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UniRef90_UPI0001D56B29	A L A F L S L G A H G P T V T Q I L E G L K F N L T E T P E T E I H Q G F Q H L			
UniRef90_UPI00038EE4CA	A L A M L S L G T C G H T R T Q L L Q A L G F N L T I M S E T K I H Q D F Q H L			
UniRef90_UPI0003F0B68C	A L V M L S F G A S S S T Q T Q V L S L G F N L T V T P V A E I Q Q G F Q Y I			
UniRef90_UPI0003EABC1E	A L A M L S L G A K G K T D E L F R G L G F N L T H I T E E K V H S Q F Q A L			
UniRef90_UPI000350FF7D	A F G M V L L G A R G N T L K Q I E K V F H F S E K C E E A G G V H S Q F Q A L			
UniRef90_E2R033	A L A M T Y L G A K E N T A L E I L G K V L H F N T N V E K M E N V H Q F Q K L			
UniRef90_UPI0004403699	A L A M V F M G A K G N T A A Q M S Q A L S L S R S S G K G M D I H Q D F Q N L			
UniRef90_F7EYT8	A Y A M L S L G A C S Y S R T Q I L E G L G F N L T E L S E S D I H D V L H T L			
UniRef90_UPI000329FFDE	A L A T V Y E G A K G D T A A Q I L T Q A L S F S S G E G V H A N F Q K L			
UniRef90_B9XLN5	C L A M T Y A G A R G E T E L Q M A K A L H F T T N Q A Q L H A G F A T L Q K Q			
UniRef90_UPI0003314D39	A F S M L C L G A Q D S T L A E I K K Q G F N L Q N L P D R T L H E G F R D L			
UniRef90_U3BL21	A L A M V L L G A K G N T A T Q M A Q A L S L N T E E D I H H G F Q L L			
UniRef90_W6FX53	A L A M V Y N G A G S T Q Q A M A K T L E L Q G M S L P E I H S A Y A T L			
UniRef90_UPI00032AEB62	A L A F L A L G A Q G S T L T E L L Q G L K F N L T E M P E K E I H Q G F R Q L			

QUERY	L	R	T	L	N	Q	P	D	S	Q	L	Q	L	T	T	G	N	G	L	F	S	E	G	L	K	L	V	D	K	F	L	E	V	K	K	L	Y	H		
UniRef90_P17475	L	Q	T	L	N	R	K	P	D	S	Q	L	Q	L	T	T	G	N	G	L	F	S	E	G	L	K	L	V	D	K	F	L	E	V	K	K	L	Y	H	
UniRef90_O54761	L	Q	T	L	N	R	K	P	D	S	Q	L	Q	L	T	T	G	N	G	L	F	S	E	G	L	K	L	V	D	K	F	L	E	V	K	K	L	Y	H	
UniRef90_UPI0003340CFE	L	H	T	L	N	Q	P	P	N	S	Q	L	Q	L	T	T	G	N	G	L	F	I	V	V	D	N	K	L	L	V	D	K	F	L	E	D	V	K	Y	H
UniRef90_K7FUC4	L	H	S	L	N	H	P	D	S	Q	L	Q	L	Q	L	T	T	G	N	G	L	F	I	D	N	K	L	L	V	D	K	F	L	E	D	V	K	Y	H	
UniRef90_UPI0003F0D502	L	H	T	F	N	K	P	D	S	Q	L	Q	L	Q	L	T	T	G	N	G	L	F	I	A	D	N	K	L	L	V	D	K	F	L	E	D	V	Y	H	
UniRef90_P34955	L	H	T	L	N	Q	P	P	N	H	Q	L	Q	L	T	T	G	N	G	L	F	I	N	D	E	S	A	K	L	L	V	D	K	F	L	E	D	V	Y	H
UniRef90_P38029	L	N	A	L	N	H	S	P	D	N	Q	L	Q	L	T	T	G	N	G	L	F	I	D	E	S	A	K	L	L	V	D	K	F	L	E	D	V	Y	H	
UniRef90_UPI000443AF3B	L	R	S	L	N	Q	P	D	D	N	Q	L	Q	L	T	T	G	N	G	L	F	I	Q	Q	G	L	K	L	L	V	D	K	F	L	E	D	V	Y	H	
UniRef90_M7B3E7	I	C	A	L	N	R	P	D	D	R	E	L	Q	L	T	T	G	N	G	L	F	I	R	R	E	S	A	K	L	L	V	D	K	F	L	E	D	V	Y	H
UniRef90_L8YAZ3	L	E	T	L	N	R	P	D	D	N	Q	L	Q	L	T	T	G	N	G	L	F	I	L	R	E	S	A	K	L	L	V	D	K	F	L	E	D	V	Y	H
UniRef90_UPI0003C10B4B	I	L	M	L	N	K	D	H	S	E	L	Q	L	Q	L	T	T	G	N	G	L	F	I	L	N	E	G	F	E	P	I	V	D	K	F	L	E	D	Y	D
UniRef90_P22355	L	H	T	L	N	R	P	H	S	E	L	Q	L	Q	L	T	T	G	N	G	L	F	I	D	Q	K	L	K	L	K	E	K	F	L	E	D	V	Y	H	
UniRef90_Q60552	L	R	M	L	S	Q	P	N	S	Q	V	Q	V	L	T	S	T	S	N	A	M	F	I	V	D	K	R	L	Q	L	L	I	Q	K	F	L	E	D	Y	Q
UniRef90_F7BFU3	L	H	M	L	N	D	P	N	S	K	V	Q	V	L	T	S	T	S	N	A	L	F	I	D	K	R	L	Q	L	L	I	Q	K	F	L	E	D	Y	Q	
UniRef90_UPI0003992B0D	L	Q	L	L	N	D	P	H	Q	E	V	S	Q	V	L	T	S	T	S	N	A	L	F	I	D	K	R	L	Q	L	L	I	Q	K	F	L	E	Y	Q	
UniRef90_UPI000334661E	I	P	R	L	N	Q	G	N	Q	D	V	S	L	T	G	L	E	N	A	L	F	I	V	D	Q	K	V	L	K	L	L	E	P	K	F	Q	K	Y	Q	
UniRef90_S9WT39	I	Q	R	L	N	Q	E	N	Q	D	R	K	L	G	V	L	E	N	A	L	F	I	V	D	Q	K	L	K	L	L	L	L	K	F	L	T	Y	E		
UniRef90_UPI0004422E40	L	H	T	L	N	Q	P	P	N	H	Q	L	Q	L	T	T	G	N	G																					

QUERY	S	E	A	F	T	V	N	F	G	D	T	E	E	A	K	K	Q	I	N	D	Y	V	E	K	G	T	Q	G	K	V	D	L	V	K	E	L	D	R	D		
UniRef90_P17475	S	E	A	F	S	T	V	N	F	A	D	S	E	E	A	K	K	Q	I	N	D	Y	V	E	K	G	T	Q	G	K	V	D	L	V	K	E	L	D	R	D	
UniRef90_O54761	S	E	A	F	S	T	D	F	T	N	T	E	E	A	K	K	Q	I	N	D	Y	V	E	K	G	T	Q	G	K	V	D	L	V	K	E	L	D	R	D		
UniRef90_UPI0003340CFE	S	E	A	F	S	T	V	N	F	K	D	S	A	A	T	A	K	K	Q	I	N	D	Y	V	E	K	G	T	Q	G	K	V	D	L	V	K	E	L	D	R	D
UniRef90_K7FUC4	A	E	A	L	P	S	N	F	Q	N	S	A	E	T	E	K	Q	I	N	D	Y	I	E	K	K	T	H	G	K	I	A	H	L	V	Q	K	E	L	D	R	D
UniRef90_UPI0003F0D502	S	E	A	F	S	T	V	N	F	E	D	T	E	A	T	K	K	Q	I	N	D	Y	V	E	K	G	T	Q	G	K	V	D	L	V	K	E	L	D	R	D	
UniRef90_P34955	S	E	A	F	S	T	V	N	F	R	D	T	E	E	A	K	K	Q	I	N	D	Y	V	E	K	G	T	Q	G	K	V	D	L	V	K	E	L	D	R	D	
UniRef90_P38029	S	E	A	F	S	T	V	N	F	R	D	T	E	E	A	K	K	Q	I	N	D	Y	V	E	K	G	T	Q	G	K	V	D	L	V	K	E	L	D	R	D	
UniRef90_UPI000443AF3B	A	E	A	F	S	T	D	F	K	N	S	T	E	A	K	K	Q	I	N	D	Y	V	E	K	G	T	Q	G	K	V	D	L	V	K	E	L	D	R	D		
UniRef90_M7B3E7	S	E	V	F	S	S	D	F	N	N	S	T	N	A	V	K	Q	I	N	D	Y	I	E	K	K	T	H	G	K	I	V	D	L	V	K	E	L	D	R	D	
UniRef90_L8YAZ3	S	E	A	F	S	T	V	N	F	K	D	T	E	S	A	K	E	Q	I	N	D	Y	V	E	K	G	T	Q	G	K	V	D	L	V	K	E	L	D	R	D	
UniRef90_UPI0003C10B4B	A	E	V	S	N	V	D	F	Q	K	S	E	E	T	M	Q	K	I	N	D	Y	H	V	K	N	G	T	H	G	K	I	E	D	L	V	K	E	L	D	R	D
UniRef90_P22325	A	E	A	F	P	T	N	F	S	N	P	K	E	A	E	K	Q	I	N	D	Y	V	E	K	G	T	Q	G	K	V	D	L	V	K	E	L	D	R	D		
UniRef90_Q60552	A	E	A	S	S	T	D	F	Q	K	P	H	E	A	K	K	L	I	N	D	Y	V	S	K	K	T	H	G	K	I	K	E	L	M	S	D	L	D	R	D	
UniRef90_F7BFU3	A	E	T	F	S	T	D	F	H	N	T	E	E	A	T	K	Q	I	N	D	Y	A	E	N	K	T	K	G	K	I	T	D	L	L	S	S	V	D	R	D	
UniRef90_UPI0003992B0D	S	E	V	I	S	N	F	Q	N	S	A	D	A	T	K	E	I	N	D	Y	I	E	K	K	T	H	G	K	I	V	D	L	V	K	E	L	D	R	D		
UniRef90_UPI000334661E	A	D	T	I	P	A	D	F	H	N	L	E	N	A	R	Q	Q	I	N	D	Y	V	S	Q	K	T	Q	G	M	I	D	D	L	I	N	S	I	A	P	G	
UniRef90_S9WT39	A	D	T	V	P	T	N	F	Q	N	L	E	D	A	Q	N	R	I	N	D	Y	V	S	Q	K	T	H	R	K	I	N	D	L	V	K	N	I	D	P	G	
UniRef90_UPI0004422E40	S	E	A	F	S	T	V	N	F	R	D	A	E	E	A	K	K	Q	I	N	D	Y	V	K	K	G	S	H	G	K	I	V	D	L	V	K	E	L	D	R	D
UniRef90_S9X216	A	D	T	F	S	T	N	F	E	D	P	E	G	A	K	K	Q	I	N	D	Y	V	A	K	Q	T	K	G	K	I	A	D	L	V	E	V	L	D	G	T	
UniRef90_H0XI50	A	E	V	F	P	T	D	F	S	N	P	S	K	A	Q	A	R	I	N	D	Y	V	K	K	E	T	K	G	K	V	K	N	L	V	Q	N	L	D	P	L	
UniRef90_UPI00027F8EB0	A	E	A	F	A	T	D	F	Q	D	S	E	A	A	K	K	L	I	N	D	Y	V	Q	N	G	T	R	G	K	I	V	D	L	V	K	E	L	D	R	D	
UniRef90_F7H1R0	A	E	T	I	P	T	N	F	Q	N	L	E	N	T	Q	K	Q	I	N	D	F	I	S	H	K	T	H	G	K	I	N	N	L	I	K	N	I	D	P	G	
UniRef90_G1NKH9	S	E	A	V	S	M	D	F	Q	N	S	E	H	A	R	E	E	I	N	D	Y	V	K	A	K	T	H	G	K	I	F	V	D	L	L	D	S	L	D	R	D
UniRef90_UPI0003ABC5ED	A	D	S	F	P	T	N	F	Q	N	S	A	G	A	L	K	Q	I	N	D	Y	V	A	K	Q	T	K	G	K	I	V	D	L	V	K	N	L	D	S	N	
UniRef90_UPI00039455D5	G	K	A	V	S	S	S	F	Q	N	S	T	Q	A	K	K	E	I	N	D	Y	V	K	N	K	T	R	G	N	I	N	Q	I	L	E	D	L	D	P	N	
UniRef90_P05544	A	E	A	F	I	A	D	F	K	Q	N	E	A	A	K	K	I	N	D	Y	V	S	N	Q	T	Q	G	K	I	A	E	L	F	S	I	D	E	E	R		
UniRef90_UPI00032ADD2D	A	E	T	I	P	T	N	F	Q	N	S	A	S	A	R	K	H	I	N	D	Y	V	S	N	Q	T	Q	G	R	V	I	S	N	L	V	Q	S	I	D	P	G
UniRef90_F6SC37	A	D	V	I	S	M	D	L	K	D	P	K	K	A	I	G	Q	I	N	D	Y	I	S	K	E	T	H	G	E	I	T	N	M	V	K	N	L	D	S	G	
UniRef90_Q7ZZW1	S	E	G	F	T	V	D	F	K	N	P	A	E	A	T	A	E	I	N	D	F	I	A	K	K	T	Q	D	K	I	T	D	M	V	K	N	L	D	P	D	
UniRef90_UPI00046B5856	A	D	S	F	P	T	N	F	G	N	P	A	G	A	K	K	Q	I	N	D	Y	V	A	K	Q	T	K	G	K	I	V	D	L	V	K	N	L	D	G	T	
UniRef90_UPI0003D0CAEE	S	E	V	L	Y	T	D	F	Q	N	S	T	A	A	E	K	L	I	N	D	Y	I	G	T	K	T	Y	G	K	I	T	D	L	V	Q	D	L	D	P	Q	
UniRef90_P70458	S	D	T	F	S	T	N	F	G	N	P	E	I	A	K	K	Q	I	N	D	Y	V	A	K	K	T	K	G	K	I	V	D	F	I	K	D	L	D	S	T	
UniRef90_UPI0002746F94	S	E	V	L	A	T	N	F	Q	D	W	A	T	A	S	R	Q	I	N	D	Y	V	A	K	K	T	Q	G	K	I	A	D	L	V	I	S	G	L	D	S	P
UniRef90_UPI000333B336	S	K	V	F	S	V	D	F	S	K	A	F	T	A	Q	R	I	N	D	Y	V	E	K	E	T	R	G	K	V	V	N	L	I	Q	D	L	D	P	L		
UniRef90_S9YC53	S	E	A	F	S	T	N	F	M	D	T	E	A	A	K	K	Q	I	N	D	Y	V	E	K	G	T	Q	G	K	I	V	D	L	V	K	E	L	D	R	D	
UniRef90_G3WB15	V	E	V	F	S	T	D	F	K	N	S	T	R	A	K	K	Q	I	N	D	F	V	K	N	G	T	L	G	K	V	D	Q	L	F	K	E	L	D	R	E	
UniRef90_H6SWK9	T	E	A	I	S	T	D	F	L	K	A	E	A	V	K	Q	I	N	D	Y	V	E	K	N	T	N	G	K	I	A	E	L	L	D	S	V	D	Q	D		
UniRef90_G1KZ67	S	E	I	L	P	T	N	F	K	K	L	K	E	A	E	Q	Q	I	N	D	Y	I	E	K	K	T	N	G	K	I	K	D	V	A	K	N	L	D	P	S	
UniRef90_UPI00027403DF	A	E	L	A	S	V	D	F	Q	N	S	E	D	T	R	K	T	I	N	D	Q	W	V	K	G	Q	T	E	G	R	X	X	X	X	X	X	X	S	M		
UniRef90_F7GA13	A	E	A	F	A	T	D	F	Q	D	S	E	A	A	K	K	L	I	N	D	Y	V	E	R	G	T	R	G	K	I	K	D	L	I	K	E	L	D	Q	Q	
UniRef90_H2SLS0	A	E	V	L	D	V	D	F	K	N	P	A	E	A	A	E	I	N	D	Y	I	A	L	N	T	G	D	M	I	K	D	Q	V	K	N	L	D	P	D		
UniRef90_UPI0003336601	A	D	V	L	P	A	N	F	H	N	L	E	H	T	Q	K	E	I	N	D	Y	I	S	Q	K	T	H	G	R	I	K	N	L	I	N	S	I	D	P	G	
UniRef90_T1EG22	A	E	L	E	P	V	D	F	N	N	D	E	C	A	L	K	I	N	D	Y	V	E	E	Q	T	N	Q	K	I	K	N	L	P	G	T	I	N	P	L		
UniRef90_Q25B53	A	Q	L	A	P	V	D	F	S	N	T	E	G	A	R	Q	T	I	N	D	Y	V	E	E	Q	T	E	N	K	I	Q	D	L	P	G	T	V	T	P	A	
UniRef90_UPI00045DDD48	A	E	L	E	Q	S	F	A	K	A	E	R	K	H	I	N	A	W	V	N	D	Y	S	K	K	T	E	G	K	I	Q	E	L	L	P	D	I	D	S	Q	
UniRef90_UPI000462A6A7	A	D	V	F	P	T	S	F	S	N	S	T	E	A	E	V	V	I	N	D	Y	I	E	N	K	T	K	I	K	D	V	V	R	G	L	Q	P	E	I		
UniRef90_V8NDI7	A	E	G	F	S	T	N	F	S	V	P	R	L	V	K	K	Q	I	N	D	Y	V	G	N	K	T	H	G	K	I	P	R	A	I	E	H	L	D	Q	Q	
UniRef90_I3N4Z0	S	K	L	E	R	L	S	F	A	K	A	T	K	S	R	K	H	I	N	D	Y	V	S	K	E	T	K	G	K	I	P	D	L	L	P	E	M	I	D	K	Q
UniRef90_M3YYL6	T	S	V	E	S	V	D	F	K	N	P	E	E	S	R	K	K	I	N	D	Y	V	E	S	Q	T	H	E	K	I	K	D	L	L	P	K	L	E	F	T	
UniRef90_UPI0002C44862	A	E	L	E	E	S	F	A	K	D	T	E	E	S	R	K	H	I	N	D	Y	V	A	E	R	T	E	G	K	I	S	E	V	A	G	T	I	D	S	L	
UniRef90_T1G677	A	A	L	E	P	V	D	F	R	N	A	E	C	E	A	T	I	N	D	Y	V	A	E	R	N	Q	T	N	G	K	I	R	N	L	I	A	P	L	N	A	M
UniRef90_P61939	T	E	V	F	S	T	D	F	S	N	V	S	A	A	Q	H	K	I	N	D	Y	V	E	K	Q	T	K	G	K	I	V	G	L	I	Q	G	L	K	L	N	
UniRef90_UPI00038EA6A3	A	E	L	E	Q	S	F	T	K	A	P	E	S	R	K	H	I	N	D	Y	V	S	K	K	T	E	G	K	I	Q	Q	L	K	D	S	L	E	E	D		
UniRef90_UPI00022F4933	G	K	V	L	R	S	N	F	R	D	M	E	A	T	T	Q	L	I	N	D	Y	V	K	E	K	T	R	G	K	I	R	D	L	V	S	G	L	T	P	D	
UniRef90_M3ZII4	S	E	L	E	A	D	F	R	T	S	S																														

QUERY	T	V	F	A	L	V	N	Y	I	F	F	K	G	K	W	E	R	P	F	E	V	K	D	T	E	E	D	F	H	V	D	K	V	T	T	V	K	V	P			
UniRef90_P17475	T	V	F	A	L	V	N	Y	I	F	F	K	G	K	W	E	R	P	F	E	V	K	D	T	E	E	D	F	H	V	D	K	V	T	T	V	K	V	P			
UniRef90_O54761	S	V	L	A	L	V	N	Y	I	F	F	K	G	K	W	E	R	P	F	E	V	K	D	T	E	E	D	F	H	V	D	K	V	T	T	V	K	V	P			
UniRef90_UPI0003340CFE	T	V	L	A	L	V	N	F	I	F	F	K	G	K	W	K	P	F	E	E	V	K	D	T	E	E	D	G	F	H	V	D	D	E	T	T	V	T	V	P		
UniRef90_K7FUC4	T	V	M	V	L	I	N	Y	I	F	F	K	A	Y	W	E	H	P	F	S	D	M	L	T	H	E	A	G	D	F	F	V	D	G	E	T	T	V	T	V	N	
UniRef90_UPI0003F0D502	T	V	L	A	L	V	N	Y	I	F	F	K	G	K	W	K	P	F	E	E	V	K	D	T	E	E	N	G	D	F	H	V	D	E	A	T	T	V	T	V	P	
UniRef90_P34955	T	V	F	A	L	V	N	Y	I	S	F	K	G	K	W	E	K	P	F	E	E	M	K	H	T	T	E	Q	D	F	H	V	D	E	Q	T	T	V	T	V	P	
UniRef90_P38029	T	V	L	A	L	V	N	Y	I	F	F	K	G	T	W	E	K	P	F	E	P	E	Y	T	T	E	Q	D	F	H	V	D	E	Q	T	T	V	T	V	P		
UniRef90_UPI000443AF3B	S	V	L	A	L	V	N	F	I	F	F	K	G	K	W	E	K	P	F	R	A	E	L	T	T	E	Q	D	F	H	V	D	E	Q	T	T	V	T	V	P		
UniRef90_M7B3E7	T	V	M	L	I	N	Y	V	I	F	F	K	G	K	W	E	K	P	F	N	Y	F	Y	T	T	K	E	E	D	F	F	V	D	G	K	T	S	V	K	V	N	
UniRef90_L8YAZ3	A	V	L	A	L	V	N	Y	I	F	F	K	G	K	W	Q	K	P	F	D	A	E	H	T	T	E	E	G	D	F	H	V	D	E	A	T	T	V	T	V	P	
UniRef90_UPI0003C10B4B	T	I	M	L	L	V	N	Y	I	F	F	R	G	E	W	E	K	P	F	S	P	N	A	T	T	E	E	G	D	F	F	V	D	N	D	I	T	V	T	V	P	
UniRef90_P22325	T	V	L	A	L	V	N	Y	I	F	F	R	G	K	W	E	K	P	F	D	V	K	H	T	T	E	Q	D	F	H	V	D	E	A	T	T	V	T	V	P		
UniRef90_Q60552	T	S	M	V	L	V	N	Y	I	F	F	K	G	K	W	K	A	P	F	D	P	D	F	T	Y	E	S	D	F	F	Y	L	D	N	K	R	S	V	T	V	P	
UniRef90_F7BFU3	T	L	L	V	L	I	N	Y	I	F	F	Y	G	E	W	E	K	H	F	E	K	E	W	T	K	D	D	I	F	H	V	D	E	N	T	N	V	T	V	P		
UniRef90_UPI0003992B0D	T	M	M	V	L	V	N	C	I	F	F	K	G	Y	W	E	K	P	F	N	N	L	A	T	T	R	D	D	V	L	L	D	T	K	N	S	V	T	V	K	P	
UniRef90_UPI000334661E	T	V	M	L	I	N	C	I	F	F	R	A	R	W	Q	Q	E	F	D	P	K	E	T	T	K	E	E	D	F	L	L	D	G	N	K	T	A	K	V	P		
UniRef90_S9WT39	T	V	M	L	I	N	Y	V	I	F	F	R	A	R	W	Q	H	P	F	D	P	K	S	T	T	K	E	E	D	F	L	L	D	R	N	E	A	V	K	V	P	
UniRef90_UPI0004422E40	T	V	F	A	L	V	N	Y	I	F	F	K	G	K	W	E	K	P	F	E	E	H	T	T	E	R	D	F	H	V	D	E	K	T	T	V	T	V	P			
UniRef90_S9X216	E	V	M	V	M	V	N	Y	I	F	F	K	A	K	W	E	T	S	F	D	H	K	S	T	H	Q	D	F	H	V	T	S	E	T	A	V	R	V	P			
UniRef90_H0XI50	T	A	M	V	L	V	N	H	I	F	F	K	A	K	W	E	K	P	F	H	P	V	D	T	K	K	F	P	F	L	G	K	G	T	T	V	P	V	P			
UniRef90_UPI00027F8EB0	T	M	M	V	L	V	N	Y	I	F	F	K	A	K	W	K	T	P	F	D	P	S	D	T	K	F	E	S	R	F	Y	F	S	K	R	N	W	V	K	V	P	
UniRef90_F7H1R0	T	V	M	L	L	T	N	Y	I	F	F	R	G	K	W	R	H	P	F	D	P	N	R	T	K	E	E	D	F	F	L	K	K	N	S	V	T	V	P			
UniRef90_G1NKH9	V	M	M	L	L	T	N	Y	V	I	F	F	K	G	Y	W	E	P	F	E	S	Y	D	T	R	Q	E	D	D	F	F	V	D	E	A	E	H	P	V	K	P	
UniRef90_UPI0003ABC5ED	A	V	M	V	M	V	N	Y	I	F	F	K	A	K	W	E	T	S	F	N	H	K	G	T	T	R	E	Q	D	F	Y	V	T	P	A	E	T	V	R	V	P	
UniRef90_UPI00039455D5	T	L	M	V	I	V	N	Y	I	F	F	K	A	Y	W	E	N	P	F	N	I	K	G	T	H	K	D	F	F	H	V	N	V	K	T	S	V	E	V	E	P	
UniRef90_P05544	T	S	M	V	L	V	N	Y	L	I	F	F	K	G	K	W	V	P	F	N	P	K	N	D	T	F	E	E	S	E	F	Y	L	D	E	K	R	S	V	T	V	P
UniRef90_UPI00032ADD2D	T	V	M	L	L	T	N	Y	I	F	F	R	A	R	W	Q	H	P	F	D	P	K	V	T	T	R	E	E	D	F	F	A	V	S	K	N	K	S	V	R	V	P
UniRef90_F6SC37	T	S	L	L	L	I	N	Y	I	F	F	Q	A	E	W	E	K	K	F	N	P	K	D	T	T	E	E	D	E	F	F	L	J	D	G	R	S	V	T	V	P	
UniRef90_Q7ZZW1	T	A	M	M	L	I	N	Y	V	I	F	F	R	G	K	W	D	K	P	F	D	A	T	L	T	H	K	A	D	F	K	V	D	E	N	T	K	V	Q	V	D	
UniRef90_UPI00046B5856	Q	I	M	V	M	V	N	Y	I	F	F	K	A	K	W	E	T	G	F	N	P	K	N	T	T	R	E	Q	D	F	K	V	A	P	G	T	V	V	V	P		
UniRef90_UPI0003D0CAEE	T	V	M	V	L	V	N	Y	V	I	F	F	K	A	H	W	E	K	P	F	D	T	F	N	T	G	E	E	D	F	F	V	D	E	K	T	T	V	R	V	N	
UniRef90_P70458	H	V	M	I	V	V	N	Y	I	F	F	K	A	K	W	Q	T	A	F	S	E	T	N	T	H	K	E	E	D	F	H	V	T	K	R	T	T	Q	V	P		
UniRef90_UPI0002746F94	A	L	L	V	L	V	N	Y	I	F	F	K	G	T	W	T	Q	P	F	D	L	A	S	T	R	E	E	N	F	Y	V	D	E	T	T	V	V	K	V	P		
UniRef90_UPI000333B336	T	A	M	V	L	V	N	H	I	F	F	K	A	N	W	T	K	P	F	N	P	A	D	T	H	K	F	P	F	L	V	D	K	Q	T	T	V	R	V	P		
UniRef90_S9YC53	T	V	F	A	L	V	N	Y	I	F	F	D	G	K	W	E	K	P	F	D	A	E	R	T	T	E	E	D	F	H	V	D	A	E	T	T	V	T	V	P		
UniRef90_G3WB15	T	M	L	I	L	I	N	Y	I	F	F	K	G	S	W	A	K	P	F	N	P	N	D	T	K	M	K	F	Y	T	S	K	N	I	S	V	D	V	L			
UniRef90_H6SWK9	A	T	F	V	F	I	N	Y	I	F	F	R	G	K	W	E	N	P	F	N	K	E	R	T	Q	E	G	D	F	H	V	N	E	N	T	T	V	K	V	P		
UniRef90_G1KZ67	V	V	L	V	I	V	N	Y	V	I	F	L	K	G	K	W	E	K	P	F	N	Y	E	F	T	R	E	G	D	F	F	V	D	E	Q	T	T	V	K	V	P	
UniRef90_UPI00027403DF	T	K	L	V	L	V	N	A	I	F	F	K	G	N	W	Q	N	Q	F	L	K	E	A	T	A	N	V	P	F	R	L	N	K	K	D	T	K	T	V	K	P	
UniRef90_F7GA13	T	M	M	V	L	V	N	Y	I	F	F	K	A	K	W	K	T	P	F	D	I	R	E	T	F	M	S	K	F	Y	F	G	N	L	M	W	V	K	V	P		
UniRef90_H2SLS0	T	A	M	V	L	I	N	Y	I	F	F	K	G	E	W	E	R	P	F	N	S	N	L	T	T	R	E	K	M	D	F	N	V	D	E	S	T	K	V	V	D	
UniRef90_UPI0003336601	T	V	M	L	L	T	N	Y	I	F	F	R	A	R	W	Q	R	E	F	D	P	K	E	T	T	R	E	E	D	F	F	L	S	S	N	K	T	V	K	V	P	
UniRef90_T1EG22	T	R	L	I	L	I	N	A	I	F	F	K	G	D	W	N	E	K	F	N	I	K	D	T	K	E	E	D	F	F	I	S	S	K	T	N	K	V	E	M	P	
UniRef90_Q25B53	T	M	L	V	L	V	N	A	I	F	F	K	G	S	W	E	R	K	F	E	E	S	R	T	R	L	G	T	F	H	V	S	S	R	D	E	K	V	E	P		
UniRef90_UPI00045DDD48	T	R	L	V	L	A	N	A	I	F	F	K	G	R	W	N	E	F	N	K	T	Y	T	R	K	M	P	F	K	I	N	K	K	K	Q	K	P	V	Q	P		
UniRef90_UPI000462A6A7	T	L	M	V	L	V	N	Y	I	F	L	K	A	Y	W	E	R	P	F	S	A	A	S	T	Q	E	D	D	F	F	V	D	E	Q	T	K	V	K	V	P		
UniRef90_V8NDI7	T	V	M	V	L	V	N	Y	I	F	F	K	A	S	W	E	K	P	F	D	T	R	L	T	R	K	K	N	F	F	V	D	A	N	T	T	V	E	I	D		
UniRef90_I3N4Z0	A	R	L	V	L	V	N	A	I	F	F	K	G	T	W	N	E	P	F	V	K	S	C	T	C	E	M	F	K	I	N	Q	K	E	T	V	V	Q	P	P		
UniRef90_M3YYL6	T	M	L	V	L	V	N	A	I	F	F	K	G	Q	W	D	N	K	F	D	K	R	N	T	V	E	K	E	F	W	L	N	K	D	T	S	K	T	P	V	Q	
UniRef90_UPI0002C44862	T	K	L	V	L	V	N	A	I	F	F	K	G	K	W	E	K	P	F	D	K	N	Y	T	R	R	M	P	F	K	I	N	Q	N	D	K	K	T	V	Q	S	
UniRef90_T1G677	T	K	L	V	L	V	N	A	I	F	F	K	G	S	W	D	I	P	F	D	E	S	N	T	K	E	D	K	F	Y	I	S	E	N	H	T	T	Q	I	V	S	
UniRef90_P61939	I	I	M	I	L	V	N	Y	I	H	F	R	A	Q	W	A	N	P	F	R	V	S	K	T	E	E	S	N	F	S	V	D	K	S	T	T	V	Q	V	P		
UniRef90_UPI00038EA6A3	C	R	L	V	L	I	N	A	V	I	F	F	K	G	R	W	E	K	F	R	E	Y	R	T	R	T	M	P	F	K	I	S	Q	K	E	Q	K	P	V	Q		
UniRef90_UPI00022F4933	M	R	M	V	L	I	N	Y	I																																	

QUERY	M	M	K	R	L	G	M	F	N	I	Q	H	C	K	K	L	S	S	W	V	L	L	M	K	Y	L	G	N	A	T	A	F	F	L	P	D	E	G	K			
UniRef90_P17475	M	M	N	R	L	G	M	F	D	M	H	Y	C	S	T	L	S	S	W	V	L	L	M	M	D	Y	L	G	N	A	T	A	I	F	F	L	P	D	D	E	G	K
UniRef90_O54761	M	M	N	R	L	G	M	F	E	V	H	Y	C	S	T	L	A	S	W	V	L	L	Q	M	D	Y	L	G	N	A	T	A	I	F	F	L	P	D	D	E	G	K
UniRef90_UPI0003340CFE	M	M	S	R	L	G	M	F	N	V	H	Y	H	T	E	L	S	S	W	V	L	L	L	M	E	Y	L	G	N	A	T	A	I	F	F	L	P	D	E	Q	G	K
UniRef90_K7FUC4	M	M	T	R	D	G	R	Y	N	S	Y	H	D	K	E	L	S	S	Q	L	V	L	E	Y	K	G	N	A	T	A	L	F	F	I	L	P	D	E	G	G	K	
UniRef90_UPI0003F0D502	M	M	H	R	L	G	M	F	N	I	H	R	Q	D	E	L	S	S	C	W	V	L	L	M	D	Y	V	G	N	A	T	A	V	F	I	L	P	D	S	G	K	
UniRef90_P34955	M	M	N	R	L	G	M	F	D	L	H	Y	C	D	K	L	A	S	W	V	L	L	L	D	Y	V	G	N	A	T	A	V	F	I	L	P	D	L	G	K		
UniRef90_P38029	M	M	H	R	L	S	S	F	D	V	Y	Q	S	D	T	L	S	S	W	V	L	L	L	D	Y	V	A	G	N	A	T	A	F	F	I	L	P	D	Q	G	K	
UniRef90_UPI000443AF3B	M	M	N	R	L	G	M	F	Q	L	H	Y	C	D	T	L	S	G	W	V	L	L	Q	M	P	Y	L	G	N	A	T	A	M	F	I	L	P	D	Q	G	K	
UniRef90_M7B3E7	M	M	Y	R	K	G	S	Y	K	H	H	Y	D	K	E	L	S	S	C	W	V	L	L	Q	I	P	Y	S	G	K	A	V	A	L	F	I	P	D	E	G	K	
UniRef90_L8YAZ3	M	M	K	R	L	G	M	F	I	Q	H	C	Y	D	T	L	S	S	W	V	L	L	M	D	Y	V	G	N	A	T	A	F	F	I	L	M	P	D	E	G	K	
UniRef90_UPI0003C10B4B	M	M	T	R	T	S	F	F	E	A	Q	Y	E	K	N	I	S	A	T	I	L	L	K	L	P	Y	K	G	N	A	T	A	M	L	F	I	P	D	E	G	K	
UniRef90_P22355	M	M	K	R	E	G	K	Y	K	A	F	H	C	E	S	T	I	Q	S	W	V	L	L	L	D	Y	E	G	N	A	T	A	L	F	I	L	P	E	E	G	K	
UniRef90_Q60552	M	M	H	K	D	L	T	T	Y	F	R	D	E	E	L	S	S	S	Y	V	V	E	M	R	Y	R	G	N	V	S	A	M	F	I	L	P	D	E	K	G	R	
UniRef90_F7BFU3	M	M	H	R	N	G	M	Y	N	V	A	F	D	E	K	L	G	C	T	V	V	V	Q	I	P	Y	K	G	N	A	T	A	L	F	I	L	P	D	E	G	K	
UniRef90_UPI0003992B0D	M	M	H	A	Y	K	Y	F	N	I	H	R	D	E	K	L	S	C	W	V	V	E	I	P	Y	K	G	K	A	T	A	L	F	I	V	L	P	D	E	G	A	
UniRef90_UPI000334661E	M	M	S	H	G	G	M	Y	E	V	G	R	D	E	K	L	A	C	T	V	L	E	M	P	Y	Q	G	N	I	T	A	T	F	I	L	P	D	E	G	K		
UniRef90_S9WT39	M	M	F	H	G	G	M	Y	E	V	G	H	C	D	Q	L	S	C	T	V	L	E	M	P	Y	Q	G	N	I	T	A	I	F	I	V	L	P					

QUERY	L	Q	H	L	E	N	E	L	T	H	D	I	I	T	K	F	L	E	N	E	D	R	R	S	A	S	L	H	L	P	K	L	S	I	T	G	T	Y	D	N	L		
UniRef90_P17475	M	Q	H	L	E	N	Q	T	L	T	K	D	L	I	T	S	R	F	L	L	N	R	Q	T	S	S	A	L	L	Y	F	P	K	L	S	I	T	G	T	Y	D	N	L
UniRef90_O54761	L	Q	H	L	E	D	T	L	T	K	E	L	L	A	K	T	S	R	F	L	K	N	D	R	S	S	V	N	L	H	F	P	K	L	S	I	T	G	T	Y	D	N	L
UniRef90_UPI0003340CFE	L	R	Q	V	E	D	D	Q	L	T	K	E	L	L	S	T	F	L	E	D	R	Y	P	S	S	S	A	S	L	H	F	P	K	L	S	I	T	G	T	Y	D	N	L
UniRef90_K7FUC4	M	K	Q	V	E	D	A	L	T	K	E	T	V	A	K	W	I	E	S	L	K	K	R	S	R	I	E	L	Y	I	P	K	F	S	I	T	G	T	Y	D	N	L	
UniRef90_UPI0003F0D502	M	Q	Q	V	E	D	D	K	L	T	K	E	L	L	A	K	F	L	E	K	R	N	R	S	S	A	S	L	H	F	P	K	L	S	I	T	G	T	Y	D	N	L	
UniRef90_P34955	L	Q	Q	L	E	D	D	K	L	N	N	E	L	L	A	K	F	L	E	K	K	Y	S	S	A	S	A	N	L	H	L	P	K	L	S	I	T	G	T	Y	D	N	L
UniRef90_P38029	L	Q	H	L	E	D	T	L	T	K	G	I	L	A	R	F	L	E	G	N	R	H	S	S	S	F	V	N	V	H	L	P	K	L	S	I	T	G	T	Y	D	N	L
UniRef90_UPI000443AF3B	M	R	H	L	E	D	T	L	S	P	E	L	L	A	K	F	L	D	K	R	G	A	S	T	N	V	Y	F	P	K	T	S	I	T	G	T	Y	D	N	L			
UniRef90_M7B3E7	M	K	E	V	E	K	A	L	M	N	K	T	L	S	K	W	K	A	F	K	E	R	T	I	Y	L	N	L	H	L	P	K	F	S	I	T	G	T	Y	D	N	L	
UniRef90_L8YAZ3	M	K	H	M	E	R	V	M	N	K	Q	I	L	S	K	F	L	E	N	R	H	T	R	S	A	N	L	Q	F	P	K	F	T	S	I	T	G	T	Y	D	N	L	
UniRef90_UPI0003C10B4B	M	E	K	V	E	K	T	L	T	S	H	K	V	L	M	K	W	V	F	N	K	E	H	N	F	I	T	N	L	H	L	P	K	F	S	I	T	G	T	Y	D	N	L
UniRef90_P22325	M	Q	H	L	E	E	T	L	T	P	E	L	L	I	F	K	F	A	R	K	T	E	R	M	F	A	N	L	N	L	P	K	L	S	I	T	G	T	Y	D	N	L	
UniRef90_Q60552	M	Q	Q	L	E	S	S	L	Q	P	E	T	R	R	W	K	D	S	L	R	P	R	M	I	H	E	L	Y	V	P	K	F	S	I	T	G	T	Y	D	N	L		
UniRef90_F7BFU3	L	R	Q	V	E	E	A	L	E	K	A	V	V	K	S	W	K	L	F	R	K	R	F	V	H	L	T	D	L	P	K	L	S	I	T	G	T	Y	D	N	L		
UniRef90_UPI0003992B0D	M	K	Q	V	E	D	A	L	K	E	T	V	S	N	W	M	Q	S	L	K	K	R	I	Y	L	T	D	L	P	K	F	S	I	T	G	T	Y	D	N	L			
UniRef90_UPI000334661E	M	K	T	V	E	K	A	L	K	T	D	T	L	A	R	W	K	T	V	I	T	R	R	V	A	D	V	S	M	P	K	F	S	I	T	G	T	Y	D	N	L		
UniRef90_S9WT39	M	K	N	V	E	E	A	L	G	L	D	T	F	F	R	W	K	E	L	L	S	R	R	V	V	D	V	F	M	P	K	L	S	I	T	G	T	Y	D	N	L		
UniRef90_UPI0004422E40	L	Q	H	L	E	D	Q	L	S	K	G	L	L	A	N	T	S	R	A	P	W	E	R	S	A	N	L	H	L	P	K	L	S	I	T	G	T	Y	D	N	L		
UniRef90_S9X216	M	G	Q	V	E	S	G	L	K	E	K	T	L	R	K	W	L	K	L	S	V	K	R	Q	L	E	L	Y	L	P	K	F	S	I	T	G	T	Y	D	N	L		
UniRef90_H0XI50	M	R	Q	V	E	Q	A	L	S	A	Q	R	L	R	K	W	R	H	S	L	Q	K	R	W	L	E	V	F	L	P	K	F	S	I	T	G	T	Y	D	N	L		
UniRef90_UPI00027F8EB0	M	E	E	V	E	A	M	L	P	K	T	K	R	W	R	D	S	L	K	T	R	W	I	D	E	L	F	L	P	K	F	S	I	T	G	T	Y	D	N	L			
UniRef90_F7H1R0	L	K	D	L	E	E	D	L	Q	V	D	I	F	S	R	W	K	T	L	L	S	R	R	V	V	D	V	S	V	P	R	L	Y	I	T	G	T	Y	D	N	L		
UniRef90_G1NKH9	M	N	H	V	E	D	A	L	L	Q	D	T	V	S	N	W	S	Q	S	F	E	K	R	S	V	D	L	Y	L	P	K	L	S	I	T	G	T	Y	D	N	L		
UniRef90_UPI0003ABC5ED	M	Q	Q	V	E	N	G	L	S	E	K	T	L	R	K	W	L	K	M	F	K	K	R	Q	L	E	L	Y	L	P	K	F	S	I	T	G	T	Y	D	N	L		
UniRef90_UPI00039455D5	L	K	Q	L	E	H	A	L	T	S	K	N	T	V	S	K	W	E	R	S	L	Q	R	W	R	M	E	L	H	L	P	K	L	S	I	T	G	T	Y	D	N	L	
UniRef90_P05544	M	Q	Q	V	E	S	S	L	Q	P	E	T	K	K	W	K	D	S	L	I	P	R	I	I	N	D	L	R	M	P	K	F	S	I	T	G	T	Y	D	N	L		
UniRef90_UPI00032ADD2D	L	K	H	L	E	N	G	L	H	V	D	I	F	A	R	W	K	S	L	M	T	H	R	V	V	D	V	S	V	P	K	L	R	I	T	G	T	Y	D	N	L		
UniRef90_F6SC37	L	K	N	V	E	E	G	L	N	K	D	K	L	I	Q	M	S	Q	S	L	K	L	S	S	V	D	V	Y	C	L	P	K	F	S	I	T	G	T	Y	D	N	L	
UniRef90_Q7ZZW1	M	E	H	V	E	A	F	I	N	K	D	Y	L	K	H	V	H	E	L	F	R	T	N	V	D	I	F	M	P	K	F	S	I	T	G	T	Y	D	N	L			
UniRef90_UPI00046B5856	M	A	Q	V	E	S	G	L	S	G	A	T	L	R	W	L	T	M	P	L	T	R	Q	L	D	I	Y	L	P	K	F	S	I	T	G	T	Y	D	N	L			
UniRef90_UPI0003D0CAEE	M	K	E	V	E	D	A	L	L	Q	K	A	A	S	K	W	E	N	S	L	R	N	R	K	I	H	L	Y	L	P	K	F	S	I	T	G	T	Y	D	N	L		
UniRef90_P70458	M	K	Q	V	E	D	G	L	D	E	R	T	L	R	N	W	L	K	M	F	T	K	R	L	D	L	Y	L	P	K	F	S	I	T	G	T	Y	D	N	L			
UniRef90_UPI0002746F94	M	N	T	V	I	A	A	L	S	R	D	T	I	N	R	W	S	A	G	L	T	S	S	Q	V	D	L	Y	I	P	K	V	T	I	T	G	T	Y	D	N	L		
UniRef90_UPI000333B336	M	R	Q	L	E	E	T	L	S	A	R	V	V	R	W	S	H	S	L	R	K	R	W	L	E	V	F	L	P	K	F	S	I	T	G	T	Y	D	N	L			
UniRef90_S9YC53	L	Q	H	L	E	D	T	L	T	K	E	L	L	S	K	F	L	E	K	R	Y	P	S	A	N	L	R	F	P	K	L	S	I	T	G	T	Y	D	N	L			
UniRef90_G3WB15	M	D	Q	V	V	A	A	L	K	R	D	E	L	S	R	W	S	H	L	L	Q	D	R	S	V	N	L	Y	I	P	K	F	S	I	T	G	T	Y	D	N	L		
UniRef90_H6SWK9	F	S	E	V	E	Q	N	L	H	K	E	S	I	V	K	W	K	N	A	L	H	E	G	W	V	D	L	S	L	P	K	F	S	I	T	G	T	Y	D	N	L		
UniRef90_G1KZ67	L	K	P	V	E	D	A	L	K	N	D	I	K	F	L	M	D	S	S	F	S	R	K	L	H	L	T	L	P	R	F	S	I	T	G	T	Y	D	N	L			
UniRef90_UPI00027403DF	R	D	D	I	E	Q	L	T	W	E	N	L	H	K	W	T	K	P	E	H	L	A	V	T	E	V	L	K	V	P	R	F	K	L	S	I	T	G	T	Y	D	N	L
UniRef90_F7GA13	M	E	R	V	E	A	M	L	P	E	T	L	K	R	W	R	D	S	M	K	I	R	W	V	A	L	F	L	P	K	F	S	I	T	G	T	Y	D	N	L			
UniRef90_H2SLS0	M	K	H	V	E	N	S	I	S	K	E	Q	L	H	W	F	N	S	L	F	R	M	S	V	E	L	M	L	P	K	F	S	I	T	G	T	Y	D	N	L			
UniRef90_UPI0003336601	M	R	Q	L	Q	N	L	Q	A	D	I	F	G	R	W	K	I	M	T	K	R	V	N	V	N	R	V	P	R	H	L	P	K	F	S	I	T	G	T	Y	D	N	L
UniRef90_T1EG22	L	S	D	V	E	K	K	L	N	G	D	E	L	F	N	V	S	Q	H	L	Y	S	R	E	V	Q	L	W	L	P	R	F	K	L	S	I	T	G	T	Y	D	N	L
UniRef90_Q25B53	D	S	T	I	E	T	S	L	T	P	D	L	R	R	W	Q	K	S	M	D	E	V	S	T	M	V	Q	I	P	K	F	K	L	V	H	D	F	V	L				
UniRef90_UPI00045DDD48	V	D	T	V	E	K	R	L	T	F	E	K	F	V	A	W	T	K	P	D	C	M	S	T	E	V	E	V	P	R	F	T	I	A	S	K	Y	D	N	L			
UniRef90_UPI000462A6A7	L	K	L	V	E	D	A	L	G	K	D	V	L	L	K	W	K	S	M	W	G	Q	R	I	D	L	Y	L	P	R	F	S	I	T	G	T	Y	D	N	L			
UniRef90_V8NDI7	L	E	R	V	E	A	A	L	V	T	E	T	L	S	K	W	T	S	L	T	Y	K	N	I	N	L	H	F	P	K	F	T	I	A	S	K	Y	D	N	L			
UniRef90_I3N4Z0	V	D	S	V	E	N	N	L	T	F	E	K	F	I	A	W	T	E	A	A	Q	N	T	E	V	E	L	P	R	F	K	L	S	I	T	G	T	Y	D	N	L		
UniRef90_M3YYL6	L	Q	K	L	E	D	Q	L	T	A	E	K	L	T	E	W	T	S	S	Q	N	M	H	D	N	Y	V	Y	L	P	R	F	K	V	E	E	T	Y	D	N	L		
UniRef90_UPI0002C44862	T	D	L	T	E	K	E	L	T	Y	E	K	F	K	A	W	T	N	P	E	E	M	T	T	V	Q	V	F	L	P	R	F	K	L	S	I	T	G	T	Y	D	N	L
UniRef90_T1G677	L	E	E	V	E	Q	K	L	T	G	T	L	Q	N	I	S	N	H	L	Y	T	K	E	V	N	V	W	L	P	R	F	K	L	S	I	T	G	T	Y	D	N	L	
UniRef90_P61939	M	E	W	V	E	A	A	M	S	S	K	T	L	K	K	W	N	Y	L	L	Q	K	G	W	V	E	L	F	V	P	K	F	S	I	T	G	T	Y	D	N	L		
UniRef90_UPI00038EA6A3	V	D	L	S	S	V	G	K	T	L	T	F	G	K	Q	S	W	H	M	K	K	T	K																				

QUERY	K	T	S	V	L	G	S	Q	L	G	I	T	K	V	F	S	N	G	A	D	L	S	G	V	T	E	A	P	L	K	L	S	K	A	V	H	K	A	V	L	T				
UniRef90_P17475	K	T	S	V	L	G	S	Q	L	G	I	T	K	V	F	S	N	G	A	D	L	S	G	V	T	E	A	P	L	K	L	S	K	A	V	H	K	A	V	L	T				
UniRef90_O54761	K	P	V	L	L	T	R	L	S	T	R	L	T	R	V	F	S	N	Y	K	A	N	L	S	G	I	T	E	D	P	P	L	K	L	S	Q	A	V	H	K	A	V	L	T	
UniRef90_UPI0003340CFE	V	E	I	M	G	K	L	G	M	T	H	V	F	F	S	N	A	N	L	S	G	I	T	E	T	E	D	M	A	P	P	L	K	L	S	K	A	V	H	K	A	M	L	T	
UniRef90_K7FUC4	E	E	I	F	G	K	R	M	L	G	I	T	A	V	F	F	S	H	A	D	L	S	G	I	T	E	D	T	H	P	P	L	K	L	S	K	A	V	H	K	A	M	L	T	
UniRef90_UPI0003F0D502	K	E	L	L	G	D	V	L	G	I	T	E	V	F	F	S	R	D	A	D	L	S	G	I	T	E	D	T	L	P	P	L	K	L	S	K	A	V	H	K	A	M	L	T	
UniRef90_P34955	K	S	V	L	G	D	V	L	G	I	T	E	V	F	F	S	R	D	A	D	L	S	G	I	T	E	T	E	K	Q	P	P	L	K	L	S	K	A	V	H	K	A	M	L	T
UniRef90_P38029	T	S	L	L	P	E	L	G	I	T	R	V	F	F	S	N	G	A	D	L	S	G	I	T	E	T	E	D	A	V	P	P	L	K	L	S	K	A	V	H	K	A	M	L	T
UniRef90_UPI000443AF3B	K	V	T	L	G	K	L	G	I	T	R	V	F	F	S	N	G	A	D	L	S	G	I	T	E	T	E	D	A	S	P	P	L	K	L	S	K	A	V	H	K	A	M	L	T
UniRef90_M7B3E7	K	E	I	F	Q	K	M	G	V	I	T	D	V	F	F	S	N	G	A	D	L	S	G	I	T	E	T	E	K	S	P	P	L	K	L	S	K	V	I	H	K	A	M	L	T
UniRef90_L8YAZ3	K	E	V	L	S	D	M	G	I	T	K	V	F	F	S	N	G	A	D	L	S	G	I	T	E	T	E	D	A	S	P	P	L	K	L	S	K	A	V	H	K	A	M	L	T
UniRef90_UPI0003C10B4B	K	E	I	L	M	E	M	G	I	T	D	V	F	F	S	N	G	A	D	L	S	G	I	T	E	T	E	D	S	P	P	L	K	L	S	K	A	V	H	K	A	M	L	T	
UniRef90_P22355	K	E	V	L	G	H	L	G	I	T	N	V	F	F	S	N	G	A	D	L	S	G	I	T	E	T	E	D	I	P	P	L	K	L	S	K	G	L	H	K	A	M	L	T	
UniRef90_Q60552	E	G	I	L	S	Q	L	G	I	K	E	V	F	F	S	N	G	A	D	L	S	G	I	T	E	T	E	D	G	K	P	P	L	K	L	S	K	V	V	H	K	A	M	L	T
UniRef90_F7BFU3	V	K	E	L	S	K	L	G	V	I	T	D	V	F	F	S	N	G	A	D	L	S	G	I	T	E	V	D	V	T	P	P	L	K	L	S	K	A	V	H	K	V	L	S	A
UniRef90_UPI0003992B0D	K	S	L	F	E	K	M	G	V	I	T	E	V	F	F	S	N	G	A	D	L	S	G	I	T	E	A	G	K	S	L	L	K	L	S	K	A	V	H	K	A	M	V	A	
UniRef90_UPI000334661E	K	K	M	L	S	Y	L	G	V	I	T	K	V	F	F	S	H	G	D	L	T	R	I	S	E	A	G	K	S	H	S	L	K	L	S	E	A	V	H	H	K	A	T	M</	

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QUERY	I	D	E	K	G	T	E	A	A	G	A	M	F	L	E	A	I	P	M
UniRef90_P17475	I	L	D	E	R	G	T	E	A	A	G	A	T	V	V	E	A	V	P
UniRef90_O54761	I	L	D	E	R	G	T	E	A	A	G	A	T	F	L	E	A	M	P
UniRef90_UPI0003340CFE	I	L	D	E	R	G	T	E	A	A	G	A	T	V	L	E	A	P	M
UniRef90_K7FUC4	I	V	H	E	N	G	T	E	A	A	A	V	T	V	A	E	M	V	P
UniRef90_UPI0003F0D502	I	V	D	E	R	G	T	E	A	A	G	A	S	F	L	E	A	I	P
UniRef90_P34955	I	L	D	E	K	G	T	E	A	V	G	S	T	F	L	E	A	I	P
UniRef90_P38029	I	L	D	E	K	G	T	E	A	A	G	T	T	M	W	E	I	M	P
UniRef90_UPI000443AF3B	M	D	E	T	G	T	E	A	A	G	A	T	I	V	E	M	V	P	
UniRef90_M7B3E7	I	V	H	E	N	G	T	E	A	A	G	V	T	V	V	E	I		
UniRef90_L8YAZ3	I	V	D	E	K	G	T	E	A	A	G	A	T	V	L	E	A	I	P
UniRef90_UPI0003C10B4B	I	V	G	E	K	G	T	E	A	A	G	T	T	H	V	G	I	P	L
UniRef90_P22325	I	D	E	K	G	T	E	A	A	G	A	T	M	M	F	E	F	M	P
UniRef90_Q60552	I	V	G	E	T	G	T	E	A	A	A	T	G	L	R	M			
UniRef90_F7BFU3	I	L	D	E	T	G	T	E	A	A	G	V	T	V	M	E	I	V	P
UniRef90_UPI0003992B0D	V	S	E	N	G	T	E	A	A	V	V	T	V	I	E	M	V		
UniRef90_UPI000334661E	M	D	E	K	G	T	E	A	A	A	G	S	G	A	Q	T	L	P	M
UniRef90_S9WT39	M	D	E	K	G	T	E	G	A	A	G	S	G	A	Q	T	L	P	M
UniRef90_UPI0004422E40	I	D	E	K	G	T	E	A	T	G	A	T	I	L	E	A	I	P	M
UniRef90_S9X216	I	V	D	E	S	G	T	K	A	A	A	T	G	T	I	F	M		
UniRef90_H0XI50	V	G	E	E	G	T	E	A	V	A	A	T	A	T	K	L	V		
UniRef90_UPI00027F8EB0	V	A	E	E	G	T	E	A	S	A	A	T	G	V	R	I	M	L	L
UniRef90_F7H1R0	M	D	E	R	G	T	E	G	A	A	G	T	G	A	Q	T	L	P	M
UniRef90_G1NKH9	I	N	E	N	G	T	E	A	A	A	V	T	M	V	E	M			
UniRef90_UPI0003ABC5ED	I	V	D	E	S	G	T	R	A	A	A	T	G	T	I	F	M		
UniRef90_UPI00039455D5	I	H	E	N	G	T	E	A	A	A	V	S	S	I	D	F	L	P	M
UniRef90_P05544	V	D	E	T	G	T	E	A	T	A	A	T	G	V	A	T	V		
UniRef90_UPI00032ADD2D	M	D	E	K	G	T	E	G	A	A	G	S	G	A	Q	T	L	P	M
UniRef90_F6SC37	M	D	E	K	G	A	E	A	A	G	G	T	G	V	E	T	L	P	M
UniRef90_Q7ZZW1	V	D	E	K	G	T	E	A	A	A	V	T	T	I	E	I	M	P	M
UniRef90_UPI00046B5856	V	D	E	S	G	T	E	A	A	A	A	S	G	A	V	F			
UniRef90_UPI0003D0CAEE	V	H	E	N	G	T	E	A	A	G	V	T	V	T	E	F			
UniRef90_P70458	V	E	E	S	G	T	T	A	A	A	I	T	G	A	I	F			
UniRef90_UPI0002746F94	L	N	E	E	G	V	D	T	A	G	S	T	G	V					
UniRef90_UPI00033B336	I	G	E	E	G	T	E	A	V	A	A	T	A	T	K	L	I		
UniRef90_S9YC53	I	D	E	K	G	T	E	A	A										

	1		10		20		30		40																																	
UniRef90_H2UBY8		I	C	K	A	N	T	S	F	S	L	A	L	F	R	K	L	S	D	N	S	T	T	A	N	I	F	Y	S	P	F	S	I	S	S	A	S					
UniRef90_UPI0003F07447		K	I	V	P	G	N	T	D	F	A	L	R	L	H	L	L	S	E	S	N	P	T	G	K	N	I	F	F	S	P	F	S	I	S	S	A	S				
UniRef90_UPI00042AE06F		M	N	T	L	S	S	A	N	G	N	F	A	L	H	L	L	C	S	E	N	P	T	G	K	N	I	F	F	S	P	F	S	I	S	S	A	S				
UniRef90_UPI0003FOA2B3		M	N	S	Q	L	S	S	A	N	N	H	F	T	L	H	L	L	N	E	K	N	P	T	G	N	I	F	F	S	P	F	S	I	S	S	A	S				
UniRef90_UPI000329005C		M	N	S	L	S	S	D	A	S	T	H	F	G	L	D	L	F	Q	E	L	R	T	L	K	K	G	N	I	F	F	S	P	V	N	I	F	S	S			
UniRef90_HOVAC9	P	A	Y	H	K	V	A	P	T	V	T	S	F	A	L	R	L	F	K	Q	L	A	A	R	T	E	R	N	I	F	F	S	P	V	S	I	F	S	S			
UniRef90_UPI0003D097A6		M	A	S	L	X	E	A	N	A	E	F	C	L	D	F	F	K	E	V	K	K	T	E	R	N	E	N	I	F	F	S	P	V	S	I	F	S	S			
UniRef90_B3RFC4		M	A	S	H	L	S	E	A	N	G	T	F	A	I	N	L	L	K	M	L	G	E	E	D	A	R	N	I	F	F	S	P	L	S	I	F	S	S			
UniRef90_P05619		M	E	Q	L	S	T	A	N	T	H	F	A	V	L	N	L	F	R	A	L	N	E	S	E	D	P	T	G	N	I	F	F	S	P	L	S	I	F	S	S	
UniRef90_E0UDK5	P	Q	Q	K	L	I	E	A	N	T	Q	F	G	L	N	L	F	Q	T	L	V	T	E	D	P	N	G	N	I	F	F	S	P	L	S	I	F	S	S			
UniRef90_W5N5S5	N	P	T	I	M	D	L	S	T	K	N	T	D	F	A	M	N	L	Y	R	K	L	A	S	T	H	H	D	D	N	I	F	F	S	P	L	C	M	S	V		
UniRef90_UPI000387159F		M	E	S	L	S	V	S	T	N	S	F	T	L	D	L	Y	R	K	L	N	E	T	S	R	G	S	G	N	I	F	F	S	P	W	S	I	A	T	S		
UniRef90_A0A023FM49	M	T	A	N	P	L	G	D	S	L	L	N	F	S	I	D	L	Y	R	K	L	I	S	K	S	G	S	G	N	I	F	F	S	P	F	S	I	A	S	A		
UniRef90_UPI00038BF713		M	N	T	L	S	E	A	N	G	T	F	A	I	H	L	L	K	I	L	C	Q	N	N	P	S	K	N	I	F	F	S	P	V	S	I	F	S	S			
UniRef90_G3HBC5		M	A	S	L	I	N	T	D	F	A	F	S	L	Y	K	E	L	V	L	K	N	P	D	K	N	I	V	F	S	P	F	S	I	S	T	S	A	S			
UniRef90_UPI00042AD952		L	T	S	T	N	T	D	F	A	F	S	L	Y	K	E	L	V	L	K	N	P	D	K	N	I	V	F	S	P	F	S	I	S	T	S	A	S				
UniRef90_Q91WP6		L	A	S	I	N	T	D	F	A	F	S	L	Y	K	E	L	V	L	K	N	P	D	K	N	I	V	F	S	P	L	S	I	F	S	S	A	S				
UniRef90_UPI00038EA0A7		M	N	T	L	S	E	A	N	G	A	F	A	I	R	L	L	K	L	G	Q	N	N	P	E	R	N	I	F	F	S	P	L	S	I	F	S	S				
UniRef90_U6DBM3		R	L	A	S	A	N	T	D	F	A	I	S	L	Y	K	Q	L	A	S	R	T	P	N	K	N	I	V	F	S	P	L	S	I	F	S	S	I				
UniRef90_H0YV20	M	C	S	L	S	A	A	N	A	K	F	C	L	D	F	F	R	E	L	N	K	R	K	R	N	E	N	I	F	F	S	P	L	S	I	F	S	A	S			
UniRef90_UPI00032B1083	M	D	C	L	A	T	S	I	N	Q	F	A	L	D	G	K	K	L	A	E	S	A	E	G	N	I	F	F	S	P	W	G	I	S	T	S	A	S				
UniRef90_UPI000333D046	M	D	S	L	A	T	S	I	N	Q	F	A	L	D	G	K	K	L	A	E	S	A	E	G	N	I	F	F	S	P	W	G	I	S	T	S	A	S				
UniRef90_X0ZTF9	V	N	K	T	I	N	S	N	Q	F	A	F	D	L	Y	L	K	L	K	D	E	Y	N	E	S	N	I	F	F	S	P	Y	S	I	F	S	V					
UniRef90_UPI00022F48BC	M	H	L	F	A	E	A	T	T	K	F	T	L	E	L	Y	W	Q	L	R	E	T	E	K	N	I	F	F	S	P	T	S	I	F	S	I	M	A	S			
UniRef90_H0XN71	N	A	T	L	Y	K	M	S	S	I	N	A	D	F	A	F	N	L	Y	R	R	L	T	L	E	T	P	D	R	N	I	F	F	S	P	V	S	I	A	S		
UniRef90_UPI0003833AA0		M	G	S	I	S	A	N	A	E	F	A	F	D	V	F	K	E	L	K	V	Y	H	A	N	D	N	I	F	F	S	P	L	S	I	F	S	I	A	S		
UniRef90_G3X118	M	N	S	L	S	T	A	N	V	E	F	C	L	D	V	F	K	E	L	S	S	K	N	H	V	A	D	N	I	F	F	S	P	L	S	I	F	S	I	L	Y	
UniRef90_H0UTW7		E	L	S	K	A	N	S	R	F	A	T	T	M	Y	Q	H	L	S	A	S	K	N	E	N	D	N	I	F	F	S	P	L	S	I	F	S	I	S	T		
UniRef90_UPI0002654206		Q	L	S	S	A	N	T	R	F	A	L	H	L	Y	Q	T	L	Q	D	E	Q	R	G	T	N	I	F	F	S	P	L	S	I	F	S	I	S	T			
UniRef90_UPI000388AABF	M	G	S	L	S	Q	A	I	N	E	L	G	L	D	L	Y	N	E	L	N	K	N	E	A	D	K	N	I	F	F	S	P	M	S	I	F	S	S	T			
UniRef90_Q5BIR5	M	D	A	L	C	E	A	N	G	T	F	A	I	N	L	L	K	M	L	G	E	E	D	H	L	R	N	I	F	F	S	P	L	S	I	F	S	S	S			
UniRef90_UPI0002C443B1	M	D	T	L	S	E	A	N	G	T	F	A	I	N	L	L	K	K	L	G	E	N	N	S	K	N	M	F	I	S	P	M	S	I	F	S	S	S	S			
UniRef90_Q9Z2G2	M	H	L	F	A	E	A	T	T	K	F	T	L	E	L	Y	W	Q	L	R	E	S	D	N	I	F	F	S	P	L	S	I	F	S	I	M	A	T	S			
UniRef90_UPI000305607D		K	L	I	N	A	N	T	K	F	G	F	K	L	E	F	R	Q	L	R	E	S	D	N	I	F	F	S	P	L	S	I	F	S	I	F	S	S				
UniRef90_G1KCM4		L	V	N	S	N	F	D	F	A	F	K	F	F	R	E	V	S	S	N	S	R	R	K	N	I	V	F	S	P	M	C	I	S	S	S	S					
UniRef90_UPI0002C572D4	P	H	R	D	L	A	P	K	N	V	D	F	A	F	T	L	Y	R	H	V	A	S	A	P	G	K	N	I	F	F	S	P	V	S	I	F	S	I	S	M		
UniRef90_Q8UVS1	N	P	R	V	W	E	L	S	K	A	N	T	R	F	A	M	E	F	Y	K	Y	L	A	S	K	N	D	N	I	F	F	S	P	L	S	I	F	S	I	S		
UniRef90_UPI00036E3D6B		K	L	T	T	A	N	T	R	F	G	F	K	L	F	S	R	I	L	A	Q	E	G	D	K	N	I	F	F	S	P	A	S	I	F	S	I	A	I			
UniRef90_UPI000333C396	M	D	S	L	A	E	A	N	G	T	F	A	I	S	L	L	K	L	L	G	E	N	D	S	S	K	N	I	F	F	S	P	V	S	I	F	S	S	S			
UniRef90_Q5I0S8	M	E	N	L	S	S	A	C	T	H	F	S	F	D	L	F	R	K	I	L	N	E	N	S	A	T	G	N	I	F	F	S	P	I	S	I	F	S	S			
UniRef90_UPI0003F17D47	M	N	S	L	G	T	A	N	T	R	F	G	I	D	L	L	K	E	L	N	K	K	T	S	D	D	N	I	F	F	S	P	V	S	I	F	S	S				
UniRef90_V8P0N6																											I	Y	C	F	V	S	I	F	S	S						
UniRef90_G5E2E4																											L	V	F	S	P	V	S	I	F	S	I	T				
UniRef90_Q3M416		K	I	V	D	A	N	N	K	F	G	F	K	L	F	S	E	I	A	K	E	D	G	N	K	N	I	S	V	S	P	T	S	I	F	S	I	A	I			
UniRef90_C3PT36		M	D	S	L	V	T	S	I	N	Q	F	A	L	E	F	S	K	K	L	A	E	S	A	E	G	N	M	L	F	S	P	W	S	I	F	S	A	S			
UniRef90_UPI000334672C		A	S	R	T	S	A	G	I	T	D	L	G	F	S	R	Q	I	L	S	E	M	K	H	D	N	I	V	V	F	S	P	L	G	I	S	A	S				
UniRef90_UPI000398FA67		C	E	K	E	G	S	N	Y	A	D	F	V	F	R	F	Y	K	Q	V	I	S	K	E	T	D	K	N	I	F	F	S	P	M	S	I	F	S	A	S		
UniRef90_UPI0003957BD8	N	P	R	S	L	Q	R	T	A	D	F	T	A	N	F	G	F	N	L	Y	R	R	I	A	M	T	H	D	N	I	F	F	S	P	L	S	I	F	S	A	S	
UniRef90_W5U8V8		N	P	R	V	W	E	L	S	K	A	N	G	R	F	G	L	S	F	F	K	Q	L	S	K	K	S	E	D	A	N	I	F	F	S	P	L	S	I	F	S	S
UniRef90_UPI00022F3772		M	T	T	V	C	E	A	N	G	S	F	A	I	H	L	L	K	T	L	C	Q	N	N	P	S	K	N	I	F	F	S	P	V	S	I	F	S	S			
UniRef90_UPI00032B0AC4		M	S	S	F	S	K	A	H	T	Q	F	T	L	D	L	F	Q	Q	L	G	K	S	K	E	E	N	I	F	F	S	P	F	S	I	T	A	S				
UniRef90_E2R065		M	D	S	L	V	A	A	N	T	K	F	C	F	D	L	F	Q	E	I	S	K	D	D	H	K	N	I	F	F	S	P	F	C	L	S	I	F	S	A		
UniRef90_UPI0003F18DB3		Q	Q	L	S	E	D	T	S	N	L	G	F	S	L	L	R	K	I	S	M	K	H	E	G	N	I	V	F	S	P	L	G	L	S	I	F	S	L			
UniRef90_M7BWCO	N	P	R	T	L	Y	N	L	T	E	K	N	M	R	F	G	F	N	L	Y	R	K	I	A	L	K	H	D	N	I	F	F	S	P	L	S	I	F	S	M	F	
UniRef90_I3JLQ7		N	P	R	V	W	E	L	S	K	A	N	G	R	F	A	L	S	L	Y	K	Q	L	A	L	R	S	P	E	S	N	I	F	F	S	P	I	S	I	F	S	T
UniRef90_G1PX37		M	N	S	L	S	E	A	N	T	R	F	A	Y	D	L	Y	Q	L	F	R	K	S	T	K	E	N	I	F	F	S	P	L	S	I	F	S	I	T	S		
UniRef90_G3UB10		M	G	S	L	S	T	N	V	E	F	C	L	D	V	F	K	E	L	N	S																					

		50	60	70	80																																							
UniRef90_H2UBY8	A	L	A	M	V	L	G	A	R	G	N	T	A	A	Q	M	S	E	S	L	K	T	K	G	L	E	D	V	H	V	S	F	S	Q	L									
UniRef90_UPI0003F07447	A	L	A	M	L	S	L	G	T	R	A	D	T	A	Q	T	E	L	L	Q	V	L	G	F	N	L	T	E	I	P	E	S	S	I	V	H	Q	G	F	Q	H	L		
UniRef90_UPI00042AE06F	A	L	A	M	V	L	L	G	A	K	G	D	T	A	A	V	Q	M	S	Q	A	L	A	L	N	T	E	K	D															
UniRef90_UPI0003FOA2B3	A	A	A	L	V	L	A	G	A	K	G	N	S	A	A	Q	L	S	K	A	F	H	L						D	K	I	E	E	V	Q	C	L							
UniRef90_UPI000329005C	G	L	S	M	L	L	L	G	A	K	G	N	T	A	A	E	I	E	L	K	V	L	H	L	K	H	T	V	D	S	P	G	N	I	V	H	Q	Q	F	R	K	L		
UniRef90_HOVAC9	T	L	A	L	L	A	L	G	F	H	G	D	T	A	T	E	L	K	Q	G	L	G	F	N	L	T	E	T	P	S	A	D	I	V	H	R	S	Q	F	Q	S	L		
UniRef90_UPI0003D097A6	A	M	A	M	V	L	L	G	A	R	G	N	T	A	K	Q	M	E	K	V	L	H	F	D	E	V	E	C		E	D	G	V	H	S	Q	F	Q	S	L				
UniRef90_B3RFC4	A	L	A	M	V	L	M	G	A	R	G	D	T	A	S	Q	M	F	Q	A	L	C	L	R					E	E	D	A	V	H	P	G	F	Q	A	L				
UniRef90_P05619	A	L	A	M	I	F	L	G	T	R	G	N	T	A	A	Q	V	S	K	A	L	Y	F					D	T	V	E	D	I	H	S	R	F	Q	S	L				
UniRef90_E0UDK5	A	L	S	M	V	L	Q	G	T	D	G	K	T	Q	Q	Q	M	L	S	T	L	G	Y	E	N	L	N	L	K	Q	I	N	M	A	N	L								
UniRef90_W5N5S5	A	F	T	M	L	S	M	A	K	G	D	T	Y	N	Q	I	L	L	K	G	L	N	L	Q	L	Q	R	A	D	Q	A	D	I	L	P	E	L							
UniRef90_UPI000387159F	A	L	A	M	V	Y	L	G	A	K	G	D	T	A	T	Q	M	A	E	V	L	H	F	N	P	E	R	K	Q	A	E	N	I	H	S	G	F	K	G	L				
UniRef90_A0A023FM49	A	L	S	M	A	L	A	G	A	R	N	T	T	A	K	Q	L	T	D	V	L	H						V	N	S	D	N	I	H	K	H	F	S	G	F				
UniRef90_UPI00038BF713	A	L	A	M	V	L	L	G	A	K	G	D	T	A	V	Q	I	L	S	Q	A	L	G	L	N	T	E	K	D															
UniRef90_G3HBC5	A	L	A	V	L	S	L	G	A	S	S	N	T	L	N	E	I	L	E	G	L	K	F	N	L	T	E	T	P	E	A	A	I	H	R	Q	G	F	G	H	L			
UniRef90_UPI00042AD952	A	L	A	I	L	S	L	G	A	R	N	K	T	L	E	E	I	L	E	G	L	K	F	N	L	T	E	T	S	E	A	A	I	H	Q	G	F	G	H	L				
UniRef90_Q91WP6	A	L	A	V	M	S	L	G	A	K	G	N	T	L	E	E	I	L	E	G	L	K	F	N	L	T	E	T	S	E	A	A	I	H	Q	G	F	G	H	L				
UniRef90_UPI00038EA0A7	A	L	A	M	V	L	L	G	A	K	G	S	T	A	A	Q	I	V	L	E	A	L	A						N	T	E	D	G	I	H	S	Q	F	Q	S	L			
UniRef90_U6DBM3	A	L	A	F	L	S	L	G	A	Q	N	T	T	L	T	E	I	L	E	G	L	K	F	N	L	T	E	T	P	D	T	E	I	H	R	G	F	Q	H	L				
UniRef90_HOYV20	A	F	G	M	V	V	L	G	A	R	G	S	T	L	E	Q	I	E	K	H	L	F	S	C	L	K	C	E	E	D	E	G	V	H	S	Q	F	Q	A	L				
UniRef90_UPI00032B1083	C	L	A	M	V	Y	L	G	T	K	G	T	A	A	Q	M	A	Q	V	L	R	L	S	R	D	Q	D	N	K	C	P	I	L	H	S	G	F	Q	T	L				
UniRef90_UPI000333D046	A	L	A	M	V	Y	L	G	T	K	G	S	T	A	A	Q	M	A	Q	V	L	R	L	T	Q	D	H	N	F	K	S	C	M	C	S	G	F	Q	A	L				
UniRef90_X0ZTF9	A	L	G	M	T	Y	E	G	A	K	G	E	T	A	E	E	I	Q	S	V	F	Y	F	P					E	D	K	N	I	R	Q	S	S	F	A	K	I			
UniRef90_UPI00022F48BC	A	L	A	M	L	E	S	L	G	A	K	G	N	T	K	Q	Q	I	L	E	K	V	L	Q	F	N	C	H	D	E	K	S	E	S	V	H	H	Q	G	F	Q	L		
UniRef90_H0XN71	A	L	A	M	L	S	F	G	A	C	S	S	T	Q	T	Q	I	L	Q	V	L	G	F	N	L	T	D	T	P	E	A	E	I	H	Q	H	G	F	Q	H	L			
UniRef90_UPI0003833AA0	A	L	A	M	V	Y	M	G	A	R	D	N	T	E	Y	Q	M	E	K	A	L	H	F	Q	T	K	C	G	K	S	M	N	I	H	I	L	F	K	E	L				
UniRef90_G3X1I8	A	L	S	M	L	F	L	G	A	R	G	N	S	A	A	Q	M	G	K	V	L	H	F	S	Y	G	E	I	S	S	N	P	I	H	S	E	F	P	V	L				
UniRef90_H0UTW7	A	F	A	M	T	K	L	G	A	C	N	D	T	L	K	Q	L	M	E	V	F	K	F	D	T	I	S	E	K	T	S	D	Q	I	H	F	F	F	F	A	N			
UniRef90_UPI0002654206	A	L	A	M	T	Q	L	G	A	C	G	D	T	A	T	Q	I	A	D	V	F	R	F	N	Q	V	D	Q	D	Q	L	H	G											
UniRef90_UPI000388AABF	G	L	V	L	V	L	L	G	A	R	G	N	T	A	T	Q	M	Q	E	V	L	H	L	N	R	R	C	D	L	V	G	G												
UniRef90_Q5BIR5	V	L	T	M	V	L	M	G	A	K	G	N	T	A	A	Q	M	S	Q	A	L	C	L	N	R	S	G	D																
UniRef90_UPI0002C443B1	A	L	A	M	V	F	M	G	A	K	G	N	T	A	T	Q	I	S	Q	A	L	S	F	N	K	V	R	G	G	G	D	V	H	Q	G	I	Q	S	L					
UniRef90_Q9Z2G2	A	L	A	M	L	Q	L	G	A	K	G	N	T	E	K	I	L	E	K	V	L	Q	F	N	E	H	C	H	D	E	E	N	V	H	S	Q	F	Q	K	L				
UniRef90_UPI000305607D	A	L	D	M	T	Y	N	G	A	S	G	S	T			Q	Q	A	M	A	K	A	L	E	L	Q	G	L	S	I	Q	E	I	N	S	S	N	A	A	L				
UniRef90_G1KCM4	A	F	A	M	L	A	L	G	A	R	A	N	T	L	D	Q	I	L	R	G	L	D	F	R	P	S	E	I	Q	E	K	T	I	H	E	S	F	H	D	L				
UniRef90_UPI0002C572D4	A	L	A	L	S	L	S	G	A	C	G	H	T	R	V	Q	L	L	Q	G	L	G	F	N	L	T	K	M	P	E	A	E	I	H	S	G	F	R	H	L				
UniRef90_Q8UVS1	A	S	A	M	T	K	L	G	A	C	G	N	T	L	Q	Q	L	R	K	V	F	R	F	D	T	I	S	E	K	T	S	D	Q	I	H	S	F	F	A	N				
UniRef90_UPI00036E3D6B	A	L	D	M	L	Y	N	G	A	G	S	T	Q	Q	A	M	A	R	A	L	E	L	E	G	L	T	L	S	E	I	N	S	S	N	A	F								
UniRef90_UPI000333C396	A	L	A	M	V	F	L	G	A	K	A	T	T	A	G	Q	M	A	Q	A	L	S	F	N	K	C	G	G	D	G	S	D	V	L	H	S	Q	F	Q	S	L			
UniRef90_Q5I0S8	A	L	A	M	V	L	L	G	A	R	G	N	T	A	A	Q	I	S	R	I	L	H	F						D	A	V	K	D	L	H	S	N	F	Q	T	L			
UniRef90_UPI0003F17D47	A	L	G	M	I	L	L	G	A	R	G	S	T	A	H	Q	L	R	K	V	F	Y	S	E	K	D	T	E	S	S	E	S	H	Q	Q	L	Q	K	F					
UniRef90_V8P0N6																																												
UniRef90_G5E2E4	A	F	S	M	L	S	L	G	A	K	S	S	E	T	H	Q	N	I	L	E	G	L	R	N	Q	T	E	V	P	E	K	D	L	H	E	A	M	E	H	L				
UniRef90_Q3M416	A	L	A	M	T	Y	N	G	A	S	G	S	T			Q	K	A	M	A	K	T	L	E	L	Q	Q	G	I	S	L	P	E	L	N	S	A	Y	A	S	L			
UniRef90_C3PT36	S	L	V	M	V	Y	L	G	T	K	G	S	T	A	A	Q	M	A	Q	V	L	H	L	K	Q	D	Q	D	I	K	S	C	P	H	S	D	F	Q	T	L				
UniRef90_UPI000334672C	A	L	A	T	L	T	L	G	A	E	G	H	T	R	T	Q	L	E	S	G	L	G	L	Q	A	A	H			Q	H	G	S	L	P	A	L	F	K	R				
UniRef90_UPI000398FA67	A	F	A	M	L	A	V	G	A	K	S	T	T	L	S	E	I	F	E	G	L	G	F	D	G	L	T	E	T	R	H	D	I	H	E	S	F	H	K	V				
UniRef90_UPI0003957BD8	L	M	S	V	C	M	M	A	A	K	G	E	T	H	R	Q	I	V	K	G	L	N	L	H	A	M	K	D	R	V	D	H	Q	P	A	L	F	K	Q					
UniRef90_W5U8V8	A	F	A	M	T	K	L	G	A	C	N	S	T	L	E	Q	I	M	E	V	F	E	F	D	T	I	K	E	K	T	S	D	Q	V	H	F	F	F	A	N				
UniRef90_UPI00022F3772	A	L	A	M	V	L	L	G	A	K	G	D	T	A	A	Q	I	T	Q	I	L	G	L	N	T	E	K	D																
UniRef90_UPI00032B0AC4	A	L	R	L	L	L	L	G	S	K	G	N	T	A	Q	I	R	E	V	L	H	L	K	H	V	E	R	S	E	N	K	V	H	L	H	F	Q	E	L					
UniRef90_E2R065	A	L	G	M	V	R	L	G	A	R	S	D	S	A	E	Q	I	D	Q	V	L	H	F	S	E	F	S	Q	N	E	S	K	E	P	C	Y	F	G	H	L				
UniRef90_UPI0003F18DB3	A	M	A	L	M	L	G	A	K	G	Q	T	K	A	Q	L	E	S	G	L	R	L	Q	V	L	N	Q	T	X	X	X	A	X	L	R	Q	R	L						
UniRef90_UPI00037BWC0	V	M	A	V	F	M	L	A	A	K	G	E	T	Y	K	Q	I	V	Q	G	T	N	L	H	L																			

	90	100	110	120
UniRef90_H2UBY8	L	N	E	L
UniRef90_UPI0003F07447	L	H	T	L
UniRef90_UPI00042AE06F	L	S	N	L
UniRef90_UPI0003FOA2B3	L	N	A	E
UniRef90_UPI000329005C	L	T	E	L
UniRef90_H0VAC9	L	H	T	L
UniRef90_UPI0003D097A6	L	S	A	I
UniRef90_B3RFC4	L	G	A	V
UniRef90_P05619	L	N	A	D
UniRef90_E0UDK5	L	K	T	L
UniRef90_W5N5S5	L	E	A	N
UniRef90_UPI000387159F	L	S	A	I
UniRef90_A0A023FM49	L	S	K	L
UniRef90_UPI00038BF713	L	S	N	L
UniRef90_G3HBC5	L	H	M	L
UniRef90_UPI00042AD952	L	H	M	L
UniRef90_Q91WP6	L	Q	R	L
UniRef90_UPI00038EA0A7	L	T	Q	V
UniRef90_U6DBM3	L	Q	T	L
UniRef90_H0YV20	L	A	E	V
UniRef90_UPI00032B1083	L	S	E	I
UniRef90_UPI000333D046	L	S	E	I
UniRef90_X0ZTF9	Y	N	Q	I
UniRef90_UPI00022F48BC	M	T	Q	V
UniRef90_H0XN71	T	S	L	N
UniRef90_UPI0003833AA0	L	S	D	I
UniRef90_G3X118	L	S	K	I
UniRef90_H0UTW7	C	R	L	Y
UniRef90_UPI0002654206	N	N	L	L
UniRef90_UPI000388AABF	L	S	Q	L
UniRef90_Q5BIR5	L	R	E	V
UniRef90_UPI0002C443B1	L	T	E	V
UniRef90_Q9Z2G2	M	T	Q	L
UniRef90_UPI000305607D	K	Q	L	L
UniRef90_G1KCM4	I	Y	M	L
UniRef90_UPI0002C572D4	H	H	L	F
UniRef90_Q8UVS1	C	R	L	Y
UniRef90_UPI00036E3D6B	K	A	L	L
UniRef90_UPI000333C396	L	D	D	I
UniRef90_Q5IOS8	N	A	E	I
UniRef90_UPI0003F17D47	L	A	E	I
UniRef90_V8P0N6	L	S	H	I
UniRef90_G5E2E4	Q	Q	L	L
UniRef90_Q3M416	N	K	L	L
UniRef90_C3PT36	I	S	E	I
UniRef90_UPI000334672C	L	K	D	R
UniRef90_UPI000398FA67	S	A	V	L
UniRef90_UPI0003957BD8	L	I	G	N
UniRef90_W5U8V8	C	R	L	Y
UniRef90_UPI00022F3772	L	N	N	L
UniRef90_UPI00032B0AC4	L	T	D	L
UniRef90_E2R065	L	S	K	I
UniRef90_UPI0003F18DB3	S	R	S	G
UniRef90_M7BWC0	L	K	D	N
UniRef90_I3JLQ7	C	R	L	Y
UniRef90_G1PX37	T	E	L	N
UniRef90_G3UB10	F	S	Q	I
UniRef90_M3V9H4	I	S	E	I
UniRef90_UPI000237C0E0	R	E	V	L
UniRef90_B0CMB0	I	S	E	I
UniRef90_D3ZKA0	L	T	E	I
UniRef90_L5KIF4	I	S	E	I
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UniRef90_B7QJF1	L	Q	S	T
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UniRef90_W5M2R7	T	H	R	L
UniRef90_L9L815	S	H	S	R
UniRef90_W2CNM8	R	E	A	L
UniRef90_F6ZLR1	L	H	T	L
UniRef90_B0CMA8	L	S	D	I
UniRef90_UPI00032B27C3	L	T	D	I
UniRef90_R7ZXZ0	T	A	F	L
UniRef90_X5DY52	V	A	A	L
UniRef90_H0VM65	N	A	K	L
UniRef90_F6W754	L	E	E	I
UniRef90_H0YV59	T	T	D	I
UniRef90_Q63556	L	Q	R	L
UniRef90_V9L272	Q	D	A	F
UniRef90_G3WAA8	L	K	D	N
UniRef90_F8W5C3	L	E	E	I
UniRef90_UPI000359C8DA	L	A	E	V
UniRef90_UPI00042C122B	L	I	S	E
UniRef90_UPI0003334746	L	T	K	I
UniRef90_Q6DGC30	I	S	S	I
UniRef90_K4GCJ9	L	L	E	L
UniRef90_UPI00044391B1	F	S	Q	I
UniRef90_M7BHH1	I	S	E	I
UniRef90_UPI0001D38C36	I	C	S	L
UniRef90_UPI000334411A	F	S	Q	L
UniRef90_J9P6C3	L	A	E	V
UniRef90_Q8K3K4	T	A	K	I
UniRef90_G1KR22	C	R	L	Y

UniRef90_H2UBY8	A	E	L	E	S	V	D	F	F	R	A	A	A	E	T	R	S	N	I	N	S	W	V	E	K	Q	T	E	G	K	I	K	D	L	L	G	S	D	D	V	D		
UniRef90_UPI0003F07447	S	Q	L	F	H	T	N	F	F	K	D	A	Q	V	G	A	S	R	K	L	N	D	H	V	K	K	E	T	E	Q	G	K	I	E	N	L	L	V	S	S	E	A	
UniRef90_UPI00042AE06F	S	E	L	E	Q	S	F	I	K	F	D	A	S	E	E	G	A	R	K	H	I	N	T	W	V	K	E	Q	T	E	G	K	I	P	E	D	I	L	P	V	S	S	
UniRef90_UPI0003FOA2B3	A	D	L	A	S	D	F	Q	H	A	S	E	E	D	V	R	K	E	I	N	Q	W	V	K	S	D	Q	T	H	G	K	I	K	H	L	F	P	R	L	S	N	S	
UniRef90_UPI000329005C	A	N	A	E	S	V	D	F	H	A	S	E	E	S	R	E	K	I	N	S	W	V	E	S	D	Q	T	E	G	K	I	K	T	D	S	F	F	Q	E	L	G	S	
UniRef90_H0VAC9	A	L	A	F	S	A	N	D	F	T	D	S	A	T	A	G	R	Q	I	N	S	E	F	V	G	E	K	Q	T	Y	G	R	K	V	T	D	S	F	Q	E	L	G	S
UniRef90_UPI0003D097A6	A	E	L	E	A	V	D	F	R	N	A	E	E	T	R	K	K	I	N	T	W	V	E	K	Q	T	E	N	G	K	I	K	E	L	L	F	H	A	L	G	S	D	
UniRef90_B3RFC4	A	E	L	E	E	S	F	S	R	D	T	E	D	C	R	K	H	I	N	H	W	V	A	E	E	T	E	G	K	I	S	E	L	L	K	G	M	V	D	N	M		
UniRef90_P05619	A	E	L	A	S	V	D	F	S	R	Q	P	E	D	A	R	K	E	I	N	E	W	V	K	E	Q	T	E	G	K	I	P	E	L	L	K	G	M	V	D	N	M	
UniRef90_E0UDK5	A	Q	I	T	S	L	N	F	Q	S	P	Q	A	P	G	L	I	N	N	R	W	T	K	E	H	T	N	G	K	I	D	Q	I	L	I	T	S	R	I	D	D		
UniRef90_W5N5S5	S	D	I	M	N	I	D	F	S	K	T	E	A	S	K	T	T	I	N	D	Y	V	K	M	K	T	N	E	K	I	V	M	G	L	I	L	S	Q	L	D	S		
UniRef90_UPI000387159F	A	K	P	Q	A	V	N	D	F	K	T	A	E	Q	A	R	A	Q	I	N	L	W	V	E	E	N	E	Q	T	E	G	K	I	Q	D	L	L	L	P	S	L	D	
UniRef90_A0A023FM49	A	T	I	E	S	V	D	F	Q	N	N	I	K	V	R	H	E	I	N	N	A	W	V	E	E	E	A	T	Q	S	K	I	P	N	E	L	L	L	S	P	V	N	
UniRef90_UPI00038BF713	S	E	L	E	Q	S	F	A	K	D	P	E	E	S	T	K	H	I	N	T	W	V	S	K	Q	T	E	G	K	I	K	N	E	L	L	L	S	S	D	L	D		
UniRef90_G3HBC5	A	E	A	T	L	A	D	F	Q	Q	R	H	K	T	I	K	L	I	N	D	Y	V	S	K	Q	T	E	G	K	I	K	E	L	L	I	S	S	D	L	D	K	E	
UniRef90_UPI00042AD952	A	E	A	S	V	A	D	F	Q	Q	P	R	D	E	A	K	K	L	I	N	D	Y	V	N	S	K	Q	T	E	G	K	I	K	E	L	L	L	S	S	D	L	D	
UniRef90_Q91WP6	A	E	A	F	T	A	D	F	Q	Q	P	R	Q	A	K	K	L	I	N	D	Y	V	N	S	K	Q	T	E	G	K	I	K	E	L	L	V	S	D	L	D	K	R	
UniRef90_UPI00038EA0A7	A	K	V	K	Q	P	F	A	K	A	E	S	R	R	K	H	I	N	N	A	W	V	S	K	Q	T	E	G	K	I	H	K	L	K	N	S	L	I	E	A	D		
UniRef90_U6DBM3	S	E	A	F	S	T	N	F	Q	E	S	A	A	A	K	K	L	I	N	D	Y	V	K	N	Q	T	E	G	K	I	V	D	L	V	K	N	D	L	I	E	A		
UniRef90_H0YV20	A	E	L	E	P	N	F	K	Y	T	E	E	E	V	R	D	K	I	N	F	W	V	E	N	E	T	K	G	K	I	K	D	L	F	G	F	I	D	S	T	P		
UniRef90_UPI00032B1083	A	E	P	Q	S	V	N	F	V	E	S	F	Q	I	R	N	E	I	N	S	W	V	E	E	R	Q	T	E	G	K	I	P	N	L	L	P	E	V	D	S	A		
UniRef90_UPI000333D046	A	E	P	R	S	V	N	F	V	E	P	D	Q	V	R	K	E	I	N	S	W	V	E	E	Q	T	E	G	K	I	L	D	L	L	P	E	V	D	S	A			
UniRef90_X0ZTF9	G	K	V	T	N	V	D	F	I	N	A	T	D	A	R	V	I	N	K	W	V	E	E	Q	T	N	N	K	I	K	D	L	I	P	Q	L	V	D	A	L	S	N	
UniRef90_UPI00022F48BC	A	N	V	E	S	D	F	V	H	A	A	E	E	S	Q	K	K	I	N	S	W	V	E	S	Q	T	N	G	K	I	K	D	L	I	F	P	H	L	S	S	N		
UniRef90_H0XN71	T	D	V	F	S	T	D	F	S	N	V	S	A	A	K	Q	E	I	N	S	Y	M	E	K	K	T	K	E	K	I	V	G	L	I	Q	D	L	K	N	S			
UniRef90_UPI0003833AA0	T	G	L	E	M	V	N	F	K	T	S	D	R	A	R	Q	L	I	N	S	W	V	G	N	Q	T	E	D	K	I	Q	D	F	P	H	S	V	D	P	D			
UniRef90_G3X118	S	E	L	Q	T	D	F	K	H	A	P	E	E	V	R	Q	T	I	N	A	W	V	E	K	T	N	E	G	K	I	K	N	L	F	S	K	I	D	T	S	F		
UniRef90_H0UTW7	A	K	L	Q	P	D	F	K	A	H	A	E	Q	S	R	Q	I	N	N	D	W	V	A	N	K	T	E	D	K	I	T	N	L	P	G	I	L	N	D	L	I		
UniRef90_UPI0002654206	A	T	I	E	A	V	D	N	F	A	A	P	I	A	T	Q	S	I	N	D	W	V	S	K	Q	T	E	D	K	I	T	N	L	P	G	I	L	N	D	L	I		
UniRef90_UPI000388AABF	A	M	L	Q	T	V	D	F	E	S	A	T	E	A	R	Q	T	I	N	S	W	V	E	S	K	T	E	D	K	I	R	E	L	F	G	I	L	D	P	T	I		
UniRef90_Q5BIR5	A	D	L	E	E	S	F	A	E	D	T	E	E	C	R	K	H	I	N	D	W	V	M	E	K	T	D	G	K	I	S	R	E	I	A	G	T	I	V	S	P		
UniRef90_UPI0002C443B1	A	E	M	E	E	L	N	F	A	N	A	E	E	S	R	N	H	I	N	T	W	I	A	D	K	T	E	G	K	I	T	E	V	S	G	S	L	V	D	S	L		
UniRef90_Q9Z2G2	A	N	V	E	S	D	F	E	H	A	A	E	E	S	E	K	K	I	N	S	W	V	E	S	Q	T	N	G	K	I	K	D	L	F	S	N	L	I	E	N	R		
UniRef90_UPI000305607D	A	K	V	T	N	L	N	F	Q	D	S	S	S	V	G	T	I	N	N	W	V	E	N	E	N	T	R	G	K	I	D	K	I	V	E	S	I	E	P	N	I		
UniRef90_G1KCM4	G	D	I	Y	L	E	N	F	K	N	T	V	I	E	T	E	Q	H	I	N	D	Y	V	E	R	K	T	H	G	K	I	A	R	L	V	D	G	V	D	P	I		
UniRef90_UPI0002C572D4	L	E	A	L	A	D	F	K	D	G	A	E	A	S	R	Q	I	N	E	Y	I	K	N	K	T	Q	G	K	I	V	D	F	L	S	K	L	D	S	S	I	F		
UniRef90_Q8UVS1	A	K	L	W	P	N	F	K	E	K	P	E	Q	S	R	T	L	I	N	E	W	I	A	N	K	T	E	G	K	I	T	D	V	I	P	E	I	D	D	L	I		
UniRef90_UPI00036E3D6B	A	Q	V	K	N	L	N	F	Q	Q	T	P	A	A	P	E	L	I	N	N	W	V	Y	E	N	T	R	G	K	I	T	N	K	I	V	E	Q	L	K	P	E		
UniRef90_UPI000333C396	A	E	M	E	E	L	D	F	R	H	T	E	E	S	R	R	H	I	N	S	W	V	A	K	K	T	E	D	K	I	K	E	V	L	S	L	A	S	P	S			
UniRef90_Q5I0S8	A	D	L	G	T	V	D	F	I	S	A	E	D	A	R	K	E	I	N	T	W	V	S	E	Q	T	K	G	K	I	P	E	V	L	S	S	A	V	N	S			
UniRef90_UPI0003F17D47	A	A	M	D	P	V	D	F	V	N	A	D	E	S	R	K	K	I	N	S	W	V	E	R	E	T	N	E	K	I	K	D	L	L	P	D	V	S	S	S			
UniRef90_V8P0N6	T	G	L	E	K	N	F	Q	Q	A	S	E	D	S	R	R	K	I	N	A	W	V	E	E	K	T	S	G	K	I	Q	D	L	P	G	I	L	D	S	S	S		
UniRef90_G5E2E4	A	E	A	I	T	A	N	F	N	S	P	E	D	A	K	K	Q	I	N	D	F	V	K	N	K	T	K	G	K	I	D	E	L	I	T	N	L	S	N	E			
UniRef90_Q3M416	A	R	V	T	N	L	D	F	K	N	V	A	A	V	N	T	I	N	S</																								

UniRef90_H2UBY8	T	R	L	V	L	V	N	A	I	Y	F	K	G	N	W	N	E	Q	F	K	E	N	A	T	R	D	A	T	F	H	I	S	K	N	S	S	K	P	V	K			
UniRef90_UPI0003F07447	T	M	L	V	L	V	N	A	I	Y	F	K	A	V	W	E	K	A	F	V	Q	K	S	R	T	T	T	Q	N	F	K	I	V	D	E	R	H	T	V	Q	V	P	
UniRef90_UPI00042AE06F	T	R	L	V	L	V	N	A	I	Y	F	K	G	W	Q	K	E	A	F	D	Q	S	R	T	T	T	Q	N	F	K	I	V	D	E	R	H	T	V	Q	V	P		
UniRef90_UPI0003FOA2B3	T	K	L	V	L	V	N	A	I	Y	F	K	G	K	W	K	E	L	F	P	K	D	E	T	K	E	A	Q	F	H	L	N	K	K	D	K	R	T	V	K	Q		
UniRef90_UPI000329005C	T	R	M	V	L	V	N	A	I	Y	F	K	G	K	W	D	K	E	F	P	K	K	E	H	T	E	E	A	Q	F	W	L	N	K	K	D	T	S	K	P	V	Q	
UniRef90_H0VAC9	T	L	L	V	L	V	N	A	I	Y	F	F	K	A	K	W	K	H	P	F	D	R	Y	Q	T	T	G	K	E	A	F	S	A	D	D	G	T	S	L	R	V	P	
UniRef90_UPI0003D097A6	A	L	L	V	L	V	N	A	I	Y	F	K	G	M	W	T	V	Q	F	K	K	E	H	T	K	E	E	P	F	R	L	N	K	Q	T	S	L	R	V	Q	P		
UniRef90_B3RFC4	T	K	L	V	L	V	N	A	I	Y	F	K	G	K	W	S	E	Q	F	M	K	E	H	T	R	G	M	A	P	F	F	K	V	N	K	Q	E	D	T	K	T	V	K
UniRef90_P05619	T	K	L	V	L	V	N	A	I	Y	F	K	G	N	W	Q	E	K	F	A	M	K	E	A	T	R	D	A	P	F	F	K	V	N	K	G	D	T	K	T	V	K	
UniRef90_E0UDK5	E	V	L	I	L	I	N	A	I	Y	F	K	G	I	W	K	T	E	F	A	S	Q	S	F	T	K	E	E	A	P	F	F	Y	L	P	N	G	Q	T	K	Q	Q	P
UniRef90_W5N5S5	T	Q	L	V	L	V	N	T	I	L	F	Q	G	K	W	E	L	P	F	A	S	Q	S	F	T	K	E	E	A	R	F	F	Y	V	D	K	N	K	I	V	K	P	
UniRef90_UPI000387159F	T	V	L	V	L	V	N	A	I	Y	F	R	G	N	W	E	K	K	F	L	E	K	N	S	T	S	E	M	D	P	F	R	L	S	K	T	R	T	K	P	V	Q	
UniRef90_A0A023FM49	T	T	L	I	L	V	N	A	I	Y	F	K	G	L	W	S	Q	F	N	P	N	G	S	T	H	V	E	D	F	H	L	N	D	S	K	K	E	V	D	P			
UniRef90_UPI00038BF713	T	K	L	V	L	V	N	A	I	Y	F	K	G	K	W	D	Q	T	F	N	K	G	N	S	T	V	E	S	V	P	F	K	I	N	K	K	E	E	R	P	V	Q	
UniRef90_G3HBC5	T	V	M	V	L	V	N	A	I	Y	F	K	G	K	W	K	T	P	F	D	P	Q	D	T	F	Q	S	E	F	H	L	N	D	K	K	R	T	V	M	V	P		
UniRef90_UPI00042AD952	T	I	M	V	L	V	N	A	I	Y	F	K	G	K	W	S	P	F	E	P	H	L	D	T	F	F	K	S	E	F	Y	L	A	G	K	R	R	P	V	I	V	P	
UniRef90_Q91WP6	T	L	M	V	L	V	N	A	I	Y	F	K	A	K	W	K	V	P	F	D	L	D	T	F	F	K	S	E	F	Y	A	G	K	R	R	P	V	I	V	P			
UniRef90_UPI00038EA0A7	C	R	L	V	L	I	N	A	V	Y	F	K	G	R	W	D	K	Q	F	R	E																						

UniRef90_H2UBY8	M	M	N	Q	T	S	K	F	P	F	V	Y	N	D	R	S	E	A	N	C	Q	S	P	L	P	Y	V	G	K	E	L	S	M	L	I	F	L	P	N	Q	Q	K	
UniRef90_UPI0003F07447	M	M	W	Q	G	N	H	H	F	W	V	Y	N	D	R	S	E	A	N	C	Q	S	P	L	P	Y	V	G	K	E	L	S	M	L	I	F	L	P	N	Q	Q	K	
UniRef90_UPI00042AE06F	M	M	Y	H	R	S	V	F	N	L	A	Y	V	K	E	V	L	Q	A	T	M	L	V	K	M	N	Y	E	G	D	M	E	L	S	V	I	V	L	P	V	D	G	
UniRef90_UPI0003FOA2B3	M	M	Y	Q	R	G	I	F	S	Y	G	Y	I	D	E	V	L	Q	A	T	M	L	V	K	M	N	Y	E	G	D	M	E	L	S	M	V	I	V	L	P	H	D	I
UniRef90_UPI000329005C	M	M	K	Q	R	G	T	I	F	S	N	F	A	F	L	E	D	V	K	A	Q	V	L	V	E	I	P	Y	K	G	K	D	L	S	M	F	V	L	P	N	D	G	
UniRef90_H0VAC9	M	M	Q	Q	R	A	M	H	R	F	L	Y	D	Q	Q	V	A	C	T	V	L	V	Q	I	E	Y	Y	G	N	A	L	L	L	L	V	L	P	D	P	G	K		
UniRef90_UPI0003D097A6	M	M	F	Q	K	N	E	Y	N	L	A	I	T	E	E	P	E	I	Q	V	L	E	L	E	L	P	Y	A	K	E	K	L	S	M	F	I	L	P	K	D	I		
UniRef90_B3RFC4	M	M	F	K	Q	A	K	F	T	G	Y	V	E	E	V	N	T	Q	V	L	E	L	E	L	P	Y	A	G	K	E	L	S	M	V	I	V	L	P	D	E	D		
UniRef90_P05619	M	M	Y	Q	K	K	K	F	P	Y	N	Y	I	E	D	L	K	C	R	V	L	E	L	E	L	P	Y	Q	G	K	E	L	S	M	I	I	L	P	D	D	I		
UniRef90_E0UDK5	L	M	S	G	T	G	K	Y	Q	Y	E	N	E	P	E	F	Q	A	V	N	L	P	Y	G	D	G	R	L	S	M	Y	V	F	L	P	R	T	N	S	N			
UniRef90_W5N5S5	M	M	F	R	E	D	K	Y	Y	L	A	Y	D	N	E	V	L	K	L	G	I	L	E	K	L	P	Y	R	G	H	A	A	M	L	V	L	P	D	K	G	D		
UniRef90_UPI000387159F	M	M	F	L	R	D	K	F	L	I	L	R	E	T	M	K	F	K	I	L	E	K	L	P	Y	V	E	N	E	L	S	M	F	V	L	P	D	D	I	I			
UniRef90_A0A023FM49	M	M	Y	Q	N	N	D	Y	K	M	S	R	S	D	E	L	A	V	T	A	L	E	I	L	P	Y	R	G	G	K	T	S	M	V	I	V	L	P	D	D	I		
UniRef90_UPI00038BF713	M	M	Y	Q	E	H	R	F	N	L	A	H	V	K	E	V	Q	A	Q	V	L	E	M	P	Y	E	G	L	E	S	L	L	V	L	P	D	D	G	I				
UniRef90_G3HBC5	M	M	N	I	E	D	T	T	P	Y	F	R	D	E	E	L	S	C	S	V	V	E	L	K	Y	T	G	N	A	S	A	L	F	I	L	P	D	E	G	K			
UniRef90_UPI00042AD952	M	M	H	H	T	F	T	T	P	Y	F	R	D	E	D	L	N	C	S	V	V	E	L	K	Y	T	G	N	A	S	A	L	F	I	L	P	D	E	G	K			
UniRef90_Q31WP6	M	M	S	M	E	D	T	T	P	Y	F	R	D	E	D	L	N	C	T	V	V	E	L	K	Y	T	G	N	A	S	A	L	F	I	L	P	D	Q	G	R			
UniRef90_UPI00038EA0A7	M	M	V	Q	S	G	T	F	P	L	A	H	V	S	E	V	Q	A	R	V	L	E	L																				

UniRef90_H2UBY8	E	D	S	T	E	K	V	G	H	S	N	A	L	D	L	K	E	T	S	M	K	F	V	E	V	Q	L	V	G	L	P	R	F	K	S	M	E	E	K	C	N	M					
UniRef90_UPI0003F07447	M	E	K	I	E	E	A	L	T	F	S	P	L	T	D	R	W	N	K	S	T	M	F	Y	R	K	T	M	V	H	L	P	R	F	K	S	M	E	E	K	C	N	M				
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UniRef90_B3RFC4	T	P	L	V	E	K	A	L	T	T	Y	E	K	F	R	A	W	T	S	P	E	N	K	G	K	I	V	S	V	F	L	L	P	R	L	K	L	E	E	S	Y	N	D	L	L		
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UniRef90_W5N5S5	Y	T	S	T	I	D	D	E	I	T	A	E	S	F	L	G	W	L	Q	K	L	K	K	T	K	L	E	V	V	Q	L	P	R	F	F	K	M	E	E	S	Y	N	D	L	L		
UniRef90_UPI000387159F	N	D	N	T	E	R	E	L	T	S	T	Y	E	K	L	S	E	W	T	K	S	A	N	M	M	K	A	E	V	V	Y	L	P	K	L	N	L	E	E	S	Y	N	D	L	L		
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UniRef90_G3HBC5	M	Q	Q	L	E	A	S	L	Q	P	E	T	L	K	R	W	K	D	S	L	K	P	R	M	I	D	L	V	L	P	P	K	F	F	S	I	S	T	D	Y	S	L	L				
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UniRef90_Q91WP6	M	Q	Q	V	E	A	S	L	Q	P	E	T	R	K	W	K	N																														

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

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UniRef90_A7BYH7				M	V	E	G	N	T	T	F	A	L	D	L	Y	E	Q	L	R	K	D	K	N	G	N	L	F	F	S	P	Y	S	I	L	T	S	T	
UniRef90_E1RK56	A	V	E	S	V	V	D	A	N	N	M	F	A	F	E	I	Y	K	Q	L	S	E	N	S	K	D	D	N	L	F	F	S	P	F	W	G	I	S	T
UniRef90_UPI0004403F25		M	D	S	L	S	Q	S	S	T	Q	F	A	I	D	I	F	K	Q	I	G	N	K	E	S	D	K	N	L	F	F	S	P	F	S	I	H	Q	S
UniRef90_K1L767				L	S	K	A	N	G	A	F	A	I	Q	L	L	K	L	L	G	Q	D	N	P	E	H	N	V	F	F	S	P	V	S	I	S	T	S	
UniRef90_HOVPL6																																							
UniRef90_B6EU39																																							
UniRef90_U3EQV8		M	D	T	L	S	V	A	N	T	T	F	A	L	N	L	F	K	K	L	S	A	N	D	P	T	K	N	L	F	F	S	P	L	S	I	L	S	S
UniRef90_A5PJ69		Q	Q	L	S	A	R	E	A	S	N	L	G	F	S	L	L	R	K	L	S	L	K	H	D	G	N	V	V	F	S	P	V	L	G	L	A	W	S
UniRef90_G5BKF1		M	S	S	L	S	A	A	N	G	A	F	A	F	R	L	L	K	L	L	C	P	D	D	P	A	D	N	V	F	F	S	P	V	S	I	L	S	S
UniRef90_A1IVL3	N	P	A	P	Q	S	L	A	D	V	N	S	E	F	A	L	E	L	Y	K	T	L	H	K	D	H	P	E	N	L	F	F	S	P	F	S	V	S	T
UniRef90_B9XLN3		A	I	P	E	L	V	Q	E	N	N	A	F	A	L	E	L	Y	G	K	L		K	S	K	E	Q	N	L	F	F	S	P	F	S	V	S	T	
UniRef90_G7W8T9		S	Q	D	V	I	N	A	N	N	R	F	A	F	N	I	F	K	Q	L		D	K	E	D	G	K	Q	N	L	F	F	S	P	F	S	V	S	T
UniRef90_C5A4E9			N	P	V	V	G	G	M	N	S	F	A	I	E	L	Y	K	K	L		G	E	N	N	G	N	V	F	F	S	P	Y	S	I	L	E	T	Y
UniRef90_HOWPQ5		M	G	S	L	S	T	A	N	V	E	F	C	L	D	V	F	K	E	L	N	T	N	S	V	G	E	N	L	F	F	S	P	V	L	N	L	Y	M
UniRef90_Q06770	S	H	R	D	L	A	P	T	N	V	D	F	A	F	N	S	F	R	K	R	L	V	A	L	N	S	D	K	N	T	L	I	S	P	V	S	I	S	S
UniRef90_UPI00042C6BF0		M	E	E	L	Y	K	A	N	A	I	F	A	L	S	F	F	S	R	L	A	N	T	S	A	T	Q	N	L	F	F	S	P	W	S	I	L	S	S
UniRef90_M3X3Q3		M	E	D	L	Y	V	A	N	T	I	F	A	L	N	F	F	K	H	L	A	N	T	S	T	P	N	L	F	F	S	P	W	S	I	L	S	S	
UniRef90_U3BQ61		M	D	R	L	A	E	A	N	G	T	F	A	L	N	L	L	K	T	L	G	E	N	S	K	N	V	F	F	S	P	M	S	M	A	S	S		
UniRef90_T1IPU0																																							
UniRef90_Q62975		A	S	Q	Q	L	S	N	E	T	S	R	F	A	F	S	L	L	R	K	L	S	M	R	H	D	G	N	V	I	F	S	P	F	G	L	S	V	T
UniRef90_Q8AYE3	N	P	R	V	W	E	L	S	K	A	N	S	R	F	A	L	S	L	F	K	Q	L	A	E	K	S	N	D	E	N	I	F	L	S	P	I	S	I	S
UniRef90_B9XIM4				P	L	V	K	G	N	T	A	F	A	L	E	L	Y	A	K	V		R	S	G	E	G	E	N	L	A	F	S	P	I	S	I	S	A	T
UniRef90_W2C3T3	H	P		E	K	V	A	A	D	D	N	A	F	T	F	D	L	L	R	A	V	R	K	H	T	D	K	A	N	V	F	I	S	P	L	S	I	S	M
UniRef90_UPI000180C8BF		M	A	F	C	K	V	A	A	A	K	T	D	F	A	L	G	L	Y	K	E	L	S	Q	K	G	D	G	N	L	F	F	S	P	Y	S	I	S	T
UniRef90_HOWSZ7				L	A	P	A	N	V	D	F	A	F	S	L	Y	K	H	L	V	A	L	T	P	D	K	N	I	F	I	S	P	V	S	I	L	S	M	S
UniRef90_UPI0002740234		M	D	N	F	C	K	A	N	G	T	F	A	I	T	L	L	K	V	L	G	E	E	D	H	S	R	N	V	F	F	S	P	L	S	I	S	S	T
UniRef90_UPI000446F88				V	T	S	A	N	K	E	F	A	F	R	L	Y	R	K	L	A	G	D	S	Q	G	K	N	I	F	F	S	P	L	S	I	L	V	S	T
UniRef90_Q9U1I5	A	H	Q	E	F	A	R	R	L	A	L	F	S	I	N	V	Y	G	K	L	S	G	Q	K	P	G	E	N	I	V	F	S	P	F	S	I	Q	T	S
UniRef90_A7UI23		Q	K	V	A	N	A	N	N	E	F	G	F	R	L	L	Q	K	I	P	A	S	S	E	V	N	V	F	F	S	P	Y	S	I	S	V	S	T	S
UniRef90_F7BXY2		M	D	S	F	S	E	A	N	G	P	F	A	F	R	L	L	K	K	L	S	E	K	D	N	S	Q	N	V	V	F	S	P	L	S	I	S	S	T
UniRef90_H5XTY7				V	E	G	N	S	R	F	A	F	D	S	F	K	Q	L	D	K	E	D	R	E	Q	N	I	L	I	S	P	L	S	I	L	S	T	M	
UniRef90_I2GRX6		P	F	A	S	Q	T	T	E	F	A	F	D	S	F	K	Q	L	D	K	E	D	R	E	Q	N	I	L	I	S	P	L	S	I	L	S	T	M	
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UniRef90_UPI0004482B8				E	L	S	K	A	N	S	H	F	A	T	V	F	Y	Q	H	L	A	S	K	N	D	N	E	N	L	F	L	S	P	L	S	I	S	T	
UniRef90_UPI0003AF5DEA		H	S	L	A	S	S	N	T	D	F	A																											
UniRef90_L9L8N7		M	D	S	L	S	T	A	N	A	Q	F	G	F	D	L	F	K	E	M	K	K	T	D	D	G	N	I	F	F	S	P	A	S	I	S	A	T	
UniRef90_F8WGA3		M	E	Q	L	S	S	A	N	S	L	F	A	L	E	L	F	H	T	L	S	E	S	S	P	T	G	N	I	F	F	S	P	F	S	I	S	S	
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UniRef90_UPI0001E2CC78		N	S	P	S	M	G	N	T	Q	F	A	F	D	I	F	S	R	L	N	E	K	D	I	D	K	N	I	F	I	S	P	L	S	I	S	T	S	
UniRef90_M4AS07				D	T	T	S	E	F	S	V	R	L	Y	H	R	L	Q	A	A	G	G	E	N	I	F	I	S	P	L	S	I	S	V	S	T	S		
UniRef90_J9JX80		N	A	L	S	L	A	N	H	D	S	F	S	L	K	E	L	A	K	T	E	N	G	N	I	F	F	S	P	F	S	I	H	V					
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UniRef90_T1PFM8				Q	F	A	R	G	G	A	Q	F	T	V	E	L	F	E	K	A	A	T	T	K	E	N	I	V	S	P	F	S	V	Q	T				
UniRef90_L5MB44	H	F	M	M	A	S	L	D	A	V	N	A	E	F	C	F	N	L	F	R	E	M	D	N	N	Q	S	G	N	V	F	F	S	P	L	S	I	S	T
UniRef90_G3VG92				Q	R	L	N	I	L	N	A	K	F	A	F	N	L	Y	R	T	L	R	E	A	A	G	D	N	I	L	L	A	V	G	L	S	T		
UniRef90_UPI00046CF928	P	L	K	A	V	S	E	G	T	G	H	F	A	T	N	F	F	K	Q	V	S	A	E	N	K	G	K	N	L	I	S	P	L	S	A	H	V		
UniRef90_L5JP23				A	P	S	N	R	E	T	F	D	L	L	R	A	L	L	A	A	N	P	N	Q	N	I	I	F	S	P	L	S	I	S	V				
UniRef90_B4J9A5				E	F	S	R	R	L	A	K	F	S	V	N	M	Y	G	K	L	V	A	S	K	P	N	T	N	V	V	F	S	P	F	S	I	Q	T	
UniRef90_B4J5M5				E	F	A	R	G	G	A	T	F	T	T	E	L	F	H	L	L	A	A	G	G	V	K	Q	N	I	V	F	S	P	F	S	I	Q	A	
UniRef90_H3DMX5				D	A	L	A	D	F	S	V	R	L	Y	Q	Q	L	Q	A	G	G	E	Q	D	N	L	V	F	S	P	L	S	V	A	V				
UniRef90_B7NZ99		M	E	D	L	Y	V	A	N	T	I	F	A	L	N	F	F	K	H	L	A	K	A	N	P	T	Q	N	L	F	F	S	P	W	S	I	S	S	
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UniRef90_M4A8C6		C	H	A	I	S	S	L	N	A	D	F	A	F	A	L	Y	R	N	I	N	R	T	A	P	G	K	N	I	F	M	S	P	L	L	G	L	S	A
UniRef90_UPI0003318AB0																																							
UniRef90_UPI000393D579		M	G	S	I	S	A	A	N	A	E	F	C	F	D	V	F	K	E	V	K	L	H	R	S	N	D	N	V	I	F	S	P	L	S	I	S	T	
UniRef90_P29508		M	N	S	L	S	E	A	N	E	K	M	F	D	L	F	Q	Q	F	R	K	S	K	E	N	N	I	F	Y	S	P	I	S	I	T	S			
UniRef90_UPI00022C953F	A	L	R	S	V	V	E	G	A	N	Q	F	S	S	S	F	Q																						

	50	60	70	80
UniRef90_UPI0003492EC	A F A M L S L G A K G G D T H T Q I L E G L H F N L K K V P E A D I I H T G L Q Q H L			
UniRef90_A7YH7	A L A M T Y A G A R K G N T E K Q M S Q S A L H F P N P N Q I Q L H P A F F H L Q Q Q Q			
UniRef90_E1RK56	A L A M L T Y E G A K G G T T A A Q M S R N V L Q F S R D Q D S K E I I H S N F Q Q E T L			
UniRef90_UPI0004403F25	S L A M V Y L G T K G G T T A A Q M S R N V L Q F S R D Q D S K E I I H S N F Q Q E T L			
UniRef90_K1L767	A L S M T M N G N E G D I L E E F F K N V L L R Y Q Q G L S L D E A N Q D S K E L			
UniRef90_HOVPL6	A L A M V L L G A K G K T T A A Q M V Q W H L P L S F Q N S G A K I I H F T T Y Y V K L			
UniRef90_B6UEU39	A L A M T Y L A A K G K T A E A Q M G K T M H F D D L S E L T L H K T F A E L			
UniRef90_U3EQV8	A L L M V S L G A K G N T E A Q M S K V L S F D D V S K T R D R E V L H Q K F E K L			
UniRef90_A5PJ69	A M A L T L L G A R G G H S R A Q Q A W N Q T W P V V N Q T R P P R L P A L F K Q			
UniRef90_G5BK1	V M A M V L L G A K G G T T A A Q I A Q V L A L N P K G D I I H G G F Q S L			
UniRef90_A1IVL3	C L A M T Y L G A R N G D T A Q Q M S R V L R F N K L N H T D F H E R F H D L			
UniRef90_B9XLN3	C L G M A Y A G A R G E T E K Q M A K T L H F S T N Q A A L H T G F G E L Q K			
UniRef90_G7W8T9	A L T M T Y Q G A A A S T K E A M A K T L G Y I G I D E A K L N D S Y K N L			
UniRef90_C5A4E9	A L T Y A Y E G A R G A T R D E M G N V L Q L P G D N E T R W K G F R G L			
UniRef90_HOWPQ5	A L S M I L L G A R G N S A D Q V Q K V L H Y D H I V Q S F K Q I I H S E L G A L			
UniRef90_Q06770	A L A M L S L S T R G S T Q Y L E N L G F N M S K M S E A E I I H Q G S F Q Y L			
UniRef90_UPI00042C6BF0	T M A M I Y L G A R G N T A D Q M A K A Q A A D T L I H S S F F R S L			
UniRef90_M3X3Q3	T M A M V Y L G A R G N T A D Q M A R V F Q F N K V G V H E D K I I H S S F F R S L			
UniRef90_U3BQ61	A L A M V Y M G A Q G N T A A Q M A Q V L S L N K S G G G D V H E G F Q S L			
UniRef90_T1IPU0	A L A M A L A G A R E N T A K Q M K D A L K L G A S F N T D L E I H E A Q F Q E V			
UniRef90_Q62975	A M V N L M L G A K G E T K V Q V E N G L N L Q A L S Q A G P L I L P A L F K R			
UniRef90_Q8AYE3	A F A M T K L G A C N T T L E Q L M K V F Q F D T I K E K T S D Q V F F F F A N			
UniRef90_B9XIM4	A V G M T Y A G A G A T A I Q I Q A L H F P Q N E T N P A L P A A Q F D R T			
UniRef90_W2C3T3	A L N M T L G A A G T T A D E M R T A L H E S G Y S Q A D I N A Y S K R L			
UniRef90_UPI000180C8BF	A L M M T L L G S K E K T R E E M L D V L G L K D L N E S D I N S G F L Q I			
UniRef90_HOWSZ7	A L A M L S L G T W G H T R T Q L L Q G L G F N L T E M A E A E I H S G F Q H L			
UniRef90_UPI0002740234	A L A M V L M G A K G N T A A Q M T Q A L C L N K G G N I I H Q G F Q S L			
UniRef90_UPI0004446F88	A L A A L S V G A Q G E T H Q Q L F R G L G F N G S Q L V Q T D V N Q A F R T F			
UniRef90_Q9U115	C A A M A R L G A E N E T A T Q L D Q G L G L A S S D P E Q I A H S F			
UniRef90_A7UI23	A L A M A Y A G A R G E T Q Q E L Y D S L A Y S S A G L A P D H V P N A H A Q			
UniRef90_F7BXY2	A L G M L F L G A R G A T A A Q I V K V L S L N R G G D I H R D L Q A L			
UniRef90_H5XTY7	A L A M T Y Q G A G A T A K E A M A G V L G Y T G I E D A K L K E S Y R N L			
UniRef90_I2GRX6	A L G M I M N G A N G Q T A G E I Q K T L N L D A Q T L A E A N T T A Y K N L			
UniRef90_H9TZT5	C L I V A Y L G A E G E T A E E M R Y A L K L G E D K N A V I K Y A E F F V K S			
UniRef90_UPI00044482B8	A F A M T K L G A C D N T L K Q L M E V K F D T I S E K T S D Q I H F F F A N			
UniRef90_UPI0003AF5DEA	A L A F L S L G A S G P T V A E I L E G L K F N L T E T P E T E I I H Q G F F Q H L			
UniRef90_L9LN87	A I G M L P G R P E S S A S Q L Q K M E K S E E I H H Q F Q S L			
UniRef90_F8WGA3	A L A M V F L G A K G S S A P S S K T F H F D S V E D I H S R F Q S L			
UniRef90_UPI0003AF86F7	A L G F L S L G A R G S T L T E I L E G L K F N L T E I D Q E T E I I H Q G F Q H L			
UniRef90_UPI0003834820	A L S M V Y L G A R E N T R A Q I D E V F H F D P Q C G A S L S V H K S L Q N V L			
UniRef90_UPI0001E2CC78	A L S M A L Q G A G T T T K E G M M Q A L K Y E G M E L D S V H K S Y K S L			
UniRef90_M4AS07	A L G M V E L G A R G A S L E E I R E A V G F S H L L P G V E F S L L Q N L			
UniRef90_J9JX80	I M F M A S M G A A S K T F D E M I N T T H S M E G Y R T L L E D L			
UniRef90_UPI000328ABC0	V M A M L Q L A A G G D T R Q Q I Q A A M R F Q I Q E K G V A P A L R Q L			
UniRef90_T1PFM8	C L A L A F A G A K D E T A D E I A T A L K Y V S N F P P E V A E T F Q F			
UniRef90_L5MB44	A L A V V R L G A R G D G A A Q M N T M S G H G N S P N T Q P L Q F Q L K R I			
UniRef90_G3V92	A M G M L S L G L K G A T H E Q V H A A F R D F K Y E T Q T V H N L F R K I			
UniRef90_UPI00046CF928	V L S M A A F G A G G N T A V Q M R Q S L H M P A D D V V S K Q G F E N L			
UniRef90_L5JP23	T L G M I A L G T G S N T K A Q I L E G L G F A L Q G G P E E I I H R V F H Q L			
UniRef90_B4J9A5	C A A M A R L G A D G E T A A E L D R G L Q L V S S D V A K I A E S F H Q V			
UniRef90_B4J5M5	C I A L A F A G A K G D T A D E I A K G M R Y V S N F P P E V A E T F Q F			
UniRef90_H3DMX5	A L G M V G L G A R G A S L E Q L R Q V A G V P H L L P R G G E F S L L Q N L			
UniRef90_B7NZ99	T M A M V Y L G S R G S T E D Q M A K V L Q F K Q Q A Q I R D T I H S S F N S L			
UniRef90_E3TE90	A L S M V Y L G A			

UniRef90_UPI0003C492EC	L	H	T	F	T	E	P	D	N	E	A	V	L	Q	L	I	T	A	N	I	L	F	V	N	E	S	V	K	P	V	D	K	F	K	N	E	D	V	G	K	L	Y	H							
UniRef90_A7BH7	L	I	N	A	S	I	Q	T	A	G	P	E	A	V	D	L	R	E	V	A	N	A	L	W	S	A	E	K	T	Y	P	F	L	V	A	K	E	Y	I	N	T	A	K	T	N	Y	Y	S	Q	
UniRef90_E1RK56	N	A	G	I	N	N	P	T	A	G	P	E	A	V	D	L	R	E	V	A	N	A	L	W	S	A	E	K	T	Y	P	F	L	V	A	K	E	Y	I	N	T	A	K	T	N	Y	Y	S	Q	
UniRef90_UPI0004403F25	T	I	S	E	I	N	N	P	T	A	G	P	E	A	V	D	L	R	E	V	A	N	A	L	W	S	A	E	K	T	Y	P	F	L	V	A	K	E	Y	I	N	T	A	K	T	N	Y	Y	S	Q
UniRef90_K1L767	T	I	S	E	I	N	N	P	T	A	G	P	E	A	V	D	L	R	E	V	A	N	A	L	W	S	A	E	K	T	Y	P	F	L	V	A	K	E	Y	I	N	T	A	K	T	N	Y	Y	S	Q
UniRef90_H0VPL6	N	C	K	V	H	K	P	G	A	P	Y	T	L	S	A	I	A	N	A	N	R	L	F	G	E	E	S	Q	F	L	P	S	F	F	Q	E	S	C	L	R	F	Y	K	G						
UniRef90_B6UE39	T	E	T	E	T	N	T	N	T	A	Y	T	L	S	A	I	A	N	A	N	R	L	F	V	G	E	E	S	Q	F	L	P	S	F	F	Q	E	S	C	L	R	F	Y	K	G					
UniRef90_U3EQV8	T	I	S	E	I	N	N	P	T	A	G	P	E	A	V	D	L	R	E	V	A	N	A	L	W	S	A	E	K	T	Y	P	F	L	V	A	K	E	Y	I	N	T	A	K	T	N	Y	Y	S	Q
UniRef90_A5PJ69	L	I	Q	E	S	L	S	H	N	G	P	E	L	G	L	A	Q	G	S	F	A	F	I	H	K	D	F	D	I	R	E	P	S	F	F	I	N	L	S	K	R	Y	F	D	R					
UniRef90_G5BKF1	L	T	Q	V	N	R	S	H	N	G	P	E	L	G	L	A	Q	G	S	F	A	F	I	H	K	D	F	D	I	R	E	P	S	F	F	I	N	L	S	K	R	Y	F	D	R					
UniRef90_A11VL3	L	T	Q	L	H	H	P	D	R	P	Y	T	L	S	A	I	A	N	A	N	R	L	F	G	Q	N	S	F	E	F	G	Q	K	F	L	D	E	T	S	R	N	Y	G							
UniRef90_B9XLN3	T	I	S	E	I	N	N	P	T	A	G	P	E	A	V	D	L	R	E	V	A	N	A	L	W	S	A	E	K	T	Y	P	F	L	V	A	K	E	Y	I	N	T	A	K	T	N	Y	Y	S	Q
UniRef90_G7W8T9	L	I	S	E	I	N	N	P	T	A	G	P	E	A	V	D	L	R	E	V	A	N	A	L	W	S	A	E	K	T	Y	P	F	L	V	A	K	E	Y	I	N	T	A	K	T	N	Y	Y	S	Q
UniRef90_C5A4E9	T	I	S	E	I	N	N	P	T	A	G	P	E	A	V	D	L	R	E	V	A	N	A	L	W	S	A	E	K	T	Y	P	F	L	V	A	K	E	Y	I	N	T	A	K	T	N	Y	Y	S	Q
UniRef90_H0WQP5	L	I	S	E	I	N	N	P	T	A	G	P	E	A	V	D	L	R	E	V	A	N	A	L	W	S	A	E	K	T	Y	P	F	L	V	A	K	E	Y	I	N	T	A	K	T	N	Y	Y	S	Q
UniRef90_Q06770	N	S	L	I	N	Q	Q	S	D	T	G	E	L	E	M	S	N	M	G	N	V	M	F	L	L	Q	N	K	L																					

UniRef90_UPI0003492EC	T	D	V	F	S	I	N	F	R	D	T	K	A	N	A	Q	V	N	D	Y	I	E	M	K	S	Q	E	K	V	D	L	F	Q	E	L	D	K	D					
UniRef90_A7BYH7	T	K	S	Q	P	V	D	F	I	K	A	P	T	E	S	R	V	S	N	D	H	W	V	E	K	Q	T	N	D	K	V	E	D	L	I	R	G	V	D	K	D		
UniRef90_E1RK56	A	N	T	T	N	L	V	D	F	E	K	A	P	T	E	S	R	V	S	N	D	H	W	V	E	K	Q	T	N	D	K	V	E	D	L	I	R	G	V	D	K	D	
UniRef90_UPI0004403F25	A	E	P	Q	S	V	N	F	M	A	S	D	Q	I	R	K	E	I	N	S	W	V	E	A	S	Q	T	E	G	K	L	E	N	L	P	D	V	D	S	V			
UniRef90_K1L767	A	E	V	S	A	L	D	M	G	N	P	E	S	R	N	V	H	I	N	N	W	I	A	S	Q	T	E	G	K	L	E	N	L	P	D	V	D	S	V				
UniRef90_H0VPL6	A	K	M	E	P	S	F	A	K	G	D	T	K	V	A	S	D	M	I	N	N	W	I	A	S	Q	T	E	G	K	L	E	N	L	P	D	V	D	S	V			
UniRef90_B6UEU39	A	E	A	G	R	V	N	F	K	G	D	T	K	V	A	S	D	M	I	N	N	W	I	A	S	Q	T	E	G	K	L	E	N	L	P	D	V	D	S	V			
UniRef90_U3EQV8	A	G	L	E	K	N	F	K	V	S	A	E	D	S	R	R	H	I	N	N	W	I	A	S	Q	T	E	G	K	L	E	N	L	P	D	V	D	S	V				
UniRef90_A5PJ69	M	E	C	V	T	V	D	F	H	N	T	E	S	Q	A	K	R	L	I	N	H	Y	M	N	Q	E	T	Q	G	K	L	E	N	L	P	D	V	D	S	V			
UniRef90_G5BKF1	A	E	V	Q	L	P	I	A	E	D	P	E	K	S	R	K	H	I	N	T	W	A	S	E	K	T	E	G	K	L	E	N	L	P	D	V	D	S	V				
UniRef90_A11VL3	A	E	L	A	P	V	D	F	R	N	T	E	S	Q	A	K	R	L	I	N	N	W	I	A	S	Q	T	E	G	K	L	E	N	L	P	D	V	D	S	V			
UniRef90_B9XLN3	A	D	A	M	R	F	D	F	T	Q	A	Q	L	A	S	D	E	L	I	N	G	W	V	E	A	K	T	E	G	K	L	E	N	L	P	D	V	D	S	V			
UniRef90_G7W8T9	D	S	V	R	S	D	F	D	F	N	Q	E	N	A	P	D	Q	I	N	D	Q	W	I	S	E	A	T	E	N	K	K	I	D	K	M	I	S	R	L	D	S	D	
UniRef90_C5A4E9	A	N	A	S	D	D	F	D	Q	R	S	T	E	E	T	R	K	T	I	N	A	W	V	E	K	R	K	T	N	G	K	V	T	N	L	F	G	S	K	L	D	S	S
UniRef90_H0WPQ5	A	G	L	Q	T	D	F	D	Q	R	S	T	E	E	T	R	K	T	I	N	A	W	V	E	K	R	K	T	N	G	K	V	T	N	L	F	G	S	K	L	D	S	S
UniRef90_Q06770	S	E	A	L	T	I	P	S	E	D	W	T	K	A	G	E	Q	I	N	N	H	V	E	K	N	K	T	E	G	K	V	T	E	H	I	V	V	S	D	L	D	S	S
UniRef90_UPI00042C6BF0	T	E	P	Q	A	V	D	F	E	C	A	E	E	A	R	K	E	I	N	S	W	V	K	T	Q	T	K	G	K	V	P	E	N	L	L	P	E	V	D	R	D	L	
UniRef90_M3X3Q3	T	E	P	Q	A	V	D	F	E	C	A	E	E	A	R	K	E	I	N	S	W	V	K	T	Q	T	K	G	K	V	P	E	N	L	L	P	E	V	D	R	D	L	
UniRef90_U3BQ61	A	E	M																																								

UniRef90_UPI0003C492EC	T	S	L	A	L	A	N	Y	I	F	Q	G	W	K	V	F	E	A	G	F	V	A	E	D	F	H	V	D	K	N	S	T	T	S	R	V	P							
UniRef90_A7BYH7	T	R	L	V	L	V	N	A	I	Y	F	K	G	N	W	A	M	P	F	D	S	N	K	M	T	T	E	K	E	D	P	P	S	G	T	S	V	P						
UniRef90_E1RK56	T	R	L	V	L	V	N	A	I	Y	F	K	G	T	W	V	L	Q	F	D	K	S	N	M	T	T	E	K	E	D	P	P	S	G	T	S	V	P						
UniRef90_UPI0004403F25	T	R	M	V	L	V	N	A	I	Y	F	K	G	I	W	E	H	Q	F	D	K	S	N	M	T	T	E	K	E	D	P	P	S	G	T	S	V	P						
UniRef90_K1L767	A	V	M	Y	L	V	N	A	I	Y	F	K	A	E	W	T	Y	N	F	P	K	A	N	T	K	K	E	N	F	F	P	P	S	G	T	S	V	P						
UniRef90_H0VPL6	N	K	L	V	L	V	N	A	I	Y	F	K	A	G	W	N	K	L	F	Q	E	S	A	N	T	K	K	E	M	P	F	F	K	I	N	S	K	E	D	S	V	P		
UniRef90_B6UQ38	T	R	L	V	L	V	N	A	I	Y	F	K	A	K	W	N	D	E	F	D	P	F	D	T	Q	K	E	D	R	P	F	F	K	I	N	S	K	E	D	S	V	P		
UniRef90_U3EQV9	T	K	L	V	L	V	N	A	I	Y	F	K	A	G	N	W	A	D	K	F	N	K	D	H	T	A	E	K	P	F	F	R	I	L	N	K	N	K	E	S	K	T	V	P
UniRef90_A5PJ69	T	K	L	I	L	V	D	Y	I	L	F	K	G	K	W	L	I	P	F	D	P	A	L	T	E	M	D	T	F	F	Y	I	L	D	K	Y	K	E	V	K	V	P		
UniRef90_G5BKF1	I	R	L	I	L	V	N	A	I	Y	F	K	G	R	W	D	Q	Q	F	E	E	S	S	D	T	R	T	M	S	P	F	K	I	N	Q	K	E	Q	R	P	V	P		
UniRef90_A11VL3	T	V	L	V	L	V	N	A	I	Y	F	K	G	S	W	E	S	P	F	Y	I	S	S	D	T	M	F	N	S	P	F	K	I	V	S	L	E	E	V	V	P	V	P	
UniRef90_B9XLN3	V	A	L	V	L	V	N	A	I	Y	F	K	G	A	W	A	T	P	F	S	K	E	V	T	M	P	N	P	F	F	Y	F	G	K	K	G	S	V	T	A	Q	M		
UniRef90_G7W8T9	V	I	M	Y	L	I	N	A	I	Y	F	K	G	D	W	A	K	Q	F	D	P	H	N	T	F	K	T	F	F	E	A	S	G	N	G	T	D	Q	V	M				
UniRef90_C5A4E9	T	R	L	V	L	V	N	A	I	Y	F	K	A	N	W	S	R	F	E	A	V	N	T	K	N	E	T	Y	F	Y	S	P	S	G	P	V	V	V	E					
UniRef90_H0WQP5	S	V	M	V	L	V	N	A	I	Y	F	K	G	Q	W	Q	N	K	F	Q	E	S	E	T	V	K	T	P	F	Q	L	S	E	S	G	T	N	V	V	E				
UniRef90_Q60770	A	T	L	I	L	V	N	A	I	Y	F	L	K	G	I	W	K	L	P	F	S	K	P	K	E	N	T	R	E	E	D	F	Y	V	N	E	T	S	T	R	V	K	V	P
UniRef90_UPI00042C6BF0	T	K	M	V	L	V	N	A	I	Y	F	K	G	N	W	K	T	P	F	S	Q	K	K	L	N	G	L	Y	P	F	R	V	N	A	T	Q	R	T	P	V	Q			
UniRef90_M3X3Q3	T	K	M	V	L	V	N	A	I	Y	F	K	G	N	W	D	K	Q	F	R	K	E	N	T	K	E	R	Y	P	F	K	V	S	K	N	E	E	K	P	V	Q			

UniRef90_UPI0003C492EC MT H R L G R F D L L H D K A L S S W V L L Q H Y R G Q M P A F L I L P D E G K
UniRef90_A7BYH7 MM N Q K N Y F G Y A E N Y N F Q H L D L S Y D D N N L S M I V L L L P R H R D G
UniRef90_E1RK56 MM K R T D D Y G Y T E T D G L Q Q V L E M P Y E N E S G K S M I V L L L P K E N D S
UniRef90_UPI0004403F25 M M S M Q E K L Q V F Y I K K P Q A K G L Q L F Y E S H D L S L L I L L P K E N D S
UniRef90_K1L767 M M D L G K A A G F R Y Y G S I D A G Y I E L P Y S S G Q Y N M G V L I L Q D G N
UniRef90_H0VPL6 M M F R K G K F P W A H V R E V Q A Q V L E M P Y V G Q E L S M I V L L P D E D
UniRef90_B6EU39 M M H R E G H F N L V D P E V G C S V L E L P Y K E K D L S M I V L P T E K E G
UniRef90_U3EQV8 M M F K K A K Y N M T Y I S D Y R T S I L E I P Y V D N E L S M I I L L P E K I
UniRef90_A5PJ69 M M Y R S G K F A S T F D K K F H C H V L K L P Y R G N A S M L V V L V E R G D
UniRef90_G5BKf1 M M Y Q E A R L P L A Y V R E L G T Q V L E L P Y T G R E L S M V I L L P V E G
UniRef90_A1IVL3 M M Y Q D G M F K L G R D E N L K C Q L E L P Y K G K H L S M V L V L P D D G
UniRef90_B9XLN3 M M Y Q Q E H F D Y Y E N P K L K A L K L P Y A G R K L S M V I L L P S A R D G S
UniRef90_G7W8T9 M M K R T G T V E Y G G N G F K L Q A V R L P Y G S G K M A M Y C I L P E K D V S
UniRef90_C5A4E9 M M H Q T A K F L Y F E N D D L Q A V E L P Y E G N R L G M L V I L P R E G R
UniRef90_H0WPQ5 M M Y Q T G T F K L A F I K E P K M Q V L E L P Y V N K Q L S M I I L L P V I G T
UniRef90_Q06770 M M V Q S G N I S Y F R D S A I P C Q M V Q M N Y V G N G T T F I I L L P D Q G Q
UniRef90_UPI00042C6BF0 M M F L H K K L N I G Y I E D L K V Q I L E L P Y A G Y V S M F L L L P D G T G
UniRef90_M3X3Q3 M M Y L R E D L N L G Y I G D L K T Q I L E L P Y T G D V S M F L L L P D E I G
UniRef90_U3BQ61 M M F K K S T F N K T Y I G E I F T Q I L V L P Y V G Q E L N M I I L P D E T
UniRef90_T1IPU0 L M H L K S E F K F A E D D N L N C K I I E L P Y V D E A F N L N N L M S R M R
UniRef90_Q62975 M M Y R E G N F A S T F D K K F R C H I L K L P Y Q G N A T M L V V L M E K G D
UniRef90_Q8AYE3 M M Y Q E K K F A Y A K I L P E D K V K I L E L P Y N G G D M V L I L P E G A T
UniRef90_B9XIM4 F M N R E G S F K Y G E N A Q A K V L V I P Y R E H Q F E M V L V L P Q K Q D G
UniRef90_W2C3T3 M M Y R Q G D Y R Y G T N D V C R Y L E M S Y G N G A F G M V V M L P Q E G K T
UniRef90_UPI000180C8BF M M N Q K E W F N F K T D P D L G L K I A E L F Y K G G D Y S M V V L P D E K
UniRef90_H0WSZ7 M M F Q S R P L R Y L R D S E L P C Q L L Q L N Y V G N G T I F F I L P D Q G K
UniRef90_UPI0002740234 M M F K Q A K F R M G Y I K E M H T Q L L E M L Y A E E E L S M V I L M L P D E D
UniRef90_UPI000446F88 M M E M E K D V N I Y S D K A I N T T V L H L P F N N S Y S M L I L L P E N M T
UniRef90_Q9U115 M M S L K E R F R Y A D L P A L D A M A L E L P Y K D S D L S M L I V L P N T K
UniRef90_A7UI23 M M H G Q L T A G Y A R D D E T N S D V V D L P Y A G L D Y S M T I V R P R D R
UniRef90_F7BXy2 M M F K E A T F K M T Y I K E M S T K I L E L P Y V G E E L S M V I L P D E N
UniRef90_H5XTY7 M M S R T G N V E Y G K G D D F Q A V R L P Y G S G K A A M Y C I L P E K D Q T
UniRef90_I2GRX6 M M R L N D T E L R R A S R P T Y S A F E L P Y G N D K S A M T V L L P A Q N S N
UniRef90_H9TZT5 L M Y Q D D Y F R Y A D L P T Y F D A T A L E M Q Y E N S D L S M L I L P R D G
UniRef90_UPI0004482B8 M M Y Q E G K F R Y R R V A E L G T Q V L E L P F K G D D I T M V L I L P E K S
UniRef90_UPI0003AF5DEA M M T L G L E T P Y F R D E E L G C T L V E L T Y T S N D S A L F I L P D E G K
UniRef90_L9L8N7 M M T Q C H S F S F T F L E D L Q A K I L G I P Y K N K D L T M F V L P N D G
UniRef90_F8WGA3 M M Y Q K E K F P F G Y I L P D L K C K V L E M P Y Q G G E L S M V I L L P E D I
UniRef90_UPI0003AF86F7 M M N L A L V T P Y F R D E E L G C T L V E L T Y T S N D S A L F I L P D E G K
UniRef90_UPI0003834820 M M Y Q F G S F K V A V A S E K V K I L E L P Y A S G D S M W V L L P D E G
UniRef90_UPI0001E2CC78 M M T K N C E L E Y G A K D D F R V V R L P Y R E E E T S M Y C V L P S E N V S
UniRef90_M4AS07 M M Y Q Q G D F Y Y G F S D Y Q V L D M P Y E G E D M S M M L I L P R Q E V P
UniRef90_J9JX80 M M T L V H D L Q Y Y H D S D K F A A L E L P Y E H Y A F K M I I L L P D D G
UniRef90_UPI000328ABC0 M M A Q T N K F R Y T E F S T P D G H Y Y E L P Y H G E T L S M F I A V P F E K
UniRef90_T1PFM8 Y M N Q K E K F G Y G Y F E E Y N C T A L E M P Y K D S D L S M F V M L P Q E R
UniRef90_L5MB44 M M Y Q E R M F N L S V I Q D P M Q V L E L R Y Q G G I S M Y I M L P Q S E S
UniRef90_G3VG92 M M Q T K G N F L V A N D Q E L D C D V L Q L Q Y V G D S M L I V M P H K L J A G
UniRef90_UPI00046CF928 T M F A S G S Y V Y G E L P S L A K A K F V E L P Y E N K D L K M V I I V P D E I
UniRef90_L5JP23 M M R C E D Q F L Y L Q D P S D L A C K V V G V P Y Q G N A T A F F I L P G E G K
UniRef90_B4J9A5 M M N L K E R F R Y A N L P N L D A A A L E L P Y K D S D L S M L I L L P N S K
UniRef90_B4J5M5 Y M N Q K A K F G Y A Y F E E L N C T A L D M P Y M N S D L S M L V L P Q E R
UniRef90_H3DMX5 M M Y Q Q G D F Y Y G F S D G V Y Q V L E M P Y E G E D M S M M I V L P R Q A
UniRef90_B7NZ99 M M Y L R E K L N I G Y I Q D L K A Q I L E L P Y A G N V S M L L L L P D E T G
UniRef90_E3TE90 M M Y Q T K K F L F N Y V D E Y R L Q V L D L P Y V I E E L S M V V L L P Q E S
UniRef90_M4A8C6 M M K K M G R F D Y Y H D H N H T T V L L P Y K G N T S M L I V L P D E N K
UniRef90_UPI0003318AB0 M M V S G H S E P Y F R D E V L G C T V V Q L P Y R D S S T A L I L L P D E G H
UniRef90_UPI000393D579 M M H Q N S T F R V G R V A E D K L K V L E L P Y T S G E L S L L V L L P D D I
UniRef90_P29508 M M R Q Y T S F H F A S L E D V Q A K V L E I P Y K G K D L S M I V L L P N D G
UniRef90_UPI00022C953F T M Y R K G N Y R Y G V L P D L D A K F V V I P Y K G D E L S M I I L L P N D G
UniRef90_P13909 M M A Q T N K F N Y T E F T P D G R Y Y D L P Y H G N T L S M L I A A P Y E K
UniRef90_I3IY10 M M M R T G Y Y E Y E D A V N H A S I T M L P Y K S N T S M M I V L P D K G W
UniRef90_Q06B74 T M R L E A R L K Y R F F D D L Q V I E V V E L P Y R G L D Y T M A I L L P K E N
UniRef90_G1TAU6 M M A Q T N K F N Y T E F D G H Y Y D I L E L P Y H G E T L S M F I A A P Y E K
UniRef90_F7CGR3 M M Y L Q A K K H L G Y I E E L K S Q I V E I P Y A G D I S M F V L L P D E T G
UniRef90_Q96P63 M M T Q K G L Y R I G F I E E V K A Q I L E M R Y T K G K L S M F V L L P S H S
UniRef90_H1XQZ0 M M F V T C R I P A L F E E R I Q V A Q V P F G Q G N Y V M T F I M P R R M D D
UniRef90_F6ULK0 M M Y K K A T F K F T Y I G R I S T Q I L E L P Y V G E E L S M L I M L P N E N
UniRef90_F7CJ66 M M Y Q Q G E F Y Y G F S D Y Q V L E I P Y E G D E I S M M L I L S R Q E V P
UniRef90_UPI00036CE199 M M R L D V N L N H F F Q T N Y Q A I L E L P Y G T G K F A M T V L L P S E S T T
UniRef90_UPI000333F355 M T N R L G I F L L T R D E K L S S W V L V Q H S V G D A M A F F I L P D P G K
UniRef90_UPI00035A2D2C M M N I E D I T P Y F R D E E L S C S V V Q L K Y T G N A S A L F I L P D E G K
UniRef90_E1BTH3 L M H L S D K F N W T Y V E S A Q L D V L E L P Y V N N E L S M F I L L P R E I
UniRef90_O08804 M M F Q K S T F K M T Y V E E I S T N L L L P Y V G N E L N M I L P D E H
UniRef90_K1PU81 M M Y Q K A S F R F C Y L P D M Q M N A L D I P Y Q G D K L S M L V L L P M D G
UniRef90_R6KDB2 M M N Q T A T F N Y T Q T E D F S I A E L P Y G N E A F S M V I L L P S G D K T
UniRef90_UPI00038EEA68 M M Y L R E K L N I G Y I E D L K A Q I L E L P Y V G H V T M F L L L P D A V A
UniRef90_G3NAW7 M M H Q K S K F P V T Y I P E A N C Q V L E M P Y K G M E L S M L I F L P S D I
UniRef90_V5WCC7 M M H L K K K F R Y F N H R D L D S T I L A M D Y K G S R L S M V F I L P N D G
UniRef90_F7CGN7 M M S M K R N L Q I F H I E K P E A K G I Q L Y Y G N G D M S M F I L L P D D I
UniRef90_T1JHQ7 M M H Q T N L F Y H G I S A D L D A Q V L E M P F I S E E V S M I F F L P D F L
UniRef90_G3VJ14 M M F L K S K F R M T H I Q D E V S T Q V L V L P Y V G G Q M D M V I L L P D E N
UniRef90_T2MF56 M M Y Q K N K Y K C Y D E E F G S Q I L L P Y K G N S L E M M I L L P D G L
UniRef90_T1IF83 M M S K T G Q F P Y K Y N P E L K A K L L E L P Y E D K E F K M V I L L P D D G
UniRef90_UPI0003C36362 M M F K S G M S A K E I S E L D A T A I R L P Y R D C D L S M V I L L P N E R
UniRef90_UPI000346F1BB L M S Q R G N F S Y Y E N K D F Q L I N L P Y G K S G A M S M Y I L L P Q K D N
UniRef90_UPI0003338980 M M A Q T S K F N Y T E F D G D F Y D I L E L P Y H G E T L S M F I A A P Y R K
UniRef90_B7QL32 T M V E K L R R H N S F E D L G V D V A E L P Y R G G D Y S M L I L L P K E K
UniRef90_W5MU67 M M H N D S S F D V Y Y D K E A S T H V L R L G Y K G G A S M M L L L P E K G
UniRef90_H3ZLU8 M M H Q T G R F P Y F E N D D L Q A L E L P Y E G E R L S M L I L L P R K G K
UniRef90_UPI000334154B M M F K H A H F N M S Y I E E V H Q T Q V L E L P Y E D E S M V I L L P E N T D
UniRef90_G8UQY8 M M A K S T F G M Y T D E C C Q Y L E M D Y G N K A F S M I V M L P N E G Q T
UniRef90_W8B9Z8 M M Y A D D T F R Y S E F P E L D A A G L E L Q Y A N S N I S M M I L L P K K R

UniRef90_UPI0003C492EC	M	Q	Y	L	E	A	K	V	C	Q	K	H	L	A	R	I	F	K	N	I	D	I	R	S	A	S	L	S	M	P	K	L	S	L	S	G	T	Y	D	L							
UniRef90_A7BYH7	L	S	Q	A	E	N	D	A	L	N	P	T	S	L	A	E	E	K	N	I	L	Q	W	K	Q	V	N	V	V	S	F	P	K	F	K	M	N	T	G	F	E	L					
UniRef90_E1RK56	L	K	A	A	E	N	D	A	L	N	P	T	S	L	A	E	E	K	N	I	L	Q	W	K	Q	V	N	V	V	S	F	P	K	F	K	M	N	T	G	F	E	L					
UniRef90_UPI0004403F25	G	D	Q	A	L	E	K	A	I	T	T	Y	E	K	S	E	W	T	S	A	D	M	M	E	L	C	D	K	V	H	L	P	K	F	F	K	L	I	E	E	M	Y	D	L			
UniRef90_K1L767	T	A	A	L	A	S	Y	L	T	T	F	E	K	L	Q	T	W	T	E	Q	D	A	K	D	I	N	L	L	L	K	M	P	K	F	F	K	L	I	Q	E	K	D	Y	D	M		
UniRef90_H0VPL6	V	D	M	V	E	D	K	S	L	T	T	F	E	K	L	Q	T	W	T	E	Q	D	A	K	D	I	N	L	L	L	K	M	P	K	F	F	K	L	I	Q	E	K	D	Y	D	M	
UniRef90_B6UEU39	L	L	G	Q	V	E	D	Q	V	T	T	M	E	T	L	Q	G	W	N	N	K	M	V	N	K	L	A	F	V	V	S	F	L	P	K	F	F	K	L	I	E	E	A	V	T	L	
UniRef90_U3EQV8	E	D	N	S	E	R	E	I	T	T	T	Y	E	K	L	M	D	W	I	N	P	E	A	M	R	K	E	L	E	L	S	F	F	P	K	F	F	K	L	I	Q	E	K	D	Y	D	M
UniRef90_A5PJ69	H	L	T	L	E	D	Y	L	T	T	T	D	L	V	D	T	W	L	R	N	M	K	T	R	K	M	E	V	L	S	F	F	P	K	F	F	K	L	I	Q	E	K	D	Y	D	M	
UniRef90_G5BKf1	V	D	T	V	E	K	S	L	T	T	T	F	E	K	L	Q	T	W	T	E	Q	D	A	K	D	I	N	L	L	L	K	M	P	K	F	F	K	L	I	Q	E	K	D	Y	D	M	
UniRef90_A11VL3	L	N	A	I	E	T	S	L	T	T	T	P	E	V	L	R	K	W	Q	N	S	M	V	K	E	D	V	G	I	L	L	P	K	F	F	K	L	V	Q	E	F	D	L				
UniRef90_B9XLN3	L	P	D	L	E	S	F	I	T	T	T	Q	S	L	S	W	I	S	Q	M	H	D	Q	E	V	A	I	Q	L	P	K	F	F	K	M	D	E	E	F	D	L						
UniRef90_G7W8T9	I	N	D	F	I	A	T	L	D	P	D	R	W	Q	I	Q	D	S	I	A	K	R	D	E	V	H	L	Q	L	P	K	F	F	K	L	I	E	E	D	Y	D	M					
UniRef90_C5A4E9	F	E	E	V	E	R	Q	L	N	A	E	M	S	E	L	V	A	N	M	T	D	E	M	V	A	V	S	I	P	K	F	F	K	L	I	E	E	D	Y	D	M						
UniRef90_H0WPQ5	T	E	Q	V	E	R	Q	L	T	V	R	T	F	H	Q	W	T	S	N	M	I	E	R	E	V	E	V	H	L	P	K	F	F	K	L	I	E	E	D	Y	D	M					
UniRef90_Q06770	M	D	T	V	V	A	A	L	N	R	D	T	L	D	R	W	G	K	I	M	L	P	R	Q	M	N	L	Y	I	P	K	F	F	K	M	S	D	T	Y	D	M						
UniRef90_UPI00042C6BF0	L	E	L	L	E	S	E	I	T	T	Y	D	K	L	N	K	W	L	S	E	D	T	M	A	E	D	D	V	Y	L	P	K	F	F	K	L	I	E	E	D	Y	D	M				
Uni																																															

UniRef90_UPI0003492EC	K	A	I	L	G	E	M	G	M	I	P	T	K	V	F	S	N	G	A	E	D	F	S	G	I	S	E	G	V	P	L	T	S	I	S	K	A	V	I	H	H	K	A	V	L	T
UniRef90_A7BYH7	S	K	L	L	S	K	M	G	M	P	D	A	F	N	G	K	A	D	F	S	G	M	D	S	E	G	V	P	L	T	S	I	S	K	A	V	I	H	H	K	A	V	L	T		
UniRef90_E1RK56	R	D	I	L	I	D	I	G	M	P	A	D	F	N	G	K	A	D	F	S	G	M	D	S	E	G	V	P	L	T	S	I	S	K	A	V	I	H	H	K	A	V	L	T		
UniRef90_UPI0004403F25	Q	S	T	I	L	S	S	M	G	M	S	D	A	F	N	G	K	A	D	F	S	G	M	D	S	E	G	V	P	L	T	S	I	S	K	A	V	I	H	H	K	A	V	L	T	
UniRef90_K1L767	M	M	A	L	G	L	E	K	P	F	D	F	H	P	D	N	F	T	K	L	F	S	N	P	T	D	A	L	K	I	L	S	N	R	V	I	H	H	K	A	V	L	T			
UniRef90_H0VPL6	G	T	V	L	Q	A	L	G	M	V	D	A	F	Q	D	E	G	K	A	D	S	G	M	V	V	D	S	E	L	C	L	S	K	F	V	I	H	H	K	A	V	L	T			
UniRef90_B6UQ39	T	D	H	L	K	N	M	G	M	E	D	L	F	D	A	T	A	D	F	S	G	L	T	G	S	K	D	L	Y	V	I	S	D	V	I	H	H	K	A	V	L	T				
UniRef90_U3EQV8	K	P	V	L	K	Q	M	G	M	M	D	A	F	D	E	G	K	D	F	S	G	M	S	T	K	N	D	L	V	I	S	E	V	V	I	H	H	K	A	V	L	T				
UniRef90_A5PJ69	H	E	L	L	K	Q	M	G	V	Q	K	I	F	L	P	W	A	D	L	S	D	M	V	T	E	R	N	L	K	V	I	S	E	K	V	L	Q	R	A	S	T	I	E			
UniRef90_G5BKF1	G	S	V	L	Q	R	L	G	M	V	H	A	F	L	Q	G	S	A	D	T	G	M	V	A	D	R	D	L	C	L	S	R	F	V	I	H	H	K	A	V	L	T				
UniRef90_A11VL3	S	E	K	L	S	E	M	G	M	P	D	L	F	T	G	T	D	A	D	L	G	M	T	A	G	S	R	G	L	H	L	D	A	L	V	I	H	H	K	A	V	L	T			
UniRef90_B9XLN3	N	S	T	L	G	E	M	G	L	H	D	A	F	C	Y	S	K	A	D	F	R	G	M	M	S	S	G	E	L	H	L	S	R	V	L	L	H	H	K	A	V	L	T			
UniRef90_G7W8T9	T	G	S	L	T	A	L	G	M	G	E	A	F	T	G	K	A	D	F	S	G	I	L	G	S	A	N	I	F	I	S	R	V	L	L	H	H	K	A	V	L	T				
UniRef90_C5A4E9	K	E	V	L	M	E	M	G	V	K	R	A	F	T	R	P	D	F	A	G	L	S	E	L	E	D	L	V	I	S	D	V	I	H	H	K	A	V	L	T						
UniRef90_H0WQP5	N	S	L	L	K	S	L	G	M	T	D	V	F	N	T	N	K	A	D	S	A	G	M	S	A	A	K	G	L	Y	L	S	K	V	I	H	H	K	A	V	L	T				
UniRef90_Q06770	K	D	V	L	A	D	V	G	I	K	D	L	F	T	N	Q	S	K	D	F	A	D	T	T	K	D	T	P	L	T	L	T	S	E	V	I	H	H	K	A	V	L	T			
UniRef90_UPI00042C6BF0	Q	S	I	L	M	S	M	G	M	D	D	A	F	S	Q	G	Q	A	N	F	S	G	M	S	E	R	N	D	L	F	L	S	K	V	F	I	H	H	K	A	V	L	T			
UniRef90_M3X3Q3	Q	S	I	L	R	S	M	G	L	E	D	A	F	S	K	S																														

UniRef90_UPI0003C492EC I D E S G H D H S G A 330
UniRef90_A7BYH7 V N E K G T E A A A A T A V
UniRef90_E1RK56 V N E E G T E
UniRef90_UPI0004403F25 I N E Q G T E S A S G T A S E V
UniRef90_K1L767 V D E Q G T E A A A A T I V E I V
UniRef90_H0VPL6 V N E E G T E
UniRef90_B6EU39 V Y E K G S E A A A A T G V I A V
UniRef90_U3EQV8 V N
UniRef90_A5PJ69 V D E E G T E A M A G T L L E I
UniRef90_G5BKF1 V N E E G T E
UniRef90_A1IVL3 V N
UniRef90_B9XLN3 V N E T E T E A A A V T M A G V
UniRef90_G7W8T9 V N E E G S E A A A S T V V E M
UniRef90_C5A4E9 V A E K G T E A A A A T A V I M
UniRef90_H0WPQ5 V S E E G T E A A A G A G E S I
UniRef90_Q06770 L D E G N V L P A A T
UniRef90_UPI00042C6BF0 V N E E G T E A A A G T G A I M
UniRef90_M3X3Q3 V N E E G T E A A A G T G A T M
UniRef90_U3BQ61 V N E E G
UniRef90_T1IPU0 V N E E G S E
UniRef90_Q62975 V D E R G T E V V S G T V S E I
UniRef90_Q8AYE3 V N E E G S E
UniRef90_B9XIM4 V N E K G T E A A A A T G
UniRef90_W2C3T3 V T E S G T E A A A V T S V E M V L M
UniRef90_UPI000180C8BF V N E T G T E
UniRef90_H0WSZ7 L D E E G V I Q A S A S R V V
UniRef90_UPI0002740234 I N
UniRef90_UPI0004446F88 V D E T G A T A A A A T G I G F I P L
UniRef90_Q9U1I5 V N E E G T E A A A A T G M A V
UniRef90_A7UI23 V N E E G S Q A A A V T G V I I
UniRef90_F7BXY2 V
UniRef90_H5XTY7 V N E E G S E A A A A T A V E I R P
UniRef90_I2GRX6 V D E K G T E A A A V T T G G I M P L
UniRef90_H9TZT5 V N E A G S E A A A A T Y L K I V P M
UniRef90_UPI00044482B8 V N E E G S E A A A S T V I G I
UniRef90_UPI0003AF5DEA V G E E G T E G A A V T A V T M M
UniRef90_L9L8N7 V T E E G T E A V A A T S I S L T V M
UniRef90_F8WGA3 V N
UniRef90_UPI0003AF86F7 I Y E A G S E V V G S S G A G I
UniRef90_UPI0003834820 V N E E G S E A A G V S G I A V
UniRef90_UPI0001E2CC78 V T E E G S E G A V G S G M I A L
UniRef90_M4AS07 V N E K G T E A A A A T G M T F V
UniRef90_J9JX80 V N E S G T V A S S S T A I I V
UniRef90_UPI000328ABC0 V N E E G S E A A A A T G
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UniRef90_L5MB44 V N E E G T Q A A A V T T V G F M P L
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UniRef90_UPI00046CF928 V D E S G T K
UniRef90_L5JP23 V N E H G T E A A A A T A M V M M P M
UniRef90_B4J9A5 V N E E G T E A A A A T G
UniRef90_B4J5M5 V T E E G S E G A A G S G M M A L
UniRef90_H3DMX5 V N E E G T E A
UniRef90_B7NZ99 V N
UniRef90_E3TE90 V D
UniRef90_M4A8C6 V
UniRef90_UPI0003318AB0 V
UniRef90_UPI000393D579 V N E E G T E A G G T E V V
UniRef90_P29508
UniRef90_UPI00022C953F V N E E G S E A A A A T G L L I M
UniRef90_P13909 V N E S G T L A S S S T A L V V
UniRef90_I3IY10 V T E M G T E A A A V S I F E L I L M
UniRef90_Q06B74 V N E E G T V A A A T T G V V I V P
UniRef90_G1TAU6 V N E S G T M A S S S T V I
UniRef90_F7CGR3 V N E E G T E A A A G T G
UniRef90_Q96P63 V D E N
UniRef90_H1XQZ0 V S E K G A E A A A V T I V E M M
UniRef90_F6ULK0 V N
UniRef90_F7CJ66 V N E E G S E A A A A S G M I A I
UniRef90_UPI00036CE199 V D E K G T E A A A V T S V G V
UniRef90_UPI000333F355 I D D K R T A T R W A T D L E
UniRef90_UPI00035A2D2C V G E T G T E A A A A T G V
UniRef90_E1BTH3 V N E E G T E
UniRef90_O08804 V N E E G
UniRef90_K1PU81 V N E E G S E
UniRef90_R6KDB2 V D E E G T E A A A V T V G G M
UniRef90_UPI00038EEA68 V N E E G T V A A A G S G A I M
UniRef90_G3NAW7 V N
UniRef90_V5WCC7 V N E K G S E
UniRef90_F7CGN7 V N E E G T E A A A S T A
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UniRef90_G3VJ14 V
UniRef90_T2MF56 V G E E G T E A A A V T A V L I
UniRef90_T1IF83 V D E K G T E
UniRef90_UPI0003C36362 V N E V I G T T A A G V T K I G I M
UniRef90_UPI000346F1BB V D E K G T E A A A V T S I G I
UniRef90_UPI0003338980 V N E N G S V A S S S T A V V I
UniRef90_B7QL32 V N E E G T E A A V V S G V
UniRef90_W5MU67 V D E I G T T A T G V T G V E I I
UniRef90_H3ZLU8 V A E N G T E A
UniRef90_UPI000334154B V N
UniRef90_G8UQY8 V D E E G T E A A A V T A V E M V
UniRef90_W8B9Z8 V N E A G S E A A A A T F I K L I P L

	1		10		20		30		40																														
UniRef90_Z4YK03		M	E	Q	L	S	A	N	T	L	F	A	L	E	L	F	Q	T	L	N	E	S	S	P	T	G	N	I	F	F	S	P	F	S	I	S	A		
UniRef90_H0X9C2		M	D	V	L	V	A	N	T	K	F	C	F	D	L	F	Q	K	I	S	K	D	D	Y	H	K	N	V	F	F	C	P	L	S	I	S	A		
UniRef90_UPI0003C397D2																																							
UniRef90_UPI00042BF121		M	N	S	I	S	E	A	T	T	K	F	C	L	D	F	K	V	L	N	K	D	F	P	T	D	K	N	I	I	F	S	P	F	S	I	S	E	T
UniRef90_B6ZAZ6		A	L	D	E	F	T	A	G	N	H	L	F	T	S	R	L	Y	T	E	V	L	K	E	N	Q	N	K	N	F	L	F	S	P	L	S	A	E	T
UniRef90_B4J3Z7																																							
UniRef90_UPI000333B0BB		M	D	F	L	I	A	N	T	H	F	G	F	N	L	F	R	E	L	K	K	H	D	G	N	I	L	F	Y	S	P	S	S	V	S	I	S	T	
UniRef90_H2MB90		S	V	S	L	V	T	S	A	N	Q	D	F	A	F	S	L	Y	R	N	L	A	D	S	Q	G	K	N	I	F	Y	S	P	S	S	V	S	I	S
UniRef90_I3LXJ5		P	H	R	D	L	A	P	I	N	T	D	F	A	F	S	L	K	H	L	V	A	S	P	D	R	N	T	F	I	S	P	V	S	I	S	I	S	
UniRef90_I3R703																																							
UniRef90_G4H7Q3		Q	D	M	T	Q	A	G	R	D	F	A	L	R	L	H	Q	S	L	A	T	E	L	E	Q	E	N	L	L	F	S	P	Y	S	I	T	Q		
UniRef90_O08800		M	D	D	L	S	E	A	N	G	S	F	A	I	S	L	L	K	I	L	S	E	K	D	K	S	R	N	I	F	F	C	P	M	S	V	I	S	T
UniRef90_F7DMU0		H	K	I	I	A	T	N	T	E	F	A	L	R	L	Y	R	L	L	A	T	D	I	P	D	G	N	I	F	F	S	P	Y	S	I	S	I	S	
UniRef90_Q6J201		M	A	A	L	Q	A	A	V	S	Q	L	A	I	S	F	F	S	S	L	I	V	P	G	A	E	K	N	V	V	C	P	L	S	I	S	I	S	
UniRef90_D3ZPF9		M	D	S	L	V	A	A	N	N	K	F	C	F	D	F	F	Q	E	I	S	K	D	D	A	H	K	N	I	F	V	C	P	L	S	I	S	A	
UniRef90_B7PX81																																							
UniRef90_G1K1L8		M	E	Q	L	S	A	A	N	T	R	F	A	V	D	L	F	L	T	L	T	E	H	N	P	A	G	N	I	F	I	S	P	F	S	I	S	I	S
UniRef90_G1SZH3		M	S	S	L	S	K	A	Y	I	Q	P	T	L	D	L	F	Q	L	L	G	K	S	K	E	E	N	V	F	Y	S	P	F	S	I	S	I	S	
UniRef90_G3VRY9																																							
UniRef90_UPI00038C0CC1		A	S	R	T	V	A	Q	M	V	T	N	F	G	M	K	V	R	E	V	V	Q	T	S	G	D	G	N	I	F	F	S	P	L	G	T	T	V	
UniRef90_M7CAZ4		H	R	L	A	E	G	L	M	K	F	T	T	D	L	L	T	E	V	Q	Q	E	T	S	R	K	N	V	I	L	S	P	L	S	I	S	I	S	
UniRef90_B4NWU8																																							
UniRef90_A9GEN7																																							
UniRef90_A8PHV8		S	P	I	D	Y	A	Q	S	N	I	A	V	S	L	L	K	E	I	V	Q	R	N	K	S														
UniRef90_UPI00001D0992		M	H	L	F	A	K	A	T	T	Q	F	T	L	E	L	Y	R	Q	L																			
UniRef90_Q9D6A7																																							
UniRef90_H2MMV6		N	A	T	I	L	D	L	S	Y	K	N	M	D	F	A	M	N	L	Y	R	K	I	A	N	Y	H	D	K	N	I	F	F	S	P	L	S	I	S
UniRef90_UPI0003686A05																																							
UniRef90_K2AAM1		N	T	A	M	Q	L	V	S	A	N	T	E	F	A	V	N	L	Y	A	K	Y	A	S	L	K	S	E	E	N	I	F	F	S	P	Y	S	I	S
UniRef90_V8BUZ0																																							
UniRef90_G3XGC5		N	P	E	R	D	A	V	I	R	R	F	N	Y	F	D	L	E	L	K	E	F	S	E	P														
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UniRef90_W8BSP5																																							
UniRef90_S9WZQ0																																							
UniRef90_F7I645		M	N	S	L	S	E	A	N	T	Q	F	L	F	D	L	F	Q	Q	F	R	K	S	K	K	N													
UniRef90_D6VWVG8		A	I	Q	E	F	T	N	A	N	N	Q	F	T	S	A	V	Y	K	E	L	S	K	T	E														
UniRef90_W0RN82																																							
UniRef90_Q8CX67		M	T	E	V	S	E	A	S	N	L	L	A	F	Q	S	I	Q	S	L	D	P	N	R	E	G	N	V	F	V	S	P	T	S	Y	W	L		
UniRef90_Q6GLQ1		M	D	A	L	R	L	A	N	T	G	L	A	V	D	I	E	K	L	C	E	K	S	A	T	D	N	F	V	F	S	P	I	C	I	S	T		
UniRef90_UPI000223FCE4		M	E	S	L	V	A	A	N	T	K	F	C	F	D	L	L	C	E	L	S	K	R	D	P	H	K	N	I	F	F	C	P	L	S	I	S	A	
UniRef90_M3XMW8		M	E	Q	L	S	T	A	N	T	H	F	A	V	D	L	F	R	A	L	N	E	D	N	P	T	G	N	I	F	I	S	P	F	S	I	S	S	
UniRef90_G3V5Q9																																							
UniRef90_B5IED0		L	Q	A	L	G	Y	A	N	N	R	F	A	S	L	F	N	E	I	W	G	Q	E	N															
UniRef90_B3N728																																							
UniRef90_UPI00032AE3C6		H	L	T	C	H	R	L	S	S	I	T	N	L	A	F	A	M	Y	A	E	P	A	R	W	S	N	S	N	V	L	F	S	P	V	S	I	A	
UniRef90_UPI00045413F8		N	Q	A	L	R	T	E	A	Q	K	N	A	E	L	A	V	D	Y	K	A	I	C	F	S	H	K	N	I	I	F	S	P	V	L	G	T	V	
UniRef90_UPI00045763C4																																							
UniRef90_V9KR25		R	V	S	E	L	A	T	D	F	G	M	R	V	F	Q	E	I	L	Q	A	N	G	D	R	N	V	L	F	S	P	Y	G	M	S	T			
UniRef90_A9FD28		S	L	S	R	N	N	A	S	F	A	L	D	L	G	R	A	L	H	S	S	T	T	N	V	V	Y	A	P	F	S	I	S	I	S	T			
UniRef90_Q7ZVL5																																							
UniRef90_A0A034VP18		A	Q	R	E	F	A	S	K	S	A	Q	F	A	V	K	L	F	N	Q	M	H	N	K	D	P	N	K	S	I	F	S	P	F	S	I	Q	T	
UniRef90_L1N085																																							
UniRef90_Q8CX66																																							
UniRef90_W0EW83		Q	P	V	K	E	S	M	S	G	F	S	F	T	F	F	K	T	L	M	K	E	K	P	N	E	N	I	F	V	S	P	L	S	I	S	H	I	
UniRef90_F9W2V9		P	V	H	H	K	I	E	A	G	N	K	A	F	H	K	L	F	K	T	L	T	E	H	P	R	K	N	I	I	F	S	P	L	S	I	S	A	
UniRef90_UPI0003333808		M	D	S	L	I	A	A	N	T	K	F	C	F	D	L	F	Q	K	I	S	K	D	D	Y	H	K	N	I	F	F	C	P	L	S	I	S	A	
UniRef90_F0YTC1																																							
UniRef90_F1L0N2		S	L	D	I	A	Q	A	N	F	A	L	G	L	R	K	S	A	N	D	G	A	H	K	S	A	I	L	S	P	F	S	I	S	A	V			
UniRef90_I3JIL1		L	S	S	L	Q	D	K	Q	T	D	F	G	L	K	V	F	Y	Q	L	A	Q	G	S	T	D	K	N	V	L	F	S	P	Y	G	V	A	S	
UniRef90_W5N5Q6		M	A	S	L	A	S	A	H	T	S	F	S	L	D	L	F	K	R	L	S	A	D	N	G	T	G	N	V	F	F	S	P	L	S	I	S	S	
UniRef90_UPI00042C0B22		M	E	S	K	L	S	N	A	N	T	H	F	A	L	D	L	F	R	K	L	N	E	T	G	N	I	F	F	S	P	V	S	I	S	A			
UniRef90_UPI000476D379		A	E	Q	Q	M	V	R	A	D	Q	T	F	A	F	E	F	F	E	H	L	F	V	E	E	S	D	N	N	F	M	V	S	P	L	S	I	S	
UniRef90_Q0IEW1																																							
UniRef90_B5DFQ5		V	S	R	V	A	Q	K	G	T	S	F																											

		50	60	70	80																																							
UniRef90_Z4YK03	A	L	A	M	V	T	L	G	A	K	G	S	T	A	A	Q	L	S	K	T	F	H	F		D	S	V	E	D	I	H	S	R	F	Q	S	L							
UniRef90_H0X9C2	S	L	A	M	V	R	F	G	A	R	H	A	S	A	H	Q	I	D	N	V	L	H	F	L	D	I	Y	Q	S	E	S	K	E	P	C	Y	F	G	K	L				
UniRef90_UPI0003C397D2	C	L	A	M	V	R	M	G	A	R	E	P	T	A	A	E	I		D	T	G	L	N	M	K	F		N	N	Q	Q	D	L	V	N	N	F	H	K	I				
UniRef90_UPI00042BF121	A	L	G	M	V	L	L	G	T	R	E	G	N	T	A	T	Q	I	K	V	L	R	F	I	E	L	R	E	N	E	N	P	I	H	S	Q	F	N	D	I				
UniRef90_B6ZAZ6	I	L	S	L	T	Q	A	G	A	K	G	P	T	A	E	E	F	T	T	A	L	N	F	P	S	T	Q	E	K	T	Q	D	A	I	K	Q	F							
UniRef90_B4J3Z7	A	L	G	L	A	Y	F	G	A	E	G	K	T	A	T	S	Q	L	Q	R	T	L	H	A	S	A	K	E	S	K	D	G	L	A	E	T	Y	H	R	L				
UniRef90_UPI000333B0BB	A	V	G	M	I	F	L	V	I	T	Q	R	V	T	T	S	Q	L	Q	K	V	F	H	L	E	K	D	T	E	S	T	E	E	I	H	E	Q	L	Q	T	F			
UniRef90_H2MB90	A	L	A	L	A	V	G	A	R	G	E	T	H	R	Q	L	F	S	T	L	G	F	N	S	S	Q	L	T	Q	A	E	V	D	Q	A	F	R	R	L					
UniRef90_I3LXJ5	A	L	A	M	L	S	L	G	A	R	G	E	T	R	A	Q	L	L	Q	G	L	G	F	N	L	T	E	T	S	E	G	E	I	H	Q	S	F	R	H	L				
UniRef90_I3R703	A	L	A	M	T	Y	A	G	A	R	G	E	T	R	T	Q	M	E	E	T	L	R	Y	T	L	G	D	E	V	H	P	A	F	S	D	L	Q	A	A	L				
UniRef90_G4H7Q3	A	L	A	L	A	Y	N	G	A	A	G	D	T	A	A	E	M	S	A	M	L	G	W	K	D	Q	P	L	A	D	V	N	E	G	N			H	Q					
UniRef90_O08800	A	L	A	M	V	Y	L	G	A	K	G	N	T	A	T	Q	M	S	E	V	L	G	L	S	G	N	G	D			V	H	Q	S	F	Q	T	L						
UniRef90_F7DMU0	T	F	A	M	L	A	L	G	A	K	S	T	T	S	V	Q	I	L	E	G	L	G	F	N	L	N	K	D	P	E	K	E	I	H	K	A	F	K	S	L				
UniRef90_Q6J201	A	L	A	L	V	A	A	G	S	R	G	K	T	L	K	E	I	A	D	A	L	N	W	R	E	D	A	D	G	L	A	K	A	L	L	A	E	A	E	K				
UniRef90_D3ZPF9	A	F	G	M	V	R	L	G	A	R	G	D	S	A	A	Q	L	D	E	V	L	H	F	N	E	S	T	N	E	H	R	L	L	G	C	H	T	G	K	L				
UniRef90_B7PX81	A	L	T	M	V	Y	A	G	A	K	G	R	S	A	A	D	L	E	T	V	L	G	L	R	R	A	K	I	T	T	R	D	A	V	L	G	S	D	L	Q	A	A	L	
UniRef90_G1K1L8	A	L	A	M	V	F	L	G	A	R	G	D	T	A	A	Q	M	S	K	A	L	H	F	E	G	V	E	I			H	S	G	F	Q	S	L							
UniRef90_G1SZH3	A	L	S	M	L	F	L	G	T	R	E	N	T	A	Q	Q	I	A	K	V	L	H	L	Q	H	H	V	E	R	S	E	N	V	H	L	Q	F	Q	K	L				
UniRef90_G3VRY9	V	L	A	M	L	Q	L	T	T	G	N	T	R	K	Q	I	A	S	A	M	E	Y	S	V	E	E	K	G	L	A	P	A	L	R	K	L								
UniRef90_UPI00038C0CC1	L	L	G	M	V	Q	L	G	A	K	G	K	A	Q	Q	Q	I	R	K			T	L	R	M	E	E	S	S	T	G	E	E	F	S	V	L	K	S	F				
UniRef90_M7CAZ4	A	L	S	Q	L	A	L	G	A	N	Q	T	E	K	R	L	L	E	A	L	H	L	E	S	V									P	C	L	H	H	L					
UniRef90_B4NWU8	A	L	S	M	A	Y	M	G	A	R	G	K	T	A	Q	E	M	R	Q	V	L	K	L	P				E	D	K	K	Q	V	A	A	K	Y	K	D	L				
UniRef90_A9GEN7	A	L	A	M	T	Y	A	G	A	R	G	E	T	A	A	Q	M	A	K	T	L	E	F	T	L	P	P	E	A	L	H	P	A	F	G	G	L	K	E					
UniRef90_A8PHV8	E	L	F	M	I	Y	L	A	A	D	E	E	T	K	Q	Q	I	L	F	L	G	G	S	T	N	E	A	E	V	R	K	H	F	S	K	L								
UniRef90_UPI00001D0992	A	L	A	M	L	Q	L	G	A	K	G	N	T	E	K	Q	I	L	E	K	A	L	Q	L	S	E	T	T	H	D	E	E	N	V	H	E	Q	F	R	K	I			
UniRef90_Q9D6A7	A	L	A	M	F	L	G	V	K	G	N	T	E	I	Q	I	S	E	A	I	G	L	N	T	A	I	D				I	H	Q	S	F	L	W	I						
UniRef90_H2MMV6	S	F	A	A	L	L	M	A	S	D	G	I	T	H	Q	E			L	K	V	C					N	L	E	Q	F	M	V	D	P	Q	L	I	P	R	L	F	Q	D
UniRef90_UPI0003686A05	A	L	G	M	A	Y	N	G	A	E	N	S	T	K			N	A	F	E	E	T	L	N	Y	T	E	F	S	P	N	E	T	N	N	L	N	K	E	I				
UniRef90_K2AAM1	A	L	G	M	T	Y	E	G	A	Q	G	E	T	A	K	E	M	E	K	V	E	G	F	I	Q	E	A	Q	K	R	R			E	G	T	L	S	L	I				
UniRef90_V8BUZ0	V	L	G	M	L	N	N	G	A	T	D	V	T	R	E	E	I	N	R	V	L	G	F	G	G	A			D	A	Q	G	I	N	A	F	C	K	K	L				
UniRef90_G3XGC5	T	L	A	L	I	L	E	G	A	D	G	Q	S	A	R	E	I			G	N	A	L	R	I	D	D	I	E	Q	K	E	I	R	E	I	L	S	R	L				
UniRef90_UPI0003441F0C	S	L	A	M	L	S	L	G	A	R	S	A	T	K	T	Q	I	L	Q	S	L	G	F	N	L	T	H	V	P	E	P	A	M	H	Q	A	F	Q	H	L				
UniRef90_W8BSP5	C	L	A	M	T	Y	M	G	S	A	Q	T	T	A	A	E	L	R	R	V	L	A	L	E	R	F	A	S	L	E	A	V	A	A	D	F	G	E	F	I				
UniRef90_S9WZQ0	A	L	A	L	S	L	R	T	R	F	T	T	H	T	N	L	I	E	G	L	G	L	E	L	K	K	I	R	V	L	D	T	Q	D	D	Q	L	L						
UniRef90_F7I645	A	L	G	M	V	L	L	G	A	K	E	N	T	A	Q	Q	I	N	K	V	L	H	F	D	Y	Q	V	D	K	S	G	N	V	H	Q	Q	F	Q	K	L				
UniRef90_D6VWVG8	V	L	A	F	A	Q	S	G	C	K	G	D	S	A	E	E	L	R	N	S	L	H	L	P	N	D	R	T	K	V	E	S	A	L	K	S	L							
UniRef90_W0RN82	A	L	G	M	T	L	N	G	A	A	G	T	T	A	D	A	M	A	A	T	L	G	F	A	G	S	L	P			Q	I	D	A	A	Y	R	A	L					
UniRef90_Q8CX67	A	M	A	M	V	Y	N	G	A	G	D	T	R	S	E	M	D	Q	A	L	Q	L	Q	G	I	N	V	E	D	F	N	R		Q	N	A	A	L	M					
UniRef90_Q6GLQ1	S	L	A	L	L	H	R	G	S	Q	G	N	T	A	S	E	L	Q	K	V	L	H	F	E	K	V	K	D	S	D	F		G	F	Q	L	L							
UniRef90_UPI000223FCE4	A	L	A	M	V	R	L	G	A	R	G	Q	S	A	Q	Q	I	D	Q	A	L	H	F	N	T	Q	E	R	E	A	R	G	L	E	S	V	I	R	K	L				
UniRef90_M3XMW8	A	L	A	M	I	F	L	G	T	R	G	N	T	A	A	Q	V	S	K	S	F	F	F	K	K	P	Q	E	Q	S	I	C	M	Q	A	F	L	Y	E	R				
UniRef90_G3V5Q9	S	L	A	M	L	S	L	G	A	G	S	T	K	M	Q	I	L	E	G	L	G	L	N	L	K	K	S	S	E	K	E	L	H	R	G	F	Q	Q	L					
UniRef90_B5IED0	A	L	A	M	L	Y	G	G	A	G	S	N	S	A	A	Q	L	E	K	V	L	Y	L	P	K	N	K	T	I	L	Q	E	N	I	K	Y	L							
UniRef90_B3N728	A	L	S	M	I	Y	M	G	A	G	A	K	T	A	Q	Q	L	T	N	V	L	G	L	P	D	N	R	E	E	V	A	A	K	T			K	D	L					
UniRef90_UPI00032AE3C6	A	L	A	M	L	S	L	G	T	Q	G	G	T	Q	S	Q	I	R	A	A	M	K	F	S	L	K	E	T	A	G	T	Q	V	H	Q	C	F	Q	Q	L				
UniRef90_UPI00045413F8	L	L	G	M	V			Q	L	G	A	K	G	K	A	Q	Q	I	M	Q	T	L	R	M	Q	E	S	S	G	G	E	F	S	V	L	K	P	L						
UniRef90_UPI00045763C4	G	L	G	M	L	E	L	G	T	G	G	A	T	L	Q	Q	L	R	K			G	L	H	F	D	G	T	Q	E	G	K	E	F	S	A	M	K	K	L				
UniRef90_V9KR25	L	M	G	M	V	Q	L	G	A	S	G	H	T	L	E	Q	L	Q	D	V	M	G	Y	K	L	Q	E	Q	G	I	P	T	A	I	R	Q	L	Q	K					
UniRef90_A9FD28	A	L	A	M	T	Y	A	G	A	R	T	T	E	Q	A	M	A	A	M	R	F	E	L	P	Q	E	R	L	H	P	A	F	N	H	V			D	L					
UniRef90_Q7ZVL5	V	L	G	M	L	L	P	G	A	H	G	D	T	R	R	Q	L	L	N	G	L	K	Y							K	K	N	G	P	Y	K	M	L	R	K	L			
UniRef90_A0A034VP18	C	V	G	M	A	R	I	G	A	V	E	T	A	A	E	L	D	R	G	L	G	L	P	S	N	D	V	T	A	I	A	D	T						F					
UniRef90_L1N085	L	M	G	M	V	N	N	G	A	A	G	T	T	Q	K	E	I	N	D	M	L	G	F	G	S	A	D	A	K	A	I	N		E	F	C	Q	K	L					
UniRef90_Q8CX66	A	V	S	M	A	Y	N	G	A	G	D	T	K	D	E	M	T	N	A	L	Q	P	E	N	I	D	L	Q	T	L	N	E	H	N	G			T						
UniRef90_W0EW83	A	L	G	M	V	A	N	G	A	G	E	T	R	D	E	I	V	K	V			L	E	A	Q	N	L	S	K	E	D	L	N	Q	S	Y	R	T	L					
UniRef90_F9W2V9	S	L	A	M	L	S	L	G	T	R	S	T	T	L	T	N	L	E	G	L	G	F	D	L	K	V	M	R	V	W	D	V	H	N	G	S	F	Q	S	V				
UniRef90_UPI000333808	A	F	G	M	V	R	L	G	A	R	S	D	S	A	H	I	D	E	V	L	H	F	N	E	L	S	H	S	E	S	K	D	N	C	Y	F	G	T	L					
UniRef90_F0YTC1	A																																											

	90	100	110	120
UniRef90_Z4YK03	N A E V S K R G A S H T L L K I A N R L Y G E K E T Y N F L P D G P			
UniRef90_H0XC92	L C K L D R A N K T D C T L L S Q M A N R K M Y I G E Q E D F E F I V H P A Y T L N D G V I Q F Y H			
UniRef90_UPI0003C397D2	L S K Y E N K S P T T S Y E L L A N A N R L Y G E K T F N F L L Q			
UniRef90_UPI00042BF121	F S A I N K N P T T D D L Q L E I A N R L V F G E K D Y K V T L D S F Q Q L A S S V Y E			
UniRef90_B6ZA26	L P R L R S N T T D D L Q L E I A N R L V F G E K D Y K V T L D S F Q Q L A S S V Y E			
UniRef90_B4J327	H S Y I K S K T V L E I A N R L V F G E K D Y K V T L D S F Q Q L A S S V Y E			
UniRef90_UPI000333B0BB	L T E I R K L S E D Y D L Y E I T M G S T L F V D H S L E L K N E F L L D D I K H Y Y G			
UniRef90_H2MB90	L T K E P S D E E V S E G T A V F V D H S L E L K N E F L L D D I K H Y Y G			
UniRef90_I3LXJ5	Q H L L R E S D D T G L E I T M G S T L F V D H S L E L K N E F L L D D I K H Y Y G			
UniRef90_I3R703	E S R E T A K N R A F Q L A V A N A S V W Y Q Q G S Y D F L L P E F L A S T Q E M Y S			
UniRef90_G4H7Q3	L S T L E R G N G V V L L K S A C R L F G E E S C D F L S T F K E S C H K R F Y Q			
UniRef90_O08800	L A E I N K T D T Q Y L L K S A C R L F G E E S C D F L S T F K E S C H K R F Y Q			
UniRef90_F7DMU0	I Q T V N L P S D E L Q M N G N T L F I W K Q L N M R Q T F Q Q G K A H R L Y S			
UniRef90_Q6J201	A A Q N C D A S C P V K T A N N V W V D N E F K I L D S Y R D L L K S F A V			
UniRef90_D3ZPF9	L S R I D R D S K A H Y T L S M A N R L Y G E Q E D F E F I V H P A Y T L N D G V I Q F Y H			
UniRef90_B7PX81	Y L N D N L Q S P A N V T L K I A N A A L F G E K R S Y D F L L P E F L A S T Q E M Y S			
UniRef90_G1K1L8	N A D I N K C G A P Y T L K I A N A A L F G E K R S Y D F L L P E F L A S T Q E M Y S			
UniRef90_G1SZH3	L N E L N K P T D A Y E L K I A N A A L F G E K R S Y D F L L P E F L A S T Q E M Y S			
UniRef90_G3VRY9	Y K E L M A P W N K D E F S T A N A L F I Q R D L E L V Q G F M P Y N F K L F R			
UniRef90_UPI00038C0CC1	F S A A S K K K Q E F T F N L A S A L Y I Q R E G F T V K E A Y L H G N E K F F Y G			
UniRef90_M7CAZ4	L S S I R R Q L T G S M L R V A S R V Y L V Q K G F E L V K E K F L E N S Q F F Y G			
UniRef90_B4NWU8	L T E L E G R E K V A I L S L A N R I Y V Q A N N F E L V P G Y N Q T V K G D S F K			
UniRef90_A9GEN7	L A L A T G P K G P E L R I A N R L W G Q A G L P I E P A F Q S T T Q Q H Y G			
UniRef90_A8PHV8	V V I D A R K N G A Y T L N I A N R F Y V Q Q G F S V K E S F A R V L R F Y Y G			
UniRef90_UPI00001D0992	M N Q L N K K S N G A Y D L K S P N S I Y G A K G F F L Q T F M E D I K K Y Y Q			
UniRef90_Q9D6A7	N L I L K K P T R K Y T F R M A N R L F G A E N T C E F L L P T F K E P C L Q F Y H			
UniRef90_H2MMV6	L Q E N I S R N G S L Q L E Q S M A L F I R Q R F E V E K T F Q D N L K N F F Q			
UniRef90_UPI0003686A05	I Y H L S D N S Q G S L F E V A N S I W T E K T F A I K E E Y I K I N K E F Y D			
UniRef90_K2AAM1	F S E I L N K K D K Q Y E L S T A N A L W V Q A G Y K L L D S Y T N L V N E F Y G			
UniRef90_V8BUZ0	I E G A P N V D K S V K I N I A N C I E V N R D Y A L K T D F K K T V E T A Y H			
UniRef90_G3XGC5	L F D L K K D S T G N T V L E S A S S I F V S N K Y N V V I P A N F E K K V T Y Y N			
UniRef90_UPI0003441F0C	L Q L L R V P S A D L D L R M G S V L F L K K E L K L Q A N F L D N I K R L Y N E			
UniRef90_W8BSP5	Q S A V K S P E S K L Q M A N R I F Y V D R Q L Q L V P T Y N Q L I S S Y F R			
UniRef90_S9WZQ0	I Q M L N K L D N Q Q Q L R H K K I L F V D R N R Y T N Q M F L Q E I D K I N D			
UniRef90_F71645	L T E L N K S T D A Y E L K I A N A A L F G E K N M R Q F L K E Y L D A I K K Y Y Q			
UniRef90_D6WWG8	L P K I K G N D L Y T L H T A N K M Y V K K D F A I K E E F K R A A S Q V Y Y			
UniRef90_W8RN82	N Q R L V R A D T A V R F E S A N S I W Y E K T F P F T Q A F F D T T A R Y F G			
UniRef90_Q0CX67	E H F T S V S D E D V E L S I A N S I W L N Q D Y E F L D T F H Q S V T D T Y E			
UniRef90_Q6GLQ1	S S D I S K V I S I Y S L K L L K R V Y V D N S I E C K K D F Y I N S T K K P Y P			
UniRef90_UPI000223FCE4	L F K L D R V R A E Y T L S A M S R L Y G E K S F P I S Q E Y L D K V M K F Y H			
UniRef90_M3XMW8	S S P G F K F M V C S S C K A S M T V L Y E E P I L Y I S A D M K A F K N F R S			
UniRef90_G3V5Q9	L Q E L N Q P R D G F Q L S L G N A L F T D L V V D L Q D T F V S A M K T L Y L			
UniRef90_B5IED0	L D K L D N G G N Y T L K I A N A L W P Q I N S S V K P E Y A E A L E N Y Y Y			
UniRef90_B3N728	L T E L E G R E K V A I L T L A N R I Y V N N K I K L P Q Y N Q V V K D S F K			
UniRef90_UPI00032AE3C6	G R L L Q K G K A R L Q V L T G S S L F M A K G V K P V A T F S T G I K N W Y H			
UniRef90_UPI00045413F8	F S A I S R K K Q E F T F N L A S A L Y I Q E G F I V K E A Y L H G N K E F F Q			
UniRef90_UPI00045763C4	L K I S T D S E E N K L N L A S A L Y I Q A R Y P L N E Q Y L L N N Q D T F N			
UniRef90_V9KR25	D I T A K S N Q D L V H S A N A M F I Q R N M T L T R G F V K S C R R A F H			
UniRef90_A9FD28	Q L R K H A E E G G F R L H T A N G I W A Q I D V P L E K P F L N V L G E S Y G			
UniRef90_Q7ZVL5	H K S L T T K S N A D I V T H A N A L F P N E G F S M K E D F L S A N R E N F L			
UniRef90_A0A034VP18	H N I L V T Y K D S P I L K V A N K I Y V M Q G Y S V K K E F F N E I A T T K F F			
UniRef90_L1N085	M E G A P N I D K S V Q I K I A N L V E V N K N Y T L K P G F K N T V E N A Y K			
UniRef90_Q8CX6				

[illegible]

	170	180	190	200
UniRef90_Z4YK03	T K L V L V N A I Y F K G M W E K F M T E D T T D A P F R L S K K K D T K T V K			
UniRef90_H0XC92	T V L V L V N A V Y F F K G W E N Y F D S E A T V D A K F F S L V D E A K E K N V D			
UniRef90_UPI0003C397D2	T R M V L V N A V Y F F K G W E N Y F D S E A T V D A K F F S L V D E A K E K N V D			
UniRef90_UPI00042BF121	T K L V L V N A V Y F F K G W E N Y F D S E A T V D A K F F S L V D E A K E K N V D			
UniRef90_B6ZA6	T R L V L V N A V Y F F K G W E N Y F D S E A T V D A K F F S L V D E A K E K N V D			
UniRef90_B4J327	T N V A L V N A I Y F F K G W E N Y F D S E A T V D A K F F S L V D E A K E K N V D			
UniRef90_UPI000333B0BB	T K L V L V N A I Y F F K G W E N Y F D S E A T V D A K F F S L V D E A K E K N V D			
UniRef90_H2MB90	T V M Y L V N A I Y F F K G W E N Y F D S E A T V D A K F F S L V D E A K E K N V D			
UniRef90_I3LXJ5	A I P A L V S Y I F A K G T W T Q P S D N P E R T V E K N F Y V N E T T T V K V P			
UniRef90_I3R703	T V L V L T N A I Y F F M A S W L H K F D P K N T E D E G I F T A L L D G T E S T V P			
UniRef90_G4H7Q3	G V A V L V N A I Y F F N G G W K D F D P A N T V D E S F T L A N G N S K Q I V P			
UniRef90_Q08800	T K L V L V N A M Y F F K G K W K A Q F D R K Y T R G M D S F F K T N Q E K K T V Q			
UniRef90_F7DMU0	T A I V L V S Y I F F K V R M L L K F D Q N A H V H G R D D F Y M I T L S L V P			
UniRef90_Q6J201	T K A V L V N A I Y F F K G K W A E P F D M E S T R D D T F H V S S N E K K T V K			
UniRef90_D3ZPF9	T V L V L V N A V Y F F K A K W E K E F D S E N T V D A P F F C L S S N E K K T V K			
UniRef90_B7PX81	G V M V L M N A I Y F F K G S W K N A F D T N Q T S H F P Y N G G I E P V Q T V K			
UniRef90_G1K1L8	T K L V L V N A I Y F F K G S W Q E K F M V E A T K D A P F F R L N K K E T V K			
UniRef90_G1SZH3	T I L V L V N A I Y F F K G E W D E K F N K E K T K E D K F F L N K K N T S K P V Q			
UniRef90_G3VRY9	T K M V F V N A I Y F F K G Q W K L P F P A K G T H H R E F H K K D G S T I F V P			
UniRef90_UPI00038C0CC1	T R L V L V N A I Y F F K G D W Q E K F R K E D T E M T E F H K K D G S A V K V P			
UniRef90_M7CAZ4	T V M L L L N A V H F Q G G F W R H K F D P S Q T G P D I F H L D D Q Q F I V P			
UniRef90_B4NWU8	M I L I L N A I Y F F K G Q W A F I F D K Q A T Q K N E D F R I S D Q Q K S V P			
UniRef90_A9GEN7	G L T R L V N A V Y F F K G K W A T P F D K Q A T K N E P T V V K P G T A P A V P			
UniRef90_A8PHV8	T K M L L L N A I Y F F S G T W E T Q F D D M N T H D E I F H I S Q H E T A K N V S			
UniRef90_UPI00001D0992	T I L V L V N A V Y F F K G Q W N H K F D E Q R T R E D K F F L N K N T S K P V Q			
UniRef90_Q9D6A7	T R L V L V N A L Y F F K G R W H H Q F D I K S T R K M K F K I N K N D E E R P V Q			
UniRef90_H2MMV6	T K L L L L N T I F F Q G G V W Q I P F N P N F T E N A P P F H I D N Y N I V Q V P			
UniRef90_UPI0003686A05	L K M I L L N A L Y F F K S D W K Y T F K E E N T Q E L P F Y G E T S T D N V Q			
UniRef90_K2AAM1	V S L I L L N A I Y F F L G N W E K Q F D V T A T S D Q K F W I T A T S V K P M			
UniRef90_V8BUZ0	A V A Y T L N A I Y F F K G V W S T P F D P K E T K E K P F T T A T S G S K Q Q V Q			
UniRef90_G3XGC5	T A L L L L N A L Y F F K G K W K T E F N P N G T K E K S C F F S P T R N C V S T P			
UniRef90_UPI0003441F0C	T V M V L V N H I F F K A K W E K F F N P N G S T K S S P F L V G P K T T V K V P			
UniRef90_W8BSP5	T A L V L T N A I Y F F K A N W R Y P F D P A Y T V P P R E F F S L V N S V D K V R A R			
UniRef90_S9WZQ0	T V L Y L V N Y V F F R G I W E R A F Q T S L M Q K E A F Y V N E N T K V Q V D			
UniRef90_F71645	T K L V L V N A I Y F F K G Q W E T K F N K E D M K E E K F Y			
UniRef90_D6WWG8	T R A V L I N A L Y F F K A N W S L P F Q L S L T S K R K K F Y K T A S D S I E V D			
UniRef90_WORN82	Q V M F L L N A V Y F F K G D W T P F D S R Q T A S A E F T R A D N S G A K Q T V D			
UniRef90_Q8CX67	H V A I L V N A T Y F F N G A W T Y P F D E N N T Q E R T F Y K E D N S S V D V P			
UniRef90_Q6GLQ1	E K T K I I M A A S F F K G N W V Y K F N E S E T K E M D F H I N K K E T K P V Q			
UniRef90_UPI000223FCE4	V V M V L V N A V Y F F R A K W E K G F E T E K T E E S V F R L N S Q G E Q K K V K			
UniRef90_M3XMW8	T K L V L V N A V Y F F K G S W E D E F R K E D T A N A P F R L N S Q G E Q K K V K			
UniRef90_G3V5Q9	A V V I M V N Y I F F K A K W E T S F N H K G T Q E Q Q D F Y V T S E T V V R V P			
UniRef90_B5IED0	P Q T I L V N A I Y F F Y G L W N Y P F D N A S K T N N G Y F L T P H G R V K V K M			
UniRef90_B3N728	V L I V L V N A I Y F F K G Q W N Q F D P S K T K K V S F H I S K K Q S V P V P			
UniRef90_UPI00032AE3C6	T R L I L V N Y F S L Q G K W F Q D G Q E A L P V Q E D F Y V E E K K A V L V P			
UniRef90_UPI00045413F8	T R L V L V N A I Y F F K G D W K K F R K E D T E M T D F H K K D I T K K Y I X			
UniRef90_UPI00045763C4	T R L V L V N A I Y F F K G T W K H K F S Q D N T S V T K D F H K K S D G S V L H I P			
UniRef90_V9KR25	T R M V L G N A L Y F F K G V W K L P F P E E G T H V R A F H R E D D G S D V A V T			
UniRef90_A9FD28	T V A V L V N A V Y F F H A Q W K T A F V K Q A T Q P G T F L R G D D G S V T A Q			
UniRef90_Q7ZVL5	T R L V A V N S I F F K G L W K S R F Q P D A S T K P R S F T A G D G N T Y K V P			
UniRef90_A0A034VP18	T R V V L V N A I H F F K G E W K Y Q F P K S A T R D D K P F R S A K G V S A D V P			
UniRef90_L1N085	A V S Y L L N A I Y F F K G I W T N K F D V N E T K D K P F R S A K G V S A D V P		</	

UniRef90_Z4YK03 MMYQKKKF PFGYI S D L K K C 220 E M P Y Q G G E L S M V I L L P K D 240
UniRef90_H0X9C2 MMT H T G L H K L A F L S E E L I A H V L E M R Y C K S G E L S M L V L L P S Y S
UniRef90_UPI0003C397D2 MM H L K G R F Y F G D I S K L D A T V L Q M P Y K N S D L S M L V L L P S S R
UniRef90_UPI00042BF121 MM H K M G E Y K I A T I E E H D C Q V L E L P Y K G D D L S M Y I L L P K D Y
UniRef90_B6ZAZ6 MM H Q T G Y F R Y Y E C T K H N V K F L E L P Y K G D N V T M T I V L L P N E I
UniRef90_B4J3Z7 T M F A D N W Y Y A D Y P E L D Q A K A I E L F F E N N M T M I L P N Q R T G
UniRef90_UPI000333B0BB M M A Q R H S F S F V F L E D L Q A K I V G I P Y R N N E L S M F V L L P N D I
UniRef90_H2MB90 M M N V E E Y F D V Y Y D Q A I N T T V L Q L P F N S S S C S M L L L L P G D
UniRef90_I3LXJ5 M I F Q S S S K H L L D P E L P C Q V V Q L D H S G N Q T I F F V L P N L I G Q
UniRef90_I3R703 L M Q Q E L E A N Y A D L P T A Q A V E L P Y I G E E V S M V L M L P D E G E
UniRef90_G4H7Q3 M M K R E G K Y E Y K E G E D W Q A I R I P Y A E G Q M H M L V I L P K A S S
UniRef90_O08800 M M F K H A K F K M G H V D E V N M Q V L A L P Y A E E E L S M V I L L P D E S
UniRef90_F7DMU0 L A F S G C L F H I S H L D L S S S F S L S P T L P R S S S L Y L P T I S N L
UniRef90_Q6J201 M M Y H S A E L K Y F M D E N S K C D L V E L P Y S S K A F S M M L I V P H E V
UniRef90_D3ZPF9 M M T K G Q G F R I G F I E E L Q A Q L E M K Y T T G K L S M L V L L P S S S
UniRef90_B7PX81 T M T C R S T M N Y C T L P E E L K S Q A V Q L P Y S G D R Y S M V I V L L P N D R
UniRef90_G1K1L8 M M Y Q K K K F P F G Y I K D L K C R V L E L P Y E G K D L S M V I L L P D D I
UniRef90_G1SZH3 M M K Q R N H F N F A L L E D V Q A K I L E I P Y K G K D L S M L V L L P N D G
UniRef90_G3VRY9 M M A Q T N K F N C T E F S G H Y Y D I V E L P Y H G D T L S M F I A A P Y E K
UniRef90_UPI00038C0CC1 M M K A L L R A K Y G Y F S E V T C Q V L E L P F K S N E F S M V I L L P G M N
UniRef90_M7CAZ4 M M K Q K Y S L S W F T L D P L E V Q V A R F P F K G N M S F V A I V P N Q F K
UniRef90_B4NWU8 M M S H I G S F N A A Y I E L S A K V I E L P Y R N S S L S M V I Y L P D R I
UniRef90_A9GEN7 M M R K T L Q A G F G K T A D A S V L E L A Y P E R R L A M V V V L P A Q V D G
UniRef90_A8PHV8 M M T L Q S E F P Y Y E D H S V Q V I K L P Y I G E E V E M V F I L P K T R F G
UniRef90_UPI00001D0992 M M R Q T N E F N Y I F L E D V Q A K M V E I P Y K G K E L S M F I L L P M D G
UniRef90_Q9D6A7 M M F Q E D M F K L A Y V N E V Q V Q V L V L P Y K G K E L S L V V L L P D D G
UniRef90_H2MMV6 M M F V E D K F Y T M E D E P L G S A R V L K L P Y K G V S M L I L L P N K N T D
UniRef90_UPI0003686A05 M M K L T N E L S F Y E N E K F S S I K L P Y K N E K F S M T I F L P K E N T
UniRef90_K2AAM1 M T F A Q N P V Y R G Y T E T E T Y Q A L N L P Y K G E D L S M M I L L P K S R
UniRef90_V8BUZ0 M M H M N D L L A Y T K N K D Y A T L Q L G Y G N G D R M L L L L P N E G K T
UniRef90_G3XGC5 L M Q V T S T F N Y N F N D L A N H A I E L P Y Q D D K Y A M L I L F P T N G
UniRef90_UPI0003441F0C M M H Q V E E F A F G V D P K V D C S V L Q M D Y G R H T T A F F V L P G Q G K
UniRef90_W8BSP5 M M Y R T D P L R H S E V S E L D L V A V E L P Y E G T E L R M L I L M P D G G
UniRef90_S9WZQ0 M M Q K T E R M I Y S R S E E L L A T M V K M P Y R G N V S L L L V L P D A G Q
UniRef90_F7I645
UniRef90_D6VWVG8 M M Q H R D H F N Y Y E S P D L K A Q F L E L P F K G G E A S M V F V L P N E K
UniRef90_W0RN82 M M T H R S V H P V W R A S D D L T A V E L P Y G T G A F S M V L V P A T G R S
UniRef90_Q8CX67 F M A L N E E L P Y V Q T S D D M Q A V S L P Y G E N E D M Q M L F L P N E N I E
UniRef90_Q6GLQ1 M M H L E A R L S I G Y I E E L K T M V L E L P F T S K H L S I L L L P K D I
UniRef90_UPI000223FCE4 M M H Q R N L Y R I G F I E E L K T Q I L E M R Y I X X X F F E F P E D S P D
UniRef90_M3XMW8 M M Y Q K K K L P F G Y I Q D L K C R V L E L P Y R G K E L S M I I L L P D D I
UniRef90_G3V5Q9 M M S R E D Q Y H Y L L D R N L S C R V V G V P Y Q G N A T A L F I L P S E G K
UniRef90_B5IED0 M H G E F T L K Y T E D K N A Q V V E L P Y K G K N I S M L V I L P K T Q
UniRef90_B3N728 M M A Q L G I Y R T A Y I G A L G A R V I E L P Y R N S S L S M V I Y L P D K V
UniRef90_UPI00032AE3C6 M L S H V G T F Y L Q R D K F L S S W V L V Q P G G Q G D T A V F I L P D P R K
UniRef90_UPI00045413F8 X T L I V S G Y F S E S L M R F Q V L E L P Y K A D E F S I V I I L P T E D V N
UniRef90_UPI00045763C4 I M H Q Q V K S K L G Y F D E V S Y Q V L E L P Y S G D E S S M I L P A E G T D
UniRef90_V9KR25 M M M Q T A Q L N V G E F G G V Y Y D V V E L P Y G D E R L S M L L A A P C R R
UniRef90_A9FD28 M M N G R H Q G S Y G D G G W E A V G I P Y A G S A V S M F L V L P A K G T
UniRef90_Q7ZVL5 M M S Q L S V F N M G Q A S T P D G Q K Y I L P Y H G N S M S M F I A L P T E D
UniRef90_A0A034VP18 M M N L K E T F G Y G V S I E L D A T V L E M P Y K D S D L S M V I L L P N S R
UniRef90_L1N085 T M H Q K E V L L Y N S N D V Y A T L H L P Y G N G G Y S M E V L L P N E G K T
UniRef90_Q8CX66 F M S L D E E L P Y W E T D E F Q S V A L P Y G E E G N I Q M E I F L P N E N I
UniRef90_W0EW83 M M R L E D T V K Y A S N G N Y T A V Q K L Y G S G Q M S T I L L P Q S G T
UniRef90_F9W2V9 M V W K K E R I L Y S R S E K L F A T M V K I P L T G N M S I V L V L P D V I G Q
UniRef90_UPI0003333808 M M N Q K G R F R I G F I E E L Q T Q I L E M K Y T L G H L S M F I L L P P R S
UniRef90_F0YTC1 M M Y S E E N E Y L E D E N T G L I K Y Y K D R K Y A F V G L L P N E G I S
UniRef90_F1L0N2 M M S I Q A N Y Q Y Y E S E G V Q V L G L P Y K N N E V Y M Y V F L P R E K Y G
UniRef90_I3JIL1 M M R I T N R F N Y G E F D G V D Y D V I E V P Y E G D L L S M S P F E P E V P
UniRef90_W5N5Q6 M M Y L K A K F G L T F I P E V S C Q I L E L P Y L G K E L S M L I M L P S A I
UniRef90_UPI00042C0B22 M M Y Q K N T F P F G Y I S E L K C C V L E L P Y D G K E L S M I I L L P D D I
UniRef90_UPI000476D379 M M K Q T A K F N Y T N D E N L Q L V Q L P Y G N Q A F S M M V L L P A E D K K
UniRef90_Q0IEW1 M M N T K K H F K H G V F D D L G A L E L T Y S D S D V S M L L L L P H E R T G
UniRef90_B5DFQ5 M M A N T G K Y N C S E F D G D F Y D V I E L P Y E G E E L S M L I A A P Y E K
UniRef90_UPI0003315E8F M M F Q S N V K H M Y D P E L G C L V V Q L D Y V G N S T A F L I L P D R E Q
UniRef90_UPI0003314B78 M M H L R E K L N I G Y I R D L K T Q I L E L P Y A G D V S M F L L L P D K T G
UniRef90_G3W2E9 M M K M Q L R T K L G Y F S Q M K Y Q V V E L P Y E G D E F S L I L L L P G I D
UniRef90_W5N9L0 M M Q M T S R F N Y G E F D G L E Y D V I E L P Y E G D T M S M F L V S P D T P
UniRef90_UPI000388A77B M M H L Q L R T K F G H F S D N N V S Y Q P Y K G K E F S L V L T L P S E D V T
UniRef90_L0HLP6 M H T Q G N F E Y V E D N S F Q V L K L P Y R G N R L S M L I I L P D K S R
UniRef90_UPI00033145E5 M M H Q K V M H R F L Y D Q E L A C T V L Q I E Y S G N A L A L I L L P D P G K
UniRef90_B4MJS5 T M Y Q S D Y F Q Y A D L P E L K A K A L E L P Y E N T D I V F L L L P H Q E
UniRef90_F7CVU6 M M H A P T Y P L H W F S L E Q P E I Q V A H F P F K N N M S F V V L L P T H F
UniRef90_R6BZN8 M M H Q N K K F A Y T E N D M L Q A V E L P Y G N G S Y Q M T V L L P K A G K S
UniRef90_UPI00046B6745 M M K A L L R T K H G H F S E Y Q V L E L P Y K G G K F S L I V I L P A E D M D
UniRef90_UPI0003318A21
UniRef90_I4DIS8 F M K Q K G T F H Y M V N D D L G A Q I L E L P Y K G N D I S M Y I F L P P Y S
UniRef90_F7GRJ7 M M S H E D H Y Y F L D R N L S C R V V G V P Y Q G N A T A L F I L P G E G K
UniRef90_E9J1B9 T M F N K H F S Y G E I P T W H T T F I E V P Y L N Q D I M I I L L P N E R
UniRef90_W5JPR6 M M K I S E Q F A Y K N F D D E G F T A L L L P Y K R C E M V M L V L L P N D I
UniRef90_H0XC9C4 M M T L K H S F S F T F L E D L Q A K I V G I P Y K N D L S L F V L L P N D I
UniRef90_P19104 M M Y Q I G S F K V A S M A S E K M K I L E L P F A S G T M S M L V L L P D D G
UniRef90_B3NAL4 T M F Q E D F F R F A G E L P E L K A K A L E L T Y A G T D F L T I L P Q E E Q G
UniRef90_J3JFT0 T M E L T E D L Q Y A S V D G H Q L V E L P Y V G G E V S M V V L L P A R G R
UniRef90_UPI0003ACACEF M M H Q V E Q F A F G V D L E L N C X K D Y S G E I M A F F V L P G Q G N
UniRef90_H2LA83 M M A N K G N Y L A A D H E L D C D I L Q L P Y S G N I S M L I A L P R K I S
UniRef90_I2ETU3 M M S M T E K L K Y T K R P N Y Q A L E L A Y G D G N Y V M T I V L P E G K T S
UniRef90_T1JQ80 S I S I N Y H C D Y V N V I Q A C V V E K L Y S G G S I S F L V I T P T N G T D
UniRef90_C1BVQ4 M F A P K I E V G S S Y I E S L K S E I I L P Y E G D Q Y E M Y L I V P D D R
UniRef90_K4FT04 M M H T K G N F L T A V D P E L E C D I L Q L P Y V G N S S M L V V L P H K S G
UniRef90_UPI0000EBEE01 M I Y N W S T F K T A C I A E I C S Q I L V L P Y V G Q E L N M V I L L P F S
UniRef90_S9X5F1 M M N T E A T F C M G H I D G I N C K V I E L P F Q N K H L S M L I L L P K D G

[illegible]

	290	300	310	320
UniRef90_Z4YK03	N S N L	G R L G V Q D L	F S S K A D L S	G M S G S R D L F L S K I V H K S F V E
UniRef90_H0XC92	N S V L	E D M G I V D I	F S S R D K A D F T	G I L S P N L N S K I I H H K T F L E
UniRef90_UPI0003C397D2	S D V L	K R L G M E R M F	S D S R D A E F	G T G I L S K T P P N F S K I I H H K T F L E
UniRef90_UPI00042BF121	N K Y L	E A L G M T D V	F R P G V S	D S G M A K T D G L S S S H V I H H K A Y A E
UniRef90_B6ZA26	K P L L	Q K L G L L K A F	S G N A D F S N I F E	D T S L Y I R I D T S V I Q K K T F I N
UniRef90_B4J327	R P T L	N K L G I N T M F	S D A A D F S N I F E	D T S L Y I R I D T S V I Q K K T F I N
UniRef90_UPI000333B0BB	E A V L	V A L G F G D P	F S E E A N C S G M C L	Q S K L Q A Q K F V H H R S F L D
UniRef90_H2MB90	N D V L	A E M G V T D V F	G N G A N L S G I A E	D A R L K V S E K V I H H Q A S L D
UniRef90_I3LXJ5	R G V L	E D M G I E D M F	T N R A N F S G I L S	H A E Q L K V S E K V I H H K A M L H
UniRef90_I3R703	S D A L	S E L G M P I A F	G S G A D F S G M V E	G D Q L M I D E V Y K K A F V S
UniRef90_G4H7Q3	P K T L	Q G L G M V K A F	D P A D F T A M A E	G D G F Y I D E V Y K K A V V D
UniRef90_O08800	E T V L	Q N L G M T D A F	E E R A D F S G M T T	K K N V P V S K V A H H K C F V E
UniRef90_F7DMU0	E M L L	L L L G V P L W E	H Q T K V L S G A T E	S L P Q F E R K K V F H H K A L L E
UniRef90_Q6J201	K D N L	K S L G I N D M F	S S M Q A N L S G I A G S	H D L F H V S K V V H H K A F V E
UniRef90_D3ZPF9	N S V L	Q D M G I R D V F	S D G K A D L T G I S	K S P S L L F H V S K V V H H K T F V E
UniRef90_B7PX81	V D A L	K K L G L I S I	F S N A Q A D L S G I S	G D R N L I V S D V V H H K A M V G
UniRef90_G1K1L8	S S V L	E A M G V V D A F	S P Q N A N S G M S	E H Q G L V V V S K V L H K S F I V E
UniRef90_G3VRY9	E R P L	E N L G M K D M F	R P G A D F T S R L S	D K S S E L V Y V S R Q A V L Q K K V F F E
UniRef90_UPI00038C0CC1	K E V L	H S L N V T E I F	N R G S A D P L	Q K I T D E P L F V V S S I Q H H Q S T L E
UniRef90_M7CAZ4	N Q V L	S Q L G L G E L F	S A P D L Q K I T D E	P L F V V S S I Q H H Q S T L E
UniRef90_B4NWU8	I D Q L	S K E M G I Q D A F	R R S A D F N D L V V	K T E A Q V G S S V I Q H H K A F V E
UniRef90_A9GEN7	S S T L	S A L G M P I A F	D D K D F T G I T R A E	P L F I V S S Q V V H H K A F V E
UniRef90_A8PHV8	K E T L	S K I G I E D A F	S E T A N F S R E L T N	D A L I S V G N I M H H K S F I E
UniRef90_UPI00001D0992	P G P L	E H M G M V D A F	N P K A D F S G M S	T K G L V V S K V F I Q K K C V E
UniRef90_Q9D6A7	E S I F	Q D L G V G D I F	T Q G G K A D S E M S	P E R G L C V S K F I Q K K C V E
UniRef90_H2MMV6	H N I L	P E M G M S S I F	T D F A N L T R L S	K A Q A L R V S E V L H H K A V I E
UniRef90_UPI0003686A05	N N P L	S D M G I S I A F	T D A A N F S G I S	D I I P L K I S F I I H H K A F I E
UniRef90_K2AAM1	T E P L	A G L G M K T A F	Y P A A D F S G I L	D G T H I P L K I S F I I H H K A F I E
UniRef90_V8BUZ0	N K A L	E S L G A A S M F	D K N N A R F R N L	C E R D T Y I S M I L Q R S K I V
UniRef90_G3XGC5	V S F L	R P L K I Q E I F	Q A N A N L T G M V	A Q E K V K I S N I V H H K T K V
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UniRef90_Q867T1 A L A L L T E A A T G S T R S E L A S A L G F G L D R T E V R R K F S T I
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UniRef90_G5BH04 A V A L V H S G A E N Q S R A E I E K A L H F N E I T E K T Q T N H L Q F Q K L
UniRef90_GONEJ4 A L A I T L L G A K E K T E A Q I K S V L N L E H I P N G E D F V N H F S K L
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UniRef90_UPI00033EZF2 V L A M L Y E G A R G N T S K Q L E K A L N I M P L A R S F T A S K F S S I

		90	100	110	120																																				
UniRef90_UPI000441AA42	NQEI	NQPT	KNV	LVLR	RSVN	QLY	GD	GS	V	S	F	Q	R	K	F	S	E	S	M	K	K	Y	Y	N																	
UniRef90_V9VJE7	LQL	S	K	S	P	N	V	T	L	D	V	A	N	L	V	L	Y	I	G	D	Q	K	G	F	P	I	L	L	E	C	Y	Q	K	Q	L	R	D	V	F	D	
UniRef90_F6KME1	AYL	A	R	A	E	S	R	N	Y	T	L	N	V	A	N	R	F	Y	V	R	E	A	E	F	S	T	K	E	S	F	Q	R	V	L	S	F	Y	Y	N		
UniRef90_C0LF31	VLA	D	A	S	I	T	G	D	P	R	V	A	F	A	N	G	V	F	V	D	A	S	L	S	L	K	P	S	F	Q	E	L	A	V	I	C	N	Y	K		
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UniRef90_UPI0003C8E2F8	V	S	A	L	N	Q	A	P	D	A	Q	Y	L	R	T	A	N	R	L	F	G	E	K	S	Y	E	F	L	S	S	F	K									
UniRef90_F4W5U0	V	K	S	L	Q	A	P	S	A	Y	T	L	N	L	G	S	R	I	Y	I	D	N	N	I	L	T	R	Q	R	Y	A	A	T	I	K	T	F	Y	N		
UniRef90_A0A022QBM2	F	S	K	S	N	G	G	H	R	R	P	R	L	S	L	A	N	G	V	W	V	E	Q	S	N	R	L	K	P	A	F	R	E	I	M	H	N	S	Y	K	
UniRef90_M3YNY6	L	S	H	L	C	Q	D	L	G	P	G	A	F	R	L	A	A	R	M	Y	L	Q	K	G	F	P	I	K	E	D	F	L	E	Q	S	E	Q	L	F	G	
UniRef90_A9SB17	V	L	S	N	Q	G	D	G	G	P	E	L	A	L	A	N	R	L	W	V	E	Q	S	V	K	L	K	P	A	F	Q	K	I	L	Q	E	S	Y	G		
UniRef90_UPI0002C634CA	V	Q	T	L	N	E	L	N	R	G	R	Q	L	K	H	R	D	F	L	F	I	D	N	N	R	R	I	N	P	K	F	L	L	E	T	E	R	L	Y	E	
UniRef90_Q27085	L	L	L	L	N	A	E	S	K	E	Y	Q	L	E	T	A	N	S	L	M	I	Q	N	T	F	N	I	L	D	N	Y	K	R	M	L	E	D	K	F	G	
UniRef90_L5LWU8	N	K	A	I	V	S	K	K	N	K	D	I	V	T	V	A	N	A	M	F	V	K	N	G	S	K	I	E	V	P	F	I	T	R	N	K	D	V	F	Q	
UniRef90_Q2PQP9	L	N	S	F	E	N	S	R	A	I	R	L	V	M	A	N	N	L	Y	Y	G	K	Q	Y	G	P	L	A	D	E	I	E	D	L	A	H	S	S	F	G	
UniRef90_T2J801	Y	N	D	L	N	T	H	G	A	L	V	N	S	L	I	V	T	N	S	L	W	A	K	E	G	F	S	F	R	Y	Q	F	R	K	N	S	R	K	Y	Q	
UniRef90_G3MFE9	F	S	K	L	P	G	Q	A	Q	D	V	S	L	H	I	A	N	R	M	Y	S	E	Q	T	Y	P	I	L	D	S	Y	L	S	L	L	K	D	S	Y		
UniRef90_H0Z0W4	C	R	L	Y	K	K	A	N	K	S	S	E	L	V	S	A	N	R	L	F	G	E	K	S	L	V	F	N	E	T	Y	Q	N	I	S	E	I	V	Y	G	
UniRef90_R6BYQ0	W	T	D	D	T	F	V	T	T	A	N	S	L	W	M	A	K	D	G	L	W	A	E	N	M	E	Q	D	F	A	T	P	V	K	R	Y	Y	K			
UniRef90_H3FYG7	T	A	A	L	S	E	T	N	A	S	V	I	T	S	V	A	N	R	F	Y	L	D	K	E	F	D	L	K	S	E	Y	Q	S	H	I	E	K	A	Y	N	
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UniRef90_Q26058	Y	A	E	R	Q	A	N	S	D	Y	V	I	D	L	A	N	R	V	Y	V	D	E	K	F	P	I	L	R	E												
UniRef90_UPI0003C9029F	L	S	H	L	C	Q	N	L	G	P	G	A	F	R	L	A	A	R	M	Y	L	Q	K	G	F	P	I	K	K	D	F	L	E	Q	S	E	Q	L	F	G	
UniRef90_A0A059DKR4	N	N	A	V	A	A	D	T	E	T	T	K	L	T	V	A	N	A	A	W	L	R	E	G	S	T	F	Q	A	P	Y	R	D	A	V	E	G	I	M	K	
UniRef90_M7BWB5	I	H	L	L	N	C	P	D	S	E	V	Q	L	N	L	G	N	A	L	F	V	D	E	K	L	L	L	Q	K	F	L	D	D	I	K	S	L	Y	D		
UniRef90_A0A023FL93	F	S	K	L	P	G	Y	A	E	D	V	K	L	H	V	A	N	R	M	Y	C	E	Q	T	Y	P	V	L	E	S	Y	L	S	L	L	K	D	S	Y		
UniRef90_UPI00033187DB	L	H	S	L	N	Q	P	D	S	Q	L	Q	L	T	T	G	N	G	L	F	I	Q	Q	G	L	K	L	A	E	K	F	L	E	D	A	K	K	M	Y	H	
UniRef90_W4CM09	M	K	L	L	N	H	V	G	P	G	V	E	L	K	I	A	N	S	V	W	G	M	K	G	L	P	L	R	R	E	Y	L	K	T	G	E	N	F	Y	D	
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UniRef90_J9JUUS	T	S	A																																						
UniRef90_A0A026WT44	N	N	L	E																																					
UniRef90_G1KZD8	Y	K	E	V	S	N	S	K	Q	G	P	V	A	Q	L	A	C	A	L	F	V	Q	A	G	I	R	L	L	P	Q	F	V	Q	L	H	A	A	F	W	A	N
UniRef90_A0A016X284	A	R	D	T	L	K	A	N	N	G	V	Q	T	K	I	A	N	A	F	F	M	D	K	K	F	T	I	E	K	P	Y	A	D	T	I	I	K	R	Y	S	
UniRef90_G3V8X9	L	S	N	L	L	H	T	K	N	C	G	I	Y	T	G	S	L	L	F	I	D	K	T	L	K	P	A	K	T	F	V	L	K	A	N	S	Y	N			
UniRef90_S9PJ78	L	H	A	H	A	K	A	K	V	E	P	T	L	R	V	V	N	A	A	W	Q	R	G	F	A	F	E	P	P	F	L	D	V	L	A	Q	H	Y	G		
UniRef90_A5N921	L	L	D	Y	Y	N	N	L	K	S	T	D	L	K	M	A	N	S	I	W	T	N	K	Q	I	A	L	N	S	D	F	K	D	T	A	E	K	Y	A		
UniRef90_Q68FT8	L	S	H	F	C	Q	D	N	L	P	G	T	I	R	L	A	A	R	I	Y	L	Q	K	G	F	P	I	K	D	D	F	L	E	Q	S	E	K	L	F	G	
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UniRef90_UPI0004548C9A	L	C	E	V	N	K	T	G	T	Q	Y	L	L	R	T	A	N	K	L	F	G	E	K	T	L	H	I	L	A	S	F	K	D	S	C	R	K	F	Y	E	
UniRef90_H3EKV9	L	S	L	P	S	T	N	E	S	G	V	A	F	K	S	A	N	R	F	Y	V	D	N	S	I	S	L	K	N	E	Y	K	R	H	V	E	D	K	Y	K	
UniRef90_A0A023FUL1	M	S	S	P	G	G	A	N	R	A	T	A	L	D	H	A	S	A	V	L	I	Q	E	G	A	P	F	N	A	S	Y	Y	R	E	I	N	Q	L	F	K	
UniRef90_O17365	M	E	A	V	G	D	T	D	N	G	V	E	T	K	I	V	N	R	V	F	V	N	Q	A	Y	T	I	H	Q	D	Y	L	E	T	V	E	K	L	Y	K	
UniRef90_W9DQC4	I	S	E	I	N	S	G	D	E	Y	E	L	E	T	A	N	A	L	W	V	Q	K	D	F	D	L	K	Q	Q	Y	I	L	S	N	A	V	J	Y	Y	S	
UniRef90_Q8R9P5	M	K	K	L	P	N	E	E	K	S	K	L	T	I	A	N	S	I	W	F	K	E	N	D	F	M	P	S	K	D	F	Q	I	Q	I	A	D	Y	Y	K	
UniRef90_M0HFV1	E	K	R	E	T	A	T	G	P	G	F	Q	L	A	V	A	N	A	L	W	G	Q	E	A	Y	S	F	S	E	D	F	L	A	S	L	E	E	H	Y	G	
UniRef90_F7DMP5	T	S	D	V	N	K	L	S	S	F	Y	S	L	K	L	T	K	R	L	Y	I	D	K	S	L	N	P	C	E	F	I	S	A	T	K	R	P	Y	A		
UniRef90_UPI000462AEC0	E	P	R	P	E	E	E	A	E	A	V	T	V	S	T	A	D	A	L	F	V	Q	R	D	L	V	L	K	A	G	F	I	P	S	F	Q	R	V	F	R	
UniRef90_UPI0002888AF3	L	L	K	R	F	E	S	L	P	K	G	D	L	T	A	N	A	I	W																						
UniRef90_H9LD39	V	Q	H	V	E	N	A	M	K	E	T	T	L	D	W	G	N	M	L	V	S	N	E	L	K	V	K	K	H	F	T	D	T	I	K	R	F	D			
UniRef90_G5E3U3	C	R	L	F	R	K	A	N	K	S	E	L	V	S	V	N	R	L	F	G	E	K	S	L	L	L	N	E	D	Y	Q	N	I	S	E	T	V	Y	G		
UniRef90_X2J6N0	L	Q	S	L	Q	A	H	T	P	G	T	Q	L	E	N	A	N	A	V	F	V	S	T	G	R	Q	V	K	Q	E	Y	D	Q	M	I	R	K	V	Y	M	
UniRef90_D7NSE1	Y	R	T	R	Q	Q	N	T	T	A	Y	S	F	N	I	A	N	R	A	Y	I	D	K	N	L	P	I	R	D												
UniRef90_H3FA37	T	A	A	L	S	E	K	N	S	A	V	I	T	N	V	A	N	R	F	F	L	D	K	E	F	T	L	K	A	E	Y	Q	S	H	V	E	K	V	F	N	
UniRef90_UPI00033346F1	L	N	S	F	H	Q	P																																		
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UniRef90_UPI0003D0C5FF	G	A	E	G	T	E	L	E	H	H	Y	V	L	S	L	A	N	T	L	F	L	Q	I	D	F	P	F	Q	T	N	Y	I	D	T	K	E	L	Y	G		
UniRef90_M9ZRP7	R	F	T	Q	V	L	K	G	D	E	N	M	T	V	A	N	G	F	F	V	D	R	N	F	E	V	K	E	K	F	L	N	H	L	K	N	D	F	H		
UniRef90_R7J8J4	I	E	G	L	H	T	V	N	S	A	I	T	V	K	T	A	N	S																							

[illegible]

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UniRef90_V9VJE7	I	V	L	F	I	L	N	A	V	Y	F	K	G	T	W	L	T	K	F	D	A	A	D	T	M	N	R	Q	P	F	F	N	M	G	T	S	E	V	S	R	V	P
UniRef90_F6KME1	T	R	M	L	I	M	N	A	I	H	F	K	G	T	W	T	T	Q	F	I	D	F	V	T	K	Q	K	Q	P	F	H	I	L	S	E	N	E	V	K	L	V	P
UniRef90_C0LF31	Y	T	T	R	L	V	N	A	I	Y	F	K	G	L	W	E	K	F	D	E	S	T	T	K	Y	D	K	Q	P	F	H	I	L	N	G	N	T	V	Q	T	P	
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UniRef90_UPI0003C8E2F8	T	K	L	V	L	V	N	A	I	Y	F	F	K	G	N	W	E	R	Q	F	E	R	E	N	S	T	R	E	S	P	F	K	V	S	K	D	V	V	K	P	V	Q
UniRef90_F4W5U0	S	V	M	L	I	V	N	G	L	F	F	K	G	W	R	R	K	Y	F	A	P	E	N	S	R	V	S	R	F	F	Y	I	N	V	N	E	S	V	N	V	P	
UniRef90_A0A022QB2	A	M	L	I	L	A	N	A	V	Y	F	K	G	T	W	Q	E	E	F	D	E	W	D	T	I	D	F	E	F	F	L	L	Q	S	G	S	V	K	A	R		
UniRef90_M3YNY6	T	V	L	L	L	L	N	A	I	H	F	Q	S	F	W	R	S	K	F	D	P	S	L	T	Q	R	D	S	F	H	L	N	E	Q	F	T	V	P	V	D		
UniRef90_A9SB17	T	R	V	L	V	L	A	N	A	I	Y	F	F	K	G	A	W	K	Q	F	D	D	Y	H	T	R	E	E	N	D	F	Y	L	L	D	G	K	T	I	K	V	D
UniRef90_UPI0002C634CA	T	F	I	F	L	L	N	Y	I	F	F	K	G	L	W	E	V	A	F	T	R	T	R	F	T	Q	K	E	N	D	F	V	E	E	K	T	T	V	Q	V	D	
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UniRef90_L5LWU8	T	R	M	V	L	V	N	A	I	Y	F	F	K	G	L	W	K	S	R	F	P	E	R	E	N	K	K	Q	P	F	V	A	A	D	G	K	S	Y	Q	V	P	
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UniRef90_T2J801	D	V	L	F	L	I	N	T	A	T	F	Q	G	L	W	E	M	G	F	D	R	D	L	T	Q	D	K	P	F	Y	L	K	N	Q	S	V	K	N	Y	P		
UniRef90_G3MFE9	A	L	T	T	L	V	N	A	I	Y	F	K	G	L	W	K	L	K	N	F	N	A	S	T	R	R	R	S	D	F	H	L	D	A	K	N	K	I	E	V	D	
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UniRef90_R6BYQ0	T	V	L	M	L	L	N	A	V	Y	F	E	G	K	W	E	L	P	F	D	K	D	D	T	Y	E	G	T	F	H	G	K										

UniRef90_UPI000441AA42 MM F Q H G K F N W K Y I N E V Q V Q I L E L Q Y I G N D F S M F I L L P D D I
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UniRef90_D2VPM2	V[S]V[Q]S[N]	F[V]G[N]S	N[E]E[R]L	A[K]V[I]N
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UniRef90_F6EGA4	A[E]A[Q]N[V]	D[F]F[S]P	E[A]V[E]T	I[N]D
UniRef90_W2D1M2	A[E]V[R]P[L]	D[F]F[S]P	R[S]P[K]V	I[N]D
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UniRef90_G0NEI1	S[N]T[A]S[V]	D[F]F[V]N	A[F]E[G]R	K[Q]I[N]
UniRef90_G7J5S4	S[E]V[V]P[V]	N[F]G[N]G	V[V]A[Q]Q	V[I]N
UniRef90_C0J8G1	G[K]V[L]R	S[N]F[R]D	S[E]A[A]R	S[L]I[N]
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UniRef90_G3HBC1	G[K]L[N]I	V[D]F[V]N	K[R]R[E]V	M[E]D
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UniRef90_Q70W32	A[S]L[E]P	V[D]F[V]N	A[D]E[S]R	K[K]I[N]
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UniRef90_Q4RGY1	V[P]L	Q[E]M	D[F]T	S[N]P
UniRef90_W5JN83	S[S]V	V[R]T	N[F]S	P[N]Q
UniRef90_I3KK73	A[A]S	N[H]D	F[Q]T	K[A]D
UniRef90_A0A022QBP2	A[K]P	V[Q]S	L[T]G	K[Q]E
UniRef90_G1S5N0	S[D]I	Q[V]P	V[D]F	S[Q]K
UniRef90_E2ALG2	S[I]K	Q[V]D	F[A]T	Q[S]E
UniRef				

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UniRef90_S4Q008	S	D	A	L	I	S	N	A	L	Y	F	K	G	L	W	K	H	A	F	N	P	K	E	T	R	A	G	C	F	H	L	V	D	N	A	C	Q	N	A	V	I	
UniRef90_K4BV31	T	R	L	I	L	A	N	A	L	Y	F	K	G	E	W	N	E	K	F	D	A	S	E	T	K	D	H	E	F	H	L	L	D	A	L	P	I	N	A	V	P	
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UniRef90_D2VPM2	T	V	I	V	L	V	N	C	I	Y	F	L	G	K	W	K	T	T	F	N	V	S	E	T	L	S	N	Q	V	F	R	T	V	N	G	D	T	N	S	A		
UniRef90_B3MGQ5	T	S	A	V	L	I	N	A	L	Y	F	K	G	K	W	Q	K	P	F	M	P	E	A	T	R	G	K	D	T	F	F	V	D	P	E	T	S	I	E	V	D	
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UniRef90_F6EGA4	T	I	A	V	L	A	N	A	I	Y	M	K	A	E	W	E	N	Q	F	S	E	S	A	T	E	D	D	D	F	T	K	A	D	G	S	V	V	T	V	P		
UniRef90_W2D1M2	A	F	L	Y	L	I	N	A	V	Y	F	K	G	T	W	A	R	T	F	D	R	D	D	T	Q	S	P	A	Q	F	H	K	A	D	G	S	T	E	K	V	Q	
UniRef90_A9KID0	T	I	M	Y	L	I	N	A	V	Y	F	D	R	A	W	E	N	W	V	Y	V	K	F	A	D	I	S	S	S	E	F	T	A	W	N	G	T	K	R	K	V	K
UniRef90_J9K796	K	E	T	V	L	V	L	A	S	A	V	H	F	Q	N	L	W	K	Q	F	A	E	T	K	N	A	S	E	F	C	L	T	A	T	N	K	I	D	I	K	V	P
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UniRef90_Q7TMB9	T	S	M	V	L	V																																				

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

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

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160

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

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

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

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UniRef90_UPI0002C596B3	S R F S I N F R D T E E A T K L I	N Q Y I E K E T Q G K I V D L V Q D L D X D		
UniRef90_UPI0003ADAD52	S S P R V L L G N D S N V N V E L I	N T W V A E K T N H K I T E L L E S L P S D		
UniRef90_K4BV28	A T S S S D F Q K K A V E V A S Q V	N Q W A E K E T S G L I K E I L P A D S V D		
UniRef90_L8Y7B6				P W
UniRef90_T1K451	T E A S S M D F G T N P G G A L K A I	N S W I E E E T H G K I K D L I P P G S V T		
UniRef90_Q8WT41	A D M K Q D F F T N S G E S R I L S I	N R W I A E K T R E K V I K D L I Q G S I T P M		
UniRef90_UPI0002658735	D S L V Q D F A D D A H G I Q K Y I	N S F V G E A T H G R I P D L L S Q P L D T		
UniRef90_A0A023FH99	A T I K S D F K N N S E S V R E Q V	N A W V E K T T E S K I K D L I P S G S V D		
UniRef90_E3IWZ9	A G M R V D Y R A D S A G A K A I	N A W T S Q Q T K G R I P K I V D G L D P S		
UniRef90_H9KRD2	Q L E M I D F K T N P N A V R D Q I	N N W V S N M T K G H I R D L L P P I T T D		
UniRef90_U6M5T8	Q S A E T L D F S D G V A A D K I	N T F V A T T R D H I K N L S P L G A Q		
UniRef90_I3MK52	A V G V Y G Q C C Q D L E I P D L		L V L K Y T H P I T Q D G A E	
UniRef90_Q5MGH0-2	S E V Q K L D F A Q N K V A A K T I	N T W V E D H T N N R I K D L V D P L D D Y		
UniRef90_C0MPR7	T N I I A S A N Q Q E E K I K A	D T L C A K V T K G D I T T L P I D V S T P		
UniRef90_UPI000374E861	G E A R G V N F T Q K N E V K Q M I	N E W V K A Q T Q A K I E D L K Q S L P E A		
UniRef90_G1FJ11	L Q V V D F A D T V G S A N L I	N N F V A T T T N N L I P T L T S Q D L I D		
UniRef90_M8BYQ2	A E A R A V C F S N P E Q A R S E I	N E W F E G E T G R G W K E L V P E I N A A		
UniRef90_W7UUT4	S E I Y K S S F D D S I V K D V	N S W N K N T R G M I P T L T K A N V A P		
UniRef90_I0TEB1	T N I I A S A N K Q Q E R I Q A	D S L C A K I T K G D I T T L P I D V S T P		
UniRef90_Q08519	M F V L V D F D K N H K D I I D I	N K W V S E R T N N H I D T I D N I G D N		
UniRef90_UPI000034E861	Q V A T A P F G T D T E A A R R K I	N E D V A E T T R D L I P E L P G T V Q P D		
UniRef90_UPI000234F23B	A V A E S V D F T D T E Q A R R R V	N A F V R D A T N N L I D D V L A P G X		
UniRef90_P33831	Y R L N F R R D A V N K I N S I	V E R R S G M S N V D S T M L D N N		
UniRef90_UPI000262818A	A S A K T P F V N D P D R A R R A I	N A D V A E T T R D L I P E L L P P D S A D		
UniRef90_F4KMC6	A P T A T L D L S D P A S Y E A V	N A W I S R K T Y G K I S Q D P S H A G E Q D		
UniRef90_UPI000443656C	S S L S T S N F T G P H R T T A Q I	N R F V A D E K S G N V S L E R T Y S A L		
UniRef90_D6WVH4	I Q A E V L D V T N K N A S A E K I	D S W F R E K T Y N K V D K I P E R D L N V E		
UniRef90_A3C9V4	A A S T V D F K I H P V E A R K E I	N A W V A R A T K N L I T E V I K P E S Q D		
UniRef90_UPI00045EC2BD	A Q V I Q S D F A G D P S G A T D T I	N E S V S D D T A G I E R L F D D L P D S		
UniRef90_C8WJ2C	A T P F S V E F G T D A A D Q A M A	N A W I S E N T G G T I D P Q V K T E S D		
UniRef90_A0A034VVP8	S A I E A I D F R S P N V A A S A I	N N W V A Q K T Q N I R E L P A Q L D A Q		
UniRef90_C0J8G3	V K A A L L D F N S P E K S A I K A	N K M I E Q A T N G K I S E A F Y N D F L		
UniRef90_D9RVB2	T N I I D S A N T P K G K E S A N K	L C K T I T K G E I Q S L P I Y L D T G P		
UniRef90_UPI0004749EF5	A V R A A D F A S D P D G V R R L I	N Q D V A E T T R D L I P E L P G A V E P R		
UniRef90_W5DL70	A E T H S D F Q T K A A E V A C Q V	N T W V E K L T S G L I K E I L P D G S V D		
UniRef90_UPI00042C6245	L K P E N L D F K N N E E A R M Q I	N L W I E N K T K G E I K N L P N S L T S S		
UniRef				

	170	180	190	200
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UniRef90_B0QST4	T R L V L L N S A I Y F F K A A W S T K F D E S A T T K K L Q F			
UniRef90_H0QHW9	N T F S L L N S A I Y F F A A A W Q T P F D A S T S D L Q P F T L D G G E Q I D V P			
UniRef90_A7XCB1	T K M V A I N A L Y F N G D W K H T F P L E G T K D G V F Y K D D K T T L T V K			
UniRef90_X1PDR5	A L T R L V L T N A I Y F N A A W			
UniRef90_B0WQ09	T T M V A N A M Y F K A F W E D V F T A G A T K P R K F F P N S E E S V E V D			
UniRef90_B7Q685	T Q L V V V Q A L H F R A L W D F Q F V R E D N V R R D F T D V H G D K H M V D			
UniRef90_UPI000454BA43	T L L A L V N F I S F D G N I L A F F			
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UniRef90_Q10GX0	H T T R L V N A L Y F F K G A W T E K F D A S K T K D G E F R L L D G K S V L A P			
UniRef90_I1HRZ1	T L A V L G N A L Y F K G A W C S K F D P R F T R D D A G F Y L H T G A H V C T P			
UniRef90_B9SIV9	T A L V L A N A L Y F K G A W D Q K F D S S K T V S K N F H L L N G Q T V K I P			
UniRef90_W3APP9	A D L I L V N T L Y L R T A W V N E F Y D Y A T R E G N F Q T L A G N Q R M V K D			
UniRef90_B4J895	S S V I L V N S L Y F R A K W A T R F S V E R T A I D D F R I N Q N Q R M V K V P			
UniRef90_UPI0004430E76	P L S L L I N T L F F K G L W R K Y F S P E N T R N G K F Y L I D N R T V D T S			
UniRef90_H9K580	S L M L I V N T L F F K G L W R K Y F S P E N T R N G K F Y L I D N R T V D T S			
UniRef90_Q53P09	T A V V L G N A I Y F F K G K W D R P F N E S E D T E R K F F Y R H D A A V A D V P			
UniRef90_UPI0002C596B3	T T L V L V N Y I Y F F H G K W K D K F D K F E R M V E G D F H V N E K T T I E V P			
UniRef90_UPI0003ADAD52	T R L V L L N A V Y L S A K W K T T F D K R T S L I E F F Y L K S S V I K A F M			
UniRef90_K4BV28	S S T R L V N A L Y F K G A W D E K F D A S V T K E S E F F H L L N G S T I Q V P			
UniRef90_L8Y7B6	E T P H L R T R A N W Y G K W S S A L E G K R I V E E D F H V L D K D T T V R V P			
UniRef90_T1K451	Q W T T I I N A I Y F H A K W Y N Q F D A S K T E I G T F H V T P V I E S I Q I P			
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UniRef90_E3IWZ9	T R L V L A N A L Y L R A P W N S P F G D A Q S P A P T R L D G S V V Q A Q			
UniRef90_H9KRD2	T D L V L A N A V Y F K G L W K S R F F N P N N S K K D I F Y S S K S Q H S M V K			
UniRef90_U6M5T8	T R L V L V N A L Y F K A P T L Q Q F E G A S T Q G V F F T P S G P K Q V M F			
UniRef90_I3MK52	V G E E L P T S P L C P A G L E E P F K A D H T M E Q D F Y V N E A T T V R V P			
UniRef90_Q5MGH0-2	T R A V L V N A L Y F K G S W K N K F D K E S T I D R P F H V D N T K T I Q V P			
UniRef90_C0MPR7	Y S A Q I I N A V A L R I P W S Y F F M E E S T D L Q T F Y K Q D G K Q T K V H			
UniRef90_C0J8G2	T K V V L L S A S F S G W A S P F I P E Y T F K M P F K K A E G V M A D L			
UniRef90_G1FJ11	G L M V I V N A V Y F K G K W T Y T F E Q R D T R N R F F T T P N A A P Q S I P			
UniRef90_M8BYQ2	T V V V L A N A L Y F R G Y W Y D F D P E L T Q D G D F Y V S P G H A V R T P			
UniRef90_W7UUT4	D N A M M M L I N T L Y F E A D W S R P Y L I T R E G E F T D L K G E K H P I			
UniRef90_I0TEB1	H S A Q I I N A V A L R I P W S N E F V G E T T N G Q T F Y K Q D G K L T K V N			
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UniRef90_UPI000374E861	T V A S I L V N A L Y L K S A W T F R F P D G D T E P A E F H A P S G T R R V P T			
UniRef90_UPI000234F23B	L Y F K G T W S E Q P F D L X A T F H A P F H T L D G T T V H V P			
UniRef90_P33831	T L W A L I N T I Y F K G T W Q Y P F D I T K T H N T S F T N K Y G K T V P M			
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UniRef90_D6WVH4	T G F F L L S A S H F G A C W A K E F A S K R T H K D N F Y N K L T Q K T S V D			
UniRef90_A3C9V4	T R H V V G N A I Y F K G E W L A P F D K S D T A E R E F R R L D G S S V E V T			
UniRef90_UPI00045EC2BD	T V V V L T N A L D L K A R W L R P F T D T R P A D F A A P G G A V T			
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UniRef90_A0A034VVP8	T Q A M L I N A I Y F K A K W A K E F S T R D T E R Q N F Y V T P A R T V P V D			
UniRef90_C0J8G3	S T V L L M S D K Y F D S F W K S P F N A A Y T R M E P F Y S K N G L K I E V A			
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UniRef90_W5DL70	S T T R L V N A L Y F K G A W T E F D A S K T K D G E F H L L D G S S V Q A S			
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UniRef90_B7PST4 A M H N L L E I K Y A E G A G W R G V D L P Y A E G F V M R L V L P D A G

UniRef90_HOQHW9 M M T Q I G K F N Y G E F T N K Y C K V I E L P Y V D D N I S M L V I V P N D N

UniRef90_A7XCB1

UniRef90_X1PDR5

UniRef90_B0WQ09 M M S H G G C F P Y Y A S K E L D A R L L G F P Y K N K T T A M Y I I L P N K S

UniRef90_B7Q685 M M V T N G V F R S C V Y T E L D T A A V E L P Y K D V G S C L V L L K P N T G

UniRef90_UPI000454BA43

UniRef90_T1PJ14 M M S Q M G S F T Y V F V P G I D S F V L E L P Y G E N L M S M L A I L L P R K G

UniRef90_Q10GX0 F M S T S K K Q Y L S S Y D S L K V L K L P Y Q K G R D L R Q F S M Y I L L P E

UniRef90_I1HRZ1 F M S S S K E Q Q Y I A C R P G Y K V L K L P Y A R G F S M Y I Y L P D E R H G

UniRef90_B9SIV9 Y M T S R D H A Q H Y Y F D D Y K V L K M S Y Q N G Q D T R R F S M Y F F L P N

UniRef90_W3APP9 F M K Q Q E R F R Y Y E D E K G K F V V L P M K G G I N A V F I L G D V D D

UniRef90_B4J895 M M R Q E G Q F R F G E S R R L K S R I L Q L P F E E S D I Y M L F I V P H N G

UniRef90_UPI0004430E76 K G L T Y E I L I A W M D P E S V A L M E I L H

UniRef90_H9K580 I M H A Y G R F Y V E S D L D A K I L R I P Y D G F A I Y L L L P R I I N G

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UniRef90_UPI0002C596B3 M L Q G L G M F D L H T D Q E L A S X L L R K R A E A E S A S

UniRef90_UPI0003ADAD52 M N S K K Y P V A H F T D S T L K A K V C S W S F P F L F L R L C L A E A G I V

UniRef90_K4BV28 F M T S K T K Q Y V K A F D G F K V L G L P Y K Q G E D R R R F S M Y F F L P D

UniRef90_L8Y7B6 M L N L L G I F D L H R D Q N L S C W V V L E H M K G G A T A F F F L P D P G K

UniRef90_T1K451 F M K L T A N L M Y G V S E A L R C T V L E L P Y A N K G S M L I L L P D A S

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UniRef90_A0A023FH99 T M Y Q K N S F K M A S C D D L D V T A L E I P Y Q S G K T S M V V L L P N D L

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UniRef90_U6M5T8 M K G K L D K A P L L V S M K R E A L A V G L P Y T D P R L R L Y I V M P E D L

UniRef90_I3MK52 M M N R L G M F D L H Y C L T L S M V L K M K Y L G N V T A I F I M P K V I G R

UniRef90_Q5MGH0-2 T M H R S G Q Y S Y G E S R E L N A K I I E M P Y E G D E T S L V I V L P D G I

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UniRef90_G1FJ11 M M T Q M A N L K Y S E A Q I G A R L E L P Y S G G L I F M Y V L L P A T E

UniRef90_M8BYQ2 F M V G G Y L H E N M C I A C W M Y C G H Y Q D C R S S M C I Y L P D D R G G

UniRef90_W7UUT4 S K M N S Q E Y Q Y F D L G N A D A F K K P Y K G G E Y S F V G I L P H E D I S

UniRef90_I0TEB1 M M H K F D Q D K N F G Y E K D Q Y K V L T L A M Q N G F F M Y V V L P H K K G

UniRef90_Q08519 M M S N K D I Y S Y G Y I K D S D K I I E I P Y K D R R F S M F I P I T K V Y

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UniRef90_UPI000234F23B F L T S S D G D D K H I A V H P G F K A L K L P Y E S N A F Y M L L L P D N N

UniRef90_P33831 M S V V I T K L Q G N T I T I D D E E Y D M V R L Q Y K D A N I S M Y L A I G D N

UniRef90_UPI000262818A M R Q T E R L G Y A R Q D G W Q V V E L P G A G V T A T V L L P D G D

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UniRef90_D6WWH4 T M Y L L G Y F N Y G Q S K Q L E A K F L E L N F I E Q Q A S M V I L L P D K

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UniRef90_UPI00042C6245 M M R L Q G H L R L G S I T E P R V Q V L E M P D V I E D H L S M V I I L P R E E

UniRef90_UPI000328C7C0 M M H L H Q K L N I G Y I E D L K V Q I L E L P Y V G D V S M F L L P D E V E

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UniRef90_M4EK36 F M T N H K K Q Y V I E Q Y S D F K V L K L P F R Q S G D T N R Q Y S M Y F Y

UniRef90_A0RZ04 F M N L A A N L D Y S E R R G A Q V L R L P Y E G G G I S M V I I L P G T R D G

UniRef90_F1L6V2 M M S I Q A D Y P Y Y E N K V Q V L G L P Y K N N E V Y M Y V F L P R E K Y G

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UniRef90_U6HXN0 M M H L E T Q M V Y L K Q D R F K V V A K P F K N Y R Y K F V I F L P N E R F N

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UniRef90_UPI000388E9DB M M H L Q L R T K G F H F A S D N N V S Y Q P Y K G K E F S L V L T L P S E D V T

UniRef90_UPI000359277C M M F K E S T F K M T Y V E E I S T T I L M L P Y V I G N E L N M V I M L P D E H

UniRef90_B9F9P0 F M S T S K K Q Y L S Y D N L K V L K L P Y Q Q G G D K R Q F S M Y I L L P E

UniRef90_UPI0003B7787D M Q Q D N Y P V K M G V D S D L S C T I A Q I Q M Q N D V S M F V F L P D D V T

UniRef90_UPI0003C270E0 M M Y F Q L R T K T G H F S D N K V S Y Q V L K L F X K G L V Q L S F K H K M X

UniRef90_G1RC58 M M G Q Y N S F N F A S L E D V I Q A K V L E I P Y K G K D L S M I V L L P N E I

UniRef90_UPI000479EEDB L M H Q S D T Y L E L S T R D G Y R M L R L P Y G E D E R Y G M E I L V P D P

UniRef90_UPI0003B6DA74 F M E Q T D H F R Y Y E D A D G K F V I L P M Q G D V D V I F M L G D I

UniRef90_F7B574

UniRef90_UPI00042C7133 M M H R V E Q I A F G V D P E L N Y S V L Q M D Y S G D T V A F S V L P G E G K

UniRef90_F1L719 M M P I W A F G L F R Y A E D A H V I Q L L G I P Y S D N E T F M Y L F L P R D R

UniRef90_UPI00035A0691 R H S T V C S Y

UniRef90_R0G9N0 F M N G W K D Q F I K A Y D G F K V L R L L Y R K G G F S M Y L Y L P D K K G E

UniRef90_G6DRC5 T M Y N K D Q Y K Y I D S K E L D A Q V L E L K Y E G G D S A L Y V V L P D G I

UniRef90_UPI0003B6555E M M F S K E H L Y I E N E F T G F L K P Y K N R E Y S M A L L P K N D

UniRef90_M1ADU5 F M T G C K D F T Y G S F E G Y Q V A K I P Y D N K E F S M S I F L P N E K N G

UniRef90_J9ET74 M M S M W A F D K F K Y T E D A D V Q V L G L P Y Q N L F L Y I F L P R E K F A

UniRef90_H2ME64 M Q Q D N Y P V K M G S D S D L S C V I A Q I Q M Q D G V S M F I F L P D T A N

UniRef90_W5FTY9 S M T T S E S Q H I A V Y P G F R A L K L P Y K N D A E F Y M L I L L P D R D T

UniRef90_W7IXU4 M A L T E T L G Y A A V D G W Q V V R L P G A G Q V E A L V L L P D G D

UniRef90_B4JAP4 M M V G A G S F P Y Y E D V Q L N C R I G L P Y H G N L T T M Y I I Q P M R S

UniRef90_B4Q673 M M S H V G R F R I A D H S Y G Q I I E L P F H N S N L S M I G L P L H N T Y

UniRef90_H5XG18 M M R Q A E R L G H A A V G G W Q L V D L P A V I G V S A S V L L P D R P

UniRef90_UPI00027435A1 M M A Q T N K F N Y T E F D G H Y Y D I L E L P Y H G D E T L S M F I A A P Y E K

UniRef90_R7E5Q8 M M L Q Q T E F R Y A E G E D W Q A V A F G Y G R K G A G F I G I L P K A S

UniRef90_UPI00042CA9A1 M M K Q T N S F Q F V S L E D V I Q A K I L E I P Y K G S E L S M M V L L P D E V

UniRef90_UPI000161C2E0 M H

UniRef90_T1JV43 V G K L P I A F G E I N D G R L K A S I I E L P Y K T Q R L G L F M V L L P L E D

UniRef90_V8N7G3 M M E Q T A E F H Y G E F S T P D Y D V I E L P Y Q G A T L S M L I A S P D A P

UniRef90_Q6P808 S T P L S A I I P H I S T K T L Q S W M T M T P K R V Q L I L P K F S 250 260 270 280

UniRef90_B7PST4 A D A L S K G P R L M E I A S A L D T A P R D T V Q I Q L P R W D H K C S F E L

UniRef90_HOQHW9 N F S I Y K L L S K I N E I D L K T N I K E T L I Q V S M P K F F I K S K N H L

UniRef90_A7XCB1 N R K I L Q D L D A N T L D E L I S N T T M R T A S V L F P K M H I T N S F E L

UniRef90_X1PDR5 I N A L V S G L T P I H L D R L L K A R H K G S V S L T I P R L R L R K T C E M

UniRef90_B0WQ09 T K L N T V M N N A E E E R A A A D D G V P N E V E V F L P R F T T Q S H F S L

UniRef90_B7Q685 A Q D G L W S L A P E F L E K R I P T R Q V T V G K F K L P K F K I S F G F E A

UniRef90_UPI000454BA43 L E S L L H K L G S H L E N S M S L M A K V P V G A L K V P K F T V S C K T N A

UniRef90_T1PJ14 A R N G L Q N L N P M I L L N N P V P V Q K R W L T H L W L P K F K F S F E F E A

UniRef90_Q10GX0 I I K K I P A A S Y E E V A V C L P K F E T E T E L S D

UniRef90_I1HRZ1 L A A L E S K L S K L D L N E V A R R A V M H D V D V T L P K F K I E C E V D L

UniRef90_B9SIV9 I D E L I D K I N P F V L T R Y M W L M Q D L S V D V L I P K F K F D F S S Y N M

UniRef90_W3APP9 L R G L V E R M A S F L H E H M P A A W P V P V G E F R V P K F K V S C G G S V

UniRef90_B4J895 Y F R L G S G I L K F L R L Y C I E W Q N S G A P P A G L R L T V F S S G Y A L

UniRef90_UPI0004430E76 A N D G L P A L E S R F L E R H L P Y Q K V G V G E F R I P K F K I S F G F E A

UniRef90_UPI0002C596B3 L Q Q L E E T L T F Q S H V N D I L K T S T V R S V N L Q F P K L S I S A T Y D L

UniRef90_UPI0003ADAD52 K D S L V R Q L K F S H L E D V V A N M F D D E I S V V L P K F K A E Q E L E L

UniRef90_K4BV28 L P N L L K Q L S A N A K H L E E M Q Y F D T E V V L K L P K F S L G G H M K L

UniRef90_L8Y7B6 C D W I Q R T L D W N L V A E V L T E M S E T R I D L T L P K L K L K G T Y D M

UniRef90_T1K451 E K L E E R L T D K L K N L F N M L R S Q S D V Q L Y L P K F K L E H A I G L

UniRef90_Q8WT41 F E A V R A L D G T A L R R L L T G L Q V T G V Q L D L P K W T T R T R V R L

UniRef90_UPI0002658735 E R D S I Y H L I T E I R D L L T S D S L P Q P V E I L L P R F E V I K E L Q I

UniRef90_A0A023FH99 A S F E K S M I S A D M E S S A M D R S F E E E L F L T L P K F K L S N K V D L

UniRef90_E3IWZ9 M E Y V E D T L T K E F

UniRef90_H9KRD2 H N L L E K L K D P K V L S R V E K D M H E I D V E V Y V P K F K I S T T K L D L

UniRef90_U6M5T8 R D L I N N F K D S T V L Y K R L T E L K K Q Y D E V E I A L P K F S T S T T P L

UniRef90_I3MK52 M K D L M K K L D Y N K I D E L I N K M N E R K A V V R F P K M D L E S N V N L

UniRef90_Q5MGH0-2 G E A G W N M T L H Q A L W G P S N F V Q R K V D V L L P K F K V E K M L E L

UniRef90_C9MPR7 L P E L V R A L S D S P S V F A V P E K L V P T A E L R I P K F D V S Q R L E A

UniRef90_C0J8G2 I Q D Y I A G L D G K T L E E G L R E Y E D P D T Y V M I P K F K Y N Y S K S L

UniRef90_G1FJ11 K L D D I L N D F K D S T L Y D L T E H K Q Y D E V E I A L P K F S T S T K L

UniRef90_M8BYQ2 K T L C N I L T I D K L A M W T S T M N L Y E V D I K I P R F K V E S S Y E L

UniRef90_W7UUT4 L A A Q E S D V D A E L V A G L L A A K R D T T V H L A L P K I D L D L R S D L

UniRef90_I0TEB1 S T Y W Q A V S T P G F I K N H T P V A K V P V G Q F M V P K F K F T F E F E A

UniRef90_Q08519 M T H F T D S I M A A K L D Y W S Q L G N K V Y N L K L P R F S I E N K R D I

UniRef90_UPI000374E861 L A A Q E P D L D D T R L A T L L A A P K Q V Q V D L R L P K I D L D R P A D L

UniRef90_UPI000234F23B T L P L S Q S L T T E A L R R F T T A G K R Y A L D I R L P R L N A G P N L D L

UniRef90_P33831 T A L L E P H L T A S A I H I W T N S L K R L K M D V F L P R F R I Q N H F N L

UniRef90_UPI00043656C I D G I Q K L E T K M D Q V L Q F R D M R T T A V D I S L P K F R M D S H F D L

UniRef90_D6WWH4 D P G L L D R I T P E F V D E H L P P G C V P V G R F R V P K F K L A F H Y G I

UniRef90_A3C9V4 D P C T V D G A T L A A L D D A S T T E V D G A L P Q L K I E Q T H Q L

UniRef90_UPI00045EC2BD V D D D E Q R L A Q A F A V D A N E D E Y G F I T Y V V P K V A F D T E L D L

UniRef90_C8WJC2 L A D M E Q R L H D V D L S L S K R M L L E T V T I R I P K F R I S T E D V N M

UniRef90_A0A034VVP8 T W V K E I F Y S L E A T R L T S L F N V Y K N E N V K L P K F K I S T E I E N

UniRef90_C0J8G3 Q D V I R K L T I K E L H K I S Q N T K A Y D Y V N V L F P R F T I S A N I P M

UniRef90_D9RVB2 L P D S E V A L D A W T L G R L L D S T M R S T Q V D L F L P R L R V S G R A E L

UniRef90_UPI0004749EF5 A N D G L W N L A P E F L E K H T P T E K V L V R N F K L P K F K I S F G F E A

UniRef90_W5DL70 V G Q V T N E I T Y E K L S N W I G S P N M K D T A V V P Q L R L H G Y H E D L

UniRef90_UPI00042C6245 L L E Q E I T F D K L K K W T S K D T M T E D D V E V L I P Q F K L K E K Y E L

UniRef90_UPI000328C7C0 L E D M E A L T P T V F K A I M K K S K Y Q S T Y L M M P R I K I K S S Q D M

UniRef90_UPI0004549CDB L P D A K D G L N S L V K R V A S S S S T L G F L D S H T P I K Q V E V G V F R

UniRef90_M4EK36 I T E L E Q S V V H D G I P A W T S G M A S K E V M V S L P K F E M G T R Y D L

UniRef90_A0RZ04 L A A V E E S L N G Q Q M L E M I H N A S W Q E V I V K L P K F K L E E E F K L

UniRef90_F1L6V2 F E G L L N A L S S G L L D D I E T T A M P K V V D I A L P R F K L R S N L D A

UniRef90_Q17HE3 L A T A E P G L T A E S L T T L L A A P H R A R I A L H L P R L A L T T H A E L

UniRef90_UPI0003D0EB3C L D E I K N D L E D G D F N W G L I Q S D R N Y T H L G L P K F K V E H E I N L

UniRef90_UPI0004761E8D L A T S E P D L D A A R L R R L L V A V E Q Q R V E L F L P K F D V T G D A E L

UniRef90_U6HXN0 I E E V E K L I T A Q L I K D W F A E T Q E D V E I S L P R F K I E Q T V N L

UniRef90_UPI000237A458 I D E K E I T Y E K F T E W T R L D K M N E K K V E V F L P R F K L E E N Y D M

UniRef90_UPI000388E9DB A Q D G L W S L A P E F L E K H I P T R Q V T V G Q F K L P K F K I S F G F E A

UniRef90_UPI000359277C T N T T E E S L T A E F V Q D L S M A L Q P A L V S L T L P V L R L S Y S T D L

UniRef90_B9F9P0 L L E V I E K L I T S H L I X R L V T E M Q E V D V E I R L L R F X I E Q K M D F

UniRef90_UPI0003B7787D N Q K L E E K L T A E K L M E W T S Q N M R E A R V

UniRef90_UPI0003C270E0 P D L L S R L D A A E W A D A V A G L G E K I S T L A L P R F E L E W E A T L

UniRef90_G1RC58 E D V C G K I D D C R S E N V H I K L P K F E T E A S F D N

UniRef90_UPI000479EEDB M R Q L E H A L X A R L R K W S R S L Q K R W C L E V F I P K F S I S S S Y N L

UniRef90_UPI0003B6DA74 D E N V I N E I T G E R I F A L V K R C R I V D V E V E I P V F R I E S N F D I

UniRef90_F7B574 L D N L L E R M T S T F L E S H I P K Y R V D V G D F R I P K F K I E S G F E A

UniRef90_UPI00042C7133 T K L E E K L K D P K L L D N V I G D M Y E T E V E V Y L P K F K I E T T T D L

UniRef90_F1L719 H N E R I F R R S V I E K L D F K G L Y D S A S Y D Q V F V N M P E F E F R T D L

UniRef90_UPI00035A0691 L P S L L E K V N S D P K F I T Q K F N L W S A S L D A F Y I P K F K F T Y T A

UniRef90_R0G9N0 L R S V R E L T G R R L L F L I A R C K I V D V E V E L P R F S I E N H F E L

UniRef90_G6DRC5 M T L L E A V S T A E F V Q D L A M T L L P A K V S L T L P V L R L S F S T D L

UniRef90_UPI0003B6555E V T Y D K A E S T P E F I K T H T P T G K V P V G Q F M V P K F K F T S K F E A

UniRef90_M1ADU5 L A E A E A T L T G E S L A A L V E A K G R A M I T L R L P R L A V R S E A K L

UniRef90_J9ET74 S V I E Q L S Y L T A D V I E Q M I R Q M V R R S I I V A F P K L H I T E S L K L

UniRef90_H2ME64 L S S I E S L L R T L S E S L V E K D V H V E L P K F K I K Y Q T E L

UniRef90_W5FTY9 L E E A E P G L D A D T L A A L L A A R R E T M V R L S L P R L S L D L R C A L

UniRef90_W71XU4 E S A L T N I L S A Q L I S H W K G N M T R L P R L L V L P K F S L E T E V D L

UniRef90_B4JAP4 S A D F T Q T L T Q Q K Y N Q A L A Q A K H Q K V L V F L P K M D L D S G I S L

UniRef90_B4Q673 D G L Q E V K P G A C G A S C C C S R C R Q H S A C

UniRef90_H5XG18 S P N G L F N L M R S L N S T M K K S K K G D E V N V R I P K F D I S S K P D L

UniRef90_UPI00027435A1 L S G L A A A I D P H L I A E W K G N M S A V T R L L V L P K F S L E S E V D L

UniRef90_R7E5Q8

UniRef90_UPI00042CA9A1

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UniRef90_B7PST4	K	K	S	L	R	K	L	G	I	T	Y	I	F	N	K	N	N	A	N	F	R	A	M	T	T	E	N	I	Y	V	Y	K	A	F	Q	D	V	Q	I				
UniRef90_HOQHW9	K	S	A	L	R	M	L	G	L	S	S	M	F	I	Q	G	R	S	N	T	N	M	T	S	A	N	S	P	T	V	G	G	V	L	H	K	V	D	L	E			
UniRef90_B0WQ09	S	Q	V	L	K	E	L	G	L	T	S	L	F	S	D	A	T	A	L	L	G	I	A	A	N	R	P	L	S	C	S	L	L	V	Q	R	V	S	L	T			
UniRef90_B7Q685	R	Y	I	L	E	N	M	G	M	I	D	V	F	Q	P	H	Y	A	N	L	T	K	L	A	K	D	I	F	V	S	S	I	F	Q	S	S	R	I	L				
UniRef90_UPI000454BA43	S	D	L	L	K	I	L	G	L	Q	L	P	F	S	S	K	A	D	L	T	G	M	P	E	R	H	N	L	F	V	S	S	L	F	H	K	S	F	V	Q			
UniRef90_T1PJ14	T	E	L	L	K	D	L	G	L	R	L	P	F	D	P	A	A	D	F	S	E	M	L	V	S	A	P	L	F	V	S	A	V	Y	H	Q	S	F	V	E			
UniRef90_Q10GX0	L	Q	A	M	H	E	L	G	H	E	E	Q	L	F	N	G	H	L	T	E	M	V	D	S	P	Q	S	P	V	I	S	K	L	L	H	K	S	F	I	E			
UniRef90_I1HRZ1	N	Q	L	L	S	F	C	G	A	M	K	A	F	T	P	D	A	D	F	S	I	M	S	H	E	M	S	L	M	I	T	D	L	I	Q	K	T	K	I	K			
UniRef90_B9SIV9	K	L	P	L	Q	K	L	G	V	R	R	I	F	E	P	G	A	A	D	R	L	F	A	K	K	S	P	H	R	I	T	E	A	R	Q	K	V	S	L	N			
UniRef90_W3APP9	A	H	I	L	C	N	L	G	I	S	N	A	F	H	E	D	K	D	F	S	G	L	S	T	L	K	E	M	L	S	S	V	F	H	S	S	S	S	M	E			
UniRef90_B4J895	E	S	I	L	R	E	L	G	I	C	D	I	F	D	D	T	A	T	L	T	T	K	R	T	S	K	C	L	K	V	S	N	I	L	Q	K	A	G	I	E			
UniRef90_UPI0004430E76	V	G	A	L	E	Q	L	G	L	R	L	P	F	S	S	D	M	V	E	D	D	G	S	G	W	P	L	F	V	G	D	I	Q	H	K	A	V	I	E				
UniRef90_H9K580	K	T	V	L	S	K	M	G	I	T	K	V	I	F	S	N	E	A	E	L	S	G	L	T	D	Q	A	P	L	K	L	S	K	A	M	H	K	V	L	S			
UniRef90_Q53P09	E	F	F												D	F	L	Y	D	L	N	L	C	G	L	T	E	D	I	D	L	Q	V	S	A	M	Q	H	T	M	L	E	
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UniRef90_UPI0003ADAD52	K	E	V	L	N	D	M	N	I	T	K	I	F	S	N	G	A	H	L	S	G	L	T	K	H	A	P	L	K	L	S	K	A	V	H	K	R	A	V	L	T		
UniRef90_K4BV28	S	G	P	L	Y	S	M	G	I	M	K	I	F	D	P	R	F	N	T	T	H	E	L	Q	T	K	G	I	T	V	N	S	V	V	H	K	R	V	Y	V	S		
UniRef90_L8Y7B6	K	E	P	L	H	K	M	G	L	K	S	A	F	D	E	R	A	D	F	S	G	I	T	N	D	R	S	L	A	V	S	D	V	Y	H	Q	A	V	I	D			
UniRef90_T1K451	K	K	T	L	T	S	L	G	L	G	V	I	F	S	N	Q	A	S	F	E	A	M	D	Q	N	R	P	V	P	I	S	N	F	L	H	K	A	E	M	S			
UniRef90_Q8WT41	K	K	T	L	Q	A	M	G	I	K	D	D	F	S	H	K	A	D	L	S	A	I	S	E	A	G	N	L	V	A	T	D	V	V	H	K	A	F	V	E			
UniRef90_UPI0002658735	D	D	A	L	V	A	L	G	M	P	T	A	F	G	D	S	A	D	F	S	G	M	T	T	T	E	R	L	S	I	A	S	V	P	Q	E	A	F	V	A			
UniRef90_AA023FH99	T	T	L	L	D	A	I	G	A	G	E	L	V	M	P	D	V	A	N	F	V	E	D	G	E	E	S	V	H	L	G	A	A	V	H	R	A	R	I	E			
UniRef90_E3IWZ9	T	E	I	F	G	R	L	G	A	T	D	M	F	M	A	K	A	D	F	T	G	I	T	G	D	R	D	L	F	V	S	S	F	V	H	Q	A	D	I	D			
UniRef90_H9KRD2	K	K	L	V	L	K	S	N	M	I	K	K	L	F	S	N	G	S	E	A	R	D	L	S	Y	K	M	S	D	A	L	Y	V	I	D	K	A	V	Q	K	I	E	
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A T A E S V S D F V S A E L A R A Q V I N A F V Q D A T R N Q R I H D I L S T L D H S S
T N I I N A A N T P Q G K E K A N K L C K T I T K G Q I Q T I L P V K F T G L
A K A E A T D F A F Q R L K E S R S I S F L I Q R P L I H K N M R T I F Y E L Q P N
S E L Q M L D F A N P A T A R Y N I I N S W V E Q Q T K G K I E N I I P D L Q P E
A R E F V T N F N E K T E T A E I I N S K M S E M T R T Q I T D I L P D G I E E D
M L R K E E S R Q W L M K E R S E V F F R K
S E V I N D F R T K A R E A R D I I N A W V K K R T M D K I D S I L D E P P R A
A S I K V L D F R S D P N S A R I A N T Y I E K S G G R V S N V L R S D D F Q E
A Y V P V D F R S E A E V R K E V N S W V E H H T N N L I K D L I P D V T S L
A E I R A V D I A E T C Q T V I Q G L R G F L H G D T E K I R E E I N D W A A A
A Q A Q N V D F S N P K E A A D I I N K W V A E R T R N L I P N L S P L S S N
T V N F N N A N Q T K E L I N E W V K T M T N G K I N S L T N P L S I N
A S T Y Q G K M S K E T N Q A L I R S W I N E Q T G G L L Q E Q A E E L S A E
S A A K K A D F K N E D A P D Q I N S W V K D S T K S T V T T L L P A G T I D
S D V E N I A D L E T V E D R R I N Q W V A Q V T R S K I P E L L I G L A A D
K I D F A V N P E L A N K Y I I N N W V S N H T N Q I L I K D L F P V G M I T
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L L K N S L Y L E K K G V W K D K F S R K K S F M A K F F K T P Q R T K R I R F
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T N K I Y A N A L S F K G A W K R P F E K Y Y T R D N D F Y L V N G T S V S V P
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T V L A L A T T V Y F R K A W S E F S P S A T E P G L F Y H G L S Q D I T C D F
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S R T I L V L A N A Y F N G Y W S S G F D S T E N D M F Y T S P S K Y E Y V T
T V L A L V S T I Y Y K A A W D E F Y A A G N T K E T F H G T K G D A T V D
V L V M L I N A V H F K A K G D W R F D P R F T S R G A F Y L D D N N M I D V E
T Q A V L T N A L Y F K G A W S R K F D A R F T E H A A F Y L P N G S H V R V P
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T D K I Y A N A L Y F K G A W K R P F E K Y N T R D R D F H L V N G T S V S V P
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T V L S L I S T I Y L K D E W I E V F E K S D N D K K I F N T P N G E K E F E F
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H T T R L V N A L Y F K G A W T E K F D A S K T K D G E F H L L D G K S V Q A P
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P M T C L V N A I Y F K G N W E N Q F N K Q H T K E R L F K V S K N V E K P V Q
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T L W I Y G N A L Y F K G A W D K F Y K S M T K H K P F Y L V N G K Q V H V P
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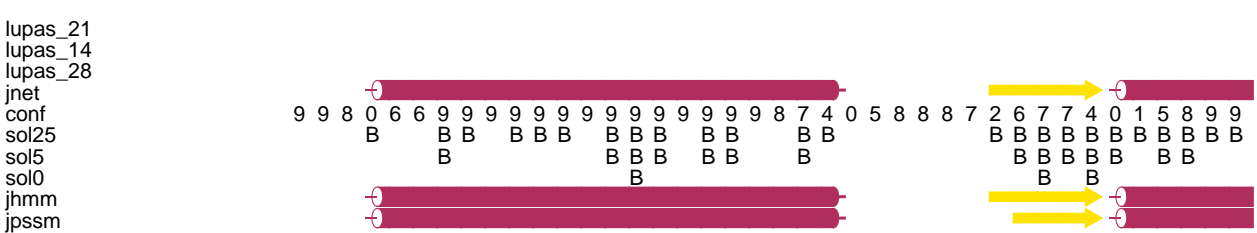
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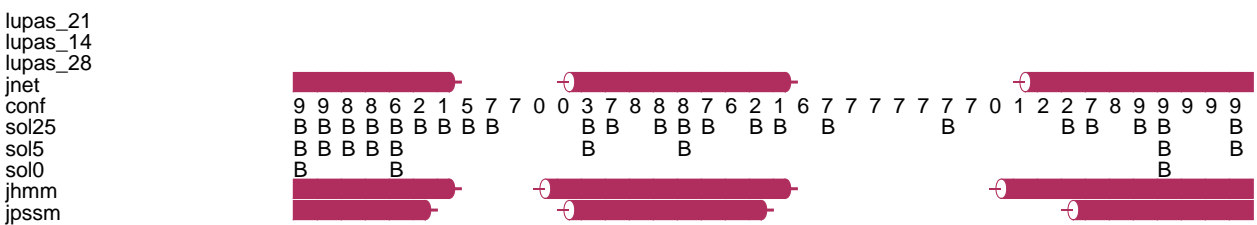
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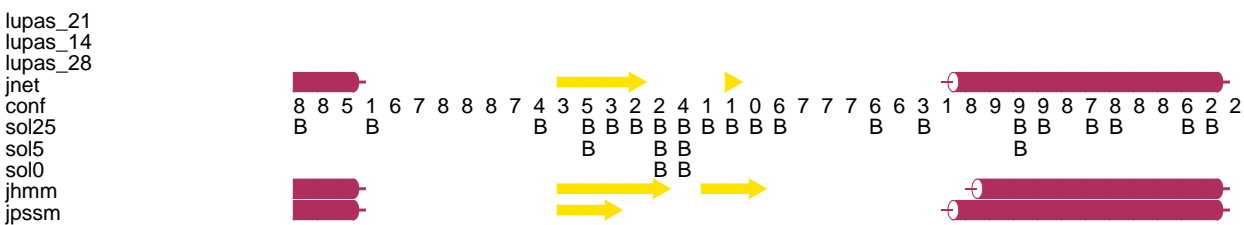
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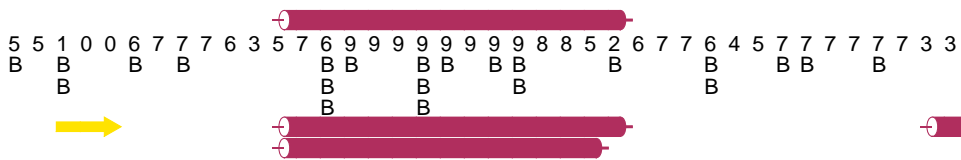
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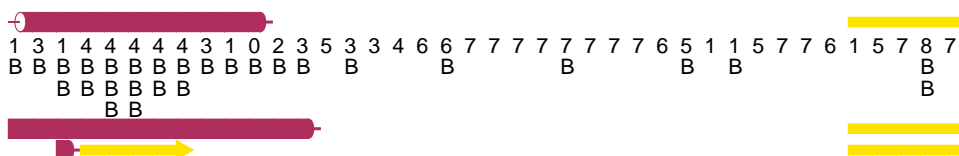


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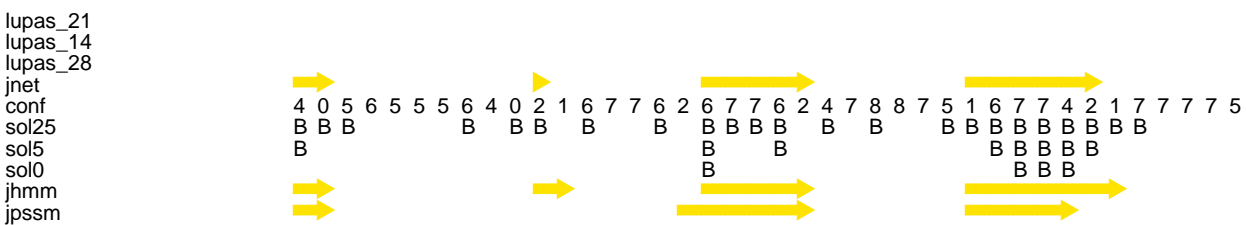


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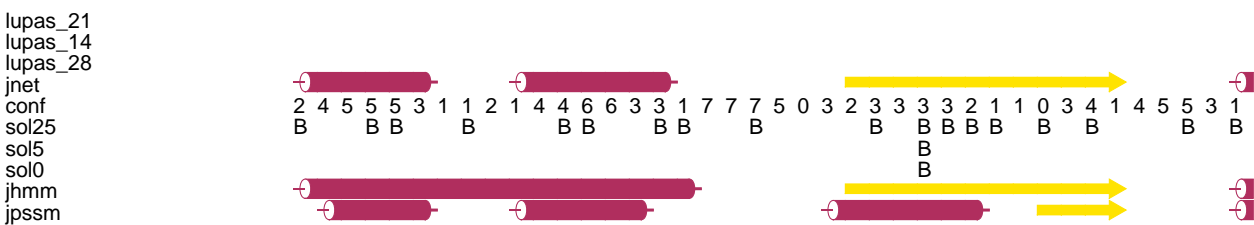
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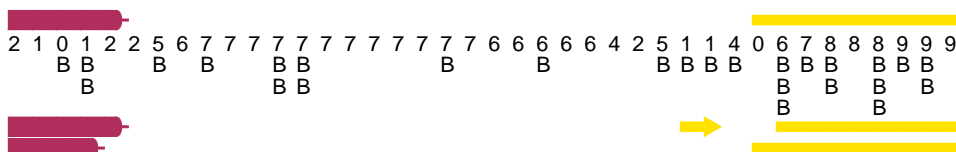


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