

QUERY	1	10	20	30	40																																					
UniRef90_P02007	V	L	S	A	A	N	K	S	N	V	K	A	A	W	G	K	V	G	G	N	A	P	A	Y	G	A	Q	A	L	Q	R	M	F	L	S	F	P	T	T	K		
UniRef90_P02004	V	L	T	A	E	D	K	K	L	I	Q	A	T	W	A	K	V	A	T	Q	A	E	E	E	I	G	A	E	A	L	W	R	M	F	H	A	S	Y	P	Q	T	K
UniRef90_UPI000273A1C1	V	L	T	K	A	E	D	K	K	L	I	Q	A	T	W	A	K	V	S	T	Q	A	E	E	E	I	G	A	E	A	L	E	R	L	F	I	S	Y	P	Q	T	K
UniRef90_UPI000273A1EE	V	L	T	S	G	A	D	K	T	N	V	K	A	V	W	S	K	V	G	G	N	A	G	A	Y	G	A	E	A	L	T	R	T	F	L	S	F	P	Q	T	K	
UniRef90_UPI000386FDDE	M	L	T	A	E	D	K	K	L	I	Q	Q	W	W	E	K	V	V	A	G	H	Q	E	D	F	G	A	E	A	L	E	R	M	F	A	T	Y	P	Q	T	K	
UniRef90_P83134	M	L	T	E	D	D	K	Q	L	I	H	V	W	E	K	V	V	L	A	G	H	Q	E	D	F	G	A	E	A	L	E	R	M	F	I	V	Y	P	Q	T	K	
UniRef90_P18971	V	L	S	P	T	D	K	S	N	V	K	A	T	W	A	K	V	I	G	N	H	G	A	E	Y	G	A	E	A	L	E	R	M	F	M	N	F	P	S	T	K	
UniRef90_P10059	M	L	S	A	S	D	K	A	N	V	K	A	I	W	S	K	V	C	V	H	A	E	E	Y	G	A	E	A	L	E	R	M	F	T	V	Y	P	Q	S	R	K	
UniRef90_Q90ZA5	L	T	A	E	D	K	A	L	V	V	V	L	W	G	K	I	A	G	H	T	D	A	L	G	A	E	A	L	E	R	D	R	L	F	A	C	Y	G	Q	S	R	K
UniRef90_P01979	M	L	T	D	A	E	K	K	E	V	T	A	L	W	G	K	A	A	G	H	G	E	E	Y	G	A	E	A	L	E	R	L	F	Q	A	F	P	S	T	T	K	
UniRef90_Q6H1L9	L	S	S	D	A	D	K	N	N	V	K	E	F	W	E	K	V	L	G	A	H	G	E	E	Y	G	A	E	A	L	E	R	T	F	S	S	F	P	S	T	K	
UniRef90_P01934	V	L	S	P	A	E	D	K	T	N	V	K	A	A	W	G	K	I	V	G	A	H	A	G	D	Y	G	A	E	A	L	E	R	M	F	L	S	F	P	T	T	K
UniRef90_P06467	L	M	K	N	E	R	A	T	I	I	M	S	M	W	E	K	M	A	A	Q	A	E	P	I	G	T	E	T	L	E	R	L	F	C	S	Y	P	Q	T	K		
UniRef90_P69891	F	T	E	E	D	K	A	T	I	I	T	S	L	W	G	K	V	N	V	E	D	A	G	A	E	A	L	E	R	G	R	L	L	V	V	Y	P	W	T	K		
UniRef90_UPI00045D5A6F	V	L	S	S	A	D	K	A	N	V	K	A	A	W	G	K	I	V	G	G	K	A	G	D	Y	G	A	E	A	L	E	R	T	F	L	A	F	P	S	T	K	
UniRef90_O12985	M	L	T	D	S	D	K	K	L	V	L	Q	W	E	K	V	I	R	H	P	D	C	G	A	E	A	L	E	R	L	F	T	T	Y	P	Q	T	K				
UniRef90_F7GY95	L	T	K	T	E	R	T	I	I	V	S	M	W	A	K	I	S	T	Q	A	D	T	I	G	T	E	A	L	E	R	M	F	L	S	F	P	T	T	K			
UniRef90_U3K6C5	W	T	A	E	E	K	Q	L	I	T	G	L	W	G	K	I	V	N	V	A	E	C	G	A	E	A	L	E	R	A	R	L	L	I	V	Y	P	W	T	K		
UniRef90_Q38IW1	L	L	S	E	A	E	K	A	A	V	L	S	I	W	A	K	A	S	G	N	V	N	A	L	G	A	E	A	L	E	R	L	F	L	S	Y	P	Q	T	K		
UniRef90_G1LJX4	L	T	T	K	A	E	R	T	I	I	L	S	M	W	D	K	I	S	S	Q	A	D	A	I	G	T	Q	A	L	E	R	L	L	E	T	S	Y	P	Q	T	K	
UniRef90_UPI000444024C	L	T	T	K	N	E	R	T	I	I	L	A	M	W	D	K	I	A	T	E	S	E	E	I	G	R	E	T	L	D	R	L	L	T	V	F	P	Q	A	K		
UniRef90_UPI0003991C8A	W	S	A	E	E	K	Q	L	I	A	T	V	W	G	K	I	V	S	V	E	E	C	G	A	E	A	L	E	R	L	L	L	I	V	Y	P	W	T	K			
UniRef90_P02011	L	S	A	S	E	K	A	A	V	L	S	I	V	G	K	I	S	G	Q	G	S	A	L	G	S	E	A	L	T	R	L	F	L	S	F	P	Q	T	K			
UniRef90_Q8UW95	L	S	A	N	D	K	A	T	V	K	A	L	W	A	K	I	V	P	K	A	E	D	I	G	N	E	A	L	S	R	M	L	Y	V	Y	P	Q	T	K			
UniRef90_F7A141	L	S	A	E	E	K	S	A	I	T	T	L	W	G	K	I	V	N	P	E	E	H	G	G	E	A	L	E	R	A	R	L	L	V	V	Y	P	W	T	K		
UniRef90_C3KGZ6	L	T	A	E	K	D	K	A	T	V	K	A	L	W	G	K	I	S	K	S	D	A	I	G	A	D	A	L	E	R	G	R	M	L	V	V	Y	P	Q	T	K	
UniRef90_Q28932	L	S	A	E	E	K	G	H	I	N	A	I	W	S	K	V	S	V	D	Q	T	G	A	E	A	L	E	R	G	R	L	L	I	V	Y	P	W	T	K			
UniRef90_Q90487	L	S	D	T	D	K	A	V	V	K	A	I	W	A	K	I	V	P	K	A	D	E	I	G	A	E	A	L	E	R	A	R	M	L	T	V	Y	P	Q	T	K	
UniRef90_V5N4L6	L	T	D	I	D	K	T	A	V	K	A	F	W	G	K	I	V	S	G	K	A	D	A	I	G	H	E	A	L	E	R	V	R	M	L	L	V	Y	P	Q	T	K
UniRef90_V5N513	L	S	A	K	D	K	A	A	V	K	A	F	W	A	T	I	V	A	P	K	A	E	D	I	G	G	Q	A	L	F	R	M	L	T	V	Y	P	Q	T	K		
UniRef90_P01984	V	L	S	S	H	D	K	S	N	V	K	G	L	F	G	K	V	G	H	L	E	E	Y	C	A	E	T	L	E	R	A	R	M	F	A	A	Y	P	Q	T	K	
UniRef90_Q7ZYZ4	L	S	A	K	D	K	A	N	V	K	A	S	F	F	D	K	V	A	P	K	A	E	E	I	G	R	E	A	L	E	R	S	R	T	L	F	V	Y	P	Q	T	K
UniRef90_H3ABR1	M	L	S	A	N	D	K	T	L	I	S	T	W	N	K	V	A	A	N	A	E	D	I	G	A	E	A	L	E	R	E	R	L	F	L	A	H	P	Q	T	K	
UniRef90_UPI000333C137	L	T	G	E	E	K	A	A	V	T	G	L	W	A	K	V	V	N	V	E	E	I	G	G	E	A	L	E	R	G	R	L	L	V	V	Y	P	W	T	K		
UniRef90_D0VWV2	L	S	S	K	D	K	D	T	V	K	A	L	W	G	K	I	V	A	D	K	A	E	E	I	G	S	D	A	L	E	R	S	R	M	L	A	V	Y	P	Q	T	K
UniRef90_C1FXX6	L	T	K	A	E	R	T	I	I	V	S	M	W	G	K	I	V	A	S	Q	A	D	A	I	G	T	E	A	L	E	R	L	F	A	S	H	P	Q	T	K		
UniRef90_UPI0003AFE419	F	T	A	E	E	K	A	A	I	T	G	L	W	G	K	V	V	N	V	E	E	A	G	G	E	A	L	E	R	G	R	L	L	V	I	Y	P	W	T	K		
UniRef90_P86882	L	S	A	D	K	K	A	A	V	K	A	L	W	N	K	I	V	S	K	S	A	D	V	I	G	A	D	A	L	E	R	G	R	L	L	V	V	Y	P	Q	T	K
UniRef90_F6YMH9	V	L	S	A	A	D	K	T	N	V	K	A	A	W	S	K	V	G	G	N	S	G	A	Y	M	G	E	A	L	E	R	Y	R	T	F	L	S	F	P	Q	T	K
UniRef90_G8G8X6	L	N	D	K	D	K	A	A	V	K	A	L	W	A	K	I	V	S	K	S	A	D	T	I	G	S	N	A	L	E	R	T	R	M	F	T	V	Y	P	Q	T	K
UniRef90_G1M487	F	T	A	E	E	K	A	A	V	V	S	L	W	A	R	V	I	N	V	E	L	V	G	G	E	V	L	E	R	G	R	L	L	V	V	Y	P	W	T	K		
UniRef90_C1BX42	L	S	A	K	D	K	A	N	V	K	S	I	W	N	K	I	V	L	P	K	S	D	D	I	G	D	Q	A	L	E	R	S	R	M	L	V	V	Y	P	Q	T	K
UniRef90_P18987	W	T	A	E	E	K	Q	L	I	T	Q	V	W	G	K	I	V	D	V	A	Q	I	G	G	E	T	L	E	R	A	C	L	L	V	V	Y	P	W	T	K		
UniRef90_UPI00044436D5	L	T	D	K	D	K	A	A	V	K	A	L	W	A	K	I	V	S	K	G	A	D	A	I	G	A	E	A	L	E	R	A	R	M	L	V	V	Y	P	Q	T	K
UniRef90_UPI0003F0D5A0	L	S	D	A	E	K	A	L	V	N	G	I	W	A	K	I	V	S	K	D	V	D	K	I	G	G	Q	A	L	E	R	G	C	L	L	I	V	Y	P	W	T	K
UniRef90_Q63067	F	T	A	E	E	K	A	T	S	L	S	I	W	E	K	V	V	D	L	E	K	L	G	G	E	T	L	E	R	G	R	L	L	I	V	Y	P	W	T	K		
UniRef90_Q98SE6	L	T	A	K	D	K	Q	T	V	K	A	F	W	A	K	I	V	S	G	K	S	E	D	I	G	A	A	A	V	E	R	A	R	M	L	V	V	Y	P	Q	T	K
UniRef90_Q9BE12	W	T	A	E	E	K	Q	L	I	L	A	I	W	A	K	I	V	S	D	I	E	E	A	G	A	A	A	V	E	R	S	R	L	L	V	V	Y	P	W	T	K	
UniRef90_H2TTY2	L	S	A	D	D	K	K	V	V	K	A	F	W	G	K	I	V	S	T	K	A	D	A	I	G	A	D	A	L	E	R	G	R	L	L	V	V	Y	P	Q	T	K
UniRef90_W5LAT4	L	T	A	K	D	M	A	T	V	K	T	L	W	G	K	I	V	S	S	K	S	D	E	I	G	A	E	A	L	E	R	G	R	L	L	T	V	Y	P	Q	T	K
UniRef90_UPI0004746CD9	L	S	A	K	D	K	A	A	V	K	D	L	W	A	K	I	V	P	K	A	D	E	I	G	S	E	A	L	E	R	G	R	L	F	E	V	F	P	Q	T	K	
UniRef90_UPI00032A1B52	L	S	E	K	D	K	N	I	V	Q	T	F	W	A	K	V	V	A	G	R	E	E	D	I	G	C	D	A	V	E	R	S	R	M	L	T	V	Y	P	Q	T	K
UniRef90_UPI000441B56A	V	L	S	D	E	D	K	T	R	I	R	A	A	W	A	P	V	S	K	N	A	E	V	Y	G	C	E	A	L	E	R	Y	R	M	F	L	S	Y	P	T	T	K
UniRef90_P18993	W	T	A	E	E	K	Q	L	I	C	S	L	W	G	K	I	V	D	V	G	L	I	G	G	E	T	L	E	R	A	G	L	L	L	V	I	Y	P	W	T	K	
UniRef90_D6R731																																										

QUERY	50	60	70	80
UniRef90_P02007	T Y F P H F D L S H G S A Q Q K A H G G Q K V A N A L T K A Q G H L N D N L P G T L			
UniRef90_P02004	T Y F P H F D L S H G S A Q Q L R G H G G K K V L N A L T G E A V K N L N D N L R Q A L			
UniRef90_UPI000273A1C1	T Y F P H F D L S H G S A Q Q I R G H G G K K V I G A I L G N D A V K N L N D N L S E S A			
UniRef90_UPI000273A1EE	T Y F P H F D L S H G S A Q Q V K A H G G K K V A D A L S Q A V A N L N D D L P G T L			
UniRef90_UPI000386FDDE	T Y F P H F D L S H G S A Q Q I K A H G G K K V A A A L V E A A N H I L N D D L A G A T L			
UniRef90_P83134	T Y F P H F D L S H G S A Q Q V K A H G G K K V V G A L G D A V K H I L N D N L A S A T L			
UniRef90_P18971	T Y F P H F D L S H G S A Q Q V K A H G G K K V A D A L T K A V G H I M D N L L D A L L			
UniRef90_P10059	T Y F P H F D L S H G S A Q Q V K A H G G K K V V N A M G E A V N H I L D D M A D M G L			
UniRef90_Q90ZA5	T Y F S H F D L S H G S A Q Q I K A H G G K K V A D A L T S T A A G H I F D D M D S A L			
UniRef90_P01979	T Y F S H F D L S H G S A Q Q V K A H G G K K V A D A L T L A V N H I M D D L P N A A F			
UniRef90_Q6H1L9	T Y F A H F L E L S H G S A Q Q V R A H G G K K V A D A L T B A V Z H I L D D M L P A A L			
UniRef90_P01934	T Y F P H F D L S H G S A Q Q L R A H G F K I M T A V G D A V K S I L D N L L S S A L			
UniRef90_P06467	R F F D S F S A I M G N P K V K A H G G K K V L T S F G D A I K H I L D D L K G T F			
UniRef90_P69891	T Y F P H F D L S H G S A Q Q V R N H G G K K V A D A L T G N A V K S L G N L S Q A L			
UniRef90_UPI00045D5A6F	T Y F P H F D L S H G S A Q Q V K A H G G K K V L T S F G E A V K N L D S I K G T F			
UniRef90_O12985	T Y F P H F D L S H G S A Q Q V R N H G G K K V L A A L T G N A V K S L G N L S Q A L			
UniRef90_F7GY95	T Y F P H F D L S H G S A Q Q V K A H G G K K V A D A L T G E A V K N L D S I K G T F			
UniRef90_U3K6C5	R F F S S F G N L S S N P K V K A H G G K K V L T S F G E A V K N L D S I K G T F			
UniRef90_Q38IW1	T Y F S H F D L S S G S H D L Q V H G G K K V L G A I G E A A Q H I L D N L D A A L			
UniRef90_G1LJX4	T Y F P H F D L S H G S A Q Q L R A H G G K K V V A A L G D A V K N I D N I A G A L			
UniRef90_UPI00044024C	T Y F P H F D M N S R S A P V K K A H G G K K V M S A I G D A V K N I D N V I A G A L			
UniRef90_UPI0003991C8A	R F F S S F T A I I G N P K V R A H G G K K V L T S F G E A V K N L D N I K T T F			
UniRef90_P02011	T Y F P H F D L T P G S A D L N T H G G K I I N A L G A A N H I L D D L A G N L			
UniRef90_Q8UW95	T Y F S H F W L S P G S A P V K K H G G K K V V A G I G L A V E K I D D L F A G L			
UniRef90_F7A141	R F F D S F G N L S S N P K V K A H G G K K V L T S F G D A V K N L D N L K G T F			
UniRef90_C3KGZ6	T Y F T H F W L S P G S A P V K K H G G K K V M S G V A L A V S K I L D D L A G L			
UniRef90_Q28932	R F F D H F G D L M G N A K V L T S F G D A V K N M D N L K G T F			
UniRef90_Q90487	T Y F S H W D L S P G S G P V K K H G K T I M G A V G E A I S K I D D L V G G L			
UniRef90_V5N4L6	I Y F S H W P L S P G S E S Q I K K H G K M V L S G V G E A V N I D D L V G G L			
UniRef90_V5N513	T Y F S H W N D S L G S E S Q I K K H G K M V L S G V G E A V N I D D L V G G L			
UniRef90_P01984	T Y F P H F D L Q P G S A Q V K A H G G K K V A G A L A E A N H I L D D I A S A L			
UniRef90_Q7ZYZ4	T Y F S H W D L S P N S P Q V K K H G T T V I N G V L T A V G L M D D L A G G L			
UniRef90_H3ABR1	I Y F S H M D L S P G S S M L R A H G G K K V M G T I E G S K S I D K L A T V L			
UniRef90_UPI000333C137	R F F D S F S A I M G N P K V K A H G A K V L H S F S E G L N H I D N L K G T F			
UniRef90_D0VWV2	T Y F S H W D L S P G S A P V N K A H G K T I M G G I V D A V A S I D D L N A G A L			
UniRef90_C1FXX6	T Y F P H F E L R A G S A Q L R A H G S K V A A A V G E A A G S V D D V A G A L			
UniRef90_UPI0003AFE419	R F F D S F S A I M G N P K A K A H G K E V L T S S R E A T K N L N N L K T D A F			
UniRef90_P86882	T Y F S H W D L S P N S A P I K K H G G K T V M T G V A L A V S N I D D M T A G L			
UniRef90_F6YMH9	T Y F P H F D L S A G S A Q I K G G G K K I A D A V S L A V A H I M D D L A T A L			
UniRef90_G8GX6	T Y F S H W T E L T P S V P V K N H G G K K V M N G I G L A V A K I D D L V C G L			
UniRef90_G1M487	R F F D S F S A I M G N P K V K A H G G K K V L T S F G N A V K H I M D D L K D T F			
UniRef90_C1BX42	T Y F S H F D L T P G S A Q V R K H G D T I M N K I D D C A V N H I M D D L V S Y L			
UniRef90_P18987	R F F P D F G A I C G N A K V K A H G G K K V L T S F G D A V K N L D N I K D T F			
UniRef90_UPI0004436D5	T Y F S H W P D M S G S G P V T K H G G K K I M G G V A L A V A K M D D L S G G L			
UniRef90_UPI0003F0D5A0	R F F D S F D A I I K N P K V A A H G K K V V N S F S E G M K H I D D L K G T F			
UniRef90_Q63067	R F F D K F P A I M G N P Q I R A H G G K K V L V S L G L A V E N M D N L K E T F			
UniRef90_Q98SE6	T Y F S H W P D S P N S A A A R K H G T V M V G V G D A V T K I D D L K E G L			
UniRef90_Q9BEI2	R Y F S N F T A I A G N P R V R A H G G K K V L T S F G E A V K N L D N V K A T F			
UniRef90_H2TTY2	T Y F S H W K E L T P N S D V K I H G A R I M T G V T E A I G K M D N L T V I G L			
UniRef90_W5LAT4	T Y F A H W D V S P G S A P V K K H G K T I M G A V G E A V S K I I E D L P G A L			
UniRef90_UPI0004746CD9	T Y F A H W S D L N P S A H V K K H G S V I V R R I V R G E A V G H I D D L T G G L			
UniRef90_UPI00032A1B52	T Y F S H W D L S P G S D P V R K H G A T V M A A V T D A V S K I D D L I G A L			
UniRef90_UPI000441B56A	T Y F P H F D F S L G S S D L K T H G R K V I D A L T E A I N N L D D I P G A L			
UniRef90_P18993	R Q F S H F T A I A G N P R V R K A H G G K K V L T S F G D A I K N L D N I K D T F			
UniRef90_D6R731	R Y F G T F G A I Q G N P K V A Q H G K T V L N A L G K A V Q N M D D I K G T Y			
UniRef90_B2KHW1	T Y F F H F D L S P G S A Q V K A H G G K K V A D A L T L A V D H I M D D L P R A L			
UniRef90_UPI00038EA702	T Y F P H F D M T P G S P Q I Q A H G G K K V A N A L N K A V E N I D D M P T A L			
UniRef90_E5RWQ1	R F F S S F S A I L H N A K V H A H G G K K V L T S F G E A V K N L D Q T K Q T F			
UniRef90_P41331	T Y F P H F D L S P G S N D L K V H G G K K V I D A L T E A V N N L D D V A G A L			
UniRef90_P02054	R F F E S F D A I M G N P K V K A H G G K K V L S A F S E G L H I L D N L K G T F			
UniRef90_Q45X16	R F F E H F D A I L K N P R V Q A H G E K V L S S F G E G L N H L D N L R G T F			
UniRef90_P41332	R F F S H F N A I L C N P V V K A H G G K K V L T S F G E A A K H I D D I K E T F			
UniRef90_P01946	T Y F S H F D V S P G S A Q V K A H G G K K V A D A L A K A A D H V E D L P G A L			
UniRef90_L8J2H0	T Y F P H F D L S Q G S A Q V K G H G A K V A A A L T K A V E H I D D L P G A L			
UniRef90_Q19LH2	T Y F A H W S D L P D S P G V R K H G S V I M A A V G A I G K I D D L P G A L			
UniRef90_Q802A4	I Y F S E W S D L R P G S P V K A H G G K K V M G G I A T A V A S I D D L T C G L			
UniRef90_P80270	T Y F T H W D L S P S S T S V K N H G K N I M V G V S L A V S K M D D L T A G L			
UniRef90_P0C0U8	R F F T S F G A I Q S N A Q V K A H G G K K V E T A F G D A V K N P E A V K E T F			
UniRef90_UPI00042CDA72	R F F D S F D A I L G N P K V K A H G G K K V L D S F S E G L K Q L D D L K G A F			
UniRef90_H2LCU1	T Y F S H L D I G P G S A H L S S H G K K I V L A I A E G A K D I S Q L T V I T L			
UniRef90_Q19LH3	A Y F S H W D L N V N P S V K K H G A V I M T G I A R G V K Y I D D L T N G L			
UniRef90_UPI000343F5F8	T Y F P H F D L S P G S A Q V K A H G G K K V A D A L T L A V A H I D D L P G A L			
UniRef90_UPI0003C8A12B	R F F D N F S A I I G N P K V Q A H G E K V L T S F G N A V K H I M E D F K G T F			
UniRef90_UPI0003C16005	R Y F S T F T V I A R N F K V Q Q H A A K V I N A L T E A I R N L D N L K A S F			
UniRef90_P09907	R F F D S F G D L S T N A K V K A H G G K K V L H S F G D G V H I L D N L K G T Y			
UniRef90_A4IGT0	R Y F S S F G N L S T N A K V R A H G G K K V L S A V G D A I T H I L D N V K G T L			
UniRef90_P18436	R F F D N F S A I M G N P K V K A H G G K K V L S S L G E A V T H I M D D L K D A F			
UniRef90_H9GGM8	T Y F P H F D L S P G S K D I Q V H G G K K V A R A L D M A L H I L D N V R G T L			
UniRef90_Q7LZC2	R Y F G Q F G A I S G N P K V A A H G K V V L D G V E K A V K N L D S I K A T Y			
UniRef90_H2TTY1	T Y F A H F W D Q S P T S A S A K K H G T I M N A I G D S V S K I D D L K G G L			
UniRef90_L5KGV2	T Y F P H F D L H P G S A Q L R L H G S K V V A A V G D A V K S I D N I A G A L			
UniRef90_P24292	R F F G H F C A V M D N P K V Q A H G G K K V L H S L G D G L N H I D D L K H F Y			
UniRef90_P02142	R Y F G S F G A I M G N P K V A A H G G K V C G A L T D K A V K N M G N I L A T Y			
UniRef90_P18974	T Y F A H F D L N P G S A Q I K A H G G K K V D A L T Q A V K N N L D D I P A S L			
UniRef90_B9EIX8	T Y F P H F D L R P G S S Q V K A H A Q K V A D A L T L A T Q H I L D D L P A S L			
UniRef90_P02012	T Y F P S F D F H N S K Q I S A H G G K K V D A L N E A S N H I D N I A G S M			
UniRef90_Q9PVM3	A Y F S H W D L N P Q H P Q M I S K H G A I I M G G I G K A V K N I D D L V R G L			
UniRef90_P84205	A Y F S H W P E T T P S A P V K K H G A R I L G A I N D A V K N I D D M A G A L			
UniRef90_I3I2Z7	R Y F Q S F G A I M G N P K V A Q H G G T V M G G I E N A V K N I D N I K N T Y			
UniRef90_B2BP38	R Y F G N F G A I M G N P M V A A H G K T V L G G L D R A V K N M D N I K A T Y			
UniRef90_G5BXY2	T Y F P N F D L S P G S P Q I Q A H G R K V A D A L N K A V E H I D D M P A A L			

QUERY	90										100										110										120													
UniRef90_P02007	S	N	L	S	N	L	H	A	H	K	L	R	V	N	P	V	N	F	K	L	L	S	H	S	L	L	V	T	L	A	S	H	L	P	T	N	F	T	P	A				
UniRef90_P02004	S	A	K	L	S	E	L	H	A	Y	N	L	R	V	D	P	V	N	F	K	F	L	S	S	H	Q	L	L	V	T	A	A	T	R	Y	L	G	K	E	Y	S	P	E	
UniRef90_UPI000273A1C1	S	K	L	S	E	L	H	A	Y	I	L	R	V	D	P	V	N	F	K	L	L	L	S	S	H	T	L	L	V	T	L	A	A	H	R	F	L	G	A	E	F	T	A	E
UniRef90_UPI000273A1EE	S	K	L	S	D	L	H	A	Q	K	L	R	V	D	P	V	N	F	K	L	L	L	G	Q	C	F	L	V	V	L	A	C	H	L	Q	S	K	A	D	L	L	T	P	E
UniRef90_UPI000386FDDE	S	E	L	S	N	L	H	A	Y	N	L	R	V	D	P	V	N	F	K	L	L	L	S	H	C	F	Q	V	V	L	G	A	H	L	L	G	R	E	Y	T	P	Q		
UniRef90_P83134	S	D	L	S	D	L	H	A	H	K	L	R	V	D	P	V	N	F	K	L	L	L	S	H	C	F	L	V	T	L	A	V	L	H	L	P	A	E	F	T	P	S		
UniRef90_P18971	L	K	L	S	D	L	H	A	Q	K	L	R	V	D	P	V	N	F	K	L	L	L	A	Q	C	F	L	V	V	L	G	V	H	H	L	P	A	A	L	T	P	E		
UniRef90_P10059	S	K	L	S	D	L	H	A	Y	N	L	R	V	D	P	G	N	F	Q	L	L	L	S	H	C	I	Q	T	V	L	A	A	H	R	F	L	G	A	D	F	T	P	Q	
UniRef90_Q90ZA5	S	A	L	S	D	L	H	A	H	K	L	R	V	D	P	V	N	F	K	L	L	L	A	H	C	F	L	V	T	L	A	A	R	H	H	L	P	G	N	L	N	P	E	
UniRef90_P01979	S	A	L	S	B	L	H	A	H	K	L	R	V	B	P	V	B	F	K	L	L	L	N	H	C	L	L	V	T	L	A	A	B	F	L	S	Z	F	T	P	A			
UniRef90_Q6H1L9	T	K	L	S	E	L	H	A	Y	I	L	R	V	D	P	V	N	F	K	L	L	L	S	H	C	L	L	V	T	M	A	A	R	F	P	A	D	F	T	P	E			
UniRef90_P01934	A	Q	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	K	L	L	L	G	N	V	L	V	T	V	L	A	I	H	F	G	K	E	F	T	P	E			
UniRef90_P06467	S	E	L	S	N	L	H	A	R	K	L	R	V	D	P	V	N	F	Q	L	L	L	H	C	L	L	V	T	L	A	R	H	Y	L	G	N	D	Y	T	P	A			
UniRef90_P69891	S	D	L	S	D	L	H	A	Y	N	L	R	V	D	P	V	N	F	K	L	L	L	A	Q	C	F	H	V	V	L	A	A	H	H	L	P	A	E	F	T	P	A		
UniRef90_UPI00045D5A6F	S	A	L	S	D	L	H	A	H	K	L	R	V	D	P	V	N	F	K	L	L	L	S	H	C	L	L	V	T	L	A	A	H	R	F	L	G	K	D	F	T	P	D	
UniRef90_Q12985	A	Q	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	L	G	D	I	L	L	V	V	L	A	S	H	F	T	K	D	F	T	P	A			
UniRef90_F7GY95	S	A	L	S	D	L	H	A	H	K	L	R	V	D	P	V	N	F	K	L	L	L	S	H	C	L	L	V	T	L	A	A	H	H	L	P	A	E	F	T	P	A		
UniRef90_U3K6C5	A	Q	L	S	E	L	H	C																																				

QUERY	V	H	A	N	L	N	K	F	L	A	N	D	S	T	V	L	T	S	K	Y	R		
UniRef90_P02007	V	H	A	A	W	D	K	F	L	A	S	S	I	S	T	V	L	T	E	K	Y	R	
UniRef90_P02004	V	H	A	A	V	D	K	F	L	M	S	A	S	T	V	L	T	A	E	K	Y	R	
UniRef90_UPI000273A1C1	A	H	A	A	W	D	K	F	L	S	K	V	A	S	A	I	L	T	E	K	Y	R	
UniRef90_UPI000273A1EE	A	H	A	S	M	D	K	F	F	A	S	V	A	S	V	A	I	L	T	E	K	Y	R
UniRef90_UPI000386FDDE	V	H	A	S	L	D	K	F	L	A	C	A	V	G	S	V	L	T	A	K	Y	R	
UniRef90_P83134	V	Q	V	A	Y	D	K	F	L	A	A	V	S	A	V	L	T	A	E	K	Y	R	
UniRef90_P18971	V	H	A	S	L	D	K	F	L	A	A	V	S	T	V	L	T	A	E	K	Y	R	
UniRef90_P10059	V	H	A	S	L	D	K	F	L	A	C	A	V	G	L	V	L	T	A	E	K	Y	R
UniRef90_Q90ZAs	A	Q	A	A	W	D	K	F	L	A	A	V	S	G	V	L	T	A	E	K	Y	R	
UniRef90_P01979	A	H	A	A	M	D	K	F	L	S	K	V	A	T	V	L	T	S	K	Y	R		
UniRef90_Q6H1L9	V	H	A	S	L	D	K	F	L	S	I	V	S	S	V	L	T	S	K	Y	R		
UniRef90_P01934	V	H	A	S	V	D	K	F	L	A	S	V	S	T	V	L	T	S	K	Y	R		
UniRef90_P06467	V	H	E	A	W	D	K	F	M	S	I	L	S	T	V	L	T	E	K	Y	R		
UniRef90_P69891	V	Q	A	S	W	Q	K	M	V	T	A	V	A	S	A	L	S	S	R	Y	R		
UniRef90_UPI00045D5A6F	M	Q	A	S	L	D	K	F	L	H	H	I	T	S	A	L	V	S	Q	Y	R		
UniRef90_O12985	A	H	A	A	F	D	K	F	L	S	A	V	C	T	V	L	T	A	E	K	Y	R	
UniRef90_F7GY95	V	H	A	S	L	D	K	F	L	A	S	V	S	T	V	L	T	A	E	K	Y	R	
UniRef90_U3K6C5	C	Q	A	A	W	Q	K	L	V	R	V	V	A	H	A	L	T	A	R	K			
UniRef90_Q38IW1	A	Q	A	A	W	D	K	F	L	A	A	I	S	T	V	L	T	S	K	Y	R		
UniRef90_G1LJX4	M	Q	A	A	W	D	K	F	L	T	G	V	A	V	V	L	T	E	K	Y	R		
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UniRef90_UPI0003991C8A	C	Q	F	A	W	Q	K	L	V	G	V	V	A	H	A	L	T	A	R	R	Y		
UniRef90_P02011	V	Q	A	A	W	D	K	F	L	A	L	V	A	S	A	V	L	T	S	K	Y	R	
UniRef90_Q8UW95	A	H	L	A	M	D	K	F	L	A	R	L	A	L	A	L	A	S	H	K	Y	R	
UniRef90_F7Al41	V	Q	A	A	W	Q	K	L	V	A	G	V	A	S	A	L	A	D	E	K	Y	R	
UniRef90_C3KGZ6	V	H	V	A	M	D	K	F	F	C	G	V	S	L	A	L	A	S	E	K	Y	R	
UniRef90_Q28932	V	Q	A	A	W	Q	K	L	V	A	G	V	A	T	A	L	A	S	E	K	Y	R	
UniRef90_Q90487	V	H	V	S	V	D	K	F	L	N	N	L	A	T	A	L	A	S	E	K	Y	R	
UniRef90_V5N4L6	V	H	I	A	M	D	K	F	L	A	A	V	S	A	A	L	A	S	E	K	Y	R	
UniRef90_V5N513	I	H	V	A	M	D	K	F	L	A	A	V	S	L	A	L	A	S	E	K	Y	R	
UniRef90_P01984	V	H	A	S	L	D	K																



	1		10		20		30		40																																
UniRef90_UPI00042C01C9	WT	A	E	E	R	H	Y	I	T	A	T	W	D	K	L	N	V	E	E	G	S	E	S	L	A	R	L	L	I	V	Y	P	W	T	Q						
UniRef90_P55267	L	N	C	D	D	K	A	H	I	R	A	I	W	P	C	L	A	S	H	A	E	Q	Y	G	A	E	A	L	H	R	M	F	L	C	H	P	Q	T	K		
UniRef90_Q8AYQ6	WT	D	F	E	R	A	T	A	Q	D	I	F	S	K	I	L	G	S	D	Y	D	I	V	G	P	E	D	A	L	S	R	E	C	L	I	V	Y	P	W	T	Q
UniRef90_UPI00018B5EDE	V	L	E	A	A	D	R	A	A	V	T	R	A	L	W	L	K	L	G	S	N	V	G	V	Y	T	T	E	A	L	E	R	T	F	L	A	F	P	S	T	K
UniRef90_UPI00035A227A	L	T	E	A	D	E	K	A	L	V	T	G	L	W	G	K	V	L	G	S	D	V	P	V	I	G	A	E	S	L	A	R	M	L	I	V	Y	P	W	T	Q
UniRef90_Q7ZT84	V	L	T	A	E	D	R	R	L	L	Q	A	S	V	I	G	K	L	G	C	R	L	E	D	I	G	A	D	A	L	N	R	L	F	I	V	Y	P	Q	S	K
UniRef90_Q7T1B0	WT	A	E	E	R	A	F	I	Q	D	I	F	S	K	L	L	N	Y	E	E	E	A	G	P	K	A	L	Q	R	A	L	I	V	Y	P	W	T	Q			
UniRef90_UPI0003955C04																																									
UniRef90_Q90486	WT	D	A	E	E	R	T	A	I	L	G	L	W	G	K	L	N	I	D	E	I	G	P	Q	A	L	S	R	E	C	L	I	V	Y	P	W	T	Q			
UniRef90_UPI00032ADC07	L	L	S	P	E	E	K	A	A	V	T	A	L	W	N	K	V	D	V	E	D	V	G	G	E	A	L	R	R	L	L	I	V	Y	P	W	T	R			
UniRef90_A9UM89	V	W	T	D	F	E	K	A	T	I	Q	D	I	F	A	K	L	A	D	Y	D	V	I	G	P	Q	A	L	A	R	C	L	I	V	Y	P	W	T	Q		
UniRef90_C8YNP9	L	T	D	K	D	K	A	L	I	K	G	F	F	A	K	V	S	S	K	A	V	E	I	G	H	Q	T	L	A	R	T	I	V	Y	P	Q	T	K			
UniRef90_UPI00039460B9	L	S	G	K	D	K	A	V	V	K	N	F	W	G	K	V	A	P	K	A	A	E	I	G	G	E	A	L	G	R	L	L	I	V	Y	P	W	T	Q		
UniRef90_B3EWE0	L	T	A	D	E	K	V	S	L	S	S	L	W	G	K	V	V	N	P	D	E	L	G	G	E	A	L	G	R	L	L	L	V	Y	P	W	T	Q			
UniRef90_P02137	L	S	A	D	E	K	S	A	I	N	A	V	W	S	K	V	V	N	I	E	N	D	G	H	D	A	L	T	R	L	L	V	Y	P	W	T	Q				
UniRef90_P83272	W	S	D	K	E	R	A	V	I	S	I	F	S	H	M	L	G	L	D	Y	E	D	I	G	P	K	A	L	S	R	C	L	I	V	Y	P	W	T	Q		
UniRef90_P29628	W	S	D	S	E	R	A	I	I	T	D	I	F	S	H	M	L	G	L	D	Y	E	D	I	G	P	K	A	L	S	R	C	L	I	V	Y	P	W	T	Q	
UniRef90_B3EWR7	L	S	D	K	D	K	T	F	V	K	A	F	W	G	K	V	L	K	G	K	A	D	D	V	G	A	E	A	L	A	R	M	F	G	A	F	P	A	T	K	
UniRef90_P84611	W	T	D	E	E	R	T	I	I	N	D	I	F	S	T	L	L	G	L	D	Y	E	E	I	G	R	K	S	L	C	R	C	L	I	V	Y	P	W	T	Q	
UniRef90_Q7LZM7	V	L	T	E	D	D	K	T	H	V	K	T	L	W	G	H	V	H	N	H	A	E	E	I	A	D	A	L	T	R	M	F	L	A	H	P	T	S	K		
UniRef90_K7N5M6	W	T	D	Q	E	R	A	T	I	S	S	I	F	G	S	L	L	N	D	Y	D	D	I	G	P	K	A	L	S	R	C	L	I	V	Y	P	W	T	Q		
UniRef90_P11749	W	T	Q	Q	E	R	S	I	I	A	G	F	I	A	N	L	L	N	Y	E	D	I	G	P	K	A	L	A	R	C	L	I	V	Y	P	W	T	Q			
UniRef90_P83113																																									
UniRef90_M1VK56	W	T	A	E	E	K	A	A	V	I	N	S	V	W	A	K	V	A	S	H	G	A	D	Y	G	G	E	A	L	Y	R	L	F	L	S	N	P	Q	T	K	
UniRef90_P83114	L	T	D	Q	E	I	K	Y	I	N	A	I	W	S	K	V	V	D	L	E	N	D	G	H	A	E	A	L	T	R	L	L	L	V	Y	P	W	T	Q		
UniRef90_U5KNU7	L	S	A	E	E	K	A	A	V	T	A	L	W	G	K	V	V	N	V	D	E	V	G	G	E	T	L	G	R	L	L	V	Y	P	W	T	Q				
UniRef90_UPI000383BA95																																									
UniRef90_W5KM05	W	T	E	E	E	R	N	F	I	R	E	I	F	S	K	L	L	K	Y	E	D	V	G	P	K	S	L	C	R	A	L	I	V	Y	P	W	T	Q			
UniRef90_M3WAU3	M	L	S	A	Q	E	R	A	H	V	A	Q	V	W	D	L	I	A	G	H	E	A	A	F	G	A	E	L	L	R	L	F	T	V	Y	P	S	T	K		
UniRef90_P85082	W	T	D	F	E	R	S	T	I	K	D	I	F	A	K	I	L	L	D	Y	D	C	V	G	P	A	A	F	A	R	C	L	I	V	Y	P	W	T	Q		
UniRef90_L5KH54	V	L	S	A	S	D	T	A	A	V	R	A	L	W	F	A	K	L	G	N	V	G	V	Y	T	T	E	A	L	E	R	T	F	L	A	F	P	S	T	K	
UniRef90_C1BJP8	W	T	P	E	E	L	T	C	I	N	G	I	F	A	K	L	L	N	D	Y	E	D	I	G	P	K	A	L	Q	R	C	L	I	V	Y	P	W	T	Q		
UniRef90_H3A6U9	W	T	E	T	E	R	A	T	I	S	E	T	V	Y	Q	K	L	L	H	L	D	E	V	G	R	E	A	L	T	R	L	F	L	I	V	Y	P	W	T	Q	
UniRef90_W5MLZ3	M	T	T	A	S	E	K	A	L	V	S	I	W	K	A	A	D	F	T	E	E	W	G	E	D	A	L	L	R	L	L	T	V	F	P	Q	T	K			
UniRef90_C8YNP6	M	L	S	K	Q	E	K	E	L	I	I	E	I	W	T	R	L	T	P	L	A	D	R	I	G	A	E	A	L	L	R	M	F	T	S	Y	P	G	T	K	
UniRef90_C8YNR8	W	T	E	F	E	R	D	T	I	K	D	I	F	S	K	L	L	D	Y	D	V	V	G	P	A	A	L	T	R	C	L	I	V	Y	P	W	T	R			
UniRef90_P02130	I	F	S	E	A	E	K	T	A	I	V	S	L	W	E	K	A	S	G	N	V	K	A	L	G	A	E	V	L	E	R	L	F	L	S	F	P	Q	T	K	
UniRef90_Q6GPU5	W	T	D	F	E	R	A	T	I	K	D	I	F	S	K	L	L	E	Y	D	V	V	G	P	A	T	L	A	R	C	L	I	V	Y	P	W	T	Q			
UniRef90_P82345	L	S	A	S	E	D	K	H	N	V	K	T	T	W	H	I	K	G	H	E	E	A	L	G	A	E	A	L	F	R	M	F	T	S	L	P	A	T	R		
UniRef90_P10784	V	L	S	A	Q	D	K	A	N	V	K	A	V	W	E	H	V	K	G	H	E	E	V	Y	G	A	E	A	L	H	R	A	F	V	C	D	P	Q	T	Q	
UniRef90_A0EZW4	W	T	D	F	E	R	A	T	I	Q	N	L	F	S	K	M	L	L	D	Y	E	L	V	G	P	A	A	L	S	R	C	L	I	V	Y	P	W	T	Q		
UniRef90_UPI00034F7437	L	T	N	S	E	R	A	I	I	T	T	I	W	D	K	M	S	M	Q	A	D	V	I	G	T	E	T	L	E	R	L	F	S	S	Y	P	Q	T	K		
UniRef90_UPI00005BFE7C																																									
UniRef90_W5KM17	M	L	S	Q	R	E	R	E	L	L	V	E	L	W	D	R	L	T	P	V	A	E	D	I	G	S	E	A	L	L	R	M	F	T	T	F	P	K	T	K	
UniRef90_UPI00039448BF																																									
UniRef90_Q33CJ7	F	T	N	D	E	R	Q	Q	I	H	D	A	W	A	K	L	L	H	A	D	Q	V	G	G	E	A	L	F	L	R	M	L	T	V	Y	P	W	T	R		
UniRef90_M4AD09	L	T	D	K	E	R	V	M	I	Q	D	S	W	A	K	V	Y	Q	N	C	E	E	A	G	V	A	M	L	Y	R	L	F	V	N	F	P	S	S	K		
UniRef90_UPI000394614B	W	T	D	F	E	R	A	T	I	K	D	I	F	S	K	I	L	L	D	Y	E	V	V	G	P	A	A	I	S	R	C	L	I	V	Y	P	W	T	Q		
UniRef90_P14521	L	T	E	A	Q	R	G	A	I	V	N	L	W	G	H	L	S	P	D	E	I	G	P	Q	A	L	A	R	L	L	I	V	Y	P	W	T	Q				
UniRef90_K7FZS0																																									
UniRef90_P02020	F	S	Q	D	D	E	V	L	I	K	E	A	W	G	L	L	H	Q	I	P	N	A	G	G	E	A	L	A	R	M	F	S	C	Y	P	G	T	K			
UniRef90_UPI0003C1633B																																									
UniRef90_UPI0003B49794																																									
UniRef90_M3WAU4																																									
UniRef90_Q9PVL7	V	F	T	N	D	E	R	K	D	I	H	E	V	W	G	K	V	L	K	A	D	K	L	G	A	D	A	L	A	R	V	L	I	V	N	P	W	T	R		
UniRef90_K4FYM0	V	L	S	K	T	D	K	A	L	L	S	S	S	V	G	K	I	Q	A	Q	A	T	L	G	S	D	V	L	A	R	M	F	A	S	F	P	Q	T	K		
UniRef90_M1VNS7																																									
UniRef90_UPI00045E4628	V	L	S	P	A	D	K	S	N	V	K	A	A	W	G	K	V	G	H	A	G	E	Y	G	A	E	A	L	E	R	M	F	L	S	F	P	T	T	K		
UniRef90_G5DZM8																																									

		50	60	70	80
UniRef90_UPI00042C01C9	K F F E D F S A	L H N T R V	H D H G K K V L N S F G S A V K N M D H	K E S F	
UniRef90_P55267	T Y F P N F D F	H A N N S A K H L	K N H G K K V L M N A L T E D A V K H L D H P	E A S L	
UniRef90_Q8AYQ6	R Y F G S F G N L Y N N S A K V R	A A H G K K V L G A G L T E K A L K N M D D L	K S A Y		
UniRef90_UPI00018B5EDE	T Y F L H L D L S P G S A Q V	K A H G K K V L A D A L T L J A V K H L D D L	P S A L		
UniRef90_UPI00035A227A	R F F E H F S A V M S N A Q V	K A H G K K V L H S F A D G L K H L D D L	K G T F		
UniRef90_Q7ZT84	T Y F S H F N L S P G S K D I	V H G G E K I G K A L D G A L K H L D D L	K R G T L		
UniRef90_Q7T1B0	R Y F G S F E A I I N N P K V	A A H G T V V L H G L D R A M K N M D D I	K N T Y		
UniRef90_UPI0003955C04	R F F S D F T A I I G N P K V	R A H G K K V L T S F G E A I K N L D N L	K G T Y		
UniRef90_Q90486	R Y F A T F G A I M G N P K V	A A H G R T V M G G L E R A I K N M D N V	K N T Y		
UniRef90_UPI00032ADC07	R S F M T F S A I L A N P K V T	I H G K K V L G A G A F T K S I K N H L D N L	K N D T F		
UniRef90_A9UM89	R Y F A K F G N L Y N N P M V	A A H G K T V L K G L E L A V K N M D N I	K A T Y		
UniRef90_C8YNP9	V Y F S H W K D L P D S P N I	R K H G Y T V V K G V L D S V V D L I D D L	V G G L		
UniRef90_UPI00039460B9	T Y C S H W D L S P D C A Q V	K M H G A N I M X V G N M D D L	V G G L		
UniRef90_B3EWE0	R F F D S F V A V M G N A K V	K A H G K K V L D S F S D S G L K H L D N L	K G T F		
UniRef90_P02137	R Y F S S F G A I S G N A K V	R A H G K K V L S A G L V D E S I H H L D D L	K N F L		
UniRef90_P83272	R Y F G S F G A I M G N P K I	A A H G I K V L H S A G L D R G V K N M D N I	K N D A Y		
UniRef90_P29628	R H F S G F G N L Y N N A N V	A A H G I K V L H G L D R G V K N M D N I	A A T Y		
UniRef90_B3EWR7	S Y F A H W P L S A G S G P V	K K H G K I L M A G L D R A L K I D N L	V S G L		
UniRef90_P84611	R Y F G A F G N I L M A N P K V	I A A H G T K I L H G L D R A L K N M D D I	K N T Y		
UniRef90_Q7LZM7	T Y F A H F D F S P N S A N I	K A H G K K V L A N A L N Q A V K H L D D I	K G T L		
UniRef90_K7N5M6	R H F G S F E A I I G N K K V	A A H G I K V L H G L D R A V K N M D N I	K E I Y		
UniRef90_P11749	R Y F S T P D A I L K G N A K I	A A H G V K V L H G L D R A V K N M D N I	K N E A Y		
UniRef90_P83113	T Y F P N F D F H K D S P Q I	K A H G K K V V D A L T E A S K H L D N I	N G A L		
UniRef90_M1VK56	R Y F S T F S A I A G N A K V	H A H G K K V L G S I D N A L K H L D D N L	K H T L		
UniRef90_P83114	R Y F S T F D A I S H N S K V	I A H G E K V L R S I D N A L K H L D D N L	K G Y		
UniRef90_U5KNU7	R F F E T F S A V M G H A E V	K T H G K K V M N A F S D G L K H L D D N L	M G T F		
UniRef90_UPI000383BA95	R F F D S F S A I M G N P K V	K A H G K K V L T S F G E A I K N L D N L	K G A F		
UniRef90_W5KM05	R Y F A H F D A I M A N P E V	I R H G A V V M H G L D V A L K D M N N I	K S N Y		
UniRef90_M3WAU3	I Y F K H L G V C P D E A Q L	L T H G Q R L L E A V G V A V Q H T D H L	R A A L		
UniRef90_P85082	R Y F G N F G A I I G N P V	A K H G I T I M H G L E R G V K N L D D L	T E T Y		
UniRef90_L5KH54	T Y F L H L D L S P G S T N V	K A H G K K V A D A L T L J A L K N M D I	N A F		
UniRef90_C1BJP8	R Y F S T F E A I I G N S K V	A A H G I K V L H G L D I A L K N M D I	N A F		
UniRef90_H3A6U9	R Y F K S F K A I A S N P K V	T E H G L K V M N K A L T E A A H N L D I	K D L F		
UniRef90_W5MLZ3	T Y F T N V D I T P G S A K L	R A H G G K V M T A L A Q A A A D I D N I	K S S V L		
UniRef90_C8YNP6	T Y F S H L D I T P R S A H L	S H G Q K I F L A L A E G S K D I A N L	M T N L		
UniRef90_C8YNR8	R Y F G N F E A I M G N E M V	A N H G K K V L H G L D R A V K N M D	H I K E S Y		
UniRef90_P02130	R Y F E H F H D I L H N S K V	Q E H G K K V L A S F G E A V K H L D N I	K G H F		
UniRef90_Q6GPU5	I S F G H I D M S P E S Q D L	Q V H G G K L L G A F G E A T K Y L D N L	D A A L		
UniRef90_P82345	R Y F A K F T A I A E N A M V	S K H G I T I L H G L D R A V K N M D D I	K N T Y		
UniRef90_P02014	T Y F P A K D L S E G S S F L	H S H G K K V M G A L D S N A V A H I D D I	D A A L		
UniRef90_P10784	T Y F A G K D L K E N S A Y L	H G H G K K V M S A L T N A V A H I D D I	E G S M		
UniRef90_A0EZW4	R Y F G N F E A I T S N E N V	I N H G K V V L H G L D R A V K N M D N I	K D T Y		
UniRef90_UPI00034F7437	T Y F P H F D L H P G S P Q L	R A H G S K V M A A V G D A V K S I D N V	E V A L		
UniRef90_UPI00005BFE7C	T Y F P H F D L H T G S A Q L	R A H G S R V V A A V G D A V K S I D N V	T S A L		
UniRef90_W5KM17	T Y F T H L D L S P H S E P L	R S I G K K V E A A I A E G T R H I G Q F	T A N L		
UniRef90_UPI00039448BF	T Y F S H W D L S P G S A P V	K K H G A A V M A A V T D A V S K I D D L	T G A L		
UniRef90_Q33CJ7	R Y F K S F D A I Q H N P K V	A S H G A K V M T S I V D A V G H L D D L	K A Y Y		
UniRef90_M4AD09	L Y F S Q F K H I E S P Q L	R K H A G A Q R V M N A L N T L V E N I D D V	A S V L		
UniRef90_UPI000394614B	R Y F A G F G A I T S N P K V	A A H G K V V M Q G L E K A V K N M D N I	K A T F		
UniRef90_P14521	R Y F A S F G A I M G N P K V	A A H G K V V V G A L D K A V K N L D N I	K G T Y		
UniRef90_K7FZS0	T Y F P H F D L H H D S E Q V	R H G K K V T A L G N A V H H M D T	S S K L		
UniRef90_P02020	S Y F P H F D F S A N N E K V	K H H G K K V V D A I G Q G V Q H L D D L	S S C L		
UniRef90_UPI0003C1633B	V Y F R H L G D H P D E V Q L	L S H G Q R M L Q A V G V A V R Y L D N L	R A V L		
UniRef90_UPI0003B49794	T Y F S H W P L S A G S G P V	T K H G K K I M A G V G L A V A K M D D L	S G G L		
UniRef90_M3WAU4	T Y F P H F D L T P G S A Q V	K A H G K K V A D A L T R A V A H L D D L	P T A L		
UniRef90_Q9PVL7	K H F S S F E A I L L H N P K I	A A H G A K V V H S I I E A S K H L D D L	K G Y Y		
UniRef90_K4FYM0	V Y F V I G S D Y T K G P R V	Q K H G L T V M T K I I E G I Q Y L D S L	K S F L		
UniRef90_M1VNS7	R Y F P T F D A I M H N P K V	L A H G E K V I T S D G G L K H L D N L	K A H F		
UniRef90_UPI00045E4628	T Y F P H F D L S H G S A Q V	K G H G K K V A D A L T L A V G H V D D M	P H A L		
UniRef90_G5DZM8	R Y F S S F T A I L S G N A K V	Q G H G K K V L S A I G D T I S H I D D V	K H F L		
UniRef90_G1MYC6	Q Y F S Q F K E M E R S L Q L	R K H A G A Q R V M G A I N S V I E N L D D V	S S V L		
UniRef90_K7FMT4	S L F A K F D E M K S S D E L	K K H G I T V L T A L G R I L K Q K N N	H E Q E L		
UniRef90_P10786	R Y F H D F D A I C R N P K V	L A H G A K V M R S I V E A T K H L D D L	K R E Y Y		
UniRef90_M3ZVD1	Q Y F S D F Q E M E Q S S Q L	R Q H A C R V M N A I N T V V I E N L D D V	S S V L		
UniRef90_P84216	T Y F P N F S Y H A T D A P V	K A H G A K V I N A V L K A A E H L D D L	P K H L		
UniRef90_P02135	R Y F S T F D A I S H N S K V	L A H G Q R V L D S I E E G L K H P Z B L	K A Y Y		
UniRef90_P02203	D R F A K F D E M K N S E D L	K K H G T T V L T A L G R I L K Q K R H H E A E I			
UniRef90_H3B4U9	Q Y F S Q F R D M E R S V Q L	R K H A R R V M N T V V E N V E D Q D K I A S V L			
UniRef90_UPI00029D92B9	R F F D S F S A I M G N P K V	K A H G W K L G V X L S G G Q A G A L			
UniRef90_P04247	D K F D K F N M K G S E D L	K K H G C T V L T A L G T I L K K K G Q	H A A E I		
UniRef90_P02138	R Y F N S F G A I K H N P K V	S A H G R K V L A A I I E C T R H F G N I	K G H L		
UniRef90_H3D5V2	R Y F S S F E A I R N N P K V	A K H G V T V L H G L D R A L K N M D N I	K E E Y		
UniRef90_H2LKV1	T Y F G T F G D I F N N P K V	A H H G K V V L R S I D K A V R M D R I	K E E T H		
UniRef90_G5CB64	T Y F P H F D L H P G S P Q L	R A H G S K V M A A L G D A V K N I D N V	E V A L		
UniRef90_V5N6Q4	Q Y F S Q F R E M D R S S Q L	R K H A C R V M N A I N T V V I E N L D D V	P E K V S		
UniRef90_G1KST1	E K F D K F D E M K N S E D L	K K H G T I V L T A L G K I L K Q K R R	H E A E L		
UniRef90_F2Z286	S Y F D Y A D Y S A A G A K V	Q L H G G K V I R A V V S A A E H D D D L	H A H L		
UniRef90_G1PMI1	D K F E K L D E M K A S E D L	K K Q G A T V L T A L G G I L K K K G Q	H E A E L		
UniRef90_K7FYS7	T Y F A H F D L H G S S Q V R	T Q G A T V L T A L G D A V A H V D D L	P S A L		
UniRef90_Q86QI8	R F F E S F D A V M G N P K V	K A H G K K V I T A F N D G L A H L D N L	K G T F		
UniRef90_E9PFT6	T Y F A H W P D L T P S H I	K A H G K K V M G G I A L A V S K I D D L	K A G L		
UniRef90_Q071M5	Q Y F S Q F K E M E R S P Q L	R K H A C R V M N T V L E S L H D P D K V	A S V L		
UniRef90_UPI0003316BA2	Q Y F S E F Q E M Q S A Q L	Q K H A V L V M K A L N A L V E N L D D G	G S V V		
UniRef90_V5N4H6	I Y F K N L Q E M Q S D N A G I	R A H G K R V M G A L N H V I E N L D D G	C S A L		
UniRef90_F6UQT5	A H F P K F K D I P S N A D V	K T H G N T V F K A L G D V V K Q K G K	H A S N L		
UniRef90_K4G4N4	Q L F K D F K E M Q R S I Q L	R K H A R V M T T N T L V E N L D D A D A M A			
UniRef90_H2U139		V R A H G A K V L V S F G D A V K N L D N L	K G T F		
UniRef90_P07420	A Y F K T I P N L Q E D P L V	R F H G R R V M V A L N Q V A E N L D N W	C R I L		
UniRef90_M7BE56	I Y F S H W K D L S A G S A V	R M H G L A V M Q G V L R A V E L M D D L	N V G L		
UniRef90_W5LAJ0	T Y F S H W P D L T P S E P V	M V H G K L	S T I		
UniRef90_UPI00032A1881	Q Y F D Q F R D M H Q S V Q L	K K H A L R V M T A L N T L V I E N L D K L	N T I F		
UniRef90_M4QW49					

[illegible]

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UniRef90\_Q90486 V Q E A W Q K F L A V V V S A L C R Q Y  
UniRef90\_UPI00032ADC07 M Q A A L Q K L F A G V A M A M A H K Y  
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UniRef90\_C8YNP9 V H V S V D K Y L A L I C L A L C E K Y R  
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UniRef90\_B3EWE0 A Q G T F Q K V V A G V A N A L A H K Y  
UniRef90\_P02137 V Q A A W E K F S A G L V A A L S H G Y  
UniRef90\_P83272 T Q L A F Q K F L A V V V S A L G K Q Y  
UniRef90\_P29628 T Q A A V Q K F L A V V V S A L G K Q Y  
UniRef90\_B3EWR7 L H V S L D K F F A A V G A A L S D K Y R  
UniRef90\_P84611 T Q V A V Q K F L S V V V S A L G R Q Y  
UniRef90\_Q7LZM7 L I V S L D K F L E E V C K V L V S K Y R  
UniRef90\_K7N5M6 T Q A T F Q K F L A V V V S A L G K Q Y  
UniRef90\_P11749 T Q C A F Q K F L A V V V F A L G R K Y  
UniRef90\_P83113 A H H Q L D K F L A A V G G S L T S K Y R  
UniRef90\_M1VK56 V Q A A W E K F L N V L V A A L S H G Y  
UniRef90\_P83114 V Q A A F E K A F G G V A D A V G K G Y  
UniRef90\_U5KNU7 V Q A A W Q K V V S G L D N S M A H K Y  
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UniRef90\_W5MLZ3 A H V A C D K F L V R V A E V L S Q K Y R  
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UniRef90\_P02130 C H A A F Q K L V R Q V A A A L A E Y  
UniRef90\_Q6GPU5 A Q A A W N K F L E A I S T L L T S K H R  
UniRef90\_P82345 V Q A A F E K F M A V V V S S L G R Q Y  
UniRef90\_P02014 V H C S V D K F L D V V G H V L T S K Y R  
UniRef90\_P10784 N H R S V D K F L S T V K H V L T S K Y R  
UniRef90\_A0EZW4 V Q A A F Q K F L A V V V S  
UniRef90\_UPI00034F7437 F H T I I D K L F L H L C  
UniRef90\_UPI00005BFE7C A H A A W D K F L S I V S G V L T E K Y R  
UniRef90\_W5KM17 A H A A T D K Y L S A Y S A I L L A E K F R  
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UniRef90_Q9YGW1	R Y F Q K R T D F R S S	I H A G G I V V G A	D L T Q D A V K	H M D V S K T
UniRef90_UPI000273F3B6	R F F D N X G N L T D N S	K V K S H S A G K L	L T S F E K M L	H I G D N T S G
UniRef90_UPI000273A1EF	T Y F L M N T A R L X R	S H S A P W S E G	A L L S Q A I A N	K L D D S L S
UniRef90_P02206	D L F P K F K E I P N N E	A R L R K H G V T	V L R A L L G N I	A K Q K G K H S
UniRef90_UPI0003C28C4F	K Y F K T I P N L Q A N	P L V R F H G R R	V M V A V N D Q V V	Q L E K D N S W
UniRef90_M7B1Z7	S Y F T H F K E M E Q S D	Q V R K S H G K R V	L T T I V N Q V L V	Q H L L D S T D
UniRef90_UPI00027F7E11	R Y F E S F V I X G N Y	P R V K A H X K K	V L I S F R N A V	T L M D D L K S
UniRef90_P02143	R Y F G N L K E F T Q S	Y G V K E A K K K	V T G A L G V A V	T L M D D L K S
UniRef90_W5PMJ4	G P A P G S Q S R G R	E A G R K G R N D	L E T T G G Q	H G E G A G R T
UniRef90_UPI0003AF8497	T Y F S H W D L S P G S	D P V R K H G A T	V M A A V T D A V	S K I D D L L I
UniRef90_M1V8U2	R Q F S T F D A I C H N A	K V L A H G G K K	V L A S I V D G L	K H P E N L K A
UniRef90_H3ARB7	D V F F L F R D A I D D	N A K E L Q A H G L	R V M S F I E K S	V L K A R L D K
UniRef90_B9A9V0	D L F P K F K G I A P N A	A V A A H G A T	V V L N K L G Q L	L K A K G N H G
UniRef90_Q9DBN1	R Y F S S F G A I Q G N	P K V A A H G K V	L V G G L D R A V	K H L L D S V K
UniRef90_C0A118	K L F P K F A A I T D S A	A V A A H G A T	V L V K K L G E L	L K A R G D N H
UniRef90_H2V2A8	R Y F A G F E A I K N N	P N I A K H G V T	V L H G L D R A V	K N M D N I A K
UniRef90_W5KX69	K L F P K F V G I P R N A	A I A H G V T	V L K K L G E L	L K A K G N H A
UniRef90_K7EFP3	T Y F P H F E L S Q G S	A Q V K A H G K K	V A D A L T T A V	A H L D D L D S
UniRef90_UPI00047C2B03	D G T F N R G N Q A E K T	Q Q L A L A G S	V A V F A S S L	V K S V P E Q L
UniRef90_H6VM55	T Y F P H F D L H P G S	E Q V R A H G G K	V A A A L G N A V	K S L D N L
UniRef90_UPI0003CD26A	K L F P K F V S I P P S A	A V A A H G A T	V L K K L G E L	L K A R G D H A
UniRef90_L8HVQ9	L G S S Q A Q K Q P G C P	Q L R K H A C R	V M G A L N T V	V E N L H D V A
UniRef90_M3ZWP1	D Y F F L F R D V Q D S A	R E L R A H G L	R V M S F I E K S	V A V A L D N I
UniRef90_UPI000273DCC4	T Y F P H F G L H P G S A	Q L R A H G S K V	V A A A L G D A	V K S I D N I G
UniRef90_P84217	R L F K S F N G H F K D S	G V Q G H A E K V	V G A L D T A V	L H L H D I R D
UniRef90_V8P9P7	T Y F S H F N L S P G S	K D I R H G G E K	V G K A L D S A	V L K L D D I R
UniRef90_F6TGD7	D V F F L F Q A L R A N K	D L R A H G G L	R V L S F V E K S	V A R L A D L R
UniRef90_B9A9D4	K L F P K F V G I P Q S S	A V A A H G A T	V L K K L G E L	L K A K G N H A
UniRef90_M1SQ0T0	D L F P K F S D L A G N A	A V A A H G A T	V L K K L G E L	L K A K G N H A
UniRef90_UPI0003D77195	T Y F P H L D L R P G S S	Q V K A A H G K K	V A D A L T L A T	Q H L D D L P A
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UniRef90_W4YI83	T L L P S Y D Q L L V D	P R V R A H G T K	V M Q T V G S A	V D R L N D L E
UniRef90_W4YI83	T L L P S Y D Q L L V D	P R V R A H G T K	V M Q T V G S A	V D R L N D L E
UniRef90_UPI000479C563	D G L F N R G N Q A D G R	Q Q Q A L A G S	V A A F A G F L	V N T P G E L L P
UniRef90_W4XLX6	R L F P F G G L S K S D D	K V K A H G L R	V M Q T I S D A I	R V L D N L D K
UniRef90_W4XLX6	R L F P F G G L S K S D D	K V K A H G L R	V M Q T I S D A I	R V L D N L D K
UniRef90_W4XLX6	R L F P F G G L S K S D D	K V K A H G L R	V M Q T I S D A I	R V L D N L D K
UniRef90_W4XLX6	R L F P F G G L S K S D D	K V K A H G L R	V M Q T I S D A I	R V L D N L D K
UniRef90_H9GXG1	Q Y F S Q F Q E M E K S S	Q L R K H A R R	V M N A I N T V	V E N L H D P E
UniRef90_W4XUE2	Q L F E K F E E L A R N	K K M A H A T R	V M A A L T S L	V E N I D Q P D
UniRef90_UPI0001CBA21D	D G V S G L A A I E K T P	A L A D H G V K	V M M D T V N S	S W V G S L G D A
UniRef90_Q90W04	T N C G S T Q D C L S S	P E F L E H V T K	V M L V I D A A	V S H L D D L H
UniRef90_R4TE60	D F F P I N M E V Q R G	R L V R A L V H I	V L V H I V D A	V S D R P D D L
UniRef90_Q9NG75	T L F R Q F R E V E E S N	G F V A H V F R	V I A A F D G I	I R E L D N N A
UniRef90_Q9NG75	T L F R Q F R E V E E S N	G F V A H V F R	V I A A F D G I	I R E L D N N A
UniRef90_Q9NG75	T L F R Q F R E V E E S N	G F V A H V F R	V I A A F D G I	I R E L D N N A
UniRef90_M1T4W5	Q L F P K F T D L A G N A	A V A D H G K T	V L I K L G E I	L K A K G S S D
UniRef90_F6RIV9	P L F Q Y N C C L A S P	E F L D H I R K	V M L V I D A A	V I H L D D L S
UniRef90_E6J667	R D T F N R G N Q K L G A	S Q R A L A A S	I A T F A T L L	V D G R S P V D
UniRef90_UPI000366BFA3	D T F P N F K D I L A R	S Q L Y L H A K R	V M V A V E N A	V T V L D D A E
UniRef90_G1FKQ7	R D L F N R G N Q A A G T	Q R E A L A G A	I A H F A T V L	V E Q P G Q R P
UniRef90_W5ZMY0	N H F P K F D G M S Q N	G D L T A Q G V T	V L T K L G E V	L K T R G N H G
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UniRef90_F6R663	S A L R H R H V R E L L R V D P A S F F Q L L L G D C L L V T L A R H F G P G D F S T			
UniRef90_Q9YGW1	K D L R S K R H A D D L L R V D P G S F F Q L L L G D C L L V T L A Y L R K D C F T P H			
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UniRef90_UPI000273A1EF	S K R S D L H A H T L R V D P V N F Q L L L S H C L L V T L A C H X K D L T P E			
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UniRef90_M7B1Z7	N P L G K K H A M Q L K V D P K N F R I I C D I L L Q L M E E K Y G D			
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UniRef90_G9DBN1	T Q L S A L S S D K L H V D P S N F T			
UniRef90_C0A118	K P L A T S H A N T H K I P I N N F K L I T E V I V K H M A E K A G L D G A			
UniRef90_H2V2A8	K E L S E L H S E K L H V D P D N F K L L S D C L T I V V A T K M G S K F T P E			
UniRef90_W5KX69	K P L A T T H A N Q H K I G L N N F K L L A T E I L A K V L G E K A G L D G A			
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UniRef90_F6TGD7	L E L G R S H Y R Y N A P P R Y Y Q Y V G T E F I S A V R P M L Q D K W T A E			
UniRef90_B9A9D4	K P L A N S H A T K H K I P I N N F K L I S E V I V K V F A E K A G L D A A			
UniRef90_M1SQT0	K P M A N S H A N K H K I P I N N F K L I V E V I P K V M E E K A G L D A A			
UniRef90_UPI0003D77195	S A L S D L H A K L C V D P A N F Q L L S Q A C S V			
UniRef90_W4YI83	P L L Q E L A T R H Y G V T K Q H F S V I M G C F S I T C Y N S I V Q D P Q			
UniRef90_W4YI83	P L L Q E L A T R H Y G V T K Q H F S V I M G C F S I T C Y N S I V Q D P Q			
UniRef90_W4YI83	P L L Q E L A T R H Y G V T K Q H F S V I M G C F S I T C Y N S I V Q D P Q			
UniRef90_UPI000479C563	L S R I A H K H V S L G L R P D Q Y Q I V H D H L M W A I V D V L G D A V T D E			
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UniRef90_M1NVC5	L	G	R	I	A
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UniRef90_F8ELZ1	P	L	L	Q	D
UniRef90_U5EPU4	L	E	V	G	N
UniRef90_UPI000022287E	K	S	M	S	R
UniRef90_H5XQB7	R	Q	L	G	R
UniRef90_V9G8F0	E	R	Q	I	A
UniRef90_C5DS97	V	N	L	I	G
UniRef90_H6RLL7	R	Q	L	G	R
UniRef90_W2T026	L	Q	M	N	R
UniRef90_UPI00039A1310	E	L	V	A	E
UniRef90_L7KGY0	I	D	R	I	A
UniRef90_W5XXL5	A	R	I	G	H
UniRef90_UPI00037706E8	A	G	L	G	R
UniRef90_K7A9V9	N	E	V	V	E
UniRef90_UPI0004025BFE	V	G	Q	I	V
UniRef90_M5E7R5	L	S	R	I	G
UniRef90_UPI00039BEC6C	R	R	L	G	R
UniRef90_H5XB25	R	Q	L	G	R
UniRef90_D7TPW5	I	D	L	G	A
UniRef90_A8FPP7	P	V	L	Q	Q
UniRef90_D8MIW2	E	L	L	K	N
UniRef90_W5KPG1	L	E	L	G	R
UniRef90_A0A022RFR4	K	K	L	G	A
UniRef90_G9P2E9	E	R	M	C	Q
UniRef90_E5XR09	L	D	R	V	A
UniRef90_C8CMH6	V	R	E	S	T
UniRef90_UPI00036F3778	H	Q	R	G	R
UniRef90_C5D1W6	P	R	I	T	Q
UniRef90_Q1Q046	P	A	I	Q	A
UniRef90_M2VJD4	A	I	M	S	R
UniRef90_D2NPK8	L	S	R	V	A
UniRef90_W3AEK2	P	A	V	I	Q
UniRef90_Q5WL63	V	K	R	I	A
UniRef90_M2XD60	L	S	R	V	A

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UniRef90_V7AEC3	V	F	T	E	E	Q	E	A	L	V	K	S	W	E	A	M	K	N	S	G	E	L	G	L	K	F	T	K	L	E	I	A	P	E	A	K						
UniRef90_G9N8G9	L	T	P	E	Q	I	A	I	V	K	S	T	V	P	I	I	R	E	H	G	K	T	V	T	T	T	F	Y	A	N	M	L	A	A	H	P	E	L	K			
UniRef90_UPI00037A7EB7	M	I	T	A	E	S	L	A	I	V	K	S	T	V	P	V	R	E	S	G	G	A	D	I	T	T	R	K	F	Y	S	T	L	E	A	A	H	P	E	L		
UniRef90_Q127H5	M	L	T	A	Q	Q	R	A	I	V	K	S	T	V	P	L	L	E	S	G	G	E	A	D	I	T	T	T	H	F	Y	Q	I	L	T	E	A	H	P	E	V	R
UniRef90_B1ZVJ7	M	T	S	R	E	I	V	L	V	Q	E	S	F	S	K	L	A	P	I	A	D	Q	A	A	A	L	F	F	V	R	L	F	E	L	D	S	P	S	L	R		
UniRef90_R4TIK9						K	L	I	R	T	S	F	A	A	V	E	T	K	S	E	E	L	S	Q	Y	F	Y	G	A	L	F	A	V	S	D	P	S	D	A	R		
UniRef90_I1FJ81	L	T	S	A	Q	V	A	L	V	E	S	T	W	K	V	V	K	D	L	Q	G	A	G	N	I	M	F	L	K	L	F	Q	I	D	V	S	V	R				
UniRef90_E4NEA9				D	P	T	L	I	K	S	S	F	A	A	V	E	P	H	G	S	A	V	T	A	Y	F	Y	T	H	L	F	E	H	N	P	D	V	R				
UniRef90_UPI00047C30DC				I	E	L	V	E	T	S	F	E	K	I	K	P	R	A	V	E	F	V	S	S	F	Y	Q	N	L	F	E	T	Y	D	P	E	T	Q				
UniRef90_UPI00031999E4	L	T	A	R	Q	V	T	L	I	T	N	S	F	R	K	V	E	P	S	L	Q	A	A	E	I	F	Y	D	T	L	F	S	Y	D	P	T	L	K				
UniRef90_H8G3Q8	M	L	S	A	K	S	A	E	I	V	R	A	T	L	P	V	V	R	D	H	G	P	E	I	T	T	Q	F	Y	S	D	L	F	A	G	H	P	E	L	L		
UniRef90_L7LC87	M	L	S	D	Q	T	R	Q	V	L	A	A	T	L	T	A	V	E	G	A	L	D	D	I	T	P	N	F	Y	N	R	M	F	T	A	H	P	Q	L	L		
UniRef90_A7RWR6	M	T	Y	E	Q	K	Y	L	L	R	E	T	W	K	F	L	E	V	S	K	K	E	I	G	V	S	V	Y	K	R	F	L	N	M	A	H	P	G	L	Q		
UniRef90_UPI00047612D0									L	L	K	E	S	W	S	L	V	E	E	H	Q	D	K	V	A	G	Y	F	Y	A	R	V	F	L	S	H	P	D	V	R		
UniRef90_K0EPI4	L	E	P	A	H	Q	A	V	I	R	A	T	L	P	L	I	G	T	R	I	D	T	L	P	L	F	Y	R	K	M	F	A	A	H	P	E	L	G	A			
UniRef90_G7YFM1	F	S	E	F	E	Q	D	V	L	L	E	T	S	T	W	P	L	I	A	S	D	L	Y	T	H	G	C	M	V	F	K	N	A	L	H	L	P	D	L	A		
UniRef90_A0A016QTS8	M	L	T	P	E	Q	L	A	T	V	K	A	T	V	P	A	L	E	L	H	G	E	T	I	T	R	H	F	Y	A	S	M	F	A	A	H	P	E	L	L		
UniRef90_K9SL27						E	L	I	Q	E	S	F	N	K	V	K	P	Y	A	G	E	L	G	D	R	F	Y	E	N	L	F	T	M	Y	P	E	A	K				
UniRef90_R7T5E2	L	T	E	Q	K	T	L	I	A	N	G	W	A	V	I	K	K	N	L	K	O	N	G	A	D	A	F	L	L	L	F	T	M	K	P	E	A	Y	Q			
UniRef90_F0RQV1	M	N	A	E	Q	I	R	L	V	K	A	T	V	P	A	L	R	A	H	G	E	D	I	T	R	H	F	Y	A	D	M	F	R	A	H	P	E	L	L			
UniRef90_U4UEU2	L	T	S	K	E	K	I	L	V	R	T	S	W	A	K	L	M	K	N	P	A	D	S	G	V	A	L	L	C	L	L	F	E	R	H	P	E	Y	V			
UniRef90_Q95NK8	L	L	S	A	S	D	R	A	L	I	R	K	T	W	E	Q	A	R	K	D	G	D	V	A	P	Q	L	F	R	F	V	K	A	H	P	E	Y	Q				
UniRef90_H8H3G1	L	L	T	D	I	E	R	A	H	I	R	R	T	W	R	L	V	E	Q	A	A	E	T	A	T	K	I	F	Y	D	D	L	F	A	T	H	P	E	Y	R		
UniRef90_T5AGV5	L	T	V	E	I	A	L	V	K	S	T	A	P	V	I	K	E	H	G	K	A	I	T	T	T	F	Y	R	L	L	L	G	A	H	P	E	L	K				
UniRef90_K6XNN0	M	L	D	S	A	T	I	E	I	K	A	T	V	P	A	I	K	E	H	A	E	I	T	K	Q	F	Y	P	L	L	F	S	L	H	P	E	V	I				
UniRef90_UPI0002EB71C2	M	L	S	Q	K	T	I	D	I	V	K	S	T	V	P	V	L	E	V	H	G	N	E	I	T	K	A	F	Y	K	N	M	F	E	T	H	P	Q	L	L		
UniRef90_M3X009										Q	S	R	W	R	R	E	R	E	S	T	G	K	D	G	K	G	V	S	A	R	L	F	D	L	E	P	D	L	L			
UniRef90_M3A177				D	S	A	L	I	R	R	T	L	A	E	I	E	P	I	A	D	T	V	V	S	H	F	Y	A	L	L	F	L	H	H	P	Q	L	R				
UniRef90_UPI0003455E06	M	L	S	A	E	S	A	A	A	V	R	A	T	L	P	A	V	A	G	S	L	D	A	I	T	A	R	F	Y	D	T	M	L	G	D	R	P	E	L	L		
UniRef90_M8E6D5	M	L	S	P	Q	T	I	A	I	V	K	S	T	V	P	V	L	E	V	H	G	K	A	I	T	T	R	F	Y	E	M	M	F	A	S	H	P	E	L	L		
UniRef90_UPI00045E96C6				K	T	Q	R	L	I	V	K	N	C	L	D	I	A	D	S	R	E	E	L	S	R	L	F	Y	R	E	L	F	H	L	D	I	N	L	K			
UniRef90_O24521	F	T	E	K	Q	E	A	L	V	K	E	S	W	E	L	K	Q	D	I	P	K	Y	S	L	H	F	F	S	Q	I	L	E	I	A	P	A	A	K				
UniRef90_UPI00036530AA	L	S	P	A	H	A	E	V	V	K	A	T	L	P	V	V	G	G	A	I	G	E	I	T	P	V	F	Y	R	R	L	F	A	A	H	P	E	L	E			
UniRef90_H2AQS4	M	L	S	A	E	T	R	I	L	V	K	A	T	V	P	V	L	E	Q	Y	G	T	T	I	T	K	T	F	Y	N	N	M	L	S	E	K	E	L	L			
UniRef90_UPI000471BD5B	M	L	T	Q	Q	T	I	A	T	I	K	S	T	V	P	V	M	E	V	Y	G	T	Q	I	T	S	T	F	Y	Q	R	M	F	A	A	H	P	E	L	L		
UniRef90_R8BN99								M	V	R	G	T	I	P	A	L	R	E	H	G	E	R	I	T	T	I	F	Y	R	N	M	L	R	D	H	P	E	L	N			
UniRef90_W1SD74	M	L	N	Q	K	T	I	E	I	K	S	T	V	P	V	L	E	Q	H	G	E	T	I	T	T	R	F	Y	Q	L	M	F	A	N	H	P	E	L	L			
UniRef90_D3SCW1	M	L	S	D	D	H	K	A	L	I	K	S	T	V	P	I	L	E	S	G	G	E	D	L	T	R	H	F	Y	S	I	M	F	R	D	Y	P	E	V	R		
UniRef90_E0IEV8	M	L	S	E	Q	T	I	A	T	I	K	S	T	V	P	L	A	E	H	G	L	A	I	T	Q	Q	F	Y	K	R	L	F	Q	Q	H	P	E	L	L			
UniRef90_S3D2U5	L	T	K	S	Q	I	A	T	I	K	A	T	V	P	V	L	A	Q	H	G	E	T	I	T	T	K	F	Y	A	D	L	L	V	A	H	P	E	L	K			
UniRef90_F2Q9W6	L	T	P	T	Q	S	R	L	V	K	E	S	W	K	M	F	L	S	K	K	R	E	N	G	F	V	I	F	R	V	L	F	T	D	Y	P	V	T	R			
UniRef90_G9EGH1	M	L	T	H	E	Q	E	K	L	I	N	A	T	A	P	V	V	A	E	H	L	N	A	I	T	Q	R	F	Y	P	L	M	F	A	R	Y	P	E	V	K		
UniRef90_F6ZKU9	F	T	D	E	E	L	K	L	I	R	N	S	W	D	V	E	V	K	G	M	K	E	V	G	L	H	I	F	T	G	L	L	N	A	A	P	S	L	R			
UniRef90_E3E3M9	M	L	S	K	Q	T	I	N	I	K	S	T	V	P	V	L	E	T	H	G	E	E	I	T	G	R	F	Y	D	L	M	F	Q	A	H	P	E	L	L			
UniRef90_X8BP34	M	L	S	A	E	S	L	G	V	I	R	E	A	T	V	P	A	V	A	G	A	I	D	E	I	T	P	L	F	Y	S	K	M	F	A	A	H	P	E	L	L	
UniRef90_L7LLG7	M	I	S	S	D	T	K	L	V	L	E	A	T	V	P	V	V	E	A	A	L	P	E	I	T	P	R	F	Y	D	R	M	F	T	A	R	P	E	L	L		
UniRef90_UPI0004142B3D	M	L	T	P	A	Q	R	D	I	I	K	A	T	V	P	L	L	E	V	G	G	E	A	L	I	T	Y	F	Y	Q	L	M	L	D	T	H	P	E	V	R		
UniRef90_M5TCL4	M	L	S	D	K	T	I	R	L	V	K	E	I	T	P	A	A	N	A	E	T	I	T	R	R	F	Y	E	R	M	F	E	S	N	P	E	V	K				
UniRef90_K1PSK3	L	T	E	E	V	I	A	V	E	D	S	W	S	M	L	Y	E	H	R	K	E	N	G	V	K	L	F	M	N	L	Y	S	L	H	P	A	T	I				
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UniRef90_W2E2W1	M	L	K	Q	A	T	I	D	I	K	S	T	V	P	A	L	E	V	H	G	T	D	I	T	K	L	F	Y	T	R	L	F	E	T	H	P	E	L	L			
UniRef90_UPI0003C168BE																																										
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UniRef90_D3G0B8	M	L	S	K	E	T	I	S	I	K	S	T	V	P	V	L	E	V	H	G	T	K	I	T	T	R	F	Y	Q	L	L	F	E	R	H	P	E	L	L			
UniRef90_W3AE72	M	L	S	L	Q	T	R	S	I	K	S	T	V	P	V	L	A	E	H	G	T	A	I	T	T	V	F	Y	K	N	M	F	A	A	H	P	E	L	L			
UniRef90_N2JD15	M	L	T	A	Q	Q	R	T	I	K	S	T	V	P	L	L	E	T	G	G	E	V	L	T	T	H	F	Y	K	M	M	L	N	E	Y	P	Q	V	R			
UniRef90_UPI00035E4E8A	M	L	T	S	R	E	I	K	I	V	K	A	T	S	P	V	L	D	S	A	G	V	D	I	T	K	Y	F	Y	N												

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UniRef90_UPI00037A7EB7	T	N	L	F	N	M	S	N	Q	A	S	G	E	Q	Q	A	A	L	A	N	S	V	L	A				A	A	T	H	L	D	N	L	E	S	V	I	L	78	
UniRef90_Q127H5	P	F	F	N	Q	A	H	Q	A	N	G	D	Q	P	R	A	L	A	N	G	V	L	M	Y	A	R	H	I	I	D	K	L	E	Q	L	G	G	L	V	77		
UniRef90_B1ZVJ7	R				C	C	Q	Q	G	E	R	Q	Q	G	R	G	L	V	R	L	L	A	S	S	I	H	R	L	L	A	R	L	E	Q	L	G	G	L	V	76		
UniRef90_R4TIK9	A	L	F	P	I	N	M	A	T	Q	R	N	R	L	R	A							L	V	Y	V	V	Q	M	D	R	P	E	D	E	L	A	T	F	L	75	
UniRef90_I1FJ81	D	K	F	P	P	Y	E	E	L	E	D	S	E	S	F	L	K	H	S	L	Q	V	M	E	T	I	D	L	A	I	G	E	M	E	K	L	V	E	A	L	74	
UniRef90_E4NEA9	K	L			F	A	E	H	L	N	E												L	G	T	L	V	N	K	L	D	D	T	D	T	V	N	V	N	L	73	
UniRef90_UPI00047C30DC	R	L	F	G	K																	L	N	S	L	V	E	G	L	R	T	P	E	L	L	V	P	I	L	72		
UniRef90_UPI00031999E4	P	L	F	K	G																	L	M	A	L	H	A	V	S	G	E	R	L	N	A	P	E	Q	I	L	71	
UniRef90_H8G3Q8	D	D	L	F	N	R	T	N	Q	K	I	L	G	T	Q	P	K	V	L	A	G	S	I	A	A	F	A	E	Y	L	V	G	E	R	Q	A	D	F	T	P	I	70
UniRef90_L7LC87	D	D	L	F	N	R	T	N	Q	K	I	L	G	T	Q	P	K	V	L	A	G	S	I	A	A	F	A	E	Y	L	V	G	E	R	Q	A	D	F	T	P	I	69
UniRef90_A7RWR6	T	Y	F	S	E	F	K	H	I	K	I	D	N	I	N	G	S	H	G	R			L	L	M	A	I	D	N	A	V	T	A	L	G	D	S	D	S	F	68	
UniRef90_UPI00047612D0	D	L	F	P	V	Q	M	D	L	Q	R	S											R	L	H	A	I	V	T	A	V	Q	T	L	D	D	P	E	K	F	D	67
UniRef90_K0EPI4	R	D	L	F	N	R	G	N	Q	A	G	T	Q	Q	R	A	L	A	S	S	I	V	T	F	A	R	H	L	V	E	E	L	P	H	P	V	D	L	L	66		
UniRef90_G7YFM1	K	F	I	P	S	N	E	E	I	A	A	D	T	R	S	K	Q	H	I	L	A	F	M	D	V	L	S	K	A	I	G	A	L	D	D	F	C	E	K	L	65	
UniRef90_A0A016QTS8	N	I	L	F	N	P	A	N	Q	K	T	G	R	Q	A	R	S	L	A	A	S	I	L	A	Y	G				A	Y	I	D	R	P	E	V	L	G	P	M	64
UniRef90_K9SL27	P	L	F	A	H	T	A	M	G	K	Q	K	Q	M	L	V							L	V	M	T	I	D	N		L	T	N	P	E	V	L	T	S	E	L	63
UniRef90_R7T5E2	D	Y	F	S																																						

	90	100	110	120																																									
UniRef90_V7AEC3	K	K	L	G	A	S	H	F	K	A	G	V	I	A	E	H	F	K	V	T	K	L	A	L	L	E	T	L	K	E	A	V	P	E	M	W	S	P	E	E					
UniRef90_G9N8G9	G	A	V	I	E	K	Q	K	H	V	S	L	F	I	Q	P	A	H	Y	T	L	V	G	K	Y	L	L	G	A	F	K	Q	I	L	G	E	A	F	T	P	E	E			
UniRef90_UPI00037A7EB7	S	R	I	A	H	K	H	A	V	S	L	F	I	Q	P	A	H	Y	T	L	V	G	K	Y	L	L	L	G	A	F	K	Q	I	L	G	E	A	F	T	P	E	E			
UniRef90_Q127H5	A	Q	I	L	N	K	H	V	S	L	F	I	Q	P	A	H	Y	T	L	V	G	K	Y	L	L	L	L	R	A	I	K	R	E	V	L	G	A	E	I	T	G	E	P		
UniRef90_B1ZVJ7	R	R	L	G	H	R	Q	A	A	H	G	T	R	D	E	H	Y	D	A	F	S	G	A	A	L	L	L	W	T	A	L	E	K	A	F	L	K	D	D	W	T	P	E	E	
UniRef90_R4TIK9	G	Q	L	G	R	D	H	A	R	K	F	D	V	L	G	R	H	Y	D	A	F	S	G	A	A	L	L	L	W	T	A	L	E	K	R	F	L	K	D	D	W	T	P	E	E
UniRef90_I1FJ81	V	D	L	G	M	A	H	A	M	Q	G	L	K	P	E	D	F	D	H	V	G	E	A	L	L	L	L	H	A	L	G	V	A	L	G	D	E	F	N	D	E	P	E	E	
UniRef90_E4NEA9	Q	D	L	G	R	R	H	A	G	Y	G	A	L	P	E	H	Y	D	A	F	S	G	A	A	L	L	L	A	A	L	A	H	F	A	G	D	A	W	T	P	E	E	E		
UniRef90_UPI00047C30DC	K	D	L	G	A	R	H	K	G	Y	G	T	V	A	E	Y	Y	P	L	V	G	D	I	L	L	L	L	Q	T	F	A	D	Y	L	Q	D	A	W	T	P	E	E	E		
UniRef90_UPI00031999E4	P	V	L	Q	Q	L	A	K	R	H	Y	G	V	K	A	H	F	T	P	V	G	N	A	L	L	L	L	H	T	L	K	V	G	L	G	D	D	F	T	R	E	E	E		
UniRef90_H8G3Q8	A	E	R	V	A	H	K	H	V	S	L	G	V	Q	P	A	Q	Y	T	L	V	G	N	A	L	L	L	L	G	A	V	A	K	V	L	G	D	A	V	T	P	E	E	E	
UniRef90_L7LC87	I	D	R	V	A	H	K	H	A	S	L	G	V	Q	P	A	Q	Y	T	L	V	H	E	H	L	L	L	F	G	A	I	V	E	V	L	G	A	V	T	P	E	E	E		
UniRef90_A7RW6	A	Y	L	V	E	L	G	R	R	H	H	F	G	M	N	P	T	H	F	N	D	L	R	K	G	L	L	L	S	V	I	E	E	L	A	T	A	W	S	F	Q	E	E		
UniRef90_UPI00047612D0	E	Y	L	R	G	L	D	H	R	K	F	H	V	E	P	V	H	Y	E	V	G	G	A	L	L	L	L	L	I	E	A	M	R	A	F	A	G	E	W	S	L	E	E	E	
UniRef90_K0EPI4	S	R	I	G	H	R	H	A	S	L	G	V	T	A	D	Q	Y	D	I	V	H	R	A	L	L	L	L	F	A	A	I	V	E	V	L	G	A	D	V	T	P	E	E	E	
UniRef90_G7YFM1	M	V	L	G	A	R	H	A	A	V	P	G	M	K	L	E	Y	F	K	V	F	K	Q	A	L	L	L	L	M	T	W	E	A	L	M	Y	E	E	F	T	P	E	E	E	
UniRef90_A0A016QTS8	V	G	R	I	A	T	K	H	V	S	L	E	V	L	P	E	H	Y	P	L	V	G	E	H	L	L	L	L	K	A	I	A	A	V	L										

		130	140
UniRef90_V7AEC3	M K N A W E E A H D Q L A D A I I S		
UniRef90_G9N8G9	I E E A W T I A Y G L L A D		
UniRef90_UPI00037A7EB7	I L A A W D E A Y W L L A C E L V A R		
UniRef90_Q127H5	V L A A W G A A Y G Q L A D I L		
UniRef90_B1ZVJ7	V K A A W T Q F Y V V L A N A M		
UniRef90_R4TIK9	V E D A W V T A Y G V I S K S M R E A		
UniRef90_I1FJ81	A K K A W T L L Y S V V T A K M K E G L K		
UniRef90_E4NEA9	T E A S W T A L Y G V V T E V M S A A		
UniRef90_UPI00047C30DC	V A Q A W		
UniRef90_UPI00031999E4	T R D A W V E L I H F V A D T M K A		
UniRef90_H8G3Q8	V R A A W D E V Y W L C A C H L I A A		
UniRef90_L7LC87	V A A A W D E L Y W E M A R V L		
UniRef90_A7RWR6	V E E A W N R L F D S I T A M I		
UniRef90_UPI00047612D0	Y D Q A W A D A Y A V I A A R M		
UniRef90_K0EPI4	V A A A W D R V Y W L M A T A L		
UniRef90_G7YFM1	V R R A W A H L M D Y I I G I L S E G		
UniRef90_A0A016QTS8	I L D A W A A A Y G Q L A D I M		
UniRef90_K9SL27	V K E A W V A A Y G A I T A I M		
UniRef90_R7T5E2	A G A A W M T A V G I L M S V I		
UniRef90_F0RQV1	I L D A W A A A Y G Q L A E L M I R		
UniRef90_U4UEU2	E V A A W K K T F E V		
UniRef90_Q95NK8	A K A A W T T A V R G L		
UniRef90_H8H3G1	V K T A W T K L Y G L I A Q T M		
UniRef90_T5AGV5	V A E A W V A A Y A Q L A D V F V R R E R		
UniRef90_K6XNN0	V L N A W G K A Y G Q L A E I L		
UniRef90_UPI0002EB71C2	I I D A W G E A Y G V I A D V F I S		
UniRef90_M3X009	M R A A W S Q L Y G A V V Q A M S R G		
UniRef90_M3A177	A E A A W V R V Y T V V S Q T M		
UniRef90_UPI0003455E06	A A A A W D E V Y W L M A G A L I A R		
UniRef90_M8E6D5	I I N A W A E A Y G V I A D A F I S V Y R		
UniRef90_UPI00045E96C6	L Q A A W N G V F D D V A R V M		
UniRef90_O24521	V E G A W S Q A Y D H L A L A I		
UniRef90_UPI00036530AA	V A E A W T A V Y W S M A D M L I G R E R		
UniRef90_H2AQS4	I L Q A W A E A Y E E I A N V		
UniRef90_UPI000471BD5B	I L Q A W A E A Y G V I A N V F I S		
UniRef90_R8BN99	V Q L A W H K A Y W M L A K M L		
UniRef90_W1SD74	I I D A W A E A Y N V I A D A F I S		
UniRef90_D3SCW1	V L E A W G A A Y Q Q L A D I L I A A		
UniRef90_E0IEV8	I L G A W G E A Y G V I A D A F A E M Y R		
UniRef90_S3D2U5	I L D A W E T A Y W Q L A N I M M S K E K		
UniRef90_F2Q9W6	L E E A W Q T A Y S H L		
UniRef90_G9EGH1	I A D A W G A L Y N E L A A L L I D R Y R		
UniRef90_F6ZKU9	T L Q A W V K A Y G V L R N G I V S A		
UniRef90_E3E3M9	I M Q A W E T A Y G V I A D A		
UniRef90_X8BP34	V A K A W S E F Y W L M A D E L I A R E K		
UniRef90_L7LLG7	V A A A W D E L Y W E M A H V L T E L Y R		
UniRef90_UPI0004142B3D	V I A A W A Q A Y Q Q L A D I L L I E G E R		
UniRef90_M5TCL4	I I E A V A E A Y G F L A D		
UniRef90_K1PSK3	M L S S W G K L L G I V V A V V S		
UniRef90_K9WM86	V R K A W E E A Y T F L S E I M K E A		
UniRef90_W2E2W1	I L H A W K E A Y G V I A D A		
UniRef90_UPI0003C168BE	I Q I V W E K L L A A M A Q A L		
UniRef90_UPI00037EC7DA	L E V A W G K A Y Q Y L S K L M I R A		
UniRef90_D3G0B8	I L A A W G E A Y G V I A N A		
UniRef90_W3AE72	I I N A W A E A Y G V I A D A		
UniRef90_N2JDI5	V I D A W A A A Y G Q L A D I L		
UniRef90_UPI00035E4E8A	V I D A W Q R A Y N L F A K L L I E R		
UniRef90_K4PYU2	L K C A W S V A Y D H L A A A I K A		
UniRef90_J9P2U9	V R A A W S Q L Y G A V V Q A M S R G		
UniRef90_W9GC32	V A R D W A D A Y G V V A A T M		
UniRef90_UPI000477A4C2	V Q Q A W I T C Y D A L T H A M		
UniRef90_R7Y0P2	V A S A W D E V Y W H M A G A L		
UniRef90_UPI000344B12C	V K Q A W T D A Y G A I T E I M		
UniRef90_I3EA62	I I Q A W T E A Y G V L A D		
UniRef90_UPI00034D7B38	V K Q A W I E T Y N T V T N M M		
UniRef90_J3D8U9	V I E A W S A A Y Q Q L A G I L		
UniRef90_UPI00040A6106	V L A A W G A A Y Q Q L A D L L I A A		
UniRef90_B9CTU8	I I K T W K K A Y Q D I A D V F I S		
UniRef90_X5KG23	V A E A W D R V Y W I M A E T L I A		
UniRef90_Z5XKQ5	V E Y A W R E A Y A L L A D V		
UniRef90_B3QH91	V E Q S W R K V Y A V I S A R M		
UniRef90_M7BGH7	V R E A W T R L Y G A V V K A M S H G		
UniRef90_UPI00047EE4C7	V R E A W T E T Y R V I A G L M T		
UniRef90_A0A058ZPU3	L K E A W V G A Y T T L S G V M		
UniRef90_W3X6Y2	V A D A W T A A Y G A L A D V F I H R E K		
UniRef90_F8I6Y7	T I T A W A T A Y E F I A D V		
UniRef90_P31331	M K S A W D A L L G V L I		
UniRef90_U1KRK6	V E Q A W A E A Y A F L A D		
UniRef90_UPI0003FA27BA	V L A A W G A A Y Q Q L A D I L		
UniRef90_F4Y0R0	V K Q A W V D A Y G A I T T I M		
UniRef90_V5H2Z2	E V A A W K K A L D V A F P V L A Q G F R		
UniRef90_F5LNG4	I L G A W E E A Y S V I A A A		
UniRef90_J8Q8L3	I L Q A W G E A Y G V I A D A F I S		
UniRef90_S4RV53	A R S A W T K L L G T L C T E F E N A Y R		
UniRef90_V5GLC7	E M E A W K K A L D V A I D L I A K S F R		
UniRef90_C7YZV6	I K E A W I A A Y G Q L A D		
UniRef90_E5G622			
UniRef90_UPI0002DA83D1	L R K A W T E A Y D L V S T I M R E A		
UniRef90_L8LTA2	V Q K A W A A V Y N L L S G V L S R		
UniRef90_C4RGE3	Y D Q A W R D A Y G A I S A R M		
UniRef90_S6IHZ6	V I N A W A N A Y Q Q L A D I L		
UniRef90_Q5YNI4	V D R A W D E G L A L I S D A M		



	1	10	20	30	40																																					
UniRef90_G7KGN2	F	T	E	N	Q	E	A	L	V	N	S	S	W	E	A	F	K	Q	N	L	P	K	Y	S	V	L	F	Y	T	I	L	L	D	K	A	P	A	A	K			
UniRef90_P81044	L	T	T	K	T	X	X	T	I	V	X	S	T	A	M	W	A	K												R	L	L	F	T	S	Y	P	Q	T	K		
UniRef90_W7B9N7			T	E	E						K	S	T	A	P	L	L	K	E	S	H	G	K	E	I	T	A	I	F	Y	K	K	M	F	A	S	H	P	E	L	L	
UniRef90_I3NH32					E	P	E	L	L		K	R	S	S	W	R	A	V	L	K	S	R	S	P	L	E	H	G	T	V	L	F	A	R	S	L	E	E	G	D	F	L
UniRef90_K9VX73											K	Q	S	S	F	E	K	I	L	K	P	H	A	D	E	F	A	S	F	Y	E	N	L	F	A	A	H	P	E	L	L	
UniRef90_P41262		L	T	G	P	Q	K	A	A	L	K	S	S	W	S	R	F	M	D	N	A	V	T	N	G	T	A	N	F	Y	M	D	L	F	K	A	Y	N	P	D	T	L
UniRef90_C9P7Z2	M	L	N	N	H	T	I	L	G	L	K	S	T	I	P	L	L	E	A	G	A	P	T	L	T	G	E	H	F	Y	Q	R	M	F	T	H	N	P	E	L	L	
UniRef90_UPI00041ACC89			L	N	V	D	Q	I	L	L	K	S	S	W	G	L	I	V	A	K	A	Q	T	L	T	G	E	H	F	Y	S	E	L	L	F	L	S	H	P	D	L	R
UniRef90_UPI0003771303							D	T	A	A	L	Q	E	S	W	Q	Q	V	A	K	S	G	D	E	V	P	L	F	F	Y	S	H	L	F	L	S	H	P	D	L	R	
UniRef90_E9HNB1	V	L	N	S	V	N	V	A	A	V	K	S	T	W	A	V	I	K	S	D	I	N	T	F	A	P	Q	F	F	Y	V	A	L	L	T	A	H	N	P	E	Y	Q
UniRef90_C9Q9U2	M	L	T	Q	D	H	I	E	L	V	K	S	T	I	P	L	L	E	A	G	A	P	T	L	T	G	E	H	F	Y	Q	R	M	F	T	H	N	P	E	L	L	
UniRef90_D8PFN9							I	E	L	V	K	S	S	F	K	L	V	A	P	Q	G	D	A	L	T	V	T	R	F	F	Y	E	R	L	F	E	K	Y	P	A	V	K
UniRef90_C3XHE5	M	L	D	K	Q	T	I	E	L	V	K	S	T	I	P	L	L	E	A	G	A	P	T	L	T	G	E	H	F	Y	Q	R	M	F	T	H	N	P	E	L	L	
UniRef90_A0A14MS30	M	L	T	D	R	Q	I	E	L	V	K	S	T	I	P	L	L	E	A	G	A	P	T	L	T	G	E	H	F	Y	Q	R	M	F	T	H	N	P	E	L	L	
UniRef90_U6NTA8	L	S	P	E	Q	R	S	M	I	R	Y	S	Y	Q	F	M	E	A	E	A	T	K	N	G	L	G	L	F	V	R	L	F	S	E	Y	P	Q	Y	K	L		
UniRef90_S3BRK2							D	A	D	L	R	A	S	M	A	E	L	E	R	S	S	D	A	A	T	A	Y	F	Y	A	L	L	F	V	Q	Y	P	H	L	R		
UniRef90_U6DK15																																										
UniRef90_UPI000360A237	M	L	D	A	H	T	I	K	V	I	K	S	T	V	P	V	L	E	Q	E	G	V	H	I	T	K	R	F	Y	Q	T	M	F	E	A	H	P	E	L	L		
UniRef90_P49852	M																																									

	50	60	70	80
UniRef90_G7KGN2	G M F S F L K D S Q D S P K L Q A H A E K V F G M V R D S L R V K G E V V L G D			
UniRef90_P81044	T Y F P H F D L H P E D S A Q L R			
UniRef90_W7B9N7	N Y F N M T N Q E I G T Q P L A L A N T V V Y L A A K N I D N I E H S A L			
UniRef90_I3NH32	Q G C S A S R V A R A S L S L S L P W Q V M L V I D T A V T N V E D L S S L E			
UniRef90_K9VX73	P L F K S F N Q M T D H P T M K A Q A L V F D G M S S F V D N L D D H E A L V			
UniRef90_P41262	T F F K S F N Q M T D H P T M K A Q A L V F D G M S S F V D N L D D H E A L V			
UniRef90_C9P7Z2	D L F N M T H Q K T G R Q S V A L F S A V A A Y A K N I D N I E H S A L			
UniRef90_UPI00041ACC89	R L F F D S I L D R S T Q A R K L T Y V I S L V V T K L D K L E T I A E E V			
UniRef90_UPI0003771303	A M F P I S M S A Q R D K L V G A L G R V V V S N L V E H L D D V V P F I			
UniRef90_E9HNB1	A M F P T I A N V P N N A A L I T L S V N V V T K I L S E I I D S L G N P G A L N			
UniRef90_C9Q0U2	H I F N M T H Q K T G R Q S V A L F E A I A A Y A K H L D N I A A L T			
UniRef90_D8PFN9	P L F K N A S I S E Q K K K L L A S L V L V I Q N L R H P E K L T S V L			
UniRef90_C3XHE5	T M F D M T K Q Q N G K Q P K A L A M A I L H A A M N I D D T I H S Q I			
UniRef90_A0A14MS30	P L F N S V H Q T G A Q P R A L A R S V L M Y A K H L D D L S G			
UniRef90_U6NTA8	G L W P A F R Q I P D S A Q L R R H A S V Y M A G L K R I V R D V M D D N E K L I			
UniRef90_S3BRK2	E M F P A A M D G Q R D R L F R A			
UniRef90_U6DK15				
UniRef90_UPI000360A237	N I F N H A N Q K Q G R Q Q T A L A N A V Y M A A L H I D R L E E I L P V V			
UniRef90_P49852	N I F N Q T N Q K K K T Q R T A L A N A V I A A A A N I D Q L G N I I P V V			
UniRef90_E7FIH1	K M F K S F A N V P Q N G N F L A Q A Y T I L A G L N V V I Q S L S Q E L I A			
UniRef90_F6AEC5	P L F N Q A H Q A S G A Q Q R A L A N A V L M Y A R H I E D R L E A L G P L V			
UniRef90_UPI000377B994	N T F N M G N Q A N G R Q K S A L A N A V L A Y A E N I D R L E A L G P L V			
UniRef90_G6XK11	A E M F D P A H Q K N G A Q P R A L A M A V L A Y A K N I D N I M G S A			
UniRef90_U1NPG6	N I W P Q F R A I P D S S E L Q M Y G I V F M N A M R Y I V D N I D N D E A I K			
UniRef90_UPI000248C5DB	N V F N H T N Q K Q G R Q Q T A L A N A V Y A A A V S G L I D N L A A I L			
UniRef90_UPI0003731866	A M F P E D M T E Q R K K L M G M L A A V V S H I D N L A A I L			
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UniRef90_A0YNP8	V L	N S	P Q	T I	E I
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UniRef90_A4JRB1	L T	P E	T I	A L	I I
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UniRef90_G9NNS6	D R I	A Q K	H V	S L F
UniRef90_P23216	H A L	G V R	H K G	F G D
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S E K E V L E I K R T W K I P M A D P L T S G E T M L L K L F E R Y P A N Q  
M L S N E H I A I V K S T V P L L E A G G E A L T T H F Y R I M L A E Y P Q V R  
M L A P Q T I E T V K A T A P A I Q A N A A A I G N R F Y E M L F V K A P E L  
L S T D E V D A V Q A W Q V V R Q D Q R S I G Q Q V M M T L F S E N P E Y I  
S A A D R H E V L D N W G I W G R R V A I T S Q M Y S T M L P S D P K I A  
L S L D T I R L L V K A T A P V V G E H G Y A I T S Q M Y S T M L P S D P K I A  
L T P R E C F L L I Q N W R A I S R K M V D T G I R T F I N L L E L F P T V K  
R C V F C T Q F Y E N  
F S E E Q E A L V K E A W E L M K P N V Q E L G L K F F L S W A D V A G G A G  
A F A S S L F C S Q F Y A N  
M L S E Q T R N I V K A T V P V L E Q H G T T I T T V F Y R N M L S E H K E L L  
T P D Q R H V L V D A W K L V K P D V V T H G T N I F L K F F E K N P E Y L  
M L D Q Q T I A T I K S T I P L L A E T G P A L T A H F Y Q R M F H H N P E L K  
I S L V R S S F K S I G A L P E K F A R S F Y A I L F A T H P E T R  
M L D S Q T I A T V K S T I P L L A A T G P K L T A H F Y D R M F H H N P E L K  
Q L V K A T I P V L R E H G V A L T T H F Y Q R M F Q H N P E L L  
M L D T Q T I A I V K S T V P L L A A T G P K L T A H F Y E R M F K H H P E L K  
L T E G E I Y N F E K I W K H V Q K N L P E I G K N M F K E L F T K N P A L S  
M V S Q K T I E I V K S T A P F L K K S G K Q I T T R M Y E I M F E N H P E V K  
I S I V K S T S F E L L A D Q G E A L V A R F Y A R L F Q D H P A V R  
L T D D D L V N V R E L W D L F C K R Y D D I A L Q L F I S L F H H H P E A V  
M T P E Q V T L V Q Q S F A K V A P I A D H A A V I F Y D R L F E I A P V K  
K I V K T T W A E L M R K K E E V G L R I Y Q E V L L K E V E M S  
V F T E K Q E A L V K E S W E L K Q D I P K Y S L H F F S Q I L E I A P A A K  
F T A E E K A Q L V R S W K A I E S Q K Q A I G C D I Y E M I F N Q C P E A R  
R A T W A L A A G D A D R T A R V F Y S N L F R L D P T T K  
S K V D T A L F C S Q F Y D N L I V M D P L L E  
F T E E Q E A L V L K S W A I M K N D S A H I G R R F F L K I F E V A P S A R  
M L D A H T I A T V K S T L P A I A A C G P K L T A H F Y D R M L S Q H P E L K  
M S A E T K A I V N S T A P A L Q Q H G V A I T Q R M Y E R L F V D P A V K  
M N E Q K A L V K A T V P V L K T N G V A L T K H F Y Q R M F T H N P E L K  
F T L R Q E A L V N S S W E A F N Q N L P L F S V L F Y T F L E K A P I A K  
L T P G Q V D I I R S T V P V L K E H G N D I T K S F Y E T L L A E V P D L N  
M I S A Q E I E V I K S T A P L L A T H G K D I T G R F Y Q L L F E Q N P E L  
Q S W R G I K R N M S E A G V E M F A Q L F K T S S H L Q

	50	60	70	80
UniRef90_C1E9M4	R L F P F R H Q L F V S A P F K L H A K L F V D T M T E L I A N G L H D L E K V I E			
UniRef90_F2Q9X5	A M F K K F K D I Q P R N A A L R D H G A K V V Q A L D D F I K G L D D G S G H E T			
UniRef90_E9F690	N Y F S L R N Q T Q Q T G A Q Q L R A L A G A I L A Y A A E H I E N D D P S V L F P L C			
UniRef90_G1Y347	A L F E N H A N Q Q G E D G A Q V T A L A L A G A I L A Y A A E H I E N D D P S V L F P L C			
UniRef90_UPI0002898BF1	H V F N M N G M Q Q N D R Q Q T A L A L A G A I L A Y A A E H I E N D D P S V L F P L C			
UniRef90_A8XBD5	Q L F P S K F Q Q S G K S K E I E F H G L R F M Q V L E S V V K T N D L D L S S L L E			
UniRef90_L5JQP5	P L F F S S H E D C L S P E F L D H I R K V I L V I D A T V T N V I D L S S L L E			
UniRef90_T2JNS3	R F F E N T H M K S P E E G R K Q A K L A A S V Y A Y A S H I D E L E S G N A			
UniRef90_F5XTH5	R I F N Q G N Q A T G E Q S K A L A S S V V A Y A V H L I S E P D A P P F			
UniRef90_W4HNQ7	P L F P Q Q D L A T Q Q E L L N Q T L A T V V K E V H R L S E V L S P A L			
UniRef90_UPI000472B50F	Q V F N Q G H Q Q S G Q Q Q A L A M A V A A Y A E H I D D D P S V L S P V L			
UniRef90_V9D8T9	N I F N T S N Q R N G R Q Q Q A L A G A L Y V Y A A N I D N L E D L L K P A L			
UniRef90_I1AQP5	R M F P K G P D G M L R Q S E K L F D M I L V L V Q S L D L H L Q M L V			
UniRef90_D4W4H1	P L F N M R S H Q K D G E Q P R A L A L A V L A Y A A R H I D D D L G T G A I M P V V			
UniRef90_UPI00046F00C3	D L F N M S H Q K D G E Q P R A L A L A V L A Y A A R H I D D D L G T G A I M P V V			
UniRef90_UPI0002F71C19	R G L F P E D L A Q Q E E K L L A A K V S D T L N T V I T S I D D D S E R L D A I L			
UniRef90_UPI0002198090	A L F P P Y Q E L P V I A K V S D T L N T V I T S I D D D S E R L D A I L			
UniRef90_N1PSX1	N V F N Q T N Q V N N H Q A R A L A G S L Y A Y A S H I D D D L G K L V S P A V			
UniRef90_UPI000360A57F	A F F P A S M D Q Q R D H F V R A L A Y I F D N I D K N E R V E S F L			
UniRef90_UPI00036D93B1	R N L F N R G N Q A Q G T Q Q R A L A V A S I A T Y A T H L I D T K L P H P T E L L			
UniRef90_P04251	T K F A R L G D V K D N S K L R G H S I T L M Y A F I D A L D N V D R L K C V V			
UniRef90_C4WSU4	S L F K S I D E L A S N P Q F M S H A S K V G A A L A S T I D H L D K P E E L L E			
UniRef90_A4XD3P	N I F N K G H Q A T G E Q P A A L A A S V V A Y A E H L T G G D D W E L L L			
UniRef90_E4NEI4	A M F P A A M D E Q R T R L F Q A L R L C A V R A G D P L R D Y L			
UniRef90_S2Y333	S L F P A A M D M Q R D R L F R A L L R A A E H I D D T E A L L			
UniRef90_B5X603	T L F P K F G D L S G N A V A A H G A T V L R K L G E L N A R G H			
UniRef90_UPI0002657117	D L F T S F Q A L K T E E S Q R E H A S L V M T T L D E G I N S L D N L D Y F V			
UniRef90_G0S336	N N I F S T T S Q R T G R Q P R A L A N A V L A Y A T Y V D D L D K L H A A V			
UniRef90_R7V3H8	N I F N A T N Q K T G R Q Q A A L A N A V L A Y A A N I D N L G V L T A A V			
UniRef90_S4XN51	R L F T R N S P G A Q G T M F E R A L M A V L D H L E D D V W L C E K L			
UniRef90_UPI00034B7A69	P L F E H T N M A K Q K T M L L N S L V L V V D N L R S P D V L S D A L			
UniRef90_G3AFJ2				
UniRef90_V5YNC2	A R F P L F E E I K T S A D F K T H A D K I V K A I S T Y I N L L T G N I S K T T L			
UniRef90_UPI000329137D	R Q F S S V G E A C L S S P E F L D H I R K V M V V I D T A V T N V I D L S S L E			
UniRef90_UPI000378DF50	R N V F N S G Q H N S L L Q P T A L A M A V L A Y A E N I D D P S V L K N A V			
UniRef90_E9FRN3	S V F L P F D D L K K S K L L S E H A L R V M G A V Q R A V H R L Q E P E K L H			
UniRef90_I0IM14	K M F P A E M G V Q A Q R L F D S I V Y I T S N I D K P D A L V			
UniRef90_I1XL92	P L F K S V T I E G Q H K E M L J A S M V L L I Q H L R D T E M I E D Y L Q G			
UniRef90_G6CW33	H L F E K F R A I V S S A E L A E H A T Q V M H T L D E G I K D M D S F F T Y V			
UniRef90_UPI00023B3405	K W F S F L K N S K K N K L K S H A M A V M V D R I C Q L X K A N I V T A R D			
UniRef90_UPI00034D9014	T N L F N M G N Q A N G A Q Q S L A A A V F A Y A A N I D N P A A L			
UniRef90_B3M391	D K F P P L E E L P G N A R F R A H A G R I I R V F D E S I Q L L D G D Q E K L			
UniRef90_D6KG01	S L F P A S M E F Q Q A H L A R A L W Y L I E H L H R P D D V A R T F			
UniRef90_UPI000_A1SYP4	S H I F N M T N Q K S G S Q K A L A T A V Y A F A K Y V D N L E V I L G D V			
UniRef90_H2ZPV2	T L F Y N L E L M R S I K K M S S H A T R I A T S I S K F I K L L D Q L K E F L			
UniRef90_UPI000316497E	S L F P L A M D V Q R D R L F H A L L T A A G L A E H P A R F T G F L			
UniRef90_Q0VMN1	A F F N P A H Q Q A G T Q Q R A L A G A I C A Y A Q H V D N P A A D A			
UniRef90_V8P4E8	P L F K Y N C E C L S S P E F L E H I R K V M L V I D A A V T H L E N L H C L E			
UniRef90_UPI00037E05FB	D M F P V Q M Q L Q R E R L I S A I V S T V H G F N D L E R T D			
UniRef90_R7QRC5	R G G T V K E E N G I P K Q V A A L G G A V I S Y A K N I D R V E A L			
UniRef90_UPI000372B9EC	A L F N H A N Q S T G A Q P K A L A G A V L A Y A Q N I D N L G A V L			
UniRef90_D7FYD1	P L F K D V D M E K Q G A K L M K V I G V A V M M M D Q F K P C M L			
UniRef90_UPI0001CBB477	V M F M S P K D K E N T A L I K E H G L R F M N V R D V L K N G S Q A E C V L			
UniRef90_V9VRQ9	T L F N Q S H Q G G D S P Q H A A L T N A I L A Y A Q N I E N L P V M A			

		90	100	110	120																																				
UniRef90_C1E9M4	R	D	V	R	E	L	G	K	R	H	L	G	V	Q	P	A	H	F	D	A	M	G	E	A	L	I	A	V	L	D	E	H	H	P	S	D	L	D	K	E	
UniRef90_F2Q9X5	V	R	N	V	G	R	I	H	K	A	A	G	M	T	N	D	N	I	N	L	M	K	P	I	L	L	E	L	L	D	E	V	G	C	G	D					
UniRef90_E9F690	S	E	A	V	E	R	I	A	Q	K	H	F	I	Q	P	E	H	Y	P	I	V	G	K	F	L	V	A	F	V	Q	I	L	G	S	A	V	T	E	E		
UniRef90_G1Y347	E	R	I	A	H	K	H	V	I	Q	Y	H	I	L	P	E	H	Y	P	I	V	A	T	A	L	I	K	E	V	L	G	D	A	A	S	D	A				
UniRef90_UPI0002898BF1	N	H	I	G	H	K	H	T	S	L	D	I	R	A	D	H	Y	A	I	V	G	K	H	L	I	A	S	I	Q	E	V	L	A	D	A	A	S	P	Q		
UniRef90_A8XBD5	D	N	L	G	R	V	H	K	R	L	S	E	S	R	G	F	R	T	H	H	W	G	V	F	I	E	C	T	L												
UniRef90_L5JQP5	E	N	L	A	G	R	K	H	R	A	S	V	G	K	F	R	S	F	S	A	V	G	E	S	L	L	Y	M	L	E	K	C	L	G	P	A	F	T	P	A	
UniRef90_T2JNS3	V	E	Q	I	A	H	A	H	V	N	T	R	V	I	A	E	Q	S	Y	P	V	I	G	E	C	L	L	A	M	K	D	I	L	G	D	A	A	T	P	E	
UniRef90_F5XTH5	N	H	V	L	R	R	I	A	Y	K	H	G	I	R	P	A	E	Q	Y	T	I	V	G	R	N	L	M	A	V	G	E	V	L	G	D	A	A	T	P	E	
UniRef90_W4HNQ7	T	A	L	A	R	R	H	A	G	Y	G	A	E	P	A	H	F	A	L	V	G	E	A	L	I	G	A	L	A	E	E	T	P	G	G	L	S	Y	E		
UniRef90_UPI000472B50F	E	R	I	A	H	K	H	V	S	L	S	V	R	P	E	Q	Y	A	I	V	G	K	H	L	L	A	S	I	R	E	V	L	G	D	A	A	T	D	E		
UniRef90_V9D8T9	E	R	I	S	Q	K	H	V	S	L	Y	I	R	P	E	Q	Y	D	I	V	G	K	H	L	L	E	A	M	K	E	V	L	G	D	A	A	T	P	A		
UniRef90_I1AQP5	A	E	I	E	V	M	G	A	R	H	Y	G	V	T	E	A	Q	Y	D	Q	V	K	A	L	I	E	T	L	A	E	H	V									
UniRef90_D4W4H1	N	K	I	A	V	K	H	C	D	C	G	V	L	E	E	H	Y	P	I	V	G	A	H	L	L	G	A	I	K	E	V	L	G	E	A	A	T	D	E		
UniRef90_UPI00046F00C3	E	R	I	A	E	K	H	V	G	L	N	I	L	P	E	H	Y	P	F	V	A	T	A	L	L	G	A	I	A	H	V	L	G	D	A	A	T	P	E		
UniRef90_UPI0002F71C19	K	L	G	Q	G	E	K	H	R	K	L	E	V	S	D	H	F	D	G	F	I	N	S	F	T	G	A	L	S	D	T	L	G	P	D	W	N	D	E		
UniRef90_UPI0002198090	R	D	L	G	R	R	H	Q	R	F	N	V	Q	P	H	Q	F	A	L	L	K	Q	A	L	T	Q	V	L	A	R	R	L	G	S	G	F	T	P	A		
UniRef90_N1PSX1	E	K	I	A	Q	K	H	A	S	L	Y	I	R	P	E	H	Y	P	V	V	G	E	G	L	L	R	A	M	G	H	V	L	G	D	A	A	T	P	E		
UniRef90_UPI000360A57F	Q	Q	L	G	R	D	H	R	K	H	G	V	D	G	T	P	R	A	G	A	S	I	S	A	F	I	R	N	F	V	G										
UniRef90_UPI00036D93B1	S	R	I	G	H	K	H	A	S	L	G	I	T	A	D	Q	Y	D	I	V	H	E	H	L	F	A	A	I	V	E	V	L	G	A	D						
UniRef90_P04251	E	K	F	A	V	N	H	I	N	R	Q	I	S	A	D	E	F	G	E	I	V	G	P	L	R	Q	T	L	K	A	R	M	G	S	Y	F	D	E	D		
UniRef90_C4WSU4	K	L	T	N	L	K	H	K	K	Y	G	L	S	A	K	H	F	G	V	I	G	D	V	L	I	A	M	I	T	E	A	I	G	D	S	E	P				
UniRef90_A4XDP3	S	R	I	A	H	K	H	A	S	L	G	I	T	A	T	Q	Y	T	I	V	G	R	H	L	L	A	V	G	E	V	L	G	E	A	A	T	A	E			
UniRef90_E4NEI4	G	P	L	G	R	R	H	R	K	Y	G	A	L	T	R	H	Y	A	S	V	A	D	C	L	V	A	A	L	A	R	Y	G	G	S	G	W	D	G	R		
UniRef90_S2Y333	A	H	L	Q	S	L	G	H	R	K	Y	G	T	R	A	E	D	Y	P	A	V	G	E	C	L	I	G	A	L	N	R	Y	A	S	R	S	W	N	A	E	
UniRef90_B5X603																																									
UniRef90_UPI0002657117	E	Y	I	H	N	A	G	G	M	H	Y	K	I	K	E	Y	F	W	L	I	E	K	P	F	L	E	A	V	K	L	T	L	G	D	R	Y	T				
UniRef90_G0S336	Q	R	I	A	H	K	H	V	S	L	N	I	V	T	A	E	Q	Y	D	I	V	G	K	H	L	I	E	A	V	A	H	Q	V	L	G	D	A	A	T	D	E
UniRef90_R7V3H8	K	R	I	A	H	K	H	A	Y	G	F	V	T	P	E	M	Y	P	L	V	G	K	H	L	I	E	A	V	A	S	E	V	L	G	D	A	A	T	D	E	
UniRef90_S4XN51	A	R	L	G	A	Q	H	A	A	Y	G	F	V	T	P	E	M	Y	P	L	V	G	K	H	L	I	E	A	V	A	S	E	V	L	G	D	A	A	T	D	E
UniRef90_UPI00034B7A69	K	G	M	G	A	R	H	V	N	Y	G	A	L	P	A	H	Y	P	L	V	G	N	S	L	L	A	K	T	F	S	Q	F	L	G	D	A	A	T	D	E	
UniRef90_G3AFJ2	W	K	L	G	K	R	H	S	R	L	S	I	E	P	T	H	F	E	I	M	G	E	A	L	I	Q	T	F	H	E	R	F	G	T	T	F	N	Q	E		
UniRef90_V5YNC2	N	E	L	G	Q	R	H	K	D	R	G	A	T	T	E	Q	F	E	K	F	K	V	S	V	L	K	Y	V	K	E	H	A	T	G	L	T	A	D			
UniRef90_UPI000329137D	E	Y	L	A	G	L	G	R	K	H	R	A	V	S	F	S	E	I	Q	E	R	Q	W	D	L	L	Q	V	I	R	R	K	Q	P	E						
UniRef90_UPI000378DF50	N	R	I	A	N	K	H	V	S	L	D	I	R	P	E	H	Y	A	I	V	G	K	H	L	L	A	S	I	G	E	V	L	G	D	A	A	T	P	E		
UniRef90_E9FRN3	A	F	L	S	E	L	K	H	E	K	N	G	A	K	L	E	I	D	Y	I	G	P	Q	F	L	C	A	I	R	P	L	G	D	D	W	T	L	D			
UniRef90_I0IMI4	P	Y	L	Q	R	L	G	S	G	H	I	K	F	D	P	E	H	Y	P	I	V	G	N	S	L	M	K	T	L	A	H	F	A	G	P	A	W	T	K	E	
UniRef90_I1XL92	L	G	V	R	H	Q	Q	Y	G	V	K	Q	S	H	Y	E	M	F	I	E	N	W	L	S	V	V	A	E	F	S	E	Q	E	W	D	D	T				
UniRef90_G6CW33	R	H	V	G	G	T	H	R	Q	V	P	G	F	K	A	E	N	F	M	K	I	E	Q	P	F	L	E	A	A	K	T	T	L	G	E	R	Y	T	P		
UniRef90_UPI00023B3405	S	T	L	K	K	L	G	H	Y	K	S	G	V	L	D	E	H	Y	Q	A	T	K	F	A	L	L	E	I	K	E	A	V	P	E	M	X	S	P	K		
UniRef90_UPI00034D9014	A	P	V	I	Q	R	I	V	H	K	H	G	I	T	P	E	H	Y	P	I	V	G	R	Y	L	L	G	G	I	A	E	V	L	G	D	A	A	T	P	A	
UniRef90_B3M391	D	E	I	W	T	K	V	A	V	S	H	I	L	S	K	E	S	Y	N	Q	L	K	E	V	I	L	E	V	L	T	A	A	C	S	L	N					
UniRef90_D6KG01	M	R	L	G	R	D	H	R	K	L	G	L	P	A	Q	Y	T	A	F	E	T	A	L	R	E	A	L	R	V	R	A	G	A	G	W	T	V	E			
UniRef90_A1SYP4	E	R	I	A	Q	K	H	A	S	L	G	I	K	S	E	H	Y	P	L	V	G	S	A	L	L	Q	A	I	D	E	I	L	Q	P	P						
UniRef90_H2ZPV2	N	H	L	G	E	I	A	A	H	S	K	V	E	P	E	D	F	E	Y	L	A	P	V	M	L	A	V	I	G	G	Q	L	N	L	K	S	D	S	P		
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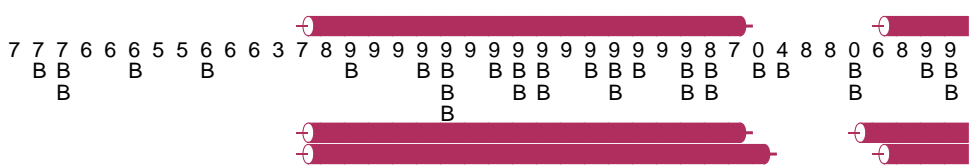
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