

QUERY	1	10	20	30	40																																		
UniRef90_W5NGN6	S	M	Q	I	R	V	L	V	T	G	A	G	Q	I	A	F	T	L	L	Y	S	I	G	D	G	S	V	F	G	K	N	Q	P	I	L	L	S	L	M
UniRef90_A7S4V3	S	D	P	I	K	V	L	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M
UniRef90_Q6F7X1	E	P	L	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_UPI00039D9733	Q	P	L	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_G6D9M8		P	L	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_A6GNA9	T	K	P	M	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M
UniRef90_D2Q476	T	T	P	V	K	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M
UniRef90_Q21K60		P	V	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_UPI0003B7036F	E	P	A	R	V	T	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_U2E149	E	P	L	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_E0VFB4	E	P	L	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_UPI000374D8AB		P	M	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_K1PU26	E	P	L	K	V	L	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_T2MFV8	E	P	L	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_I1FND6		L	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M		
UniRef90_F8UHY1	K	P	M	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_H3NUK0	T	P	V	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_G0QR65		P	V	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_B8R5G8	S	E	P	V	K	V	L	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M
UniRef90_A4BT20		P	V	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_E8RCE7		P	V	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_L0GSY7		P	V	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_K0C734		P	V	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_E4NCD5	T	P	V	N	V	T	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_G9PER1		P	V	N	V	T	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_F8GE84		P	I	R	I	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_Q4PP81	S	E	P	I	N	V	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_B4NQQ2	E	P	L	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_Q47C34		P	M	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_D7GCF6	T	T	P	V	K	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M
UniRef90_A0A058ZGK3	E	P	V	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_H2TUL9	E	P	L	R	V	L	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_V5GL68	S	E	P	L	R	V	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_E4WX88		P	M	R	V	V	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_T0GDL9		P	V	K	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_U1H656	T	A	P	V	K	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M
UniRef90_D8HVG5		P	V	N	V	T	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_A6C4P0	T	H	P	I	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M
UniRef90_R5PL56		K	P	I	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M
UniRef90_V5DLA8		K	P	V	H	I	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M
UniRef90_D5EQK3		E	P	I	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M
UniRef90_UPI00037AC21E	S	R	P	V	K	V	T	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M
UniRef90_F0J9X5	E	P	L	R	V	L	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_B5JL49		P	L	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_W2TAD7		P	L	R	V	L	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_UPI00036E172E	T	P	I	R	V	L	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_B5JM37		P	L	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_A4QGA0			K	V	T	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M		
UniRef90_UPI000362CD90	S	Q	A	V	K	I	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M
UniRef90_UPI0003B3CEF7		K	P	V	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M
UniRef90_P61977		P	V	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_UPI0003B31073	K	P	V	K	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_Q8H0P9		P	V	H	V	M	I	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_M4CF15	E	P	I	R	V	L	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_UPI00037FD405		P	V	R	V	A	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_R7QQ53		P	L	T	V	C	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M	
UniRef90_S2WNR5	T	E	A	R	I	V	T	V	T	G	A	G	Q	I	A	Y	S	L	L	Y	S	I	A	K	G	D	V	F	G	K	N	Q	P	I	L	L	S	L	M

QUERY	D	V	P	K	Q	T	S	E	A	V	N	M	Q	L	Q	N	C	A	L	P	L	L	L	K	S	Q	F	G	K	N	S	G	N	Y	A	S	Q	N	V					
UniRef90_W5NGN6	D	I	T	P	M	M	G	A	L	D	G	V	V	L	M	E	L	Q	D	C	A	L	P	L	L	H	R	E	V	V	A	T	D	D	K	E	E	K	A	F	T	D	L	
UniRef90_A7S4V3	D	I	T	P	K	A	Q	Q	A	L	K	G	V	V	M	M	E	L	D	D	C	A	F	P	L	L	A	G	I	M	I	G	T	D	D	K	E	K	V	A	F	K	D	A
UniRef90_UPI00039D9733	E	I	T	P	A	L	D	A	L	N	G	V	V	A	M	M	E	L	E	D	C	A	F	P	L	L	V	A	G	I	T	M	S	D	D	K	G	E	E	A	F	K	D	A
UniRef90_G6D9M8	D	I	T	P	M	M	G	V	L	E	G	V	V	M	M	E	L	A	D	C	A	F	P	L	L	A	A	G	V	V	L	P	T	A	N	P	E	E	E	A	F	K	D	V
UniRef90_A6GNA9	D	I	T	P	A	L	P	A	V	K	G	V	V	M	M	E	L	E	D	C	A	F	P	L	L	A	Q	G	V	V	I	T	D	D	P	A	T	A	F	K	D	V		
UniRef90_D2Q476	E	I	T	P	A	L	K	A	L	E	G	V	V	M	M	E	L	D	D	C	A	F	P	T	L	A	K	V	E	I	G	S	D	D	P	N	T	I	F	D	G	A		
UniRef90_Q21K60	E	I	T	P	A	L	E	A	L	K	G	V	V	A	M	M	E	L	D	D	C	A	F	P	L	L	A	A	G	M	V	C	S	D	D	P	N	V	A	F	K	D	A	
UniRef90_UPI0003B7036F	E	I	T	P	A	L	K	A	L	N	G	V	V	M	M	E	L	R	D	C	A	F	P	L	L	H	D	I	V	V	T	D	D	P	M	V	A	F	K	D	A			
UniRef90_U2E149	E	I	P	P	A	M	D	A	L	N	G	V	V	M	M	E	V	N	D	C	A	F	P	L	L	V	K	D	I	I	G	T	D	K	P	E	E	A	F	K	D	A		
UniRef90_E0VFB4	D	I	P	P	M	M	G	V	L	E	G	V	V	M	M	E	L	T	D	C	A	F	P	L	L	K	Y	E	L	V	P	T	A	D	P	G	V	A	F	K	D	V		
UniRef90_UPI000374D8AB	E	I	P	K	A	Q	K	A	L	K	G	V	V	M	M	E	L	T	D	D	C	A	F	P	L	L	A	A	G	M	T	G	S	D	D	P	N	T	A	F	K	D	I	
UniRef90_K1PU26	D	I	A	P	M	M	E	V	L	N	G	V	V	M	M	E	L	T	D	C	A	F	P	L	L	Q	Q	V	I	P	S	C	D	E	M	E	A	F	K	D	V			
UniRef90_T2MFV8	D	I	P	P	M	M	Q	C	V	E	G	V	V	L	E	L	Q	D	C	A	F	P	L	L	L	H	D	A	I	A	T	S	D	P	N	V	A	F	K	D	I			
UniRef90_I1FND6	D	I	T	P	M	M	E	S	L	K	G	V	V	M	M	E	L	Q	D	C	A	L	N	L	L	K	D	V	V	A	T	S	D	K	P	E	E	A	F	K	D	I		
UniRef90_F8UHY1	E	I	P	K	A	Q	K	A	L	K	G	V	V	M	M	E	L	D	D	C	A	F	P	L	L	A	A	G	M	T	A	A	S	D	A	K	V	A	F	K	D	A		
UniRef90_H3NUK0	D	I	T	P	A	L	D	A	L	E	G	V	V	K	M	E	L	D	D	C	A	F	P	L	L	A	A	G	I	T	C	S	D	D	P	S	N	I	A	F	K	D	A	
UniRef90_Q0QR65	E	L	P	Q	A	K	N	A	L	K	G	V	V	A	M	E	L	N	D	C	A	F	P	L	L	Q	D	I	I	L	T	D	N	E	S	A	I	G	F	K	D	A		
UniRef90_B8R5G8	D	I	E	P	M	M	A	V	L	D	G	V	V	M	M	E	L	Q	D	C	A	F	P	L	L	A	A	D	V	I	P	T	A	D	E	S	A	A	F	K	D	I		
UniRef90_A4BT20	E	I	T	P	A	L	E	V	L	E	G	V	V	M	M	E	L	E	D	C	A	F	P	L	L	A	A	G	V	T	T	S	D	Q	A	K	I	A	F	K	R	D	A	
UniRef90_E8RC67	E	I	P	P	A	M	G	A	L	Q	G	V	V	M	M	E	L	N	D	C	A	F	P	L	L	V	A	G	V	I	A	T	D	D	P	N	V	A	F	K	D	I		
UniRef90_L0GSY7	E	L	P	R	A	Q	R	A	L	K	G	V	V	M	M	E	L	E	D	C	A	F	P	L	L	A	A	G	V	I	I	G	T	S	D	P	K	V	A	F	R	D	A	
UniRef90_K0C734	E	I	T	P	A	L	G	A	L	E	G	A	V	M	E	L	N	D	C	A	F	P	L	L	L	Q	S	V	S	M	S	D	D	A	P	E	N	V	A	F	K	D	I	
UniRef90_E4NCD5	E	I	P	Q	G	L	K	A	A	E	G	T	A	M	E	L	F	D	S	A	F	P	L	L	L	R	D	S	V	I	D	I	F	D	Q	A	N	V	A	F	D	G	A	
UniRef90_G9PER1	E	I	P	Q	A	L	V	K	A	A	E	G	T	A	M	E	L	F	D	S	A	F	P	T	L	G	S	V	D	I	F	D	D	P	K	Q	A	F	D	G	A			
UniRef90_F8GE84	D	I	T	D	A	Q	P	F	F	E	A	I	V	M	E	L	Y	D	C	A	F	P	L	L	L	T	E	I	I	T	T	D	N	P	E	E	V	V	I	F	D	N	V	
UniRef90_Q4PP81	D	L	P	F	A	M	E	P	L	Q	G	V	V	M	M	E	L	E	D	C	A	F	P	L	L	L	R	E	V	I	P	T	T	D	P	N	M	G	F	K	D	V		
UniRef90_B4NQQ2	D	I	P	P	M	A	G	V	L	E	G	V	V	M	M	E	L	N	D	C	A	F	P	L	L	L	R	E	V	I	P	T	T	D	P	N	M	G	F	K	D	V		
UniRef90_Q47C34	D	L	P	Q	A	Q	Q	A	V	K	G	V	V	M	M	E	L	E	D	C	A	F	P	L	L	A	A	G	M	V	A	T	D	D	P	N	V	A	F	K	D	A		
UniRef90_D7GCF6	E	I	T	P	A	L	P	R	L	E	G	V	V	M	M	E	L	D	D	C	A	F	P	L	L	N	L	A	G	V	E	I	G	S	D	P	E	K	V	F	D	G	A	
UniRef90_A0A058ZGK3	D	I	N	P	G	M	E	S	L	N	G	V	R	M	E	L	E	D	S	A	L	P	L	L	L	A	A	G	V	V	C	T	S	D	P	E	V	A	F	T	G	A		
UniRef90_H2TUL9	D	I	T	A	M	L	P	V	L	E	G	V	V	M	M	E	L	Q	D	C	A	L	P	H	I	A	A	D	I	A	T	A	D	M	E	E	V	A	F	K	D	L		
UniRef90_V5GL68	D	I	P	P	M	M	G	V	L	E	G	V	V	M	M	E	L	A	D	C	A	F	P	L	L	Q	A	V	V	P	T	A	D	P	A	V	A	F	K	D	V			
UniRef90_E4WX88	D	L	P	F	A	K	D	A	M	E	G	V	V	M	M	E	L	T	D	C	A	F	P	S	L	K	S	V	T	A	T	C	D	Q	T	E	A	F	T	D	I			
UniRef90_T0GDL9	E	L	E	A	A	L	P	A	A	K	G	V	V	M	E	L	E	D	C	A	F	P	L	L	L	Q	K	V	S	V	S	S	D	L	D	T	A	F	K	D	I			
UniRef90_U1H656	E	I	T	P	A	L	K	A	L	E	G	V	V	M	M	E	L	D	D	C	A	F	P	L	L	G	N	L	V	N	I	E	I	G	D	D	P	K	K	I	F	D	G	A
UniRef90_D8HVG5	E	I	P	Q	A	V	K	A	A	E	G	T	A	M	E	L	E	D	G	A	F	P	L	L	L	A	G	T	D	I	F	D	D	P	K	Q	A	F	E	G	T			
UniRef90_A6C4P0	E	L	P	P	M	L	S	A	L	D	G	V	E	M	E	L	D	D	C	A	F	P	T	G	V	V	K	A	D	S	D	H	L	E	D	A	F	A	D	C				
UniRef90_R5PL56	D	R	P	E	S	Q	Q	K	V	T	G	V	M	M	E	L	D	D	C	A	F	P	L	L	L	A	G	L	E	N	S	P	E	A	T	T	A	F	R	K	D	A		
UniRef90_V5DLA8	E	I	P	P	A	M	K	A	L	Q	G	V	V	M	M	E	L	S	D	C	A	F	P	L	L	L	H	R	V	E	I	T	D	D	P	Y	K	A	F	K	K	A		
UniRef90_D5EQK3	E	I	P	P	A	L	D	A	L	K	G	V	V	M	M	E	L	D	D	C	A	F	P	L	L	L	K	D	V	V	A	T	T	D	M	D	E	G	F	K	D	V		
UniRef90_UPI00037AC21E	E	I	P	A	A	T	R	A	A	E	G	V	A	M	E	L	G	D	S	A	F	P	L	L	L	C	G	I	T	V	T	D	S	A	D	T	A	F	D	G	A			
UniRef90_F0J9X5	D	I	P	M	M	M	G	V	L	N	G	V	V	M	M	E	L	V	D	C	A	F	P	L	L	K	K	D	V	V	A	T	E	D	E	K	T	A	F	T	A	I		
UniRef90_B5JL49	E	I	E	P	A	M	Q	A	L	E	G	V	V	M	M	E	L	Q																										

QUERY	90	100	110	120
UniRef90_W5NGN6	G V L L A	G Q R A K N A A K N L	K A N V K I	F K C Q G A A L L N K Y W K K S V I V
UniRef90_A7S4V3	D A I L L V	G S M P R E R K D L L L	K A N A N K	F F K S Q Q G K A A L L D K Y A K K K T C K I V
UniRef90_Q6F7X1	Y A L L L V	G S R P R E R A D L L L	K V N G E	F I G Q G G K A L L N D E V A S R D V V K V
UniRef90_UPI00039D9733	Y A L L L V	G A K P R E R K D L L L	E A N A S	F F S A Q Q G K A L L N D V A S R D V V R V
UniRef90_G6D9M8	A A F L L V	G A M P R E R K D L L L	S A N V R	F F K E A Q Q G K A L L N D K V A R K D V V K V
UniRef90_A6GNA9	D V L L L V	G A R P R E R K D L L L	E A N G A I	F T V Q G G K A L L N D N A K P T V V K V
UniRef90_D2Q476	N V L L L V	G A R P R E R K D L L L	E A N G A I	F T G Q G G K A L L N D H A K D D I R V
UniRef90_Q21K60	Y A L L L V	G A R P R E R K D L L L	E A N A A I	F S V Q G G K A L L N D H A S R D I K V
UniRef90_UPI0003B7036F	Y A L L L V	G A M P R E R K D L L L	S A N G G I	F K P Q G G A I L N A V A K R D I K V
UniRef90_U2E149	D I L L L V	G A K P R E R A D L L L	K A N A D I	F S V Q G G K A I L N D H A S R D V K V
UniRef90_E0VFB4	D A F L L V	G A M P R E R K D L L L	S A N V K	F K I Q G G E A L L D K F A K R K T V K V
UniRef90_UPI000374D8AB	C A F L L V	G A R P R E R K D L L L	S A N A Q I	F T A Q G G K A L L N A V A K R D V K V
UniRef90_K1PU26	D V A M V	G A M P R E R K D L L L	A A N V K I	F K S Q Q G K A I L D K V A K K T I K V
UniRef90_T2MFV8	D V L L L V	G A M P R E R S D L L L	K A N A K I	F E T Q Q G K A L L D T Y A K K T V K V
UniRef90_I1FND6	D V I L L V	G S M P R E R S D L L L	K A N A K I	F E T Q Q G K A L L D Q F A K K T V K V
UniRef90_F8UHY1	D V I L L V	G A R P R E R K D L L L	E A N G A I	F T V Q G G R A L L D E G A S R D V K V
UniRef90_H3NUK0	Y A L L L V	G A R P R E R K D L L L	E A N A A I	F S A Q G G K A M N A V A S R G I K V
UniRef90_Q0QR65	Y A L L L V	G S K P R E R S D L L L	K D N G K I	F V D T G K A I L N D N A S R N I K V
UniRef90_B8R5G8	D V L L L V	G A Q P R E R K D L L L	K A N V K I	F K S Q G G A L L N D A H A K K T V K V
UniRef90_A4BT20	H F I L L I	G A K P R E R R D L L L	E A N A A I	F T S Q Q G K A I L D A M A S R S V R V
UniRef90_E8RCE7	F A L L L V	G S R P R E R R D L L L	N A N G A I	F T V Q G G A I L L D E D N A K P N V R V
UniRef90_L0GSY7	Y A L L L V	G A R P R G R G M L L	Q E N A K I	F I E Q G G R A L L D E V A S R D I R V
UniRef90_K0C734	F A F L L V	G A R P R E R K D L L L	E A N A A I	F S V Q G G K A L L N K V A K R D I R V
UniRef90_E4NCD5	N V L L L V	G A M P R E R S D L L L	S A N G G I	F G P Q G G A I L N A N A A D D I K V
UniRef90_G9PER1	N I F L L V	G S M P R E R S D L L L	Q A N G G I	F G P Q G G A I L N A V A A D D I K V
UniRef90_F8GE84	D I L L L V	G A R P R E R K D L L L	A A N G P	F I A Q G G R A L L N V A A K R N V K V
UniRef90_Q4PP81	S A F L L V	G A M P R E R K D L L L	S A N V K I	F K V Q G G E A L L D K F A R K D V K V
UniRef90_B4NQK2	S A F L L V	G A M P R E R K D L L L	S A N V K I	F K V Q G G A L L D K V A K K D V K V
UniRef90_Q47C34	D V L L L V	G A R P R E R A D L L L	T A N G A I	F T V Q G G K A I L A K E N A K E D V K I
UniRef90_D7GCF6	N A M L L V	G A M P R E R S D L L L	G A N G K I	F T G Q G K A L L N K R V A S A D D V R I
UniRef90_A0A058ZGK3	O A I F L	G A M P R E R S D L L L	K A N A K I	F R E Q G G E A M N K R V A S P D I C
UniRef90_H2TUL9	D A I L L V	G S M P R E R K D L L L	K A N V A I	F K S Q Q G S A L L E K F S K K T V K V
UniRef90_V5GL68	S A F L L V	G S M P R E R K D L L L	S A N V K I	F K V Q G G A L L N T V A K K T V K V
UniRef90_E4WX88	D V V L V	G A P G M E R N D M L	A K N A E I	F K A Q G G A L L N T V A K K T V K V
UniRef90_T0GDL9	W A L L L V	G S V P R E R G D L L L	K I N G G I	F V N Q G G K A L L E K N A A A D L R V
UniRef90_U1H656	N A F L L V	G A M P R E R S D L L L	S K N G A I	F T A Q G G K A L L N E V A A D D V K V
UniRef90_D8HV65	N I L L L V	G A R P R E R G D L L L	E A N G G I	F K P Q G G A I L N A G A A D D I K V
UniRef90_A6C4P0	F V V C V	G S I P R E R G D L L I	R I N G P	F T S T G K A I L E A A A A E D V R V
UniRef90_R5PL56	D V L L L V	G A R P R E R A D L L L	N A N A E I	F V A Q G G R A L L N E A A S R D C K V
UniRef90_V5DLA8	Y A F L L V	G A R P R E R K D L L L	V V N A E I	F S V Q G G K A L L N E V A S R N V K V
UniRef90_D5EQK3	W A L L L V	G S V P R E R G D L L L	G I N G K I	F T G Q G G K A I L A A N A A S D D V R V
UniRef90_UPI00037AC21E	N A F L L V	G A K P R E R A D L L L	A E N G R I	F G P Q G G A L L G E H A A S D I K V
UniRef90_F0J9X5	D V F L L V	G S M P R E R K D L L L	A A N V K I	F F K S Q G K A L L D Q F A K K S V K V
UniRef90_B5JL49	W A L L L V	G S V P R E R K D L L L	S I N G K I	F T S Q G K A I L Q E N A A S D I R T
UniRef90_W2TAD7	Y A F L L V	G A M P R E R K D L L L	A A N V K I	F K S Q G K A L L A D Y A K A T K V
UniRef90_UPI00036E172E	Y A F L L V	G A R P R E R K D L L L	E V N A E I	F V V Q G G K A L L N A V A S R D V R V
UniRef90_B5JM37	W A L L L V	G S V P R E R A D L L L	S V N G K I	F V G Q G G K A I L N D F A K P N V R V
UniRef90_A4QGA0	N A F L L V	G A K P R E R A D L L L	A A N G K I	F G P Q G G A I L N D N A A D D I R V
UniRef90_UPI000362CD90	S A F L L V	G A K P R E R G D L L L	A A N G T I	F G P Q G G A I L N E H A A Q D V R V
UniRef90_UPI0003B3CEF7	D V F L L V	G A K P R E R K D L L L	A A N A G I	F A T Q G G K A L L N H S A K R D A K V
UniRef90_P61977	Y A L L L V	G A A P R E R R D L L L	Q V N G K I	F T E Q G G R A L L A E V A K K D V K V
UniRef90_U				



QUERY	130													140													150													160												
UniRef90_W5NGN6	I	L	V	V	G	N	P	A	T	N	N	C	L	T	A	S	K	N	S	A	Q	I	N	K	A	K	Q	V	N	S	V	K	L	N	H	N	R	A	R	K	S	M										
UniRef90_A7S4V3	L	L	V	V	G	N	P	A	N	T	N	C	L	I	A	S	K	S	W	A	P	S	I	P	K	E	N	F	S	C	L	T	R	L	D	H	N	R	G	S	Q											
UniRef90_Q6F7X1	L	L	V	V	G	N	P	A	N	T	N	A	Y	I	A	M	K	S	A	P	D	I	P	A	K	N	F	T	A	M	L	R	L	D	H	N	R	A	L	T	Q											
UniRef90_UPI00039D9733	L	L	V	V	G	N	P	A	N	T	N	A	L	I	A	Q	R	N	A	P	D	I	D	P	A	K	G	R	F	T	A	M	T	R	L	D	H	N	R	A	L	Q										
UniRef90_G6DM8	L	L	V	V	G	N	P	A	N	T	N	A	L	I	C	S	K	Y	A	P	D	I	D	P	K	E	N	F	T	A	M	T	R	L	D	H	N	R	A	Q	S											
UniRef90_A6GNA9	L	L	V	V	G	N	P	A	N	T	N	A	Y	I	A	Q	Q	S	A	P	D	I	D	P	N	C	F	T	S	M	L	R	L	D	H	N	R	A	L	S												
UniRef90_D2Q476	T	V	T	G	N	P	A	N	T	N	A	L	I	A	K	S	N	A	P	D	I	D	P	A	E	R	F	T	S	A	L	T	R	L	D	H	N	R	A	L	S											
UniRef90_Q21K60	L	L	V	V	G	N	P	A	N	T	N	A	L	I	A	Q	R	N	A	P	D	I	N	P	R	Q	F	T	A	M	M	R	L	D	H	N	R	G	L	S												
UniRef90_UPI0003B7036F	V	V	V	V	G	N	P	A	N	T	N	A	L	I	A	Q	Q	N	A	P	D	I	D	P	K	Q	F	T	A	L	V	R	L	D	H	N	R	A	I	S												
UniRef90_E2E149	L	L	V	V	G	N	P	A	N	T	N	A	L	I	A	A	S	N	A	P	D	I	D	D	K	Q	F	T	A	M	M	R	L	D	H	N	R	A	I	S												
UniRef90_E0VFB4	L	L	V	V	G	N	P	A	N	T	N	A	L	I	C	S	K	F	A	P	D	I	D	P	K	E	N	F	S	A	M	T	R	L	D	H	N	R	A	S	Q											
UniRef90_UPI000374D8AB	L	L	V	V	G	N	P	A	N	T	N	A	Y	I	A	M	K	S	A	P	D	I	P	K	Q	N	F	T	A	M	L	R	L	D	H	N	R	G	L	S												
UniRef90_K1PU26	V	V	V	V	G	N	P	A	N	T	N	A	Y	I	C	S	K	Y	A	P	D	I	P	K	Q	N	F	T	A	M	L	T	R	L	D	H	N	R	A	Q	A											
UniRef90_T2MFV8	L	L	V	V	G	N	P	A	N	T	N	C	L	I	A	Q	R	C	A	P	S	I	P	P	K	E	N	F	S	C	L	T	R	L	D	H	N	R	A	V	S	Q										
UniRef90_I1FND6	L	L	V	V	G	N	P	A	N	T	N	C	L	I	A	Q	K	S	A	S	S	L	S	P	A	C	F	T	S	M	M	R	L	D	H	N	R	A	S	Q												
UniRef90_F8UHY1	L	L	V	V	G	N	P	A	N	T	N	A	L	I	A	M	H	N	A	P	D	I	S	G	S	Q	F	T	A	M	T	R	L	D	H	N	R	A	I	T	Q											
UniRef90_G0QR65	I	V	V	V	G	N	P	A	N	T	N	C	L	I	A	S	H	Y	A	K	D	I	P	P	K	E	N	F	T	A	M	T	R	L	D	H	D	R	G	L	T	Q										
UniRef90_B8R5G8	V	V	V	V	G	N	P	A	N	T	N	A	L	V	I	A	Q	F	A	P	S	I	P	P	K	E	N	F	S	C	L	T	R	L	D	H	N	R	A	Q	A											
UniRef90_A4BT20	L	L	V	V	G	N	P	A	N	T	N	A	L	I	V	Q	R	N	A	P	T	I	A	P	R	R	F	T	A	M	T	R	L	D	H	N	R	A	L	A	Q											
UniRef90_E8RCE7	L	L	V	V	G	N	P	A	N	T	N	A	L	I	C	L	K	N	A	P	S	I	N	P	R	N	V	T	A	M	M	R	L	D	H	N	R	A	M	S	Q											
UniRef90_L0GSY7	I	V	V	V	G	N	P	A	N	T	N	A	L	I	A	M	K	S	A	S	G	L	S	P	R	E	N	F	T	S	M	M	R	L	D	H	N	R	A	L	S	M										
UniRef90_K0C734	L	L	V	V	G	N	P	A	N	T	N	A	L	I	A	M	N	N	A	P	D	I	D	P	R	N	F	T	A	M	T	R	L	D	H	N	R	A	M	S	L											
UniRef90_E4NCD5	L	L	V	V	G	N	P	A	N	T	N	A	L	I	A	Q	R	N	A	P	D	I	D	P	S	R	F	T	A	M	T	R	L	D	H	N	R	A	V	A	Q											
UniRef90_G9PER1	L	L	V	V	G	N	P	A	N	T	N	A	L	I	A	A	N	H	A	P	D	V	D	P	S	S	R	F	T	A	M	T	R	L	D	H	N	R	A	L	A	Q										
UniRef90_F8GE84	L	L	V	V	G	N	P	A	N	T	N	A	Y	I	T	L	K	N	A	P	D	I	D	P	A	N	F	T	S	A	M	L	R	L	D	H	N	R	A	V	S	Q										
UniRef90_Q4PP81	L	L	V	V	G	N	P	A	N	T	N	A	L	I	C	S	H	Y	A	P	S	I	P	K	E	N	F	T	A	M	T	R	L	D	H	N	R	A	Q	A	V											
UniRef90_B4NQK2	L	L	V	V	G	N	P	A	N	T	N	A	F	V	I	C	A	N	Y	A	P	S	I	P	K	E	N	F	T	S	A	M	T	R	L	D	H	N	R	A	T	A	Q									
UniRef90_Q47C34	L	L	V	V	G	N	P	C	N	T	N	A	F	I	A	A	A	A	G	R	T	N	P	N	N	Y	H	G	M	L	R	L	D	H	N	R	A	L	S	Q												
UniRef90_D7GCF6	L	L	V	T	G	N	P	A	N	T	N	A	L	I	A	K	D	N	A	P	D	I	P	D	D	R	F	T	S	A	L	T	R	L	D	H	N	R	A	K	S	M										
UniRef90_A0A058ZGK3	V	V	V	G	N	P	A	N	T	N	A	L	I	L	S	K	Y	A	P	R	V	P	K	E	N	I	T	A	L	T	R	L	D	D	A	N	R	A	R	N	Q											
UniRef90_H2TUL9	L	L	V	V	G	N	P	A	N	T	N	C	L	V	A	K	S	A	P	S	I	I	P	K	A	N	F	S	C	L	T	R	L	D	H	N	R	A	R	S	Q											
UniRef90_V5GL68	L	L	V	V	G	N	P	A	N	T	N	A	L	V	C	S	R	Y	A	P	S	I	P	K	E	N	F	T	A	M	T	R	L	D	H	N	R	A	Q	A	Q											
UniRef90_E4WX88	L	L	V	V	G	N	P	A	N	T	N	C	L	I	A	Q	K	Y	A	P	T	I	P	K	Q	N	F	S	A	L	T	R	L	D	H	N	R	A	T	A	Q											
UniRef90_T0GDL9	L	L	V	V	G	N	P	C	N	T	N	C	L	I	A	M	N	N	A	K	G	I	P	T	E	R	W	F	A	M	T	K	L	D	E	N	R	A	K	S	Q											
UniRef90_U1H656	L	L	V	T	G	N	P	A	N	T	N	A	L	I	A	A	T	N	A	T	D	I	P	A	D	R	H	F	A	L	T	R	L	D	H	N	R	A	K	T	Q											
UniRef90_D8HVG5	L	L	V	V	G	N	P	A	N	T	N	A	L	I	A	R	S	H	A	P	D	V	P	A	E	R	F	T	A	M	T	R	L	D	H	N	R	A	L	A	Q											
UniRef90_A6C4P0	L	L	V	V	G	N	P	C	N	T	N	C	L	I	A	M	S	N	A	P	K	V	P	R	D	R	W	Y	A	M	T	R	L	D	H	N	R	A	M	T	Q											
UniRef90_R5PL56	L	L	V	V	G	N	P	C	N	T	N	A	W	I	A	M	K	S	A	P	D	L	K	P	E	N	F	T	S	M	L	J	R	L	D	H	N	R	A	L	M	A	Q									
UniRef90_V5DLA8	L	V	T	G	N	P	A	N	T	N	A	L	I	A	L	R	N	A	P	D	L	R	P	P	E	N	F	T	S	A	M	S	R	L	D	H	N	R	A	L	M	A	Q									
UniRef90_D5EQK3	V	V	V	V	G	N	P	C	N	T	N	C	L	I	A	M	A	N	A	E	G	V	P	R	N	D	R	F	F	A	M	T	M	L	D	E	N	R	A	K	T	Q										
UniRef90_UPI00037AC21E	V	V	V	G	N	P	A	N	T	N	A	L	I	A	A	H	A	Q	D	I	V	P	A	E	R	F	T	A	L	M	R	L	D	H	N	R	A	L	S	Q												
UniRef90_F0J9X5	L	L	V	V	G	N	P	A	N	T	N	A	L	I	C	S	K	Y	A	P	S	I	P	K	E	N	F	T	A	M	T	R	L	D	H	N	R	A	K	G	Q											
UniRef90_B5JL49	L	L	V	V	G	N	P	C	N	T	N	C	L	I	A	M	N	N	A	P	D	V	P	K	D	R	W	F	A	M	T	K	L	D	E	N	R	A	K	T	Q											
UniRef90_W2TAD7	I	V	V	G	N	P	A	N	T	N	A	F	I	C	A	K	Y	A	P	K	I	V	P	A	R	N	F	S	A	M	T	R	L	D	H	N	R	A	T	A	Q											
UniRef90_UPI00036E172E	L	V	T	G	N	P	A	N	T	N	A	L	I	A	L	K	N	A	P	D	L	K	P	E	N	F	T	S	S	M	S	R	L	D	H	N	R	A	V	S	Y											
UniRef90_B5JM37	L	L	V	V	G	N	P	C	N	T	N	A	L	I	A	M	T	S	A	T	N	I	P	P	N	E	Q	F	F	A	M	T	R	L	D	E	N	R	A	K	T	Q										
UniRef90_A4QGA0	L	L	V	V	G	N	P	A	N	T	N	A	L	I	A	S	A	A	A	P	D	V	P	A	S	R	F	N	A	M	M	R	L	D	H	N	R	A	I	S	Q											
UniRef90_UPI000362CD90	V	V	V	G	N	P	A	N	T	N	A	L	I	A	Q	Q	A	A	P	D	V	D	P	A	E	R	F	T	A	L	M	R	L	D	H	N	R	A	L	A	Q											
UniRef90_UPI0003B3CEF7	L	I	V	G	N	P	A	N	S	N	A	L	I	A	L	R	N	A	P	D	L	E	S	R	N	F	T	A	M	T	C	L	D	H	N	R	A	V	G	M												
UniRef90_P61977	L	L	V	V	G	N	P	A	N	T	N	A	L	I	A	Y	K	N	A	P	G	L	D	P	R	N	F	T	A	M	T	R	L	D	H	N	R	A	K	A	Q											
UniRef90_UPI0003B31073	L	L	V	V	G	N	P	A	N	T	N	A	L	I	A	A	T	A	A	G	G	L	D	P	K	Q	I	H	A	M	V	R	L	D	H	N	R	A	V	S	Q											
UniRef90_Q8H0P9	L	L	V	V	A	N	P	A	N	T	N	A	L	I	L	S	N	Y	A	P	K	I	P	P	K	E	N	V	T	C	L	T	R	L	D	H	N	R	A	V	G	Q										
UniRef90_M4CF15	L	L	V	V	A	N	P	A	N	T	N	A	L	I	L	K	E	F	A	P	S	I	P	P	E	N	I	T	C	L	T	R	L	D	H	N	R	A	Q	A	R											
UniRef90_UPI00037FD405	L	L	V	V	G	N	P	C	N	T	N	C	L	I	A	Y	R	N	G	K	D	I	P	Q	N	Q	W	G	A	M	T	R	L	D	H	N	R	A	V	G	A											
UniRef90_R7QQ53	V	V	V	G	N	P	A	N	T	N	A																																									

QUERY	170	180	190	200
UniRef90_W5NGN6	L V A I R L V G N S P K L S	K N V I L Y G Q H G S T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_A7S4V3	I A G R L N L R V A D Q V I	K N V I L W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_Q6F7X1	I A Q K A G V A V A D I E K N L T V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_UPI00039D9733	L A N R T G G H T T D I R N M V V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_G6D9M8	L A A K L G V P V Q D V I K N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_A6GNA9	V A A K T G K V V A S I E K L A V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_D2Q476	L A K K T G T S V N D I L K K L T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_Q21K60	L A A K L D V T L E D I D K M T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_UPI0003B7036F	L A E K T G G A V K D I K N I T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_U2E149	L A Q K T G T Q V T D I D K M I V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_E0VFB4	L A L K L G V P I S N V I K N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_UPI000374D8AB	L A T K M G K V S S I E K F C V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_K1PU26	V A A R L G V P N S A V I K N C V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_T2MFV8	V A M R L G V K T N V I K N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_I1FND6	I A A K V G V S N D A V R N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_F8UHY1	L A G R I G K P V D S I E K I V V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_H3NUK0	I A Q K T G V V N T D V I Q N M T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_G0QR65	I A Q K L K C H V D D I Q N F C I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_B8R5G8	V A S R L G I S N E N V Q R T I I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_A4BT20	L A S K T G A R V N E L R Q M I V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_E8RCE7	L A E K T G T H S T K V I E K V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_L0GSY7	L A G R A G K P V A A V E R M V V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_K0C734	L A E K T G N H T N D V I K K M T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_E4NCD5	L A K K A G V T N T E D V K K V T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_G9PER1	L A A K T G V H V T D I L D K V T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_F8GE84	A A L K L H V P V S D I K K M I V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_Q4PP81	L A S R L G V Q V D K V I K N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_B4NQQ2	I A L K L G V S V S N V S N I I I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_Q47C34	L A G K T G R A V S S L K K L V V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_D7GCF6	L A K K L G V N V G S E L T N M T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_A0A058ZGK3	I A L R A G V S V D R T L D V L I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_H2TUL9	V A M R C G V P A T H V I K N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_V5GL68	I A A K V G V P A A Q V S N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_E4WX88	I A A K A G V T S D K V T G I T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_T0GDL9	L A N K A G V P V K D V I K N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_U1H656	L A R K V N A S V N D I K N M T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_D8HVG5	L A K K L G V P V T E L R K V A I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_A6CAPO	L A K K A G Q P V S A V I K N M N I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_R5PL56	T A T Q A K V S V N D I T H A A V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_V5DLA8	L A E K C G V L S K E V I K N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_D5EQK3	L A Q K A G V D V T E V I K N M T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_UPI00037AC21E	L A Q K L D C Q V G D L S R V A V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_F0J9X5	I A Q K L K V S A A D V H N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_B5JL49	L A L K A D V D V T D V K N L A I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_W2TAD7	L A L K A G V C I I G D V K N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_UPI00036E172E	L A A K C G V R S K Y V K N M T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_B5JM37	I A Q K A G V P V R E V S E L C I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_A4QGA0	L A T K L G R G S A E F N N I V V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_UPI000362CD90	V A Q K L E R P S A E L E K M V V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_UPI0003B3CEF7	L A R H C Q V V T D V I R R M T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_P61977	L A K K T G T G V D R I R R M T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_UPI0003B31073	L S S K T G V H G N D I D Q V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_Q8H0P9	V S E K T G V P V S D V I K N C I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_M4CF15	L A E K L S V P V S S V K N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_UPI00037FD405	L A K K A G V A N E E V T N V T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_R7QQ53	V A A R L D V P V Q S V A G V C I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_S2WNR5	L S H K L Q V P S R L I K D M V V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_A5C6E2	I S E K L F V H V G D V K N A I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_UPI0003B46F43	L A A T V D S P V G E L R G V A I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_K0F1T3	L A K K T G A P A A E I A R V A I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_L1JY01	I A M R L K V P S S A V E N C T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_C7R939	L A E K A D A D I A G I K K M I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_K4G5N6	I G S R L E I T S S V K N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_D5STY3	L A I K A Q R P V A A V Q N V A I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_A0A034W6Y2	I A A K L G V I S A V K N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_R5EG60	V A Q K A N S T V A Q I S K L A V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_K2B930	L A I K A N V D V D A I S Q M I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_B3S0L5	I A A R L N V K N T E V I R N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_C1LBX1	I A K R L E V P K D L V K N C I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_V4JQ14	L A T R T G K T V S D I E K M V V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_K8EDN9	L A L K A G V F Y E T V S N V T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_K6W9P9	L S H A A G V P A R E I S R V S V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_I6WSS7	L A A K A R R P V A D V T N V T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_Q5X2T6	L A K K A G V D I L T A V T Q M T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_UPI000376E18E	L S R K L G V S P Q S V E R L A V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_A0L5T9	L A S K A G A Q V T D V T N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_L7VYD3	L A Q K A G V P V T A V A N V T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_Q9FNR7	L A M K A G K F Y T S V S R V A V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_B7PRH2	I A Q R L K V S P A D V R N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_UPI000359DDEE	I A A K L N V S T E K V S N I I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_C5C858	L A A R A G V A V T D V A G V T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_I3LBY9	L A L K L G V T S D D V K N V I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_UPI00016C5284	L A L K A G V T N D A V T C V T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_T0RJL6	L A Q K A G V D V T E V T N M T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_DOWNS0	L A A K T G A P V A D I K K M T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_DOA8Y7	V A E R A R A R V E E V K N C I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_UPI0002193EFC	L A E K L G C A T T D L T R M T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_COXRG9	L A G K L G V P V G D L D G L V V	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_W5EJL1	L A L Q A G V F Y D K V S N M T I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_I0IFE6	L A K R A G V S V A D V T D Y I	W G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		
UniRef90_B4RCG7	L A K K A G V S I N D V S E L F I	Y G N H S S A T Q Y F S G L I Q L Q L Q N K Q S A		

QUERY	210	220	230	240
UniRef90_W5NGN6	G V R A S K N Q S W K T S I Y N N V I Q Q Q R G V V H V Q A R T A N N S M K T G F			
UniRef90_A7S4V3	A Y E A V K D D S W L K G E F I L S T V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_Q6F7X1	I R D A V K D D S W L K G E F I L S T V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_UPI00039D9733	D K I N D D A E W N K D V F L P T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_G6D9M8	D L V E A I N N D Q Q W L K D E F I L S T V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_A6GNA9	D M I N D Q Q W N A N T F I L P T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_D2Q476	E V V N D Q T W L E N D F I L P T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_Q21K60	E Q V E K D W Y E N D F I L P T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_UPI0003B7036F	D Q V V D R T W Y E N D F I L P T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_U2E149	D L V D R D W Y E N D F I L P T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_E0VFB4	V Y D A V N D T K W L Q E N F I L T T V Q Q R G A A V I S A R K M S S A M S A A K			
UniRef90_UPI000374D8AB	D I I G D E D W N R N A N F I L P T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_K1PU26	A R E A I K D D N W V K N D F I L P T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_T2MFV8	V K E A V K D D S W L K G E F I L K T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_I1FND6	A Y E A V K D D S W L K G E F I L K T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_F8UHY1	A L V N D E A W Y R D T F I L P L V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_H3NUK0	E I K P Q L D D Q A W Y E N D F I L P T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_Q0QR65	A Q E A I K D D D W V K N D F I L P T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_B8R5G8	G L V T D I V D R Q W L T Q D F I L P T V V Q Q R G A A V I R A R G Q S S A M S A A K			
UniRef90_A4BT20	S L V T D I V D R Q W L T Q D F I L P T V V Q Q R G A A V I K A R G A S S A M S A A K			
UniRef90_E8RCE7	D L V T D I V D R Q W L T Q D F I L P T V V Q Q R G A A V I K A R G A S S A M S A A K			
UniRef90_L0GSY7	D A L S K V D A S W Y A D D F I L P V A V Q Q R G A A V I K A R G L S S A M S A A K			
UniRef90_K0C734	D A V G G D Q E W V E N D F I L P K V A K R G A A V I E V R G A S S A M S A A K			
UniRef90_E4NCD5	E L L A I V D R Q W L T Q D F I L P T V V Q Q R G A A V I K A R G A S S A M S A A K			
UniRef90_G9PER1	S L I A V N D D A W L N G V F V E T I V Q Q R G A A V I A A R K N S S A M S A A K			
UniRef90_F8GE84	K S R A I V N D S Y L R G A F V E T I V Q Q R G A A V I A A R K N S S A M S A A K			
UniRef90_Q4PP81	A L I V N D S Y L R G A F V E T I V Q Q R G A A V I A A R K N S S A M S A A K			
UniRef90_B4NQK2	E L I V N D S Y L R G A F V E T I V Q Q R G A A V I A A R K N S S A M S A A K			
UniRef90_Q47C34	V S E V I T D T E W L H G E F I A T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_A0A058ZGK3	C F D A I K D E A W L K G E F I A T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_H2TUL9	A S E V V K D S D W I R N T F V Q T T V V Q Q R G A A V I G A R K M S S A M S A A K			
UniRef90_V5GL68	A S A A C K D N A W L K S D F I T T V V Q Q R G A A V I A A R K L S S A M S A A K			
UniRef90_E4WX88	D V I K D Q D W L K G D F I L K N V V Q Q R G A A V I K A R G A S S A M S A A K			
UniRef90_T0GDL9	E L V E Q S W I E N D F I L P T V V A K R G A A V I D A R G A S S A M S A A K			
UniRef90_U1H656	D A V D Q A W L E N D F I L P T V V A K R G A A V I E A R G L S S A M S A A K			
UniRef90_D8HVG5	E I I E D H D W L R G E F I L E T V V A K R G A A V I Q A R G A S S A M S A A K			
UniRef90_A6C4P0	E L V D R S Y Y Q E T M T P I L V A K R G S A V I E A R G A S S A M S A A K			
UniRef90_R5PL56	N A L S V D Y E W F T D E F I L P K V Q Q R G T E I N A R G Q S S A M S A A K			
UniRef90_V5DLA8	E V I G D D A W L K E T F I L P T V V Q Q R G A A V I E A R G A S S A M S A A K			
UniRef90_D5EQK3	D V D Q S W Y T D E F I L P T R V A K R G A A V I D V R G S S A M S A A K			
UniRef90_UPI00037AC21E	V T E A I K D E A Y F Q G E N F I L T T V V Q Q R G A A V I A A R K L S S A M S A A K			
UniRef90_F0J9X5	D V I N D E A W Y K G E N F I L T T V V Q Q R G A A V I K A R K L S S A M S A A K			
UniRef90_B5JL49	A Y T A I N D A Y L Q G P F I S T I V Q Q R G A V I Q K R K L S S A M S A A K			
UniRef90_W2TAD7	D L V E Q D W F V Q N D F I L P T V V Q Q R G S E V L K A R G Q S S A M S A A K			
UniRef90_UPI00036E172E	D V I L D Q A W F R D T F I L P T V V Q Q R G K A V I K A R G S S S A M S A A K			
UniRef90_B5JM37	D L V D H D W Y V E E F I L P R V A N R G A E I I E V R G K S S A M S A A K			
UniRef90_A4QGA0	D R V E G A W Y R E E F I L P R V A N R G A E I I E V R G R S S A M S A A K			
UniRef90_UPI000362CD90	E R V D W D W Y V K T F I L P A I E Q R G S E V I R L R G R S S A M S A A K			
UniRef90_UPI0003B3CEF7	E L V D M E W Y E K V F I L P T V A Q R G A A V I Q A R G A S S A M S A A K			
UniRef90_P61977	S L V D Q A W L C K D F I L P V V A Q R G A A V I K A R G L S S A M S A A K			
UniRef90_UPI0003B31073	E A I G D D A Y L D G E F I L A T V V Q Q R G A A V I A A R K L S S A M S A A K			
UniRef90_Q8H0P9	R E L L V A D Q K W L K E F S T E V Q Q R G A E I L R A R R Q S S A M S A A K			
UniRef90_M4CF15	E V I T D R T W L E T V Y V P C Q E R G K A I N K R G L S S			



QUERY	250	260	270	280
UniRef90_W5NGN6	A I C D H M R D L W F G T P E E F T S M G V L Y S S G N Y A G V P D D L I Y S F P V			
UniRef90_A7S4V3	A I C D H M R D W F G T R E G K W V T S M G V V S D G S Y G I E E G V I Y S F P V			
UniRef90_Q6F7X1	A A I D H M R D W A L G T N G K W V T M G I P S D G S Y G I P E E G V I Y S F P V			
UniRef90_UPI00039D9733	A A I D H M R D W T L G T P D D W V S M A I P S D G S Y G I A E G D I Y S F P C			
UniRef90_G6D9M8	A A S D H M R D W F L G T G D R W V S M G V V S D G S Y G V P E K D V V S F P V			
UniRef90_A6GNA9	A A I D H V R D W V L G T N G K W V T M G I P S D G S Y G V P E E G T Q F S F P V			
UniRef90_D2Q476	A T I D H T R D W L R G S D G D W L S M A V V S D G S Y G V P E E G L I S S F P V			
UniRef90_Q21K60	A A I F H M R D W A L G T P N D W V S M G V Y S D G S Y G V P E E G L I Y S F P C			
UniRef90_UPI0003B7036F	A A I D H I R D W A L G T P E E W T S M A I P S D G S Y G V P E E G L I Y S F P V			
UniRef90_U2E149	A A I D H I H D W V N G S K G I V S M G I P A D G S Y G V P E E G L I M F S F P V			
UniRef90_E0VFB4	A A G D H M K D I W H G T P C W V S M G V V S D G S Y G I P E K D L V F S F P V			
UniRef90_UPI000374D8AB	A A I D H M H D W V L G S N G R W V T M G I P S D G S Y G I P E E T M F G V P V			
UniRef90_K1PU26	A I V D H V H D W W F G V P E S M V S M A V P S D G S Y G I E E G L V Y S F P V			
UniRef90_T2MFV8	A I C D H M K T W W F G T D D D Y C S M G V V S D G S Y G I P E E G I V Y S F P L			
UniRef90_I1FND6	A I C D H M S D W W F G T K E E W T S M G V W S D G H Y G I P E E G I V Y S F P V			
UniRef90_F8UHY1	A A I D H V R D W V L G S N G K W V T M G V V S D G S Y G I P E E G V M Y S F P C			
UniRef90_H3NUK0	A A I D H M R T W A L T T D N D W T S M G I L S T D G A Y G V P E G L I Y S F P C			
UniRef90_G0QR65	A A I V H V R D W V L G S K H W K S M A V H T D G S Y G V P K G L I Y S F P V			
UniRef90_B8R5G8	A I C D H V R D W W F G T G E R W V S M G I I S K G D Y G I K E G L M Y S F P V			
UniRef90_A4BT20	A I D H M R S W L L G T P D D W V S M A I L S D G S Y G I A E G L F F S F P C			
UniRef90_E8RCE7	A A V D H M R N W A L G S N G Q W V S M G V Y S K G N Y G V D Q D L I F A F P I			
UniRef90_L0GSY7	A A I A H M R D W A L G T S G R W V T M G V V S D G S Y G I P E E G L V Y S F P C			
UniRef90_K0C734	S A L D H M R T W V Q G T D G D W V S M G I P S D G S Y G I E E G L I Y S F P V			
UniRef90_E4NCD5	A A I D H V Y T W V N G T P G D W T S M G I V S D G S Y G V P E E G L I Y S F P V			
UniRef90_G9PER1	A A I D H V R D W V K G V K Y S W T S A A I M S D G S Y G V P E E G I I S S F P A			
UniRef90_F8GE84	A I L N H M Q S W I F G T P D D W V S M G V P S N G C Y D I P R G V I F S F P V			
UniRef90_Q4PP81	A A A D H M R D W F N G T K P Q F I S M G V V S D G S Y G I P K D I V F S F P V			
UniRef90_B4NQQ2	A A C D H M H D W W N G T P G Q F V S M G V F S D G S Y N S P K N V I F S F P V			
UniRef90_Q47C34	A A I D H V R D W V L G S D E W V T M G V P S D G S Y G I P A G I V F G F P C			
UniRef90_D7GCF6	A T V E A M H D W A V G T P N D W V S M S V V S D G S Y G V P A G L I V F S F P V			
UniRef90_A0A058ZGK3	A V A D H M R D W W M G S E R E L V S M A V P S D G S Y G I A E G L I F S F P V			
UniRef90_H2TUL9	A I C D H M R D I W T G T P E E F I S M G V Y S D G N Y G V P K D D V F S F P V			
UniRef90_V5GL68	A A C D H M K D W F S G T P G K F V S M G V I S D G S Y G A P K D D V F S F P V			
UniRef90_E4WX88	A I G D H L H D W I C G S E G R W V S M A V T S D G N Y G V P E G L I Y S F P V			
UniRef90_T0GDL9	G V V D T V R Q I L N P T P G D W F S V A V A S D G S Y E A D K G L I F G F P V			
UniRef90_U1H656	A T V E C M H D W M L G T P E D W V S M C V A E S D G S Y G V P E E G L I S S F P V			
UniRef90_D8HVG5	A A V D H V Y T W V N G T P G D W T S A A V A S D G S Y G V P E E G L I S S F P V			
UniRef90_A6C4P0	A A L D T I K S I T P T P G E S F S A A V C S D G S Y G V D E G L I C G F P L			
UniRef90_R5PL56	A A I D H I R D W V L G S G D R W V T M G V P S D G S Y G I P E E G L L F G F P C			
UniRef90_V5DLA8	A A V D Q M R D W A L G T P E D W V S M G I P S D G S Y G I E Q G L V Y S F P V			
UniRef90_D5EQK3	G A I D C V R K L T T D T P G D S F S M C I C S D G S Y G T T P G L I T S L P C			
UniRef90_UPI00037AC21E	A A V D H M R D W V Q G S D G W A T A A V V S D G S Y G V D E G L I A G F P T			
UniRef90_F0J9X5	A A A D H V H D W W H G T P E A W V S M A V M S N G S Y G S P S D V V F S Y P V			
UniRef90_B5JL49	A A I D T V A N I V K P T A D D V F S V A V C S N G E Y G I P E P G L M Y S F P M			
UniRef90_W2TAD7	A A C D H I H D W H F G T K P E W V S M A V P S D G S Y G I P A G L V F S F P V			
UniRef90_UPI00036E172E	A A I D Q M K A W I F T D E G D W V S M G V M S D G S Y G I E A G L V F S F P V			
UniRef90_B5JM37	A V V D T V R D L S T P T R G D I H S V C V I S R G E Y G T P A G I I T S L P I			
UniRef90_A4QGA0	S A I D H M R D W V Q G T E A W S A A I P S T G A Y G I P E G I F V G L P T			
UniRef90_UPI000362CD90	A A V D H M R D W V Q G S R G W A T A A V V S D G S Y G V E E G L V F G F P T			
UniRef90_UPI0003B3CEF7	A A L T H M R H W V F G T P P D W A S M G V L S D G S Y G I S E E G I V Y S F P V			
UniRef90_P61977	A A I E H M R D W A L G T P E D W V S M A V P S Q G E Y G I P E E G I V Y S F P V			
UniRef90_UPI0003B31073	A A V D H M H D W A L G S N G K W V S M G V P S D G S Y G I K P G I V Y G Y P C			
UniRef90_Q8H0P9	S V C D H I R D W V N G T P P T W V S M G V V S P G A Y G V A E E G L M Y S F P V			
UniRef90_M4CF15	A A C D H I H D W F L G T P K S W V S M G V C S D G S Y G I A G L V Y S F P V			
UniRef90_UPI00037FD405	G A L D H V K S L L K P T P G D W T S A A V I S N G E Y G V P K G L V F G Y P V			
UniRef90_R7QQ53	A I A N H L R S W V C G D E H I V S M A V P S D G S Y G I K E G V F F S F P V			
UniRef90_S2WNR5	A A I D H M H D W V N G T P E D W V T S G S V S D G S Y G V P E G L I Y S F P V			
UniRef90_A5C6E2	S A C D H I R D W V L G T P K A W V S M G V Y S D G S Y G I Q P G I I Y S F P V			
UniRef90_UPI0003B46F43	A T V D H L R D W V L G T A Q G W T S A A V V S D G S Y E V P E G L I S S F P V			
UniRef90_K0F1T3	A A L D H I H D W V R G T A G D W V S M A V P S D G S Y G V P E E G L I S S F P V			
UniRef90_L1JY01	A I S D H M H D W V V G S N G K T V S M A V P S D G S Y G I E K G L I Y S F P V			
UniRef90_C7R939	A I L D H M H D W V L G S E D D W V S M A V P S D G S Y G I E E G L I Y S F P V			
UniRef90_K4G5N6	A I G D H L R T I W F G T P K E W V S M G V N S D G N Y G I A E E G L I F S F P V			
UniRef90_D5STY3	A A L D T V K S L V N P T P G T C I S A A V L S D G S Y G V E E G I I S G F P L			
UniRef90_A0A034W6Y2	A A C D H M H D W W H T T S G Q F V S M G V L S D G S Y G A P K D V V F S F P V			
UniRef90_R5EG60	A A I D H I H D W V L G S N G E W A T M A V P S D G S Y G V P E G L I T F G M P V			
UniRef90_K2B930	A A L M T V Y N L T H D T Q G E T F S V A R C S Q G E Y G I D E G L I F S M P C			
UniRef90_B3S0L5	A I C D H V R D L W N G T K E E W T S M G V I S D G N Y G V P D N V I M Y S F P V			
UniRef90_C1LBX1	S V T D H M R D W W L G T K N E W V S M S V I S D G S Y G A P K D V I F S F P V			
UniRef90_V4JQI4	A A I D H M H D W A L G S D G K W V T M G V V S D G S Y G I P E G F I Y G V P C			
UniRef90_K8EDN9	S I A D A I K A L V T P T K E D W F S A V I T D G N Y G I E E G L V F S M P C			
UniRef90_K6W9P9	A A I D H V H D W F L G T P E D W V S A A L P S P G A Y G V P E E G L V C S F P V			
UniRef90_I6WSS7	A T I A H V R D W L L G T P G D W T S M A V V S D G S Y G V P A G L V S S F P V			
UniRef90_Q5X2T6	A I I T G V N H L V I T D T P G E S F S M C R R S K G E Y G V D E G L I F S F P C			
UniRef90_UPI000376E18E	A I I D H L R D W M L G T S T D F V S M G V F S H G E Y G V A P G L I F S F P V			
UniRef90_A0L5T9	A A L D H V R S L I T P T P G D T F C A A V M A N G A Y G V D A G L I A G M P L			
UniRef90_L7VYD3	A A L D H V M S F E A K T P E H W F S A A V P S D G S Y G I A E G L M F S F P V			
UniRef90_Q9FNR7	S V A D S I R S L I T P T P E C F S S G V C S D G N Y G I Q E E G L N F S F P C			
UniRef90_B7PRH2		F F C T Q G E W V S M A V I S D C S Y G S P A D V M F S Y P V		
UniRef90_UPI000359DDEE	A A C D H M R D W F I G T K G N W V S M G V I S D G S Y G I K E G L M Y S F P V			
UniRef90_C5C858	A A I D H L R D W T L G T A P N R T S A A V V S D G S Y G V P E G L I S S F P V			
UniRef90_I3LBY9	A I C D H V R D I W F G T P E E F V S M G I I S D G N Y G V P D D L I Y S F P V			
UniRef90_UPI00016C5284	G A I D H V K S L V T G T P G D W T S A A I V S K G E Y G V P A G L V F G Y P C			
UniRef90_T0RJL6	A C V Q G V Y N L T H D T P G E T F S M C L S S K G Q Y G V D E G L I F S F P C			
UniRef90_DOWNS0	A A I D H V Y N W V N G V P E D W V T P G V Y Q D G H Y G V P E G L I F G M P A			
UniRef90_DOA8Y7	A I V D H V H D W M L G T P S T H V S M A V Y S D G N Y G V P G G L I F S F P V			
UniRef90_UPI0002193EFC	A A C D H M R D W I H G T P E D W V S V A L P S D G S Y G I P E G V A S F P C			
UniRef90_COXRG9	A A V D H M H D W V N G T G G R W T T V A L P S T G E Y G V D P G L V F G F P T			
UniRef90_W5EJL1	S I V D A M R S L V T P S E G D W F S T A V Y T T G N Y G I A E D L V F S M P C			
UniRef90_I0IFE6	A L V D H V R S G L V T P T P G K V Q S T A V K S D G H Y G F A P A V W A G M P V			
UniRef90_B4RCG7	A L I D H V R S L N T V G E V H S I A V N S E G R Y G F A E G V W A G M P V			

QUERY	R	L	Q	N	K	T	W	K	I	V	E	G	L	P	I	N	D	F	S	R	E	K	M	N	E	T	A	K	E	L	310	E	E	T	E	F	A	E	K			
UniRef90_W5NGN6	V	I	K	G	K	R	S	W	K	I	V	D	G	L	E	S	I	N	D	F	S	R	E	K	M	N	A	T	A	T	E	L	A	E	E	R	D	T	A	V	E	K
UniRef90_A7S4V3	Q	I	C	G	D	R	T	W	K	I	V	D	G	L	E	S	I	N	D	F	S	R	E	K	M	N	A	T	A	T	E	L	L	K	E	E	S	E	A	V	K	D
UniRef90_Q6F7X1	T	C	E	N	G	E	Y	K	R	V	E	G	L	E	I	D	E	F	S	R	E	R	M	A	T	L	Q	E	E	E	E	L	L	E	E	S	R	A	I	A	D	M
UniRef90_UPI00039D9733	R	V	S	N	G	Q	Y	S	I	V	Q	E	G	L	E	I	D	D	F	S	R	E	R	M	A	T	L	Q	E	E	E	L	L	V	E	E	K	Q	D	A	V	A
UniRef90_G6D9M8	T	V	S	N	G	K	Y	W	K	I	V	Q	E	G	L	E	I	D	D	F	S	R	E	R	M	A	T	L	Q	E	E	L	L	V	E	E	K	Q	D	A	V	A
UniRef90_A6GNA9	T	C	A	N	G	K	F	E	I	V	K	G	L	E	I	D	A	F	S	R	Q	E	R	I	N	I	T	L	N	E	E	L	L	M	E	E	R	E	G	V	K	H
UniRef90_D2Q476	I	T	K	D	G	N	W	E	I	V	Q	G	L	E	I	D	N	D	F	S	R	G	R	I	D	A	S	A	A	E	E	L	L	M	E	E	R	D	A	V	Q	Q
UniRef90_Q21K60	V	C	K	N	G	D	W	E	I	V	Q	G	L	E	I	D	E	F	S	R	A	K	M	T	A	T	A	K	E	E	E	L	L	K	E	E	R	D	A	V	K	S
UniRef90_UPI0003B7036F	R	V	K	D	G	K	Y	E	I	V	Q	G	L	E	I	D	E	F	S	R	A	R	M	D	A	T	A	K	E	E	E	L	L	Q	E	E	R	D	E	V	S	K
UniRef90_U2E149	T	C	K	N	G	Q	Y	E	I	V	Q	G	L	E	I	D	E	F	S	R	R	D	R	M	K	Q	T	E	K	E	E	L	L	R	S	E	R	E	A	V	S	E
UniRef90_E0VFB4	T	I	E	N	K	N	W	K	I	V	Q	G	L	E	I	D	G	F	S	K	G	K	L	E	L	T	A	K	E	E	E	L	L	L	E	E	R	Q	E	A	L	E
UniRef90_UPI000374D8AB	I	C	E	G	G	Y	Q	R	V	E	G	L	E	I	D	A	F	S	Q	S	Q	L	D	K	T	L	A	E	E	E	E	L	L	Q	D	E	K	D	G	V	K	H
UniRef90_K1PU26	R	T	K	D	H	T	Y	E	I	V	K	D	L	E	I	D	D	F	S	R	E	K	M	D	I	T	M	K	E	E	E	L	L	V	D	E	K	N	M	A	M	
UniRef90_T2MFV8	T	I	D	S	H	T	Y	K	I	V	Q	G	L	E	I	D	E	F	S	R	E	K	M	D	A	S	A	V	E	E	E	L	L	Q	E	E	R	D	D	A	F	S
UniRef90_I1FND6	R	I	N	D	R	S	W	Q	I	V	D	G	L	E	I	S	D	F	S	R	E	K	M	D	I	S	A	K	E	E	E	L	L	V	E	E	R	D	T	A	T	Q
UniRef90_F8UHY1	T	T	A	D	G	R	Y	K	I	V	K	G	L	E	I	D	E	F	S	R	Q	R	M	D	K	T	L	A	K	E	E	L	L	V	E	E	R	A	G	V	K	H
UniRef90_H3NUK0	T	C	V	D	G	Q	Y																																			



QUERY		N S N A
UniRef90_W5NGN6	L	
UniRef90_A7S4V3	L	P N A
UniRef90_Q6F7X1	L	K
UniRef90_UPI00039D9733	L	P
UniRef90_G6D9M8	C	K D
UniRef90_A6GNA9	L	
UniRef90_D2Q476		
UniRef90_Q21K60	L	P
UniRef90_UPI0003B7036F		
UniRef90_U2E149	L	
UniRef90_E0VFB4	C	
UniRef90_UPI000374D8AB	L	
UniRef90_K1PU26		
UniRef90_T2MFV8		F K S S
UniRef90_I1FND6	L	S
UniRef90_F8UHY1	L	
UniRef90_H3NUK0	L	
UniRef90_G0QR65	L	K
UniRef90_B8R5G8	L	E
UniRef90_A4BT20	L	P
UniRef90_E8RCE7		
UniRef90_L0GSY7	L	S
UniRef90_K0C734	L	
UniRef90_E4NCD5		
UniRef90_G9PER1		
UniRef90_F8GE84		
UniRef90_Q4PP81		
UniRef90_B4NQQ2	L	
UniRef90_Q47C34	L	
UniRef90_D7GCF6		
UniRef90_A0A058ZGK3		
UniRef90_H2TUL9	L	
UniRef90_V5GL68		
UniRef90_E4WX88	L	E K A
UniRef90_T0GDL9	L	
UniRef90_U1H656		
UniRef90_D8HVG5		
UniRef90_A6C4P0	L	P
UniRef90_R5PL56	L	
UniRef90_V5DLA8	L	
UniRef90_D5EQK3		
UniRef90_UPI00037AC21E	L	
UniRef90_F0J9X5	C	K D
UniRef90_B5JL49	L	P
UniRef90_W2TAD7	C	E E A
UniRef90_UPI00036E172E		
UniRef90_B5JM37		
UniRef90_A4QGA0	L	
UniRef90_UPI000362CD90	L	A
UniRef90_UPI0003B3CEF7	L	
UniRef90_P61977		
UniRef90_UPI0003B31073	L	K
UniRef90_Q8H0P9	L	A
UniRef90_M4CF15		
UniRef90_UPI00037FD405	L	P S
UniRef90_R7QQ53	L	E
UniRef90_S2WNR5		
UniRef90_A5C6E2		
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UniRef90_K0F1T3		
UniRef90_L1JY01		N K D A
UniRef90_C7R939		
UniRef90_K4G5N6		
UniRef90_D5STY3	L	P
UniRef90_A0A034W6Y2		
UniRef90_R5EG60	L	A K A
UniRef90_K2B930		
UniRef90_B3S0L5	L	S
UniRef90_C1LBX1		
UniRef90_V4JQI4	L	
UniRef90_K8EDN9		
UniRef90_K6W9P9	L	P
UniRef90_I6WSS7		
UniRef90_Q5X2T6		
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UniRef90_A0L5T9	L	P
UniRef90_L7VYD3		
UniRef90_Q9FNR7		
UniRef90_B7PRH2	C	K D
UniRef90_UPI000359DDEE		
UniRef90_C5C858		
UniRef90_I3LBY9	L	S S A
UniRef90_UPI00016C5284	L	P S
UniRef90_T0RJL6		
UniRef90_DOWNNS0		
UniRef90_D0A8Y7		
UniRef90_UPI0002193EFC		
UniRef90_C0XRG9		
UniRef90_W5EJL1		
UniRef90_I0IFE6	L	P
UniRef90_B4RCG7	L	

	1		10		20		30		40																														
UniRef90_A4I421		V	K	V	A	V	T	G	A	G	Q	I	G	Y	A	L	V	P	L	I	A	R	G	V	L	L	G	P	T	T	H	V	E	L	R	L	L		
UniRef90_S7J325		I	S	V	A	V	T	G	T	G	Q	I	A	Y	S	F	L	F	S	L	S	R	G	D	V	F	G	D	D	Y	G	I	D	L	R	I	Y		
UniRef90_H5U2I9																																							
UniRef90_F7HA15				K	V	S	I	I	G	A	G	S	V	G	M	A	C	A	I	S	I	L	L	K	G	L													
UniRef90_H3AJ84				K	V	T	I	V	G	V	G	Q	V	G	M	A	C	A	I	S	I	L	L	K	D	L													
UniRef90_UPI000363E9C2	S	K	S	I	K	V	V	T	V	G	A	G	Q	I	A	Y	S	L	I	P	R	L	V	D	G	N	T	F	G	D	K	I	V	D	L	A	M	V	
UniRef90_A0A011U5M8				V	T	V	T	V	G	A	G	Q	I	A	Y	A	L	L	F	R	I	A	A	G	A	M	L	G	P	D	R	P	V	R	L	R	L	V	
UniRef90_UPI0003336907				K	I	T	V	V	G	V	G	A	V	G	M	A	C	A	I	S	I	L	M	K	D	L													
UniRef90_A2FYF4	S	D	P	A	H	V	L	I	T	G	A	G	Q	I	G	Y	I	L	S	H	W	I	A	G	G	E	L	Y	G	D	R	P	V	V	L	H	L	F	
UniRef90_UPI0002E014C8																																							
UniRef90_U1NT98	E	P	I	R	V	L	V	T	G	A	G	Q	I	G	Y	S	L	V	L	Q	V	A	K	G	D	V	F	G	H	S	T	P	I	V	L	V	M	L	
UniRef90_H0XWQ6				K	I	T	V	V	G	V	G	A	V	G	M	A	C	A	I	S	I	L	M	K	D	L													
UniRef90_C5LWK5	P	A	R	V	A	I	T	G	A	G	S	V	G	T	N	L	A	F	R	I	A	M	G	D	M	L	G	V	N	Q	P	V	I	L	H	L	Y		
UniRef90_S7N4B3				K	I	S	I	I	G	S	G	S	V	G	L	A	C	A	I	S	I	L	L	R	G	L													
UniRef90_H2KV10	G	T	E	P	T	K	I	T	V	V	G	A	G	S	V	G	M	A	A	F	S	L																	
UniRef90_G0HI15				V	A	I	T	G	A	G	S	I	G	Y	A	I	S	A	H	I	A	R	G	E	L	Y	G	D	G	V	P	V	H	I	R	F	L	L	
UniRef90_B9T307				I	N	I	A	V	S	G	A	G	M	I	S	N	H	L	L	F		K	T	Q	L	I	L	R	H	I	R	H	F	L	L	S	C	L	
UniRef90_F6DVB1	K	R	N	K	I	T	V	V	G	A	G	N	V	G	A	T	C	A	H	W	A	A	A	K	E	L													
UniRef90_M1VIR0																																							
UniRef90_UPI0000F2D5FF				K	I	S	I	V	G	V	G	S	V	G	M	A	C	A	V	S	I	V	M	K	E	L													
UniRef90_K9GX13				K	I	A	L	V	G	A	G	N	I	G	G	T	L	A	H	L	I	G	L	K	E	L													
UniRef90_Q9GPV4																																							
UniRef90_UPI0002C3D08B	E	P	I	H	V	L	V	T	G	A	G	Q	I	G	Y	N	L	T	F	L	I	A	H	G	L	M	F	G	P	S	Q	T	V	V	L	H	L	Y	
UniRef90_H2KV11	G	K	P	R	T	K	I	T	V	V	G	V	G	A	V	G	M	A	A	F	S	L	L																
UniRef90_P00342				R	C	K	I	T	V	V	G	V	G	N	V	G	M	A	C	A	I	S	I	L	L	K	G	L											
UniRef90_K2MP53				K	I	A	L	V	G	A	G	N	I	G	G	T	A	H	L	V	G	L	K	E	L														
UniRef90_A0A037Z0V8	K	G	I	K	I	S	I	I	G	A	G	F	V	G	S	T	A	Y	A	I	M	M	E	G	L														
UniRef90_I9M5E5				M	K	I	T	V	V	G	A	G	N	V	G	A	T	C	A	N	V	I	A	Q	R	E	L												
UniRef90_UPI000428FE0E	H	R	R	K	I	T	V	V	G	S	G	F	T	G	T	T	A	L	M	A	A	Q	K	E	L														
UniRef90_A7NG29	M	R	P	K	I	S	I	I	G	A	G	F	V	G	S	T	A	A	H	W	I	A	S	K	E	L													
UniRef90_Q81K80				R	V	L	V	G	T	G	A	V	G	C	S	Y	A	Y	S																				
UniRef90_D6YWT7	K	P	M	K	V	A	V	T	G	A	G	Q	I	C	Y	S	L	L	F	R	I	A	N	G	D	M	L	G	K	D	Q	P	L	A	L	N	I	L	
UniRef90_P00345	K	T	R	K	V	A	V	T	G	T	G	F	V	G	S	S	Y	A	F	S																			
UniRef90_D4W2Z4				R	V	V	L	V	G	T	G	F	V	G	M	S	F	A	Y	S	I	I	N	Q															
UniRef90_A9VCK2	S	K	P	L	T	V	C	V	T	G	A	A	G	T	A	Y	N	L	V	Y	L	I	A	S	G	E	V	F	G	H	D	Q	P	V	A	L	R	L	L
UniRef90_G3S0B2				K	I	T	V	V	G	V	G	A	V	G	M	A	C	A	I	N	I	L	M	K	D	L	A	D	E	H									
UniRef90_UPI000479CAD3				K	I	A	I	V	G	T	G	F	V	G	S	T	A	F	A	L	A	L	S	G	I														
UniRef90_UPI0001E892AC				R	V	A	L	I	G	T	G	F	V	G	S	S	Y	A	F	A	L	L	N	Q	G	V													
UniRef90_M1ZLT6				R	K	K	I	T	V	V	G	A	G	F	T	G	A	T	A	L	M	L	A	Q	K	E	L												
UniRef90_UPI000361DDDE	M	R	K	K	I	S	L	I	G	S	G	Q	I	G	G	T	L	A	H	L	V	S	L	K	E	L													
UniRef90_F7PG43				K	V	A	I	I	G	A	G	D	V	G	A	T	T	A	Y	A	L																		
UniRef90_W0JHH6				K	I	S	V	I	G	A	G	Q	V	G	A	T	T	A	V	R	I	A	E	K	E	L	A	R	Q										
UniRef90_Q2W064				R	K	K	I	A	L	V	G	S	G	N	I	G	G	T	L	A	H	L	I	G	L	K	E	L											
UniRef90_T1EG84	V	K	V	T	V	V	G	T	G	Q	V	G	M	A	S	A	F																						
UniRef90_P00344				R	V	V	V	I	G	A	G	F	V	G	A	S	V	E	A	L	M	N	Q	G	I														
UniRef90_W4QDI0	K	R	R	K	I	S	V	I	G	G	G	F	T	G	A	T	T	A	L	M	V	A	Q	K	E	L													
UniRef90_A2DUI4	K	P	A	H	V	L	I	V	G	A	G	Q	I	G	Y	I	L	A	H	W	I	A	H	G	D	L	Y	G	D	R	Q	V	F	L	H	L	Y		
UniRef90_U6HNF1	S	K	P	K	K	V	S	I	V	G	V	G	S	V	G	M	A	I	G	F	S	I	M	T	K	G	L												
UniRef90_F0ZJ23																																							
UniRef90_UPI00033153F6				K	I	S	I	I	G	T	G	S	V	G	M	A	C	A	I	G	I	L	L	K	G	L													
UniRef90_UPI00042220C6	K	R	K	K	I	S	V	I	G	A	G	F	T	G	S	T	A	F	M	L	A	L	K	E	L														
UniRef90_R5V0K8	K	G	K	K	V	T	V	I	G	A	G	N	V	G	A	S	I	A	F	T	L	A	I	K	G	L	C												
UniRef90_UPI0003B72E94				K	I	A	L	I	G	A	G	N	I	G	G	T	L	A	L	L	T	G	L	K	E	L													
UniRef90_UPI000371B392				R	K	K	I	A	L	I	G	A	G	M	I	G	G	T	L	A	H	I	A	A	R	E	E	L	G										
UniRef90_L8HIY2																																							
UniRef90_R7FIV4																																							
UniRef90_UPI00041D10FF	S	K	P	T	R	I	V	V	I	G	A	G	A	V	G	A	T	T	A	Y	T	L																	
UniRef90_R6IP68	S	D	K	K	V	A	I	V	G	V	G	M	V	G	M	S	F	A	Y	A	L																		
UniRef90_Q8PVJ7				V	K	I	S	V	I	G	A	G	N	V	G	S	T	V	Q	R	L	A	E	L	E														
UniRef90_A5D2J2	K	R	R	K	I	T	I	V	G	A	G	N	V	G	A	T	A	A	H	W	A	A	A	K	E	L													
UniRef90_UPI000289CA07				R	K	V	T	V	V	G	A	G	F	T	G	A	T	A	Y	L	I	A	Q	K	E	L													
UniRef90_I0JR33				R	V	A	L	I	G	A	G	S	V	G	S	S	Y	A	F																				
UniRef90_D5AAB2				K	I	T	V	V	G	V	G	N	V	G	M	A	I	A	Q	T	I	L	T	Q	E	L													
UniRef90_UPI000426689E				Q	V	A	V	I	G	A																													

UniRef90_A4I421	D	I	E	P	A	L	K	A	L	A	G	V	E	A	E	L	E	D	C	A	F	P	L	L	L	E	K	V	V	I	T	A	D	P	R	A	A	F	D	G	V	
UniRef90_S7J325	D	L	P	G	T	E	R	A	L	A	S	G	V	R	M	E	L	D	D	C	A	F	P	L	L	L	Q	H	V	H	V	T	T	D	L	N	A	F	D	G	I	
UniRef90_H5U219	D	E	L	P	Q	A	I	S	A	A	H	G	T	A	M	E	L	D	D	G	A	F	P	L	L	L	T	S	V	D	I	F	D	D	A	R	A	F	D	G	I	
UniRef90_F7HA15	D	L	N	E	G	K	L	K	G	E	T	M	D	L	Q	H	G	S	P	F	L	K	M	P	N	I	V	Y	C	R	D	D	Y	S	R	V	T	A	N	S	R	L
UniRef90_H3AJ84	D	V	M	E	D	R	L	K	G	E	M	D	L	L	H	G	S	L	F	L	K	I	P	N	I	V	A	G	K	D	Y	V	T	A	N	S	R	L				
UniRef90_UPI000363E9C2	E	I	P	Q	V	V	D	K	L	K	G	L	V	M	E	L	D	S	Y	F	P	K	M	G	K	V	T	Y	T	D	N	F	E	E	A	F	D	G	A			
UniRef90_A0A011U5M8	E	I	P	Q	G	L	K	S	A	E	G	A	A	L	L	Q	D	S	C	A	F	P	L	L	A	D	V	E	I	T	D	D	P	R	V	A	F	D	G	A		
UniRef90_UPI0003336907	D	V	M	E	D	K	L	K	G	E	M	D	L	Q	H	G	S	L	F	L	R	T	P	K	I	V	S	G	K	D	Y	S	V	A	N	S	R	L				
UniRef90_A2FYF4	D	L	P	P	A	M	N	R	L	T	A	L	T	M	E	L	D	C	A	F	P	H	L	A	G	V	V	A	T	T	E	P	E	A	A	F	D	G	A			
UniRef90_UPI0002E014C8																																										
UniRef90_U1NT98	D	I	P	P	T	A	A	V	L	E	G	V	K	F	E	L	M	D	C	A	F	P	L	N	L	I	D	V	V	A	T	D	E	K	T	A	F	T	N	I		
UniRef90_H0XWQ6	D	V	A	T	D	K	L	K	G	E	M	D	L	Q	H	G	S	L	F	F	N	T	S	K	I	S	S	G	K	D	Y	R	V	S	A	N	S	R	L			
UniRef90_C5LWK5	S	R	D	R	E	A	L	R	G	L	V	L	E	D	T	C	A	P	L	L	A	K	V	V	A	T	D	N	Y	E	E	A	F	G	R	D	A					
UniRef90_S7N4B3	D	V	A	E	G	K	L	R	G	E	M	D	L	Q	H	G	S	L	F	V	K	M	P	K	I	V	S	K	D	Y	Q	V	T	A	N	S	R	L				
UniRef90_H2KV10	D	V	A	T	D	K	L	M	G	E	V	L	D	L	Q	H	G	E	Q	F	T	R	R	C	K	V	Y	G	S	G	D	Y	K	D	T	A	N	S	R	L		
UniRef90_G0HII5	D	L	E	P	H	T	P	R	L	V	A	I	R	M	E	L	D	C	A	S	P	L	L	A	R	V	D	V	I	T	T	D	P	R	A	E	F	C	E	A		
UniRef90_B9T307																																										
UniRef90_F6DVB1	D	V	A	E	G	I	P	Q	G	K	A	L	D	L	M	E	A	A	P	V	E	G	F	D	S	I	V	T	G	T	D	F	A	D	T	A	Q	D	A	L		
UniRef90_M1VIR0	D	V	P	A	A	E	S	V	L	K	G	V	C	C	E	L	D	G	A	Y	P	L	D	H	P	L	V	L	Y	T	S	V	A	D	E	A	F					



	90										100										110										120													
UniRef90_A41421	A	I	I	M	C	G	A	F	P	R	E	R	K	D	L	L	E	M	N	A	R	E	F	K	E	Q	Q	G	E	A	I	A	A	V	A	K	R	D	C	R	V			
UniRef90_S7J325	D	F	V	L	L	I	G	A	K	P	R	E	R	A	D	L	L	K	S	R	N	G	E	F	F	A	S	T	Q	G	T	V	I	N	D	V	A	K	R	D	A	K	I	
UniRef90_H5UJ29	D	F	L	L	L	V	I	G	A	K	P	R	E	R	A	D	L	L	K	S	R	N	G	E	F	F	A	S	T	Q	G	T	V	I	N	D	V	A	K	R	D	A	K	I
UniRef90_F7HA15	V	I	I	T	A	G	A	R	Q	E	R	R	L	N	L	N	L	Q	R	N	V	A	I	F	F	K	S	M	I	S	S	I	A	Q	Y	S	P	L	C	K	L	I		
UniRef90_H3AJ84	V	V	V	T	A	G	A	V	R	Q	Q	E	R	L	N	L	N	Q	R	N	V	N	V	F	F	K	S	M	I	S	S	I	A	Q	Y	S	P	L	C	K	L	I		
UniRef90_UPI000363E9C2	D	W	F	L	L	L	G	K	K	I	E	E	R	S	D	L	L	S	I	N	G	G	I	F	F	V	Q	Q	G	E	A	L	I	G	K	Y	G	K	D	D	A	K	I	
UniRef90_A0A011U5M8	N	A	M	L	V	G	A	R	P	R	E	R	A	D	L	L	L	A	A	N	A	G	I	F	F	G	P	Q	G	A	L	I	N	E	V	A	A	G	D	I	R	V		
UniRef90_UPI0003336907	V	I	V	T	V	I	G	A	R	Q	Q	E	R	L	N	L	N	Q	R	N	V	N	V	M	K	A	V	I	P	H	I	N	E	S	P	D	C	K	I					
UniRef90_A2FYF4	D	C	A	F	L	V	A	P	G	Q	V	R	A	D	L	L	L	S	S	N	S	V	I	F	F	K	N	T	G	E	Y	L	I	S	K	W	A	K	P	T	V	K	V	
UniRef90_UPI0002E014C8	N	A	L	L	V	G	A	R	P	R	E	R	G	D	L	L	L	E	A	N	G	A	I	F	F	T	A	Q	G	A	A	L	N	K	V	A	A	D	D	I	R	V		
UniRef90_U1NT98	Y	A	F	L	V	G	A	M	P	R	E	R	K	D	L	L	L	A	A	N	V	K	I	F	F	K	S	Q	G	K	A	L	L	A	D	Y	A	K	P	T	T	K	V	
UniRef90_H0XWQ6	V	I	I	T	A	G	A	R	Q	E	R	R	L	D	L	V	Q	R	N	V	D	I	M	M	K	T	I	I	P	T	I	V	R	Y	S	P	D	C	K	M	L	V		
UniRef90_C5LWK5	Y	A	C	L	V	G	S	P	P	R	E	R	S	D	L	L	L	Q	V	S	G	A	L	F	F	K	Q	E	G	S	I	L	G	E	V	A	N	R	N	C	K	V		
UniRef90_S7N4B3	V	I	I	T	A	G	A	R	Q	E	R	R	L	D	L	V	Q	R	N	L	A	I	F	F	R	L	M	I	S	D	I	M	M	H	S	P	N	C	K	I	V			
UniRef90_H2KV10	V	V	I	T	A	G	A	R	Q	E	R	R	L	D	L	V	Q	R	N	V	D	I	F	F	K	R	I	I	P	E	V	I	A	M	Y	S	P	K	C	I	V			
UniRef90_Q60H15	D	V	F	L	V	G	A	K	P	R	E	R	A	D	L	L	L	A	R	N	A	G	I	F	F	R	E	H	G	Q	A	M	R	D	V	G	S	F	E	N	A	K	V	
UniRef90_B9T307	W	A	L	L	I	G	A	K	P	R	E	R	A	D	L	L	L	D	I	N	G	Q	I	F	F	A	E	Q	G	K	A	L	N	D	A	V	A	S	R	E	N	V	K	V
UniRef90_F6DVB1	V	V																																										

UniRef90_A4I421	V	V	V	G	N	P	A	N	T	N	A	L	I	L	K	S	A	G	K	L	N	P	R	H	V	T	A	M	T	R	L	D	H	N	R	A	L	S	L	130		
UniRef90_S7J325	F	V	V	G	N	P	V	N	T	N	A	C	W	I	A	M	N	N	A	P	R	L	N	R	N	F	T	A	M	L	R	L	D	Q	N	R	M	A	S	M	140	
UniRef90_H5U219	I	V	V	S	N	P	V	N	T	N	A	A	V	A	A	A	S	A	P	D	V	P	K	N	R	N	F	T	A	M	L	R	L	D	H	N	R	M	A	Q	150	
UniRef90_F7HA15	I	V	V	S	N	P	V	D	I	L	T	Y	V	A	W	R	L	S	A	F	P	K	N	R	V	I	G	S	G	C	N	L	D	T	A	R	F	R	F	160		
UniRef90_H3AJ84	I	V	V	S	N	P	V	D	I	L	T	Y	V	A	W	R	L	S	A	G	L	P	K	H	R	V	I	G	S	G	C	N	L	D	T	A	R	F	R	F		
UniRef90_UPI000363E9C2	L	V	V	G	N	P	V	N	T	N	A	F	I	G	K	D	A	A	N	N	D	N	Q	L	W	M	A	S	M	T	M	L	D	S	S	N	R	A	K	S		
UniRef90_A0A011U5M8	L	V	V	G	N	P	A	N	T	N	A	L	I	A	A	A	A	A	P	D	I	P	G	S	E	R	F	A	A	L	T	R	L	D	S	H	D	R	A	L	Q	
UniRef90_UPI0003336907	L	V	V	T	N	P	V	D	I	M	T	H	V	A	W	K	L	S	A	P	D	I	S	A	S	V	I	G	S	G	C	N	L	D	S	A	R	F	R	Y	E	
UniRef90_A2FYF4	L	V	I	G	N	P	D	N	T	N	C	E	I	A	M	L	H	A	K	N	L	K	P	S	E	R	N	F	S	F	L	S	M	L	D	H	N	R	A	Y	Y	E
UniRef90_UPI0002E014C8	L	V	I	T	G	N	P	A	N	T	N	A	L	I	A	Q	N	A	A	P	D	I	P	A	E	R	F	S	A	L	T	R	L	D	H	N	R	A	K	S	L	
UniRef90_U1NT98	L	V	V	G	N	P	A	N	T	N	A	F	I	C	A	K	Y	A	P	K	I	P	A	C	N	F	S	A	M	T	R	L	D	H	N	R	A	L	A	Q		
UniRef90_H0XWQ6	L	V	V	S	N	P	V	D	I	L	T	Y	V	V	W	K	L	S	G	L	P	A	T	S	V	I	G	T	G	C	N	L	D	S	A	R	F	R	Y	L		
UniRef90_C5LWK5	V	V	V	G	N	P	A	N	T	N	A	L	I	A	A	S	N	S	K	H	V	P	A	E	N	F	T	A	M	T	R	L	D	H	N	R	G	L	V	Q		
UniRef90_S7NA33	I	V	V	S	N	P	V	D	I	L	T	Y	V	A	W	R	L	S	G	L	P	Q	N	R	V	I	G	S	G	C	N	L	D	T	A	R	F	R	F	L		
UniRef90_H2KV10	I	V	V	S	N	P	V	D	I	L	T	Y	V	A	K	L	S	G	F	P	P	N	R	V	I	M	G	T	G	T	L	L	D	S	A	R	F	R	H	L		
UniRef90_G0HII5	L	V	V	G	N	P	A	N	T	N	A	Y	V	L	A	R	Y	A	P	N	I	Q	R	D	N	V	T	G	L	T	R	L	D	Y	N	R	A	L	Q	Y		
UniRef90_B9T307	I	V	V	G	N	P	C	N	T	N	A	L	C	L	K	N	A	A	P	N	I	P	A	K	N	F	H	A	L	T	R	L	D	E	N	R	A	K	C	Q		
UniRef90_F6DVB1	L	V	V	T	N	P	V	D	V	S	A	Y	L	A	Y	K	A	S	G	F	A	P	N	R	V	F	G	L	S	G	V	L	D	S	A	R	F	R	T	F		
UniRef90_M1VIR0	I	V	V	G	N	P	A	N	T																																	

UniRef90_A4I421	L	A	R	K	A	G	V	P	V	S	Q	V	R	N	V	I	W	G	N	H	S	T	Q	V	P	D	I	D	N	A	V	I	G	T	T	P	A	R						
UniRef90_S7J325	L	A	H	R	A	Q	V	P	V	S	Q	V	R	N	V	I	W	G	N	H	S	A	T	Q	V	P	D	I	D	N	A	V	I	G	T	T	P	A	R					
UniRef90_H5U219	L	A	A	H	T	G	A	P	V	L	D	E	I	S	R	T	V	W	G	N	H	S	A	T	Q	V	P	D	I	F	H	A	R	V	I	G	D	R	S	G	A			
UniRef90_F7HA15	I	G	Q	K	L	G	I	H	S	P	E	S	C	H	G	W	I	L	G	E	H	G	H	S	D	S	S	V	V	W	S	G	V	N	I	A	G	V	I	L	K			
UniRef90_H3AJ84	M	A	E	K	L	G	I	H	S	P	E	S	C	H	G	W	I	L	G	E	H	G	H	S	D	S	S	V	V	W	S	G	V	N	I	A	G	V	I	L	K			
UniRef90_UPI000363E9C2	L	A	K	K	T	N	N	N	V	S	D	V	K	N	M	I	I	W	G	N	H	S	P	T	M	Y	P	D	S	G	N	A	L	I	S	G	K	L	G	S				
UniRef90_A0A011U5M8	L	A	A	A	L	E	A	P	V	A	A	V	Q	G	V	A	I	W	G	N	H	S	A	T	Q	F	P	D	V	A	H	A	S	V	A	D	G	R	P	V	L			
UniRef90_UPI0003336907	V	G	E	K	L	G	V	H	P	T	S	C	H	G	W	I	I	W	G	N	H	G	H	S	A	T	Q	F	P	D	L	W	S	G	V	N	I	A	G	V	I	L	K	
UniRef90_A2FYF4	V	A	S	K	L	G	V	H	P	T	S	C	H	G	W	I	I	W	G	N	H	G	H	S	A	T	Q	F	P	D	L	T	S	Q	A	T	F	K	D	G	K	T	Q	
UniRef90_UPI0002E014C8	L	S	H	Q	T	G	A	P	V	T	D	I	K	D	R	M	T	I	W	G	N	H	S	A	T	Q	F	P	D	L	S	H	T	T	V	G	G	K	P	A	L	E		
UniRef90_U1NT98	I	A	M	K	C	G	V	G	L	P	T	S	C	H	G	W	I	I	W	G	N	H	S	A	T	Q	F	P	D	A	S	H	V	N	K	V	A	G	V	S	D	P		
UniRef90_H0XWQ6	I	G	E	K	L	G	V	H	P	T	S	C	H	G	W	I	I	W	G	N	H	G	H	S	A	T	Q	F	P	D	L	W	S	G	V	N	I	A	G	V	S	D	P	
UniRef90_C5LWK5	L	A	H	C	I	N	V	T	H	I	D	N	F	V	I	I	W	G	N	H	S	P	N	M	Y	P	D	D	V	N	H	A	T	V	R	G	R	K	I	R				
UniRef90_S7N4B3	I	G	E	K	L	G	V	H	P	T	S	C	H	G	W	I	I	W	G	N	H	G	H	S	A	T	Q	F	P	D	L	W	S	G	V	N	I	A	G	V	I	L	K	
UniRef90_H2KV10	L	G	E	K	L	G	V	S	A	N	S	V	C	H	A	Y	I	I	W	G	N	H	G	H	S	A	T	Q	F	P	D	L	W	S	Y	A	N	I	A	G	V	R	L	S
UniRef90_G0HII5	L	S	S	G	H	N	V	S	P	R	L	V	D	R	N	L	A	I	W	G	N	H	S	T	T	V	F	P	D	L	R	N	A	K	T	V	A	G	G	R	P	L		
UniRef90_B9T307	L	A	L	K	A	G	V	F	D	K	V	S	N	V	T	I	I	W	G	N	H	S	A	T	Q	F	P	D	D	L	R	N	A	K	T	V	A	G	G	R	P	L		
UniRef90_F6DVB1	I	A	R	E	L	N	I	S	F	E	D	V	T	T	F	V	I	L	G	N	H	G	H	S	A	T	Q	F	P	D	L	V	K											



UniRef90_A4I421	E	V	A	I	K	G	G	A	L	L	N	D	F	V	Q	V	V	R	G	R	G	A	E	I	I	Q	L	R	G	L	S	S	A	M	S	A	A	K		
UniRef90_S7J325	E	V	A	I	S	D	R	D	W	L	N	D	F	V	Q	V	V	R	G	R	G	A	E	I	I	Q	L	R	G	L	S	S	A	M	S	A	A	K		
UniRef90_H5U219	D	V	A	A	D	T	D	W	L	V	D	F	I	P	S	T	V	I	Q	N	R	G	S	T	A	V	I	E	A	R	G	A	S	S	A	A	R			
UniRef90_F7HA15	D	L	N	P	D	I	G	T	D	K	D	P	E	Q	W	K	N	V	H	K	E	A	S	A	Y	E	I	I	K	M	K	G	Y	T	S	W	A	I	G	L
UniRef90_H3AJ84	N	L	N	P	D	F	G	A	D	Q	D	K	E	Q	W	K	E	V	H	K	M	V	S	A	Y	E	I	I	K	M	K	G	Y	T	N	W	A	I	G	L
UniRef90_UPI000363E9C2	E	V	I	N	D	M	N	W	I	E	S	E	F	I	P	K	V	Q	Q	R	G	K	A	V	I	D	S	R	K	G	S	S	A	T	S	A	K	A		
UniRef90_A0A011U5M8	D	A	L	A	D	A	A	S	W	L	D	V	F	V	P	R	V	A	K	R	G	A	E	I	I	S	V	R	K	G	S	S	A	S	A	A	N			
UniRef90_UPI0003336907	T	L	N	P	H	L	G	T	D	A	D	K	E	N	W	K	S	V	H	K	E	S	A	Y	E	I	I	K	M	K	G	Y	T	N	W	A	I	G	L	
UniRef90_A2FYF4	K	V	V	D	V	L	D	H	D	Y	V	F	G	T	F	K	K	I	G	H	R	A	W	D	I	L	E	H	R	G	F	T	S	A	A	S	P	T	K	
UniRef90_UPI0002E014C8	D	L	I	V	D	V	D	S	W	V	E	E	E	Y	L	P	R	V	A	K	R	G	A	E	I	I	A	A	R	G	T	S	A	S	A	A	G			
UniRef90_U1NT98	A	P	A	A	V	G	D	D	A	W	L	K	G	E	F	N	L	T	V	Q	K	R	G	A	E	I	I	E	K	R	K	L	S	S	A	M	S	A	A	K
UniRef90_H0XWQ6	K	L	G	T	D	S	D	K	E	Q	W	K	N	I	H	K	Q	V	V	S	S	S	S	A	Y	E	I	I	K	L	K	G	Y	T	S	W	A	I	G	L
UniRef90_C5LWK5	D	L	V	P	H	P	D	W	I	K	N	E	F	M	T	R	V	Q	Q	R	G	K	E	I	I	E	A	A	G	K	S	A	P	S	A	A	M			
UniRef90_S7N4B3	D	L	N	A	Q	L	G	T	D	Q	D	P	E	R	W	K	D	V	H	K	E	V	V	A	Y	E	I	I	K	T	K	G	Y	T	S	W	A	I	G	L
UniRef90_H2KV10	S	L	N	P	H	I	L	G	T	V	D	D	P	E	D	F	S	D	I	Y	Q	K	S	A	Y	H	I	I	K	L	K	G	Y	T	S	W	A	I	G	L
UniRef90_G0HII5					V	Q	P	G	S	V	C	G	T	G	L	V	S	H	V	R	A	R	G	A	E	I	I	G	L	R	G	S	S	A	L	S	A	A	V	
UniRef90_B9T307	E	V	I	K	D	N	K	W	L	I	E	E	F	T	E	K	V	Q	K	R	G	G	V	E	I	I	K	K	W	G	S	S	A	S	A	S	T	A	V	
UniRef90_F6DVB1	K	L	I	P	A	D	R	L	E	A	M	V	E	R	T	R	K	G	G	A	E	I	V	I	N	Y	L	K	T	G	S	A	Y	Y	A	P	S			
UniRef90_M1VIR0	M	R	A	A	D	I	G	G	D	S	Q	L	A	S	E	V	I	L	I	Q	K	R	G	A	E	I	I	A	L	R	K	L	S	S	A	M	S	A		

UniRef90\_A4I421 A A V D H V H D W I H G T P E G V V S M G V Y S D G N Y D V P S G L I F S F P C  
UniRef90\_S7J325 A L A E S A R S I F I P K E G E W F S V G I C S D N P Y G V I P E E G L I F S F P C  
UniRef90\_H5U2I9 A A I D H V I R D S W V L G T P D R D W T S A A V S S P G A Y G V I P E E G L I F S F P V  
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UniRef90\_UPI000363E9C2 A I D T V I A C E K P T D S G D F S A A I A S D G A Y D V P A G L I C G Y A I V  
UniRef90\_A0A011U5M8 A A I S H V R D L V H G T A N G W T S A A V L S H G E Y G V P A G L I Y S S A P V  
UniRef90\_UPI0003336907 S V T N L A L S I L K N L R R V H P V S T V V K G L Y G I K E D I F L S V P C  
UniRef90\_A2FYF4 A A I Q H M K A W L F G T P E D V L S M G V P E D N P Y G I K P E G L V F S F P V  
UniRef90\_UPI0002E014C8 A T V D H A R D L F R G T P E D W T S M A V V S D G S Y G V P A G L V F S F P V  
UniRef90\_U1NT98 A A C D H V H D W F V G T K Q D W V S M A V P S D G S Y D I P A G L V F S F P V  
UniRef90\_H0XWQ6 S V M D L T G S I L K N L R K V H P V S T M V K G L Y G I K E E I F L S I P C  
UniRef90\_C5LWK5 S C V D Q M R D W A L G S D N K W V S M A V I G K D S Y G V I D D L C F S F P V  
UniRef90\_S7N4B3 S V A D L A E S V L R D L R R V H P V S T I V K G L Y G I R N E E V A L S V P C  
UniRef90\_H2KV10 A C R S L C S A I L N N S Y T I P L S T S A K G V H G I N N E V Y L S L P C  
UniRef90\_G0HII5 A A V E H M R D W I N G T E R E W T S M A V P S T G W Y G V P D G I V F G V P V  
UniRef90\_B9T307 S I A D A I K S L V T P T P E D W F S S G V Y T N G N Y G I A E D L V F S M P C  
UniRef90\_F6DVB1 A S V M Q M A E C L I K D K K R I L P V S A Y L Q G E Y G E K D V F A G V P A  
UniRef90\_U1VIR0 A I G D H L R D W M F Q T E N E I V S M I V P S D G S Y G I D K G L M F A F P V  
UniRef90\_UPI0000F2D5FF C V A D L T L S I M R N I K K V H P V S T L I K G F Y G I K E E I F L S L P C  
UniRef90\_K9GX13 A S A I E M A E A Y L K D K R L L P C A A W C D G V Y G L D G F Y V G V P C  
UniRef90\_Q9GPV4 A A L C Q M R D W W C T P A D D W V S M A V P E N E P Y G I K K G V V Y S F P V  
UniRef90\_UPI0002C3D08B A I V D H F R D W T L T D K E K I V C M G I Y S E G Q Y G I P K G I F F S M P V  
UniRef90\_H2KV11 T C K S L C N A I L N N L H T V Y P L S T N A Q G I H G I S E D V C L S L P C  
UniRef90\_P00342 S V T D L A R S I L K N L K R V H P V P T T L V K G F H G I K E E V F L S I P C  
UniRef90\_K2MP53 A S A I A M A E S Y L K D Q K R V M P V A A Y L S G E Y G V D G L Y V G V P V  
UniRef90\_A0A037Z0V8 A V R R I V E A I I R D E D S I L T V S S L L T G Q Y S I E N I Y M G V P T  
UniRef90\_I9M5E5 A A G A L L V E A I V R D E K K V Y P C C V A L D G E Y G Q K D I C L G V P V  
UniRef90\_UPI000428FE0E A A I V Q M V E A V L K D K R V L P A I A Y L D G E Y G Y S D M Y L G V P A  
UniRef90\_A7NG29 A A T V Q M V E A I L R D K K R V L P C A C Y L E G E Y G K N D I Y F G V P C  
UniRef90\_Q81K80 S L L R V T K A I L N N S V L T V S A Y L E G Q Y G E K N D A Y V G V P A  
UniRef90\_D6YWT7 A V V D A I R S L L I P T P E E W F S S G V C T D G N Y G I E D N L I F S F P C  
UniRef90\_P00345 G L V R I T K A I L D D E N S I L T V S A L L E G Q Y G I S D V Y I G V P A  
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UniRef90_G9YP16	V I V	T A G A P G E T R	L D L V H K N V A I	F R S I I V P E I V A R R S N R D A I L
UniRef90_N0B400	V V I	C A G A P G E T R	L D L V G K N T A I	F K G I I V E Q V I M G S G F D G I F V
UniRef90_F61382	C I I	T A G V I R Q E S R	L N L V Q R N V K L	F S C I I V Q Q L A H S S P D S I L
UniRef90_U2DVD6	I V I	T A G A N Q Q E R	L D L V H K N K K I	M K G I I G E I D K S G S P F N G I L
UniRef90_A9EZV5	L I V	T A G K P G Q K P G M S	R D D L V A T N L P	I R S V A A D G A K E H C P N A L V
UniRef90_Q3MDN9	V V I	T A G F P R R K P G M S	R D D L L N A K I	V V I E A A K Q A I A Y S P C A I F I
UniRef90_R7EXD5	L I I	T A G A P G E S R	T E L V H R N E R I	F A S I I V D S I T A V R A S G I L
UniRef90_V4GU78	T V I	T A G R P G E T R	L D L A Q R N T D I	F K Q I I P E I V K Y N P N G L I
UniRef90_H3DEZ9	V V V	T A G V I R Q Q E R	L N L V Q R N V N I	F K H I I V Q I V R Y S P E C V I
UniRef90_F2F8Y3	V L I	T A G V I P G M S R	D D L V Q I N Q G I	M K A V A S E I V A R T S P D A T I
UniRef90_R9C0T2	V V I	C A G A P G E T R	L D L V E K N L K I	F K S I I V D Q V M E S G F H G I F L
UniRef90_UPI000379EB44	V I M	T A G A P G E T R	L D L V N R N V K I	F K Q V I G D I A K Y C P H A V L
UniRef90_F6YK35	V I I	T S G A R Q Q E R	E N L D Q H N M N I	F K F I I P N V V K Y S P N C K L
UniRef90_V7YV58	V I I	T A G K P G M S R	D D L V N T N A G I	I K S V C E N V K K Y A P E S I V
UniRef90_U5Q298	I V I	T S G I P R K P G M T	R E E L N A S I	V N E V V T N S L K Y A S P N A I V
UniRef90_UPI0003457D10	V I I	T A G V I A Q R D R	L S L V E R N I S I	V Y K S I L H D V V K Y C P D C I
UniRef90_I0IPH8	V V V	T A G K P G M T R	D D L L H K N G E I	M I E I S E K I K K H A P E A I V
UniRef90_A2E124	D V F	L V I G S F P K K P V	D Y D F Q R N A S I	Y S E H G R A L K S D F A K E T V K V
UniRef90_X5H MV3	L I V	T A G I P R K P G M S	R E E V N A L V	M K E V G E K I K Q F A P E A F V
UniRef90_R5TX92	A V I	C A G V I P G E S R	L D L L K R N A A V	F K S I I V D P V T E S G F N G I F L
UniRef90_H3NCR0	V V E	T A G A P G E T R	L D L L H K N A L K I	T K T I I V D Q V M A S G F N G I F L
UniRef90_E0R9S2	I I V	T A G A P G E T R	I D L L K R N A E I	F E S I I D N I V K V N T H G I L
UniRef90_H1Z595	V V I	T S G I P R K P G M T	R E E L N T A I	V K S V M E N A L T V S P N A I F V
UniRef90_R6Q0Q6	V V I	C A G V I P G E S R	L D L L N R N V A V	F K T I I V P E I V A V G F H A G I F L
UniRef90_N9Y5K7	V I I	T A G A E G E T R	L D L I E K N Y N I	F K G F V P E I A K L S P N S I F V
UniRef90_V5XPB8	V I L	T A G V I P G Q R	D L V K T N A T I	T R Q I I V K E V M A S G F D G I F V
UniRef90_G2IIR6	I I V	T A G V I P G M S R	D D L L G I N L K V	M K A V A G E G I K A N A S G F D A F V
UniRef90_X5DQK7	V C I	C A G A P G E T R	L D L V G K N V S I	F Q D I L V S Q V R D S G F D G I Y L
UniRef90_Q9GSY5	A F L	V A S V P L R Q R	A D L L K K N A S I	F K A T G E A L G R Y A K R

[illegible]

UniRef90_A6CLY3	L	G	D	H	F	D	V	D	A	R	N	V	H	A	Y	I	M	G	E	H	G	D	T	E	F	P	V	W	S	H	A	T	I	G	A	S	P	L	R				
UniRef90_K1VR37	L	A	T	E	F	L	N	V	S	V	V	D	V	H	A	N	I	M	G	S	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R		
UniRef90_A0A033UL77	L	S	E	E	F	D	V	A	P	Q	S	D	V	H	A	N	I	M	G	S	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R		
UniRef90_S2XMB0	L	A	E	A	L	N	V	A	V	K	D	V	T	G	L	I	V	L	G	G	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R		
UniRef90_QUTUX8	L	S	E	E	H	F	D	I	D	A	R	N	V	H	T	Y	L	I	M	G	S	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R	
UniRef90_UPI000287B187	L	V	S	E	A	L	N	I	S	V	K	D	I	S	G	F	V	L	L	G	G	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R	
UniRef90_G6A0R4	L	A	E	E	F	N	V	S	I	E	D	V	T	A	F	V	L	L	G	G	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R		
UniRef90_F4XXE6	L	A	M	E	N	G	N	V	S	V	A	D	V	T	A	N	A	V	L	L	G	G	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R
UniRef90_UPI00047E65A2	L	S	L	A	M	N	V	S	P	N	D	L	H	A	T	V	I	L	L	G	G	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R	
UniRef90_UPI00031D07F6	L	V	A	E	E	L	N	V	S	V	E	D	I	S	G	F	V	L	L	G	G	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R	
UniRef90_UPI000288388F	L	V	G	K	R	Y	N	I	D	P	R	N	V	I	S	T	Y	L	I	M	G	S	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R
UniRef90_T1AS32	L	V	A	D	A	L	G	N	V	A	A	R	D	V	T	G	F	V	L	L	G	S	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R
UniRef90_H3AQL4	L	M	G	E	K	L	N	V	H	P	A	S	D	V	H	G	W	I	L	L	G	S	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R
UniRef90_Q6G1M0	L	S	E	E	F	K	I	S	V	K	D	V	T	A	F	V	L	L	G	G	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R		
UniRef90_UPI0003768D30	L	S	L	E	L	G	V	S	V	E	D	I	S	A	L	I	V	L	L	G	G	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R	
UniRef90_J9HTD7	L	V	A	S	E	L	L	G	V	S	V	E	D	V	H	G	F	V	L	L	G	V	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R
UniRef90_R2S6W6	L	I	S	E	E	L	V	N	D	P	R	N	V	H	A	Y	I	L	L	G	G	H	G	D	S	E	F	P	V	W	S	R	Y	S	N	I	G	A	K	P	L	R	
UniRef90_5AKA2	L	I	G	E	K	L	G	V	S	P	T	S	H	G	W	I	L	L	G	E	H	G	D	S	S	V	A																



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210  
220  
230  
240

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

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



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



		50	60	70	80
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UniRef90_UPI00037EE0FB	D I	A E G P Q G K A L D I	L A Q S S T V E G V D A S	V T G S D N Y S D I	A D A D A D V
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UniRef90_R7NS51	D I	N K E R A T G E A M D L	N H G L A F S S S S M K I	Y S G E Y T H C S N A D	I
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UniRef90_UPI00029A6D32	E T	P V R L R T L Q G I Q L	E L T D C A F P L L K D S	L I S D S E D E A F A D A	A
UniRef90_X5DAU6	D I	K E G F A E G K A M D L	M Q T A S G F D S T I V	G A T N D Y T K T A G S	D
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UniRef90_M3J7P0	D L	D K S K V E G D A L D L	A H G L A Y T R P K K I	F K A S A Y T D C S	D A D L
UniRef90_R7B3C0	D V	A E G L P Q G K A L D M	M H M R S V I E K F T V	S V T G T N D Y A T A D	S D V
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UniRef90_R7A677	D V	N K E K A Y G E A L D M	Q H A I H F M N R N I	T I H A G D Y E E C K	D A D I
UniRef90_R6CBK8	D I	N K E K V A G E V M D I	I Q G T C F R D P I N I	K A G E Y E D A K D S N	I
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UniRef90_K6WMW2	D I	N T A K V T A E V L D M	S H G L E F V P R A D I	I G G D D V S V C A D A	D V
UniRef90_R7HGQ8	D I	N Q D K I I G E V M D L	N H C L A F S P S K I	D I K V G T Y E D C C	K A D I
UniRef90_U2FTZ3	D L	D R E R A Q G E I M D F	S H T T A T F A R N T	R L V S G D Y S D C R	D A D I
UniRef90_T0N605	P E	G K A L D M M E G T P H	W G T D L N I K G F T T	V D P K N Y E N M K G S	D V
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UniRef90_R5I5E8	D I	N K E K V E G E V M D I	E Q G T C F R S P V	S L V A G D Y A D A K	D S D I
UniRef90_R5XC55	D I	N K E R A W G E A D L S	S H G L P F A P S S M	K I Y S G N Y C D C	G D M D V
UniRef90_W0THK6	D I	R P D T P Q G G V A L D I	L Q T S P F F S F D T	R V E G S D P A A L A	G A D L
UniRef90_UPI00046F2452	D I	N Q K R L E G E V M D L	N H G I A F V P V R	I R S G T Y E D C A D	S N V
UniRef90_R5MSF8	D V	N K Q K A E G E A M D L	N H G L S F A K T N M	K I Y A G S Y T D C R	D A D I
UniRef90_R6ZIB9	D A	D R N K A E G E A L D I	S H G L P F A R P M Q	I Y A G D Y S D D I	V D A A I
UniRef90_M5AYJ3	D V	V K E R T E G D A L D I	E D A Q V F T S P K	N V Y S G D Y S D C	K D A D V
UniRef90_G4CLV3	D L	N E K R A H A E V R D L	R H G V L Y A P T P	M K V T Q G T Y A D C	A D A D I
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UniRef90_G2D928	D I	R E D A P Q G G V A L D	V L Q T S F F R F D T	R V S G S D P A A M A	G S D L
UniRef90_R6HRR9	D A	N E K K A Q A E A M D I	A H A T P F A Y A N K	V K A G T Y E D L K G	C E I
UniRef90_E0IGK3	D R	T P A R A Y A Q A L D L	S H C M D F T H T R	T K I L Y T G S Y A D	C G D A D I
UniRef90_A0A059MR00	D P	N T D K V R A E V L D L	N H G T Q F A P A C R	I D G A D D L A V I T	A G S D L
UniRef90_K9SRM3	D V	V A S R S Q G V A L D L	M Q A R A L E N H D R	Q I T I G T D D Y H T	K D S D V
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UniRef90_P62054	D A	F P Q P A E G N A L D L	S D T L A V I P H F T	S I K A G S Y E D C K	D A D V
UniRef90_R5NYU5	D A	D R N K A E G E A M D I	S H G I P F A S P M R	I Y A G D Y D D V A D A	G I
UniRef90_R5FYY8	D V	N T A R A E G E A L D I	A H G V P Y Y S P M N	I Y A G T Y E D L A D A	S I
UniRef90_UPI000273D9D7				D Y S V S A N S R I	
UniRef90_G1MBW7	D V	L E D K L K G E M M D L	Q H G S L F P Q T P K	V V A D K D Y S V T	A N S K I
UniRef90_K6QEQ3	D T	N R E K A L G D A L D M	S H G A P F L P P C	R V V A G D Y P D L	A G C Q V
UniRef90_U2XUN0	D I	V D G V P Q G K A L D L	A Q S S T V S H F D A	N L K G T S Y A I K	G A D V
UniRef90_B4LKK3	D I	N E K L C K A E S L D L	Q H G S L F L N N C N	L E P T C N V I E A T	K D S R V
UniRef90_S2XH58	D L	N K D K V L G D V L D L	N H G A P Y A E S P V	K V K A G E Y S D C	G D A D L
UniRef90_H3AA37	D D	D N T R D L L F A L Q M E	A E D L A Y P L L R	K V T V H T D L R E A	F S D A
UniRef90_E3BRJ6	D I	V K D R T K G D A I D L	S D A T P W I A P K N I	Y S A E Y S D A K D A	D L
UniRef90_A9FSL2	D V	N R A K V G A E V L D L	N H G L Q F V P A A T	L D G S D D V I E V	C R G A D V
UniRef90_UPI00041A92B2	D R	T P E R A Y A Q A L D L	S H C M D F T F T R T	K I F T G E P H C G	D A D I
UniRef90_F4A3L9	D L	N E S K S K G E T L D L	S H A T E Y M P L R T	K V K V G T Y E E C	K D V D V
UniRef90_W8BJU3	D A	N E K L V N G E S K D V	Q Q G S L Y L R D A V I	I G N T D Y S K A S E D	S A V
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UniRef90_L9KRK0	D V	L E N K F K G E M M D L	Q H E S V F L Q T P K	T V A D K D Y S V T	A N S K I
UniRef90_D2NTC0	D I	D G K R A H A E A L D I	A H G A M F A H E A T	V T G G D D I E L L	R D C M
UniRef90_W2STE0	D V	S N K V K G E M M D L	Q H G L A F T R R C V	V N A D D T D Y A C	T A G S N L
UniRef90_UPI0002F90DBE	D I	Q Q D H I K G D A L D L	E D V Q P F T S P L	D V H A G S Y A D A G	A D L
UniRef90_H3SL21	D I	M T E A A Q G K A L D L	Q E S G P V I E G F D	C L V V G T S Q P D	T A N S D I
UniRef90_R7AGX3	D V	D T R R A E G E A L D I	V H G V P F A S P M K I	Y A G T Y D D V A D A	A I
UniRef90_B0PC22	D I	D Q K K A E G E A M D I	A H S V P F V R P V	N V Y A G G Y P D L	A D A G M
UniRef90_F8IBN2	D L	Q E G P Q G K A L D M	W E S G P I E G F S L	K V V I G T N D Y A T E	G S D V
UniRef90_W4CU84	D R	T Y D R A M A Q A L D L	S H C M D F T S T R T	K V Y A G T Y S D C	A K M D V
UniRef90_Q4JY42	D L	D E R K T W G H V Q D L	N H A V P W S H H N T	R V T V G T Y E D C	R D A A M
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UniRef90_L8LRM7	D L	A E E K V E G E V M D L	M H G I P F L E P T	D L K A G T V A D A	G Q D A D V
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	90	100	110	120																																								
UniRef90_F2I3I4	I	I	T	A	G	V	P	R	K	P	G	M	T	R	D	L	N	L	K	I	L	K	Q	V	A	E	G	I	K	K	T	S	P	E	A	F	I	V						
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UniRef90_R6UV85	V	V	I	T	A	G	V	P	R	K	P	G	M	S	R	D	L	N	L	N	S	I	L	K	E	K	V	A	E	G	I	R	K	A	A	P	N	A	L	S	F	V		
UniRef90_B7JVP2	V	V	I	T	A	G	R	P	R	T	S	R	D	D	L	L	A	I	N	A	K	I	V	V	V	N	S	A	K	E	A	I	K	Y	S	P	N	A	L	S	F	V		
UniRef90_UPI000273C4CA	I	I	I	T	A	G	I	C	Q	E	K	T	Q	D	L	V	Y	G	N	V	E	I	F	K	S	V	I	P	S	I	V	Q	Y	S	P	N	A	L	S	F	V			
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UniRef90_S6AYD9	V	V	L	T	A	G	A	P	G	K	P	R	L	S	L	V	E	K	N	L	R	I	F	K	D	V	I	T	K	I	V	A	S	G	F	N	D	G	I	F	L			
UniRef90_P62050	V	V	I	C	A	G	A	P	G	E	T	R	L	Q	L	V	D	K	N	M	K	I	F	M	K	S	I	V	A	P	V	C	M	A	N	S	G	F	N	D	G	I	F	
UniRef90_R7NS51	V	V	I	C	A	G	A	P	G	K	S	R	P	E	L	L	K	K	N	T	E	V	I	F	M	K	S	I	V	A	P	V	C	M	A	N	S	G	F	N	D	G	I	F
UniRef90_R5GVV0	I	V	I	T	A	G	A	P	E	E	T	R	L	D	L	I	Q	K	N	A	K	I	L	F	M	R	S	I	V	A	G	E	I	K	K	R	A	D	F	E	G	I	L	
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UniRef90_UPI00029A6D32	W	I	I	M	L	A	A	T	E	K	S	R	L	D	L	L	R	A	N	G	P	I	Y	E	S	H	Q	A	I	E	R	V	A	P	N	A	L	S	F	V				
UniRef90_X5DAU6	A	V	I	T	S	G	I	P	R	K	P	G	M	T	R	E	L	N	A																									

[illegible]



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UniRef90_B7JVP2	I	S	L	E	L	G	I	S	T	S	A	N	I	T	A	L	V	L	G	H	G	H	G	D	L	M	L	P	L	P	R	Y	C	T	V	N	G	V	P	
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210  
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N F L S A K E M D A I A D E V K N A A Y E I I K R K G A T Y Y G I G M  
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220  
E W M E K H P E I T K D T L D K I Y K N A A Y E D I I N T K G A T F Y Y G I G T  
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D V M S D N A D R T K N E T K E T E Q T K A S A G W E I F S R K G A T Y Y G I A S  
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E F L S E E E N D I I D V K T K K G G E I I A N K L G T S A W M A P S  
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E F C K G C E R D K V F E R I F E N T R D A A Y K I I E K K G A T Y Y G I G L  
D W N P L P D G E P I R A K M H D E V V H A A Y K I I E G K G A T N Y A I G L  
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A Y C A R H D L P I L D R V L E D V K G V G L E I F R R K G N T D H G I A A  
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D F C E M R G H F E H E K S M K K E N V K N S A Y K I I E K K G A T Y Y G I A M  
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E A L K K Q P D G E A R M A K I H A D V R D A A Y S I I E G K G A T Y Y G I A M  
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UniRef90_B2S1S1	D	V	A	Q	D	K	A	K	G	E	V	M	D	L	N	H	G	Q	M	F	L	E	K	N	I	K	I	A	F	G	N	Y	D	L	C	S	D			
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UniRef90_UPI00036CF85A	D	A	N	Q	A	M	A	E	G	E	A	L	D	L	M	H	G	S	A	F	T	A	D	Q	R	I	Y	A	G	G	Y	E	A	A	D	S	D			
UniRef90_N9QYP6	D	I	S	H	S	F	A	E	G	N	A	F	D	F	E	D	A	S	A	S	L	P	R	F	S	I	F	P	Y	E	Y	S	D	L	K	D	A			
UniRef90_E6NB57	D	V	I	Q	G	L	P	Q	G	E	A	L	D	L	N	H	A	C	A	T	L	D	L	D	V	D	V	K	G	S	N	D	Y	D	I	Q	G			
UniRef90_U6LL56	D	V	V	P	N	M	P	M	G	K	A	M	D	V	T	N	H	N	G	S	V	V	D	T	G	I	T	V	Y	G	S	N	S	Y	E	C	T			
UniRef90_Q704B2	D	I	L	K	G	L	P	Q	G	E	A	L	D	L	I	N	H	M	S	S	L	L	G	L	D	V	Y	Y	T	G	S	D	Y	A	D	M	K			
UniRef90_R5QVJ9	D	A	N	E	A	R	A	K	A	E	A	A	D	I	A	H	A	S	P	F	A	D	A	S	K	I	K	A	G	T	Y	E	D	L	K	G				
UniRef90_H9KER0	D	A	F	P	K	K	L	E	G	E	G	M	D	Y	C	H	G	L	S	L	I	E	S	P	R	I	D	F	D	T	D	F	C	I	T	S				
UniRef90_M3VEF8	D	V	N	E	A	K	V	E	A	E	V	L	D	L	I	R	H	G	L	S	F	I	V	G	A	T	V	I	C	G	D	P	S	V	A	S				
UniRef90_W4CD15	D	R	T	Y	D	R	A	V	A	Q	A	L	D	F	S	H	C	M	D	F	T	H	N	R	T	K	V	Y	A	G	T	Y	A	D	C	G	N			
UniRef90_UPI0002234979	D	I	Q	Y	E	R	A	Q	A	E	A	R	D	F	N	H	A	A	V	F	L	T	D	P	K	I	T	A	C	G	D	G	V	N	T	K				
UniRef90_B3MHC7	D	V	V	K	E	R	P	I	G	D	A	M	D	L	E	D	I	T	P	F	M	G	E	T	Y	V	H	A	G	D	Y	S	E	A	K	D				
UniRef90_UPI00046A62B6	D	V	V	P	T	L	G	A	A	K	A	L	D	T	M	H	A	V	T	V	G	N	K	A	L	S	C	K	G	T	C	Y	E	I	A	G				
UniRef90_L1LFX8	D	E	P	S	A	M	E	V	L	E	G	V	C	M	E	I	D	D	L	A	L	P	L	V	Q	G	Y	V	K	L	E	V	A	F	K	N	V			
UniRef90_J9JMB3	D	L	N	A	K	K	V	E	A	E	V	A	D	L	A	H	G	T	Q	Y	T	P	T	S	Q	I	M	G	G	A	D	I	E	Y	V	A				
UniRef90_UPI000362594C	D	I	D	S	D	L	T	V	G	K	A	L	D	L	I	Q	Q	S	T	S	Y	S	P	R	G	T	I	V	T	P	A	L	H	P	E	M				
UniRef90_T0L381	D	V	K	P	G	V	S	E	G	K	A	M	D	M	Q	T	A	Q	M	M	H	I	D	T	K	I	I	G	V	T	A	P	A	T	E	N				
UniRef90_D4KE67	D	I	N	K	Q	K	A	F	G	E	A	M	D	I	Y	Q	G	A	P	F	C	S	P	A	I	V	R	S	G	E	Y	E	D	A	A	D				
UniRef90_R6LQB7	D	I	V	P	N	I	G	A	G	K	S	L	D	I	M	H	A	N	S	I	Q	G	K	A	Y	K	C	K	G	T	N	N	Y	D	I	A				
UniRef90_Q4N618	D	A	D	M	D	K	A	E	G	E	A	M	D	I	S	H	G	L	P	F	A	K	Q	M	R	V	Y	A	G	N	Y	D	D	V	R	D				
UniRef90_V2XQ09	D	I	A	K	D	K	V	E	A	E	V	A	D	L	A	H	G	T	Q	F	T	P	A	S	V	M	G	A	D	V	H	D	T	A	D	S				
UniRef90_Q6A9C3	D	Y	S	Y	E	V	A	L	G	Q	A	L	D	L	E	D	S	T	P	Y	L	A	S	N	S	R	V	R	A	K	D	Y	S	E	L	K	D			
UniRef90_F0QQS1	D	I	V	K	G	L	P	Q	G	E	A	L	D	L	I	N	H	M	S	A	L	L	G	L	D	V	E	Y	E	G	S	D	Y	K	D	M				
UniRef90_A3MWU9	D	V	N	K	Q	K	A	F	G	E	A	M	D	I	Y	Q	G	A	P	F	C	S	P	T	I	V	R	S	G	D	Y	D	A	A	S	G				
UniRef90_R5ICX5	D	I	N	K	A	K	A	E	G	E	A	M	D	I	G	D	A	A	F	V	K	P	L	D	V	Y	A	G	S	F	E	D	C	K	D	S				
UniRef90_A4J898	D	I	D	E	D	R	C	N	G	E	V	M	D	L	D	Q	G	S	L	F	L	E	S	Y	I	T														
UniRef90_W6UKH2	D	V	D	K	D	K	A	Y	A	Q	A	L	D	I	A	D	S	V	S	F	C	E	R	E	T	V	V	R	S	G	D	Y	K	D	C	E				
UniRef90_R5G950	D	V	D	V	K	K	A	E	A	Q	A	L	D	I	F	D	S	T	V	Y	L	Q	K	R	A	I	V	R	A	G	D	Y	S	D	A	K				
UniRef90_R6CRM5	D	I	N	A	A	K	V	R	A	E	A	L	D	L	A	H	G	S	Q	F	M	P	Q	A	R	V	E	G	S	D	E	P	E	I	T					
UniRef90_I6XQ70	D	T	D	Q	F	K	E	A	L	C	G	I	V	M	E	A	E	D	M	A	L	P	L	L	R	S	I	S	E	H	T	E	I	D	E					
UniRef90_UPI00038330D0	D	I	A	A	E	K	V	E	A	E	V	L	D	L	A	H	G	S	Q	F	T	N	S	S	D	I	S	G	G	S	D	V	S	V	A	A				
UniRef90_A0A031FVS4																																								
UniRef90_G8A1G6																																								
UniRef90_X0PAN5	D	L	K	E	D	H	V	R	G	D	V	L	D	L	E	D	V	L	P	M	T	S	P	M	K	L	R	Y	G	S	Y	Q	D	A	A	D				
UniRef90_A0LRV1	D	I	L	E	G	R	P	E	G	L	A	L	D	L	I	N	S	Q	S	R	P	I	E	G	F	E	T	K	V	I	G	K	T	Y	E	V				
UniRef90_UPI0002E97E77	D	L	N	T	A	K	V	E	A	E	L	D	L	I	N	S	H	G	Q	M	F	A	S	D	T	R	V	E	G	S	D	D	V	S	V	L				
UniRef90_E2RLK0	D	V	A	V	D	K	L	K	G	E	T	M	D	L	Q	H	G	S	L	F	F	N	T	S	K	I	T	S	G	K	D	Y	S	V	S	A				
UniRef90_UPI00036BD2AC	D	V	A	P	G	L	P	E	G	K	A	L	D	L	I	W	E	A	G	P	I	E	R	F	S	L	K	V	V	I	G	T	D	Y	E	T				
UniRef90_UPI00047B4CF6	D	A	F	P	Q	A	A	Q	G	N	A	L	D	L	A	D	T	M	A	V	L	P	V	F	T	S	I	K	A	G	D	Y	S	D	C	G				
UniRef90_D3NY47	D	M	N	E	A	L	A	Q	A	Q	A	Q	D	L	A	H	A	V	P	F	T	H	A	V	T	V	R	A	G	S	Y	A	A	L	E	G				
UniRef90_H6N407	D	I	N	T	A	K	V	E	A	E	V	L	D	M	S	H	G	L	E	F	V	P	R	T	D	I	I	G	G	D	T	M	D	V	V	A				
UniRef90_S7PVK8	D																																							

	90	100	110	120
UniRef90_D3DHB4	I V I T A G F P R R S R E D L R Q E K N L S I L L S V I C E K I K Q Y A K E A			
UniRef90_U5VDI6	V V I T A G V P R K K P G E Q S R Q D V N L N K I L L D V G I M R D I Q Q H A K A			
UniRef90_S0JEP4	I I V T A G A S P R K P E G E T R L D L V N S K I N V A S I V K N I P E I A K A			
UniRef90_R5TQZ7	V A I T A G A I G E T R M D L L N K N S K I F A K S I V T E V R K S G S F N G Y L			
UniRef90_M5RII3	I V V T A G I P R K P G M S T R D D L N A K I T S V I G E Q I K K A T S G F N A V V			
UniRef90_Q98PG4	L I V T A A G R P Q K S Q G E T R L E M N S A K I M K D S I G A I E I K K S G F N G F T I			
UniRef90_K7J615	V I V T T A G A R Q E S R E E L L V A Q R N A D I V A S I I P I A E Y A P S R A V F V			
UniRef90_E1QUL2	V I V T A G K P G M T S R E E L L A A K N A E I V A S I A E Q I K K Y A P N S I			
UniRef90_Q6ZCC6	I I I T A G M P R K S R E D L L E I N L K I M T S D V A G N I K Q H A P N A F V			
UniRef90_B6AHM2	V I I T A G V P R S R D L L S I N A K I M T S D V A E N I K E F C P N S F V			
UniRef90_UPI00047CF493	V V I T A G A G P G Q T R L D L A G T N A I R L L E N L M P A L K V A P N D A V F V			
UniRef90_UPI000288FE2E	V V I T A G A P G Q S R L E L A D V N A R M I L R S M M P Q Q L M E V A P N A I F V			
UniRef90_UPI000375CE3A	V V I T A G A P G Q T R L D L A G T N V R I L E Q L M P Q L L E R A P D A V Y V			
UniRef90_Q9P7P7	V V I T A G K P G E T R M D L L K A N I S I F K E I L R E V I T K Y T K D A I L			
UniRef90_UPI000360BD98	V I I T A G K P G M T R D D L L K T N Q K V M A S V T R E I V K Y S P E C T I			
UniRef90_A0A024DAD9	V I I T A G I T E W S R G K D L L V N V K I L R D V G A I V K Q C P H A F V			
UniRef90_UPI0004697C1E	V V I T A G I P R K P G M S R D D L L N A K I I V Q I V E E I K K N A P D A I I			
UniRef90_A4WAE8	A V I T V S K P G Q T R L D E L A N T A R I V K N L V P Q M M E N S G F N G I F L			
UniRef90_B2S1S1	V V I T A G K P G E T R L D L V G K N T K I F K E I V T G V V S S G F N G I F V			
UniRef90_W4QOW6	I V I T A G K P G E T R L D L V A K N T K V F K Q I V G N I M K S G F N G I F L			
UniRef90_UPI00036CF85A	F I I T A G K P D E S R L D L V I N R N V A L F V Q I L E S K V K K A G R K D A I V			
UniRef90_N9QYP6	I I I T A G R P D K P R L E L V A G N I Q I R E I A F R K K E S G F S G I S I			
UniRef90_E6NB57	V V V T A G K P D M T R L D L L K N A E I I K E V S R H I K R E N A P K S K V			
UniRef90_U6LL56	V I I T A G D K E W S R M D L L V N L K I M R E V V G A S I I A Q Y C P S A F V			
UniRef90_Q704B2	V I V T A G K P G M T R E Q L L E Q N A Q I V A N I G K E I A K Y A P D S V V			
UniRef90_R5QVJ9	V I I T A G A P G E P R T A L E R N V K I F E N I I P Q V V K N A P D C M L			
UniRef90_H9KER0	I V L A A G A R Q E S R L D L V Q R N S E I L K S I I P T L V G Y S P N A V I			
UniRef90_S3VEF8	V I F T A G A P G Q R L L E A E A T I E L T R R A L P P I V A A A P D A V F I			
UniRef90_W4CD15	I L L T A G A N P K P G Q T R L E E A E S I A K D I V V I M N S G F N G I F V			
UniRef90_UPI0002234979		A A D K L K G E M M D L Q H G S L F F S T S K		
UniRef90_B3MCH7	V I V T A G V R P K S R R L E V M H D T I K I F K E L V P K L V S F S P D A I Y L			
UniRef90_UPI00046A62B6	A V I T A G V P R K P R L D L V A K N V K I L K S I V K K P L V S F S G F N G I F V			
UniRef90_L1LFX8	C I I T A G A P E K S R R D D L V G F N S K I L I T T V A E N I L K K Y A P D G A F V			
UniRef90_J9JMB3	D A F L L G T M P N N E S K E L S S N V N T F K L L G E A L D K E A S K D V K V			
UniRef90_UPI000362594C	V I I T A G A P G Q T R M D L L A V N A G I L R D L M P K L V E Q A S K A C F V			
UniRef90_T0L381	V V I T A G V P R K T R A D L L M I N A K I L M K E V V A N V M K Y S P D A I I			
UniRef90_D4KE67	V V I T S G I P R K P G M S R T D V N S K I V K G V M D Q A L K H S P E A V F I			
UniRef90_R6LQB7	V I I T S G M P R K S R R L E L A Q A N V N I L K D I T P Q I V K K V A P N A I Y I			
UniRef90_Q4N6I8	C I V T A G A P A K S R R D D L V A F N A K I I T E V A E N I K K Y A P K A F V			
UniRef90_V2XQC9	V I V T A G A P D E T R L D L V H K N V G I F K S I I P E I A S R D F N G I L			
UniRef90_Q6A9C3	V F I T A G A R Q K P G Q T R L D V N A K I L R S L M P Q L V E Q S P K A L F V			
UniRef90_F0QQS1	V V I T A G R P Q K P E E T R L E M N A K I I S G I A R S I I N D S G P F S G I V			
UniRef90_A3MWU9	V I V T A G F P R K P G M T R E Q L N A K I V S D I G K E I K K Y A P D S V V			
UniRef90_R5ICX5	V I I T S G L P R K S R R L E L A Q A N V N I I K D I A Q Q I T A A A P D A I Y I			
UniRef90_A4J898	I V F T A G A P G E T R R L D L V Y K N V D I L K E S L P Q L L K Y C P Y A I Y L			
UniRef90_W6UKH2	V V V T A G V R Q E S R R L N L V Q R N V D I V F K K I L P T L V E Q S P K C I L V			
UniRef90_R5G950	V V I A I G E A R K P G Q T R L D M L G R S V E M L K E L L A Q L S P Y K I I V			
UniRef90_R6CRM5	M I V A A G S G Q T R M D T L L R Q T I A I V E K D V A E N I L R K S G F L G I I			
UniRef90_I6XQ70	V V I T A G A P G E T R M D L A A S T V N L M K K V I P P L V E R S P E A I F L			
UniRef90_UPI00038330D0	V I V L D D V L L N C E V Q S L E N Y L E I C Q V Y A P L I E K N A K S E V R V			
UniRef90_A0A031FVS4	V V I T A G A P G Q T R T E L A G V N A G I L R R M L P E L L E V A P N R V Y V			
UniRef90_G8A1G6	W A L L I G A K P R R A A L D I N G Q I F A E Q G K A L N A V A S R N V K V			
UniRef90_X0PAN5	V V I T A G V P R K P R L D L V A K N A R I L E S I V K P I V K S G F H G V F L			

UniRef90_D3DHB4	I	V	V	T	N	P	V	D	L	M	T	Y	A	V	Y	K	M	L	G	F	S	K	R	K	V	M	G	M	A	G	V	L	D	S	A	R	F	K	T	F		
UniRef90_U5VDI6	L	V	V	S	N	P	V	D	V	L	T	Y	R	A	W	S	L	S	G	F	G	R	N	R	K	V	V	G	Q	A	G	V	L	D	T	A	R	M	K	Y	F	
UniRef90_S0JEP4	L	I	V	S	N	P	V	D	L	I	T	Y	R	A	W	S	L	S	G	F	P	T	T	H	K	V	V	G	Q	A	G	V	L	D	T	A	R	L	R	Y	E	
UniRef90_R5TQZ7	L	I	A	T	N	P	V	D	V	M	T	Y	L	T	W	K	Y	S	S	L	P	T	T	H	K	V	V	G	Q	A	G	V	L	D	T	A	R	L	R	Y	E	
UniRef90_M5RII3	I	V	V	S	N	P	V	D	A	M	V	Q	Q	M	W	K	V	T	N	F	D	K	E	K	V	V	V	G	Q	A	G	V	L	D	T	A	R	Y	R	T	F	
UniRef90_Q98PG4	I	V	I	S	N	P	V	D	L	A	T	V	F	Q	K	V	L	S	G	F	P	K	E	K	V	V	G	Q	A	G	V	L	D	T	S	R	F	R	K	F		
UniRef90_K7J615	I	V	I	T	N	P	V	D	L	L	S	W	L	A	W	K	L	S	G	L	P	V	N	I	I	I	G	S	G	T	H	L	D	T	S	R	F	Y	A			
UniRef90_E1QUL2	I	I	T	T	N	P	V	D	A	M	V	Y	V	L	Y	K	K	L	G	F	P	R	N	R	V	I	I	G	F	S	G	T	I	D	T	S	Q	R	M	A	Y	Y
UniRef90_Q6ZCC6	I	N	V	A	N	P	L	D	A	M	V	F	A	L	H	K	I	A	G	L	P	K	M	H	M	V	I	A	G	M	G	V	L	D	T	S	S	R	F	K	Y	F
UniRef90_B6AHM2	I	C	I	T	N	P	L	D	A	M	V	Y	Y	F	K	E	K	S	G	F	A	S	N	M	V	I	C	G	M	A	G	V	L	D	S	S	R	F	K	Y	H	
UniRef90_UPI00047CF493	L	V	T	N	P	C	D	V	L	T	V	A	A	Q	Q	I	S	G	L	P	T	S	N	G	I	L	S	S	G	T	V	L	D	T	S	S	R	L	R	W	L	
UniRef90_UPI000288FE2E	I	V	T	N	P	C	D	V	L	T	V	A	H	E	E	S	G	L	P	P	E	R	I	F	A	S	S	G	T	V	L	D	T	S	S	R	L	R	W	L		
UniRef90_UPI000375CE3A	L	V	T	N	P	C	D	V	L	T	V	A	A	Q	Q	I	S	G	L	P	P	E	R	I	F	A	S	S	G	T	V	L	D	T	S	S	R	L	R	W	L	
UniRef90_Q9P7P7	L	V	A	T	N	P	C	D	V	L	T	Y	A	T	K	L	T	G	F	P	A	E	R	V	I	I	I	G	S	G	T	I	D	T	A	R	F	Q	Y	L		
UniRef90_UPI000360BD98	I	V	L	T	N	P	V	D	A	M	T	Y	T	V	Y	K	E	S	G	F	K	A	H	R	V	L	I	G	Q	S	G	V	L	D	T	A	R	F	R	T	F	
UniRef90_A0A0224DAD9	I	N	I	T	N	P	L	D	A	M	V	A	A	L	R	E	A	A	G	L	P	A	A	R	V	I	C	G	M	A	G	V	L	D	S	A	R	F	R	R	L	
UniRef90_UPI0004697C1E	T	V	T	N	P	L	D	A	T	T	Y	T	A	L	K	A	G	G	Y	P	S	N	Q	V	V	I	G	M	G	I	L	D	S	S	R	M	E	T	I	L		
UniRef90_A4WAE8	I	A	T	N	P	C	D	I	I	T	W	Q	V	W	K	L	S	G	L	P	R	S	Q	V	I	I	G	T	G	V	W	L	D	T	T	R	L	R	R	T	F	
UniRef90_B2S																																										



	170	180	190	200																																												
UniRef90_D3DHB4	I	S	Q	E	E	V	K	V	S	P	K	D	I	H	A	Y	V	I	G	G	H	G	D	E	M	V	P	L	I	S	I	N	V	G	S	I	P	L	K									
UniRef90_U5VDI6	I	A	E	E	T	G	F	V	S	A	R	S	D	I	T	A	L	V	I	G	G	H	G	D	S	E	M	V	L	L	M	R	Y	C	A	N	V	G	S	I	P	L	S	D	R			
UniRef90_S0JEP4	I	S	E	H	L	R	F	V	D	S	P	K	N	I	H	A	F	I	I	G	G	H	G	D	S	E	F	V	P	W	S	N	A	N	V	G	S	I	P	L	S	D	R					
UniRef90_R5TQZ7	V	A	K	N	I	D	I	S	P	K	N	I	I	H	A	Y	V	I	G	G	H	G	D	S	E	F	V	P	W	S	N	A	N	V	G	S	I	P	L	S	D	R						
UniRef90_M5RII3	L	A	M	E	L	G	V	S	I	E	D	I	V	S	A	L	V	I	M	G	G	H	G	D	S	M	V	P	V	I	P	S	C	R	M	Q	I	V	G	S	I	P	L	S	D	R		
UniRef90_Q98PG4	I	S	E	K	T	G	V	P	T	N	S	V	I	H	G	F	V	I	M	G	G	H	G	D	S	K	S	V	P	V	I	F	S	R	M	Q	I	V	G	S	I	P	L	S	D	R		
UniRef90_K7J615	I	A	N	R	I	G	V	A	A	N	S	V	I	H	G	F	V	I	M	G	G	H	G	D	S	K	S	V	P	V	I	F	S	R	M	Q	I	V	G	S	I	P	L	S	D	R		
UniRef90_E1QUL2	A	S	L	L	V	G	I	A	P	E	S	I	I	H	G	F	V	I	M	G	G	H	G	D	S	K	S	V	P	V	I	F	S	R	M	Q	I	V	G	S	I	P	L	S	D	R		
UniRef90_Q6ZZC6	V	A	E	A	L	G	V	C	S	I	R	D	I	E	A	L	V	I	M	G	G	H	G	D	S	M	V	P	V	I	P	L	S	R	H	S	T	V	V	G	S	I	P	L	S	D	R	
UniRef90_B6AHM2	I	S	Q	K	L	G	V	P	N	D	I	S	A	I	S	A	L	V	I	M	G	G	H	G	D	S	M	V	P	V	I	P	L	S	R	H	S	T	V	V	G	S	I	P	L	S	D	R
UniRef90_UPI00047CF493	L	A	R	E	A	G	V	S	T	S	V	I	H	A	A	M	I	I	G	G	H	G	D	S	E	F	P	V	I	P	L	S	R	Q	A	T	I	I	V	G	S	I	P	L	S	D	R	
UniRef90_UPI000288FE2E	L	A	R	R	A	G	V	S	P	T	S	V	I	H	A	S	I	I	G	G	H	G	D	S	E	F	P	V	I	P	L	S	R	Q	A	T	I	I	V	G	S	I	P	L	S	D	R	
UniRef90_UPI000375CE3A	I	A	R	R	A	G	V	S	P	T	S	V	I	H	A	S	M	V	I	G	G	H	G	D	S	E	F	P	V	I	P	L	S	R	Q	A	T	I	I	V	G	S	I	P	L	S	D	R
UniRef90_Q9P7P7	I	G	K	L	Y	G	L	D	P	Q	S	V	N	A	D	I	I	I	G	G	H	G	D	S	E	F	P	V	I	P	L	S	R	Q	A	T	I	I	V	G	S	I	P	L	S	D	R	
UniRef90_UPI000360BD98	V	A	E	A	L	G	V	S	I	K	D	V	K	G	F	V	I	M	G	G	H	G	D	S	M	V	P	V	I	P	L	S	R	Y	A	S	V	V	G	S	I	P	L	S	D	R		
UniRef90_A0A024DAD9	I	A	D	R	L	G	V	S	P	R	D	V	Q	A	M	V	I	M	G	G	H	G	D	S	M	V	P	V	I	P	L	S	R	Y	A	S	V	V	G	S	I	P	L	S	D	R		
UniRef90_UPI0004697C1E	I	S	G																																													

UniRef90_D3DHB4	D	M	L	P	S	K	E	K	L	S	210	E	I	V	K	R	T	Q	F	G	G	G	E	I	V	D	L	M	G	T	S	A	Y	A	P	A	A					
UniRef90_U5VDI6	H	F	L	S	K	E	Q	I	L	S		R	V	I	K	R	T	Q	F	G	G	G	E	I	V	D	L	M	G	T	S	A	Y	A	P	A	A					
UniRef90_S0JEP4	D	F	L	C	E	M	R	G	H	F	D	H	E	E	A	M	D	R	E	K	V	K	G	S	A	Y	E	I	I	S	K	K	H	A	T	Y	G	I	A	M		
UniRef90_R5TQZ7	D	F	L	D	N	D	K	L	E	E	I	C	N	E	N	V	R	N	A	A	Y	E	I	I	N	R	K	G	N	T	S	Y	S	Y	G	I	G	M				
UniRef90_M5RII3	Q	L	I	D	S	R	A	R	L	E	D	E	V	E	R	T	R	K	G	G	A	E	I	V	S	L	L	K	T	G	S	A	Y	A	P	A	A					
UniRef90_Q98PG4	D	F	L	K	S	K	A	L	T	E	D	D	L	K	W	I	S	E	K	T	Y	K	E	A	Y	E	I	I	N	R	K	G	T	S	T	Y	F	G	I	G	A	
UniRef90_K7J615	D	V	L	P	N	I	G	M	S	T	D	D	E	K	W	H	E	V	A	K	D	N	A	G	A	T	V	R	C	L	K	G	Y	S	N	T	A	I	G	L		
UniRef90_E1JUL2	E	F	I	T	K	E	Q	Y				D	D	I	V	K	K	T	V	Q	A	G	A	E	I	T	N	L	K	G	F	S	N	W	G	P	A	A				
UniRef90_Q6ZZC6	E	L	I	A	K	D	K				L	D	A	I	I	K	R	T	R	E	Q	A	G	A	E	I	L	N	G	L	Y	K	T	G	S	A	Y	F	G	P	A	
UniRef90_B6AHM2	N	F	I	R	D	G	Q	I	T	N	D	E	D	A	I	I	K	R	T	A	F	A	G	G	E	I	L	D	L	K	T	S	A	F	F	A	P	A	A			
UniRef90_UPI00047CF493	E	W	T	V	Q	G	R	I	J	F	T	G	E	H	L	A	D	G	V	R	N	A	A	Y	K	V	I	E	G	K	G	A	T	N	Y		A	I	G	L		
UniRef90_UPI000288FE2E	E	W	Q	R	D	G	H	P	R	M	T	E	D	D	I	A	D	G	V	R	N	A	A	Y	K	V	I	E	G	K	G	A	T	N	Y		A	I	G	L		
UniRef90_UPI000375CE3A	D	W	T	D	G	G	G	R	V	I	F	T	S	E	N	L	A	A	T	A	R	D	K	N	A	Y	K	V	I	A	G	K	G	A	T	N	Y		A	I	G	L
UniRef90_Q9P7P7	D	F	C	E	E	S	E	S	T	K	Y	D	E	Q	A	L	N	E	C	F	K	D	N	A	A	Y	D	I	I	Q	R	K	G	S	T	E	Y	G	V	A	A	
UniRef90_UPI000360BD98	R	L	L	E	Q	E	K	I				D	A	I	V	E	R	T	R	K	G	G	A	E	I	V	N	L	L	G	D	G	S	A	Y	A	P	A	A			
UniRef90_A0A024DAD9	E	L	A	R	Q	G	W	I	S	E	A	E	T	R	E	V	E	R	Q	T	R	A	G	G	D	I	V	R	L	L	G	Q	G	S	A	Y	F	A	P	G		
UniRef90_UPI0004697C1E	D	L	L	T	D	L	E	I				E	D	I	E	K	T	R	H	G	A	G	A	E	I	V	S	Y	M	N	T	S	A	Y	A	P	A	N				
UniRef90_A4WAE8	E	V	Y	Q	R	H	T	G	K	T	L	D	R	Q	Q	L	A	E	N	V	R	R	Q	G	F	K	I	Y	N	R	K	G	C	T	E	Y	G	I	A	G	L	
UniRef90_B2S1S1	E	Y	I	A	E	G	T	I	R	E	V	E	L	D	E	I	H	K	K	V	N	A	A	Y																		

UniRef90\_D3DHB4 S I L V E M V E A 250 260 270 280  
UniRef90\_U5VDI6 V A I A R M V D A I A Y G E R K S I L P C S V Y E E G K Y Y E A E D V C V G V P V  
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UniRef90\_M5RII3 A A C A Q M V E A V V R D K K R V I P V A A L C D S E Y G V G G Y Y V G V P V  
UniRef90\_Q98PG4 S V A E M A E S V L Y N Q R Q S I F A P I G I Y L D E S K P G G G I Y I S R P A  
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UniRef90\_E1QUL2 G L A L M V D S I K K D R K R I F E A S V Y L D G E Y G V R D V F A E V P V  
UniRef90\_Q6ZZC6 A S A I A M A E S F L Q D S K R V L P A A A L L E G G Y G I N G Y F F G V P V  
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UniRef90\_A4WAE8 T I A E I C R N I F T G S H R A L A I S C V L E G E Y G V E G L A I G V P A  
UniRef90\_B2S1S1 G I K K I V N A I L S D Q N L I L P I S S Y I N G Q Y G F I K D I Y I G A P A  
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UniRef90\_N9QYP6 A L V R I V R N I L E D S K N I L V G A N L R G E Y G F S N V N I G V P A  
UniRef90\_E6NB57 A G V A V M V E A I L K D Q K S I I P T S T L L T G Q Y G E K D V Y A V L P C  
UniRef90\_U6LL56 A S A I E M A E A Y L K D R K R V L V C S C L L D G Q Y G V K G H Y L G V P C  
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UniRef90\_R5QVJ9 A L C R I C Q A I S A N E Y A I L T A S T F H E K V E N S E N I C I S Y P C  
UniRef90\_H9KER0 A T A D I V R A I L N N T Q R V M P S T L I Q G H H E V C H E M F L S L P C  
UniRef90\_M3VEF8 A A V R I T E A I F G D E H R V L P V S T L I A D G P E I D D V C L S L P T  
UniRef90\_W4CD15 A L A H I T R S I L N D E H K I A V S A I L D G E Y E Q H N V C V G V P A  
UniRef90\_UPI0002234979 S T V T D L A G S I L A K N L R V H P V S T M V K G L Y G I K E E N I F L S L P C  
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UniRef90\_L1LFX8 T A A I E M A S A Y L N D K K S V I V C S C Y L E G E Y G Y E G I Y C G T P A  
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UniRef90\_UPI000362594C T G A R L T E A V L L E H Q R M I L P L S S V L D D Y R G V S G V A L S V P S  
UniRef90\_T0L381 A V A V M V E A M L D D S Q I V M P S S V L L D D G E Y G Y S D V C V G V P V  
UniRef90\_D4KE67 T T A A T M A E A I A K D D S G L T I S S I C Y L D G E Y G E H D V C A G V P A  
UniRef90\_R6LQB7 M S V C H L C K C C L N T A G T A L T I S T M M H G E Y G V D D V C L S T L A  
UniRef90\_Q4N618 T A A I E M A S A Y L N D K K S V F P C S C Y L E G Q Y G H K E V Y C G T P A  
UniRef90\_V2XQ09 A V K R I C E C I V R D E K S I L P V S A M M H G E L G I D G V V L S M P C  
UniRef90\_Q6AC3 L T G A R L A E A L L R P G R S V L P L S S V M T D M H G I S G V A L S M P C  
UniRef90\_F0QQS1 A L S K I I S A I L F D T H E V L P V G V T P T K G E Y G L S S N V T L A L P T  
UniRef90\_A3MWU9 G L A I M A D S V K R D A R R S L I A S V V L K G E Y G V F D L P V E V P I  
UniRef90\_R5ICX5 M S V C H L C K C V Q S T A G T A V T V S T M M H G E Y G V S D V C L S T L A  
UniRef90\_A4J898 T I K R I C E T V L R D E N S I L T V S G I V N D L Y G I Q D C V L S L P T  
UniRef90\_W6UKH2 C C A S L C N A I L R N K S I V I P V S T S L K D K L G I K D E V F A S V P C  
UniRef90\_R5G950 A L T E M A A C I L R D E K K I M P A S V L L Q G E Y G Q Y D V H C G V P C  
UniRef90\_R6CRM5 S I A E V V R A I E G D E N R I L P V S V L L N G E Y G Q K G V Y A S V P T  
UniRef90\_I6XQ70 A T R I I E S V L R D E H R V L P V S S L V E D W Y G I K D V C L S V P T  
UniRef90\_UPI00038330D0 A V A T V L R Y W Y H G S P P E I V S V G I R T E G Q F C V P E G I V F S M P V  
UniRef90\_A0A031FVS4 S S A R I V E A I L S D Q H A V M P S T V L S D F Q G V D G V A L S V P S  
UniRef90\_G8A1G6 S I V D A I R S L I T P T E D W F S T G V  
UniRef90\_X0PAN5 S L M R L S K A I L Y N Q N V V M P V S A P L T G Q Y G L K D I Y I G N P A  
UniRef90\_A0LRV1 A A A A R M A R A V A E D S G Q V L P V C A W V D G E Y G I H G V Y L G V E A  
UniRef90\_UPI0002E97E77 S G I R I A E A I L R D L R S V L P V S S I L D D F H G I S G L A L S V P S  
UniRef90\_E2RLK0  
UniRef90\_UPI00036BD2AC S S L A E M V E A I L K D E R R V I P V I S Y L D G E Y G E H D I F V G V P A  
UniRef90\_UPI00047B4CF6 G L T K I V K A I L R N E R T T L M V I G A K L N G E Y G N K D L Y T G V P A  
UniRef90\_D3NY47 G L A R L V S A I G A D E G L V A T C A M L T D E V C G V P R V L S L P R  
UniRef90\_H6N407 A T T R I V E A V L N N E H R V L P V S T L A T G F E G L D D V C L S L P S  
UniRef90\_S7PVK8  
UniRef90\_UPI00045420D9 V D R S T L A A V Q Q G M Y G I D N E V F L S L P C  
UniRef90\_K2G3G6  
UniRef90\_UPI000359E2D4 S V A D I A E S I L K N L R K T H P V S T K I K G L Y G I K H E V F L S V P C  
UniRef90\_K9PZR7 V T A T L V K W I L R G D R R I L T V S R V Q N G M F G Y R D L A I S L P T  
UniRef90\_D9Q057 G L A L M A E A I K K D Q R K V I L V S A Y L N G E Y G Y K D V I A E V P A  
UniRef90\_UPI000429D7A5 A I A E V V R A V F G D E D R I L V S T L L M G Q Y G Q T D V Y A S V P A  
UniRef90\_M7AJ90 S V A D L A E T I M K N L K R V H P I S T M V K G M Y G I H D D V F L S V P C  
UniRef90\_S2ZMX3 A A N I A G A V L R D E Q R V L T I S T L L E D W E G I S D V V M A A P T  
UniRef90\_UPI0003B77AF4 S G V R I V E A I L N D E H A V L T V S T V L E G F H G I T G T A L S I P S  
UniRef90\_H7F6C3 T I V E I C R H I F S G S Q R A L T V S C I L E G E Y G E T E L A I G V P A  
UniRef90\_E4RY73 A A I G Q V V E S I L R D E K K I L P S C V Y L N G E Y G Q K D I C L G V P V  
UniRef90\_D5UDQ4 A G S R I I E A V L K D E R R V I P V S S L L D D Y L G M S D V C L S V P S  
UniRef90\_B1ZR97 T I A E V V H A I A Q D K R Q L L P V S S L Q Q G C Y G L R D V A L S V P T  
UniRef90\_A9A450 A I S A I V E A V V R D R K Q V I P V A T Y L D G E Y D H S D V T L G V P A  
UniRef90\_H1PY92 C T C T E V V K A I F H D E K K V M P C A F L Q G E Y G T S D I Y A G V P A  
UniRef90\_R8EKZ6 S L L R V T K A I L N D E N S V L T V S A Y L E  
UniRef90\_I3DJX3 T C A N L V K A I F H N E R R V L P C S A Y L D G E Y G H S G F Y I G V P A  
UniRef90\_K0YW34 A A T N I V S A V L R D E H R V L T I S T L L E D W H G I S G V C M A A P A  
UniRef90\_C2EVY9 C L S S I V C A I I E N Q N T V I P V S A P L T G Q Y G I N D L Y L G S P A  
UniRef90\_C4LFJ3 S A T R I V E T I L L G H S F A P I K I S A E I Q D E Y G L S G T F L S L P T  
UniRef90\_Q8EUG3 C L A R I C E A V L R D E N V I L P V S I K K N A D S D I Y I G W P A  
UniRef90\_W7A9Y2 A I V K M I K S Y L Y N E S Q L Y T C A V Y L N G L Y N C S D L Y V G S T  
UniRef90\_B6IX40 G L A R L A Q Q V I A N D E R A L V T C S M L T D S C L G V P Q V A L S L P R  
UniRef90\_U1LL12 G L L R I V R A I L V R N E N S V T I G A H L D G E Y G A S G L H I G V P A  
UniRef90\_A3CYB5 A I A T L V K T I L G D E N R I L T V S S Y I K S E I H G I G D V C I G V P A  
UniRef90\_F8AMF8 A I V N V V K C I I H N D K R L L T L S A Y L D G E I D G I K D V C I G A P V  
UniRef90\_E8R091 S I R E V V H A V A L D S K R I L P V S S V I Q G A Y G I R D V A L S V P T  
UniRef90\_UPI000203581B A V A T A L R Y W F H G S P P E I V S M G I F S E G Q F C I P E G I V F S M P V  
UniRef90\_UPI0003D070E1 S V T D I A A S I L K N L K R V L H A V T T L V K G L Y G I K E E I F L S L P C  
UniRef90\_UPI0003B73373 A C C Q I V E S V L R D E R V L P V S T M L E G E Y G V D G V C L S V P T  
UniRef90\_A6UUM3 A V L N V V R C I A N D N K K Y L T L S T Y L D G E L D G I K D V C L G V P V

UniRef90\_D3DHB4 K L G N C G V E E I I N I P M L P E E R E M W R R S V S S V R K N L K V V E E M 320  
UniRef90\_U5VDI6 V L A A D G I S Q V I E L P L D T R E Q A M F D H S A D Q V A R D I A E M  
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UniRef90\_F9MQQ1 K L A L V G A G V G A N I A Q I A A M R G M A E E I A L I  
UniRef90\_UPI0004704A2D K L V V I G A G H V G Y V L A D A M K I G L F G K I G V I D I L N N V  
UniRef90\_D5V655 T M T R K I G V I G V I G H V G S T V A H Y I I S G G Y A D D I V L I  
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UniRef90\_T0T884 R K I G L I G M G N V G A T I A Y T L V T K G L A D E L V M I  
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UniRef90\_E5A5L6 K I L T F V G A G M I G S N M A Q T A A M M R L T P N I C L Y  
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UniRef90\_A7JYY7 K L T I V G A G M I G S N M A Q T A I M M N L T P N I C L Y  
UniRef90\_R5Z1A0 M E R K V V V I G A G F V G T T Y V Y A L M H T G L A G E I V L I  
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UniRef90\_D8J4I4  
UniRef90\_K2EQ88 M S R K L A I I G L G H V G S T V A H Q I V S A G L A D D L V L I  
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UniRef90\_E8SFF7 P L Q V W I A S A A P A C C N L I P I L T T G E V F G M E T E I S I T L F  
UniRef90\_L9L819 M T R K I A V I G M G N V G S T A A H Y I V A C G F A D D L V L I  
UniRef90\_H1LIF6 M T R K I G I I G M G N V G A A C A H Y I V A G C L V S E I A V I  
UniRef90\_UPI000465C4E2 K A G V V G A G H V G A M T A L R L A E S D L F S E V A L V  
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UniRef90\_X1FQ17

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UniRef90_F7NEE8	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
UniRef90_W8RXW5	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
UniRef90_S4RP83	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
UniRef90_F7K142	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
UniRef90_C9LST3	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
UniRef90_A4A2L6	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
UniRef90_Q9EVR0	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
UniRef90_Q7SI97	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
UniRef90_U1PEM3	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
UniRef90_D5RLA5	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
UniRef90_D7DTV0	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
UniRef90_UPI0003728EF8	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
UniRef90_R7FA89	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
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UniRef90_N4XSB7	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
UniRef90_G2WUT6	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
UniRef90_UPI0002C669D3	D	I	N	K	N	L	A	R	K	A	M	D	L	A	Q	M	A	A	V	L	N	L	D	V	D	I	L	G	G	D	D	Y	E	L	R	D	I	
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	90	100	110	120
UniRef90_U5Y0Y9	V V I	T A G K D G Q S R D D L	A M M N A K L I V S	H S S K M V S K F A P K S I I
UniRef90_F7NEE8	V I I	T A G I P R R E T R V L L L	E R N A R A L V F A D I V R Q E V V N Y S P K G C I I	
UniRef90_W8RXW5	V I L	S C G V I P G E T R L V L	E R N A A V F R A D I V R Q E V V N Y S P G A I L	
UniRef90_S4RP83	D A I	L V G S M P R E T R K D L	L K A N V R I F K S Q G A A L N K Y S K T V L K V	
UniRef90_F7K142	M V I	A V G A K G E T R M D T L	A A T A A I I R D V A E E L I R Q S G F H G L L V	
UniRef90_C9LST3	V V I	T S G M P R K S P G M S R E D V N A K I	V K S V V D Q A L K F S P D A Y F I	
UniRef90_A4A2L6	I C I	T A G K P D E S R R L D L I	N R N V D L F L S I L D S V K S A G K D A I C	
UniRef90_Q9EVR0	I V I	T A G P S I R P R L K L A G T N A K I	M S V M G E I V K R T K E A M I	
UniRef90_Q7SI97	V I V	T A G A P G K S R R D D L A P L N N K I	M I E I V G G H I K N N C P N A F I	
UniRef90_U1PEM3	V V I	T A G A P G Q S R R L D L A G A T I N I	M K S I V P K A V E Q A P N A T I F L	
UniRef90_D5RLA5	V V V	T A G A P G Q T R L E L L A G Q N I R I	V G Q I I E Q V L K V A P D T I F L	
UniRef90_7D7TV0	I I I	T S G A K R M S R R L D L A K T N A K I	I K N Y S Q E I A K H C D T K I	
UniRef90_UPI0003728EF8	I I L	T A G V P G E T R R L L E L D R N T A V	F A E I L P Q V L A V T P D P L I	
UniRef90_R7FA89	I C I	T A G V S Q R S R M E D L H N A S N I	F K E I L V K S I A T T K F N G I	
UniRef90_J2W9F4	V V I	T A G A S P Q G E E S R L S V S A A I	V A D C A R R V A E A G F A G V M	
UniRef90_N4XSB7	V V I	T A G A K Q K K R T D L I G R N K A I	L E S A I V S D M K P F R P D T V L	
UniRef90_G2WUT6	V V I	T A G V P G Q T R L E L V Q T N Y A L	F A D V V P R I A T A A P D T I F L	
UniRef90_UPI0002C669D3	V I V	L D D S T D K E V H S L E D C R V P L	C R L Y G Y L M E K N A H E S V R V	
UniRef90_I9M5S3	I I I	A A G P S I I M P R L T L A G R N V E V	M K D V M T S I T Q Y T K D A V I	
UniRef90_B1R0W0	V V I	S V G I I T K T H D R L D L Q E S I	V D S F V K K I V K S G F D G I F I	
UniRef90_UPI00038EC6BC	V I V	L D D S T V Q E V H S L E D C R V P L	C Q L Y G Q L L E K N A D H S V R V	
UniRef90_UPI0003289C0F	H V I	I V S K D M N T L E D C L R S K V P L	C R L Y G Y L I E K N A Y E S V R V	
UniRef90_G1X7N9	I V I	T A G A K Q K P G E T R L D L I E K N	V K V L G S V L K Q P I N P L A I	
UniRef90_UPI0002C56CA0	S I I	G T G S V G M D E L A L V D V N E D K	L K G E T M D L Q H G S P F L K M P	
UniRef90_V715B5	V V I	A I I G E P R L P G Q T R L D E S S A R	M L R E L T E T L K P I G I G V V	
UniRef90_UPI00021A6FA8	V I I	C T R E T A P G E S P N V R H N F K V	K K I I P A V A R F A C K S V I	
UniRef90_UPI000252B565	C V I	T I G D R E Q D P S T L L E Q N L N I	F K D V I P K V C K Y A P N S I L L	
UniRef90_U7U9T2	I V T	A T G D L G K D R L E E Y V K F K D A	T R D Y V K E I V D A G F K G I F	
UniRef90_UPI0004440146	V I L	A A G V P G E S R L S L L S R N A A V	F S E V I I A K V R A Q A P E A L L I	
UniRef90_D5APZ5	I V V	T A R V R Q E R L N L V Q R N V N V	F K F I I P Q I V K Y S P D C K I	
UniRef90_L81QK4	I V V	S A G K P G M T R L D L A T K N A G I	I K D I A K K I V E H S P E S K I	
UniRef90_F2KRE4	V V N	I A G A H H H R L N L A Q H N V N I	F K F I I P N I V K C S P N C K L	
UniRef90_F6VVZ7	V A I	T V I G Q K N G S R L D V L K D N I	E I Y K S I I C N I I K Y N K D C I V	
UniRef90_C6Q058	V I I	T A S I R P K E R M E L L T D N A K I	L R K I I G Q S I I K D S G F A G V I T I	
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UniRef90_U1LQZ8	V I L	T A G K P G E T R L D L V N K N I A I	V N T L I P E I A K Y N P N A I L	
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UniRef90_E6L9G5	I V N	A G H V A Q A A G N R D G E L F C T A	E E T K K W A P R I K G Y K G V I	
UniRef90_G5F266	C I I	V T A G V P R K P A G M S R D D L N L K	V M E Q V G A L K K Y A P K A F V	
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UniRef90_D3LTV8	V V I	T A G A P G Q T R L Q L S Q N V A I L	K G I V A E I K K V A H C I L	
UniRef90_K2DR66	V V L	A Y G N S Q K N R L D D I L K I A T E	M V L D T V P K V V E N G Y D G V I	
UniRef90_C7RDJ3	L F I	T S G N I G S L Q H N E F E Y T R D I	V K D I A P K I A Q S G F H G V L I	
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UniRef90_F9CUI5	I V M	T A G A K Q K K R A D L I G R N K S I	L Q S A I N D M S P L R P D T I L	
UniRef90_QUCM2	V V I	S A G A K Q R S R T R D L L G R N L A I	L Q S A T N D M K P F R E D T V I	
UniRef90_H6BWZ9	V I I	C A G E R M P D R S E L A Q I S G A V I	R D V M T N I T A N V I G N P P V	
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UniRef90_E2AWM8	I V N	S V G K I E H D R V T E M D F T I P A	V R G Y A E K L K A S G F D G V L I	
UniRef90_R5RX49	C I I	T A G V R Q K R L D L V Q R N T D V L	K H I V P K L V Q Y S P D T I L	
UniRef90_U4TU44	V I N	A A G D V K K D R D G E L F V T T D I	A R T W I S R L F N A G F H G V I	
UniRef90_R6NXP7	I L F	L D D W P S N S E H M V S Q V A E R F	R S Y G R L V E A N A Q K D V R V	
UniRef90_W5L6T4	Y I I	S S G G A P R K R E D L L K G N C Q I	A A D F G D N I K K Y C P N V	



[illegible]

	170																	180																	190																	200																
UniRef90_U5Y0Y9	M	S	Q	K	L	G	L	S	V	A	Q	C	F	G	K	C	V	G	M	H	N	N	A	M	I	C	L	E	S	S	K	F	K	N	Q	S	I	C																														
UniRef90_F7NEE8	L	S	R	E	F	L	T	V	N	A	R	D	I	H	A	Y	V	I	G	H	G	E	T	M	V	P	V	A	S	N	K	R	K	G	S	I	L	E																														
UniRef90_W8RXW5	I	L	G	R	H	L	G	I	S	P	R	S	V	D	A	A	Y	V	L	G	E	H	G	E	S	E	V	L	A	W	S	N	R	A	G	S	I	L	E																													
UniRef90_S4RP83																																																																				
UniRef90_F7K142	T	A	E	A	A	G	V	S	I	E	D	V	E	G	Y	A	L	L	G	E	H	G	E	S	Q	I	A	A	W	S	T	V	S	V	Q	R	T	L	S																													
UniRef90_C9LST3	T	E	A	G	Y	P	A	T	P	T	D	I	D	G	M	V	L	G	G	H	S	D	K	T	M	V	P	L	V	S	H	A	T	V	L	R	G	V	L	P																												
UniRef90_A4A2L6	I	A	Q	E	M	K	L	P	P	T	Q	V	K	A	L	I	L	G	G	E	H	G	D	S	M	L	P	V	W	S	A	T	T	G	V	N	G	L	P																													
UniRef90_Q9EVR0	L	A	D	K	Y	Q	V	D	P	K	N	I	V	N	G	Y	V	L	G	E	H	G	N	A	F	V	V	A	W	S	T	T	G	C	A	G	F	P	I	D																												
UniRef90_Q7SI97	I	S	Q	K	L	N	V	Y	P	R	D	V	N	A	H	L	V	L	G	E	H	G	N	K	M	V	L	K	R	Y	I	T	V	A	G	G	I	P	L	Q																												
UniRef90_U1PEM3	I	A	Q	A	C	G	A	P	Q	N	S	V	H	A	Y	V	L	A	G	E	H	G	D	S	E	I	P	L	W	S	S	A	M	V	G	G	A	V	P	L	L																											
UniRef90_D5RLA5	I	A	K	H	H	L	E	V	A	A	N	S	V	H	A	Y	V	L	G	E	H	G	D	S	E	V	L	H	W	S	S	A	Q	V	I	G	G	V	P	V	R																											
UniRef90_D7DTV0	I	A	K	F	F	K	V	H	I	D	D	V	R	A	R	I	V	L	G	E	H	G	D	S	M	V	P	L	I	S	S	A	A	I	G	G	I	P	V	R																												
UniRef90_UPI0003728EF8	L	A	D	H	L	G	V	S	P	N	S	I	H	A	S	V	L	G	E	H	G	D	S	E	V	L	C	W	S	S	A	T	I	G	G	I	P	L	A	I																												
UniRef90_R7FA89	I	A	N	R	L	D	I	S	P	K	N	S	H	A	Y	V	L	G	E	H	G	N	S	Q	F	V	P	W	S	N	A	K	I	G	L	E	P	I	Y																													
UniRef90_J2W9F4	I	A	D	R	L	G	V	A	P	V	S	V	E	G	M	V	L	G	G	E	H	G	D	S	E	V	A	V	F	S	G	V	R	I	G	G	V	P	L	D																												
UniRef90_N4XSB7	L	A	L	K	A	E	V	A	A	S	S	I	D	A	Y	V	L	G	G	E	H	G	E	S	Q	F	V	A	W	S	L	A	S	I	G	G	V	P	L	D																												
UniRef90_G2WUT6	L	G	H	H	F	G	L	S	P	R	S	V	H	A	F	I	V	L	G	E	H	G	D	S	Q	L	P	V	W	S	L	A	N	I	S	G	M	R	L	P																												
UniRef90_UPI0002C669D3	L	A	R	K	L	G	T	T	P	S	S	I	K	D	V	I	L	W	G	N	I	S	G	N	Y	V	D	L	R	K	A	K	V	Y	R	H	E	S	A	N																												
UniRef90_I9M5S3	M	A	N	K	Y	K	V	D	P	K	N	V	H</																																																							

UniRef90\_U5Y0Y9 K D E L K K Y F E 210 D I K L N T K S G G S N I V K L M G T S A F Y A P A 240  
UniRef90\_F7NEE8 Q F P A Y S D K I L T D I D H V I A T S G E V I A L K G G T V F A P A V  
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UniRef90\_Q7SI97 E F I N N K K I T D Q E L D A I F D R T I N T A L E I V N L H A S P Y V I A P A A  
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UniRef90\_UPI0003C103CC D D D N T R D L L F A L Q M E A E D L A Y P L L R K V I T V H T D L R E A F S D A  
UniRef90\_Q07841 D I F D K E D D T V G Q A A D T N H G A Y D S N T R Y F R S G T Y N D L A G S D I V  
UniRef90\_B3PLZ8 D N F E C A I A Q A K D L N D A A C A M P S N G Y V F R S G T Y N D L A G S D I V  
UniRef90\_I0DV95 D I A P V T P G V A A D L S H I P T D V K V V G F S G E D A T P A L K G A D I V  
UniRef90\_UPI0004002BD6 D I D E N I A R G E A V D Q E Q A R A L T Y M N N I K V I T H Y E Q T D D A D I V  
UniRef90\_H9JU51 D I A P V T P G V A A D L S H M N T P A K V S G H K G P E E S A I K D A D I V  
UniRef90\_C4LKR7 D T K E G L A L G E G L D H S Q S T G V P G T N T Y I H E G T Y D D T R D A D I V  
UniRef90\_S0SA4T0 D S K D T I L K A E Y N D L M D G Q M E Q A N Q V R L I G P D V A E A D T D I V  
UniRef90\_Q05FY9 D K N E D K V A A E Y N D L R D S L S R N N Y Y V R V T M Q D V H E L K D A D I V  
UniRef90\_M0SUX9 D V V N A P G V T A D I S H M N G A V V R G F L G Q P Q L E D A L A G M D I L  
UniRef90\_A712F1 D I F G D L A K A R A L D L S H L A S V Y N K K T E I S G S S D E T L K N S D I V  
UniRef90\_G3PQU2 D L K G N E E G L R G L R M E T E D L A L P L L H Q V S I H T D Q A F Q G A  
UniRef90\_K2M8P7 D Q N H D L A V A Q A E D I A H A V P F L S S T I V E A A D Y V L G L A G A S V  
UniRef90\_W6T6Q2 D H D E K L A Q A Q K L D D A S P R L A S T T K I I L N D Y S A L A D A E V  
UniRef90\_UPI0004797F05 D N N L N K A K G E T L D A S H T T S F Y S P N V L L R V L G D Y E D C S D A Q I  
UniRef90\_D5WGB7 D V A R V R A E G Q A L D L S H A A A F W G H S R F R A G D Y E D A R D A D I V  
UniRef90\_H2FUY1 D I A P V T P G V A A D L S H I P T A V N V V G F G E D P T P A L T G A D I V  
UniRef90\_R5FMZ7 D V F S A E G V A E E M R Q S G F D D A N I V A T T D A A E A F T G A K  
UniRef90\_N9SRF7 D A F A D Y V K A Q A K D L N D A A C S M A N N G T F T P G N Y D D L K D A Q V  
UniRef90\_J9FP02 D V F S P E G V A E E M R Q S G F N D N I V A T T D V K E A L T G A K  
UniRef90\_W7C2B7 D Q A E E K V A S E A M E L R D M L S A V I Q R H N T K I V G T D Y T L A D A D I V  
UniRef90\_E3C828 D T D Q K K L N A N A T D F E D A A A N L P T H T R I R K N D Y A L L A D A D I V  
UniRef90\_G8P7Y2 D K D R K K A E A E V L D L D A L A L L P F Y V K I Y V G E Y D D L A T A D I V  
UniRef90\_D3FWQ5 D V N E K L L L N H L L D L Q N A F P N K D I Y S G S Y E N L K N S D I V  
UniRef90\_A3JXA9 D L D T A R A Q A E A E D I A H A V P F S V S A R I V A G G Y D D L S G A D I V  
UniRef90\_I4DQC2 D I A P V T P G V A V D L S H M D T P A Q V T H K H K G P E Q L A A A V E C A D I V  
UniRef90\_S2K7K8 D L V N T P G V A A D I G H I N T N S K V T G H T P E N D G L K A A L E D A H V  
UniRef90\_W9WTE5 D P N T D Q R D A Q V K D L E Y H G A V G G G V R I R S A T H K E A G Q C D I V  
UniRef90\_K8D9W4 UniRef90\_UPI00021A76C5 D I V H T P G V A A D L S H I N T P S K V K G Y T G P D E L K D C K G A Q L  
UniRef90\_M4ALQ2 D V A E S S S K G G A T D L E I F N L P K V Q V S R D I S S S A G S K V  
UniRef90\_A5BEJ8 D V N A P G V T A D I S H M D G A V V R K G F L G Q P Q L E S A L T G M D I V  
UniRef90\_J3JXT9 D I V H T P G V A A D L S H I E T V G K V K G Y N G P E N L E A L R N A D I V  
UniRef90\_K6YFM5 D V A P V V P G V A V D L S H I L P T D V K V Q G F G K D D L A L Q G C D I V  
UniRef90\_A0A026W785 D Q N L D R A S A E A E D I Q H A G I F L G C P L V T S T S D F Y K L K D S A V  
UniRef90\_E2BPD9 D Q N L D K A A A E A E D I Q H A S M F L G C P L V T G T S D I Y K I R D S S V  
UniRef90\_A9SLS5 D I A G T P G V A C D I S H I N T G A N V K G F A G E E D L A K A K G C D I V  
UniRef90\_A8ABY7 D A V P G L S K G V M E D I K H A A A V F R R S I Q V E A D D V S K V E N A D A  
UniRef90\_J2S7H9 H A A A V F R W G H N R F Y A G D Y E N A R D A D I V  
UniRef90\_UPI0003B307A4 D H T E E K V V A N Q L D F E D A M A N L T H H A S I R V N D W S A L A D A D I V  
UniRef90\_W7QH75 D I A P V T P G V A K D L S H I P T D V E V T G F A G E D C T P A L E G A D I V  
UniRef90\_G2QMJO D I K A D W R D G Q V R D L A D V A Y G I G S G T R V R A A T H R E A G Q C D I V  
UniRef90\_G0EHD0 D I R E D F V Q G I A E E F R H Y V A I A S M H D V E V V S D A S E V A G A D I V  
UniRef90\_F4CZ19 D I D E G R A T G I A L D L T H T A A L S G F T T R V R G T V E E A G R A D Y  
UniRef90\_I7LLY8 D A Y D P L I R A Q V L D L Q H T G I D V T V S T D T A A M R D A D I V  
UniRef90\_J3ZD71 D K N E D K V N A E Y N D L H D T L A R N D T Y V N V R K K Q D W D G L E D A D I V  
UniRef90\_UPI0004727FF0 D I R D D F V K G R A D L D S T M S V I L K K K I N H S K S Y E I I R N F D I  
UniRef90\_I1PFY8 D V V N T P G V T A D V S H M D T T A V V R G D L G P N Q L E A A L T G M D I V  
UniRef90\_N1JA02 D I N A A P G V A A D L A H I N T K S K V T G H D K T E D A L S E A L



	90	100	110	120
UniRef90_UPI0002627462	I I V A A G P K K P D R A M L A E E N A G K N I R E V I M S G I T K Y T T E A I I			
UniRef90_K9GZX6	A A G A N F Q K P G E S R M F L L E Y S F N A Q Q A Q V I G T R V L K E A G F H G V L			
UniRef90_R5E9U3	V I T A N G K A D G G S R M F L L E Y S F N A Q Q A Q V I G T R V L K E A G F H G V L			
UniRef90_L8JB26	V L I S A G V P G M D R A D L F N V N A G I I K S L A E R I L A V V C P K A C V			
UniRef90_B2GA86	V V S T L G K P D H R D F A E F K F T R T Q V P L V A T K K I L V D N G Y F H G K L V			
UniRef90_UPI00047965D7	I V I T A G K P G E S R L D L T N E N V A I M K N V V K T S I Q Q Y Y T R G V I			
UniRef90_G9ZRM5	V I S A V G N K E H D R F I E L P F T K E A V I K S V S E K I K A S G F N G I I			
UniRef90_N0AUJ7	I C A A G D T M P D R V Q L A V I N S E V I R E V M T G I T K Y T K D A I I			
UniRef90_E3ZH57	I V I A V G P E R E D M E E L I E T S K A V A E I V P K I L A T G F D G I F I			
UniRef90_B9D261	V V V T A G S P R K E G Q T R E D K N A G I V A K G T V E K I A K F A P N C V I			
UniRef90_R5ILV4	Y I V S S G K A G M T R E D L K N A E I V A A Q F G K D I K R S Y C P N V Q H V			
UniRef90_X0T3M2	V V V T A G F P R K P G M S R D D L N S K V V S S V A A Q I K R H A G P D A V V			
UniRef90_S4RCF3	V I V L D N V A P G L G G E W S D A G A P L C A A Y G S A I G D R R A G P D V R V			
UniRef90_I7L6N0	I V I A A T V K T G D R F G E F D I N A A N A K E V G S A K I K D S G F K G L I			
UniRef90_Q4SRH5	V V V T A G V R Q Q E R L N L V Q R N V N V F K S I I P Q I I K Y S P N C T L I			
UniRef90_UPI0003ADD3DF	A I I T A G A E G E S R L N L I Q R N L N I F K F I P N I V K Y S P N C K L L			
UniRef90_C7FI96	V I V T A G V P R K P G M S R D D L N L K V M Q A V G E G I L A H N E E F V S I			
UniRef90_G0LFF5	V V I T A G S P R Q T R I D L A G D N A S I M A D I L G S S I A A H N E E F V S I			
UniRef90_V4HQD4	V L I P A G M P R K P G M D R A D V N A S I V R T L A E G I V K N C P K A F V			
UniRef90_UPI000416F5C5	I I N A A G N V K L A A V S R D G E L F A T V D S A R T F V G R L A A F E G F W			
UniRef90_K0B7Z9	V V I T A S V D I K A D R T E N I G L Q V K M V K D I A E K V K E Y C P S A I V			
UniRef90_J6UAY0	V V I T A G A Q G E S R D V A L V E V N T K V I R D I A R V I E A T S P N A I V			
UniRef90_UPI000468B680	V I L E A S V K S G D R F A E L P I N R A A A K E V G K V I K A A G F K G V V			
UniRef90_UPI0003B2FC6B	I V N A A G K A S K D R D G E L F Y T T E T A A K T F I K P I A D A G F D G V W I			
UniRef90_X0PQ10	I I F A A G D I T T D R F A E L T Y T R T V E Q W A P I I K A N A N F K G V I			
UniRef90_B4H195				
UniRef90_UPI00029AE761	I I T A F G R M N G E R D R F G E L K F N M Q A V Q E V A A G I I K S S G F N G V L			
UniRef90_U6PKB5	C I V I T A G A R Q R E S L V Q R N V E I F K G I P N I K Y S P N C K I K E V G F K G I			
UniRef90_A8AXZ0	I I S A L G N I K A D R F A E L P F T S K E V I E V S K K I K E V G F K G I L			
UniRef90_UPI0003C103CC	D V I I D D V I L Q E I Q S H A D M I G P I A N Q C G D L I E Q N A K R N V K V			
UniRef90_Q07841	V V I T A G I P R Q P G Q T R I D D N A P I M E D I I Q S S L D E H N D D Y I S L			
UniRef90_B3PLZ8	L V I T A S V R P K D R L E L N D N A K I M K D I A N K V I A N G F K G I T V			
UniRef90_I0DV95	V L I S A G V P G M D R S D L F N V N A G I I R N L T Q Q I A D T C P K A L I			
UniRef90_UPI0004002BD6	I V I A A G N S M K P R A T L A K I T S K T I R D V M E N I V E H T K E A I			
UniRef90_H9JU51	V V I P A G V P R K P G M T R D D L N A S I V R D I A L S I A Q N A K P A I V			
UniRef90_C4LKR7	I I C A A G A S I P P R S L L A K V G A Q A A R D V M K N V S E R T K E P V I I			
UniRef90_S0SA70	I I F S A G D I N P D R F A E L N L T K T I E E W A P V I R D S G F E G I I			
UniRef90_Q5FIY9	I V I A A S V K T G D R F G E F E L N A K N A K E V G E K I K N T G F K G V L			
UniRef90_M0SUX9	V I I P A G V P R K P G M T R D D L N A G I I V K T L C E G I V K C C P K A I V			
UniRef90_A712F1	V V I T A G K T R Q S R A D L L N D N A K I I S Y C A K N V A K Y A P E A I I			
UniRef90_G3PQU2	D V I S D D G D G E Q K K N V K G M S D R Y I I E Y G Q L I T R A N K E V K V			
UniRef90_K2M8P7	I I L A A G V P G E S R L A L L E R N A A V F K D V V G N V L A V A P D A I L			
UniRef90_W6T6Q2	L I V A S G N I K K R F G E Y D S N Q A I V R D I A P K I V A S G F K G I L			
UniRef90_UPI0004797F05	I V M T A G S I K P R L L L A D K N V K V M N S V M S S I T Q Y T K D A V I V			
UniRef90_D5WGB7	V V I T A G A P G E T R L H L A K T N A D I A T E I V G R I A P L A P E A I Y L			
UniRef90_H2FUY1	V L I S A G V P G M D R A D L F N V N A G I I V K N L I E K A A A C P Q A C I			
UniRef90_R5FMZ7	Y I I S G G A P R K E G M T R E D L N S K A A T E L G D N I K K Y C P D A K F C			
UniRef90_N9SRF7	I V I T A S V K P K D R L E L L T D N A K I A E E L A K N V K K S G F N G T I V			
UniRef90_J9FP02	Y I I S G G A P R K E G M T R E D L N C K I A E E L G M N I K T Y C P D V K H I			
UniRef90_W7C2B7	I V M A I G P T R E D R M E E L K E T S A A V R S I V P Q I M K A G F D G I F			
UniRef90_E3C828	V V I A V G D A K H D R F M E L K V T S R A A K E V G T K L K E V G F K G V L V			
UniRef90_G8P7Y2	V L S T L G K P G G D R F T E L K A N I P E I K E V S E Q L N R I N F K G I L			
UniRef90_D3FWQ5	V V I T A G I P N R S R N E L E G N L K L F K E F G K K L S I H A P D S I I			
UniRef90_A3JXA9	V I L A C G V P G E S R L E			

UniRef90_UPI0002627462	T	L	I	L	T	N	P	L	D	T	M	V	Y	V	A	E	N	E	F	G	Y	P	K	G	R	I	F	G	T	G	T	M	L	D	S	A	R	L	R	H	V		
UniRef90_K9GZX6	L	V	A	I	T	N	P	V	D	V	M	T	Q	V	A	T	R	E	N	E	F	G	L	A	S	R	G	V	F	G	T	V	L	D	T	A	R	F	R	G	L		
UniRef90_R5E9U3	I	N	I	T	N	P	V	C	D	V	I	T	T	G	L	A	Q	H	L	T	Y	T	G	L	S	R	Q	V	F	G	T	F	L	D	T	A	R	M	Q	R	A		
UniRef90_L8JB26	G	I	I	T	N	P	V	N	T	T	V	A	I	A	A	D	K	A	G	V	Y	D	K	R	K	L	F	G	V	T	T	L	D	V	I	R	S	E	T	F			
UniRef90_B2GA86		D	V	T	N	P	V	C	D	V	I	T	S	M	Y	Q	K	L	T	E	L	G	P	K	E	H	V	F	G	T	G	T	L	D	S	A	R	M	R	A			
UniRef90_UPI00047965D7	L	V	I	S	N	P	V	D	I	L	T	T	Y	K	V	T	E	W	M	E	L	G	P	B	D	G	M	V	F	G	T	G	C	I	L	D	S	S	R	F	V	R	T
UniRef90_G9ZRM5	I	D	I	T	N	P	V	C	D	V	I	T	T	Y	M	Y	Q	H	F	T	G	L	P	K	N	H	V	M	G	T	G	T	L	D	S	S	R	M	R	R	A		
UniRef90_N0AUJ7	F	I	T	N	P	L	D	T	M	V	Y	V	A	E	N	E	F	G	Y	P	K	G	R	I	F	G	T	G	T	M	L	D	S	A	R	L	R	K	I				
UniRef90_E3ZH57	N	I	T	N	P	V	C	D	V	I	T	S	F	I	Q	K	L	T	G	Y	F	D	H	S	R	I	V	F	G	T	G	T	M	L	D	T	A	R	M	R	I		
UniRef90_B9D261	N	V	T	N	P	L	D	A	L	T	Y	L	V	Y	K	T	S	G	F	D	K	K	N	R	N	Q	V	G	T	G	T	M	L	D	S	A	R	L	K	Y	E		
UniRef90_R5ILV4	V	V	V	F	N	P	A	D	I	T	G	L	V	T	L	L	Y	S	G	F	L	K	P	N	N	Q	V	G	T	G	T	M	L	D	S	A	R	L	Q	N	E		
UniRef90_X0T3M2	I	M	V	T	N	P	L	D	V	M	A	Y	V	A	M	K	E	T	G	F	P	R	E	R	V	L	G	M	A	G	V	L	D	S	A	R	L	R	F	F			
UniRef90_S4RCF3	L	V	A	A	K	G	A	N	L	Q	L	L	A	T	A	A	A	P	L	H	V	P	R	R	N	V	F	V	A	L	S	T	H	L	E	R	R	A	K	G	L		
UniRef90_I7L6N0	N	I	S	N	P	V	C	D	A	I	S	T	I	L	Q	E	T	T	G	L	S	K	K	N	Q	V	F	G	T	G	T	F	L	D	T	A	R	M	Q	R	I		
UniRef90_Q4SRH5	V	V	S	N	P	V	D	V	L	T	Y	V	T	W	K	L	S	G	L	P	K	H	R	V	I	G	S	G	T	N	L	D	S	A	R	F	R	Y	L				
UniRef90_UPI0003ADD3DF	V	V	S	N	P	H	G	D	S	S	V	P	V																														
UniRef90_C7FI96	I	C	I	T	N	P	L	D	I	M	V	N	M	L	Q	K	F	S	G	A	P	D	N	K	I	V	G	M	A	G	V	L	D	S	A	R	F	R	T	F			
UniRef90_G0LFF5	T	T	S	N	P	V	D	L	M	N	R	H	L	Y	E	T	G	D	R	E	R	H	T	V	I	V	G	F	G	G	R	L	D	S	A	R	F	R	Y	F			
UniRef90_V4HQD4	G	I	I	T	N	P	V	D	L	N	R	P	I	V	F</																												

	170	180	190	200
UniRef90_UPI0002627462	V A S W N Y N I D S P K S V T T G Y M M G E H G M T A F P V F S S R S L N V Y G F G E K			
UniRef90_K9GXZ6	L A S H L G L S N S K S V H G Y V L G E H G D S E V L C W S T I T I A G S V R V E			
UniRef90_R5E9U3	L V S M S L D Q N S P H N I A G Y V L G E H G D S Q F A A W S T I T I A G Q G E P I T			
UniRef90_L8JB26	V A E L K G I D P D S G Q V R V P V L G G E H S G V T I L L P L L S Q V I E G V E F T E E			
UniRef90_B2GA86	V G E A L L N V D S R S V G F N L G G E H G N S Q F T A W S T V R V L G T K Q V V I			
UniRef90_UPI00047965D7	I A D Y A E L D S T G V I N G Y N L G E H G D S G M V P V W S H V T V L G G I P I D			
UniRef90_G9ZRM5	V S S E L G I D P R S V G G Y N L G E H G N S Q F T A W S S V R V L G G Q P I T			
UniRef90_N0AUJ7	I A T N F D I D P K S V T G Y M M G E H G H T A F P V L S R L N V Q G V G E K			
UniRef90_E3ZH57	V G E T L H I N P K S V D G Y V L G E H G E S Q F V A W S T V R I V G G I N I A			
UniRef90_B9D261	I L S Q K T G L K N S A F S A H I I G S H N D D M V A L Q S N V S V			
UniRef90_R5ILV4	L A K Y F K I P A S E I K N S R T Y G G H G E Q M A V F A S T T S V K G K P L N			
UniRef90_X0T3M2	I A A E L G V R S P A D V S A M V L G G H G D G M V P L L S H T T V G G V G V T			
UniRef90_S4RCF3	L A A K L K V N S A G V E D V V V W G D A G G S T Y T Q L S A A R L R G Y D G A			
UniRef90_I7L6N0	V A E E L D E D P R N V Q G F V L G E H G A S Q F T A W S T V S V N G K K A T			
UniRef90_Q4SRH5	M A E R L G I H A S S F N G W V L G E H G D T S V P V V S G A N V A G V N L Q			
UniRef90_UPI0003ADD3DF	W S G A N V A G V S L K N L			
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A A D L S H I A P T R A R I N T S G C L P A A G A W P G E R D Q L G Q A L E G C D L  
E L Q H C S L S L K D I A T A G K K E V S F K D L D  
D V V N A P G V A A D L S H I N T A S P V Q G F L P E N D G L A K A V S D A  
D K R E E K V R A E A A L D F E D A K A N Q N E S Y Q I T V N D Y S A L I D D A D V  
D A V R S L E H A Q A L D L A H A S F D V G I E T D T L L V R D A D V  
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E I A R E R G V D L A D I E E D S I R G A S M E V I R G K G G T V F G P A A  
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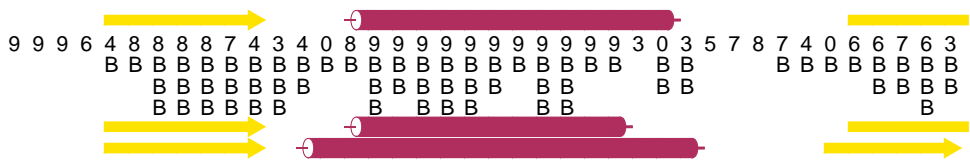
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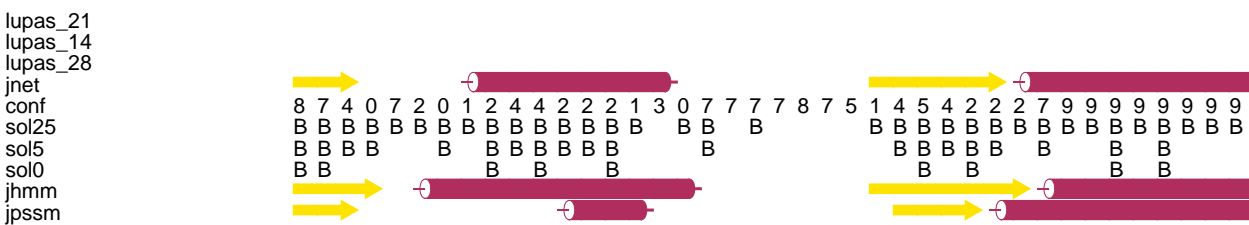
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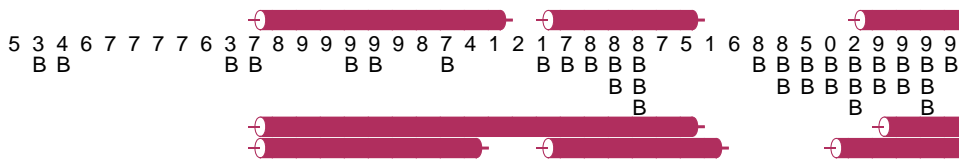


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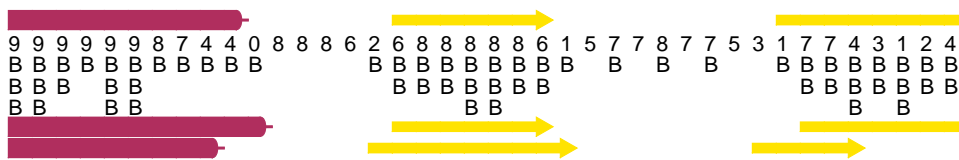
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