

QUERY	1	M	I	S	L	I	A	A	L	A	V	D	R	V	I	G	M	E	N	A	M	P	W	N	L	P	A	D	L	A	W	F	K	R	N	T	L	D	K	P	V	40		
UniRef90_L8PNV8		M	I	S	F	I	F	A	M	D	A	N	R	L	I	G	K	D	N	D	L	P	W	H	L	P	A	D	L	A	Y	F	K	K	V	L	T	S	G	H	S	I	V	
UniRef90_UPI00041DF5CC		M	I	S	L	I	V	A	A	D	E	N	N	G	I	G	K	K	N	D	Q	L	P	W	H	L	P	A	D	L	K	H	F	K	K	N	V	T	T	S	G	H	A	V
UniRef90_M5PFL6		M	I	S	F	I	F	A	M	D	K	N	R	L	I	G	K	D	N	D	L	P	W	H	L	P	A	D	L	K	Y	F	K	K	N	V	T	T	S	G	H	A	V	
UniRef90_F5LT89		M	I	S	F	I	F	A	M	D	R	N	N	A	I	G	K	D	N	D	L	P	W	H	L	P	A	D	L	K	Y	F	K	K	M	T	T	S	G	H	P	I		
UniRef90_UPI0001E89777		M	I	S	L	I	V	A	T	D	R	N	N	A	I	G	K	D	N	D	L	P	W	R	L	P	A	D	L	A	Y	F	K	K	V	T	T	M	G	S	L	I	V	
UniRef90_UPI000472E17C		M	I	S	L	I	A	A	M	A	D	R	V	I	G	K	M	D	N	A	M	P	W	S	L	P	A	D	L	A	W	F	K	K	Q	T	L	N	K	P	V			
UniRef90_B2U8M3		I	L	T	L	I	V	A	R	A	R	N	G	V	I	G	R	N	N	T	L	P	W	R	L	P	E	D	L	A	H	F	K	R	T	T	M	G	A	P	I			
UniRef90_UPI0002F86E87		M	I	S	F	I	V	A	M	D	D	N	W	V	I	G	K	D	N	Q	L	P	W	H	L	P	E	D	L	K	F	F	K	R	V	T	T	M	G	H	P	I		
UniRef90_UPI0003452C6B		M	I	S	Y	I	V	A	M	D	K	Q	R	A	I	G	K	D	N	Q	L	P	W	H	L	P	N	D	L	A	Y	F	K	K	I	L	T	T	M	G	H	P	I	
UniRef90_A6EGV0		I	V	S	I	I	V	A	L	A	E	D	H	G	I	G	R	D	N	Q	L	L	W	H	L	P	A	D	L	K	F	F	K	N	T	T	T	G	H	T	I	V		
UniRef90_UPI0002D59F27		M	I	S	L	I	V	A	V	A	E	N	G	V	I	G	D	N	N	R	Q	L	L	W	H	L	P	S	E	D	L	R	R	F	K	R	I	T	T	G	H	P	V	
UniRef90_N0AX68		M	I	S	L	I	W	A	M	D	E	N	R	V	I	G	K	D	N	Q	L	P	W	H	L	P	E	D	L	K	F	F	K	K	T	T	T	G	H	P	I	V		
UniRef90_R4WZE7		I	L	T	L	I	V	A	R	A	R	N	G	V	I	G	R	D	N	Q	L	P	W	R	L	P	E	D	L	A	F	F	K	R	T	T	M	G	A	P	I	V		
UniRef90_H1YH84		I	L	T	I	V	A	L	S	N	Y	A	I	G	K	D	N	Q	L	L	W	H	L	P	P	K	D	L	K	H	F	K	D	I	T	A	G	G	T	V				
UniRef90_M1Z497		M	I	S	L	I	V	A	M	G	R	N	R	V	I	G	K	K	N	Q	L	P	W	H	L	P	A	D	L	N	Y	F	K	K	M	T	M	G	H	P	I	V		
UniRef90_W8QX12		M	I	S	M	I	V	A	T	G	K	D	R	V	I	G	K	D	N	Q	M	P	W	H	L	P	A	D	L	A	Y	F	K	K	V	T	T	S	G	H	T	I	V	
UniRef90_UPI00037B3A63		M	L	S	M	I	V	A	M	T	R	N	G	I	G	K	D	N	D	M	P	W	H	L	P	P	A	D	L	A	Y	F	K	Q	T	T	L	G	K	P	V			
UniRef90_UPI000371592F		M	L	S	I	V	A	M	D	N	N	G	L	I	G	K	D	N	Q	L	P	W	H	L	P	P	A	D	L	A	Y	F	K	K	I	T	T	G	K	S	I	V		
UniRef90_M8DYY8		M	I	S	I	I	V	A	M	D	R	N	R	V	I	G	Y	N	N	T	L	P	W	H	L	P	A	D	L	A	Y	F	K	R	V	T	T	M	G	H	P	L		
UniRef90_B8GN07		M	L	S	L	I	V	A	V	D	R	N	N	L	I	G	R	D	N	Q	L	P	W	H	L	P	P	A	D	L	A	F	F	K	R	T	T	M	G	A	P	M		
UniRef90_G9QNM4		M	I	S	L	I	V	A	M	D	E	N	R	V	I	G	R	D	N	R	L	P	W	R	L	P	E	D	L	K	F	F	K	R	T	T	M	G	H	V	I	V		
UniRef90_K1ZZV7		M	I	S	A	I	V	A	M	S	E	N	R	V	I	G	K	D	N	Q	L	L	W	H	L	P	P	A	D	L	Q	H	F	K	R	I	T	T	M	G	K	P	I	
UniRef90_UPI00047B0345		M	I	S	F	I	V	A	M	D	E	N	R	V	I	G	K	E	N	D	L	P	W	H	L	P	P	E	D	L	K	F	F	K	R	V	T	T	M	G	H	P	I	
UniRef90_A0A023CPQ9		M	I	S	H	I	F	A	M	D	Q	N	R	V	I	G	K	D	N	R	L	P	W	H	L	P	P	A	D	L	A	Y	F	K	K	V	T	T	M	G	H	A	L	
UniRef90_J0LNIJ3		M	I	A	T	V	V	A	L	A	E	N	N	V	I	G	K	D	N	Q	L	L	W	H	L	P	P	A	D	L	R	H	F	K	Q	K	T	T	M	G	H	P	M	
UniRef90_G2Z5E0		M	I	L	I	I	A	A	M	A	Q	N	R	A	L	G	K	K	N	D	L	L	W	H	L	P	P	N	D	F	K	R	F	K	A	Q	T	T	G	H	Y	I		
UniRef90_S6BLW3		M	L	S	L	I	A	A	V	A	D	N	G	V	I	G	K	D	N	R	L	P	W	H	L	P	P	A	D	L	A	H	F	K	R	L	T	T	G	K	P	I	V	
UniRef90_UPI0004728410		I	S	M	I	W	A	M	A	Q	N	G	V	I	G	R	D	N	K	L	P	W	R	L	P	P	R	D	M	A	F	F	K	E	Q	T	T	G	K	T	V			
UniRef90_W4QPH9		M	I	S	F	I	V	A	M	D	R	N	Q	V	I	G	K	D	N	Q	L	P	W	H	L	P	P	A	D	L	K	F	F	K	K	I	T	T	G	H	T	I		
UniRef90_UPI0003770B85		M	L	S	L	I	V	A	R	A	R	N	G	V	I	G	V	N	N	Q	L	P	W	R	L	P	P	A	D	L	K	Y	F	K	R	I	T	T	M	G	K	P	I	
UniRef90_B8IOT9		M	I	S	M	I	W	A	M	G	R	N	N	A	L	G	K	N	R	M	P	W	Y	I	P	P	A	D	F	A	Y	F	K	K	V	T	T	M	G	K	P	V		
UniRef90_UPI00036E4D42		M	I	N	I	V	A	K	A	S	N	N	V	I	G	A	K	N	D	L	I	W	H	L	P	P	N	D	L	K	H	F	K	S	L	T	T	S	G	H	P	I		
UniRef90_I2ESC7		M	I	S	I	I	V	A	T	A	E	N	G	V	I	G	K	D	N	Q	M	L	W	K	L	P	S	T	D	F	K	Y	F	K	N	L	T	T	G	H	S	V		
UniRef90_S5KH05		M	I	I	F	V	W	A	Q	D	R	A	G	N	I	G	K	D	N	K	M	P	W	H	L	P	P	G	D	L	Q	F	F	K	K	T	T	T	G	K	T	L		
UniRef90_L9PA45		L	T	I	I	V	A	M	D	A	Q	R	G	I	G	I	N	N	T	L	P	W	K	L	P	P	E	D	L	A	H	F	K	R	V	T	T	T	G	H	P	I		
UniRef90_Q2SA18		V	L	S	I	V	V	A	R	A	E	N	G	A	I	G	V	E	N	T	L	P	W	R	L	P	S	N	D	L	Q	Y	F	K	Q	V	T	T	M	G	K	P	I	
UniRef90_W0SJP3		L	L	T	L	I	A	A	V	A	R	N	G	V	I	G	L	G	N	R	L	P	W	H	L	P	S	A	D	L	K	H	F	K	A	L	T	T	T	G	H	T	V	
UniRef90_W6K9D2		I	S	L	I	V	A	M	A	E	N	R	I	G	R	A	N	G	L	P	W	R	L	P	S	A	D	L	K	H	F	K	A	L	I	T	T	G	K	A	V			
UniRef90_K2BA12		I	S	I	I	V	A	K	S	K	N	N	V	I	G	K	N	N	Q	L	P	W	Y	L	P	P	A	D	L	H	H	F	K	S	I	T	T	M	G	K	P	I		
UniRef90_R5X2E9		M	I	S	L	I	V	A	V	A	R	N	G	V	I	G	G	G	N	T	L	L	W	H	L	P	S	E	D	L	K	R	F	K	A	L	T	T	T	G	H	P	V	
UniRef90_UPI000287CCDE		M	I	S	F	I	V	A	M	D	R	N	G	V	I	G	R	N	N	Q	L	P	W	H	L	P	S	E	D	L	R	Y	F	K	R	K	T	T	M	G	H	P	V	
UniRef90_R7JQ76		M	I	A	I	I	V	A	V	A	E	N	G	V	I	G	G	D	N	R	L	L	W	H	L	P	S	E	D	L	K	H	F	K	A	V	T	T	T	G	H	P	V	
UniRef90_A0A023RGN7			M	I	A	M	A	M	A	H	D	R	V	I	G	L	D	K	Q	M	P	W	H	L	P	P	A	D	L	A	H	F	K	R	V	T	L	G	K	P	V			
UniRef90_U7G2R7		L	S	M	M	V	A	K	A	S	N	N	V	I	G	R	D	N	K	A	L	P	W	Y	L	P	P	N	D	L	K	Y	F	K	Q	V	T	F	G	K	P	V		
UniRef90_UPI000289AF5E		M	I	S	I	I	V	A	J	A	E	N	G	V	I	G	D	K	N	A	L	L	W	H	L	P	S	E	D	L	K	H	F	K	S	V	T	T	G	H	P	V		
UniRef90_R1F9F2			M	I	A	M	A	M	A	C	D	R	V	I	G	K	D	N	Q	M	P	W	H	L	P	P	A	D	L	A	H	F	K	R	V	T	L	G	K	P	I			
UniRef90_UPI00035F4F01		I	S	M	I	A	A	M	A	R	N	R	T	I	G	V	D	D	D	L	P	W	R	L	P	P	D	D	M	A	Y	F	K	R	M	T	T	G	T	T	V			
UniRef90_UPI0003B602D4		L	T	L	I	A	A	L	A	R	N	R	V	I	G	R	D	G	D	L	P	W	R	L	P	P	D	D	L	K	Y	F	K	R	L	T	V	G	K	T	V			
UniRef90_A6DH01		S	M	I	C	A	M	A	S	N	R	G	I	G	Y	K	N	T	L	P	W	R	L	P	S	N	D	L	Q	H	F	K	A	L	T	T	M	G	K	A	I			
UniRef90_UPI00047089FA		L	S	M	I	V	A	V	A	R	G	G	V	I	G	L	J	N	N	T	L	P	W	H	L	P	P	E	D	L	K	R	F	R	A	L	T	T	T	G	H	I		
UniRef90_R9PRP5		V	A	M	I	A	A	M	A	K	Q	R	V	I	G	K	D	N	Q	M	P	W	H	L	P	P	A	D	L	K	H	F	K	A	V	T	T	M	G	K	P	V		
UniRef90_A6VM90		L	F	S	L	I	V	A	A	T	K	N	Q	V	I	G	K	D	N	Q	M	P	W	H	L	P	P	A	D	L	A	W	F	R	R	N	T	T	G	K	P	V		
UniRef90_A6W1R3		M	L	S																																								

QUERY	I	M	G	R	H	T	W	E	S	I	G	R	P	L	P	G	R	K	N	I	L	S	S	Q	P	G	T	D	R	V	T	W	V	K	S	V	D	E					
UniRef90_L8PNV8	I	M	G	R	K	T	Y	E	S	I	G	R	P	L	P	P	N	R	K	N	I	V	T	S	A	P	S	T	D	R	V	T	W	V	K	S	V	D	E				
UniRef90_UPI00041DF5CC	I	M	G	R	K	T	Y	F	D	S	I	G	K	P	L	P	N	R	K	N	I	V	T	S	R	S	D	K	F	I	E	G	A	E	L	V	N	S	L	K	E		
UniRef90_M5PFL6	I	M	G	R	K	T	Y	E	S	I	G	R	P	L	P	P	N	R	K	N	I	V	T	T	S	R	N	R	E	D	F	P	G	C	D	I	L	H	S	A	E	E	
UniRef90_F5LT89	L	M	G	R	K	T	Y	D	S	I	G	R	P	L	P	T	R	Q	D	F	K	A	E	G	G	C	E	T	V	V	T	S	L	K	E	E	E	E	E	E	E		
UniRef90_UPI0001E89777	V	M	G	R	K	T	Y	E	S	I	G	K	P	L	P	P	Y	R	R	N	I	L	T	S	R	Q	D	F	H	A	E	G	C	E	T	L	H	S	L	E	E	E	
UniRef90_UPI000472E17C	I	M	G	R	R	T	F	E	S	I	G	R	P	L	P	P	G	R	I	N	I	V	T	S	R	T	A	G	T	S	E	G	V	S	W	V	T	S	P	D	E		
UniRef90_B2U8M3	V	M	G	R	K	T	Y	D	S	I	G	R	P	L	P	P	G	R	R	N	I	V	T	T	R	N	K	L	E	L	P	G	C	E	I	A	Y	S	M	E	D		
UniRef90_UPI0002F86E87	V	M	G	R	K	T	F	A	S	I	G	R	P	L	P	P	G	R	E	N	I	V	T	T	R	N	K	D	F	H	H	D	G	C	S	I	F	Y	G	L	D		
UniRef90_UPI0003452C6B	V	M	G	R	K	T	F	E	S	I	G	R	P	L	P	P	N	R	R	N	I	V	T	T	R	N	K	S	F	E	A	E	G	V	L	D	V	H	S	I	A	E	
UniRef90_A6EGV0	I	M	G	R	K	T	Y	D	S	I	G	R	P	L	P	P	N	R	R	N	I	V	T	T	R	N	K	A	E	F	A	E	G	V	L	D	V	H	S	I	A	E	
UniRef90_UPI0002D59F27	V	M	G	R	K	T	W	E	S	I	G	R	P	L	P	P	G	R	E	N	I	V	T	T	R	R	E	L	S	F	D	G	A	R	T	V	H	S	I	L	D	E	
UniRef90_N0AX68	A	M	G	R	K	T	H	V	S	I	G	R	P	L	P	P	G	R	E	N	I	I	T	T	R	N	Q	E	Y	T	S	E	G	C	L	I	V	H	S	I	V	Q	E
UniRef90_R4WZE7	V	M	G	R	K	T	F	E	S	I	G	R	P	L	P	P	G	R	R	N	I	V	T	T	R	D	A	T	R	R	Y	E	G	C	D	V	V	T	S	L	D	E	
UniRef90_H1YH84	I	M	G	R	K	T	F	D	S	V	G	K	P	L	P	P	K	R	R	N	I	V	T	T	R	Q	A	I	T	I	A	G	C	E	V	V	S	L	D	E	E		
UniRef90_M1Z497	V	M	G	R	K	T	Y	D	A	I	G	K	P	L	P	P	G	R	T	N	I	V	T	T	R	D	P	A	C	K	A	E	G	C	I	L	H	S	L	D	E		
UniRef90_W8QX12	V	M	G	R	K	T	F	E	S	I	G	R	A	L	P	P	N	R	R	N	I	V	T	T	T	S	S	S	F	Q	E	G	C	E	V	V	H	S	I	L	D	E	
UniRef90_UPI00037B3A63	I	M	G	R	N	T	H	E	S	I	G	R	P	L	P	P	G	R	R	N	I	V	T	S	R	S	L	R	E	A	P	A	G	T	E	V	S	S	P	E			

QUERY	A	I	A	C	G	D	V	P	E	I	M	V	I	G	G	G	R	V	Y	E	Q	F	L	P	K	A	Q	K	L	Y	L	T	H	I	D	A	E	V	E						
UniRef90_L8PNV8	V	L	D	I	C	S	G	S	E	E	C	F	V	I	G	G	A	Q	L	Y	T	A	L	F	P	Y	A	D	R	L	Y	M	T	K	I	H	H	E	F	E					
UniRef90_UPI00041DF5CC	A	L	Q	L	C	P	A	G	E	Q	V	F	I	G	G	G	S	T	L	F	N	Q	S	L	A	L	A	T	K	L	Y	M	T	K	I	H	H	E	V	F	D				
UniRef90_M5PFL6	V	V	Q	F	A	T	S	E	E	C	F	V	I	G	G	G	S	T	L	Y	T	E	L	L	P	H	A	D	K	L	Y	M	T	K	I	H	H	E	V	F	D				
UniRef90_F5LT89	E	V	L	E	R	Y	T	E	G	E	F	V	I	G	G	G	T	E	V	F	L	L	F	W	P	H	V	D	K	L	Y	V	T	F	I	D	D	E	F	F	E				
UniRef90_UPI0001E89777	V	Q	Q	L	N	K	G	D	V	E	E	L	F	I	G	G	G	A	H	I	F	K	E	A	L	P	E	J	A	D	R	L	Y	L	T	Y	D	D	E	F	F	E			
UniRef90_UPI000472E17C	A	L	A	L	A	G	D	V	P	E	I	M	V	I	G	G	G	K	I	Y	A	Q	M	L	P	E	K	A	D	R	L	Y	L	T	H	I	D	D	E	F	F	E			
UniRef90_B2U8M3	A	Q	R	L	C	V	G	A	E	Q	I	F	L	I	G	G	A	Q	L	Y	A	D	A	L	P	S	A	D	R	L	I	V	T	E	I	D	A	S	D	F	F	E			
UniRef90_UPI0002F86E87	Q	F	S	Q	Q	K	P	E	E	E	F	F	V	I	G	G	A	E	L	F	K	Q	M	L	Q	K	A	D	R	L	Y	L	T	Y	I	H	S	S	F	F	D				
UniRef90_UPI0003452C6B	V	V	E	L	G	R	E	E	A	E	C	F	V	I	G	G	A	E	L	F	T	S	L	W	D	K	V	E	R	I	Y	L	T	Y	I	D	E	T	F	F	E				
UniRef90_A6EGV0	A	I	A	L	C	M	E	E	K	E	V	F	V	I	G	G	A	E	L	Y	K	H	A	L	P	L	A	N	R	L	Y	V	T	Q	V	E	G	S	Y	E	E				
UniRef90_UPI0002D59F27	A	Y	A	L	F	P	P	E	E	E	V	F	V	I	G	G	A	Q	I	Y	G	E	A	L	P	A	A	D	R	F	Y	L	T	R	V	H	R	A	Y	E	E				
UniRef90_N0AX68	L	L	H	Y	A	Q	Q	Y	D	E	V	F	I	G	G	A	E	I	F	K	E	V	F	P	F	A	D	R	L	Y	I	T	K	I	Y	E	T	F	D	D	E	F	F		
UniRef90_R4WZE7	A	A	L	A	L	E	P	A	N	E	A	F	L	I	G	G	A	Q	L	Y	R	D	A	I	A	R	A	D	K	M	I	V	T	E	I	D	A	S	D	F	D	D	E	F	F
UniRef90_H1YH84	A	I	A	L	C	N	D	E	V	F	I	V	I	G	G	A	E	I	F	Y	R	Q	A	M	S	V	T	N	R	L	Y	L	T	I	V	H	H	S	F	D	D	E	F	F	
UniRef90_M1Z497	E	V	W	R	K	F	R	D	Q	D	L	F	V	I	G	G	A	E	I	F	R	Q	T	L	S	L	A	D	R	L	Y	L	T	K	I	H	H	S	F	F	S	S	F	F	E
UniRef90_W8QX12	I	L	T	I	A	K	T	E	E	E	L	L	I	I	G	G	S	K	L	Y	E	E	M	M	P	Y	A	D	R	L	Y	I	T	H	I	H	H	S	F	F	E	E	E	E	
UniRef90_UPI00037B3A63	A	I	A	L	L	I	N	G	E	E	V	M	V	M	G	G	G	Q	L	Y	A	A	F	L	P	L	A	D	R	L	Y	I	T	R	I	E	A	N	I	D	D	E	F	F	E
UniRef90_UPI000371592F	L	L	L	I	E	N	E	K	E	V	M	V	I	G	G	A	S	L	C	E	Q	L	L	P	K	V	N	R	L	Y	I	T	R	I	D	S	E	F	F	E	E	E	E		
UniRef90_M8DY8	I	K	Q	V	E	Q	Q	Y	G	H	V	F	V	I	G	G	A	Q	V	F	E	Q	A	M	P	I	A	N	R	L	Y	V	T	H	I	D	A	T	F	N	N	E	E	E	
UniRef90_B8GN07	G	I	A	A	A	G	D	A	P	E	L	F	V	I	G	G	A	K	L	F	V	D	T	L	P	L	A	D	R	L	Y	L	T	R	I	D	H	A	F	F	E	E	E		
UniRef90_G9QNM4	V	L	A	M	N	D	Q	Y	G	E	I	F	V	I	G	G	A	E	I	F	R	I	F	L	P	H	A	K	R	M	Y	I	T	K	I	H	H	H	F	F	A	A	F	F	E
UniRef90_K1ZZV7	A	L	T	A	V	E	Y	S	N	E	I	F	V	I	G	G	A	L	I	Y	Q	E	M	L	S	L	I	E	R	L	Y	M	T	I	V	H	R	E	F	T	A	A	F	F	E
UniRef90_UPI00047B0345	F	V	T	Y	C	Q	N	D	E	I	F	V	I	G	G	A	E	L	F	K	E	T	F	A	F	A	D	R	L	Y	I	T	I	V	H	H	E	D	E	F	A	A	F	F	E
UniRef90_A0A023CPQ9	V	K	R	F	A	M	R	D	D	E	V	F	V	I	G	G	A	E	L	F	R	A	T	L	P	V	A	D	R	L	Y	I	T	K	I	H	E	A	S	F	P	P	E	E	E
UniRef90_J0LNI3	A	L	A	K	A	L	D	S	E	Q	V	S	I	V	G	G	A	E	I	Y	K	Q	A	L	P	H	V	D	T	I	Y	L	T	E	V	H	H	T	F	D	D	E	F	F	E
UniRef90_G2Z5E0	A	L	A	L	C	P	K	N	Q	D	L	Y	I	I	G	G	G	E	I	Y	K	Q	T	M	P	M	A	D	V	L	D	I	T	L	V	E	A	T	F	F	E	E	E	E	
UniRef90_S6BLW3	A	I	E	Q	F	G	D	V	D	E	L	M	L	I	G	G	A	Q	L	Y	A	Q	A	L	P	R	A	A	R	L	Y	L	T	E	V	H	I	E	F	P	E	E	E	E	
UniRef90_UPI0004728410	E	G	L	R	L	A	A	E	E	E	L	M	V	I	G	G	A	E	I	Y	S	L	F	W	P	H	A	D	R	L	I	V	T	R	I	E	E	D	F	F	E	E	E	E	
UniRef90_W4QPH9	V	L	Q	M	V	N	Q	D	E	E	F	F	I	I	G	G	T	Q	V	F	S	L	F	W	D	Y	V	D	R	L	Y	L	T	E	V	I	D	H	E	F	F	E	E	E	
UniRef90_UPI0003770B85	A	L	E	K	V	G	E	A	E	E	F	M	L	I	G	G	A	E	L	Y	R	Q	G	M	E	Y	A	S	T	V	Y	L	T	E	V	I	K	A	E	F	P	E	E	E	
UniRef90_B8I0T9	K	A	M	E	Y	T	E	E	K	E	V	F	I	I	G	G	A	E	I	Y	K	E	F	L	P	I	A	D	R	L	Y	I	T	L	I	E	K	E	F	F	E	E	E	E	
UniRef90_UPI00036E4D42	K	A	I	E	L	K	K	I	D	E	D	V	I	I	G	G	G	N	I	Y	K	Q	A	M	E	F	T	D	V	L	Y	L	T	E	V	H	H	E	D	E	F	F	E	E	
UniRef90_I2ESC7	A	I	E	L	A	K	T	H	E	E	I	F	I	I	G	G	G	N	V	Y	E	Q	A	L	K	I	T	D	K	L	Y	L	T	E	V	D	A	N	I	E	E	E	E	E	
UniRef90_S5KH05	V	L	A	L	A	E	T	G	E	T	I	Y	I	V	G	G	A	E	I	Y	R	L	F	M	D	V	A	D	Q	L	I	V	T	K	I	D	A	E	F	F	E	E	E	E	
UniRef90_L9PA45	A	A	L	A	L	L	D	G	A	P	G	F	V	I	G	G	A	E	L	Y	R	Q	A	M	P	L	A	D	Q	L	Y	L	T	E	V	I	A	R	T	F	Q	Q	E	E	E
UniRef90_Q2SA18	S	L	A	A	R	E	Q	A	E	E	V	M	L	I	G	G	A	E	L	Y	R	Q	G	L	A	A	A	Q	R	V	Y	L	T	E	V	K	E	S	T	V	Q	Q	E	E	E
UniRef90_W0SJP3	A	A	L	A	A	A	E	S	G	E	A	F	V	I	G	G	A	E	L	Y	V	A	A	M	P	L	A	N	R	L	Y	L	T	E	V	I	K	A	S	I	E	E	E	E	
UniRef90_W6K9D2	H	A	A	E	G	W	G	D	D	E	A	M	V	I	G	G	A	A	I	Y	E	S	Q	F	L	P	A	Q	A	D	R	L	Y	L	T	E	V	H	A	E	V	L	E	E	E
UniRef90_K2BA12	A	L	N	A	V	K	T	E	K	E	V	M	I	I	G	G	A	N	I	Y	S	Q	F	L	P	R	A	D	C	I	Y	M	T	I	I	D	A	E	L	Q	E	E	E	E	
UniRef90_R5X2E9	A	L	A	L	F	P	A	Q	K	E	V	F	V	T	G	G	G	Q	I	Y	A	Q	A	L	P	L	A	D	R	L	Y	L	T	T	V	M	R	D	Y	L	E	E	E	E	
UniRef90_UPI000287CCDE	F	L	E	G	Q	T	F	G	K	E	C	F	V	I	G	G	A	H	I	F	K	A	F	I	S	F	A	D	R	L	Y	L	T	K	I	D	A	E	L	Q	E	E	E	E	
UniRef90_R7JQ76	A	L	A	L	F	R	P	E	K	V	F	V	I	G	G	A	Q	I	Y	F	A	Q	A	L	P	L	C	D	E	F	Y	L	T	R	V	F	H	A	Y	Q	Q	E	E	E	
UniRef90_A0A023RGN7	T	L	S	E	A	E	A	P	D	E	L	M	V	I	G	G	G	H	L	Y	G	Q	L	L	P	R	A	D	S	L	Y	L	T	R	I	D	L	A	V	A	E	E	E	E	
UniRef90_U7G2R7	N	V	A	F	I	E	G	Q	E	E	A	V	I	M	G	G	A	E	I	Y	S	L	A	L	P	Q	A	D	R	L	Y	L	T	E	V	F	H	A	N	V	E	E	E	E	
UniRef90_UPI000289AF5E	A	V	R	L	F	P	E	D	E	E	V	F	V	I	G	G	A	Q	I	Y	A	E	A	L	P	J	A	R	R	F	Y	L	T	R	V	F	R	A	Y	E	E	E	E	E	
UniRef90_R1F9F2	S	L	D	E	G	G	E	V	I	E	L	M	V	I	G	G	G	N	L	Y	R	Q	L	L	N	Q	A	D	T	L	Y	L	T	Q	I	D	L	N	V	E	E	E	E	E	
UniRef90_UPI00035F4F01	E	V	L	E	K	Y	G	Q	D	L	M	I	I	G	G	E	A	L	Y	R	L	F	L	P	H	A	D	R	L	L	T	E	V	I	E	E	D	F	F	E	E	E	E		
UniRef90_UPI0003B602D4	Q	V	L	N	A	G	Q	G	R	E	L	V	V	I	G	G	A	E	L	Y	R	Q	T	L	P	L	A	T	R	L	E	L	T	E	V	I	J	A	E	V	E	E	E	E	
UniRef90_A6DH01	I	R	E	N	C	A	Q	E	E	E	V	F	I	I	G	G	A	Q	I	Y	E	I	L	F	D	E	V	D	T	L	H	L	T	L	I	D	A	E	I	V	E	E	E	E	
UniRef90_UPI00047089FA	A	V	A	L	A	C	H	D	D	E	P	F	L	I	G	G	A	E	L	Y	Q	Q	G	V	K	L	A	R	R	L	Y	L	T	E	I	D	A	E	F	K	E	E	E	E	
UniRef90_R9PRP5	A	L	D	L	V	K																																							

QUERY	G	D	T	H	F	P	D	Y	E	P	D	D	W	E	S	V	F	S	E	F	H	D	A	D	A	Q	N	S	H	S	Y	C	F	K	I	L	E	R	R
UniRef90_L8PNV8	G	D	R	H	F	P	E	F	D	E	T	N	W	K	L	V	S	S	E	Q	G	I	K	D	E	K	N	P	Y	D	Y	E	F	L	M	Y	E	K	K
UniRef90_UPI00041DF5CC	A	D	T	F	F	P	E	I	D	N	I	W	K	E	E	D	R	K	T	Q	H	Q	K	D	E	K	N	A	Y	A	Y	S	I	S	I	K	K		
UniRef90_M5PFL6	G	D	R	F	F	P	E	F	N	E	D	E	W	E	I	V	S	S	E	K	G	L	K	D	D	K	N	Y	D	Y	E	F	L	V	Y	Q	R	K	
UniRef90_F5LT89	A	D	T	F	F	P	E	I	D	P	G	E	W	T	L	V	S	S	E	K	G	I	R	D	E	K	N	P	Y	D	Y	T	F	R	V	Y	E	R	
UniRef90_UPI0001E89777	G	D	T	Y	F	P	E	I	N	E	Q	D	W	E	L	L	S	S	E	K	G	I	K	D	E	K	N	P	Y	D	Y	T	F	K	K	Y	K	R	
UniRef90_UPI000472E17C	G	D	T	L	F	P	D	Y	D	P	D	Q	W	Q	S	V	F	S	E	F	H	D	A	D	S	N	N	T	H	S	F	C	F	E	I	L	E	R	R
UniRef90_B2U8M3	G	D	A	H	F	P	A	P	D	P	K	V	W	H	E	V	S	R	E	T	H	H	A	A	A	P	N	D	F	D	Y	A	F	V	T	Y	E	R	R
UniRef90_UPI0002F86E87	G	D	T	F	F	P	A	I	E	M	N	E	W	K	L	S	S	K	E	Q	G	L	K	D	E	K	N	P	Y	E	E	F	V	I	Y	D	R	K	
UniRef90_UPI0003452C6B	G	D	T	F	F	P	A	I	D	E	N	E	W	K	L	V	S	V	E	K	G	K	I	D	E	N	N	R	Y	A	H	E	F	R	V	Y	E	R	
UniRef90_A6EGV0	A	D	T	F	F	P	E	F	S	E	E	E	W	L	E	T	H	R	E	A	H	L	P	D	E	K	N	T	V	A	Y	T	F	I	T	F	E	R	K
UniRef90_UPI0002D59F27	G	D	T	R	F	P	E	W	D	A	A	E	W	R	L	V	G	N	E	S	F	P	C	G	E	R	Y	E	Y	P	F	T	F	E	T	Y	E	R	K
UniRef90_N0AX68	G	D	T	F	F	P	D	I	D	M	E	A	Q	W	K	L	V	S	E	P	G	V	K	N	E	K	N	P	Y	H	Y	E	F	F	I	Y	Q	R	K
UniRef90_R4WZE7	G	D	T	H	F	P	A	P	D	P	A	H	W	R	E	V	S	R	E	P	H	R	A	A	A	P	N	T	F	D	F	A	F	V	T	Y	E	R	
UniRef90_H1YH84	A	D	T	F	F	P	E	I	D	Y	K	Q	W	H	E	I	A	R	E	D	H	Q	T	D	E	K	H	Q	Y	A	Y	S	F	I	T	L	E	R	
UniRef90_M1Z497	G	D	R	F	F	P	E	I	T	E	G	D	W	R	L	I	S	R	E	K	G	I	K	D	E	K	N	Y	D	Y	E	F	L	L	Y	E	R		
UniRef90_W8QX12	G	D	R	F	F	P	Y	Y	D	E	D	H	W	T	V	V	S	R	E	K	G	H	R	D	E	K	N	P	Y	N	Y	E	F	V	V	Y	D	R	K
UniRef90_UPI00037B3A63	G	D	T	R	F	P	A	L	D	E	Q	A	W	K	L	V	R	E	V	R	A	A	D	E	R	N	E	F	D	C	R	F	Q	V	L	E	R		
UniRef90_UPI000371592F	G	D	I	L	F	P	T	Y	D	A	S	S	H	Q	V	S	A	E	S	H	P	K	I	A	N	N	Y	S	Y	H	F	I	V	L	E	R			
UniRef90_M8DYY8	G	D	T	F	F	P	H	I	D	E	Q	Q	W	E	L	C	S	V	I	Q	P	G	V	Q	D	E	K	N	R	Y	P	H	T	F	C	I	Y	E	R
UniRef90_B8GN07	G	D	T	W	F	P	E	I	G	D	A	W	R	E	L	T	R	E	E	H	E	P	D	E	K	N	A	Y	A	A	F	I	T	L	E	R			
UniRef90_G9QNM4	G	D	T	Y	F	P	E	V	N	W	S	E	W	R	I	E	K	K	K	G	I	K	D	E	K	N	P	Y	D	Y	E	F	L	L	F	S	R		
UniRef90_K1ZZV7	G	D	A	Y	F	P	A	L	N	S	A	D	W	Q	E	V	I	R	V	S	H	S	A	D	E	K	N	Q	Y	N	F	S	F	I	T	L	Q	R	K
UniRef90_UPI00047B0345	G	D	T	F	F	P	E	F	D	S	S	D	W	E	L	V	S	N	E	K	G	L	R	D	N	K	N	P	Y	D	Y	E	F	R	I	Y	D	R	K
UniRef90_A0A023CPQ9	G	D	T	F	Y	P	A	F	D	S	E	W	Q	L	V	S	T	Y	T	K	G	L	K	D	E	K	N	P	Y	D	Y	A	F	I	V	Y	E	R	K
UniRef90_J0LJN3	G	D	T	F	F	P	E	L	K	K	E	E	W	Q	E	V	S	S	E	S	H	Q	P	D	E	K	N	K	Y	A	Y	T	F	K	E	L	I	R	K
UniRef90_G2Z5E0	A	D	T	F	F	P	E	I	N	P	K	E	W	Q	L	A	S	K	E	S	H	P	I	D	D	K	N	P	Y	E	H	F	L	T	Y	L	E	R	K
UniRef90_S6BLW3	G	D	A	F	F	P	A	I	D	P	A	E	W	R	E	V	R	I	E	G	R	V	D	E	K	N	P	I	P	H	E	F	V	T	Y	Q	R		
UniRef90_UPI0004728410	G	D	T	T	F	P	E	L	D	W	N	G	W	Q	V	V	S	E	T	P	G	V	K	D	E	R	N	P	Y	D	Y	R	F	I	V	Y	E	R	
UniRef90_W4QPH9	G	D	T	F	F	P	K	I	E	Q	D	Q	D	M	V	S	A	E	L	G	M	V	D	E	K	N	V	I	P	H	E	F	R	I	Y	E	K	K	
UniRef90_UPI0003770B85	G	D	A	Y	F	P	E	L	S	E	W	R	E	V	S	R	E	S	H	T	A	D	D	K	N	Q	F	D	H	D	F	I	V	F	E	R			
UniRef90_B8I0T9	A	D	A	F	F	P	E	I	D	Y	S	K	W	K	Q	I	S	C	E	T	G	I	K	D	E	K	N	P	Y	E	Y	K	W	L	V	Y	E	R	
UniRef90_UPI00036E4D42	G	D	T	Y	F	P	E	I	D	S	E	E	W	E	E	V	D	R	E	D	F	K	K	D	E	K	H	P	Y	A	Y	S	F	V	T	Y	R	R	
UniRef90_I2ESC7	G	D	A	F	F	P	E	I	D	M	S	E	W	T	E	N	S	R	V	S	H	H	K	D	E	K	N	E	Y	D	F	D	F	V	V	L	E	R	
UniRef90_S5KH05	A	D	T	A	F	P	E	V	D	W	E	N	F	S	E	V	A	K	E	F	H	E	K	D	E	K	N	K	Y	N	Y	T	F	Y	T	Y	E	R	
UniRef90_L9PA45	C	D	A	F	F	P	E	L	D	A	S	V	W	E	T	A	R	E	K	H	A	S	E	T	A	D	L	Q	Y	A	F	V	T	L	R	R	K		
UniRef90_Q2SA18	G	D	A	F	F	P	E	L	D	J	A	D	W	R	E	T	S	R	E	S	H	H	P	A	D	E	K	N	P	Y	P	H	D	F	V	V	F	E	R
UniRef90_W0SJP3	G	D	T	W	F	P	A	I	D	H	H	Q	W	Q	E	V	A	R	E	T	H	R	A	D	E	A	G	L	N	Y	A	F	V	T	Y	Q	R		
UniRef90_W6K9D2	G	D	V	S	F	P	E	F	D	P	C	Q	W	R	E	L	T	S	R	E	R	H	S	A	G	Q	G	A	D	H	D	Y	S	F	V	V	L	E	R
UniRef90_K2BA12	G	D	I	L	F	P	E	L	N	S	E	W	K	L	T	S	E	E	K	F	S	G	D	E	K	N	K	Y	A	Y	R	F	L	I	Y	R	R		
UniRef90_R5X2E9	G	D	T	R	F	P	D	W	N	R	S	G	W	T	E	V	F	R	E	Y	H	E	R	G	K	D	F	P	Y	P	F	E	Y	T	D	W	V	R	
UniRef90_UPI000287CCDE	G	D	T	Y	F	T	S	F	N	A	G	D	W	K	L	V	E	T	T	P	G	R	L	D	R	K	N	I	Y	P	H	E	F	Q	V	Y	E	R	
UniRef90_R7JQ76	G	D	T	C	F	P	R	W	N	D	E	R	E	W	I	L	D	S	E	S	F	A	S	G	K	E	F	P	Y	P	F	A	F	E	H	Y	R	R	R
UniRef90_A0A023RGN7	G	D	T	R	F	P	A	F	D	E	G	E	W	H	C	V	E	R	E	P	H	E	A	D	E	K	N	P	H	P	Y	C	F	E	T	W	Q	R	R
UniRef90_U7G2R7	G	D	T	F	F	P	E	Y	D	A	S	E	W	Q	I	A	R	E	D	F	V	A	E	G	P	N	P	Y	D	Y	S	F	V	V	Y	E	R	Q	
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UniRef90_R1F9F2	G	D	T	R	F	P	A	Y	E	A	Q	E	W	H	C	V	A	S	E	A	H	Q	P	D	E	K	N	P	H	A	Y	R	F	E	T	L	V	R	
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UniRef90_UPI0003B602D4	G	D	T	L	F	P	A	I	D	A	A	Q	W	T	I	A	S	E	A	H	P	A	D	E	R	H	N	V	H	A	F	R	F	V	T	L	Q	R	
UniRef90_A6DH01	A	D	A	F	F	P	E	F	D	H	S	Q	W	K	E	T	S	R	E	R	H	K	A	D	S	K	N	D	Y	D	Y	S	F	V	T	L	E	K	
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UniRef90_R9PRP5	G	D	A	H	F	P	D	Y	Q	K	S	Y	W	Q	Q	E	L	A	S	E	K	H	L	A	D	E	K	N	P	Y	N	Y	E	F	V	T	L	E	R
UniRef90_A6VM90	G	D	T	F	F	P	E	L	N	W	N	E	W	E	I	E	H	E	E	R	H	S	A	D	E	N	N	A	Y	D	L	R	F	L	I	L	R	R	K
UniRef90_A6W1R3	G	D	A	F	F	P	E	V	D	P	F	S	F	T	L	I	G	E	A	F	A	A	E	G	P	N	P	Y	D	Y	R	F	S	V	Y	Q	R		
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UniRef90_D7UY41	A	D	T</																																				

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UniRef90_A9DJM5			L	V	S	I	V	A	A	A	E	N	N	V	I	G	K	D	N	Q	L	I	W	H	L	P	E	D	D	L	K	R	F	K	A	L	T	T	M	G	K	H	I				
UniRef90_UPI00034D0EBD			L	S	I	I	V	A	R	A	R	N	G	V	I	G	R	D	N	Q	L	P	W	H	L	P	E	D	L	K	A	F	F	K	R	T	T	L	G	A	P	V					
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UniRef90_U2CBV0			I	T	L	I	A	A	L	D	L	H	G	I	G	K	K	N	Q	L	L	W	H	L	P	S	A	D	D	F	Q	H	F	K	Q	L	T	M	G	K	Y	V					
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UniRef90_A0RDM0			I	V	S	F	M	V	A	M	D	E	N	R	V	I	G	K	D	N	N	L	P	W	R	L	P	S	E	L	Q	Y	V	K	K	T	T	M	G	H	P	L					
UniRef90_A9KH09			I	L	T	L	I	A	A	M	D	K	N	R	L	I	G	R	N	N	E	L	P	W	H	L	P	S	A	D	L	A	H	F	K	S	I	T	T	L	G	K	P	I			
UniRef90_S2D9N8			I	L	S	L	I	V	A	K	A	N	N	A	I	G	R	K	N	N	Q	L	I	W	K	L	P	S	S	D	L	K	L	F	K	K	I	T	T	L	G	K	Y	I			
UniRef90_Q26HU7			V	I	T	M	I	A	A	A	G	A	N	N	E	L	G	K	D	G	D	L	V	W	H	L	P	S	D	D	F	K	R	F	K	S	L	T	T	M	G	H	H	I			
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UniRef90_M5ITK1			I	R	L	V	V	A	Y	A	A	N	R	I	G	K	D	N	D	L	P	W	R	L	P	P	S	D	L	Q	H	F	K	R	V	T	M	G	L	P	I						
UniRef90_A0A015KX11			I	T	M	I	A	A	M	A	R	N	R	V	I	G	A	D	N	D	L	P	W	K	L	P	P	D	D	M	A	F	F	K	R	N	T	L	G	K	T	I					
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UniRef90_UPI00037F32BD			M	I	T	M	I	V	A	R	A	R	N	G	V	I	G	R	D	N	R	L	P	W	H	L	P	E	D	L	A	F	F	K	R	T	T	M	G	A	P	I					
UniRef90_S6GI61			M	I	L	A	M	I	V	A	Q	S	K	N	R	L	I	G	K	D	N	D	L	P	W	K	L	P	N	D	L	Q	Y	F	K	S	V	T	M	G	R	P	I				
UniRef90_UPI0003B5AF86			M	I	T	L	I	A	A	A	E	N	N	A	L	I	G	K	N	N	E	M	I	W	H	L	P	P	D	D	F	K	R	F	K	Q	L	T	S	G	K	P	D	I			
UniRef90_W9A9F2			M	I	S	L	L	L	A	M	D	R	N	N	L	I	G	E	N	N	D	L	P	W	H	L	P	P	K	D	L	R	F	F	K	E	K	T	L	G	N	T	I				
UniRef90_H8GNC9			M	I	S	L	I	V	A	M	A	S	N	R	A	I	G	L	J	N	N	Q	M	P	W	H	L	S	A	D	L	K	H	F	K	K	I	T	T	M	G	S	P	I			
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UniRef90_A3UB42						M	I	A	A	A	E	N	N	A	L	I	G	K	D	G	D	L	V	W	H	L	P	P	D	D	F	K	R	F	K	K	L	T	T	M	G	H	H	I			
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UniRef90_I8T603						L	S	L	I	V	A	A	L	D	E	N	N	L	I	G	K	N	G	D	L	P	W	R	L	P	A	D	L	Q	H	F	K	R	L	T	L	G	K	I	V		
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UniRef90_W8VWW3			I	T	M	I	A	A	A	G	E	N	N	E	L	I	G	K	D	G	D	L	V	W	H	L	P	P	D	D	F	K	R	F	K	A	L	T	S	G	H	H	I				
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UniRef90_A5FJX2			M	I	I	M	I	A	A	V	A	E	N	N	T	L	G	K	N	N	E	L	V	W	H	L	P	P	N	D	F	K	R	F	K	S	L	T	T	N	G	H	I	V			
UniRef90_UPI000380F867			M	I	L	S	L	I	A	A	V	A	E	N	G	V	I	G	R	D	G	D	M	P	W	K	L	S	T	D	L	K	R	F	K	A	L	T	T	M	G	K	P	V			
UniRef90_R2RX79			M	I	L	A	I	A	W	A	D	K	N	G	L	I	G	K	N	N	R	L	P	W	H	L	P	P	N	D	L	R	F	F	K	E	A	T	T	N	K	T	L				
UniRef90_UPI00036A0853			M	I	S	M	I	W	A	M	A	A	N	N	V	I	G	K	D	N	D	M	P	W	H	L	P	P	R	D	F	A	Y	F	K	A	E	T	L	G	K	R	M				
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UniRef90_R7NS22			M	I	S	L	I	V	A	I	A	K	N	N	G	I	G	K	D	N	Q	L	L	Y	W	L	P	P	N	D	L	K	R	F	K	A	L	T	T	M	G	K	T	V			
UniRef90_R6YU86			M	L	S	I	I	V	A	K	A	K	N	N	T	I	G	K	E	N	K	L	L	W	Y	I	P	P	D	D	L	K	R	F	K	N	L	T	T	N	G	H	N	I			
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[illegible]

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UniRef90_K6Y5B0	A M Q E A S V F D E V M I I G G G S I Y K S M L A Q A Q R R L L Y L T F I D L K V I D			
UniRef90_Q2BL89	S I A L I N G I D E A F V I I G G A Q E I Y E Q A G L A K L A D R L L Y L T T E I V D A E F A			
UniRef90_Q1H2G1	A I D M A I D D A E A F V I I G G A Q E I Y Q Q A G L A K L A D R L L Y L T T E I V D A E F A			
UniRef90_A9DJM5	A V S V A T S D A E P Y F V I I G G G A E I Y K Q A G L P F A T K L L Y L T T R V I D H E F F			
UniRef90_UPI00034D0EBD	H A L E L C S A P Q A F V I I G G A Q E I Y A E A G L S Y A K Q L L Y L T T R V I D H E F F			
UniRef90_C0N5C2	A M A L C S D A E M M V I I G G A S I Y Q Q L L S L A D T L L Y L T T R V I D H A S L T Q			
UniRef90_I2CBV0	A I A V A Q Q Q P F V I I G G G A E I Y R L L A L P Y A T L L Y L T T Q V I Q A R F Y Q			
UniRef90_U2GLN6	D A A K S I N N Q E I F V I I G G A E I Y R L L A L P Y M A T T L L Y L T T R V I Q K A Y F E			
UniRef90_V6S9P7	A I S I C P K E E Q I F V I I G G G A E I Y S Q S M K I A D K L L Y L T T R V I F A T Y F E			
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UniRef90_R5BG02	I	A	M	I	A	A	M	A	N	N	R	V	I	G	K	D	N	Q	M	P	W	H	L	P	E	D	L	R	H	F	K	A	M	T	L	G	K	P	V			
UniRef90_Q12K26	M	I	T	I	V	V	A	M	A	L	K	N	E	I	G	A	D	N	Q	L	L	W	H	L	P	Q	D	L	K	H	F	K	E	L	T	T	G	H	P	I		
UniRef90_C6X2F4	L	I	I	I	A	A	G	E	N	N	A	L	I	G	K	D	N	D	L	V	W	H	L	P	P	D	D	F	K	R	F	K	S	L	T	S	G	H	P	K	I	
UniRef90_G2PKF0	M	K	S	I	I	V	H	D	Q	N	R	V	I	G	L	D	N	K	M	P	W	H	L	P	N	D	L	K	R	V	K	A	L	T	T	G	N	T	I			
UniRef90_A0A033UA04	L	S	L	I	V	A	V	A	A	D	N	A	I	G	K	N	N	D	L	L	W	H	L	P	A	D	L	K	R	F	K	E	T	T	M	G	H	T	V			
UniRef90_UPI0004704604	M	I	S	L	I	A	A	V	A	R	N	G	A	I	G	R	N	Q	Q	L	I	W	R	L	P	E	D	M	R	Y	F	R	E	T	T	S	G	K	T	V		
UniRef90_C7RLL7	V	S	L	I	A	A	L	A	R	N	R	A	I	G	R	D	N	A	L	I	W	R	L	P	A	D	L	A	H	F	K	K	V	T	H	G	H	P	I			
UniRef90_UPI000367D063	I	V	L	I	V	A	V	A	D	N	G	V	I	G	R	D	N	A	L	P	W	R	L	P	K	S	D	L	Q	R	F	K	Q	L	T	L	N	K	P	I		
UniRef90_Q2IYG6	L	N	I	I	V	A	Y	N	Q	D	H	V	I	G	K	D	N	T	M	P	W	K	L	P	A	D	L	A	Y	F	K	Q	T	T	M	G	K	P	I			
UniRef90_V8G766	M	I	S	M	I	A	A	H	D	Q	N	R	L	I	G	E	D	N	W	M	P	W	D	I	P	N	D	L	G	Y	F	K	A	M	T	T	G	K	T	I		
UniRef90_UPI0002FBF660	L	A	L	I	A	A	V	A	A	N	G	A	I	G	R	D	N	R	L	P	W	H	L	P	A	D	L	Q	H	F	K	A	S	T	M	G	K	P	V			
UniRef90_C1DK10	I	S	M	I	A	A	M	A	N	N	R	V	I	G	Q	D	N	Q	M	P	W	H	L	P	A	D	L	R	H	F	K	A	V	T	M	S	K	P	V			
UniRef90_UPI000369A46C	V	A	L	I	A	A	V	D	R	N	L	A	I	G	R	D	N	D	L	P	W	R	L	P	D	D	L	K	R	F	K	A	L	T	L	G	K	P	V			
UniRef90_UPI0003B5052A	L	V	A	I	V	A	M	T	E	N	R	V	I	G	K	D	G	G	M	P	W	H	L	P	A	D	L	A	H	F	R	R	L	S	V	G	K	P	N			
UniRef90_C1D068	I	A	M	I	A	A	M	D	R	N	R	L	I	G	R	D	N	Q	M	P	W	H	L	P	P	D	D	F	K	H	F	K	R	H	T	M	G	K	P	V		
UniRef90_UPI00036FF9EE	T	I	V	V	A	V	S	D	N	G	I	I	G	R	D	G	D	M	P	W	R	L	L	S	T	D	L	K	R	F	K	A	L	T	L	G	K	P	V			
UniRef90_J3BE37	I	V	S	F	I	V	A	V	S	D	N	N	A	I	G	R	K	N	T	L	P	W	H	L	P	E	D	L	K	F	F	K	A	R	T	T	S	G	K	P	V	
UniRef90_F8UUVU7	L	T	L	I	A	A	K	A	K	N	N	V	I	G	K	E	N	D	L	I	W	R	L	P	A	D	F	K	R	F	K	A	I	T	S	G	H	Y	I			
UniRef90_UPI00047CE7C8	S	L	I	I	V	A	V	A	A	N	G	I	I	G	R	D	N	R	L	P	W	H	L	P	E	D	L	R	W	F	K	H	T	T	L	G	K	P	V			
UniRef90_H8FPN7	I	S	L	I	A	A	V	A	Q	N	G	T	I	G	R	N	D	D	L	P	W	H	L	P	S	D	D	F	K	F	F	K	D	T	T	S	G	H	P	V		
UniRef90_UPI00036008BD	M	L	H	L	I	A	A	V	A	E	D	G	G	I	G	R	D	N	Q	L	L	C	H	I	P	A	D	L	R	H	F	K	A	L	T	M	G	H	P	M		
UniRef90_U7UE02	T	I	V	V	A	V	S	S	N	G	I	I	G	R	D	G	D	M	P	W	R	L	L	S	S	D	L	K	R	F	K	A	L	T	L	G	K	P	V			
UniRef90_B9JGK8	V	A	M	I	A	A	L	S	R	N	R	V	I	G	V	E	N	Q	L	P	W	Y	L	P	E	D	L	R	F	F	K	A	R	M	T	Q	A	K	P	L		
UniRef90_W7Q4D6	M	I	S	L	I	V	A	R	D	K	N	G	G	I	G	K	D	G	D	L	L	C	H	I	P	A	D	L	K	R	F	F	K	A	L	T	T	G	H	D	L	
UniRef90_E2Z9X6	M	L	S	F	I	W	A	E	D	K	N	G	L	I	G	A	N	G	T	L	P	W	H	L	P	D	D	M	K	F	F	K	K	T	T	T	G	N	P	I		
UniRef90_G9ZSD3	M	I	A	A	L	V	A	M	S	E	N	N	V	I	G	L	J	N	N	K	M	P	W	H	L	P	Q	E	L	A	Y	F	K	K	V	T	T	G	Y	T	I	
UniRef90_UPI000412A8BC	L	I	S	M	I	A	A	M	A	D	D	R	V	I	G	K	D	N	Q	M	P	W	H	L	P	A	D	F	A	W	F	K	A	L	T	T	G	K	P	V		
UniRef90_UPI0002F5DE65	M	L	T	I	V	A	A	V	A	E	N	G	V	I	G	R	G	D	D	L	P	W	H	L	S	S	G	D	L	K	R	F	R	T	T	T	W	G	K	P	I	
UniRef90_D7A7D6	I	N	L	I	V	A	M	A	R	N	R	V	I	G	C	H	E	N	G	R	M	P	W	H	L	P	S	E	D	L	R	R	F	K	Q	L	T	W	G	K	P	L
UniRef90_UPI0003B4C939	I	S	M	I	A	A	M	A	H	D	R	V	I	G	K	E	N	A	M	P	W	H	L	P	A	D	F	A	W	F	K	Q	C	T	L	G	K	P	V			
UniRef90_F2PG79	M	I	H	L	I	A	A	V	D	R	N	G	G	I	G	K	D	N	D	L	L	C	H	I	S	A	D	L	K	R	F	K	S	L	T	M	G	H	T	M		
UniRef90_S7HFK5	L	S	M	I	A	A	M	A	D	N	R	I	I	G	K	N	N	Q	M	P	W	H	L	P	P	A	D	F	A	W	F	K	R	Q	C	T	L	G	K	P	V	
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UniRef90_S4NF21	M	L	S	F	I	A	A	M	A	N	N	R	I	I	G	Q	N	N	Q	M	P	W	H	L	P	A	D	L	Q	H	F	K	K	V	T	L	G	K	P	V		
UniRef90_A4C912	I	V	S	V	I	V	A	A	K	N	R	V	I	G	M	H	N	Q	I	P	W	Y	L	P	P	A	D	L	K	Y	F	K	K	I	T	T	N	H	V			
UniRef90_F4KXP6	M	I	S	L	I	V	A	Q	S	E	N	R	A	I	G	M	N	N	T	L	P	W	H	L	P	A	D	L	K	R	F	K	A	I	T	M	G	H	H	M		
UniRef90_Q11US6	M	I	A	M	I	A	A	M	T	N	N	R	V	I	G	F	E	N	D	M	P	W	H	L	P	D	D	L	K	F	F	K	A	N	T	L	G	K	P	V		
UniRef90_UPI00037E555C	M	L	A	A	I	W	A	Q	D	E	N	G	L	I	G	K	E	D	R	L	P	W	R	L	P	N	D	L	K	F	F	K	Q	M	T	E	A	N	T	L		
UniRef90_H8LEU3	I	T	L	V	A	A	M	A	A	N	R	V	I	G	K	D	N	R	L	P	W	H	L	P	E	D	L	K	H	F	K	A	V	T	L	G	K	P	V			
UniRef90_G2IYB5	I	S	M	I	A	A	M	A	N	E	R	V	I	G	K	D	N	Q	M	P	W	H	L	P	A	D	F	A	W	F	K	R	S	T	L	G	K	P	I			
UniRef90_UPI0002E9B530	L	S	L	I	V	A	V	A	E	N	G	V	I	G	R	E	N	S	L	I																						

UniRef90_D7JDP8	I	M	G	R	K	T	Y	M	S	L	F	R	P	L	K	N	R	R	N	I	V	I	S	T	S	L	A	D	I	D	G	A	E	V	A	H	S	V	E	E			
UniRef90_N0E5Y1	I	M	G	R	K	T	F	F	S	I	G	R	P	L	P	G	R	R	T	I	V	I	T	T	R	N	T	W	H	H	P	D	V	E	T	A	H	S	F	A	D		
UniRef90_G7FSS0	I	M	G	R	K	T	F	F	S	I	G	R	P	L	P	G	R	R	N	I	V	I	T	T	R	N	T	Y	E	Y	K	E	D	I	E	T	V	T	S	F	A	D	
UniRef90_Q70YQ6	V	I	M	G	R	N	T	F	F	S	I	G	R	P	L	P	G	R	L	N	I	V	L	T	S	R	Q	T	D	Y	Q	P	E	V	T	V	V	A	T	L	E	D	
UniRef90_U1KA10	I	M	G	R	K	T	F	F	S	I	G	R	P	L	P	G	R	R	N	I	V	L	T	S	R	N	L	D	Y	T	Q	E	G	I	E	V	V	A	T	S	P	E	A
UniRef90_B4F215	I	M	G	R	K	T	Y	F	E	S	I	G	R	P	L	P	N	R	L	N	I	V	L	T	S	S	Q	P	G	N	D	D	N	V	V	W	V	K	S	V	E	E	
UniRef90_R6YHV9	I	M	G	R	K	T	F	D	S	L	P	K	A	L	P	N	R	R	N	I	V	L	T	S	S	Q	E	L	N	I	P	G	A	E	C	F	H	S	L	E	E		
UniRef90_UPI0002E2E9AF	I	M	G	K	R	T	F	F	S	L	G	K	P	L	P	N	R	K	N	I	V	L	T	S	S	T	L	S	E	Q	P	G	I	L	L	F	P	L	L	A	E		
UniRef90_Z5XVW4	I	M	G	R	K	T	F	F	S	I	G	R	P	L	P	G	R	Q	N	I	V	I	T	S	R	N	D	Y	K	A	E	G	I	E	V	V	T	S	P	L	D	A	
UniRef90_A3TMG5	V	I	M	G	R	K	T	F	F	S	I	G	R	P	L	P	G	R	R	T	I	V	L	T	S	R	D	P	W	H	H	P	D	V	E	T	V	H	S	L	D	D	
UniRef90_UPI000364D415	L	M	G	R	K	T	W	D	S	I	G	K	P	L	V	D	R	A	N	I	V	I	T	T	R	D	P	A	F	R	A	D	P	G	G	E	G	V	R	A	F	A	D
UniRef90_R7HRC0	V	M	G	R	K	T	F	D	S	L	P	K	A	L	P	N	R	R	N	I	V	I	T	T	R	N	P	Q	F	S	A	P	G	V	E	V	V	A	S	V	E	D	
UniRef90_G8TL10	I	M	G	R	K	T	F	F	S	L	G	K	P	L	A	G	R	T	I	V	I	T	T	H	Q	K	D	W	Q	P	G	G	A	F	V	V	N	D	A	M			
UniRef90_F8UVT0	V	M	G	R	R	T	Y	E	S	V	G	R	L	P	P	G	R	T	T	I	V	I	T	T	R	Q	R	E	Y	A	V	P	G	A	V	V	V	H	S	L	P	D	
UniRef90_D2PSR9	V	M	G	R	K	T	Y	D	S	I	G	R	P	L	P	G	R	R	T	V	V	V	T	T	R	Q	P	D	W	S	A	P	G	V	E	V	V	A	H	S	L	A	
UniRef90_R5BG02	I	M	G	R	K	T	L	E	S	I	P	F	L	P	P	N	R	E	H	I	W	V	T	T	T	R	Q	T	D	Y	E	G	V	R	V	F	T	S	P	E	A		
UniRef90_Q12K26	V	M	G	R	K	T	F	F	S	I	G	R	P	L	P	N	R	H	N	I	V	I	T	T	R	Q	D	Y	A	I	E	G	V	S	C	V	I	S	F	D	E		
UniRef90_C6X2F4	I	M	G	R	K	T	Y	F	E	S	I	G	R	P	L	P	N	R	T	N	I	V	V	T	S	R	K	K	D	W	F	E	G	V	L								

	90	100	110	120																																										
UniRef90_D7JDP8	A	V	A	L	C	R	T	E	D	E	V	F	V	I	V	G	G	A	S	V	Y	E	Q	T	I	G	I	A	K	R	L	Y	L	T	R	V	L	K	D	F	E					
UniRef90_N0E5Y1	A	L	A	L	A	G	T	E	D	E	V	F	V	I	V	G	G	G	N	T	V	Y	E	Q	Q	F	L	M	F	Q	R	M	V	L	T	F	V	D	A	S	D	V	E			
UniRef90_G7FSS0	A	L	S	L	V	C	D	V	E	E	V	F	V	I	V	G	G	G	A	T	V	Y	Y	N	Q	C	L	T	A	A	A	D	R	L	L	T	F	I	D	E	L	T	T	E		
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UniRef90_U1KA10	A	L	S	A	V	R	G	C	D	E	E	I	M	V	I	G	G	G	K	S	I	V	Y	E	Q	F	L	F	P	M	A	N	K	R	L	L	T	F	I	D	A	E	V	I		
UniRef90_B4F215	A	L	Q	A	A	E	N	D	E	E	V	F	I	I	I	G	G	G	A	S	I	V	Y	E	Q	F	L	F	P	M	A	N	K	R	L	L	T	F	I	D	A	E	V	I		
UniRef90_R6YHV9	A	L	K	T	C	R	T	E	D	E	V	F	I	I	I	G	G	G	A	S	I	V	Y	E	Q	F	L	F	P	M	A	N	K	R	L	L	T	F	I	D	A	E	V	I		
UniRef90_UPI0002E2E9AF	L	A	N	W	I	T	H	H	P	D	D	F	V	I	I	G	G	G	V	R	L	V	Y	K	E	L	M	P	M	A	D	R	R	L	L	V	T	K	I	D	A	T	F	D		
UniRef90_Z5XVW4	A	L	A	L	V	K	E	A	D	E	V	M	I	I	I	G	G	G	N	I	V	Y	Q	Q	F	L	P	H	A	E	R	R	L	L	Y	L	T	F	I	D	L	D	V	E		
UniRef90_A3TMG5	A	L	G	L	A	G	P	V	G	E	V	F	V	A	I	G	G	G	E	I	V	Y	Q	Q	A	M	P	F	A	H	R	L	L	I	T	E	V	D	Q	E	P	E				
UniRef90_UPI000364D415	A	A	L	A	A	P	V	N	G	E	L	M	V	I	I	G	G	A	E	I	V	Y	R	Q	T	L	P	F	A	R	R	R	L	L	Y	L	T	E	I	V	D	A	T	F	F	
UniRef90_R7HRC0	A	F	R	M	A	E	S	D	G	E	V	F	V	I	I	G	G	G	E	Q	I	V	Y	R	Q	T	L	P	F	A	R	R	R	L	L	Y	L	T	E	I	V	D	A	T	F	F
UniRef90_G8TL10	T	V	A	A	S	T	D	A	K	E	A	F	I	I	I	G	G	G	E	I	V	Y	K	F	R	S	L	P	L	A	T	Q	R	R	L	L	Y	L	T	R	V	D	A	E	P	A
UniRef90_F8UVT0	A	I	E	A	C	K	D	D	E	I	F	V	I	I	I	G	G	A	E	I	V	Y	R	E	S	L	P	L	A	T	D	R	I	L	L	Y	L	T	R	V	D	A	E	P	A	
UniRef90_D2PSR9	A	A	L	E	L	A	D	G	K	D	V	Y	V	A	I	G	G	G	E	I	V	Y	R	Q	A	L	P	S	A	D	R	R	L	L	Y	L	T	E	V	D	Q	S	E	P	A	
UniRef90_R5BG02	A	A	A	E	A	A	K	L	D	V	A	Y	C	I	I	G	G	G	A	Q	M	V	Y	E	S	F	M	P	Y	A	E	D	V	L	Y	V	T	E	I	K	E	H	E	F	E	
UniRef90_Q12K26	A	K	K	I	A	G	D	C	D	E	L	I	V	M	I	G	G	G	A	Q	L	V	Y	A																						

[illegible]

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UniRef90_R5MRE0
UniRef90_UPI00036A3BDA
UniRef90_Q07PL3
UniRef90_C9Y9Z4
UniRef90_A0A024KDL0
UniRef90_UPI0003B54175
UniRef90_UPI0003F53185
UniRef90_L8JXP3
UniRef90_UPI00047631C7
UniRef90_UPI00037367DC
UniRef90_UPI00047667BE
UniRef90_Q5R038

	1	10	20	30	40
UniRef90_F2MTJ4	M L	A A I	W A Q D E Q G V I	G K E G K L P W H L	P N D L K F F K R K T I L H N T L
UniRef90_I0K3I6	I	S L I	A A M Q N R V A I	G R D D D L L P W H L	P D D F A Y F K R T L T G H A T L
UniRef90_J9GTZ1	I	S I I	A A V D R K M A I	G F Q D D L L L F W H L	P N D L K F F K A V T T M S K P L
UniRef90_Q1QUE0	I	A L V	A A M S R N R V I	G V D N K L L P W H L	P E D L K F F K A V T T M S K P L
UniRef90_G2DQB7	V	T V I	A A V A K N R G I	G I N N D M P W H I	P E D F A F F K Q Y T M E K P L
UniRef90_I3UFQ7	L I	L V	A Y A I E N R A I	G V N N T L P W H L	P G D L K R F K T L T M E K P L
UniRef90_UPI0002D81736	L	F L V	A A R A R N G V I	G A N G T L P W H L	P M D L K R H F K A L T T Q N K P M
UniRef90_A0A021VWE2	L	V L I	A A L D R K H A I	G R D N A L P W R L	S D D L K R F K A L T L G K P L
UniRef90_U1MCP0		M L	A A M A N N R I	G K D N D M P W H L	S A D L K H F K S V T L G K P L
UniRef90_W2UNK3				G K D N D L V W H L	P D D F K R F K Q L T T G H P L
UniRef90_K0I8Y3	L	H L I	Y A R A A N G V I	G K D N R L P W H I	P E D M A H F F K Q L T T Q G C P V
UniRef90_UPI00046667A5	I V	T I V	V G V A E N G V I	G R D G G L P W R L	S T D L K R F K Q T T T M G K P V
UniRef90_R1GXV2	L	S M I	A A M A K G R V I	G K D N A M P W H L	P A D F T W F K Q N T L G K P V
UniRef90_UPI00047D544B	L	I M I	A A A A E N D A L	G K D N D L L W H L	P D D F K R F K K L T T S G H K I
UniRef90_F0SAH7	V	S I I	V A I D E N K A I	G K N N Q L L W H L	P N D L K F F K K T T T S G H T I
UniRef90_Q54277	I	S L I	V A M D K K R V I	G K D N D I P W R I	S S D W E Y V K N T T K G H A I
UniRef90_A0A023Y7E9	L	S L I	A A L D R S H G I	G H D N Q L P W Q L	P D D L K R F K A L T L T G K P I
UniRef90_UPI00040FA1C0	M I	C I	V A M A E N R T I	G A E G K I P W H I	P G E L A Y F K R V T T M G H P I
UniRef90_Q21NW4	L V	I V	V A A A Q N G V I	G I N N T L P W R I	S A D L K Q H F K Q V T I G H P I
UniRef90_UPI00031AAC38	V	A I	Y A I A E N G V I	G R D G G L P W R L	S T D L K R F K A D T M G K P I
UniRef90_UPI00046AD626	L	S A L	V A M A Q N R V I	G K N N E M P W R L	P P D L K R F K T L T M G H P I
UniRef90_F0K1Q0	M L	S Y V	W A E D E K G A I	G Y Q G R L P W H L	P A D L A H F F K A K T M G H P M
UniRef90_M4X651	L	A M I	A A I A E N R V I	G V D N R L P W H L	P Q D L K H F F K A M T L G K P I
UniRef90_D7NBT0	I	L S I	A A V A R N R A I	G Y Q N R L L F H I	K A D L A E H F K R L T T M G H V V
UniRef90_E8TW77	V	H L I	Y A R A A N G V I	G K D G A M P W H L	P E D L A H F F K R L T T Q G H P V
UniRef90_UPI00037A2421	L	T I V	V A A A R N G I	G R D G D M P W R L	S T D L K R F K A L T T T G K P V
UniRef90_G8PD50	M I	A L I	V A M D N K R G I	G K N N T I P W H L	P D D V K F F K D T T T T G H S P V
UniRef90_D5BKS2	M V	T M I	A A A A E N N A L	G K D N D L L W R L	P D D F K R F K K L T T S H H P I
UniRef90_UPI00037F4FF9	L	A M V	A A M S R N R V I	G V A N Q L P W Y L	P E D L K F F K K R I T T L G K P I
UniRef90_R3WR89	M L	A A I	W A Q D E K G T I	G K D D R L P W H L	P N D L K F F K Q M T E D N T I
UniRef90_W6T7S2	M I	A L I	W A Q D Q N G I	G N A G Q L P W H L	P A D L K R F F K Q L T L D A K I
UniRef90_C5CTW3	I	H L I	F A R A A N G V I	G A K G T I P W H L	P E D M V H F K Q Q T A G A V
UniRef90_R5CCV6	I	T I I	A A V A R N L A I	G K D N K L I Y R L	P D D M K R F F K A L T T T G N T V I
UniRef90_UPI0003FF647B	I	S L I	L A M A D N G T I	G N N N S L P W H I	S K D L Q F F K Q S T L G K P I
UniRef90_B1XTJ0	L	S M I	V A R S R N H V I	G R D N Q M P W K I	S A D L Q F F K R V T M G H P V
UniRef90_F8UVS1			V A R D R E G V I	G K D G T L L P W R L	S D D L K R F F K A L T L G K P V
UniRef90_R5IA50	I	S L I	A A V A E D M A I	G K N K E L L C D I	P N D M K H F K E R T L N H A V
UniRef90_A6G6A1	I	S L I	S A S A D N D A I	G R D N D L L W H L	P D D F R F F K R T T T K G H H V
UniRef90_M4XKL0	I	S L I	V A R T I N K V I	G K D N Q M P W H L	P V D L A W F R Q N T L G K P V
UniRef90_C6CYL9	I	T M I	A A M D R G R T I	G I G N K L P W R L	P A E M A Y F T R H T T G K A V
UniRef90_H0JIM7	L	S L I	V A V A D N G V I	G I D N R L L P W H L	P A E L K Y F F K A V T T L G K P L
UniRef90_R9C564	M I	S L I	V A M D K N N G I	G N K N K L L A H I	S E D L K R Y F K K V T T D G K H T I
UniRef90_G7UQC3	I	S L I	A A L D R N H A I	G R D N R L P W R L	P D D L R R F F K A L T L G K P V
UniRef90_L0DUR0	I	E I I	V A M D P R V I	G R D N A L P W H L	P D D L R R H F F R R L T T G H T V
UniRef90_A9BMQ5	I	H L I	Y A R A A N G V I	G K D N A M P W H L	P E D L A H F F K Q L T T Q G S A V
UniRef90_A0A011PJV1	I	L S I	A V V A R N R A I	G K N Q Q L L W H L	P E D L R N F R E T T T R G K P V
UniRef90_R5N9Z7	M I	S V I	V A L A R N R A I	G F E N R L L Y R L	P D D L K R F F K A L T T T G H T I
UniRef90_C6W5S3	I	S I I	V A A A E N G A I	G R D N Q L L W R L	S D D L K R F F K Q L T L G H P M
UniRef90_F2F4U4	M I	S L I	V A H D E N R V I	G Y Q N D L P W Y L	P G D L K Y F K E M T M G K P M
UniRef90_Q12C17	I	N M I	F A R A A N G V I	G N N N R M P W H L	P E D M A H F F K R L T T Q G W P V
UniRef90_U					

[illegible]

	90	100	110	120
UniRef90_F2MTJ4	I L A Y A D N Y E	G V T V I G G G S S V	F K E L P A C D V	L Y R M I H E T F E
UniRef90_I0K3I6	A I E T A K V I E	G G G S S I Y Y K R A A L	P L P L A T D E R	L I L Y L T M E I D T Q R T A P Y E
UniRef90_J9GTZ1	A L Q H C G K E E E E	H I F V I G G G A G E I	F A E A T L C A T	R L Y L T E V D I E V E
UniRef90_Q1QUE0	G Q A I I D G V E D I	Y C V I G G G A G E I	Y A E A T I C A T	R L Y L T E V D I E V E
UniRef90_D2QDB7	A L G L C K E D V E I	M V I G G G A Q I	Y A Q E A I T E K	S Q Q V L M A T K E V D S A F V D
UniRef90_I3UFQ7	A I A L A F E Q Q G D	T F V I G G G A Q I	Y A Q E A I T E K	S Q Q V L M A T K E V D S A F V D
UniRef90_UPI0002D81736	E A I A A A N A P H V	L A V I G G G A E I	F A L A L P S R A	S D R R L T T R V I H A E V P E
UniRef90_A0A021VWE2	E L A R A D G A A E A	V C V I G G G G E I	Y A L C L P S R A	S D R R L T T R V I H A E V P E
UniRef90_U1MCP0	A L S L A G D V D E L	V M I G G G G K I	Y L D F L S S R A	S D R R L T T R V I H A E V P E
UniRef90_W2UNK3	A L E I S K N D E T P	F V I G G G A Q I	Y K L S L S M S V	A D K L I E E V T R V I H A E V P E
UniRef90_K0I8Y3	A L L A C D T G K T V	W I V I G G G A Q I	Y A E A L C V L A	D C V L E V T R V I H A E V P E
UniRef90_UPI00046667A5	A I A L A K G A E A A	S I I G G G Q Q I	F V D A L P P F T	D R L D V L T H I V A D F D
UniRef90_R1GXV2	A I A L A G D V E E A	V I I G G G G T I	Y E A S M P R A D	K L C L T F I D A E I D
UniRef90_UPI00047D544B	A I D L V K E E E A	F V I G G G E I	Y K Q G E K R S D	K L C L T F I D A E I D
UniRef90_F0SAH7	A L N T C K N E E E E	V F I I G G G A E I	Y K Q A E P I T D	K F Y L T K V I H H Q F D E
UniRef90_Q54277	A F K L C E N E E E E	V F I I G G G E Q I	Y V M F L P Y Y E	T K I H H E F E
UniRef90_A0A023Y7E9	A F A A A S G A D E E	L C V I G G G G E V	Y R M L T M A Q A	T E D H L V T W V D T T V T
UniRef90_UPI00040FA1C0	P I L E L A K S Q D V	F V I G G G A E V	Y K L F L P H A S	D K V L Y Q T V I H R H Y D E
UniRef90_Q21NW4	Q I A A Q M G V A E A	C M L V G G G A Q L	Y R Q Q V L E R V	S K V L H V T R V I H A E I E
UniRef90_UPI00031AAC38	A I R C M P D A E E I	C V I G G G A E I	Y R Q Q V L P M T	D R R L H V T R V I H A E I E
UniRef90_UPI00046AD626	A L R A C H D D K E I	F V I G G G A K I	F Q Q M L P L C D	R L Y T E I Q R D F D
UniRef90_F0K1Q0	V S A W K E Q A G E V	C V I G G G S S I	F A L A L A D Q R	V D K L L E V T R V I K G F S
UniRef90_M4X651	A L E R A Q Q W A E Q	M L I G G G A Q L	Y G E A L D E R A	D R R L L E V T R V I G L S P T
UniRef90_D7NBT0	A L D M C Q T E E E E	V F V I G G G E Q V	Y K E A I L T Q A	D R R L L E V T R V I D A P A E
UniRef90_E8TW77	L S V A E Q T G S E A	W I V I G G G A Q I	Y A G Q A L P L A	T A D R R L L E V T R V I G R D F V D
UniRef90_UPI00037A2421	R L A V E T G V D E I	C V I G G G G Q I	Y A G Q A L D I A	D R R L L E V T R V I H V D D V D
UniRef90_G8PD50	V E E Y I D T H A E	F F V I G G G S K V	Y Q E F S N E L A	D R I L Y L T Q I V E T A D F E E
UniRef90_D5BKS2	A Q K I A Q D L D E	N F I G G G G E I	F K M G L E R T S	D K I E L T R V I H E S F E
UniRef90_UPI00037F4FF9	Q Q A T I D G V E E I	A V I G G G G E I	F H Q A M P S A S	R L L T E V E V D I A
UniRef90_R3WR89	V L E Y A K F A G I T	F I A G G G S A V	Y E D F L P H C D	V L Y R T V I H H S F D
UniRef90_W677S2	A L D A A R P N E M I	F V I G G G A Q V	Y F E A V L P K A	D R L Y R T I D D T F S
UniRef90_C5CTW3	A L L A C E Q V P D V	W I V I G G G A Q I	Y A E A E P L A Q	Q Q V V V T E I A H D Y E
UniRef90_R5CCV6	A L Q H C A P E E D I	Y I I G G G A K V	Y G Q A I L G L A	D R R L L E V T R V I D D T P D E
UniRef90_UPI0003FF647B	Y A E E I L D A K E I	M I G G G A K L	Y Q S A F P L A M	N R L Y L T H I H A D I E
UniRef90_B1XTJ0	A L K S L N E F P R V	F I V I G G G E Q L	F R Q A F D K A	D R R L L E V T R V I D L D I E
UniRef90_F8UVS1	E Q A A E D G V E E E	F C V I G G G Q A L	F E L A L P K A A	R R L Y L T E V I D A A S G
UniRef90_R5IA50	A L Q L C E T Q D E	V F V I G G G A M V	Y K Q T I D M A N	K L L T E T R V I H A T F E
UniRef90_A6G6A1	E L A R A A G E D E A	F V I G G G T R L	Y A E A I E S A D	R M Y L T R V I H A H I E
UniRef90_M4XKL0	L A K N F A N T A E I	M V I G G G G E L	F K Q A L P L A E	R L Y L T E V I Q A D I E
UniRef90_C6CYL9	E A I D R Y G E G E E	L M V I G G G A D I	F A D F L P F A D	K I R L T E V I D T N I
UniRef90_H0JIM7	A W A R E R E A S E E	L M L I G G G A Q L	F A D A L P L A Q	R R L Y L T R V A L A P D
UniRef90_R9C564	L L K L L N T E D E T	F I C G G G A S I	F Y D Q M L S Y A	D K L L Y L T H I F A E F E
UniRef90_G7UQC3	A Q A Q A Q S A D E	L C V I G G G Q Q L	Y A Q A L A R A A	D A L H L T R V I D T R V E
UniRef90_L0DUR0	E A L A A A D S G R V	F V I G G G A E L	F K A A L P R A A	A V L T R V I H D R H P
UniRef90_A9BMQ5	A M E L G R Q A S D V	W V M I G G G A Q I	F Y A Q A L P L A	D A S I L E V T E V I H E R D Y E
UniRef90_A0A011PJV1	A I A L A G D A E E V	F I V I G G G E A I	Y R Q A L P L A K	R L Y L T E V I A E N A P
UniRef90_R5N9Z7	A L S H C K E E E E E	F I I G G G E S V	Y K E A L P L A Q	K K L Y L T E V I E D T P Q
UniRef90_C6W5S3	A L E K A K E I Q E E	V C V I G G G G E I	Y E Q S Q A I A T	H L Y L T K V I H T S V V
UniRef90_F2F4U4	A L V L V E G S E E V	M I G G G A Q I	F E Q S M A I A D	R L Y L T F I N H S F K E
UniRef90_Q12C17	A L S L C G Q S E E V	W V I G G G A Q I	Y A Q A K P L A Q	R R I L Y L T E

	130	140	150
UniRef90_F2MTJ4	G D T F F P E	I D W S V W E K V A T V P G V V D E K N L A Y A H D F Y E T Y H R	
UniRef90_I0K3I6	G D T Q F P Q	F D K A Q W R E K V S R E H H V H P A D E G R K H E A F H D F F V V Y E I R K	
UniRef90_J9GTZ1	G D A Y F P N	F S D E W Q E K S R E V H H P A D E G R K H E A C A S Y V F V D Y E I R K	
UniRef90_Q1QUE0	G D A W F P A	F D A R E W Q E T Q R V P G Q G G E G K P E Y A F F V H Y T Y R R K	
UniRef90_Q2DQB7	G D A F F P E	I D S D I W E V I S C E K G I S S K N G T G Y A F F V H Y T Y R R K	
UniRef90_I3UFQ7	G D A F F P D	I D E K L W R E T S R D T Q P S E N G N G M Y D Y V V Y E R K	
UniRef90_UPI0002D81736	G D T I M P P	F A P S E W Q E S S R A D H P A D P E N N R P A F S F V T L V Y R R	
UniRef90_A0A0211VWE2	G D A F F P R	F D R D E W R E V S A R E S H R A D D E R T N E F D F E Y V E Y V R R	
UniRef90_U1MCP0	G D T Q F P D	Y E A A D W Q V L E T Q S F A P D D E T N Q Y H Y Q F V I Y K K	
UniRef90_W2UNK3	A D T Y F P E	I D L N S W K L T R S E Y H G K D D K H G F A F T Y L T Y E R	
UniRef90_K0I8Y3	G D A Y A P V	L G A E W V E T A R E H H V S T N G L S F S F V T R V R R	
UniRef90_UPI00046667A5	G D T F F P N	I D P D V W K V V S S Q D Y P A G E N D S H A T F R H V I Y E R	
UniRef90_R1GXV2	G D T C F P Y	W G E G W A E T H R E S Y Q A D E K N N R Y N M F F V V L E R	
UniRef90_UPI00047D544B	A D T F F P E	I D E E F W M L T K Q E F H P T D E K H K L S T F Y L T Y I K K	
UniRef90_F0SAH7	A D T F F N N	I N L N E L N E I W R E E N H A D E R K H L Y D Y T F L I L E K R	
UniRef90_Q54277	G D T Y F P V	V N F D D W K E V S V E K G I K D E K N P Y D F Y F H I Y E R	
UniRef90_A0A02337E9	A D T Y F P P	V D P A L W V E V A R E H H P A D A R H S T A F D F V D Y T R	
UniRef90_UPI00040FA1C0	G D A H F P E	L E G R W E L V K S Q P G P S D V V P H T F Q V Y Q R R	
UniRef90_Q21NW4	G D A W F P E	I D G N I W A E V S C A L R Y K A D E K N E Y D Y S F V E L H R R	
UniRef90_UPI00031AAC38	G D T F F P D	I D P V W Q V V S A L D V P A G E K D S H A T R Y T V Y E R R	
UniRef90_UPI00046AD626	G D V L F P E	F N H E E W K E T S R E K Y R W D D N G L E Y H F V V F D R K K	
UniRef90_F0K1Q0	A D T Y M P N	L D W A F A L V K S E A H R A D D E G K N K Y D Y V F E T Y L R K	
UniRef90_M4X651	G D A H F P E	V D E A H W H L A S S I E H D A E G E T P A Y A F F E V W E R	
UniRef90_D7NBT0	A D A Y F P A	Y N S W H L V A H E A H K K S E D T N P F A F A F T V Y Q R R	
UniRef90_E8TW77	G D A H A P Q	L G P E W Q E V A R S R H V P S G G L P F S F V T Y E R R	
UniRef90_UPI00037A2421	G D T S F P A	I D P A I W R A G E T L D V V P E G E K T D T Y P T R Y V V Y D R R	
UniRef90_G8PD50	C D T F A P E	F N L S E Y K L I E Q K E V D D T P I A H E F Q T W Q R K K	
UniRef90_D5BK52	A D T F F P D	I A E E E W K L T E E V F H E K D E K K H K Y S F S Y L T Y E R K	
UniRef90_UPI00037F4FF9	G D A F F P E	I D T Q E W Q E V Q R V T G D A Q G K V R P Y S F A F V A Y E R R	
UniRef90_R3WR89	G D T K F P P	V A W E E W T L I N L S E G E K D E E N N Y D Y Q F E T Y Q H K	
UniRef90_W6T7S2	G D T W M P T	I D Y T N W H L V D R Q A G V T D V K N P Y R Y Q F E D Y V R	
UniRef90_C5CTW3	G D A H A P E	L S P S A W R E T K R E A H V S A K E G L N Y S F V T Y E R	
UniRef90_R5CCV6	G D T F F P E	S Y K G W H E T A R E E H A A D D R H A Y P F A F V D Y V K	
UniRef90_UPI0003FF647B	G D T Q M P P	F D F T G A T E I F K E A H G K D E R N Q Y D Y T F E I T W D	
UniRef90_B1XTJ0	G D T F F E V	P N A S A W K E V E R T P G S E G E I T F S F I T L E	
UniRef90_F8UVS1	G D V F F P S	F D E T D W T E V R S E R H P A D E K N A Y A T T F R V L E R K	
UniRef90_R5IA50	A D S F F P A	I N P A I W K E T S R E D H P A D K Q H P A Y S F V V Y E R	
UniRef90_A6G6A1	G D A T F P S	F D A T Q W R E V E R I E H P T D E R N N A F R C R F M C L E R K	
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UniRef90_K8WF83	G D T H F P T	E Y E D W S I F T E Y H E A D E N N T H G Y C F E I L T K R K	
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UniRef90_E3DLF6	G D T Y F P P	L N F D N W L K V M K K K G K Y N S E N P Y H Y N Y Y I Y Q R K	
UniRef90_K9AN65	G D T F F P Y	T F E D W E V E S S V R G E L D D K N T I P H T F F L I L R K	
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UniRef90_F6CE80	M	I	E	Y	V	W	A	E	D	E	K	H	Q	I	G	L	N	G	H	L	I	P	W	H	L	S	D	D	L	K	R	F	K	E	K	T	I	M	G	H	P	I
UniRef90_U1LVP2	M	I	V	H	V	V	A	I	G	S	N	R	E	I	G	K	D	N	A	L	L	W	R	L	S	D	D	L	K	R	F	K	E	K	T	I	M	G	H	P	I	
UniRef90_F5S5B1	I	T	L	V	A	A	I	L	G	S	N	R	E	I	G	K	D	N	A	L	L	W	R	L	S	D	D	L	K	R	F	K	E	K	T	I	M	G	H	P	I	
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UniRef90_F8UVR5	V	T	L	V	A	A	I	L	G	S	N	R	E	I	G	K	D	N	A	L	L	W	R	L	S	D	D	L	K	R	F	K	E	K	T	I	M	G	H	P	I	
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UniRef90_A4YZC2	M	I	E	I	I	V	A	V	A	E	N	G	V	I	G	K	D	N	A	L	L	W	R	L	S	D	D	L	K	R	F	K	E	K	T	I	M	G	H	P	I	
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UniRef90_G4SZ30																																										
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UniRef90_K1DZA4	L	V	L	V	A	A	L	G	A	N	R	A	I	G	K	D	N	A	L	L	W	R	L	S	D	D	L	K	R	F	K	E	K	T	I	M	G	H	P	I		
UniRef90_A8AXC0	I	A	A	I	W	A	Q	D	Q	N	G	L	I	G	K	D	N	A	L	L	W	R	L	S	D	D	L	K	R	F	K	E	K	T	I	M	G	H	P	I		
UniRef90_F4QJU5	L	A	L	V	V	A	M	S	D	N	G	V	I	G	K	D	N	A	L	L	W	R	L	S	D	D	L	K	R	F	K	E	K	T	I	M	G	H	P	I		
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UniRef90_R7HR44	M	V	G	L	I	V	A	A	K	N	R	V	I	G	K	D	N	A	L	L	W	R	L	S	D	D	L	K	R	F	K	E	K	T	I	M	G	H	P	I		
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UniRef90_K1YXY9	L	S	L	V	V	A	M	S	R	N	I	I	G	K	D	N	A	L	L	W	R	L	S	D	D	L	K	R	F	K	E	K	T	I	M	G	H	P	I			
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UniRef90_U1LVP2	I	M	G	R	K	T	F	E	S	L	P	K	P	L	P	N	R	R	N	I	V	V	T	T	R	S	Q	A	N	W	Q	A	T	G	V	L	D	V	W	H	L	A	E
UniRef90_F5S5B1	I	M	G	R	K	T	W	D	S	L	P	R	P	L	P	N	R	R	N	I	V	V	T	T	R	S	Q	A	N	W	Q	A	T	G	V	L	D	V	W	H	L	A	E
UniRef90_K8Z811	L	M	G	R	K	T	A	Q	S	L	G	R	A	L	P	G	R	L	N	L	V	V	T	T	R	S	Q	A	N	W	Q	A	T	G	V	L	D	V	W	H	L	A	E
UniRef90_F8UVR5	V	M	G	R	K	T	W	D	S	L	F	R	P	L	P	G	R	R	N	V	V	V	T	T	R	S	D	D	W	H	S	P	F	G	A	E	R	A	A	S	L	D	D
UniRef90_E5SH41	V	M	G	R	A	T	Y	E	S	L	G	K	P	L	P	Y	R	R	N	V	V	V	T	T	R	D	N	P	S	D	F	K	P	D	G	V	E	V	I	H	S	I	E
UniRef90_D8VFQ9	I	M	G	R	K	T	W	D	S	L	P	R	P	L	P	G	R	M	N	V	V	V	T	T	R	D	Q	S	F	K	P	D	A	V	A	C	E	T	W	M	E		
UniRef90_UPI0003B50699	V	M	G	R	K	T	W	D	S	L	P	R	P	L	P	G	R	A	N	F	V	V	T	S	R	R	S	M	T	A	A	A	G	A	Y	V	F	A	D	V	D	A	
UniRef90_S8FEJ5	I	M	G	R	R	T	F	E	S	L	Q	G	A	L	P	H	R	R	N	I	V	L	T	S	R	R	C	D	V	D	F	K	E	R	A	E	R	Y	A	S	L	Q	E
UniRef90_UPI000470B72C	I	M	G	R	K	T	F	E	S	L	G	R	P	L	P	G	R	L	N	I	V	L	T	T	R	D	E	E	D	Y	K	E	G	V	V	I	V	H	S	L	E	E	
UniRef90_A4YZC2	V	M	G	R	K	T	F	V	S	F	P	R	P	L	P	G	R	T	N	I	V	V	T	T	R	D	A	A	F	N	A	A	G	A	I	V	T	H	R	I	A		
UniRef90_A0A059EBT8	I	M	G	R	K	T	W	E	S	L	P	R	P	L	P	K	G	R	E	N	I	V	M	T	T	R	D	W	A	T	N	A	D	G	A	R	V	P	S	S	A	R	
UniRef90_R5JT39	I	M	G	R	K	T	F	E	S	L	P	K	A	L	P	N	R	R	N	I	V	L	T	T	S	T	N	P	A	T	N	F	P	G	T	E	V	P	S	L	E	A	
UniRef90_L0L8C1	V	M	G	R	K	T	F	E	S	L	G	R	A	L	P	N	R	T	N	I	V	M	T	T	R	D	N	P	D	F	N	H	K	D	V	L	V	Q	S	I	F	C	
UniRef90_R5VRL1	V	M	G	R	R	T	Y	E	S	L	G	R	P	L	P	G	R	Q	T	I	V	V	T	T	R	N	P	K	N	F	D	Q	G	C	R	T	A	G	S	L	T		
UniRef90_G4SZ30	L	M	G	R	K	T	Y	E	S	L	G	R	P	L	P	G	R	L	N	I	V	V	T	T	R	N	P	D	Y	R	P	S	G	C	E	V	N	D	I	E	S		
UniRef90_UPI0004721B69	I	M	G	R	K	T	F	D	S	L	P																																

		90	100	110	120																																						
UniRef90_R6ADW5	K	L	L	A	A	L	P	A	G	E	S	F	V	I	G	G	E	H	M	R	E	L	L	P	Y	A	D	T	M	Y	L	T	E	I	E	E	D	F	E				
UniRef90_F6CE80	I	N	D	Y	K	H	K	Q	E	K	M	C	V	I	G	G	A	S	V	F	K	A	L	L	D	Q	V	D	I	L	E	K	T	A	I	E	A	V	F	E			
UniRef90_U1LVP2	S	L	N	T	E	T	T	D	L	I	I	I	M	G	G	A	T	Q	L	Y	E	Q	T	F	S	M	T	D	R	F	Y	V	T	E	I	V	D	G	T	F	E		
UniRef90_F5S5B1	A	L	Q	S	C	A	D	A	P	E	I	I	M	G	G	A	T	Q	L	Y	E	Q	T	F	S	M	T	D	R	F	Y	V	T	E	I	V	D	G	T	F	E		
UniRef90_K8Z81	E	A	A	Q	A	S	G	A	G	E	L	A	V	I	G	G	A	D	I	F	A	L	A	L	P	H	A	E	M	L	Y	L	T	H	V	D	T	L	V	E			
UniRef90_F8UVR5	A	W	R	L	V	A	G	D	G	Q	V	F	V	I	F	G	G	A	T	Y	A	A	A	L	P	R	A	D	E	L	V	L	T	E	I	V	D	L	E	V	E		
UniRef90_E8SH41	E	I	D	A	I	G	D	H	I	F	I	F	G	G	A	T	Q	L	Y	E	Q	T	F	S	M	T	D	R	F	Y	V	T	E	I	V	D	D	K	F	Q			
UniRef90_D5VFQ9	A	V	Q	M	A	K	E	V	D	E	V	C	V	I	G	G	A	T	L	F	E	L	A	L	P	K	A	K	R	L	Y	L	T	E	V	A	A	E	V	E			
UniRef90_UPI0003B50699	C	L	D	E	A	R	A	D	E	V	C	V	I	G	G	A	T	L	Y	A	D	L	L	P	R	V	D	E	L	Y	L	T	E	V	D	L	E	P	E				
UniRef90_S8FEJ5	A	L	T	H	C	R	T	D	E	K	A	F	V	I	G	G	A	T	L	Y	R	A	A	L	P	L	A	D	E	L	L	T	E	V	D	L	E	P	E				
UniRef90_UPI000470B72C	A	I	A	R	A	E	Y	A	D	E	V	M	V	I	G	G	A	T	L	F	E	M	A	M	P	Y	A	D	R	L	Y	T	T	E	I	V	R	R	T	Y	K		
UniRef90_A4YZC2	E	A	A	L	R	R	S	A	A	E	I	V	V	G	G	A	T	L	Y	T	A	T	L	P	L	T	D	R	L	E	Y	T	T	E	V	H	A	R	P	P			
UniRef90_UPI000470B72C	E	A	A	L	R	R	S	A	A	E	I	V	V	G	G	A	T	L	Y	T	A	T	L	P	L	T	D	R	L	E	Y	T	T	E	V	H	A	R	P	P			
UniRef90_A0A059EBT8	A	V	A	A	R	T	D	A	D	K	V	F	V	I	G	G	A	T	L	Y	K	L	A	L	P	L	A	D	R	I	Y	L	T	E	V	D	A	E	P	D			
UniRef90_R5JT39	A	L	Q	S	C	H	E	K	E	H	V	Y	I	G	G	E	T	V	Y	R	Q	A	L	E	L	A	D	E	L	C	Y	L	T	E	I	V	D	N	E	S	P	Q	
UniRef90_L0L8C1	V	L	A	E	C	R	N	E	L	E	V	V	I	G	G	E	T	V	Y	N	Y	F	L	P	Y	T	D	R	L	Y	L	T	E	I	V	D	H	S	R	I	E		
UniRef90_R5VRL1	E	A	L	A	L	S	A	G	E	D	V	Y	I	S	G	G	E	T	L	Y	E	E	A	L	P	L	A	D	E	L	Y	L	T	E	I	V	D	S	R	I	E		
UniRef90_G4SZ30	A	M	E	S	C	R	N	H	N	E	I	F	V	I	G	G	A	T	L	Y	E	A	M	L	P	V	A	D	Y	L	Y	L	T	E	V	R	R	A	F	E			
UniRef90_UPI0004721B69	D	A	I	A	R	A	A	S	P	T	V	T	V	I	G	G	A	T	L	Y	S	L	F	L	P	F	S	H	R	I	E	L	T	E	V	H	V	D	A	E			
UniRef90_UPI0004697C77	A	L	D	S	C	K	N	D	E	V	F	V	I	G	G	A	T	L	Y	R	E	A	L	P	S	K	A	N	K	L	Y	I	T	E	V	H	V	D	L	P	K		
UniRef90_L1QL14	A	L	S	I	A	R	E	V	D	E	V	C	V	I	G	G	T	A	I	F	A	A	A	L	P	R	A	R	R	L	Y	I	T	E	V	E	A	E	P	E			
UniRef90_UPI00030A2750	K	V	A	S	Q	D	G	A	D	A	V	F	V	I	G	G	E	T	L	F	E	Q	A	L	P	M	A	D	K	L	F	L	T	E	V	L	A	S	I	K			
UniRef90_K1DZA4	E	A	L	V	A	A	G	P	G	E	V	H	V	L	G	G	E	T	L	Y	R	Q	T	L	D	L	A	S	R	L	E	L	T	E	I	V	D	R	S	P	E		
UniRef90_A8AXC0	V	L	K	W	Y	Q	E	Q	E	K	N	Y	I	I	G	G	G	Q	I	F	S	L	F	Q	Y	H	L	D	E	I	I	K	T	E	I	V	H	A	S	F	E		
UniRef90_F4QJU5	E	H	A	I	D	D	G	V	D	E	I	C	V	I	G	G	A	T	L	Y	A	Q	T	L	P	K	A	D	R	L	Y	L	T	E	V	H	A	T	V	E			
UniRef90_R5Y5N1	A	L	E	A	A	K	N	D	K	I	F	I	I	G	G	A	T	L	Y	S	E	F	L	P	K	A	D	R	L	Y	L	T	E	V	H	A	T	V	E				
UniRef90_N1MRZ6	G	A	L	A	L	A	D	A	P	V	V	M	V	I	G	G	A	T	L	Y	R	L	F	L	D	A	A	H	R	L	E	L	T	E	V	H	L	E	A	E			
UniRef90_R7HR44	E	A	L	E	A	A	G	N	R	T	V	Y	I	S	G	G	A	T	L	Y	K	E	A	L	P	F	V	D	R	K	M	Y	L	T	E	V	D	A	E	I	E		
UniRef90_UPI000468EB7E	N	H	A	M	I	E	G	V	D	E	I	M	V	I	G	G	A	T	L	Y	A	Q	A	L	P	I	A	T	R	L	Y	L	T	E	V	A	V	E	I	E			
UniRef90_U2YSI0	E	Q	A	E	E	E	G	A	E	E	I	C	V	I	G	G	V	A	L	F	E	L	A	L	P	R	A	K	R	L	Y	L	T	E	V	D	A	E	P	E			
UniRef90_K1YXY9	W	I	K	L	Q	P	E	E	D	E	I	F	V	V	G	G	A	T	L	Y	E	L	T	W	P	Y	I	K	Q	I	Y	L	T	E	V	D	A	R	D	Y	K		
UniRef90_UPI00036D7DA5	N	L	A	K	E	K	P	H	E	M	E	I	F	V	I	G	G	A	T	L	Y	E	L	F	P	H	V	H	R	L	Y	L	T	E	V	D	A	R	K	I	K		
UniRef90_A0A031IIV7	L	H	P	Y	V	D	S	E	E	E	V	F	L	I	G	G	E	T	L	F	A	Q	T	L	P	L	V	R	R	I	Y	V	T	E	I	D	A	T	L	E			
UniRef90_D4YUF7	L	K	Y	A	H	Q	A	D	D	L	K	A	L	G	G	V	S	I	F	K	L	L	E	K	Q	V	D	Q	V	L	E	K	T	E	V	H	G	R	F	E			
UniRef90_UPI00036BF211	V	L	D	W	Y	N	Q	Q	E	K	N	Y	I	T	G	G	A	T	L	Y	A	L	F	S	P	Y	L	D	Q	V	I	K	T	E	V	H	G	R	F	E			
UniRef90_D9SKY2	V	K	N	C	I	K	E	D	Q	E	N	F	I	I	G	G	E	T	L	Y	K	E	L	L	P	S	T	D	K	I	Y	L	T	E	V	D	R	E	A	D			
UniRef90_I3ZXK2	A	V	A	T	A	K	N	S	E	K	A	H	V	I	G	G	D	N	I	Y	R	Q	T	M	D	L	I	D	E	I	E	T	T	E	V	H	A	T	Y	E			
UniRef90_D4W574	I	L	A	N	Y	K	N	S	K	E	L	F	V	I	G	G	R	S	I	Y	E	Q	T	L	P	I	A	D	R	L	Y	L	T	E	V	H	A	T	Y	E			
UniRef90_E5V117	S	I	L	E	N	T	T	T	Q	K	V	F	I	F	G	G	G	T	I	Y	E	K	Y	F	D	K	C	D	E	M	F	I	T	E	V	D	T	V	E				
UniRef90_K2FRJ7	V	F	D	K	A	R	E	K	E	D	E	V	F	I	C	V	I	G	G	E	T	L	Y	A	Q	T	L	G	L	A	D	R	L	Y	L	T	E	V	E	G	D	L	E
UniRef90_Q6FZ92	R	V	A	S	Q	N	G	A	D	A	V	F	V	I	G	G	E	T	L	Y	F	Q	Q	G	F	N	I	A	D	R	L	Y	L	T	E	V	L	A	S	I	E		
UniRef90_MOD2Z7	A	V	E	A	A	E	A	A	A	E	F	V	A	G	G	A	T	L	Y	E	A	F	L	D	R	A	D	R	L	V	L	T	E	V	P	G	E	P	E				
UniRef90_V4NFV7	E	A	L	D	I	G	R	E	H	E	V	C	V	I	G	G	A	T	L	Y	A	Q	T	L	P	R	A	D	R	L	Y	L	T	E	V	H	A	T	V	D			
UniRef90_H5YK21	G	D	A	L	R	R	S	V	A	E	L	A	V	I	G	G	A	T	L	Y	R	Q	W	L	P	L	A	D	R	L	E	I	T	E	V	H	A	R	P	E			
UniRef90_UPI000319B476	A	L	A	L	G	R	E	A	A	R	R	M	V	A	G	G	A	T	L	Y	A	E	C	L	P	L	A	D	E	I	L	T	E	V	H	A	A	P	A				
UniRef90_R6F0C1	P	P	A	D	A	P	V	P	A	K	C	V	I	G	G	A	T	L	Y	E	R	T	I	A	S	A	D	K	L	Y	L	T	E	V	H	R	T	S	V	D			
UniRef90_K2G6F1	V	F	A	K	A	R	E	I	E	I	F	I	C	V	I	G	G	S	V	Y	A	Q	T	L	G	M	A	D	K	L	Y	L	T	E	V	E	G	E	F	E			
UniRef90_H3NKK2	V	L	D	L	A	Q	D	Q	E	L	M	V	I	G	G	A	T	L	Y	F	K	S	L	W	D	H	V	D	L	I	V	R	T	V	I	D	G	E	F	P			
UniRef90_B9M6P8	A	L	K	L	A	G	D	V	E	I	F	I	C	V	I	G	G	D	I	Y	R	Q	A	L	P	L	A	N	R	I	Y	L	T	E	V	H	Q	V	I	E			
UniRef90_Q38WX9	D	Y	Q	K	E	H	P	M	Q	K	L	F	I	I	G	G	A	T	L	Y	K	L	F	A	A	D	V	D	Y	L	Y	V	T	K	I	A	E	K	F	K			
UniRef90_K6VDJ4	A	L	E	L	A	A	T	D	G	V	P	I	V	V	G	G	Q	I	Y	T	Q	A	M	P	V	A	T	R	L	E	V	T	H	I	D	A	A	P	D				
UniRef90_Q1GQK3	A	L	K	R	A	N	A	P	H	V	M	V	I	G	G	A	T	L	Y	A	L	F	L	P	L	A	D	R	L	E	L	T	E	V	G	L	E	P	A				
UniRef90_UPI00037ECC91	A	L	A	E	E	M	G	A	D	E	I	C	A	G	G	E	T	L	Y	Q	L	F	M	A	K	A	V	R	L	E	L	T	E	V	E	A	E	P	E				
UniRef90_W1Q566	A	I	K	A	L	A	E	D	Q	E	V	M	V	I	G	G	A	T	L	Y	F	A	A	L	P	L	A	D	R	V	I	R	T	Q	I	K	A	T	F	P			
UniRef90_U5A6X9	A	L	K	A	V	G	D	V	E	V	M	V	I	G	G	S	I	Y	E	S	Y	L	P	I	A	N	K	L	Y	L	T	E	V	I	E	A	E	I	E				
UniRef90_UPI0002197444																																											

	130	140	150
UniRef90_R6ADW5	G D A Y F P D F D P F R W K L E E S I I E G	E G K L P H R F C T Y R K	
UniRef90_F6CE80	A D T Y M P A I D Y D Q F A L L N K E H H V S D S E	K N K Y P Y T F L T Y D Q R K	
UniRef90_U1LVP2	A D T Y M P A L I D Y D G L T V T L N K E Q F H P V D E	K H A H S Y F T F R Q Y D Q R K	
UniRef90_F5S5B1	G D T H F P E F A P Q E W C E Q S D R E S C V S Q	N G I A F F D L V H Y Q R R K	
UniRef90_K8Z811	G D A H F P A F D P A Q W E V V A R Q A H A A D A	R H A L A F F E F V D Y R R R K	
UniRef90_F8UVR5	G D T W F P D W D R S A Q W E E T A R Q Q A D V	A S E D G T P F A W V D Y A R R K	
UniRef90_E8SH41	A D T F F P P Y T F E D W E V T S A V E G T V D	E K N K Y P H T F L H L T R K	
UniRef90_D5VFQ9	G D V H F P A F D E S A W T E E H P A G D	G D G D H A F V F R V L E R K	
UniRef90_UPI0003B50699	G D A H F P K L D Q A D W R E I S A E R V E A	S D T D D A G F T L R V L D R K	
UniRef90_S8FEJ5	A D A Y F P S V E W E W E K I S E E M H P A	A D D R E H A H P Y S F V D Y E R	
UniRef90_UPI000470B72C	G D T F F P P Y N M G W K L I S E S K D H H T	E D G L A Y A Y H I Y E R	
UniRef90_A4YZC2	G D T L F P A I D P A Q W E E V A R E R H A S G	P D D Q A D F S Y V T Y R R K	
UniRef90_A0A059EBT8	G D A Y F P E L D A N D W Q E T S A E Q Y D A	G N G N D F A F K I R Q L D R K	
UniRef90_R5JT39	A D A F F P A I D P Q I W H K K S K E V H L A	D E K H L C S Y S F V D Y I K	
UniRef90_L0L8C1	A D A F F P Q I D K S E W G Q Y F S Q Q G D Q S	S E Y N Y R F N V Y K R	
UniRef90_R5VRL1	G D A Y F P E F D A K Q Y Q K C V E E R H	E G E I P Y T Y V T Y R K	
UniRef90_G4SZ30	G D T F F P E I D N N H W L E T H R E D I L H D	D P D V S F G Y S F V K L E R	
UniRef90_UPI0004721B69	G D T R I A Y P D P A D W R E V A R Q D H P A	D E N R P A Y S F V T F L R	
UniRef90_UPI00004697C77	A D A F F P A I D K M D E W E I K N R E H P I D	D D R H P N F S F I N Y E R	
UniRef90_L1QL14	G D A V F P A F D E T A F V R T A F E P H E P	G E K D D H A F A F T V L D R R K	
UniRef90_UPI00030A2750	G D S F F P L F D K E K W T I V Q T Q Y I P E	G D K D T H P T R F I V Y E Q K	
UniRef90_K1DZA4	A E V F F P E V D A R V W R E V R R D F R E G	F D F V T Y E R	
UniRef90_A8AXC0	G D T Y F P D F D L T A F R E V N S Q F P R K	D E K N A Y D F T V K I L E R K	
UniRef90_F4QJU5	G D T H F P T I D P A V W Q V V R E E S F T K A	E F D D H D F T L K V Y E R K	
UniRef90_R5Y5N1	A D T F F P Q F D K S E W S R E D V L S C A	E E N G I S F S F V L Y T R K	
UniRef90_L1MRZ6	G D A C I G Y P D P A E W A E M A R E D H A A	L D G R P A Y S F V T L R R K	
UniRef90_R7HR44	G D T Y F P E F D T S L F Q R E V E E S F D G E	L P Y Q Y V T Y T K	
UniRef90_UPI000468EB7E	G D A H F P M L D A N W Q E A Q R V P G E S G	E M P A Y D F V R Y E R	
UniRef90_U2YS10	G D A V F P A F D E S A F V E L A S E R H E P	G E A D D H A F T F R I L E K R	
UniRef90_K1YXY9	G D T F F P F T N P E G F T I V A D T G P L I S	Q T G L P Y R I I Q A Q R K	
UniRef90_UPI00036D7DA5	A D A F F P K W Q E S E F K R I G Q R H Y A K	D Q N N E F D F D F E V W E K Q	
UniRef90_A0A0311IV7	G D V Y Y P E I P S T F Q I T S E T H Y D A	V E G N D Y S F V I R Q Y D R K	
UniRef90_D4YUF7	V D T Y M P E I D Y S D F K I I K K E Q H E P	D E R N K F A Y D F L T Y K R K	
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UniRef90_L0WKJ2						V	V	A	M	S	Q	N	R	A	I	G	K	D	N	Q	L	L	W	H	I	P	D	D	L	L	Q	H	F	K	R	I	T	H	G	K	V	I		
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UniRef90_UPI00026CC111	M	I	T	L	L	Y	L	A	R	A	D	N	G	V	I	G	A	K	G	A	L	P	W	H	L	P	A	D	L	K	R	F	K	A	L	T	M	G	K	P	M			
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UniRef90_D8GLE8	M	L	H	I	I	A	A	L	N	E	D	Y	A	L	I	G	R	D	N	K	L	L	W	H	I	P	E	D	L	K	R	F	K	D	I	T	Y	G	K	S	I			
UniRef90_UPI0002492AE7	M	I	A	F	V	W	A	E	D	S	Q	R	N	I	I	G	Y	Q	G	D	L	P	W	Y	L	P	N	D	M	K	R	F	K	E	L	T	T	N	N	T	I			
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UniRef90_UPI000345C860			V	S	L	I	A	A	L	D	E	N	F	A	I	G	R	K	G	Q	L	P	W	H	L	P	D	D	L	R	W	F	K	E	L	T	L	G	K	Y	V			
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UniRef90_R9NBT6			M	N	L	I	V	A	V	D	K	N	W	A	I	G	K	D	N	R	M	M	W	S	I	P	A	D	M	K	F	F	K	R	E	T	T	S	G	K	I	V		
UniRef90_K0D7F2			I	K	M	V	W	A	E	D	Q	K	H	A	I	G	K	D	G	S	T	P	W	H	M	P	D	D	L	K	L	F	R	E	E	T	T	N	T	L	M			
UniRef90_F4H750			L	R	L	V	W	A	Q	T	P	A	G	V	I	G	V	D	N	T	L	P	W	H	V	P	S	G	D	L	Q	A	R	F	R	R	A	L	T	T	G	H	P	V
UniRef90_B6BUF2										M	S	E	N	N	V	I	G	L	D	N	S	L	P	W	H	L	P	S	G	D	L	K	R	F	K	A	L	T	T	G	H	Q	I	
UniRef90_D0J8Z9			I	I	L	I	S	A	V	S	S	N	G	V	I	G	K	N	N	Q	L	M	W	H	L	P	S	N	D	L	K	R	F	K	N	M	T	F	G	E	T	V		
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UniRef90_D4H815					L	I	V	A	M	T	K	D	R	V	I	G	K	N	D	M	P	W	H	L	P	P	E	D	L	K	L	F	K	A	K	T	T	G	H	I	I			
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UniRef90_K6TJC2			M	I	S	I	V	A	V	S	K	N	N	V	I	I	G	N	N	G	V	I	P	W	K	I	K	G	E	Q	K	R	F	K	E	L	T	T	G	K	T	I		
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UniRef90_H3KC00	V	M	G	R	K	T	R	E	S	I	G	R	A	L	P	G	R	R	N	I	A	V	S	R	R	A	D	W	H	P	D	G	T	E	V	T	L	A	A	A	
UniRef90_F0DMT6	V	M	G	R	K	T	F	E	S	I	G	R	P	L	P	G	R	R	N	I	I	V	M	T	R	N	E	S	Y	E	A	E	N	G	I	T	A	V	H	L	Q
UniRef90_C9B0Y8	A	M	G	R	K	T	L	E	S	F	G	R	Q	P	L	K	N	R	V	N	I	V	M	T	T	R	D	K	A	Y	S	T	E	N	G	I	V	V	H	S	L
UniRef90_B9ECC1	I	M	G	R	K	T	F	E	S	I	G	R	P	L	P	P	N	R	K	T	I	I	V	S	T	S	K	S	K	D	N	Y	N	N	Y	C	L	E	S	L	
UniRef90_U2FRI6	V	M	G	R	K	T	F	E	S	I	G	R	P	L	P	P	N	R	D	N	I	V	V	S	R	N	L	F	P	N	D	E	V	E	S	F	K	S	L	D	
UniRef90_K2A9Q6	I	M	G	K	K	T	F	E	S	I	G	K	P	L	P	P	N	R	T	N	I	V	V	S	R	D	K	N	F	S	A	E	G	I	V	A	N	S	V		
UniRef90_M1PEC1	I	M	G	R	K	T	Y	D	S	I	A	S	P	L	P	P	G	R	F	N	V	V	L	S	R	D	K	D	P	Q	I	A	G	C	M	V	T	S	N		
UniRef90_S6B7C7	L	M	G	R	V	T	F	D	G	M	N	R	V	L	P	P	N	R	T	T	I	I	L	T	R	D	K	S	Y	Q	A	E	N	E	Q	V	L	V	F	Y	
UniRef90_C5VR52	I	M	G	R	K	T	F	E	A	L	P	N	V	L	P	P	G	R	K	H	I	I	L	T	E	N	Q	N	Y	V	I	N	T	N	V	K	N	I	T		
UniRef90_L0WKJ2	V	M	G	R	K	T	F	E	S	I	P	N	L	L	P	P	N	R	T	H	I	V	L	T	R	D	Q	P	I	G	Y	E	A	V	M	A	H	S	L		
UniRef90_Q0C500	I	M	G	R	K	T	W	E	S	F	P	R	P	L	P	P	G	R	E	N	I	V	L	T	R	D	W	D	Y	D	A	E	A	R	V	Y	S	A	A	R	
UniRef90_UPI00026CC111	V	M	G	R	K	T	F	E	S	F	P	A	P	L	P	P	G	R	R	H	I	V	L	T	R	D	R	D	W	S	A	P	G	A	E	V	A	Y	S	V	
UniRef90_I7L3D7	I	M	G	R	P	T	W	L	S	I	G	R	P	L	P	P	N	R	T	S	V	V	M	T	R	D	D	L	N	W	Y	P	E	V	K	V	V	H	S	L	
UniRef90_D8GLE8	I	M	G	R	K	T	F	E	S	L	P	C	I	L	P	P	K	R	K	H	I	V	L	T	R	D	K	S	Y	N	E	R	V	E	J	I	V	H	S	L	
UniRef90_UPI0002492AE7	V	M	G	R	K	T	Y	E	S	F	N	G	P	L	P	P	N	R	Q	N	I	V	I	S	R	N	K	N	Y	Q	S	P	A	I	L	I	N	D	K	G	A
UniRef90_UPI00037A6DFF	V	M	G	R	K	T	F	E	S	F	P	S	P	L	P	P	G	R	R	H	I	V	L	T	R	D	P	H	W	Q	S	A	G	A	E	V	V	H	S	L	
UniRef90_UPI000345C860	L	M	G	Y	N	T	A	L	A	I	G	K	A	L	P	P	G	R	T	N	L	V	L	S	K	R	H	E	A	P	F	G	Q	V	T	V	R	S	I	E	
UniRef90_UPI000364DF9B	I	M	G	R	K	T	Y	E	S	I	G	R	P	L	P	P	N	R	V	N	Y	V	V	S	R	T	L	N	E	I	K	G	A	H	V	F	N	S	I	D	A
UniRef90_R9NBT6	I	M	G	R	K	T	L	E	S	F	P	Q	P	L	P	P	K																								

UniRef90_H3KC00	L	A	A	S	D	G	A	E	N	V	F	V	I	G	G	G	E	I	Y	R	Q	S	L	P	Q	V	E	R	A	Y	V	T	V	I	D	E	S	D	F	E		
UniRef90_F9DMT6	T	A	I	A	Q	S	D	G	A	E	N	V	F	V	I	G	G	A	Q	I	F	D	M	A	M	G	L	A	D	R	A	Y	V	T	V	I	D	E	S	Y	D	
UniRef90_C0BY08	M	L	C	E	L	K	K	Y	P	D	V	V	V	I	G	G	A	Q	I	Y	F	R	Q	S	L	P	H	C	A	D	R	A	Y	V	T	R	I	D	H	A	Y	D
UniRef90_B9ECC1	A	F	N	L	Y	K	D	G	E	D	E	I	F	I	A	G	G	G	E	I	Y	K	E	S	L	P	F	A	D	R	R	I	Y	L	T	I	E	K	E	Y	E	
UniRef90_U2FR16	F	L	N	L	Y	K	D	H	D	E	E	V	F	I	I	G	G	K	T	I	Y	E	Q	S	L	P	F	A	K	R	L	I	Y	L	T	H	I	E	Q	E	Y	E
UniRef90_K2A9Q6	E	A	A	K	E	I	E	K	E	E	V	F	I	I	G	G	G	Q	I	Y	Q	Q	A	M	N	M	A	D	K	V	L	Y	L	T	V	V	E	G	F	D		
UniRef90_M1PEC1	G	I	E	C	C	K	G	Y	E	R	T	I	Y	I	G	G	R	T	L	Y	S	E	A	M	N	M	D	T	V	L	S	V	L	T	S	V	L	D	K	E	Y	E
UniRef90_S6B7C7	M	K	W	Y	K	N	Q	E	R	I	Y	I	I	G	G	G	Q	I	F	S	A	F	E	P	L	I	D	E	L	V	L	T	R	I	N	H	A	R	L	Q		
UniRef90_C5VR52	L	T	E	L	I	K	S	H	K	E	Y	F	V	I	G	G	G	K	I	F	S	L	L	L	P	H	A	T	K	I	Y	M	T	R	I	N	H	S	F	E		
UniRef90_L0WKJ2	A	I	A	H	A	K	Q	K	N	K	A	F	I	G	G	G	A	E	I	Y	H	Q	S	L	P	E	M	A	D	V	L	E	I	T	E	V	D	T	V	I	E	
UniRef90_Q0C500	A	I	A	A	R	E	G	K	D	A	F	V	I	G	G	A	E	I	Y	F	A	L	A	L	P	F	A	D	R	I	Y	L	T	E	V	D	A	E	I	E		
UniRef90_UPI00026CC111	A	A	L	A	L	A	G	D	G	D	V	A	V	I	G	G	A	E	I	F	A	L	L	F	T	P	L	A	D	R	V	E	L	T	E	V	H	L	M	P	A	
UniRef90_I7L3D7	A	L	A	L	I	K	N	E	R	D	I	S	I	A	G	G	S	V	I	Y	K	A	F	M	P	Y	A	T	D	L	V	V	T	K	I	D	G	I	I	D		
UniRef90_D8GLE8	V	L	K	Y	K	D	S	P	I	E	S	F	V	S	G	G	G	E	I	Y	K	Q	L	M	P	Y	C	N	K	L	Y	L	T	K	I	H	S	H	E	K		
UniRef90_UPI0002492AE7	L	F	E	Y	V	S	K	Q	A	N	T	M	I	I	G	G	K	T	I	F	Q	L	F	K	D	D	V	D	T	L	Y	L	T	K	I	V	H	H	E	F	S	
UniRef90_UPI00037A6DFF	A	A	A	L	R	I	A	G	A	R	V	A	V	I	G	G	A	E	I	F	A	L	L	P	Y	A	D	A	V	E	L	T	E	V	N	A	A	P	V			
UniRef90_UPI000345C860	E	A	R	A	R	A	D	G	T	G	L	M	V	I	G	G	G	Q	V	Y	A	E	A	L	P	V	A	D	R	I	Y	L	T	E	V	N	A	A	V	D		
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UniRef90_R9NBT6	A	V																																								

UniRef90_H3KC00	G	D	T	V	F	P	D	L	P	E	A	E	W	T	M	T	V	L	D	R	L	E	P	T	E	T	R	P	F	A	V	E	F	R	R	Y	D	R						
UniRef90_F9DMT6	G	D	T	F	F	P	E	Y	K	E	G	W	Q	L	T	S	E	S	D	V	Q	E	E	A	E	D	R	T	E	F	A	V	E	F	R	R	Y	D	R					
UniRef90_C0BY08	A	D	T	Y	F	P	N	L	D	E	D	G	W	K	M	T			K	T	S	E	Q	E	Q	T	E	Y	F	D	L	E	Y	A	V	F	Q	I	W	D	K	R		
UniRef90_B9ECC1	G	N	I	F	F	P	M	F	N	K	D	E	F	E	I	T	Y	Q	Q	K	V					E	G	F	I	P	Y	T	Y	T	F	T	Y	E	R	K				
UniRef90_U2FRI6	G	D	T	Y	F	P	N	V	N	Y	D	Q	Y	I	K	L	N	E	R	Q	S	G	V								L	R	F	C	V	I	Y	E	R	K				
UniRef90_K2A9Q6	A	D	T	F	F	P	E		Y	S	E	F	K	N	V	V	S	E	R	K	G	S	D	E				N	F	K	Y	T	F	L	E	L	T	K	R					
UniRef90_M1PEC1	G	D	V	F	F	P	H	L	P	K	E	Q	F	D	H	V	S	E	K	R	M	G	E	T	D				R	F	T	L	H	T	Y	R	R	K						
UniRef90_S6B7C7	G	D	T	Y	F	P	E	F	D	M	T	K	F	Q	E	L	S	H	Q	F	H	A	K	D	E	D			K	N	E	Y	D	T	V	T	T	F	R	K				
UniRef90_C5VR52	G	D	T	F	F	P	E	I	D	M	N	K	W	E	I	V	E	Y	L	H	G	T	L	N	N	E	N	I	I	Y	K	H	T	F	L	T	L	C	K					
UniRef90_L0WKJ2	G	D	A	F	Y	P	D	I	D	E	K	F	I	K	T	D	E	T	K	T	F	Y							D	K	S	G	F	Q	F	R	F	C	W	Q	K			
UniRef90_Q0C500	G	D	T	L	F	P	E	I	D	L	R	Q	W	R	S	D	E	I	A	T	H	P	A	G	E				G	N	D	H	A	F	I	C	R	R	L	D	R			
UniRef90_UPI00026CC111	G	D	A	I	V	P	A	F		V	G	W	H	E	T	A	R	E	D	H	P	A	E	G	T	R	P	A	Y	S	F	V	T	L	D	R								
UniRef90_I7L3D7	G	D	T	F	V	A	P	F	D	L	S	Q	F	K	L	T	S	S	E	A	H	P	K	D	N				H	N	D	Y	A	Y	V	V	E	R	Y	K	R			
UniRef90_D8GLE8	G	D	T	Y	F	P	K	F	D	K	S	N	Y	H	V	I	E	F	K	E	H								C	Y	G	N	I	K	Y	S	F	I	T	Y	E	K		
UniRef90_UPI0002492AE7	G	D	T	K	M	I	D	L	D	Y	R	K	F	K	L	T	E	K	K	E	G	T	M	D	E	K	N	P	Y	P	Y	T	F	E	T	Y	H							
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UniRef90_R9NBT6	A	D	T	Y	F	P	D																																					

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UniRef90_C3X6T6	L	I	S	H	V	V	A	M	A	S	N	R	V	I	G	K	N	G	Q	M	P	W	H	L	P	E	G	Q	K	I	F	R	N	L	T	L	A	G	A	T	
UniRef90_UPI00047E47BD	M	I	G	L	V	W	A	Q	S	N	G	V	I	G	R	D	G	T	L	P	W	H	L	P	E	D	M	K	H	F	R	T	L	T	A	G	A	T	V		
UniRef90_M0E3A5	L	V	L	V	A	A	V	A	E	N	R	V	I	G	R	D	S	G	G	M	P	W	H	Y	P	A	D	L	A	H	F	R	R	L	T	T	G	A	T		
UniRef90_B1MYC2	I	R	M	V	W	A	E	D	S	T	H	A	I	G	K	N	G	Q	L	A	W	H	L	P	D	D	L	K	L	F	K	A	E	T	M	N	T	L	M		
UniRef90_R4I0H1	L	S	L	I	A	A	L	S	V	E	H	V	I	G	T	G	N	G	V	M	P	W	H	L	P	S	D	L	I	W	F	K	E	M	T	Q	N	K	P	V	
UniRef90_W9BM55	L	R	L	I	W	A	Q	S	V	S	G	V	I	G	L	D	N	G	V	P	W	R	L	P	E	D	Q	A	R	F	K	E	L	T	L	G	Q	T	V		
UniRef90_Q1YJ87	L	V	A	V	V	A	M	A	E	N	G	V	I	G	D	A	G	A	M	P	W	R	M	P	S	D	L	K	R	Y	R	E	L	T	M	G	K	A	P	M	
UniRef90_D8HQY3	M	I	G	L	V	W	A	Q	A	N	G	V	I	G	R	D	G	E	L	P	W	H	L	P	E	D	L	R	H	F	K	E	L	T	A	G	A	A	V		
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UniRef90_F1Z5D5	L	V	T	I	V	A	R	A	R	D	G	T	I	G	H	D	G	A	M	P	W	H	L	P	A	D	L	R	R	F	K	A	L	T	M	G	K	A	P	M	
UniRef90_A5Z9U9	M	N	L	I	V	A	V	D	E	N	W	A	I	G	Y	N	N	E	L	L	V	S	I	P	D	D	M	K	F	F	R	E	T	T	T	G	K	V	V		
UniRef90_R6P6D2	M	N	L	I	A	A	V	D	E	N	W	A	I	G	Y	K	N	K	L	L	V	S	I	P	D	D	M	K	F	F	R	Q	T	T	T	G	K	V	V		
UniRef90_C6LEJ1	M	N	L	I	V	A	V	D	K	N	W	A	I	G	K	D	N	K	L	L	V	S	I	P	A	D	M	K	F	F	R	Q	T	T	T	G	K	V	V		
UniRef90_R5UBL0	M	N	A	I	V	A	A	D	K	N	W	A	I	G	Y	K	N	K	L	L	V	S	I	P	A	D	M	K	F	F	R	Q	M	T	G	G	K	A	V		
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UniRef90_B2ICT5	L	T	I	V	A	A	L	A	D	N	R	V	I	G	L	N	Q	A	M	P	W	D	L	P	G	D	R	R	H	F	R	E	R	T	W	G	K	A	P	M	
UniRef90_R4PLX3	M	K	E	L	I	V	A	Y	D	K	R	G	I	G	A	D	G	D	L	L	W	D	L	P	G	D	L	A	H	F	K	Q	M	T	M	G	S	S	L	M	
UniRef90_V7HZ46	M	L	M	F	V	W	A	E	D	K	A	H	N	I	G	A	Q	G	G	M	P	W	H	L	P	E	D	L	A	H	F	K	A	I	T	L	G	A	P	V	
UniRef90_UPI00036FDC12	V	G	L	I	W	A	E	A	H	D	G	V	I	G	A	Q	G	G	M	P	W	H	L	P	E	D	L	A	H	F	K	A	I	T	L	G	A	P	V		
UniRef90_G5HR94	M	N	L	I	V	A	V	D	E	A	W	G	I	G	R	D	G	G	L	L	T	H	L	P	S	D	M	K	Y	F	R	E	T	T	R	G	K	I	V		
UniRef90_N9FKR7	L	V	A	I	W	A	D	E	K	N	W	A	I	G	K	G	N	A	L	P	W	H	L	P	S	A	D	L	K	H	F	K	A	I	T	T	R	G	G	V	V
UniRef90_W0P475	I	S	L	I	A	A	T	S	K	N	F	V	I	G	H	N	N	K	I	P	W	H	L	P	E	D	L	K	W	F	K	K	N	T	I	N	K	N	V		
UniRef90_L7U3L2	V	A	L	I	V	A	V	D	Q	Q	F	G	I	G	K	N	N	D	L	L	M	W	H	L	P	A	D	M	K	F	F	K	E	T	T	T	G	H	I	V	
UniRef90_D9R739	M	N	I	I	V	A	V	D	K	N	W	S	I	G	N	Q	Q	G	L	L	V	S	I	P	E	D	K	K	L	F	R	D	E	T	T	M	G	K	V	I	
UniRef90_K9GP45	I	G	L	I	V	A	R	A	E	N	G	V	I	G	H	E	G	G	M	P	W	D	I	P	E	D	L	R	H	F	K	R	V	T	S	G	G	A	V		
UniRef90_R5JH10	L	I	Y	M	I	V	A	M	T	E	K	N	A	I	G	L	N	G	D	M	L	F	Y	L	K	D	D	L	K	Y	F	K	E	T	T	L	N	H	T	I	
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UniRef90_R4JEX4	I	S	L	I	A	A	I	G	Q	N	N	E	I	G	L	D	N	K	L	L	W	N	I	K	E	D	M	N	W	F	R	K	H	T	K	H	K	V	V		
UniRef90_K2EQY0	M	L	S	L	I	V	V	V	A	K	N	N	A	I	G	Y	C	N	N	Q	L	L	W	N	I	P	E	D	M	A	H	F	K	K	I	T	I	G	H	A	V
UniRef90_R7CJA6	M	N	V	I	V	A	A	D	K	N	W	G	I	G	K	N	N	Q	L	L	V	S	I	P	A	D	M	K	M	F	R	E	E	T	S	G	K	V	V		
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UniRef90_S0KD48	M	I	T	A	I	W	A	Q	D	R	N	G	L	I	G	K	D	G	L	L	P	W	K	L	P	N	D	L	N	F	F	K	S	Q	T	M	N	G	T	L	
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UniRef90_D8HQY3	V	M	G	R	R	T	W	E	S	I	L	F	R	P	L	P	G	R	R	N	L	V	L	S	G	T	P	P	Q	E	G	A	E	T	F	A	D	L	P	S				
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UniRef90_F1Z5D5	I	M	G	R	K	T	F	E	S	I	P	G	L	L	P	P	G	R	R	H	I	V	L	T	T	R	D	A	A	W	Q	A	E	G	A	E	V	A	H	T	T	E		
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UniRef90_R4PLX3	V	M	G	R	T	T	Y	E	S	I	G	R	P	L	P	P	G	R	E	M	I	V	V	T	H	R	P	L	D	D	E	G	I	L	I	A	V	H	S	L	A	E	E	
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UniRef90_C3X0T6	G	I	A	L	A	K	K	L	K	E	D	V	V	I	G	G	G	A	L	Y	F	A	Q	A	L	P	P	I	T	D	K	R	I	E	V	L	T	E	H	A	E	F	E	
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UniRef90_W9BM55	V	V	G	E	L	P	T	D	L	H	G	W	V	I	G	G	A	Q	L	Y	A	L	T	L	P	L	A	D	R	R	C	E	V	T	T	R	I	E	D	V	D	V	S	
UniRef90_Q1YJ87	D	A	A	A	R	G	A	D	E	I	V	V	A		G	G	A	E	I	Y	R	A	L	L	P	L	A	D	R	R	L	Y	V	T	T	R	I	E	A	V	D	V	S	
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UniRef90_R6P6D2	L	H	K	E	L	E	Q	Y	N	D	I	V	Y	V	I	G	G	G	S	I	Y	R	Q	L	L	P	Y	C	S	L	A	H	V	T	T	K	R	I	N	H	A	Y	E	
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UniRef90_R6NBB3
UniRef90_V6DPG3
UniRef90_Q168V7

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UniRef90_V2YG26	M	N	L	I	V	A	V	D	K	N	W	A	I	G	R	D	G	D	Q	L	V	I	S	A	D	L	K	R	F	R	R	L	T	T	G	H	T	V			
UniRef90_E3I2Y9	L	A	L	V	V	A	A	A	E	N	D	V	I	G	R	E	G	K	L	P	W	R	L	K	S	D	L	K	R	F	R	R	L	T	T	M	G	H	T	V	
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UniRef90_U2JBX8	M	K	L	I	L	A	V	D	K	N	W	S	I	G	N	Q	G	R	L	L	Y	H	L	P	R	D	L	K	H	F	K	A	T	T	M	G	G	I	L		
UniRef90_UPI00037509E0	L	V	L	V	A	A	V	A	E	N	G	V	I	G	N	Q	G	R	M	P	W	H	Y	S	A	D	L	T	H	F	K	R	L	T	T	G	H	P	V		
UniRef90_M1LVK0																																									
UniRef90_Q8LF0		V	V	V	A	A	T	K	D	M	G	I	G	K	D	G	K	L	P	W	R	L	S	T	D	L	K	F	F	K	E	L	T	T	K	N	A	I			
UniRef90_I5ASV7	M	R	A	I	L	C	A	D	K	N	W	G	I	G	K	N	N	K	L	L	V	S	I	P	A	D	M	R	F	F	R	D	T	T	S	N	H	V	I		
UniRef90_R7IXI5	M	K	M	I	A	A	V	D	K	N	W	G	I	G	F	E	N	R	L	L	F	S	I	P	A	D	M	R	F	F	R	E	L	T	S	N	H	V	I		
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UniRef90_B6GC06	L	K	A	I	V	A	V	C	D	D	W	G	I	G	R	D	G	D	M	V	V	S	N	R	A	D	M	R	H	F	V	A	C	T	K	G	H	P	V		
UniRef90_G5IHW6	M	N	V	I	V	A	V	D	S	H	W	A	I	G	R	G	G	Q	L	L	V	N	I	P	A	D	M	K	R	F	R	E	T	L	S	K	V	I			
UniRef90_W5TQD1	V	G	L	I	W	A	Q	T	P	S	G	V	I	G	A	D	N	T	I	P	W	R	V	P	E	D	M	A	H	F	R	A	V	T	A	D	H	P	V		
UniRef90_D6DI29	M	Q	L	I	A	A	V	D	K	N	W	A	I	G	R	K	G	Q	M	L	V	T	I	P	A	D	Q	K	L	F	R	Q	E	T	I	G	K	V	V		
UniRef90_R5M3U8	L	T	L	I	A	A	V	G	K	N	N	E	L	G	R	K	D	N	K	L	I	W	H	I	P	A	D	M	K	F	F	K	E	Q	T	I	N	K	K	I	
UniRef90_R5THF0	M	K	A	I	V	A	V	D	E	A	W	G	I	G	K	D	G	K	L	L	T	H	L	P	E	D	M	K	F	F	R	T	V	T	K	G	K	V	V		
UniRef90_R5FWVW4	M	K	A	I	V	A	V	D	K	K	W	G	I	G	K	N	N	G	L	L	F	Q	I	A	E	D	M	R	F	F	R	Q	Q	T	L	G	K	T	V		
UniRef90_UPI000348FA68	V	G	M	V	W	A	R	A	T	N	G	V	I	G	A	D	G	G	M	P	W	H	V	P	E	D	L	A	H	F	R	Q	V	T	G	D	A	T	V		
UniRef90_D4MVJ7	M	N	L	I	V	N	A	D	K	N	W	G	I	G	K	N	N	E	L	L	V	H	I	P	N	D	M	K	M	F	R	Q	M	T	T	G	K	V	V		
UniRef90_S4E3F3	M	F	I	S	M	W	A	Q	D	K	N	G	L	I	G	K	D	G	L	L	P	W	R	L	P	A	D	M	R	F	F	R	E	H	T	M	N	R	I	L	
UniRef90_B0X4N3	S	L	I	V	A	V	C	S	N	G	G	I	G	L	K	D	G	L	L	P	W	R	L	P	R	S	E	L	R	H	F	R	A	R	M	T	K	R	N	A	I
UniRef90_F6FTA4	M	L	G	L	I	W	A	Q	A	H	D	D	V	I	G	A	G	G	Q	I	P	W	R	L	P	E	D	F	A	H	F	R	R	T	T	T	G	H	P	V	
UniRef90_F4KVT6	T	I	I	A	A	K	S	D	N	N	A	I	G	L	K	Q	T	L	P	W	H	M	P	A	D	E	K	F	F	K	J	A	Q	I	Q	N	G	Y	L		
UniRef90_UPI0003F080F7	S	L	V	A	A	C	N	N	M	G	I	G	K	N	G	D	L	P	W	R	L	P	R	K	E	M	S	F	F	K	E	D	G	K	Q	N	A	V			
UniRef90_UPI0003822C75	M	I	E	L	I	V	A	K	S	E	N	N	A	I	G	K	N	N	D	L	P	W	H	L	P	A	D	L	R	H	F	K	Q	H	T	K	N	G	I	V	
UniRef90_R6GUD3	V	S	M	I	A	A	V	G	K	N	N	E	L	G	K	N	N	E	L	I	W	R	I	K	E	D	L	K	F	F	K	E	Y	T	M	G	K	Q	M		
UniRef90_M7MVH1	I	G	M	I	W	A	E	A	D	G	I	E	L	G	A	D	G	A	M	P	W	S	L	P	E	D	L	A	H	F	K	A	T	T	A	G	H	P	V		
UniRef90_R5PST4	M	I	E	L	I	A	A	A	R	T	G	V	I	G	A	E	N	K	L	L	W	R	I	P	E	D	F	A	F	F	K	K	T	T	M	G	S	P	V		
UniRef90_E1VYA2	L	I	G	A	I	W	A	Q	A	E	N	G	I	I	G	A	N	G	T	M	P	W	H	V	P	E	D	L	A	H	F	K	A	T	T	A	G	H	P	V	
UniRef90_U1MQM7	M	I	G	M	I	W	A	Q	A	R	E	G	V	I	G	A	D	G	M	P	W	S	L	P	E	D	M	A	R	F	K	A	I	T	M	G	H	P	V		
UniRef90_UPI000401BF45	V	H	L	I	W	A	Q	A	R	E	G	A	I	G	F	N	G	E	L	P	W	H	L	S	E	D	L	K	R	F	K	E	L	T	V	S	H	P	V		
UniRef90_A0A023FG61																																									
UniRef90_R6GIF4	M	K	L	I	V	A	V	D	R	H	W	G	I	G	F	K	N	A	L	P	W	R	L	K	K	E	M	A	Y	F	T	R	T	T	K	Q	N	A	V		
UniRef90_R5ELV8	M	E	L	I	V	A	V	D	D	W	G	I	G	K	D	G	T	Q	P	V	A	L	S	A	D	R	K	F	F	R	V	T	T	R	G	A	M	V			
UniRef90_B6B1Z6	M	I	S	L	I	V	G	R	D	K	S	G	V	I	G	K	G	N	D	L	P	W	Y	A	P	E	D	M	R	F	F	K	R	E	T	L	G	A	I		
UniRef90_H5UNR1	L	V	L	V	A	L	V	A	A	N	G	V	I	G	K	D	G	D	Q	P	F	R	F	R	E	D	F	A	R	F	K	A	L	T	T	G	H	P	L		
UniRef90_UPI000404E387	M	K	A	I	V	A	V	D	S	N	W	A	I	G	N	K	G	Q	L	L	V	S	I	P	A	D	Q	K	N	F	R	N	E	T	I	G	K	T	I		
UniRef90_UPI00037FD009	I	L	I	A	A	A	I	A	Q	N	G	V	I	G	D	R	G	Q	L	P	W	S	I	P	E	D	L	K	R	F	R	Q	L	T	L	H	H	T	V		
UniRef90_C5WG30	M	I	A	I	W	A	E	D	E	A	G	L	I	G	V	D	G	K	L	P	W	Y	L	P	R	E	L	K	H	F	K	E	T	T	L	N	Q	A	I		
UniRef90_R5SLE9	K	L	I	A	C	V	D	D	H	W	G	I	G	R	Q	G	Q	L	L	V	D	I	P	A	D	K	K	A	F	K	A	H	T	I	G	K	I	V			
UniRef90_H9JUX7	L	N	L	I	A	A	A	C	E	N	M	G	I	G	K	N	G	T	L	P	W	K	L	P	A	D	K	K	A	F	K	A	H	T	I	G	K	I	V		
UniRef90_E3C6L8	V	N	F	V	W	A	E	D	I	D	G	W	I	G	K	D	H	D	L	P	W	H	V	P	S	A	D	L	K	R	F	K	E	T	V	G	H	P	V		
UniRef90_R9JIW9	M	N	V	I	V	A	V	D	S	H	W	G	I	G	N	K	G	E	L	L	V	R	I	P	N	D	H	K	F	F	R	E	E	T	T	G	K	V	V		
UniRef90_UPI0003628C54	I	I	G	I	W	A	Q	D	E	E	G	V	I	G	K	N	Q	V	L	P	W	S	L	P	A	E	L	R	H	F	K	E	T	T	Q	G	A	P	V		
UniRef90_UPI0004689210	V	G	L	I	W	A	E	A	A	G	V	I	G	A	E	G	G	M	P	W	Y	V	A	E	D	L	A	H	F	K	E	T	T	Q	G	A	P	V			
UniRef90_D5EIU9	K	A	I	A	A	M	A	E	N	R	V	I	G	N	N	G	D	I	P	W	H	L	P	E	D	F	Q	W	F	K	Q	T	T	M	G	G	I	L			
UniRef90_T1A0M0	L	S	V	I	A	A	Y	D	R	G	R	A	I	G	R	G	D	T	I	P	W	H	L	P	D	D	L	K	R	F	K	A	L	T	L	G	R	P	A	L	
UniRef90_B9KKD1	M	L	T	L	V	V	A	R	A	R	D	G	A	I	G	R	D	G	T	I	P	W	A	A	P	E	D	L	A	R	F	K	Q	R	E	T	L	G	R	A	V
UniRef90_G0QDT6	V	V	V	A	T	D	E	D	N	V	I	G	E	K	G	E	I	P	W	H	H	L	P	E	D	L	R	H	F	R	D	L	T	I	G	H	P	V			
UniRef90_R7AK02																																									
UniRef90_A7SCT0	S	C	I	V	A	M	D	L	K	R	G	I	G	R	D	G	D	M	L	V	A	N	R	A	D	M	R	H	F	V	R	C	T	K	G	H	A	V			
UniRef90_C3KIX5	V	L	N	A	I	V	A	M	D	L	K	R	G	I	G	R	N	G	D	L	P	W	H	L	P	E	D	L	A	R	F	K	E	I	T	M	G	H	T	V	
UniRef90_G7CD27	V	G	L	I	W	A	Q	S	T	S	G	V	I	G	R	D	G	G	L	P	W	Q	L	P	E	D	L	A	R	F	K	E	I	T	M	G	H	T	V		
UniRef90_S3JKU8	M	I	A	I	A	A	Y	A	K	N	R	A	I	G	K	D	G	K	L	P	W	K	L	I	N	E	L	H	H	F	K	E	I	T	A	G	N	I	V		
UniRef90_K1X4P9	L	I	N	I	V	V	A	A	C	K	N	N	G	I	G	V	N	G	S	I	P	W	R	L	K	K	D	M	A	M	F	R	H	I	T	K	Q	N	A	V	
UniRef90_V3Z195	M	V	G	L	I	W	A	Q	A	T	S	G	V	I	G	R	G	G	D	I	P	W	R	L	P	E	D	Q	A	M	F	R	E	I	T	M	G	H	T	V	
UniRef90_POA547	V	R																																							

	50	60	70	80
UniRef90_V2YG26	I L G R K K T L A S T F P R P L	K G R R N L I V L S R T P G F V P Q G A E V F S D L D		
UniRef90_E3I2Y9	I M G R K K T F A S I G R A L D	D G R D S T I V V T T R A S D P Q R G V F V A T S I K D		
UniRef90_UPI0003B415EB	I L M G R K G T F W D S I G R A L D	D G R D S T I V V T T R R Q D W Q P A G V A V A G S I K L A		
UniRef90_UPI0003B4C7E4	I M G R K K T F W D S L Y R P L	P G R R N V V V T T S R R Q D W V G F D G A E R A G S L D E		
UniRef90_U2JBX8	I M G R K K T Y E S L P R K P L	P G R E M V V L T T S R A D Q R E F P G A Y H A R A S I H E		
UniRef90_UPI00037509E0	I V G R K K T Y D R I L G K P L	P D R T S V V L T T S R D D D L L P E G A V V A G D S P E T		
UniRef90_M1LVK0	I M G R K K T W E S L P K P L	P N R K N I L T T T K S N L I E K G A L I A K S L S E		
UniRef90_K8L6F0	V M G R K K T W E S L F R P L	P G R L N V V L T T F D A K A A E N V I C A G S M S S		
UniRef90_I5ASV7	V M G R K K T L E S F P K P L	K N R T N I V L T T S R N R N Y K A D A L V V H S M S E Q E		
UniRef90_R7IXI5	L M G R N T F L S L Q K A L	K N R K N I V L T T H D K F R A A P A V I V T D M E Q		
UniRef90_UPI00029A1F7D	I M G R R T F E S F P G L	P Q R R H Y L L T T H D Q K R A P Q M T V H S K Q A		
UniRef90_B6GC06	I M G R K K T L E S F P R P L	K D R R N I V L T T R D G S F R E G F E V V H S V D E E		
UniRef90_G5IHW6	V M G R K K T L E S L P Q P L	P G R T N I V L T T S R D M D Y Q A K A I V C H S V E E		
UniRef90_W5TQD1	L M G R R T F W D S L F R P L	P G R R N I V L T T R Q A D W S A P A G A E R A E S V I P		
UniRef90_D6DI29	V M G R K K T L A A L L P R P L	D S R T N I V L T T R D P F S V K G A T A V H S V E E		
UniRef90_R5M3U8	I L G R K K T L E S L P G L	P K R I H L V L T T H Q S L K E K E N L K V Y N N I E		
UniRef90_R5THF0	V M G R K K T L Q S F P K P L	K N R I N I V L T T S D T A M N G E G L I V C N S V I E		
UniRef90_R5FWW4	V M G R K K T L E S F P K P L	K N R K N V V L T T G N P K N L E G I V S V K N F E E		
UniRef90_UPI000348FA68	V M G R R T F W S L F R P L	P G R R N V V L T T R D A A W A S E A A S G A E H D		
UniRef90_D4MMJ7	V M G R K K T L E S F P M P L	P K R T N I V L T T H D K D Y D A K G A I V K E L L		
UniRef90_S4E3F3	V M G R K K T Y E G M G E S K	P Y R K I I V L T T T R K P V K E N A Q V M H S I D E		
UniRef90_B0X4N3	I M G R K K T Y F G I P R P L	P D R L N V V L T T R D P T Y P E G V L V C T S L E D		
UniRef90_F6FTA4	V M G R L T W E S L F R P L	P G R T N V V V T T R Q A D W T A E G A V V A S P L I E		
UniRef90_F4KVT6	L T G R N S Y L T P E G F A	K R K D V I V V T T R Q K D Y Q A N A N V V H S V E E		
UniRef90_UPI0003F080F7	V M G R K K T F W S I Y R P L	A G R Y N I V I T S R N K E C P S G A D M L S E S L D		
UniRef90_UPI0003822C75	I M G R K K T F E S M G K	P N R T N I I I T S R N A E Y Q Q V G Q Q F A S V A K		
UniRef90_R6GUD3	I M G Y N T F Y S L R K P L	P G R K H I V L T T Q N H E R N E Q I Y I V H S M Q E		
UniRef90_R7MVH1	I M G R K K T W E S F F R P L	P G R T N I V I T T R D E T R H A G A V P V A S T E A		
UniRef90_R5PST4	V M G S R T W A S I G R A L	P G R L N V I V T S R R L Q P A D N V V V V K S L N E		
UniRef90_E1VYA2	I M G R A T W N S F F R P L	P G R T N L V L T T H E Q L R Q D G A E P V S N L E E		
UniRef90_U1MQM7	V M G R R T W K S F Y R P L	P G R E N I V I T T S D D F V A P G A R V V P N L D E		
UniRef90_UPI000401BF45	I M G R K K T W E S L Y R P L	P N R D N I V V T T R S N A Y V A P G A T V A N Q E A		
UniRef90_A0A023FG61	V M G R N T W E S I Y R P L	S D R I N V V V T S K T L K Q V P E G H H V A T S L Q		
UniRef90_R6GIF4	V M G K N T F L S F P G P L	K N R I N V V L T S K S N T V G C I C I V K S M D E L M		
UniRef90_R5ELV8	I A G R R T L E D F P G P L	P G R V N V A L T T R S V T V L P G F T V C G S A E D		
UniRef90_B6B1Z6	I M G R N T W D S L F K P L	K D R L N I V V T T S Q G C A A E L T C K S I S E A I		
UniRef90_H5UNR1	L M G R R T H E A I G R A L	P G R R T I V L T T S Q D R Q W R D D A V D V A H D L D		
UniRef90_UPI000404E387	V Y G R K T L E T F P Q V L	P G R R N I I L T T K K D Y T V K N A A V A H S K E E		
UniRef90_UPI00037FD009	I M G R K K T W E F R K R P L	P D R R N I I I T S S Q S L Q A E G V E F V R S L S Q		
UniRef90_C5WG30	L M G R V T F D G M N R A L	P N R Q T L V M T T R D N Y Q V I D G V L T M T S V E E		
UniRef90_R5SLE9	V G G R K T M E G L P R A L	P D R T N I V L T T T D E T Y C F E G A Q V L H S L Q		
UniRef90_H9JUX7	I M G R R T W D S C I Y R P L	S N R I N I V L T T H N K Q V P E G V I V V P G L D E		
UniRef90_E3CJL8	V M G R R T Y E S I G P P L	P Q R E N I V L T T H P I A D E R V Q S F A T T A D		
UniRef90_R9JIW9	V L G R K K T L E T F P Q P L	K N R T N I I L S S N Q D Y Q V R D A V V V H N L L E		
UniRef90_UPI0003628C54	L M G R V T F D G M R R A L	P G R L S I I L T T R D R E F N E R V L I F H D V N E		
UniRef90_UPI0004689210	V M G R K K T W D S L F R P L	P G R D N I V L T T R Q Q D W T A E G A R R A S T V I S		
UniRef90_D5EIU9	V M G R K K T Y D S I G R A L	P G R D T F V F V S R T P R E I K G V H S F T D L E		
UniRef90_T1A0M0	L M G Y R T A L S I G R A L	P G R R N L V L T S R A H D A P F A G Q E I V R D		
UniRef90_B9KKD1	I M G R S T W E S L P R P L	P R R M N I V V T T S Q P L E G D S A L F T S F S E A A I		
UniRef90_Q0QDT6	I M G R S T Y E S L H R P L	P E R T N V V L T T R E E L G H D S V Q E A N S L Q E		
UniRef90_R7AK02	I M G R K K T L E S F P R P L	K D R R N I V L T T R D S F A R E G V E V V H S L D E E		
UniRef90_A7SCT0	I			

UniRef90_V2YG26	S	L	L	A	A	P	E	D	A	F	V	L	G	G	A	S	V	Y	H	A	L	L	D	R	C	D	T	A	Y	V	T	K	V	I	G	R	A	S	F	E			
UniRef90_E3I2Y9	A	L	D	I	E	R	G	V	D	A	E	A	V	G	G	A	E	V	F	A	L	A	L	D	P	H	A	D	R	L	H	L	T	A	R	V	H	A	S	P	Q		
UniRef90_UPI0003B415EB	E	A	L	A	L	A	L	R	G	V	D	A	E	V	G	G	A	E	V	F	A	L	A	L	D	P	H	A	D	R	L	H	L	T	A	R	V	H	A	S	P	Q	
UniRef90_UPI0003B4C7E4	A	L	A	T	G	S	P	A	D	R	V	W	V	I	G	G	G	Q	L	F	A	E	A	I	E	R	A	D	R	V	E	L	T	E	V	H	P	D	A	P			
UniRef90_U2JBX8	L	W	N	I	L	N	H	Q	R	E	A	D	F	V	I	G	G	A	T	V	Y	E	A	Y	L	D	R	A	D	R	M	V	L	T	M	I	D	R	D	R	E	E	
UniRef90_UPI00037509E0	A	L	E	R	A	A	A	D	A	K	R	F	I	G	G	S	S	I	Y	F	E	Q	F	L	D	R	A	S	R	I	L	A	T	E	I	Q	C	S	L	N			
UniRef90_M1LVK0	A	I	L	R	F	Y	C	S	P	I	E	N	K	R	F	I	G	G	S	S	I	Y	F	E	Q	F	L	D	R	A	S	R	I	L	A	T	E	I	Q	C	S	L	N
UniRef90_Q8L6F0	A	L	E	Y	C	S	P	I	E	N	K	R	F	I	G	G	S	S	I	Y	F	E	Q	F	L	D	R	A	S	R	I	L	A	T	E	I	Q	C	S	L	N		
UniRef90_I5ASV7	L	L	E	E	L	T	K	K	Y	D	E	V	Y	I	G	G	A	E	I	Y	R	E	L	M	L	P	Y	C	D	T	V	Y	V	T	R	V	E	M	E	Y	D		
UniRef90_R7IXI5	A	L	E	E	I	T	K	X	S	Q	X	Q	F	I	G	G	S	S	V	Y	R	Q	F	L	D	R	A	S	R	I	L	A	T	E	I	Q	C	S	L	N			
UniRef90_UPI00029A1F7D	L	G	K	L	L	Q	D	D	S	Q	Q	F	I	G	G	A	S	V	F	A	A	F	A	E	Q	V	E	E	L	L	Y	V	T	K	V	I	A	A	N	F	S		
UniRef90_B6GC06	A	R	A	A	V	T	D	E	E	V	A	W	V	I	G	G	G	A	V	Y	E	Q	F	L	P	Y	C	D	T	A	H	V	T	R	N	H	V	V	H	P			
UniRef90_G5IHW6	T	L	Q	E	L	A	K	A	Y	P	D	V	F	I	G	G	Q	S	I	Y	E	Q	F	L	P	Y	C	D	T	A	H	V	T	R	N	H	V	V	H	P			
UniRef90_W5TQD1	G	A	I	L	E	L	A	A	A	D	T	A	W	V	I	G	G	G	E	I	Y	R	E	A	M	V	Y	A	T	D	L	M	V	T	F	I	D	A	D	I	A		
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UniRef90_R5M3U8	D	L	L	D	Y	T	I	N	E	F	V	M	V	I	G	G	A	K	I	Y	E	Q	F	L	P	Y	C	D	T	A	H	V	T	R	N	H	V	V	H	P			
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UniRef90_R5FWW4	T	A	L	S	G	E	N	Q	S	D	V	Y	V	I	G	G	G	S	V	Y	N	L	L	L	P	Y	C	D	S	V	L	V	T	K	V	I	K	A	D	G	D		
UniRef90_UPI																																											

UniRef90_V2YG26	A	D	C	W	F	P	D	L	D	A	R	Q	W	R	V	E	E	S	E	P	Q	E	E	N	G	L	R	F	R	Y	V	T	Y	R	R	Q				
UniRef90_E3I2Y9	G	D	A	Y	W	Q	A	P	P	A	E	E	W	Q	V	V	S	R	A	E	W	P	E	N	D	E	F	S	V	T	D	L	V	T	R	R				
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UniRef90_UPI0003B4C7E4	G	D	V	H	A	P	L	P	P	A	A	L	E	L	V	A	S	D	P	G	A	H	T	S	R	G	G	I	R	Y	A	F	L	T	Y	R	R			
UniRef90_U2JBX8	V	D	A	R	I	E	A	L	N	P	A	E	W	K	L	V		R	E	S	I	P	K	E	E	N	G	L	S	Y	R	Y	Q	F	Y	E	K			
UniRef90_UPI00037509E0	G	D	T	R	F	P	E	W	D	P	E	A	W	T	E	R	E	R	E	T								D	G	D	L	A	F	V	T	Y	E	R	Q	
UniRef90_M1LVK0	G	D	S	F	F	P	K	V	R	S	D	I	W	L	E	I	D	R	K		P	Q	L	T	E	N	N	N	Y	N	D	F	T	Y	V	K	Q			
UniRef90_Q8L6F0	C	D	T	F	M	P	L	D	F	T	T	F	R	P	W	Y	S	S	F	P	K	V				E	N	N	I	R	Y	S	F	T	T	Y	E	R	K	
UniRef90_I5ASV7	A	D	T	R	F	P	D	M	D	Q	M	P	E	W	E	I	T	S	E	S	E	E	Q	T	Y	F	E	D	V	E	Y	R	F	C	T	Y	R	K	R	
UniRef90_R7IXI5	A	D	T	R	F	P	N	L	D	R	D	D	W	E	L	V	W	Q	S	E	R	Q	T	D	F	E	A	G	Y	Y	F	R	T	Y	R	K	R	Q		
UniRef90_UPI00029A1F7D	G	D	V	K	M	P	I	P	G	K	F	E	L	V	W	A	K	R	G	K	M	D	S	Q	N	H	Y	P	Y	Q	F	K	L	Y	R	R	Q			
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UniRef90_G5IHW6	A	D	T	W	F	P	N	L	D	K	D	D	W		V	M	D	L	E	S	E	E	E	E	T	Y	S	F	N	L	C	Y	E	F	R	R	Y	V	R	R
UniRef90_W5TQD1	G	D	V	A	P	A	I			E	G	D	W	R	V				E	D	A	P	W	Q	E	S	R	S	G	L	R	Y	R	I	R	R	F	A	R	
UniRef90_D6DI29	A	D	T	Y	M	V	N	L	D	K	E	G	W	R	V	T				D	V	S	D	E	Q	T	Y	F	D	L	C	Y	E	F	R	R	Y	V	R	
UniRef90_R5M3U8	A	D	A	Y	F	P	K	L	N	K	N	D	W	T					R	K	I	L	V	T	K	E	Y	N	G	I	T	F	H	F	V	I	Y	E	R	
UniRef90_R5THF0	A	D	T	W	F	V	N	L	D	R	Q	E	W	E	E	T				E	T	G	D	E	K	E	Y	E	G	L	T	H	A	F	C	T	Y	K	N	R
UniRef90_R5FWW4	A	E	V	F	F	P	N	L	D	E	D	E	N	F	F	V	S	S	D	S	G	D	V	A	T	E	S	G	Y	T	I	R	F	V	T	Y	E	N	K	R
UniRef90_UPI000348FA68	G	D	T	V	A	P	E	L	D	D	A	W	V	L	A	D	E	G	S	W	R	E	S	S	R	A	D	G	T	R	Y	R	F	L						

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UniRef90_I6X776				I	V	A	I	A	V	A	D	N	G	V	I	G	K	D	G	K	L	P	W	Q	L	P	S	D	L	K	Q	F	K	E	K	T	L	K	K	N	A	I			
UniRef90_R7BDG8				M	N	V	I	A	A	V	D	A	N	W	A	I	G	Y	K	N	E	L	L	V	K	I	P	N	D	L	K	Q	F	K	E	K	T	L	K	K	N	A	I		
UniRef90_I1BWH0				L	A	L	I	A	A	V	D	E	E	L	G	I	G	R	K	G	D	L	P	W	H	L	P	R	D	L	R	Y	F	R	D	V	T	T	G	K	N	V	V		
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UniRef90_K4KV44				M	K	A	I	V	S	V	D	Q	N	W	A	I	G	Y	K	G	D	L	L	L	K	I	P	E	D	L	K	M	K	F	F	K	Q	M	T	V	G	K	N	V	V
UniRef90_R5NN50				M	D	L	I	V	A	V	D	N	N	W	A	I	G	N	K	G	D	L	L	V	S	I	P	E	D	L	H	K	F	F	R	Q	M	T	M	G	N	V	V		
UniRef90_C2BF28				M	K	L	I	L	A	V	D	K	N	W	A	I	G	R	D	N	K	M	L	V	D	L	K	K	D	L	N	H	F	F	K	E	I	T	T	G	G	L	V		
UniRef90_E7GIU0				M	Q	L	I	A	A	V	D	K	N	W	A	I	G	H	K	G	Q	M	L	V	A	I	P	A	D	L	K	Q	F	K	E	I	T	T	M	G	K	L	I		
UniRef90_E1GW56																	G	Y	Q	N	N	L	I	Y	A	I	K	D	D	L	K	R	F	K	A	L	T	T	G	N	T	I	V		
UniRef90_R5H9G7				M	K	L	I	V	A	V	D	A	C	W	A	I	G	K	D	G	D	Q	L	C	Y	I	P	P	D	L	K	R	F	Q	R	L	T	T	G	H	P	I	V		
UniRef90_V4XXC7																	G	A	D	G	E	M	P	W	H	L	P	A	D	L	E	H	F	F	R	E	L	T	L	G	H	P	I		
UniRef90_Q3A0W8				M	T	I	V	V	A	M	T	A	E	R	L	I	G	R	R	G	Q	L	P	W	S	I	P	E	D	L	A	L	F	R	R	L	T	T	G	H	P	I	V		
UniRef90_G7H0C5				V	Q	L	V	W	A	Q	A	R	D	G	A	I	G	R	D	N	A	I	P	W	R	V	P	E	D	L	M	A	R	F	F	K	E	L	T	I	G	Y	P	I	
UniRef90_R7K4H4				M	N	A	I	V	V	V	D	K	N	W	A	I	G	K	N	N	D	L	L	F	K	L	P	E	D	L	M	K	Y	F	R	Q	K	T	L	N	K	L	I		
UniRef90_J9PU01				I	A	I	V	A	I	G	R	N	G	E	I		G	K	D	N	K	L	L	W	N	I	P	S	D	L	M	K	E	F	F	R	R	I	T	T	G	N	T	I	
UniRef90_A1A0D7				V	N	L	I	W	A	Q																																			

UniRef90_UPI0002D9658A	V	M	G	R	T	T	F	E	A	L	K	K	P	L	P	Q	R	T	T	Y	V	I	T	H	Q	P	L	H	Y	E	H	V	H	V	I	N	D	F	K	G						
UniRef90_AO0A059BPA9	L	M	G	R	K	T	W	E	S	I	F	R	P	L	P	G	R	L	N	V	V	V	T	T	R	E	T	K	L	S	E	D	V	V	L	C	H	S	R	A	S					
UniRef90_I6X776	I	F	G	R	K	T	H	E	Q	I	F	G	L	P	L	P	G	R	R	T	N	V	V	T	T	R	Q	P	D	L	S	E	D	V	V	L	C	H	S	R	A	S				
UniRef90_I7BDW8	V	M	G	R	K	T	M	E	T	F	P	M	P	L	P	L	K	N	R	T	N	I	V	L	T	S	R	N	P	N	D	K	D	A	E	L	V	T	S	G	I	E	E			
UniRef90_R1BWH0	I	M	G	R	I	V	T	W	E	S	I	Y	R	P	L	L	K	N	R	F	N	I	V	V	T	S	R	N	P	N	D	K	D	N	A	I	L	V	T	S	F	E	E			
UniRef90_UPI00034C1F98	I	V	G	R	K	T	W	E	F	E	K	C	P	L	P	L	S	D	R	T	H	N	I	V	V	S	H	C	P	R	K	F	P	F	K	L	T	F	V	T	S	F	E	A		
UniRef90_K4KV44	V	M	G	R	G	T	Y	E	S	L	P	G	N	P	L	P	L	K	D	R	T	N	I	V	L	T	S	T	N	R	D	F	Q	D	E	R	F	I	I	C	H	S	L	E	D	
UniRef90_R5NN50	V	L	G	R	K	T	L	A	G	F	P	G	N	P	L	P	L	A	G	R	D	N	I	V	L	T	S	T	D	P	N	Y	T	V	R	G	T	I	V	C	H	S	K	E	E	
UniRef90_C2BF28	I	M	G	R	K	T	F	D	S	I	G	F	A	L	P	L	P	K	R	E	N	I	L	I	L	T	T	R	D	E	S	L	K	R	N	G	A	L	V	F	N	D	N	V		
UniRef90_E7GIU0	V	M	G	R	K	T	L	L	T	L	P	R	P	L	P	L	D	G	R	I	N	L	I	V	L	T	T	R	D	K	S	F	K	L	K	N	G	A	D	V	C	H	S	L	V	E
UniRef90_E1GW56	I	M	G	R	K	T	Y	D	S	I	P	K	A	L	P	L	P	N	R	R	N	I	L	I	V	L	T	S	R	E	K	K	H	L	K	N	C	Q	V	D	S	L	E	E		
UniRef90_R5H9G7	L	L	G	R	K	T	L	A	T	F	P	R	P	L	P	L	K	N	R	R	N	I	L	I	L	T	S	T	D	P	A	F	A	P	A	G	G	E	V	F	G	A	T	L	L	
UniRef90_V4XXC7	V	V	G	R	R	T	H	E	S	I	G	G	P	L	P	L	P	D	R	T	N	V	V	L	T	T	S	T	T	P	E	A	P	D	D	V	V	A	C	H	S	A	A	L		
UniRef90_Q3A0W8	I	M	G	R	R	T	F	E	S	I	G	R	P	L	P	L	P	G	R	F	N	I	V	V	L	T	S	R	S	M	P	V	I	E	G	L	R	V	C	R	F	A	E			
UniRef90_G7H0C5	I	M	G	R	K	T	W	D	S	I	F	R	P	L	P	L	P	H	R	R	N	I	V	L	T	T	R	D	D	A	W	S	A	E	G	A	V	R	A	R	T	L	L			
UniRef90_R7K4H4	V	M	G	S	N	T	L	K	S	F	P	K	P	L	P	L	K	N	R	T	N	A	V	L	F	F	P	G	G	E	K	E	R	D	D	C	I	L	V	A	D	S	L	E	E	
UniRef90_J9PU01	V	M	G	R	K	T	Y	E	S	I	G	K	P	L	P	L	P	N	R	R	N	I	L	I	V	L	T	P	R	N	K	E	F	E	E	G	C	E	I	A	H	D	M	E	E	

UniRef90_UPI0002D9658A	L	L	K	Y	Q	C	D	E	L	M	I	C	G	G	A	K	I	Y	Q	A	A	L	P	Y	V	D	E	M	W	I	S	L	V	P	G	D	Y	A				
UniRef90_A0A059BPA9	A	L	E	Y	C	S	A	G	K	N	V	I	G	G	G	G	Q	L	Y	R	E	A	A	L	N	A	P	D	C	L	H	D	I	T	E	V	E	D	H	V	D	
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UniRef90_R7BDG8	L	L	D	K	I	K	Q	Y	N	D	V	F	V	I	G	G	G	E	S	L	Y	R	Q	A	L	P	Y	C	D	T	A	Y	I	T	K	I	D	Y	T	Y	Q	
UniRef90_I1BWH0	A	L	E	K	I	D	T	N	P	R	V	F	V	I	G	G	G	E	S	L	Y	R	Q	A	L	P	Y	C	D	T	A	Y	I	T	K	I	K	A	K	I	E	
UniRef90_UPI00034C1F98	A	L	Q	T	V	A	N	E	D	K	A	F	I	I	G	G	G	E	S	L	Y	R	Q	A	L	P	Y	C	D	T	A	Y	I	T	K	I	E	G	D	R	T	F
UniRef90_K4KV44	L	L	Q	E	L	K	E	Y	P	D	I	C	F	V	I	G	G	G	E	S	L	Y	Q	L	M	P	Y	C	D	T	A	Y	I	T	K	I	N	R	T	F	P	
UniRef90_R5NN50	L	F	E	K	K	Y	E	D	K	E	I	F	V	I	G	G	G	E	S	L	Y	E	M	L	M	P	Y	C	D	T	A	Y	I	T	K	I	N	R	T	F	P	
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UniRef90_E7GIU0	E	V	L	N	R	I	K	W	E	K	E	F	I	I	G	G	G	E	S	L	Y	E	Q	F	L	P	Y	C	D	T	A	Y	I	T	K	I	N	R	T	F	P	
UniRef90_E1GW56	A	L	S	S	C	K	E	D	E	H	V	F	I	I	G	G	G	E	S	L	Y	E	K	A	L	P	Y	C	D	T	A	Y	I	T	K	I	N	R	T	F	P	
UniRef90_R5H9G7	K	A	A	L	A	A	A	P	A	D	T	F	V	I	G	G	G	E	S	L	Y	E	K	A	L	P	Y	C	D	T	A	Y	I	T	K	I	N	R	T	F	P	
UniRef90_V4XXC7	D	A	A	A	A	T	G	A	A	T	A	Y	F	I	G	G	G	E	S	L	Y	E	Q	F	L	P	Y	C	D	T	A	Y	I	T	K	I	N	R	T	F	P	
UniRef90_Q3A0W8	A	L	Q	V	A	D	Q	G	N	D	I	F	V	I	G	G	G	E	S	L	Y	R	Q	A	L	P	Y	C	D	T	A	Y	I	T	K	I	N	R	T	F	P	
UniRef90_G7H0C5	E	A	L	V	L	A	D	G	E	P	V	S	F	I	G	G	G	E	S	L	Y	R	Q	A	L	P	Y	C	D	T	A	Y	I	T	K	I	N	R	T	F	P	
UniRef90_R7K4H4	Q	V	L	T	S	F	F	R	E	D	D	I	F	I	G	G	G	E	S	L	Y	R	Q	A	L	P	Y	C	D	T	A	Y	I	T	K	I	N	R	T	F	P	
UniRef90_J9PU01	L	F	K	L	F	R	F	E	E	D	V	I	F	I	G	G	G	E	S	L	Y	R	Q	A	L	P	Y	C	D	T	A	Y	I	T	K	I	N	R	T	F	P	
UniRef90_A1A0D7	A	L	D	L	A	R	Q	E	S	E	I	W	V	I	G	G	G	E	S	L	Y	R	Q	A	L	P	Y	C	D	T	A	Y	I	T	K	I</						

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UniRef90_A0A059BP9A9	G A D T F I P S V A D	S V F R P W Y A S P M V	E N D Y R H S F V T Y V R
UniRef90_I6X776	C A A T F P S V A D	S H E W T E S R E I H E G	Y D F V Q Y R
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UniRef90_C2BF28	A D T F L H N F	D E D D F E L V E E S	P I D D E G K K I K F V R Y K R K
UniRef90_E7GIU0	A D T Y L V N L	D K E G W I V T	E E S D E Q T Y F N L C Y E F R K Y K R
UniRef90_E1GW56	A D V F F L F D	R S Q Y K E T F V E E S	H K A T Q D H P A F R F V N L K K K
UniRef90_R5H9G7	A D C Y F P N L	A D A W E A V E T E G	P Y R Y E D L A Y T Y V T Y R R R
UniRef90_V4XXC7	G D T R F P A V	R D R E R W R E T S R E R Y D	Q F D V V T Y S R R
UniRef90_Q3A0W8	G D C R F P E Y	R S D D W L I E Q E Q D Y S	E F R H I Y R R R
UniRef90_G7H0C5	A D A F A P P I	G P G W E A F Y T G D	W L L S K S G E R Y R F V N Y R
UniRef90_R7K4H4	A S V F F P D L	D R L G W T L S E R	V A K K R D G E Y E L E F V V Y
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UniRef90_R9IZ89	S D A Y F P N L	D M D E W H I T A	D S D E L T Y F D L I E Y T F T K Y E R
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UniRef90_F4QC73	D D A L A P V L	D E A W V G T E	G D W R D S S G L R Y R F Y S F V R K
UniRef90_R5PB05	A D V F F P S L	D L E K W E V I K C Y E	K K E K E E Y N
UniRef90_J3JTN2	C D T F F L P A L	P G N L K E I S	D V T E D I Q D E E N D I E Y T F Q V I F E
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UniRef90_UPI000337A93	M	K	M	I	L	S	A	D	E	H	N	G	E	L	G	N	K	G	Q	L	L	I	W	R	I	P	N	D	M	K	N	F	F	R	A	E	T	M	G	K	V	L	
UniRef90_R5THI5	L	Y	L	I	G	A	I	S	A	D	E	N	G	E	L	G	N	K	G	Q	L	L	I	W	R	I	P	N	D	M	K	N	F	F	R	A	E	T	M	G	K	V	L
UniRef90_UPI00029AF9D1	V	R	M	V	W	A	Q	A	R	D	G	G	V	I	G	D	G	S	D	M	P	W	Y	I	P	E	D	L	A	F	F	K	K	A	T	L	G	S	P	V	V		
UniRef90_U7JZF7	M	L	G	A	I	W	A	Q	S	L	D	G	I	I	G	D	G	V	A	M	P	W	H	V	I	P	E	D	L	A	H	F	K	E	I	T	T	G	A	P	V	V	
UniRef90_DON806					V	A	A	L	E	T	T	G	G	I	G	L	R	Q	H	I	P	W	R	L	I	P	E	S	D	M	K	H	F	R	A	L	T	T	G	H	A	V	
UniRef90_UPI00038029D5	I	I	A	I	A	L	V	S	A	N	G	V	I	G	D	G	E	R	Q	P	F	E	F	A	E	D	W	A	R	Y	K	R	S	L	T	L	G	H	P	M			
UniRef90_W2CRJ0	M	I	T	L	I	A	A	L	D	E	H	N	A	I	G	L	G	N	T	M	P	W	H	L	I	P	A	D	M	K	H	F	R	S	L	T	T	M	G	H	T	V	
UniRef90_I0R5P4	M	N	L	I	V	S	V	D	K	R	W	G	I	G	N	K	G	K	L	V	S	I	P	R	D	K	K	L	F	R	E	E	T	T	G	K	V	I	V				
UniRef90_R9LPL4					I	A	A	L	G	K	H	N	E	L	G	K	N	E	M	I	W	H	L	I	P	K	D	L	K	F	R	Q	T	T	Q	G	K	T	I	V			
UniRef90_Q7K51	M	L	G	A	I	W	A	Q	S	L	D	G	I	I	G	D	G	E	G	M	P	W	H	V	I	P	E	D	L	K	H	F	K	D	V	T	M	G	A	P	V		
UniRef90_U53D67	V	N	C	I	V	A	V	D	K	Q	L	G	I	G	K	N	G	T	M	P	W	P	L	I	K	N	E	M	M	Y	F	Q	K	M	T	S	K	N	V	V			
UniRef90_Q05763					V	V	A	A	T	K	E	M	G	I	G	K	D	G	A	L	P	W	N	L	I	P	E	D	L	K	F	F	K	D	L	T	K	K	N	A	V		
UniRef90_UPI00047AEBAD	V	G	L	I	W	A	Q	A	R	D	G	V	I	G	V	D	G	A	L	P	W	H	L	I	P	E	D	L	K	H	F	K	D	V	T	M	G	A	T	V			
UniRef90_UPI0002191B3B	I	L	I	W	A	Q	T	N	G	T	I			A	L	N	G	S	I	P	W	R	Q	I	P	E	A	D	M	N	F	F	K	E	Q	T	I	H	O	V	A		
UniRef90_G5ZW74	M	V	C	I	A	A	M	A	R	N	R	V	I	G	D	G	A	D	L	I	W	H	L	I	P	G	D	L	K	R	V	K	Q	L	T	M	G	C	P	L			
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UniRef90_F1LGH0	I	N	I	I	V	A	M	D	S	R	G	G	I	G	K	N	G	A	L	P	W	H	L	I	P	E	D	L	K														

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UniRef90_UPI0003B37A93	V	Y G R K T L E T F Q Q N P L	E G R K N I I L S	T N P N Y E V K N A T V V H D L D	
UniRef90_R5TIH5	I	M G R A T Y L S M P F R N L	K G R K Y I I L S	T N K N I V Y D N A M V F N N K E	
UniRef90_UPI00029AF9D1	L	M G R A T W D S L F R P L P	G G R R N I V C T	R N A W S A E G A E L A G S V N E	
UniRef90_U7JZF7	I	M G R K T W Q S L F R P L P	P G R D N Y V L S	S A S P G S W S A G A S E V I G	
UniRef90_DON806	I	M G R K T W E S L F R P M	P K R Y N V V L S	T R D S S Y P D T V G V A A S F R E	
UniRef90_UPI00038029D5	I	M G R R T H E A I G R W L	P A R P T I V V V	T S R P E L V D M G Y A V R S V E A	
UniRef90_W2CRJ0	L	M G R R T F D S L P K A L	P D R L N V V L S	T A Q P D R C P G C L M V H S M D E	
UniRef90_I0R5P4	I	M G H N T L L S L P K P L	A G R K N I V L S	S K D K S L T V K G A T V T C L D Y	
UniRef90_R9LPL4	V	M G R N T F L S L P K M L	P N R H H V V I S	K T M E P R E N I E V F R D L Q T	
UniRef90_U7KK51	I	M G R K T W E S L F R P L	P G R E N Y V L S	S R T P G Q W S A G A Q	
UniRef90_Q53D67	I	M G K R T W F S L P R P L	A N R I N I I L S	R E L R E N P K G A H F F N F Y R	
UniRef90_Q05763	V	M G R K T W E S I Y R P L	S G R L N V V L S	R F D I A N T E N V V T C S S I D S	
UniRef90_UPI00047AEBAD	V	M G R R T W E S L F R P L	P G R T N V V L S	T S D P T W A E G A R R A S S V I E E	
UniRef90_UPI0002191B3B	L	M G R N T M L S F G R A L	P E R I N M V L S	H D E M L D V P A G F Y T M A E A	
UniRef90_G5ZWT4	I	M G R R T F Q S I G R A L	P G R L S V V L S	T R D E S W Q A E G A V A V S K E W	
UniRef90_UPI0002D2C89E	L	M G W N T Y L S L N K P L	P F A T A Y I A S	N Q Q G N L S D G I I V N D L I A	
UniRef90_F1LGH0	V	M G R K V W E S L P R P L	K N R L N V V L S	S N S M D D P H D G S Y F E S A I D	
UniRef90_G3PJP3	V	W G K L C W Y S V P P L	P N V L H V V L S	S K T L E S V P D H A H F L C E D L	
UniRef90_UPI00047A4CAD	L	M G S A T F V G M Y R A L	K D R L N Y V L S	T R D P N R F E S Y A F I K D Y Q P	
UniRef90_Q59397	I	M G R K T F A S L P K V L	P G R L H V V V S	K T T Q N T D Q V V Y V S T Y Q I	
UniRef90_Q8JKV3	I	M G R L T W E S L F R P L	P G R V N I V L S	T T K H R D Y D G A T R V S N F D E	
UniRef90_D4TRH7	I	M G R K T Y A T F N H P L	P N R T N L I V S	T K N T D Y Q P G C V V F H S L E E	
UniRef90_D8UB22	I	M G R K T W E S L F R P L	K G R I N I A R R	N G A Q F G P D V L G C S S L E	
UniRef90_M1XP40	I	L G R R T F E S M R E D L	P G R A Q V V L S	S R T E R S Y N V A T A R H A A D V	
UniRef90_M0I764	I	L G R R T F E S M L D D L	P G S D Q V V L S	S R S E Q E F D V V T A H H E A I	
UniRef90_UPI00037919F9	V	M G R R T W E S L P K P L	P G R E N F V V S	S S R E A G E W S D G A F V E	
UniRef90_UPI00041B6610	I	M G R H T W E S I G R P L	P G R K N I I L S	S S Q P G T D D R V T W V K S V D E	
UniRef90_D0WS26	I	M G R K T W E S L F R P L	P G R R N I V L S	S R D P S F A D G A E A V R S L A E	
UniRef90_T2MI23	I	M G K N T W F S L H R P L	K N R L N V I L S	S S S F I K E D Y P K N V S L E A	
UniRef90_D0LYN1	I	M G R K T W E S L P R P L	P S R R N I V L S	S R D P G V V H A A E L E A A L A	
UniRef90_D5NW46	I	M G R N T W E S L F R P L	P G R E N F V L S	S R Q P G D W S D G A T	
UniRef90_M4BX13	I	M G R K T W E S L P R P L	P K R Y N V I L S	T R D E N I P D T V G V A A S F S E	
UniRef90_R7UK12	I	K G R A T W Q D T E K A R	P N V I T I I I S	K T D Y L V E D F N E A H C T A S	
UniRef90_R6TWW3	I	L G S K T L A T F P R P L	K N R R N I I M S	R R P E Y T V I E G A E V V H S L E	
UniRef90_C5LQI2	I	M G R K T W E S L F R P L	K R D R I N V V L S	T S P T D Y P P G V R I C P S L L D	
UniRef90_L8FWM8	L	M G R K T W D S L F R P L	K G R V N I V L S	S S H T T P K P L A E I D T D A E	
UniRef90_M0IT32	V	L G R A T F E S M L D D L	P G S A Q I V M S	R R S F S V D T A R R A A S V I E D	
UniRef90_K9UIS2	V	M G R K T F D G M F D P L	K G R Q N I V V T	S S Q A E K Y R S R F T P E Q S L S	
UniRef90_T5LWB7	V	M G R K T M E S L K R P L	P E R Q N I V L S	T R S H G F V P N G F Y P A G V D D	
UniRef90_O81395	I	M G R K T W E S L P R P L	P G R L N V I L S	T F D F A T V E N V V I C G S M E S	
UniRef90_UPI0002195706	V	M G R K T Y A G M G K P L	P G R T N V L S	S Q Q V D Y P P G V I L L N N V A A	
UniRef90_D3R1R3	I	M G R K T L A G F G P L	P G R E N W V L S	S R R V H S D S N C R F F A D L E Q	
UniRef90_P27422	L	V G R K T F D S M G V L	P N R K Y A V V S	R K G I S N E N V L V F P S I E I	
UniRef90_W77463	I	M G R R T W Q S L F R P L	R N R L N V V L S	S R N P G I R E Q V R V A T S L K A	
UniRef90_UPI0003F494CE	I	M G R K T W E S L F R P L	P N R R N V I I S	S R Q G Q D N D L I S T H S I E H	
UniRef90_UPI0003706814	L	V G R T T F E S M G K P L	P N R Q Y A V V S	S S K E Q S D G V S V F S S I E E	
UniRef90_D8LWN8	I	L G K N T Y F S F F R P L	K N R L N F I I S	H D K N I P D S V Y I C S S V D E	
UniRef90_M5BKU6	I	M G R K T W E S L Y R P L	K G R L N V V L S	S S I T S V E H S P T L L A S S L D	
UniRef90_V4XRV8	I	L G R R T F E S M Q G D L	P G V I Q I V L S	S R R D Y D V P S A H H A D G V E S	
UniRef90_UPI000470E4A4	L	M G S K T F V S M N R P L	K N R L N V L S	T R N P K K F E G I E I F T S D V D	
UniRef90_R6VL26	L	M G R V T Y E H L P K R L	D H R L L H V A G	H K P L S D S D V L P C S D V Q A	
UniRef90_MONT33	L	L G R R T F D S M R D D L	P G S R Q I V V S	S R D S V D V P T A V V A D G V E S	
UniRef90_U1MVL9	A	L G R A T F E A M Q A N L	P G T T Q I V L S	S R S E R H Y E S V F L V Q T V V E	
UniRef90_UPI000479E854	L	M G R A S W E A L G R P L	P G R L N V V L S	S R D T T Y V A S G A V V I S S L E	
UniRef90_V4XG32	V	L G R R T F D S M R D D L	P G R A Q V V V S	S R S R D A V D R V A G G V S D A L	
UniRef90_B5U9U8	I	F G R K T Y E S L P Q P L	K G R I N V L S	S S I K E M P G V L T F S S L A E	
UniRef90_UPI00047A2C65	I	M G R K T L E S L P K P L	P G R I N I V L S	S S L V R D D V L I C R N L D A L	
UniRef90_UPI0003EDC2E5	I	M G R K I W F S I P K P L	K D R L N I V L S	S R D L K E P P Q G A H F K S L D D	
UniRef90_S2ZW54	I	M G R R S W K A L G R A L	P G R T N I V I S	T R T P G Y E A G A L V V S S I D E	
UniRef90_W8W2Q6	I	M G R K T W D S I F K P L	K N R I N I V S	T T L T L S N P T S K V E S A I K	
UniRef90_Q2QRX6	V	M G R K T W E S I F R P L	P G R L N V I L S	T F D F A T A E N V V I C G S L D S	
UniRef90_UPI0003618068	I	M G S R S W L A L F R P L	P G R T N Y V L S	S S R E P G D W S R G A	
UniRef90_UPI000377B68B	I	M G R R T W E S L F R P L	P G R E N V V V S	T R S G F E A P G A A A V P S I E E	
UniRef90_U1NW14	I	L G R V T F E S M R N N L	P G S A Q I V L S	S R S E Q A F E E A T A H H D D A I	
UniRef90_A0EPW5	L	M G R K T W E S L P R P L	K N R L N V V L S	S R Q E V L D G G A Y H A R S L D D	
UniRef90_F3Q608	I	M G R K T A Q S L G K P L	P G R R N V M L S	T R Q G I E V P Q G I Q S A S V E R	
UniRef90_G9P4Z9	I	M G R K T W D S I F R P L	K N R L N I V I S	T R S A P A H P P S V R V P S V E A	
UniRef90_F0YJX9	V	M G R K T W L S L F R P L	G G R K N V V L S	S R N P N A P P D V E V C P S L D D	
UniRef90_F5BFX1	L	V G R K T F E S M G P L	P N R K Y A V V S	T R S N W T N E N V V V F P S I D E	
UniRef90_D6ZHY5	I	M G R A S F L S L G Q A L	P G R R N I V L S	T S R E F T A P D V E I A H S L E E	
UniRef90_F6IFH3	V	M G R K T H D S I G G C L	K G R E N V V L S	S R R A P L F D S C R F V S E L P M	
UniRef90_UPI00037764BC	I	M G R A T W E S L P K P L	K N R L N I V L S	S K E Q P L S I Q C M D I H S V F E	
UniRef90_N4TNI2	L	M G R K T W D S I F R P L	K D R L N I V I S	S R E P S E P V R V Q S L E L A L Q	
UniRef90_T1C1D6	I	S I G R P L P G R L N V I	S R N P D Y R P K G C L V Y	P A L E	
UniRef90_F0W9B4	T	M G R K T W E S L Y Q P L	P N R Y N H I	T R T T N Y R I D H S V P H D V L E	
UniRef90_N1JGW1	I	M G R T T W E S I F R P L	K E R R N I I L S	R H P D T T S S A L V V K S L Q E	
UniRef90_I1LQ11	V	M G R K T W E S I N R P L	P G R L N V V L S	T R S G S F D E N V L I C G S M A S	
UniRef90_I0GUJ6	I	M G R R T L E S L P K P L	A D R I N I V L S	R T L Q R E D V I V C R E L S E L	
UniRef90_A4GI75	L	M G R T T W E T I F R P L	V D R I N I V V S	T R N R N Y A L S D A H V T Y S I E	
UniRef90_UPI0004416A5E	V	M G R N T W E S I F K P L	K Q R L N I I S	S S K K E Y Q L M P P G A A A V I N	
UniRef90_H3ADL5	I	M G R K T W F S L N R P L	K G R V N V L S	S R E L Q E A P E G A H Y L A R D E	
UniRef90_R7BS51	V	M G S N T L L S F G P L	K N R T N I V L S	T E E D A M Q K G Y I L V K S L D E	
UniRef90_E4XN72	V	M G R N T W Q S I F R P L	K G R V N V V L S	T N E S E N F I K C T S L E A A I A	
UniRef90_E1ZCI9	I	M G R K T W E S I F R P L	A G R L N V V L S	T R E A S K A E G V H I S S S L D S	
UniRef90_J9GMM5	L	M G R K T W E S I G R P L	P G R K N V I S	T R Q E Y E A P G A V C V S S L E E	
UniRef90_E3TFQ6	I	W G K Y S W F S C P E L	A N S L H V V L S	S K K H Y V C E D F V S A V K L A S	
UniRef90_Q5V3R2	I	L G R R T F E S M K P I	D C Y T V V L S	T S D D R R S A D S E T V E F A G D	
UniRef90_D0RB21	L	V G R K T F E S M G A L	P N R K Y A V V S	T R S N F N D E G V M V F S S I Q D	
UniRef90_F0XQ23	I	M G R R T W D S I F R P L	P G R L N V V I S	S R S E M G P V E A S S L E A A L D	
UniRef90_S4XCA9	V	M G R V S W E A L H R P L	P G R D N H V I S	T R D P G Y D A P G G T V H T T L P	
UniRef90_K9CI18	V	M G R R T M E S L P K P L	A G R E N V V L S	S R I R E K A E G F R L V H D L P A	

	90	100	110	120
UniRef90_UPI000329AC29	E T E L A D Q A D Q V W V I	G G S S L Y K E M M T	G M R R L F V	T Q I L K Q F Q
UniRef90_UPI0003B37A93	E L K D A L A E Y N D T Y C I	G G A K I V Y E E L L I	P M T D L C I	T K I D R T S F D
UniRef90_R5THI5	S L L D F I N S N D T F Y V I	G G S K I V Y E N L L I	D E V N I L Y L	T K I D D S F D
UniRef90_UPI00029AF9D1	A L A L A G A D A V I M	G G G Q I Y A A T L D Y	A D E C I	T E I D A D A P
UniRef90_U7JZF7	S L A D V A Q L H T A W V I	G G G K V Y E A A T L G	D V D R L E I	T L M G A N I Q
UniRef90_D0N806	A L E Q G D K V D Q V F V I	G G G A V Y A E A Y P S	C Y C T K V L H	T R V L K G Q F E
UniRef90_UPI00038029D5	A L D L A R D D E E L Y V A	G G G Q V Y R A A W D	H L T D L D L	T E V H A E A E
UniRef90_W2CRJ0	A L E V C H T A G E A F I	G G A		
UniRef90_I0R5P4	I K K N N I D D N D V F V I	G G E S V Y N S D F L P	Y C N I A H I	T Y I D Y E Y E
UniRef90_R9LP4	F F D A Y S S T E E N Y V I	G G G E I Y T S L L P	Y S K E L I	T H I D A E D K
UniRef90_U7KK51	V I T A M S P L E D A W V I	G G G Q I Y T A T L D Q	C V D R I E V	T L M G V N I G
UniRef90_Q53D67	Q Y K L T K Q L S N T V W V I	G G K S V Y E L N Y E	C S L K L Y I	T R I M E S F D
UniRef90_Q05763	A L D F S S I E K V F V I	G G G D I L R E A K P S	C E A I H I	T E I D T S I D
UniRef90_UPI00047AEBAD	A L A E G R P L W V I	G G G A V Y A A F L P	H A D R L V V	T D V D L D V
UniRef90_UPI0002191B3B	E Q I A D E K G M K L A V I	G G K A I Y D S A Y L P	V A D I L Y V	T Y L D T D F M
UniRef90_G5ZW74	L I N Q Q S D E R R L L F	G G G Q I Y A A G L S Y	C Q V I E A T	F Y E A E P A
UniRef90_UPI0002D2C89E	F L K K Y Q N S E N F I	G G S Q I Y T Q S L P	Y A D V L Y I	T H I L K R Y Q
UniRef90_F1LGHO	L I N G M S D K I E I W D I	G G R R P Y E E G L K S	S Q Q L Y V	T F V E G D F D
UniRef90_G3PJ3P	D A A A D L I E T I W V V I	G G T Q V Y E V A F H P	W C D E L Y L	T D V M A D F D
UniRef90_UPI00047A4CAD	L I E E Y L H N P D L Y V I	G G A Q V F E L F F D N	C D E L L C S	I K K P Y L
UniRef90_Q59397	A V R T A P E Y S Q L F V I	G G K S A Y E N L A A Y	V D K L Y L	T R V Q L N T Q
UniRef90_Q8JKV3	A I E S R G D I E T A W V I	G G A S V Y A A A M T H	C H Q I H L	T A I K K Y Y E
UniRef90_D4TRH7	A I K W M C T E E I F A	G G E Q I Y T Q T M E L	A H K L Y L	T I V E G S F E
UniRef90_D8UB22	D E K L K R D V D F V F V I	G G A Q V Y A E A H P S	C A T A V H	T K V E K E F D
UniRef90_M1XP40	D V A A S L G Y P S Y V V I	G G G E V Y E L L Q P	H V D R M V L S	R V H G S Y D
UniRef90_M0T764	E L A E S L G A E T A Y V I	G G A A I Y E L F Q P	H L D R M V L S	R V P G E Y D
UniRef90_UPI00037919F9	V P E V P E L D T E A W I	G G P Q L W E S Y M D	S L D V I E I	T L I D A H V
UniRef90_UPI00041B6610	A I A A C G D V P E I M V I	G G A		
UniRef90_D0WS26	A A E A A S H C E Q A W I	G G A A L Y A E A V N V	A D V L V V	T D V D V D V E
UniRef90_T2MI23	A I F Y A N T V E N I F V I	G G A S R V Y K E A M K F	C D K I Y L	T K I E Q D Y S
UniRef90_D0LYN1	T D L A T P P I D R R F I	G G K G V Y A E A M Q R	C H I F Y	T E I Q D R F D
UniRef90_D5NW46	V L S H L P E L T E G W I	M G G R L Y A S T L E Q	M D I E V	T L M D D A Y G
UniRef90_M4BX13	A L K Q G E K V D Q V F V I	G G S A V Y A E A H S E	C K K V F L	T R V K G E F K
UniRef90_R7UK12	S L F N A G V I S D A V V I	G G Q A V Y K S A I P	H C E I H L	T E I K C D L E
UniRef90_R6TWW3	E L L A L P G I S D A A V I	G G E G I Y R L L P Y	C C D R A V I	T E F D A E F P
UniRef90_C5LQ12	S L A S L Q Q G E E I F V I	G G A S L I T E A M Q Q	C C R T L Y T	T R V G T D F E
UniRef90_L8FWM8	P L R V A S D I G K V F V I	G G A E I Y R M A I Q E	T K R I L V	T K I L S D F D
UniRef90_M0IT32	A V D I A A S A E T A Y V I	G G A A I Y A L F Q P	H L D R M V L S	R V P G E Y E
UniRef90_K9UIS2	H L N F T L D D A K I F Y C	G G A N I Y Q Q V I	Q R L D I Y L S	R L D E S Y D
UniRef90_T5LWB7	V L R L P E P V I W V I	G G E Q I Y S L F M P	H V E I W L	S H I G V D V E
UniRef90_A81395	A L E Y C L S I E K V F V I	G G G Q V L R E Y L P	A C E A I H L	T D I Q S S I E
UniRef90_UPI0002195706	V L D Y A H P Q Q E T L I	G G A Q I F A L F K E Y	V T R L Y V	T E I D A T F S
UniRef90_D3R1R3	V L A E L P S E A S A W V I	G G S E I Y Q L F L P	Y C Q I A Y L	S E F D C T A P
UniRef90_P27422	A L Q E L S K I T D H Y V S	G G G Q I Y N S L I E K	A D I H L	S T V H V E V E
UniRef90_W7T463	A L A L L A H G N K V F V I	G G A A V Y R E A V E S	C E A I E F T	S I E E E A D Q
UniRef90_UPI0003F494CE	A I E V S S Q E G R I F L I	G G A Q L Y N L A F Y L	C D R V L	T R V L N D F Q
UniRef90_UPI0003706814	A L E M A E R T D H L M V A	G G G Q I Y R Q L L P	R I D T L H L	S I H A R P E
UniRef90_D8LWN8	A L I L M Q E E E N I F V I	G G G Q I Y K K A L N E	C E K L Y L	T E V D A D I S
UniRef90_M5BKU6	N S L S G I E G N V F V I	G G A S I Y T Q A H P	A T T R I L	T R V P A Y E E
UniRef90_V4XRV8	A L E V A A T R D E D Y V L	G G A E I Y E L F Q P	H L D R M V L S	R V T G S Y D
UniRef90_UPI000470E4A4	A L L K K Y Q N D D L Y V I	G G N E I F T I F F D	C A D E I I R	S M I L E N Y Q
UniRef90_R6VL26	L C R E W K K E E V Y C	G G A Q I Y A A I A Y A	D E L W I	T R I E Q S Y T
UniRef90_MONT53	A I A R A E D G D L Y V V L	G G G T I Y E L F Q P	H L D R M V L S	R V H A G S Y D
UniRef90_U1MVL9	A L D Q A L			

UniRef90_UPI000329AC29 C D T F L P E I S L D K Y R L L P E V P H E L Q E E N G L Q Y R F E V Y E
UniRef90_UPI0003B37A93 A D R F F P N L D E S E E W E L V E E S E E Q A Y F D T Y T F R T Y K R K
UniRef90_R5TIH5 A T V Y F P L F D K D N Y D I T I G D L M K E N G I S Y R H H N K Y V R R K
UniRef90_UPI00029AF9D1 G V L J A P D L R R G A W V L A E V G E W I T D P R D E V R H R H T V W R R K
UniRef90_U7JZF7 R A V Y A P D V P D D F G L V A D S D W Q V S A N G P L K Y R F L T Y E R K
UniRef90_DON806 C D A F F P L E Q L E Q N F K V A E E S E V K E E N G V Q F H F V E W E R K
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UniRef90_Q6F181	L	M	G	R	K	T	F	F	E	S	M	F	R	G	L	P	N	R	K	Y	A	V	V	T	T	R	D	T	H	M	S	E	N	V	N	F	I	H	S	K	K	A	D	F	
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UniRef90_P0ABQ7	I	M	G	R	K	T	F	F	E	S	L	F	V	K	L	E	G	R	T	Y	V	M	T	T	T	R	Q	A	L	E	L	P	F	V	N	N	V	S	D	A	M	R			
UniRef90_W8W233	I	M	G	R	K	T	W	D	S	I	L	F	K	P	L	K	N	R	N	I	V	V	S	N	T	T	F	S	T	L	N	N	T	W	I	H	S	K	K	A	D	F			
UniRef90_E3PVD8	I	F	G	S	S	T	Y	I	K	L	H	K	P	L	I	G	R	D	N	F	V	L	S	R	N	K	D	I	D	Y	G	V	P	K	L	K	N	I	L	E	E				
UniRef90_C3JYD2	I	M	G	R	K	T	F	F	E	S	V	G	R	P	L	A	D	R	P	N	I	V	V	S	R	N	P	F	E	H	E	Q	A	V	V	Y	C	R	S	L	A	S			
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UniRef90_Q96V60	L	M	G	R	K	T	W	E	S	L	F	R	P	L	K	G	R	I	N	V	V	I	S	S	R	Q	E	V	L	D	L	G	Q	T	Y	H	S	C	I	Y					
UniRef90_E0S583	V	M	G	R	K	T	W	H	S	I	L	F	R	P	L	Q	N	R	I	N	V	V	L	S	S	S	S	L	P	H	S	Q	N	T	F	F	I	P	S	F	A				
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UniRef90_B0CPS0	I	M	G	R	N	T	W	E	S	L	F	R	P	L	P	N	R	L	N	V	V	I	S	S	R	N	L	A	Y	D	L	C	E	F	A	A	R	V	N	E	H				
UniRef90_R7Q5X1	L	M	G	A	A	T	Y	E	S	L	P	R	P	L	P	G	R	L	N	V	V	I	S	S	R	R	S	R	P	P	D	D	V	L	I	A	G	S	F	D	E				
UniRef90_G0NUX7	L	M	G	R	K	C	W	E	S	L	P	R	P	L	V	G	R	L	N	V	V	I	S	S	R	Q	E	Q	K	S	E	N	L	I	A	S	N	S	L	E	S				
UniRef90_D0NVQ6	V	V	G	R	R	S	F	E	E	F	D	E	P	I	P	N	R	H	T	I	V	V	I	S	S	T	L	Q	R	W	P	S	V	Q	F	A	R	T	L	E	E				
UniRef90_G2R8V7	I	M	G	R	R	T	W	E	S	I	F	R	P	L	P	G	R	V	N	V	V	I	S	S	S	T	W	A	A	A	A	A	A	A	A	T	A	S	M	A	G				
UniRef90_E4LKR8	I	M	G	R	R	T	M	K	S	L	P	G	P	L	A	G	R	E	N	I	V	V	I</																						

	90	100	110	120
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UniRef90_P0ABQ7	F A Q A E E S S V G D V A Y V I I G G A E I Y F K R L A L L M L T Q I E L T F V I K R L Y E			
UniRef90_W8W233	F L A N S Q Q N I E T V W I I G G S I Y I L E A L L L L D T F M Y V T E I Y K R K L Y E			
UniRef90_E3PVD8	V L A K N N N P D K K V F I I G G S E S V Y K S F L D Y S H E I Y L T T I L K T N D T E			
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UniRef90_R7Q5X1	E L L K S K G V E N C F V I I G G S E S V Y R E A I K W S Q R V Y Y T R I S P D F F E			
UniRef90_G0NUX7	A L Q F V D S I E T I W N I I G G A E I Y D L A L Q G I K E S V H L T S R V F K N F A			
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UniRef90_G9PHK8	Q L A I Y R T F P R V W V V I I G G A Q V Y Q L A L D S A D V L V I L S E L D A R E			
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UniRef90_G2MKB1 G D R Y F P E L D D S E W K H D D E Q V I G Q G L R V V E Y V R R
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UniRef90_Q8SDF8 S C V Y F P K I K W D K W K S T
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UniRef90_W5LLJ3 C D V F F P D F D R N I Y R K Q S R
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UniRef90_X5EEC8
UniRef90_P78028 G D K Y L K V D F S P F E L T K E I S F
UniRef90_D4G8G5 G D V F F P F I S K N R W R C S Y G D A I R S D H R N S H S Y I H K I F D R K
UniRef90_G0S5Q8 G D A F F P V L D A Q E W R V S Q E E M D A Q R E A G A E Y E F E M W E R
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UniRef90_G9PHK8 A K T L A P Q V D Y S R F R L E A S D S H W R P L S G D A R W R V K T W V R
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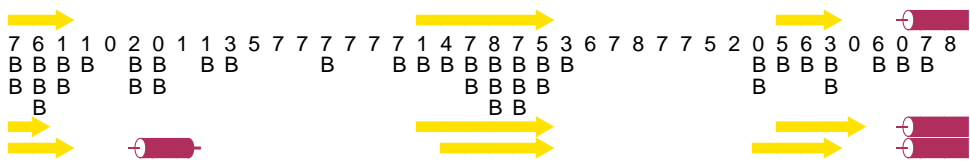
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