

QUERY	1	M	E	K	L	K	S	K	I	I	F	V	V	G	G	P	G	S	G	K	G	T	Q	C	E	K	I	V	Q	K	Y	G	Y	T	H	L	S	T	G	40					
UniRef90_C1LL44		Q	K	L	A	K	A	K	V	I	F	V	L	G	G	P	G	S	G	K	G	T	Q	C	E	K	L	V	H	K	F	N	F	N	H	L	S	S	G						
UniRef90_R6S6K1						L	N	I	V	I	F	V	L	G	G	P	G	S	G	K	G	T	Q	S	A	R	I	V	E	K	Y	G	L	N	H	L	S	S	G						
UniRef90_UPI0002A4AADF		Q	D	K	L	K	D	A	K	I	F	V	V	L	G	G	P	G	S	G	K	G	T	Q	C	E	R	I	V	A	K	Y	G	Y	T	H	L	S	S	G					
UniRef90_A3U716		K	H	K	P	T	K	M	T	N	I	V	F	G	P	P	G	A	G	K	G	T	Q	A	E	V	L	K	E	K	Y	N	L	V	H	L	S	T	G						
UniRef90_D3IMC2						K	N	I	V	I	F	F	G	A	P	P	G	S	G	K	G	T	Q	S	D	K	M	I	A	K	Y	G	L	E	H	L	S	T	G						
UniRef90_K1R282		K	P	G	L	P	E	A	P	I	F	L	A	G	G	P	G	S	G	R	G	T	Q	A	K	K	I	L	D	R	Y	K	V	V	H	L	S	M	G						
UniRef90_C0GI89						R	I	V	L	L	G	L	P	P	G	A	G	K	G	T	Q	G	E	R	L	V	K	Y	N	I	P	H	L	S	T	G									
UniRef90_N0BAU5						N	L	I	L	L	G	A	P	P	G	A	G	K	G	T	Q	A	E	R	I	V	A	K	Y	G	I	P	Q	I	H	L	S	T	G						
UniRef90_UPI0003B4FBB6					S	K	N	I	I	L	L	G	L	P	G	V	G	K	G	T	Q	A	A	K	I	L	V	E	T	Y	D	L	P	H	L	S	T	G							
UniRef90_C9LE48					K	N	I	V	I	F	G	A	P	P	G	S	G	K	G	T	Q	S	D	L	L	V	K	Y	G	F	K	H	L	S	T	G									
UniRef90_E4T6Y3					L	N	I	I	I	C	G	A	P	G	G	G	K	G	T	Q	S	D	L	L	V	G	K	Y	N	L	K	H	L	S	T	G									
UniRef90_UPI000373A59E						N	I	V	L	F	G	P	P	G	A	G	K	G	T	Q	A	E	H	L	K	E	K	Y	N	L	K	H	L	S	T	G									
UniRef90_F6VN10		V	K	N	N	M	D	S	K	K	I	V	F	V	L	G	G	P	G	S	G	K	G	T	Q	C	E	K	L	V	E	K	Y	G	F	T	H	F	S	S	G				
UniRef90_UPI0003F0C2CE			K	L	K	T	A	K	V	I	F	V	L	G	G	P	G	S	G	K	G	T	Q	S	C	E	K	M	I	A	K	Y	G	F	T	H	I	S	V	G					
UniRef90_UPI000468AA99						T	N	I	V	I	F	G	A	P	P	G	S	G	K	G	T	Q	S	E	N	L	I	K	R	Y	G	F	K	H	L	S	T	G							
UniRef90_Q8XHU4					P	V	K	I	V	L	L	G	P	P	G	A	G	K	G	T	Q	A	K	S	I	S	N	R	Y	S	I	P	H	L	S	T	G								
UniRef90_U6NUB5		S	P	L	K	K	V	P	I	E	F	I	V	G	G	P	G	S	G	K	G	T	Q	C	E	K	L	V	A	K	Y	G	L	S	H	L	S	S	G						
UniRef90_D2VVU5						V	I	C	V	N	G	G	P	P	G	S	G	K	G	T	Q	C	A	K	L	V	E	K	Y	G	F	I	H	L	S	T	G								
UniRef90_G0IVS5						L	N	I	V	L	F	G	P	P	G	A	G	K	G	T	Q	S	E	K	L	I	E	K	Y	N	I	E	H	L	S	T	G								
UniRef90_E4TT93						L	N	I	I	L	F	G	P	P	G	A	G	K	G	T	Q	S	E	K	I	I	D	Q	Y	K	L	T	H	L	S	T	G								
UniRef90_E5GCA2		K	K	P	T	V	V	F	V	L	G	G	P	P	G	S	G	K	G	T	Q	C	A	Y	I	V	E	H	F	G	F	T	H	F	S	A	G								
UniRef90_M2X2B6		P	K	K	K	V	F	I	L	L	G	G	P	P	G	S	G	K	G	T	Q	C	E	K	L	V	E	E	F	H	L	C	H	L	S	A	G								
UniRef90_R5YKG0						N	I	V	I	F	G	A	P	P	G	S	G	K	G	T	Q	S	E	K	L	I	E	K	Y	G	L	Y	H	L	S	T	G								
UniRef90_UPI0003693A10						K	R	L	I	F	L	G	P	P	G	A	G	K	G	T	Q	A	Q	T	L	A	E	K	W	N	I	P	H	L	S	T	G								
UniRef90_R5XM39						R	L	I	L	L	G	P	P	G	A	G	K	G	T	Q	A	A	G	I	V	E	K	Y	K	I	P	H	L	S	T	G									
UniRef90_K9XD29						T	R	L	I	F	L	G	A	P	P	G	A	G	K	G	T	Q	A	Q	T	L	A	H	R	N	I	P	H	L	S	T	G								
UniRef90_U2FXT4						I	V	L	L	G	A	P	P	G	S	G	K	G	T	Q	S	E	K	L	V	A	E	F	G	V	P	Q	I	H	L	S	T	G							
UniRef90_L0K5C9						R	L	V	L	L	G	P	P	G	A	G	K	G	T	Q	A	A	R	I	E	A	A	Y	N	L	P	H	L	S	T	G									
UniRef90_G8R789						L	N	I	V	L	F	G	P	P	G	A	G	K	G	T	Q	S	H	I	V	E	K	F	Q	L	I	H	L	S	T	G									
UniRef90_A1SNJ7						R	L	I	I	M	G	P	P	G	A	G	K	G	T	Q	A	K	Y	I	A	E	H	F	K	I	P	A	I	S	T	G									
UniRef90_A0A024JGR6		V	T	V	I	F	V	L	G	G	P	P	G	S	G	K	G	T	Q	C	A	K	L	V	K	D	Y	G	F	T	H	L	S	A	G										
UniRef90_UPI00036BEF1C						R	L	I	F	V	G	P	P	G	A	G	K	G	T	Q	S	K	F	L	A	D	A	H	Q	I	P	H	L	S	T	G									
UniRef90_F2IKB1						L	N	I	V	L	F	G	P	P	G	A	G	K	G	T	Q	S	E	R	L	I	A	R	N	L	V	H	L	S	T	G									
UniRef90_H0XAR7		P	R	P	K	T	I	L	V	I	G	G	P	P	G	S	G	K	G	T	Q	S	L	K	I	A	E	R	Y	G	F	Q	Y	I	S	V	G								
UniRef90_D8UMJ8			A	Q	I	I	F	V	L	G	G	P	P	G	S	G	K	G	T	Q	C	A	Q	I	L	Q	E	Y	E	C	V	H	L	S	A	G									
UniRef90_UPI00036E33EA						L	N	I	A	L	F	G	P	P	G	A	G	K	G	T	Q	A	K	K	I	V	E	K	Y	N	L	A	H	L	S	T	G								
UniRef90_B9E9L2						N	I	I	L	M	G	L	P	P	G	A	G	K	G	T	Q	A	S	E	I	I	K	K	Y	P	I	P	H	L	S	T	G								
UniRef90_I8T9W0						R	I	V	L	L	G	A	P	P	G	S	G	K	G	T	Q	A	K	N	L	I	T	H	Y	G	I	P	Q	I	H	L	S	T	G						
UniRef90_J3PM34						L	V	V	F	V	L	G	G	P	P	G	A	G	K	G	T	Q	C	T	R	L	V	A	E	Y	G	F	A	H	L	S	A	G							
UniRef90_L7WE17						R	M	K	N	I	V	L	F	G	P	P	G	A	G	K	G	T	Q	A	T	R	L	K	D	K	Y	G	L	V	H	L	S	T	G						
UniRef90_UPI00045496D7		L	T	E	D	L	R	K	H	K	I	I	F	L	M	G	G	P	P	G	S	G	K	G	T	Q	C	E	K	L	A	E	K	Y	G	F	T	Q	L	S	T	G			
UniRef90_K0J1A0						N	L	I	L	M	G	L	P	P	G	A	G	K	G	T	Q	A	E	K	I	I	E	K	Y	Q	I	P	H	L	S	T	G								
UniRef90_UPI0003B4CCB4						I	I	L	L	G	G	P	P	G	A	G	K	G	T	Q	A	T	K	L	K	E	Y	Y	N	I	P	H	L	S	T	G									
UniRef90_C4GC11						I	I	M	L	G	A	P	P	G	A	G	K	G	T	Q	A	K	Q	I	A	S	A	Y	G	I	P	H	L	S	T	G									
UniRef90_G3MLZ3		N	V	P	V	V	F	V	F	G	G	P	P	G	S	G	K	G	T	Q	C	E	K	I	V	A	K	Y	G	F	T	H	L	S	S	G									
UniRef90_K9PN08						T	R	L	I	F	L	G	P	P	G	A	G	K	G	T	Q	A	Q	A	L	A	E	F	L	H	V	P	H	L	S	T	G								
UniRef90_K0DC36						A	K	N	L	I	L	L	G	G	P	P	G	A	G	K	G	T	Q	A	D	F	I	V	K	D	Y	P	N	V	H	L	S	T	G						
UniRef90_UPI0003C29558		D	L	R	Q	S	T	I	I	F	V	I	G	G	P	P	G	S	G	K	G	T	Q	C	E	Q	L	A	K	Y	G	F	V	H	L	S	T	G							
UniRef90_U1GSP8						K	V	T	V	V	Y	I	L	G	G	P	P	G	S	G	K	G	T	Q	S	A	H	L	V	Q	D	Y	G	F	V	H	L	S	A	G					
UniRef90_R7B4W5										I	V	M	L	G	A	P	P	G	A	G	K	G	T	Q	A	Q	R	I	A	E	K	Y	G	I	P	H	L	S	T	G					
UniRef90_C0VZ30		M	I	A	T	E	K	K	A	P	L	V	L	L	G	A	P	P	G	A	G	K	G	T	Q	A	E	R	I	A	Q	F	L	N	V	P	S	I	S	T	G				
UniRef90_G0VJ16						V	I	F	V	L	G	G	P	P	G	A	G	K	G	T	Q	C	A	K	L	V	A	D	Y	G	F	V	H	L	S	A	G								
UniRef90_R7CP34										I	M	L	G	A	P	P	G	A	G	K	G	T	Q	A	K	K	I	A	A	K	Y	Q	I	P	H	L	S	T	G						
UniRef90_UPI000479DF89						N	L	V	L	F	G	K	P	P	G	A	G	K	G	T	Q	A	E	F	L	K	E	K	Y	N	L	K	H	L	S	T	G								
UniRef90_F9UYU5						T	N	L	V	L	F	G	K	P	P	G	A	G	K	G	T	Q	A	A	F	L	K	E	N	Y	N	L	V	H	L	S	T	G							
UniRef90_UPI000379A262						L	N																																						

QUERY	D	L	L	R	A	E	V	S	S	50	A	R	G	K	M	L	S	E	I	M	E	K	G	Q	L	V	P	L	E	T	V	L	D	M	L	R	D	A	M					
UniRef90_C1LL44	D	L	L	R	A	E	V	Q	S	G	S	Q	K	G	K	E	L	K	A	M	M	E	R	G	E	L	V	P	L	E	V	V	L	S	L	L	K	S	V	F				
UniRef90_R6S6K1	D	V	L	R	A	E	V	K	N	G	S	E	L	G	K	T	A	K	S	Y	I	D	N	G	Q	L	V	P	L	D	A	L	M	I	D	L	K	A	S	D				
UniRef90_UPI0002A4AADF	D	V	L	R	A	E	V	A	K	N	G	S	D	R	G	K	Q	L	K	A	S	Y	I	M	Q	G	E	L	V	P	L	D	T	V	L	D	M	I	K	A	S	D	A	M
UniRef90_A3U716	D	V	F	R	Y	N	I	K	N	A	T	E	L	G	T	L	A	K	S	Y	M	D	K	G	H	L	V	P	D	E	V	T	I	K	M	L	K	N	A	E	V			
UniRef90_D3IMC2	D	V	L	R	S	N	Q	I	K	N	K	D	P	L	G	W	N	T	A	K	S	Y	I	D	N	G	Q	L	V	P	D	E	V	L	M	I	D	E	L	V	E	H		
UniRef90_K1R282	D	I	L	F	R	A	A	I	K	E	G	T	E	L	G	L	K	A	K	E	Y	M	D	K	G	E	L	V	P	D	E	V	V	V	N	I	V	K	E	R				
UniRef90_C0G189	D	M	L	R	E	A	V	A	K	G	T	E	L	G	K	K	A	K	S	Y	M	D	R	G	E	L	V	P	D	E	V	V	I	G	I	V	K	E	R					
UniRef90_NOBAU5	D	M	F	R	E	A	A	M	A	N	E	T	E	L	G	L	Q	A	K	S	Y	M	D	A	G	N	L	V	P	D	E	V	T	N	G	I	V	K	E	R				
UniRef90_UPI0003B4FBB6	D	V	L	R	A	E	I	K	N	G	T	S	L	G	Q	T	A	K	S	Y	I	D	K	G	Q	L	V	P	D	E	L	M	I	D	I	L	L	A	N	V	Y			
UniRef90_C9LE48	D	L	L	R	K	E	I	A	E	K	S	E	L	G	I	T	A	E	S	Y	I	S	K	G	N	L	V	P	D	E	M	I	I	N	L	L	S	N	A	K	V			
UniRef90_E4T6Y3	D	L	L	F	R	Y	N	I	K	N	Q	T	E	L	G	L	L	A	K	S	Y	I	D	K	G	A	L	V	P	D	E	V	T	I	K	M	L	K	E	R				
UniRef90_UPI000373A59E	D	L	L	R	A	E	V	N	S	G	S	P	Q	G	E	E	L	K	Q	M	M	E	R	G	D	L	V	P	M	S	T	V	L	K	L	L	K	E	D	N	M			
UniRef90_UPI0003F0C2CE	D	L	L	R	A	E	V	L	S	G	T	E	D	R	G	A	Q	V	A	K	T	E	I	M	E	K	G	V	L	P	T	S	V	V	E	F	E	L	K	E	A	M		
UniRef90_UPI000468AA99	D	L	L	R	A	E	I	K	E	S	T	E	L	G	Q	Q	V	A	K	S	Y	I	D	K	G	Q	L	V	P	D	E	Y	I	I	Q	M	I	K	E	H	L			
UniRef90_Q8XHU4	D	I	F	R	K	N	I	S	E	N	T	P	L	G	I	E	A	K	S	Y	M	D	N	G	Q	L	V	P	D	E	V	T	I	N	M	V	K	E	D	R				
UniRef90_U6NUB5	D	L	L	R	D	E	V	K	S	G	S	P	R	G	T	K	L	N	Q	I	M	E	A	G	E	L	V	P	L	E	I	V	L	D	I	L	L	K	R	E	A	M		
UniRef90_D2VVU5	D	L	L	R	A	E	A	A	K	D	T	E	L	Q	G	R	M	I	S	S	Y	I	K	E	G	K	I	V	P	G	A	V	T	L	G	L	L	K	R	E	A	M		
UniRef90_G0IVS5	D	L	F	R	K	H	L	G	E	G	T	E	L	G	K	L	A	R	K	Y	M	D	E	G	N	L	V	P	D	E	V	V	I	G	M	V	E	D	E	K	I			
UniRef90_E4TT93	D	L	F	R	K	H	L	G	E	G	T	D	L	G	K	L	A	K	Q	Y	M	D	E	G	N	L	V	P	D	E	V	V	I	G	M	V	D	E	K	I				
UniRef90_E5GCA2	D	L	L	R	G	E	I	L	D	S	G	S	E	N	G	L	M	I	K	S	M	M	N	E	G	K	I	V	P	S	E	V	T	V	K	L	L	K	A	K	A	M		
UniRef90_M2X2B6	D	L	L	R	K	E	M	Q	T	G	S	S	N	G	Q	M	I	D	R	M	I	R	N	G	E	I	V	P	G	H	I	T	I	E	L	L	L	K	A	K	A	M		
UniRef90_R5YKG0	D	L	L	R	K	E	I	K	A	G	S	E	L	G	K	L	A	D	D	Y	I	S	K	G	Q	L	V	P	D	D	S	L	I	I	D	M	L	A	K	L	L			
UniRef90_UPI0003693A10	D	L	L	R	Q	A	L	K	E	Q	T	P	L	G	L	K	A	Q	S	Y	M	D	R	G	E	L	V	P	D	D	Q	L	V	Q	D	M	V	K	E	E	R			
UniRef90_R5XM39	D	I	F	R	Q	N	I	K	E	G	T	E	L	G	K	K	A	K	E	Y	M	D	Q	G	L	L	V	P	D	E	L	T	V	G	L	V	T	D	R					
UniRef90_K9XD29	D	I	L	R	Q	A	M	Q	R	Q	T	P	L	G	V	K	A	Q	S	Y	V	S	R	G	E	L	V	P	D	D	Q	L	V	N	D	L	V	E	E	R				
UniRef90_U2FXT4	D	L	L	R	S	A	V	S	N	Q	T	E	L	G	K	K	A	K	S	A	M	D	A	G	E	L	V	P	S	D	D	I	V	V	G	M	I	R	E	E	R			
UniRef90_L0K5C9	D	I	F	R	R	A	I	N	N	K	T	A	L	G	V	K	A	K	E	Y	I	D	Q	G	K	L	V	P	D	E	I	V	V	G	I	V	E	E	R					
UniRef90_G8R789	D	L	L	R	S	E	I	A	A	G	T	P	L	G	Q	E	A	K	L	L	M	D	G	K	E	L	V	P	D	E	V	V	I	G	M	I	D	N	K	R				
UniRef90_A1SNJ7	D	I	F	R	A	N	V	T	E	G	T	P	L	G	V	E	A	K	R	Y	M	D	A	G	E	Y	V	P	D	E	V	T	N	R	M	V	R	N	R					
UniRef90_A0A024JGR6	D	L	L	R	A	E	Q	S	R	P	S	T	Y	G	K	L	I	A	D	H	I	K	A	G	T	I	V	P	Q	E	V	T	L	A	L	L	E	Q	R					
UniRef90_UPI00036BEF1C	D	L	L	R	E	S	V	A	A	K	T	S	L	G	V	Q	A	K	G	Y	M	D	R	G	E	L	V	P	D	D	Q	L	V	I	D	L	L	R	E	R	E			
UniRef90_F2IKB1	D	I	F	R	A	N	I	K	G	E	T	E	L	G	L	L	A	K	S	Y	M	D	Q	G	N	L	V	P	D	D	E	V	T	I	N	M	L	K	S	E	V			
UniRef90_H0XAR7	E	L	K	R	I	H	S	A	S	S	N	R	K	W	S	L	I	A	K	I	I	T	T	G	E	L	A	P	Q	E	T	T	I	T	E	I	K	Q	K					
UniRef90_D8UMJ8	D	L	L	R	A	E	V	K	S	G	S	V	V	F	G	R	K	Y	E	E	L	M	R	E	G	K	L	V	P	S	F	A	V	T	L	N	L	L	K	K	A	M		
UniRef90_UPI00036E33EA	D	M	I	R	K	E	I	A	E	G	S	D	V	F	G	K	M	A	A	G	I	I	N	K	G	E	L	L	S	D	E	F	V	V	A	L	I	E	N	S	I			
UniRef90_B9E9L2	D	M	F	R	A	A	I	K	N	N	T	E	L	G	Q	K	A	K	S	F	M	D	N	G	E	L	V	P	D	E	V	T	I	G	I	V	R	E	R					
UniRef90_I8T9W0	D	A	L	R	A	A	V	K	G	R	E	S	E	L	G	K	K	A	K	A	M	E	A	G	Q	L	V	P	A	N	E	I	V	I	G	I	V	R	E	R				
UniRef90_J3PM34	D	L	L	R	V	E	Q	Q	R	E	S	E	Y	A	P	V	I	Q	E	H	I	K	E	A	G	K	I	V	P	M	E	I	I	L	K	L	M	Q	E	S	M			
UniRef90_L7WE17	D	V	F	R	Y	N	I	K	N	G	T	E	L	G	T	L	A	K	S	Y	M	D	K	G	N	L	V	P	D	E	V	T	I	K	M	L	K	A	E	V				
UniRef90_UPI00045496D7	E	L	L	R	Q	E	L	A	S	E	S	E	R	S	R	K	L	I	R	D	T	M	E	R	G	D	L	V	P	S	G	V	L	I	E	L	L	K	E	A	M			
UniRef90_K0J1A0	D	M	F	R	S	A	L	K	E	G	T	D	L	G	K	K	A	K	S	F	M	D	K	G	E	L	V	P	D	D	E	V	T	V	G	I	V	K	E	R				
UniRef90_UPI0003B4CCB4	E	V	L	R	E	A	R	K	A	G	T	E	L	G	K	K	A	K	E	Y	M	D	A	G	K	L	V	P	D	S	I	I	L	G	I	V	G	D	K					
UniRef90_C4GC11	D	I	F	R	A	N	I	K	N	Q	T	P	L	G	K	K	A	K	E	Y	M	D	A	G	N	L	V	P	D	E	L	T	C	D	L	L	M	D	R					
UniRef90_G3MLZ3	D	L	L	R	A	E	V	K	S	G	S	D	L	G	K	E	M	N	E	I	M	K	K	G	E	L	V	P	M	V	M	V	L	Q	L	L	K	E	A	I				
UniRef90_K9PN08	E	I	F	R	Q	A	I	K	E	Q	T	P	L	G	T	I	A	Q	S	Y	L	D	R	G	E	L	V	P	D	E	L	T	Q	N	L	V	K	E	R					
UniRef90_K0DC36	D	I	F	R	A	N	L	S	N	D	T	E	L	G	K	K	A	R	E	Y	M	D	A	G	N	L	V	P	D	E	I	I	T	N	A	M	V	A	K	E	A	M		
UniRef90_UPI0003C29558	D	L	L	R	K	R	E	S	S	S	L	S	E	R	S	K	L	I	K	D	I	L	E	C	G	Q	V	P	G	D	I	I	L	E	L	M	K	E	A	M				
UniRef90_U1GSP8	D	L	L	R	E	Q	D	R	S	G	S	Q	Y	G	Q	L	I	K	D	Y	I	K	N	G	Q	I	V	P	L	E	V	T	V	K	L	L	K	E	M	H	E			
UniRef90_R7B4W5	D	I	F	R	S	N	I	K	A	G	T	E	L	G	K	K	A	K	S	F	I	D	K	G	L	L	V	P	D	D	E	V	T	I	G	M	L	I	D	J	R			
UniRef90_C0VZ30	A	I	F	R	Q	N	I	K	E	E	T	E	L	G	K	R	A	N	E	F	I	S	K	G	E	F	V	P	D	S	S	V	T	N	P	M	V	A	A	R				
UniRef90_G0VJ16	D	L	L	R	E	Q	N	R	E	G	S	E	F	G	T	L	I	K	H	Y	I	T	E	G	L	T	V	P	Q	E	I	T	L	A	L	L	K	N	I	Q				
UniRef90_R7CP34	D	I	F	R	A	N	I	K	N	G	T	E	L	G	K	K	A	K	T	Y	M	D	Q	G	L	L	V	P	D	D	E	L	T	C	D	L	V	V	D	R				
UniRef90_UPI000479DF89	D	I	F	R	Y	N	I	K	N	G	T	E	L	G	Q	L	A	K	S	Y	I	N	K	G	D	L	V	P	D	D	E	V	T	I	K	M	L	Q	D	D	V			
UniRef90_F9YUY5	D	L	L	R	Y	N	I	K	N	G	T	E	L	G	K	L	A	Q	S	Y	M	D	K	G	E	L	V	P	D	D	E	V	T	I	K	M	L	Q	Q	E	V			
UniRef90_UPI000379A262																																												

QUERY	V	A	K	V	D	T	S	K	G	F	L	I	D	G	Y	P	R	E	L	D	Q	Q	G	E	E	F	E	R	K	I	G	Q	P	T	L	L	L	Y	V	D	A		
UniRef90_C1LL44	I	K	L	V	D	K	N	C	H	F	L	I	D	G	Y	P	R	E	L	D	Q	Q	G	E	E	F	E	R	K	I	G	Q	P	T	L	L	L	Y	V	D	A		
UniRef90_R6S6K1	D	S	F	K	D	S	K	G		V	I	F	D	G	Y	P	R	E	L	D	Q	Q	A	E	E	F	E	K	T	M	L	A	E	R	G	Q	M	L	D	L	E	V	
UniRef90_UPI0002A4AADF	I	A	K	A	D	V	S	K	G	F	L	I	D	G	Y	P	R	E	V	K	Q	G	E	E	F	E	K	T	M	L	A	E	R	G	Q	M	L	D	L	E	V		
UniRef90_A3U716	D	K	N	A	D	A	N	G		F	I	F	D	G	Y	P	R	T	E	A	Q	A	E	A	M	D	E	K	D	S	Q	I	D	A	M	I	E	A	L	E	V		
UniRef90_D3IMC2	D	S	F	G	K	E	H	K	G	V	I	F	D	G	Y	P	R	T	E	A	Q	A	E	A	M	D	E	K	D	S	Q	I	D	A	M	I	E	A	L	E	V		
UniRef90_K1R282	I	K	K	H	P	D	C	A	G	A	G	A	L	E	G	Y	P	R	D	K	N	Q	V	E	E	F	N	K	H	I	G	L	N	F	M	L	D	L	D	C			
UniRef90_C0G189	L	K	Q	P	D	C	N	G	Y	L	L	D	G	F	P	R	T	L	A	Q	A	E	A	T	G	R	R	V	C	R	S	C	G	S	S	F	H	V	Q	F	N		
UniRef90_NOBAU5	I	A	Q	P	D	C	E	K	G	F	L	D	G	F	P	R	T	I	N	Q	A	E	N	R	R	T	C	K	N	C	K	A	V	I	H	L	T	I	Y	N			
UniRef90_UPI0003B4FBB6	L	A	Q	P	D	T	Q	K	G	F	L	D	G	F	P	R	N	I	A	Q	A	Q	A	L	E	A	M	L	A	K	H	A	R	S	I	D	A	V	L				
UniRef90_C9LE48	D	S	L	C	P	C		D	G	V	I	F	D	G	F	P	R	T	I	P	Q	A	R	M	L	K	E	R	K	G	E	V	D	V	M	I	E	L	S	V			
UniRef90_E4T6Y3	E	A	F	D	N	D	I	N	G	M	L	L	D	G	F	P	R	T	V	A	Q	A	E	A	L	Q	T	M	L	S	N	S	G	K	E	I	D	L	S	V			
UniRef90_UPI000373A59E	E	A	H	L	E	S	K	G		F	I	F	D	G	Y	P	R	T	E	A	Q	A	V	S	M	A	S	K	N	S	Q	I	N	A	M	I	E	A	L	E	V		
UniRef90_F6VN10	A	A	H	T	E	S	K	G		F	I	V	D	G	Y	P	R	E	V	Q	Q	G	I	E	F	E	Q	S	I	A	P	C	T	F	V	L	W	V	D	V			
UniRef90_UPI0003F0C2CE	S	A	K	I	D	T	A	N	G	F	I	F	D	G	Y	P	R	E	V	C	Q	G	E	E	F	E	K	E	I	T	E	C	Q	F	A	L	Y	F	D	V			
UniRef90_UPI000468AA99	L	S	Q	L	P	K	E	T	G	L	I	F	D	G	F	P	R	T	V	A	Q	A	V	A	L	D	H	H	Q	T	K	V	D	V	V	L	D	L	K	V			
UniRef90_Q8XHU4	L	Q	Q	D	D	C	N	G	Y	L	L	D	G	F	P	R	T	V	H	Q	A	T	G	R	R	V	C	P	S	C	G	A	S	Y	H	I	K	F	N				
UniRef90_U6NUB5	L	R	D	V	K	S	S	K	G	F	L	D	G	F	P	R	E	V	K	Q	Q	G	E	Q	F	E	K	E	I	Q	E	A	K	S	V	I	Y	F	D	V			
UniRef90_D2VVU5	L	N	H	P	K	K	D	A	T	F	L	D	G	F	P	R	E	M	Q	Q	A	V	D	F	E	A	H	V	C	F	K	F	V	L	F	F	D	C					
UniRef90_G0IVS5	N	H	S	L	D	A	N	G		V	I	F	D	G	F	P	R	T	V	A	Q	A	E	A	L	D	A	L	T	K	K	G	T	M	I	A	L	E	V				
UniRef90_E4TT93	K	E	T	K	A	N	S	S	K	G	F	I	F	D	G	F	P	R	T	V	P	Q	A	K	A	L	D	T	L	L	K	E	K	G	E	M	I	A	L	D	V		
UniRef90_E5GCA2	E	E			E	S	G	N	E	S	K	F	L	D	G	F	P	R	N	D	E	N	A	F	A	A	V	T	G	I	E	P	A	F	V	L	F	F	D	C			
UniRef90_M2X2B6	E	E	Q	T	Q	T		P	G	F	L	I	D	G	F	P	R	K	L	D	Q	A	G	A	F	E	K	W	V	G	D	F	E	F	I	L	F	L	D	C			
UniRef90_R5YKG0	D	T	T	P	E	A	R	E	G	V	I	L	D	G	F	P	R	T	I	P	Q	A	Q	A	L	D	A	L	L	L	D	R	G	M	E	V	G	L	E	V			
UniRef90_UPI0003693A10	L	Y	Q	S	D	S	H	F	G	W	L	L	D	G	F	P	R	T	V	K	Q	A	A	F	L	E	Q	L	L	Q	K	L	A	G	S	V	K	K	V	I			
UniRef90_R5XM39	I	S	Q	P	D	C	N	G	Y	L	L	D	G	F	P	R	N	V	S	Q	A	V	Q	R	I	C	K	S	C	G	A	T	Y	H	I	E	F	N					
UniRef90_K9XD29	L	D	E	D	D	V	E	H	G	W	L	L	D	G	F	P	R	K	V	S	Q	A	S	F	L	D	E	L	L	Q	Q	K	H	S	D	R	L	Q	V	R			
UniRef90_U2FXT4	L	A	E	D	D	T	E	N	G	F	L	L	D	G	F	P	R	S	L	D	Q	A	K	A	L	D	E	S	L	L	D	E	M	N	R	P	H	Q	G	V			
UniRef90_L0K5C9	L	A	N	G	D	C	Q	D	G	F	L	L	D	G	F	P	R	T	T	E	Q	A	E	G	R	R	V	C	Q	E	C	G	A	T	F	H	L	E	Y	N			
UniRef90_G8R789	L	K	A	N	E	D	A	K	G	F	L	I	F	D	G	F	P	R	T	E	Q	A	K	A	L	D	D	L	L	K	S	N	D	M	I	A	L	E	V				
UniRef90_A1SNJ7	I	D	K	E	N	D	A	V	G	G	F	L	D	G	Y	P	R	T	V	A	Q	V	E	M	I	R	F	T	G	H	R	L	N	D	A	V	V	C	L	T	V		
UniRef90_A0A024JGR6	A	M	R	E	S	N	S	K	K	F	L	I	D	G	F	P	R	K	M	D	Q	A	I	K	F	E	D	D	I	A	V	S	K	M	I	L	F	L	D	C			
UniRef90_UPI00036BEF1C	L	S	K	P	D	A	Q	S	G	W	L	L	D	G	F	P	R	N	V	A	Q	A	E	F	L	D	A	L	L	S	E	L	H	Q	G	C	D	R	V	V			
UniRef90_F2IKB1	L	K	Q	E	N	A	K	G		F	I	F	D	G	F	P	R	T	N	A	Q	A	Q	A	L	D	T	F	L	A	S	I	N	T	E	I	T	R	M	I			
UniRef90_H0XAR7	L	M	Q	I	P	D	E	E	G	V	I	F	D	G	F	P	R	D	V	A	Q	A	L	S	F	E	D	Q	I	C	T	P	D	L	V	F	F	L	A	C			
UniRef90_D8UMJ8	I	E	S			G	G	K	F	F	L	I	D	G	F	P	R	A	L	D	Q	A	E	Q	F	E	G	N	I	M	P	C	K	A	V	L	F	F	D	C			
UniRef90_UPI00036E33EA	E	H	H	K	D	V		D	G	F	L	I	F	D	G	F	P	R	T	V	R	Q	A	E	L	D	E	M	L	A	K	T	G	H	P	V	S	I	D	V			
UniRef90_B9E9L2	L	L	E	E	D	A	K	R	G	F	L	L	D	G	F	P	R	T	V	E	Q	A	T	G	R	R	I	C	E	T	C	G	T	T	Y	H	L	V	F	N			
UniRef90_I879W0	L	G	E	A	D	A	R	K	G	F	L	L	D	G	F	P	R	N	A	A	Q	A	M	L	Q	R	L	G	Q	P	A	I	D	K	A	I	H	L	H	V			
UniRef90_U3PM34	R	S	L	A	D	G	H	T	K	F	L	L	D	G	F	P	R	E	M	E	Q	A	I	K	F	D	D	E	I	C	E	S	A	F	V	L	F	L	T	C			
UniRef90_L7WE17	E	K	T	P	D	A	E	G		F	I	F	D	G	F	P	R	T	D	A	Q	A	K	A	L	D	E	K	G	T	E	I	A	G	M	V	A	L	E	V			
UniRef90_UPI00045496D7	V	A	S	L	G	N	T	R	G	F	L	L	D	G	F	P	R	E	V	K	Q	G	E	E	F	G	R	K	I	G	D	P	H	L	V	I	C	M	D	C			
UniRef90_K0J1A0	L	G	K	D	D	C	N	G	Y	L	L	D	G	F	P	R	T	L	K	Q	A	T	G	R	R	V	C	P	T	C	G	A	T	Y	H	I	V	F	N				
UniRef90_UPI0003B4CCB4	L	D	M	P	E	M	K	N	G	Y	L	L	D	G	F	P	R	T	I	P	Q	A	E	M	L	R	S	K	N	G	S	I	D	A	V	I	S	I	Q	V			
UniRef90_C4GC11	I	G	Q	D	D	C	E	D	G	F	V	L	L	D	G	F	P	R	T	I	P	Q	A	R	G	R	R	V	C	P	S	C	G	A	T	Y	H	L	V	A	L		
UniRef90_G3MLZ3	R	K	A	L	J	A	T	A	K	G	F	L	L	D	G	Y	P	R	N	V	E	Q	G	E	R	F	E	A	E	V	C	K	C	G	A	T	N	L	L	Y	F	E	V
UniRef90_K9PN08	L	S	Q	P	D	A	Q	S	G	W	L	L	D	G	F	P	R	N	V	S	Q	A	A	F	L	D	E	L	L	V	T	I	N	Q	N	D	E	R	V	V			
UniRef90_K0DC36	S	Q	A	D	V	E	E	T	G	F	M	L	D	G	Y	P	R	N	E	A	Q	A	E	F	L	D	N	Y	L	D	K	K	S	N	S	V	S	A	T	L			
UniRef90_UPI0003C29558	M	T	S	L	G	E	T	K	G	F	L	I	D	G	Y	P	Q	N	E	V	K	Q	A	V	E	E	F	E	M	V	G	E	P	K	L	V	L	C	M	D	C		
UniRef90_U1GSP8	K	M	S	N	D	G	T	G	R	F	L	I	D	G	F	P	R	K	M	D	Q	A	A	F	F	E	S	S	V	C	H	S	R	C	T	I	F	L	D	C			
UniRef90_R7B4W5	I	H	E	A	D	C	N	G	Y	L	L	D	G	F	P	R	T	I	P	Q	A	E	S	R	R	A	C	L	K	C	G	A	T	Y	H	I	Q	F	A				
UniRef90_C0VZ30	L	E	A	P	D	V	D	N	G	C	L	L	D	G	Y	P	R	T	V	E	Q	A	H	Y	L	R	D	K	G	K	E	I	D	L	V	L	E	I	V	T			
UniRef90_G0VJ16	E	N	Y	D	K	G	M	K	K	F	L	V	D	G	F	P	R	K	M	D	Q	A	L	S	F	E	E	Q	I	V	P	S	K	F	I	L	F	F	D	C			
UniRef90_R7CP34	I	Q	Q	P	D	A	N	G	Y	V	I	F	D	G	F	P	R	T	I	P	Q	A	E	C	R	R	A	C	L	K	C	G	A	T	Y	H	V	V	H	A			
UniRef90_UPI000479DF89	E	K	N	P	D	A	S	G		F	I	F	D	G	F	P	R	T	T	A	Q	A	K	F	L	T	T	K	G	M	K	I	D	A	T	I	A	L	E	A			
UniRef90_F9YUY5	E	N	N	P	Q	A	N	G		F	I	F	D	G	F																												

QUERY	G	P	E	T	M	T	K	R	L	L	K	R	G	E	T	S	G	R	V	D	D	N	E	E	T	I	K	K	R	L	E	T	Y	Y	K	A	T	E	P	V	
UniRef90_C1LL44	S	E	E	V	M	R	K	R	L	L	K	R	A	E	T	S	N	R	V	D	D	N	E	E	T	I	V	K	R	F	R	T	F	N	E	L	T	K	P	V	
UniRef90_R6S6K1	P	E	D	E	L	M	T	R	L	L	K	R	G	E	T	S	G	R	A	D	D	N	E	E	T	I	K	K	R	L	V	V	H	S	Q	T	A	P	V		
UniRef90_UPI0002A4AADF	K	S	E	T	M	I	K	R	L	L	K	R	G	E	T	S	G	R	A	D	D	N	E	E	T	I	K	K	R	L	D	L	V	Y	Y	K	A	T	E	P	V
UniRef90_A3U716	E	D	E	V	L	V	Q	R	L	L	E	R	G	K	T	S	G	R	K	D	D	N	E	E	T	I	K	N	R	I	K	V	Y	Y	N	K	E	T	A	P	V
UniRef90_D3IMC2	P	E	D	E	L	M	K	R	L	L	V	L	R	G	Q	Q	S	G	R	T	D	D	N	E	E	T	I	K	K	R	L	G	V	H	N	K	E	T	A	P	V
UniRef90_K1R282	E	E	Y	Y	M	Q	R	R	L	L	D	R	G	K	A	T	Q	R	I	D	D	N	E	E	T	I	K	Q	N	R	I	S	F	F	K	N	N	T	A	P	V
UniRef90_C0G189	P	P	K	V	R	S	V	C	D	K	C	G	G	E	L	Y	Q	R	S	D	D	T	E	E	T	V	K	Q	R	L	E	V	Y	N	N	Q	T	E	P	V	
UniRef90_N0BAU5	P	P	K	E	E	G	K	C	D	K	C	G	G	E	L	Y	Q	R	S	D	D	T	E	E	T	V	K	Q	R	L	K	V	Y	K	S	Q	T	E	P	V	
UniRef90_UPI0003B4FBB6	Y	F	T	A	D	N	D	V	L	V	K	R	M	L	A	R	G	R	A	D	D	T	E	P	E	V	I	K	N	R	L	D	V	N	G	K	L	T	E	P	V
UniRef90_C9LE48	P	D	E	M	L	M	E	R	L	I	N	R	G	K	T	S	G	R	A	D	D	N	E	E	T	I	R	K	R	L	D	V	Y	K	N	Q	T	A	P	V	
UniRef90_E4T6Y3	E	K	D	E	L	T	D	R	L	L	K	R	G	Q	T	S	G	R	S	D	D	N	E	E	T	I	Q	K	R	L	E	V	Y	E	L	Q	T	A	P	V	
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UniRef90_U6NUB5	P	E	N	V	M	V	E	R	L	M	H	R	A	K	T	S	G	R	A	D	D	N	E	E	T	I	K	K	R	L	K	T	F	S	R	D	Q	T	A	P	V
UniRef90_D2VVU5	P	E	E	L	L	E	Q	R	L	L	E	R	G	K	T	S	G	R	A	D	D	N	E	E	T	I	K	K	R	F	K	T	Y	N	G	K	L	T	A	P	V
UniRef90_G0IVS5	P	E	E	E	L	K	N	R	L	L	E	R	G	K	T	S	G	R	D	D	Q	D	E	E	K	I	N	N	R	I	K	V	Y	N	Q	E	T	A	P	V	
UniRef90_E4TT93	P	E	E	E	L	K	K	R	L	L	K	E	R	G	K	T	S	G	R	T	D	D	Q	D	E	A	I	E	N	R	I	K	V	Y	Q	E	E	T	A	P	V
UniRef90_E5GCA2	P	E	E	E	M	E	R	R	I	L	N	R	N				Q	G	R	D	D	N	E	E	T	I	E	K	R	F	K	V	F	L	Q	S	S	A	P	V	
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UniRef90_G8R789	P	D	E	E	L	T	S	R	L	L	E	R	G	K	D	S	G	R	D	D	Q	D	N	E	E	V	I	K	N	R	L	K	V	Y	N	D	Q	T	A	P	V
UniRef90_A1SNJ7	D	Q	D	E	I	V	G	R	L	L	Q	R	A	Q	V	E	G	R	A	D	D	T	E	D	V	I	R	R	R	Q	D	L	Y	L	E	Q	T	A	P	V	
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UniRef90_F2IKB1	G	L	E	V	A	E	N	E	L	R	E	V	S	R	G	R	P	D	D	A	N	E	P	D	V	I	Q	N	R	L	N	V	Y	K	N	E	T	A	P	V	
UniRef90_H0XAR7	A	N	Q	R	L	K	E	R	L	L	K	R	A	E	Q	Q	G	R	P	D	D	N	L	K	A	T	Q	R	R	L	M	N	F	K	Q	N	A	A	P	V	
UniRef90_D8UMJ8	P	E	E	E	M	E	K	R	L	L	K	R	G	E	T	S	G	R	S	D	D	N	E	E	T	I	R	K	R	F	H	T	F	L	E	Q	S	L	P	V	
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UniRef90_B9E9L2	P	P	K	V	E	G	I	C	D	I	D	G	G	K	L	Y	Q	R	A	D	D	N	E	E	T	V	R	N	R	L	D	V	N	I	K	Q	T	K	P	V	
UniRef90_I8T9W0	P	D	E	E	I	V	R	L	L	E	R	A	K	I	E	G	R	V	D	D	T	E	P	V	I	R	K	R	L	E	V	Y	N	A	E	T	K	P	V		
UniRef90_J3PM34	P	E	E	K	L	L	P	R	L	I	E	R	G	K	T	S	G	R	E	D	D	N	E	E	S	I	K	K	R	F	R	T	F	V	Q	T	S	M	P	V	
UniRef90_L7WE17	D	D	E	V	L	V	E	R	L	L	E	R	G	K	D	S	G	R	D	D	A	N	E	G	V	I	R	D	R	I	S	V	Y	Y	K	Q	T	A	P	V	
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UniRef90_C4GC11	P	P	E	K	E	G	V	C	D	A	C	G	S	E	L	I	Q	R	A	D	D	S	E	A	T	I	A	N	R	L	Q	V	Y	H	E	Q	T	A	P	V	
UniRef90_G3MLZ3	K	D	E	T	M	K	E	R	L	L	K	R	G	Q	T	S	G	R	V	D	D	N	E	E	T	I	T	K	R	I	K	T	F	H	D	E	S	E	P	V	
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UniRef90_U1GSP8	P	E	D	V	M	K	E	R	L	L	N	G	K	T	S	G	R	T	D	D	N	E	E	S	I	K	K	R	F	R	T	F	V	E	T	S	M	P	V		
UniRef90_R7B4W5	A	P	K	K	E	G	I	C	D	K	C	G	S	E	L	V	L	R	D	D	D	K	P	E	T	V	Q	K	R	L	E	I	Y	H	D	Q	T	H	P	V	
UniRef90_C0VZ30	N	Q	E	E	V	I	A	R	L	L	K	R	A	E	I	E	H	R	A	D	D	N	E	E	V	I	R	H	R	M	E	V	Y	R	E	M	T	E	P	M	
UniRef90_G0VJ16	P	E	D	V	M	L	E	R	L	L	D	R	G	K	T	S	G	R	V	D	D	N	E	E	S	I	K	K	R	F	K	T	F	E	E	T	S	M	P	V	
UniRef90_R7CP34	A	P	K	V	E	G	V	C	D	T	C	G	E	K	V	L	R	D	D	D	Q	P	E	T	V	R	K	R	L	N	V	Y	H	E	Q	T	A	P	V		
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UniRef90_F9YUY5	D	D	E	A	L	I	A	R	L	L	E	R	G	K	V	S	G	R	A	D	D	Q	D	E	A	L	R	N	R	F	V	E									

QUERY	I	A	F	Y	E	K	R	G	I	V	R	K	V	N	A	E	G	S	V	D	D	V	F	S	Q	V	C	T	H	L	D	T	L	K					
UniRef90_C1LL44	I	E	Y	Y	K	K	N	D	G	K	Y	C	H	I	N	D	A	S	G	T	M	E	D	F	F	A	D	I	T	H	E	L	D	K	F				
UniRef90_R6S6K1	I	D	W	Y	K	K	N	D	G	K	Y	C	H	I	N	D	A	S	G	T	M	E	D	F	F	A	D	I	T	H	E	L	D	K	F				
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UniRef90_E4LE48	I	E	W	Y	K	T	D	G	K	I	H	R	A	V	I	N	D	G	H	G	S	A	L	E	E	I	T	F	A	D	V	K	K	V	L	D	S	L	L
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UniRef90_Q8XHU4	I	D	F	Y	A	N	K	K	Q	L	S	V	V	I	N	D	G	T	G	A	I	S	E	N	E	V	F	G	D	R	I	C	R	I	L	D	K	L	
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UniRef90_D2VVU5	I	G	F	Y	K	K	T	D	R	V	K	T	I	N	N	D	S	S	K	T	Q	E	E	V	F	A	E	V	C	A	L	F	D	D	K	L			
UniRef90_G0IVS5	A	N	F	Y	E	K	Q	K	L	S	K	I	I	N</																									

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UniRef90_B5JL76	L	N	F	Y	K	K	K	N	L	L	L	H	E	D	A	D	A	T	A	S	I	D	E	K	V	F	E	S	I	L			
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UniRef90_G9PH32	V	D	V	Y	R	E	R	G	L	L	L	V	Q	V	D	G	L	L	G	P	I	E	E	E	V	A	G	R	V	H	K		
UniRef90_O66490	I	E	Y	Y	K	K	K	G	L	L	L	R	I	L	D	A	S	K	P	I	D	E	E	V	T	E	R	I	Q	V	L		
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UniRef90_T0F470	L	D	Y	A	A	K	G	N	L	L	L	S	R	I	N	G	V	G	S	L	E	E	Q	V	T	E	L	I	K	K	E		
UniRef90_Q5B5C2	V	T	E	F	E	K	Q	D	K	V	I	S	V	I	A	A	T	G	T	G	L	E	E	V	E	R	I	Q	A	G	F		
UniRef90_U2TBC2	V	D	V	Y	S	K	R	G	L	L	L	V	E	V	D	G	L	G	E	I	D	E	E	V	A	E	R	V	R	A	L		
UniRef90_E5WSZ4	L	D	F	Y	E	T	K	S	L	L	L	R	N	I	D	G	Q	Q	D	I	N	K	V	F	F	S	D	L	D	A	L		
UniRef90_V9L339	V	K	Y	F	Q	E	R	S	L	L	L	V	T	L	D	A	D	R	D	E	E	N	K	V	F	F	S	D	L	D	A	L	
UniRef90_M8AUM5	V	Q	Y	Y	D	S	K	G	K	V	V	K	K	I	N	A	A	K	P	I	P	E	E	V	F	E	D	V	K	T	I	F	
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UniRef90_R9XDA7	V	E	Y	F	D	K	Q	K	V	V	R	L	S	C	D	Q	G	S	V	M	E	E	V	Y	S	R	Q	V	E	A	A	V	
UniRef90_G0SXY2	A	D	Y	Y	K	K	K	G	I	L	L	W	T	G	V	D	A	A	Q	S	P	K	T	V	W	A	S	L	S	K	I	F	
UniRef90_D5E6Q3	T	D	Y	Y	A	N	K	N	L	L	L	V	H	I	N	G	E	K	D	I	N	S	V	F	D	D	I	R	V	L	L		
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UniRef90_T1G1C3			N A I L L	G P P	G S G K G T	Q A P K L	S E K F C S C H L	S T G	
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UniRef90_D6Y535			R V V L V	L G P	G A G K G T	Q A Q Y I	A S H L S V P K I	S T G	
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UniRef90_Q8VY84		K K S T	V V F V L	L G P	G S G K G T	Q C A N V	V K H F S Y T H I	S A G	
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UniRef90_M7SCE9		V T	V V F V L	L G G P	G A G K G T	Q C A R L	V S D Y G F T H I	S A G	
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UniRef90_R6UMZ9			N I L I M	G G P	G A G K G T	M S A K I	V E K F N V N H I	S T G	
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UniRef90_W2RRI5	Q K	V T V V Y	I L G	P	G A G K G T	Q S A H L	V S D Y G F T H I	S A G	
UniRef90_A8PAA1			L R T I L	I G P	G A G K G T	Q A P R I	R D E F C V C H I	A T G	

	50	60	70	80
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UniRef90_D7FPH2	E L L R Q E R A S G S S D G Q L I D D Y I A E A G R I V P V I A I S L I A L L R K A M			
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UniRef90_K9FJZ7	D I L R A A V A A K S E L G Q K A E S Y M N A G A G L V P D D E L I L D L I L R E R			
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UniRef90_J3NJ29	D L L R E Q E R P S G S E F G G L I K R Y I R D A G K I V P M E V T I Q L L E N A M			
UniRef90_A4FPK1	D L F R Y H I G N N T P L G E E A K R Y L D A G E L V P D E I T N E M V L E R			
UniRef90_K7RQN1	D I F R A N I K G G T E L G K K V K A I M D A G E L V P D D Q V T D E I V A D R			
UniRef90_UPI0002483D3C	D L L R D A I S A Q S D L G K Q A Q T H V I D E T G E L V P D D L I V D L M R D S F			
UniRef90_D6Y535	D I F R A N V S R G T E L G K L A K E Y M D R G E L V P D D E V T I A M V R D R			
UniRef90_A0A022QAM8	D L L R H E I S S N T E N G S M I L N T I K E G K I V P S E V T V K L I Q K A I			
UniRef90_R5S7S1	D I F R E N I K N G T E L G K K A K E Y M D A G N L V P D E L L V C D L V V D R			
UniRef90_A3DJJ3	D L F R S N I K N G T E L G R K A K E Y I D K G L V P D E L T V D I V K D R			
UniRef90_F7NF76	D M F R E A V K A Q T E L G K Q A K A F M D V G Q L V P D S V T I G I V K E R			
UniRef90_K2B6J0	D I L R E N V K A G T A L G A N A K S Y M E K G L V P D G V I S M I E E R			
UniRef90_UPI0000F624FA	D M L R A M V A S G S E L G K K L K A T M D A G K L V S D E M V V E L I E K N			
UniRef90_Z9JW75	D I F R A N V S Q E T E L G V L A K S Y M D K G E Y V P D S V T N D M V R D R			
UniRef90_V6K7F8	D L F R A N I S Q G T D L G K Q A K S Y M D A G N L V P D E V T I A M A L D R			
UniRef90_C6HW99	D L L R E A I K E K T V L G E R A K S F M E R G E L V P D A L V I D L V N E K V			
UniRef90_V6IU76	D M F R Q A I K D G T P L G K Q A K S F I D K G A L V P D E V T I G I V N E R			
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UniRef90_X1GJU8	D L F R Q A L E Q G T E L G I R A K S Y M E K G V L V P D E I T I Q M V L A R			
UniRef90_H1XTN4	D M L R E A I R Q G T E L G K K A E E I I A R G D L V S D D I M L G L I D E R			
UniRef90_UPI00029A8397	D L L R A N I S Q G T E L G K Q A K A Y M D A G N L V P D E V T I G M A K A R M			
UniRef90_G3BA14	D L L R A E Q A R E S K Y G E L I A T C I K D G T I V P Q E V T I A L L K Q A I			
UniRef90_B3QS41	D M L R S A I K Q G T E L G L K A K S F I D K G E L V P D D V I I G M I E K E Y V			
UniRef90_U2WUW7	D M L R A A V A A E T E I G L K A K D I M A R G D L V P D E V V V G I I S D R			
UniRef90_R9ARL8	D M L R S E V G K K S D L G V E A K K I M D A G G L V P D E I V V G M I K N Q L			
UniRef90_A0A024SIK0	D L L R E Q N R P G S Q F G Q L I K D Y I K D G L I V P M E V T I K L L E N A M			
UniRef90_UPI0004413195	D L L R E Q H R E G S E F S K L I Q D C I K N G T I V P M E V T I K L L E N A M			
UniRef90_B8D0S9	D L F R Q A I R E E T P L G K E A K K Y L D S G E L V P D E I T I G I V R E R			
UniRef90_A8F9A6	D M F R A A M K E E T Q L G L E A K S F I D K G E L V P D E V T I G I V R E R			
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UniRef90_I0K3T9	D L L R S Q I A A G T A L G L Q A K T L M D Q G M L V P D E V V I G M I E S K			
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UniRef90_G8RKD6	D L F R H I G A R T G L G I R A K R Y L D A G E L V P T A V T N A L V D D R			
UniRef90_V2B6J8	D M L R A Q V A R K T P L G K E A K K I M D Q G G L V S D D I M L N M I R N E L			
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	90	100	110	120
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UniRef90_K9FJZ7	L G Q E D A S K G W L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
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UniRef90_UPI000462F240	L N D D D A K E G F L L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
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UniRef90_UPI0003B6E263	L S Q P D A E A G F L L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
UniRef90_J3NJ29	K E A M K K K P G F L L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
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UniRef90_K2B6F0	L S K P D C K N G F L L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
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UniRef90_B3QS41	L V Q E N R E Q G F L L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
UniRef90_U2WUA7	L I E D S D C S D G F L L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
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UniRef90_A8F9A6	L G K N D C E Q G F L L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
UniRef90_K7FVM3	I A S L G D T K G F L L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
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UniRef90_F3ZJ22	E Q E D A A N G F L L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
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UniRef90_R6LQE6	L V S Q D D C T K G Y V L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
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UniRef90_UPI0000477615D	L K V N P D A N G F L L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
UniRef90_V3Z5F5	L N K P T C R N G F L L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
UniRef90_W4KJU3	E N N E A C K N G F L L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
UniRef90_G9WKK8	I H K E D C K N G Y L L	D G G F P R T V L Q A E K L D G M L E G S S L D A V S Y L M V F		
UniRef9				

UniRef90_T1G1C3	P	P	K	V	P	M	K	D	L	I	T	G	E	P	I	V	H	R	S	D	D	N	E	P	E	A	L	K	R	L	D	N	Y	H	K	Q	T	T	P	L				
UniRef90_UPI000369FAAC	D	V	D	A	V	A	R	L	R	L	T	K	R	A	E	I	E	G	R	S	D	D	T	I	E	T	A	K	R	R	Q	Q	V	Y	A	N	K	Q	T	A	P	L		
UniRef90_G2FPG0	N	K	P	E	K	E	G	V	C	Q	C	G	G	E	L	I	Y	G	R	S	D	D	T	I	E	T	A	K	R	R	Q	Q	V	Y	A	N	K	Q	T	A	P	L		
UniRef90_D7FPH2	P	E	D	V	L	E	K	R	L	L	S	R	G	K	S	S	G	R	T	D	D	N	A	E	T	A	K	R	R	F	Q	T	Y	V	E	Q	M	T	L	P	V			
UniRef90_I4X7N5	P	P	A	T	A	G	V	C	D	K	D	G	G	E	L	I	Y	G	R	S	D	D	K	P	E	T	V	T	K	R	L	A	V	N	M	Q	K	T	Q	P	L			
UniRef90_K9FJZ7	N	L	E	V	P	D	N	V	L	I	S	R	G	L	E	A	R	G	R	K	D	D	K	P	E	N	V	I	T	K	R	L	L	E	V	N	M	R	K	Q	T	E	P	L
UniRef90_Q6NMK6	P	E	E	E	M	V	K	R	V	L	N	R	N				Q	G	R	I	D	D	N	I	T	T	M	K	K	R	L	K	V	I	F	N	A	L	N	R	A	P	V	
UniRef90_UPI000462F240	E	F	R	V	P	E	E	L	V	S	R	L	Q	G	R	G	A	D	D	T	E	D	E	I	T	T	M	K	K	R	R	F	K	V	I	R	D	E	T	A	P	L		
UniRef90_K0P5J9	P	N	V	H	L	K	R	L	R	E	R	A	T	I	E	A	R	P	D	Q	D	D	E	D	K	I	K	K	A	R	M	H	I	Y	Q	Q	K	T	L	P	M			
UniRef90_UPI00024B7885	H	D	E	L	V	L	R	L	V	S	R	G	K	Q	Q	S	G	R	I	D	D	N	I	E	T	I	K	K	R	R	L	Q	L	F	H	T	T	K	T	E	A	P	L	
UniRef90_A9WST7	D	D	E	L	V	R	R	L	L	G	R	A	K	E	Q	G	R	S	D	D	T	E	S	V	I	R	R	R	R	L	D	V	Y	A	E	T	Q	T	A	P	V			
UniRef90_UPI0003B6E263	D	T	D	E	V	A	R	L	L	N	R	A	K	E	Q	G	R	S	D	D	T	E	S	V	I	R	R	R	R	L	D	V	Y	A	E	T	Q	T	A	P	L			
UniRef90_J3NJ29	P	E	A	E	M	E	R	R	L	L	D	R	G	K	T	S	G	R	S	D	D	T	E	A	E	S	I	R	R	R	R	F	R	T	F	V	E	T	S	M	P	V		
UniRef90_UPI0000483D3C	E	F	D	V	P	E	E	L	V	K	R	L	T	G	R	G	A	D	D	T	E	D	V	I	R	R	R	R	L	Q	V	Y	G	S	E	T	A	P	L					
UniRef90_A4FPK1	D	P	E	L	L	T	D	R	L	L	K	R	A	E	I	E	G	R	A	D	D	N	E	E	T	I	R	R	R	M	S	V	Y	I	S	Q	T	E	A	P	L			
UniRef90_UPI0002483D3C	Y	F	D	A	P	E	D	L	V	E	R	M	L	K	R	G	Q	D	D	S	E	E	D	L	I	R	R	Q	R	L	L	Q	V	Y	L	H	Q	T	V	A	P	L		
UniRef90_D6Y535	P	P	A	V	E	G	V	C	D	A	C	G	G	E	L	F	Q	R	D	D	D	R	E	E	T	I	R	R	R	R	L	L	Q	V	Y	Q	E	Q	T	A	P	L		
UniRef90_A0A022QAM8	P	E	E	E	M	V	K	R	V	L	N	R	N				Q	G	R	I	D	D	N	L	D	T	V																	

	170	180	190
UniRef90_T1G1C3	I D Y Y G K R D L H R H V	D A S Q S P N K V	F S E I V N L L E N L
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UniRef90_G2FPFG0	I A F Y S E E K G L L V T V	D G L G T P V E E K V	F A A R I A E A G L E S
UniRef90_D7FPH2	I V E E F Q Q K G L L V P R N V	D G N Q Q D I E S V F	F R D V L L L G L K S V
UniRef90_I4X7N5	I L D F Y E S K N V L E N V	D G N Q Q D I E S V F	F R D V L L L G L K S V
UniRef90_K9FJZ7	I E F F R S R K Q L L V S V	D N G H Q A M G S V	F A D L D K Q V L L K Q A
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UniRef90_A9WST7	V V R Y Q K L G L L A K V	D G L G A I D E V T	D R I M A A L
UniRef90_UPI0003B6E263	V Q T Y A D R E G R V V K I	D G M G E V D E V T	A R L T D A L
UniRef90_J3NJZ9	I D F H Y E R E G R V V K I	P A T A A P D A V	N A E T R K Q L A S
UniRef90_A4FPK1	L N Y Y R D K L I R I	D A V G S V E I D	T E R A L K A L
UniRef90_K7RQN1	I D H Y R Q A G L L V P V	D G V G E I S Q V I	R D R I F S A L D A
UniRef90_UPI0002483D3C	I D F Y R R R Q L G L V E I	D G S R P E S E I T	D A I L S E V I Q P L
UniRef90_D6Y535	I S F Y E K E G L L A G I	D A T G P V E I E V	T Q R A L S V L
UniRef90_A0A022QAM8	I E H Y S K K G K L Y K I	D G T G S E D E I I	V E R V R P V F A A L R
UniRef90_R5S7S1	I D Y Y K K K G L L K V I	D G S K G L D T C	F E E I C G I L E S G V K
UniRef90_A3DJJ3	I E Y Y E K K G K L L T V	H G Q E G V D T T	K E V L N A L
UniRef90_F7NF76	I E Y Y Q D K G L Y T E V	N G L Q S I D R V	M D D I V K S L
UniRef90_K2B6F0	L D Y Y T K R N I V L N V	D G T G E I N E I	F K R I T A G L E A
UniRef90_UPI0000F624FA	V E Y Y C K R G I H S A V	D A S Q T P D V V	F A S I L A A F S K
UniRef90_Z9JW75	I A V Y E E R S L L R R V	D G M A S I D E V T	F A A L L A E L
UniRef90_V6K7F8	I D H Y R E Q G L V V I T	S A L L G K V A E V	T K R A M A A L E
UniRef90_C6HW99	L D F Y R Q R N L L Q T I	D A S R S I D V F	K R A D K L V S K I K
UniRef90_V6IU76	L D F Y E A K G S L K T I	N G D Q A I D S V	F K E V S E I L
UniRef90_UPI0003B320C6	V N F Y S E L G K Y A R I	D G V G S V D E I	T R R V L E A L Q
UniRef90_X1GJU8	I D Y Y A R R G K L L E I	D G E G S A D E V T	T R R I V A V L H K
UniRef90_H1XTN4	R D Y Y R Q F N K F Y S I	D G N R T V N E V F	N E I L E I L T S V
UniRef90_UPI00029A8397	I D H Y R A Q G L V V I T	S A L G K V D E V T	E R A M A A L S K
UniRef90_G3BAI4	V I D Y F D K Q G R V V K V	R C D H P V D Q V	V A S V L E A L K Q
UniRef90_B3QS41	L D Y Y K K K G T A A E V	D G T Q S I D K V	S K E I D E I L T S
UniRef90_U2WUA7	S E Y Y A Q K G L H R P I	D G M Q D M D T V	T E D I V E I L
UniRef90_R9ARL8	V D Y Y R N Q N K H R V	D A S Q S P K L V	W E N L S A I F A T N K
UniRef90_A0A024SIK0	V N Y Y E S Q G K V I K V	D A T P A P E D	
UniRef90_UPI0004413195	I D Y Y R S L N K V A E I	D S T G S V D E V	H A K A A T V V N A I
UniRef90_B8D0S9	I E Y Y R N Q G N L K T V	E S T G G I D E V	F N K I Q E I I G G L N
UniRef90_A8F9A6	L N F Y S E K G Y L A N I	D G A K H I N D V	F A D I K D L L
UniRef90_K7FVM3	I A Y Y E K K T P L C K A	N A E G T P E E F	L Q V C T S V D D E
UniRef90_I0K3T9	A D Y Y K Q Q G K F A A I	S G V G G I D E I	F A L I C E K I
UniRef90_F3ZJZ2	I D F Y R A Q D L V K T I	P A L L G K V N E V	T E R A L A A L E E E
UniRef90_E2ZE45	I D Y Y K S N L Y I E V	D G Q Q D M D S V	F N A I V A S L E K
UniRef90_R6LQE6	I D Y Y T S A G L I K S V	D G T V D M E D V	F G A I V S I L
UniRef90_G8RKD6	L E F Y R V P L Q T V	D A Q G S V I E K V	F E R T L R A V
UniRef90_W2S6J8	V A Y Y Q D K G I W S G I	D A S Q E P G L V	W K N I L G V F
UniRef90_UPI000477615D	A N Y Y K S Q D K F K S I	N G I G D I D I	F N K L T K A I D A L
UniRef90_V3Z5F5	V D Y Y S K K G L H V A V	D A S Q P P K I V	F A A I C A A F S A
UniRef90_W4KJU3	V Q Y Y K N K G L W H R I	D A A Q S P S V V	W D N L K K I V F
UniRef90_G9WKK8	I S Y Y K K E N L L E E V	D G M E K L D A V	F E K V K E I N K
UniRef90_Q8RE31	L D Y Y K V Q N K V T E I	D G T K K L E D I	T Q D I F K I L
UniRef90_R7VI69	V D Y Y S K R G L H S A V	D A S K S P D T V	F A A I Q A I F S A A K
UniRef90_U6IT31	I E Y Y E K K G L V V H I	N G D Q S K E D V	F Y E V I R K L D D P L
UniRef90_X2H548	I S E Y Q H E A K Y F R I	D G T Q P V A D V	T K E L A K I L D D T L
UniRef90_J9JQL8	I E A Y K S K V V I I	S A E Q S A E A V	F A E A E K K L
UniRef90_Q1QN09	I H Y Y S E R G K L L T V	D G M P I E Q V	T R D I Y R V L E
UniRef90_B4RU55	V N Y Y S A E A E Y H K L	D G T R P V E E V	S A E L A E R L
UniRef90_UPI00041D7214	T P F Y A E R G L L K P V	D G M A P I E D V	A E A I R T A L E R L
UniRef90_E1G6K7	I E H Y A K A N L V R Q V	S A T A S P D E V	Y E E V E K I F K N
UniRef90_Q8VY84	I S Y Y E S K G K L R K I	N A A K S S E E V	F E A V R V L F A S
UniRef90_W1Q3E2	L D Y Y E E R G L L Y R V	D G Q Q A I D K V	Y E D I R Q I L S S V
UniRef90_M7SCJ9	V E Y Y S K Q D K V L A V	D A R P K P E D V	Y R T T Q K E L E S
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UniRef90_M5ECB6
UniRef90_B7S454
UniRef90_V4PA50
UniRef90_A1S566
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UniRef90_C1DX53
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UniRef90_UPI0003B6E8D8
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UniRef90_N1ZLJ0
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UniRef90_U4QVL1
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UniRef90_F2IU08
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UniRef90_Q1N1Z8
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UniRef90_Q65UF7
UniRef90_G8ANK4
UniRef90_B4LFT3
UniRef90_Q82TF5
UniRef90_Q3B4C0
UniRef90_UPI0003672840
UniRef90_C2CJX2
UniRef90_A6F7X4
UniRef90_M5EAU6
UniRef90_UPI0004438224
UniRef90_UPI000375AC1A
UniRef90_N1J9F7

[illegible]

	90	100	110	120																																											
UniRef90_U5EZ29	V	K	V	K	S	T	T	I	G	Y	L	I	D	G	Y	P	R	E	T	P	A	Q	G	E	P	E	F	E	K	F	I	A	P	V	D	I	L	L	Y	F	E	C					
UniRef90_M5ECB6	E	N	N	R	A	C	R	K	G	F	V	L	I	D	G	F	P	R	T	T	Q	A	Q	A	E	K	L	D	Q	M	L	E	Q	R	H	K	V	I	F	Q	K	L	D	H	V	V	C
UniRef90_B7S454	H	E	N	V	Y	A	K	S	T	K	F	L	I	D	G	F	P	R	T	T	Q	A	Q	A	E	K	L	D	Q	M	L	E	Q	R	H	K	V	I	F	Q	K	L	D	H	V	V	C
UniRef90_V4PA50	L	I	P	A	A	E	A	A	G	G	A	L	I	D	G	F	P	R	T	T	V	A	Q	A	E	M	L	G	E	R	G	A	K	I	D	K	V	V	R	L	K	V	I	D	V	C	
UniRef90_A1S566	L	I	A	Q	D	D	C	A	N	G	F	L	I	D	G	F	P	R	T	T	I	P	Q	A	D	A	M	A	K	E	A	G	V	I	P	I	D	F	V	L	E	I	D	V	C		
UniRef90_Q5P106	L	I	K	E	D	D	C	K	S	G	Y	M	F	I	D	G	F	P	R	T	I	P	Q	A	D	A	M	K	E	A	G	V	I	P	I	D	F	V	L	E	I	D	V	C			
UniRef90_K1Z6F4	L	L	A	P	D	C	H	K	N	G	Y	V	L	I	D	G	F	P	R	T	E	A	Q	A	E	G	R	R	V	C	G	T	G	A	S	Y	H	I	E	Y	S	K	I	D	V	C	
UniRef90_D4JDN5	S	H	L	A	D	K	N	G	Y	L	I	D	G	F	P	R	T	T	L	V	D	Q	A	K	A	F	E	E	C	K	K	C	G	A	I	F	N	I	L	Y	S	K	I	D	V	C	
UniRef90_A5GAW3	L	E	K	N	D	C	L	N	G	F	L	I	D	G	F	P	R	T	T	V	D	Q	A	E	A	L	K	H	M	L	V	C	M	N	M	S	I	E	H	V	V	C	I	D	V	C	
UniRef90_C1DX53	E	E	F	K	D	K	N	I	L	I	D	G	F	P	R	T	T	V	V	Q	A	E	R	G	R	I	C	P	N	C	G	A	S	Y	H	I	L	F	N	C	I	D	V	C			
UniRef90_W7DTF2	I	Q	V	D	C	K	N	G	F	L	I	D	G	F	P	R	S	L	G	Q	A	E	R	F	S	C	A	K	C	G	A	S	Y	H	K	L	F	K	Q	C	I	D	V	C			
UniRef90_UPI0003688E61	E	K	V	K	G	I	K	D	G	F	L	I	D	G	F	P	R	T	L	E	Q	A	K	M	R	R	S	C	K	Q	C	N	E	V	Y	H	L	E	A	K	N	C	I	D	V	C	
UniRef90_A4BGU1	I	Q	Q	P	D	C	A	N	G	F	L	I	D	G	F	P	R	T	L	P	Q	A	E	A	L	K	E	Q	G	I	R	I	D	V	Y	H	V	M	H	N	C	I	D	V	C		
UniRef90_L9VEN9	E	A	A	D	G	F	V	L	I	D	G	F	P	R	N	Q	D	Q	A	E	Y	R	R	V	C	S	N	C	G	A	N	I	Y	H	V	K	F	N	C	I	D	V	C				
UniRef90_UPI00034DC8F4	I	S	Q	P	D	C	E	N	G	F	L	I	D	G	F	P	R	T	I	P	Q	A	D	A	M	K	D	A	G	V	K	L	D	H	V	L	E	I	D	V	C	I	D	V	C		
UniRef90_UPI000472088B	L	N	A	H	P	T	A	N	G	F	L	I	D	G	F	P	R	T	V	A	Q	A	E	A	L	D	Q	H	G	T	D	L	S	A	M	L	C	L	Q	V	C	I	D	V	C		
UniRef90_Q11DV1	I	A	Q	P	D	C	A	K																																							

	130	140	150	160
UniRef90_U5EZ29	K N E T L P V A R D L L K R E S A V V R A D D D N E E A L I K T R R I A T F Y H K T N T E K I	P E E K P M T D D V T G E G Q L V Q R N D D D D N M E Q V I L R K K R R F L E V T T F E L E Q T T A P I	D E Q A L V T R L L E T R R F A E E G R S D D D D N P E A Y K V R L L A A Y F N A Q T T A P L	P D E E I V N R M S G R R A V H P V Q R K D D D D R E E E S T V V A K R R L L G I Y Y H S E Q T K P L
UniRef90_B7S454	P S K T Q G I C D C C G S A L T I Q R K D D D D N E E E S T V V Q E R L L R V Y Y H S A K N T E P V	P K T E G L C D E C G S G E L F Q R D D D D Q E E E T M R K K R L L D E V Y E S D Q T T A P L	S M A V D K E E L L Q R G T P L I Q R D D D D Q E E E T V I R K K R L L S T V Y H S R K Q T A P L	P P K N D N L C D K C G S T E F V S R A D D D D K E E T V L A R R L L S E T V Y K E R T T A P L
UniRef90_Q5P106	P K V D K V C D R C G S T E F V S R A D D D D K E E T V L A R R L L S E T V Y K E R T T A P L	P P K A A G K C D K C G S T E L Y Q R T D D D S E E A T V R K R R L L R V Y Y H S E Q T K P L	P P K E S G I D D I T G E G L I Q R D D D D K E E T V R K R R L L R V Y Y H S E Q T K P L	P P A E A G T C N E C G G D L Y H R E D D D Q E E T A R E R R L L R V Y Y E E N T Q P L
UniRef90_K1Z6F4	A D D E I V N R L L A G R R V H P Q R E D D D Q E E S T V R N R R L L A V Y Y H S D Q T T A P L	E K Q E L I D R L L N R G L V T S G R D D D D Q R A A I I V R N R L L S V Y Y H S K T A P L	D D E E I V G R M A G R R V H I Q R D D D D Q E E T V V R H R R L L S V Y Y H S K T A P L	P P K V F G I C D K D Q T P L V Q R K D D D T E E T V V K R R L L K V Y Y E S E T F P V
UniRef90_D4JDN5	D C P E E V M V E R L R R A E G L T Y Q R A D D D N E E T I I K K R R V L N Q I F K S Q M A E A V	P D E I L I D R C V G R R R V I T R P D D D T E E K V R K R R L L N Q I F K S Q M A E A V	P P K K E M T C D S C E G T L V Q R A D D D T E K V V R K R R L L D V Y Y H Q Q T T A P L	A L D V S D D E I T E R E D L E Q R V D D D T P E V V R H R R L L S V Y Y H S K T A P L
UniRef90_A5GAW3	P K T D G V C D V C G G H E F K R R R P D D D N A E T V R T R M A E Y R A K T A P L	P P K K A G I C D V C G S T E L T Y Q R A D D D T L E A G K R R L L A T F H E Q S E P L	P K V D G V C D V C G S T E L T Y H R A D D D N E E T I G K N R L L E V Y Y E K N T A P L	P K V E G V C D K C G S T E F K R R R P D D D N E E T V I E T R L L K A Y Y E K E T A P L
UniRef90_C1DX53	P P K Q D G V C D K D G G E L Y Q R P D D D N E E T V I E T R L L K A Y Y E K E T A P L	E L K V N P A T L I E R M E K R V R S D D D N P D T F A T R L L D E E Y A S Q K T A P L	P E D K C V E R C L A R G Q G S G R S D D D N L E S L K K R R L L Q T Y Y N N D S L P I	P D A A I I E R M S G R R A H V Q R D D D D K E E V V K K R R L L D V Y H A Q T T A P L
UniRef90_W7DTF2	N D D V L V Q R L L E R G K T S G R A D D D Q D E I I R S R Y E E Y N E K T A P L	K N F D G K C P K C G S T D I Y Q R A D D D N E E S A K K R R L L I N V Y Y H S Q T T A P L	P F E A I I E R M S G R R S H P Q R D D D D K E E T V K K R R L L E V Y Y S A Q T T A P L	P F D E I I T R M S G R R M H P Q R D D D D K E E T V V K K R R L L D V Y Y V S Q T T A P L
UniRef90_UPI0003688E61	P P K V P G K C D L D G G E L Y Q R P D D D T P E A I V E K R R L L Q V W A K E N E G L	E L V V D Q E A L L E R A G K P V R P D D A P E T V I R R R L L A D F N R V I T S L P L	E F R I D E D T V V Q R M L A R G R E D D D T E D V I R N R M S V R S E T A P L	P D E I L I D R C V G R R L D P T R P D D D T E E K V R K R R L L Q I Y Y K Q N S E A P L
UniRef90_A4BGU1	P P K K D S L C D Y C S V Q L V Q R A D D D N E E V I R K R S A V Y W E T T E P L	P K E I C T E R L L N R G K T S G R S D D D N V E S L H K R K F E T Y V N E T T P I	N P K V A G I C D E C G S P L Y Q R D D D T E Q T I E K R R L L A V Y Y N N Q T K P I	P Q E E M V R C V L N R N E G R V D D D N I D T I K K R R L L R T F S A L N L P V
UniRef90_L9VEN9	E K E C V E R C L S R G E A G S G R D D D N I E S L K K R R Q R T H I S S E T P L	L I E L D D E T L I K R L L S R G R S D D D T Q E V I R H R L L S V Y Y R E K T A P L	P D E D I I T R M G R R V H P Q R D D D D R E E S T V R N R R L L S V Y Y Q Q Q T R P L	P E E V C V Q R C L N R G K S G R T D D D N I E S L R K R R F K T Y T N D T P I
UniRef90_UPI00034DC8F4	P D E E I V R M A G R R V H S I R K D D D E E S T V R K R R L L D I Y H T Q T E P L	P D E I I V E R I V G R R V H T I R K D D D Q E E S T V R K R R L L V E Y H Q Q T T A P L	A S P D A A A C S S C N G E L Y Q R E D D D K E E V I A K R R L L A V Y Y E E Q T T A P L	D D E A L L E R V I S K R F A D Q G R P D D D N P E S F K V R L L D A Y Y N R N T A P L
UniRef90_Q1D1V1	S D E V L R D R L L K R G N F D D T E D A I C N R R L L D T Y Y E K Q T S P L	P P K A G V C D F C G A D L V Q R G D D H P E S I C N R R L L S V Y Y E K Q T S P L	P P K V A G K D D V T G E P L I Q R T D D D N A A T L A T R L L A V Y Y H K Q T A P L	P P K V A G R C D R D G V E L V Q R P D D D R P E A I A T R L L A V Y Y H E Q T A P L
UniRef90_UPI00047DFE35	L L K L E D D L L I E R L L S R G R A D D D N E I V I R H R R L L G I Y H E Q T A P L	P P K V P G V C D E C G S E L Y Q R D D D R E E T V R H R R L L D V Y Y K E Q T A P L	P S A K G D L C D Q C G G E L Y Q R D D D R E E V I R N R R L L Q V Y Y H N Q T A P L	P D E I L V K R L L G R A E Q E G R S D D D N P E S I K N R R L L A V Y Y H K E Q T A P L
UniRef90_D8TJD2	P P K V E G K C D V S G E D L V H R K D D D N E D T V R T R M K V F T D N I E P V	S D E I L K E R L L S R G Q A S L A A D D D N E L A I M N Q I N T F H G I T Q P V	P P K V E C I D D V T G E P L I Q R K D D D V E T V R H R R L L S V Y Y H A Q T T A P L	E D E E I V S R L S G R R V H I Q R E D D D Q E A T I R K R R L L D V Y Y H Q K T A P L
UniRef90_V7B0M9	E L K V D E G A L V R M E N R V R S D D D N P E A F K K R R L L V E Y R E K T A P L	D E E I L I Q R I T G R R V C I Q R N D D D N E D T V K N R R L L D V Y Y N A H T S V L	E L K V D D G K L V D R I E N R A R E D D D N A E A L K T R L M A Y Y R E T A P I	P E E I L V E R V V G R R R V I T Q R F D D T E E K V K L R L Q T F H H Q N V A I
UniRef90_F8L6Z6	S A D T M S N R L Q C G R G S G F Q A A P D R E S V H R R V V E S F C S D T Q A V	E D T C V Q R C L S R G A A G S G R S D D D N I E S L K K R R C A T Y L N S T L G V	D A D V V V R M L A R G R A D D S E V I R N R R L L A V Y Y E N E T A P L	E L R V D Q S K L V D R I M Q P V R K D D D P E V F K D R L L D A F Y N R D T A I V
UniRef90_D0GMD5	P P K M S M K D I T G E P L I R R S D D D N V E S L K T R L E S Y H N K T S P L	P P I R L L E R I A K R A E Q Q P R T D D S P E V L K K R I L K T Y Y H D Q T A P L	D D E E I V K R M S G R R V H P Q R E D D A E T V R K R R L L K T Y Y H D Q T A P L	P P K V E G K D D V T G E D D L V Q R K D D D T E E T V R H R R L L S V Y Y H S Q T K P L
UniRef90_UPI000370288B	P P K K E M T D D V T G E P L V R S D D D N P E A L R K R R L L Q T Y Y H S Q T K P L	P N E L I T D R I T G R I H I P R N D D Q E Q T I R K R R L L I E Y H Q Q T T A P L	P D E E V E G R L L K R A E I E G R A D D D T P E V I A H R V K V Y Y H D Q T A P I	A D E E I K R M S G R R V H P Q R D D D D N E E T V R K R R L L D V Y Y H S Q T K P L
UniRef90				

	170	180	190
UniRef90_U5EZ29	L E Q Y P T Q	L K R I D A E Q G P D V I F A E V T K I I D G L	
UniRef90_M5ECB6	T E W Y D K Q G K L W S P R I D S A D K G Q E T V W Y H A D V I S A V F E D E T L		
UniRef90_B7S454	L P Y Y A A Q G K L Y E I D D G M G A V E D V A A R I E G A L		
UniRef90_V4PA50	V D Y Y G K N T K Y T K F D G T G S A V A E D V A S K L I Q A A L S		
UniRef90_A1S566	V E Y Y S K W A K V R K I T S G L G A V D E I V T S R A F A A L S K		
UniRef90_Q5P106	I A Y Y A K Q N T L R P I D D G T G E I G F I K E R I I A K E V L		
UniRef90_K1Z6F4	I A Y Y E E K G M V S R I D A S K A I D D I W Q Q R I L A K E T L K N		
UniRef90_D4JDN5	I T Y Y E N E S L L L R S I A G V G S I D D I W Q Q R I L A K E T L K N		
UniRef90_A5GAW3	I D Y Y K D L L L K I D A T A K P P E E V Y K T K I K S V L		
UniRef90_C1DX53	L P Y Y Q K K L Y A Y A N G M K S V D E V Y T K T D I D Q V L K Q I K		
UniRef90_W7DTF2	A K L Y Q D R G I L V N V D G Q G E I V D A V Y T K R I L D A V L K		
UniRef90_UPI0003688E61	V E Y Y E S A P K Y V I E G V G S V E I E A V K T K R I L D A V L K		
UniRef90_A4BGU1	I E F Y R G I G E L I E I D G E Q S I E A V W E D V K T A V Q S		
UniRef90_L9VEN9	I E F Y R Q Q W A N Y H R V K G V G S V D D I T R Q V L A A A L S D K A L		
UniRef90_UPI00034DC8F4	I E F Y K A Q G K Y V I E G M G T V E E S I A D K L V R S V S		
UniRef90_UPI000472088B	V D F Y Q K K P K Y S H I E G V G S V E E S I T A K V L A A A L S		
UniRef90_Q11DV1	I E Y Y K N K G L L V D I I D G N G E I L E I T E K I L E I L L		
UniRef90_D8TJ02	L D Y Y R A I I G K V T T I S T D R P D D I Y S E L S S L L S Q L Q		
UniRef90_V7B0M9	S S S Y S N I T I K V D D G S H S K E A V F K E I E S L L S		
UniRef90_F8L6Z6	I S Y Y E S Q K T L Q T V V C N Q S K D K I T K E I L S I L S		
UniRef90_D0GMD5	L E Y Y K K K N K V Y S V D G A K K L E E I T K D I I D I L E K		
UniRef90_UPI0003B6E8D8	A G A Y A E R G L L T R V V D G T G T L D E V T A R L H A A L S D E A		
UniRef90_UPI00026305BE	L P F Y E E K G L V R R V D G M A D I D E V S R Q I A A V L S D E A		
UniRef90_N1ZLJ0	V E Y Y K K Q G L L F E V D G M L G V E E V S K A I A E L E A K L		
UniRef90_UPI00037D7A81	I D Y Y D K Q K N L I R I N G V G E M E D I T A S I E K V L A S		
UniRef90_UPI000465163F	I G Y Y A K K G K L S S V D G M A D M D T V T A S I E K V L A S		
UniRef90_UPI000370CCB6	I D Y Y A N K G L L R Q I D G M Q E I G T V S E G I S V L A K V		
UniRef90_UPI000248AB95	L N Y Y R R R G E L R V E D G M Q G M D I V A R D I A S V L A K V		
UniRef90_A0A034W2B2	I K H Y E Q I G K V Q Q I D A N P S A D E V F K N V E K V F		
UniRef90_UPI00035E3DA3	V K Y Y K A A P R Y A K I A G T G P V E E I T A K A F A A L E		
UniRef90_H1ZCM5	I D Y Y T G K N C Y N S V D G I G T V E E I T T R L S G V I D R L		
UniRef90_B2KEK1	V G F Y K N K T Y Y K E V D G S K N K E E V F E E I L S K F I D N R K K		
UniRef90_UPI00035DD44C	V D Y Y G N W A K Y R A I S G M G S V D E I T A R A L Q A L A S		
UniRef90_B2JDV1	I D Y Y N N W A Q Y R R I S G L G S V D E I T A R A V D A L K A S		
UniRef90_D1CFE7	V N Y Y Q S E R G I L Y K V D A N K P V E Q V T Q D I M T I L K A		
UniRef90_UPI00037B03E3	R P F Y E E K G I H S S V D G M A S I D E I A R Q I D A A L A K		
UniRef90_UPI00029AB28D	L E Y Y G S E V K T I D A V G E V D E I H S R A M S A L		
UniRef90_Q8VYL1	L I S A Y S D V M V K I D A N R P K E V V F E E T Q T L L S Q I Q		
UniRef90_U4QVL1	L N Y Y R Q K N I L L K V V D A S S I E N V F S R I K H I F Q E L N		
UniRef90_H2ZH9	I K H Y E A E N K I V R H V L T E S S A D E V F E R V K K H F S		
UniRef90_R6XT56	L A Y Y K K L G L L V S V V N S N Q K I D E V N A E I I K K L E A		
UniRef90_B9R9Q5	I G Y Y S K K G K L H T I N A V G T V D E I F E Q V R P V F		
UniRef90_T1ELX0	I E F Y E A K G L V R K V I N G S R S V D E V F E D V R K I F V G L K		
UniRef90_A9BCM8	V D F Y Q S L G L L V K I L Q G E G D V K D V A L T I R S A L		
UniRef90_UPI00037938DF	V D Y Y S G W S T Y R K K I S G V G S V D E I T Q R L L G A L Q		
UniRef90_L7M308	V D Y Y D K Q D L V R R A D T S N D P D E V F K S V A K H F E		
UniRef90_A1STI3	V A Y Y K N E G E Y H K F D G T K T V D V I S A E L A T V L		
UniRef90_D2TWE9	I A Y Y R Q E A K Y F L I D G S R K V T E V S E E L A K I L S R V		
UniRef90_UPI00036E7B92	V H F Y R T E G L L T I T I S A D G E V S E I T E R A I T A L S R V		
UniRef90_D9QGM3	L P Y Y S D K G L L T E V D G M G S I E T V A T A I S G A L		
UniRef90_C1BNA5	L E K F A S K L K K V N G D Q D K D K T Y E E V K K A I E L		
UniRef90_A1ALW2	K A F Y A Q K G L L R A V D G S L P V E Q I Q L Q I R K K V L E		
UniRef90_F4PD49	A D Y Y K R R G I W H G V D A A Q S T K L V W A S L E A I F A K		
UniRef90_T0ZXJ9	L D Y Y R A R G L L T S I A A D G S P D E V A A R V R A A L S		
UniRef90_B1X4Y9	I A F Y Q A K S L L L I S I D A G G T V D S I A M R I S K A L S		
UniRef90_UPI000381A9F3	V G Y Y S E R H L L L P I Q A T G P V K E V T G R A M T A L		
UniRef90_D2Z934	I S Y Y E E R G Q L H R I D A A D G D D V P D K I Q D S I V		
UniRef90_I4B7F3	I Q Y Y T D K K L L R D I N G L G T A E I A A A V Q N S V V		
UniRef90_T0CIK1	L E Y Y E A Q G R L V R V D A T N G L D E I F E E I K K V V K		
UniRef90_G0R5T9	L D F Y E N L G K V C T I D G S K E I D E V F K K I E M I K K		
UniRef90_Q48F36	V E F Y S K K P K C S H I P G V G S V E E I T A K V L E A L K K		
UniRef90_F3LDD9	V E F Y K N L G K Y V R I E G V G E V E D I K R Q L F S A L S A		

	1					10						20						30							40																						
UniRef90_D0CSB9		A	D	T			T	K	P	A	V	L	T	L	L	G	P	P	G	A	G	K	G	T	Q	A	R	M	L	E	E	K	F	G	L	V	Q	L	S	T	G						
UniRef90_A4BSV8							R	I			L	L	L	L	L	G	P	P	G	A	G	K	G	T	Q	A	A	D	V		Y	R	S	Y	G	I	P	Q	L	S	T	G					
UniRef90_UPI0002B4494F							P	L	K	V	M	I	S			G	A	P	A	S	G	K	G	T	Q	A	E	L	V		Q	K	F	G	L	V	H	I	S	T	G						
UniRef90_R6J0T9							N	L	L	L	L	L	L	L	L	G	A	P	G	A	G	K	G	T	Q	A	E	K	I	V		E	K	Y	G	I	P	A	I	S	T	G					
UniRef90_R5V5H0								L	L	L	L	F				G	A	P	G	A	G	K	G	T	Q	A	V	K	L	A	T	K	Y	H	I	P	H	I	S	T	G						
UniRef90_A0A031FXS4							P	A	R	L	L	L	L	L	L	G	P	Q	G	S	G	K	G	T	Q	A	R	I	A	D	L	L	L	L	G	I	P	T	I	S	T	G					
UniRef90_L0LHK9								R	L	L	L	L	L	L	L	G	P	P	G	A	G	K	G	T	Q	A	Q	R	I	V	E	K	H	G	I	P	Q	L	S	T	G						
UniRef90_V6KFX3								R	I	V	L	L	V	L	L	G	P	P	G	A	G	K	G	T	Q	A	A	Y	L	A	E	N	L	S	I	P	H	I	S	T	G						
UniRef90_UPI00037B11C6								R	I	L	L	L	L	L	L	G	A	P	G	A	G	K	G	T	Q	A	Q	F	I	M	E	N	Y	G	I	P	Q	L	S	T	G						
UniRef90_G0U5Q0								L	I	F	M	G				G	P	P	G	C	G	K	G	T	Q	S	P	F	I	A	E	R	Y	N	I	C	H	L	S	T	G						
UniRef90_E2AXH5							S	R	L	P	I	F	L	T		G	P	P	G	A	G	K	T	T	Q	S	T	R	I	A	E	H	Y	G	F	C	T	I	T	T	R						
UniRef90_U2DF33							K	P	L	R	I	V	L	L	L	G	A	P	G	S	G	K	G	T	Q	A	K	L	I	C	D	Y	L	K	I	P	H	I	S	T	G						
UniRef90_Q6NJ71											R	L	V	L	L	G	P	P	G	A	G	K	G	T	Q	A	A	I	L	S	E	K	L	R	I	P	H	I	S	T	G						
UniRef90_B4U765											I	L	V	L	L	G	P	P	G	S	G	K	G	T	Q	G	A	L	L	K	S	E	L	S	F	E	H	I	S	T	G						
UniRef90_A0A034WVG6							V	P	I	V	W	I	L	L	L	G	P	P	G	C	G	K	G	T	Q	A	K	L	V	E	K	Y	G	F	T	H	L	S	S	G							
UniRef90_R7MBV5											L	I	F	L	L	G	P	P	A	C	G	K	G	T	Q	T	S	R	L	A	E	F	L	G	F	H	L	V	D	T	G						
UniRef90_R5IK62												I	L	F		G	P	P	G	A	G	K	G	T	Q	A	K	Q	I	V	D	K	Y	S	Y	L	H	L	S	T	G						
UniRef90_T5K230												L	L	L	V	G	P	Q	G	S	G	K	G	T	Q	G	V	R	I	A	E	S	Y	G	I	P	V	V	S	T	G						
UniRef90_Q0A982												V	L	L	L	G	P	P	G	A	G	K	G	T	Q	A	A	G	I	C	E	R	F	D	I	P	Q	I	S	T	G						
UniRef90_O00846							S	T	L	R	K	P	F	V	Y	F	I	L	G	P	G	S	G	K	G	T	Q	C	E	L	L	S	K	N	L	K	Y	V	H	L	S	A	G				
UniRef90_M7MVY5												T	R	L	L	L	I	G	P	P	G	A	G	K	G	T	Q	A	V	Q	I	S	E	R	L	N	V	V	A	I	S	T	G				
UniRef90_D3HSH6												R	L	M	L	L	I	G	P	P	G	A	G	K	G	T	Q	A	L	R	I	E	R	Y	K	I	P	Q	I	S	T	G					
UniRef90_D0P2Z9							I	E	C	A	N	K	K	E	R	T	T	I	F	I	G	P	P	G	C	G	K	G	T	Q	S	P	R	V	K	D	E	Y	C	L	H	L	A	T	G		
UniRef90_G3IT49												R	I	L	L	L	G	P	G	S	G	K	G	T	Q	A	Q	F	I	T	E	K	Y	A	I	P	Q	I	S	T	G						
UniRef90_P61115												N	L	L	L	F	G	A	P	G	A	G	K	G	T	Q	S	E	L	L	I	K	R	Q	G	M	T	Q	I	S	T	G					
UniRef90_A0A024UT37							L	T	S	R	R	Q	H	P	L	R	L	V	I	C	G	P	P	A	G	K	G	T	Q	C	E	R	L	V	A	K	Y	G	V	H	L	S	T	G			
UniRef90_UPI00035C598F												R	L	V	L	L	G	P	P	G	A	G	K	G	T	Q	S	A	R	L	V	A	K	Y	A	I	P	Q	L	S	T	G					
UniRef90_UPI0003B74BF4												R	L	V	L	V	G	P	P	G	A	G	K	G	T	Q	A	E	F	I	A	E	F	A	I	P	K	I	S	T	G						
UniRef90_K9P8S3												Q	R	L	L	F	L	G	P	P	G	A	G	K	G	T	Q	A	A	L	L	A	E	R	H	Q	L	H	L	S	T	G					
UniRef90_UPI0003B32C42													L	L	F	L	G	A	P	G	S	G	K	G	T	Q	A	Q	F	V	C	Q	R	Y	R	I	P	Q	I	S	T	G					
UniRef90_UPI0004756F4C												R	L	V	L	V	G	P	P	G	A	G	K	G	T	Q	A	E	F	I	A	A	H	L	S	V	P	K	I	S	T	G					
UniRef90_E7QZR4												P	N	L	L	L	G	A	P	G	A	G	K	G	T	Q	S	A	R	I	A	E	E	F	D	V	E	H	V	T	T	G					
UniRef90_U6DYL7												I	L	L	L	L	G	A	P	G	I	G	K	G	T	Q	A	A	F	L	S	D	L	L	K	M	H	H	V	A	T	G					
UniRef90_D4L6B6												N	I	L	M	L	G	A	P	G	A	G	K	G	T	Q	A	A	V	L	C	E	H	F	G	I	P	T	I	S	T	G					
UniRef90_A0A059FCB9												N	L	L	L	F	G	P	A	A	G	K	G	T	Q	A	K	R	L	V	E	E	R	G	F	I	Q	L	S	T	G						
UniRef90_U3U8E2												R	I	L	L	L	G	A	P	G	T	G	K	G	T	Q	A	Q	F	L	M	K	Q	Y	G	I	P	H	I	S	T	G					
UniRef90_M1LY38												R	L	L	L	L	G	P	P	G	A	G	K	G	T	Q	A	A	F	L	T	K	Q	F	N	I	P	Q	I	S	T	G					
UniRef90_UPI00034C9CE8												R	L	L	M	L	G	P	G	S	G	K	G	T	Q	A	N	K	I	A	K	D	L	N	I	T	I	S	T	G							
UniRef90_V9HKG7												V	L	L	L	L	G	A	P	G	A	G	K	G	T	Q	A	Q	F	I	T	Q	T	F	N	I	P	Q	I	S	T	G					
UniRef90_UPI00045EA6A7												I	L	L	L	G	A	P	Q	G	A	G	K	S	T	Q	G	N	L	L	S	E	K	L	N	I	P	Y	L	S	T	G					
UniRef90_E1IA28												T	N	V	I	L	L	G	P	P	G	A	G	K	G	T	Q	A	K	T	L	S	E	R	T	S	L	S	H	V	A	S	G				
UniRef90_W8X4E2													M	I	L	L	G	P	P	G	A	G	K	G	T	Q	A	A	Y	I	T	E	A	F	G	I	P	Q	I	S	T	G					
UniRef90_UPI0004418F92							M	T	K	K	L	K	D	S	I	I	I	F	M	I	G	P	P	G	C	G	K	G	V	Q	S	I	R	L	S	S	R	Y	D	F	Y	H	V	A	I	G	
UniRef90_B5RRM3													L	V	F	L	G	P	P	G	S	G	K	G	T	I	A	K	I	L	S	N	E	L	N	Y	Y	H	I	S	T	G					
UniRef90_Q08ZH7												N	L	L	L	L	G	P	P	N	A	G	K	G	T	Q	A	K	K	L	Y	D	E	F	E	I	P	Q	I	S	T	G					
UniRef90_UPI0002DB3C3D												K	Y	L	L	F	L	G	P	P	G	A	G	K	G	T	Q	A	G	L	M	S	Q	A	S	Q	Y	L	H	L	S	T	G				
UniRef90_R5RYM2													L	L	L	L	G	A	P	G	A	G	K	G	T	Q	A	A	I	L	A	A	E	L	G	I	P	T	I	S	T	G					
UniRef90_W5HNV3													M	I	A	G	A	P	A	S	G	K	G	T	Q	C	E	L	I	K	A	K	Y	G	L	V	H	I	S	A	G						
UniRef90_Q0I2Y5													I	L	L	L	G	A	P	G	A	G	K	G	T	Q	A	Q	F	I	T	N	K	F	G	I	P	Q	I	S	T	G					
UniRef90_UPI000381DC7A														M	V	G	P	P	G	A	G	K	G	T	Q	A	Q	I	L	A	S	E	L	S	I	P	K	V	S	T	G						
UniRef90_D3TLM5													N	A	V	L	L	G	P	P	G	S	G	K	G	T	Q	A	P	W	L	K	E	K	F	C	V	C	H	L	S	T	G				
UniRef90_UPI0004689BEC												N	I	L	L	L	G	P	P	G	A	G	K	G	T	Q	A	K	L	V	E	G	R	N	M	V	Q	L	S	T	G						
UniRef90_E2B2R5							M	S	A	V	T	K	K	P	E	V	V	F	I	L	G	P	P	G	A	G	K	G	T	L	C	R	Y	I	V	E	R	Y	G	Y	H	L	S	A	G		
UniRef90_UPI00038C0F57												L	K	S	S	L	I	I	F	V	V	G	P	P	G	C	G	K	E	T	Q	C	K	N	M	A	T	K	Y	G	F	C	H	V	G	L	G
UniRef90_K2EHP6												K	I	L	V	L	L	G	P	P	G	S	G	K	G	T	Q	A	K	L	I	A	E	N	Y	K	Y	T	H	I	S	T					

UniRef90_D0CSB9	D	L	L	R	A	A	V	A	A	G	T	K	A	G	K	D	A	K	A	V	M	E	A	G	G	L	V	S	D	D	I	V	I	A	L	V	R	D	R	M				
UniRef90_A4BSV8	D	M	L	R	A	E	I	Q	E	A	G	S	E	I	L	G	R	E	A	K	A	V	M	D	N	S	A	G	G	L	V	C	D	D	E	I	V	T	K	R	L			
UniRef90_UPI0002B4494F	D	I	L	R	A	E	I	S	A	G	S	T	S	E	I	L	G	N	K	A	K	E	F	M	D	N	S	A	G	G	L	V	P	D	D	D	I	V	T	K	R	L		
UniRef90_R6J0T9	N	L	I	R	A	A	L	K	E	G	T	E	M	G	L	I	E	A	K	A	K	Y	M	D	A	G	K	L	V	P	D	D	D	I	V	I	G	I	V	T	K	R	L	
UniRef90_R5V5H0	E	M	F	R	Q	A	I	D	H	Q	T	E	P	M	G	L	I	E	A	K	A	K	Y	M	D	A	G	K	L	V	P	D	D	D	I	V	I	G	I	V	T	K	R	L
UniRef90_A0A031FXS4	D	V	F	R	A	N	V	K	D	Q	T	E	P	M	G	L	I	K	V	K	A	L	I	D	A	G	K	L	V	P	D	D	D	I	T	S	E	I	V	T	K	R	L	
UniRef90_L0LHK9	D	M	L	R	A	A	V	Q	A	G	T	E	V	L	G	K	R	A	D	A	L	M	K	A	G	K	L	V	P	D	E	V	I	V	N	A	I	V	S	E	R	L		
UniRef90_V6KFx3	D	L	F	R	A	N	I	S	Q	G	T	E	V	L	G	R	Q	A	K	E	F	M	D	A	G	K	L	V	P	D	E	V	T	I	G	M	A	E	K	R	L			
UniRef90_UPI00037B11C6	D	M	L	R	A	A	V	K	A	G	S	E	L	G	N	Q	A	K	A	I	M	D	A	G	K	L	V	T	D	E	V	L	V	I	A	L	V	E	K	E	R	S		
UniRef90_G0U5Q0	D	M	L	R	K	A	I	L	E	N	T	Q	R	F	G	K	Q	A	K	V	I	I	D	A	G	N	L	V	S	D	E	V	I	F	G	I	V	K	E	R	S			
UniRef90_E2AXH5	E	L	L	R	V	E	I	A	T	G	S	Q	R	F	G	V	I	L	A	Y	I	L	M	S	E	G	K	L	V	P	D	A	D	V	M	V	E	L	K	A	R	M		
UniRef90_U2DF33	D	L	F	R	A	Q	I	R	D	N	T	P	L	G	I	K	A	N	E	Y	I	I	Q	A	G	K	L	V	P	D	E	L	T	I	S	V	V	K	E	S	R			
UniRef90_Q0NJ71	D	L	F	R	A	N	I	G	E	G	T	P	L	G	K	E	A	K	S	Y	I	I	D	A	G	K	L	V	P	T	D	V	T	A	R	M	V	K	A	R	L			
UniRef90_B4U765	D	M	L	R	A	E	V	S	K	K	S	P	L	G	L	K	A	E	E	Y	M	K	D	A	G	L	V	P	D	D	D	I	L	I	A	M	I	A	K	N	L			
UniRef90_A0A034WVMG6	D	L	L	R	A	E	V	A	S	G	S	D	K	G	R	E	L	A	A	I	M	K	E	G	K	L	V	P	N	E	A	V	L	C	L	L	A	K	A	I	L			
UniRef90_R7MBW5	S	L	L	R	A	E	I	K	N	G	T	E	N	G	K	V	A	K	S	F	I	D	K	G	E	L	V	P	V	S	L	V	I	L	V	A	S	I	J	A	K	D	R	
UniRef90_R5MK62	D	L	L	R	Q	E	M	A	A	G	T	E	L	G	K	K	A	A	E	L	I	N	R	N	G	D	L	V	P	D	E	V	V	E	G	M	I	A	R	N	K	N	L	
UniRef90_T5K230	D	I	F	R	A	N	I	K	E	G	T	P	L	G	Q	Q	V	T	A	I	L	D	K	A	G	L	V	P	D	E	L	T	S	E										

	90	100	110	120																																					
UniRef90_D0CSB9	A	E	P	D	C	A	R	G	V	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q			
UniRef90_A4BSV8	I	L	T	Q	P	D	C	A	R	G	V	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q	
UniRef90_UPI0002B4494F	S	G	K	D	A	T	E	C	A	K	G	F	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q
UniRef90_R6J0T9	L	E	Q	K	D	C	A	R	G	V	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q		
UniRef90_R5V5H0	L	A	Q	E	D	C	A	R	G	V	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q		
UniRef90_A0A031FXS4	L	A	Q	E	D	C	A	R	G	V	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q		
UniRef90_L0LHK9	L	D	E	Q	P	D	C	A	R	G	V	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q	
UniRef90_V6KF33	M	R	D	E	D	C	A	R	G	V	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q		
UniRef90_UPI00037B11C6	I	A	Q	E	D	C	A	R	G	V	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q		
UniRef90_G0U5Q0	I	A	Q	E	D	C	A	R	G	V	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q		
UniRef90_E2AXH5	L	I	G	S	L	E	T	S	R	G	F	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q	
UniRef90_U2DF33	L	K	K	E	N	K	D	G	F	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q			
UniRef90_Q6KNJ71	L	K	K	E	N	K	D	G	F	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q			
UniRef90_B4U765	L	L	T	E	A	P	H	K	N	Y	V	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q	
UniRef90_A0A034WVG6	A	D	H	K	C	D	S	K	G	F	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q		
UniRef90_R7MBW5	L	A	Q	E	D	C	A	R	G	V	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q		
UniRef90_R5IK62	L	A	S	N	Q	N	V	P	G	F	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q		
UniRef90_T5K230	L	S	Q	E	D	A	A	H	G	F	L	D	G	F	P	R	T	T	V	Q	A	E	R	Y	T	C	A	N	C	G	E	G	Y	H	D	Q	F	K	Q		
UniRef90_Q0A982	L	A	E	P	D																																				

UniRef90_D0CSB9	P	K	V	E	G	I	C	D	K	C	G	G	T	A	F	S	R	R	A	D	D	N	A	E	T	V	A	S	R	L	L	A	A	Y	H	E	Q	T	A	P	L					
UniRef90_A4BSV8	P	P	T	I	L	D	D	R	D	D	L	T	G	E	R	P	L	V	Q	R	R	D	D	D	T	E	E	K	V	R	K	R	L	L	R	E	I	Y	H	K	R	N	A	E	A	I
UniRef90_UPI0002B4494F	K	P	K	V	D	G	V	C	D	A	C	G	G	A	L	I	Q	R	K	D	D	D	A	P	E	T	V	Q	A	R	L	L	V	E	Y	H	K	M	T	K	P	L				
UniRef90_R6J0T9	P	S	E	I	E	G	K	C	D	V	C	G	G	D	L	T	R	K	D	D	D	N	A	E	T	V	L	V	R	L	L	D	A	Y	H	E	K	S	E	T	A	P	L			
UniRef90_R5V5H0	P	R	D	E	S	I	A	R	L	S	R	R	A	A	E	Q	G	R	A	D	D	D	N	A	E	S	S	I	A	K	R	L	L	S	I	Y	E	K	S	E	T	A	P	L		
UniRef90_A0A031FXS4	P	A	T	A	G	V	C	D	K	C	G	S	T	H	F	K	R	P	D	D	D	N	A	E	T	M	A	T	R	L	L	S	Q	V	Y	Y	K	S	E	T	A	P	L			
UniRef90_L0LHK9	P	P	K	V	D	G	V	C	D	K	C	G	S	E	G	L	Y	Q	R	E	D	D	S	E	A	T	V	R	K	R	L	L	S	V	Y	H	S	E	T	E	P	I				
UniRef90_V6KF3X	P	D	E	L	I	V	D	R	I	T	G	R	V	H	A	N	R	K	D	D	D	Q	E	E	T	V	V	R	K	R	L	L	S	V	E	Y	H	E	L	T	A	P	L			
UniRef90_UPI00037B11C6	P	D	D	V	I	L	A	R	T	S	G	R	W	I	H	P	R	Q	S	D	D	D	K	E	E	V	V	R	K	R	L	L	D	G	Y	H	K	M	T	Q	P	I				
UniRef90_G0U5Q0	R	E	S	L	L	M	D	R	I	L	A	R	T	I	T	T	E	R	Q	S	R	N	F	D	E	N	M	Q	R	I	L	L	K	D	H	E	R	K	M	V	I	Q	P	I		
UniRef90_E2AXH5	P	S	K	L	K	D	K	C	E	A	C	G	G	T	L	I	H	R	N	D	D	D	E	E	H	I	V	L	D	R	L	L	T	V	Y	N	K	S	I	Q	P	V				
UniRef90_U2DF33	N	Y	E	V	A	E	D	V	V	V	E	R	M	L	A	R	G	R	A	D	D	D	N	E	E	D	T	I	R	T	R	L	L	Q	V	Y	R	D	E	T	A	P	L			
UniRef90_Q6NJ71	E	D	D	V	I	L	K	R	L	S	G	R	V	L	C	P	Q	R	D	D	D	K	E	E	V	I	V	N	R	L	L	R	V	Y	K	E	Q	T	F	P	I					
UniRef90_B4U765	S	D	E	V	M	V	Q	R	I	M	G	R	A	S	T	E	V	R	A	D	D	D	N	E	E	T	I	K	T	R	L	L	A	T	F	R	T	N	T	N	A	I	L			
UniRef90_UPI00037B11C6	P	T	K	V	E	G	I	C	D	K	C	G	T	E	L	T	Q	R	K	D	D	D	N	E	E	T	A	K	A	R	F	L	D	T	Y	F	K	E	T	A	P	L				
UniRef90_R7MBW5	P	D	E	L	V	Y	E	R	I	L	H	R	A	Q	L	E	Q	R	K	D	D	T	D	S	I	I	E	N	R	L	L	I	S	T	Y	H	D	K	T	E	P	I				
UniRef90_R5IK62	P	R	E	E	S	L	E	R	L	T	L	R	A	T	E	Q	G	R	S	D	D	D	T	P	E	A	I	G	H	R	L	L	I	D	I	Y	E	R	Q	T	A	P	L			
UniRef90_T5K230	P	D	E	D	I	V	Q	R	M	A	G	R	S	V</																																

		170	180	190
UniRef90_D0CSB9	I	D Y Y Q R Q G V L K R L	N A M G Q I E E I	A R G L E G I V
UniRef90_A4BSV8	V	A Y Y S A W A V L L V I	D G R G G V D E I	Q A R I L Q T A L
UniRef90_UPI0002B4494F	A	P V Y L N I L A K K I	D G S R E P K E E I	F E E L S S L L
UniRef90_R6J0T9	K	D F Y D K L G K L A V V	D G Q E E V A D T	T A L V F A A L
UniRef90_R5V5H0	L	E Y Y Q N Q G L L I H V	D G K Q S D I H N V	F K D I V N E L
UniRef90_A0A031FXS4	L	D V Y R E R G I V D E I	D G V G S L D E I	T E S I T V A L
UniRef90_L0LHK9	I	G Y Y Y A K D K L Q S I	D G M A D I E H V	T E S I E A I L
UniRef90_V6KFX3	I	D Y Y K A Q G L V T T I	S G L G A A A D V	T T R A M S A L
UniRef90_UPI00037B11C6	I	G Y Y S D E A K Y V K I	D G T R Q V A E V	R A E L A E I L
UniRef90_G0U5Q0	I	G F Y E S R N V L V H V	D G S T R S I E L V	R D T L R S I L
UniRef90_E2AXH5	L	K Y Y R K R L V V I	D G E N D E T A V	F E E I Y N A I
UniRef90_U2DF33	L	N Y Y K E I G I L E T I	E G N A N A F D I	F D N I L R S T L
UniRef90_Q6NJ71	I	R Y Y G D D I I T I	K A E G S I E D I	N A R T L G A L
UniRef90_B4U765	I	E Y Y K Y K N K L F V V	S A D G T Q E E V	F E K L K S M L
UniRef90_A0A034WVG6	L	T Q Y I E K T I L T L	N A E R S A D D I	F V D V Q R A L
UniRef90_R7MBV5	F	D Y Y K N K N L K T I	N A E G S I D E V	W E R L L K V I N
UniRef90_R5IK62	I	S Y Y K G K G N Y R E I	E G N D T I E N V	F A A L Y G I L
UniRef90_T5K230	L	E V Y G A K G I V D R I	D G V G S L D E I	T E R N I A E A L
UniRef90_Q0A982	V	E Y Y S D W A R Y I V I	K G V G S V D D I	R N R I L S E L
UniRef90_O00846	I	E H Y R N K N Q L I E I	N G D N S I E I V	Q R E I L E S L
UniRef90_M7MVY5	V	N R Y Q E R G I V R L V	D G I G E I D E V	T N R V I M D A L
UniRef90_D3HSH6	I	N Y Y K A W A E F H S I	C G T G D V D E V	F K K I I N S I
UniRef90_D0P2Z9	I	D F Y R K Q G K L T E V	N A H T D M D K V	T E Q I R K S L
UniRef90_G3IT49	V	G F Y E Q Q G V K F S S I	A G V G S V D E I	T K K V F A V L
UniRef90_P61115	K	E F Y K K S G K Y T E V	D G N R D T E E V	Y K E I E K I I
UniRef90_A0A024UT37	V	D T F V P V S T I V H V	D G M L P K A D I	I H H I D A S I
UniRef90_UPI00035C598F	S	D Y Y S G K G E L K Q V	D G M E P V D V V	S A A I E Q A L
UniRef90_UPI0003B74BF4	I	E F Y S G R G Q L I V V	D A L G P V E D V	T E R
UniRef90_K9P8S3	I	D H Y R Q L G L L C S V	E A S G T V E E I	A G R I V A S L
UniRef90_UPI0003B32C42	V	D F Y R Q R A R F S T V	S G T G S V E S I	R D Q I F Q I L
UniRef90_UPI0004756F4C	V	D F Y G A Q G K L F S V	D A T G T V E D I	T I R A I
UniRef90_E7QZR4	I	E H Y E E T G E L V R I	D G E Q T P D E V	W D D I K E T V
UniRef90_U6DYL7	V	Q Y Y R Q K N K L F E V	D G M Q N I S Q V	T N L I L K V L
UniRef90_D4L6B6	V	S Y Y E K Q G K L V T V	K G Q D D V E A T	T K A I L E G I
UniRef90_A0A059FCB9	V	P I Y A E R S I L T E V	D G M A S I E E V	A T Q I D A A L
UniRef90_U3U8E2	I	D Y Y N K K A K Y F K I	D A T A Q V A D V	S K Q L I K I L
UniRef90_M1LY38	V	E Y Y S E W P K Y V R I	S G I G S V E E I	S K R I F S C I
UniRef90_UPI00034C9CE8	L	E Y Y D Y K H T L I N I	S A E G S I E Q I	E Q E I V D F I
UniRef90_V9HKG7	I	D F Y K G K M S K Y I K V	D G T Q N V E T V	K Q Q V L T A L
UniRef90_UPI00045EA6A7	L	D Y Y R E K G I V I E I	D G E K S I E D I	H K E I L S N L
UniRef90_E1IA28	I	E Y Y K Q Q G L L H E I	D G Q R E I S L V	A D A M L L A L
UniRef90_W8X4E2	V	D Y Y S S W A R Y A Q I	S G V G S V E E I	R D R I L G I L
UniRef90_UPI0004418F92	L	T Y Y L Q K S I L R N I	L G E E P P E V V	F A K C C S V V
UniRef90_B5RRM3	I	N F Y S N S N R L N N I	D A S K N I N E V	Q K N L M E I I
UniRef90_Q08ZH7	K	A F Y A K K G I L K S I	D G V G S P D G I	Y A E L L A I V
UniRef90_UPI0002DB3C3D	I	D F Y K E K N I L N Y I	D G D R K L K T I	S D E I K Q K M
UniRef90_R5RYM2	K	D F Y K S R S V L Y P V	E D M G S V E A T	S K A I L A V L
UniRef90_W5HNV3	V	S I Y E D I I V K V	N G N T T V E D V	F G E I E K L L
UniRef90_Q0I2Y5	V	D Y Y Q A E A K Y F R I	D G T Q K V E E V	S Q E L D K L L
UniRef90_UPI000381DC7A	V	S F Y E G G L L V S I	Q A T G A V E D V	T A R A K E A L
UniRef90_D3TLM5	V	D Y Y A L R G L H F R V	D A K K A S D V	F A N I D S I F
UniRef90_UPI0004689BEC	I	G Y Y H A K G D L K G V	D G L G S M E A V	A G E I A A I L
UniRef90_E2B2R5	V	A L Y E Q Q G L V F K V	D S M K P P G Q V	F Q D G T E F L
UniRef90_UPI00038C0F57	L	T F Y Q Q K K L L R N I	S A E E A P E N I	F A K C C S V I
UniRef90_K2EHP6	V	D Y Y K K L G I L K A V	D G S K D I E T V	T K E I K E I L
UniRef90_A9NEF4	I	K Y Y A H K N L L M D V	D G N Q P L E V I	T K H V L E I L
UniRef90_B6J8H9	S	D Y Y A Q W P K Y F R I	S G L G S M E E V	R E R I L Q V F
UniRef90_W0VB10	L	G Y Y N E W A K Y R R I	S G V G P V E Q I	R D S A F T A L
UniRef90_L9W8X0	I	E F Y E E K G S L E R V	N G E Q A P D E V	W E E V K A T I
UniRef90_S5ZCL1	I	L F Y K E R G R L V E I	D A N E Q A D K V	V P V V I E R L
UniRef90_Q254P2	I	D Y Y A D L G K L T C V	P A E K S P D E V	F Q S I L A C I
UniRef90_W5STQ6	V	D F Y S K S N R L N N I	N A S K E I D K V	E K S L M E I I
UniRef90_G0LJH6	V	E H Y R D R D K L V T I	V N G E T P G D V	F D S I V D V I
UniRef90_UPI000237B181	L	D F F R E R G L L V R I	D A R G P V A E V	G E R A I S A V
UniRef90_F9ZZH9	V	G F Y S Q K A T F A S I	E G V G S V G D I	T A K L L A V L
UniRef90_D4D641	V	N Y Y E K M G K V M S V	S A V G T E T E V	T A R I H K E I
UniRef90_UPI0004709CE8	V	G Y Y R D M W A Q Y S I	S I N G V G K F E E I	R A E L V K A L
UniRef90_F2N8M7	V	E Y Y R G Q G L L K T V	N G D G H K D D V	
UniRef90_UPI00026CBCE8	I	P I Y Q A R G L L L A R V	D G M G D I G D V	T R A I E A I L
UniRef90_K7UDN5	L	P T Y S D I L N K I	D G N C P A E V V	F Q A I D F L L
UniRef90_Q5DDI4	L	S F Y K S Q N K L M Q V	D A N N D V N Q V	F S D I Q G K I
UniRef90_UPI0004766308	S	P F Y E Q R G L L R R I	D A R Q D V E A V	A A A I A S T I
UniRef90_G9ZVC5	L	P Y Y K A Q H K L S Q V	D G M A S M A E V	S A Q I S A I L
UniRef90_E0XPY1	L	D Y Y K S H G D V V E I	V A T G S P D E V	F E K L S Q T I
UniRef90_V4YFR0	V	D Y Y A N W A K Y R A I	S G T G S V N D I	T Q R A F A A L
UniRef90_D0A1T7	I	D Y Y R A R G V L A T L	D A T Q S V N V V	R E S L R R V L
UniRef90_C7JFT0	L	P F Y E K T G R L H K I	N G M L S A S E V	T G E I E D A L
UniRef90_UPI000377CF3E	V	E Y Y Q K Q E K F T R I	A G V G P I A E I	K D K V L T A L
UniRef90_H2W2C5	I	E Q Y E K H G M V F R	V S Q R P I S E V	Y Q D V V E V F
UniRef90_A1USR5	S	K F Y S N I G L L K T V	D G M A D I A D V	S R A I N A I L
UniRef90_G7JRB1	L	S M Y K D I L T I K I	I N G N S S Q K E V	F A Q I D G A L
UniRef90_T0MAP1	L	P Y Y E A Q G K L S K V	N G I G D I D F I	F G E L T A I D
UniRef90_A0A037XL62	A	D Y Y R A A G R L R S L	D S M R P I D E V	A N E I N A M L
UniRef90_A6NXF1	K	D F Y Q K R G K L D P V	A G Q G T L E A T	T Q A I V Q I L
UniRef90_U1NKI4	I	D Y Y R E E G V L T D I	D G E A P P D E V	F D D V D V V
UniRef90_U1PT75	I	A E Y R S R G V L V S V	D G I G G I D E V	A S R V C D A L
UniRef90_A0A010PH37	I	A E Y E S R G L V R R V	D G L G P M D E V	N A R I M E A L
UniRef90_F9UBH5	I	D Y Y D D A P R Y V K V	I G I G S V E G I	R D E I I A K L
UniRef90_T0Q7F1	V	G A F A S V A T L C K V	D G M L P K E D V	F A T I E
UniRef90_J0PW27	S	R F Y S E K G L L K V I	D G M R D I A V V	S C M I K G V L
UniRef90_K0CBK4	V	D F Y Q D L A K Y V R V	P G V G S V E S I	R D S I F K A L
UniRef90_C7NVG3	I	E Y Y S D R E A F V E I	D G E Q S L D A V	W A D L K D A V

	1		10		20		30		40																																
UniRef90_M5E102			R	V	I	L	L	G	A	P	G	A	G	K	G	T	Q	A	Q	F	I	C	E	Q	F	A	I	P	Q	I	S	T	G								
UniRef90_R6C6F9			N	L	I	L	L	G	A	P	G	A	G	K	G	T	Q	A	E	V	I	C	K	E	L	G	I	P	Q	I	S	T	G								
UniRef90_A8PP28			R	I	L	L	L	G	P	P	G	A	G	K	G	T	Q	A	K	F	L	T	R	Y	K	I	P	Q	I	S	T	G									
UniRef90_R6SLI6			K	N	I	M	F	I	A	P	P	A	A	G	K	G	T	Q	A	E	L	I	E	R	Y	K	I	P	Q	I	S	T	G								
UniRef90_A8JDN2			V	M	I	A	G	A	P	P	A	A	G	K	G	T	Q	A	K	I	V	D	K	Y	K	L	V	H	I	S	V	G									
UniRef90_L2GUD4			V	L	I	T	G	A	P	P	G	G	G	K	G	T	Q	S	A	K	V	S	A	D	Y	H	L	R	I	S	T	G									
UniRef90_F4XGV4			L	I	L	L	G	A	P	P	G	A	G	K	G	T	Q	A	E	V	L	S	A	K	L	N	I	P	T	I	S	T	G								
UniRef90_A0A024U5C9			L	I	L	L	G	A	P	P	A	G	G	K	G	T	Q	A	E	Q	L	V	K	K	Y	G	V	I	H	L	S	T	G								
UniRef90_L1L9M5		L	S	K	P	E	N	F	V	L	L	G	P	P	G	S	G	K	G	T	Q	S	A	L	L	K	N	S	H	C	Y	C	H	L							
UniRef90_UPI0003B6BA34			S	S	A	R	F	L	I	V	G	P	P	G	S	G	K	G	T	Q	G	V	L	V	A	A	F	G	V	P	Q	V	A	T	G						
UniRef90_UPI00035D47E7			N	I	L	L	L	G	P	P	G	A	G	K	G	T	Q	A	T	R	L	V	E	T	R	G	M	V	Q	L	S	T	G								
UniRef90_B0ER70		E	M	S	L	S	D	K	H	V	L	F	C	L	G	P	P	G	A	G	K	G	T	Q	C	Q	K	I	V	N	K	Y	P	I	T	H	L				
UniRef90_D5E4X8			N	I	L	I	F	M	G	P	P	G	A	G	K	G	T	V	A	E	V	L	S	K	T	T	D	L	V	H	I	S	T	G							
UniRef90_UPI0002554EC5			L	I	L	L	G	P	P	G	A	G	K	G	T	L	A	A	K	A	V	D	I	L	T	V	P	H	I	S	T	G									
UniRef90_Q0EW57			N	V	I	L	F	G	P	P	G	V	G	K	G	T	Q	G	E	K	L	A	G	E	T	G	I	K	H	L	A	M	G								
UniRef90_L0EUT2			R	I	L	L	L	G	P	P	G	A	G	K	G	T	Q	A	K	R	L	T	E	K	F	A	I	P	H	L	S	T	G								
UniRef90_C3PP86			I	V	I	F	L	G	P	P	G	A	G	K	G	T	Q	G	K	I	A	K	K	I	N	L	P	H	I	A	I	G									
UniRef90_V7EG37		M	T	E	V	A	T	T	P	A	V	L	L	L	L	G	P	P	G	A	G	K	G	T	Q	A	R	M	L	E	E	D	F	G	L	V	Q	L	S	T	G
UniRef90_H0E8R1			L	N	L	L	L	L	G	P	P	G	A	G	K	G	T	Q	G	E	R	L	T	A	S	E	P	L	E	Y	I	V	I	T	G						
UniRef90_U1LNH3			N	L	L	I	V	G	P	P	G	A	G	K	G	T	Q	A	A	R	L	A	A	A	L	R	V	P	A	V	S	T	G								
UniRef90_UPI000366AD99			N	L	L	L	L	G	P	P	G	A	G	K	G	T	Q	A	K	K	I	E	A	H	F	N	L	P	Q	I	S	T	G								
UniRef90_B3PMM7		L	K	S	E	K	K	S	L	P	N	V	I	F	L	G	A	P	G	A	G	K	G	S	V	A	S	R	L	A	E	F	G	Y	S	H	L	S	T	G	
UniRef90_C1FHZ1		L	D	C	Q	S	K	P	D	K	R	L	I	L	V	G	P	P	G	C	G	K	G	T	Q	S	P	K	I	K	A	E	H	C	L	C	H	L	A	T	G
UniRef90_B4SA64			R	I	L	L	L	G	A	P	P	G	V	G	K	G	T	Q	S	N	Y	I	S	K	T	F	G	I	P	Q	I	S	T	G							
UniRef90_D4JX77			N	L	L	F	L	G	A	P	P	G	A	G	K	G	T	Q	A	E	V	V	C	E	K	L	G	I	P	A	I	S	T	G							
UniRef90_Q2YB23							M	G	P	P	G	A	G	K	G	T	Q	A	N	F	I	K	E	H	F	G	L	P	Q	I	S	T	G								
UniRef90_R7IDB9			K	N	I	I	F	I	A	P	P	A	A	G	K	G	T	Q	S	T	M	L	K	E	N	Y	G	Y	N	H	I	S	T	G							
UniRef90_D5U110						I	M	I	G	A	P	P	A	G	K	G	T	Y	A	Q	Y	L	R	D	K	Y	C	I	P	H	I	S	T	G							
UniRef90_R5J7Z1			N	I	I	F	I	A	P	P	A	A	G	K	G	T	Q	A	S	L	L	K	E	E	F	G	L	Y	H	L	S	T	G								
UniRef90_S9Q651			N	I	L	L	L	G	P	P	G	A	G	K	G	T	Q	A	R	K	L	V	A	E	R	G	M	V	Q	L	S	T	G								
UniRef90_B8J881			I	L	L	L	L	G	P	P	G	A	G	K	G	T	Q	A	K	L	L	S	S	E	L	G	I	P	Q	I	S	T	G								
UniRef90_UPI0003F91BEC			N	L	L	L	L	G	A	P	P	G	C	G	K	G	T	Q	S	E	Y	I	S	K	K	Y	E	V	T	H	I	S	T	G							
UniRef90_A0A010SHH0			R	M	I	L	L	G	P	P	G	A	G	K	G	T	Q	A	P	K	I	K	E	K	F	N	C	C	H	L	I	I	G								
UniRef90_F9UK13		K	Q	L	P	N	I	V	F	M	G	P	P	G	V	G	K	G	T	V	A	A	L	A	K	K	A	N	M	V	H	L	S	T	G						
UniRef90_Q2CBK8			N	I	L	L	L	G	P	P	G	A	G	K	G	T	Q	A	K	R	L	V	D	E	R	N	M	V	Q	L	S	T	G								
UniRef90_K9ZHD9			R	L	V	L	L	G	S	P	G	S	G	K	G	T	Q	A	Q	R	L	C	A	Y	F	G	V	P	L	I	S	T	G								
UniRef90_E6U812			N	L	L	L	L	G	A	P	P	G	A	G	K	G	T	Q	A	E	N	I	C	A	H	F	H	I	P	T	I	S	T	G							
UniRef90_UPI0003C28ED4			R	L	L	R	A	V	I	M	G	P	P	G	S	G	K	G	T	V	S	S	R	I	V	K	H	F	A	L	K	H	L	S	S	G					
UniRef90_Q7UZW3			K	H	L	L	F	L	G	P	P	G	A	G	K	G	T	Q	A	A	L	L	S	A	A	N	S	Y	L	H	L	S	T	G							
UniRef90_Q22RE2		M	R	P	Q	I	I	H	I	L	G	P	P	G	C	G	K	G	T	Q	C	V	R	L	A	T	K	Y	N	F	K	L	S	A	G						
UniRef90_K7W3A0			R	L	I	F	L	G	V	P	P	G	A	G	K	G	T	Q	G	A	A	L	S	S	Q	W	Q	I	P	H	I	S	M	D							
UniRef90_F21IG5			N	I	L	I	F	G	P	P	G	A	G	K	G	T	Q	S	S	F	L	I	N	N	F	N	F	Q	L	S	T	G									
UniRef90_G0JRR2			A	K	H	F	I	F	L	G	A	P	P	G	V	G	K	G	T	Q	A	Q	R	F	A	Q	L	M	D	L	P	H	V	S	T	G					
UniRef90_G3PZP5		L	Q	R	V	F	R	A	V	I	M	G	P	P	G	S	G	K	G	T	M	S	A	R	I	S	K	T	F	G	L	K	H	I	S	S	G				
UniRef90_U3AED7		M	S	D	P	R	L	L	L	L	G	A	P	P	G	A	G	K	G	T	Q	S	K	R	L	V	D	A	Y	D	I	E	H	I	V	T	T	G			
UniRef90_Y0KF09			R	L	L	L	L	G	A	P	P	G	A	G	K	G	T	Q	A	T	F	I	K	E	K	F	S	I	P	Q	I	S	T	G							
UniRef90_R4WIT0						V	L	L	G	P	P	A	G	S	G	K	G	T	T	A	T	K	L	K	E	R	F	C	L	C	H	L	S	T	G						
UniRef90_D1J866		E	H	A	K	K	F	P	N	I	L	M	L	G	A	P	P	G	A	G	K	G	S	A	T	K	M	V	Q	N	N	D	Y	V	Q	I	S	T	G		
UniRef90_S6GEG8			R	L	L	L	L	G	A	P	P	G	A	G	K	G	T	Q	A	K	F	I	T	E	K	Y	S	I	P	Q	I	S	T	G							
UniRef90_G3MFY5		M	A	K	I	F	R	A	V	I	M	G	P	P	G	S	G	K	G	T	I	S	E	W	I	V	R	D	F	A	L	K	Y	L	S	C	G				
UniRef90_G2XUU2			P	K	I	E	F	V	L	G	P	P	G	V	G	K	G	T	Q	C	M	L	L	A	Q	H	R	H	I	H	I	S	I	G							
UniRef90_G6D3R7			P	E	V	V	F	V	L	G	A	P	P	G	A	G	K	G	T	Q	C	S	L	I	S	K	E	F	D	F	V	H	L	S	A	G					
UniRef90_A6FSE5			S	A	P	V	L	L	L	G	P	P	G	A	G	K	G	T	Q	A	R	L	L	E	E	K	H	G	L	V	Q	L	S	T	G						
UniRef90_UPI00005889D9		M	S	R	L	I	R	A	M	I	M	G	P	P	G	S	G	K	G	T	M	S	S	R	L	A	K	E	F	K	L	N	H	L	S	S	G				
UniRef90_H3CLM4		E	Q	K	K	S	K	I	F	M	I	G	P	P	G	S	G	K	G	T	Q	C	E	Q	M	E	R	L	G	L	Q	H	V	T	L	A	G				
UniRef90_M7NJS1			K	E	V	T	V	V	F	V	L	G	R	P	P	G	S	G	K	G	T	Q	A	Q	L	V	R	D	Y	D	F	V	H	L	S	A	G				
UniRef90_K9SNR0						R	L	V	L	L	G	A	T	P	P	G	A	G	K	G	T	Q	A	K	R	L	S	E	H	F	N	V	P	I	S	T	G				
UniRef90_F9QD27			I	K	Q	N	C	N	L	I	F	L	G	A	P	P	G	V	G	K	G	T	V	A	S	I	A	N	L	T	N	L	E	H	V	S	T	G			
UniRef90_B6EHK0						R	L	L	L	L	G	A	P	P	G	A	G	K	G	T	Q	A	Q	F	I	M	D	K	F	G	I	P	Q	I	S	T	G				
UniRef90_A0A037UKT3						R	N	F	L	L	L	G	A	P	P	G	S	G	K	G	T	Q	S	H	L	V	K	K	F	G	T	I	S	T	G						
UniRef90_V5FZH2			I	K	R	H	M	R	I	A	I	V	G	P	P	G	S	G	K	T	Q	A	A	K	L	K	K	R	L	C	I	C	H	L	P	I	G				
UniRef90_B0EEP6						V	Y	F	I	L	G	P	P	G	A	G	K	G	T	Q	C	D	K	L	V	E	K	F	P	I	T	H	L	S	A	G					
UniRef90_UPI000161CF02			P	K	V	V	F	V	L	G	P	P	G	C	G	K	G	T	Q	C	K	L	K	A	K	N	L	G	L	K	H	L	S	A	G						
UniRef90_I0GKG0			K	R	L	V	I	L	G	P	P	G	A	G	K	D	T	Q	G	K	M	L	G	K	A	L	N	L													

[illegible]

	90	100	110	120
UniRef90_M5E102	IQQQDDC[V]NGGFL	EDGGFPRTTIV	PQAAEALLLEGGVIE	DHVVVEIIV
UniRef90_R6C6F9	IKEPDDAQINGGFL	EDGGFPRTTIV	PQAAEALLLEGGVIE	DHVVVEIIV
UniRef90_A8PP28	IQQSDDCQINGGFL	EDGGFPRTTIV	PQAAEALLLEGGVIE	DHVVVEIIV
UniRef90_R6SLI6	ISEDDDCKNGGFL	EDGGFPRTTIV	PQAAEALLLEGGVIE	DHVVVEIIV
UniRef90_A8JDN2	AEDDD[V]KQRGWL	LDGGYPRTSAS	QQAEEALLLEGGVIE	DHVVVEIIV
UniRef90_L2GUD4				
UniRef90_F4XGV4	LAQEDCANGFLL	LDGGMPTRTL	PQAEGGRRV[CA]GCG	GASVHIVAR
UniRef90_A0A024U5C9	GQPDCAQHGWL	LDGGYPRTSAS	QQAEEALLLEGGVIE	DHVVVEIIV
UniRef90_L1L9M5	INTPKCRRGFL	LDGGYPRTSAS	QQAEEALLLEGGVIE	DHVVVEIIV
UniRef90_UPI0003B6BA34	LAQADAPAEGL	LDGGYPRTSAS	QQAEEALLLEGGVIE	DHVVVEIIV
UniRef90_UPI00035D47E7	LDALPQETGVIF	LDGGYPRTHAQAVDF	QQAEEALLLEGGVIE	DHVVVEIIV
UniRef90_B0ER70	AIRNDEHK[V]FIF	LDGGYPRRNAE	QQAEEALLLEGGVIE	DHVVVEIIV
UniRef90_D5E4X8	LELHKKKNGFMI	LDGGYPRRTL	QQAEEALLLEGGVIE	DHVVVEIIV
UniRef90_UPI0002554EC5	LAQADAKNGFLL	LDGGYPRTI	PQAEGGRRV[CA]GCG	GASVHIVAR
UniRef90_Q0EW57	IEDLSQNGFLL	LDGGYPRNIV	QQAEEALLLEGGVIE	DHVVVEIIV
UniRef90_L0UTE2	IRKVEY[CA]ANGFLL	LDGGYPRNIV	QQAEEALLLEGGVIE	DHVVVEIIV
UniRef90_C3PP86	LSSEYKNGYLL	LDGGYPRNIV	QQAEEALLLEGGVIE	DHVVVEIIV
UniRef90_V7EG37	AQPDVARG[V]IL	LDGGYPRTD	GQAAGRFT[CA]GCG	GEGYHDEFKR
UniRef90_H0E8R1	RAEQATDGGFLL	LDGGYPRNIV	QQAEEALLLEGGVIE	DHVVVEIIV
UniRef90_U1LNH3	LAQPDADERGYLL	LDGGYPRTAGQV	YENLRGGEQL	DADVVRILIA
UniRef90_UPI000366AD99	ISKADC[CA]KNGFLL	LDGGYPRRTL	LGQAEEALLKKG	LVIEIDCIV
UniRef90_B3PMM7	SDLSKKHIAFLL	LDGGYPRRTL	DQANFRRI[CA]P	ADKTIYHLEFN
UniRef90_C1FHZ1	IKDVSCKRNGFLL	LDGGYPRTV	PQAANFRWI	HAASGRSYHTKFS
UniRef90_B4SA64	LTKSDC[CA]KNGFLL	LDGGYPRRTL	LTQAEEALLRK	DGIIHIDYIV
UniRef90_D4JX77	IAQDDAKNGFLL	LDGGYPRTV	QAQAEEALLDAM	GVQIDKVI
UniRef90_Q2YB23	IAQPD[CA]CKGFL	LDGGYPRTI	PQAADA[CA]KAV	QIQKVI
UniRef90_R7ID89	AKIDGKPFIL	LDGGYPRTL	LNQA[CA]KSL	DNMLDKDY
UniRef90_D5U110	LQEKDVEKNGFLL	LDGGYPRTL	LNQA[CA]KSL	DNMLDKDY
UniRef90_R5J721	LSLKKKNGFLL	LDGGYPRTL	LNQA[CA]KSL	DNMLDKDY
UniRef90_S9Q651	EGDHAGGFIF	LDGGYPRTL	PQAADA[CA]L	GLLAKHGT
UniRef90_B8J881	LSRPDVA[CA]GFL	LDGGYPRTV	VQAEEYRRS	CP[CA]G
UniRef90_UPI0003F91BEC	LRLLDSSKSGFL	LDGGYPRTL	LNQV[CA]E	SLDLGLIE
UniRef90_A0A010SHH0	DNNKE[CA]KGGFLL	LDGGYPRTV	PQAEEGL	LDTMLKARN
UniRef90_F9UK13	ESLLAKGKIL	LDGGYPRTL	LDQVIE	FLKTIKNDY
UniRef90_Q2CBK8	LTQGGAGQGYIF	LDGGYPRTL	PQAADRST	CGD[CA]G
UniRef90_K9ZHD9	LSQQDAN[CA]GWV	LDGGYPRTA	FQAEEEL	DFLLDNL
UniRef90_E6U812	LKEP[CA]YQNGFLL	LDGGYPRTV	PQAEEALLDQ	MGVJR
UniRef90_UPI0003C28ED4	LEKTL[CA]QYSWL	LDGGYPRTV	PQAATARW	HPTSGR
UniRef90_Q7UZW3	DKDNNNGWILL	LDGGYPRNIV	LSQVNS	LNNDVLL
UniRef90_Q22RE2	LNKQTNKFL	LDGGYPRNIV	ENLKG	WKKEQL
UniRef90_K7W3A0	S[CA]SSAKRQGW	LDGGYPRSN	LSQVNS	LNNDVLL
UniRef90_F2I1G5	LEDKSIENRIF	LDGGYPRNIV	DQAKT	LDNCSV
UniRef90_G0JR22	LLLEDASDGVIF	LDGGYPRTI	HQA[CA]H	GRRV[CA]SK
UniRef90_G3PZP5	RALLD[CA]SSWL	LDGGYPRTV	VSQAEE	SRWTHL
UniRef90_U3AED7	EDADAGGFVLL	LDGGYPRNES </td <td>QV[CA]EYRRV</td> <td>CP[CA]G</td>	QV[CA]EYRRV	CP[CA]G
UniRef90_Y0KF09	IKDAD[CA]QAGFLL	LDGGYPRTI	PQAEEAMK	QAGVMI
UniRef90_R4WIT0	LDKPECKRKGFL	LDGGYPRTV	VGQAADK	LDHAPAS
UniRef90_D1J866	TELVR[CA]ENKHF	LDGGYPRTL	QAQAKFRRI	CLNCK
UniRef90_S6GEG8	ITQAD[CA]ANGFLL	LDGGYPRTI	PQAADA[CA]K	DAGVVI
UniRef90_G3MFY5	INTNFKNEHFWL	LDGGYPRTV	PQAEEGRW	HAASGR
UniRef90_G2XUU2	ARRPKGKEM[V]FLL	LDGGYPRSI	YPI[CA]S	LFESTV
UniRef90_G6D3R7	AMQKSGKTRFLL	LDGGYPRNK	DNLD	QWQRIM
UniRef90_A6FSE5	LAEAD[CA]ARGVIF	LDGGYPRTV	VQAEEFRT	CGGCG
UniRef90_UPI00005889D9	NGLP[CA]PNWL	LDGGYPRTV	VQAEEWRWI	H[CA]P
UniRef90_H3CLM4	ESSSKQGKGLV	LDGGYPRTD	LRWAK	EFE[CA]SK
UniRef90_M7NJS1	IQVITRGGKRFLL	LDGGYPRKL	LDQMA	EAKNV
UniRef90_K9SNR0	LQQQDADVAGWILL	LDGGYPRTA	FQAEEEL	DFLLLEE
UniRef90_F9QD27	DETIKNTKIFLL	LDGGYPRTI	PQAAKFLET	IE[CA]NF
UniRef90_B6EHD0	IAQED[CA]KAGFLL	LDGGYPRTI	PQAAGL	KENGVS
UniRef90_A0A037UKT3	H[CA]LQIVSGDIF	LDGGYPRTI	AQAKKL	DQCLT
UniRef90_V5FZH2	DNNVECKNGFLL	LDGGYPRNIV	TEAR	KLDEML
UniRef90_B0EEP6	AIQEH[CA]PK[V]FIF	LDGGYPRNE	ENKNV	WEEMV
UniRef90_UPI000161CF02	MND[CA]LSKAGFLL	LDGGYPRNQ	DNVE	GEWEH
UniRef90_I0GKG0	LSNYNLKAGYLL	LDGGYPRTI	INQA	EFRRI
UniRef90_UPI0003B53B96	LHEPDTKSGF			

UniRef90_M5E102	A	D	E	E	I	V	K	R	L	S	G	R	R	V	H	P	Q	R	P	D	D	E	E	D	T	V	R	K	R	L	A	L	Y	H	D	Q	T	A	P	L		
UniRef90_R6C6F9	P	D	D	E	I	Q	Q	R	M	S	G	R	R	V	I	C	V	I	R	K	D	D	D	E	E	A	I	R	K	R	L	L	K	T	Y	H	E	Q	T	A	P	L
UniRef90_A8PP28	D	D	E	E	I	V	K	R	L	S	G	R	R	V	I	H	P	Q	R	K	D	D	D	T	E	A	I	R	K	R	L	L	K	T	Y	H	E	Q	T	A	P	L
UniRef90_R6SLI6	K	P	I	I	E	S	V	C	D	K	C	G	G	K	L	R	Q	R	N	D	D	N	I	E	A	F	Q	N	R	L	L	V	T	Y	H	E	Q	T	A	P	L	
UniRef90_A8JDN2	P	D	E	L	L	V	E	R	V	V	G	R	L	D	P	Q	Q	R	S	D	D	D	T	E	D	K	C	R	V	R	V	A	T	H	N	A	N	V	D	A	V	
UniRef90_L2GUD4	D	E	E	E	C	V	R	R	I	V	G	R	N			Q	G	R	S	D	D	D	N	R	E	A	A	M	R	Y	K	V	Y	N	K	D	T	E	P	L		
UniRef90_F4XGV4	P	T	K	V	E	G	V	C	D	S	C	G	G	P	V	V	L	R	D	D	D	D	K	P	E	T	V	R	Q	R	L	A	V	Y	H	E	Q	T	E	P		
UniRef90_A0A024U5C9	P	D	E	D	V	V	A	R	I	S	G	R	R	V	D	P	Q	R	S	D	D	D	T	E	E	A	T	V	R	I	R	L	K	T	Y	H	E	Q	T	E	P	
UniRef90_L1L9M5	P	P	K	V	P	G	K	D	I	T	G	E	V	L	V	S	R	T	D	D	D	T	E	P	E	I	I	K	K	R	M	E	Q	Y	R	E	L	T	Q	P	L	
UniRef90_UPI0003B6BA34	P	R	D	E	S	I	S	R	L	T	Q	R	A	V	E	Q	G	R	T	D	D	T	E	E	V	I	A	N	R	L	M	A	E	Y	R	E	T	A	P	L		
UniRef90_UPI00035D47E7	P	K	V	E	G	T	C	D	I	C	G	G	H	E	F	K	R	P	D	D	N	E	E	T	V	T	V	R	T	R	M	A	E	Y	R	A	K	T	A	P	L	
UniRef90_B0ER70	F	I	D	V	S	E	E	T	M	I	N	R	I	H	K	R	S	R	V	D	D	N	D	D	S	L	M	K	R	F	R	T	Y	K	L	E	T	E	P	L		
UniRef90_D5E4X8	N	E	D	I	I	E	R	L	T	G	R	F	C	S	I	R	K	D	D	A	P	E	A	I	K	V	R	L	I	T	Y	V	N	Q	T	K	P	L				
UniRef90_UPI0002554EC5	P	P	K	K	A	D	T	C	D	S	C	G	G	E	V	Y	T	R	E	D	D	D	K	P	E	A	V	A	Q	K	R	L	E	V	Y	R	N	Q	T	E	P	L
UniRef90_Q0EW57	P	P	S	K	S	G	I	C	D	R	C	G	G	E	V	Y	Q	R	D	D	D	D	R	E	D	V	I	A	H	R	L	L	E	V	Y	K	E	Q	T	A	P	L
UniRef90_L0UTE2	K	L	R	V	D	D	N	A	M	L	K	R	I	H	V	R	A	D	D	D	N	Y	K	P	F	L	N	N	R	L	V	E	F	R	K	T	A	P	L			
UniRef90_C3PP86	P	K	T	D	N	V	C	D	V	C	G	S	T	F	D	Y	R	A	D	D	N	E	V	I	K	K	R	I	L	E	V	Y	K	T	E	T	Y	P	L			
UniRef90_V7EG37	P	A	Q	A	G	T	C	D	R	C	G	S	H	D	F	K	R	R	A	D	D	N	A	E	T	V	R	K	R	L	L	S	A	Y	H	A	Q	T	A	P	L	
UniRef90_H0E8R1	P																																									

	170	180	190
UniRef90_M5E102	V S F Y Y K K A P K Y S H I P G V G S L N D I T A K V L A A L		
UniRef90_R6C6F9	K D Y Y K A Q G K L T T I V H G Q A E D V E N D T V R K R L T L E A L		K A
UniRef90_A8PP28	R C Y Y Q E W Q N Y I S I V G G Q A E D V E N D T V R K R L T L E A L		
UniRef90_R6SLI6	I K H Y E E K K V L Y H I N G N Q S I N Q I F N D I E K I L K N N		
UniRef90_A8JDN2	V G Y Y K D V V K V D I V D G T G S I M Q D V F E A I C K T A L D		D D G L
UniRef90_L2GUD4	V K H L K E R K V L T E I A G N R G I E E V T V F G D I K K V L		
UniRef90_F4XGV4	K G Y Y Q S K G L L S S V D N G Q P T I E A T T K V I L E A L		
UniRef90_A0A024U5C9	L K V F A P L A N V V R F D N G Q K S S A D M T T T A I F S S I D		
UniRef90_L1L9M5	V E Y Y N K K G L L K E V D A S A S E A N V Q K A V F E K I V A K S K		
UniRef90_UPI0003B6BA34	L D V Y R E R G L V V R I D G V G T I A E V T E R I F E A L		
UniRef90_UPI00035D47E7	L P Y Y E A K G L V D R V D G M A D I A H V G E A I D G I L D R V		
UniRef90_B0ER70	I E S F E N E N K L L R I S G E G S V D D I F N K I D V S L S K F		
UniRef90_D5E4X8	L D Y Y A K T K R M V I V D S L R A P E V I A Q D I L D L Q K		
UniRef90_UPI0002554EC5	I D Y Y R K K G L L K D V D A R P A V D Q V V I E N F R K A V E		
UniRef90_Q0EW57	L D Y Y R H K A G F R M I D A S G E M E T V Y A A L K E A V E		
UniRef90_L0EUT2	S D Y Y H S I G C L Y C V D G M L D V D S V T E I Q I N S I F		
UniRef90_C3PP86	I D Y Y K N S G N F Y I V N G S K S E Q E I E I D I Q K I L K		
UniRef90_V7EG37	I T H Y D R A G V L Q R I D A M G N I A D I R N A L A E I V K R		
UniRef90_H0E8R1	I G Y Y E E R G L L H R F D G T A P A D E V E A H V R K T I S T		
UniRef90_U1LNH3	I A L F E E R G L V V E V D G I G A V D E V T E R I L A G L		
UniRef90_UPI000366AD99	I E Y Y Q K K P A Y I T V D G S K G V N E V T D V I L S K L		
UniRef90_B3PMM7	I D Y Y K N L G I L K E V N A Y Q S T D R V Y N D T K K A L E		
UniRef90_C1FHM2	I D Y Y K S R G K V N V I H A N K P S K N V E E Q I A S A L K		
UniRef90_B4SA64	I A Y Y L D A P T Y F K I E G K G K V E D I R D R I L E A L		
UniRef90_D4JX77	K D Y Y M R K K K L I T V T G Q G E E I A E T S K L T L A A V E A		
UniRef90_Q2YB23	V E Y Y K D A P K Y V V T T G A G S I V A E T I R D A I F A S L		
UniRef90_R7ID89	M E Y Y E D K N K L H K I N V N R N V E D I F K D I V D V		
UniRef90_D5U110	I E Y Y K E R K L T I E N G E G G L S F V M P L L E K L I		
UniRef90_R5J721	I S Y Y E N K G L L T K S C N G T K E I V Y D N I K S I L		
UniRef90_S9Q651	I G Y Y Y A K G D L H T V D G L G E I D A V A K A I A G V L D		
UniRef90_B8J881	K R Y Y R D R G E L S D V E G V T P E G I L A V D T K K V L		
UniRef90_UPI0003F91BEC	A T Y Y K D R G N Y F Q L D G T G T V D M V I A D Q I S K V L E		
UniRef90_A0A010SHH0	V N Y Y K Q N G I W K G L D A S Q Q P G Q V W K N M L E V F D		
UniRef90_F9UK13	L S Y Y K E H N K L H T F D A T S S A E E I A Q I I K S L D E K		
UniRef90_Q2CBK8	I G Y Y Y A K G E L V S V D G L G E I D D V A A R I A G K L		
UniRef90_K9ZHD9	L E Y Y D R R R R L L T I N G D D S P E Q V Q H N I L T L L		
UniRef90_E6U812	K A Y Y A K Q D K L S V V E G Q E D I A D T R L R L Q T L E		
UniRef90_UPI0003C28ED4	L D Y Y R K K G V L E S F S G T E T N K I W P L H V H A F L Q T		
UniRef90_Q7UZW3	L E Y Y K D L A L L E N I K A D G D L K T I W S A D I K Q K M		
UniRef90_Q22RE2	K D Y F E S Q D K C I T I N A E D T P E N I F A T I E T R L Q		
UniRef90_K7W3A0	I Q H Y R Q Q G C L T V I N G D R P V E I V T Q F L Q D S F S K		
UniRef90_F2I1G5	L D Y Y S A K N I V S D V S D A M G Q I A M V T S D Q I S N I I K D L K		
UniRef90_G0JRR2	I A Y Y H D R P A Y H L V S G E G E V D D V F S R I V K A V E		
UniRef90_G3PZP5	L E F Y R S K G V L E I F S G T E T N K I W P H V H A F L Q		
UniRef90_U3AED7	I E H Y R G T D E F V E I D G A Q S P D G V W A D V R D A V D A		
UniRef90_Y0KF09	V G Y Y S D W A K Y V K V N G I G D M N T I R D Q I F M Q L K		
UniRef90_R4WIT0	V D Y Y K K K G V H H K I D A S L P H P R V S L V E S I L		
UniRef90_D1J866	I N F Y Q E L G I L L K I N S Y Q T I D K V Y N D V E E A L K		
UniRef90_S6GEG8	I N Y Y Q S A P R Y V V P G V G S V S D I K D K V F N G L S A		
UniRef90_G3MFY5	L A Y Y D K K G L L H E F H G T K S K		
UniRef90_G2XUU2	I E N Y R E R G L L A E I D A S R S V I E E V H R D V W G A V E K I		
UniRef90_G6D3R7	I N H Y D R Q G L V Q R I N S E V G P Q E E V F Q D V K S V F N		
UniRef90_A6FSE5	I D H Y Y G K G A I L S R I P A M G A D E I A A A L D S V V S K		
UniRef90_UPI00005889D9	L E F Y R S K G V L T E F H G A T E R N Q I W P H V Q Q D F L S G L		
UniRef90_H3CLM4	V S H Y E N K S I L H M I D A E R S P D E V F S Q I C Q V M E T F		
UniRef90_M7NJS1	L E Y M E K G Q K L I R V A C E N S I E S T Y Q E T L D Q I E		
UniRef90_K9SNR0	L D Y Y E Y K Q K L L I E G A N A I D N V T Q S I L S K L		
UniRef90_F9QD27	I E Y F K N K D K L I V V E A I D T P E N V A D S V L K K I K S		
UniRef90_B6EHK0	I A Y Y T K K T E Y L K F D G T K L V A E V S A E I E K V L S		
UniRef90_A0A037UKT3	L E Y Y L N Q Q V L T V I D A D M E G H A V W D Q I M A V L K		
UniRef90_V5FZH2	S E Y Y K G K I W R D V D G S G P V Q V C D S I M N A I		
UniRef90_B0EEP6	I E Y F G K I N K L L R V S G E G S V I E V F K P I N E E M T K F		
UniRef90_UPI000161CF02	I E Y Y K A K N L V R Q V S A T A P A D E V Y E E V E K I F K N		
UniRef90_I0GKG0	L D F Y E K K G I L K S C D A N		

	1	10	20	30	40		
UniRef90_R6A915		S R Q L N I	T L V G P P	G A G K G T H S V H I	E Q K Y N T P H I	S T G	
UniRef90_A2FYU1			K R I I F F G P P	G S G K G T Q S E I L L	E K K F G L A H I	S T G	
UniRef90_S2JWY2		Q P L R	L L L F G C P	G S G K G T Q S S R L	E K N F G V A H I	S S G	
UniRef90_D0A2W9			L L L F G A P	G G K G T A S E F L	V R R Y D F I	H V S T G	
UniRef90_UPI00038701DE	L	K Q N S D A	P R I C V L G P P	A S G K T T V A M W L	C K H L D A I	R V S Q E	
UniRef90_M1VIP1		R P L R	I L L A G P P	A S G K G T Q A A L L	V E R Y G L V	H I S S G	
UniRef90_W4WEJ7			K T I W I L G P	G G K G T Q C D R M I	E K Y G F L	H I S S G	
UniRef90_J9HZ64	L	I Q K L S K	P K R I F I V G P P	G S N R K E N A L A L	A E Y F T W Q	S I S I G	
UniRef90_M5T521		Q P C P Q	P N V V F V L G G	P G A G K G T M C E L A E	H Q L G W T	H L S M G	
UniRef90_C5K518			K I V I L F G P	P G A G K G T P K M E	E T Y K I	P Q L S T G	
UniRef90_O96907			L I M L G G	P G A G K G T Q C A N T	E K H L N S A	H I S T G	
UniRef90_UPI00042C9E5A		S K L L R	A V I L G P	G S G K G T V C Q R I	A Q N F G L Q	H I S S G	
UniRef90_UPI0002F3391C			R L V I L G S	P G A G K S T Q A Q E L	C R Y F D I	P L I S D G	
UniRef90_F0WC21			P P K V I L A G P	P A G G K G T Q C E R L	V R A Y G V V	H I V S T G	
UniRef90_E1FI19	I	P D V P	I L E M F G P	P G G K G T R H A A R V	Q E K F G L V	H I C M P	
UniRef90_L1IND7			T I M L F G P	P G A G K G T H G P K I	V E S R N I	P Q L S T G	
UniRef90_UPI00038C5A91	L	S K P T C	F I V F G K P	G S G K T T L A R N I	A Q A W K C I	R V E A L	
UniRef90_UPI0003345DEB	L	S K P V C	F I F G K P	G V G K T T L A H I	A Q A W K C I	R V E A L	
UniRef90_K2E5K8			N I V L L G S	P A S G K G T Q A E I L	C Q K F G L	H I S S G	
UniRef90_F9VLX6			R I L L I G P	G V G K G T Q A N L I	C S K Y N L	K H I S T G	
UniRef90_O52352			R L I F L G A	P G T G K G T I S S Y L	K E Q H G F F	H I S S G	
UniRef90_A0A059BUA4	P	D P L R	I M I S G A P	A S G K G T Q C E L I	T K K Y G L V	H I V A A G	
UniRef90_K2D078			I Y V A G L P	G S G K T T Q T E K L	G K Y L N L	P V A Q M G	
UniRef90_Q5M7G4	P	H T P R	I L L Y G P	G S G R S L Q A S L L	A Q K Y G I	I N I C C G	
UniRef90_F7XX96			I I M L L G A	P G A G K G T H A K F I	M D K Y S I	P Q I S T G	
UniRef90_UPI00047A3532			I I V L L G P	P A G G K G T Q G E R L	A A R L D V	P K V A T G	
UniRef90_B9S706	P	E P L K L M	I S G A P	A S G K G T Q C E L I	T K K Y G L V	H I A A G	
UniRef90_B4CYD1		M K Y R T Y	L I F G A P	G S G K G T Q G K I L	G A I P R F F	H C A C G	
UniRef90_UPI00038EF88B	K A K	P T M P	V R Y I I V G P	P R S G K T T V A K K L	A S E Y G L K	H I S V G	
UniRef90_Q01SJ5			I L L L F G P	P G G K G T Q A A Y L	A E R F H I	P A I S T G	
UniRef90_UPI00038EBC40				G A G T G T R A R R L	K Y G Y T	H I S S G	
UniRef90_S5LUW7			N I I L L G A	P G S G K G T Q S E F L	C D K K N F I	Q L S T G	
UniRef90_U3Q7B6			I L L F G P	G G K G T Q A K I I	S N K F G F I	H I S T G	
UniRef90_H2M295	M A K	L F R A A I	L G P	P G S G K G T I S K R I	A Q S F G L Q	Y V S S G	
UniRef90_D2HPJ8				G A P G S G K G T V S S R I	T K H F A L K	H I S S G	
UniRef90_Q6F1X3			N I M L L G A	P G S G K G T L A E K L	I K N Q G F N	Q M S T G	
UniRef90_A8WXP9	N A	P V I L V L G A	P	G S Q K N D I S R R I	A Q K Y G F T	M L S M G	
UniRef90_UPI00036A76FE			P M K L I L L G P	P A G G K G T Q A K F V	T E Y L K I	P Q I S T G	
UniRef90_E4WS24	M K	L T V A Q Q L R A I	I M G A P	G S G K G T I S A R I	T E N Y G M A	H R S S G	
UniRef90_I0IDE7		K P Y K T	V L L F G A P	G A G K G T Q G K I L	A R I P G F Y	H C S C G	
UniRef90_C9ZPT0			L I I V G P	P G S G K Q T Q A R R I	A K R Y D A V	H I V R A Q	
UniRef90_UPI00042BF05C			P R I L L F C	P G S G K S L Q A A L	A Q K Y S I	V N I C C G	
UniRef90_UPI0003DEC821			R A V I L G A	P A S G K G T M S A R I	V E Q F K L T	H I S S G	
UniRef90_UPI0003C87997	L	S K P V C	F V V F G K P	G V G K T T L A Q Q I	S Q T W R C I	R V E A L	
UniRef90_A3ZSW2			F V I M G V Q	G C G K G T Q A K L L	C Q A Y D L T	H I S V G	
UniRef90_A7EXX7	L	K S S P P K I K I	I F I L G P	P G I G K G T Q C T L L	T Q S P T I	H I S I G	
UniRef90_R7T860	L	K R D N D D V	P Q I T I L G P	P A S G K Q S I A K M V	A S K L R C T	L L T K D	
UniRef90_UPI00044413EC		K P K P T I	P I R I A I V G P	P K S G K T T V A K R F	A N E Y G L Q	R L S V G	
UniRef90_K2EHY5			N L V L F G P	P G A G K G T Q A R L I	Q D R H H L E	L I A T G	
UniRef90_G8S111				V I M G V Q G S G K G T Q G Q L I	A R D L D L V	H I S V G	
UniRef90_K2ELY0			K I V I L M G V	P G S G K G T Q A R K L	V Q R F A F A	H I S T G	
UniRef90_UPI0001CE1B67			P R V L L C	P L G S G K S L Q A A L	L A Q K Y G L	V N V C C G	
UniRef90_B3E181	M K A K	V K Y N S	L L L I G A P	G S G K G T Q G K I L	L G T I P G F F	H F S S G	
UniRef90_A5USL8		M T A A L N	I I L L G P	P G A G K S T I A E E L	V H Q L L V	P I S T G	
UniRef90_K1ZR27			I I F L G S	Q G S G K S T Q A K L A A K K	L K L P V I	E M G	
UniRef90_G1X1L5	L	S R A A R I	I M V G A	P A G G K G T Q A A R L	L K A F P L K A L	S S G	
UniRef90_V3Z5F9			P H T P R I	L V F L G P	S G S G K A V Q A A L	A S K Y N L V N I	S C G
UniRef90_O51378				L V F L G P	P G S G K G T I S K I I	S N E F K Y Q	H I S T G
UniRef90_L1JW53			V V F I L G G	P G S G K G T Q C G K L	T A E F R M R	H I S A G	
UniRef90_H9G6A2	M	I E H L M K V	P A V L V L G P	P A A G K T T I A R W L	C K H L S A T Y L	S P Q	
UniRef90_UPI0004441ED0			M K P L V V F V L G G	P G A G K G T Q C A R I	V Q E		
UniRef90_F612X6			L V I L L I G		S Q C P L I	V K Q F R L T H L S A G	
UniRef90_UPI000344613B	L	S K P V C	F V I F G K P	G V G K T T L A H Q I	A Q T W K C I	R V E A L	
UniRef90_F7ERX0			R L L R A V I M G	P G S G K G T V S R I	T K H F E L K	H I S S G	
UniRef90_G0TW25				M M I V G P	G G K G T Q S R L I	A K K Y G A I H I V R A E	
UniRef90_B8MY74	Q	L S K A A R	I I L I G A P	V G K G T Q T E R L	L A K F F L A S I	S S G	
UniRef90_V5H3V9			L V I L G A	P A S G K G T I S Q R I	V K V F H L K	H I S S G	
UniRef90_UPI0004402463	L	S K P V C	F V V F G K P	G V G K T T L A Q Q I	T Q A W K C I	R V E A L	
UniRef90_S5R3Z2			R L I L L G A	P G S G K G T Q A M F I	K K K F H I	P Q I S T G	
UniRef90_UPI000388C72F			P R V L L C	G P G S G K S L Q A A L	A Q K Y G L V N V	C C G	
UniRef90_H0V338	V	P K I I I L G P	P A S G K T T I A M W L	C K H L N T N L L	T K G		
UniRef90_G2LPX0			R I I L I G A	P G T G K G T Q G T F I	S E R Y K I	P K I S T G	
UniRef90_UPI00037627FB			N I V L L G P	Q G S G K G T F S S L I	A Q R F N L K	H I S T G	
UniRef90_R7GFG6			I I I M L G A	P G T G K G T V A S I L	S E K L N I	P Q V S T G	
UniRef90_D8M6Q9	K	P Q V V F L L G G	P G S G K G T V S A T L	K E K L G W I	P L S A G		
UniRef90_C3XN21			K L F L V I L G A	P G S G K T T D A E I	I S K N N S M V	H Y S T G	
UniRef90_B7G252				M L I L G K	P G G K G T I S G K I	L K D F P F H H V S T G	
UniRef90_UPI00037FD6CA	I	Q E K L K N	K V I L L M G F	P G S G K G T Q G K I L	E S E L N I	P H I S T G	
UniRef90_UPI0003BBB7E6		K P K P N M P	I K I A I V G P	P K S G K T T V A K K I	S S E Y G I K R L	S V G	
UniRef90_UPI0003512B8B	M K	C S S K P D K R L	L I L I G P	P G S G K G T Q S P L I	K D E Y C L C H L A T G		
UniRef90_UPI000273AA2B					Q A P K L A E S Y C V C H L A T G		
UniRef90_L8Y8A7			P R V L L C	G P V G S G K S L Q A A L	A Q K Y G L V N V	C C G	
UniRef90_K1YD31				L I L L G A	P A G G K G T V A K L L	T A I D G S V Q I S T G	
UniRef90_MORNI9	E	Q T L E R N V	Q W V F L G C	P G V G K G T Y A S R L	S Q L V G V P H I A T G		
UniRef90_Q8EUD3			L V L L G A	P G C G K G T I S D Y L	V K N Y G L V H I S T G		
UniRef90_HOYSW4					Q A P K L A E T Y C V C H L A T G		
UniRef90_UPI00033363F0			R V P K I I I L G P	P A S G K T T I A M W L	C K H L S T N L L	T R G	
UniRef90_UPI00032AF542			P I R I F I V G P	P K S G K T T V A N K L	A S E Y G L K R L	S V G	
UniRef90_G0V9F3	M	L S K L P	S M R L V F L G A	P G S G K G T Q I S R L	I Q L L P T V N I S S G		
UniRef90_K0S747			P R N I I L F G P	P G A G K G T H G P K I	E D L F G M L P Q L S T G		
UniRef90_U4LBN9			K L R K A M R L I L V G P	P G S G K G T Q S G R L	S H L L Q M S A I S S G		
UniRef90_UPI0003AF8E94			V P R V M V L G P	P A V G K H T V A K K L	S A E L R A V H V T E G		

UniRef90_R6A915	D	L	F	R	S	D	A	I	S	K	G	T	P	M	G	V	K	A	K	E	F	I	D	K	G	E	L	V	P	D	E	L	T	V	G	I	V	R	E	A	L			
UniRef90_A2FYU1	D	L	C	F	R	S	E	I	T	A	G	S	T	P	V	G	V	K	V	K	E	F	I	D	K	G	E	L	V	P	D	D	D	A	T	V	M	E	S	V	F	E	A	L
UniRef90_S2JWY2	D	L	L	R	S	K	N	I	T	A	Q	T	A	L	I	G	Q	Q	A	Q	Q	Y	V	E	S	D	G	K	L	V	P	D	D	L	L	I	S	L	I	D	S	E	L	V
UniRef90_D0A2W9	N	L	L	R	E	E	V	K	K	G	S	A	I	L	I	G	R	Q	V	E	G	L	M	S	E	G	Q	L	V	P	D	H	V	V	V	A	M	I	J	N	R	L		
UniRef90_UPI00038701DE	T	L	L					F	K	E	L					T	K	E	A	K	A	Y	K	E	R	K	Q	K	I	P	N	A	L	W	A	N	I							
UniRef90_M1VIP1	D	M	L	R	A	A	V	A	G	S	E	R				G	L	A	A	K	K	Y	M	D	A	G	E	L	V	P	P	D	E	L	V	I	G	L	M	Q	R	R	M	
UniRef90_W4WEJ7	D	L	L	R	A	E	V	A	G	S	E	R				G	A	T	L	S	E	D	L	M	S	K	G	L	F	V	P	T	D	N	I	V	L	E	L	I	K	E	Q	M
UniRef90_J9HZ64	D	L	L	K	K	E	L									S	I	K	A	I	R	S	I	L	A	R	G	L	V	D	N	E	I	T	V	T	L	I	K	N	T	M		
UniRef90_M5T521	E	L	L	R	A	E	R	E	R	G	G	P	T	A	E	T	I	R	S	I	L	A	R	G	L	V					P	S	D	E	I	V	I	G	M	I	N	K	D	R
UniRef90_C5K518	D	M	L	R	A	A	V	A	A	E	T	P	I	G	L	K	A	K	D	V	I	M	A	R	G	E	L	V																
UniRef90_O96907	D	L	L	R	A	E	I	K	A	N	T	E	V	I	G	L	K	V	E	D	I	R	N	G	Q	L	V																	
UniRef90_UPI00042C9E5A	H	F	I	L	R	E	N	I	K	A	N	T	E	V	I	G	D	M	A	K	Q	Y	I	E	K	G	L	V																
UniRef90_UPI0002F3391C	E	I	L	P	D	A	M	A	Q	F	N	N	L	G	L	S	H	S	H	L	E	M	A	G	E	L	V																	
UniRef90_F0WC21	D	I	L	R	N	A	I	H	N	D	L	P	I	G	L	K	A	K	S	Y	M	D	A	G	Q	L	V																	
UniRef90_E1FIi9	D	V	I	R	A	A	I	A	E	Y	Q	N	E	W	K	E	A	A	Q	R	Y	Q	R	S	G	E	L	V																
UniRef90_L1IND7	D	M	L	R	A	A	V	A	A	G	T	D	V	G	K	K	A	K	A	I	M	D	S	G	G	L	V																	
UniRef90_UPI00038C5A91	S	V	L	E	E	H	I	A	T	E	T			P	T	M	L	Q	S	L	L	M	S	G	H	S	I	P	D	E	L	V	T	R	L	I	L	E	K	L				
UniRef90_UPI0003345DEB	S	V	L	E	E	H	I	A	N	E	T	T	S	G	K	M	L	Q	S	M	L	L	T	G	H	N	I	P	D	E	L	V	T	K	L	M	I	E	K	L				
UniRef90_K2E5K8	D	I	A	R	K</																																							

UniRef90_R6A9Y15	L	L	K	K	D	T	E	S	G	F	L	L	D	G	F	P	R	T	L	D	Q	A	I	T	R	R	V	C	P	K	C	G	A	S	F	N	I	K	T	L				
UniRef90_A2FYU1	L	G	K	I	P	T	E	S	Q	G	F	L	L	D	G	F	P	R	T	I	N	Q	A	C	G	R	L	F	H	P	G	S	G	R	T	Y	H	T	K	F	N			
UniRef90_S2JWY2	L	L		N	V	I	G	N	T	N	W	L	L	D	G	F	P	R	T	I	N	Q	A	M	D	R	W	L	H	P	G	S	G	R	V	I	N	L	S	Y	N			
UniRef90_D0A2W9	Q	R	P	D	T	K	G	R	G	I	L	L	L	D	G	F	P	R	T	R	A	Q	A	E	T	L	A	A	N	G	F	K	V	D	A	M	I	F	I	D	V			
UniRef90_UPI00038701DE	S	N	V	D	C	I	K	Q	G	W	L	L	L	D	G	F	P	E	N	Q	E	A	Q	A	W	M	L	Q	S	S	G	I	I	P	R	H	V	V	L	Y	A			
UniRef90_M1VIP1	A	A	P	D	V	I	Q	T	S	G	W	L	L	L	D	G	F	P	R	T	A	A	Q	I	V	A	M	D	A	A	G	I	E	P	D	L	V	I	S	L	D	V		
UniRef90_W4WEJ7	D	K	A	H	T	T	K	T	G	F	F	I	L	L	D	G	F	P	R	E	K	D	Q	G	I	L	F	E	E	K	V	C	P	V	D	L	I	L	F	F	D	V		
UniRef90_J9HZ64	K	N	Y	E	K	D	N	Q	S	W	I	L	L	L	D	G	F	P	R	T	R	K	V	Q	A																			
UniRef90_M5T521	I	I	R	T	T	G	K	N	F	L	L	L	L	L	D	G	F	P	R	S	L	S	N	L	D	G	W	Y	E	I	F	G	Y	D	P	K	M	L	Y	F	E	C		
UniRef90_C5K518	I	Q	E	I	D	A	G	W	G	F	L	L	L	L	D	G	F	P	R	T	V	S	Q	A	T	R	I	C	G	R	W	I	H	K	P	S	G	R	S	Y	H	V		
UniRef90_O96907	A	K	N	E			K	E	V	I	V	F	L	L	L	D	G	F	P	R	A	V	S	Q	A	L	L	K	E	A	T	A	E	T	K	I	C	S	V	I	N	L	E	I
UniRef90_UPI00042C9E5A	E	N	R	R			G	E	H	W	L	L	L	L	L	D	G	F	P	R	T	L	V	Q	A	E	R	R	W	I	H	P	P	S	G	R	V	I	N	L	D	F	N	
UniRef90_UPI0002F3391C	L	K	K	P	D	F	D	R	G	W	V	L	L	L	L	D	G	F	P	R	T	A	F	E	A	E	E	L	D	F	L	D	N	L	P	G	H	N	L	D	W	A	I	
UniRef90_F0WC21	Q	D	E	D	C	Q	Q	Y	G	W	V	L	L	L	L	D	G	F	P	R	T	G	P	Q	A	Q	A	L	L	E	H	E	I	L	P	D	A	M	L	V	L	Q	V	
UniRef90_E1FIi9	S	K	H	R	N	A	K	A	F	F	L	L	L	L	L	D	G	F	P	R	E	A	R	Q	V	E	N	F	E	R	E	V	R	P	V	N	M	A	M	I	L	D	Y	
UniRef90_L1IND7	I	A	K	P	E	C	Q	N	G	F	I	L	L	L	L	D	G	F	P	R	T	L	A	Q	A	N	A	L	D	Q	M	G	E	K	V	N	C	V	I	A	L	E	V	
UniRef90_UPI00038C5A91	K	S	P	E	V	S	H	F	G	Y	I	L	L	L	L	L	D	G	F	P	S	T	L	Q	L	E	F	V	K	N	L	E	L	K	V	P	D	V	I	A	N	I	K	C
UniRef90_UPI0003345DEB	N	S	V	E	V	S	H	F	G	Y	V	I	L	L	L	L	L	D	G	F	P	S	L																					

	130	140	150	160																																									
UniRef90_R6A9Y15	L	S	K	V	D	G	L	C	D	Y	C	G	A	N	L	I	Q	R	K	D	D	T	A	E	A	F	K	T	R	M	T	E	Y	E	A	K	T	A	P	I					
UniRef90_A2FYU1	P	P	K	V	P	M	K	L	D	D	V	T	G	E	D	L	I	V	R	K	D	D	D	T	I	E	V	F	N	K	R	M	N	Q	Y	G	N	T	F	Q	P	V			
UniRef90_S2JWY2	P	P	R	V	P	G	L	D	D	V	T	G	E	D	L	I	S	K	R	P	D	D	D	T	I	E	V	F	N	K	R	M	N	Q	Y	G	N	T	F	Q	P	V			
UniRef90_D0A2W9	D	E	I	K	L	E	E	R	C	V	F	R	R	L	D	P	L	R	S	D	D	D	N	R	E	K	H	Q	R	R	R	M	Q	V	I	L	K	Q	K	A	S	L			
UniRef90_UPI00038701DE	P	D	T	V	L	V	E	R	N	S	G	K	R	I	Y	H	T	T	F	D	W	P	S	D	P	A	L	S	D	Q	R	S	L	V	E	Y	H	R	K	F	P	E	V		
UniRef90_M1VIP1	P	F	E	I	L	K	E	R	V	S	G	K	R	I	Y	H	L	R	F	D	P	S	P	A	L	S	D	Q	R	S	L	V	E	Y	H	R	K	F	P	E	V				
UniRef90_W4WEJ7	A	N	D	T	M	K	E	R	L	L	G	R	A	V	Q	H	R	A	D	D	T	E	E	T	I	Q	K	R	I	E	I	F	N	V	K	N	N	E	L						
UniRef90_J9HZ64	P	Y	P	V	L	E	K	R	I	L	G	R	A	K	Y	T	G	R	S	D	D	D	N	V	E	S	L	K	L	R	F	D	T	F	K	S	A	S	T	E	L	P	T		
UniRef90_M5T521	P	D	A	T	N	M	L	D	D	V	T	G	E	D	L	I	S	K	R	P	D	D	D	T	A	E	A	L	K	T	R	F	D	T	F	K	S	A	S	T	E	L	P	T	
UniRef90_C5K518	P	D	E	I	L	I	Q	R	I	V	S	T	G	E	D	L	I	S	K	R	P	D	D	D	T	A	E	A	L	K	T	R	F	D	T	F	K	S	A	S	T	E	L	P	T
UniRef90_O96907	P	P	H	V	H	G	I	D	D	V	T	G	E	D	L	I	S	K	R	P	D	D	D	T	A	E	A	L	K	T	R	F	D	T	F	K	S	A	S	T	E	L	P	T	
UniRef90_UPI00042C9E5A	Y	L	Q	V	P	Q	A	V	M	V	S	R	S	L	G	R	S	L	P	D	D	D	D	Q	P	E	I	V	Q	R	R	L	V	E	I	F	Y	K	D	V	A	K	P	I	
UniRef90_UPI0002F3391C	P	D	E	Q	V	I	A	R	I	S	G	R	S	R	C	I	T	R	D	D	D	D	T	P	E	I	V	V	R	V	R	L	E	A	Y	H	A	N	S	S	N	V			
UniRef90_F0WC21	D	E	D	T	L	R	Q	H	M	E	S	R	G	L																															
UniRef90_L1IND7	P	D	S	V	L	E	E	R	I	C	S	G	R	I	H	M	Q	R	S	D	D	D	T	A	E	A	L	K	T	R	F	D	T	F	K	S	A	S	T	E	L	P	T		
UniRef90_UPI00038C5A91	G	D	H	D	L	C	Q	R	I	V	S	G	R	Q	H	Y	N	R	S	D	D	D	T	A	E	A	L	K	T	R	F	D	T	F	K	S	A	S	T	E	L	P	T		
UniRef90_UPI0003345DEB	Q	R	V	S	G	Q	R	H	C	N	T	G	H	I	Y	T	R	D	Q	W	D	P	E	F	I	E	N	R	R	K															
UniRef90_K2E5K8	P	P	K	I																																									

UniRef90_R6A915
UniRef90_A2FYU1
UniRef90_S2JWY2
UniRef90_D0A2W9
UniRef90_UPI00038701DE
UniRef90_M4VIP1
UniRef90_W4WEJ7
UniRef90_J9HZ64
UniRef90_M5T521
UniRef90_C5K518
UniRef90_O96907
UniRef90_UPI00042C9E5A
UniRef90_UPI0002F3391C
UniRef90_F0WC21
UniRef90_E1FIJ9
UniRef90_L1IND7
UniRef90_UPI00038C5A91
UniRef90_UPI0003345DEB
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UniRef90_F9VLX6
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UniRef90_B9S706
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UniRef90_UPI00038EBC40
UniRef90_S5LUW7
UniRef90_U3Q7B6
UniRef90_H2M295
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UniRef90_UPI00036A76FE
UniRef90_E4WS24
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UniRef90_UPI0003C87997
UniRef90_A3ZSW2
UniRef90_A7EXX7
UniRef90_R7T860
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UniRef90_G8S111
UniRef90_K2ELY0
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UniRef90_B3E181
UniRef90_A5USL8
UniRef90_K1ZR27
UniRef90_G1X1L5
UniRef90_V3Z5F9
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UniRef90_H0V338
UniRef90_G2LPX0
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UniRef90_R7GFG6
UniRef90_D8M6Q9
UniRef90_C3XN21
UniRef90_B7G252
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UniRef90_R6C3B4	E	L	L	R	G	V	A	D	P	S	T	E	L	G	K	K	I	L	R	E	I	Q	S	E	K	R	Q	M	A	V	P	D	S	I	I	T	N	E	L	M	K	E	R	
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UniRef90_D6HBS0	D	M	F	R	K	A	I	K	E	E	T	E	L	G	K	E	A	K	S	Y	M	D	S	R	G	E	L	V	P	D	E	I	V	T	V	G	I	V	A	K	E	R		
UniRef90_D8R4X7	D	L	V	R	Q	E	L	K	R	D	S	P	L	G	S	K	E	L	K	D	L	V	S	R	G	E	L	V	P	D	E	I	L	V	L	G	L	T	R	K	R	L		
UniRef90_Q011N2	D	L	V	R	A	E	I	K	G	E	T	P	L	G	K	E	M	R	A	L	A	A	G	E	L	V	P	D	E	T	E	T	V	L	E	I	L	R	K	R	I			
UniRef90_I3SMA8	D	L	L	R	K	E	V	L	S	D	T	E	Y	G	S	M	I	L	S	T	I	S	E	G	R	I	V	P	P	Q	V	T	V	K	E	L	I	R	E	M				
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UniRef90_UPI000																																												

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UniRef90_K8EJU0	T	M	P	K	T	K	A	S	E	R	G	F	D	G	F	P	R	T	V	A	Q	A	C	A	R	R	K	C	G	E	C	G	K	G	Y	N	V	A	D	I		
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UniRef90_UPI0001D54AFB																																										
UniRef90_K7R8N7	T	A	A	S	L	G	H	T	T	G	F	L	I	F	D	G	F	P	R	N	I	L	Q	A	E	A	Y	L	N	Q	I	G	K	P	D	L	T	I	L	V	N	V
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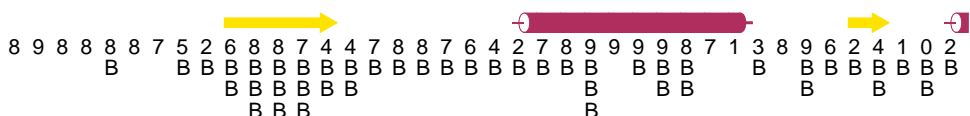
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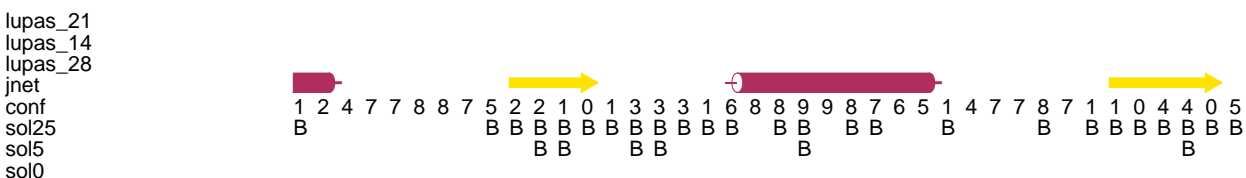
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D S F K R Q K G K G V V C D F P R D L R W A E E Y G W Q V G E P S A V I L L R C
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E Q L E S N K Q N Y F L E G F P K T R V Q A I A L Q K A G I I P D T F I I I N K
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I R Q L Q D K S G I I D G Y P R N L Q Q V K Y F E N K Y K Q R P T I L L D C
N S P E A A H Y G Y V L C G F P S L S E Q
D N N K E C R G G F I L D G F P R T V P Q A Q G L D S M L Q E R N Q Y H T T F H
A K N N S S V L I D G F P R S V A Q T N F M
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E E Y C R G E K G F I L D G I P R T R I Q A E I L D Q I A D I D L I V N F K C T
N S S E V T H H G Y V L D G F P C M P E Q L E L V K N W K L K P D F I V N L K I
I D A P D C A N G F I L D G Y P R T V P Q A V A L G Q M L K G K G L K L D A V I
K L F D C I R K G W L D G F P D T R E Q A L A L Q E I G I N P K H F V L E A
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L G V T L G E R G F V L D G F P R T R L Q A E I L D L V A D I D L A I N L K C
I R E A D C R N G F I L D G F P R T V E Q A E A L D N E G R S I D K A I N L Q V
T R G S H K Y N G I V L D R F V I S S E D A Y Y I Q S C L A G A G L P V P F V F
F I L D G F P R N Y N N L N G W I N N Y A Y V H L C I F L Y C
N Y Y G T S K E S I V S Y N F V L T V D G N G A K V L K E K I P C T T I Y L E I
M D R V C A T I G V V T D G Y P V T R K Q V N L L E S A R I I P V K I F E L E M
T D Y I K H R T D N I C I D G I R P D E I R Y F K E H M D G R F Y V I G L V S
I A Q D D C K N G F I L D G F P R T L A Q A E A M V E A G V D L D A V V E I D V
A K V E G G S R K F I L D W F P R D V R E A K A F D L V A G I D F V L F F D V
L S Q D D A K N G A V L D G F P R T K E Q A R V V C S N K D C G E S F N T E F K
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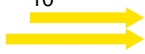
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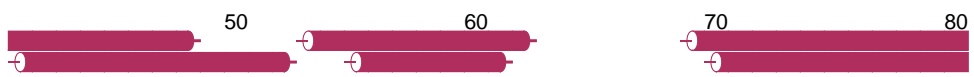


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