

QUERY	1	10	20	30	40																																								
UniRef90_B4GNQ7	A	P	R	K	F	F	V	G	G	N	W	K	M	N	G	S	D	Q	R	K	S	L	G	E	I	L	H	T	L	D	G	A	K	L	S	A	D	T	E	V	V	C			
UniRef90_B3SC17	A	S	A	R	K	F	C	V	G	G	N	W	K	M	N	G	S	D	Q	R	K	S	L	G	E	I	C	K	T	L	S	G	A	K	L	D	P	N	T	E	V	V	V		
UniRef90_Q8MPF2	A	D	R	K	F	I	V	G	G	N	W	K	M	N	G	S	D	R	E	K	S	I	N	D	G	E	I	I	Q	F	L	K	S	Q	G	P	L	N	Q	S	T	E	V	V	V
UniRef90_A0A023GGS5			R	R	F	V	V	G	G	N	W	K	M	N	G	N	K	K	N	S	I	R	D	I	C	N	T	L	K	G	A	S	L	D	N	S	P	N	T	E	V	V	I		
UniRef90_UPI0003597EB3			R	K	F	F	V	G	G	N	W	K	M	N	G	D	K	K	N	S	I	D	D	I	V	N	A	F	M	K	T	G	P	L	N	S	P	N	T	E	V	V	I		
UniRef90_P82204			R	K	F	V	V	G	G	N	W	K	M	N	G	D	K	N	Q	I	N	E	I	V	N	N	L	K	K	G	P	L	N	S	P	N	T	E	V	V	I				
UniRef90_K9LHF9			R	K	F	F	V	G	G	N	W	K	M	N	G	S	T	A	L	L	K	S	L	V	A	E	L	N	T	A	K	L	D	E	T	V	E	V	V	I					
UniRef90_Q45XG1		S	R	K	F	F	V	G	G	N	W	K	M	N	G	S	Q	E	E	N	K	K	I	V	D	H	I	L	S	D	A	H	F	G	N	T	E	V	V	I					
UniRef90_D7F1Q0		S	R	K	F	F	V	G	G	N	W	K	M	N	G	D	K	A	A	I	D	G	I	V	D	F	M	K	K	G	P	L	N	S	P	N	T	E	V	V	V				
UniRef90_P12863			R	K	F	F	V	G	G	N	W	K	M	N	G	T	T	D	Q	V	E	K	I	V	K	T	L	N	E	G	P	P	S	D	V	V	E	V	V	V					
UniRef90_A7S4D2			R	K	F	F	V	G	G	N	W	K	M	N	G	S	L	V	Q	I	D	G	I	V	K	N	L	H	D	S	S	L	S	D	D	T	E	V	V	I					
UniRef90_W2SJK4			R	K	F	F	V	G	G	N	W	K	M	N	G	D	K	P	S	I	D	G	I	V	C	V	F	L	N	Q	S	A	G	V	P	D	V	D	V	I	V				
UniRef90_M5E9U4		S	R	T	F	F	V	G	G	N	W	K	M	N	G	S	I	E	Q	T	Q	S	L	V	Q	H	L	L	G	A	Q	L	D	S	N	T	E	V	V	V					
UniRef90_E3URL7			R	K	F	F	V	G	G	N	W	K	M	N	G	T	T	V	A	E	V	N	K	I	V	K	L	L	N	E	A	D	V	P	S	Q	V	E	V	V	I				
UniRef90_D2D303			R	K	F	F	V	G	G	N	W	K	M	N	G	T	T	E	E	V	N	K	I	V	K	L	L	N	E	A	G	E	V	P	S	Q	V	E	V	V	V				
UniRef90_R7G3H9			R	K	K	I	V	A	G	N	W	K	M	N	K	T	P	S	E	A	V	A	L	V	E	E	L	K	P	L	V	A	N	E	D	V	D	V	V	F					
UniRef90_G7E089			R	K	F	F	V	G	G	N	L	K	M	N	G	S	L	D	S	I	K	K	I	V	E	N	L	N	N	A	T	L	D	S	N	T	E	V	V	I					
UniRef90_E3Q2U0			R	K	F	F	V	G	G	N	F	K	M	N	G	S	I	S	I	K	E	I	V	Q	N	L	N	N	A	N	A	L	D	P	N	T	E	V	V	V					
UniRef90_C3XYH6			R	K	F	F	V	G	G	N	W	K	M	N	G	S	K	D	S	I	N	E	I	C	G	W	L	T	A	G	D	R	G	D	T	E	V	V	V						
UniRef90_D8QR59		P	R	K	F	C	V	G	G	N	W	K	M	N	G	T	V	E	E	L	K	I	V	N	T	L	N	A	A	A	D	V	P	G	V	E	V	V	I						
UniRef90_A5CYN7		S	A	R	K	P	L	I	A	G	N	W	K	M	F	K	T	V	P	E	A	V	A	F	A	Q	E	L	K	T	A	V	A	G	V	D	V	E	I	A	V				
UniRef90_UPI00041A3F41			R	K	K	I	V	A	G	N	W	K	M	N	M	T	P	A	K	T	V	E	L	I	A	T	L	K	P	L	V	E	S	I	D	V	D	V	V	F					
UniRef90_V7RRI2			R	K	P	L	I	A	G	N	W	K	M	N	K	T	A	K	E	A	A	Q	F	I	E	L	R	D	K	V	K	D	A	K	C	H	E	V	V	V					
UniRef90_V4AU55		Q	R	K	F	F	V	G	G	N	W	K	M	N	G	D	K	Q	S	V	D	G	I	I	K	F	L	N	D	G	P	L	N	S	P	N	T	E	V	V	V				
UniRef90_W6N518			R	K	A	I	V	A	G	N	W	K	M	N	K	T	V	D	E	A	A	K	L	I	E	E	L	K	P	L	V	K	D	A	K	A	D	V	V	V					
UniRef90_K0AY14			R	K	P	F	I	A	G	N	W	K	M	H	K	T	L	N	E	S	V	E	L	R	E	I	K	A	K	I	K	D	S	D	V	E	V	A	V						
UniRef90_A0A016PQK3			R	K	F	F	V	G	G	N	F	K	M	N	G	S	K	S	I	K	E	I	V	E	N	L	N	N	A	D	L	D	K	N	A	E	V	V	V						
UniRef90_H6BLF6			R	K	F	F	V	G	G	N	F	K	M	N	G	T	I	K	T	I	K	E	I	A	H	N	L	S	S	A	K	L	D	P	N	T	E	V	V	V					
UniRef90_F3ZYC8			R	K	P	L	I	A	G	N	W	K	M	N	E	T	P	S	Q	A	V	A	L	I	N	E	I	K	P	L	V	A	D	A	K	C	H	E	V	V	V				
UniRef90_Q12574			R	S	F	F	V	G	G	N	W	K	M	N	P	T	L	S	A	K	A	L	I	N	E	A	L	N	K	P	L	V	A	D	P	S	T	E	V	V	V				
UniRef90_W1Q838			R	Q	F	F	V	G	G	N	F	K	M	N	G	S	K	D	S	I	Q	S	I	V	Q	N	L	N	S	A	S	L	P	S	N	T	V	Q	V	V	I				
UniRef90_T1J351			R	R	F	F	V	G	G	N	W	K	M	N	G	T	N	E	S	I	R	E	I	G	K	F	L	T	T	G	P	L	N	A	N	T	E	D	I	V	C				
UniRef90_H8MUB9			R	R	K	I	V	A	G	N	W	K	M	N	K	T	V	P	E	A	L	A	L	V	R	E	L	R	G	A	V	A	G	D	K	V	E	V	A	I					
UniRef90_W6MIU9			R	Q	F	F	V	G	G	N	F	K	M	N	G	S	K	A	S	I	K	T	I	V	E	N	L	N	S	A	D	L	P	A	N	T	V	Q	V	V	I				
UniRef90_A7F1G3		P	R	Q	F	F	V	G	G	N	F	K	M	N	G	S	V	E	S	I	K	K	I	V	G	Y	L	N	D	A	K	L	D	P	N	T	E	V	V	I					
UniRef90_F9X431			R	Q	F	F	V	G	G	N	F	K	M	N	G	T	I	S	G	I	K	D	I	I	H	H	L	N	D	A	K	L	D	P	N	T	E	V	V	V					
UniRef90_Q6CJG5			R	T	F	F	V	G	G	N	F	K	M	N	G	S	K	A	S	I	K	E	I	V	D	R	L	N	G	A	S	I	P	S	N	T	V	E	V	I					
UniRef90_R5X6W6			R	K	P	L	I	A	G	N	W	K	M	N	K	N	I	V	S	E	A	L	E	F	V	K	E	V	G	S	R	A	D	R	D	E	V	E	A	V	I				
UniRef90_UPI00031431EC			R	K	P	L	I	A	G	N	W	K	M	N	H	K	T	V	S	E	A	V	S	L	V	Q	E	L	K	P	L	V	K	D	A	K	C	H	E	V	V	V			
UniRef90_K3WWT6		S	S	R	K	F	F	V	G	G	N	W	K	M	N	G	S	V	G	Q	A	N	D	L	V	G	L	N	T	A	K	I	P	K	S	V	E	V	V	V					
UniRef90_C9R8T0			R	V	P	F	L	I	A	G	N	W	K	M	N	K	T	V	S	E	A	V	A	F	A	Q	E	L	K	C	L	A	P	F	P	G	V	E	V	L	I				
UniRef90_F2T109			R	K	F	F	V	G	G	N	F	K	M	N	G	T	S	Q	S	I	S	D	I	I	T	N	L	N	N	A	K	L	D	A	N	T	E	V	V	I					
UniRef90_A3DBQ1			S	R	K	V	I	A	A	G	N	W	K	M	N	K	T	P	K	E	A	V	E	F	V	Q	A	L	K	G	R	V	A	D	A	D	T	E	V	V	V				
UniRef90_K6DSW0			R	K	P	L	I	A	G	N	W	K	M	N	K	T	L	S	E	A	K	S	F	A	E	E	V	K	S	L	V	P	S	E	K	M	E	S	V	I					
UniRef90_A4XKV2		P	R	K	K	I	I	A	A	N	W	K	M	N	K	T	P	A	E	A	K	E	F	V	E	E	L	K	K	Y	I	D	V	Q	A	E	V	V	I						
UniRef90_H3G9A8			R	K	F	L	I	G	G	N	W	K	M	N	G	T	R	S	S	V	R	E	L	V	T	I	L	N	K	A	V	D	P	S	Q	V	D	V	V	V					
UniRef90_R9C0B5			R	K	P	L	I	A	G	N	W	K	M	N	K	T	L	S	E	A	V	E	F	V	Q	E	V	K	A	S	V	P	S	K	V	D	T	V	V						
UniRef90_G3ARZ3			R	Q	F	F	V	G	G	N	F	K	M	N	G	S	N	E	S	I	T	K	I	V	E	G	L	N	Q	A	D	L	P	A	N	V	Q	V	V	I					
UniRef90_M1VG61		S	A	R	K	F	F	V	G	G	N	W	K	M	N	G	S	K	Q	S	V	Q	E	L	C	E	A	F	N	A	G	K	D	F	N	R	V	E	V	V					
UniRef90_R5NAE4			R	K	K	I	V	A	G	N	W	K	M	N	L	N	L	Q	E	G	V	A	L	A	T	E	L	N	A	A	L	A	A	P	N	C	H	E	V	V	I				
UniRef90_D1AFV5			R	K	L	I	V	A	G	N	W	K	M	N	K	T	N	K	E	A	V	S	F	L	S	E	L	K	G	L	V	G	N	E	V	E	T	V	I						
UniRef90_UPI00030BDAF6			R	K	P	L	I	A	G	N	W	K	M	N	K	T	L	S	E	A	V	S	F	V	E	E	V	K	N	S	V	P	A	E	V	D	A	V	V						
UniRef90_E1ZKB3			R	K	F	F	V	G	G	N	W	K	M	N	G	T	V	K	S	N	E	E	L	V	K	V	L	N	A	A	E	V	P	G	T	D	V	V	E	V					
UniRef90_D6SAR1			R	K	P	L	I	A	G	N	W	K	M	N	M	T	D	G	E	T	K	Q	F	L	N	D	L	K	N	F	E	I	S	D	N	T	E	V	A	C	L				
UniRef90_D4JVV5			R	K	A	V	I	A	G	N	W	K	M	N	K	T	R	P	E	A	K	A	L	L	E	E	L	K	P	M	V	A	D	K	D	V	E	V	A						
UniRef90_V5FMR1		P																																											

QUERY	50	60	70	80	
UniRef90_B4GNQ7	G A P S I Y L D F A R N Q K L D A K T V G V A A Q N N C Y K V P K G A F T T G E E S S P A	G C P F I V Y L M Y A R N K L P D C K V G S V A A Q N N C Y Y K V A K K G A F T T G E E S S A	UniRef90_Q8MPF2	G V P A I Y L E L V R T Q V P A S I V G V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	
UniRef90_A0A023GGS5	G C P A P Y I D Y Y C R S D L L P A N S V V E V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_UPI0003597EB3	A P P Y C Y I Q Y S R D S G L P A N S V V E V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_P82204	G V P A I Y L S Y V K T I L P D N N I G V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_K9LHF9	A P P A V Y L E K T R A T A N K N I G V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_Q45XG1	A P P F V F L Q E V R R K T L K K E I L H G V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_D7F1Q0	G C P Q C Y I S Y T R E K L R A E I L H G V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_P12863	S P P Y V F L P V T R K L P A E I F H G V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_A7S4D2	S P P A L Y L S Y V R K A A K Q N S I G V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_W2SJK4	A P P A P Y L T Y V K D L K K N S V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_M5EU94	A P P A L Y L L S A Q E L K G K N S V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_E3URL7	S P P F V F L P Q V K A V L R S D F A V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_D2D303	S P P F V F L P L V K T S L R P D F H G V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_R7G3H9	C V P A I D I I P V A E A K G T N I E V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_G7E089	A P P A L Y L I P I R D S H L R K E I V E V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_E3Q2U0	S P P A L Y L Q L V R Q D S L R K D N I E V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_C3XYH6	G P P T A Y L G Y V R Q E L A G S G V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_D8QR59	G P P F V Y I P L V K S I L R P D F A I V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_A5CYN7	C P P F T A L V P V A E L R G T N I A I V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_UPI00041A3F41	C V P A I D I P A I T A T R G T N I A I V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_R7RRI2	C P P F T S L A Q V L T L E D T N N I A I V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_V4AU5Y	S P P A I Y L D Y V R G K L K N N I A A T V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_W6N518	C P P Y V C L D T V R K A A K G T N I K V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_K0AY14	C V P F T S L N V K K E I Q E T N I K V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_A0A016PQK3	S P P A L Y L P L V R E T L R K E I E V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_H6BLF6	A P P S L Y L L L A R E H L A H I E V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_F3ZYC8	C P P F V C L P A A K A L K G S N I K V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_K12574	A P P A L Y L L P I Q E I L G K A K V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_W1Q838	A P P A P Y L F W A A E H N K P T V V E V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_T1J351	G A P A V Y L D F A R R I M P P S V V K I L S A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_H8MUB9	A P P F V A L Q L H V A L E G A P L Q L K V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_W6MIU9	A P P A P Y L E Y A N N L V A P T V V K V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_A7F1G3	A P P A L Y L L L T R E H L R S P G L E V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_F9X431	S P P A L Y L L L A R E H L R S G I E V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_Q6CJG5	A P P A I Y L L H A V A L N K K E V K V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_R5X6W6	C A P F L Q L K D L K E A K G T K I K V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_UPI00031431EC	C P T F L S L P A V I E A C D N I M I V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_K3W0W76	A P S S V H A S E V K K S L R K D N I R V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_C9R8T0	C P P Y P A L A P V A E L A G T E I A L V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_F2T109	S P P A I Y L L L A R S Q A D S K I G V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_A3DBQ1	G V P F V C L L V V I E A A K G S N I K V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_K6DSW0	C A P A L F L Q T L V E A A Q G S N V K I G T Q N M H F E E K K G A F T T G E E S S A	UniRef90_A4XKV2	C A P S I L V P L V K E A I G T N I K L V G T Q N M H F E E K K G A F T T G E E S S A
UniRef90_H3G9A8	A P P S L H L D L V Q Q L L Q K N I A V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_R9C0B5	C A P A L F L G Q L V E L L T D T V V K I G A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_G3ARZ3	C P P A P Y L G A V A S K N T Q S T F E V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_M1VG61	A P P S V Y A M L T R A S I R P D F E G V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_R5NAE4	C T P F L H L A S V A A V I L D A Q I G L G A A E N C Y Y K V P K K G A F T T G E E S S A	UniRef90_D1AFV5	G A P F T A L D A V K E V E G S N V K I G A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_UPI00030BDAF6	C S P A L F L D K L V E A K G T D L K V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_E1ZKB3	V V I A P A G S H F P Q V L S R K D F S V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_D6SAR1	I S P F T S L K E T A L A V T G T N I S T G A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_D4JVV5	C V P F T N L L E T A L A V T G T N I S T G A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_V5FMR1	A P P F L Y L H Y A R D L A S P N I A V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_R7M7C2	C M P Y T S L M Y G L T A Q D T N I K I V A A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_U1YG61	C A P F T S L N L V Q E L L Q E Y N P I A V V A A A Q N N C Y Y K V P K K G A F T T G E E S S A	UniRef90_Q88YH4	A A P A L F L Q E M V E A K G S D L K I G A A E N A Y F E D A G A F T T G E E S S A	UniRef90_UPI0002884FAE	C A P A L F L E A N V K E G N S D L K I G A A Q N N C Y Y K V P K K G A F T T G E E S S A
UniRef90_H2CIW0	C P P Y T A L I P V R A L K G S S I L H L G A				

QUERY	90																														100																														110																														120																													
UniRef90_B4GNQ7	M	L	K	D	I	G	A	A	W	V	L	G	H	S	E	R	R	A	V	I	F	N	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	G	L																																																																																
UniRef90_B3SCI7	M	A	V	D	I	G	C	A	D	W	V	L	G	H	S	E	R	R	N	Q	I	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																														
UniRef90_Q8MPF2	M	I	K	D	V	G	A	D	W	V	L	G	H	S	E	R	R	N	Q	I	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																															
UniRef90_A0A023GGS5	M	I	K	D	V	G	A	D	W	V	L	G	H	S	E	R	R	N	Q	I	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																															
UniRef90_UPI0003597EB3	M	V	K	D	L	G	A	T	W	V	L	G	H	S	E	R	R	H	I	F	M	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																															
UniRef90_P82204	M	I	K	D	V	G	V	N	W	V	L	G	H	S	E	R	R	N	Q	I	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																															
UniRef90_K9LHF9	I	L	K	D	V	N	V	D	W	V	L	G	H	S	E	R	R	Q	Y	F	N	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_Q45XG1	M	I	K	D	I	G	C	D	W	V	L	G	H	S	E	R	R	N	Q	I	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																															
UniRef90_D7F1Q0	M	V	K	D	I	G	C	E	W	V	L	G	H	S	E	R	R	N	Q	I	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																															
UniRef90_P12863	M	L	V	N	L	G	V	P	W	V	L	G	H	S	E	R	R	A	L	L	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_A7S4D2	M	I	K	D	I	G	C	E	W	V	L	G	H	S	E	R	R	N	Q	I	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																															
UniRef90_W2SJK4	M	L	K	D	L	G	I	E	W	V	L	G	H	S	E	R	R	H	I	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_M5E9U4	Q	L	K	D	A	Q	I	P	W	V	L	G	H	S	E	R	R	Q	I	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_E3URL7	M	L	I	N	L	E	S	I	P	W	V	L	G	H	S	E	R	R	A	L	L	K	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																															
UniRef90_D2D303	M	L	V	N	L	S	I	P	W	V	L	G	H	S	E	R	R	A	L	L	K	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_R7G3H9	M	L	T	D	A	G	V	K	Y	V	L	G	H	S	E	R	R	E	Y	F	A	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_G7E089	Q	L	S	Q	A	Q	I	P	W	T	L	G	H	S	E	R	R	S	I	F	A	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_E3Q2U0	Q	L	K	D	L	N	I	N	W	A	L	G	H	S	E	R	R	N	Q	I	F	L	R	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																														
UniRef90_C3XYH6	M	I	K	D	I	G	C	E	W	V	L	G	H	S	E	R	R	N	Q	I	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																															
UniRef90_D8QR59	M	F	K	D	L	A	I	P	W	V	L	G	H	S	E	R	R	A	L	L	C	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																															
UniRef90_A5CYN7	M	L	K	D	A	G	C	S	Y	V	L	G	H	S	E	R	R	Q	L	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_UPI00041A3F41	M	L	V	D	A	G	V	K	Y	V	L	G	H	S	E	R	R	E	Y	F	H	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_R7RRI2	M	L	K	E	L	G	V	K	Y	V	L	G	H	S	E	R	R	M	V	F	K	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_V4AU55	M	A	K	D	V	G	A	T	W	V	L	G	H	S	E	R	R	H	V	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_W6N518	M	L	E	S	M	G	V	E	Y	V	L	G	H	S	E	R	R	Q	Y	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_K0AY14	M	L	K	E	I	G	V	D	Y	V	L	G	H	S	E	R	R	Q	Y	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_A0A016PQK3	Q	L	K	D	S	D	I	N	W	A	L	G	H	S	E	R	R	T	I	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_H6BLF6	Q	L	K	D	S	N	I	T	W	V	L	G	H	S	E	R	R	T	I	F	L	R	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																															
UniRef90_F3ZYC8	M	L	K	E	I	G	V	E	Y	V	L	G	H	S	E	R	R	Q	Y	F	A	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_Q12574	Q	I	S	D	A	G	I	P	Y	V	L	G	H	S	E	R	R	T	I	F	H	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_W1Q838	A	L	K	D	L	G	I	P	W	V	L	G	H	S	E	R	R	I	F	K	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																	
UniRef90_T1J351	M	L	R	D	I	G	I	E	W	V	L	G	H	S	E	R	R	Q	I	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_H8MUB9	M	L	A	E	L	G	C	A	Y	V	L	G	H	S	E	R	R	Q	Q	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_W6MIU9	S	L	K	D	I	G	L	E	W	V	L	G	H	S	E	R	R	T	I	F	K	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_A7F1G3	Q	L	K	D	S	N	I	T	W	T	L	G	H	S	E	R	R	V	V	L	K	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_F9X431	Q	L	K	D	S	N	I	T	W	A	L	G	H	S	E	R	R	T	I	F	K	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_Q6CJG5	Q	I	K	D	V	G	A	E	W	V	L	G	H	S	E	R	R	T	Y	F	N	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_R5X6W6	M	L	K	E	I	G	M	D	Y	V	L	G	H	S	E	R	R	E	Y	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_UPI00031431EC	M	L	K	E	L	G	V	D	Y	V	L	G	H	S	E	R	R	Q	Y	F	N	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_K3WWT6	M	L	K	D	I	G	A	E	Y	T	L	V	G	H	S	E	R	R	E	K	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_C9R8T0	M	L	K	A	A	G	C	R	Y	V	L	G	H	S	E	R	R	Q	Y	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_F2T109	Q	L	K	D	S	K	I	T	W	T	L	G	H	S	E	R	R	V	I	L	K	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_A3DBQ1	M	L	A	E	L	G	V	D	Y	V	L	G	H	S	E	R	R	Q	Y	F	G	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_K6DSW0	A	L	A	D	L	G	V	Q	Y	V	L	G	H	S	E	R	R	E	M	F	N	E	S	D	E	L	I	G	A	K	V	A	H	A	L	A	E	S	G	L																																																																																
UniRef90_A4XKV2	M	L	K	A	V	G	V	E	Y	V	L	G	H	S	E	R	R	Q	Y	F	G	E	S	D	E	L	I	G																																																																																												

QUERY	G	V	I	A	C	I	G	E	K	L	D	E	R	E	A	G	I	T	E	K	V	V	F	Q	E	T	K	A	I	A	D	N	V	K	D	W	S	K	V	V	130			
UniRef90_B4GNQ7	K	V	I	A	A	I	G	E	E	L	D	E	R	E	A	G	K	T	F	N	E	K	V	V	F	Q	E	T	K	A	I	A	D	N	V	K	D	W	S	K	V	V		
UniRef90_B3SC17	K	V	I	A	A	I	G	E	E	L	D	E	R	E	A	G	K	R	T	F	N	E	K	V	V	F	Q	E	T	K	A	I	A	D	N	V	K	D	W	S	K	V	V	
UniRef90_Q8MPF2	K	V	I	A	A	I	G	E	E	L	D	E	R	E	A	G	K	T	F	N	E	K	V	V	F	Q	E	T	K	A	I	A	D	N	V	K	D	W	S	K	V	V		
UniRef90_A0A023GGS5	G	V	I	A	A	I	G	E	E	L	D	E	R	E	A	G	K	T	F	N	E	K	V	V	F	Q	E	T	K	A	I	A	D	N	V	K	D	W	S	K	V	V		
UniRef90_UPI0003597EB3	G	V	V	P	A	C	I	V	G	E	K	L	E	E	R	E	A	N	Q	T	M	D	V	I	N	R	Q	M	K	A	I	A	D	K	I	E	D	W	S	K	V	V		
UniRef90_P82204	K	V	I	A	A	C	I	G	E	E	L	D	E	R	E	A	S	G	K	T	E	E	V	V	F	R	Q	L	K	A	I	V	S	I	G	D	W	K	W	E	N	I		
UniRef90_K9LHF9	K	V	I	A	A	C	I	G	E	E	L	D	E	R	E	A	S	G	K	T	E	E	V	V	F	R	Q	L	K	A	I	A	D	N	V	K	D	W	T	N	V	I		
UniRef90_Q45XG1	N	V	I	A	A	C	I	G	E	E	L	D	E	R	E	A	S	G	K	T	E	E	V	V	F	R	Q	L	K	A	I	A	K	S	A	D	Q	W	K	R	I	V		
UniRef90_D7F1Q0	K	V	I	P	A	C	I	G	E	E	L	D	E	R	E	A	S	N	R	T	E	E	V	V	F	A	Q	M	K	A	I	V	P	E	N	I	K	D	W	S	R	V	V	
UniRef90_P12863	K	V	I	A	A	C	I	G	E	E	L	D	E	R	E	A	G	K	T	Q	E	E	V	V	F	R	Q	L	K	A	I	A	D	K	I	S	D	W	S	K	V	V		
UniRef90_A7S4D2	K	V	I	A	A	C	I	G	E	E	L	D	E	R	E	A	G	K	T	Q	E	E	V	V	F	R	Q	L	K	A	I	A	D	K	I	S	D	W	S	K	V	V		
UniRef90_W2SJK4	N	V	I	F	C	I	G	E	E	L	D	E	R	E	A	G	K	T	K	E	E	V	V	F	R	Q	M	K	A	I	V	D	K	K	V	D	W	T	N	I	V			
UniRef90_M5E9U4	S	V	I	L	C	I	V	G	E	T	L	E	E	Q	R	E	A	G	E	T	N	Q	V	V	L	D	Q	L	Q	T	G	T	K	D	V	K	D	W	S	K	I	V		
UniRef90_E3URL7	K	V	I	A	A	C	I	G	E	E	L	D	E	R	E	A	G	E	T	L	N	V	V	S	E	Q	T	K	A	I	A	E	K	I	K	D	W	S	N	I	V			
UniRef90_D2D303	K	V	I	A	A	C	I	G	E	E	L	D	E	R	E	A	G	S	T	V	A	V	V	A	E	Q	T	K	A	I	A	K	I	S	N	W	T	D	V	V	V			
UniRef90_R7G3H9	T	P	I	M	C	C	I	G	E	E	L	D	E	R	E	A	Q	G	V	T	M	D	F	I	R	Q	Q	V	K	A	I	V	G	F	Q	N	V	D	Q	A	K	T	A	V
UniRef90_G7E089	K	V	I	F	C	I	G	E	E	S	L	E	E	Q	R	E	A	N	K	T	E	E																						

QUERY	L	A	Y	E	P	V	WA	170	G	K	T	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	180	R	G	W	L	K	T	H	V	S	D	A	V	190	200
UniRef90_B4GNQ7	V	A	Y	E	P	V	WA	GT	G	K	T	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	Q	W	L	K	T	H	V	S	D	A	V	S		
UniRef90_B3SC17	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	Q	W	L	K	T	H	V	S	D	A	V	S		
UniRef90_Q8MPF2	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	Q	W	L	K	T	H	V	S	D	A	V	S		
UniRef90_A0A023GGS5	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	S	W	L	A	N	V	S	S	A	D	V	A		
UniRef90_UPI0003597EB3	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	A	N	W	L	A	N	V	S	S	A	D	V	A	
UniRef90_P82204	V	A	Y	E	P	V	WA	GT	G	K	T	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	R	N	W	L	A	N	V	S	S	A	D	V	A	
UniRef90_K9LHF9	I	A	Y	E	P	V	WA	GT	G	K	V	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	K	W	L	A	N	V	S	S	A	D	V	A		
UniRef90_Q45XG1	I	A	Y	E	P	V	WA	GT	G	K	V	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	Q	W	L	K	T	H	V	S	D	A	V	S		
UniRef90_D7F1Q0	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	Q	W	L	K	T	H	V	S	D	A	V	S		
UniRef90_P12863	V	A	Y	E	P	V	WA	GT	G	K	V	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	D	W	L	K	T	H	V	S	D	A	V	S		
UniRef90_A7S4D2	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	A	W	L	K	T	H	V	S	D	A	V	S		
UniRef90_W2SJK4	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	E	F	L	K	T	H	V	S	D	A	V	S		
UniRef90_M5E9U4	I	A	Y	E	P	V	WA	GT	G	K	V	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	E	W	L	K	T	H	V	S	D	A	V	S		
UniRef90_E3URL7	L	A	Y	E	P	V	WA	GT	G	K	V	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	S	W	L	A	N	V	S	S	A	D	V	A		
UniRef90_D2D303	L	A	Y	E	P	V	WA	GT	G	K	V	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	K	W	L	A	N	V	S	S	A	D	V	A		
UniRef90_R7G3H9	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	A	C	I	A	E	V	S	D	A	V	S			
UniRef90_G7E089	I	A	Y	E	P	V	WA	GT	G	K	V	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	K	W	L	A	N	V	S	S	A	D	V	A		
UniRef90_E3Q2U0	I	A	Y	E	P	V	WA	GT	G	K	V	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	A	W	L	K	T	H	V	S	D	A	V	S		
UniRef90_C3XYH6	L	A	Y	E	P	V	WA	GT	G	K	V	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	T	W	L	S	E	N	V	S	S	A	D	V	A	
UniRef90_D8QR59	I	A	Y	E	P	V	WA	GT	G	K	V	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	S	W	L	E	K	N	V	S	S	A	D	V	A	
UniRef90_A5CYN7	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	G	L	V	E	K	N	V	S	S	A	D	V	A	
UniRef90_UPI00041A3F41	I	A	Y	E	P	V	WA	GT	G	V	T	A	T	S	E	Q	A	E	E	V	C	K	A	I	R	E	C	I	A	E	L	Y	D	E	D	T	A		
UniRef90_V7RRI2	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	G	K	I	R	E	M	F	G	D	E	K	A		
UniRef90_V4AU55	L	A	Y	E	P	V	WA	GT	G	K	V	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	K	W	L	A	N	V	S	S	A	D	V	A		
UniRef90_W6N518	V	A	Y	E	P	V	WA	GT	G	K	T	A	T	D	E	Q	A	N	A	T	I	A	Y	L	R	S	V	I	G	K	L	Y	G	K	E	D	T	A	
UniRef90_K0AY14	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	S	K	E	D	A	N	S	M	I	S	F	I	R	E	T	L	K	E	K	Y	D	S	E	V	S	
UniRef90_A0A016PQK3	I	A	Y	E	P	V	WA	GT	G	K	V	A	T	T	E	Q	A	Q	E	V	H	E	K	L	R	D	L	L	R	S	I	S	D	K	V	A			
UniRef90_H6BLF6	I	A	Y	E	P	V	WA	GT	G	K	V	A	T	T	E	Q	A	Q	E	V	H	E	K	L	R	K	W	L	A	D	A	V	S	A	E	A	A		
UniRef90_F3ZYC8	I	A	Y	E	P	V	WA	GT	G	R	N	A	S	T	P	E	D	A	N	D	V	T	K	I	R	D	T	V	A	G	M	F	G	Q	D	V	A		
UniRef90_Q12574	I	A	Y	E	P	V	WA	GT	G	K	V	A	T	T	S	Q	A	Q	E	T	H	V	D	I	R	K	T	Y	L	A	T	A	V	S	K	V	A		
UniRef90_W1Q838	I	A	Y	E	P	V	WA	GT	G	L	A	A	T	A	D	D	A	Q	E	I	H	K	D	I	R	N	F	L	S	T	A	I	G	S	Q	A			
UniRef90_T1J351	V	A	Y	E	P	V	WA	GT	G	M	T	A	T	P	Q	Q	A	Q	E	V	H	E	K	L	R	K	W	L	L	D	N	V	S	P	E	V	S		
UniRef90_H8MUB9	L	A	Y	E	P	V	WA	GT	G	R	T	A	T	T	A	Q	A	Q	E	V	H	E	K	L	R	G	L	L	T	R	M	Y	D	E	G	T	A		
UniRef90_W6MIU9	I	A	Y	E	P	V	WA	GT	G	L	A	A	T	P	Q	D	A	Q	D	I	H	K	S	I	R	D	Y	L	V	T	S	I	G	K	D	Q	A		
UniRef90_A7F1G3	I	A	Y	E	P	V	WA	GT	G	K	V	A	S	T	E	Q	A	Q	E	V	H	E	K	L	R	S	W	L	K	K	E	V	S	E	K	A	A		
UniRef90_F9X431	V	A	Y	E	P	V	WA	GT	G	K	V	A	S	T	E	Q	A	Q	E	V	H	E	K	L	R	E	W	I	E	K	E	L	G	K	E	A	A		
UniRef90_Q6CJG5	V	A	Y	E	P	V	WA	GT	G	L	A	A	T	A	E	D	A	Q	D	I	H	H	S	I	R	E	F	L	A	E	K	L	S	R	D	V	A		
UniRef90_R5X6W6	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	A	E	D	A	N	D	V	T	S	Y	I	R	E	V	V	A	S	V	Y	G	D	L	L	A		
UniRef90_UPI00031431EC	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	A	E	D	A	N	E	T	I	G	F	I	R	M	V	I	E	K	I	Y	G	K	D	I	A		
UniRef90_K3WWT6	I	A	Y	E	P	V	WA	GT	G	L	T	A	S	P	Q	Q	A	Q	D	V	H	A	S	I	R	S	W	L	E	K	T	V	S	A	D	A	A		
UniRef90_C9R8T0	I	A	Y	E	P	V	WA	GT	G	R	N	A	R	T	P	E	Q	A	Q	E	V	N	Y	F	I	R	D	W	L	A	R	R	Y	S	P	E	K	A	
UniRef90_F2T109	I	A	Y	E	P	V	WA	GT	G	K	V	A	T	T	E	Q	A	Q	E	V	H	E	K	L	R	E	W	L	C	K	T	V	S	P	A	V	S		
UniRef90_A3DBQ1	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	N	E	Q	A	E	E	V	C	G	I	R	E	C	I	K	E	L	Y	G	Q	D	V	A			
UniRef90_K6DSW0	I	A	Y	E	P	V	WA	GT	G	K	S	S	T	S	Q	D	A	N	D	V	C	A	H	I	R	Q	V	V	A	Q	A	F	S	Q	D	V	A		
UniRef90_A4XKV2	I	A	Y	E	P	V	WA	GT	G	K	N	A	T	P	E	E	A	N	R	V	I	G	V	I	R	N	V	I	A	E	M	Y	D	E	D	T	A		
UniRef90_H3G9A8	I	A	Y	E	P	V	WA	GT	G	V	V	A	T	P	A	Q	A	Q	E	A	H	Q	K	L	R	K	W	L	A	N	V	S	V	G	V	A			
UniRef90_R9C0B5	V	A	Y	E	P	V	WA	GT	G	K	S	S	T	S	A	D	A	N	E	V	C	A	H	I	R	K	V	V	S	E	Q	F	S	P	E	V	A		
UniRef90_G3ARZ3	I	A	Y	E	P	V	WA	GT	G	L	A	A	T	P	E	D	A	N	E	T	H	K	G	I	R	D	H	V	V	K	T	I	G	A	D	Q	A		
UniRef90_M1VG61	I	A	Y	E	P	V	WA	GT	G	K	V	A	T	A	A	Q	A	Q	E	A	H	S	E	I	R	S	W	L	R	R	Q	V	S	E	A	C	A		
UniRef90_R5NAE4	L	A	Y	E	P	V	WA	GT	G	K	T	A	T	A	E	Q	A	E	E	M	H	A	F	I	R	T	T	J	A	E	K	F	G	A	E	A	A		
UniRef90_D1AFV5	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	P	E	Q	A	E	L	V	H	N	F	I	R	L	L	L	I	D	L	Y	G	K	E	I	G		
UniRef90_UPI00030BDF A6	I	A	Y	E	P	V	WA	GT	G	K	S	S	T	A	E	D	A	N	E	V	C	A	A	I	R	K	V	V	E	N	V	F	S	T	D	V	A		
UniRef90_E1ZKB3	V	A	Y	E	P	V	WA	GT	G	K	V	A	S	P	A	Q	A	Q	E	V	H	E	K	L	R	K	W	L	A	N	V	S	P	E	V	A			
UniRef90_D6SAR1	I	A	Y	E	P	V	WA	GT	G	K	T	A	S	S	D	D	A	Q	S	M	C	N	F	I	R	N	L	L	A	E	M	Y	S	K	D	L	A		
UniRef90_D4JVV5	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	A	D	Q	A	E	E	V	C	A	F	I	R	A	T	L	A	K	L	Y	G	A	D	V	A		
UniRef90_V5FMR1	I	A	Y	E	P	V	WA	GT	G	K	V	A	T	T	E	Q	A	Q	E	V	H	E	K	L	R	K	F	L	A	E	K	I	S	P	E	V	A		
UniRef90_R7M7C2	I	A	Y	E	P	V	WA	GT	G	K	T	A	T	A	E	D	A	N	N	A	I	K	S	I	R	K	Q	I	E	K	D	F	G	K	T	I	S		
UniRef90_U1YG61	I	A	Y	E	P	V	WA	GT	G	K	S	S	S	A	E</																								

QUERY	V	Q	S	R	I	Y	G	G	S	210	T	G	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	240	
UniRef90_B4GNQ7	A	A	L	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_B3SC17	A	S	L	R	I	M	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_Q8MPF2	N	S	L	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_A0A023GGS5	A	K	L	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_UPI0003597EB3	K	K	T	R	I	T	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_P82204	D	A	V	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_K9LHF9	E	N	T	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_Q45XG1	E	K	L	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_D7F1Q0	E	S	C	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_P12863	E	S	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_A7S4D2	E	S	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_W2SJK4	E	K	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_M5E9U4	K	S	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_E3URL7	E	S	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_D2D303	A	S	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_R7G3H9	E	A	L	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_G7E089	S	S	L	R	I	V	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_E3Q2U0	E	E	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_C3XYH6	N	S	L	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_D8QR59	S	K	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_A5CYN7	G	A	M	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_UPI00041A3F41	K	S	V	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_V7RRI2	D	E	L	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_V4AU55	Q	K	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_W6N518	E	K	T	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_K0AY14	Q	K	L	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_A0A016PQK3	D	E	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_H6BLF6	E	N	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_F3ZYC8	E	A	V	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_Q12574	S	E	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_W1Q838	E	S	V	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_T1J351	A	A	V	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_H8MUB9	E	R	V	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_W6MIU9	E	A	V	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_A7F1G3	E	E	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_F9X431	E	K	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_Q6CJG5	D	S	V	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_R5X6W6	N	E	V	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_UPI00031431EC	D	S	V	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_K3WWT6	K	S	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_C9R8T0	G	S	W	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_F2T109	E	A	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_A3DBQ1	E	A	L	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_K6DSW0	D	A	V	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_A4XKV2	Q	K	V	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_H3G9A8	N	G	V	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_R9C0B5	E	H	I	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_G3ARZ3	E	A	V	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_M1VG61	S	Q	M	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_R5NAE4	E	N	V	S	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_D1AFV5	E	G	V	T	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_UPI00030BDF46	E	A	V	R	I	Q	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V
UniRef90_E1ZKB3	E	A	T	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_D6SAR1	D	S	L	R	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_D4JVV5	E	T	I	T	I	Y	G	G	S	V	T	A	A	N	C	K	E	L	A	S	Q	H	D	V	D	G	F	L	V	G	G	A	S	L	K	P	E	F	V	
UniRef90_V																																								

QUERY	D	I	I	N	A	K	H
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UniRef90_B3SCI7	Q	I	V	N	A	R	
UniRef90_Q8MPF2	N	I	V	N	A	K	Q
UniRef90_A0A023GGS5	Q	I	I	N	A	R	Q
UniRef90_UPI0003597EB3	E	I	V	N	A	A	
UniRef90_P82204	E	I	V	N	A	N	Q
UniRef90_K9LHF9	N	I	I	N	A	R	
UniRef90_Q45XG1	D	I	C	K	A	K	
UniRef90_D7F1Q0	T	I	I	N	A	R	
UniRef90_P12863	D	I	I	N	A	A	
UniRef90_A7S4D2	Q	I	V	N	A	R	
UniRef90_W2SJK4	K	I	I	N	A	R	
UniRef90_M5E9U4	D	I	V	N	A	R	
UniRef90_E3URL7	D	I	I	R	S	A	
UniRef90_D2D303	D	I	I	K	S	A	E
UniRef90_R7G3H9	K	I	V	N	Y	K	
UniRef90_G7E089	D	I	V	N	A	N	H
UniRef90_E3Q2U0	D	I	V	N	A	K	Q
UniRef90_C3XYH6	K	I	I	N	A	R	
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UniRef90_W6N518	K	I	V	N	Y		
UniRef90_K0AY14	A	L	V	Q			
UniRef90_A0A016PQK3	D	I	I	N	A		
UniRef90_H6BLF6	D	I	I	N	C	N	Q
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UniRef90_W1Q838	D	I	I	K	S	R	E
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UniRef90_W6MIU9	D	I	I	K	S	R	
UniRef90_A7F1G3	D	I	I	N	S		
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UniRef90_Q6CJG5	D	I	I	N	S	R	
UniRef90_R5X6W6	A	L	V	N	F	K	
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UniRef90_C9R8T0							
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UniRef90_R9C0B5	A	L	L	E	A		
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UniRef90_M1VG61	D	I	V	R	A	Y	Q
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UniRef90_V5FMR1	D	I	I	N	A	R	
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UniRef90_UPI0004257DA7	Q	L	V	E	A	G	N
UniRef90_Q9HGY8	D	I	I	N	A	R	
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UniRef90_C7RH34	A	L	V	N			
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UniRef90_UPI000376C8BF	N	I	V	R	Y		
UniRef90_R6YEL1	T	I	V	A	A	A	
UniRef90_UPI00035D824D	A	I	C	Q	A	A	
UniRef90_B3QPT6	A	I	I	E	A	A	
UniRef90_UPI00035E3236	T	V	V	K	A	N	N
UniRef90_J7S1M7	D	I	V	N	S	R	
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UniRef90_UPI00040017BE	G	I	I	D	A	F	N
UniRef90_U4TWL1	Q	L	V	H	Y	Q	

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UniRef90_B7FSI3	R	K	F	F	V
UniRef90_D6Y1U7	A	D	R	K	P
UniRef90_W4BH40	R	T	P	L	I
UniRef90_U2SYL2	R	K	K	I	V
UniRef90_F9YU64	R	K	K	I	V
UniRef90_J0N2K6	R	K	A	V	I
UniRef90_D9UFR8	R	T	P	L	M
UniRef90_H3NBS3	S	R	K	F	I
UniRef90_C7NBY8	R	K	V	I	V
UniRef90_R5PFK3	R	K	R	I	V
UniRef90_B3EE10	K	R	T	N	I
UniRef90_UPI00047DAD4F	R	K	H	I	V
UniRef90_V6MAA5	R	T	P	L	I
UniRef90_D3FY95	R	K	P	L	I
UniRef90_P07669	R	K	F	F	V
UniRef90_L1MBS2	R	K	H	I	V
UniRef90_D1PNY7	R	K	A	I	V
UniRef90_A3UB69	R	K	H	I	V
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UniRef90_S9UN64	S	K	P	Q	P
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UniRef90_UPI0002FC4686					
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UniRef90_R5L465	R	K	K	I	V
UniRef90_A9TTT0					
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UniRef90_UPI0003FBA579	R	K	K	I	V
UniRef90_A1BQT3	R	K	L	W	V
UniRef90_I0L8D5	R	R	P	L	M
UniRef90_A0A023VJL0	S	R	K	P	F
UniRef90_UPI00036A880F	S	R	K	P	L
UniRef90_D5URT6	S	R	K	P	L
UniRef90_K1M1W4	R	K	K	I	V
UniRef90_J3EPW8	R	K	P	L	I
UniRef90_E5WFN3	R	K	P	L	I
UniRef90_E0E555	R	K	P	L	I
UniRef90_K0YWE9	R	T	P	L	M
UniRef90_E7RUW1	K	R	R	P	L
UniRef90_UPI0003C1AE30	A	P	R	K	F
UniRef90_M7N4Q4	R	T	K	L	V
UniRef90_C2G2T9	R	K	K	I	V
UniRef90_A0A024QA68	R	K	K	V	I
UniRef90_R5BCL7	R	K	N	I	V
UniRef90_R5RV18	R	K	P	L	I
UniRef90_UPI0002197271	R	T	P	L	I
UniRef90_UPI00037072D6	R	T	P	L	M
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UniRef90_P48499	A	K	P	Q	P
UniRef90_UPI0004645B51	R	K	P	L	I
UniRef90_V5T6K6	R	T	P	L	I
UniRef90_B4DUI5	S	R	K	F	F
UniRef90_I7EQN8	R	R	K	L	A
UniRef90_V2QBP9	S	R	K	P	L
UniRef90_I9MJH8	R	K	P	L	I
UniRef90_UPI00039E3C44	R	T	P	L	M
UniRef90_UPI000422DEA9	R	K	N	I	V
UniRef90_C2M6C7	R	K	K	I	V
UniRef90_UPI00037E3BEA	R	T	P	L	I
UniRef90_X5KAU1	R	K	K	I	V
UniRef90_E0NJT3	R	K	P	L	I
UniRef90_Q5CMF9	S	R	K	Y	F
UniRef90_E3H866	R	K	T	I	V
UniRef90_Q11PZ7	R	K	K	V	I
UniRef90_E4T3W7	R	K	N	I	V
UniRef90_C7MSM6	R	K	P	L	I
UniRef90_F8WWW0	R	K	N	I	V
UniRef90_U7V8S4	R	K	T	I	V
UniRef90_J7L9I4	A	K	R	M	P
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UniRef90_M5A0W4	K	R	T	P	L
UniRef90_M3D2K8	R	K	P	L	I
UniRef90_D7G091	R	K	F	L	I
UniRef90_W6KNN0	Q	P	L	I	V
UniRef90_G8QVI5	R	K	P	Y	L
UniRef90_UPI00047E2F9C	R	K	P	L	M
UniRef90_UPI0003611473	R	T	P	F	I
UniRef90_A0A031FZ18	R	K	P	L	I
UniRef90_U4KTB5	R	R	P	V	L
UniRef90_I2ESF1	R	K	K	I	A
UniRef90_Q31NS8	A	V	R	I	L
UniRef90_Q6A9J2	S	R	T	P	L
UniRef90_R6ZIO4	S	K	R	T	R

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UniRef90_D3PAL003	A	L	P	P	F	V	I	S	I	Y	E	I	K	K	Y	L	N	D	S	H	I	V	L	A	G	Q	N	L	M	Y	F	F	D	S	G	A	Y	T	G	E	D	I	S	A	G	A				
UniRef90_UPI00036DFE59	L	P	P	S	Q	V	H	L	R	S	V	V	Q	S	T	L	I	R	G	D	I	V	L	V	A	G	Q	Q	D	L	S	W	T	A	F	F	D	S	G	A	Y	T	G	E	D	I	S	A	G	A
UniRef90_B7FSI3	C	L	P	S	Q	V	H	L	R	S	V	V	Q	S	T	L	I	R	G	D	I	V	L	V	A	G	Q	Q	D	L	S	W	T	A	F	F	D	S	G	A	Y	T	G	E	D	I	S	A	G	A
UniRef90_D6Y1U7	L	P	P	F	T	D	L	R	S	V	V	Q	T	L	V	A	G	R	I	L	V	L	V	A	G	Q	Q	D	L	S	W	T	A	F	F	D	S	G	A	Y	T	G	E	D	I	S	A	G	A	
UniRef90_W4BH40	C	A	P	F	T	N	L	R	S	V	V	E	A	K	G	T	N	I	V	L	V	L	V	A	G	Q	Q	D	L	S	W	T	A	F	F	D	S	G	A	Y	T	G	E	D	I	S	A	G	A	
UniRef90_U2SYL2	C	V	P	A	I	D	I	V	P	V	V	E	A	K	G	T	N	I	V	L	V	L	V	A	G	Q	Q	D	L	S	W	T	A	F	F	D	S	G	A	Y	T	G	E	D	I	S	A	G	A	
UniRef90_F9YU64	A	P	T	F	V	N	L	P	A	T	E	A	A	K	G	T	N	I	V	L	V	L	V	A	G	Q	Q	D	L	S	W	T	A	F	F	D	S	G	A	Y	T	G	E	D	I	S	A	G	A	
UniRef90_J0N2K6	C	V	P	F	I	D	L	P	A	A	V	E	A	K	G	T	N	I	V	L	V	L	V	A	G	Q	Q	D	L	S	W	T	A	F	F	D	S	G	A	Y	T	G	E	D	I	S	A	G	A	
UniRef90_D9UFR8	L	A	P	F	T	D	L	R	S	V	V	Q	T	L	V	D	G	E	I	K	Y	V	L	V	A	G	Q	Q	D	L	S	W	T	A	F	F	D	S	G	A	Y	T	G	E	D	I	S	A	G	A
UniRef90_H3NBS3	G	A	S	T	L	Q	L	T	A	V	K	E	A	K	G	S	E	N	I	K	I	V	L	V	A	A	Q	N	S	M	N	A	F	F	D	S	G	A	Y	T	G	E	D	I	S	A	G	A		
UniRef90_C7NBY8	G	A	P	F	T	A	L	T	A	T	R	E	T	A	G	S	N	I	K	I	V	L	V	A	A	Q	N	S	M	N	A	F	F	D	S	G	A	Y	T	G	E	D	I	S	A	G	A			
UniRef90_R5PFK3	C	V	P	A	I	D	I	V	P	V	V	E	A	K	G	T	N	I	V	L	V	L	V	A	A	Q	N	S	M	N	A	F	F	D	S	G	A	Y	T	G	E	D	I	S	A	G	A			
UniRef90_B3IEE10	A	P	T	C	P	A	L	I	F	T	G	K	L	V	A	S	G	S	L	F	L	V	L	V	A	A	Q	N	S	M	N	A	F	F	D	S	G	A	Y	T	G	E	D	I	S	A	G	A		
UniRef90_UPI00047DAD4F	A	P	A	T	T	N	L	W	H	F	Q	S	V	R	E	D	D	I	E	V	L	V	L	V	A	A	Q	N	S	M	N	A	F	F	D	S	G	A	Y	T	G	E	D	I	S	A	G	A		
UniRef90_V6MAA5	C	A	P	Y	T	A	L	S	A	L	S	E	L	Q	G	S	D	G	L	A																														

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UniRef90_UPI00036DFE59	ML	AKLGLGCTYVITV	GHSERRREYHFGETDEAVV	GSKVKAAALDKHG	L
UniRef90_B7FSI3	ML	KDLGLGVKFWATLV	GHSERRRQYKGEEDDAQV	AAKAKKAYALDKQG	L
UniRef90_D6Y1U7	ML	AKDLGLGCTFTVLV	GHSERRRQYHFHETDDAL	LAKLKAFAFRKHGL	L
UniRef90_W4BH40	ML	KDLGLGVDYVIL	GHSERRRQYFAETDDADSL	NKKLHKAALFRKHGL	L
UniRef90_U2SYL2	ML	KDAGAEYVIL	GHSERRRQYFAETDDADSL	NKKLHKAALFRKHGL	L
UniRef90_F9YU64	ML	KSIGVKTVIL	GHSERRRAYFNETDDADSL	NKKAKKADTALKKGN	L
UniRef90_J0N2K6	ML	TFIGVSYVIL	GHSERRRTYFGETDDQTLV	NQRIRAAALDAGL	L
UniRef90_D9UFR8	ML	AKLKLCTYVAV	GHSERRRQYHFRETDEDLV	NKKVKAAAYKHG	L
UniRef90_H3NBS3	AL	EALGLVEYVIL	GHSERRREYFGETDEDLV	NKKVKAAVVAHGM	L
UniRef90_C7NBY8	ML	KDLGLVEYVIL	GHSERRREYFGETDEDLV	NEKVKKSALAHDL	L
UniRef90_R5PFK3	ML	VDAAGVKYVIL	GHSERRRQYFKETDDDFL	NKKVSKAIAQSG	L
UniRef90_B3EE10	MI	LGAAGCTYVIL	GHSERRRQYFGETDDDFL	NKKVSKAIAQSG	L
UniRef90_UPI00047DAD4F	ML	KSIGIKTVIL	GHSERRRAYFNETDDASL	AKKVVDAAALSN	DM
UniRef90_V6MAA5	ML	KEILGVEYVIL	GHSERRRQYFNETDDDET	VNKKVLAALAHK	HL
UniRef90_D3FY95	AL	EDMNVAVYVIL	GHSERRREMFANETDDDET	VNKKVHAFAFKH	NL
UniRef90_P07669	SL	LDAGITTYTLT	GHSERRRTTFKETSDDEFV	ADKTKFALAQGL	L
UniRef90_L1MBS2	MI	KSTGAEYVIL	GHSERRREYFNETDPEVL	KEKVDLALANG	L
UniRef90_D1PNY7	ML	TDLGLVEYVIL	GHSERRRQYFAETDDDET	VNKRARAALANG	L
UniRef90_A3UB69	ML	KSIGVKTVIL	GHSERRRAMFHESTNESL	SEKVNTAJANEM	L
UniRef90_V6Q688	AL	ADMGVDYVIL	GHSERRRQYFHESTDEDD	SNKKAKAIAANG	M
UniRef90_UPI00036FF478	ML	QSVGCGEYVIL	GHSERRRQYFRETTDELL	NKQKKAALANG	L
UniRef90_R7HN84	MV	ASTGAKYVIL	GHSERRRQYHFETSEILL	KEKVALAFENGL	L
UniRef90_UPI00042B6ACB	QL	KDILGCKWVIL	GHSERRRDYFHETDDQF	IGKKAAYALNEGL	L
UniRef90_E4KPA9	AL	GALGVDTVIL	GHSERRRDYFHETDDEE	VNKKAHAFRND	DM
UniRef90_B2UP29	ML	NELNLKYVVL	GHSERRRQYFGETDAIIV	NSKTKKALAG	L
UniRef90_S9UN64	IL	KDLKINWVIL	GHSERRRTYFGETDNEIV	AQKTLDAYKGG	F
UniRef90_UPI000408458B	QL	ADLGNVYVIL	GHSERRREYFNETDDEAV	NKKVHAFAHSL	L
UniRef90_UPI00047D0A12	ML	KNILGVSYVVL	GHSERRRAYFNETDDET	VNLTKKALAEGL	L
UniRef90_UPI0002FC4686	AL	KDILDVDYVIL	GHSERRREMFANETDDET	VNKKVHAFAFKH	QL
UniRef90_E1ZJ95	ML	HDFGIPWVIL	GHSERRRSLCANETDDEL	VGQKCEYALSSQ	L
UniRef90_R5W5N9	ML	AALGVEYVIL	GHSERRREYFGETSATL	NRKLJAMAYAN	NL
UniRef90_J4GNQ3	QL	VDAAGVPYVIL	GHSERRRTLFHETSAFV	AQKTRAAALD	T
UniRef90_R5L465	ML	LSAGVKYCV	GHSERRRAYFNETDDEL	VNKKVKALLEK	D
UniRef90_A9TTT0	QL	ADAGVKWVIL	GHSERRRHVIGETDAMI	GKKSAAYALSS	Q
UniRef90_Q7KQM0	IL	AKDLNIEYVIL	GHSERRRKYFHETDDE	DLVREKQLQASL	K
UniRef90_UPI0003FBA579	IL	ASFGNVYVIL	GHSERRREYFKENNEL	AEKVKTALAH	N
UniRef90_A1BQT3	ML	LDAGIKTIT	GHSERRRDYFHETDDEE	IGKKVAKALSC	GM
UniRef90_I0L8D5	ML	AKLGLCTYVVL	GHSERRRAYHFETDDGV	VNKKVKAALTH	GL
UniRef90_A0A023VJL0	VL	AEMGTHYVVL	GHSERRREYFHETDDQD	INAKVKAALF	A
UniRef90_UPI00036A880F	ML	KDAGCTYVVL	GHSERRRQYFGETDNET	VNKKTKSALF	H
UniRef90_D5URT6	F	LAKLGLCTYVV	GHSERRRTYFHETDNET	VLEKTKAALR	H
UniRef90_K1M1W4	ML	ASFGADYVIL	GHSERRREYFGETDNEI	LLTKTRQALN	G
UniRef90_J3EPW8	VL	AEMGVNYGI	GHSERRREYFHETDDE	DIKKAHALFK	N
UniRef90_E5WFN3	AL	EDLGLVKYVIL	GHSERRREMFNETDDEA	VNKKTLAAFK	Y
UniRef90_E0E555	NL	VEIGMDYVIL	GHSERRREYFGETDDET	CVNKKVLKAL	E
UniRef90_K0YWE9	ML	TKLGLCTYVV	GHSERRREYHFNETDDE	VVNAKARKAL	A
UniRef90_E7RUW1	ML	VDLKVRWVLV	GHSERRSLYGETDDEI	VAAKQVQVLA	D
UniRef90_UPI0003C1AE30			RPCLFTSLQLI	GQKVSHAL	S
UniRef90_M7N4Q4	ML	KNLGVKWVIL	GHSERRREYFGETSGQQL	AKKLDAVLAG	G
UniRef90_C2G2T9	QV	KSVGAEYVIL	GHSERRRAYFNETDDEL	LAEKVNIALKH	GL
UniRef90_A0A024QA68	ML	EDLGLVSHYVVL	GHSERRREYFNETDDET	VNKKTHAFNH	L
UniRef90_R5BCL7	MV	ASTGAKYVIL	GHSERRRQYFGETSETL	KEKVNLALAN	N
UniRef90_R5RV18	ML	KEILGVEWVIL	GHSERRRQYFGETDET	VNAKMLQVLC	K
UniRef90_UPI0002197271	AL	DEMGVDYVIL	GHSERRRQYFGETDDE	DIKKAHAILK	N
UniRef90_UPI00037072D6	ML	AKLNLCTYVV	GHSERRRQYHAESE	BPVVNAKVKAAY	R
UniRef90_A3TLE7	F	LAKLGLCTYAV	GHSERRREYFHETDDET	VKAKVAAAYEN	G
UniRef90_P48499	IL	KDILGVHWWIL	GHSERRRTYFGETDDEL	VAKQVSEAYC	K
UniRef90_UPI0004645B51	ML	KEILNIDYVIL	GHSERRRQYFNETDDET	VNKKVLKAL	E
UniRef90_V5T6K6	VL	KEMGMNYCI	GHSERRRGYFHETDDE	DIKKAKALFA	N
UniRef90_B4DUI5	MI	KDYGATWVIL	GHSERRRHVIGESDDEL	IGQKVAHALAE	G
UniRef90_I7EQN8	ML	HDAAGATVIL	GHSERRRADHGETDDET	VRAKAKTAIA	A
UniRef90_V2QBP9	MI	KSAGASWVIL	GHSERRRSFGETDDEI	LNKKVKKALAD	G
UniRef90_I9MJH8	ML	RDVCCGYVIL	GHSERRRQYFAETDDES	VNKKVKAALE	G
UniRef90_UPI00039E3C44	ML	NKLGCTYVIL	GHSERRREYHAE	SDVVNAKVRAA	F
UniRef90_UPI000422DEA9	MI	QSVGVKYVIL	GHSERRRQYFNETDNT	LSAEKVN	S
UniRef90_C2M6C7	ML	EALGVRTTIL	GHSERRREYFNETDDE	SLAKKVNTALA	K
UniRef90_UPI00037E3BEA	ML	AKLGLCTWVVL	GHSERRRTYFHGETD	DAVLARKVT	K
UniRef90_X5KAU1	ML	ASVNATGAJ	GHSERRRQYHGETDS	HCNRRKVKAAL	D
UniRef90_E0NJT3	ML	VDLGLGCDYVIL	GHSERRRDYFKESS	ELVRKAEKAI	E
UniRef90_Q5CMF9	ML	KDMDIDCSIL	GHSERRRQYFSETDQ	ELVNNKVKKGL	E
UniRef90_E3H866	ML	TSIGVKYVIL	GHSERRREYFKE	CFEINNEKVKA	L
UniRef90_Q11PZ7	ML	KSIGVKYVIL	GHSERRREYFGETN	QQLADKVTIS	L
UniRef90_E4T3W7	MV	KSTGANVYVIL	GHSERRREYFGETS	AILNDKVVAL	A
UniRef90_C7MSM6	ML	AKLGLCTYVV	GHSERRREYFHETD	DELNKKVRAA	L
UniRef90_F8WWW0	MV	ASTGAKYVIL	GHSERRRTYFGETD	AILKEKVLLA	L
UniRef90_U7V8S4	ML	KEILGVKYVIL	GHSERRREYFHET	SNAFINEKVKA	A
UniRef90_J7L9I4	ML	AKLGLCTYVVL	GHSERRREYFHETD	DLVNAKVKAAY	K
UniRef90_X5MH90	ML	ADAGATAVV	GHSERRRODHRETDE	DDVNAKALA	A
UniRef90_M5A0W4	F	LAKLNTKYVIL	GHSERRREYFGETD	EMVNAKVQA	I
UniRef90_M3D2K8	QL	ADILGVKYVIL	GHSERRRQYFGETS	DKSVNQKVKA	A
UniRef90_D7G091	MI	KDFGVEWVIL	GHSERRRVGFGETS	DLIAEKSKV	A
UniRef90_W6KNN0	IL	RDQGVQWLIL	GHSERRRAYFGETN	EILAGKVRDA	Y
UniRef90_G8QVI5	ML	KDLGLVTNVIL	GHSERRRAYFGETD	FEINAKVLLA	L
UniRef90_UPI00047E2F9C	ML	AKLGLGAYATV	GHSERRRQYHETD	DAVLNAKARA	A
UniRef90_UPI0003611473	ML	EALGLVDYVIL	GHSERRREYHFNET	DDSVNKKVHA	L
UniRef90_A0A031FZ18	F	LKLLAADYVIL	GHSERRREYFHETD	EVVNAKVQAAL	R
UniRef90_U4KTB5	VL	ETTGAITYVIL	GHSERRRAYFNETD	DETVNKLKSA	I
UniRef90_I2ESF1	ML	KSIGVSYIIL	GHSERRRQYFNES	DAFLAEKVDA	I
UniRef90_Q31NS8	ML	TEILGVRYVVV	GHSERRRQYFNET	DETVDNQRLLA	A
UniRef90_Q6A9J2	ML	SKLGLCRYVVV	GHSERRREYFNET	DELVNNAKAKK	V
UniRef90_R6ZIO4	ML	KSVPVEYCI	GHSERRRDYFKE	TDEENKKA	K

	N	V	L	C	V	G	E	L	E	E	R	E	A	G	C	E	V	E	T	V	L	R	Q	V	L	G	L	G	L	K	S	V	E	K	L	N	N	V	160			
UniRef90_D3PAL8	N	V	L	C	V	G	E	L	E	E	R	E	A	G	C	E	V	E	T	V	L	R	Q	V	L	G	L	G	L	K	S	V	E	K	L	N	N	V	160			
UniRef90_UPI00036DFE59	T	P	I	A	C	C	G	P	L	D	E	A	R	E	S	H	T	N	E	Y	V	F	P	Q	L	E	A	A	A	L	E	G	V	T	Q	A	A	N	L	V		
UniRef90_B7FSI3	S	V	I	A	C	C	G	P	L	D	E	A	R	E	A	G	R	T	N	E	Y	V	F	P	Q	L	E	A	A	A	L	E	G	V	T	Q	A	A	N	L	V	
UniRef90_D6Y1U7	T	P	I	L	C	V	G	G	L	P	I	R	Q	R	E	A	G	R	T	N	E	Y	V	F	P	Q	L	E	A	A	A	L	E	G	V	T	Q	A	A	N	L	V
UniRef90_W4BH40	T	P	I	F	C	C	G	G	L	P	I	R	Q	R	E	A	G	R	T	N	E	Y	V	F	P	Q	L	E	A	A	A	L	E	G	V	T	Q	A	A	N	L	V
UniRef90_U2SYL2	N	P	I	V	C	C	G	G	L	P	I	R	Q	R	E	A	G	R	T	N	E	Y	V	F	P	Q	L	E	A	A	A	L	E	G	V	T	Q	A	A	N	L	V
UniRef90_F9YU64	R	M	V	F	C	C	G	G	L	P	I	R	Q	R	E	A	G	R	T	N	E	Y	V	F	P	Q	L	E	A	A	A	L	E	G	V	T	Q	A	A	N	L	V
UniRef90_J0N2K6	S	V	I	L	C	V	G	E	E	L	S	V	R	E	A	G	E	T	Q	A	V	V	A	D	Q	V	E	A	A	L	L	K	D	L	P	A	E	Q	T	I	V	
UniRef90_D9UFR8	T	P	I	L	C	V	G	E	E	L	S	V	R	E	A	G	E	T	Q	A	V	V	A	D	Q	V	E	A	A	L	L	K	D	L	P	A	E	Q	T	I	V	
UniRef90_H3NBS3	N	P	I	V	C	C	G	G	L	P	I	R	Q	R	E	A	G	R	T	N	E	Y	V	F	P	Q	L	E	A	A	A	L	E	G	V	T	Q	A	A	N	L	V
UniRef90_C7NB58	K	P	I	L	C	V	G	E	E	L	S	V	R	E	A	G	E	T	Q	A	V	V	A	D	Q	V	E	A	A	L	L	K	D	L	P	A	E	Q	T	I	V	
UniRef90_R5PFK3	T	P	I	L	C	V	G	E	E	L	S	V	R	E	A	G	E	T	Q	A	V	V	A	D	Q	V	E	A	A	L	L	K	D	L	P	A	E	Q	T	I	V	
UniRef90_B3EE10	R	V	I	L	C	V	G	E	E	L	S	V	R	E	A	G	E	T	Q	A	V	V	A	D	Q	V	E	A	A	L	L	K	D	L	P	A	E	Q	T	I	V	
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UniRef90_V6MAA5	V	P	I	L	C	V	G	E	E	L	S	V	R	E	A	G	E	T	Q	A	V	V	A	D	Q	V	E	A	A	L	L	K	D	L	P	A	E	Q	T	I	V	
UniRef90_D3FY95	V	P	I	M	C	C	G	G	L	P	I	R	Q	R	E	A	G	R	T	N	E	Y	V	F	P	Q	L	E	A	A	A	L	E	G	V	T	Q	A	A	N	L	V
UniRef90_P07669	T	V	V	F	C	C	G	G	L	P	I	R	Q	R	E	A	G	R	T	N	E	Y	V	F	P	Q	L	E	A	A	A	L	E	G	V	T						

						170	180	190	200
UniRef90_D3PAL8	I	A	Y	E	P	V	W	A	
UniRef90_UPI00036DFE59	V	A	Y	E	P	I	W	A	
UniRef90_B7FSI3	I	A	Y	E	P	I	W	A	
UniRef90_D6Y1U7	V	A	Y	E	P	V	W	A	
UniRef90_W4BH40	I	A	Y	E	P	I	W	A	
UniRef90_U2SYL2	I	A	Y	E	P	I	W	A	
UniRef90_F9YU64	L	A	Y	E	P	V	W	A	
UniRef90_J0N2K6	I	A	Y	E	P	I	W	A	
UniRef90_D9UFR8	V	A	Y	E	P	V	W	A	
UniRef90_H3NBS3	L	A	Y	E	P	L	W	A	
UniRef90_C7NBY8	L	A	Y	E	P	V	W	A	
UniRef90_R5PFK3	I	A	Y	E	P	I	W	A	
UniRef90_B3EE10	I	A	Y	E	P	V	W	A	
UniRef90_UPI00047DAD4F	L	A	Y	E	P	V	W	A	
UniRef90_V6MAA5	I	A	Y	E	P	I	W	A	
UniRef90_D3FY95	I	A	Y	E	P	I	W	A	
UniRef90_P07669	I	A	Y	E	P	V	W	A	
UniRef90_L1MBS2	I	A	Y	E	P	I	W	A	
UniRef90_D1PNY7	I	A	Y	E	P	I	W	A	
UniRef90_A3UB69	L	A	Y	E	P	V	W	A	
UniRef90_V6Q688	L	A	Y	E	P	I	W	A	
UniRef90_UPI00036FF478	V	A	Y	E	P	I	W	A	
UniRef90_R7HN84	L	A	Y	E	P	V	W	A	
UniRef90_UPI00042B6ACB	I	A	Y	E	P	V	W	A	
UniRef90_E4KPA9	L	A	Y	E	P	I	W	A	
UniRef90_B2UP29	I	A	Y	E	P	V	W	A	
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UniRef90_UPI000408458B	I	A	Y	E	P	I	W	A	
UniRef90_UPI00047D0A12	V	A	Y	E	P	V	W	A	
UniRef90_UPI0002FC4686	I	A	Y	E	P	I	W	A	
UniRef90_E1ZJ95	I	A	Y	E	P	V	W	A	
UniRef90_R5W5N9	V	A	Y	E	P	V	W	A	
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UniRef90_R5L465	I	A	Y	E	P	I	W	A	
UniRef90_A9TTT0	V	A	Y	E	P	V	W	A	
UniRef90_Q7KQM0	L	A	Y	E	P	L	W	A	
UniRef90_UPI0003FBA579	I	A	Y	E	P	I	W	A	
UniRef90_A1BQT3	I	A	Y	E	P	V	W	A	
UniRef90_I0L8D5	I	A	Y	E	P	V	W	A	
UniRef90_A0A023VJL0	I	A	Y	E	P	I	W	A	
UniRef90_UPI00036A880F	I	A	Y	E	P	L	W	A	
UniRef90_D5URT6	I	A	Y	E	P	V	W	A	
UniRef90_K1M1W4	I	A	Y	E	P	I	W	A	
UniRef90_J3EPW8	I	A	Y	E	P	I	W	A	
UniRef90_E5WFN3	I	A	Y	E	P	I	W	A	
UniRef90_E0E555	I	A	Y	E	P	I	W	A	
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UniRef90_E7RUW1	L	A	Y	E	P	V	W	A	
UniRef90_UPI0003C1AE30	L	A	Y	E	P	V	W	A	
UniRef90_M7N4Q4	I	A	Y	E	P	I	W	A	
UniRef90_C2G2T9	L	A	Y	E	P	V	W	A	
UniRef90_A0A024QA68	I	A	Y	E	P	I	W	A	
UniRef90_R5BCL7	L	A	Y	E	P	V	W	A	
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UniRef90_E0NJT3	V	A	Y	E	P	I	W	A	
UniRef90_Q5CMF9	I	A	Y	E	P	I	W	A	
UniRef90_E3H866	V	A	Y	E	P	V	W	A	
UniRef90_Q11PZ7	I	A	Y	E	P	I	W	A	
UniRef90_E4T3W7	I	A	Y	E	P	I	W	A	
UniRef90_C7MSM6	V	A	Y	E	P	V	W	A	
UniRef90_F8WWW0	I	A	Y	E	P	V	W	A	
UniRef90_U7V8S4	V	A	Y	E	P	V	W	A	
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UniRef90_X5MH90	V	A	Y	E	P	V	W	A	
UniRef90_M5A0W4	I	A	Y	E	P	I	W	A	
UniRef90_M3D2K8	I	A	Y	E	P	I	W	A	
UniRef90_D7G091	V	A	Y	E	P	V	W	A	
UniRef90_W6KNN0	L	A	Y	E	P	V	W	A	
UniRef90_G8QVI5	I	A	Y	E	P	V	W	A	
UniRef90_UPI00047E2F9C	I	A	Y	E	P	V	W	A	
UniRef90_UPI0003611473	I	A	Y	E	P	I	W	A	
UniRef90_A0A031FZ18	V	A	Y	E	P	V	W	A	
UniRef90_U4KTB5	I	A	Y	E	P	I	W	A	
UniRef90_I2ESF1	I	A	Y	E	P	I	W	A	
UniRef90_Q31NS8	I	A	Y	E	P	I	W	A	
UniRef90_Q6A9J2	I	A	Y	E	P	I	W	A	
UniRef90_R6ZIO4	I	A	Y	E	P	I	W	A	
						GT G K T A S K D D A E K M H M E I		R K Y I A K L Y D D D V A	
						GT G R T A T P E D D A Q E V I G A L		R A K Y L A E Q V A G D A E V A	
						GT G L T A T P E K D A Q E V C G A I		R S R Y L A G Q V A G D E V A	
						GT G E V A T P E K D A Q E V C G A I		R S R Y L A G Q V A G D E V A	
						GT G K T A S S Q D D A Q E V I A Y I		R T L V K E L Y N E T V A	
						GT G E T A S P E Q D A Q E M H A F I		R E L V S E L Y G A K T A	
						GT G R T A T S A Q D A Q E V C R A I		R K T L A D K Y G K E V A	
						GT G K T A T P E D D A Q E V C G A I		R S V I A A L Y D K Q T A	
						GT G K T A T P E D D A Q E V C G A I		R G K L A E L Y D Q E E A	
						GT G K T A T P E D D A Q E V C G A I		R Q T V A E E F G Q E A A	
						GT G K T A T P E Q D A Q E V H A F I		R G L L T D L Y G K E V A	
						GT G K T A T S E Q D A Q E V H A F I		R E L V A E L Y D T D T A	
						GT G E T A S P E Q A Q D M H A F I		R K T V S E L Y G A E A A	
						GT G K S S S A A Q E A N E T I A V I		R K T L S N K Y G N T V A	
						GT G K S S S A A D A N E V C A Y I		R Q V I A E R F G Q D A G	
						GT G K T A T P E Q A Q E V H A F I		R K V V A E S N F S E D A A	
						GT G K T A T S D Q A Q E I H A F I		R K W A T N K L G A S V A	
						GT G K T A T A D Q A Q E V C A A I		R K C V A E E K Y G E E A A	
						GT G E T A S P E Q A Q D M H K F V		R K V V G E L Y G E D A A	
						GT G K S T A K D A N D T C G V V		R N L I A E E Y S D E V A	
						GT G K T A T S Q Q A Q E V H A F I		R E T V A K K F G E E T A	
						GT G K T A T A D Q A Q E V H A F I		R K T I A N K Y G N D V A	
						GT G K S A T K D D A Q K M C A H I		R S V L A G E F S Q D V A	
						GT G L T A T S K E A Q E A H S F I		R K V I S D V F G A D A A	
						GT G K T A T P E Q A Q E V H A F I		R K Y L K E S K L G D Q E I A	
						GT G K T A T S E N A N E V C G A I		R N K V E S L F G Q G V S	
						GT G K T A T K E Q A N E T I I A V		R K V L E K L Y D L E T A	
						GT G R S S S A K D A Q E V C G Y I		R A V V A R L F S S K E V A	
						GT G V V A T P E Q A Q E A H A Y V		R K W I S D N V S P D V A	
						GT G K T A T S E Q A Q E E M H A H I		R R T L A E K F G A A A	
						GT G K T A T S A Q A Q E A H A N I		R A F L S S A V S P A V I A	
						GT G V T A T D E Q A Q E M C K Y I		R D V I A E I Y D E V I A	
						GT G K V A S P Q Q A Q E V H A A I		R Q W L K E K V S D D V S	
						GT G K T A T P E Q A Q L V H K E I		R K L V K S D T C G K E Q A	
						GT G K T A T A D E A Q E M H A A I		R R H I S T K F G K E I A	
						GT G V V A T P E Q A Q E A H Q A L		R G W L N E K V S A E V A	
						GT G K T A T P E D D A Q E V C G A V		R Q R L A K R L D Q Q E T A	
						GT G K S A T Q D D A Q N M C K A V		R D V V A A K D F G Q A V A	
						GT G L T A A P S Q A Q E V H S F I		R N K L S E K Y G N E T G	
						GT G K T A T P A D A Q E V C A A V		R A T I A E I A S A E I V A	
						GT G K T A S S D Q A Q D M H A A L		R A H F A S K Y G O I I A	
						GT G E T A T P E Q A Q E V C H L I		R E T V A G L Y D Q T T A	
						GT G K S T S A D A N E V C A H I		R S V V A K Q F S Q V A A	
						GT G K T A T A E Q A N E V I A Y I		R Q V V R D I Y G D L A	
						GT G E V A T P E D A Q E V C G A I		R K H L A S E L Y S E D V A	
						GT G L T A T P E Q A Q A V H A F L		R D R L A S S N G Y A A A	
						GT G K T A T P E Q A Q E V H E K L		R K W L K E N S S E T V A	
						GT G K T A S D E Q A Q D M H A H I		R K Q L A G K W G E A L A	
						GT G L T A S P E Q A Q E V H A F I		R E T L A N Q Y D S P E T A	
						GT G K T A T S D E A N E V C A H I		R Q V I G K I T S P E T A	
						GT G K T A T D D Q A Q E M H A H I		R G V I A G K Y G K E V A	
						GT G K T A T N E I A Q D V C G Y I		R S V V A E L Y G Q E V A	
						GT G K T A T A D D A Q E M V H V I		R E K I A S L Y D N D T A	
						GT G E V A T P E D A Q E V C A A I		R G R L A E L Y D Q D L A	
						GT G E V A T P E D A Q E V C A A I		R T A L A E L Y S G D L A	
						GT G K V A T P E Q A Q E V H L L L		R K W V S E N I G T D V A	
						GT G K T A T A E Q A N D V I S Y I		R E V I K S L Y G D L S	
						GT G K T A S S D Q A Q E M C K T I		R D T V K D L Y N E T A	
						GT G K T A T P Q Q A Q E V H E K L		R G W L K S N V S D A V A	
						GT G K V P V E Q I A E V H N D L		R A S L V K R F G G E T A	
						GT G K T A S P A D A E A M H K A I		R E Y I A K I T R S S A A A	
						GT G R T A T A D Q A N E V C A F I		R R T V G E I V F G Q D T A	
						GT G E V A T P D D A Q E V C G A I		R R V L G E L C D E G A A	
						GT G L T A T P D Q A Q E V H A F I		R K E I E E K F G Q S A A	
						GT G E T A T P E Q A Q E I H A F I		R K T V A D K Y G K E V A	
						GT G K T A T A Q D A Q E V C R A I		R A R L R E Q H G G A V A	
						GT G E T A S P E Q A Q E I H A H I		R S L I A A K Y G Q E V A	
						GT G K T C S P E D A E A M C K N I		R E T L K E M G H A A	
						GT G V V A T P E Q A Q E A H A F I		R E Y V T K M Y N S Q V S	
						GT G K T A T P E M A Q E T H K A I		R N F L A D M F G A E V A	
						GT G V T A T D E Q A Q E M H A K I		R E H L A S K Y G A A V A	
						GT G V T A S T E Q A Q D M L A F I		R T I I A E K Y G K E I A	
						GT G R V A T P S D A E E V C A A I		R T A L A D K Y G A D L A	
						GT G L T A T S A Q A Q E M H A F I		R Q T I A D K Y G K E V A	
						GT G K T A T P E M A E E T H K E I		R D V L I A M F G A E A A	
						GT G E V A T P E D D A Q E V C A A I		R A R L A E L Y S P E V A	
						GT G R T P A D D V A K V H A T M		R E T L V A R F G D E V G	
						GT G K T A T S D D A Q S V C A A I		R S K I R D M A D D A T A	
						GT G K T A T A E			

UniRef90_D3PAL8	Q	R	I	R	I	M	Y	G	G	S	V	K	P	E	N	I	A	K	E	L	M	S	S	P	E	I	D	G	A	L	V	G	G	A	S	L	K	A	E	F	I	V	210					
UniRef90_UPI00036DFE59	A	R	T	R	I	L	Y	G	G	S	V	K	A	G	N	I	A	G	L	M	S	S	A	D	I	E	D	D	G	A	L	V	G	G	A	S	L	K	A	E	F	A						
UniRef90_B7FSI3	A	N	T	R	I	L	Y	G	G	S	V	K	A	G	N	I	A	P	A	G	L	M	S	A	K	P	D	D	D	G	F	L	V	G	G	A	S	L	K	D	A	E	F	A				
UniRef90_D6Y1U7	Q	V	V	R	I	L	Y	G	G	S	V	K	P	E	N	I	A	G	L	M	S	S	A	K	P	D	I	D	D	G	A	L	V	G	G	A	S	L	K	D	A	E	F	V				
UniRef90_W4BH40	N	A	V	R	I	Q	Y	G	G	S	V	K	P	E	N	I	A	G	L	M	S	S	A	K	P	D	I	D	D	G	A	L	V	G	G	A	S	L	K	D	A	E	F	V				
UniRef90_U2SYL2	E	C	I	R	I	Q	Y	G	G	S	M	N	A	G	N	A	C	R	E	L	L	G	K	A	P	N	I	D	D	G	G	L	I	V	G	G	A	S	L	K	A	E	F	G				
UniRef90_F9YU64	D	S	V	S	I	L	Y	G	G	S	V	K	P	D	N	A	K	E	I	L	F	A	K	A	G	D	V	V	D	D	G	G	L	I	V	G	G	A	S	L	K	A	D	F	A			
UniRef90_J0N2K6	D	A	F	T	I	Q	Y	G	G	S	M	N	A	K	N	A	A	E	L	L	F	A	K	A	G	D	V	V	D	D	G	G	L	I	V	G	G	A	S	L	K	A	D	F	A			
UniRef90_D9UFR8	D	A	V	R	I	Q	Y	G	G	S	V	K	A	N	A	N	V	A	E	L	L	M	A	R	S	P	D	I	D	D	G	A	L	V	G	G	A	S	L	K	D	E	F	V				
UniRef90_H3NBS3	D	A	I	R	I	Q	Y	G	G	S	V	K	P	N	N	I	A	E	F	L	L	A	Q	S	T	D	I	D	D	G	A	L	V	G	G	A	S	L	K	D	E	F	V					
UniRef90_C7NBY8	E	N	V	T	V	Q	Y	G	G	S	M	N	A	D	N	A	A	A	D	L	L	I	A	Q	S	T	D	I	D	D	G	G	L	I	V	G	G	A	S	L	K	A	E	F	A			
UniRef90_R5PFK3	E	A	V	R	I	Q	Y	G	G	S	M	N	A	D	N	A	K	E	L	L	I	A	K	P	N	I	D	D	D	G	G	L	I	V	G	G	A	S	L	K	A	E	F	A				
UniRef90_B3EE10	D	G	L	R	I	Q	Y	G	G	S	V	K	P	S	N	A	K	E	I	L	F	A	K	P	D	I	D	D	D	G	G	L	I	V	G	G	A	S	L	K	N	A	D	F	A			
UniRef90_UPI00047DAD4F	N	N	V	S	I	L	Y	G	G	S	V	K	P	N	N	A	K	E	I	L	F	A	K	P	D	I	V	V	D	D	G	G	L	I	V	G	G	A	S	L	K	A	E	F	Y			
UniRef90_V6MAA5	A	R	V	R	I	Q	Y	G	G	S	V	K	P	E	N	I	A	S	Y	L	S	Q	A	P	D	I	D	D	G	A	L	V	G	G	A	S	L	K	D	A	S	F	L					
UniRef90_D3FY95	N	A	V	R	I	Q	Y	G	G	S	V	K	P	E	N	I	A	E	Y	M	A	K	P	D	I	D	D	D	D	G	A	L	V	G	G	A	S	L	K	E	E	K	F	L				
UniRef90_P07669	E	G	L	R	V	I	Y	G	G	S	V	N	G	A	N	C	K	E	F	L	K	F	H	D	I	D	D	D	D	G	F	L	V	G	G	A	S	L	K	P	E	F	H					
UniRef90_L1MBS2	D	N	T	S	I	L	Y	G	G	S	C	N	G	K	N	A	P	E	L	L	F	A	K	E	D	I	D	D	D	G	G	L	I	V	G	G	A	S	L	K	A	D	F	K	A			
UniRef90_D1PNY7	K	A	L	T	V	I	Y	G	G	S	M	N	A	K	N	A	E	E	L	L	F	S	Q	P	D	I	V	V	D	D	G	G	L	I	V	G	G	A	S	L	K	A	D	F	A			
UniRef90_A3UB69	Q	N	V	S	I	L	Y	G	G	S	V	K	P	N	N	A	K	E	I	L	F	S	Q	P	D	I	D	D	D	G	G	L	I	V	G	G	A	S	L	K	D	A	S	F	M			
UniRef90_V6Q688	E	K	V	R	I	Q	Y	G	G	S	V	K	P	E	N	I	K	E	Y	M	A	K	P	D	I	D	D	D	D	G	A	L	V	G	G	A	S	L	K	E	A	D	F	L				
UniRef90_UPI00036FF478	L	N	T	S	I	L	Y	G	G	S	C	N	A	Q	N	A	R	E	I	F	S	Q	P	D	I	V	V	D	D	D	G	G	L	I	V	G	G	A	S	L	K	S	D	F	T			
UniRef90_R7HN84	E	E	I	S	I	L	Y	G	G	S	C	K	P	S	N	A	K	E	I	F	S	K	T	N	V	D	D	D	D	G	G	L	I	V	G	G	A	S	L	K	A	E	F	T	M			
UniRef90_UPI00042B6ACB	S	K	T	R	I	L	Y	G	G	S	V	N	G	G	N	C	A	D	L	A	K	E	E	D	I	D	D	D	D	G	F	L	V	G	G	A	S	L	K	P	E	F	F	A				
UniRef90_E4KPA9	D	K	V	R	I	Q	Y	G	G	S	V	K	P	E	N	I	A	D	Y	M	A	K	P	D	I	D	D	D	D	G	A	L	V	G	G	A	S	L	K	V	D	E	F	A				
UniRef90_B2UP29	A	K	V	R	I	Q	Y	G	G	S	V	K	P	E	N	V	E	E	Y	M	A	K	P	D	I	D	D	D	D	G	A	L	V	G	G	A	S	L	K	P	E	F	F	A				
UniRef90_S9UN64	S	K	L	R	I	L	Y	G	G	S	V	T	G	Q	N	A	A	T	L	L	Y	K	K	P	D	I	D	D	D	G	F	L	V	G	G	A	S	L	K	P	E	F	F	L				
UniRef90_UPI000408458B	E	T	V	R	I	Q	Y	G	G	S	V	K	P	E	N	I	E	E	L	L	T	S	M	S	D	I	D	D	D	G	A	L	V	G	G	A	S	L	K	Q	S	E	F	F	L			
UniRef90_UPI00047D0A12	D	K	I	R	I	L	Y	G	G	S	V	K	P	D	N	I	K	D	L	L	T	S	M	S	D	I	D	D	D	D	G	A	L	V	G	G	A	S	L	K	V	J	A	D	F	L		
UniRef90_UPI0002FC4686	D	A	V	R	V	Q	Y	G	G	S	V	K	P	E	N	I	G	E	Y	M	A	K	P	D	I	D	D	D	D	D	G	A	L	V	G	G	A	S	L	K	D	S	S	F	L	I		
UniRef90_E1ZJ95	A	D	L	R	I	L	Y	G	G	S	V	N	E	S	N	C	Q	E	L	F	A	N	L	E	D	V	V	D	D	D	G	F	L	V	G	G	A	S	L	K	Q	A	S	F	I	L		
UniRef90_R5W5N9	D	A	T	P	I	L	Y	G	G	S	C	K	P	S	N	A	G	T	E	L	F	A	K	P	D	I	D	D	D	D	G	G	L	I	V	G	G	A	S	L	K	A	D	F	I	L		
UniRef90_J4GNQ3	E	S	T	R	V	I	L	Y	G	G	S	V	T	A	N	A	C	K	E	L	C	A	Q	L	D	V	V	D	D	D	G	F	L	V	G	G	A	S	L	K	P	E	F	F	V	V		
UniRef90_R5L465	G	K	V	R	I	Q	Y	G	G	S	V	K	P	S	N	A	S	K	I	L	N	M	P	D	I	D	D	D	D	D	G	A	L	V	G	G	A	S	L	K	T	N	D	E	F	V	G	
UniRef90_A9TTT0	S	K	T	R	I	L	Y	G	G	S	V	N	G	A	N	A	E	L	A	T	Q	E	D	I	D	D	D	D	D	D	G	F	L	V	G	G	A	S	L	K	A	E	F	V	G			
UniRef90_Q7KQM0	N	Q	I	R	I	L	Y	G	G	S	V	N	T	E	N	C	S	S	L	I	Q	Q	E	D	I	D	D	D	D	D	G	F	L	V	G	N	A	S	L	K	E	S	F	F	V	L		
UniRef90_UPI0003FBA579	A	E	T	S	I	L	Y	G	G	S	A	N	P	G	N	A	K	E	L	F	S	Q	P	D	I	D	D	D	D	D	G	L	I	V	G	G	A	S	L	K	S	D	F	L				
UniRef90_A1BQT3	A	S	V	R	I	V	Y	G	G	S	V	A	V	N	S	A	D	L	A	K	M	P	D	I	D	D	D	D	D	D	G	F	L	V	G	G	A	S	L	K	P	D	F	L				
UniRef90_I0L8D5	D	A	V	R	V	L	Y	G	G	S	V	K	A	S	N	V	A	S	L	M	A	K	P	D	I	D	D	D	D	D	G	G	L	V	G	G	A	S	L	K	D	A	E	F	F	A		
UniRef90_A0A023VJL0	D	K	V	R	V	Q	Y	G	G	S	V	K	P	E	N	V	A	E	Y	M	A	K	P	D	I	D	D	D	D	D	D	G	A	L	V	G	G	A	S	L	K	E	A	E	F	L		
UniRef90_UPI00036A880F	F	C	A	L	I	L	Y	G	G	S	V	K	P	A	N	A	F	S	L	M	K	E	K	D	I	D	D	D	D	D	G	A	L	V	G	G	A	S	L	K	A	E	F	F	A			
UniRef90_D5URT6	A	G	I	R	V	L	Y	G	G	S	V	S	K	N	V	G	E	L	L	V	A	K	P	D	I	D	D	D	D	D	D	G	G	L	V	G	G	A	S	L	K	P	E	F	F	A		
UniRef90_K1M1W4	D	N	L	S	I	L	Y	G	G	S	C	N	P	G	N	A	K	D	I	L	F	S	K	A	D	I	D	D	D	D	D	G	G	L	I	V	G	G	A	S	L	K	S	D	E	F	V	
UniRef90_J3EPW8	E	N	V	R	I	Q	Y	G	G	S	M	K	P	A	N	V	K	E	L	L	M	S	K	A	P	D	I	D	D	D	D	G	G	L	V	G	G	A	S	L	K	Q	P	E	F	F	L	
UniRef90_E5WFN3	D	A	V	R	I	Q	Y	G	G	S	V	K	P	A	N	V	I	K	E	Y	M	S	Q	P	D	I	D	D	D	D	G	A	L	V	G	G	A	S	L	K	P	Q	F	F	L			
UniRef90_E0E555	D	Q	V	R	I	Q	Y	G	G	S	V	K	P	A	N	V	A	E	I	M	G	S	Q	P	D	I	D	D	D	D	D	G	A	L	V	G	G	A	S	L	K	P	D	F	F	L		
UniRef90_K0YWE9	S	K	I	R	I	L	Y	G	G	S	V	K	S	A	N	V	A	D	I	M	A	K	E	D	I	D	D	D	D	D	D	G	A	L	V	G	G	A	S	L	K	A	E	F	F	G		
UniRef90_E7RUW1	P	S	V	R	I	L	Y	G	G	S	V	K	A	N	A	A	P	E	L	F	S	Q	P	D	I	D	D	D	D	D	D	D	G	L	V	G	G	A	S	L	K	V	J	A	E	F	F	V
UniRef90_UPI0003C1AE30	D	S	V	R	I	L	Y	G	G	S	V	T	G	A	S	C	K	E	L	G	S	Q	Q	D	V	V	D	D	D	D	D	G	F	L	V	G	G	A	S	L	K	P	E	F	F	V		
UniRef90_M7N4Q4	Q	E	L	R	I	L	Y	G	G	S	V	N	P	G	N	A	R	G	L	F	A	K	P	D	I	D	D	D	D	D	D	D	G	L	V	G	G	A	S	L	K	S	D	F	T	M		
UniRef90_C2G2T9	D	D	T	T	I	L	Y	G																																								

UniRef90_D3PAL8	K	I	L	K	Y	Y	E
UniRef90_UPI00036DFE59	K	I	C	R			
UniRef90_B7FSI3	D	I	V	N			
UniRef90_D6Y1U7	K	I	C	R			
UniRef90_W4BH40	A	L	V	E	G	A	
UniRef90_U2SYL2	E	I	A	N	S		
UniRef90_F9YU64	A	I	I	N			
UniRef90_J0N2K6	E	I	V	R	A	A	
UniRef90_D9UFR8	K	I	V	R			
UniRef90_H3NBS3	A	L	F	E	A		
UniRef90_C7NBY8	V	I	I	K	A		
UniRef90_R5PFK3	Q	V	V	N	A		
UniRef90_B3EE10	A	I	V	K	A	A	
UniRef90_UPI00047DAD4F	A	I	V	N	A		
UniRef90_V6MAA5	Q	L	V	K			
UniRef90_D3FY95	E	L	L	E	A		
UniRef90_P07669	N	I	V	N			
UniRef90_L1MBS2	L	I	I	D	A		
UniRef90_D1PNY7	L	I	V	D	A	A	
UniRef90_A3UB69	Q	I	V	H	S		
UniRef90_V6Q688	A	L	L	E	A		
UniRef90_UPI00036FF478	D	I	I	K	S		
UniRef90_R7HN84	G	I	V	D	A		
UniRef90_UPI00042B6ACB	T	I	I	N	S		
UniRef90_E4KPA9	A	L	L	E	A		
UniRef90_B2UP29	A	L	V	T	S	A	
UniRef90_S9UN64	Q	I	I	D	A		
UniRef90_UPI000408458B	K	L	L	E	A		
UniRef90_UPI00047D0A12	K	L	A	E	A	A	
UniRef90_UPI0002FC4686	K	L	L	E	A		
UniRef90_E1ZJ95	S	I	C	N	A	E	N
UniRef90_R5W5N9	R	I					
UniRef90_J4GNQ3	D	I	I	N	A	K	
UniRef90_R5L465	A	I	V	N	Y		
UniRef90_A9TTT0	V	I	C	N	A		
UniRef90_Q7KQM0	D	I	I	K	S	A	
UniRef90_UPI0003FBA579	D	I	I	K	S		
UniRef90_A1BQT3	V	I	C	K			
UniRef90_I0L8D5	Q	I	C	R			
UniRef90_A0A023VJL0	A	L	L	D			
UniRef90_UPI00036A880F	E	I	I	K	E	A	
UniRef90_D5URT6	A	L					
UniRef90_K1M1W4	D	I	I	K	S		
UniRef90_J3EPW8	E	L	V	H	Y	Q	
UniRef90_E5WFN3	Q	L	L	E	A		
UniRef90_E0E555	G	L	L	K			
UniRef90_K0YWE9	K	I	V	R			
UniRef90_E7RUW1	G	I	A	K	A	A	
UniRef90_UPI0003C1AE30	T	I	I	N	A	R	Q
UniRef90_M7N4Q4	D	V	V	K	S	C	
UniRef90_C2G2T9	D	I	V	K	V	F	N
UniRef90_A0A024QA68	Q	L	V	E	A		
UniRef90_R5BCL7	G	L	V	T	A		
UniRef90_R5RV18	A	M	I	E			
UniRef90_UPI0002197271							
UniRef90_UPI00037072D6	K	I	V	R	Y		
UniRef90_A3TLE7	S	I	C	R	Y	R	
UniRef90_P48499	D	I	I	D	A		
UniRef90_UPI0004645B51	E	L	V	N			
UniRef90_V5T6K6	E	L	V	N	Y	Q	
UniRef90_B4DUI5	D	I	I	N	A	K	Q
UniRef90_I7EQN8	P	I	V	A	A		
UniRef90_V2QBP9	K	I	I	N			
UniRef90_I9MJH8	K	I	V	K			
UniRef90_UPI00039E3C44	K	I	A	R	Y	Q	
UniRef90_UPI000422DEA9	D	I	I	K	A	F	N
UniRef90_C2M6C7	S	I	I	Q	A		
UniRef90_UPI00037E3BEA	E	L	C	A	L	A	
UniRef90_X5KAU1	A	I	I	K	A		
UniRef90_E0NJT3	K	L	V	N	Y	K	
UniRef90_Q5CMF9	K	I	I	E	S	A	Q
UniRef90_E3H866	K	I	V	E	A		
UniRef90_Q11PZ7	D	I	A	K	S	Y	
UniRef90_E4T3W7	A	I	I	D	A		
UniRef90_C7MSM6	K	L	C	A	L	A	
UniRef90_F8WWW0	P	V	I	E			
UniRef90_U7V8S4	Q	V	I	K	A		
UniRef90_J7L9I4	K	V	I	R	F	R	E
UniRef90_X5MH90	G	I	I	D	A	Y	R
UniRef90_M5A0W4	R	V	I	Q			
UniRef90_M3D2K8	K	L	L	E	A		
UniRef90_D7G091	D	I	I	K	A	V	E
UniRef90_W6KNN0	Q	I	I	D	S		
UniRef90_G8QVI5	P	I	V				
UniRef90_UPI00047E2F9C	K	I	C	R	Y	R	
UniRef90_UPI0003611473	Q	L	L	E	G	A	
UniRef90_A0A031FZ18	A	I	I	R	Y	Q	
UniRef90_U4KTB5	T	L	V	K	A	A	
UniRef90_I2ESF1	N	I	A	K	S		
UniRef90_Q31NS8	R	I	V	N	Y	Q	
UniRef90_Q6A9J2	K	L	V	T	F	Y	E
UniRef90_R6ZIO4	A	M	V	E	K	A	

	1	10	20	30	40																																				
UniRef90_UPI000289E918	R	K	N	I	A	G	N	W	K	M	Y	K	T	L	S	E	A	V	E	F	V	E	Q	V	K	T	Q	V	P	A	N	T	D	D	A	V	V	L	C		
UniRef90_H8XTJ3	R	K	N	I	A	G	N	W	K	M	N	K	D	Y	S	E	A	L	E	F	V	E	Q	V	K	T	Q	V	P	A	N	T	D	D	A	V	V	L	C		
UniRef90_E8JEV3	R	T	N	P	L	M	A	G	N	W	K	M	N	L	D	H	L	E	A	N	E	H	L	V	N	Q	L	K	A	M	E	L	S	N	D	T	D	E	V	V	L
UniRef90_C9AC97	R	K	N	P	L	I	A	G	N	W	K	M	N	K	L	A	K	E	A	K	E	F	A	E	A	V	K	T	K	I	L	P	S	N	D	T	D	E	V	V	L
UniRef90_UPI0003806EFF	S	R	K	N	P	L	I	A	G	N	W	K	M	N	K	V	P	A	E	A	R	E	F	I	S	Q	V	E	L	A	L	P	S	N	D	T	D	E	V	V	L
UniRef90_E1SSS6	A	L	R	R	P	M	V	A	G	N	W	K	M	D	G	S	Q	Q	L	A	N	E	L	F	D	K	F	K	Q	L	K	D	D	S	P	S	V	D	I	L	L
UniRef90_B9NSF5	R	R	K	I	L	A	A	G	N	W	K	M	N	G	T	G	A	A	L	N	E	L	E	A	L	R	T	A	A	C	P	A	K	T	K	S	V	D	I	L	L
UniRef90_R5SM91	R	K	T	I	I	A	G	N	W	K	M	N	K	T	A	T	E	A	K	K	F	A	D	D	F	K	A	L	L	P	A	K	T	K	S	C	K	E	I	V	V
UniRef90_B8E2R2	R	R	K	I	I	A	A	N	W	K	M	Y	K	T	C	A	E	T	E	S	F	I	K	E	F	K	E	L	S	K	G	E	E	K	E	I	V	V	L		
UniRef90_UPI0003B7635E	R	R	K	P	L	I	A	G	N	W	K	L	N	K	T	V	S	E	A	R	D	F	V	L	A	V	K	D	P	L	P	S	E	D	V	D	S	V	L		
UniRef90_C9LYH5	R	R	N	P	L	I	A	G	N	W	K	M	N	T	I	L	A	E	G	V	L	E	V	K	E	L	D	L	V	K	P	D	A	K	D	V	D	V	L		
UniRef90_L0GFQ0	R	R	P	M	V	A	G	N	W	K	M	N	G	T	R	A	S	V	A	E	L	V	E	S	L	R	M	Q	A	L	P	V	S	V	E	I	A	V	L		
UniRef90_W5XBC7	R	K	K	I	V	V	G	N	W	K	M	N	T	R	P	E	A	A	A	C	V	E	G	L	V	R	L	V	G	R	E	D	V	A	V	A	J	L			
UniRef90_UPI0003826830	R	K	N	I	V	A	G	N	W	K	M	N	T	V	A	E	G	V	E	L	A	K	D	V	R	A	S	I	E	G	K	K	C	E	V	I	L	L			
UniRef90_UPI0004647BD4	R	T	K	I	V	A	G	N	W	K	M	N	K	T	V	A	E	A	A	S	L	V	E	K	I	K	Q	L	A	T	F	S	G	C	E	V	V	L			
UniRef90_V4LFC7	R	Q	P	L	I	A	G	N	W	K	M	N	S	K	A	D	T	T	D	L	N	G	I	K	A	G	I	G	E	R	Q	A	A	V	A	V	L	L			
UniRef90_R6FLB2	R	L	P	F	I	A	G	N	W	K	M	Y	K	N	I	A	Q	A	R	D	F	A	E	K	F	R	T	L	J	H	D	E	R	T	V	R	T	A	L		
UniRef90_B6YRU5	R	K	N	I	V	V	G	N	W	K	M	N	K	T	L	Q	E	G	V	F	L	A	K	E	L	E	L	A	L	K	E	R	N	C	D	V	I	L			
UniRef90_UPI0001FFE3E9	A	S	T	P	L	I	A	G	N	W	K	M																													

UniRef90_UPI000289E918	A	P	A	L	F	L	P	S	L	V	E	A	T	K	G	T	D	L	A	I	G	A	Q	N	M	H	F	E	K	E	G	A	F	T	G	E	V	I	P	N		
UniRef90_H8XTJ3	A	T	P	F	T	D	L	R	K	A	V	E	L	V	V	D	T	D	L	K	I	Y	A	Q	N	S	V	Q	H	E	D	N	G	A	F	T	G	E	A	T	A	
UniRef90_C9AC97	G	S	P	A	L	F	L	T	L	V	N	A	A	E	G	S	T	E	L	K	I	Y	A	Q	N	S	V	Q	H	E	D	N	G	A	F	T	G	E	A	T	A	
UniRef90_UPI0003806EFF	G	A	P	A	I	F	L	T	E	G	M	K	S	K	A	N	S	Q	L	K	I	Y	A	Q	N	S	V	Q	H	E	D	N	G	A	F	T	G	E	A	T	A	
UniRef90_E1SSS6	C	P	P	S	I	L	Y	L	D	S	V	Q	K	L	H	D	C	L	V	R	I	L	G	Q	N	L	S	H	F	H	E	S	F	G	A	F	T	G	E	A	T	A
UniRef90_B9NSF5	C	P	P	A	T	L	R	A	T	R	V	A	V	A	G	S	G	R	V	A	V	G	A	Q	N	L	S	H	F	H	E	S	F	G	A	F	T	G	E	A	T	A
UniRef90_R5SM91	C	V	P	S	V	D	I	S	A	T	R	V	A	K	D	S	G	R	V	A	V	G	A	Q	N	L	S	H	F	H	E	S	F	G	A	F	T	G	E	A	T	A
UniRef90_B8E2R2	C	P	P	F	T	S	L	Y	A	N	K	L	L	E	D	T	P	I	K	L	G	A	Q	N	M	F	W	E	K	S	G	A	F	T	G	E	A	T	A	I		
UniRef90_UPI0003B7635E	G	A	P	A	L	D	L	F	S	V	V	E	A	K	G	S	V	L	K	S	A	A	Q	N	C	Y	F	W	E	K	S	G	A	F	T	G	E	A	T	A		
UniRef90_C9LYH5	A	C	P	T	A	T	A	L	J	A	V	V	A	E	A	G	S	N	I	H	I	G	A	Q	N	V	F	W	E	K	S	G	A	F	T	G	E	A	T	A		
UniRef90_L0GFQ0	F	P	S	C	L	H	V	A	Q	V	L	G	G	V	D	S	H	V	A	V	G	A	Q	D	C	Y	A	Q	N	S	G	A	F	T	G	E	A	T	A			
UniRef90_W5XBC7	C	P	P	Y	L	A	L	D	C	V	V	Q	V	L	R	N	T	S	A	I	K	V	A	A	E	N	V	F	A	W	E	K	S	G	A	F	T	G	E	A	T	A
UniRef90_UPI0003286830	G	V	P	F	T	H	L	T	V	V	R	A	V	E	G	S	A	I	K	V	A	A	E	N	V	F	A	W	E	K	S	G	A	F	T	G	E	A	T	A		
UniRef90_UPI0004647BD4	C	P	P	F	T	A	L	A	S	V	N	K	L	L	E	S	R	I	Q	L	G	A	Q	N	L	S	H	P	E	A	P	R	E	G	A	F	T	G	E	A	T	A
UniRef90_V4LFC7	C	P	P	F	P	Y	L	Y	L	A	E	E	L	F	A	G	T	A	I	A	Y	G	S	Q	D	L	S	H	P	E	E	K	S	G	A	F	T	G	E	A	T	A
UniRef90_R6FLB2	F	A	P	L	P	Q	I	P	V	L	K	E	F	F	G	T	G	I	G	V	A	A	E	N	C	A	D	K	E	K	S	G	A	F	T	G	E	A	T	A		
UniRef90_B6YRU5	C	V	P	F	T	H	L	V	A	I	F	E	T	I	N	T	K	I	K	L	G	A	Q	N	N	A	D	R	V	S	G	A	F	T	G	E	A	T	A			
UniRef90_UPI0001FFE3E9	L	P	P	F	T	D	L	R	S	V	Q	T	L	I	D	G	R	V	V	H	G	A	Q	D	L	S	H	P	E	A	P	R	E	G	A	F	T	G	E	A	T	A
UniRef90_C8W0I1</																																										

UniRef90_UPI000289E918	Q	L	A	D	I	N	V	G	Y	V	V	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_H8XTJ3	M	L	T	S	I	L	G	V	S	T	V	V	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L
UniRef90_E8JEV3	M	L	T	N	K	L	G	V	S	T	V	V	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L
UniRef90_C9AC97	A	L	A	A	D	L	G	V	D	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L
UniRef90_UPI0003806EFF	T	I	A	A	D	L	G	V	E	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L
UniRef90_E1SSSS6	M	L	K	E	F	G	V	S	T	V	V	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_B9NSF5	M	L	L	D	A	G	A	S	T	V	V	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_R5SMR1	M	L	K	D	L	G	V	K	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_B8E2R2	M	L	K	D	L	G	V	S	T	V	V	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_UPI0003B7635E	A	L	A	A	D	L	G	V	D	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L
UniRef90_C9LYH5	M	L	K	E	I	L	G	V	D	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L
UniRef90_L0GFQ0	Q	F	A	E	V	G	C	E	W	V	L	V	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_W5XBC7	M	L	A	D	V	G	C	S	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_UPI0003826830	M	V	A	S	T	G	A	T	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_UPI0004647BD4	M	L	R	E	V	G	C	Q	F	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_V4LFC7	M	L	K	D	F	G	T	Y	A	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L		
UniRef90_R6FLB2	M	L	K	E	L	G	V	D	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_B6YRU5	M	I	A	S	I	L	G	V	Q	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L
UniRef90_UPI0001FFE3E9	M	I	A	K	L	G	C	R	Y	V	V	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_C8WU01	M	L	K	E	L	G	C	A	G	S	I	V	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_D1XX05	M	V	K	S	T	G	A	Q	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_D7BNV9	M	L	T	K	D	L	G	V	T	Y	V	V	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L
UniRef90_E4TBD5	M	I	A	S	V	N	L	D	G	S	I	A	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L		
UniRef90_E8RFV2	M	L	K	D	L	G	V	S	L	A	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_L8XVS6	M	L	K	D	I	G	C	A	Q	Y	V	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_G8ULQ5	M	V	A	S	T	G	A	K	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_E3BA45	F	L	A	K	L	G	C	T	Y	A	C	V	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_B3F1J6	M	L	K	D	I	G	C	R	Y	V	V	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_J9Y3M3	M	L	E	E	L	G	A	K	W	C	I	V	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_R5UT49	M	V	A	S	T	G	S	T	H	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_UPI00034DA605	M	L	A	K	L	G	C	S	Y	V	L	A	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_V2YCM1	M	L	K	E	A	G	A	K	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_F2ND84	M	L	K	D	V	G	C	R	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_B7C8R0	M	L	E	E	M	G	V	K	Y	C	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_A6GS73	M	L	K	E	F	G	V	K	Q	V	L	V	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_I3YFH8	M	L	A	E	F	G	C	C	Y	V	I	C	V	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L
UniRef90_UPI00039F2D22	M	L	V	D	V	G	A	R	Y	G	L	V	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_S6GC79	M	L	R	D	V	G	C	G	Y	V	L	I	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_S6HXM2	Q	L	V	D	A	G	C	K	L	V	L	V	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_B0TGK3	M	L	K	A	L	G	C	R	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_Q0PIF8	M	L	K	A	L	D	C	K	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_UPI00035F79BC	Q	L	D	S	I	L	G	L	D	F	A	V	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_A8KYR6	M	L	A	R	L	G	C	S	Y	V	V	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_R9AAV2	Q	L	K	D	F	D	L	K	W	T	L	T	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_A6VM53	M	L	K	D	F	G	A	K	Y	I	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_UPI00037EF08C	M	L	K	E	L	G	A	R	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_F2NUQ8	M	L	K	D	L	G	V	Q	C	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_UPI0002555F5A	M	I	K	E	F	G	C	K	Y	A	I	V	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_UPI00026C7EAE	M	L	K	D	Y	N	C	R	Y	V	L	V	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_M7ML58	F	L	S	R	D	L	G	C	S	Y	V	L	V	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L
UniRef90_UPI0003B3C869	F	L	A	K	L	G	C	T	Y	V	V	V	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_K1LB81	L	L	A	E	V	G	V	Q	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_K4JG61	M	L	K	D	L	G	V	G	T	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_I7A3G6	Q	L	S	D	A	G	C	E	W	V	L	V	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_A6SY03	M	L	K	E	F	D	C	R	Y	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A	V	N	K	K	A	H	A	A	F	A	N	G	L	
UniRef90_G4D133	M	L	T	D	L	N	V	T	H	V	I	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	E	A														

[illegible]

			170	180	190	200
UniRef90_UPI000289E918	I	A Y E P I	W A	GS G K T A T A A D A N E V C G A I	R Q A I A G E I G E E T A	
UniRef90_H8XTJ3	L	A Y E P V	W A	GT G E T A S P E Q A Q E M H A F I	R N L V D K V F G N E S V A	
UniRef90_E8JEV3	I	A Y E P I	W A	GT G E T A S A A N A D E V C G A I	R K A L R E K D Y G D E S V A	
UniRef90_C9AC97	I	A Y E P I	W A	GT G K S A D A A D E I C C G V V	R K T V R E K L Y G K E S V S	
UniRef90_UPI0003806EFF	I	A Y E P I	W A	GT G K S A T K E D D A Q N M C K A V	R D V V A S E D F G G Q E V A	
UniRef90_E1SSS6	I	A Y E P L	W A	GT G K S A T P E Q A Q E V H A Y I	R R R L S E R V S P Y I G	
UniRef90_B9NSF5	V	A Y E P I	W A	GT G K S V P T G D E I G E V H D F I	R R R L S E R R F G E I V G	
UniRef90_R5SM91	I	A Y E P I	W A	GT G K T A T G E Q A A E V C G F I	R A T I R A M Y G A R I V A	
UniRef90_B8E2R2	I	A Y E P V	W A	GT G H S A K A G E D A N E V A K L I	R R I S E I T S D E E V S A	
UniRef90_UPI0003B7635E	L	A Y E P I	W A	GT G K S S A K A D E T C G V I	R A T V S D L T S K E V A	
UniRef90_C9LYH5	I	A Y E P I	W A	GT G K T A T F E Q A A E V C A A I	R A T V A E V F N K D A A	
UniRef90_L0GFQ0	I	A Y E P V	W A	GS G L T A T P E Q A Q E V H A A I	R E Q L S R Q D R D E V A	
UniRef90_W5XBC7	V	A Y E P V	W A	GT G K T C D T A E A E R V C G M I	R S E L S R Q F D E D T A	
UniRef90_UPI0003826830	L	A Y E P V	W A	GT G K T A T S D Q A Q E I H A H I	R S V I E S K Y G K S D V A	
UniRef90_UPI0004647BD4	L	A Y E P V	W A	GT G R N A T P E Q A Q E A H A L L	R Q E V E K F H G K S I A	
UniRef90_V4LFC7	I	A Y E P V	W A	GT G V T A T P E Q A Q D V H A F I	R G R I A A K S Q Q I V A	
UniRef90_R6FLB2	V	A Y E P V	W A	GT G R T A T P E Q A D Q M C R F I	R M T L A E M Y G F E T A	
UniRef90_B6YRU5	L	A Y E P V	W A	GT G R T A T P V Q V Q E M H I F I	R Q L L I D N Y G G D I A	
UniRef90_UPI0001FFE3E9	L	A Y E P V	W A	GT G K V A G P P D A Q E V C C A A I	R E T L Q E L Y G Q D V A	
UniRef90_C8WI01	V	A Y E P I	W A	GT G R T A T P E Q A A E V C C A I	R A T L A D L Y G A E V A	
UniRef90_D1XX05	L	A Y E P I	W A	GT G K T A T A E Q A E E M C C A I	R Q V A E N Y N Q E V A	
UniRef90_D7BNV9	I	A Y E P I	W A	GT G E V A T P A D A Q E V C G A I	R G K I A E M F D A P T A	
UniRef90_E4TBD5	I	A Y E P V	W A	GT G E T A T A E Q A Q E V H A F I	R N M I A E K Y G K E V A	
UniRef90_E8RFV2	L	A Y E P V	W A	GT G K T A S A S K E E V H A F I	R Q L L A A M Y E K S V A	
UniRef90_L8XVS6	V	A Y E P V	W A	GT G K S A S A E I A N E V H A F I	F C T L I G K S G D E V A	
UniRef90_G8ULQ5	L	A Y E P V	W A	GT G K T A T A E Q A Q E I H A H I	R H T I A Q Q Y G P E V A	
UniRef90_E3BA45	V	A Y E P V	W A	GT G E V A T P A D A Q E V C A A V	R V A L A D A F D P A L A	
UniRef90_J3FIJ6	I	A Y E P V	W A	GT G E T A T P E Q A Q A V H R Y I	R E W L A E Q D R Q A A	
UniRef90_B9Y3M3	L	A Y E P I	W A	GT G K S A T K E I A Q N C C H I V	R D L V R V M F G D E A A	
UniRef90_R5UT49	L	A Y E P V	W A	GT G K T A T S A Q A Q E M H A F I	R K V L T E K Y G K E I A	
UniRef90_UPI00034DA605	I	A Y E P V	W A	GT G E V A T P D D A Q E V C C G A V	R A T L A G L Y G D E A T A	
UniRef90_V2YCM1	I	A Y E P L	W A	GT G K T A T A E Q A G E V C Q A I	R T V I R K L Y G A H V A	
UniRef90_F2ND84	I	A Y E P V	W A	GT G R T A T P E Q A Q E V H S F I	R Q L L A K Q V R P D I A	
UniRef90_B7C8R0	I	A Y E P I	W A	GT G K S A S V E I A E N C C K I V	R D Q V K V M Y G E E A A	
UniRef90_A6GS73	I	A Y E P V	W A	GT G V T A S P E Q A Q E V H A M I	R A R L N A M L G P E V A	
UniRef90_I3YFH8	I	A Y E P V	W A	GT G M T A T P E Q A Q D V H A F I	R Q R I A E R S Q T I A	
UniRef90_UPI00039F2D22	L	A Y E P I	W A	GT G R T A T P E Q A Q A V H A F I	R G E V A K S D A R I A	
UniRef90_S6GC79	V	A Y E P I	W A	GT G E T A S P E Q A Q E M H S Y I	R T V L A E Q I S V A M A	
UniRef90_S6HXM2	I	A Y E P V	W A	GT G L T A S P D D A Q D V H A A I	R A Q L A Q K N S E V A	
UniRef90_B0TGK3	I	A Y E P I	W A	GT G R T A S P D D A Q V C A F I	R S V M A R L A G E G A	
UniRef90_Q0PIF8	I	A Y E P V	W A	GT G K T A S S A D A Q K V C R F I	R S V L S S W H G D T A	
UniRef90_UPI00035F79BC	I	A Y E P V	W A	GT G K T A T P E Q A Q E I H A F I	R K V L K D E F G V D V A	
UniRef90_A8KYR6	V	A Y E P V	W A	GT G R T A S A Q D A Q D M C A A V	R G Q L T K L Y D E P I A	
UniRef90_R9AAV2	I	A Y E P V	W A	GT G K V A T P E I A Q E A H K D I	R Q W L T T N L G Q D A A	
UniRef90_A6VM53	I	A Y E P I	W A	GT G K S A T P A Q A Q A V H A F I	R A H I A A K S Q A V A	
UniRef90_UPI00037EF08C	I	A Y E P V	W A	GT G K T A S P E Q A Q D I H H F I	R H V L S E H S D A D L A	
UniRef90_F2NUQ8	I	A Y E P V	W A	GT G K T A T P E D A E A I H K F V	R G Y I A K L Y N Q K V A	
UniRef90_UPI0002555F5A	I	A Y E P I	W A	GT G K T A T P E I A Q N V H S Q I	R A Y L A S F N A D V A	
UniRef90_UPI00026C7EAE	V	A Y E P V	W A	GT G K T A L P E Q A Q E V H Q F I	R K L I A E I N H S D A	
UniRef90_M7ML58	V	A Y E P V	W A	GT G E V A G P E D A Q E L C A A I	R T E L A Q L F G D E T A	
UniRef90_UPI0003B3C869	V	A Y E P V	W A	GT G E V A T P D D A Q E V C C A V	R E T V A E L V G R S D V A	
UniRef90_K1LB81	I	A Y E P I	W A	GT G K S S A E I A N E T C G F I	R S V V E E L Y S Q D V A	
UniRef90_F4GJ61	I	A Y E P V	W A	GT G K T A T P D D A D N A H A Y I	R G L I N G L Y G K D V A	
UniRef90_I7A3G6	V	A Y E P V	W A	GS G L T A T P E Q A Q E V H A A I	R K Q L A R E D Q R V A	
UniRef90_A6SY03	V	A Y E P V	W A	GT G K T A T P A M A Q E V H A M L	R K Q L Q A K N A E A A	
UniRef90_G4D133	I	A Y E P T	W A	GT G D V C P E D A E E M A K F I	R E T I E G L Y G K E V S	
UniRef90_W0EJT6	V	A Y E P T	W A	GT G R T A S P Q D A Q E M C A A I	R A T L A R L A A E A A	
UniRef90_UPI0002ECC8EE	I	A Y E P V	W A	GT G R T A S P E Q A Q E V M A G I	R A Y Q A G F D A S L A	
UniRef90_A8ZTP5	L	A Y E P V	W A	GT G K T A S R E Q A Q E A H A F I	R S V V E K L F G G P A A	
UniRef90_A7INK7	I	A Y E P V	W A	GT G R T P T A E D V A N I H G T I	R S V L R S Q F G A E A	
UniRef90_UPI0004009643	I	A Y E P V	W A	GS G K T P T A E E A Q A V I Q A I	R A E L A D L A G A D T A	
UniRef90_UPI00039C825C	L	A Y E P V	W A	GT G K T A T P Q M A Q E A H F F L	R G C V A K K S E Q V A	
UniRef90_A2SFM4	V	A Y E P V	W A	GT G R T A S P E Q A Q A V H A L L	R A Q L L A A A T P R A	
UniRef90_UPI00030438A1	I	A Y E P I	W A	GT G K T C S S E D A E N M C R E I	R G I T N K N Y G E V S	
UniRef90_S3XUI8	I	A Y E P V	W A	GT G E V A T S E D A Q E V C R E I	R D L L R T K F G D E V A	
UniRef90_UPI000369AE4D	V	A Y E P V	W A	GT G M T A T P E Q A Q A V H K F I	R D L L A S S S E D I A	
UniRef90_S4XM39	I	A Y E P V	W A	GT G K V A R A E D A Q E V H A F I	R G L L A K A S E D L A	
UniRef90_E3H220	V	A Y E P V	W A	GT G K V A T A D D A Q E M S A A I	R A E F E K L Y S A D V A	
UniRef90_U6MH12	L	A Y E P I	W A	GT G Q T A T P D M A Q Q T H K E I	R Q W L R K N V G Q Q I A	
UniRef90_C5KSY9	I	A Y E P V	W A	GT G H S A S P E D V E A V H A S L	R Q W L A G K L G R A T A	
UniRef90_UPI00037CBC0F	I	A Y E P V	W A	GT G Q T A S D E Q A Q E A H S F I	R G L V A G L F N Q E T A	
UniRef90_B0U800	I	A Y E P V	W A	GT G L T P T P E D V A Q V H G L I	R R D L T E R L G A E G	
UniRef90_UPI00026C73FA	I	A Y E P V	W A	GT G E V A T P D D A Q E V C S A I	R E A L R A M H G D T V A	
UniRef90_Q1QMJ6	V	A Y E P V	W A	GT G R T P T P K D V Q D V H G F I	R D Q L T Q R F S G E G A	
UniRef90_K1M4Q9	I	A Y E P V	W A	GT G E T A T P E Q A Q E I H A H I	R K V L A S K F G E E V A	
UniRef90_L9PDH0	V	A Y E P V	W A	GT G K T A T P Q I A Q E A H A L L	R A R V A Q K N A P V A	
UniRef90_Q2JX75	I	A Y E P I	W A	GT G K T C A A E A N R V I G L I	R Q H L G	
UniRef90_UPI00035E0B50	V	A Y E P V	W A	GS G K T A T P E D A Q E V C S A I	R Q E L R K I G S D E I A	
UniRef90_B1R147	I	A Y E P I	W A	GT G K T A T P E D A Q A N E T I K A I	R G I V A E E M F G S D E V A	
UniRef90_D1BHK5	I	A Y E P V	W A	GT G E V A T P Q D A Q E V A G A I	R V R L A E L Y S A D V A	
UniRef90_A0A022LJ47	I	A Y E P V	W A	GT G K T A S A A D A Q E V C A A I	R E A L A E L S D P G T A	
UniRef90_Q67SW4	I	A Y E P V	W A	GT G R N C D P G D A Q A R I A A V	R A V V A E S A F G P E A A	
UniRef90_UPI00046F2FF5	I	A Y E P I	W A	GT G K T A T A Q D A Q D V C L A I	R Q N L A K I Y D Q T T A	
UniRef90_UPI0003B30EB3	V	A Y E P V	W A	GT G K T A G P E D A Q E M S A A I	R S K L T E L Y G D E F A	
UniRef90_F5T2Y6	L	A Y E P V	W A	GT G R S A T P E W A Q D V H S F M	R Q R V A K H D K E I A	
UniRef90_X7E3G1	V	A Y E P V	W A	GT G L S A S A E Q A Q E V H E S I	R A F L A K S S E S V S	
UniRef90_U2RMX0	I	A Y E P V	W A	GT G E V A T P E D A Q E V C G A I	R R A V T E L Y D E A T G	
UniRef90_E1VIO2	L	A Y E P V	W A	GT G V T A T P A Q A Q E V H A F I	R Q M L A A S S R E V A	
UniRef90_UPI0003B56848	L	A Y E P V	W A	GT G E T A S P E Q A Q E M H A F I	R K T V D D K F G P T V S	
UniRef90_G0AJX6	V	A Y E P V	W A	GT G K T A T P Q M A Q D V H L A I	R A M L A G K N P T A A	
UniRef90_R8ALS2	I	A Y E P V	W A	GT G K S A T P A Q A Q A V H A F I	R G H V A K H D A N V A	
UniRef90_I0AP96	I	A Y E P V	W A	GT G R T A T P Q Q A Q E V H N F I	R K L L A N M Y S K D F A	

	210	220	230	240
UniRef90_UPI000289E918	E K T R I I Q Y G G S V K P S N L S E F L S T E H I D G A L V I G G A S L E V D Y L			
UniRef90_H8XTJ3	E N V T R I L Y G G S V K P D N N A K E I F S K Q P D V D G G L V I G G A S L E Q A D F F			
UniRef90_E8JEV3	D A T R I R L Y G G S V K P G N I K E L F S K Q P D V D G G L V I G G A S L K A D F F			
UniRef90_C9AC97	D S V R I R L Y G G S V K P E N I A E E Y M A K E N V D G A L V I G G A S L Q A D F F			
UniRef90_UPI0003806EFF	D K V R I R L Y G G S V N P A N I A E Y M A K Q P D V D G A L V I G G A S L E P S F F T			
UniRef90_E1SSS6	E N I R I R L Y G G S V K A S N A A D L F A Q P S D V D G G L V I G G A S L N A E F F T			
UniRef90_B9NSF5	R S V R L L Y G G S V K P A G N A A D L F A V S N V D G A L V I G G A S L K A D F F A			
UniRef90_R5SMR1	R S V T I R L Y G G S M N P A N A A E L L G H E D I D G G L V I G G A S L D A K F F M			
UniRef90_B8E2R2	Q K V R I R L Y G G S V N P Q N I K E F L A Q S E I D G A L V I G G A S L K P Q F F W			
UniRef90_UPI0003B7635E	D K V R I R L Y G G S V K P N N I A E Y M A K E N I D G A L V I G G A S L Q P D F F L			
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UniRef90_V4LFC7	A	I	C	K	A		
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UniRef90_C8WI01	Q	L	I	N	A	C	
UniRef90_D1XX05	G	I	I	D	A		
UniRef90_D7BNV9	K	I	V	T	F	Q	Q
UniRef90_E4TBD5	K	I	I	E	A		
UniRef90_E8RFV2	R	I	A	R	F	R	
UniRef90_L8XVS6	Q	I	I	R	S	V	E
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UniRef90_A3Y8H1	R	Q	K	I	V	A	G	N	W	K	M	N	G	S	S	E	S	I	D	Q	L	V	V	G	L	N	A	I	D	N	A	P	V	E	V	V	V			
UniRef90_F3KPZ6	R	K	L	I	A	G	N	W	K	M	N	G	S	L	A	A	N	A	A	L	L	Q	T	I	L	S	G	V	R	Q	P	A	C	A	V	A	V			
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UniRef90_B7A7G4	R	R	V	L	V	A	G	N	W	K	M	H	K	V	P	S	E	A	R	V	W	L	A	E	I	K	R	L	P	P	L	D	S	E	A	A	V			
UniRef90_M5DJY8	R	S	K	L	V	A	G	N	W	K	M	H	G	G	M	V	Q	N	R	D	L	L	A	E	I	V	A	G	T	A	A	H	K	A	G	F	A	V		
UniRef90_Q1MZR8	R	R	T	F	V	A	G	N	W	K	M	N	G	S	K	A	E	N	Q	S	R	L	E	A	L	V	A	A	L	Q	R	Q	D	I	D	M	A	V		
UniRef90_B2JA20	R	K	L	V	I	A	G	N	W	K	M	F	K	T	Q	A	E	T	Q	E	F	L	Q	G	F	L	P	H	L	T	P	Q	G	R	E	V	I	L		
UniRef90_I4F074	R	R	P	L	I	A	G	N	W	K	M	H	L	T	H	L	E	A	I	G	L	V	Q	K	L	A	F	S	L	T	E	A	Q	A	E	V	V	V		
UniRef90_UPI0002DB7331	R	R	P	L	I	A	G	N	W	K	M	N	L	D	H	V	Q	G	I	T	L	L	Q	K	L	A	W	T	L	D	D	A	R	A	E	V	A	V		
UniRef90_C7JHB8	R	Q	I	I	V	I	G	N	W	K	M	N	G	L	S	R	D	S	Q	E	L	V	K	A	I	T	S	G	L	P	A	N	S	A	D	V	V	V		
UniRef90_A0L8V0	R	A	L	I	A	G	N	W	K	L	N	G	T	T	Q	A	A	T	A	L	A	T	A	V	R	D	G	V	A	A	P	D	C	D	V	L	V			
UniRef90_W7CTG4	R	K	P	I	I	A	G	N	W	K	M	N	K	T	A	A	T	A	A	E	F	I	E	S	V	K	N	K	V	P	S	H	E	I	D	S	V	V		
UniRef90_B6BBV3	R	R	K	L	A	A	G	N	W	K	M	N	G	T	G	A	A	L	A	E	L	A	A	L	A	E	S	H	P	A	P	A	A	D	I	L	I			
UniRef90_UPI0003B51387	R	R	P	L	V	A	G	N	W	K	M	H	G	T	R	G	S	I	A	K	L	V	T	E	L	S	V	Q	A	M	P	A	D	V	D	V	A	I		
UniRef90_A0A024PY51	R	T	P	L	I	A	G	N	W	K	M	N	G	S	H	A	L	V	D	A	F	G	R	A	F	A	D	T	A	L	P	D	S	L	D	V	I	V		
UniRef90_I1ARZ9	R	T	K	L	A	A	G	N	W	K	M	N	G	L	T	Q	A	L	S	E	L	S	E	G	M	E	E	A	A	K	G	A	S							
UniRef90_UPI0002E455ED	A	I	R	K	M	V	A	G	N	W	K	M	N	G	S	K	E	L	V	Q	L	S	E	A	I	N	N	V	K	S	D	E	I	N	V	V	V			
UniRef90_G0QUL1	A	V	R	L	F	V	G	G	N	W	K																													
UniRef90_C7HU94	R	T	P	V	I	V	I	G	N	W	K	M	N	M	T	P	S	E	A	K	S	L	L	E	E	L	V	E	L	D	L	D	E	S	V	E	K	G		
UniRef90_Q21YC9	R	K	K	L	I	A	G	N	W	K	M	N	G	S	L	A	A	N	E	A	L	V	K	G	L	R	V	G	V	G	A	S	V	C	Q	V	A	L		
UniRef90_Q0B082	R	R	R	L	I	A	A	N	W	K	M	N	K	S	I	R	E	A	E	D	F	A	R	E	F	L	Q	L	I	P	D	A	N	S	E	I	V	I		
UniRef90_U2B8D8	R	R	P	L	V	A	G	N	W	K	M	H	G	T	R	A	S	V	A	E	L	T	E	E	L	R	Q	L	E	F	P	A	E	V	E	V	A	V		
UniRef90_V4YRK6	R	K	K	L	I	A	G	N	W	K	M	N	G	S	R	S	G	N	A	D	L	L	Q	A	I	V	A	G	L	P	V	G	V	C	D	V	V	V		
UniRef90_UPI00047AD5E5	R	K	K	V	I	F	G	N	W	K	M	N	G	T	N	A	A	V																						

UniRef90_Q8DKA0	C	V	P	S	Y	T	C	L	V	L	S	K	S	L	H	A	G	T	N	V	I	K	L	V	G	A	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P			
UniRef90_U0100040DF388	A	P	S	F	V	N	L		A	Q	A	V	K	Q	T	A	G	T	N	V	I	K	L	V	G	A	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P			
UniRef90_T2DK51	C	A	P	S	F	N	L		H	A	F					D	K	G	D	S	N	F	I	S	V	L	V	G	A	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P
UniRef90_UPI00046766CC	C	P	P	Y	V	Y	L		S	Q	A	A	E	L		S	K	S	N	I	F	E	L	V	G	A	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P			
UniRef90_M1REU3	Y	P	P	C	L	Y	V		C	V	S	K	L			L	S	K	S	N	I	F	E	L	V	G	A	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P		
UniRef90_B7RHC8	C	P	P	A	P	L	L		Y	A	C	E	K	T	R	G	D	T	S	N	I	F	E	L	V	G	A	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P		
UniRef90_A4ATC25	I	P	P	F	T	D	L		R	S	V	Q	T	L	V	D	G	T	S	N	I	F	E	L	V	G	A	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P		
UniRef90_A3SY95	P	P	A	P	Y	L			P	A	V	T	K	A	Q	G	T	S	N	I	F	E	L	V	G	A	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P			
UniRef90_UPI000376D42D	F	P	P	F	T	D	L		R	S	V	Q	A	A	D	K	L	P	L	A	F	I	G	G	A	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P				
UniRef90_UPI000041C609E	C	P	P	F	T	L		D	R	A	V	A	E	V	K	D	T	D	L	A	F	I	G	G	A	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P				
UniRef90_B4E5M4	C	V	P	F	T	Y	L		Q	V	Q	A	Q	L	G	G	G	R	V	A	F	I	G	G	A	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P				
UniRef90_E1QL68	C	P	N	F	V	C	L		E	A	V	R	A	V	A	G	S	P	H	L	V	Q	V	G	G	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P				
UniRef90_J1TCP4	C	P	P	A	T	L		Y	V	A	T	A	L	T	D	S	P	H	L	V	A	I	S	L	G	A	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P			
UniRef90_UPI0004708D26	A	P	P	V	I	Y	L		D	Q	A	K	A	L	S	G	S	H	L	V	A	I	S	L	G	A	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P			
UniRef90_Q1AUH8	F	A	P	F	T	C	L		E	V	A	R	M	A	E	G	S	G	V	V	L	A	G	A	Q	N	M	V	H	Q	W	A	D	Q	G	A	F	T	G	E	I	S	V	P	P					
UniRef90_K9Q481	C	T	P	F	T	D	L		I	M	S	K	L	H	A	G	T	R	I	R	L	G	L	A	A	Q	N	M	V	H	Q	W	A	D	Q	G	A													

UniRef90_Q8DKA0	M	L	V	E	L	G	V	R	Y	V	I	L	G	H	S	E	R	R	Q	Y	F	G	E	T	D	A	T	V	N	Q	R	V	L	R	A	Q	S	H	G	L						
UniRef90_UPI00040DF388	M	L	K	S	E	L	K	V	N	T	V	I	L	G	H	S	E	R	R	R	E	D	F	G	E	T	N	S	E	L	V	A	K	K	K	C	V	L	R	A	G	L				
UniRef90_T2DK51	M	L	K	E	A	G	C	K	Y	A	I	V	L	G	H	S	E	R	R	R	E	D	Q	Q	G	E	T	N	S	E	L	V	A	K	K	K	C	V	L	R	A	G	L			
UniRef90_UPI00046766CC	M	L	A	D	L	G	C	R	Y	V	I	V	L	G	H	S	E	R	R	R	R	M	Q	G	E	T	S	D	Q	V	A	E	K	F	H	A	A	Q	Q	A	G	L				
UniRef90_M1REU3	M	V	K	S	C	G	A	E	Y	I	V	L	V	G	H	S	E	R	R	H	I	F	K	E	E	T	S	D	E	L	V	R	K	K	V	I	S	L	S	L	E	G	L			
UniRef90_B7RHC8	M	I	A	D	T	G	A	S	Y	V	I	V	L	G	H	S	E	R	R	R	D	H	E	E	T	S	D	E	L	V	R	K	K	A	R	A	A	W	A	A	G	L				
UniRef90_A4TC25	F	L	A	K	L	G	C	T	F	A	V	V	L	G	H	S	E	R	R	T	Y	G	E	E	T	S	D	E	L	V	A	A	K	A	T	A	A	L	K	H	G	L				
UniRef90_A3SY95	M	I	K	E	V	G	A	T	Y	V	I	V	L	G	H	S	E	R	R	D	A	Y	G	E	E	T	S	D	E	L	V	A	A	K	A	Q	A	A	W	D	A	G	L			
UniRef90_UPI000376D42D	F	L	A	A	L	E	S	R	Y	V	I	V	L	G	H	S	E	R	R	T	L	H	A	E	E	T	S	D	E	L	V	A	G	K	V	A	A	A	L	H	N	I				
UniRef90_UPI00041C609E	M	L	A	D	L	G	A	R	Y	V	I	V	L	G	H	S	E	R	R	R	V	L	N	G	E	E	T	S	D	E	L	V	L	G	K	A	L	A	A	H	R	A	G	L		
UniRef90_B4E5M4	M	V	A	E	F	G	A	R	Y	A	I	V	L	G	H	S	E	R	R	A	Y	H	G	E	E	T	S	E	K	T	V	A	A	K	T	Q	R	A	A	L	R	A	G	L		
UniRef90_E1QL68	M	L	R	S	V	G	A	S	H	V	I	V	L	G	H	S	E	R	R	Q	A	Y	F	G	E	E	T	S	E	K	T	V	A	R	M	R	K	L	J	A	A	L	R	H	G	L
UniRef90_J1TCP4	M	I	A	D	I	C	Y	G	T	Y	V	I	V	L	G	H	S	E	R	R	T	D	Y	H	E	E	T	S	D	E	L	V	R	A	K	A	Q	A	A	Y	Q	A	D	L		
UniRef90_UPI0004708D26	M	L	K	D	I	G	A	K	Y	I	V	L	V	G	H	S	E	R	R	T	T	Y	H	K	E	E	T	S	D	E	L	V	T	K	K	A	F	A	V	L	K	E	A	G	L	
UniRef90_Q1AUH8	M	L	L	D	V	G	A	R	A	S	I	V	L	G	H	S	E	R	R	R	E	L	F	C	E	E	T	S	D	E	L	V	A	R	K	K	A	R	R	A	V	E	A	G	L	
UniRef90_K9Q481	M	L	T	E	V	G	V	R	Y	V	V	L	V	G	H	S	E	R	R	Q	Y	F	G	E	E	T	S	D	E	L	V	N	Q	R	K	L	K	A	A	Q	R	H	S	L		
UniRef90_B1I0X8	M	L	A	E	I	G	C	R	Y	V	I	V	L	G	H	S	E	R	R	Q	Y	F	G	E	E	T	S	D	E	L	V	N	Q	R	K	A	W	A	A	L	R	A	G	L		
UniRef90_UPI00047C846B	M	L																																												

UniRef90_Q8DKA0	T	P	I	L	C	V	G	E	T	K	A	Q	R	A	A	G	E	T	E	N	H	I	F	Q	Q	L	A	L	D	L	V	D	V	D	Q	T	N	L	V					
UniRef90_UPI00040DF388	T	I	I	F	C	F	G	E	S	E	L	E	R	D	R	A	N	E	N	V	F	V	F	E	Q	Q	L	R	L	D	F	H	I	G	E	A	D	W	S	K	T	V		
UniRef90_T2DK51	T	P	I	L	C	V	G	E	S	E	L	E	R	D	R	A	N	E	N	V	F	V	F	E	Q	Q	L	D	A	L	I	N	A	M	E	L	S	K	T	V				
UniRef90_UPI00046766CC	T	P	I	L	C	V	G	E	S	E	L	E	R	D	R	A	N	E	N	V	F	V	F	E	Q	Q	L	L	T	V	V	K	G	L	E	A	F	A	R	A	V			
UniRef90_M1REU3	K	V	M	L	C	V	G	E	T	L	E	E	R	D	R	A	N	E	N	V	F	V	F	E	Q	Q	L	K	L	A	L	V	A	G	L	E	E	W	F	E	N	I		
UniRef90_B7RHC8	T	A	I	V	I	V	G	E	T	L	G	D	D	R	E	A	D	N	T	F	D	I	A	I	E	A	G	Q	S	G	S	L	P	D	G	A	T	E	D	N	T	V		
UniRef90_A4TC25	T	P	I	V	I	V	G	E	S	Q	L	E	V	R	E	A	G	T	H	V	E	F	N	V	N	S	L	R	G	S	S	L	S	A	E	Q	I	A	Q	T	V			
UniRef90_A3SY95	T	A	I	V	I	V	G	E	S	E	A	D	R	S	G	T	T	F	D	V	I	A	E	A	E	Q	L	A	G	S	L	P	D	G	C	T	G	E	N	T	V			
UniRef90_UPI000376D42D	A	P	I	V	I	V	G	E	T	A	E	D	L	E	T	H	G	A	S	A	V	P	V	A	A	Q	L	R	A	A	L	S	R	V	D	S	A	A	D	F	V			
UniRef90_UPI00041C609E	I	S	I	V	I	V	G	E	T	T	R	H	E	R	D	E	G	R	A	L	E	V	V	V	G	E	Q	L	R	G	S	L	P	E	G	A	T	S	R	N	L	V		
UniRef90_B4E5M4	T	P	V	I	V	I	V	G	E	T	L	D	E	R	E	S	G	A	T	E	Q	V	V	V	G	A	Q	L	D	A	V	L	T	A	D	E	A	A	R	I	V			
UniRef90_E1QL68	K	P	I	V	I	V	G	E	T	Q	A	D	E	R	E	S	G	Q	T	D	D	V	L	A	S	Q	L	A	L	A	G	L	S	A	A	E	M	V	K	V	T			
UniRef90_J1TCP4	T	A	I	V	I	V	G	E	T	T	G	D	E	R	D	A	Y	Q	T	E	D	I	L	K	R	Q	L	S	G	S	L	P	E	A	T	A	E	N	T	V				
UniRef90_UPI0004708D26	I	P	V	L	C	V	G	E	T	E	S	E	N	E	R	D	A	G	K	T	E	E	V	C	A	R	Q	I	D	A	N	A	L	G	A	D	A	F	K	E	N	D	A	V
UniRef90_Q1AUH8	L	P	V	L	C	V	G	E	T	E	S	E	N	E	R	D	A	G	R	M	W	E	K	V	S	G	Q	V	R	A	V	V	E	G	L	G	D	A	S	R	V	V		
UniRef90_K9Q481	I	P	I	V	I	V	G	E	S	K	A	Q	R	D	A	G	E	T	D	T	V	I	A	N	Q	L	A	K	D	L	V	D	V	D	Q	N	L	L	V					
UniRef90_B1I0X8	V	P	I	V	I	V	G	E	S	L	D	E	R	E	A	G	R	T	E	K	V	V	T	A	Q	L	Q	G	C	L	A	G	L	P	A	D	A	V	A	V				
UniRef90_UPI00047C846B	T	P	V	L	C	V	G	E	T	L	A	Q	R	E	A	G	E	T	E	A	V	I	A	A	Q	L	L	A	V	L	N	G	V	A	S	F	D	T	A	V				

UniRef90_Q8DKA0	I	A	Y	E	P	I	W	A	I	G	T	G	D	T	C	E	E	T	E	A	N	R	V	I	G	L	I	R	S	Q	L	I	R	N	
UniRef90_UPI00040DF388	L	A	Y	E	P	V	W	A	I	G	T	G	V	T	A	S	A	E	Q	A	Q	E	M	H	A	F	I	R	T	G	L	L	R	N	
UniRef90_T2DK51	I	A	Y	E	P	I	W	A	I	G	T	G	K	T	A	S	P	E	Q	A	Q	E	V	H	H	R	F	I	R	G	Y	F	F	K	
UniRef90_UPI00046766CC	V	A	Y	E	P	V	W	A	V	G	T	G	K	T	A	S	P	E	Q	A	E	E	V	H	H	R	F	I	R	A	E	L	L	K	
UniRef90_M1REU3	I	A	Y	E	P	V	W	A	I	G	T	G	K	S	A	N	P	E	Q	A	S	K	I	H	S	F	I	K	D	I	J	A	K	K	
UniRef90_B7RHC8	I	A	Y	E	P	I	W	A	I	G	T	G	K	I	A	P	T	L	A	Q	I	I	E	V	H	S	D	F	I	R	A	R	L	I	
UniRef90_A4TC25	I	A	Y	E	P	V	W	A	I	G	T	G	R	V	A	S	A	A	D	A	Q	E	V	C	H	K	A	I	R	D	E	L	G	N	
UniRef90_A3SY95	L	A	Y	E	P	I	W	A	I	G	T	G	K	I	L	P	T	L	D	Q	I	V	E	V	H	H	D	F	I	R	A	T	L	A	
UniRef90_UPI000376D42D	V	A	Y	E	P	V	W	A	I	G	S	G	Q	A	A	T	P	E	Q	A	E	Q	V	A	A	A	L	R	A	V	I	A	E	E	
UniRef90_UPI00041C609E	V	A	Y	E	P	V	W	A	I	G	T	G	L	V	P	T	N	E	Q	I	E	V	H	A	A	L	R	Q	M	L	A	E	E	R	
UniRef90_B4E5M4	V	A	Y	E	P	V	W	A	I	G	T	G	K	S	A	T	S	A	Q	A	Q	D	V	H	A	F	I	R	T	R	L	A	A	K	
UniRef90_E1QL68	L	A	Y	E	P	V	W	A	I	G	T	G	L	T	A	S	D	E	Q	A	Q	Q	V	H	A	F	I	R	A	W	L	A	A	R	
UniRef90_J1TCP4	I	A	Y	E	P	V	W	A	I	G	T	G	L	T	P	T	A	K	D	V	E	I	V	H	A	F	I	R	D	E	L	V	L	R	
UniRef90_UPI0004708D26	I	A	Y	E	P	I	W	A	I	G	T	G	K	S	A	T	P	A	Q	A	Q	A	I	L	H	Q	F	I	R	Q	H	I	A	K	
UniRef90_Q1AUH8	F	A	Y	E	P	I	W	A	I	G	T	G	K	T	A	S	P	E	A	Q	A	Q	A	I	I	G	R	I	R	G	L	L	R	E	
UniRef90_K9Q481	I	A	Y	E	P	I	W	A	I	G	T	G	E	T	C	D	A	K	E	A	N	R	V	I	G	L	I	R	E	K	J	L	T	N	
UniRef90_B10X8	I	A	Y	E	P	V	W	A	I	G	T	G	R	T	A	S	D	A	K	E	A	N	R	V	I	G	L	I	R	A	E	L	V	A	
UniRef90_UPI00047C846B	I	A	Y	E	P	V	W	A	I	G	T	G	R	T	A	T	P	E	Q	A	Q	Q	V	H	H	F	I	R	S	Q	L	R	E	A	
UniRef90_UPI000262B2CD	V	A	Y	E	P	V	W	A	I	G	S	G	Q	A	A	T	P	E	Q	A	Q	E	V	A	R	A	L	R	E	H	L	R	D	L	
UniRef90_I0HPF9	V	V	Y	E	P	V	W	A	I	G	T	G	R	T	A	T	P	E	Q	A	Q	A	V	H	A	V	L	R	A	Q	L	R	A	A	
UniRef90_B3R3W5	L	A	Y	E	P	V	W	A	I	G	T	G	K	T	A	T	S	E	Q	A	Q	A	V	H	A	F	I	R	G	Q	V	A	A	R	
UniRef90_Q59994	I	A	Y	E	P	I	W	A	I	G	T	G	D	T	C	A	A	T	E	A	N	R	V	I	G	L	I	R	E	Q	L	T	N		
UniRef90_UPI00047E61DF	V	A	Y	E	P	V	W	A	I	G	T	G	E	V	A	G	P	E	D	A	Q	E	M	C	A	A	L	R	A	E	L	E	K		
UniRef90_G4T820	I	A	Y	E	P	V	W	A	I	G	T	G	K	V	A	T	P	Q	M	A	Q	D	V	H	H	A	V	L	R	A	Q	V	J		
UniRef90_UPI00037FF762	L	A	Y	E	P	V	W	A	I	G	T	G	K	T	A	S	P	Q	M	A	Q	D	V	H	H	A	V	L	R	A	Q	V	J		
UniRef90_A1SWS5	I	A	Y	E	P	V	W	A	I	G	T	G	K	V	A	S	S	E	Q	A	Q	D	V	H	A	H	I	R	T	W	L	A	E		
UniRef90_A1SJQ1	I	A	Y	E	P	I	W	A	I	G	T	G	E	V	A	T	P	D	D	A	Q	Q	E	V	C	H	A	I	R	R	E	R	I		
UniRef90_UPI0003B77319	L	A	Y	E	P	V	W	A	I	G	T	G	L	T	A	T	P	E	Q	A	Q	A	V	H	A	S	L	R	A	V	V	A	A	V	
UniRef90_UPI00037E9826	V	A	Y	E	P	V	W	A	I	G	T	G	R	T	A	S	A	E	Q	A	Q	A	A	H	A	F	I	R	G	Q	L	A	A	A	
UniRef90_U2U1B4	I	A	Y	E	P	I	W	A	I	G	T	G	K	T	A	T	A	D	D	A	Q	E	V	C	H	G	A	I	R	E	T	L	T	E	
UniRef90_UPI0003B3A8E4	L	A	Y	E	P	V	W	A	I	G	T	G	R	T	A	S	V	E	Q	V	E	V	H	H	R	H	L	R	S	K	I	S	T		
UniRef90_B2T2E5	V	A	Y	E	P	V	W	A	I	G	T	G	K	S	A	S	S	E	Q	A	Q	A	V	H	A	F	I	R	A	R	L	A	A	K	
UniRef90_B2V9Z2	I	A	Y	E	P	V	W	A	I	G	T	G	K	N	A	T	K	E	Q	A	Q	E	V	H	H	F	I	R	T	L	I	A	N	E	
UniRef90_UPI00047EB3FD	V	V	Y	E	P	V	W	A	I	G	T	G	K	T	A	S	P	E	E	A	Q	A	V	H	A	V	L	R	A	Q	L	K	A	A	
UniRef90_A0A037URR1	I	A	Y	E	P	I	W	A	I	G	T	G	K	T	A	T	A	E	I	A	Q	N	V	C	A	L	I	R	A	K	I	A	S	L	
UniRef90_A3Y8H1	I	A	Y	E	P	V	W	A	I	G	T	G	L	S	A	S	A	E	Q	A	Q	E	V	H	K	A	I	R	E	H	I	A	K	S	
UniRef90_F3KPZ6	V	A	Y	E	P	V	W	A	I	G	T	G	K	T	A	T	P	E	Q	A	Q	A	V	H	A	V	L	R	A	Q	L	Q	A	A	
UniRef90_A0A059LJC9	V	V	Y	E	P	V	W	A	I	G	T	G	K	V	A	T	P	E	Q	A	Q	E	V	H	A	W	I	R	A	W	M	E	G	R	
UniRef90_B7A7G4	I	A	Y	E	P	V	W	A	I	G	T	G	K	N	A	T	P	E	D	A	E	A	M	H	H	Q	A	I	R	Q	A	L	A	E	
UniRef90_Q5MDJY8	L	A	Y	E	P	V	W	A	I	G	T	G	K	T	A	T	P	G	A	Q	E	V	H	A	F	I	R	D	R	I	A	A	H	S	
UniRef90_Q1MZR8	V	A	Y	E	P	V	W	A	I	G	T	G	K	T	A	S	P	E	Q	A	Q	E	V	H	H	S	A	I	R	A	Q	L	A	E	
UniRef90_B2JA20	I	A	Y	E	P	I	W	A	I	G	T	G	E	T	C	E	A	V	E	A	N	R	I	I	G	L	I	R	S	Q	L	A	S	N	
UniRef90_I4F074	V	A	Y	E	P	V	W	A	I	G	T	G	E	V	A	T	P	D	D	A	Q	E	V	C	H	A	L	R	A	R	L	A	A	E	
UniRef90_UPI0002DB7331	V	A	Y	E	P	V	W	A	I	G	T	G	E	V	A	G	P	D	D	A	Q	E	M	C	A	A	L	R	A	E	L	G	S	L	
UniRef90_C7JHB8	L	A	Y	E	P	I	W	A	I	G	T	G	L	A	A	T	T	D	Q	I	A	E	T	M	K	F	I	R	E	E	L	V	R	Q	
UniRef90_A0L8V0	V	A	Y	E	P	V	W	A	I	G	T	G	K	V	A	S	A	Q	A	Q	E	A	H	A	F	I	R	G	L	A	K	E	L	G	
UniRef90_W7CTG4	L	A	Y	E	P	I	W	A	I	G	T	G	K	S	S	T	A	E	L	A	N	E	Y	C	H	A	I	R	E	V	V	A	S	A	
UniRef90_B6BBV3	I	A	Y	E	P	V	W	A	I	G	T	G	K	V	P	T	L	E	Q	I	A	E	V	H	H	D	F	I	R	A	E	L	A	T	
UniRef90_UPI0003B51387	I	A	Y	E	P	I	W	A	I	G	T	G	L	T	A	S	P	E	Q	A	Q	E	I	H	A	Q	I	R	A	H	V	A	Q	S	
UniRef90_A0A024PY51	I	A	Y	E	P	V	W	A	I	G	T	G	R	T	A	T	P	E	Q	A	Q	D	V	M	A	A	I	R	E	Y	Q	S	G	F	
UniRef90_I1ARZ9	I	A	Y	E	P	I	W	A	I	G	T	G	K	V	P	T	T	D	Q	I	G	E	V	H	H	D	F	M	R	A	R	L	E	K	
UniRef90_UPI0002E455ED	V	A	Y	E	P	V	W	A	I	G	T	G	K	T	A	S	P	E	Q	A	Q	E	H	V	H	K	F	I	R	D	K	I	A	S	
UniRef90_QOQUL1	I	A	Y	E	P	V	W	A	I	G	T	G	K	V	A	S	P	A	Q	A	Q	E	V	H	H	D	F	I	R	G	Y	L	A	Q	
UniRef90_C7HU94	I	A	Y	E	P	I	W	A	I	G	T	G	K	T	A	S	A	E	D	A	D	D	M	C	H	A	F	I	R	N	Y	I	K	E	
UniRef90_Q21YC9	V	V	Y	E	P	V	W	A	I	G	T	G	K	T	A	S	I	E	Q	A	Q	Q	E	M	H	S	V	L	R	Q	Q	L	Q	A	
UniRef90_Q0B082	V	A	Y	E	P	V	W	A	I	G	T	G	V	N	A	S	S	D	D	A	Q	E	M	I	A	F	I	R	S	Q	C	L	E	K	
UniRef90_U2B8D8	V	A	Y	E	P	V	W	A	I	G	T	G	L	T	A	T	P	E	Q	A	Q	Q	V	H	A	A	I	R	A	Q	V	A	Q	A	
UniRef90_V4YRK6	V	V	Y	E	P	V	W	A	I	G	T	G	Q	T	A	T	P	E	Q	A	Q	E	V	H	A	V	L	R	A	Q	L	R	A	A	T
UniRef90_UPI00047AD5E5	I	A	Y	E	P	I	W	A	I	G	T	G	K	T	A	T	S	E	D	A	E	V	V	C	H	A	I	R	E	N	L	A	A	I	
UniRef90_B2G617	V	A	Y	E	P	S	W	A	I	G	T	G	E	S	A	D	P	E	Q	A	A	E	G	C	H	A	I	R	Q	T	I	S	D	M	
UniRef90_S2LSH2	I	A	Y	E	P	V	W	A	I	G	T	G	K	T	A	S	P	E	Q	A	Q	A	V	H	A	A	I	R	A	R	L	K	E	Y	
UniRef90_C7NP17	I	A	Y	E	P	V	W	A	I	G	T	G	E	V	A	S	S	A	D	A	Q	E	V	C	H	A	I	R	R	E	Q	V	A	H	
UniRef90_UPI00037566F1	V	A	Y	E	P	V	W	A	I	G	T	G	K	T	A	S	A	A	Q	V	T	E	T	H	A	F	V	H	E	E	L	T	R	H	
UniRef90_G8THS8	I	A	Y	E	P	I	W	A	I	G	T	G	K	T	A	T	S	E	Q	A	Q	E	M	H	A	F	I	R	S						

UniRef90_Q8DKA0	P	D	V	P	I	Q	Y	G	G	S	V	N	A	N	N	I	D	A	I	M	A	P	P	E	I	D	G	V	L	V	G	G	A	S	L	P	Q	Q	F	G												
UniRef90_U000040DF388	E	E	T	T	S	I	L	Y	G	G	S	V	K	P	D	N	A	A	E	I	F	A	S	K	P	E	I	D	G	G	L	L	V	G	G	A	S	L	K	A	D	F	I	L								
UniRef90_T2DK051	Q	G	L	R	I	L	Y	G	G	S	V	K	P	D	N	A	A	K	T	I	F	A	Q	N	D	I	V	D	D	G	L	L	V	G	G	A	S	L	K	A	D	F	I	L								
UniRef90_UPI00046766CC	P	K	T	Q	I	L	Y	G	G	S	V	N	P	G	N	A	E	Q	L	F	A	L	P	P	N	V	D	D	G	L	L	V	G	G	A	S	L	K	N	A	D	F	I	L								
UniRef90_M1REU3	D	I	R	L	V	L	Y	G	G	S	V	N	P	Q	N	A	K	E	F	L	K	A	P	N	V	D	D	D	G	L	L	V	G	G	A	S	L	K	A	D	F	I	L									
UniRef90_B7RHC8	N	A	I	R	L	V	L	Y	G	G	S	V	K	P	D	N	A	A	E	I	F	T	A	E	N	V	D	D	G	L	L	V	G	G	A	S	L	K	A	D	F	I	L									
UniRef90_A4TC25	A	G	V	R	V	L	Y	G	G	S	V	N	A	K	N	V	G	E	I	V	G	V	D	N	V	D	D	D	G	L	L	V	G	G	A	S	L	K	A	D	G	E	Q	F	I	L						
UniRef90_A3SY95	D	A	L	R	L	L	Y	G	G	S	V	K	P	D	N	A	A	E	I	F	K	V	D	N	V	D	D	D	G	L	L	V	G	G	A	S	L	K	A	D	F	I	L									
UniRef90_UPI000376D42D	A	K	T	R	I	L	Y	G	G	S	V	K	S	G	N	I	A	G	F	M	R	E	P	N	V	D	D	D	G	L	L	V	G	G	A	S	L	D	V	E	F	F	A	I	L							
UniRef90_UPI000041C609E	H	S	V	K	I	L	Y	G	G	S	V	K	T	S	N	A	E	A	I	F	G	L	R	N	V	D	D	D	D	G	L	L	V	G	G	A	S	L	K	A	E	F	F	A	I	L						
UniRef90_B4E5M4	A	D	V	S	V	L	Y	G	G	S	V	K	P	D	N	A	E	E	I	F	A	Q	P	N	D	I	V	D	D	D	G	L	L	V	G	G	A	S	L	K	A	E	F	F	A	I	L					
UniRef90_E1QL68	N	S	G	I	L	Y	G	G	S	V	K	P	A	N	A	A	G	L	L	R	A	Q	K	D	I	V	D	D	D	G	L	L	V	G	G	A	S	L	K	A	D	F	F	L	I	L						
UniRef90_J1TCP4	K	G	M	R	I	L	Y	G	G	S	V	K	P	A	N	A	N	A	E	L	L	A	V	D	N	V	D	D	D	G	L	L	V	G	G	A	S	L	K	A	D	F	F	L	I	L						
UniRef90_UPI0004708D26	E	Q	V	I	I	Q	Y	G	G	S	V	N	D	K	N	A	A	E	I	F	T	Q	P	P	N	V	D	D	D	G	L	L	V	G	G	A	S	L	K	A	D	F	F	A	I	L						
UniRef90_Q1AUH8	E	E	A	R	L	L	Y	G	G	S	V	K	P	E	N	I	S	E	I	M	A	Q	K	D	I	V	D	D	D	G	L	L	V	G	G	A	S	L	E	V	S	F	F	A	I	L						
UniRef90_K9Q481	K	N	V	T	I	Q	Y	G	G	S	V	K	P	A	N	V	D	E	I	M	A	Q	P	E	I	V	D	D	D	D	G	L	L	V	G	G	A	S	L	K	A	D	F	F	A	I	L					
UniRef90_B110X8	D	R	V	R	I	Q	Y	G	G	S	V	K	P	E	N	T	R	A	L	I	S	Q	P	P	N	V	D	D	D	G	L	L	V	G	G	A	S	L	K	V	E	F	F	A	I	L						
UniRef90_UPI00047C846B	R	L	T	R	L	L	Y	G	G	S	V	K	P	A	N	A	A	E	L	F	A	Q	A	D	V	D	D	D	D	G	L	L	V	G	G	A	S	L	K	T	A	D	F	F	L	I	L					
UniRef90_UPI000262B2CD	A	R	T	R	I	L	Y	G	G	S	V	A	S	Q	N	I	A	G	F	M	R	Q	P	P	N	V	D	D	D	D	G	L	L	V	G	G	A	S	L	K	V	E	F	F	T	I	L					
UniRef90_I0HPF9	T	M	R	I	L	Y	G	G	S	V	K	A	D	N	A	A	T	I	F	A	Q	P	D	I	V	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	K	A	D	F	F	L	I	L				
UniRef90_B3R3W5	G	R	M	A	I	L	Y	G	G	S	V	K	P	D	N	A	A	E	L	F	S	M	T	D	I	V	D	D	D	D	G	L	L	V	G	G	A	S	L	K	K	S	E	F	F	L	I	L				
UniRef90_Q59994	S	Q	V	T	I	Q	Y	G	G	S	V	N	A	N	N	V	D	E	I	M	A	Q	P	E	I	V	D	D	D	D	G	L	L	V	G	G	A	S	L	E	P	Q	E	F	F	A	I	L				
UniRef90_UPI000047E61DF	A	K	V	R	L	Y	G	G	S	V	K	G	A	N	A	A	S	I	L	Q	R	D	P	N	V	D	D	D	D	G	V	L	V	G	G	A	S	L	K	D	P	E	F	F	A	I	L					
UniRef90_G4T820	E	T	I	R	I	L	Y	G	G	S	V	T	G	T	S	G	E	L	L	S	A	Q	P	D	V	D	D	D	D	D	G	F	L	V	G	G	A	S	L	K	P	E	F	F	I	L	L					
UniRef90_UPI00037FF762	A	G	V	Q	I	L	Y	G	G	S	V	M	K	P	D	S	A	K	E	L	M	A	Q	P	D	I	V	D	D	D	D	G	L	L	V	G	G	A	S	L	K	A	D	F	F	L	I	L				
UniRef90_A1SWS5	A	K	V	Q	I	L	Y	G	G	S	V	K	A	S	A	K	E	L	M	F	A	Q	P	D	I	V	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	V	E	F	F	L	I	L				
UniRef90_A1SJQ1	D	G	V	R	V	L	Y	G	G	S	V	K	A	A	N	V	A	G	I	M	A	K	D	D	V	D	D	D	D	G	G	L	L	V	G	G	A	S	L	Q	A	E	F	F	G	I	L	L				
UniRef90_UPI0003B77319	E	A	L	R	I	A	Y	G	G	S	V	K	A	A	N	A	A	G	L	F	A	N	A	D	I	V	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	D	A	E	F	F	L	I	L			
UniRef90_UPI00037E9826	N	S	T	R	I	L	Y	G	G	S	V	K	A	D	N	A	A	E	L	F	A	N	A	D	I	V	D	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	K	A	E	F	F	L	I	L		
UniRef90_U2U1B4	D	G	I	R	I	L	Y	G	G	S	V	A	K	P	D	N	V	A	G	F	L	E	K	Q	D	V	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	A	D	F	F	L	I	L				
UniRef90_UPI0003B3A8E4	D	R	T	R	I	L	Y	G	G	S	V	K	P	D	N	V	S	D	L	M	S	I	E	D	N	V	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	D	A	D	F	F	L	I	L			
UniRef90_B2T2E5	A	D	V	P	L	L	Y	G	G	S	V	K	P	E	N	A	E	E	L	F	R	Q	P	D	I	V	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	K	D	D	F	F	L	I	L			
UniRef90_B2V9Z2	E	T	T	R	I	L	Y	G	G	S	V	N	E	N	N	A	K	D	L	I	S	Q	K	N	V	D	D	D	D	D	D	G	F	L	V	G	T	A	S	L	K	D	P	K	F	Y	I	L	L			
UniRef90_UPI00047EB3FD	A	R	V	K	I	L	Y	G	G	S	V	M	N	P	V	N	A	A	S	L	L	A	Q	P	D	I	V	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	A	D	F	F	L	I	L			
UniRef90_A0A037URR1	N	V	I	R	I	Q	Y	G	G	S	V	K	P	E	N	I	Q	E	L	L	A	Q	P	D	I	V	D	D	D	D	D	D	G	L	L	V	G	G	A	S	L	E	P	K	F	I	L	L				
UniRef90_A3Y8H1	E	K	V	R	I	L	Y	G	G	S	V	K	A	S	S	S	S	E	L	F	T	M	P	D	I	V	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	V	E	F	F	L	I	L				
UniRef90_F3KPZ6	G	R	I	R	I	L	Y	G	G	S	V	M	N	A	A	A	A	S	L	L	A	Q	P	D	I	V	D	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	A	D	F	F	L	I	L			
UniRef90_A0A059LJC9	Q	A	V	R	I	L	Y	G	G	S	V	T	E	A	S	A	G	V	L	A	A	Q	P	D	V	D	D	D	D	D	D	G	F	L	V	G	G	A	S	L	K	A	D	F	F	L	I	L				
UniRef90_B7A7G4	S	R	V	R	V	L	Y	G	G	S	V	N	P	K	N	F	A	D	L	L	A	S	M	P	N	V	D	D	D	D	D	D	G	L	L	V	G	G	A	S	L	E	L	E	F	F	L	I	L			
UniRef90_M5DJY8	A	G	L	K	I	L	Y	G	G	S	V	K	A	N	N	A	E	E	L	F	A	M	Q	D	I	V	D	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	V	A	E	F	F	L	I	L		
UniRef90_Q1MZR8	E	A	M	Q	I	L	Y	G	G	S	V	K	P	E	N	A	A	I	F	A	Q	Q	D	I	V	D	D	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	A	E	F	F	L	I	L			
UniRef90_B2JA20	N	V	S	I	L	Q	Y	G	G	S	V	K	P	N	N	I	D	E	I	M	A	Q	P	E	I	V	D	D	D	D	D	D	G	V	L	V	G	G	A	S	L	K	E	P	E	F	F	A	I	L	L	
UniRef90_I4F074	A	A	I	R	L	L	Y	G	G	S	V	K	A	G	N	T	A	G	I	L	A	G	P	D	V	D	D	D	D	D	D	D	D	G	L	L	V	G	G	A	S	L	D	A	E	F	F	A	I	L	L	
UniRef90_UPI0002DB7331	G	K	V	R	M	L	Y	G	G	S	V	K	A	A	N	T	A	G	I	L	K	G	K	D	V	D	D	D	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	D	A	E	F	F	A	I	L	L
UniRef90_C7JHB8	K	V	I	K	I	L	Y	G	G	S	V	N	A	G	N	A	A	T	L	P	I	P	E	V	D	V	D	D	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	A	D	F	F	L	I	L		
UniRef90_A0L8V0	D	A	V	R	I	L	Y	G	G	S	V	M	K	P	D	N	A	K	E	L	L	G	Q	A	D	I	V	D	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	A	D	F	F	L	I	L		
UniRef90_W7CTG4	E	A	V	R	I	Q	Y	G	G	S	V	K	P	E	N	I	A	S	Y	M	A	Q	S	D	I	V	D	D	D	D	D	D	D	G	L	L	V	G	G	A	S	L	K	E	A	E	F	F	L	I	L	
UniRef90_B6BBV3	D	S	I	R	L	L	Y	G	G	S	V	K	P	S	N	A	A	E	I	F	A	V	S	N	V	D	D	D	D	D	D	D	D	G																		

UniRef90_Q8DKA0	R	I	V	N	Y	K
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UniRef90_UPI00046766CC	A	I	C	R	A	A
UniRef90_M1REU3	E	I	V	N	A	C
UniRef90_B7RHC8	P	I	L	K	A	
UniRef90_A4TC25	A	T	L	S	A	
UniRef90_A3SY95	P	I	L	Q	A	
UniRef90_UPI000376D42D	A	I	V	R	Y	Q
UniRef90_UPI00041C609E	G	I	I	S	A	A
UniRef90_B4E5M4	A	I	C	R	A	A
UniRef90_E1QL68	G	I	I	A	A	
UniRef90_J1TCP4	A	I				
UniRef90_UPI0004708D26	V	I	V	N		
UniRef90_Q1AUH8	Q	L	V	E	A	A
UniRef90_K9Q481	R	L	V	N		
UniRef90_B1I0X8	G	I	I	R		
UniRef90_UPI00047C846B	A	I	C	A	A	A
UniRef90_UPI000262B2CD	R	I	I	Q	F	Q
UniRef90_I0HPF9	A	I	C	R	A	A
UniRef90_B3R3W5	A	I	G	N	A	
UniRef90_Q59994	R	I	V	N	F	Q
UniRef90_UPI00047E61DF	S	I	V	R	F	E
UniRef90_G4T820	N	I	I	N	V	N
UniRef90_UPI00037FF762	A	I	I	R	A	A
UniRef90_A1SWS5	G	I	I	E	G	A
UniRef90_A1SJQ1	G	I	C	R	F	Y
UniRef90_UPI0003B77319	A	I	C	A	A	A
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UniRef90_U2U1B4	A	M	V	K	A	A
UniRef90_UPI0003B3A8E4	K	I	I	N		
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UniRef90_F3KPZ6	S	I	I	N	A	A
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UniRef90_M5DJY8	A	I	C	R	A	A
UniRef90_Q1MZR8	A	I	C	D	A	A
UniRef90_B2JA20	R	I	V	N		
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UniRef90_UPI0002DB7331	S	I	V	R	F	E
UniRef90_C7JHB8	S	I	V	S	A	A
UniRef90_A0L8V0	A	I	M	D		
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UniRef90_C7HU94	Q	L	I	N		
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UniRef90_Q0B082	A	R	I			
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UniRef90_V4YRK6	S	I	I	Q	A	A
UniRef90_UPI00047AD5E5	A	L	V	N	Y	
UniRef90_B2G617	Q	L	V			
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UniRef90_C7NHI7	S	I	V	R	F	R
UniRef90_UPI00037566F1	A	I	V	N	A	A
UniRef90_G8THS8	T	I	I	N	S	
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UniRef90_UPI0003A5F34B	N	I	A	R		
UniRef90_T0SSY7						
UniRef90_L0NEE2	A	I				
UniRef90_W5TJW4	A	T	L	S	A	
UniRef90_B5YLS7	N	C	V	N		
UniRef90_UPI000255D1ED	K	I				
UniRef90_UPI00046EAF68	K	I	C	Q	A	A
UniRef90_K9SWD4	R	L	V	N	Y	
UniRef90_W1SI51	G	M	I	K		
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UniRef90_U6GH90	D	I	I	G	A	P
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UniRef90_I5C8I7	A	I	A	A	A	C
UniRef90_A8TL56	A	I	A	R	S	
UniRef90_UPI00047C6737	E	I	A	K	S	
UniRef90_E5YA42	D	I	V	R	A	
UniRef90_Q57D01	A	I	C	E		
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UniRef90_R5ZKZ3	A	L	V	E		
UniRef90_UPI0003AAF1C1	A	I	C	D	A	Y
UniRef90_R5AUD8	K	I	V	A	A	
UniRef90_UPI00037ED2B7	A	I	A	R	A	Y
UniRef90_C7RL15	G	I	V			
UniRef90_R5DNV2	E	I	I	E		
UniRef90_H0PVM0	E	I	C	R	A	A

	1			10		20		30		40																															
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UniRef90_A1WLP6		R	K	K	L	I	V	A	G	N	W	K	M	N	G	S	L	A	A	N	Q	D	L	L	Q	A	I	R	A	G	I	A	D	A	A	C	T	V	A	L	
UniRef90_UPI0003B68C37		R	T	K	L	I	V	A	G	N	W	K	M	N	G	S	L	A	A	N	Q	D	L	L	Q	A	I	R	A	G	I	A	D	A	A	C	T	V	A	L	
UniRef90_D3SFJ1		R	T	K	L	I	V	A	G	N	W	K	M	N	G	S	L	A	A	N	Q	D	L	L	Q	A	I	R	A	G	I	A	D	A	A	C	T	V	A	L	
UniRef90_Q6MSF2		K	K	K	V	I	F	G	N	W	K	M	N	G	T	N	E	S	L	T	D	F	L	L	N	Q	V	D	N	K	I	D	S	S	K	I	I	A	G	L	
UniRef90_B8C5E1	A	A	R	K	P	F	I	S	G	N	W	K	M	N	P	T	K	D	E	A	L	K	L	G	N	E	I	A	A	S	S	D	S	P	D	A	E	V	A	L	
UniRef90_T0R5L7		R	K	K	V	I	S	G	N	W	K	M	N	Q	N	L	A	E	V	R	T	F	F	N	E	L	S	S	F	K	P	D	W	K	C	V	A	G	I		
UniRef90_UPI0003147E29				L	L	V	A	G	N	W	K	M	H	G	D	L	S	A	N	A	F	V	V	A	E	L	T	A	E	V	S	G	L	A	C	R	A	A	L		
UniRef90_C7XX29		R	K	P	F	I	V	A	G	N	W	K	M	H	K	T	V	Q	E	S	A	D	F	V	K	A	I	K	D	H	L	P	D	P	K	V	E	V	G	I	
UniRef90_B0VFR7		R	K	I	Y	I	A	G	N	W	K	M	N	K	G	L	Q	E	T	K	N	F	L	E	T	V	L	N	K	L	K	L	E	N	V	I	P	L	I		
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UniRef90_A0A059DYS4		R	T	L	I	A	G	N	W	K	M	N	G	L	K	A	S	L	G	E	I	R	D	A	A	A	G	G	K	G	K	A	G	V	E	A	L	L	L		
UniRef90_A0NSY0		K	P	L	V	A	G	N	W	K	M	N	G	L	K	A	N	Q	A	E	I	Y	K	M	I	A	G	I	G	D	D	S	V	D	A	M	I	I			
UniRef90_C0W1G7				M	A	G	N	W	K	M	N	M	D	H	L	E	A	I	H	L	V	Q	G	L	H	G	Q	E	L	T	D	A	N	K	E	V	V	V			
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UniRef90_D2MMA1		R	K	P	I	V	A	G	N	W	K	M	N	K	T	P	V	E	T	E	A	F	V	K	E	I	E	A	V	L	T	D	E	K	A	D	Y	G	I		
UniRef90_E3BG27		R	R	P	V	V	M	A	N	W	K	M	N	G	S	K	N	M	V	T	E	L	L	S	G	L	S	R	E	L	Q	G	E	G	V	D	V	A	I		
UniRef90_UPI0003B33531		Q	K	I	F	A	G	N	W	K	M	N	K	T	R	A	Q	A	A	Q	S	A	S	D	L	A	K	G	L	M	P	B	G	Q	D	V	V	V	V		
UniRef90_UPI0002485BDB		R	T	P	L	I	A	G	N	W	K	M	N	L	N	H	L	E	A	L	Q	V	V	Q	K	F	D	F	A	L	P	Y	D	H	V	D	V	A	V		
UniRef90_V7F395		R	P	L	V	A	G	N	W	K	M	N	G	T	S	A	S	L	N	E	F	M	S	G	L	D	A	E	T			A	E	T	E	A	L	V	I		
UniRef90_D6ZCQ8	S	R	Q	P	L	I	A	G	N	W	K	M	N	L	N	H	F	E	A	I	A	L	V	Q	K	L	C	H	A	L	K	A	E	H	V	Q	T	S	V		
UniRef90_A7XK09																																									
UniRef90_A1AXX3		R	Q	I	I	I	A	G	N	W	K	M	N	A	S	K	E	A	T	N	T	L	V	I	G	I	L	S	G	M	A	D	V	K	S	K	V	I	V		
UniRef90_F8DRZ9		R	K	P	F	I	A	A	N	W	K	M	N	H	K	N	V	Q	E	S	V	E	F	V	D	A	I	K	G	K	L	P	D	P	E	V	E	V	G	I	
UniRef90_A4SJR1		R	K	P	F	V	A	A	N	W	K	M	N	H	G	S	R	Q	E	S	V	E	F	V	D	A	I	K	G	K	L	P	D	P	E	V	E	V	G	I	
UniRef90_UPI000305CA9E		R	K	K	I	V	A	A	N	W	K	M	N	G	R	Y	D	Q	V	K	L	L	L	Q	L	L	T	L	T	P	G	N	E	A	A	Q	C	V	V	V	
UniRef90_U4KJT0	K	R	V	P	V	I	A	A	N	W	K	M	N	K	S	K	D	E	A	L	E	F	I	F	K	V	N	Q	A	V	P	S	G	E	E	A	V	E	S	I	V
UniRef90_A0A011UD60		R	P	L	V	A	G	N	W	K	M	N	G	T	S	A	S	L	D	E	L	R	M	I	G	D	G	F	M	L	D	A	Q	T	E	A	L	I	I		
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UniRef90_S6A998		K	R	Y	Y	I	A	A	N	W	K	M	N	H	K	T	R	L	E	A	A	C	K	L	A	E	Q	M	R	E	G	L	K	D	G	S	N	Q	M	I	
UniRef90_B8J003				K	I	I	A	A	N	W	K	M	N	K	D	R	T	Q	A	A	T	T	A	G	E	L	A	A	V	L	P	P	A	G	R	E	V	I	V		
UniRef90_S5T2P4		R	K	T	L	I	A	A	N	W	K	M	N	L	D	H	I	Q	A	I	G	T	V	Q	K	L	A	F	A	L	P	K	K	H	V	D	V	A	L		
UniRef90_W8JQ71		R	E	R	Y	I	F	G	N	W	K	M	N	K	T	S	Q	E	A	K	E	Y	F	S	I	F	C	S	L	V	Q	D	I	Q	T	P	V	I	I		
UniRef90_A0Z555				L	V	I	A	N	W	K	M	N	H	G	S	L	A	L	I	E	E	F	S	Q	Q	W	R	G	L	P	Q	L	S	E	V	D	A	V	L		
UniRef90_A5EK22		R	P	L	I	A	G	N	W	K	M	N	G	L	K	A	S	T	A	E	F	E	A	M	L	A	A	A	E	V	T	G	K	A	D	L	L	V			
UniRef90_L0E0M1																																									
UniRef90_A8DJG3	A	Q	R	I	P	L	I	I	G	N	W	K	M	N	H	K	T	V	A	E	A	V	A	Y	V	T	A	F	L	P	Q	I	A	H	S	S	S	E	I	G	I
UniRef90_U7KLK5		R	T	P	L	I	A	G	N	W	K	M	N	L	D	H	V	E	A	I	G	S	V	Q	K	F	A	F	S	L	P	K	D	K	V	D	V	A	I		
UniRef90_K0C2B5		R	R	S	L	E	T	I	G	N	W	K	M	N	G	S	L	D	E	S	E	I	L	R	A	I	E	T	T	I	D	D	K	T	C	D	I	G	V	I	
UniRef90_L1ILQ4	A	A	R	V	P	F	I	A	G	N	W	K	M	N	P	T	V	E	E	A	I	S	L	A	K	A	I	A	D	G	K	G	S	S	K	A	Q	V	A	I	
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UniRef90_A8LPW1		R	R	K	L	A	A	G	N	W	K	M	N	G	L	R	A	A	L	A	E	A	E	A	I	T	A	A	A	A	D	G	P	E	V	L	L	C	I		
UniRef90_UPI000364D425	S	S	R	R	P	L	I	A	G	N	W	K	M	N	G	L	R	A	D	A	D	L	L	V	S	G	L	A	A	A	L	S	A	P	A	F	D	M	L	L	
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UniRef90_UPI00037FE075	A	G	R	R	S	L	I	I	A	N	W	K	M	N	G	I	D	L	M	C	T	S	I	A	T	L	V	G	K	E	F	D	T	D	I	A	V	I	I		
UniRef90_V6S0P8																																									
UniRef90_I1E241	S	R	K	A	L	I	A	A	N	W	K	M	N	G	S	A	L	A	L	V	K	E	M	T	N	T	L	Q	S	L	A	I	S	A	V	D	V	L	I		
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UniRef90_H9UA75																																									
UniRef90_D5WR89	A	A	R	K	P	L	L	A	A	N	W	K	M	N	K	T	P	E	E	A	L	A	F	W	R	E	F	S	G	R	L	E	S	E	R	V	E	V	I		
UniRef90_UPI00036BA2F7		K	K	L	V	A	A	N	W	K	M	N	G	E	G	S	W	S	T	A	A	L	A	S	L	L	G	D	N	M	P	E	N	V	Q	V	L	F	I		
UniRef90_Q1NKT3		R	T	P	L	L	A	G	N	W	K	M	N	H	L	D	Q	A	A	A	E	L	A	A	V	A	K	V	A	A	A	P	E	R	E	V	M	I	I		
UniRef90_K6QDT9	A	G	R	R	P	L	L	A	G	N	W	K	M	N	H	T	L	P	G	E	A	A	E	L	A	A	V	R	Q	G	L	E	G	S	A	E	V	L	C		
UniRef90_S5LYV3		R	K	Q	I	I	V	I	G																																

UniRef90_Y0KHV2	C	V	P	Y	P	Y	L	A	Q	A	Q	Q	L	L	S	S	A	I	A	W	G	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E			
UniRef90_A1WLP6	A	V	P	A	P	Y	L	A	Q	A	Q	Q	L	L	V	G	S	P	A	L	A	W	G	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E	
UniRef90_UPI0003B68C37	F	P	P	F	T	S	L	W	R	A	L	E	L	S	K	R	S	P	W	L	A	K	V	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E	
UniRef90_Q3SFJ1	C	P	P	A	V	Y	L	S	E	T	A	E	L	S	K	R	S	V	I	A	K	V	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E		
UniRef90_D6MSF2	A	V	P	Y	V	M	L	S	E	T	A	E	L	S	K	R	S	N	V	I	A	K	V	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E	
UniRef90_B8C5E1	F	V	P	Y	V	F	I	E	S	T	M	G	V	V	G	D	K	L	V	K	V	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E			
UniRef90_T0R5L7	A	P	Q	F	I	H	I	P	E	L	S	L	S	L	A	G	S	N	R	V	K	L	V	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E	
UniRef90_UPI0003147E29	C	V	P	A	V	Y	L	A	Q	M	Q	V	L	S	G	S	R	N	I	D	L	G	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E		
UniRef90_C7XX29	A	G	A	F	A	L	Y	M	H	E	A	A	A	K	S	G	L	R	I	L	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E				
UniRef90_B0VFR7	A	P	A	Y	P	F	L	E	A	L	K	G	S	Y	G	S	C	M	Q	V	L	S	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E		
UniRef90_UPI000378237D	C	P	P	F	T	A	L	V	M	V	E	Q	L	R	G	T	S	Y	G	L	S	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E			
UniRef90_UPI000464D587	C	P	P	S	T	L	L	Y	V	A	T	T	L	T	D	T	R	L	L	I	V	G	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E		
UniRef90_A0A059DYS4	C	V	P	A	T	L	L	T	V	A	A	E	A	H	G	S	E	L	K	V	L	G	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E		
UniRef90_A0NSY0	C	A	P	A	T	L	I	A	A	I	A	E	A	G	N	G	V	L	S	V	G	G	E	T	D	S	A	H	E	K	A	V	S	G	A	H	T	G	D	I	V	S	A	E
UniRef90_C0W1G7	I	P	P	F	T	D	I	R	S	V	Q	T	L	V	E	G	D	I	K	Y	G	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E			
UniRef90_UPI00036BDDC1	C	V	P	F	V	Y	L	D	V	V	R	A	N	V	I	K	K	I	G	L	G	A	Q	N	L	M	G	K	F	E	R	G	A	Y	T	G	E	V	S	A	E			
UniRef90_D2MMA1	G	A	P	F	I	D	L	D	V	A	V	R	H	A	K	H	L	L	I	A	A	E	N	C	H	E	K	D	N	G	A	Y	T	G	E	V	S	A	E					
UniRef90_E3BG27	A	P	P	T	L	Y	L	D	L	A	E	R	M	L	G	S	N	I	L	L	G	A	Q	N</																				

[illegible]

	130	140	150	160																																												
UniRef90_Y0KHV2	T	P	V	L	C	V	G	E	T	L	P	E	R	E	A	G	V	M	E	M	V	V	G	K	Q	L	D	T	I	V	I	R	Q	F	G	A	F	A	H	T	J							
UniRef90_A1WLP6	T	P	V	V	L	V	L	G	E	T	L	P	E	R	E	A	G	Q	T	E	R	V	V	V	R	R	Q	L	A	A	K	A	L	V	L	N	G	L	H	C	P	L	E	V	V			
UniRef90_UPI0003B68C37	Q	A	V	L	V	L	V	L	G	E	T	L	P	E	R	E	A	G	E	R	T	V	P	V	V	R	R	Q	L	D	A	V	L	L	D	G	V	L	E	A	F	D	R	A	V			
UniRef90_D3SFJ1	T	P	V	L	V	L	V	L	G	E	T	L	P	E	R	E	A	G	E	R	T	E	S	E	V	V	A	E	Q	L	D	A	V	L	L	D	G	V	L	E	A	F	D	R	A	V		
UniRef90_Q6MSF2	T	P	V	L	V	L	V	L	G	E	T	L	P	E	R	E	A	G	E	R	T	E	S	E	V	V	A	E	Q	L	D	A	V	L	L	D	G	V	L	E	A	F	D	R	A	V		
UniRef90_B8C5E1	S	V	M	L	V	L	V	L	G	E	T	L	P	E	R	E	A	G	E	R	T	E	S	E	V	V	A	E	Q	L	D	A	V	L	L	D	G	V	L	E	A	F	D	R	A	V		
UniRef90_T0R5L7	E	V	V	F	V	L	V	L	G	E	T	L	P	E	R	E	A	G	E	R	T	E	S	E	V	V	A	E	Q	L	D	A	V	L	L	D	G	V	L	E	A	F	D	R	A	V		
UniRef90_UPI0003147E29	T	P	V	V	L	V	L	V	L	G	E	T	L	P	E	R	E	A	G	E	R	T	E	S	E	V	V	A	E	Q	L	D	A	V	L	L	D	G	V	L	E	A	F	D	R	A	V	
UniRef90_C7XXZ9	T	P	V	V	L	V	L	V	L	G	E	T	L	P	E	R	E	A	G	E	R	T	E	S	E	V	V	A	E	Q	L	D	A	V	L	L	D	G	V	L	E	A	F	D	R	A	V	
UniRef90_B0VFR7	T	P	V	V	L	V	L	V	L	G	E	T	L	P	E	R	E	A	G	E	R	T	E	S	E	V	V	A	E	Q	L	D	A	V	L	L	D	G	V	L	E	A	F	D	R	A	V	
UniRef90_UPI000378237D	T	P	V	V	L	V	L	V	L	G	E	T	L	P	E	R	E	A	G	E	R	T	E	S	E	V	V	A	E	Q	L	D	A	V	L	L	D	G	V	L	E	A	F	D	R	A	V	
UniRef90_UPI000464D587	T	A	I	V	V	L	V	L	V	L	G	E	T	L	P	E	R	E	A	G	E	R	T	E	S	E	V	V	A	E	Q	L	D	A	V	L	L	D	G	V	L	E	A	F	D	R	A	V
UniRef90_A0A059DYS4	T	P	V	V	L	V	L	V	L	G	E	T	L	P	E	R	E	A	G	E	R	T	E	S	E	V	V	A	E	Q	L	D	A	V	L	L	D	G	V	L	E	A	F	D	R	A	V	
UniRef90_A0NSY0	V	A	I	V	V	L	V	L	V	L	G	E	T	L	P	E	R	E	A	G	E	R	T	E	S	E	V	V	A	E	Q	L	D	A	V	L	L	D	G	V	L	E	A	F	D	R	A	V
UniRef90_C0W1G7	T	P	V	V	L	V	L	V	L	G	E	T	L	P	E	R	E	A	G	E	R	T	E	S	E	V	V	A	E	Q	L	D	A	V	L	L	D	G	V	L	E	A	F	D	R	A	V	
UniRef90_UPI00036BDDC1	K	A	I	V	V	L	V	L	V	L	G	E	T	L	P	E	R	E	A	G	E	R	T	E	S	E	V	V	A	E	Q	L	D	A	V	L	L	D	G	V	L	E	A					

						170	180	190	200																																		
UniRef90_Y0KHV2	I	S	Y	E	P	I	W	A	I	G	T	G	L	A	T	P	E	Q	A	K	T	M	H	A	F	I	R	S	K	L	G	Q	S	D	A	S	I	E					
UniRef90_A1WLP6	L	A	Y	E	P	V	W	A	I	G	T	G	R	T	A	T	A	R	Q	A	Q	A	V	H	A	V	L	R	R	A	Q	L	G	A	A	S	H	A					
UniRef90_UPI0003B68C37	V	A	Y	E	P	V	W	A	I	G	T	G	L	N	A	T	A	R	E	Q	A	Q	E	V	C	Q	A	F	I	R	R	N	R	V	S	E	R	F	D	P	R	I	A
UniRef90_D3SFJ1	I	A	Y	E	P	V	W	A	I	G	T	G	L	T	A	T	S	E	D	A	E	E	V	C	K	Q	I	R	N	N	L	A	E	M	Y	D	K	N	T	A			
UniRef90_Q6MSF2	I	A	Y	E	P	I	W	A	I	G	T	G	K	V	A	T	P	E	I	A	Q	N	V	H	K	Q	C	R	D	L	A	E	M	Y	D	K	N	T	A				
UniRef90_B8C5E1	I	A	Y	E	P	V	W	A	I	G	T	G	V	T	A	T	P	E	I	A	Q	N	V	H	K	Q	C	R	D	L	A	E	M	Y	D	K	N	T	A				
UniRef90_T0R5L7	L	A	Y	E	P	V	W	A	I	G	T	G	L	T	A	T	S	E	D	A	E	E	V	C	K	Q	I	R	N	N	L	A	E	M	Y	D	K	N	T	A			
UniRef90_UPI0003147E29	V	V	Y	E	P	V	W	A	I	G	T	G	L	T	A	T	S	E	D	A	E	E	V	C	K	Q	I	R	S	Q	L	K	A	A	S	S	H	A					
UniRef90_C7XX29	I	S	Y	E	P	S	W	A	V	G	V	G	Q	R	A	T	A	L	A	E	E	G	C	R	Q	I	R	R	N	M	I	A	D	I	Y	T	Y	E	I	A			
UniRef90_B0VFR7	L	A	Y	E	P	V	W	A	I	G	T	G	K	T	A	T	P	S	Q	A	Q	E	V	H	N	L	I	R	N	W	L	K	S	N	Y	S	I	Y	D	S			
UniRef90_UPI000378237D	I	A	Y	E	P	V	W	A	I	G	T	G	L	N	A	D	E	S	Q	I	E	E	A	H	Q	F	I	K	Q	K	I	K	S	N	Y	S	I	Y	D	S			
UniRef90_UPI000464D587	I	A	Y	E	P	V	W	A	I	G	T	G	Q	T	P	G	P	E	D	Q	V	A	D	V	H	A	A	M	R	R	D	L	I	Q	R	F	G	E	A	G			
UniRef90_A0A059DYS4	I	A	Y	E	P	I	W	A	I	G	T	G	E	V	A	T	P	E	D	Q	I	D	E	V	H	T	A	I	R	T	R	L	A	E	R	F	G	A	D	G			
UniRef90_A0NSY0	I	A	Y	E	P	V	W	A	I	G	T	G	L	T	P	T	T	G	D	V	E	E	M	H	K	A	M	R	D	N	L	A	S	A	R	F	G	S	E	G	A		
UniRef90_C0W1G7	I	A	Y	E	P	I	W	A	I	G	T	G	E	V	A	T	P	E	D	A	Q	R	I	H	A	S	I	R	V	R	I	G	E	L	Y	D	E	T	A				
UniRef90_UPI00036BDDC1	I	A	Y	E	P	V	W	A	I	G	T	G	L	A	A	T	P	E	Q	V	Q	S	V	H	K	F	I	R	S	V	V	T	K	S	N	E	L	L	A				
UniRef90_D2MMA1	I	A	Y	E	P	I	W	A	I	G	T	G	K	S	A	D	S	N	T	A	E	A	C	C	Q	L	V	R	E	T	V	C	G	L	Y	D	E	S	T	A			
UniRef90_E3BG27	I	A	Y	E	P	I	W	A	I	G	T	G	K	A	A	T	A	E	D	A	Q	R	I	H	A	S	I	R	A	L	I	A	E	Q	S	Q	S	I	A				
UniRef90_UPI0003B33531	I	G	Y	E	P	V	W	A	I	G	T	G	K	V	A	G	P	E	E	V	L	D	A	H	A	V	T	R	A	L	L	K	K	L	V	G	E	T	A				
UniRef90_UPI0002485BDB	I	A	Y	E	P	V	W	A	I	G	T	G	K	V	A	S	A	A	D	A	Q	E	V	C	H	A	V	R	G	V	V	A	E	L	A	G	E	E	T	A			
UniRef90_V7F395	I	A	Y	E	P	V	W	A	I	G	T	G	L	T	P	T	A	E	D	V	A	E	A	H	A	H	I	R	Q	K	L	A	E	A	L	G	A	V	A				
UniRef90_D6ZCQ8	I	A	Y	E	P	V	W	A	I	G	T	G	R	V	A	S	P	K	D	A	Q	E	V	C	G	A	M	R	K	A	L	A	E	I	G	D	H	V	A				
UniRef90_A7XK09	I	A	Y	E	P	V	W	A	I	G	T	G	L	T	A	T	P	E	Q	A	Q	E	V	H	A	S	I	R	N	W	L	K	T	K	V	S	Q	S	A	A			
UniRef90_A1AXX3	V	A	Y	E	P	V	W	A	I	G	T	N	V	T	A	T	P	Q	Q	A	Q	E	D	T	H	A	F	I	R	S	M	L	A	E	Y	D	A	D	I	A			
UniRef90_F8DRZ9	V	S	Y	E	P	S	W	A	V	G	Y	G	Q	H	A	T	P	V	L	A	E	E	G	C	R	Q	I	R	R	T	I	A	D	N	Y	T	Y	E	I	A			
UniRef90_A4SJR1	I	A	Y	E	P	I	W	A	V	G	T	G	K	C	A	T	P	E	Q	A	Q	E	V	H	S	F	I	R	G	R	L	A	E	D	T	P	V	I	G				
UniRef90_UPI000305CA9E	V	A	Y	E	P	V	W	A	I	G	T	G	K	T	A	T	P	E	Q	A	Q	E	V	H	S	A	I	R	T	L	V	A	E	F	D	T	D	D	A				
UniRef90_U4KJT0	V	A	Y	E	P	R	W	A	I	G	T	G	K	N	A	T	A	K	E	A	S	G	V	I	T	H	I	R	E	K	I	A	S	L	Y	S	K	E	L	S			
UniRef90_A0A011UD60	I	A	Y	E	P	V	W	A	I	G	T	G	L	T	P	T	A	Q	D	V	A	A	A	H	A	H	I	R	A	Q	L	S	E	K	L	G	P	Q	A				
UniRef90_UPI00045EAD38	I	A	Y	E	P	V	W	A	I	G	T	G	K	T	A	T	P	E	I	A	Q	E	A	H	A	F	I	R	N	W	L	S	A	H	F	N	T	I	V	A			
UniRef90_S6A998	I	A	Y	E	P	V	W	A	I	G	T	G	K	N	A	T	P	E	D	A	D	L	I	H	S	Y	L	R	D	V	L	S	K	K	M	Y	N	E	K	I	S		
UniRef90_B8J003	I	A	Y	E	P	V	W	A	I	G	T	G	K	V	A	G	P	G	E	V	R	E	A	H	G	V	T	R	A	L	L	E	R	F	V	G	D	S	G				
UniRef90_S5T2P4	I	A	Y	E	P	V	W	A	I	G	T	G	K	V	A	S	A	A	D	A	Q	E	V	C	A	A	I	R	G	L	L	R	E	L	T	D	E	Q	T	A			
UniRef90_W8JQ71	I	A	Y	E	P	T	W	A	I	G	T	G	K	V	A	S	T	A	D	V	Q	E	A	H	V	F	C	R	Q	V	I	S	R	I	F	S	K	E	K	A			
UniRef90_A0Z555	V	A	Y	E	P	I	W	A	I	G	T	G	R	T	A	S	P	V	I	Q	A	D	D	M	H	G	V	I	R	Q	R	L	Q	E	H	F	G	A	G				
UniRef90_A5EK22	V	A	Y	E	P	V	W	A	I	G	T	G	L	T	P	T	A	K	D	V	E	Q	I	H	A	F	I	R	T	L	L	I	E	R	F	N	G	E	A				
UniRef90_L0E0M1	V	A	Y	E	P	V	W	A	I	G	T	G	L	T	A	T	P	A	D	Q	A	A	E	V	H	G	L	I	R	A	R	V	A	A	R	D	S	A	V	A			
UniRef90_A8DJG3	L	A	Y	E	P	V	W	A	I	G	T	G	R	A	A	T	P	E	V	A	Q	A	M	H	Q	H	I	R	A	L	W	A	D	H	F	G	A	S	A	A			
UniRef90_U7KLK5	I	A	Y	E	P	V	W	A	I	G	T	G	K	V	A	S	A	A	D	A	Q	E	V	C	A	A	I	R	E	L	V	K	E	L	A	G	D	E	V	A			
UniRef90_K0C2B5	L	A	Y	E	P	V	W	A	I	G	T	G	L	T	A	S	P	E	E	A	Q	K	V	H	A	F	I	R	A	L	V	S	E	R	D	V	N	A	A				
UniRef90_L1ILQ4	I	A	Y	E	P	V	W	A	I	G	T	G	L	V	C	D	A	S	V	A	Q	D	V	H	K	F	I	R	G	W	L	A	N	M	Y	D	Q	E	T	A			
UniRef90_UPI0003B6EA56	I	A	Y	E	P	V	W	A	I	G	T	G	K	T	A	T	N	E	Y	A	Q	V	M	C	N	H	I	R	A	K	L	L	L	L	L	L	L	L	L	L			
UniRef90_C7MND5	I	A	Y	E	P	I	W	A	I	G	T	G	R	T	A	T	P	E	A	A	Q	E	V	C	A	A	I	R	A	Q	V	A	L	D	F	T	A	E	T	A			
UniRef90_UPI00034905EF	I	A	Y	E	P	V	W	A	I	G	T	G	L	T	A	T	P	D	E	A	Q	A	A	M	G	A	I	R	G	W	L	E	A	L	N	S	D	L	A	A			
UniRef90_B0TWU2	I	A	Y	E	P	V	W	A	I	G	T	G	V	V	A	S	L	V	D	Q	V	Q	E	T	H	Q	F	I	R	S	L	V	A	K	V	D	E	N	L	A			
UniRef90_A8LPW1	V	A	Y	E	P	V	W	A	I	G	T	G	R	V	P	S	V	E	D	Q	I	G	E	V	H	D	F	I	R	A	R	L	E	Q	R	F	G	E	V	G			
UniRef90_UPI000364D425	L	A	Y	E	P	V	W	A	I	G	T	G	R	V	T	P	T	D	D	V	A	E	V	H	A	E	I	R	K	V	A	A	E	V	L	G	D	G	A	A			
UniRef90_Q1NBN4	V	A	Y	E	P	I	W	A	I	G	T	G	R	I	P	T	M	E	A	V	A	T	M	H	A	A	L	R	N	A	L	A	S	R	I	G	A	E	A	A			
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UniRef90_Y0KHV2	N	S	L	K	I	L	Y	G	G	S	V	N	A	P	Q	N	A	V	Q	L	F	S	V	N	G	I	D	G	G	L	V	G	K	L	Q	A	D	F	V							
UniRef90_A1WLp6	G	R	I	R	L	L	Y	G	G	S	V	N	A	A	N	A	A	A	Q	L	L	L	S	V	N	G	I	D	G	G	L	V	G	G	A	L	K	P	A	D	F	V				
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UniRef90_Q6MSF2	E	Q	I	L	I	Q	Y	G	G	S	V	K	P	S	N	I	A	G	E	Y	L	L	K	M	P	N	I	D	D	G	A	L	V	G	G	A	L	L	L	A	D	Y	L			
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UniRef90_B1VA75	F	P	A	Q	S	T	L	D	V	L	V	A	L	N	G	S	P	N	V	A	L	G	A	Q	N	A	F	H	A	E	Q	G	A	F	T	G	E	E	V	S	A	G	
UniRef90_UPI0003B63D44	F	P	A	S	L	Y	L	D	A	L	V	A	L	L	S	G	P	N	V	A	L	G	A	Q	N	A	F	H	A	E	Q	G	A	F	T	G	E	E	V	S	A	G	
UniRef90_F8LSQ7	S	P	P	A	L	Y	L	D	Y	V	R	Q	K	L	D	Q	K	F	G	V	A	L	G	A	Q	N	A	F	H	A	E	Q	G	A	F	T	G	E	E	V	S	A	G
UniRef90_D5BPF9	A	P	H	P	Y	I	L	P	M	S	I	R	L	A	Q	S	D	I	T	L	G	A	Q	N	A	F	H	A	E	Q	G	A	F	T	G	E	E	V	S	A	G		
UniRef90_E4PF39	C	P	P	H	P	Y	L	F	Q	V	R	D	L	L	Q	T	G	I	M	L	G	A	Q	N	A	F	H	A	E	Q	G	A	F	T	G	E	E	V	S	A	G		
UniRef90_UPI000360A0C8	C	A	P	Y	P	Y	L	A	Q	L	Q	R	S	L	Q	D	T	N	I	A	W	G	A	Q	N	A	F	H	A	E	Q	G	A	F	T	G	E	E	V	S	A	G	
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UniRef90_K0TM27	G	A	P	F	L	H	I	P	M	L	L	N	T	L	R	P	D	I	K	V	A	A	Q	N	A	F	H	A	E	Q	G	A	F	T	G	E	E	V	S	A	G		
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UniRef90_I1A7E2	A	A	P	F	T	N	L	A	A	F	K	E	N	A	K	V	K	E	L	S	L	G	A	Q	N	A	F	H	A	E	Q	G	A	F	T	G	E	E	V	S	A	G	
UniRef90_B7K1N5	A	P	F	T	A	L	G	T	M	S	K	S	L	H	G	G	L	I	R	V	L	G	A	Q	N	A	F	H	A	E	Q	G	A	F	T	G	E	E	V	S	A	G	
UniRef90_F6DC21	C	P	P	S	L	Y	V	S	A	V	Q	Q	L	T	S	S	S	V	K	V	G	A	Q	N	A	F	H	A	E	Q	G	A	F	T	G	E	E	V	S	A	G		
UniRef90_UPI000309DDA8	C	P	S	T	F	T	A	L	T	M	S	K	N	L	H	G	S	R	V	L	G	A	Q	N	A	F	H	A	E	Q	G	A	F	T	G	E	E	V	S	A	G		
UniRef90_I7L3B3	A	A	Q	D	L	F	L	D	M	V	R	A	T	E	K	S	P	I	H																								

UniRef90_I4ZVU1	L	L	A	D	S	G	L	G	Y	V	L	V	G	H	S	E	R	R	E	I	F	G	E	S	R	E	T	L	V	N	T	K	F	K	N	A	L	N	A	G	L	120			
UniRef90_C1DL89	M	L	E	E	L	G	V	R	Y	V	L	V	G	H	S	E	R	R	R	S	L	F	G	E	S	R	D	E	T	V	A	E	K	F	E	K	A	L	N	A	G	L			
UniRef90_B1VA75	N	L	V	S	L	G	V	K	Y	V	L	V	G	H	S	E	R	R	R	S	V	L	F	G	E	S	R	D	E	T	V	A	E	K	F	E	K	A	L	N	A	G	L		
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UniRef90_F8LSQ7	M	I	K	D	L	G	C	Q	W	V	L	V	G	H	S	E	R	R	R	H	V	F	G	E	S	R	D	E	T	V	A	E	K	F	E	K	A	L	N	A	G	L			
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UniRef90_E4PF39	M	L	Q	E	M	G	C	R	Y	A	L	V	G	H	S	E	R	R	R	L	L	F	G	E	S	R	D	E	T	V	A	E	K	F	E	K	A	L	N	A	G	L			
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UniRef90_UPI00047C9EDA	M	L	K	D	V	L	G	C	E	Y	A	L	V	G	H	S	E	R	R	R	Q	Y	F	L	G	E	S	R	D	E	T	V	A	E	K	F	E	K	A	L	N	A	G	L	
UniRef90_K0TM27	Q	L	K	D	L	G	L	E	V	W	V	L	G	H	S	E	R	R	R	E	G	F	G	E	S	R	D	E	T	V	A	E	K	F	E	K	A	L	N	A	G	L			
UniRef90_A0A011PA94	M	L	K	S	M	D	V	P	Y	V	I	L	G	H	S	E	R	R	R	S	E	R	F	G	E	S	R	D	E	T	V	A	E	K	F	E	K	A	L	N	A	G	L		
UniRef90_F8ES78	M	L	R	E	V	G	A	S	Y	V	I	L	G	H	S	E	R	R	R	M	E	Q	N	E	T	G	E	S	R	D	E	T	V	A	E	K	F	E	K	A	L	N	A	G	L
UniRef90_E3D0R7	M	L	A	D	F	G	C	A	Y	I	L	G	H	S	E	R	R	R	H	L	F	H	N	E	S	R	D	E	T	V	A	E	K	F	E	K	A	L	N	A	G	L			
UniRef90_I1A7E2	M	L	K	D	L	D	V	Q	Y	V	I	L	G	H	S	E	R	R	A	Y	F	H	N	E	S	R	D	E	T	V	A	E	K	F	E	K	A	L	N	A	G	L			
UniRef90_B7K1N5	M	L	T	E	L	G	V	E	Y	V	V	L	G	H	S	E	R	R	R	Q	Y	F	G	E	S	R	D	E	T	V	A	E	K	F	E	K	A	L	N	A	G	L			
UniRef90_F6DC21	M	L	V	D	M	G	V	P	Y	A	L	V	G	H	S	E	R	R	R	A	F	Y	G	E	S	R	D	E	T	V	A	E	K	F	E	K	A	L	N	A	G	L			
UniRef90_UPI000309DDA8	M	L	A	E	F	G	V	S	Y	V	I	L	G	H	S	E	R	R	R	Q	Y	F	G	E	S	R	D	E	T	V	A	E	K	F	E	K	A	L	N	A	G	L			
UniRef90_I7L3B3	A	L	K	D	I	G	A	K	Y	V	I	L	G	H	S	E																													

UniRef90_I4ZVU1	T	V	I	Y	C	V	G	E	S	L	E	Q	R	E	A	G	Q	A	E	A	V	V	L	Q	Q	I	C	A	A	V	V	E	A	E	Q	W	K	N	I	V			
UniRef90_C1DL89	V	P	V	L	C	V	V	G	E	T	L	A	Q	R	R	E	D	G	S	T	K	E	F	L	A	Q	Q	V	R	A	V	L	Q	G	G	A	E	L	A	G	V		
UniRef90_B1VA75	S	P	V	L	C	V	V	G	E	T	L	A	E	R	E	A	G	N	K	T	K	E	F	L	A	Q	Q	V	R	A	V	L	Q	G	G	A	E	L	A	G	V		
UniRef90_UPI0003B63D44	V	P	I	L	C	V	V	G	E	T	L	D	E	R	E	A	G	R	T	L	D	V	V	A	E	Q	Q	L	D	V	A	V	M	Q	T	V	G	E	L	S	S	L	V
UniRef90_F8LSQ7	H	L	I	P	C	V	V	G	E	T	K	L	E	E	R	E	A	G	Q	T	D	A	V	V	L	Q	Q	T	K	V	I	A	M	D	N	V	S	D	W	S	R	V	V
UniRef90_D5BPF9	D	V	M	I	C	V	V	G	E	T	R	N	D	R	E	A	G	N	A	E	S	D	V	V	L	A	Q	Q	L	G	G	S	I	P	K	A	M	D	P	A	R	L	I
UniRef90_E4PF39	T	P	V	L	C	V	V	G	E	T	L	E	D	R	E	S	G	R	T	G	L	I	V	E	Q	Q	L	Q	A	V	I	D	E	V	G	A	M	A	N	G	I		
UniRef90_UPI000360A0C8	T	P	I	L	C	V	V	G	E	T	L	E	J	E	R	E	A	G	V	M	E	L	V	V	G	K	Q	L	D	I	Q	L	H	S	A	A	I	F	A	D	S	I	
UniRef90_UPI00047C9EDA	I	P	I	L	C	V	V	G	E	T	L	E	E	R	K	N	L	L	Q	T	E	M	Q	V	L	S	R	Q	L	F	G	A	L	K	G	I	D	M	S	Q	L	I	
UniRef90_K0TM27	K	V	M	F	C	I	V	G	E	K	K	E	E	R	E	A	G	T	T	M	D	V	C	A	E	Q	Q	M	E	A	E	I	L	S	E	D	E	W	A	N	V	S	
UniRef90_A0A011PA94	I	P	I	F	C	C	V	G	E	S	R	A	E	V	R	E	R	N	E	H	L	V	C	A	E	Q	Q	I	E	A	E	L	F	H	L	N	E	E	K	I	V		
UniRef90_F8ES78	I	T	I	V	C	V	V	G	E	S	R	A	E	H	A	S	G	Q	A	L	P	I	V	G	A	Q	Q	L	D	G	C	Y	P	T	D	A	T	S	E	S	L	V	
UniRef90_E3D0R7	R	C	L	F	C	V	V	G	E	L	L	E	E	R	E	A	G	K	T	H	Q	V	V	L	E	R	Q	L	L	G	A	L	E	G	V	T	I	P	D	R	F	A	
UniRef90_I1A7E2	T	P	V	I	C	V	V	G	E	T	L	E	E	E	E	Y	E	K	G	T	T	K	K	V	E	E	Q	I	L	K	G	S	L	N	D	L	D	H	S	K	V	I	
UniRef90_B7K1N5	T	P	I	L	C	V	V	G	E	T	K	S	Q	R	D	A	G	E	T	E	T	V	V	I	N	Q	V	K	R	G	L	V	D	V	D	Q	R	N	I	V			
UniRef90_F6DC21	T	P	I	L	C	V	V	G	E	T	L	E	E	R	E	S	D	Q	T	E	H	V	K	T	Q	L	T	A	V	I	E	K	I	A	A	F	A	N	I	V			
UniRef90_UPI000309DDA8	T	P	I	L	C	V	V	G	E	T	K	A	Q	R	D	A	G	E	T	E	A	I	L	S	A	Q	L	T	Q	D	L	V	G	V	D	Q	S	N	L	V			
UniRef90_I7L3B3	R	P	I	D	V	D	S	D	M	S	T	Y	A	Q	F	M	D	A	E	P	S	V	A	Q	V	A	A	A	L	A	S												

UniRef90_I4ZVU1	I	A	Y	E	P	I	W	A	170	G	T	G	K	T	A	S	P	E	D	A	Q	A	M	H	A	Q	180	R	Q	G	L	K	Q	I	T	G	Y	G	190	R	A	L	L	G	E	N	T	G	Y	G	200	Y	G																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
UniRef90_C1DL89	I	A	Y	E	P	V	W	A	G	T	G	E	T	A	S	P	E	Q	E	A	Q	A	Q	H	R	K	I	R	A	L	L	G	E	N	T	G	Y	G	A	V	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
UniRef90_B1VA75	I	A	Y	E	P	V	W	A	G	T	G	E	T	A	S	P	E	Q	E	A	Q	A	Q	T	I	H	R	K	R	E	K	V	T	G	E	N	T	G	Y	G	A	V	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
UniRef90_UPI0003B63D44	V	A	Y	E	P	V	W	A	G	T	G	K	T	A	S	P	E	Q	A	Q	A	Q	D	V	H	A	Y	I	R	Q	R	I	A	G	Y	S	E	K	L	A	V	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
UniRef90_F8LSQ7	L	A	Y	E	P	V	W	A	G	T	G	K	T	A	T	P	Q	A	Q	A	Q	E	V	H	A	A	L	R	S	T	W	L	S	S	E	N	V	S	P	Q	V	A	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
UniRef90_D5BPF9	V	A	Y	E	P	V	W	A	G	T	G	L	V	P	S	E	D	I	A	A	M	H	E	N	I	L	R	S	S	W	L	S	S	A	F	P	N	R	G	D	I	S	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
UniRef90_E4PF39	V	A	Y	E	P	V	W	A	G	T	G	K	T	A	T	P	E	Q	V	S	E	V	H	Q	Q	I	R	Q	Q	F	L	A	K	S	A	A	D	D	I	S	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
UniRef90_UPI000360A0C8	I	S	Y	E	P	I	W	A	G	T	G	L	A	A	S	P	A	Q	A	K	A	M	H	K	F	I	R	H	Q	K	I	E	N	L	D	K	D	A	A	A	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
UniRef90_UPI00047C9EDA	I	A	Y	E	P	V	W	A	G	T	G	Q	S	A	T	A	D	L	A	E	Q	T	H	A	Y	I	R	S	V	L	K	Q	L	V	G	H	R	A	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
UniRef90_K0TM27	I	A	Y	E	P	V	W	A	G	T	G	L	T	A	T	P	E	M	A	Q	E	T	H	A	N	I	R	Q	W	V	A	A	N	V	S	Q	K	V	A	V	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
UniRef90_A0A011PA94	I	A	Y	E	P	V	W	A	G	T	G	K	T	A	T	S	S	Q	A	Q	A	Q	D	M	H	A	V	R	K	H	L	A	G	K	Y	Q	K	A	V	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
UniRef90_F8ES78	V	A	Y	E	P	I	W	A	G	T	G	H	T	P	P	P	E	N	I	A	E	M	H	A	S	I	R	D	R	L	C	L	L	L	G	S	E	G	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

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UniRef90_I4ZVU1	E	T	T	A	I	L	Y	G	G	S	V	K	P	E	N	A	V	E	L	A	A	C	P	D	I	N	G	A	L	V	G	G	A	S	L	N	A	E	F	H			
UniRef90_C1DL89	T	A	T	A	I	L	Y	G	G	S	V	K	S	P	N	N	A	A	A	L	A	A	Q	P	D	I	D	G	G	L	V	G	G	A	S	L	N	A	E	F	L		
UniRef90_B1VA75	Q	S	L	K	I	L	Y	G	G	S	V	K	S	P	N	N	A	V	E	L	A	L	E	Q	N	E	D	D	G	V	L	V	G	K	A	S	L	E	T	D	F	L	
UniRef90_UPI0003B63D44	A	G	V	R	I	L	Y	G	G	S	V	K	A	A	N	A	A	E	L	F	S	Q	A	D	I	D	D	G	G	L	V	G	G	A	S	L	D	A	E	F	S		
UniRef90_F8LSQ7	Q	S	V	R	I	L	Y	G	G	S	V	T	G	A	N	A	R	E	L	A	S	Q	A	P	D	I	D	D	G														
UniRef90_D5BPF9	T	H	I	P	V	L	Y	G	G	S	V	K	P	G	N	A	A	E	L	S	L	S	L	P	A	V	D	D	G	A	L	V	G	G	A	S	L	D	A	D	F	E	
UniRef90_E4PF39	E	E	L	R	V	I	L	Y	G	G	S	V	K	V	A	N	A	Y	E	L	F	S	L	A	D	V	D	D	G	G	L	I	G	G	A	S	L	H	A	D	E	F	
UniRef90_UPI000360A0C8	N	R	L	K	I	L	Y	G	G	S	V	N	P	Q	N	A	V	Q	L	F	A	V	P	N	I	D	D	D	G	V	L	V	G	G	A	S	L	N	A	S	Q	F	E
UniRef90_UPI00047C9EDA	E	T	I	S	I	L	Y	G	G	S	V	N	G	E	N	A	A	D	F	R	S	M	P	N	I	D	D	D	G	V	L	V	G	G	A	S	L	N	A	S	F	D	
UniRef90_K0TM27	D	A	V	Q	I	Q	Y	G	G	S	M	N	G	G	N	A	K	A	L	L	A	E	N	D	I	D	D	D	G	G	L	I	G	G									
UniRef90_A0A011PA94	D	S	I	S	I	L	Y	G	G	S	V	N	A	N	A	N	A	K	E	L	F	A	Q	A	D	V	D	D	G														
UniRef90_F8ES78	K	K	V	R	I	L	Y	G	G	S	V	T	G	K	N	A	A	E	L	L	S	I	P	E	V	N	G	T	L	V	G	G	A	S	L	T	A	K	F	V			
UniRef90_E3D0R7	Q	H	L	Q	V	V	Y	G	G	S	V	P	K	G	N	T	A	G	L	M	V	Q	G	D	I	D	D	G	L	L	V	G	G	A	S	L	E	P	S	F	V		
UniRef90_I1A7E2	S	D	L	V	V	Q	Y	G	G	S	V	S	P	K	N	I	A	E	L	S	S	Q	K	D	I	D	N	G	F	L	V	G	G	A	S	L	E	P	E	F	V		
UniRef90_B7K1N5	K	A	V	T	I	Q	Y	G	G	S	V	K	P	D	N	A	E	L	S	M	A	Q	P	E	I	D	D	G	A	L	V	G	G	A	S	L	E	P	G	F	A		
UniRef90_F6DC21	Q	Q	V	V	I	Q	Y	G	G	S	V	K	P	D	N	A	A	E	L	F	A	Q	P	D	I	D	D	D	G	G	L	I	G	G	A	S	L	E	D	P	D	F	L
UniRef90_UPI000309DDA8	D	V	S	V	I	Q	Y	G	G	S	V	K	P	D	N	A	E	L	I	M	A	Q	P	E	I	D	D	D	G	A	L	V	G	G	A	S	L	E	A	S	F	A	
UniRef90_I7L3B3	E	Q	V	R	I	L	Y	G	G	S	V	T	P	A	N	A	R	E	L	M	L</																						

UniRef90_I4ZVU1	K I A Q A
UniRef90_C1DL89	A I C R A A Q
UniRef90_B1VA75	N F T Q A A
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UniRef90_F8LSQ7	
UniRef90_D5BPF9	A I C A A A
UniRef90_E4PF39	G T I A G A
UniRef90_UPI000360A0C8	K I C M A A E
UniRef90_UPI00047C9EDA	E I I D
UniRef90_K0TM27	
UniRef90_A0A011PA94	
UniRef90_F8ES78	P I I E A
UniRef90_E3D0R7	G I L E A A
UniRef90_I1A7E2	Q L L
UniRef90_B7K1N5	R I V N Y R
UniRef90_F6DC21	A I C K A A
UniRef90_UPI000309DDA8	R I V N Y Q
UniRef90_I7L3B3	E L V A I A H
UniRef90_K2BX40	K I I N A
UniRef90_G2KVF3	K L A N F K
UniRef90_P0C0J6	K I L
UniRef90_W7QS73	E I C A L A N
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UniRef90_D2RJR4	A I A N
UniRef90_U5DHS0	R I A N Y
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UniRef90_A4TXN7	A I A R
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UniRef90_L7YBP1	T I I Q S
UniRef90_Q6PTG6	
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UniRef90_C5WDR6	D I I K C A
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UniRef90_UPI000412F9CF	E I C R A A Q
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UniRef90_H6UNT3	
UniRef90_R8B3S7	S I C Q A
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UniRef90_A5EUT5	K I I E
UniRef90_I2CCR7	
UniRef90_N9GGJ5	Q I A K A
UniRef90_Q9A733	A I I Q A
UniRef90_Q45Y98	
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UniRef90_D5EEI7	E I I
UniRef90_UPI00045E7FCE	M I C Q T A
UniRef90_G1CW51	
UniRef90_E5ASV0	
UniRef90_M9RPL3	N I L D
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UniRef90_R4PKB8	T I I N N T H
UniRef90_Q45YB9	
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UniRef90_N8X4Z7	K I A Q A
UniRef90_Q162J0	K I L E
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UniRef90_B2IKQ0	
UniRef90_F7YE29	D I L
UniRef90_I2CCT0	
UniRef90_J8VBX3	
UniRef90_A0A023D1T8	G I
UniRef90_UPI000369A95C	D I L K
UniRef90_Q6PTE3	
UniRef90_C4ZKH5	A I C C A A
UniRef90_S0FJC5	D I I K
UniRef90_F7XYQ5	D I L E
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UniRef90_UPI00036CC7C6	D I I R A A
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UniRef90_Z9JKA8	S I A R A A
UniRef90_R6YW77	E L V K
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UniRef90_K6VII6	K I A Q A
UniRef90_L5M8B4	

1 10 20 30 40

UniRef90_J3BUT2 R K F F V W V G T S F K M N K T L E E A V A F A N R L A E T D R D R D T R I Q I

UniRef90_K3XLK7 R K F F V G G N W K Y N G T A D Q V D K I V K T L N E G P P P D V V E V V V V

UniRef90_Q45Y76 K L Y I G T N T K M Y M N I S F S S I K V I S G F L T S E T L D T D V E V V V

UniRef90_F4LS00 R E T F L I A N W K M H K T V E E G R A F A R E L V R R L V S P K H Q L I I

UniRef90_UPI0004745893 K T R W I G T S W K M N K T S D E V A A F C Q Q I L P A L Q G C P E W I Q I

UniRef90_UPI0003FB804A Q P L L A L N W K M N K T P S E A R A W A A D L S S A L T P G N A E L A V

UniRef90_Q11ZA2 K K F L L G T N W K M N K T L A D A T Q Y T N D L M P I E K Y P A F D F F I

UniRef90_H8GUW9 R T K Y L I G N W K T N K D L H Q A L A F V E Q F K Q H P A K T K A V L G I

UniRef90_H6LBU5 K P L F V G N W K M N G F R A N L T E I V E E S I A K T P F H G D V V I C

UniRef90_P78010 S H R P Y I V G N W K M N G S R A M L A E A R A I D R A A G R Y P D V Q V A I

UniRef90_C6XJT7 K L Y I G T N T K M Y K T T R Q T I A F L D E L G R L T Q D I D R E C F V

UniRef90_Q2G6R5 K R F I I G S G W K M N N T I A E S I T L L D N L E K N L D Q F D Y I F L F V

UniRef90_W0V8S2 R V P F I V G N W K T N K K A A E V H F L R A I E G K L P E P N V E V G I

UniRef90_G5HNU1 R K L L V G G N W K M N G D K K T I D S I V A F L N E G A V V P N V D V V V

UniRef90_I8SGJ7 K P F I V A N W K Y N T L R E A K R I F Y S I K K G I R R K N L E I V I

UniRef90_M5JCR9 M I L A A N F K M N H T R A S T K A Y I E R L N A Y G K Q T D I D I A V

UniRef90_F1L4W1 N I L K S I D E L I S L L I Q Y P L P N T D V V V

UniRef90_X0U883 K P F I V A N W K Y N T L R E A K R I F Y S I K K G I R R K N L E I V I

UniRef90_I2CCT4 M I L A A N F K M N H T R A S T K A Y I E R L N A Y G K Q T D I D I A V

UniRef90_A6Q538 M N G L K A G I S Q I V A V A V G A G R D D V T A L L C

UniRef90_A0A059G3E6 Q R R P L F A G N W K M H G R G A G T Q P A E G P A G P A A G A A E V V L C

UniRef90_Q3CZR0 P P Q K L I A N W K L H G D A A H V I E R W V H A V Q S L E E S G R I Q V I L

UniRef90_E6SKU6 P R K P W I G T S W K M N K G P V A A R D A A A Q I A S I V V P E T V T P F V

UniRef90_T1AWZ7 A N R R P I V G T G W K M N N L A A D A R Y A S T M Q A A L S D V D L S V V L

UniRef90_UPI0004706AC0 K K F V I G N L K M N L N I K E R E A Y L T R M I S K K N M E N V E I V L

UniRef90_UPI000474482B K T W V V A N W K M P S S A Q V I T D L M Q G L A Q N L A D N S H V V I

UniRef90_K2EQL5 K K I I A N L K M Y G S S L F Y E D L F T Q V K S A L A T N D V I E L V M

UniRef90_UPI00036F5F04 F W V G T S F K M N K T L G E A L A F A G A L A A S D E S R D E Q R F V

UniRef90_B6BWW8 R K P I V G I S L K I Y M N E L I E T I K Y T Q K L K E L C N H A D I D L F M

UniRef90_S9VCS7 R T R Y L I G N W K T N K N L K D A V S F V E Q F Q Q N K L N Y N A K I G I

UniRef90_J3CCT2 K K F L L G T N W K M N K T L A E G L A Y S A A L M T I I K Y P Q F E F F I

UniRef90_S0L668 R A P L F V G N W K M N K N A S Q T R S F I E A F L P L A A R V D I A I A P

UniRef90_G2J7Q8 T F W V G T S F K M N K L L S E A L A F A N A L V D A A R D A R I Q R F V

UniRef90_UPI0003FF2440 M H G R H A F N A Q L V A Q L L A S E S V N R S G V A I

UniRef90_E6PCM9 P Q T H L I A A N W K M N G V K A S L P I A R T I A E Q S R G L Q A R V A L

UniRef90_UPI00036B7BB2 R P Y I V G N W K M N G S R A M L T E A R A I D R G A Q R C P D V Q V A L

UniRef90_G2IX98 P Q R H L I A A N W K M N G V K A L P V A K A I A E I A S N H R A Q I V I

UniRef90_B6E8L4 K M N G D K D Q I A E I V K N L S G P L D P N V E V V I

UniRef90_V4RSQ6 P I I A S N F K T N H T R K T T K E Y I E K L N N Y L K N S S I K N E V

UniRef90_F1Z9L0 K Q F I V G N W K M Y K T F T E T L N F F D E F N P Q L T P D N N V F G V

UniRef90_V4Q861 M I V A A N F K T N K T R K E T K R Y L K E L G K I K F N G V K V A V

UniRef90_B2ZNP5 K L Y F G T N T K M Y K T R K Q T A D F V E Q L Y D L T I D Q E T E L F V

UniRef90_UPI00047EEDC6 M H G M R S H L V E I D A I V A A A R A H P Q V D T L L

UniRef90_A5IYV3 R F L L G T N W K M F K T N T Q A A A W V T G V A G F S P P P G L L L F A

UniRef90_UPI000463E038 K L W I G T S W K M N K T L A E A G E Y A D T V A A A V E D D A V E A F V

UniRef90_F0YVS5 K I Y F G T N L K M Y K G N C E T V D Y L T Q L A L Q S D Y D I E L F V

UniRef90_UPI0002630398 M I L A A N F K T N H T R K S T R H Y L E R L S N F L F E T S C E H D I

UniRef90_B8C8U5 M I I A A N F K T N H T R A S A K E Y I S F V N E L T K E K D V E I I

UniRef90_W0J533 P W V G T S W K M T K T L A E G R E F A R G L A E A L A A E R V H P F V

UniRef90_UPI00034D451 M N G G L A S N A N L L N E V M A A V A E D A V D V L V

UniRef90_V4MS41 G N W K M N G S K A S I A E L C K L L G S G A L D I K T E V I V

UniRef90_Q7MA77 S K R K P V V V M S W A M R Q N R E E A V T F A E Q L V I E L L N D Q N I E K I L

UniRef90_K7Z830 G N W K M N G K K S T I A G K L K I L N S G P L D P N A E V Y V

UniRef90_D5V5Q3 K K V I I G N F K M N L L P N E V V L Y I E N L K K D I E S N N E I V L C

UniRef90_UPI000255D0B9 Q K L V V A N W K M N I L L H E A V A L L E S V N I G S L H K S L V I

UniRef90_B1PMU5 R P L I I G N W K M N K T I S E S L E L V K A L H E Y S Q S K F E I V V

UniRef90_K8ES31 K R F V I A N W K M K G N Q S L C D T F V K R F I D S F N P R V A V V I

UniRef90_C9DE09 K K I I I G N W K Y K N F S E I D E K I D E I K D Q V F L K D L D I V I

UniRef90_K7ZII8 G N W K M N G D Q S I A E M C K T L D C G T L D P N T E V V I

UniRef90_S0LLI6 K I I V A N W K M N P N S K S A E K I F F D I S K K I N N K N E V V I

UniRef90_K7ZF85 G G N W K M N G D K A S I K D I C N V L I T G P L D P N V E V V I

UniRef90_R6YJ78 W I G T S W K M N K T L D E A R A W T T G L V D A L A P A G I Q P F V

UniRef90_F7XVA2 M Y F V A N W K M Y G N L S S L N T L D K V I K S K E I K G G R L T Y C

UniRef90_K2A586 K I V I G N W K M N L T V R E S V A L A R A C V R A M R G K L V D V I I

UniRef90_X5H3B8 K I V F G N L K M N F L Y K D F Q D Y I E N L K F L G E T P K V H L G L

UniRef90_W7A2A3 N W K M N G N K T E I A E I C K G L T A G P L D P N T E V V V

UniRef90_B3SFL2 F L V V A N W K M N G S V A L V R D F L S A I D A L L S K H S L E L V I

UniRef90_K7Z821 M Y Q T A A Q T V E Y L R C L E K R L A D G I A Q R F V

UniRef90_V7PZU2 R K L V A A N W K M H G S N A L T A T L L G T L A A Q P A C E V A V

UniRef90_K7Z7K8 G N W K M N G D K N S I N L I C R N L V A G P L D P N T E V V V

UniRef90_Z9JTU7 A P R K F F V G G N W K M N G D K K I L G E L I H T L N S G K I P A D T G E W R

UniRef90_Q4FM49 K Y L I G N F K M N K T F F D V E S Y I E A L K N K T K L K N L Q I G I

UniRef90_K1Y6R9 K I I A S N F K T N H T R K S T L R F C E E L E K F A N Q A Q Q I V

UniRef90_E8ZK59 G N W K M N G D Q A I G E L C K V L A A G P L D A N T E V V V

UniRef90_K7ZF51 F I I G S G W K M E L S Y Q K S I E V A K Q L D K N L A N H D F P V V I

UniRef90_D1AS53 T K I I A L N H K M N L N Y D L V N E Y I E R I N K V K T D N K I I I

UniRef90_B0PG85 G N W K M X G D K A T I A D I C K N L S S G L D A N T E V V I

UniRef90_T1AIU4 G N W K M N G D K V S I S L D C K I Y S T G P L D P A V E I V V

UniRef90_K7Z066 K F M A N F K C N H T P S S T Y H Y L R E F E N A K F W E Q N E V V V

UniRef90_M7API8 N W K M N G D K V S I T D I C K T L S A G P L D P N T E V V I

UniRef90_C1L841 K I I A S N F K T N H T R K S T L R F C E E L E K F A N Q A Q Q I V

UniRef90_N9U0L3 G N W K M N G D Q A I G E L C K V L A A G P L D A N T E V V V

UniRef90_UPI00047919BB F I I G S G W K M E L S Y Q K S I E V A K Q L D K N L A N H D F P V V I

UniRef90_K7Z643 T K I I A L N H K M N L N Y D L V N E Y I E R I N K V K T D N K I I I

UniRef90_E6MG41 G N W K M X G D K A T I A D I C K N L S S G L D A N T E V V I

UniRef90_R5TKX0 G N W K M N G D K V S I S L D C K I Y S T G P L D P A V E I V V

UniRef90_B5TYK8 K F M A N F K C N H T P S S T Y H Y L R E F E N A K F W E Q N E V V V

UniRef90_K7ZFA3 N W K M N G D K V S I T D I C K T L S A G P L D P N T E V V I

UniRef90_V8CBE7

UniRef90_K7ZII0

	50	60	70	80
UniRef90_J3BUT2	P S F T A V R E V Q R V L A A T S V K V	G A Q N M H W E D S G A W T G E I V S A P		
UniRef90_K3XLK7	S P P Y V F L P V V K R S Q L R K S P E F	Q V V A A Q N C Y W V K K D G G A F T G E	I V V I S A E Q	
UniRef90_Q45Y76	A P P F P Y L Q H V R K Q T L R K S I V	G V V A A Q N C Y W V K K D G G A F T G E	I V V I S A E Q	
UniRef90_F4LS00	I P S Y T A L N A R K Q S V L P K S I V	G L G A Q N M C W E D R G Q F T G E I V	I V V I S A E Q	
UniRef90_UPI0004745893	C P T A L S L N A W V Q E L A T S V D T L	T G V Q N I L C W A E Q G A Y T G E I V	I V V I S A E Q	
UniRef90_UPI0003FB804A	P P F P Y V Q Q V G E A L D S V D T L T	G V Q N I L C W A E Q G A Y T G E I V	I V V I S A E Q	
UniRef90_Q11ZA2	L A P A I A L D L P V L A G A L P A G V S	V A L G G Q D V L S R F A A G A Y T G E I	V I I V S A A A	
UniRef90_H8GUW9	M A P A I A L D L P V L A G A L P A G V S	V A L G G Q D V L S R F A A G A Y T G E I	V I I V S A A A	
UniRef90_H6LBU5	I P S Y T H L W K L K E V L I D S A L L K	L L G A Q N M A H Y A D S G Q F T G E I	V I I V S A E Q	
UniRef90_P78010	A P V T H L L T E V N K V L P N N L L L	L L G A Q N M A H Y A D S G Q F T G E I	V I I V S A E Q	
UniRef90_C6XJT7	P P A T L A L A V D A L K K S V I Q I	G G Q D C H H T E A G A G A Y T G E I	V I I V S A A A	
UniRef90_Q2G6R5	A P P F T L I G A L R E A V S S A M G V	G G Q D C H H T E A G A G A Y T G E I	V I I V S A A A	
UniRef90_W0V8S2	I P S Y T T L E A S R S A Y V S S I T L	G A Q N M S W E D E G Q F T G E I V	I V V I S A E Q	
UniRef90_G5HNU1	L P S F T A L H A V S E A G N T S R I I F	G A Q N M H W E E Y G A F T G E I V	I V V I S A E Q	
UniRef90_I8SGJ7	A A Q D I F L H E M A D Q V E E P L Q I	F S E N I H W A D E G A Y T G E I V	I V V I S A E Q	
UniRef90_M5JCR9	A P A P Y L S E Y M K H V K G L E V A	G A Q N C Y K V P K G A F T G E I V	I V V I S A E Q	
UniRef90_F1L4W1	C P P F V Y L P I L G A S T F A H F G V	V A G Q D C Y F W E E K G A F T G E I	V I I V S A E Q	
UniRef90_X0U883	S P P S L Y L Q Y V S K L E T S Q I G V	V A G Q N C Y Y A A K G S F T G E I	V I I V S A E Q	
UniRef90_I2CC74	F P P A T A L Q Q Y E T F A D S S A M G	V A G A Q N A Y A A E H S G S F T G E I	V I I V S A E Q	
UniRef90_A6Q538	L P A T L V A L G S A A K G H S A L R I	K I G G E T C H P N E K G A F T G E I	V I I V S A E Q	
UniRef90_A0A059G3E6	P P F T S L A A A A E A L A G S A I A L	G A Q D L A W G D F G A F T G E I V	I V V I S A E Q	
UniRef90_Q3CZR0	C P P A I W L R A C R H V H G E W L T	A L L G I Q N M V S A E A E G S F T G E I	V I I V S A A A	
UniRef90_E6SKU6	I P P F T S L E T V S E L G K T S V W A I	V A L G A Q N M H W A E D E G A W T G E I	V I I V S A E Q	
UniRef90_T1AWZ7	P P F T A L A A A A F G G M P V A I V	G G Q N M H W A E D E G A W T G E I	V I I V S A E Q	
UniRef90_UPI0004706AC0	C P P F V H L E G F K K W K N K K I A R	G A Q D V F F E E K G S F T G E I	V I I V S A S S	
UniRef90_UPI000474482B	A P S L V H L S Q V I D F V D N H M H I	S A Q N V C A N H N G A F T G E I	V I I V S A S S	
UniRef90_K2EQL5	C P P Y P Y L F L A E K I F N S G I S W	S G S Q N V A K D I E G A F T G E I	V I I V S A S S	
UniRef90_UPI00036F5F04	I P P Y P Y L F L A E K I F N S G I S W	S G S Q N V A K D I E G A F T G E I	V I I V S A S S	
UniRef90_B6BWW8	P P F T S L A A A A E A L A G S A I A L	G A Q D L A W G D F G A F T G E I V	I V V I S A E Q	
UniRef90_S9VCS7	C P P A I W L R A C R H V H G E W L T	A L L G I Q N M V S A E A E G S F T G E I	V I I V S A A A	
UniRef90_S3CCT2	I P P F T S L E T V S E L G K T S V W A I	V A L G A Q N M H W A E D E G A W T G E I	V I I V S A E Q	
UniRef90_J0L668	P P F T A L A A A A F G G M P V A I V	G G Q N M H W A E D E G A W T G E I	V I I V S A E Q	
UniRef90_G2J7Q8	C P P F V H L E G F K K W K N K K I A R	G A Q D V F F E E K G S F T G E I	V I I V S A S S	
UniRef90_P47670	A P S L V H L S Q V I D F V D N H M H I	S A Q N V C A N H N G A F T G E I	V I I V S A S S	
UniRef90_UPI0003FF2440	C P P Y P Y L F L A E K I F N S G I S W	S G S Q N V A K D I E G A F T G E I	V I I V S A S S	
UniRef90_E6PCM9	I P P Y P Y L F L A E K I F N S G I S W	S G S Q N V A K D I E G A F T G E I	V I I V S A S S	
UniRef90_UPI00036B7BB2	A V P T A L A A A A A L A A S S R V A L	K L G A Q N M S E Y G E G A Y T G E I	V I I V S A S S	
UniRef90_G2IX98	C P T F V C L D A A K A A A G S N I K I	G A Q N M H F E E K G A F T G E I V	I V V I S A E Q	
UniRef90_B6E8L4	F P P A T L L P L M A D L Q G T D I V I	G G Q D C H H A D S G A Y T G E I	V I I V S A A A	
UniRef90_V4RSQ6	A P P F F L A L L R E E T S N I G I	G G Q D C H H A D S G A Y T G E I	V I I V S A A A	
UniRef90_F1Z9L0	F P P A T L L P L M S Q L E G S S V Q L	G G Q D C H H A D S G A Y T G E I	V I I V S A A A	
UniRef90_V4Q861	G V P S I Y V A F V S S I L T E T I G V	A G Q N C W K V A K G A F T G E I	V I I V S A E Q	
UniRef90_B2ZN5P	L V F P T S T S F D S F Y T V S S L E I	G A Q N A Y C T N N G S F T G E I	V I I V S A E Q	
UniRef90_UPI00047EEDC6	A P S Q C N L T A Y F T N R V P E L K L	C Y G A Q N M S K N E E G A F T G E I	V I I V S A E Q	
UniRef90_A5IYV3	F P P Q S A L F D E K V V V G A Q N A Y	P T V S G A Y T G E I V	I V V I S A E Q	
UniRef90_UPI000463E038	I P S F T A L D T A A A R A A A G R I R I	V V G A Q N A Y P T V S G A Y T G E I	V I I V S A E Q	
UniRef90_F0YVS5	C V P F T L I A A A A E L A G D F T I V	V V G A Q D V H E N D F G A F T G E I	V I I V S A S S	
UniRef90_UPI0002630398	I P S F P S L V P V R A L V S H H L Q I	V V G A Q N V H Y E D K G A F T G E I	V I I V S A S S	
UniRef90_B8C8U5	I P S H T A I A T V A E R L G R W F R V	V V G A		

UniRef90_J3BUT2	M	L	K	D	C	Q	L	D	I	V	E	L	G	H	S	E	R	R	E	H	F	G	E	T	D	E	T	V	G	L	K	V	A	A	V	R	H	R	L	90		
UniRef90_K3XLK7	M	L	V	N	L	G	V	P	W	V	I	L	G	H	S	E	R	R	A	L	L	G	E	T	S	N	E	F	V	G	D	K	V	A	Y	A	L	S	S	Q	G	100
UniRef90_Q45Y76	M	I	L	D	V	G	A	E	W	V	I	L	G	H	S	E	R	R	N	L	F	G	E	T	N	D	K	L	V	E	A	E	K	V	Q	A	L	S	S	H	V	
UniRef90_F4LS00	M	L	K	E	I	G	V	Q	I	V	Q	I	L	G	H	S	E	R	R	L	I	F	G	E	T	N	D	V	E	E	N	K	K	V	L	C	A	L	R	H	N	F
UniRef90_UPI0004745893	L	I	H	E	A	G	A	R	W	V	I	V	G	H	S	E	R	R	N	L	F	G	E	T	D	D	A	L	T	G	Q	K	V	A	Q	A	F	E	A	H	L	
UniRef90_UPI0003FB804A	M	A	K	D	I	G	A	S	L	V	E	I	L	G	H	S	E	R	R	E	L	F	N	E	S	D	H	T	V	N	L	K	V	H	A	A	Q	A	Q	G	L	
UniRef90_Q11ZA2	M	L	R	D	V	G	A	T	Y	V	I	V	G	H	S	E	R	R	T	Y	H	A	G	E	S	D	A	V	V	A	A	K	A	R	Q	A	Q	A	N	G	L	
UniRef90_H8GUW9	M	L	V	D	V	G	T	R	Y	A	V	V	G	H	S	E	R	R	E	Y	H	A	G	E	S	D	A	V	V	A	A	K	A	R	Q	A	Q	A	N	G	L	
UniRef90_H6LBU5	M	L	K	E	I	G	L	D	I	E	L	L	G	H	C	E	R	R	Q	Y	F	N	E	T	D	E	T	V	N	L	K	T	L	A	A	L	K	H	G	F		
UniRef90_P78010	Q	L	Q	D	I	K	V	N	S	V	I	L	G	H	S	E	R	R	K	Y	F	N	E	T	A	Q	V	I	N	Q	K	L	K	A	C	L	Q	A	G	M		
UniRef90_C6XJT7	K	W	K	D	L	G	A	G	Y	V	I	V	G	H	S	E	R	R	A	Y	Y	Q	E	N	D	N	K	A	V	K	A	K	S	K	A	V	L	R	A	G	L	
UniRef90_Q2G6R5	M	L	V	D	T	G	A	D	F	A	I	L	G	H	S	E	R	R	K	D	H	A	G	E	S	D	A	L	V	K	A	K	A	E	A	A	L	T	A	G	L	
UniRef90_W0V8S2	M	L	R	D	F	G	S	R	Y	V	I	V	G	H	S	E	R	R	A	Y	H	A	G	E	S	D	E	L	V	A	Q	K	A	V	V	A	L	T	A	G	L	
UniRef90_G5HNU1	M	L	E	E	V	G	V	R	V	I	C	I	G	H	S	E	R	R	H	I	F	G	E	S	D	D	E	V	E	N	K	K	V	L	A	A	L	R	H	N	F	
UniRef90_I8SGJ7	M	L	R	E	L	G	C	T	Y	V	E	L	N	H	Q	E	R	R	A	Y	F	N	E	T	N	N	E	I	T	N	L	K	I	L	T	A	L	K	F	G	L	
UniRef90_M5JCR9	A	L	A	D	I	G	V	N	G	A	I	V	G	H	S	E	R	R	K	M	F	K	E	T	N	G	E	T	V	G	L	K	V	A	A	A	L	R	N	G	L	
UniRef90_F1L4W1	M	I	K	D	L	G	L	H	W	V	I	L	G	H	S	E	R	R	H	I	F	G	E	S	D	E	L	I	A	E	K	V	V	H	A	I	E	S	G	L		
UniRef90_X0U883	M	L	K	N	L	G	C	K	Y	V	I	V	G	H	S	E	R	R	G	Y	F	E	E	T	D	N	E	M	V	N	R	K	L	K	T	A	L	K	E	N	L	
UniRef90_I2CCT4	M	I	L	D	V	K	A	E	W	V	I	V	G	H	S	E	R	R	N	V	F	Q	E	T	D	E	L	I	S	E	K	V	G	H	A	L	T	V	G	L		
UniRef90_A6Q538	Q	L	Q	E	F	G	I	E	T	V	L	L	G	H	S	E	R	R	H	I	F	Y	E	S	Q	E	M	I	A	R	K	F	A	F	Y	K	E	R	G	F		
UniRef90_A0A059G3E6	M	L	A	D	A	G	A	S	H	V	I	V	G	H	S	E	R	R	A	D	H	A	G	E	S	D	A	V	V	A	S	Q	A	K	A	A	L	R	A	G	L	
UniRef90_Q3CZR0	V	L	A	E	M	G	T	X	Y	V	V	I	G	H	S	E	R	R	D	Y	F	H	E	T	D	A	Q	D	I	N	K	K	A	K	A	I	F	A	N	G	L	
UniRef90_E6SKU6	M	L	R	E	L	G	C	R	Y	V	I	V	G	H	S	E	R	R	Q	L	L	G	E	T	D	A	L	I	L	R	K	L	E	A	A	L	A	G	G	L		
UniRef90_T1AWZ7	M	A	F	E	A	G	A	R	Y	A	L	V	G	H	S	E	R	R	R	L	L	F	G	E	S	D	D	Q	V	V	A	C	K	V	E	Q	S	M	R	A	G	L
UniRef90_UPI0004706AC0	M	I	R	E	C	G	A	D	M	V	E	L	G	H	S	E	R	R	E	H	F	G	E	S	D	D	R	T	V	N	L	K	V	K	S	A	I	R	A	G	L	
UniRef90_UPI000474482B	M	L	K	D	A	G	C	T	Y	V	E	L	A	H	A	E	R	L	K	H	F	G	E	S	T	Y	E	C	V	R	L	K	V	M	A	A	L	R	A	G	L	
UniRef90_K2EQL5	M	L	K	D	F	D	C	Q	Y	V	I	L	G	H	S	E	R	R	R	Y	F	G	E	S	G	E	F	I	T	S	Y	K	I	K	A	V	L	K	N	A	L	
UniRef90_UPI00036F5F04	M	L	K	E	L	G	V	K	S	V	I	L	G	H	S	E	R	R	Q	Y	Y	G	E	T	D	E	S	L	T	A	K	I	Q	N	A	F	N	A	N	L		
UniRef90_B6BWW8	M	L	T	D	F	S	S	Q	Y	A	I	I	G	H	S	E	R	N	T	A	Y	C	E	S	D	E	L	N	I	A	E	K	F	K	R	L	K	D	H	V		
UniRef90_S9VCS7	I	L	K	D	L	D	I	N	W	L	I	L	G	H	S	E	R	R	Q	Y	Y	G	E	T	D	E	I	V	A	Q	K	T	L	D	A	Y	K	Q	G	F		
UniRef90_J3CCT2	M	L	K	D	C	N	L	D	L	V	E	L	G	H	S	E	R	R	E	Q	F	F	G	E	T	D	D	R	T	V	G	L	K	V	A	A	V	R	K	G	L	
UniRef90_S0L668	S	L	C	D	M	G	C	S	Y	V	E	L	G	H	A	E	R	R	K	Y	F	N	E	T	D	E	I	I	N	E	K	V	K	L	A	F	K	N	E	I		
UniRef90_G2J7Q8	M	A	A	E	F	G	A	T	F	A	L	I	G	H	S	E	R	R	A	H	H	Q	E	S	D	Q	V	V	A	E	K	A	L	R	A	L	D	A	G	L		
UniRef90_P47670	Q	L	Q	D	I	G	V	N	S	I	L	L	G	H	S	E	R	R	K	Y	N	E	S	T	S	A	V	I	N	Q	K	L	F	A	C	L	K	A	S	M		
UniRef90_UPI0003FF2440	M	L	A	E	I	G	V	D	I	T	E	L	G	H	S	E	R	R	Q	Y	F	N	E	S	D	E	A	V	N	R	K	A	R	A	A	L	K	H	G	F		
UniRef90_E6PCM9	M	L	A	E	F	Q	V	S	Y	V	I	L	G	H	S	E	R	R	L	Y	Q	H	E	S	D	E	L	A	I	G	A	K	V	R	A	A	L	R	A	G	M	
UniRef90_UPI00036B7BB2	M	L	V	D	C	G	L	D	L	V	E	L	G	H	S	E	R	R	E	F	F	G	E	T	D	D	E	T	V	G	L	K	V	E	S	A	V	R	A	H	A	L
UniRef90_G2IX98	M	L	A	D	V	G	C	R	Y	V	L	V	G	H	S	E	R	R	Q	Y	L	G	E	S	G	S	E	A	L	S	L	K	L	R	N	A	I	A	A	G	L	
UniRef90_B6E8L4	M	L	E	A	M	G	V	D	Y	V	V	L	G	H	S	E	R	R	E	Y	F	N	E	T	D	D	E	A	L	N	K	K	V	K	V	A	F	A	H	N	L	
UniRef90_V4RSQ6	M	L	K	D	A	G	A	S	M	V	I	L	G	H	S	E	R	R	H	H	L	E	P	C	A	L	V	A	R	K	S	L	A	A	A	L	R	A	G	L		
UniRef90_F1Z9L0	M	L	A	D	I	G	A	D	V	I	V	L	G	H	S	E	R	R	R	D	H	G	E	T	D	A	I	V	K	A	K	A	E	A	A	L	R	A	G	L		
UniRef90_V4Q861	Q	L	R	D	A	G	A	T	M	V	I	L	G	H	S	E	R	R	H	G	H	L	E	P	C	A	L	V	A	E	K	V	K	A	A	L	R	A	G	L		
UniRef90_B2ZNP5	M	I	K	D	V	G	A	E	W	V	I	L	G	H	S	E	R	R	T	I	F	G	E	P	K	D	E	L	I	A	E	K	V	A	H	A	L	E	A	G	L	
UniRef90_UPI00047EEDC6	Q	L	E	E	F	N	I	K	T	L	L	L	G	H	S	E	R	R	H	L	L	S	E	S	Q	E	D	L	A	K	K	Y	E	F	Y	K	Q	Q	G	F		
UniRef90_A5IYV3	M	L	Q	D	I	N	V	S	Y	A	L	C	I	G	H																											

[illegible]

	170	180	190	200
UniRef90_J3BUT2	L A Y E P V W A I	G N G I P A T A D Y A	C E R H G K I	A E V A T G V L G
UniRef90_K3XLK7	V A Y E P V W A I	G T G K V A T P D Q Q A Q E	V H A S L R K W L	S E I N V S P E V S
UniRef90_Q45Y76	I A Y E P V W A I	G T G K T A T P E Q A Q E	V H A S L R K W L	S E I N V S P E V S
UniRef90_F4LS00	I A Y E P V W A I	G D G I P A S K E Y A N E K	H K V I K D T L I	J E L F G E T L G
UniRef90_UPI0004745893	V A Y E P V W A I	G S G E V P E P E Q A N E	V A G L I R Q I L	S K Q I S D D A
UniRef90_UPI0003FB804A	I A Y E P V W A I	G Q G I P A S A E E A E S	V L A A I R A G V	R Q C F G E A C A
UniRef90_Q1I2A2	V A Y E P V W A I	G T G K T A T A D D A E E L	L A A A I R E A L	A G R L Y T A E A
UniRef90_H8GUW9	V A Y E P V W A I	G T G K T A T A D D A E E L	L A A A I R E A L	A G R L Y T A E A
UniRef90_H6LBU5	V A Y E P V W A I	G N G I P A E T P Y V K K I	H D F L R T V L I	J E L Y G P L G
UniRef90_P78010	I A Y E P I W A I	G T G K T A T P E I A N N T I	A Q I R V Y L	S E L Y N K E I A
UniRef90_C6XJT7	V G Y E P V W A I	G S G L T A T L E E I S E A	H K V I R E A L	H K K I G D K A
UniRef90_Q2G6R5	V A Y E P V W A I	G T G R V A A V E D V V T M	H A A I R A L	V A L Y G E S G
UniRef90_W0V8S2	L A Y E P V W A I	G T G Q T A T P S D M A Q E	V H A M V R A	L V V Q K N A V I A
UniRef90_G5HNU1	I A Y E P V W A I	G V G I P A D V S Y A N E K	H T V I R E T L	E E I Y G K E T G
UniRef90_I8SGJ7	F A Y E P R W A I	G K A L A A P A T H I K M V	H G I R E V L	S E N Y G A I A
UniRef90_M5JCR9	I A Y E P A W A I	G A S E A P T M D V I E	H A A K V I R A S I	L A I L F T Q E V A
UniRef90_F1L4W1	I A Y E P V W A I	G T G K T A T P D Q A Q E	G M N R K I L	A K L F D K N F T
UniRef90_X0U883	I T Y E P V W A I	S T T K I A T P I E A K Q G A	I F I R K I L	A K L F D K N F T
UniRef90_I2CCT4	I A Y E P V W A I	G T G E T A T P S Q A Q E	V H N Y I R G W L	T E K V S P E V G
UniRef90_A6Q538	I A Y E P V W A I	G T G V A A K P E I E	E V L A Y E L A S L	T D A
UniRef90_A0A059G3E6	I A Y E P I W A I	G T G K V A S T E Q I G E	V H G A I R A W L	S G R F G P D A A
UniRef90_Q3CZR0	I A Y E P I W A I	G T G K S A T Q D D A Q N M	C A A V R D V V A	A A D F G Q A V A
UniRef90_E6SKU6	I A Y E P V W A I	G S G T P A T P A D A Q A	V A A I R G L I	E R L H G P A V A
UniRef90_T1AWZ7	W I Y E P V W S I	G T G T P A T A E S I L E A A S	F I R A H V V I S	S D A T I H A
UniRef90_UPI0004706AC0	L A Y E P V W A I	G K G K A A E P H F V G V A	H T R L R R V L	C E L I G E E N A
UniRef90_UPI000474482B	L A Y E P R W A I	G V T E A A S P S Y V A G R	H R H R A V L	A E R F G R D A A
UniRef90_K2EQL5	I A Y E P I W S V	G T D M V P A S N E I M S A K	L L I K K I L	H E L V G K K F A
UniRef90_UPI00036F5F04	V A Y E P V W A I	G T G L T P T F D E V A N	V H F I S E L L	S T F K M P A
UniRef90_B6BWW8	I A Y E P I W A I	G S D M A A S P E Q A Q N M	C S F H T E V L	T N R N D Q K K
UniRef90_S9VCS7	L A Y E P V W A I	G T G K V A S P E Q A Q E	V H A I I R R Y I	K D K I G A D V A
UniRef90_J3CCT2	L A Y E P I W A I	G N G I P A T S E Y A	D E R H A N I	A A V A K S V L G
UniRef90_S0LK68	I A Y E P V W A I	G Q E K A A S A S Y V H H	V H E M I R N I L	A D H Y G S I A
UniRef90_G2J7Q8	I A Y E P V W A I	G A G K S A S A D E V R A I	H S V L H R T L	A A L D T Q L
UniRef90_P47670	I A Y E P V W A I	G T G K T A T P E V A N Q T I	K T I R E Y I	N D L Y D E N V A
UniRef90_UPI0003FF2440	A Y E P V W A I G	V A G T P A A A A Y V E E I	H D F L R R V L I	D R Y G P S G A
UniRef90_E6PCM9	I A Y E P I W A I	G T G K N C D R D Q A Q E	I A H A I R G	S R G A F
UniRef90_UPI00036B7BB2	L A Y E P V W A I	G K G I P A S S D Y A	D A R H A K E I	S A A A Q A V L G
UniRef90_G2IX98	V A Y E P V W A I	G T G K V A S L E Q I D E	I H R E I K A E	C L R R L K G S
UniRef90_B6E8L4	V A Y E P I W A I	G T G K T A T N E Q A N E T I	A A I R G I L	A E M F G K E V A
UniRef90_V4RSQ6	V S Y E P V W A I	G T G L V A S D A Q I L E A F A	S I R E H L D K H F G T	
UniRef90_F1Z9L0	L A Y E P V W A I	G T G R V A A V E D V I A M	H A S I G A R L	V A A F G D A A
UniRef90_V4Q861	V S Y E P V W A I	G T G L I A S D A Q I C E A I	G L V R T W L	S E R F P N
UniRef90_B2ZNP5	V A Y E P V W A I	G T G K T A S P Q Q		
UniRef90_UPI00047EEDC6	L A Y E P V W A I	G T G V T A T N E D I E K I	H S A I K E K I	S K T S
UniRef90_A5IYV3	I A Y E P V W S I	G T G I T P T P E E V E N	V S A L I H K L	
UniRef90_UPI000463E038	V A Y E P V W A I	G T G V S A K L E Q I Q E T	H K E I R K F	
UniRef90_F0YVS5	I A Y E P V W A I	G E G T P A T A E Y A A E R	H R D I R L L	L K E M F G D A A
UniRef90_UPI0002630398	I A Y E P R W A I	G T G K T P T L D E I A T M	H A I R A K L	L R G M I G A S A
UniRef90_B8C8U3	I A Y E P V W A I	G T G L V C E A D K A N D	V H K F I R S V L	E K M Y D K E V A
UniRef90_W0J553	V A Y E P V W A I	G Q G E P A T P D Y A A S R	H A L L R A L L	A A R F G D A A A
UniRef90_UPI00034DD451	I A Y E P R W A I	G A G R P A R G E E L A G	P F A A L R S E	Y G G V V A
UniRef90_V4MS41	I A Y E P V W A I	G E G I P A T A Q Y A D E	K Q K I I K Q C	L F E M F G E E S
UniRef90_Q7MA77	I A Y E P I W A I	G T G V S A S L E Q I Q E T	H A A L K A H L S C	
UniRef90_K7Z830	V A Y E P V W A I			
UniRef90_D5V5Q3	L A Y E P V W A I			

UniRef90_J3BUT2 R S V P V L Y G G S V S P Q N C E E L V S Q A H I D G L F I G R S A W S V D Y L

UniRef90_K3XLK7 E S T R I I Y G G S I H F S S S C A K S L A S K P D V

UniRef90_Q45Y76 E K T R I I Y G G S V T A S T C A K S L A S K P D V

UniRef90_F4LS00 R N I P V L Y G G S V N N Q N A A S D L I Q M P Y I D G L F I G R S A W D A D N F

UniRef90_UPI0004745893 N T V P V L Y G G S V S S K N I H Q F L E Q A H I D G S L V G G A S L Q Q V E F L

UniRef90_UPI0003FB804A E H T V L L Y G G S V N P D N A A E L L L Q Q P N I D G L F I G R S A W Q A E

UniRef90_Q1ZA2 R S F R I L Y G G S V K P D N I A S I C A Q P N V N G A L V G G A S L N A D V V

UniRef90_H8GUW9 E E V R V L Y G G S V K P D N I A S I C A K P N V N G A L V G G A S L K V

UniRef90_H6LBU5 K D V P L L Y G G S V N I N N A K D Y A G L E N V D G L F I G R S A W E P D F E

UniRef90_P78010 Q Q T S I L Y G G S V A K D N I K E L A Q T E Q I D G F L V G K A S L D V D F L

UniRef90_C6XJT7 D L T P I L Y G G S L K P S N A K E I L A L L G V D G G L V G G A S L K A D F L

UniRef90_Q2G6R5 S K V R I L Y G G S V N S G N A A E L L A A D G V D G G A L V G G A S L T A E F L

UniRef90_W0V8S2 V G V Q I L Y G G S M K P D N A K E L M A M P D I D G G L I G G A A L K A E F L

UniRef90_G5HNU1 A K I P I L Y G G S V N N I N A H E L V Q T P N I D G L F I G R S A W D A K N F

UniRef90_I8SGJ7 Q E T Y V L Y G G S V D K S N A I E I A T Q D G V D G L F I G R S G L Q V E F S

UniRef90_M5JCR9 D K I R I Q Y G G S V T P A N A A E I M Q Q P N I D G L L I G R A S L E P D F L

UniRef90_F1L4W1 R R I R I I Y G G S V D S N I R G F I K E T E I D G V L V G A A S L N S E F V

UniRef90_X0U883 L S Q T I I Y G G S V N A G N C V D L A A Q K D I

UniRef90_I2CCT4 L S Q T P I L Y G G S V K P A N I K E V L A S I P K C D G A L I G T A S W D V E F I

UniRef90_A6Q538 V T L I L Y G G S M N P G N A A E L L A V T D V N G G L I G G A S L K A E F L

UniRef90_A0A059G3E6 D K V R V Q Y G G S V K P E N V A E Y M A C P D I D G A L V G G A S L K A E F L

UniRef90_Q3CZR0 A A V R I L Y G G S V K P D N I G G F M A Q P D I D G A L V G G A S L D A D F A

UniRef90_E6SKU6 E L R L F Y G G S V G V G N A S A L G A L E G V D G L L V G R A S V E T D

UniRef90_T1AWZ7 L R I P I L Y G G S V S L D N A A Q Y T A L R D V D G V F I G R S A W D P S G L

UniRef90_UPI0004706AC0 E T V R I I Y G G S V N R D N A M V L A A L P E V D G L F V G R H A W T G E F A

UniRef90_UPI000474482B S E V A I I Y G G S V N A K T I R Q V C L D A E V D G V L V G R E S L D P E F I

UniRef90_UPI00036F5F04 I P L K V V Y G G S V N E K N T L Q L S L D E V D G A L I G R C S L S A D F I

UniRef90_B6BWW8 A G L R I L Y G G S V N G K N A A T L Y A K K D I N G F L V G G A S L K P E F L

UniRef90_S9VCS7 V A V P V L Y G G S V N P E N C A E L I A C P N I D G L F I G R S A W A E Y L

UniRef90_J3CCT2 Q K I R I I Y G G S V S Q N N V N D L I E N E H V D G V F V G R F G H D P E F K

UniRef90_S0L668 A H V P V L Y G G S V K P D N A R A L F R E P G I D G G L V G G A S L K A D F L

UniRef90_G2J7Q8 N N I S I L Y G G S V K H N N I Q K L A I M E Q I D G F L V G K A S L E I K F L

UniRef90_P47670 A V P L L F G G S V N I D N A R D Y A R L A N V D G L F I G R S A W E P E L F

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UniRef90_U2QXE5
UniRef90_L7QNE8
UniRef90_UPI00036FF848
UniRef90_L7QNE7
UniRef90_J2UZF7
UniRef90_UPI000370904B
UniRef90_UPI000345F1CD
UniRef90_X1U277
UniRef90_UPI0003B6F23C

		90	100	110	120										
UniRef90_D9ZHG7	ML	KDV	GADWV	L	GHSERRRA	IF	GES	DEL	LI	GEK	CA	HA	AI	SE	GL
UniRef90_D9ZHH4	ML	KDV	GADWV	L	GHSERRRA	IF	GES	DEL	LI	GEK	AE	HA	AI	SE	GL
UniRef90_J9YTU2	MV	KGV	GAKYV	L	GHSERRRA	EN	GET	SD	KL	LI	NQK	IV	KT	AL	KN
UniRef90_K7Z7K0	ML	KDI	GADWV	L	GHSERRRA	IF	GET	SD	KL	LI	NQK	IV	KT	AL	KN
UniRef90_D1L5J7	ML	KEI	GIDYV	L	GHSERRRQ	YF	NET	DE	ET	V	NKK	VK	SAL	KY	DI
UniRef90_V4NQB9	ML	KDA	GAGMV	L	GHSERRRR	HGH	HE	P	Y	AL	V	AKK	VI	GAL	VR
UniRef90_S6ITP7	VL	KEMG	CNVVE	I	GHAERRRY	FA	ET	DR	QI	FA	AD	KT	TA	AA	WR
UniRef90_B4Y1H5	ML	KEI	GVEYV	L	GHSERRRE	MF	NE	TD	LD	V	NKK	AK	VLL	EN	NI
UniRef90_K7VTX9						QEY	LD	R	I	MF	V	ADK	V	YA	LT
UniRef90_B9KFD8	H	L	E	F	N	I	K	S	V	L	I	G	H	S	E
UniRef90_D9ZHG6	ML	KDV	GAEWV	L	GHSERRRQ	IF	NE	DD	VL	I	AEK	CA	HA	AL	AM
UniRef90_S0S9B1	S	L	K	E	M	K	G	G	Y	A	E	I	G	H	I
UniRef90_E9LRZ0	ML	EEL	GVKYV	L	GHSERRRQ	YF	NET	DA	DL	V	NKK	MM	KA	FE	HN
UniRef90_E4ZHE7	V	L	R	Q	A	G	V	K	L	V	E	I	G	H	A
UniRef90_L8GE90	MV	KD	L	G	L	P	W	V	I	L	G	H	S	E	R
UniRef90_L7QMJ5	MI	KDV	GGEWV	L	GHSERRRST	IF	KE	SD	EL	I	GT	K	V	Q	K
UniRef90_K7ZIH5	MI	REV	GGEWV	L	GHSERRRST	IF	KE	SD	EL	I	GT	K	V	Q	K
UniRef90_J7LT15	ML	AEL	GVGLV	E	I	G	H	A	E	R	R	RY	F	AE	T
UniRef90_UPI0003B6BC80	ML	KSV	GAKYT	L	V	G	H	S	E	R	R	GE	D	E	A
UniRef90_D0URZ7	MI	KDI	GGEWV	L	GHSERRRQ	IF	NE	DD	VL	I	AEK	VA	HA	SL	SA
UniRef90_E9NYX3	MI	KDL	S	C	N	V	V	L	G	H	S	E	R	R	RY
UniRef90_K2DF69	N	L	K	E	L	I	S	L	T	I	V	G	H	S	E
UniRef90_G1EQU2	ML	NDI	GVEWV	L	GHSERRRT	YF	GE	TD	DE	LI	AEK	VA	HA	SL	SA
UniRef90_UPI0003B49D1E	N	I	S	D	L	N	I	K	F	T	L	V	G	H	S
UniRef90_L7QRD1	MI	KDN	G	I	E	W	V	L	G	H	S	E	R	R	RY
UniRef90_K1X0E6	S	L	H	E	L	G	C	S	V	V	E	L	G	H	A
UniRef90_L7QLP7	MI	KDI	G	K	N	W	V	L	G	H	S	E	R	R	RY
UniRef90_A0A024C3W4	H	L	E	E	L	G	C	I	H	T	L	L	V	G	H
UniRef90_R2PVL2	S	L	L	D	M	D	G	T	F	V	E	L	G	H	S
UniRef90_D0US08	MI	L	D	V	G	A	D	W	V	L	G	H	S	E	R
UniRef90_L7QLE9	ML	K	D	I	G	V	N	W	V	L	G	H	S	E	R
UniRef90_X0W6I3															
UniRef90_L7QR96	M	I	K	D	I	K	C	E	W	V	L	G	H	S	E
UniRef90_D1L5J8	ML	NEL	N	V	D	Y	V	I	L	G	H	S	E	R	R
UniRef90_B5ZAY7	Q	L	L	D	S	N	I	K	N	T	L	V	G	H	S
UniRef90_G1EQT3	ML	R	D	I	G	V	D	W	V	L	G	H	S	E	R
UniRef90_L7QMT5	MI	KDI	G	C	K	W	V	L	G	H	S	E	R	R	RY
UniRef90_K2FUX4	N	L	S	G	L	I	D	Y	A	I	L	G	H	S	E
UniRef90_C7MF36	Q	A	K	D	A	G	A	G	I	V	E	I	G	H	S
UniRef90_M9MH97	V	L	S	Q	V	G	V	K	F	V	E	I	G	H	A
UniRef90_D0US17	MI	KDV	GVEWV	L	GHSERRRQ	IF	GE	TD	DE	LI	AEK	VE	HA	AL	AS
UniRef90_L7QMM3	MI	KDV	GSEWV	L	GHSERRRT	IF	KE	TD	DE	LI	AEK	VA	HA	AL	AT
UniRef90_M4CG81	ML	V	N	L	D	M	P	W	F	I	L	G	H	S	E
UniRef90_L7QM82	MI	S	D	I	G	V	K	W	V	L	G	H	S	E	R
UniRef90_C9DE01	MV	M	Q	T	G	A	H	W	V	I	L	G	H	S	E
UniRef90_D1L5L8	ML	K	E	L	D	I	S	D	W	V	L	G	H	S	E
UniRef90_E9LRZ4	ML	N	E	L	N	I	D	Y	V	V	L	G	H	S	E
UniRef90_I6ZKF7															
UniRef90_D0URZ1	M	I	K	D	V	G	G	T	W	V	L	G	H	S	E
UniRef90_H1VS16	V	L	S	E	T	G	V	T	I	V	E	V	G	H	A
UniRef90_M1PP30	MI	R	G	M	V	E	Y	V	I	L	G	H	S	E	R
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UniRef90_L8EQB4	ML	A	E	T	G	A	R	Y	V	E	V	G	H	A	E
UniRef90_D0URZ6	MI	A	D	V	G	L	S	W	V	L	G	H	S	E	R
UniRef90_D0URY9	MI	KDV	G	A	T	W	V	L	G	H	S	E	R	R	RY
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UniRef90_E9LRX5	ML	E	A	M	G	V	D	Y	V	I	L	G	H	S	E
UniRef90_G9I7E1	ML	L	D	M	D	L	S	H	V	I	L	G	H	S	E
UniRef90_L7QN58	MI	K	D	I	G	S	D	W	V	L	G	H	S	E	R
UniRef90_L7QN53	MI	T	D	V	G	I	N	W	V	L	G	H	S	E	R
UniRef90_M3JQ86															
UniRef90_D0US24	M	I	K	D	I	G	L	K	W	V	L	G	H	S	E
UniRef90_UPI00037ADC06	ML	H	E	M	G	C	G	Y	V	E	I	G	H	A	E
UniRef90_A0A024VVQ6	L	I	Q	D	F	G	N	E	Y	T	L	I	G	H	S
UniRef90_UPI00046A910D															
UniRef90_R7NGH0	Q	L	K	S	L	N	I	Q	Y	A	I	I	G	H	F
UniRef90_W3XF43	V	L	A	E	V	G	C	R	I	V	E	L	G	H	A
UniRef90_X1U9F1															
UniRef90_UPI00034A6DA6	E	L	A	E	V	G	C	A	F	A	E	V	G	H	A
UniRef90_D0US15	ML	I	D	V	G	A	D	W	V	L	G	H	S	E	R
UniRef90_C9D9H9	ML	K	D	V	G	C	E	W	V	L	G	H	S	E	R
UniRef90_E1YCY3															
UniRef90_I6YAL2	Q	L	S	S	I	N	V	R	S	T	L	I	G	H	S
UniRef90_X0XI43															
UniRef90_D0US11	M	L	V	D	V	G	I	E	W	V	I	L	G	H	S
UniRef90_K7ZIG4	Q	L	K	D	V	G	A	D	W	V	L	G	H	S	E
UniRef90_A8Q3D0	T	L	A	Q	V	G	C	R	L	V	E	L	G	H	A
UniRef90_D8MVI4	ML	A	E	M	G	C	G	F	A	E	I	G	H	A	E
UniRef90_D0URZ8	ML	K	D	V	G	A	S	W	V	L	G	H	S	E	R
UniRef90_UPI0003B7B42C	E	L	A	E	V	G	V	S	V	V	E	I	G	H	A
UniRef90_Q2H196	V	L	H	E	V	G	C	G	M	V	E	I	G	H	A
UniRef90_UPI00035F0ED4	T	V	A	E	L	G	G	R	Y	A	E	V	G	H	A
UniRef90_E1YCY4	MI	V	S	A	G	C	T	Y	I	I	L	G	H	S	E
UniRef90_U2QXE5	Q	L	A	E	V	G	C	S	L	V	E	I	G	H	A
UniRef90_L7QNE8	MI	K	D	V	G	S	W	V	L	G	H	S	E	R	R
UniRef90_UPI00036FF848	T	V	A	E	L	G	G	R	Y	A	E	V	G	H	A
UniRef90_L7QNE7	MI	K	D	V	G	V	R	W	V	L	G	H	S	E	R
UniRef90_J2UFZ6	ML	Q	E	L	G	C	S	L	A	E	I	G	H	A	E
UniRef90_UPI000370904B	E	L	A	E	I	G	V	T	Y	A	E	V	G	H	A
UniRef90_UPI000345F1CD	ML	A	E	L	G	C	R	Y	V	E	I	G	H	A	E
UniRef90_X1UZ77	ML	A	D	L	C	E	F	V	I	L	G	H	S	E	R
UniRef90_UPI0003B6F23C	ML	H	E	L	G	V	H	I	V	E	L	G	H	A	E

[illegible]

	170	180	190	200
UniRef90_D9ZHG7	L			
UniRef90_D9ZHH4	V			
UniRef90_J9YTU2	I	A Y E P V W A I G S G M I P K S N D L L N A I D F I K S R F K		
UniRef90_K7Z7K0	I	A Y X P V W A		
UniRef90_D1L5J7	V	I Y E P I W		
UniRef90_V4NQB9	V	A Y E P V W A I G T G H I P T D E Q V V D A M V L V K S Y L E D R F H G Q V		
UniRef90_S6ITP7	V	A Y E P Q W A I G A A Q P A S P Q Y I G A V C T A L R Q H C I D T D L		
UniRef90_B4Y1H5	I	A Y E P I W A I G T G K T A T S S D A E E V C K Q I R N X L A K I Y D K N T A		
UniRef90_K7VTX9	I	A Y E P V W A I G T G K V I S T P T Q A Q E V H D G L R K W L H S N V S P T V V		
UniRef90_B9KFD8	I	A Y E P I Y S I G T G V S A N L D D I N T I L N F L R K F		
UniRef90_D9ZHG6	V			
UniRef90_S0S9B1	L	A Y E P A W A V G K T C A A S A V H V Q Q V H G L I R E C I K E L Y D I Q T S		
UniRef90_E9LRZ0	I	A Y E P I W A I G T G K		
UniRef90_E4ZHE7	L	A Y E P V W A I G A R E P A D A D H V V N V T Q E L R K L A A G R K G		
UniRef90_L8GE90				
UniRef90_L7QMJ5				
UniRef90_K7ZIH5	F	A Y E P V W A		
UniRef90_J7LT15	I	A Y E P V W A I G A P E P A S A E Y V S R V V A A L R E S L A Q H G L		
UniRef90_UPI0003B6BC80	V	A Y E P I W S I G T G K I P T A D E L K K T T I H I K K V L K G I F K K		
UniRef90_D0URZ7	I			
UniRef90_E9NYX3	L	A Y E P V W A		
UniRef90_K2DF69	V	A Y E P S F A I G T G N P D T P E N A D E L A K L L K G S Y G		
UniRef90_G1EQU2				
UniRef90_UPI0003B49D1E	I	S Y E P I Y S V G T G L V P E N C H I E H V I S L I K E K I		
UniRef90_L7QRD1	V			
UniRef90_K1X0E6	F	A Y E P V W A I G M E V P A D P E Y V V D V A K G L R A L C G E R		
UniRef90_L7QLP7				
UniRef90_A0A024C3W4	V	A Y E P V W A I G T K K S A S L E D I Y L T H G F L K Q I L N		
UniRef90_R2PVL2	I	A Y T P A W A V G K S K A A G T P H I K L A T T L I R K A I A K I Y G E D A N		
UniRef90_D0US08				
UniRef90_L7QLE9	V			
UniRef90_X0W6I3	L	A Y E P V W A I G T G L T A T P Q Q A Q Q M H A L I R K L L R E M Y D S Q L A		
UniRef90_L7QR96	V			
UniRef90_D1L5J8	I	A Y E P I W		
UniRef90_B5ZAY7	I	A Y E P I W A I G T N L T L D L K H I N H M I E G I K T Y L Y N C T G		
UniRef90_G1EQT3	V			
UniRef90_L7QMT5	V			
UniRef90_K2FUX4	L	A Y E P I Y A I G S G N N E P V E K V L K I K K K L R L A		
UniRef90_C7MF36	I	A Y E P I W A I G K G R P A T V E E L A E P F A A L G A E Y G G		
UniRef90_M9MH97	L	A Y E P V W A I G K A E P A S P E Y V V R I T K A L R R R Y N K E Y D K R T D		
UniRef90_D0US17	V			
UniRef90_L7QMM3	V			
UniRef90_M4CG81	A	T L V R Q Y M I G V E L V K C C H R L W T S A D H R K K W L A K N V G E D V A		
UniRef90_L7QM82				
UniRef90_C9DE01	I	A Y E P V W A		
UniRef90_D1L5L8	I	A Y E P I W		
UniRef90_E9LRZ4	I	A Y E P I W A		
UniRef90_I6ZKF7	I	A Y E P V W S I G T G V V A T P E Q A E E V H V G L R K W F A E K V C A E G A		
UniRef90_D0URZ1	I			
UniRef90_H1VS16	V	A Y E P V W A I G A S Q P A S E D H V I Q V V K G I R A F E S V K R R T		
UniRef90_M1PP30	I	A Y G P K E A A M A R I P E Q P K R V A E A A Q F I S Q V Q		
UniRef90_A9XXY1	V			
UniRef90_L8EQB4	I	A Y E P V W A I G A R E P A P A R H V R T V A T A I G T C L R D H G		
UniRef90_D0URZ6	L			
UniRef90_D0URY9	I			
UniRef90_L7QLV6				
UniRef90_E9LRX5	V	A Y E P I W A		
UniRef90_G9I7E1	I	A Y E P V W S I G T G V V A T		
UniRef90_L7QN58	V			
UniRef90_L7QN53				
UniRef90_M3JQ86	V	A Y E P V W A I G T G L T P T V Q D V R A A H A F M R D K L T E R F G T S G A		
UniRef90_D0US24	I			
UniRef90_UPI00037ADC06	L	A Y E P Q W A I G A K E P A S A D F I G E V C Q G L A Q R L V G G S G E R		
UniRef90_A0A024VVQ6	I	A F E P R F A I G T G Q P V S Y D I L N K Y Y Y E L K R D I A K E I D K S T S		
UniRef90_UPI00046A910D	V	A Y E P V W A I G T G R T A T K E Q A Q Q V H A F I R G E V A R I D A R I A		
UniRef90_R7NGH0	I	A Y E P T Y L I G N N T A Y D I L K I R S M I I F I K K L M Q D Y Y Q		
UniRef90_W3XF43	L	A Y E P V W A I G A A S P A A E Y V V N V V N D I R G L D C V I Q R R S		
UniRef90_X1U9F1	I	A Y E P V W A I G T G K A A T G E Q A N E T I G L I R C N I T D L Y N K E I A		
UniRef90_UPI00034A6DA6	V	A Y E P H W A I G A S E S A P V D H I A A V C R R L R S D L R A D A D L		
UniRef90_D0US15	L			
UniRef90_C9D9H9	I			
UniRef90_E1YCY3	L	A Y E P V W A I G T G K T A S S E Q A Q E V H L F L R N L I E K L F G E N I A		
UniRef90_I6YAL2	I	A F E P L S A I G S G S A M P P E L V E K Q L E E I K S L V M E M W G E P G		
UniRef90_X0XI43	I	A Y E P V W A I G T G E T A T P D Q A Q E V H A F I R T L L A D L Y D A R L A		
UniRef90_D0US11	L			
UniRef90_K7ZIG4				
UniRef90_A8Q3D0	L	A Y E P V W A I G K E E P A T P E H I R A V T Q A L R S R C L A E F P E R H D		
UniRef90_D8MVI4	L	A Y E P Q W A I G A A T S A P D D F I A E V C H G L R A F S G L G E		
UniRef90_D0URZ8	V			
UniRef90_UPI0003B7B42C	V	A Y E P V W A I G T A S P A P L A H I T A V C S G L R G A L D M L S E R		
UniRef90_Q2H196	L	A Y E P V W A I G A P E P A S A A H V K G V V R R L R E S E V V K A R K		
UniRef90_UPI00035F0ED4	V	A Y E P Q W A I G A P E P A T P G Y I N A V I S G L D E H L R S L P G Q E		
UniRef90_E1YCY4				
UniRef90_U2QXE5	I	A Y E P H W A I G R E D P A P A A H I A T V L D A L A E W G R T S G		
UniRef90_L7QNE8				
UniRef90_UPI00036FF848	V	A Y E P Q W A I G A P E P A T P E Y I S A V I A G L D T H L R S L P G Q		
UniRef90_L7QNE7	V			
UniRef90_J2UFZ6	F	A Y E P Q W A I G A P Q P A P D S Y I R A V C A G L Q Q L A T P A G		
UniRef90_UPI000370904B	V	A Y E P V W A I G A P H P A P V A H I T T V T R A L R T A L D A L P G R		
UniRef90_UPI000345F1CD	L	A W E P Q W A I G A P A P A D A F I A E V C H G L R Q L H D L G D		
UniRef90_X1UZ77	I	A Y E P V W A I G T G K A A T G E Q A N		
UniRef90_UPI0003B6F23C	F	A Y E P V W A I G A A K P A S A D H I N A V L Q L I R E Q L T R S G		

	210	220	230	240
UniRef90_D9ZHG7				
UniRef90_D9ZHH4				
UniRef90_J9YTU2	Q N L K I L Y G G S V N D K N I N E L K T I H N I D G F L V G G A S Q N S K F I			
UniRef90_K7Z7K0				
UniRef90_D1L5J7				
UniRef90_V4NQB9	T P H V L Y G G S V K P D N A A H L L T L D G V G G L L V G G A S L K A D F N			
UniRef90_S6ITP7	Q N T R V I Y G G S A G P G L L T R L G D H V D G L F L G R F A H E P E F A			
UniRef90_B4Y1H5	E Q I I I Q Y G G S V K P S N I Q E Y L K M P N I D G			
UniRef90_K7VTX9	E L T R I I Y G G S V N G A N C K E L A A Q P D V D G F L V G G A S L K V			
UniRef90_B9KFD8	T N A K L L Y G G S V N Q S N I K E I C A L K N C D G V L I G S A A L N A D F L			
UniRef90_D9ZHG6				
UniRef90_S0S9B1	E N I R I I Y G G S V S Q E N T K L I V S D E N V D G V F V G R F G H N P K Y A			
UniRef90_E9LRZ0				
UniRef90_E4ZHE7	V T R I V Y G G S A G P G T F A K I A Q G V D G L F L G R F A H D			
UniRef90_L8GE90				
UniRef90_L7QMJ5				
UniRef90_K7ZIH5				
UniRef90_J7LT15	A G I P V I Y G G S A K P G L L P Q L D G V S G L F L G R F A H D A			
UniRef90_UPI0003B6BC80	N S P A V L Y G G S V D G S N V E M F K E I K E I D G F L V G G A S K T S K F I			
UniRef90_D0URZ7				
UniRef90_E9NYX3				
UniRef90_K2DF69	E G L E V L Y G G S V N S G N V N N F I I Q E Y L S G V L V G G A S L D A E F T			
UniRef90_G1EQU2				
UniRef90_UPI0003B49D1E	N K P V L Y G G S V S N N N I N H L M E I N S V N G F L I G K E A L D V K F E			
UniRef90_L7QRD1				
UniRef90_K1X0E6	K V R F L Y G G S A G P G T F G K M K E E V D G L F L G R F A H D A Q A L			
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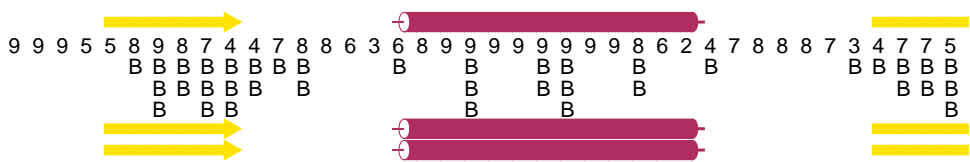
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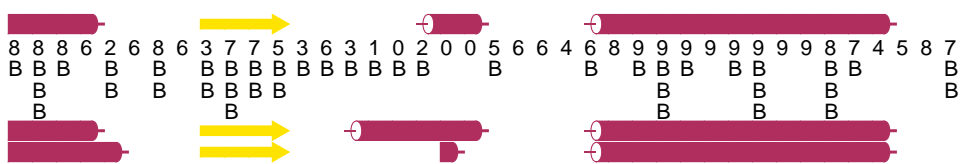
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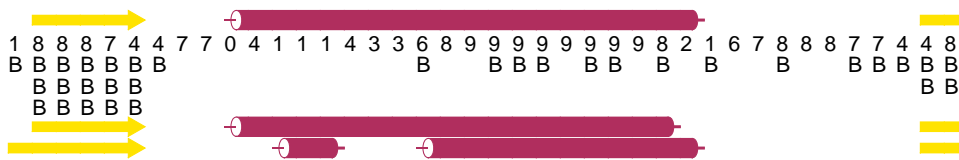
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UniRef90_UPI0004663E1D	T	P	V	V	C	I	G	E	R	D	H	L	P	A	A	V	A	A	E	A	I	C	G	Q	F	D	G	V	R	D	L	S	A	E	A	V	A	A	L	L
UniRef90_L8TSS9	T	P	V	L	C	V	G	E	G	L	E	V	R	Q	A	G	T	H	V	N	H	T	L	E	Q	L	R	A												
UniRef90_R7M8C1	T	P	I	L	C	I	S																																	
UniRef90_R6RVY9	K	V	L	Y	C	I	G	E	K	S	E	E	Q	E																										
UniRef90_D9XXD7	T	P	V	L	C	V	G	E	R	D	R	G	T	P	G	E	A	A	A	R	T	V	A	E	A	A	R	L	L	D	G	L	D	G	T					
UniRef90_UPI0001B445F1	T	P	V	V	C	V	G	E	G	I	R	A	N	D	T	N	E	A	A	N	A	L	K	K	Q	I	E	A	L	F	D	T	I	Q	Q	F	K	N	V	V
UniRef90_D4J6Z7	D	V	L	Y	C	I	G	E	N																															
UniRef90_G9RQW5	R	V	L	Y	C	I	G	E	T																															
UniRef90_UPI00016C008B	K	V	L	Y	C	I	G	E	K	E																														
UniRef90_U6K4K3	Q	V	I	A	C	I	G	E	S	L	E	T	R	E	S	G	K	T	M	E	F	L	G	E	Q	L	K													
UniRef90_R5TB64	S	V	L	Y	C	I	G	E	S	S	E	E	Q	E																										
UniRef90_UPI00034D65C0	V	P	I	A	C	L	G																																	
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UniRef90_E6N8A3	V	S	I	V	C	A	D	D																																
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UniRef90_Q8TUT9	L	T	I	V																																				
UniRef90_B8GJJ7	V	T	V	I	C	S	N	N	D	M	T	S	A	A	A	A	A																							
UniRef90_Q97VM8	K	S	I	L	C	V	D																																	
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