L R	
UniRef90_P87118	D T F N M V T E I	P R W T Q A K C E I	S L T S P F H P I	K Q D K K G K L R Y V A	
UniRef90_A0A024UFR3	N V F N F V N E I	S K G T R A K M E I	A G E E A H N P I	K Q D K K G N L R Y	
UniRef90_S9Q0J1	G T L N M V V E I	P R W T Q A K C E I	S N T I P F N P I	V H D M K N K L R Y V Q	
UniRef90_J5J4T5	N I I N M Y V E I	P R W T D A K I E T	K R N E P L N P I	F D D K K K K P R F I F	
UniRef90_L2GMD9	N Y V T C I N E I	S R F E H G K F E I	C K E A S F N P I	C Q D K K D K V R F V K	
UniRef90_H3GPI8	E V F H F V V E I	P R G S R D K M E I	A G D E E F N P I	K Q D K R K G I	
UniRef90_D8LCB9	G H L N F V C E I	P R C S R K K F E I	A T N E V G N P I	K Q D T K K G I	
UniRef90_R0KTG4	D V V R V V N E I	P R F E N A K F E I	N K S E N L N C I	M Q D K K G K M R F V G	
UniRef90_V5HW75	G V L N M V V E I	P K G T S A K L E I	S K E E D Y N P I	K Q D T H G K P R Y L A	
UniRef90_UPI0003D71067				K E H D I P R K K A R N D E	
UniRef90_M4C3W8	S S F N F I V E I	P K G T A H K M E I	N K E E Q Y N P I	T M Q D T T H N G T R G R	
UniRef90_S7N3I5	N L F N M V V E I	P R W T N A K M E I	A T E E A L N P I	K Q D K D G K L R Y V A	
UniRef90_G0UBQ7	N R Y N F V C E I	P K W T R A K F E I	A T G E P F N P I	K Q D M K D G	
UniRef90_Q00GL5	G L Y N M L T E I	P K M T L K K M E I	D T K A E G N P I	K Q D E K K G K	
UniRef90_W7T124	G A L N F I C E I	P K F T R R K F E I	C T T E A G N P I	K Q D Q K N G K P R V L	
UniRef90_M4BYR4	G T V N F I C E I	P K W T R K K M E I	A T G E P F N P I	K Q D T K N G K	
UniRef90_UPI00032A9234	G V F N F I V E I	P K E S S A K M E I	A T D E P F T P I	K Q D K K G K L R	
UniRef90_Q5CQB2	L L Y N M I I E I	P K L T N K K F E I	N T K E E Y T P I	Y Q D R K	
UniRef90_S9VN75	N R Y N F I C E I	P K W T R A K F E I	A T G E P F N P I	K Q D K K N G	
UniRef90_C4V7Z9	D V V T I V N E I	P R F E N G K F E I	N K G V S L N P I	K Q D K K G K V R F V K	
UniRef90_L8GPC3	G V L R Y V V E I	P K G T D Q K M E I	A T D E P W N P I	K Q D T R K D G A L R	
UniRef90_B8C276	P Y L N F V C E I	P K F S R K K F E I	A T D E V G N F I	K Q D E K K G	
UniRef90_UPI000440AE47	G V L N M I V E I	P R W T N A K M V V T	D E T M N P I E	Q E T R K G H P R F V R	
UniRef90_K3X1P5	N I F N F V N E I	P K G A R A K M E I	A G E E E F N P I	K Q D M K K G K	
UniRef90_Q5SQT6	D V F H M V V E I	P R W S N A K M E I	A T K D P L N P I	K Q D K K G K L R Y V A	
UniRef90_F0YGD1	P T F N F V C E I	P K C T R K K F E I	A T N E H V T P I	K Q D T K K G	
UniRef90_W6KFW5	N R Y N M I C E I	P K W T R A K F E I	A T N E P F N P I	K Q D K N G	
UniRef90_B5XDR2	E L Y N M V V E I	P R W S N A K M E I	A T K E P L N P I	K Q D K K G K L R Y V A	
UniRef90_I8IL67					
UniRef90_L9L2L9	D V F H M V V E I	P R W S N A K M E I	A T K D P L T P I	K D V K K G K L R Y V A	
UniRef90_I1P4M9	G V F H M V V E I	P K E S S A K M E I	A T D E S F T P I	K Q D K D G K N L R	
UniRef90_M4BEP0	T H Y Y F V N E I	P R G S R H K M E I	A G D E A F N P I	K Q D E R K G	
UniRef90_UPI0002C3CECD	N T V N M V C E I	P R G T N A K M E I	N T T T R F N P I	K Q D L N K D G S L R	
UniRef90_F0WUB2	S I F H F I S E I	P R G E R A K L E I	A C K E A Y N P I	K Q D V T	
UniRef90_U6DYL6	N L F N M V V E I	P R W T N A K M E I	A T K E P L N P I	K Q D K N G K L R Y V A	
UniRef90_Q4QQZ1	D V F N M V V E I	P R W T N A K M E I	A T K E L L N P I	K Q D K K G K L R Y V S	
UniRef90_U3LNY4	E R Y N F I C E I	P K W T R A K F E I	S T G E A F N P I	R Q D M K N G L	
UniRef90_Q6UQ31	D V L T C V T E I	P K G T R A K L E I	S K E E P Y N P I	K Q D F K K E G H P L	
UniRef90_F0W060	H L Y N F V V E I	P K G V M Y K M E I	V N K E S A H N P I	M Q D T T H N G T R G R	
UniRef90_S4PS53	R L A H M V V E I	P R W T N A K M E I	S L A E P L N P I	R Q D T K R G A L R F V A	
UniRef90_D7G0D3	G V F R F I V E I	P M Y Q T A K M E I	M K D V A F N P I	M Q D E S K G K P R Y	
UniRef90_E9ETL2	G V I N F V V E I	P R W T D G K I E T	Q R N E P L N P I	F H D T K N K P R F V A	
UniRef90_I0Z7Z5	G T L N F V C E I	P K D T S A K F E I	V A T G E E R N P I	K Q D V K K G V	
UniRef90_D6RGV9	N L F N M I V E I	P R W T N A K M E I	A T K E P M N P I	K Q Y K D G K L R Y V A	
UniRef90_G0UK39	S I I T F V C E I	P K Q T R A K L E I	L K E E P H N P I	A Q D V L K K E G R P L	
UniRef90_A0A024UTA2	V V N F V V E I	E K G R M E K M E I	V N K R L P F N P I	K Q D V T K T N H T R Y	
UniRef90_I1BU96		P R W S N A K I E I	V S I G E K F N P I	K Q D K K G K P R F V R	
UniRef90_W6LFK1	N I F T Y V N E I	P R G S R A K M E I	L I K E E T Y N P I	S Q D R F N K M G Q P L	
UniRef90_Q4N676	G H V T M V V E I	P R N T R A K M E I	I G T G L E H N P I	V Q D L F G S L R D D C	
UniRef90_T1GBX8				K Q D K K G K L R F V A	

		90	100	110	120																																				
UniRef90_G8BCD6	N	L	F	P	Y	H	G	Y	I	H	N	Y	G	A	F	P	Q	T	W	E	D	P	F	V	Q	H	Y	N	L	Y	G	D	N	D	P	L	D	V			
UniRef90_F7BBR1	N	L	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	H	R	K	E	K	S	T	D	C	C	G	D	N	D	P	L	D	V	
UniRef90_Q54PV8																																									
UniRef90_UPI0003EDD3D8	N	L	F	P	Y	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	E	H	T	H	P	S	T	G	A	K	G	D	N	D	P	L	D	V
UniRef90_S6E342	N	I	F	P	F	H	G	Y	I	Q	N	Y	G	A	L	P	Q	T	W	E	D	P	T	R	E	A	G	L	G	S	I	K	G	D	N	D	P	L	D	C	
UniRef90_H3FIIO	N	I	F	P	H	R	G	A	L	W	N	Y	G	A	L	P	Q	T	W	E	N	N	T	H	V	D	P	R	T	G	A	T	G	D	N	D	P	L	D	V	
UniRef90_L8GQA5	Y																																								
UniRef90_C9SNW6	S	V	W	P	H	K	T	Y	P	F	L	Y	G	S	I	P	Q	T	W	E	S	P	N	F	E	H	D	F	T	G	E	K	G	D	N	D	P	L	D	L	
UniRef90_E3QTQ8	S	V	W	P	H	K	S	Y	P	F	L	Y	G	S	I	P	Q	T	W	E	S	P	N	Y	K	H	G	F	T	G	L	T	G	D	N	D	P	V	D	V	
UniRef90_W7TQS0																																									
UniRef90_M4G081	S	V	W	P	H	K	S	Y	P	F	V	Y	G	S	I	P	Q	T	W	E	S	P	N	F	K	H	N	F	T	G	F	K	G	D	N	D	P	V	D	L	
UniRef90_UPI0003506E75	N	V	F	P	Y	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	S	H	K	D	E	N	T	G	C	C	G	D	N	D	P	L	D	V
UniRef90_M2VXI5	N	V	F	P	Y	H	K	G	Y	I	W	N	Y	G	C	F	P	Q	T	W	E	D	P	S	Q	V	H	M	E	T	G	A	L	G	D	N	D	P	L	D	V
UniRef90_H2AQL6	N	I	F	P	F	N	G	Y	I	H	N	Y	G	A	I	P	Q	T	W	E	D	P	T	E	L	D	T	V	L	G	L	N	G	D	N	D	P	L	D	C	
UniRef90_A7TRB9	N	L	F	P	F	K	G	Y	I	L	H	N	Y	G	A	I	P	Q	T	W	E	D	S	T	E	L	N	G	T	E	S	L	K	G	D	N	D	P	L	D	C
UniRef90_C7ZPB4	S	V	W	P	H	K	S	Y	P	F	H	Y	G	S	I	P	Q	T	W	E	S	P	N	Y	D	H	D	F	T	G	Y	P	G	D	N	D	P	L	D	L	
UniRef90_W0T537	N	I	F	P	Y	H	G	Y	I	H	N	Y	G	A	I	P	Q	T	W	E	Q	P		V	I	E	V	L	P	G	L	K	G	D	N	D	P	L	D	C	
UniRef90_Q6CC75	N	F	Y	P	H	H	G	Y	C	H	N	Y	G	A	I	P	Q	T	W	E	N	P	H	V	K	D	S	L	T	Q	I	E	G	D	N	D	P	L	D	V	
UniRef90_J9NSN3	N	I	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	H	R	K	D	K	S	T	D	C	C	G	D	N	D	P	L	D	V	
UniRef90_A9SSG3																																									
UniRef90_A5DST2	N	L	F	P	H	H	G	Y	I	H	N	Y	G	A	F	P	Q	T	W	E	D	P	T	E	K	H	Y	D		L	F	G	D	N	D	P	L	D	V		
UniRef90_UPI00033383C0	N	L	F	P	Y	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	T	E	K	H	Y	D		L	F	G	D	N	D	P	L	D	V	
UniRef90_W2S2Y0	S	V	W	P	H	K	T	Y	P	F	V	Y	G	S	I	P	Q	T	W	E	N	P	N	V	N	H	S	F	T	E	A	P	G	D	N	D	P	I	D	F	
UniRef90_L2G582	N	V	W	P	H	K	S	Y	P	F	L	Y	G	S	I	P	Q	T	W	E	S	P	N	F	K	H	E	F	T	G	L	N	G	D	N	D	P	V	D	L	
UniRef90_Q5BGD5	S	V	W	P	H	K	S	Y	P	F	L	Y	G	S	I	P	Q	T	W	E	S	P	N	F	K	H	D	F	T	G	K	E	P	G	D	N	D	P	V	D	L
UniRef90_W1QGT4	N	I	Y	P	N	H	G	V	P	H	N	Y	G	A	F	P	Q	T	W	E	S	P	L	E	S	S	S	L	V	N	Q	N	G	D	N	D	P	L	D	V	
UniRef90_G8BXC2	N	I	F	P	Y	H	G	Y	I	H	N	Y	G	A	L	P	Q	T	W	E	N	P	T	K	F	S	A	L	P	G	L	K	G	D	N	D	P	L	D	C	
UniRef90_Q8SR69	N	V	F	P	M	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	N	P	H	E	V	D	R	H	T	G	A	R	G	D	N	D	P	L	D	V	
UniRef90_G1N310	N	I	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	N	H	T	D	N	I	T	G	C	C	G	D	N	D	P	V	D	V	
UniRef90_UPI0001585D1A	N	C	F	P	H	K	G	Y	I	W	N	Y	G	A	F	P	Q	T	W	E	D	P	N	V	I	H	P	E	T	K	A	K	G	D	N	D	P	L	D	V	
UniRef90_UPI000331731E	N	C	F	P	Y	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	N	H	V	D	P	R	T	E	A	K	G	D	N	D	P	L	D	V
UniRef90_I0YY91																																									
UniRef90_UPI00035A1343	N	I	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	N	H	K	D	D	V	T	G	C	C	G	D	N	D	P	L	D	I	
UniRef90_G9N4J5	S	V	W	P	H	K	S	Y	P	F	L	Y	G	S	I	P	Q	T	W	E	N	S	N	I	K	H	N	F	T	G	Y	V	G	D	N	D	P	M	D	I	
UniRef90_Q1K8W4	N	L	F	P	Y	K	G	Y	P	W	N	Y	G	C	L	P	Q	T	W	E	S	P	H	Y	K	E	G	A	E	G	A	R	G	D	N	D	P	I	D	A	
UniRef90_Q9LXC9																																									
UniRef90_F7DH82	N	L	F	P	Y	K	G	Y	I	W	N	Y	G	A	L	P	H	T	W	K	D	S	G	H	N	D	K	P	T	G	C	C	G	D	N	D	P	L	D	C	
UniRef90_L7JT90	N	L	F	P	C	R	G	Y	P	W	N	Y	G	A	I	P	Q	T	W	E	D	P	S	V	K	N	T	N	T	N	C	F	G	D	D	P	L	D	V		
UniRef90_Q93Y52																																									
UniRef90_C1MYT5	F	Y																																							
UniRef90_A0A059LQW6																																									
UniRef90_D8QMR6																																									
UniRef90_P87118	N	S	F	Y	P	Y	N	I	R	W	N	Y	G	L	F	P	Q	T	W	E	D	P	N	H	A	N	P	E	V	G	A	L	G	D	N	D	P	V	D	V	
UniRef90_A0A024UFR3	N	S	F	Y	H	G	F	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	N	V	I	D	S	R	T	G	K	M	K	G	D	N	D	P	L	D	V	
UniRef90_S9Q0J1	N	C	F	P	Y	H	G	Y	I	W	N	Y	G	A	F	P	Q	T	F	E	D	P	N	K	L	D	A	H	T	N	L	K	G	D	N	D	P	L	D	V	
UniRef90_J5J4T5	S	V	W	P	H	K	T	Y	P	F	N	Y	G	S	I	P	Q	T	W	E	D	S	T	V	V	H	N	F	T	G	Y	V	G	D	N	D	P	M	D	I	
UniRef90_L2GMD9	N	V	F	P	S	F	G	Y	P	F	N	Y	G	A	L	P	Q	T	W	E	N	P	M	L	E	D	S	E	C	K	A	R	G	D	N	D	P	V	D	I	
UniRef90_H3GPI8	R	L	Y	H	S	A	S	L	V	N	Y	G	C	L	P	Q	T	W	E	D	P	N	H	V	D	P	N	T	R	H	G	G	D	N	D	P	L	D	V		
UniRef90_D8LKB9	R	E	F	K	K	G	D	I	F	F	N	Y	G	C	F	P	R	T	W	E	D	P	E	H	V	H	P	D	T	K	F	P	G	D	N	D	P	L	D	V	
UniRef90_R0KTG4	N	V	Y	P	F	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	K	D	E	V	C	S	F	T	N	C	K	G	D	N	D	P	L	D	V	
UniRef90_V5HW75	D	I	L	P	P	F	Q	G	Y	P	C	N	Y	G	A	F	P	Q	T	Y	E	S	D	I	V	D	D	K	T	G	I	Q	G	D	D	P	L	D	V		
UniRef90_UPI0003D71067	Y	E																																							
UniRef90_M4C3W8	D	Y	L	Y	G	V	P	F	F	N	Y	G	M	L	P	Q	T	W	E	D	P	G	V	K	D	G	S	G	N		G	G	D	N	D	P	L	D	V		
UniRef90_S7N315	N	I	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	H	R	N	D	R	S	T	D	C	C	G	D	N	D	P	L	D	V	
UniRef90_G0UBQ7	R	F	Y	K	H	G	D	M	M	W	N	Y	G	A	L	P	Q	T	W	E	S	T	E	V	L	S	E	V	G	V	G	D	N	D	P	V	D	A			
UniRef90_Q00GL5	R	L	Y	H	G	P	I	F	W	N	Y	G	C	L	P	Q	T	W	E	D	P	N	V	K	D	D	V	G	G	A	F	G	D	N	D	P	V	D	V		
UniRef90_W7T124																																									
UniRef90_M4BYR4	F	S	K	G	D	I	F	F	N																																

[illegible]

	170	180	190	200
UniRef90_G8BCD6	D E L A S R V N D V N D V V Q L C P G L L E A T K Q W F R D Y K L A D G K P A N			
UniRef90_F7BBR1	D P E A S K F H D I D D V K K Y K P G Y L E A T L N W F R F Y K V P E G K P E N			
UniRef90_Q54PV8	D P I A S Q I N S Q E D I E K K H L P G K L N E V Y T F L R D Y K L P D G K G P N			
UniRef90_UPI0003EDD3D8	D P D A A N Y N G K P H L S D F			
UniRef90_S6E342	D P L A K L N N S L E D V E V H M P G L L S A T R E W F K K Y K I P A G K P A N			
UniRef90_H3FI10	D P V A N D V N S M D D V E R V F G G Q P K A T R E Y L R D Y K I P S G K G E N			
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UniRef90_E1ZQX8	V	L	Y	S	S	V	V	Y	P	H	N	Y	G	F	I	P	R	T	Y	C	P	N	K	H	L	D	Q	D	T	Q	C	Y	G	D	H	D	P	L	D	V		
UniRef90_A0PCY4	P	L				D	I	F	W	N	Y	G	M	I		P	Q	T	W	E	N	P	K	H	E	H	P	E	L	K	A	F	G	D	N	D	P	V	D	I		
UniRef90_G9MUI2					P	R	R	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	N	F	L	H	P	D	T	K	A	K	G	G	D	N	D	P	L	G	I	
UniRef90_K0R1M0				Y	T	Y	G	T	P	F	N	Y	G	A	V	P	Q	T	W	E	D	P	N	F	L	K	D	S	L	G	N	K	G	G	D	N	D	P	L	D	V	
UniRef90_X6N8I3				Y	Q	H	G	D	M	M	W	N	Y	G	A	F	P	Q	T	W	E	D	P	E	Y	I	P	E	D	T	K	F	P	G	G	D	N	D	P	L	D	V
UniRef90_B4F6Y8	N	I	F	P	H	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	K	H	V	I	D	N	D	T	K	C	C	C	G	D	N	D	P	I	D	V
UniRef90_L5M3T4	N	V	F	P	Y	K	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	K	H	N	D	K	H	T	G	C	C	C	G	D	N	D	P	I	D	V	
UniRef90_F1LH74	N	V	F	P	H	H	G	Y	I	W	N	Y	G	A	L	P	Q	T	W	E	D	P	A	H	V	D	K	E	T	N	T	K	G	D	N	D	P	I	D	V		
UniRef90_H5S8J3	V	L	Y	S	S	L	H	Y	P	G	D	Y	G	F	I	P	Q	T	F	C	D																					
UniRef90_A9WJ49	V	L	Y	S	A	V	Q	Y	P	G	D	Y	G	F	M	P	Q	T	Y	Y	D																					
UniRef90_Q11QG6	V	L	F	S	S	V	H	Y	P	A	N	Y	G	F	I	P	R	T	Y	C	D																					
UniRef90_G1TQS3	N	I	L	P	H	K	G	Y	I	R	N	Y	G	V	L	S	D	L	K	D	P	V	E	Q	I	R	A	T	S	C	C	C	G	D	N	D	P	N	D	V		
UniRef90_P21216	V	L	Y	S	S	I	V	Y	P	H	N	Y	G	F	I	P	R	T	L	C	E																					
UniRef90_Q5JIY3	V	L	Y	S	S	P	F	F	Y	P	V	D	Y	G	I	P	Q	T	W	Y	D																					
UniRef90_W8L343	F	M	A	T	P	M	F	Y	P	C	N	Y	G	F	I	P	H	T	L	S	D																					
UniRef90_I3TA08	I	L	Y	S	S	V	V	Y	P	H	N	Y	G	F	I	P	R	T	L	C	E																					
UniRef90_R5YNE8	I	L	Y	S	S	V	H	Y	P	A	N	Y	G	F	I	P	Q	T	Y	C	E																					
UniRef90_A0A023B1K8	V	L	Y	S	S	V	V	Y	P	A	N	Y	G	F	I	P	Q	T	L	G	Q																					
UniRef90_UPI00029A6AD3	V	L	F	S	S	V	M	Y	P	A	N	Y	G	F	I	P	Q	T	Y	C	D																					
UniRef90_Q8GQS5	F	L	F	T	A	M	Y	Y	P	F	N	Y	G	F	I	P	Q	T	L	A	D																					
UniRef90_N9W494	F	L	H	T	P	M	R	Y	P	A	N	Y	G	F	I	P	H	T	L	G	E																					
UniRef90_UPI00036CDF65	F	L	Y	T	A	M	R	Y	P	G	N	Y	G	F	I	P	H	T	L	S	D																					
UniRef90_I3CDJ5	F	M	S	A	A	M	H	Y	P	C	N	Y	G	F	I	P	H	T	L	L	A																					
UniRef90_C7PUV9	V	L	Y	S	S	V	Y	Y	P	A	N	Y	G	F	I	P	K	T	Y	C	D																					
UniRef90_F2NKQ4	V	L	P	S	A	Q	F	Y	P	G	D	Y	G	F	I	P	Q	T	L	A	E																					
UniRef90_K7T4E5	F	L	Y	T	P	M	T	Y	P	G	N	Y	G	F	V	P	H	T	L	S	E																					
UniRef90_G8R7E8	V	L	Y	S	A	M	Y	Y	P	A	N	Y	G	F	I	P	Q	T	F	C	D																					
UniRef90_UPI00047982C6	I	L	S	T	P	M	R	Y	P	C	N	Y	G	Y	V	P	G	T	L																							
UniRef90_UPI00047242AE	V	L	F	S	S	V	N	Y	P	A	N	Y	G	F	I	P	Q	T	Y	C	D																					
UniRef90_UPI00036450DD	I	L	H	T	P	M	R	Y	P	A	N	Y	G	F	V	P	H	T	L	S	P																					
UniRef90_Q00GK9				Y	T	Y	G	D	M	P	F	N	Y	G	C	L	P	Q	T	W	E	D	P	N	H	T	Q	P	D	T	D	C	G	G	D	N	D	P	V	D	V	
UniRef90_U2EWN3	I	L	Y	T	S	T	H	Y	P	A	N	Y	G	F	I	P	R	T	Y	A	D																					
UniRef90_H8KMD0	V	L	F	S	S	V	M	Y	P	A	N	Y	G	F	I	P	Q	T	Y	C	D																					
UniRef90_B2V9D5	F	L	F	T	A	M	Y	Y	P	F	N	Y	G	F	I	P	N	T	L	A	D																					
UniRef90_G7ICM1	V	L	Y	S	S	V	V	Y	P	H	N	Y	G	F	I	P	R	T	L	C	E																					
UniRef90_D5X555	F	M	S	T	A	M	H	Y	P	C	N	Y	G	Y	I	P	Q	T	L	S	E																					
UniRef90_UPI0003B50439	V	L	T	T	P	M	R	Y	P	C	N	Y	G	Y	I	P	H	T	L	S																						
UniRef90_G0J4M0	V	L	F	S	A	V	H	Y	P	A	N	Y	G	F	I	P	Q	T	F	C	E																					
UniRef90_UPI0004658B11	F	I	G	T	G	M	R	Y	P	A	N	Y	G	Y	I	P	Q	T	L	A																						
UniRef90_Q9MAM9	I	L	Y	S	S	V	V	Y	P	H	N	Y	G	F	V	P	R	T	L	C	E																					
UniRef90_Q8TVE2	V	L	Y	S	P	F	H	Y	P	L	D	Y	G	F	I	P	R	T	L	Y	D																					
UniRef90_H8W607	F	M	A	T	P	M	F	Y	P	A	N	Y	G	F	I	P	H	T	L	A	D																					
UniRef90_G0A9G3	F	M	G	T	A	M	H	Y	P	C	N	Y	G	Y	I	P	Q	T	L	S	D																					
UniRef90_Q8UC37	F	L	Y	T	P	M	T	Y	P	G	N	Y	G	F	V	P	H	T	L	S	D																					
UniRef90_Q2NGN0	V	L	F	S	P	F	H	Y	P	A	E	Y	G	F	M	P	K	S	L	W	D																					
UniRef90_G1XVF2	F	L	H	T	A	M	Y	Y	P	A	N	Y	G	F	V	P	H	T	L	S																						
UniRef90_F6D3W8	V	L	Y	S	P	F																																				

UniRef90_U6DUR1	C	E	I	G	S	K	V	C	A	R	G	E	L	I	G	V	K	V	L	G	I	L	A	M	I	D	E	G	E	T	D	W	K	V	I	A	I	N	V	D			
UniRef90_J9HLI5	V	E	L	G	K	N	P	I	S	I	G	D	T	R	T	V	K	V	L	G	S	I	C	L	I	D	Q	G	E	L	D	W	K	I	L	A	V	H	A	D			
UniRef90_E1ZQX8	L	V	L	M	Q	N	E	P	V	I	F	S	F	L	R	C	R	P	I	G	V	M	Q	M	V	D	Q	G	E	Q	D	D	K	I	L	A	V						
UniRef90_A0PCY4	V	E	I	G	S	S	P	V	I	P	R	G	Q	V	V	S	V	K	A	L	G	T	L	A	M	I	D	R	G	E	L	D	W										
UniRef90_G9MUI2	C	E	I	G	E	R	V	G	Y	P	G	E	I	R	Q	V	K	V	L	G	I	L	A	L	L	D	D	G	E	D	T	D	N	K	T	I	A	I	D	I	K		
UniRef90_K0R1M0	M	E	V	G	S	V	R	L	D	M	G	S	I	T	P	C	R	V	L	G	H	L	E	L	L	D	D	E	G	E	M	D	N	K	T	I	C	I	A	L	S		
UniRef90_X6N8I3	I	E	L	G	T	R	Q	L	P	T	G	S	V	T	A	V	K	V	L	G	V	L	G	L	L	D	D	S	G	E	T	D	W	K	V	F	A	I	N	I	K		
UniRef90_B4F6Y8	C	E	I	V	G	F	P	L	L	Y	K	M	A	I	R	C	A	C	V																								
UniRef90_L5M3T4	C	E	I	G	S																																						
UniRef90_F1LH74	V	E	L	G	S	K	I	H	K	R	G	D	V	V	Q	V	K	V	V	G	T	L	A	L	I	D	E	G	E	T	D	W	K	L	V	G	I	D	V	S			
UniRef90_H5S8J3	L	V	M	L	N	E	P	T	F	S	G	C	L	I	V	E	A	R	P	I	G	L	F	R	M	L	D	R	D	G	E	P	D	D	K	V	L	A	V	P	A	R	
UniRef90_A9WJ49	L	V	M	T	N	L	P	T	F	P	G	C	L	I	V	E	A	R	P	I	G	L	F	R	M	L	D	D	K	G	E	P	D	D	K	V	L	A	V	P	Q	Y	
UniRef90_Q11QG6	L	V	I	S	Q	V	E	V	V	P	F	C	I	V	N	A	K	V	I	G	V	M	R	M	L	D	D	G	G	E	K	D	D	K	I	L	A	V	A	A	D		
UniRef90_G1TQS3	C	E	I	G	S	K	V	L	T	H	A	E	V	T	H	V	K	L	L	G	I	L	I	L	D	A	G	E	T	D							C	I	R	V	I		
UniRef90_P21216	L	V	L	M	Q	E	P	V	L	T	G	S	F	L	R	A	R	A	I	G	L	M	P	M	I	D	Q	G	E	K	D	D	K	I	L	A	V	C	A	D			
UniRef90_Q5JIY3	M	V	I	M	R	E	P	V	Y	P	L	T	S	I	V	E	A	R	P	I	G	L	M	K	M	E	D	S	G	D	K	D	W	K	V	L	A	V	P	V	E		
UniRef90_W8L343	L	V	L	T	P	H	P	L	L	S	G	S	V	I	R	S	R	P	V	G	M	L	K	M	T	D	E	A	G	E	D	A	K	I	L	A	V	P	V	I			
UniRef90_I3TA08	L	V	L	M	Q	E	P	V	I	P	G	C	F	L	R	A	R	A	I	G	L	M	P	M	I	D	Q	G	E	A	D	D	K	I	L	A	V	C	A	D			
UniRef90_R5YNE8	L	V	L	G	Q	E	P	I	V	P	L	S	I	M	R	A	R	P	I	G	V	M	K	M	I	D	C	G	E	A	D	D	K	I	L	A	I	H	E	D			
UniRef90_A0A023B1K8	L	V	L	M	Q	E	P	V	Y	P	S	S	I	M	K	V	K	P	I	G	V	M	H	M	V	D	Q	G	A	P	D	E	K	I	L	C	I	V	F	L	D		
UniRef90_UPI00029A6AD3	L	V	L	C	S	V	D	V	Y	P	M	T	L	I	E	A	K	V	V	G	V	M	H	M	V	D	N	G	E	Q	D	D	K	I	L	A	V	A	A	H			
UniRef90_Q8GQS5	L	V	I	S	R	E	P	V	A	P	G	S	V	M	R	C	R	P	I	G	M	L	E	M	R	D	D	E	E	G	I	D	T	K	L	L	A	V	P	H			
UniRef90_N9W494	L	V	V	A	R	S	P	V	V	A	G	A	V	V	K	C	R	P	I	G	V	L	K	M	E	D	D	G	G	G	D	E	K	I	L	C	I	V	P	V	N		
UniRef90_UPI00036CDF65	I	V	A	N	T	R	A	I	I	S	G	A	I	M	S	C	R	V	V	G	V	L	L	M	Q	D	E	A	G	Q	D	A	K	I	L	A	V	P					
UniRef90_I3CDJ5	L	V	I	T	P	V	P	L	I	S	G	S	V	I	R	C	R	P	I	A	L	L	R	M	T	D	E	S	G	Q	D	A	K	V	L	A	V	P	A				
UniRef90_C7PUV9	L	I	L	S	Q	V	D	V	V	P	M	C	L	M	E	A	K	V	I	G	V	M	Q	M	I	D	N	G	E	A	D	D	K	I	L	A	V	A	A	N	E		
UniRef90_F2NKQ4	I	V	L	S	T	Y	P	L	V	P	G	V	L	V	E	V	R	V	I	G	L	I	E	M	E	D	D	E	K	G	P	D	S	K	V	L	A	V	V	J	A	E	S
UniRef90_K7T4E5	L	V	L	N	T	R	P	L	V	P	G	C	V	I	N	C	R	P	I	G	A	L	I	M	E	D	D	G	G	K	D	E	K	I	L	A	V	P					
UniRef90_G8R7E8	L	V	L	S	Q	V	D	I	V	P	L	T	L	V	E	A	K	L	L	G	V	M	R	M	I	D	Q	G	E	A	D	D	K	I	L	A	V	A	N	G			
UniRef90_UPI00047982C6	L	V	I	L	P	L	P	L	V	P	G	S	V	I	R	C	H	P	I	G	M	L	K	M	T	D	E	A	G	A	D	E	K	L	V	V	P	V					
UniRef90_UPI00047242AE	L	V	I	C	S	I	D	V	Q	P	M	C	L	I	D	A	K	V	I	G	V	M	Q	M	I	D	N	N	E	E	D	D	K	I	L	A	V	A					
UniRef90_UPI00036450DD	L	V	I	A	R	S	P	F	V	P	G	S	V	V	R	V	R	P	I	A	V	L	R	L	E	D	E	A	G	G	D	E	K	L	I	T	V	P	D				
UniRef90_Q00GK9	V	E	L	G	E	K	T	M	A	I	G	T	V	A	A	V	K	V	L	G	V	L	G	L	I	D	E	G	E	C	D	W	K	V	I	A	I	R	T	D			
UniRef90_U2EWN3	L	V	M	C	S	E	T	L	D	S	L	V	E	V	D	C	Y	P	I	G	V	I	R	M	I	D	D	G	E	V	D	D	K	I	L	A	I	P	C	Q			
UniRef90_H8KMD0	L	V	L	C	S	E	E	V	I	P	L	S	I	I	E	A	K	V	I	G	V	M	H	M	I	D	D	G	E	R	D	D	K	I	L	A	V	A	N	N			
UniRef90_B2V9D5	L	V	I	S	R	E	P	V	V	P	G	S	V	I	R	C	R	P	I	G	M	L	E	M	E	D	E	E	G	I	D	T	K	I	L	A	V	P	V				
UniRef90_G7ICM1	L	V	I	M	Q	E	P	V	V	P	G	C	F	L	R	A	K	A	I	G	L	M	P	M	I	D	Q	G	E	K	D	D	K	I	L	A	V	C	A	D			
UniRef90_D5X555	L	V	V	T	T	I	P	L	V	H	G	C	V	V	R	C	R	P	I	G	M	L	K	M	T	D	E	A	G	V	D	A	K	L	I	A	V	P	V				
UniRef90_UPI0003B50439	L	V	I	M	P	M	P	L	I	P	G	S	V	I	R	C	R	T	V	G	M	L	K	M	T	D	E	A	G	E	D	T	K	I	L	A	V	P	V				
UniRef90_G0J4M0	L	I	I	S	Q	I	D	I	P	S	M	T	L	V	K	A	K	T	V	G	V	M	R	M	I	D	D	G	E	A	D	D	K	I	L	A	V	A	A	D			
UniRef90_UPI0004658B11	L	V	I	T	P	F	P	L	L	A	G	S	V	V	R	A	R	A	V	G	M	L	N	M	T	D	E	S	G	V	D	A	K	L	V	A	V	A	N				
UniRef90_Q9MAM9	L	V	I	M	Q	E	P	V	L	P	G	C	F	L	R	A	R	A	I	G	L	M	P	M	I	D	Q	G	E	K	D	D	K	I	L	A	V	C	V	D			
UniRef90_Q8TVE2	L	V	I	M	Q	D	P	T	F	P	G	C	V	I	E	A	R	P	I	G	L	M	K	M	L	D	D	S	D	Q	D	D	K	V	L	A	V	P	T	E			
UniRef90_H8W607	L	V	V	T	P	Y	P	V	Q	A	G	S	V	I	R	C	R	P	V	G	V	L	N	M	E	D	E	A	G	Q	D	A	K	L	V	A	V	P	H				
UniRef90_G0A9G3	L	V	I	T	P	F	P	L	V	P	G	V	V	V	R	C	R	P	I	G	V	L	K	M	S	D	E	A	G	Q	D	A	K	L	L	A	V	P	V				
UniRef90_Q8UC37	L	V	I	C	N	T	R	P	L	V	P	G	C	V	I	N	V																										

	170	180	190	200
UniRef90_U6DUR1	D P D A A N Y N D I L N D V K R L K P G Y L E A T V D W F R R Y K V P D G K P E N			
UniRef90_J9HLI5	D A K K Q N E F K S D F E D D Y S R L N P G H R I K A E I F R F F F E D Y K K N E			
UniRef90_E1ZQX8				
UniRef90_A0PCY4	D P L A S E F N D I E D I E V H M P G L F R A T K E W F R I Y K M P D G K P A N			
UniRef90_G9MUI2	D P D A S S I T N M G D L E R V K P G T I E R L K D W L K R Y K T A E G K G E N			
UniRef90_K0R1M0	D P L A N I M H D V H D I D K H M P G G I D A I R D W L R I Y K V C T G A V E N			
UniRef90_X6N8I3				
UniRef90_B4F6Y8				
UniRef90_L5M3T4				
UniRef90_F1LH74	D P A A A G E I N S T E D V I K K H F P G L L K R A T V D W F R R Y K V P D G K P E N			
UniRef90_H5S8J3	D P I F A G Y I H A L G D I P Q K H F P G L L K R A T V D W F R R Y K V P D G K P E N			
UniRef90_A9WJ49	D P F F A D Y H N Y T A L P A H Y L K R E V E H F F F T V Y K K D L E G S R V E			
UniRef90_Q11QG6	D I S V K H Y N D D V I S D L P P H T I L E V Q R F F E D Y K K L E N K K V V			
UniRef90_G1TQS3	D P E A S R F N D I D D V I S D L P P H T I L E V Q R F F E D Y K K L E N K K V V			
UniRef90_P21216	D P E A S R F N D I D D V I S D L P P H T I L E V Q R F F E D Y K K L E N K K V V			
UniRef90_Q5J1Y3	D P E A S R F N D I D D V I S D L P P H T I L E V Q R F F E D Y K K L E N K K V V			
UniRef90_W8L343	S K L Y P E Y D R I Q G P D D V S P K A F L D E I A H F F F Q R Y K E L Q G K T T T			
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UniRef90_W0BCH7					N I P P G K N P P E
UniRef90_V4RSA5				M N I W H D I D P K R I T P	
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UniRef90_K4KXH5				M N I W H D I N P D R I S P T	
UniRef90_UPI00040F4C41				M N L W H D V P L G D K K P	
UniRef90_R7IQB4					I A I G N N P P E
UniRef90_K2BYC9					N P W H G V S I G D Q H P
UniRef90_C6AYW1				M D V S K I S P G K D V P	
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UniRef90_A9H4G5					I G P G K N A P K
UniRef90_I3UBN1					I S V I G P N A P W
UniRef90_A3DLS2					I A V G V N P P Y
UniRef90_E8RS08					I S S G E N P P K
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UniRef90_UPI0003B666EB				M N L W H D L G L G E G A P	
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UniRef90_I2JW85				N D V P A G K N L P	
UniRef90_A0A024IK35					G N K L P
UniRef90_F7RYI8				M N L W H D V A P H R V R P E	
UniRef90_D9SFG8					V P S G K D L P N
UniRef90_R5S4I2					L P I G R T S P
UniRef90_Y0KJM7				V G P G H N V P	
UniRef90_D7G7D1					I S P G A N P P E
UniRef90_W6MAT6				N P W H D I A P G Y A P P E	
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UniRef90_D0L085					N F W H D I E T G T D I P
UniRef90_UPI00036FE632				K V S P G K N I P	
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UniRef90_C5CYM6					I P V I G K N P P R
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UniRef90_UPI000350BC00					I P T G D N P P
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UniRef90_F7QK84					G S K V P
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UniRef90_UPI0003787CA3					I V E L A G K V P Q
UniRef90_UPI00035FF3B4					I P P G K N I P D
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UniRef90_M0UXV9					
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UniRef90_R5A5X6					
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UniRef90_UPI00026CCAB6	D L N V V I	E I P K G S G K K Y	E P I K Y E V D K E S G L L K L F V D R	
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UniRef90_UPI00046583E3	D D I N V I	E I P M N G	E P I K Y E V D K E S G A I F V D R	
UniRef90_C8PIJ2	D K I N A V I	E I P Y G S N I K Y E I D	E P I K Y E V D K A S G A L C V D R	
UniRef90_E8R2T7	E E F S A L I	E I P M G S S V K Y	E P I K Y E V D K E T G L L K M D R	
UniRef90_Q21DB7	D V N V I V	E V P V G G	E P I K Y E M D K A A G T L V V D R	
UniRef90_A0A024KIL6	D L N V I V	E V P V G G	E P I K Y E M D K A A G T L F V D R	
UniRef90_W0BCH7	N E I N V I	E I P M	R G E P V K Y E V D K E T G A L F V D R	
UniRef90_V4RSA5	E I N V I	E V P V G G	E P I K Y E M D K A A G T L F V D R	
UniRef90_S6A552	D I Y V V V	E I P L G S N I K Y	E P I K Y E V D K E S G M I F V D R	
UniRef90_R7G5Q2	D E F I A V I	E I P K G S K Q K Y	E L D K K T G L L I L D R	
UniRef90_Q49949	Q I F N V V I	E I P K G S K V K Y	E L D K K T G L I K V D R	
UniRef90_K4KXH5	D I N V I	E I P L N G	D P I K Y E V D K D S G A I F V D R	
UniRef90_UPI00040F4C41	T F D V L I	E I P K G S R N K Y E Y D F	E L D K K I R Y D R	
UniRef90_R7IQB4	E F V I A V V	E I P K G S R K K Y	E L D K E T G L I V L D R	
UniRef90_K2BYC9	E I N V I	E I P R G S L N K Y E I D K E T G L	I A L D R	
UniRef90_C6AYW1	D V N V I V	E V P V G G H	P I K Y E M D K E A G T L V V D R	
UniRef90_Q3ATF8	R V V N A V I	E I S K G S R I K Y	E L D K K T G M L M L V D R	
UniRef90_A9H4G5	F D I N V V I	E I Q G S S V K Y E I D K D S	G A I V F V D R	
UniRef90_I3UBN1	E E F N V V I	E I P M N A	D P V K Y E V D K D T G A V F V D R	
UniRef90_A3DSL2	E V H V V I	E I P M G S S V K Y E I D K E T G L	V F V D R	
UniRef90_E8RS08	D I H A V I	E I P Q G G M	P V K Y E M D K D S G A L F V D R	
UniRef90_Q9AC20	D L N A I	E I P Q G G	E P V K Y E I D K E S G A L M V D R	
UniRef90_UPI0003B666EB	D V N V V I	E I P L G G	E P I K Y E I D K D S G A M F V D R	
UniRef90_D9QLY3	D I N V V I	E I P Q G G	L P V K Y E M D K A S G A L F V D R	
UniRef90_K2F0G1	Q E F N V I	E I C P R G S K N K Y E I D K E T G L	I K L D R	
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UniRef90_I2JW85	D A F N V I	E I P R Y S Q A K F E I S K E L P W N P I T Q D K K G K L R Y V N		
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UniRef90_F7RYI8	H E C N V I	E I P K A N A	H A D P V K Y E V D K D S G A L F V D R	
UniRef90_D9SFG8	D F L A V I	E I E K G S K N K Y	E M D K E T G A L R L D R	
UniRef90_R5S412	D F N V I	E I P M	Q G D P V K Y E V D K E S G A I F V D R	
UniRef90_Y0KJM7	Q V C N C F I	E I V S R E S R M K Y	H A D P V K Y E V D K K T G A L F V D R	
UniRef90_D7G7D1	E E F N V I	E I P A	E P V K Y E V D K E T G L I K V D R	
UniRef90_W6MAT6	D I N V I V	E V P V G G	E P V K Y E M D K D S G T I V V D R	
UniRef90_UPI00037851AF	Q V T A I I	E V P S G S R N K Y	E L D K D T G H F K L D R	
UniRef90_D0L085	D I F V V I	E I P A	Q G A P I K Y E V D K E S G A L L V D R	
UniRef90_UPI00036FE632	D D F N V V I	E I S A N A A	E P I K Y E F D K K H N M M K L D R	
UniRef90_V6ATQ6	E I I N V V V	E I P K G S Q N K Y E Y D	D P I K Y E V D K E S G A I F V D R	
UniRef90_C5CYM6	D A F N V V I	E I P M N A	T P V K Y E V D K K S G A L F V D R	
UniRef90_G4QFC8	D E V N V I	E I P A Y S	E P V K Y E V D K D M A L V V D R	
UniRef90_UPI000478B642	D I N A I	E I P Y G G V	E P V K Y E V D K D S G A I F V D R	
UniRef90_A6W0A1	D I N V I	E I P A Q A N	E P V K Y E V D K K T G L I K V D R	
UniRef90_Q47GJ0	D D F N V I	E I S A H S	E P V K Y E V D K D S G A I F V D R	
UniRef90_UPI0003817758	D V N V V I	E I P G G A N G G A	E P V K Y E V D K D S G A I F V D R	
UniRef90_H5XDR9	P I F S I V V	E I T K G S K V K Y	E L D K K T G L I K V D R	
UniRef90_M8XQG1	T F D V L V	E I P R G S R N K Y E Y D F D	E P I K Y E L H K E S G T L W V D R	
UniRef90_UPI00037880E9	D I N V I	E V P V G G	E P I K Y E V D K E S G A M Y V D R	
UniRef90_G8PGK5	D I N V I	E V P V G G	E P I K Y E V D K K S G A V V D R	
UniRef90_E7A9V8	D A I N A I	E I V Y G S K V K Y	E L D K K T G L I K V D R	
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UniRef90_W0SCA4	D F N V V I	E I S M H S	E P I K Y E V D K E S G A I F V D R	
UniRef90_L9PSA0	N D F N V I	E I P M N A	D P I K Y E V D K E S G A I F V D R	
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UniRef90_F0RD79	F D V L I	E I P K G S R		

[illegible]

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UniRef90_K7QWL9	L	I	L	S	T	Y	P	L	L	P	G	V	V	V	E	V	R	P	I	V		G	L	L	L	M	E	D	E	K	G	Q	D	E	K	I	L	V	C	V	A	E	
UniRef90_UPI00026CCAB6	L	V	I	A	R	S	P	F	I	P	G	C	V	V	R	A	R	P	I	V		A	V	L	N	L	E	D	E	K	G	Q	D	E	K	I	L	V	C	V	A	D	
UniRef90_W8EZY7	L	V	L	C	S	V	D	I	V	P	M	C	L	V	D	A	K	V	I		G	A	V	M	Q	M	I	D	Q	A	E	E	D	D	K	I	L	V	A	V	A	N	
UniRef90_UPI00046583E3	L	V	V	F	N	E	Y	P	L	A	G	S	V	I	R	C	R	P	I		G	V	L	K	M	T	D	E	S	G	E	D	E	K	I	L	V	A	V	P	I	V	
UniRef90_C8PIU2	L	V	L	N	E	Y	P	L	A	G	S	V	I	P	C	R	L	I		G	V	L	M	M	E	D	E	S	G	M	D	E	K	I	L	V	A	V	P	I	V		
UniRef90_E8R2T2	L	V	F	C	Q	E	A	V	V	P	M	T	L	V	R	A	R	V	I		G	L	M	T	M	I	D	D	M	G	K	R	D	H	K	I	L	V	A	E	D		
UniRef90_Q21DB7	L	V	A	N	T	R	G	I	V	P	G	A	I	I	S	V	R	P	I	V		G	V	L	L	M	E	D	E	A	G	G	D	E	K	I	L	V	A	V	P	S	
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UniRef90_W0BCH7	L	V	V	T	P	V	P	L	I	S	G	A	V	I	R	C	R	A	I		G	M	L	K	M	T	D	E	S	G	L	D	E	A	K	V	I	L	A	V	P	V	
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UniRef90_S6A552	V	L	L	S	Y	D	S	V	A	P	G	S	V	V	R	A	R	P	I	V		G	L	L	E	M	E	D	E	N	G	P	D	D	E	K	I	L	V	P	H		
UniRef90_R7G5Q2	L	V	L	C	S	E	S	L	L	P	L	S	L	V	K	V	I	P	I		G	V	I	T	M	N	D	N	G	K	N	D	E	K	I	L	V	A	V	P	I		
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UniRef90_K4KXH5	L	V	I	M	P	L	A	L	I	P	G	S	V	V	R	C	R	P	I		G	V	L	K	M	T	D	E	S	G	E	D	E	K	I	L	V	A	V	P	H		
UniRef90_UPI00040F4C41	L	V	L	V	T	E	P	T	F	P	G	C	V	M	E	V	K	P	I		G	V	F	H	M	A	D	E	K	G	P	D	E	K	V	I	C	V	P	V	S		
UniRef90_R7IQB4	L	V	L	C	S	E	P	L	E	P	L	T	L	V	K	C	Y	P	I		G	V	M	K	M	L	D	N	G	M	G	D	E	K	I	L	V	A	V	P	I		
UniRef90_K2BYC9	I	V	M	T	T	R	P	L	H	P	G	L	V	I	R	V	R	P	I	V		G	L	M	K	M	I	D	S	G	E	S	D	D	E	K	I	L	V	P	V	D	
UniRef90_C6AYW1	L	I	A	S	T	R	P	L	V	P	G	C	V	I	N	V	R	P	I		G	V	L	K	M	E	D	N	S	G	K	D	E	K	I	L	V	A	V	P	D	S	
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UniRef90_A3DLS2	L	V	L	G	Y	E	S	L	Y	P	G	V	I	I	K	A	R	P	I		G	V	L	E	T	E	D	E	K	G	R	D	A	K	I	L	V	A	V	P	V	I	
UniRef90_E8RS08	L	V	V	G	P	T	P	V	V	P	G	A	V	I	R	S	R	P	I		G	V	L	L	M	E	D	E	A	G	K	D	E	K	I	L	V	A	V	P	V	I	
UniRef90_Q9AC20	M	V	V	G	P	T	P	V	V	P	G	A	I	I	R	C	R	P	I		G	T	L	M	M	V	D	E	A	G	S	D	E	K	I	L	V	A	V	P	V	I	
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UniRef90_D9QLY3	I	V	L	N	T	P	T	P	V	V	P	G	C	I	L	R	S	R	P	I		G	V	L	K	M	V	D	E	A	G	G	D	E	K	I	L	V	A	V	P	V	I
UniRef90_K2F0G1	V	V	L	T	T	Y	P	L	Y	P	G	L	L	L	K	V	R	P	I	V		A	I	M	H	M	I	D	C	G	D	S	D	D	K	I	L	V	A	V	P	A	K
UniRef90_Q0KDM7	L	V	L	S	P	F	P	L	I	A	G	A	V	V	R	C	R	A	L	I		G	M	L	K	M	T	D	E	S	G	V	D	A	K	L	V	A	V	P	L	K	
UniRef90_I2JW85	L	E	I	L	G	S	T	V	G	G	L	G	E	I	K	T	V	K	V	L		G	A	L	A	M	I	D	E	S	G	E	L	D	W	K	I	L	T	I	N	L	K
UniRef90_A0A024IK35	L	V	I	T	P	V	P	L	H	P	G	V	V	I	T	C	R	A	L	I		G	M	L	R	M	E	D	E	A	G	E	D	A	K	L	V	A	V	P	V	I	
UniRef90_F7RYI8	L	V	P	T	P	H	P	L	Q	P	G	C	V	I	R	C	R	P	I	V		G	V	L	K	M	S	D	E	S	G	E	D	A	K	I	L	V	A	V	P	V	I
UniRef90_D9SFG8	L	V	I	T	P	F	P	I	V	H	G	A	I	I	P	C	R	P	I	V		G	V	L	M	M	S	D	E	S	G	G	D	A	K	I	L	V	A	V	P	T	I
UniRef90_R5S4I2	L	V	L	C	S	E	C	I	R	P	L	S	L	V	E	C	Y	P	I		G	V	I	T	M	E	D	G	S	G	L	D	E	K	I	L	V	A	V	P	F	Q	
UniRef90_Y0KJM7	L	V	I	T	P	V	P	L	L	P	G	V	V	V	R	C	R	A	L	I		G	M	L	N	M	T	D	E	A	G	G	D	A	K	L	V	A	V	P	V	I	
UniRef90_D7G7D1	L	V	L	G	T	S	A	L	Q	P	G	S	V	I	D	V	R	P	L		G	F	M	C	M	E	D	E	K	G	L	D	E	K	V	L	A	V	P	D	K		
UniRef90_W6MAT6	L	V	V	A	P	L	A	V	I	S	G	C	V	V	R	C	R	A	L	I		G	V	L	H	M	T	D	E	D	G	G	D	P	K	L	V	A	V	P	I	K	
UniRef90_UPI00037851AF	M	C	L	G	Q	T	T	L	I	P	G	C	L	I	R	A	R	P	I		G	V	L	L	M	E	D	E	S	G	M	D	E	K	I	L	A	V	P	H	I		
UniRef90_UPI0004788BE8	L	V	K	I	N	E	P	T	F	P	G	C	Q	I	N	A	R	P	I		G	V	L	M	M	L	D	K	G	E	P	D	D	K	I	L	V	A	V	P	A	D	H
UniRef90_D0L085	L	V	V	T	P	T	P	L	M	P	G	S	V	I	R	A	R	P	I	V		G	M	L	K	M	T	D	E	S	G	V	D	A	K	I	L	V	A	V	P	H	I
UniRef90_UPI00036FE632	L	V	A	T	P	F	P	L	P	P	G	V	V	V	R	C	R	A	L	I		G	V	L	K	M	E	D	D	G	G	V	D	A	K	I	L	V	A	V	P	V	I
UniRef90_V6ATQ6	L	V	L	V	T	N	P	T	F	P	G	I	L	I	E	C	R	P	I		G	L	L	R	L	K	D	Q	A	G	K	S	D	D	K	I	L	V	C	V	S	T	T
UniRef90_C5CYM6	L	V	I	A	P	Y	P	L	L	P	G	V	V	V	R	C	R	P	I		G	I	L	M	M	E	D	E	A	G	V	D	G	K	V	L	V	A	V	P	T	I	
UniRef90_G4QFC8	L	V	M	S	P	H	P	L	I	A	G	S	V	I	K	C	R	P	I	V		G	V	L	K	M	T	D	E	S													

	170	180	190	200
UniRef90_A8PP39	D K L S S L Y H T I	K T W K D L P Q Q L L Q S I I	Q H F F F E H Y K D L E	G K W V Q
UniRef90_K7QWL9	D Q R L D H Y N N	Q D E R G D V P E E G V K Q E I	Q H F F F E T Y K D L E	A K K G K
UniRef90_UPI00026CCAB6	S T F P Y Y S N V	N E R G D M P E I V F E Q I	E H F F F E T Y K D L E	K K
UniRef90_W8EZY7	D V S V N F N	D I A D L P P E H M L L E M	Q R F F F E D Y K A L L E	H
UniRef90_UPI00046583E3	D K V T P I Y S Q V K E A Q A D L	P E I T L N Q I I	K R F F F E T Y K D L E	K G K W V
UniRef90_C8PIU2	S K I D P R Y E G I K G V S A D L	P E K A T L K Q I	S K N F F E T Y K D L E	P N
UniRef90_E8R2T2	S K I D P E F N G F H E A N E L	P P H R L Q M L	R R F F F E Q D Y K Y L E	G K T V E
UniRef90_Q21DB7	S K L T Q R Y D R I Q N Y S D M	P D I T L Q Q I	K H F F F E T Y K D L E	P N
UniRef90_A0A024KIL6	S K L T K V Y D V K T A S D L	P T I T L E R V	Q H F F F E T Y K D L E	P G K W A
UniRef90_W0BCH7	N K L S K M Y D G V K T Y R D L	P Q P L L S I	N H F F F E T Y K D L E	E G
UniRef90_V4RSA5	T K L T R R Y E R I A T Y E D L	P E I T L H	I N H F F F E T Y K D L E	G G K W V
UniRef90_S6A552	E K I D N R F A K I K D I N D V	D D V V K E R I K	H H F F F E T Y K D L E	K G K W V
UniRef90_R7G5Q2	F T D P N Y N Y S Y K T I A D L	P K H V F D E M Q	K H F F F S V Y K Q L E	G
UniRef90_Q49949	D P E Y K D Y A D I N E L	P P H R L A E I	R R F F F E D Y K K N E	N
UniRef90_K4KXH5	D K I T P L Y A N V E S V R N D L	P E I T L A N E I	A H F F F E T Y K D L E	K G K W V
UniRef90_UPI00040F4C41	D P I W N K L N N L D E L N	P P H L L K E I	E H F F F Q V Y K D L E	N
UniRef90_R7IQB4	Y N D P M Y N S Y T D L N Q L	P T H V F D E L	K H F F F A V Y K D L E	G K E T K
UniRef90_K2BYC9	D P R W A E V K T I V D D V N K H	T L K T M	K H F F F E T Y K D L E	N
UniRef90_C6AYW1	P K L I T L R Y E K I Q D Y T D L	P E I T L K Q I	E H F F F E T Y K D L E	G K W V K
UniRef90_Q3ATF8	D V S M S N	I K T D Y T D L P P Y F I S E L	E H F F F E T Y K D L E	K
UniRef90_A9H4G5	D K V H P Y Y S K V E K I E D L	P E I V I Q E I	K H F F F E T Y K D L E	K G K W V
UniRef90_I3UBN1	D K L Y P P Y S N L K A H T D L	P E Q D L Q R I	Q H F F F E T Y K D L E	K G K W V
UniRef90_A3DSL2	E K I D P R F E N I K D I N D L	P E N F R D R I	A H F F F E T Y K D L E	K G K W V
UniRef90_E8RS08	D K L H P Y Y T N V S S Y R Q M	P A I L I E Q I	T H F F F A H Y K D L E	K N K E T
UniRef90_Q9AC20	D K L H P F Y T G V T S W R D L	P T I L T E Q I	A H F F F Q H Y K D L E	K G K S T
UniRef90_UPI0003B666EB	A K L T R L Y D K V H E K E D L	P D V I L E R I	A H F F F E T Y K D L E	P N
UniRef90_D9QLY3	D K L N P Y Y T D I E A S Y R Q L	P T I L V E Q I	E H F F F S R Y K D L E	K G K S V
UniRef90_K2F0G1	D P R W D D I S D L E D I N K H	T I K E M Q	E H F F F E T Y K T I E	E
UniRef90_Q0KDM7	D K L S P A T A Y M K G L S D V	P Q N Q L D Q I	K H F F F E T Y K A L E	A G K W V
UniRef90_I2JW85	D P M A K A L T D I I D V S T V M	P P S Q L N A I	R R W F F K D Y K R P	A G K K E N
UniRef90_A0A024IK35	D K I L S I Y T Q W Q K P E D L	N P M R L K T I	Q H F F F E T Y K D L E	G K W V K
UniRef90_F7RY18	S K L S K E Y D H I E K D V N D L	P E L L R A Q I	T H F F F E T Y K D L E	K G K W V
UniRef90_D9SFG8	D K L T P L Y H E I K T Y E D L	P K I T L E Q I	K H F F F E T Y K A L E	P G K W V
UniRef90_R5S412	E K I D P T Y N T Y Q D I S E L	P D H V A S E I	K H F F F R V Y K S L E	G
UniRef90_Y0KJM7	E K V C G L T A Y Q K T Y K D V	S P W R L E M I	S H F F F E T Y K D L E	K G K W V
UniRef90_D7G7D1	D P R F N H M T S L R D V I	P E H V L R E I	T N F F F E T Y K Q L E	K S K W V
UniRef90_W6MAT6	T E C A L Y D Q I D S V D Q M	P K S Q L N Q I	A H F F F E T Y K D L E	S G
UniRef90_UPI00037851AF	S K L T P F Y D D I Q N Y T Q M	N Q A M L A R I	T H F F F E T Y K D L E	P R
UniRef90_UPI0004788BE8	S K L D P Y Y S D V F D I A D L	N S P H Y L K E V	E H F F F Q Y K D L E	G K R M E
UniRef90_D0L085	G K L S P L Y D E I K E A T D L	P A L L L A Q I	K H F F F E T Y K A L E	S G
UniRef90_UPI00036FE632	E K L C P M Y K D I K Q L E D L	P Q L L L R D Q I	K H F F F E T Y K D L E	K G K W V
UniRef90_V6ATQ6	D P R Y L N T K D V S D I E S	H H L K E M	A H F F F Q V Y K D L E	K G K V E
UniRef90_C5CYM6	D K V L P I Y S H W K S V D V N	P M R L K A I	S H F F F E T Y K D L E	G K W V K
UniRef90_G4QFC8	S K L T K I Y D D V H N I E D V	P G L L K N Q I	E H F F F A H Y K D L E	P N
UniRef90_UPI000478B642	D K L H P F Y T G V R S F E D L	P M I M C	Q I A H F F F Q H Y K D L E	K G
UniRef90_A6W0A1	E K L S K E Y G H I K D V Q I D	P Q L L R D Q I	E H F F F E T Y K T L E	K G K W V
UniRef90_Q47GJ0	D K L T P L Y K D A K S I E D M	P E L L R K Q I	S H F F F E T Y K D L E	P G
UniRef90_UPI0003817758	E K I D P F Q A D V L S I E D V	P Q I E R D R I	R H F F F E T Y K A L E	K G K W V
UniRef90_M5XDR9	D P A Y N H Y T D I K E L	P P H R L C	R R F F F E T Y K K N E	N
UniRef90_H8XQG1	D P I W N K L N D L S D I N	P P H L L K E I	E H F F F E T Y K D L E	N K K V D
UniRef90_UPI00037880E9	T K L T K R Y E N V H S Y E D L	P K I T L D Q I	V H F F F E T Y K D L E	P N
UniRef90_G8PGK5	S K L T R R Y E S V H T I E D L	P E I T L K Q I	E H F F F E T Y K D L E	P N
UniRef90_E7A9V8	E K I D P R Y A K I Q S L E D L	P P I T L E K I	K H F F F E T Y K D L E	K D K W V
UniRef90_UPI0				

UniRef90_A8PP39 V E G W V G P E E A K M E M V T S I E R Y K K T S 230 240
UniRef90_K7QWL9 K W V K V T G W R G R E E A L A E I R A S M A R Y
UniRef90_UPI00026CCAB6 K W V R V G K W G D R E E A R K V I E A I D R Y E Q A K K A G D P A P G E V
UniRef90_W8EZY7 K H V S V E R F M G R E D A Y R I I E D S V K L Y E E T F P K G N P K D E E
UniRef90_UPI00046583E3 K I D G W A N A E A R Q E I L D S V E L Y K K
UniRef90_C8PIU2 K W V K V K D F A S A A E A K I L D K A I K A Y K
UniRef90_E8R2T2 V D E F Q P T A A A L P I I E D A L Q R Y S R K R R G
UniRef90_Q21DB7 K W V K I T R W G D A D E A R R L I I E G I E R
UniRef90_A0A024KIL6 K I R G I G E A E D A A R R V V L E S I E R A K A
UniRef90_W0BCH7 K W V R V D G W D A A E A A H E E I L S S V A R Y Q Q H
UniRef90_V4RSA5 K V V R R W A S V E E A K Q L I V D S I E R A K K
UniRef90_S6A552 K V R N W K G R E A A L E A I Q K A I D R Y N K
UniRef90_R7G5Q2 K N T A V N T V C G R E N A I A I I E K S L M S Y K D
UniRef90_O49949 K E V A V N D F L P S D K A F E A V Q H S Q D L Y A D Y I
UniRef90_K4KXH5 K I E G W E G P D A A K K E L E E A K A R Y D A
UniRef90_UPI00040F4C41 K K V D V G W G D V T E A R A I I D E C V D R F E A L T D K P E E
UniRef90_R7IQB4 V D E F G G P Q E A T R I I E N C I S N Y N L K F G Q R S P
UniRef90_K2BYC9 K E V L I N G F E G R E Q A S A A V L R S I D M Y K E K Y A K
UniRef90_C6AYW1 I F G W G D S K E A G E L I L E A V E R A K K K
UniRef90_Q3ATF8 K T V L V E D F Q D A E E A Y N S I Q H A I D N Y N E V F
UniRef90_A9H4G5 K V A G W A G R E E A G E V I K A S L A A A E K
UniRef90_I3UBN1 K V K G W E G I D A A H T E I T S S I E R F Q K
UniRef90_A3DLS2 K V I G W K S R E D A L N R I R D A I E R Y K R
UniRef90_E8RS08 R V I G W G D P E Q A A Q L I R E G Q E R L A K K I G
UniRef90_Q9AC20 K I S G W A D P D E T A E I I R T A I K R Y N E
UniRef90_UPI0003B666EB K W V K V D C W D G R E K A E E L I A Q S I A R Y A E
UniRef90_D9QLY3 T V K G W G D A G E A K E L I A I G M R A H E
UniRef90_K2F0G1 K I V S V G G F E G K E A I E A V M K S I E L Y K S K F
UniRef90_Q0KDM7 K V E G W A G I E E A H K E I T D G V A N Y K K
UniRef90_I2JW85 T F A F
UniRef90_A0A024IK35 V L G W A D K A A A H K E I L D G I A N Y E K A Q K K
UniRef90_F7RYI8 K V E G W G D I K E A K E E I E S S Y A R A Q E K K
UniRef90_D9SFG8 K I R G W E G V D A A H N E I L N G L A A Y K K E V A G K
UniRef90_R5S4I2 K E T V V S D V L G R D E A V K I I I K C Q N A Y I E K Y C
UniRef90_Y0KJM7 K I E G W E G I E E A H K E I M D G V A R Y N
UniRef90_D7G7D1 K V G G W K G T T D T H E L I D K T H Q K F K K R I K G K
UniRef90_W6MAT6 K W V R I D G W G S A E E A K A E I L Q C V E R Y N D H
UniRef90_UPI00037851AF K W V K I E G W A D A D R A R E L I V E A L E R E K A T K A A K A
UniRef90_UPI0004788BE8 I M G W R K S Q E A M V I V T E S I V R Y A D K Y G
UniRef90_D0L085 K W V R V D G W A D K A A C A E I E A S I A R Y H Q K
UniRef90_UPI00036FE632 K I Q G W E G I E A T E E L E S G I K N F K
UniRef90_V6ATQ6 V L G W D S A D K A K S V I M D A V K N Y R Q I L R K
UniRef90_C5CYM6 V L G W E G I D A A K K E I V D G I A A Y K K
UniRef90_G4QFC8 K W V K I E G W A D I D A A K A E I S S S V E R Y N K
UniRef90_UPI000478B642 K W V N M G R W H G V A E A E Q L V I D A I E A R G K E
UniRef90_A6W0A1 K V E G W A N A E E A K A I V E G I E A Y N A
UniRef90_Q47GJ0 K W V K V N G W E D I D A A R K E V M E G V Q R Y N D
UniRef90_UPI0003817758 K V S G W A D K A A A E E I A R G V A A
UniRef90_M5XDR9 K E V A V D Q F L P S H N A A E A I Q Y S M D L Y A E Y I M
UniRef90_H8XQG1 V Q G W G D V K E A Q E I L K Q C V D R F N A
UniRef90_UPI00037880E9 K W V E V T G W E G A A E A E I I E R S I
UniRef90_G8PGK5 K W V K I T G H G A E E A K R L I V E S I E R Y G K
UniRef90_E7A9V8 K V K G F G N K A Q A Q E V L E K A I
UniRef90_UPI000350BC00 K D V A V D D F L P A A A A R E A I Q Y S M D L Y G Q Y I M Q
UniRef90_UPI00036A7F5E K W V K V S G W A D K D A A C K V I E E S I A A A K K
UniRef90_F8EW69 K I E G W G S A Q D A R Q I I I E A I E A R A Q K K
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UniRef90_L9PS40 K I D G W Y G P D E A K E E I L S G V A A Y K K
UniRef90_E6X5B3 V G G W G D A K A I E I Y E Q C V Q R Y D E S D H K K K
UniRef90_A2BL57 K W V K V R E W G P E E A K R K I A E A I E R F K K
UniRef90_F0RD79 V G G W G D A K E A Y D I L N K C I E R Y D E
UniRef90_F7QK84 K M I G W G D A A D A R Q L I V E A I A R A R K
UniRef90_G0EC71 K W V K V K E W R G A D E A R K K I M E A I R R Y R E
UniRef90_UPI0002DBDC10 K V K G W E G V E S A A K E L M D G I A N Y K K
UniRef90_UPI0003787CA3 G L G W G D A E E A K Q M I K D A I E A R A K K
UniRef90_UPI00035FF3B4 T V S G W E G P E R A R E L I L K A I A A Y K
UniRef90_R5Q3B0 V E G F L D Q H E A F S V I A A A V K S Y E E
UniRef90_F3L323 K V D G W G T A Q D A R D A I L K A V A K F D E
UniRef90_F3LEI4 K V E G W A D A A A K K E I L D S V E N F N K
UniRef90_K2BNT6 K V V G W A G P E R A K S E I K S S L A R Y Q K L
UniRef90_R6QCX7 S V T E V K P K E D A E E I I Q T C I D N Y I E N F
UniRef90_R9XL67 K V E G W G D V N E A R Q E I L E S F E R A K K
UniRef90_UPI00035E04ED K V V H G G D W V D H K A A E D E I N A S Y A R Y K K H
UniRef90_G2DHJ7 K W V R V D G W Y G L D E A K A E I M E S V Q L Y K D
UniRef90_L0GTC7 V M G W G G R D E A R E E I L R S V Q M F E D
UniRef90_K2CTX4 K W V K V G D W L D K T A A A K E I Q E S V E R F E D
UniRef90_G4E552 K W V K V D A W V G V E E A K A E L V A S Y K R Y Q K
UniRef90_F2G3N3 K W V K I D G W A D A A A K E E I T A S I A R F E A
UniRef90_UPI0003656872 K V E G W D N A A F A R K E I E K S V K N Y K
UniRef90_D2ANH5 K V E G W G D K A E A I A E I Q A S V V R Y E E
UniRef90_C4LAG0 K D T V V D D V K D R E H A I E I V A Q C I D R Y I E N F C K
UniRef90_R6TF13 K W V K V Q G W E G P E A A K A E V A N G I A N Y A K
UniRef90_UPI00037A09F0 K F V K V R E W Q S K E M A E Q L I S Q G L E N A K K
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UniRef90_L7VKP6 R F G L G D K P T S K E Y A L K V I E E T N E S W E K L V K R K I P A G E L S
UniRef90_M0UXV9 K R V D V G G W G D A T E A I E I F D Q C I K R Y E D
UniRef90_UPI000404D8A2 Q I G D V R G H E D A K A I I A S C L D R Y L N Y F C K
UniRef90_R5A5X6 K V T G W A D A D A R A E I T S G V E R
UniRef90_A0A059KNH3 K W V K V D G W E G V E S A R A E I N D S V E R Y N K
UniRef90_UPI00036B6B26 K L D G W D G A V I Q A R A E V L A S K Q R Y D A
UniRef90_T0Z132 K V T G W G K A D A A R K E I V D S I A R Y K
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UniRef90_K7QWL9
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UniRef90_W8EZY7
UniRef90_UPI00046583E3
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UniRef90_W0BCH7
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UniRef90_S6A552
UniRef90_R7G5Q2
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UniRef90_A3DLS2
UniRef90_E8RS08
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UniRef90_Y0KJM7
UniRef90_D7G7D1
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UniRef90_Q11J12	L	V	F	C	Q	E	P	T	F	P	L	T	I	V	Q	A	R	T	V	G	L	M	T	M	I	D	D	S	G	K	A	D	E	Q	K	I	L	A	V	A	P	V		
UniRef90_UPI00047CAF4C	L	V	L	C	Q	E	D	I	E	P	M	S	L	V	E	C	Y	P	I	G	V	M	K	M	I	D	D	D	G	K	A	D	E	K	I	L	A	V	A	P	L	G		
UniRef90_Q7NSP8	L	V	V	T	P	F	P	L	P	P	G	V	V	V	R	E	C	R	A	L	G	L	I	K	M	E	D	D	S	G	G	V	D	A	K	L	I	V	A	V	A	P	L	V
UniRef90_R6YET2	L	V	L	C	Q	E	N	I	D	P	M	T	L	V	E	E	C	Y	P	I	G	V	I	T	M	I	D	D	S	E	Q	N	D	E	K	L	I	V	A	V	A	P	V	
UniRef90_K2MAP5	M	V	M	F	R	E	P	V	V	A	G	S	V	I	R	A	R	P	V	G	V	L	M	M	E	D	E	A	G	Q	N	D	E	K	L	I	C	V	P	H				
UniRef90_Q1ND37	L	V	V	A	R	S	P	F	I	P	G	C	V	V	R	A	R	P	I	A	V	L	N	L	E	D	E	A	G	G	D	E	K	L	I	C	V	P	V	D				
UniRef90_A5PA56	L	V	I	S	R	S	P	F	I	P	G	C	V	V	R	A	R	P	I	G	V	L	N	L	E	D	E	H	G	G	D	E	K	L	I	C	V	P	V	D				
UniRef90_M5RI50	M	V	L	C	Q	E	P	V	V	P	L	S	L	M	A	K	P	I		G	M	M	T	M	I	D	E	G	K	R	D	H	K	I	L	I	G	V	A	P	L			
UniRef90_UPI000351448F	L	V	L	M	Q	E	P	V	V	P	L	G	C	F	L	R	A	R	A	I	G	V	M	P	M	M	D	Q	G	E	K	D	D	K	I	L	I	A	V	A	P			
UniRef90_G0R0K5	L	V	I	C	S	I	D	V	E	P	L	C	L	V	D	A	K	V	I	G	V	M	H	M	I	D	D	G	Q	I	D	D	K	I	L	I	A	V	A	P	A	N		
UniRef90_UPI0003741B8D	L	V	V	G	R	R	A	L	M	P	G	S	V	V	R	A	R	P	V	G	V	L	L	M	E	D	E	A	G	M	D	E	K	I	L	I	V	A	V	P	H			
UniRef90_UPI0003B52766	M	I	V	S	R	R	Q	I	L	P	G	A	V	I	S	A	R	P	I	G	V	L	I	M	E	D	E	K	A	G	E	D	E	K	L	I	L	A	V	A	P	S		
UniRef90_T1CRD8	L	V	L	N	E	Y	P	L	Q	A	G	S	V	I	K	A	R	P	I	G	V	L	I	M	E	D	E	S	G	M	D	E	K	L	I	L	A	V	A	P	I	H		
UniRef90_V8A5T5	L	V	L	A	G	P	I	V	P	L	G	A	V	I	R	A	R	P	I	G	M	L	K	M	E	D	E	S	G	Q	D	E	K	L	I	C	V	P	P	H				
UniRef90_I1XKY8	L	V	L	T	P	F	P	L	I	N	G	C	V	V	A	C	R	P	V	G	M	L	K	M	T	D	E	K	G	E	D	A	K	V	V	A	V	A	P	P				
UniRef90_A0A014QBB7	L	V	M	T	P	F	P	L	P	S	G	V	V	V	P	C	R	A	I	G	I	L	H	M	E	D	E	G	G	V	D	G	K	V	L	A	V	A	P	T	G			
UniRef90_B3EQU1	V	V	L	S	Q	C	A	I	V	P	M	C	L	V	R	A	R	V		G	V	M	R	M	I	D	H	G	E	S	D	D	K	I	L	I	A	V	A	P	E	G		
UniRef90_UPI000361AA9B	M	V	V	S	Q	T	P	V	W	P	G	V	V	P	A	R	P	I		G	A	L	L	M	E	D	E	H	G	I	D	E	K	I	L	I	A	V	A	P	I			
UniRef90_A6ERW6	L	V	I	M	G	T	E	P	T	F	P	M	C	V	M	E	V	K	P	I	G	V	F	H	M	S	D	E	K	G	Q	D	E	K	I	L	C	V	P	I	T			
UniRef90_R5VM30	L	V	I	C	S	E	D	I	E	S	L	C	L	V	R	A	R	P	I	G	V	M	Y	M	L	D	N	G	A	N	D	E	K	I	L	I	A	V	A	P				
UniRef90_N8S035	L	V	L	T	P	H	P	L	V	H	G	S	V	I	R	C	R	P	V	G	K	L	N	M	E	D	D	G	G	I	D	A	K	L	I	A	V	P	H					
UniRef90_F8JEP8	L	V	I	C	N	T	R	A	I	V	P	G	A	V	I	N	C	R	P	V	G	V	L	V	M	E	D	D	G	G	A	D	E	K	L	I	A	V	P	S				
UniRef90_UPI0003701362	L	V	I	T	P	F	P	L	I	P	G	V	V	V	T	C	R	P	I	G	I	L	K	M	E	D	E	A	G	Q	D	E	K	V	L	A	V	A	P	T				
UniRef90_UPI00035E70E8	L	V	V	G	S	L	P	I	L	P	G	A	V	I	R	V	R	P	V	G	V	L	V	M	E	D	E	A	G	Q	D	E	K	L	L	A	V	A	P	V	I			
UniRef90_D3UHB0	L	V	L	N	K	Y	P	L	Q	A	G	S	L	I	K	C	R	A	I	G	A	L	L	M	E	D	E	A	S	G	M	D	E	K	L	L	A	V	A	P	I			
UniRef90_UPI00036636DA	L	V	L	M	T	P	F	P	L	Q	A	G	S	V	I	P	C	R	A	I	G	I	L	K	M	E	D	E	A	G	V	D	G	K	V	L	A	L	A	P	T			
UniRef90_Q3B3E2	V	V	I	S	Q	C	Q	I	V	P	M	C	M	V	R	A	R	V		G	V	M	R	M	I	D	H	G	E	G	D	D	K	I	L	I	A	V	A	E	D			
UniRef90_Q0G159	L	V	L	N	D	R	P	F	V	P	G	C	V	V	P	C	R	P	I	G	V	L	V	M	E	D	D	A	G	Q	D	E	K	V	L	A	V	A	P	T				
UniRef90_K1XG13	L	I	I	N	D	R	P	V	F	T	G	C	V	V	N	M	R	P	I	A	V	F	H	M	V	D	S	G	E	A	D	A	K	L	I	G	V	Q	A	N				
UniRef90_K4MLD0	L	V	L	T	W	E	P	T	F	P	G	C	L	I	D	V	H	P	I	A	L	F	D	M	E	D	D	K	G	R	D	E	K	L	L	C	V	P	E	S				
UniRef90_F5Y0J7	L	V	L	T	P	V	P	L	I	P	G	V	V	V	T	C	R	A	I	G	I	L	K	M	Q	D	E	A	G	E	D	S	K	L	L	A	V	A	P	V	D			
UniRef90_A8TKK3	M	V	A	G	Q	V	P	L	I	P	K	S	V	V	R	V	R	P	V	G	V	L	I	M	E	D	E	A	G	Q	D	E	K	L	L	A	V	A	P	P				
UniRef90_UPI0003828FCE	L	V	I	L	D	V	D	L	A	P	G	I	L	A	S	V	R	P	V	G	V	L	K	M	S	D	E	A	G	G	D	D	K	V	V	A	V	L	A	K				
UniRef90_D3RRA1	L	V	V	T	P	Y	P	L	I	P	G	S	V	I	K	C	R	P	V	G	V	L	K	M	T	D	E	A	S	G	D	D	A	K	L	L	A	V	A	P	I			
UniRef90_N9F0T9	L	V	V	T	P	H	P	V	A	I	P	G	S	V	I	R	C	R	P	V	G	K	L	I	M	E	D	E	A	G	I	D	T	K	L	I	A	V	P	H				
UniRef90_UPI000370D351	L	V	V	T	P	Y	P	V	I	P	G	S	V	I	R	C	R	T	V	G	M	L	N	M	S	D	E	S	G	R	D	E	K	L	I	L	A	V	A	P	H			
UniRef90_C6HWH6	F	V	L	S	S	E	P	L	Q	S	N	S	I	V	T	I	R	P	I	G	L	I	N	M	E	D	D	G	E	K	D	D	K	I	L	I	A	V	A	P	L	I	K	
UniRef90_Q9YBA5	L	V	I	S	R	E	P	V	A	P	G	S	L	I	E	A	V	P		A	V	L	D	M	E	D	E	G	E	G	P	D	S	K	V	V	A	V	A	P	L	K		
UniRef90_U7QHM0	M	V	L	M	D	Q	P	T	F	P	G	C	V	I	T	A	R	P	I	G	M	L	E	M	I	D	D	G	G	D	R	D	E	K	I	L	C	V	P	E	K			
UniRef90_U2YXF9	L	V	L	V	K	D	Q	T	F	P	E	C	V	I	E	A	R	P	V	A	L	M	R	M	D	D	D	G	E	Q	D	D	K	V	L	A	V	A	P	E	E			
UniRef90_E8RA28	L	V	V	S	S	E	P	L	V	P	G	S	V	I	K	A	R	P	V	G	V	L	E	T	E	D	E	K	G	R	D	A	K	L	L	A	V	A	P	A				
UniRef90_UPI00037B7CEE	L	V	I	T	P	V	P	L	I	S	G	A	V	I	P	C	R	V	I	G	M	L	K	M	T	D	E	A	G															

	170	180	190	200
UniRef90_A1WYK7	D K L T T D Y S E V I K K G P D L V S P R L L Q E I I S H F F F E H Y K D L E	P G		
UniRef90_Q8PWY5	Q R D P L F W N Y S Y N K T E A D Q V L P P H R L L K E M L T R H F F F E T Y K N L E	G D V V		
UniRef90_Q11J12	S K D D P E F W N Y S Y N K T E A D Q V L P P H R L L K E M L T R H F F F E T Y K N L E	G		
UniRef90_UPI00047CAF4C	E K L C P M Y K S I Q K L E D L P S E L L R N Q E M V H F F F E T Y K A L E E	G K Q T Y		
UniRef90_Q7NSP8	K K D D P F L N V I Q K L E D L P S E L L R N Q E M V H F F F E T Y K A L E E	G K W V K		
UniRef90_R6YET2	D K I D P Y Y T D I I K S H E D L P Q I L R S D Q Q I E H F F F E T Y K A L E E	K G K W V		
UniRef90_K2MAP5	S T F P Y Y S N V G Q T K S L P S I I V F Q Q I E H F F F T H Y K D L E K	A		
UniRef90_A1ND37	T T F P Y Y S N V G Q T K S L P S I I V F Q Q I E H F F F T H Y K D L E K	A		
UniRef90_A5PA56	S D A E F Y R G F D D L Q S L P S H R L V Q E M V R R F F F L D Y K I L P D K K N E N			
UniRef90_M5RI50	C T D D S S V N H Y N D L H D L P Q Y L T K Q I E R F F F E D Y K K L E	K		
UniRef90_UPI000351448F	Q K L T K Y Y D Q V Y T Y R D L P Q V L Q D Q I P H F F F A H Y K D L E A E K W V			
UniRef90_G0R0K5	D R L H D P Y Y S D V I Q S L Q D L P K I T L D R I K N F F F E T Y K M L E E	K E K W V		
UniRef90_UPI0003741B8D	S K I D P R Y D K I Q S L Q D L P K I T L D R I K N F F F E T Y K M L E E	P N		
UniRef90_UPI0003B52766	D K I H T K Q Y T D V K T I D D L P E I L L N Q I G H F F F E T Y K D L E K	P N		
UniRef90_T1CRD8	H D K M Y D H V K D I N D V H E F L L N Q I A H F F F E T Y K D L E K	G K W V N		
UniRef90_V8A5T5	K K I L P A Y E K I E S L S L A D V H E F L L N Q I A H F F F E T Y K D L E K	G K W V N		
UniRef90_I1XKY8	D M S L V S N I T S A D E S L P H F N S E L K H F F F E T Y K A L E D D K W V			
UniRef90_A0A014QBB7	D K L H S F Y T R V T S Y R D L P E I F I F E E T V A H F F F E T Y K D L E N	Q		
UniRef90_B3EQU1	D P I W N S Y N I Y T D I S E D L N P S H I F E E I Q H F F F S I Y K D L E			
UniRef90_UPI000361AA9B	Y N D P M Y N I Y T D I S E D L N P S H I F E E I Q H F F F S I Y K D L E			
UniRef90_A6ERW6	D K L T P L Y K D V K E Y S D L P A L L L N Q I E H F F A H Y K D L E P G K W V			
UniRef90_R5VM30	T K L T K R Y D S V K T Y T D L P K I S I L N Q I E H F F A H Y K D L E P G K W V			
UniRef90_N8S035	D K I L P I Y T H W K P E D I N P K L R L K Q I A H F F F E T Y K D L E G K W V	K		
UniRef90_F8JEP8	T K L D P N Y K N I K E Y T D L P E N L I A Q I G H F F F E T Y K D L E S G K W V			
UniRef90_UPI0003701362	S K I D P R F D G I K K S Y E D L P K I T L A R I K N F F F E T Y K M L E E	P N		
UniRef90_UPI00035E70E8	T K I C P Q Y N H I F D L D Q L S P L T L N S E L S Q H F F F E T Y K S L E	G K W V K		
UniRef90_D3UHB0	D M S L S N I F D L D Q L S P L T L N S E L S Q H F F F E T Y K S L E	K		
UniRef90_UPI00036636DA	S K M T R Q Y E N V K T A T D M P E I L L K Q V E H F F F E T Y K D L E P G K W V			
UniRef90_Q3B3E2	N P R F D S I K L A D V E L H S P H L L K E I S H F F F K V I Y K D L Q G K E V H			
UniRef90_Q0G159	D P L W N H I E S D L Q V P P H L L K E I P H F F F E T Y K H H K V K			
UniRef90_K1XG13	K K C S L Y T Q W Q K P E D L N P L R L K T I S H F F F E T Y K D L E A	N		
UniRef90_K4MLD0	D K L H P Y Y A D I G S W R D L P K I L I Q I Q H F F F T H Y K D L E A			
UniRef90_F5Y0J7	D P R W A H I Q D V G D I S E F L Q K E I A H F F F E T Y K D L E P G			
UniRef90_A8TKK3	D K L Y K G Y R Q V E S F R D M P Q H L L D Q I A H F F F E T Y K D L E D E G K W V			
UniRef90_UPI0003828FCE	E K L S A I Y K D V K E Y S D L P Q L L L S Q I E H F F F N H Y K D L G K W V	K		
UniRef90_N9F0T9	D K L S A I Y K D V K E Y S D L P Q L L L S Q I E H F F F N H Y K D L G K W V			
UniRef90_UPI000370D351	D P E W G Q Y R H I E D I I P P H R V R E L T Q F L K D Y K T L E E	P N		
UniRef90_C6HWH6	A K L D P L F A S Y K D V G D I P D A L K S K I K H F F F E T Y K E L E	P G		
UniRef90_Q9YBA5	D P R Y K Q V F A S K D D V A P H R L D E I A E F F F T Y K N L E K K V T E			
UniRef90_U7QHM0	D K V D P R Y S G V R D L G D I P E P V K Q R I K H F F F E T Y K E L E	G K W V K		
UniRef90_U2YXF9	T K L S K M Y Q S V E T Y K D I P Q H L L L S L A E F F F N H Y K D L G K W V	K		
UniRef90_E8RA28	D K L S K M Y Q S V E T Y K D I P Q H L L L S L A E F F F N H Y K D L G K W V			
UniRef90_UPI00037B7CEE	T K L D P R Y S Q I T S L E Q I S P H R L D E I A E F F F T Y K N L E N K V T E	E G		
UniRef90_UPI0002FF228E	K K C S L Y S H W K P E D M N P L R L K T I A H F F F E T Y K D L E			
UniRef90_A1VMY7	R K L T P A Y D H V E E T D L P E L L R Q K I A H F F F E T Y K D L E K G K W V			
UniRef90_UPI00037C1500	E K L D P Y Y K N V Q N Y T D M P D I L L K R I S H F F F E T Y K D L E D G K W V			
UniRef90_A7HSW3	K K D P F L N E Y Q D I S E V S H Q I S A E I K H F F F E T Y K D L E G K T T T	P G		
UniRef90_R6X3K4	D Q R A S W R T D I D V S E F H R L E L Q H F F F E T Y K D L E N K T T T			
UniRef90_U1QH78	M N D P T Y N G Y H D I K D L P K H I F D E M C H F F F E T Y K R L E			
UniRef90_R6UYG3	A K L Y A D Y A H I K D I E Q V D S H L L A R I G H F F F E T Y K D L E G K W V	K		
UniRef90_H8L4E9	D K I H P Q F S G V T E V D P A L T R D A I E H F F F T H Y K D L E K G K W V			
UniRef90_A5G1E8	D K I C P M T A H M K S I D D V P G Y L K D Q I K H F F F E T Y K A L E G K W V			
UniRef90_V5PUC8	D K I D P E Y K H F N D I K L P P H R L A E I			

		210		220	230	240
UniRef90_A1WYK7	K	W	V	Q	V	R
UniRef90_Q8PWY5	V	Y	G	W		
UniRef90_Q11JI2	K	E	V	E	V	D
UniRef90_UPI00047CAF4C	V	L	D	I	E	G
UniRef90_Q7NSP8	I	Q	G	W	G	T
UniRef90_R6YET2	K	Q	T	V	V	E
UniRef90_K2MAP5	K	V	I	T	G	
UniRef90_Q1ND37	K	W	V	R	I	G
UniRef90_A5PA56	K	W	V	R	I	G
UniRef90_M5RI50	K	S	V	E	V	E
UniRef90_UPI000351448F	K	E	V	A	V	D
UniRef90_G0R0K5	K	D	V	K	V	Q
UniRef90_UPI0003741B8D	K	I	V	G		
UniRef90_UPI0003B52766	K	V	K	R	W	G
UniRef90_T1CRD8	K	W	V	K	V	K
UniRef90_V8A5T5	K	W	V	K	V	S
UniRef90_I1XKY8	K	W	V	K	I	E
UniRef90_A0A014QBB7	K	V	L	G		
UniRef90_B3EQU1	K	T	V	L	V	E
UniRef90_UPI000361AA9B	K	L	L			
UniRef90_A6ERW6	K	K	V	D	I	G
UniRef90_R5VM30	K	E	T	A	V	K
UniRef90_N8S035	K	L	T	G		
UniRef90_F8JEP8	K	I	D	H	W	G
UniRef90_UPI0003701362	V	L	G	W	E	G
UniRef90_UPI00035E70E8	K					
UniRef90_D3UHB0	K	W	V	K	V	K
UniRef90_UPI00036636DA	V	L	G	W	G	
UniRef90_Q3B3E2	K	T	V	L	V	E
UniRef90_Q0G159	K	I	H	N	W	G
UniRef90_K1XG13	I	Q	G	W		
UniRef90_K4MLD0	I	I	G	W	E	G
UniRef90_F5Y0J7	V	L	G	W	E	G
UniRef90_A8TKK3	K	W	V	K	V	K
UniRef90_UPI0003828FCE	K	W	V	K	V	D
UniRef90_D3RRA1	R	I	A	G	W	G
UniRef90_N9F0T9	T	N	G	W	E	G
UniRef90_UPI000370D351	K	W	V	K	I	D
UniRef90_C6HWH6	K	Q	V	T	V	S
UniRef90_Q9YBA5	K	W	V	R	V	T
UniRef90_U7QHM0	I	L	G	W		
UniRef90_U2YXF9	K	E	V	S	V	G
UniRef90_E8RA28	T	I	G	W		
UniRef90_UPI00037B7CEE	I	D	G	W	V	G
UniRef90_UPI0002FF228E	I	L	G	W		
UniRef90_A1VMY7	K	W	V	K	I	S
UniRef90_UPI00037C1500	K					
UniRef90_A7HSW3	K					
UniRef90_R6X3K4	I	E	K	I	L	G
UniRef90_U1QH78	K	S	V	E	G	A
UniRef90_R6UYG3						
UniRef90_H8L4E9	V	E	G	W	A	N
UniRef90_A5G1E8	K	V	I	T	G	
UniRef90_V5PUC8	V	E	G	W	E	G
UniRef90_R7W8H2						
UniRef90_L0B8I8	K					
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UniRef90_A7HD90	P I P	A I I	E I	A T G S K V K Y			E L D K K S G L I V D R
UniRef90_A0A031LSR8	G L V N V F I		E I	P M G S N I K Y	E Y D E E E D I		I K V D R
UniRef90_UPI000470EBC8	D V	N V I	E I	P I G G V		P V K Y	E V D K D S G A M F V D R
UniRef90_D2V0H7	E L F N A I I		E I	P K G C K I K Y	Q Y D T		K Y G L L K V S H
UniRef90_U4KM89	R F V	A C I	E I	S K G S K K K Y		E L D K D T G M I	L D R
UniRef90_UPI0003B46BFF	K E V E V L I		E I	P T G S Q N K Y		E F D K D K G V F K L	D R
UniRef90_R5YG74	D F V	C V V	E I	P K G S K K K Y		E L D K E T G L I	L D R
UniRef90_M0ZVI3	I F N C V V		E I	G K G S K V K Y		E L D K A S G L I	K V D R
UniRef90_Q9ZLL5	D S L C V V I		E I	S K H S N I K Y		E L D K E S G A L	M V D R
UniRef90_I0V3N4	E F D V T I		E I	P K G E R N K Y		E V D H K T G R I	R L D R
UniRef90_T0LN01	E E F Y A V I		E T	P K G S R N K Y	E V N K E G P		G I M L D R
UniRef90_UPI000474761B	D Q F V V L I		E I	P Q G S K K K Y	E I D K E T G L		L S L D R
UniRef90_A8M9I8	D E L Y V V V		E I	P A G S N V K Y		E F D S A S G V F I	V D R
UniRef90_UPI00035DBC62	E H E V V I		E I	P K G S R N K Y		E V D H E T G R V	K L D R
UniRef90_E6X1Y9	D A V K A I I		E V	P Y G S N V K Y		E L D K E S G A I	E V D R
UniRef90_B1C779	D F I	A F I	E I	P K G S N V K Y		E L D K E T G Y I	V D R
UniRef90_UPI00035EEBC8	D E F Y V V I		E I	A A	Y G P V K Y	E V D K E S G L I	M V D R
UniRef90_D6Y9W0	E F D V V V		E I	P K G Q R N K Y	E I D		H K T G R I R L D R
UniRef90_C7MC12	E F D V T I		E I	P R G N R N K Y		E V D H H N G R I	R L D R
UniRef90_W7ZZH8	E F D V T I		E I	P R G Q R N K Y		E V D H E T G R V	R L D R
UniRef90_G0QC8N	E T I	H A V V	E N	P T G T K N K Y	E Y D K D		K E S V L D R
UniRef90_C9YAC4	E S F N V I I		E I	P S M N G		D P I K Y	E V D K A S G C I F V D R
UniRef90_A1ZYG9	I D V V V		E I	P K G S R N K Y	E Y D Y D		K M I R Y D R
UniRef90_E8V8U3	E V	N V V I	E I	P L D G V T K F	E Y D		K Q L H V F R L D R
UniRef90_M7AJL9	E F D V T I		E I	P K G S R N K Y		E V D H E T G K I	Y L D R
UniRef90_D3PLE0	E I V H M V I		E V	P R G S S N K Y	E Y D P D L E		A V K L D R
UniRef90_W9SD68	L L P V V V V		E I	G K G S K V K Y		E L D K A S G L I	K V D R
UniRef90_A5FS97	I T L T V M I		E I	P K G S R N K Y	E Y D		K E R K V I K F D R
UniRef90_T1D4I2	R D L H V V I		E I	P A G A		P P V K Y	E F D K T S G L I M V D R
UniRef90_S3N288	D D L Y S I I		E I	P A N S K		P V K Y	E V N K E Y D E L V D R
UniRef90_U7JP65	M T F D V T I		E I	P R G T K N K Y		E M D H E T G R I	R L D R
UniRef90_A3THT9	E F D V T I		E I	P K G Q R N K Y		E V D H E T G R I	R L D R
UniRef90_R6XQH9	D F Y A V V		E I	S K G S K N K Y		E L D K S T G L I	M L D R
UniRef90_K6X0Y4	F D V T I		E I	P K G Q R N K Y		E V D H E S G R I	R L D R
UniRef90_D2PYA2	E F D V F I		E I	P K G T R N K Y		E L D H K T N R L	R L D R
UniRef90_UPI0002D2E961	K V V E A I I		E I	P T G S Q N K Y		E F D K E A G V F R L	D R
UniRef90_W6IEQ1	D I	N V V I	E I	P Q G S A V K Y		E V D K D S G A V I	V D R
UniRef90_F7XLZ2	E I V Y A V V		E I	P M G S R N K I	E Y S		K E Y G T Y I L N R
UniRef90_D7GG69	L T F D M T V		E I	P R G T K N K Y		E M D H N T G R I	R L D R

	90	100	110	120
UniRef90_R9TA94	I L Y T S T H Y P A N Y G L	P R T L A D	D G D P L D V	
UniRef90_G9ZXMG9	F L F T P M A Y P A A Y G F	P G T L A D	D G D P L D V	
UniRef90_F2PG95	F M S S P M F Y P C N Y G F	V N N T L S	I A G D G D P V D V	
UniRef90_A0A023HW61	F L P T A M Y Y P C N Y G F	I P N T L	D G D P V D V	
UniRef90_I3TRA0	F V A T P M F Y P A N Y G F	V P N T L S E	D G D P L D V	
UniRef90_Q1YSR7	F V A T P M F Y P A N Y G F	V P Q T L S E	D G D P L D V	
UniRef90_UPI00036D20D8	V L F T S M V Y P T D Y G F	I E E T L	G G D G D P L D A	
UniRef90_Q47KT7	M L F T S T S Y P A D Y G F	I E E T L	D G D P L D A	
UniRef90_R7H4G2	I L Y T S T H Y P A N Y G F	I P R T Y A D E	D G D P L D V	
UniRef90_J0NB99	V L Y T S T H Y P A N Y G F	I P R T L A E	D G D P L D V	
UniRef90_UPI00047E3EB2	I L H T S T H Y P A N Y G L	I P R T L S D	D G D P L D V	
UniRef90_I0QZU8	V L F T P F V Y P T D Y G F	F E N T L	G G D G D P L D A	
UniRef90_G2Z727	M L Y S A M F Y P A D Y G F	I P E T L A	L D G D P L D V	
UniRef90_E4T2H0	V L F S S M Y Y P H N Y G F	I P Q S Y C D	D H D P L D I	
UniRef90_A1S350	I M T A P M F Y P C N Y G Y	V N Q T L S	L D G D P V D V	
UniRef90_Q9KCG7	V L F S P M F Y P A E Y G Y	I E N T L A	L D G D P L D V	
UniRef90_I3UNP7	F L S T P M F Y P A N Y G F	I P N T L S D	D G D P L D V	
UniRef90_I4A2Q8	T I F S S M H Y P A D Y G F	V P N T L A	L D Q D P L D V	
UniRef90_I4AGA3	M I F S S M H Y P S D Y G F	V P E T L A	L D G D A L D V	
UniRef90_F2B129	C L Y S A S H Y P G D Y G F	I P Q T L A E	D G D A L D I	
UniRef90_D3SBW6	F M A V A M F Y P C N Y G F	I P N T E S E E	D N D P V D V	
UniRef90_I0IR51	I L H S A N Y Y P V N Y G F	V P R T Y C	D G D P L D I	
UniRef90_G2KN67	F L H T A M Y Y P G N Y G F	I P H T L	G D G D P V D V	
UniRef90_UPI0004207A22	V L F T P F V Y P V D Y G F	F E H T L A D	D G D P L D A	
UniRef90_A9KC48	F M P T S M R Y P C N Y G F	V P S T L A Q	D G D P L D V	
UniRef90_W9UW13	F M A A P M F Y P A N Y G Y	I P N T L A D	D G D A L D V	
UniRef90_UPI0003B41E52	N L Y S P I H Y P A D Y G F	I P Q T L A E E	D G D P L D I	
UniRef90_G4RNB5	V L Y T A L V Y P F N Y G F	I P Q T L S E E	D G D P L D V	
UniRef90_D5WUF9	V L Y S P H Y Y P T E Y G Y	I Q E T L A E	D G D P L D I	
UniRef90_F0P1W6	V L Y S P M F Y P A D Y G F	V P D T L	G L D G D P L D V	
UniRef90_F6EG63	Y L F T S M Q Y P A D Y G Y	I E D T L	G G D G D P L D A	
UniRef90_V8D371	Y L Y T S M G Y P A D Y G F	I D N T L G E	D G D P L D A	
UniRef90_UPI0003736D5F	M L F T S T R Y P A D Y G Y	I E H T L G E	D G D P L D A	
UniRef90_A8LF23	M L F T S T H Y P S D Y G F	I E G T L	G R D G D P L D A	
UniRef90_R6R8W6	I L Y T A T H Y P A N Y G F	I P R T Y G D	D N D P L D V	
UniRef90_H6RPV8	M L F T S T R Y P A D Y G Y	I E N T L	G M D G D P L D A	
UniRef90_R7GHG5	I L Y T S T H Y P A N Y G F	I P H T Y C	G D H D P L D V	
UniRef90_D7W0W3	V L F S S I H Y P A N Y G L	I P H T Y Y	T D H D P L D I	
UniRef90_F7VCS7	F L F T P M A Y P T A Y G F	I P G T L A	A D G D P T D A	
UniRef90_U2EAF9	F M N V A M H Y P A N Y G F	V P Q T L Y D	D G D P V D V	
UniRef90_I0RMB8	Y L Y T S M V Y P T D Y G F	I D D T L G E	D G D P L D A	
UniRef90_Q464W7	M L S S S M V Y P S D Y G F	F P D T L S	L D G D P L D A	
UniRef90_UPI0003716C8D	F M N T A M F Y P C N Y G F	V P N T L A E	D G D P V D V	
UniRef90_E3I002	M L Y T A M H Y P G N Y G F	V P H T L S E	D G D P L D V	
UniRef90_B1VAG3	F L T T S F R Y P V N Y G F	I P L T H C Q	D N D P M D V	
UniRef90_G8NPZ7	N L F S P V H Y P G D Y G F	I P S T L G D	D G D P L D V	
UniRef90_B3QTH2	V L Y A S V H Y P T G Y G F	I P R T L A E	D G D P L D V	
UniRef90_C7NFT9	L L F T A M R Y P A D Y G Y	I E D T L G E	D G D P L D A	
UniRef90_E6PJ89	V L H S A I H Y P G D Y G F	A P Q T L A	L D D D P L D V	
UniRef90_H2CG62	V L H S S I H Y P A N Y G F	I P R T Y C D	D N D P L D I	
UniRef90_D7W9X7	Y L F T S M G Y P L D Y G F	I D H T L G D	D G D P L D A	
UniRef90_F0VHA3	F E S S P D T P A T R D G F	A Q N T P P G A R I N P N R A V I N V	L T T H V A	
UniRef90_A4BFT1	F M A T P M F Y P A N Y G Y	I P N T L A D	D G D A V D V	
UniRef90_A7HD90	I L F S A V H Y P A N Y G F	V P R T Y C D	D G D P L D V	
UniRef90_A0A031LSR8	I L Y T S M V Y P F N Y G F	I P G T L S D	D G D P L D V	
UniRef90_UPI000470EBC8	F L H T A M F Y P C N Y G F	I P H T R S D	D G D P T D M	
UniRef90_D2V0H7	I L S S S L L Y P A N Y G F	I P Q T L G E	D N D P I D V	
UniRef90_U4KM89	V L Y T S T H Y P A N Y G F	I P R T Y A	G D N D P L D V	
UniRef90_UPI0003B46BFF	V L F S P M F Y P A E Y G Y	I D D T L A	L D N D P L D V	
UniRef90_R5YG74	I L Y T S T H Y P A N Y G F	I P R S L G D	D G D P L D V	
UniRef90_M0ZVI3	I L Y S S V V Y P H N Y G F	I P R T L C E	D S D P M D V	
UniRef90_Q9ZLL5	V L Y G A Q N Y P A N Y G F	V P N T L G S	D G D P V D A	
UniRef90_I0V3N4	T L F T A T Q Y P A D Y G F	I D D T L		

UniRef90_R9TA94	L	V	L	C	S	E	N	I	H	P	L	S	L	V	Q	C	Y	P	I	G	V	I	S	M	L	D	G	G	K	L	D	E	K	I	I	A	I	P	F	N				
UniRef90_G9ZXMG9	L	V	L	A	P	A	V	V	V	G	A	V	I	R	A	R	P	I	I	G	V	L	F	M	E	D	E	S	G	G	Q	D	E	K	I	V	C	V	H					
UniRef90_F2PG95	L	V	L	P	T	P	F	P	V	P	G	A	V	I	R	A	R	P	I	G	V	L	K	M	T	D	E	S	G	G	Q	D	E	K	I	V	C	V	H					
UniRef90_A0A023HW61	L	V	L	A	R	F	P	V	M	P	G	A	V	I	R	A	R	P	I	G	V	L	K	M	N	D	E	S	G	G	Q	D	E	K	I	V	C	V	H					
UniRef90_I3TRA0	M	V	V	T	P	Y	P	V	V	P	G	S	V	I	R	A	R	P	I	G	V	L	K	M	N	D	E	S	G	G	Q	D	E	K	I	V	C	V	H					
UniRef90_Q1YSR7	L	V	V	T	P	Y	P	V	V	P	G	A	V	I	R	A	R	P	I	G	V	L	K	M	N	D	E	S	G	G	Q	D	E	K	I	V	C	V	H					
UniRef90_UPI00036D20D8	L	V	L	L	P	F	P	V	Y	P	G	V	V	V	E	C	R	A	I	V	A	M	Y	V	M	E	D	E	A	K	G	Q	D	E	K	V	L	C	V	N				
UniRef90_Q47KT7	L	V	L	L	K	Q	P	T	F	P	G	C	M	I	R	C	R	A	I	V	G	M	F	R	M	R	D	E	A	K	G	Q	D	E	K	V	L	C	V	N				
UniRef90_R7H4G2	L	V	L	L	C	S	E	Q	L	Y	P	M	T	L	V	R	C	Y	P	I	G	V	I	R	M	I	D	N	G	E	H	H	D	D	E	K	I	I	A	I	P	L	S	G
UniRef90_J0NB99	L	I	L	S	S	D	E	S	F	E	P	L	S	L	I	P	C	H	P	I	G	V	I	H	M	V	D	C	N	E	R	D	E	K	I	I	A	I	P	L	S	G		
UniRef90_UPI00047E3EB2	L	V	L	S	S	E	V	I	H	P	P	M	S	L	V	R	C	Y	P	I	G	G	V	F	T	M	L	D	C	N	E	R	D	E	K	I	I	A	I	P	L	S	G	
UniRef90_I0QZU7	L	V	L	L	E	F	P	L	F	P	G	V	G	V	K	V	R	A	V	G	M	L	V	M	E	D	D	G	G	V	D	E	K	I	I	C	V	P	A	K	V	A		
UniRef90_G2Z727	L	V	L	L	F	T	E	T	M	P	G	I	L	A	E	V	K	P	I	A	I	F	R	M	A	D	D	K	G	E	P	D	E	K	I	I	C	V	P	A	K	V	A	
UniRef90_E4T2H0	L	I	L	S	Q	I	E	V	V	P	L	C	I	V	E	A	K	V	I	G	V	M	R	M	L	D	N	G	E	A	D	D	K	I	I	A	V	A	A	G	H	H		
UniRef90_A1S350	L	V	L	P	T	Q	Y	P	L	Q	P	G	S	V	I	R	C	Y	P	I	G	V	L	K	M	T	D	E	S	G	E	A	D	A	K	V	I	V	A	V	P	H	H	
UniRef90_Q9KCG7	L	V	I	V	S	N	P	T	F	P	G	C	V	I	D	A	K	V	L	G	F	L	N	M	I	D	D	G	E	E	D	A	K	V	L	I	V	A	V	P	T	E	H	H
UniRef90_I3UNP7	L	V	V	L	C	P	Y	P	V	S	P	G	A	V	I	R	A	R	P	I	G	V	M	Y	M	T	D	E	A	G	A	D	A	K	V	I	V	A	V	P	H	H	H	
UniRef90_I4A2Q8	L	V	L	V	L	T	E	P	T	F	P	G	C	L	I	E	V	K	T	I	G	V	F	H	M	Q	D	E	K	G	P	D	A	K	V	L	I	C	V	P	V	G	S	H

	170	180	190	
UniRef90_R9TA94	D P T Y C N Y K D I V	S E L P S H I F N E M R	H F F S V Y K N L E	G
UniRef90_G9ZXMG	D K L H T A F S E H I V K D V	I A N D L P K I T R K A Q I	T H F F F T R Y K D L E	P G
UniRef90_2PG95	S K L L S K E Y S E H I V K D V	N D L P K I T R K A Q I	T H F F F T R Y K D L E	P N
UniRef90_A0A023HW61	T K V D Q Y Y G N I V N Y	S D L P S S F L A D S I	S H F F F S F Y K K L E	K D
UniRef90_I3TRA0	Q K V S A L I Y D D H V Q S E Y	T D L P E L L L R Q I V H	F F F T R Y K K L E	K G K W V
UniRef90_Q1YSR7	T K L T K I Y D D I R Q D I	G D L P E L L L R Q I V H	F F F T R Y K K L E	P G
UniRef90_UPI00036D20D8	D P R F D D I R Q D I	G D L P E L L L R Q I V H	F F F T R Y K K L E	P G K S V
UniRef90_Q47KT7	D P R M E H I R D I	H H V N E F E R L E I	Q H F F T V Y K D L E	G K S V E
UniRef90_R7H4G2	S D P T Y N S Y T S I	I D E L P S H I F F E E M V	H F F K V Y K E L E	H
UniRef90_J0NB99	D P N Y N T F R D I	I Q E L P P Q H I F S E M R	H F F S V Y K E L E	G K K T V
UniRef90_UPI00047E3EB2	F S D P T Y N S Y R D I	S D L P S H I F S E M R	H F F Q V Y K E L E	H
UniRef90_I0QZU8	D P R W D H I S D I	S D V P S Q T K N E I	E H F F T H Y K D L E	P G K W V
UniRef90_G2Z727	D P I M N K L N D I	S E L H T I E H F F R V	I Y K D L E	N K S V D
UniRef90_E4T2H0	D P S K S V T H Y N D I	S E L P P H M T T E I	M S F F E D Y T K L E	N
UniRef90_A1S350	E K V S K S Y G S H I Q D V	L S E L P A L L K A Q I	M S F F E D Y T K L E	V G
UniRef90_Q9KCG7	D P R F S K D V N S I	N D L P K H K L D A I	A H F F K T Y K D L E	G K K T E
UniRef90_I3UNP7	D K L F S M Y S A V K E S E	D L P T L L L A Q I	Q H F F E N Y K K L E	P G
UniRef90_I4A2Q8	D P V W S N L E T L E D L	N P P H M R S E I	E H F F Q V Y K D L E	K K K V D
UniRef90_I4AGA3	D P I W N S I H K L E D V	N P P H L L K E I	G H F F E V Y K D L E	K K K V V
UniRef90_F2B129	D P L Y G E Y N T L Q D	V A P P H F L R V V	E H F F T N Y K Q L E	G V T I E
UniRef90_D3SBW6	S K L C T Q S G R F Q G P	E D V P K E L L D S I	K H F F E R Y K E L E	G K W V K
UniRef90_I0IR51	D P L H Y K D Y R H I E D L	P V H L R V R Q I	T R F F L E D Y K I	N K K V E
UniRef90_G2KN67	P K L L Y Y H D N I E D L	T D I L R P L R R Q I	T R F F L E D Y K I	P G K W V
UniRef90_UPI0004207A22	D P R F A Q Y Q E I E D V	L P Q N T R D Q L	Q H F F E H Y K D L E	P G
UniRef90_A9KC48	V K A C R A Y E A I Q S L	K D I P S L L L D A I	S H F F E N Y K K L E	P N
UniRef90_U9UW13	Q K L S Q A Y A N D I Q D	I N D L P S L L T K D R I	A H F F E N Y K K L E	V G
UniRef90_UPI0003B41E52	N P R Y A Q I E S F R E I	M D L P H L L R E I	E H F F S I Y K D L E	G K R T K
UniRef90_G4RNB5	E K V D P S Y A D V K D I	M D L P T K P T L E I	R H F F E R Y K E L E	P G K W V
UniRef90_D5WU9F	D P R W K Q Y V Q S L E D V	I P P H L L D E I	A H F F S V Y K H	G K K V T
UniRef90_F0P1W6	D P T W N Q L E N I E D M	N S H T L K A V	E H F F K T Y K D L E	N
UniRef90_F6EG63	D P R W D H I K D I	G D V P P Q H N L D E I	K H F F E R Y K D L E	G K E V H
UniRef90_V8D371	D V R W D H I Q D I	D D V P P F E F L K A I	A H F F E H Y K D L E	P G
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UniRef90_G7SQR4					
UniRef90_E6WSA2					P L Q A S Q P R
UniRef90_UPI0003B6F135					M
UniRef90_D1ATV5					I G S G K N A P
UniRef90_L0EVQ5					I S L G R N P P D
UniRef90_Q6ACP7					
UniRef90_K3Z9R6				H P W H D L E I G P E A P A	
UniRef90_Q8FMF8					
UniRef90_G2P8T0					E H
UniRef90_T1B7E6				K T G S L W H I V G P G E K A P E	
UniRef90_UPI000364BE96					
UniRef90_F7XW85					L S I G K N P P Y
UniRef90_W0P4I8					I A G D N L P
UniRef90_G7H2X5					
UniRef90_I4CP51					V P A G K D L P N
UniRef90_R5VBE7				H P W H G L E V I G E E A P	
UniRef90_UPI00047CCDC9					
UniRef90_E8X2Q8					L P V G P K S P
UniRef90_UPI0003B54AC8					M
UniRef90_D8JZW5					
UniRef90_Q8D274					V P A G E K L P N
UniRef90_U3U7B4				N N L P A G K N F P E	
UniRef90_A0A059MU19					
UniRef90_UPI0003631192					
UniRef90_UPI00047C6080					L P I G D K V P
UniRef90_M1R5P9					N P P
UniRef90_UPI00041448E5					
UniRef90_E4U085					I G Y G E N P
UniRef90_M0MFR0				N L W E D L E T G P N A P E	
UniRef90_I4EJX6					
UniRef90_UPI000366FBA3					
UniRef90_B5JW34					G E K S P
UniRef90_UPI000368FE9A					G S D A R A
UniRef90_A5CFM4					I K I G N N V P N
UniRef90_UPI000050FDC9					
UniRef90_A3YZG0					D L S L A A S P S Q
UniRef90_M5A0F0					P Q P A A
UniRef90_A0A023Y521				H P F L A A Q P K E A P	
UniRef90_UPI00035C7BDA					G N N A P

			50		60		70		80
UniRef90_U6E237	E E F	I V V I	E I	P Q G S	K K K Y	E I	D K E T		G M L I L D R
UniRef90_M3BJ30		F D V V V	E I	P Q G S	R N K Y			E M D H R L	G R I R L D R
UniRef90_U1LNP8		Y D V V I	E I	P K G S	R N K Y			E V D H E T	G R V Y L D R
UniRef90_UPI00035CE54D	A E F	N A V I	E I	P A G S	F T K Y	E I	D A D T		G H L V A D R
UniRef90_UPI00035CE54D	A E F	N A V I	E I	P A G S	F T K Y	E I	D A D T		G H L V A D R
UniRef90_A0A010ZQ87		E F D V T I	E I	P K G Q	R N K Y			E V D H E T	G R I R L D R
UniRef90_R6TVI9	D F	D A A I	E I	P K G S	N C K Y			E L D K K S	G F R R L D R
UniRef90_A1AW25	N E I	N V I I	E I	P A N S				E I D K E T	G A M F V D R
UniRef90_F3KHN1	D I Y	V V I	E I	P A E S		S P I	K Y	E I E K E T	H D A V F V D R
UniRef90_D4YMQ1		A T I	E I	P A G S	R N K Y			E V D H E T	G R V K L D R
UniRef90_UPI000262CDB3	D I Y	V A I	E I	P S N S		T P I	K Y	E I E K E Y	D A V F V D R
UniRef90_K0ICW7	D E I	N V V I	E V	P K G S	S I K Y	E L	D A E T		G A V F V D R
UniRef90_K9PWF1	G L V	N V L V	E I	T G G S	K N K Y			E F D K D M	N A F I L D R
UniRef90_C2GEG2		F E V T I	E I	P A G S	R N K Y	E I	D H E T		G K V Y L D R
UniRef90_K5XR09	H D I	N V V I	E I	P A G S		G V	K Y	E V D K D S	G A L V V D R
UniRef90_UPI000474F65F	N V V	N V I I	E T	P K G S	K N K Y			E V S K D Y	D A I L L D R
UniRef90_U1YGZ4	K V V	D V F V	E I	P A G S	Q N K Y			E F D K E A	G V F R L D R
UniRef90_E4RNY5	N I I	D V L I	E I	P K G S	N N K Y	E Y	D		K E K G A F R L D R
UniRef90_F3ZJX7	V E F	D V T I	E I	P K G S	R N K Y			E V D H E T	G R V R L D R
UniRef90_W0GQQ2	N V L	R I I V	E I	P K G S	S N K Y	E Y	D S		Q T G R I I L D R
UniRef90_Q2GFI3	K E I	N V I I	E I	S Q N S	C			P V	K Y E F D K E K N L F C V D R
UniRef90_D7CRD1	E V L	T A V I	E V	P K D S	S N K F	E Y D P	E Y D I		
UniRef90_UPI00047653C5	L H F	D V T I	E I	P K G T	K N K Y			E M D H H T	G R I R L D R
UniRef90_W2BQ80	T F	D M T V	E I	P R G T	K N K Y			E M D H N S	G R I R L D R
UniRef90_UPI000380A203	G L L	N I L V	E I	P A G S	K N K Y			E F D K D L	N A F A L D R
UniRef90_UPI00040EF32F	E V E	A I I	E I	P T G S	Q N K Y			E F D K D K	G H Y K L D R
UniRef90_Q60CJ4	E D I	H V V I	E I	P A F S		D P V	K Y	E V D K E T	G A L F V D R
UniRef90_C8XA89		F D V T I	E I	P K G S	R N K Y			E V D H H S	G R I R L D R
UniRef90_A1TG52		F D V L I	E I	Q K G S	R N K Y	E V	D H D S		G K V K L D R
UniRef90_W2E4Y4	V V E	A F I	E I	P T G S	Q N K Y			E F D K E R	N V F V L D R
UniRef90_UPI000370DDEF		F D V L I	E I	P K G N	R N K Y			E M D H A S	G R L R L D R
UniRef90_X5M8F4	Y D V	N V I V	E V	P V G G	A			P I	K Y E F D K P S G A L V V D R
UniRef90_D7E796	E I V	Y A V I	E I	P K G S	R N K F	E Y	S		K E F G T Y I L D R
UniRef90_UPI00036DABFF	E F	D V T I	E I	P R G Q	R N K Y			E V D H E T	G R I R L D R
UniRef90_B2GGG5	E L	D V T I	E I	P R G S	R V K Y	E I	D H E T		G R I R L D R
UniRef90_UPI00034B178A	E F	R M V V	E I	P Q G S	R N K Y			E M D H E R	G R I R L D R
UniRef90_F0FWS7	E V	N A V I	E I	P A Q S		S P V	K Y	E A D K Q L	G L R V D R
UniRef90_U2SXI2		Y D V V I	E I	P K G S	R N K Y			E V D H E T	G R V Y L D R
UniRef90_D2NQQ3		E L D V T I	E I	P R G S	R V K Y			E V D H E T	G R L R L D R
UniRef90_UPI00047AC1FC		E F D V T I	E I	P A G S	R N K Y			E M D H E T	G R I K L D R
UniRef90_UPI0003B489C7	M Q F	D V T I	E I	P Q G S	R N K Y			E V D H E T	G R I R L D R
UniRef90_B1VHL5		I E V T I	E I	P K G S	R N K Y	E I	D E E T		G K V H L D R
UniRef90_F4B934	E L V	N A F I	E I	P M G S	N I K Y	E Y D E E E	E V		L K V D R
UniRef90_L0B4E2	Q E F	N V V I	E I	S A N S	M			P V	K Y E V D K N S G V I F V D R
UniRef90_C1F6J8	E V V	N A V I	E I	P L E G	I N K Y	E Y D			K E L H V F R L D R
UniRef90_C5WCB9	D I Y	V I I	E I	G A H S				T P V	K Y E I N K E S G H L F V D R
UniRef90_UPI00037A50E8	K V	N A F I	E I			L T P	F D T I	K Y E V D K K T	G Y M R V D R
UniRef90_H2C337	D V I	N V L I	E I	P M G S	N I K Y	E Y D E E E E E	I		V K V D R
UniRef90_T0M9Y5	S I V	T V V N	E I	P R F E	N A K F	E I S K D I	S L N P I	K Q D I	K N K L R F T K
UniRef90_UPI0002896764	E T F	D A F V	E I	P A G S	R N K Y	E Y D F D			L K R L R F D R
UniRef90_C6XHG2	D V	N V I	E I	S L G G	Y			P I	K Y E M D K K S G V L V V D R
UniRef90_UPI00029A49BC		V T I	E I	P K G S	R N K Y	E I	H H E T		G K I Y L D R
UniRef90_UPI0003FDC777	E F	D V T V	E I	P K G S	A N K Y	E I	D		H K T G R I R L D R
UniRef90_G7SQR4		F D A F I	E I	P K G S	R N K Y			E F D K K N S I	R L D R
UniRef90_E6WSA2	Q A P	E E V V	E I	P A G S	F T K Y	E I	N E E		G L F V D R
UniRef90_UPI0003B6F135	V E F	D V L I	E I	P K G S	R N K Y			E V D H E T	G R I R L D R
UniRef90_D1ATV5	D E V	N V V V	E I	S K D S	H			P V	K Y E L D K D C G V F C V D R
UniRef90_L0EVQ5	D I	N V I I	E I	S		L Y G H	P V	K Y	E M D K K A E V L F V D R
UniRef90_Q6ACP7		Y D V V I	E I	P K G S	R N K Y			E V D H E T	G R V Y L D R
UniRef90_K3Z9R6	V F	N V V V	E I	T K G S	K V K Y			E L D K K T	G L I K V D R
UniRef90_Q8FMF8		V T V	E I	P K G S	R N K Y	E I	D H E T		G K V I L D R
UniRef90_G2P8T0	G E F	D V V V	E I	P E G S	R N K Y	E M D H	D T		G R I R L D R
UniRef90_T1B7E6	E V	N V I I	E T	P K G S	R N K Y	E I	S		K E Y Q G I L D R
UniRef90_UPI000364BE96		E F D V I V	E I	P Q G S	R N K Y			E M D H A L	H R I R L D R
UniRef90_F7XW85	E V	N V M I	E I	A A N S	G S			S P I	K Y E F D K E T G V L S V D R
UniRef90_W0P4I8	N D I	Y V I I	E I	P S N S				S P I	K Y E M D K K S G M L F V D R
UniRef90_G7H2X5		V D V I I	E I	P K G S	R N K Y			E V D H E T	G R V F V D R
UniRef90_I4CP51	D I Y	V A I	E I	P A N	H A			P I	K Y E I D H D T D C L F V D R
UniRef90_R5VBE7	E V L	T A F I	E M			V P	T D T V	K Y	E L D K V S G Y I K I D R
UniRef90_UPI00047CCDC9		M F V	E I	P K G S	R N K Y			E W D E	E V G A I V F D R
UniRef90_E8X2Q8	E V I	N V V I	E I	P Q E G	V N K Y	E Y D K D			L H V F R L D R
UniRef90_UPI0003B54AC8	A D Y	D A I I	E I	P R G S	R N K Y			E V D H E T	G R V Y L D R
UniRef90_D8JZW5		I	E I	P K G S	R N K Y			E W D K E R	K I I K F D R
UniRef90_Q8D274	D I Y	A I I	E I	P T N S	N			P I	K Y E V D K K T G I L F V N R
UniRef90_U3U7B4	D C Y	V I I	E I	P T N A				D P I	K Y E V D K E S G V L F V D R
UniRef90_A0A059MU19		E F E V T I	E I	P K G Q	R N K Y			E V D H E T	G R V K L D R
UniRef90_UPI0003631192		I E V T I	E I	P K G S	R N K Y			E V D H E T	G K V F L D R
UniRef90_UPI00047C6080	E V I	N S V I	E I	P F E G	I N K Y	E Y	D		K Q L H V F R L D R
UniRef90_M1R5P9	E D I	Y A F I	E I	P K D S	N I K Y			E L N K E S	G V I F V D R
UniRef90_UPI00041448E5		I E V T I	E I	P K G S	R N K Y			E V D H V I	T G K V Y L D R
UniRef90_E4U085	D K V	K A I I	E I	A C G S	N I K Y			E V E K E S	G A L V L D R
UniRef90_M0MFR0	T I	H A V V	E I	C L K	G E R N K Y	E Y D K D V	P		G V V L D R
UniRef90_I4EJX6		A L I	E I	P Q G S	R N K Y	E Y D E			K L G G I R L D R
UniRef90_UPI000366FBA3		M I V	E I	P K G S	A N K F	E Y D G			K L N V F R L D R
UniRef90_B5JW34	E L V	N V I I	E I	P A N A				D P V	K Y E I E K D S G A L V V D R
UniRef90_UPI000368FE9A	E A F	D V I V	E I	P Q G S	R N K Y			E M D H E L	G R I R L D R
UniRef90_A5CFM4	D V	N A I I	E I	P M N Q	Q Y			I K Y	E I D K N S G A I V D R
UniRef90_UPI000050FDC9		A T I	E I	P R G S	R N K Y			E V D H E T	G R V K L D R
UniRef90_A3YZG0	G L V	N L V V	E I	P A G S	R N K Y	E Y	N S		V A G L M A L D R
UniRef90_M5A0F0	D C I	H V I I	E I	P R G S	R N K Y	E I	D H D T		G K V Y L D R
UniRef90_A0A023Y521	D E A	N L A V	E I	P A G S	F T K Y	E I			K E D G L V H V D R
UniRef90_UPI00035C7BDA	E D V	N V V I	E I	P M				D H Q Y I	K Y E I D K H S G A I V V D R

[illegible]

	130	140	150	160
UniRef90_U6E237	L V L T Q E S L T P L T L V K C R P L	G V I K M I D N Y E L D D E K I L A V P V A		
UniRef90_M3BJ30	L V L A G D P T F P G V V I R C R A P L	G M F R M R E D D Q G E I D D K K V I C V P A K		
UniRef90_U1LNP8	L V L L E Y P T F P G V F V R V R A P L	G Q L N M E D D G Q G I D D K V I V A P L E K		
UniRef90_UPI00035CE54D	L V L A R Q P L V P G T V V K V R A I	G M L K M I D D G G E A D D K I V A V P V S		
UniRef90_UPI00035CE54D	L V L A R Q P L V P G T V V K V R A I	G M L K M I D D G G E A D D K I V A V P V S		
UniRef90_A0A010ZQ87	L V L L Q E A P T F P G Y C L R A R A I	G M F R M K D D E K G P D D D K V I C V H A N		
UniRef90_R6TVI9	L V L C S E A I Y P M T L V R C Y P I	G A M R M I D D S G K L D D D K I L A I P I		
UniRef90_A1AW25	L V I T P Y P L I H D S V I R C R P I	G I L R M T D E A A G K D D K I L V A V P I		
UniRef90_F3KHN1	L V V A P Y P V A I G S V I R C R P I	G I L N M T D E A A G G D A K I L V A V P H		
UniRef90_D4YMQ1	L V L L H E S V F P G C Q L D A R P I	G V F K M V D E A A G G D D K V I L A D P		
UniRef90_UPI000262CDB3	L V V T P Y P V Q P G S I I R A R P I	G I L D M S D E A A G R D D K V I L A V P H		
UniRef90_K0ICW7	L V L G D Y Q V V P M S V I R A T P V	G V L L T E D E E A G P D D A K V I A P I		
UniRef90_K9PWF1	M V I M D E P T F P G C V I A A R P I	G M M E I D D G A G D R D D K I C V P A E		
UniRef90_C2GEG2	L V I L P E S V E P G V I P A R P I	G V F K M T D E A A G G D D K I L V V D D H		
UniRef90_K5XR09	L V L L P T A V V P G A V I R C R P I	G M L E M E D E A A G K D D K I L V C V P H		
UniRef90_UPI000474F65F	M V V M S E P T F T G C V I E A R P I	G L L R M R D D K K G A D D K V I A V K		
UniRef90_U1YGGZ4	L V L T T F P T F P G C V I S T R I I	G V L V M S D D D K G Q D D K I L G V P V D		
UniRef90_E4RNY5	M V L T T F P T F P G C I I S T A K V I	G M F I M E D E A K G M D D K I L M A V S E Y		
UniRef90_F3ZJX7	L V I L D E P L F P G V L V E A R T I	G M F K M T D E A A G G D D K I L C V P A G		
UniRef90_W0GQQ2	I S L I T Y P T V I P G C Q I N V R V I	G T I N M I D D S G E I D T K I L F G V V D S		
UniRef90_Q2GFI3	L V A S R F P V M S G A V I R A R P V	G V L V M H D E S G E D V K I L A V P T		
UniRef90_D7CRD1	T V M I G R P S F P G A V L D V R P L	G F L E M T D D K G R D D K I L A V P V F		
UniRef90_UPI00047653C5	M V L I T E P T F P G A L V E C R A I	G M F R M K D E M G P D D D K V I C I P V A		
UniRef90_W2BQ80	M V I L P E S T F P G C L V E C R A I	A M F Q M Q D E M G G D D D K V I C I P T A		
UniRef90_UPI000380A203	L V M I D E P T F P G C V I T V R P L	G Y L E M D D N G G E P D E K I L C V P V N		
UniRef90_UPI00040EF32F	L V L A T N P T F P G C A I D A R V I	G Y L H M V D D D G E D D K I L G V P T E		
UniRef90_Q60CJ4	L V I A P C R L L S G S V V R C R P I	G V L K M E D E A A G S D A K V I L A V P V		
UniRef90_C8XA89	L V L L S E A T F P G C L V E C R A I	G M F R M T D E A A G P D D K V I C V S A K		
UniRef90_A1TG52	L V L L P E P V F P G C V I E A R P V	G M F R M T D E A K G G D D K V I L A V L A		
UniRef90_W2E4Y4	L V L S T F P T F P G C V I E S R V V	G V L V M S D D K G Q D D K I L A V P V N		
UniRef90_UPI000370DDEF	L V L V Q E P T F P G C I I S R T I	G M F R M T D E A K G G D D K I L C V P A G		
UniRef90_X5M8F4	L V A G T P A V V P G A V M A C R P V	G V L M M E D E A A G M D E K I L V A V P P		
UniRef90_D7E796	I V L M D E R T F P G C M L E A R P V	G L M L M T D S G E T D D K I L A V P N K		
UniRef90_UPI00036DABFF	L V L L P E P V F P G V V V E A R P I	G V F H M T D E A A G G D D K V I C V P V		
UniRef90_B2GGG5	M V I M D V D I M P G V V V E A R P I	A V F N M T D E A A G G D A K V I L C V S T		
UniRef90_UPI00034B178A	M V P L D K P S F P G C E V L V R P V	A V F W M Q D E A G G P D A K V I L C M P A		
UniRef90_F0FWS7	I V I A P F E L D R L A L V A C R P V	G L L N M T D Q A A G S D E K V I A V P I D		
UniRef90_U2SX12	L V L L E Y P A F P G V G V K V R P V	G V L N M S D E A A G S D A K V V V P A K		
UniRef90_D2NQQ3	M L I L D V D V V P G V L V E S R P I	A V F N M T D E A A G G D A K V I C V P T A		
UniRef90_UPI00047AC1FC	M V L I E E P T F P G C L I R C R A I	G M F R M T D E A A G G D D K V I C V P A E		
UniRef90_UPI00036489C7	L V L L D E P T W P G C L V L A R P I	G M F H M R D D E A A G G D D K I L C V P A E		
UniRef90_B1VHL5	L V I L P E P L F P G V V V K A R P V	G V F K M T D E A A G G D D K I L C V L D		
UniRef90_F4B934	L V I S N Y P F N P G S V V E A R P V	G L I Y M T D E A G V I D K K I L A V P K		
UniRef90_L0B4E2	L V I T P F P V Q I G S V I R C R A I	G I L E M E D E S G F D A K I L A L P V K		
UniRef90_C1F6J8	L V L V D A P S F P G C L Q R V R P I	G V L E M L D Q G V L D E K I L A V G K N		
UniRef90_C5WCB9	L V T P H P L Y S G S V I R C R P V	G M L K M T D S G E K D V K I V A V P H		
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UniRef90_L2F9M4					
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UniRef90_T0DJ61					
UniRef90_D6YU93			F L E K Y G K M F N P W H G I K T W D D E D K		
UniRef90_A5K7R4			H P W H G L P L G K K A P E		
UniRef90_UPI0003B4FFF5			Y F Q K V D D K I S P W H D I D L V N E D		
UniRef90_Q0I8K1					
UniRef90_V5SEM3				S L P P S P S P	
UniRef90_R6TA00					
UniRef90_UPI0003775C1A					
UniRef90_L0HLV4				N S H K A H P W H G I D L G E N V P	
UniRef90_G2LHP1				H P W H G I E I G S R T P E	
UniRef90_A2BVH3					
UniRef90_UPI000476CA40					
UniRef90_A4A041					
UniRef90_K2R0C9					
UniRef90_D5USC5					
UniRef90_R7F6U8					
UniRef90_U1T4W3					
UniRef90_UPI000376A149					
UniRef90_R4PXA0					
UniRef90_UPI00037FAC26					
UniRef90_UPI0003B3D659					
UniRef90_A0Z588					
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UniRef90_F3ZUA1					
UniRef90_R5IT13					
UniRef90_W2CZF5					
UniRef90_UPI00040CC9CC					
UniRef90_M7T2U6					
UniRef90_D7JFN4					
UniRef90_E8Q6Q9					
UniRef90_K2DL26					
UniRef90_Q948I7					
UniRef90_F8EA27					
UniRef90_S5LWF0					
UniRef90_UPI0002EC1DDA					
UniRef90_A0A024K5G6					
UniRef90_A0A024GK18					
UniRef90_C7M0A6					
UniRef90_D5VCL5					
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UniRef90_M0P961					
UniRef90_X1BD88					
UniRef90_C5LHB2					
UniRef90_X5L3M0					
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UniRef90_UPI0004708BCA					
UniRef90_A5KSU2					
UniRef90_W8JMF9					
UniRef90_F2UTX6					
UniRef90_F0TNU0					
UniRef90_R7K479					

	50	60	70	80
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UniRef90_H8ML37	E V V T A Y I E I	V P T D A V K Y E E M D K E S G L L M L D R		
UniRef90_P58733	G I L N A Y I E I	E F D K E D L N A F A L M L D R		
UniRef90_D6ZBQ6	E F D V V V E I	E V D H A T G R V T L D R		
UniRef90_R6D414	D V V E A I I E I	P F R S R N K Y E V D H D T K R I K L D R		
UniRef90_C6V5L5	E A N V I V E I	P A G S N G V K Y E I N D D G L V C L D R		
UniRef90_UPI0003B5F98B	E F D V T I E I	P K G N R N K Y E I D H K T G R I R L D R		
UniRef90_Q05RM6	G L V N L V V E I	P A G S R N K Y E Y L E S A G V M A L D R		
UniRef90_G4SW08	N I V T A F I E I	V P S D T V K Y E I D K V S G F L M L D R		
UniRef90_UPI000479E5FE	A V M C F I E V V P	T D T I K Y E I D K V S G Y L R I D R		
UniRef90_A5EWH6	G V I N V V V E I	P A G S N H K I E W Q R Q L G V M L D R		
UniRef90_D2SDP7	E V D V I V E I	P K G S R N K Y E Y D Q R L G R I R L D R		
UniRef90_M7P016	V F I E I	I R G S K K K Y E L D E E T G C L I L D R		
UniRef90_X1WIA2	E V F R A V I E I	P K E G T N K F E Y D K E L H V F K L D R		
UniRef90_E6QK54	S V L N A Y I E I	T P S D R V K Y E I D K A T G Y L K L D R		
UniRef90_T0SF51	G I I N V I E I	I A G G S K N K Y E F D K D L Q A F A L D R		
UniRef90_X5JY22	D V V N A V V E I	C L K G E R N K Y E Y D K D V P G V V L D R		
UniRef90_U1NPX9	G T I N A I I E I	P T G T N Q K W E I N K D D T S Q V I W E F K K G K P R I V N D R		
UniRef90_B8K6E0		P E G S R N K Y E M D H A I G R I R L D R		
UniRef90_UPI00023795B7	D L H V I I E I	P M H H D P V K Y E M D K S S G A L F V D R		
UniRef90_K0P8T7	G V I N V V I E I	P A G S S N I E W N R K L G F M Q L D R		
UniRef90_L2F9M4	D V N V I E I	P A F A P P I K Y E V D K D T L F V W V D R		
UniRef90_T0DJ61	K V L N A Y I E I	T P N D R V K Y E V H K E S G Y L M V D R		
UniRef90_D6YU93	E I N C F I E I	P S D T I K Y E L D K E T G L K I R Y Y H D R		
UniRef90_A5K7R4	G T Y N M V V E I	T K Y N Y I K L E I Q L T E S F N V I K Q D K K G K L R Y Y H D R		
UniRef90_UPI0003B4FFF5		D V T I E I	P A G S R V K Y E I D H E T H R L R L D R	
UniRef90_Q018K1	G L L N L I V E I	P A G S C N K Y E F S E D V G V M A L D R		
UniRef90_V5SEM3	D E V R A F I E I	V P T D T V K Y E V D K A S G T L S L D R		
UniRef90_R6TA00	V V T S F I E V I P	S D T V K Y E V D K K T G Y L K I D R		
UniRef90_UPI0003775C1A	E D I Y V F I E V	P K G S N I K C E Y D F E M N V I K V D R		
UniRef90_L0HLV4	Q V T A Y I E I	P K G S N I K C E Y D F E M N V I K V D R		
UniRef90_G2LHP1	G I V N L V V E I	P A G S R N K Y E Y C S Q A G I M A L D R		
UniRef90_A2BVH3	I V T A F I E I	V P T D T V K Y E I D K Q S G F L K I D R		
UniRef90_UPI000476CA40	E F C A V I E I	P T G C S L K Y E L D K Q T G L L R M D R		
UniRef90_A4A041	K V V Y A V I E T	P K G S W N K Y V Y E T S K E T F C L D R		
UniRef90_K2R0C9	E F E V T V E I	A K G S R N K Y E V D H K S G R L K L D R		
UniRef90_D5U5C5	D F V A V V E I	A K G G T N K Y E L D K A T G L L R L D R		
UniRef90_R7F6U8	N Q V H M A V E I	P A G S I T K Y E I N E E G L V F V D R		
UniRef90_U1T4W3	R V H A Y I E I	S P F D T V K F E V D K K S G Y L R V D R		
UniRef90_UPI000376A149	G V V N T V V E I	P E G S T L K I E W D R E R A A F T L D R		
UniRef90_R4PXA0		M V V E I	P R G S R N K Y E I D H E T G R V F L D R	
UniRef90_UPI00037FAC26	N S I Q M L V E I	P A G S R N K Y E I D H E T G R V F L D R		
UniRef90_UPI000471CCBD	G I V R A Y I E M	L P S D T V K Y E L D K N T G F L M V D R		
UniRef90_A0Z588	D I Y G I E I	S A F S K P I K Y E L N K S F N M Y V D R		
UniRef90_Q058B7	V V T S F I E I	P L N T K N K F E I D E T T T G K I R L D R		
UniRef90_U7DC30	N I V D A I I E I	P L N T K N K F E I D E T T T G K I R L D R		
UniRef90_R5SSW7	R V H A Y I E I	P A G S R N K Y E Y S A E S T P F D L M K Y E I D K T T G Y L R V D R		
UniRef90_UPI000376A149	G L I N L V I E I	P A G S R N K Y E Y S A E S T P F D L M K Y E I D K T T G Y L R V D R		
UniRef90_Q3AW51	S V N V I E I	P R G S N N K Y E Y K E D I D A I V L D R		
UniRef90_V6DF24	G I V N L I V E I	P A G S R N K Y E Y C S E A G I M A L E V D G V S G K I K L D R		
UniRef90_UPI0002DC6DDA	N V I P M I V E I	P K G S S N K Y E V D G V S G K I K L D R		
UniRef90_UPI000471CCBD	E E F Y A V T E I	P A G G N I K Y E T D A K T G F I V A D R		
UniRef90_E6WGA9	E F D V T V E I	P R G T R N K Y E A D P A T H R L H L D R		
UniRef90_R4LJ82	E I V N A Y I E M	T P T D T V K Y E E L D K Q S G L L K V D R		
UniRef90_UPI000376A149	E F E V T I E I	P K G G R N K Y E V D H D S E V D H E T G K V Y L D R		
UniRef90_H1XYM1	N S V E M I V E I	P A G C R N K Y E V D H D S G R V R L D R		
UniRef90_F1YQLQ1	V V N S F I E I	P V P T D T V K Y E V D K E T G Y L K I D R		
UniRef90_UPI0003F4D8C5	D I V E I I V E I	P Y R S R N K Y E I D S V T G R I K L D R		
UniRef90_R5IT13	Q V I T A F I E M	V P T D T V K Y E L N K V N G F L C L D R		
UniRef90_W2CZF5	G T I N V V I E I	P M G S T H K I E W N R Q L A I M Q L D R		
UniRef90				

	90	100	110	120
UniRef90_UPI000376B194	P Q K F S N I V	P A L Y G F I	P Q T Y C K D E V K T G K K D I V G	D D D P L D I
UniRef90_H8ML37	P Q R F S S S Q Q	P T L Y G F V	P R T Y C G E Q V A K R K C E I R G	D D D P L D I
UniRef90_P58733	V L Y S S V Q Y	P Y D Y G F V	P I T	D D D P L D G
UniRef90_D6ZBQ6	Y L Y T S F G Y	P S D Y G F I	E N T L G E	D D D P L D A
UniRef90_R6D414	V L Y S A M G Y	P A E Y G F I	E N T L A	D D D P L D A
UniRef90_C6V5L5	F I P V S M H Y	P C A N Y A F I	E N T L A	D D D P L D A
UniRef90_UPI0003B5F98B	M L F T S T R Y	P D D Y G F I	D D T L G E	D D D P L D A
UniRef90_Q05RM6	V L H S S V R Y	P F D Y G F I	E N T L A E	D D D P L D A
UniRef90_G4SW08	P Q K F S N M I	P T L Y G F I	P Q T F C A E Q V K S G R E V I G	D D D P L D I
UniRef90_UPI000479E5FE	P Q K Y S N V V	P S L Y G F I	P Q T Y C G D L V K S G K K D I K G	D D D P L D V
UniRef90_A5EWH6	V E P M I F A K	P T N Y G F I	P Q T L D E	D D D P L D A
UniRef90_D2SDP7	M L F T A T G Y	P G D Y G F V	P E T L A E	D D D P L D A
UniRef90_M7P0I6	Y L N T A F C Y	P A N Y G F I	P L T L C D	D N D P L D V
UniRef90_X1WIA2				
UniRef90_E6QK54	N L H S P V H Y	P G D Y G F I	P S T L S D	D D D P L D V
UniRef90_T0SF51	P Q K F S S N I I	P A L Y G F I	P R T Y E Y T M K Q T G R D G L F G	D D D P L D V
UniRef90_X5JY22	V L Y S S V K Y	P Y D Y G F V	P N T L A D	D D D P L D G
UniRef90_U1NPX9	V L H A N V H Y	P S D Y G F L	P R T Y Y D	D D D P F D I
UniRef90_B8K6E0	Y L	P A N Y G A I	P S T A L P K E	D D D P L D V
UniRef90_UPI00023795B7	T L F T A A Q Y	P A D Y G Y I	P G T V A E	N G D P L D A
UniRef90_K0P8T7	F M A T P M Y Y	P C N Y G F V	P H T	A S G D D D P L D V
UniRef90_L2F9M4	V E P K L F A K	P T N Y G F I	P Q T L D E	D D D P L D A
UniRef90_UPI0004662AFE	L Q G A T M Q Y	P A N Y G Y I	N D T L S D	D D D P V D V
UniRef90_T0DJ61	P Q K F S N I I	P Q L Y G L I	P R T Y S D E K S A N G R T G I V G	D D D P L D I
UniRef90_D6YU93	P Q K F S S V C	P L Y G F V	P R T Y A H C M E K T G L K G I K G	D D D P L D I
UniRef90_A5K7R4	N	S L Y W N Y G A L	P R T Y E Y P K H I Y S C Q T	D G N Q D I
UniRef90_UPI0003B4FFF5	V L Y T P M Q Y	P T H Y G Y F	D D T L G E	D D D P L D A
UniRef90_Q0I8K1	V L H P S I R Y	P F D Y G F V	P N T L A E	D D D P L D A
UniRef90_V5SEM3	F L Y T P M R Y	P G N Y G F V	P H T L S E	D D D P I D V
UniRef90_R6TA00	P Q K F S N I V	P S L Y G F L	P R T Y C S K N Q A L A R Y D V E G	D D D P L D I
UniRef90_UPI0003775C1A	P Q K F S N I V	P A L Y G F I	P R T Y C K E R V A T G R K D I V G	D D D P L D I
UniRef90_L0HLV4	V L H T A S F Y	P F N Y G F I	P E T L E E	D N D P I D C
UniRef90_G2LHP1	P Q K Y S N H C	P T L Y G L I	P Q T Y C G R R E R T G R T D M A G	D D D P L D I
UniRef90_A2BVH3	I L H S S V R Y	P F D Y G F I	P R T L A D	D G A P L D A
UniRef90_UPI000476CA40	P Q K F S N M V	P T L Y G F I	P R T C G S K V K S G K R D I K G	D D D P L D I
UniRef90_A4A041	I L Y S A V H Y	P A N Y G F I	P Q T L A D D D D P L D V L V L C	
UniRef90_K2R0C9	G Q V I S P L C Y	P A D Y G I I	P Q A L G D	N G N P L N M
UniRef90_D5USC5	Y L Y T S F G Y	P T D Y G Y I	E D T L G E	D G D P L D A
UniRef90_R7F6U8	V L Y T A T H Y	P A N Y G F I	P R T Y A	G D D D P L D V
UniRef90_U1T4W3	F Q S M P V A Y	P A N Y G S L	P R T L	G G D D D P L D A
UniRef90_UPI000376A149	S V R S S S Q H	P A L Y G F I	P R T L C A K H V G D L D D A K R G	D D D P L D I
UniRef90_R4PXA0	V E P Q I F A K	P V N Y G F I	P Q T L D E	D D D P L D T
UniRef90_UPI00037FAC26	M L F T S T Q Y	P L D Y G Y V	P G T L A E	D D D P L D A
UniRef90_UPI0003B3D659	T L F T A M V Y	P A D Y G Y I	E N T L A D	D D D P L D A
UniRef90_A0Z588	P Q R T T A T P	P A L Y G F I	P R T Y C A E E V A A R C A H A V A	D D D P L D I
UniRef90_Q058B7	F I P T T M F Y	P C N Y G F I	N Q T L S	L D D D P L D I
UniRef90_U7DC30	P Q K Y S N V V	P A L Y G F I	P Q T Y S G K R V K T E D A S I K G	D D D P I D I
UniRef90_R5SSW7	V L Y S A M N Y	P V E Y G Y I	E N T L A	L D D D P L D I
UniRef90_D5C534	P Q R S S S L P	P A L Y G F I	P R T Y C G D Q V A S L C E G A E	D D D P L D I
UniRef90_U3AWS1	V L H A S V R Y	P F D Y G F I	P N T L A E	D G S P L D A
UniRef90_V6DF24	V L H S P F F Y	P T D Y G F I	P Q T R S E	D D D P L D V
UniRef90_UPI0002DC6DDA	I L H S S V R Y	P F D Y G F I	P N T L A D	D G A P L D A
UniRef90_UPI000471CCBD	V L Y G A N F Y	P G E Y G M V	E N T L D	W D G D D P L D V
UniRef90_E6WGA9	F Q S M P V A Y	P A N Y G S L	T Q S L	G G D D D P L D V
UniRef90_R4LJ82	T L F T A T Q Y	P A D Y G Y I	E D T L A	G D G T N L D A
UniRef90_H1XYM1	P Q R F S S M P	P M L Y G F I	P R T Y E Y C N K K T G R T D I I G	D D D P L D I
UniRef90_F1YLQ1	Y L Y T P M G Y	P A D Y G Y I	D H T L G E	D D D P L D A
UniRef90_UPI0003F4D8C5	T L Y T S M V Y	P A D Y G F I	D H T L A D	D D D P L D A
UniRef90_F3ZUA1	P Q K Y S N I I	P A L Y G F I	P Q T Y E L T N Q A L G R T D I E G	D D D P V D I
UniRef90_R5IT13	V L Y S A M G Y	P A E Y G S		

UniRef90_UPI000376B194	C	V	L	T	R	E	V	T	H	G	N	I	V	N	A	V	P	I	G	G	F	R	M	I	D	G	G	E	A	D	D	K	I	I	A	V	M	A	K			
UniRef90_H8ML37	C	V	L	T	E	K	V	V	S	N	G	N	L	V	H	A	V	P	I	G	G	F	R	M	I	D	G	G	E	A	D	D	K	I	I	A	V	M	A	K		
UniRef90_P58733	M	V	I	L	M	V	P	T	F	P	G	N	V	A	T	A	R	P	I	G	G	M	L	Q	M	V	D	G	D	E	A	D	D	K	F	L	C	P	A	K		
UniRef90_D6ZBQ6	L	V	L	L	P	E	S	V	F	P	G	V	V	P	A	R	A	R	P	I	A	L	F	N	M	T	D	E	A	G	G	D	A	K	V	L	A	V	P	A	G	
UniRef90_R6D414	L	V	I	G	T	E	S	P	T	Y	P	G	V	V	P	A	R	V	P	I	G	Y	L	E	A	I	D	N	G	F	E	D	Y	K	L	L	S	V	D	V		
UniRef90_C6V5L5	L	V	V	T	R	S	P	L	M	P	G	S	L	V	R	V	K	V	I	G	A	F	V	M	R	D	E	K	G	E	D	K	L	L	S	T	V	P	I			
UniRef90_UPI0003B5F98B	L	V	L	L	E	E	P	T	F	A	G	C	V	I	R	C	R	A	L	G	M	F	R	M	K	D	E	A	G	G	D	D	K	V	L	C	V	P	A	S		
UniRef90_Q05RM6	M	V	I	M	E	E	P	T	F	A	G	C	V	I	R	C	R	A	L	G	V	L	D	M	H	D	T	E	A	G	H	Y	D	K	I	I	A	V	M	A		
UniRef90_G4SW08	C	V	L	S	E	R	N	V	S	H	G	D	I	L	Q	A	I	P	I	G	G	F	R	M	I	D	G	G	E	A	D	D	K	I	I	S	V	L	K	G		
UniRef90_UPI000479E5FE	C	V	L	T	E	K	D	V	M	H	G	D	I	L	E	V	I	P	I	G	G	F	R	M	I	D	G	G	E	A	D	D	K	I	I	S	V	L	K	G		
UniRef90_A5EWH6	L	I	I	L	T	E	D	N	P	L	T	G	I	Y	L	Q	A	R	I	I	G	V	M	N	F	I	D	D	G	E	V	D	D	K	I	I	V	V	P	A	D	
UniRef90_D2SDP7	L	L	L	L	A	E	P	T	F	P	G	C	L	V	R	A	R	V	I	A	V	F	W	V	H	D	K	R	G	P	D	A	K	L	I	C	V	P	A	T		
UniRef90_M7P016	F	V	L	T	Q	E	I	L	D	P	M	V	L	V	E	C	R	P	I	G	V	I	R	M	L	D	N	G	Q	Q	D	D	K	I	I	A	I	P	V	K		
UniRef90_X1WIA2	I	S	H	E	D	P	L	F	I	D	K	L	I	F	T	D	E	S	T	F	I	R	H	G	Q	T	R	E	T	D	W	K	I	L	V	I	N	V	E			
UniRef90_E6KQ54	L	V	L	V	P	A	P	S	F	P	G	C	V	Q	E	V	R	P	I	G	L	L	E	M	M	D	Q	G	I	L	D	E	K	V	L	A	V	G	K	N		
UniRef90_T0SF51	C	V	L	T	D	K	N	I	D	H	A	D	I	V	N	C	I	P	I	G	G	F	R	M	I	D	G	G	E	V	D	D	K	I	I	V	A	V	S			
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UniRef90_B8K6E0	I	V	L	G	H	I	P	R	G	S	I	A	E	V	R	L	I	P	I	G	V																					

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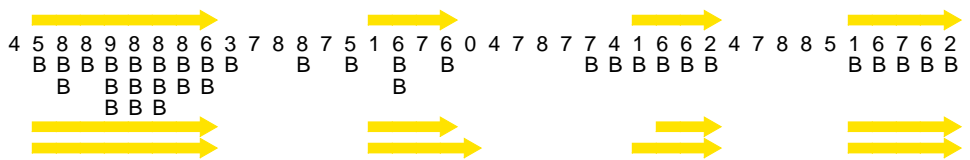
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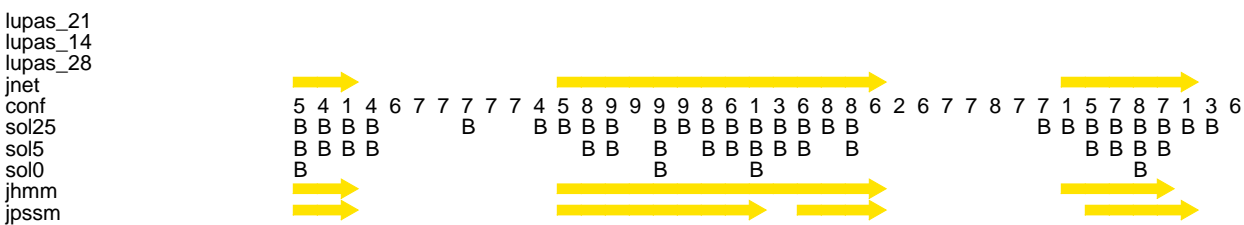
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