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QUERY	A	T	T	V	G	V	A	Y	A	A	K	N	V	V	S	Q	F	V	S	S	M	S	A	S	A	D	V	L				
UniRef90_Q4SM54	G	A	T	T	V	V	G	V	Y	A	A	K	T	V	V	T	Q	F	V	S	S	M	S	A	S	A	D	V	L			
UniRef90_W5MKF8	G	A	T	T	V	V	T	V	Y	A	A	K	T	V	V	T	Q	F	V	S	S	T	M	S	A	S	A	D	V	L		
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UniRef90_A0A023F872	G	G	G	A	I	A	S	A	Y	A	A	K	T	V	V	T	Q	F	V	T	S	M	S	A	S	A	D	V	L			
UniRef90_Q1W2B9	G	G	G	A	V	A	T	A	Y	A	A	K	T	V	V	R	Q	E	L	L	S	T	M	S	A	S	A	D	V	L		
UniRef90_UPI0001CBB8A2	G	A	S	G	V	V	G	A	Y	A	A	K	N	I	V	V	Q	E	L	L	S	T	M	S	A	S	A	D	V	L		
UniRef90_K4FY92	G	A	T	L	C	M	T	A	Y	A	A	K	N	V	V	T	Q	F	V	S	S	M	S	A	S	A	D	V	L			
UniRef90_U5ERH1	G	S	T	V	A	A	A	Y	S	A	K	A	V	V	T	Q	F	V	S	S	M	S	A	S	A	S	A	D	V	L		
UniRef90_H9GLL6	A	T	T	C	V	A	T	A	Y	V	A	K	N	V	V	T	Q	F	V	S	S	M	S	A	S	A	S	A	D	V	L	
UniRef90_D6WDE2	G	A	G	T	V	T	A	Y	A	A	K	A	V	V	G	Q	F	V	S	S	M	S	A	S	A	S	A	D	V	L		
UniRef90_C3Z0Y7	G	G	C	A	V	T	C	A	Y	A	A	K	N	V	V	Q	D	L	V	T	T	M	S	A	S	A	D	V	L			
UniRef90_T1J524	A	A	G	C	V	T	G	A	Y	A	A	K	G	V	V	T	M	F	V	S	S	M	A	S	A	S	A	D	V	L		
UniRef90_H9J0M9	G	A	G	S	V	A	G	A	Y	A	A	K	S	V	V	T	H	F	V	S	S	M	S	A	S	A	S	A	D	V	L	
UniRef90_D3YN33	G	T	G	A	I	A	G	A	Y	G	A	K	A	L	V	T	Q	F	V	S	S	M	S	A	S	A	S	A	D	V	L	
UniRef90_W4Y0P7	G	G	G	T	L	A	A	T	Y	G	A	K	N	I	V	T	D	F	I	Q	T	M	N	A	S	A	S	A	D	V	L	
UniRef90_U4U4U5	G	G	L	G	A	A	S	V	Y	G	T	K	N	L	V	T	Y	F	I	S	S	M	S	A	S	A	S	A	D	V	L	
UniRef90_UPI0003D081B5	A	T	A	C	V	T	T	A	Y	V	A	K	N	F	V	T	Q	F	V	S	S	L	S	A	S	A	A	D	V	L		
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UniRef90_E9FW02	G	S	G	A	V	T	G	A	Y	A	A	K	T	V	V	G	E	F	V	G	S	M	S	A	S	A	S	A	D	V	L	
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UniRef90_J3RYY4	G	A	T	Y	L	L	A	A	Y	F	A	K	N	T	V	V	M	F	V	S	S	M	N	P	A	S	A	D	V	L		
UniRef90_H9K8S9	A	A	S	G	I	T	G	A	Y	L	A	K	S	A	I	H	D	L	V	A	T	F	S	A	S	A	S	A	D	V	L	
UniRef90_V5H0F7	G	T	T	A	T	L	A	L	Y	S	L	K	S	E	V	T	R	L	V	T	Y	M	S	A	S	A	S	A	D	V	L	
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UniRef90_T2MF71	A	G	L	G	V	T	G	A	H	A	G	K	N	L	A	I	D	F	I	S	T	M	S	A	S	A	S	A	D	V	L	
UniRef90_K7IQ02	A	S	A	G	V	I	G	A	Y	T	A	K	S	F	V	I	D	L	L	S	T	M	A	S	A	S	A	D	V	L		
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UniRef90_A0A026WK13	A	G	A	S	V	G	V	Y	A	A	K	M	I	V	H	E	A	V	G	I	L	S	A	S	A	S	A	D	V	L		
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UniRef90_Q6VBC4	A	G	A	A	I	P	S	V	Y	G	A	T	K	F	V	N	V	F	I	S	N	L	S	P	S	R	D	V	L			
UniRef90_R4WE28	G	A	G	V	A	G	A	Y	A	A	K	T	L	V	T	Q	Y	V	S	S	M	S	A	S	A	S	A	D	V	L		
UniRef90_UPI000258ECE5	A	A	L	G	V	A	G	A	Y	S	A	K	S	L	V	H	N	V	V	A	M	L	A	S	K	D	V	L				
UniRef90_U4UCR7	G	I	L	L	T	S	G	I	Y	S	V	K	G	E	V	H	R	Y	V	K	S	M	N	A	S	A	S	A	D	V	L	
UniRef90_C1BSB1	G	S	T	A	L	V	I	G	I	Y	A	G	K	S	T	V	S	K	F	I	N	S	M	N	P	A	S	A	D	V	L	
UniRef90_E2BZA7	A	G																														
UniRef90_G6D1W2	G	A	G	S	V	A	S	A	Y	A	A	K	S	V	V	T	Q	F	V	S	S	M										
UniRef90_V8P4X7	G	A	I	Y	L	L	S	A	Y	F	A	K	N	A	V	V	M	F	I	G	S	M	N	P	A	S	A	D	V	L		
UniRef90_T1G2W6	A	A	G	T	I	P	T	T	Y	F	A	K	A	M	V	Q	E	L	V	I	S	M	S	A	S	A	S	A	D	V	L	
UniRef90_R7TZW0	A	G	A	G	A	P	A	L	Y	G	T	K	T	V	I	T	Q	F	V	S	S	M	S	A	S	A	S	A	D	V	L	
UniRef90_F6RM20	G	V	I	T	A	V	A	T	A	Y	A	A	K	N	A	V	T	Q	F	V	T	S	M	S	A	S	A	S	A	D	V	L
UniRef90_A7SI73	A	G	M	G	V	T	G	V	H	A	G	K	N	L	L	V	N	F	L	S	T	M	S	A	S	A	S	A	D	V	L	
UniRef90_I1FN00	G	S	G	V	A	T	A	Y	F	G	K	N	A	V	R	G	L	A	T	K	N	P	S	A	S	A	S	A	D	V	L	
UniRef90_E9C659	G	A	T	G	V	F	T	A	S	I	V	K	N	T	V	V	D	F	V	M	S	M	S	A	S	A	S	A	D	V	L	
UniRef90_L7M6S9	S	A	G	A	V	G	G	T	Y	A	A	K	S	L	V	T	K	F	V	M	A	L	A	S	A	S	A	D	V	L		
UniRef90_A0A016T509	G	A	G	G	M	S	L	W	A	T	K	E	M	V	Q	A	M	V	Y	F	K	G	L	A	S	A	S	A	D	V	L	
UniRef90_G6CXK8	F	F	G	L	L	G	G	M	Y	C	T	K	T	E	L	T	H	F	L	L	S	M	S	A	P	A	S	A	D	V	L	
UniRef90_A0A026WLU2	F	V	G	S	V	A	G	L	Y	T	F	K	S	H	L	L	H	Y	V	S	F	F	S	P	S	R	D	I	L	L		
UniRef90_E1ZW11	F	A	G	W	V	A	G	L	Y	A	F	K	S	H	L	L	H	Y	V	F	F	L	S	P	S	R	D	I	L	L		
UniRef90_X8JCJ6	G	S	M	G	V	L	S	A	T	A	A	K	S	T	V	T	D	F	L	A	S	M	S	A	S	A	S	A	D	V	L	
UniRef90_I6R2G6	G	G	G	V	A	A	A	Y	A	T	K	T	L	V	A	Q	Y	V	E	C	M	A	A	T	A	S	A	D	V	L		
UniRef90_UPI000258F8CB	F	V	G	S	V	A	G	M	Y	G	F	K	S	H	L	L	H	Y	V	M	F	M	A	P	S	R	E	V	L	L		
UniRef90_D6X499	G	T	A	V	T	V	A	L	Y	G	A	K	A	E	V	I	R	Y	V	E	F	M	A	S	A	S	A	S	A	D	V	L
UniRef90_F6UA65	A	G	A	W	I	G	G	V	Y	V	A	K	N	T	V	E	L	F	I	K	S	M	S	A	S	A	S	A	D	V	L	
UniRef90_Q9VQ29	G	A	G	A	V	G	G	A	Y	A	A	K	G	L	V	N	T	F	L	G	S	M	S	A	S	A	S	A	D	V	L	
UniRef90_T1KLT0	S	G	L	A	L	G	G	A	L	M	T	K	G	V	V	R	G	L	A	E	T	W	L	P	S	K	D	V	L			
UniRef90_UPI00046B4259	A	I	T	T	V	G	V	A	Y	V	T	K	D	V	V	S	Q	F	V	S	S	M	G	A	S	A	S	A	D	V	L	
UniRef90_K7J7F9	F	V	A	G	V	A	G	L	Y	A	S	K	A	I	H	Q	H	L	M	T	M	A	P	S	R	D	V	L				
UniRef90_H3EXM1	G	V	G	G	M	S	L	W	A	G	K	E	V	I	Q	T	M	V	A	Y	K	A	M	A	S	A	S	A	D	V	L	
UniRef90_Q6CI02	G	S	F	G	M	L	S	A	A	G	A	K	A	T	V	Q	D	F	L	S	N	M	S	A	S	A	S	A	D	V	L	
UniRef90_M5FS66	G	S	M	G	L	G	A	S	A	A	K	A	T	V	T	D	F	L														

UniRef90\_G4VNI0 1 A H T D V N V P D F T K Y R L E S T K D P Q S R A A D T E Q R K I F S Y T M M 40  
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UniRef90\_F1L9A3 V P D F S H Y K K N S G P N T S R A F T Y L M V  
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	50										60																			
UniRef90_G4VNI0	F	A	T	A	M	I	A	T	T	S	A	K	Y	T	V	R	M	F	I	E	P	L	G	P	S					
UniRef90_K0KQS3	G	S	L	G	L	L	S	A	A	G	A	K	S	T	V	E	A	F	L	T	T	M	S	A	S	A	D	V	L	
UniRef90_C4R0S5	G	S	F	G	L	L	S	A	A	G	A	K	S	T	V	E	E	S	F	L	L	T	M	S	A	S	A	D	V	L
UniRef90_W9WFW9	G	S	M	G	L	L	S	A	A	G	A	K	N	T	V	Q	E	D	F	L	E	N	M	S	A	S	A	D	V	L
UniRef90_M7XMK6	G	T	M	G	L	V	T	A	A	G	A	K	S	T	V	Q	D	F	L	T	N	M	S	A	S	S	D	V	L	
UniRef90_C7Z6V5	G	A	L	G	A	V	S	A	A	G	A	K	S	T	V	Q	S	E	F	L	V	N	M	S	A	S	A	D	V	L
UniRef90_G7DY02	G	T	F	G	L	L	T	A	A	G	A	K	S	L	V	S	D	F	L	A	N	M	A	S	A	S	A	D	V	L
UniRef90_F1L749	G	V	G	G	V	M	S	L	L	V	A	K	E	A	V	Q	T	M	V	S	F	K	A	M	A	A	D			
UniRef90_G1X13	G	T	L	G	A	L	S	A	T	S	A	K	A	T	V	Q	D	F	L	V	N	M	S	A	S	A	D	V	L	
UniRef90_K1WVR6	G	T	M	G	A	L	T	A	A	G	A	K	A	T	V	Q	D	F	L	V	N	M	S	A	S	A	D	V	L	
UniRef90_I4Y689	G	S	M	G	L	L	S	S	A	G	A	K	A	T	V	T	D	L	L	S	N	L	S	A	S	A	D	V	L	
UniRef90_F2SR13	G	S	M	G	M	M	T	A	V	G	A	K	A	T	V	Q	D	F	L	L	N	M	S	A	S	A	D	V	L	
UniRef90_N1JDD3	G	T	M	G	A	L	T	A	A	G	A	K	A	T	V	Q	D	F	L	V	N	M	S	A	S	A	D	V	L	
UniRef90_C4YBB6	G	S	M	G	L	L	S	A	A	G	A	K	S	T	V	E	A	F	L	S	S	M	S	A	S	A	D	V	L	
UniRef90_G4N4E1	G	A	M	G	A	I	S	A	A	G	A	K	S	T	V	Q	E	F	L	V	N	M	S	A	S	A	D	V	L	
UniRef90_G3AYM0	G	S	M	G	L	L	S	A	A	G	A	K	S	T	V	E	T	F	L	S	S	M	A	S	A	S	A	D	V	L
UniRef90_H2AV16	G	S	L	G	L	L	S	S	A	G	A	K	S	T	V	E	T	F	L	S	S	M	S	A	S	A	D	V	L	
UniRef90_UPI00044129D9	G	S	L	G	L	L	S	S	A	S	A	K	S	T	V	E	T	F	L	A	T	M	S	A	S	A	D	V	L	
UniRef90_A9UXZ8	A	G	G	A	L	A	T	A	Q	L	A	K	S	M	V	Q	D	F	L	D	T	M	S	A	S	A	D	V	L	
UniRef90_U6NQ29	G	A	G	G	A	M	A	L	W	A	A	K	E	I	N	L	I	N	V	K	F	K	W	L	P	A	D			
UniRef90_W1Q819	G	S	Y	G	L	L	S	S	A	A	A	K	S	T	V	E	A	F	L	T	T	M	S	A	S	A	D	V	L	
UniRef90_G0WDF8	G	S	L	G	L	L	S	S	A	G	A	K	S	T	V	E	T	F	L	S	S	M	S	A	S	A	D	V	L	
UniRef90_W2S999	G	S	M	G	L	L	T	A	A	G	A	K	A	T	V	Q	D	F	L	V	N	M	S	A	S	A	D	V	L	
UniRef90_Q6CM66	G	S	L	G	L	L	S	S	A	G	A	K	S	T	V	E	T	F	L	A	S	M	S	A	S	A	D	V	L	
UniRef90_M7SBU0	G	T	M	G	A	I	T	A	A	G	A	K	S	T	V	Q	E	F	L	K	N	M	S	A	S	A	D	V	L	
UniRef90_U6IX86	F	A	G	T	V	L	A	T	T	S	A	K	F	A	V	K	T	L	V	Q	T	L	G	P	S	A	S	T	L	
UniRef90_F1L9A3	G	V	G	G	V	M	T	L	L	A	K	E	S	I	Q	A	L	V	A	F	K	G	M	A	A	D				
UniRef90_U9SXW8	G	A	T	G	A	L	T	A	A	G	S	K	A	F	V	T	D	F	L	A	N	L	S	A	S	A	D	V	L	
UniRef90_UPI00044081C4	G	G	M	G	L	L	S	A	S	V	A	K	S	T	V	T	E	F	L	G	T	M	S	A	S	A	D	V	L	
UniRef90_UPI0004412691	G	S	M	G	I	V	A	S	A	A	K	S	S	V	T	E	F	L	G	S	M	A	S	A	S	A	D	V	L	
UniRef90_G0VHI3	G	S	M	G	L	L	S	S	A	G	A	K	S	T	V	E	T	F	L	S	S	M	A	S	A	S	A	D	V	L
UniRef90_J4UD48	G	T	L	G	A	L	A	A	S	G	A	K	S	T	V	T	D	L	L	S	N	M	A	S	A	S	A	D	V	L
UniRef90_E3L519	G	S	M	G	L	V	T	A	S	G	A	K	S	L	V	S	D	F	L	T	N	L	S	A	S	A	D	V	L	
UniRef90_U4LTE1	G	T	M	G	A	L	T	A	A	G	A	K	A	T	V	Q	D	F	L	V	N	M	S	A	S	A	D	V	L	
UniRef90_G0S7E0	G	T	L	G	A	I	S	A	A	G	A	K	S	T	V	Q	E	F	L	V	N	M	S	A	S	A	D	V	L	
UniRef90_F8NL04	G	S	L	G	V	L	S	A	S	V	A	K	S	T	V	T	G	F	L	E	T	M	S	A	S	A	D	V	L	
UniRef90_R8BPD9	G	T	L	G	A	I	T	A	A	G	A	K	S	T	V	Q	E	F	L	K	N	M	S	A	S	A	D	V	L	
UniRef90_M1WBT6	G	T	M	G	A	L	S	A	A	G	A	K	S	A	V	H	E	F	L	V	N	L	S	A	S	A	D	V	L	
UniRef90_T0S9M2	G	G	A	R	V	A	Y	A	T	A	A	R	L	A	V	L	S	D	F	L	G	T	M	S	A	S	A	D	V	L
UniRef90_UPI0004560E62	G	S	M	G	L	I	A	S	A	G	A	K	S	L	V	S	D	F	L	A	S	M	G	A	S	S	A	D	V	L
UniRef90_M2LCN1	G	A	F	G	G	L	S	A	L	G	A	K	D	T	V	Q	N	F	L	V	N	M	S	A	S	A	D	V	L	
UniRef90_K5VCV0	G	T	M	G	V	L	S	A	S	V	A	K	S	T	V	T	E	F	L	A	S	M	S	A	S	A	D	V	L	
UniRef90_L1JMM3	G	T	A	R	F	F	Y	A	S	A	A	R	L	A	V	L	K	F	V	H	Y	M	N	A	S	A	D	V	L	
UniRef90_UPI00044492C4	G	S	M	G	I	T	A	S	V	A	K	S	T	V	T	E	F	L	Q	T	M	S	A	S	A	S	A	D	V	L
UniRef90_B2B3E7	G	T	L	G	A	I	T	A	G	G	A	K	S	T	V	Q	E	F	L	V	N	M	S	A	S	A	D	V	L	
UniRef90_I2H2V2	G	S	L	G	M	L	S	A	A	G	G	K	S	T	V	E	T	F	L	G	S	M	S	A	S	A	D	V	L	
UniRef90_M4B2Y1	G	G	A	R	V	A	Y	A	T	A	A	R	L	A	V	V	K	F	V	G	S	M	S	A	S	A	D	V	L	
UniRef90_UPI00026590AF	A	A	V	G	V	A	G	L	Y	S	A	K	N	T	V	A	F	F	V	E	A	M	A	S	A	D	V	L		
UniRef90_V5HYI3	G	A	G	A	L	G	A	T	Y	A	A	K	S	L	V	T	Q	F	V	M	A	L	S	A	S	A	D	V	L	
UniRef90_R1EHD8	G	S	M	G	A	L	S	A	M	G	A	K	N	T	V	Q	D	F	L	V	N	M	S	A	S	A	D	V	L	
UniRef90_C9WSW8	G	G	A	S	A	T	V	I	M	G	K	E	L	V	Q	D	L	V	G	Y	L									
UniRef90_F0W758	G	G	A	R	I	M	Y	A	T	A	A	R	L	A	V	I	K	F	V	G	S	M	S	A	S	A	D	V	L	
UniRef90_H9IU02	F	F	G	L	L	C	G	S	Y	A	V	K	S	E	L	V	H	F	I	S	Y	M								
UniRef90_G8C1L7	G	S	L	G	L	L	S	S	V	G	A	K	S	T	V	E	T	F	V	S	S	M	S	A	S	S	D	V	L	
UniRef90_W7TQL4	G	G	A	R	F	I	Y	A	S	A	A	R	L	V	A	L	K	F	V	S	T	M	S	A	S	A	D	V	L	
UniRef90_A8Q0C2	G	T	F	G	A	V	S	A	A	A	R	S	T	V	T	N	F	L	S	T	M	S	A	S	A	D	V	L		
UniRef90_S3BYJ7	G	A	M	G	A	L	S	A	A	G	A	K	S	T	I	Q	E	F	L	V	N	M	S	A	S	A	D	V	L	
UniRef90_F5HAS9	G	A	L	G	A	L	G	A	S	V	K	S	T	A	V	D	M	L	S	N	M	A	S	A	S	A	D	V	L	
UniRef90_G4TRG0	G	S	L	G	L	L	S	A	S	M	A	K	A	S	I	T	N	F	L	A	T	M	S	A	S	A	D	V	L	
UniRef90_B7FYB7	S	S	V	R	F	A	Y	A	S	A	A	R	L	V	V	K	F	V	A	S	M	S	A	S	A	D	V	L		
UniRef90_L8HIC2	G	T	A	G	V	G	Y	A	A	A	K	H	T	V	K	F	L	D	S	M	N	P	A	A	N	V	L			
UniRef90_I2JWU8	G	A	Y	G	V	L	G	A	A	A	K	S	T	V	D	V	F	L	S	T	X	S	A	S	A	D	V	L		
UniRef90_A0A016S494	Y	G	A	L	I																									
UniRef90_UPI00024TUD3	G	G	S	R	L	A	Y	A	T	A	A	R	L	A	V	I	K	F	V	G	S	L	S	A	S	A	D	V	L	
UniRef90_M5EL95	G	S	F	G	A	I	S	A	A	S	A	R	S	T	V	T	N	F	L	S	T	M	S	A	S	S	D	V	L	
UniRef90_K0SJ93	S	G	V	R	F	A	Y	A	S	T	A	R	V	L	V	K	F	V	S	S	M	S	A	S	A	D	V	L		
UniRef90_UPI0002655479	G	A	L	G	A	V	S	A	A	G	K	S	T	V	Q	E	F	L	V	N	M	S	A	S	A	D	V	L		
UniRef90_UPI0002655479	A	I	A	T	V		A	H	A	A	D	S	V	F	P	Q	F	V	P	S	T	R	A	S	A	D	V	L		
UniRef90_UPI00017RZH8	G	T	L	G	L	L	S	A	A	G	A	K	A	T	L	H	D	F	L	V	N	M	S	A	S	A	D	V	L	
UniRef90_UPI0003WU0	G	G	A	R	V	A	Y	A	T	A	G	R	L	A	V	I	K	F	V	G	S	M	S	A	S	A	D	V	L	
UniRef90_UPI000273D26A	A	T	A	T	V		A	Y	G	A	N	N	V	F	P	X	F	V	P	S	V	R	A	S	A	E	V	L		
UniRef90_UPI0001E1G9W1	G	V	N	G	A	V	Y	L	Y	M	A	T	K	F	V	Q	S	L	V	T	Y	K	S	M	P	A	D	V	L	
UniRef90_UPI0001C1MT06	T	G	G	R	M	V	Y	A	S	A	L	R	L	T	V	L	K	F	L	S	M	S</								



