

	1	10	20	30	40																																						
QUERY	V	L	S	A	A	D	K	T	N	V	K	A	A	W	S	K	V	G	G	H	A	G	E	E	Y	G	A	E	A	L	L	E	R	M	F	L	G	F	P	T	T	K	
UniRef90_P02004	V	L	T	A	E	D	K	K	L	I	Q	T	F	W	G	K	I	G	G	A	T	E	E	E	E	G	A	E	A	L	L	W	R	M	F	H	A	Y	P	T	T	K	
UniRef90_P07414	V	L	T	S	D	E	S	D	K	N	V	K	T	F	W	G	K	I	G	T	H	T	G	E	E	Y	G	G	E	A	L	L	E	R	M	F	L	S	F	P	T	T	K
UniRef90_F6YMJ4		L	T	K	S	D	K	S	A	S	I	A	N	I	W	S	K	I	A	G	T	Q	A	E	A	L	G	T	E	A	L	L	E	R	L	F	L	S	F	P	Q	T	K
UniRef90_B8K130		L	T	K	S	E	R	T	I	I	M	S	I	W	D	K	V	A	S	Q	S	E	A	I	L	G	T	E	A	L	L	E	R	L	F	L	S	F	P	Q	T	K	
UniRef90_K7FZX0		L	T	Q	A	E	K	A	A	V	V	A	I	W	E	K	V	A	T	A	H	A	N	A	L	G	A	E	S	L	L	E	R	L	F	S	G	F	P	Q	T	K	
UniRef90_UPI00045412ED	M	L	T	K	S	D	K	K	E	V	T	A	L	W	G	K	A	A	H	G	E	E	Y	L	G	A	E	S	L	L	E	R	L	F	L	S	F	P	Q	T	K		
UniRef90_Q533G9		L	T	K	S	D	K	T	I	I	A	A	M	W	S	K	I	A	A	P	H	A	D	S	I	G	T	E	A	L	L	E	R	L	F	T	S	F	P	Q	T	K	
UniRef90_UPI0003F058A3	V	L	T	S	A	A	D	K	A	N	V	K	A	A	W	D	K	A	G	G	N	I	G	A	Y	G	S	E	A	L	L	D	R	T	F	L	S	F	P	T	T	K	
UniRef90_P83131	V	L	T	A	G	D	K	A	N	V	K	T	V	W	S	K	V	A	G	S	H	L	E	E	Y	G	S	E	A	L	L	E	R	L	F	V	V	Y	P	S	T	T	K
UniRef90_UPI000332FBA8		L	I	K	S	E	R	A	S	I	M	S	I	W	D	K	L	A	M	R	A	E	A	I	G	T	E	T	L	L	E	R	L	F	V	T	Y	P	Q	A	K		
UniRef90_UPI0004442C09		L	T	K	S	E	R	A	I	I	L	A	M	W	A	K	M	A	T	K	M	E	E	I	G	T	E	T	L	L	H	E	R	L	F	C	A	Y	P	Q	T	K	
UniRef90_B0M2T2	V	L	S	S	D	D	K	C	N	V	K	A	V	W	C	K	V	A	G	H	L	E	E	Y	G	A	E	S	L	L	E	R	M	F	C	A	Y	P	Q	T	K		
UniRef90_P10059	M	L	S	A	S	D	D	K	A	N	V	K	A	I	W	S	K	V	C	V	H	A	E	E	Y	G	A	E	S	L	L	E	R	M	F	T	V	Y	P	S	T	T	K
UniRef90_UPI00038EDBB6	V	L	S	S	D	D	K	A	N	V	K	A	V	W	S	K	V	I	G	S	H	G	A	E	E	Y	G	A	E	S	L	L	A	R	M	F	L	S	F	P	T	T	K
UniRef90_P02104		F	T	A	E	E	K	T	I	I	N	G	L	W	S	K	V	I	G	S	N	V	E	E	Y	G	G	E	A	L	L	G	R	L	L	V	V	Y	P	S	T	T	K
UniRef90_P11896	V	L	S	A	E	E	K	A	L	V	V	G	L	C	G	K	I	S	G	H	C	D	A	L	G	G	E	A	L	L	D	R	L	L	F	A	S	F	G	Q	T	R	K
UniRef90_B3RFA9						E	K	G	V	V	T	G	L	W	G	K	V	I	N	V	D	E	V	G	G	E	A	L	L	G	R	L	L	V	V	Y	P	S	T	T	K		
UniRef90_Q6H1L9		L	S	D	A	D	K	N	N	V	K	E	F	W	E	K	L	G	S	N	T	G	V	Y	T	T	E	A	L	L	E	R	T	F	S	S	F	P	S	T	T	K	
UniRef90_UPI00015150AE		L	S	A	A	D	R	A	L	L	R	A	L	W	K	K	L	G	S	N	V	G	V	Y	T	T	E	A	L	L	E	R	M	F	L	A	F	P	L	T	T	K	
UniRef90_P11752		L	T	N	E	E	K	T	A	V	I	G	L	W	G	K	V	I	N	V	E	E	V	G	G	E	A	L	L	G	R	L	L	V	V	Y	P	W	T	Q	K		
UniRef90_U3K6C5		W	T	A	E	E	K	Q	L	I	T	G	L	W	G	K	V	I	N	V	A	E	C	V	G	G	E	A	L	L	A	R	L	L	I	V	Y	P	W	T	Q	K	
UniRef90_G1LJX4		L	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	L	E	R	L	L	F	T	S	Y	P	Q	T	K	
UniRef90_F7A1A1		L	S	A	E	E	K	S	A	I	T	T	L	W	G	K	V	I	S	N	P	E	E	H	G	G	E	A	L	L	A	R	L	L	V	V	Y	P	S	T	T	K	
UniRef90_UPI0003F134CF	V	L	S	E	A	E	R	A	L	V	R	A	L	W	N	K	M	G	D	N	V	G	V	Y	T	T	E	A	L	L	E	R	T	F	V	S	F	P	S	T	T	K	
UniRef90_Q38IW4	I	L	S	E	A	E	K	A	A	I	L	S	L	W	A	K	A	S	G	N	V	N	A	L	G	A	E	S	L	L	E	R	M	F	L	T	Y	P	S	T	T	M	
UniRef90_UPI000333E286		L	S	D	A	D	K	S	T	I	R	F	A	W	K	K	I	G	P	N	F	A	Q	H	S	P	D	A	V	L	Y	R	M	F	V	S	F	P	S	T	T	K	
UniRef90_UPI0003331BBB		F	T	A	E	E	K	A	A	I	T	N	I	W	K	K	V	I	N	V	E	E	I	G	A	E	T	L	L	G	R	L	L	I	V	Y	P	S	T	T	K		
UniRef90_P14520		L	T	A	K	S	K	S	I	V	K	A	F	W	G	K	I	G	S	R	A	D	D	I	G	A	E	A	F	L	G	R	M	L	T	V	Y	P	E	T	K		
UniRef90_V5N4L6		L	T	D	I	D	K	T	L	V	K	A	F	W	G	K	V	I	S	G	K	A	D	A	I	G	H	A	L	L	V	R	M	L	L	V	Y	P	Q	T	K		
UniRef90_Q6T497		L	T	K	R	D	K	K	A	T	V	K	A	F	W	D	K	V	A	P	K	V	E	D	I	G	V	Q	A	L	S	R	L	L	V	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	G	H	L	E	E	Y	C	A	E	T	L	L	A	R	M	F	A	A	Y	P	Q	T	K		
UniRef90_W5MM27	M	L	S	Q	E	E	K	D	L	L	V	S	I	W	E	S	I	A	P	D	A	E	E	I	G	A	E	S	L	L	E	R	M	F	T	C	F	P	K	T	K		
UniRef90_G3PNE8		L	T	D	K	D	K	A	T	V	K	A	V	W	A	K	I	A	S	K	S	A	D	A	I	G	A	D	A	L	S	R	M	L	V	V	Y	P	Q	T	T	K	
UniRef90_V5N513		L	S	A	K	D	K	A	A	V	K	A	F	W	A	T	I	A	P	K	A	E	D	I	G	G	Q	A	L	F	R	M	L	T	V	Y	P	Q	T	T	K		
UniRef90_UPI0003B553FE		L	S	D	K	D	K	S	R	V	K	A	L	W	A	K	A	E	G	K	A	G	E	L	G	S	E	D	A	L	G	R	M	L	V	A	Y	P	Q	T	K		
UniRef90_D0VWV2		L	S	S	K	D	K	D	T	V	K	A	L	W	G	K	I	A	D	K	A	E	E	I	G	S	D	A	L	S	R	M	L	A	V	Y	P	Q	T	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	L	G	R	L	L	V	V	Y	P	W	T	Q	K		
UniRef90_UPI0004441846		L	S	A	K	D	K	A	T	V	K	A	F	W	A	K	I	S	S	S	G	E	A	L	G	A	D	A	L	S	R	M	L	V	V	Y	P	Q	T	T	K		
UniRef90_P01976	V	L	S	A	N	D	K	T	N	V	K	G	A	F	W	S	K	V	G	G	S	S	G	A	Y	M	G	D	E	L	Y	R	T	F	L	S	F	P	T	T	K		
UniRef90_Q6Y257		L	S	G	K	D	K	N	I	V	K	S	I	W	E	K	V	S	P	K	S	A	D	I	G	A	E	S	L	L	G	R	M	L	C	V	Y	P	Q	T	T	K	
UniRef90_UPI000333480A		L	N	A	D	E	K	S	M	I	S	T	L	W	G	K	V	I	N	A	D	E	V	I	G	G	E	S	L	L	G	R	L	L	V	V	Y	P	W	T	Q	K	
UniRef90_UPI0004746CD9		L	S	A	K	D	K	A	A	V	K	D	L	W	A	K	I	I	S	P	K	A	D	E	I	G	G	S	E	A	L	G	R	L	L	F	E	V	F	P	Q	T	K
UniRef90_G3IA41	V	L	S	A	D	D	K	N	N	I	K	G	A	W	G	K	I	G	G	H	G	A	E	Y	G	A	E	S	L	L	E	R	M	F	V	T	Y	P	T	T	K		
UniRef90_I3N129		F	T	A	E	D	K	A	A	I	T	S	M	W	R	K	V	I	N	V	E	E	A	G	G	E	T	L	L	G	R	L	L	V	V	Y	P	W	T	Q	K		
UniRef90_L8J2H0	M	L	S	A	Q	E	R	A	H	I	T	Q	V	W	D	L	I	A	G	H	E	A	P	F	G	A	E	L	L	R	R	M	F	L	S	F	P	T	T	K			
UniRef90_Q4S4F1		L	T	K	T	D	K	A	A	V	K	A	L	W	N	K	I	L	S	K	S	V	D	V	I	G	A	E	A	F	G	R	M	L	L	V	Y	P	Q	T	T	K	
UniRef90_O88754		F	T	A	E	E	K	A	A	I	I	S	I	W	E	K	V	I	D	L	E	K	I	G	G	E	T	L	L	G	R	L	L	V	V	Y	P	W	T	Q	K		
UniRef90_Q98SE6		L	T	A	K	D	K	Q	T	V	K	A	F	W	A	K	V	I	S	G	K	S	E	D	I	G	A	A	V	L	A	R	M	L	V	V	Y	P	Q	T	T	K	
UniRef90_Q45XJ0		L	T	A	A	E	K	T	Q	V	T	N	L	W	G	K	V	I	N	V	K	E	L	G	G	E	A	L	S	R	L	L	V	V	Y	P	W	T	R	K			
UniRef90_C5HYH6		L	T	A	G	E	K	S	L	V	A	S	T	W	S	K	I	I	N	V	D	E	V	G	G	E	V	L	L	G	R	L	L	V	V	Y	P	W	T	Q	K		
UniRef90_UPI0003AFE82		L	T	R	T	E	R	T	I	I	L	S	L	W	S	K	I	S	T	Q	A	D	V	I	G	T	E	T	L	L	E	R	L	L	F	T	V	Y	P	S	T	T	K
UniRef90_I3KU09		L	T	E	K	D	K	A	A	V	K	A	L	W	A	K	I	I	S	K	S	V	D	A	L	G	A	E	S	L	L	G	R	M	L	L	V	Y	P	Q	T	T	K
UniRef90_Q6H1U7		L	T	A	E	E	K	N	A	I	T	S	L																														

QUERY	50	60	70	80
UniRef90_P02004	T Y F P H F D L S H G S A Q V I K A H G K K V A D A L T L A V G H L D D N L P G A L			
UniRef90_P07414	T Y F P H F D L S H G S A Q V I K A H G K K V A D A L T L A V G H L D D N L P G A L			
UniRef90_F6YMJ4	T Y F P H F D L S H G S A Q V I K A H G S K V A D A L T G D A V G K N I D E D N V L S G S A L			
UniRef90_B8K130	T Y F P H F D L S H A G S A Q L R T H G S K V A A A L G D A V K N I D N N L A C A L			
UniRef90_K7FZX0	T Y F P H F D L S Q G S A Q V L K A H G S K V A A A L G E A T K N I D N N L T D S A L			
UniRef90_UPI00045412ED	T Y F P H F E L S Q G S A Q V L K A H G S K V A A A L T T A V A H L D D D L T D S A L			
UniRef90_Q533G9	T Y F P H F D L S H H D S A Q L H A H G A K V V N A L G D A V K N I D N N L H S A L			
UniRef90_UPI0003F058A3	T Y F P H F D Q T P G S K D I M N H G K K V A D A L T L A V N H L D D D L P Q A L			
UniRef90_P83131	T Y F P H F D L S H H D S P Q V R A H G K K V L S A L G E A V N H I D D D L P G A L			
UniRef90_UPI000332FBA8	T Y F P H F D L S H Q G S P Q L R A H G T K I V A A V G D A V K N I D D N M Q S G A L			
UniRef90_UPI0004442C09	T Y F P H F D L S H A G S A Q L R A H G K K V V A A L L H E A V N H I D D N V L P G A L			
UniRef90_B0M2T2	I Y F P H F D L S H G S A Q V I K A H G K K V V N A M G E A V N H L D D D M A G A L			
UniRef90_P10059	T Y F P H F D L S H G S A Q V I K A H G K K V A D A L T N A N H L D D D L K S A L			
UniRef90_UPI00038EDBB6	T Y F H S F D L S P G S A Q V I K A H G K K V A D A L T N A N H L D D D L K S A L			
UniRef90_P02104	R F F D S F G N I M G N P R V K A H G K K V L T A F T G E S I K N L D D N L K S A L			
UniRef90_P11896	T Y F S H F D L S P G S A D V K R H G K K V L S A L I G E A A K N I D S M D Q A L			
UniRef90_B3RFA9	R F F D S F G D I M G N P K V K A H G K K V L Q S A L L G D G I N N L D D N L K A A F			
UniRef90_Q6H1L9	T Y F A H L E L S R G S A Q V R A H G K K V A D A L T L A V N H M D D D L P G A L			
UniRef90_UPI00015150AE	T Y F P H L N L S P G S A Q V K A H G Q K V A A A L T L A V Y H L D D D L P D T L			
UniRef90_P11752	R F F E S F G D I M G N P K V K A H G K K V L N S F S E G L K N L D D N L K G T F			
UniRef90_U3K6C5	R F F S S F G N L S G N P K V Q A H G K K V L T S F S E G L K N L D D S I K G T F			
UniRef90_G1LJX4	T Y F P H F D L S H P G S P H L H M H G A K V V A A L G D A V K N I D N I A G A L			
UniRef90_F7A141	R F F D S F G N L S G N T K V K A H G K K V L T S F G D A V K N L D D N L K G T F			
UniRef90_UPI0003F134CF	T Y F A N F N L K P G S T Q I K D H G K K V A V A L T Q A V N H L D D D L P G A L			
UniRef90_Q38IW4	T Y F S H L D L S S G S H D L Q V H G K K V L G A L I G E A T K H L D D N L H E A L			
UniRef90_UPI000333E286	T Y F P S F A L A P G S P Q I Q A H G K K V A N A L N K A V E N V L D D M P T A L			
UniRef90_UPI0003331BBB	R F F D T F C A V M G N P R V K A H G K K V L T S F G E A V K N M D H L K E A F			
UniRef90_P14520	T Y F A S W S D S P G S A A V K K H G K T I M G G I A E A V G H I D D D L T G G L			
UniRef90_V5N4L6	I Y F S H W P D S P G S E S V K K H G R T V I G A L N D A V V N I D D D L V G G L			
UniRef90_Q6T497	T Y F A H W K D S P G S E S V R K H G K T I M T G V L G S A V S N I D D D L K G G L			
UniRef90_P01984	T Y F P H F D L Q P G S A Q V K A H G K K V A G A L A E A A N H I D D I A S A L			
UniRef90_W5MM27	T Y F A H L D L S P G S A H L R T H G K K I I M A V I G D G V K N I S T L A T A L			
UniRef90_G3PNE8	T Y F S H W P D L P N S A S V K N H G K N V M G G I A L A V S K I D D D L T A G L			
UniRef90_V5N513	T Y F S H W N F S L G S E Q I K K H G K M V L S G V G E A V D K I D D D L T N G L			
UniRef90_UPI0003B553FE	T Y F S H W G D S P Q S P K V K H G A T I M G A L G K A V K G I D D D L P G T L			
UniRef90_D0VWV2	T Y F S H W K D S P G S A P V N K H G K T I M G G I V D A V A S I D D D L N A G L			
UniRef90_G1M487	R F F D S F G N I M G N P K V K A H G K K V L T S F G N A V K H M D D D L K T D T F			
UniRef90_UPI0004441846	T Y F S H W D M S P G S A P V K K H G A T V M G G V A E A V A K I D D D L T S G L			
UniRef90_P01976	T Y F P N Y D F S A G S A Q I K T Q G Q K I A D A V G L A V A H L D D D M P T A L			
UniRef90_Q6Y257	A Y F S H W S D L P N S S Q V K K H G A S I M A A I G D A V G K I D D D L V G G L			
UniRef90_UPI000333480A	R F F G S F G D I M G N A K V K A H G K K V I H S F S E G L K N L D D N L K G T F			
UniRef90_UPI0004746CD9	T Y F A H W S D L N G N A H V K K H G S V I V R R I G E A V G H I D D D L T G G L			
UniRef90_G3IA41	T Y F P H F D V S H G S A Q V K A H G A K V A D A L A K A A S H L D D D L P G T L			
UniRef90_I3N129	R F F D S F G N I M G N P K V K A H G K K V L T S L G N A L R D M D D D L K G A F			
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 N H L D D D L P G A L			
UniRef90_Q4S4F1	I Y F S K W G D I F G S S Q V K N H G K I V M G G I A T A V A N I D D D L T S G L			
UniRef90_O88754	R F F D K F G N I M G N P R I L K A H G K K V L T S L G S A V E N M D N L K E T F			
UniRef90_Q98SE6	T Y F S H W P Q S P N S A A A R K H G I T V M V G V I G D A V T K I D D D L K E G L			
UniRef90_Q45XJ0	R F F E H F G D L S H N A K V L A H G E K V L T S F G E G L K H L D D N L K G T F			
UniRef90_C5HYH6	R F F T S F G D I M G N A K V Q A H G K K V L K S F A E G L N H L D D D L K G A F			
UniRef90_UPI0003AFEA82	V Y F R H L G D Q P D E V L L S H G Q R M L Q A V G V A V Q Y M D N L H A V L			
UniRef90_I3KU09	T Y F S H W P D L P G S A P V V L S H G K Q T M G G V T E A M S K I D N N L R G G L			
UniRef90_Q6H1U7	R F F D H F G D L M S N P K V L A H G A K V L V A F G D A V K N L D D N L K G T F			
UniRef90_Q4RHD1	T Y F S H W D Q S P N S A S A K K H G I T I M N A V G D A V S K I D D D L K T G L			
UniRef90_P08853	R F F D S F G D L M G N A K V K A H G K K V I D S F S N G L K H L D D N L K G T F			
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UniRef90_C5HYH8	R F F D H F G D L M G N A K V K A H G K K V L N S F S D G L K H L D D D L K G T F			
UniRef90_P13274	R F F S T F G N I L H N P H V H A H G K K V L T S F G E A V K N L D H I K Q T F			
UniRef90_P10777	T Y F S H W P S V P G H P D I K A H G K K V M G G L A I A V S K I N D L K A G L			
UniRef90_P22743	R F F A H F G N L C G N P Q V R A H G K K V L T S F G E A L K H L D N V K E T F			
UniRef90_Q802A4	I Y F S E W S D L P A S G P V K A H G K K V M G G I A T A V A S I D D D L T C G L			
UniRef90_UPI000329AB1A	T Y F S D W G D S P N S P Q V K K H G A T I M R A V G K A V K N I D D D L T N H L			
UniRef90_H9GGM8	T Y F P H F D L S P G S K D I Q V H G K K V A R A L D K A L H H L D D N V T N G L			
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UniRef90_D6R731	R Y F G T F G N 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 L K G T Y			
UniRef90_Q8JH84	T Y F S H W A D S P G S G P V K K H G K V I V A A V G D A V S K I D D D L A G G L			
UniRef90_P0C0U7	T Y F S H F N L S P G S K D I V H Q G E K V G K A L D S A L K H L D D D I R G T L			
UniRef90_UPI000343F5F8	T Y F P H F D L S P G S A Q V K A H G K K V A D A L T L A V A H L D D D L P G A L			
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UniRef90_P56250	I Y F S E W G Q G P Q T P Q V R N H G A V I M A A V G K A V K S I D N L V G G L			
UniRef90_UPI0003503817	T Y F P H F D L S H G S A Q I K G H G K K V V A A L I E A A N H I D D D I A G T L			
UniRef90_B0JZZ3	R Y F S S F G N L S G N A K V R A H G N K V L S A V G N A I A H L D D N V K G T L			
UniRef90_P18436	R F F D N F G N I M G N P K V K A H G K K V L S S L G E A V T H M D D D L K D A F			
UniRef90_UPI0003767A2A	R Y F A S F G N I S G N A K V A A H G K V V I N G L D K A V K N L D D N V N A V Y			
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UniRef90_P18974	T Y F A H F D L N P G S A Q I K A H G K K V V A D A L T Q A V N N L D D D I P A L			
UniRef90_UPI00038EE4CD	T Y F P H F D L S T G S A Q V K A H G K K V A D A L T L A V N Q M Y D L P A L			
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UniRef90_G5BXY2	T Y F P N F D I 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			
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QUERY				90					100					110				120																														
UniRef90_P02004	S	D	L	S	N	L	H	A	H	K	N	L	R	V	D	P	V	N	F	K	F	L	S	H	C	C	L	L	S	T	L	A	V	H	L	P	N	D	F	T	P	A						
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UniRef90_F6YMJ4	S	E	L	S	E	L	H	A	Y	N	L	R	V	D	P	V	N	F	K	F	L	S	H	C	C	M	L	V	T	L	A	V	H	F	P	N	D	F	T	T	A	E	E	P	S			
UniRef90_B8K130	S	K	L	S	E	L	H	A	Y	V	L	R	V	D	P	V	N	F	K	F	L	S	H	C	C	I	L	V	T	L	A	V	H	L	P	A	N	D	F	T	T	A	E	E	P	S		
UniRef90_K7FZX0	A	T	L	S	E	L	H	A	Y	L	R	V	D	P	V	N	F	K	F	L	S	H	C	C	I	L	V	T	L	A	A	H	F	P	N	D	F	T	T	A	E	E	P	S				
UniRef90_UPI00045412ED	S	A	L	S	D	L	H	A	H	K	L	R	V	D	P	I	N	F	K	L	S	H	C	C	I	L	V	V	V	L	A	A	H	F	C	P	N	G	E	F	T	T	A	E	E	P	S	
UniRef90_Q533G9	S	K	L	S	E	L	H	A	Y	L	R	V	D	P	V	N	F	K	L	S	H	T	F	L	V	T	L	A	A	H	F	P	A	E	E	F	T	T	A	E	E	P	S					
UniRef90_UPI0003F058A3	S	A	L	S	D	L	H	A	H	K	L	R	V	D	P	V	N	F	K	L	S	H	C	C	L	V	T	L	A	A	H	L	G	K	E	F	T	T	P	A	E	E	P	S				
UniRef90_P83131	S	K	L	S	D	L	H	A	Q	N	L	R	V	D	P	V	N	F	K	L	S	N	L	C	F	V	V	V	S	G	T	H	H	P	T	I	L	L	T	P	E	E	P	S				
UniRef90_UPI000332FBA8	T	K	L	S	E	L	H	A	Y	L	R	V	D	P	V	N	F	K	L	S	H	C	C	L	V	T	L	A	A	H	F	P	A	D	F	T	T	P	E	E	P	S						
UniRef90_UPI0004442C09	A	R	L	S	E	M	H	A	Y	L	R	V	D	P	V	N	F	K	L	S	H	C	C	L	V	T	L	A	T	H	F	P	A	D	F	T	T	A	E	E	P	S						
UniRef90_B0M2T2	C	R	L	S	E	L	H	A	H	S	L	R	V	D	P	V	N	F	K	F	L	A	Q	C	C	V	L	V	V	V	A	I	H	H	P	A	G	S	L	T	P	E	E	P	S			
UniRef90_P10059	L	K	L	S	D	L	H	A	Q	K	L	R	V	D	P	V	N	F	K	F	L	A	Q	C	C	F	L	V	V	L	G	V	H	H	P	A	E	A	L	T	P	E	E	P	S			
UniRef90_UPI00038EDBB6	S	A	L	S	D	L	H	A	H	K	L	R	V	D	P	V	N	F	K	F	L	S	H	C	C	L	V	T	L	A	A	H	S	S	A	E	L	T	P	A	E	E	P	S				
UniRef90_P02104	A	K	L	S	E	L	H	A	C	K	L	H	V	D	P	E	N	F	K	L	S	G	N	V	L	V	I	V	L	A	A	H	F	P	G	K	E	F	T	T	A	E	E	P	S			
UniRef90_P11896	S	K	L	S	D	L	H	A	Y	N	L	R	V	D	P	G	N	F	Q	L	S	H	C	I	Q	A	V	L	A	A	H	F	P	A	D	E	F	T	T	P	Q	S	E	E	P	S		
UniRef90_B3RFA9	A	K	L	S	E	L	H	A	C	K	L	H	V	D	P	E	N	F	K	L	S	G	N	V	L	V	C	V	L	A	A	H	F	P	G	K	E	F	T	T	P	S	E	E	P	S		
UniRef90_Q6H1L9	S	S	L	S	D	L	H	A	H	K	L	K	V	D	P	I	N	F	K	Y	L	S	H	C	F	L	V	T	L	A	R	H	H	P	T	G	N	L	N	P	E	E	P	S				
UniRef90_UPI00015150AE	S	A	L	S	D	L	H	A	C	K	L	R	V	D	P	A	N	F	K	L	S	G	H	C	F	L	V	T	L	A	R	H	Y	P	G	D	F	S	P	A	Q	S	E	E	P	S		
UniRef90_P11752	A	K	L	S	E	L	H	A	C	D	K	L	H	V	D	P	E	N	F	R	L	G	Y	I	L	L	C	V	L	A	R	H	F	P	G	K	E	F	T	T	P	Q	S	E	E	P	S	
UniRef90_U3K6C5	A	Q	L	S	E	L	H	A	C	D	K	L	H	V	D	P	E	N	F	R	L	G	D	I	L	V	V	V	L	A	A	H	F	P	G	K	D	F	T	T	P	D	S	E	E	P	S	
UniRef90_G1LJX4	A	K	L	S	E	L	H	A	Y	L	R	V	D	P	V	N	F	K	L	L	I	Q	C	F	Q	V	V	L	A	S	H	L	Q	G	E	F	T	T	V	E	S	E	E	P	S			
UniRef90_F7A141	S	K	L	S	E	L	H	A	C	D	K	L	H	V	D	P	E	N	F	R	L	G	N	V	L	V	V	V	L	A	R	H	F	P	G	K	D	F	T	T	P	E	T	S	E	E	P	S
UniRef90_UPI0003F134CF	S	V	L	S	E	L	H	A	Y	N	L	R	V	D	P	V	N	F	Q	L	S	S	H	S	L	L	V	T	L	A	R	H	Y	P	G	D	F	S	P	T	S	E	E	P	S			
UniRef90_Q38IW4	S	A	L	S	A	L	H	A	Y	N	L	R	V	D	P	G	N	F	R	L	S	S	H	A	I	E	V	T	L	A	V	H	F	P	D	D	F	D	A	T	E	S	E	E	P	S		
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UniRef90_P14520	A	S	L	S	E	L	H	A	F	K	L	R	V	D	P	A	N	F	K	I	L	A	H	N	L	V	I	V	L	A	L	F	F	P	A	D	F	T	T	P	E	S	E	E	P	S		
UniRef90_V5N4L6	S	A	L	S	D	L	H	A	Y	T	L	R	V	E	P	G	N	F	K	I	L	S	H	N	F	L	V	T	L	A	I	N	F	P	A	D	F	T	T	P	E	S	E	E	P	S		
UniRef90_Q6T497	L	P	L	S	E	L	H	A	F	T	L	R	V	D	P	A	N	F	K	I	F	T	H	C	I	L	V	V	V	F	A	N	M	F	P	I	D	F	T	T	P	E	S	E	E	P	S	
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UniRef90_W5MM27	A	P	L	S	E	L	H	A	Y	Q	L	M	I	H	P	S	N	F	K	I	L	S	H	C	I	L	V	T	L	S	C	R	R	P	Q	E	F	T	T	P	V	S	E	E	P	S		
UniRef90_G3PNE8	L	E	L	S	E	Q	L	H	A	F	Q	L	R	V	D	P	A	N	F	K	I	L	S	H	C	I	L	V	V	I	A	G	L	F	P	K	D	F	T	T	P	E	S	E	E	P	S	
UniRef90_V5N513	L	N	L	S	E	Q	L	H	A	F	Q	L	R	V	D	P	A	N	F	K	I	L	S	H	S	I	L	V	V	L	A	L	L	F	P	A	D	F	T	T	P	E	S	E	E	P	S	
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UniRef90_Q98SE6	K	E	L	S	E	L	H	A	F	T	L	R	V	D	P	A	N	F	K	I	L	L	S	H	C	I	L	V	V	M	A	V	M	F	P	T	D	F	T	T	P	E	S	E	E	P	S	
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QUERY	V	H	A	S	L	D	K	F	L	S	S	V	T	V	L	T	S	K	Y	R
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UniRef90_P07414	V	H	A	S	L	D	K	F	M	S	S	V	T	V	L	T	S	K	Y	R
UniRef90_F6YMJ4	T	H	A	A	W	D	K	F	L	A	L	V	T	A	V	L	T	E	K	Y
UniRef90_B8K130	T	H	A	A	W	D	K	F	L	C	Q	V	T	A	V	L	T	E	K	Y
UniRef90_K7FZX0	V	H	A	A	L	D	K	F	L	S	Q	I	V	S	A	V	L	T	E	K
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UniRef90_UPI0003F058A3	I	H	A	S	L	D	K	F	L	S	T	V	A	S	T	L	T	S	K	Y
UniRef90_P83131	V	H	V	S	L	D	K	F	L	S	A	V	A	T	A	L	T	S	K	Y
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UniRef90_P10059	V	H	A	S	L	D	K	F	L	C	A	V	G	L	V	L	T	A	K	Y
UniRef90_UPI00038EDBB6	A	H	A	S	L	D	K	F	L	A	T	V	S	T	V	L	T	S	K	Y
UniRef90_P02104	M	Q	A	A	W	Q	K	L	V	A	G	V	A	T	A	L	T	S	H	K
UniRef90_P11896	C	Q	A	A	W	D	K	F	L	A	V	S	A	V	L	T	S	K	Y	R
UniRef90_B3RFA9	V	Q	A	A	F	Q	K	M	V	A	G	V	A	A	A	L	A	H	K	Y
UniRef90_Q6H1L9	V	H	A	S	L	D	K	F	L	S	I	V	S	S	V	L	T	S	K	Y
UniRef90_UPI00015150AE	L	Q	A	S	L	D	K	F	L	S	H	V	I	L	A	L	A	S	K	Y
UniRef90_P11752	V	Q	A	A	Y	Q	K	V	V	A	G	V	A	T	A	L	A	H	K	Y
UniRef90_U3K6C5	C	Q	A	A	W	Q	K	L	V	R	V	I	A	H	A	L	A	R	K	
UniRef90_G1LJX4	M	Q	A	A	W	D	K	F	L	T	G	V	A	V	V	L	T	E	K	Y
UniRef90_F7Al41	V	Q	A	A	W	Q	K	L	V	A	G	V	A	S	A	L	A	H	K	Y
UniRef90_UPI0003F134CF	M	H	V	S	L	D	K	F	L	S	H	V	N	S	A	L	V	S	K	Y
UniRef90_K38IW4	A	Q	A	A	W	D	K	F	L	A	A	V	S	T	A	L	T	S	K	Y
UniRef90_UPI000333E286	V	H	A	T	M	D	K	F	M	S	A	V	G	T	V	L	T	S	K	Y
UniRef90_UPI0003331BBB	V	Q	A	A	W	Q	K	L	V	A	G	V	A	V	A	L	G	N	K	Y
UniRef90_P14520	V	H	M	A	V	D	K	F	F	V	Q	N	V	A	S	A	L	S	E	K
UniRef90_V5N4L6	V	H	I	A	M	D	K	F	L	A	A	V	S	A	A	L	A	D	K	Y
UniRef90_Q6T497	V	H	V	A	M	D	K	F	L	A	A	V	S	L	S	L	A	E	K	Y
UniRef90_P01984	V	H	A	S	L	D	K	F	L	C	A	V	G	T	V	L	T	A	K	Y
UniRef90_W5MM27	A	H	G	A	W	D	K	L	L	S	A	V	S	A	V	L	T	E	K	Y
UniRef90_G3PNE8	A	H																		



	1	10	20	30	40																																						
UniRef90_Q9PVM3	L	S	A	K	D	K	T	T	V	K	K	F	W	D	K	V	E	G	K	S	A	E	I	G	G	E	A	L	G	R	M	L	V	A	Y	P	Q	T	K				
UniRef90_P84204	W	S	S	S	E	R	S	T	I	T	S	L	W	G	K	V	T	P	K	S	A	E	I	G	P	V	A	F	A	R	V	L	I	V	Y	P	W	T	Q				
UniRef90_UPI00018B5EDE	V	L	E	A	A	D	R	A	V	R	A	L	W	G	K	I	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_Q5BJC7	L	T	A	K	D	K	A	V	I	K	G	F	W	A	K	I	A	S	Q	A	D	S	I	G	Q	E	A	M	G	R	M	L	T	V	Y	P	S	T	K				
UniRef90_P80726	L	T	A	K	D	K	S	L	I	T	G	F	W	Q	K	I	A	S	K	A	D	D	L	G	A	E	A	L	S	R	M	I	V	V	F	P	A	T	K				
UniRef90_W5MM67	L	S	D	K	D	K	Q	H	V	Q	A	I	W	A	K	A	S	K	V	D	T	I	G	H	E	A	L	S	R	M	L	I	V	Y	P	Q	T	K					
UniRef90_UPI0002034AF2										K	S	T	W	R	N	V	V	P	K	P							W	P	G	L	L	I	V	Y	P	W	T	Q					
UniRef90_Q802A2	M	L	S	Q	K	E	K	R	L	L	A	E	V	W	K	S	L	I	P	A	A	E	D	I	G	S	D	S	L	R	M	F	T	A	F	P	G	S	K				
UniRef90_C3KJ57	V	W	S	D	N	E	R	A	L	I	N	S	I	F	S	G	L		D	Y	E	E	V	G	P	S	A	L	G	R	C	L	I	V	Y	P	W	T	K				
UniRef90_Q10733	W	T	A	E	E	R	H	Y	I	T	S	M	W	D	K	I		N	V	A	E	I	G	G	E	S	L	A	R	M	L	I	V	Y	P	W	T	K					
UniRef90_P02136	W	T	A	E	E	K	A	V	I	N	S	V	W	Q	K	V		D	V	E	Q	D	G	H	E	A	L	T	R	L	F	I	V	Y	P	W	T	Q					
UniRef90_UPI00032A2F3D	W	T	D	A	E	R	K	A	I	I	G	L	W	G	K	I		D	V	G	E	I	G	P	Q	A	L	S	R	L	L	I	V	Y	P	W	G	K					
UniRef90_P07433	L	T	A	H	E	K	Q	L	I	T	G	S	W	G	K	I		N	A	K	A	I	G	K	E	A	L	G	R	L	L	I	N	T	F	P	W	T	Q				
UniRef90_P02076	M	L	T	A	E	E	K	A	A	V	T	G	F	W	G	K	V	K		V	D	E	V	G	A	E	A	L	G	R	L	L	I	V	Y	P	W	T	Q				
UniRef90_UPI0000F60FEE	M	L	S	A	Q	E	R	A	Q	V	A	Q	V	W	D	L	I	A	G	H	E	A	P	F	G	A	E	L	V	R	L	F	T	V	F	P	T	T	K				
UniRef90_Q4F6Z2	W	T	D	A	E	R	A	A	I	K	S	L	W	G	K	I		D	V	G	E	I	G	P	Q	A	F	A	R	L	L	I	V	Y	P	W	T	Q					
UniRef90_Q7T1B0	W	T	A	E	E	R	A	F	I	Q	D	I	F	S	K	L		N	Y	E	E	A	G	P	K	A	L	Q	R	A	L	I	V	Y	P	W	T	Q					
UniRef90_I3IZ54	W	T	D	F	E	R	A	T	I	K	D	I	F	S	K	L		D	Y	E	V	V	G	P	A	A	I	S	R	C	L	I	V	Y	P	W	T	Q					
UniRef90_P06639	L	T	A	E	D	K	H	N	V	K	A	I	W	D	H	V	K	G	H	E	E	A	I	G	A	E	A	L	Y	R	M	F	C	C	M	P	T	T	R				
UniRef90_G1PSU3																																											
UniRef90_P02137	L	T	S	A	D	E	K	S	A	I	N	A	V	W	S	K	V		N	I	E	N	D	G	H	D	A	L	T	R	L	F	A	S	Y	P	Q	T	K				
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	A	D	A	L	T	R	L	F	V	F	P	W	T	K				
UniRef90_E3TGF8	L	T	S	A	K	D	K	D	T	V	K	A	F	W	A	T	V	S	P	K	A	G	E	I	G	A	E	A	L	Y	R	M	L	I	V	Y	P	W	T	K			
UniRef90_C1BY71	W	T	D	A	E	R	S	A	I	L	G	L	W	G	K	L	S		A	D	E	I	G	P	Q	A	F	A	R	C	L	I	V	Y	P	W	T	Q					
UniRef90_P68056										K	A	L	I	T	G	F	W	S	K	V	K																						
UniRef90_G3RZQ0	L	T	P	E	E	K	T	A	V	N	A	L	W	G	K	V		N	V	D	A	V	G	G	E	A	L	G	R	L	L	I	V	Y	P	W	T	Q					
UniRef90_UPI000383BA95																																											
UniRef90_P83113																																											
UniRef90_E3TGA8	V	W	T	D	F	E	R	A	T	I	Q	D	V	F	S	K	I	V	S	D	Y	E	S	V	G	H	Q	A	L	S	R	C	L	I	V	Y	P	W	T	Q			
UniRef90_C8YNP9	L	T	D	K	D	K	A	I	K	G	F	F	A	K	V	S		K	A	V	E	I	G	H	Q	Q	S	L	A	R	T	I	V	Y	P	Q	T	K					
UniRef90_Q8UW93	W	T	E	F	E	R	T	T	I	K	G	F	S	K	M			N	Y	D	V	V	I	G	Q	S	L	A	R	C	L	I	V	Y	P	W	T	Q					
UniRef90_P07429	L	T	A	K	E	R	Q	L	I	T	G	T	W	S	K	I	C	A	K																								
UniRef90_UPI0003EC2A4A																																											
UniRef90_P29628	W	S	D	S	E	R	A	I	T	D	I	F	S	H	M			D	Y	D	D	I	G	P	K	A	L	S	R	C	L	I	V	Y	P	W	T	Q					
UniRef90_W5LAT8	W	T	D	A	E	R	T	A	I	S	G	L	W	G	K	L	S		V	D	E	I	G	P	Q	A	L	S	R	L	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		N	Y	E	D	I	G	P	K	A	L	A	R	C	L	I	V	Y	P	W	T	Q					
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	V	R	L	F	V	N	F	P	S	S	K				
UniRef90_UPI0003C87102	F	T	A	E	E	R	X	A	I	A	S	L	W	S	K	V		N	V	E	V	A	R	G	E	R	L	G	R	L	L	I	V	Y	P	W	T	Q					
UniRef90_P23018	W	T	N	F	E	R	A	T	I	K	D	I	F	S	K	L	E	Y	D	V		V	G	P	A	T	L	A	R	C	L	I	V	Y	P	W	T	Q					
UniRef90_P85082	W	T	D	F	E	R	S	T	I	K	D	I	F	A	K	I		D	Y	D	C	V	G	P	A	A	F	A	R	C	L	I	V	Y	P	W	T	Q					
UniRef90_Q6F3D2	L	S	A	G	D	K	A	N	V	K	A	V	W	D	H	V	K	G	H	E	E	A	F	G	A	D	A	L	H	R	C	F	K	I	D	C	Q	T	Q				
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	R	M	F	T	T	F	P	K	T	K				
UniRef90_P10784	V	L	S	S	Q	D	K	A	N	V	K	A	V	W	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_P84206	W	T	D	G	E	R	T	A	I	L	T	L	W	K	K	I		N	V	E	E	I	G	A	Q	A	M	G	R	L	L	I	V	Y	P	W	T	H					
UniRef90_Q1AGS5	L	S	S	K	D	K	A	T	V	K	E	F	F	G	K	M	S	T	R	S	D	D	I	G	A	E	A	L	S	R	L	V	A	V	Y	P	Q	T	K				
UniRef90_W5KM05	W	T	E	E	R	N	F	I	R	E	I	F	S	K	L	K		Y	E	D	V	G	P	K	S	L	C	R	A	L	I	V	Y	P	W	T	Q						
UniRef90_Q1AGS7	W	T	A	T	E	R	T	H	I	E	A	I	W	S	K	I		D	I	D	V	C	G	P	L	A	L	Q	R	C	L	I	V	Y	P	W	T	Q					
UniRef90_P07408	V	L	S	A	A	D	K	A	I	K	H	L	T	G	S	L	R	T	N	A	E	A	W	G	A	E	S	L	A	R	M	F	A	T	T	P	S	T	K				
UniRef90_C0HJE1	F	S	A	H	E	E	K	L	I	L	D	L	W	A	K	V		N	V	A	A	C	G	G	D	A	L	S	R	L	L	I	I	Y	P	W	K	R					
UniRef90_A4IGG7	L	T	D	V	E	R	G	L	I	K	D	T	W	A	R	V	Y	A	S	C	E	D	V	G	V	T	I	L	I	R	F	F	V	N	F	P	S	A	K				
UniRef90_K7FZS0																																											
UniRef90_P02197	L	S	D	Q	E	W	Q	Q	V	L	T	I	W	G	K	V	E	A	D	I	A	G	H	G	H	E	V	L	M	R	L	F	H	D	H	P	E	T	L				
UniRef90_G1QF83																																											
UniRef90_K4FYM0	V	L	S	K	T	D	K	A	L	L	S	S	S	V	G	K	I	Q	A	Q	A	T																					
UniRef90_UPI000383CDF0																																											
UniRef90_G3Q6H8	L	S	D	A	E	R	E	I	Q	D	T	W	G	H	V	Y	K	N	C	E	D	V	G	V	T	V	L	I	R	F	F	I	N	F	P	S	A	K					
UniRef90_H3B4U9	L	S	D	T	E	V	E	S	I	R	Q	A	W	S	N	V	Y	T	N	C	E	N	V	G	V	L	V	L	I	R	F	F	V	N	F	P	S	A	K				
UniRef90_Q33CJ7	F	T	N	D	E	R	Q	Q	I	H	D	A	W	A	K	L			H	A	D	Q	V	G	G	E	A	L	G	R	L	L	I	V	N	F	P	W	T	R			
UniRef90_P02015	L	S	G	E	D	K	A	N	V																																		

UniRef90_Q9PVM3	A	Y	F	S	H	W	D	L	N	P	Q	H	P	M	V	K	K	H	G	A	V	I	M	G	G	V	G	K	A	V	K	N	I	D	D	L	V	R	G	L			
UniRef90_P84204	R	Y	F	G	N	F	G	D	I	S	G	N	A	K	V	A	A	H	G	K	V	V	L	D	G	V	D	K	A	V	K	N	L	D	D	L	K	S	A	Y			
UniRef90_UPI00018B5EDE	T	Y	F	L	H	L	D	L	S	P	G	S	A	Q	V	R	A	K	H	G	Q	K	V	A	D	A	I	T	D	A	V	D	K	I	D	D	D	L	P	S	A	L	
UniRef90_Q5BJC7	I	Y	F	A	H	W	P	D	S	L	G	S	A	Q	V	R	A	K	H	G	K	I	V	M	G	A	I	T	D	A	V	D	K	I	D	D	L	V	G	A	L		
UniRef90_P80726	V	Y	F	A	S	H	W	P	D	L	P	G	S	A	Q	V	R	A	K	H	G	K	V	I	M	A	A	V	G	D	A	V	G	K	M	N	D	L	K	G	N	F	
UniRef90_W5MM67	T	Y	F	A	S	H	W	S	D	S	A	G	S	A	Q	V	R	A	K	H	G	K	V	I	M	T	A	V	G	D	A	V	G	H	L	D	G	D	L	K	G	N	F
UniRef90_UPI0002034AF2	R	F	F	A	S	F	G	N	I	M	G	N	P	R	V	R	A	H	G	K	K	V	L	S	S	F	G	E	A	V	K	N	L	D	N	I	L	K	N	T	Y		
UniRef90_Q802A2	T	Y	F	S	H	L	D	I	S	P	R	S	P	H	M	L	S	H	G	R	K	I	V	L	J	A	I	A	E	G	A	Q	D	I	S	Q	L	A	V	N	L		
UniRef90_C3KJ57	R	H	F	T	N	F	G	N	I	Q	G	N	P	K	V	I	A	A	H	G	I	K	V	L	H	S	L	D	M	A	V	K	N	M	D	N	I	K	A	T	Y		
UniRef90_Q10733	K	F	F	S	D	F	G	N	I	M	H	N	V	K	I	Q	E	H	G	K	K	V	L	N	S	F	G	S	A	V	K	N	L	D	D	V	K	E	T	F			
UniRef90_P02136	R	Y	F	S	T	F	G	D	I	A	G	N	P	K	V	I	H	A	H	G	K	K	I	L	G	A	I	D	N	A	I	H	N	L	D	D	I	K	K	G	T	L	
UniRef90_UPI00032A2F3D	R	Y	F	K	E	F	G	D	I	M	G	N	P	K	V	A	A	Q	H	G	K	T	V	M	G	G	L	E	N	A	V	K	N	L	D	D	I	K	Q	T	Y		
UniRef90_P07433	R	Y	F	S	S	F	G	N	I	F	H	N	E	A	V	A	A	H	G	E	K	V	V	T	S	V	G	E	A	V	K	N	M	D	D	I	K	K	G	Y	Y		
UniRef90_P02076	R	F	F	E	S	H	F	G	D	L	M	N	N	A	K	V	K	A	H	G	K	K	V	L	B	S	F	S	N	G	M	K	H	L	D	D	L	K	G	T	F		
UniRef90_UPI0000F60FEE	T	Y	F	G	H	L	G	S	C	L	D	E	V	A	L	N	H	G	Q	R	M	L	M	A	V	G	V	A	V	Q	Y	M	D	C	L	R	A	A	L				
UniRef90_Q4F6Z2	R	H	F	S	S	F	G	N	I	S	G	N	E	K	V	A	A	H	G	K	T	V	M	G	G	L	D	R	A	V	K	N	M	D	D	I	K	N	A	Y			
UniRef90_Q7T1B0	R	Y	F	G	S	F	G	N	I	T	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_I3IZ54	R	Y	F	A	G	F	G	N	L	Y	N	N	P	K	V	A	A	H	G	K	V	V	M	Q	G	L	L	E	K	A	V	K	N	M	D	N	I	K	A	T	F		
UniRef90_P06639	I	Y	F	P	A	K	D	L	S	E	R	S	K	V	A	L	H	S	H	G	K	K	V	V	G	A	L	T	T	D	A	V	A	H	I	D	D	I	K	D	A	F	
UniRef90_G1PSU3	T	Y	F	P	H	F	D	L	H	P	G	S	A	H	L	R	S	H	G	S	K	V	V	V	A	A	V	G	D	A	V	K	H	I	D	D	I	A	S	A	L		
UniRef90_P02137	R	Y	F	S	S	F	G	N	I	S	G	N	A	K	V	R	A	A	H	G	K	K	V	L	S	A	V	D	E	S	I	H	H	L	D	D	I	K	N	F	L		
UniRef90_Q7LZM7	T	Y	F	A	H	F	D	F	S	P	N	S	A	N	I	K	A	H	G	K	K	V	A	N	A	S	V	D	N	Q	A	V	S	K	I	D	D	I	T	T	G	L	
UniRef90_E3TGF8	T	Y	F	S	H	W	T	D	S	F	G	S	A	Q	V	K	K	H	G	K	T	I	M	A	S	V	D	Q	A	V	S	K	I	D	D	L	T	T	G	L			
UniRef90_C1BY71	R	Y	F	S	S	F	G	N	I	M	G	N	P	K	V	A	K	H	G	R	T	V	M	H	G	L	D	S	K	A	I	Q	N	L	D	D	I	K	N	T	Y		
UniRef90_P68056	R	F	F	E	S	H	F	G	D	L	S	G	N	A	K	V	K	A	H	G	K	K	V	L	D	S	F	S	D	N	G	V	Q	H	L	D	D	L	K	G	T	F	
UniRef90_G3RZQ0	R	F	F	E	S	F	G	D	L	M	G	N	P	K	V	K	A	H	G	K	K	V	L	D	G	A	S	F	S	D	G	L	A	H	L	D	N	L	K	G	T	F	
UniRef90_UPI000383BA95	R	F	F	D	S	F	G	N	I	M	G	N	P	K	V	K	A	H	G	K	K	V	L	T	S	A	F	G	E	A	I	K	N	L	D	N	L	K	G	A	F		
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	K	N	G	A	L		
UniRef90_E3TGA8	R	Y	F	G	S	F	G	N	I	T	G	N	P	K	V	A	A	H	G	L	V	V	V	R	G	L	E	K	A	A	K	N	M	D	N	I	K	A	I	Y			
UniRef90_C8YNP9	V	Y	F	G	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	K	D	L	I	D	D	L	V	G	G	L	
UniRef90_Q8UW93	R	Y	G	S	N	F	G	N	I	M	G	N	P	M	V	A	A	H	G	R	V	V	L	H	G	L	D	K	A	V	K	N	M	D	N	I	K	A	A	Y			
UniRef90_P07429	R	Y	F	S	S	F	G	N	I	F	H	N	A	A	V	A	T	H	G	E	K	V	V	L	T	S	I	G	E	A	I	K	H	M	D	D	I	K	G	Y	Y		
UniRef90_UPI0003EC2A4A	T	Y	F	P	H	F	D	L	S	H	G	S	A	Q	V	K	G	A	H	G	K	K	V	G	E	A	L	G	N	A	V	A	H	M	D	D	I	P	G	A	L		
UniRef90_P29628	R	H	F	S	G	F	G	N	L	Y	G	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	K	A	A	Y			
UniRef90_W5LAT8	R	H	F	A	A	F	G	N	I	Q	G	N	A	K	V	A	H	H	G	K	V	V	M	G	G	L	E	R	A	I	K	N	M	D	N	I	K	A	A	Y			
UniRef90_P11749	R	Y	F	S	T	P	D	A	I	K	G	N	A	K	I	A	A	H	A	Q	R	V	L	H	G	L	D	R	A	V	K	N	M	D	N	I	N	E	A	Y			
UniRef90_M4AD09	I	Y	F	S	Q	F	K	H	I	E	D	S	P	Q	L	R	K	H	A	Q	R	V	M	N	A	L	N	T	L	V	E	N	I	D	D	V	A	S	V	L			
UniRef90_UPI0003C87102	R	F	F	D	N	F	G	N	I	T	G	N	P	K	V	Q	A	H	G	E	K	V	L	T	S	F	G	N	A	V	K	H	M	E	D	F	K	G	T	F			
UniRef90_P23018	R	Y	F	G	K	F	G	N	L	Y	N	A	M	V	S	A	K	H	G	T	T	I	M	H	G	L	D	Q	A	V	K	N	M	D	D	I	K	N	T	Y			
UniRef90_P85082	R	Y	F	G	N	F	G	N	I	T	G	N	P	N	V	A	K	H	G	I	T	I	M	S	A	L	D	R	G	V	K	N	L	D	D	I	H	I	K	E	T	Y	
UniRef90_Q6F3D2	T	Y	F	P	G	K	D	L	N	E	G	S	A	F	L	H	S	H	G	K	K	V	M	S	A	L	T	N	A	V	A	H	I	D	D	L	E	A	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	V	E	A	L	I	A	E	G	T	R	H	I	G	T	A	Q	F	T	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_P84206	R	H	F	A	S	F	G	N	I	M	S	N	D	K	V	A	K	H	G	A	T	V	M	G	G	L	D	K	A	I	K	N	M	D	D	I	K	N	A	Y			
UniRef90_Q1AGS5	S	Y	F	A	S	H	W	K	D	S	P	G	S																														

	90																				100																				110																				120
UniRef90_Q9PVM3	S	A	L	S	E	L	H	A	F	K	L	R	V	D	P	A	N	F	K	I	L	A	H	N	V	L	V	A	A	M	F	P	A	D	F	T	P	E																							
UniRef90_P84204	T	S	L	R	E	L	H	S	E	K	L	R	N	V	D	P	D	N	F	K	I	L	L	G	H	C	L	T	I	V	V	A	T	R	K	F	G	A	E	D	F	T	P	S																	
UniRef90_UPI00018B5EDE	T	S	L	R	E	L	H	A	H	K	L	R	N	V	D	P	V	K	F	Q	L	L	V	H	C	L	T	I	V	V	T	L	A	R	H	Y	F	G	A	E	D	F	T	P	S																
UniRef90_Q5BJC7	S	S	L	S	D	L	H	A	T	K	L	R	V	D	P	G	N	F	K	I	L	V	S	H	N	I	L	V	T	L	A	V	H	F	P	A	D	F	T	A	E	E																			
UniRef90_P80726	S	A	L	S	D	L	H	A	F	K	M	R	V	D	P	G	N	F	K	I	L	V	S	H	N	I	L	V	A	C	A	V	N	F	P	V	D	F	T	A	E	E																			
UniRef90_W5MM67	S	H	L	S	E	L	H	A	Y	K	L	R	V	D	P	A	N	F	K	I	L	S	S	H	N	I	L	V	A	L	I	Y	F	P	A	D	F	T	A	E	E																				
UniRef90_UPI0002034AF2	A	K	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	D	I	L	L	I	V	L	A	S	H	F	L	A	R	D	D	F	T	P	A	E																		
UniRef90_Q802A2	A	P	L	Q	I	L	H	A	Y	Q	L	R	V	D	P	T	N	F	K	I	L	T	H	C	L	T	I	V	V	A	C	H	I	F	A	G	D	D	F	T	P	E	T																		
UniRef90_C3KJ57	A	D	L	S	V	L	H	S	E	K	L	R	V	D	P	D	N	F	R	V	L	S	D	H	C	L	T	I	V	V	A	A	R	M	G	N	A	F	T	P	E	T																			
UniRef90_Q10733	A	D	L	S	K	L	H	C	E	T	L	H	V	D	P	E	N	F	R	L	L	G	S	I	L	L	I	V	L	A	M	H	F	L	G	K	E	F	T	P	T	P																			
UniRef90_P02136	H	D	L	S	E	E	H	A	N	E	L	H	V	D	P	E	N	F	R	R	L	G	E	V	L	L	I	V	V	L	G	A	K	L	G	K	A	F	S	P	Q	E																			
UniRef90_UPI00032A2F3D	A	K	L	S	A	M	H	S	E	K	L	H	V	D	P	D	N	F	R	V	L	A	E	G	C	L	T	I	C	V	A	A	K	F	G	P	S	V	I	F	T	A	E	E																	
UniRef90_P07433	A	E	L	S	K	Y	H	S	E	T	L	H	V	D	P	N	N	F	K	R	F	G	C	X	C	L	S	I	T	L	G	H	H	F	G	E	E	F	T	P	E	E																			
UniRef90_P02076	A	Q	L	S	E	L	H	C	D	K	L	H	V	D	P	Z	B	F	R	X	X	X	X	X	X	X	X	X	X	X	X	H	H	G	S	E	F	T	P	V	E																				
UniRef90_UPI0000F60FEE	A	P	L	A	T	M	H	A	Q	M	L	R	V	D	P	A	N	F	A	L	L	S	H	C	F	Q	V	V	L	A	S	H	L	Q	D	E	F	T	V	E	E																				
UniRef90_Q4F622	T	L	L	S	K	K	H	S	E	Q	I	H	V	D	P	D	N	F	R	L	L	A	E	O	C	T	S	V	C	V	I	G	A	K	F	G	K	V	I	F	N	A	D	E																	
UniRef90_Q7T1B0	A	E	L	S	V	L	H	S	E	K	L	H	V	D	P	D	N	F	R	L	L	A	E	O	C	T	S	V	C	V	I	G	A	S	T	M	G	A	F	N	T	A	D	E																	
UniRef90_I3I254	T	E	L	S	T	L	H	S	E	K	L	Q	V	D	P	D	N	F	M	L	L	G	D	C	L	T	I	V	V	A	S	Q	L	G	K	D	F	S	P	E	S																				
UniRef90_P06639	S	K	L	S	D	K	H	A	E	E	L	M	V	D	P	A	N	F	P	K	L	A	S	H	N	I	L	V	V	L	G	I	L	K	P	H	F	T	Y	S																					
UniRef90_G1PSU3	S	K	L	S	E	L	H	A	E	I	L	R	V	D	P	V	N	F	K	L	L	A	S	H	C	L	T	I	V	V	A	S	H	F	P	A	D	F	T	A	D	E																			
UniRef90_P02137	S	V	L	S	T	K	H	A	E	E	L	H	V	D	P	E	N	F	K	R	L	A	D	V	L	V	I	V	L	A	G	K	L	G	A	A	F	T	P	Q																					
UniRef90_Q7LZM7	S	K	L	S	D	L	H	A	Q	Q	L	R	V	D	P	V	N	F	G	F	L	R	H	C	L	T	I	V	V	A	A	N	L	H	D	H	K	A	S																						
UniRef90_E3TGF8	L	S	L	S	E	L	H	A	F	Q	L	R	V	D	P	A	N	F	K	I	L	A	H	N	V	L	V	V	L	A	I	M	F	P	A	A	F	N	A	D	E																				
UniRef90_C1BY71	A	A	L	S	V	K	H	S	E	K	L	H	V	D	P	D	N	F	R	V	L	A	E	C	L	T	V	C	V	A	A	K	L	G	P	A	F	N	A	D	E																				
UniRef90_P68056	A	Q	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	N	V	L	V	V	V	L	A	R	N	H	F	G	K	E	F	T	P	E																				
UniRef90_G3RZQ0	S	Q	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	N	V	L	V	V	L	C	V	A	A	R	N	F	G	K	E	F	T	P	Q																			
UniRef90_UPI000383BA95	A	K	L	S	E	L	H	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	N	V	I	V	I	L	A	T	H	F	G	R	E	F	T	P	D																						
UniRef90_P83113	S	K	L	F	D	L	H	A	F	E	L	R	V	D	P	G	N	F	P	L	L	A	D	H	I	N	V	T	I	A	V	M	F	L	D	D	K	F	D	E																					
UniRef90_E3TGA8	A	D	L	S	V	L	H	S	E	K	L	R	V	D	P	D	N	F	K	L	L	A	D	C	I	T	I	V	I	A	S	V	P	L	G	A	S	F	T	A	D	E																			
UniRef90_C8YNP9	L	E	L	S	E	L	H	A	F	R	L	R	I	D	P	A	N	F	K	I	L	N	L	N	L	V	V	V	L	G	L	M	F	P	D	D	F	T	A	Q																					
UniRef90_Q8UW93	A	E	L	S	V	L	H	S	E	K	L	R	V	D	P	D	N	F	R	L	L	G	D	C	L	T	I	V	V	A	A	Q	L	G	A	A	F	T	P	E																					
UniRef90_P07429	A	Q	L	S	K	Y	H	S	E	T	L	H	V	D	P	Y	N	F	K	R	F	C	S	C	L	T	I	V	S	M	A	Q	T	L	Q	E	D	F	T	P	E																				
UniRef90_UPI0003EC2A4A	S	T	L	S	D	L	H	A	Y	K	L	R	V	D	P	V	N	F	K	L	L	S	H	C	L	T	I	V	T	L	A	S	H	H	P	N	E	F	T	P	A																				
UniRef90_P29628	A	E	L	S	T	L	H	S	E	K	L	R	V	D	P	D	N	F	K	L	L	S	D	C	I	T	I	V	V	A	A	K	M	G	Q	A	F	T	P	E																					
UniRef90_W5LAT8	A	S	L	S	V	M	H	S	E	K	I	H	V	D	P	D	N	F	R	L	L	S	D	C	I	T	V	C	V	A	A	M	K	F	G	Q	S	A	F	T	P	D																			
UniRef90_P11749	S	E	L	S	V	L	H	S	D	K	L	H	V	D	P	D	N	F	R	I	L	L	G	D	C	L	T	V	V	I	A	A	N	L	G	D	A	F	T	V	E																				
UniRef90_M4AD09	K	L	V	G	K	A	H	A	L	K	H	K	V	D	P	V	Y	F	K	I	L	S	G	V	I	V	E	V	L	G	E	E	Y	P	E	V	V	T	P	E																					
UniRef90_UPI0003C87102	A	K	L	I	E	L	P	C	D	K	L	H	V	D	P	E	N	F	R	L	L	G	N	V	L	V	V	V	L	A	R	H	F	G	K	E	F	T	P	D																					
UniRef90_P23018	A	E	L	S	V	L	H	C	D	K	L	H	V	D	P	D	N	F	Q	L	L	A	E	C	L	T	I	V	L	A	A	Q	L	F	G	K	E	F	T	G	E																				
UniRef90_P85082	E	E	L	S	V	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	S	R	L	G	K	A	F	T	G	E																					
UniRef90_Q6F3D2	S	K	L	I	D	K	H	A	E	K	L	M	V	D	P	A	N	F	V	L	L	N	H	I	L	A	V	L	A	M	S	H	L	P	Q	L	F	T	P	A																					
UniRef90_W5KM17	S	Y	L	S	R	F	H	A	Y	Q	L	R	I	H	P	T	N	F	K	L	F	N	H	C	L	L	V	T	L	A	C	Y	L	G	E	D	F	S	P	N																					
UniRef90_P10784	S	K	L	S	D	K	H	A	E	L	M	V	D	P	G	N	F	D	I	L	L	A	H	I	L	T	T	M	A	M	F	M	P	Q	E	C	L	T	S	A																					
UniRef90_P84206	R	D	L	S	V	M	H	S	E	K	L	H	V	D	P	D	N	F	R	L	L	A	S	E	C	L	T	I	V	A	A	K	F	G	P	K	E	F	N	A	D	E																			
UniRef90_Q1AGS5	L	S	L	S	E	L	H	A	F	M	L	R	V	D	P	V	N	F	K	L	L	A	H	C	M	L	V	C	M	S	M	V	F	P	E	E	F	T	P	Q																					
UniRef90_W5KM05	A	E	L	S	E	L	H	S	E	K	L	H	V	D	P	D	N	F	K	L	L	A	D	C	I	T	V	V	I	A	T	K	M	R	A	G	F	T	P	P																					
UniRef90_Q1AGS7	A	T	L	S	V	L	H	S	E	K	L	R	V	D	P	D	N	F	R	L	L	A	D	C	L	T	I	V	V	A	G	K	F	G	P	T	L	R	P	E																					
UniRef90_P07408	D	P	L	A	V	L	H	G	T	T	L	C	H	V	D	P	H	N	F	P	L	L	T	Q	C	L	L	V	T	L	A	A	H	L	T	E	L	K	P	E																					
UniRef90_C0HJE1	A	H	L	S	K	L	H	Y	E	K	F	H	V	D	C	E	N	F	K	L	L	G	N	I	I	V	V	L	G	M	H	H	P	K	E	F	T	M	E																						
UniRef90_A4IGG7	S	V	L	G	K	A	H	A	K	Y	K	V	E	P	V	Y	F	K	I	L	S	G	V	I	L	E	I	L	A	E	E	F	G	E	C	F	T	P	E																						
UniRef90_K7FZS0	S	D	L	S	D	L	H	A	Y	N	L	R	V	D	P	V	N	F	K	L	L	S	H	C	F	Q	V	V	L	A	V	H	L	R	D	E	Y	T	P	Q																					
UniRef90_P02197	K	P	L	A	Q	T	H	A	T	K	H	K	I	P	V	K	Y	L	E	F	I	S	E	V	I	L	K	V	I	A	E	K	H	A	A	D	F	G	A	D																					
UniRef90_Q1QF83	S	A	L	S	D	L	H	A	H	K	L	Q	V	D	P	A	N	F	K	L	L	G	H	C	L	L	V	T	L	A	R	H	Y	P	G	D	F	S	P	A																					
UniRef90_K4FYM0	D	A	L	S	A	K	H	A	H	E	L	M	V	D	P	V	N	F	G	F	L	G	E	C	L	V	L	S	S	L	A	Y	Q	L	P	D	F	S	P	E																					
UniRef90_UPI000383CDF0	S	L																																																											

[illegible]



	1	10	20	30	40																																				
UniRef90_B3DUZ7	M	I	D	Q	K	E	K	E	L	I	K	E	S	W	K	R	I	E	P	N	K	N	E	I	G	L	L	F	Y	A	N	L	F	K	E	E	P	T	V	S	
UniRef90_D2HU50	L	T	G	E	E	K	A	A	V	I	T	G	L	W	S	K	V	V	P	N	V	D	E	V	G	G	E	A	L	G	R	L	L	V	V	Y	P	W	T	Q	
UniRef90_S4RN97	L	T	S	A	E	D	E	K	S	A	V	R	D	T	W	K	V	V	P	H	A	E	D	H	G	T	T	I	L	I	K	F	L	T	E	N	A	D	A	K	
UniRef90_W5MMD7	U	N	I	R	E	A	E	D	K	N	N	R	H	V	W	G	M	V	Y	K	D	P	E	G	N	G	A	V	V	V	I	R	L	F	T	D	H	P	E	T	K
UniRef90_UPI000289948C	L	T	E	R	K	K	R	L	V	Q	S	S	F	T	K	V	A	P	I	A	D	K	A	A	E	I	F	Y	A	E	L	F	E	M	D	P	S	L	K		
UniRef90_S4XEM3	L	T	S	P	A	H	E	E	T	V	K	A	T	L	P	V	V	G	A	H	I	G	E	I	A	H	T	F	Y	K	G	M	F	S	A	H	P	E	L	L	
UniRef90_UPI000372CA72	M	L	S	E	Q	S	A	P	V	I	K	E	T	L	P	V	V	G	A	I	E	I	E	I	T	A	L	F	Y	K	L	F	S	E	A	R	P	E	L	L	
UniRef90_Q5QRU6	F	S	E	A	E	V	Q	S	A	R	G	A	W	E	K	M	Y	V	D	A	E	E	D	N	G	T	A	V	L	V	R	M	F	T	E	H	P	D	T	K	
UniRef90_F6UQT5	L	T	G	A	D	I	E	N	I	N	E	V	W	S	K	I	Y	A	N	P	E	E	S	G	R	T	V	V	I	S	L	F	L	T	Y	P	Q	T	K		
UniRef90_D1AB44	M	L	S	A	K	S	A	D	I	V	R	A	T	L	P	A	V	A	G	A	I	E	D	I	T	P	V	F	Y	G	K	M	F	S	A	H	P	E	L	L	
UniRef90_S4XMC7	T	P	R	T	I	E	L	V	R	S	W	A	K	V	M	P	I	S	D	A	A	S	A	L	F	Y	D	R	L	F	E	L	D	P	S	V	R				
UniRef90_UPI0003620E6C	M	L	S	E	Q	S	A	P	V	I	R	S	F	W	D	K	V	S	P	K	S	G	E	I	G	A	E	A	L	A	R	M	L	T	V	F	P	Q	T	K	
UniRef90_A0EM53	M	L	S	E	K	S	T	A	T	V	R	A	T	L	P	A	V	G	A	A	I	T	D	I	T	E	L	F	Y	A	K	L	F	A	A	H	P	A	L	L	
UniRef90_D9VYL3	M	L	S	A	E	S	A	A	V	I	R	A	T	L	P	A	V	A	G	A	L	D	E	I	T	T	R	F	Y	G	A	M	F	H	A	D	R	P	E	L	L
UniRef90_L1L5G1	L	R	A	R	E	Q	E	L	V	Q	K	T	W	G	V	L	S	L	D	T	E	Q	H	G	A	A	M	F	A	K	L	I	S	A	H	P	A	V	A		
UniRef90_W4XLX6	L	R	A	R	E	Q	E	L	V	Q	K	T	W	G	V	L	S	L	D	T	E	Q	H	G	A	A	M	F	A	K	L	I	S	A	H	P	A	V	A		
UniRef90_W4XLX6	L	R	A	R	E	Q	E	L	V	Q	K	T	W	G	V	L	S	L	D	T	E	Q	H	G	A	A	M	F	A	K	L	I	S	A	H	P	A	V	A		
UniRef90_W4XLX6	L	R	A	R	E	Q	E	L	V	Q	K	T	W	G	V	L	S	L	D	T	E	Q	H	G	A	A	M	F	A	K	L	I	S	A	H	P	A	V	A		
UniRef90_W4XLX6	L	R	A	R	E	Q	E	L	V	Q	K	T	W	G	V	L	S	L	D	T	E	Q	H	G	A	A	M	F	A	K	L	I	S	A	H	P	A	V	A		
UniRef90_W4XLX6	L	R	A	R	E	Q	E	L	V	Q	K	T	W	G	V	L	S	L	D	T	E	Q	H	G	A	A	M	F	A	K	L	I	S	A	H	P	A	V	A		
UniRef90_UPI000479C563	M	L	S	D	T	S	R	P	V	I	E	A	T	L	P	V	V	G	E	N	I	V	E	I	A	Q	R	F	Y	A	H	M	F	A	D	K	P	E	L	M	
UniRef90_UPI00022F722E	L	T	D	A	E	K	G	L	V	T	G	L	W	A	K	V	N	A	D	A	V	G	A	E	A	L	G	R	M	M	V	V	Y	P	W	T	Q				
UniRef90_C7PYV8																																									
UniRef90_UPI000273F3B6	F	T	V	E	K	R	A	A	V	T	N	L	G	R	L	S	S	N	P	A	K	H	G	A	T	M	F	S	K	L	V	T	D	Y	P	A	V	G			
UniRef90_W4YI83	T	A	E	H	K	R	M	V	Q	K	T	W	T	K	L	S	S	N	P	A	K	H	G	A	T	M	F	S	K	L	V	T	D	Y	P	A	V	G			
UniRef90_W4YI83	T	A	E	H	K	R	M	V	Q	K	T	W	T	K	L	S	S	N	P	A	K	H	G	A	T	M	F	S	K	L	V	T	D	Y	P	A	V	G			
UniRef90_W4YI83	T	A	E	H	K	R	M	V	Q	K	T	W	T	K	L	S	S	N	P	A	K	H	G	A	T	M	F	S	K	L	V	T	D	Y	P	A	V	G			
UniRef90_B8LND3	F	S	E	E	Q	E	A	L	V	K	K	S	W	N	A	M	K	P	N	A	P	Q	L	G	F	K	F	F	L	R	V	F	E	I	A	P	S	A	K		
UniRef90_P02143	W	S	E	V	E	L	H	E	I	T	T	T	W	K	S	I	D	K	H	S	L	G	A	K	A	L	A	R	M	F	L	V	Y	A	P	W	T	T			
UniRef90_UPI0002627209																																									
UniRef90_H1QLS3	M	L	S	E	Q	S	V	P	V	V	R	A	T	L	P	A	V	G	A	A	I	G	D	I	A	D	V	F	Y	R	K	L	F	D	A	H	P	D	L	L	
UniRef90_G0Q818	M	L	S	A	R	S	T	A	T	V	R	A	T	L	P	A	V	G	A	A	I	G	D	I	A	D	L	F	Y	E	K	L	F	A	A	H	P	E	L	L	
UniRef90_A6DJX1	M	L	S	Q	E	T	I	D	I	V	K	A	T	A	P	V	V	G	E	N	A	E	K	I	T	S	R	F	Y	P	I	M	F	E	R	P	M	V	K		
UniRef90_C7MXK9	M	L	S	P	K	S	A	E	I	V	R	A	T	L	P	A	V	G	G	A	I	G	E	I	A	E	V	F	Y	R	K	M	F	T	A	H	P	E	L	L	
UniRef90_C6L8I9																																									
UniRef90_V4JDM3	M	S	P	D	T	T	H	V	I	Q	T	S	W	E	K	I	P	S	E	Q	A	A	Q	L	F	Y	G	R	L	F	E	V	Y	P	E	V	R				
UniRef90_UPI00031FBD7	M	L	S	E	K	S	R	P	V	I	A	Q	T	L	G	V	V	A	E	R	I	P	H	I	T	P	E	F	Y	R	S	M	F	E	A	R	P	D	L	L	
UniRef90_M5UN87	M	T	P	E	Q	V	T	V	K	D	S	W	E	K	V	K	P	I	S	E	K	A	A	E	L	F	Y	D	R	L	F	T	L	D	P	S	L	K			
UniRef90_F4H1R1	M	L	S	S	T	S	R	P	V	V	E	A	T	L	P	V	V	A	E	H	I	G	Q	I	A	Q	R	F	Y	E	H	M	F	G	A	R	P	D	L	L	
UniRef90_V4CJX8	V	L	S	E	E	K	T	L	I	L	N	S	W	K	F	I	K	D	I	A	K	V	G	I	F	T	F	I	G	L	F	E	S	H	P	D	I	K			
UniRef90_S9QGF4	M	L	T	Q	G	E	I	K	A	L	R	A	S	W	L	L	V	A	A	N	R	A	E	L	G	E	R	F	Y	K	N	L	L	E	R	A	A	P	E	V	R
UniRef90_Q92025																																									
UniRef90_UPI000383C928	V	L	A	P	A	D	R	A	A	V	L	A	L	W	R	K	L	G	T	N	V	G	I	Y	T	T	E	A	L	E	R	T	F	V	A	F	P	S	S	K	
UniRef90_Q2QA16																																									
UniRef90_B7XGC1																																									
UniRef90_UPI0002C33079	F	T	E	E	Q	E	A	L	V	V	K	S	W	A	A	M	K	K	N	S	A	E	L	G	L	Q	F	F	L	K	V	F	E	I	A	P	S	A	Q		
UniRef90_A7IIA0	M	T	P	T	Q	I	D	L	V	Q	A	S	F	A	K	V	A	P	I	A	D	T	A	A	G	L	F	Y	G	R	L	F	E	I	A	P	E	V	K		
UniRef90_I3KUU5	M	L	S	K	R	E	K	D	L	I	K	E	I	W	E	R	L	T	P	V	A	A	E	I	G	A	D	A	L	R	M	F	A	S	Y	P	E	T	K		
UniRef90_E6PMQ5	T	A	E	Q	I	Q	L	V	Q	S	S	F	A	K	V	R	P	I	A	D	Q	A	A	A	L	F	Y	A	R	L	F	E	I	A	P	Q	V	K			
UniRef90_UPI0003959284																																									
UniRef90_W5TEG7	L	E	P	Q	H	T	D	T	V	R	A	T	L	P	V	I	A	A	R	I	D	D	I	T	A	E	F	Y	R	R	L	F	A	A	H	P	D	L	L		
UniRef90_K9WVS1	L	V	P	S	Q	V	D	L	V	Q	S	S	F	A	K	V	K	P	I	A	D	K	A	A	E	I	F	Y	N	R	L	F	E	L	A	P	S	F	R		
UniRef90_A7SFV0	L	S	E	A	Q	K	Y	L	V	R	E	T	W	E	T	I	E	P	Q	K	Q	T	V	G	K	K	A	F	L	R	F	F	D	M	N	P	D	Y	Q		
UniRef90_H6VMS5	M	L	T	A	E	D	K	K	L	I	M	Q	L	W	E	K	V	A	G	H	Q	E	E	F	G	S	E	A	L	Q	R	M	F	L	A	Y	P	Q	T	K	
UniRef90_H8Z115	M	T	S	D	D	I	A	L	V	R	T	S	W	A	Q	L	Q	P	Q	A	E	Q	V	G	A	A	L	Y	Q	R	M	F	N	D	H	P	E	L	R		
UniRef90_UPI00029B0822	L	S	A	H	N	V	E	L	I	R	E	T	L	P	V	I	G	A	H	I	D	Q	I	T	P	L	F	Y	E	K	M	F	G	A	H	P	E	L	L		
UniRef90_UPI00038C3EF8	L	S	D	G	E	K	N	A	I	R	E	T	A	P	G	K	V	N	A	A	E	V	G	A	E	S	L	G	R	L	V	V	Y	P	W	T	Q				
UniRef90_V9G8F0	M	L	T	E	K	T	I	A	T	I	K	S	T	V	P	V	L	E	Q	H	G	V	T																		

[illegible]

	90	100	110	120
UniRef90_B3DUZ7	Q D L	G R R	H K Q Y G V	V D S H Y P
UniRef90_D2HU50	A K L	S E K	H A C D K F	K V D P E N F
UniRef90_S4RN97	A Q L	S E K	H A C D K F	K V D P E N F
UniRef90_W5MMMD7	T A L	A E R	H R D V H K I	H I H K N F
UniRef90_UPI000289948C	Q N L	G K G	H A K Y G V	K D S H Y D T
UniRef90_S4XEM3	S R I	A H K	H A V S L G I	A P E Q Y E I
UniRef90_UPI000372CA72	A R I	A H K	H A V S L G I	T S D Q Y K L
UniRef90_Q5QRU6	N P L	G K K	H A T Q L K I	D P K N F R I
UniRef90_F6UQT5	S H L	A K R	H Q D V H K I	E V N N F E I
UniRef90_D1AB44	S R I	A H K	H A V S L G I	T A D Q Y P I
UniRef90_S4XMC7	Q A L	G V R	H G Y M V	I D R Y D L V
UniRef90_UPI0003620E6C	L D R	I A H	K H A S L G I	T S D Q Y K I
UniRef90_A0EM53	S S L	S E L	H A F K L G V	D P A N F R M
UniRef90_D9VYL3	S R I	A H K	H A S L G V	T R E Q Y P V
UniRef90_L1L5G1	L D R	I A H	K H A S L G V	T D D Q Y T I
UniRef90_W4XLX6	R D L	A R R	H V G Y S V	T R Q H F E G
UniRef90_W4XLX6	R D L	A R R	H V G Y S V	T R Q H F E G
UniRef90_W4XLX6	R D L	A R R	H V G Y S V	T R Q H F E G
UniRef90_W4XLX6	R D L	A R R	H V G Y S V	T R Q H F E G
UniRef90_W4XLX6	R D L	A R R	H V G Y S V	T R Q H F E G
UniRef90_UPI000479C563	S R I	A H K	H A V S L G L	R P D Q Y Q I
UniRef90_UPI00022F722E	S S L	S E L	H A F K L G V	D P E N F
UniRef90_C7PYV8	Q G L	G R D	H R K F A V	E P G H Y P A
UniRef90_UPI000273F3B6	D K L	K E L	Q C R K L S	V N F E S F Q L L
UniRef90_W4YI83	P L L	Q E L	A T R H Y G V	T K Q H F S V I
UniRef90_W4YI83	P L L	Q E L	A T R H Y G V	T K Q H F S V I
UniRef90_W4YI83	P L L	Q E L	A T R H Y G V	T K Q H F S V I
UniRef90_B8LND3	S E S	N A K	D M G K L H	V L D E F D V
UniRef90_P02143	T D L	S K K	H A E E L H	V D V I E S F K L
UniRef90_UPI0002627209	R Q L	G R D	H R K F A V	E P G H Y P A
UniRef90_H1QLS3	S R I	S H K	H A S L G V	T P D Q Y T I
UniRef90_G0Q818	L D R	I A H	K H A S L G V	T P E Q Y E I
UniRef90_A6DJX1	E G I	T E R	H A S L N V	Q P E H Y P I
UniRef90_C7MXX9	L D R	I A N	K H A S L G V	T R D Q Y P I
UniRef90_C6L8I9	K P L	A T T	H A Q K H K I	P L K N F Q L I
UniRef90_V4JDM3	Q P V	K N M	G A R H Y G V	N P G D Y D K V
UniRef90_UPI00031FBDF7	S R V	A H K	H A S L G L	K P E E Y P T V
UniRef90_M5UN87	Q A L	G K K	H A V I E Y E V	P E S S Y A T V
UniRef90_F4H1R1	A R V	A H K	H A S L G L	R P D Q Y A V
UniRef90_V4CJX8	K S L	G C R	H G Q S Y Q V	V H Q H L D L M A
UniRef90_S9QGF4	R Q L	G A S	H A A L G V	R P E H F D L V
UniRef90_Q92025	S A L	S V K	H S E K L G V	D P D N F R L L A
UniRef90_UPI000383C928	S Y L	R E L	H T H K L R V	D P V F F
UniRef90_Q2QAI6	D K L	S E L	H S D K L H	V D P Q N F R L L
UniRef90_B7XGC1	K P L	A T S	H A N K H K I	G I G N N F K L I
UniRef90_UPI0002C33079	K R L	G G V	H F K S G V	V D E H Y E K F A
UniRef90_A7IIA0	Q N L	A R K	H V G Y G V	K T E H Y A P V
UniRef90_I3KUU5	A P A	Q T L	H A Y Q L R I	D P R N F
UniRef90_E6PMQ5	P A A	Q S M	A K R H Y G V	R P E H Y A C V
UniRef90_UPI0003959284	S K L	S E L	H C D K L H	V D P E N F R L L
UniRef90_W5TEG7	S R I	G H K	H A S L G V	D P E Q Y P V
UniRef90_K9WVS1	Q K L	G R N	H A G Y G V	K A E Y Y D I V
UniRef90_A7SFV0	E E L	G R R	H K T R A L	K P S Y L E A M
UniRef90_H6VMS5				
UniRef90_H8Z115	R V I	I M M	G A R H Y G V	E D E D Y P K M R
UniRef90_UPI00029B0822	S R I	G H K	H A S L G I	T S D D Q Y Q I V
UniRef90_UPI00038C3EF8	I F S	V H A	K T L H I H T	S F F P Q L L G N M
UniRef90_V9G8F0	R Q I	A H K	H R S L G V	K P E H Y P I V
UniRef90_V9LCA3	F D L	G R S	H Q R Y N V	D P K Y Y E F V G
UniRef90_X5DV37	S R I	A H K	H A V S L G I	T A D Q Y Q I V
UniRef90_C3Y502	K D I	G K K	H Y P A R V	P T E Y F D V I
UniRef90_UPI0002559C10	S L I	V Q K	H A S L N I	V D E H Y P I V
UniRef90_U5D5B6	K D L	G F T	H F K Y G I	V D E H Y P I V
UniRef90_K1QKF07	K D L	G V K	H Q G Y G A	K K E Y L E P V
UniRef90_UPI0002D348F1	S R I	A H K	H A S L G I	T A D Q Y E V Y R
UniRef90_N1USI6	S R I	A H K	H A S L G I	T A D Q Y E V Y R
UniRef90_P23244	K K L	G A S	H F K H G V	A D E H F E V T K F
UniRef90_UPI00035EA429	L A R	I A H	K H T A L G	V P E Q Y Q I V
UniRef90_Q9NG75	K K L	G R E	H I K R	
UniRef90_Q9NG75	K K L	G R E	H I K R	
UniRef90_Q9NG75	K K L	G R E	H I K R	
UniRef90_UPI000350EAA7	A L V	G K A	H A L K H	

		130	140
UniRef90_B3DUZ7	A K A A W T K	V Y G	A A Q V M T A
UniRef90_D2HU50			
UniRef90_S4RN97	A K N G W S K	L L T T T	C I G L K S A F
UniRef90_W5MMD7	A C E S W S K	V F Q L L Y S F	L Q S V Y
UniRef90_UPI000289948C	V K D A W T E	V Y T V L A T T	M K D A
UniRef90_S4XEM3	V A E A W D E	V Y Q L M A D	V L I T A E R
UniRef90_UPI000372CA72	V A A A W D E	V Y W L M A N A	L T A
UniRef90_Q5QRU6	C K A S F E K	V T N E I	C T H L T N I Y K
UniRef90_F6UQT5	Q S K S W E K	L F S I T Y K Y	L E S C Y
UniRef90_D1AB44	V A A A W D E	V Y W L M A G A	L I A A
UniRef90_S4XMC7	V E T A W K D	V Y G V I A D	V M K K A
UniRef90_UPI0003620E6C	V A E A W D E	V Y W L M A N A	L A R L Y R
UniRef90_A0EM53			
UniRef90_D9VYL3	V A E A W D E	V Y W L M A N A	L I A A
UniRef90_L1L5G1	V A A A W D E	V Y W L M A G A	L I
UniRef90_W4XLX6			
UniRef90_W4XLX6			
UniRef90_W4XLX6			
UniRef90_W4XLX6			
UniRef90_W4XLX6			
UniRef90_UPI000479C563	V A A A W D E	V Y W L M A N	V L I N Q E R
UniRef90_UPI00022F722E			
UniRef90_C7PYV8	V A E S W T E	A Y G I V	A K V M T D A
UniRef90_UPI000273F3B6	V Q A A Y Q K	V V A G V A T A	L A H K Y
UniRef90_W4YI83	V E K S W L	A V L Q V I	V D T M S A
UniRef90_W4YI83	V E K S W L	A V L Q V I	V D T M S A
UniRef90_W4YI83	V E K S W L	A V L Q V I	V D T M S A
UniRef90_B8LND3	M K I A W D E	A Y T Q L A E A	T K S
UniRef90_P02143	T Q A I W E K Y	F G V V V D A	L S K E Y
UniRef90_UPI0002627209	V E R A W A E	A F T I I A R	Q M Q E A
UniRef90_H1QLS3	V A R A W D E	V Y W L M A N A	L I A
UniRef90_G0Q818	V A A A W D E	V Y W L M A G S	L I A
UniRef90_A6DJX1	I A N A W G E	A Y G F L A E	L I A K Y
UniRef90_C7MXK9	V A A A W D E	V Y W L M A D T	L I A R
UniRef90_C6L8I9	G Q D A L R K I	M G V I I S D	L D S T Y K
UniRef90_V4JDM3	V K A A W V E	V Y T L L A D	T M
UniRef90_UPI00031FBD7	V V A A W D E	V Y W L M A D A	L I K
UniRef90_M5UN87	V K E A W L L T	Y T T L S A A	M
UniRef90_F4H1R1	V A A A W D E	V Y W L M A Y A	L I H L E R
UniRef90_V4CJX8	L E S A W D K	L F K L M I	H Y M K S G
UniRef90_S9QGF4	A T D A W T K A	Y Q A V A S A	M I
UniRef90_Q92025	I Q E A F Q K F	L A V V V S A	V G R Q Y
UniRef90_UPI000383C928			
UniRef90_Q2QAI6	V Q A A W Q K	L V G V V A S A	L S R K Y
UniRef90_B7XGC1	G Q Q A M R N	V M A V V V A D	L E A N Y K
UniRef90_UPI0002C33079	M K S A W G E	A Y D Q L V A A	I
UniRef90_A7IIA0	V K A A W A D A	Y G L L S S V	M I
UniRef90_I3KUU5			
UniRef90_E6PMQ5	V K Q A W A D A	Y G L L S G V	M I A A
UniRef90_UPI0003959284	C Q A T W Q K	L V G L V A	H A L A R K Y
UniRef90_W5TEG7	V A A A W D R	V Y W L M A D T	L
UniRef90_K9WVS1	V R K A W E E	A Y T F L S E	I M K E A
UniRef90_A7SFV0	T A E A W N K	L F S F I S T T	M V R G
UniRef90_H6VMS5			
UniRef90_H8Z1I5	T R S A W I S	V Y G E L A E	L M M E G
UniRef90_UPI00029B0822	V A A A W D E	V Y W L M A S V	L I
UniRef90_UPI00038C3EF8	A Q A A F Q K	V V A G V A N A	L S H K Y
UniRef90_V9G8F0	I L D A W K E	A Y G V I S D A	
UniRef90_V9LCA3	V E G A W K	C L F L Y L T T	M M K M G Y
UniRef90_X5DV37	V A E A W D E	V Y W L M A E T	L I A A Y R
UniRef90_C3Y502	V D S A W T K	L Y G	
UniRef90_UPI0002559C10	V L N A W G E	A Y Q Q L A D	I L I A A
UniRef90_U5D5B6	M K D A W A E	A Y T Q L A F A	L I K E
UniRef90_K1QF07	V H S A W R T	F F A V M S	
UniRef90_UPI0002D348F1	V A E A W T E	V Y W L M A N S	L
UniRef90_N1USI6	I A E A W T E	V Y W L M A D A	L I K
UniRef90_P23244	M K N A W G E	A Y D K L V A A	I
UniRef90_UPI00035EA429	V A E A W T E	V Y W L M A D A	L I K
UniRef90_Q9NG75			
UniRef90_Q9NG75			
UniRef90_Q9NG75			
UniRef90_UPI000350EAA7	T Q R A W A K	L R G L I Y S	H V T A A Y K
UniRef90_M1T4W5	A Q D A L R K	V M A S V V N E	L G C V Y K
UniRef90_UPI0002A49A56			
UniRef90_UPI000305D9F9	V K E A W V T	A Y T I L A T T	M I E A M K
UniRef90_D6ZBY8	V A S A W T E	L Y W L M A G E	L I A R E R
UniRef90_UPI0004245EE8	V A A A W D A	V Y W I M A D V	L I
UniRef90_UPI0002EB71C2	I I D A W G E	A Y G V I A D V	F I S
UniRef90_Q14SN0	V A E A W N K	T L D M M	
UniRef90_UPI000382B6E6	L A A D W A E	A Y G L I A T T	M I
UniRef90_Q7WUM8	I I S A W A Q A	Y G N L A D I	L A
UniRef90_F0SHM8	I L A A V G E	A Y G L L A D V	C I K R
UniRef90_Q9DGJ2	G Q T A L R N	V M G L I I A D	L E A N Y K
UniRef90_Q24520	M K V A W G Q A	Y D H L V A A I	K A
UniRef90_A0A058ZN65	V K S A W T T	A Y G T L S S V	M I E A
UniRef90_UPI00037CD26A	G Q S A F R R	V M E A V I G D	I D T Y Y K
UniRef90_Q15Q64	V E Q A W V E	A Y G A L A	
UniRef90_UPI0003FF27C9	I A A A W T E	V Y W L M A N A	L I
UniRef90_M1S101	G Q Q A L R N	V M A I V I T D	L E A N Y K
UniRef90_UPI000478A6DA	V E R A W A E	A Y T I M	
UniRef90_UPI000255F3AE	V A A A W T E	V Y W L M A D A	L I K



	1	10	20	30	40																																				
UniRef90_W4CVN4	M	L	D	Q	Q	T	I	E	I	K	S	T	V	P	V	L	Q	V	H	G	K	T	I	T	T	F	Y	R	M	L	F	E	N	H	P	E	L	R			
UniRef90_UPI00037706E8																																									
UniRef90_B8CU80	M	L	S	E	A	E	K	H	I	L	S	K	S	T	V	P	V	L	Q	V	H	G	K	T	I	T	T	F	Y	R	M	L	F	E	N	H	P	E	L	R	
UniRef90_F6XB67																																									
UniRef90_UPI0004284BBA	L	L	S	P	E	S	E	A	V	V	K	A	T	A	G	V	V	A	E	N	G	D	E	I	T	K	R	F	Y	A	H	M	F	E	A	R	P	E	L	K	
UniRef90_UPI000273DCC4																																									
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UniRef90_G7SSR7	M	L	D	Q	Q	T	R	D	I	I	K	A	T	I	P	V	L	E	Q	H	G	T	T	I	T	N	T	F	Y	H	N	M	F	N	A	H	P	E	L	L	
UniRef90_A1ZN75	M	T	T	Q	D	I	N	L	V	R	N	S	W	V	S	V	L	A	H	R	D	E	A	G	D	I	F	Y	N	Y	L	F	E	K	Q	N	P	Q	V	K	
UniRef90_Q90W04	L	S	S	K	D	K	E	L	I	R	G	S	W	D	S	L	G	K	N	K	V	P	H	G	V	I	L	F	S	R	L	F	E	L	D	P	E	L	L		
UniRef90_H2RIW6																																									
UniRef90_W5N545	L	S	D	H	I	E	Q	I	K	D	S	W	K	V	I	Q	E	D	I	A	K	V	G	I	M	F	V	R	L	F	E	T	N	P	E	T	Q				
UniRef90_UPI00036F013B																																									
UniRef90_L7L323	M	L	S	D	T	Q	R	A	T	L	A	A	T	L	P	A	V	E	G	A	L	T	E	I	T	P	R	F	Y	R	G	L	F	D	A	H	P	N	L	L	
UniRef90_UPI00036DA9C1																																									
UniRef90_G1FKQ7	M	N	A	Q	D	I	E	L	L	K	S	S	W	A	K	V	V	P	I	K	D	T	A	A	E	L	F	Y	G	K	L	F	E	M	D	P	A	V	K		
UniRef90_D7B2F3																																									
UniRef90_W4LBL3	M	L	S	T	E	S	A	A	T	V	R	A	T	V	P	A	V	A	G	A	L	D	T	I	T	A	R	F	Y	D	T	M	L	G	E	R	P	E	L	L	
UniRef90_F8E207																																									
UniRef90_W9RPJ5	L	S	D	E	T	A	E	I	I	R	Q	T	L	P	V	I	G	N	I	N	K	I	T	P	V	F	Y	R	T	M	F	A	N	H	P	E	L	L			
UniRef90_Q4JDG1	V	F	T	E	E	Q	E	A	L	V	V	K	S	W	A	M	K	K	N	A	G	E	L	G	L	K	F	F	K	I	F	E	I	A	P	S	A	K			
UniRef90_UPI0002557E95																																									
UniRef90_M7XWG2	T	A	D	E	A	H	T	I	G	G	I	W	K	D	L	D	K	Q	A	T																					
UniRef90_Q6N314																																									
UniRef90_UPI000414M4M2																																									
UniRef90_N0ASU0	M	M	T	P	Q	A	I	A	L	V	Q	Q	S	F	A	K	V	R	P	I	S	D	E	T	A	T	L	F	Y	E	R	L	F	A	T	A	P	Q	V	R	
UniRef90_S3D2U5	M	L	S	L	E	S	A	A	V	I	R	A	T	L	P	V	V	S	E	A	L	D	E	I	T	A	R	F	Y	G	T	M	F	A	E	Q	P	E	L	L	
UniRef90_Q1R0E4	M	L	S	Q	K	T	I	E	T	I	K	S	T	V	P	V	L	E	V	K	G	T	E	I	T	T	V	F	Y	K	N	M	F	E	K	H	P	E	L	L	
UniRef90_U5D7L0	L	T	K	S	Q	I	Q	T	I	K	A	T	V	P	V	L	A	Q	H	G	E	T	I	T	T	K	F	Y	A	D	L	V	A	H	P	E	L	L			
UniRef90_UPI00047ADCBA	M	L	T	S	A	Q	E	S	V	I	A	A	T	T	P	V	V	A	E	H	I	E	A	I	A	Q	R	F	Y	B	L	M	F	A	R	P	E	V	K		
UniRef90_A7S5B8																																									
UniRef90_G0RRL0	M	L	S	E	K	S	L	P	L	I	E	A	T	L	P	V	V	G	E	R	M	P	G	I	A	K	D	F	Y	R	R	L	F	E	A	H	P	E	L	L	
UniRef90_M7BMA4	L	T	A	D	Q	K	Y	I	I	K	S	T	V	P	I	I	R	E	H	G	T	T	V	T	T	T	F	Y	A	N	M	L	A	A	H	P	E	L	K		
UniRef90_M3FBC5																																									
UniRef90_UPI00047BB5FF	M	L	S	V	E	T	R	T	I	I	K	S	T	V	P	V	L	E	Q	H	G	E	A	I	T	T	V	F	Y	K	N	L	F	E	A	H	P	E	L	L	
UniRef90_G3UU32																																									
UniRef90_S6F2N4	V	L	S	A	A	D	K	N	N	V	K	G	I	F	T	K	I	A	G	H	A	E	E	Y	G	A	E	T	L	E	R	M	F	I	T	Y	P	E	T	K	
UniRef90_A4FQN9	M	L	D	T	K	T	I	D	I	L	I	R	E	S	W	A	E	V	P	Q	A	D	D	V	A	R	F	F	Y	G	M	L	F	S	L	S	P	A	T	R	
UniRef90_UPI000288BE67	M	L	S	E	R	S	V	P	I	V	I	R	D	T	L	P	A	I	S	A	N	H	E	I	A	G	Q	F	Y	E	G	L	F	A	A	H	P	G	L	L	
UniRef90_G9DBN1																																									
UniRef90_M1KHB2	M	L	D	E	K	T	I	E	I	I	K	S	T	V	P	V	L	E	E	H	G	E	E	I	T	G	R	F	Y	D	L	L	F	Q	H	H	P	E	L	L	
UniRef90_UPI00036E50FC																																									
UniRef90_O17824	L	S	D	R	Q	R	D	V	L	I	Q	K	T	F	A	P	I	L	Q	D	H	V	R	N	G	L	K	I	F	V	R	L	F	E	S	E	Y	P	R	Y	K
UniRef90_UPI000393ED6D	L	S	A	E	S	R	E	A	I	R	S	S	W	K	E	I	Q	E	D	I	S	R	V	G	V	I	M	F	V	R	L	F	E	T	H	P	E	L	L		
UniRef90_V4LI57	M	T	A	E	E	I	L	V	S	Q	S	W	A	E	L	S	R	T	P	K	H	A	A	D	I	F	Y	R	R	L	F	E	T	Y	P	E	V	R			
UniRef90_G4QHE2	M	T	I	K	S	I	L	V	V	Q	K	S	W	Q	K	L	K	P	I	A	P	Q	A	A	K	I	F	Y	E	T	L	F	E	M	D	P	S	L	K		
UniRef90_L7ZC15	V	F	T	E	E	Q	E	A	L	V	V	K	S	W	N	V	M	K	N	S	A	E	L	G	L	K	L	F	L	R	I	F	E	I	A	P	T	A	K		
UniRef90_A0A014MD88	M	L	S	Q	K	S	A	E	T	V	R	A	T	L	P	A	V	G	E	A	I	G	T	I	T	E	L	F	Y	R	K	L	F	T	A	H	P	E	L	L	
UniRef90_B4V9T0																																									
UniRef90_UPI0002FFFA2A	M	N	P	A	Q	I	K	L	V	Q	E	S	F	G	K	V	A	P	I	S	E	Q	A	A	V	I	F	Y	D	R	L	F	E	V	A	P	A	V	K		
UniRef90_K0T1L2																																									
UniRef90_H0TDW5	M	T	P	A	Q	I	A	L	V	Q	D	S	F	A	K	V	A	P	I	S	D	Q	A	A	I	F	Y	D	R	L	F	E	V	A	P	Q	V	R			
UniRef90_W5MYS7	L	T	A	K	D	K	E	M	I	R	D	S	W	E	R	L	G	K	N	K	L	T	H	G	T	I	M	F	T	R	L	F	E	L	D	P	E	Y	N		
UniRef90_UPI00041E3C32	M	L	S	Q	Q	N	I	D	I	I	K	S	T	A	P	V	L	A	V	K	G	T	E	I	T	T	V	F	Y	K	N	L	F	K	N	H	P	E	L	L	
UniRef90_UPI00035D3C7B	L	S	Q	K	T	I	D	I	I	K	S	T	V	P	V	L	E	V	H	G	V	T	I	T	T	S	T	F	Y	K	N	M	F	S	N	H	P	E	L	L	
UniRef90_U1KXH3	M	L	S	N	N	T	I	A	L	V	K	S	T	I	P	L	L	S	Q	A	G	T	A	V	T	A	H	F	Y	D	R	M	F	T	H	N	P	E	L	N	
UniRef90_F9DTV8	M	L	D	Q	K	T	I	H	I	I	K	S	T	V	P	V	L	E	Q	H	G	K	T	I	T	T	V	F	Y	R	N	M	F	E	A	H	P	E	L	L	
UniRef90_A6FFE8	M	L	T	Q	H	T	I	D	I	I	K	A	T	V	P	A	V	S	L	H	A	N	D	I	T	A	H	F	Y	P	L	M	F	R	E	Y	P	E	V	K	
UniRef90_W5K4Z1	L	T	G	K	D	K	E	L	I	R	D	S	W	E	S	L	G	K	N	K	V	P	H	G	I	V	M	F	T	R	L	F	E	L	D	P	N	Y	K		
UniRef90_S3B1Y0	M	L	S	Q	K	S	A	E	T	V	R	A	T	L	P	A	V	A	E	A	I	D	T	V	T	D	L	F	Y	R	R	L	F	A	A	H	P	E	L	L	
UniRef90_UPI000380D1																																									

	50	60	70	80
UniRef90_W4CVN4	N I L F N H A N Q R E G K Q T A L A N A V L A A A M N	I L D Q Q G N I L D P V V		
UniRef90_UPI00037706E8	E L F P V A M D L Q R G D R L F G A L V R I A V A A Y A K N I	D N Q P F E F L D G F L		
UniRef90_B8CU80	H L I F N L S H Q H S G G Q P A A L F N A V A A Y A K N I	D N Q P F E F L D G F L		
UniRef90_F6XB67	S Y L F E S P V I L Q K I L Q T G K G A S V Y Y K I R G L	D H L S T K F H S I L		
UniRef90_UPI0004284BBA	R Y L F N M A N Q V A G D Q A K A L A A S V V A Y A V H L	D F A P F A S I D F		
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 V G D A V	K S I D N D I G G A L		
UniRef90_A7RJ19	E V F S N E G Q L E Q D E R F L F Q S R K F M E M I N S A	V D R L N D I L V M I L		
UniRef90_G7SSR7	N V F N K T N Q K G R Q P M A L A S T V L A A A K H I	D N L T V I L		
UniRef90_A1ZN75	R L F Q S N T H I Q N Q K L M S S I T L I V T K L N K L	D N I K E E V		
UniRef90_Q9W04	N L 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 A D F L		
UniRef90_H2RIW6	K L F P K F A G I T Q S D A V S A H G A T V L K K L G E L	K A K G N H A A L L		
UniRef90_W5N545	D V F F L F R D V E D S K E L R A H G F R V M S F I E K T V	A R L D Q L D R L D		
UniRef90_UPI00036F013B	E M F P P Y M D I Q R D R L L G A I R I V Q Q I D R P E F R L	T N F L		
UniRef90_L7L323	D N L F N R T H Q K S G E Q P Q A L A G S V A A F A R L Q L	E P V R R Q R F L		
UniRef90_UPI00036DA9C1	P L F K G D M K E Q G R K L M A A I N T V V N G V R D K L D T M V			
UniRef90_G1FKQ7	N H F P K F D G M S Q N G D L T A Q G V T L T K L G E V L K T	R G N H R G E I I		
UniRef90_D7B2K3	D G L F P N R G N Q S G E Q R R A L A G S I A A F A T L L E	H P R D N P D V L		
UniRef90_W4LBL3	P L F A H T E M K E Q Q K K L M Q T M T V V V N G L N R L	D K M V P A V		
UniRef90_F8E207	A D T F N R G N Q R S G E Q Q K A L A A S I V T F A A M L V	D E K S D P V E M L		
UniRef90_W9RPJ5	K L F S F L K D S P Q N A K L K P H A M T V M K T C E A A V	D L R K A G K V T L		
UniRef90_Q4JDG1	R L F S S F K H D F K G S G V Q Q G H A K K V V G A L G T A V	D H L G L E A A F		
UniRef90_UPI0002557E95	P L F A G A D M Q K Q G K K L M Q M L N A V V K N L N D I	P A L L		
UniRef90_M7XWG2	P L F P A D M T V Q K R K L M M A M L A V A V K N L D K L V S A V			
UniRef90_Q6N3I4	P L F H G D M R R Q G K K L M S T L N V V V T G L T D L T T I L			
UniRef90_A0A014M4M2	D G L F N R G N Q A S G E Q R K A L A G S I A A F A Q A L L A D	P D T R P D A L		
UniRef90_N0ASU0	N I F N H A N Q K R G R Q Q T A L A N T V L A A A T Y I D K L	E T I P V V		
UniRef90_S3D2U5	N V F N S T H Q A T G R Q A R A L A G A S L H A Y A S N I	D D L G R L S P A L		
UniRef90_Q1R0E4	T L F A N A T H Q H T G G Q P R A L A G A V V G V Y V L R H T	P Q R L D E V L		
UniRef90_U5D7L0	P L F A N A D L K A Q S K K L L A S L V G V F V E N L K K P D A L	T E A L		
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UniRef90_A7S5B8	L M F P E F R E L K E S R S L Q Q G H T K R V M K V E N A V N	S L E D L M E Y I V		
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UniRef90_M7BMA4	E R F A K F K N L K S S E E V K K H G T T V L T A L G R I L K Q K	N N H E Q E L		
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UniRef90_S6F2N4	D L F A V N M E V Q R S R L L R A L A A Q N I V D N L E A L I P A V			
UniRef90_A4FQN9	R D L F S N R G N Q A N G E Q C T A L A G S I A A Y A G M L G N G	T R A D A I L L		
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UniRef90_G9DBN1	N I F N Q T N Q K K K T Q R T A L S N A V I A A A S N I D R L	E N I V P V V		
UniRef90_M1KH2	A L F P V A M A T Q R G R L L R A L V Y V V V Q M V D R P D E L	V T F L		
UniRef90_UPI00036E50FC	L I W P Q F R A I P D S S L M N A H A S V Y L N G L G K I I D S	M R D L G K S M		
UniRef90_UPI000393ED6D	D A F F A F R D L N D S K E L K A H G L R I M Y I L E K T V A R I	D Q L D Q L I		
UniRef90_V4LI57	H L F K G E I D E Q G E K I M R M I G K A V T A L E D L E P L E			
UniRef90_G4QHE2	P M F K G D M V E Q G N K L M S M L D A A I K L D D L I P A V			
UniRef90_L7ZC15	K M F S F L R D S N Q N P K L K A H A M S V F V M T C S A V I Q L	R K S G K I L		
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UniRef90_B4V9T0	E L F P A S A Q E M E R Q R D R L F A A L T H V I A H L D D L	T P Y L		
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UniRef90_H0TDW5	A L F P D D L T E Q R K K L M G T L A V V V N G L T N L P S I L			
UniRef90_W5MY57	T P Y S S P Q E C L S S P E F V D H I N K V M L V V D A A V T H L	D N L H S L L		
UniRef90_UPI00041E3C32	H I F N H T N Q E Q G R Q Q T A L A N V Y A A A V H I D Q L	E A L L P A V		
UniRef90_UPI00035D3C7B	N I F N H A N Q S G R Q Q T A L A N M V L A A A K N I D Q L	E S V L		
UniRef90_U1KXH3	D I F N M S N Q S			

UniRef90_W4UCVN4	K	Q	I	A	E	K	H	R	A	L	G	V	L	P	E	H	Y	P	I	V	G	E	R	S	L	L	A	A	I	G	Q	V	L	G	D	A	A	T	P	E	120			
UniRef90_UPI00037706E8	A	G	L	G	R	D	H	R	K	F	G	V	K	A	A	H	Y	P	I	V	G	E	R	S	L	L	A	A	I	G	Q	V	L	G	D	A	A	T	P	E				
UniRef90_B8CU80	A	E	R	I	A	H	K	H	T	S	F	N	I	Q	P	A	A	H	Y	P	I	V	G	H	H	L	L	E	T	A	R	E	L	A	P	D	A	F	T	P	E			
UniRef90_F6XB67	P	L	L	T	V	K	K	C	L	C	L	R		D	A	G	F	K	I	L	L	S	H	A	I	E	V	T	L	A	V	H	F	P	D	D	F	D	A	T	E			
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UniRef90_A7RJ19	K	S	L	G	E	V	H	W	T	R	K	F	K	I	K	P	E	Y	Y	P	I	V	G	K	E	L	L	Y	S	I	K	V	G	L	G	S	L	F	N	D	E			
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UniRef90_H2RIW6	Q	P	L	A	N	T	H	A	T	K	H	K	L	P	I	N	N	F	K	L	I	A	E	S	V	I	G	K	V	M	E	K	A	G	L	D					A	A		
UniRef90_W5N545	Q	E	L	G	K	S	H		Y	R	Y	N	A	P	P	K	Y	Y	G	Y	V	G	T	E	F	I	C	A	V	Q	P	I	L	K	E	K	W	T	A	S	E			
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UniRef90_L7L323	D	R	I	A	H	K	H	A	S	L	G	V	L		A	D	Q	K	V	V	H	Q	H	L	F	A	A	I	V	I	E	V	L	G	D	A	V	T	P	E				
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UniRef90_G1FKQ3	K	N	L	S	K	T	H	A	N	Q	H	K	V	P	I	G	H	K	V	I	A	E	I	L	G	K	V	M	E	K	A	G	L	D							P			
UniRef90_D7B2F7	L	S	R	I	A	H	K	H	V	S	L	G	V	L		T	E	D	Q	Y	V	I	A	H	E	K	Y	L	F	D	A	I	A	S	T	L	G	D	A	A	T	P	A	
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UniRef90_O97381																																												
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UniRef90_S2XKA8	M	L	T	Q	E	E	K	G	I	L	Q	T	V	P	L	L	K	E	R	G	T	E	I	T	S	N	F	Y	N	R	M	F	N	K	Q	H	P	E	L	L				
UniRef90_Q5YTF8																																												
UniRef90_Q6CHJ2																																												
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UniRef90_Q2LC33																																												
UniRef90_J9ZAU4																																												
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UniRef90_B0UIC5																																												
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UniRef90_UPI000289034B	M	L	S	Q	E	T	I	Q	V	I	K	S	T	V	P	V	L	E	I	H	G	T	A	I	T	K	R	F	Y	E	M	M	F	N	G	H	P	E	L	L				
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UniRef90_O24521																																												
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UniRef90_M5RKZ4	M	L	S	E	K	T	V	Q	I	V	K	A	I	T	P	L	V	A	A	N</																								

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	90										100										110										120														
UniRef90_G7G771	E	A	L	T	R	I	N	H	K	H	L	S	N	I	L	P	E	H	Y	P	I	V	G	A	S	H	L	I	L	G	T	L	K	E	L	I	P	E	Q	F	T	P	D		
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UniRef90_V4A8E7	D	L	L	A	Q	K	N	T	H	F	K	S	L	G	I	R	Y	A	Q	Q	Y	K	E	L	F	D	M	F	P	G	Y	L	K	D	R	I	L	G	A	Q	C	Y	E	Q	
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UniRef90_O97381	V	A	L	G	E	R	H	I	T	T	R	G	T	V	R	R	H	F	E	A	F	S	S	Y	A	F	I	D	E	L	K	K	Q	R	G	V	A	D	E	S	A	S	A		
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UniRef90_Q9IOH4	A	K	V	N	N	K	H	V				S	L	Q	V	L	P	E	H	Y	K	I	V	V	G	E	N	L	L	L	A	A	I	K	E	V	V	L	G	D	A	V	T	P	E
UniRef90_C5QR69	K	E	V	A	Y	K	H	C				A	L	Q	V	L	P	E	H	Y	K	I	V	V	G	E	N	L	L	L	A	A	I	K	E	V	V	L	G	D	A	V	T	P	E
UniRef90_S2XKA8	P	I	I	K	E	I	A	Y	K	H	C			Y	V	F	P	E	H	Y	K	I	V	V	G	E	N	L	L	L	A	A	I	K	E	V	V	L	G	D	A	V	T	P	E
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UniRef90_Q6CHJ2	W	S	V	G	K	R	H	N	R	M			S	L	G	V	E	P	I	H	Y	R	W	L	G	E	A	M	I	K	T	F	A	D	R	F	G	D	S	F	T	P	E		
UniRef90_D8FWM6	K	G	M	G	A	R	H	V				Q	Y	G	T	L	P	E	H	Y	R	L	V	T	G	A	S	I	L	K	T	F	E	S	Y	L	G	P	D	W	T	P	E		
UniRef90_Q2LC33	Q	L	L	A	T	T	H	A	N	K	H	K	I	A	L	N	N	F	R	L	I	T	E	V	L	V	L	K	V	M	A	E	K												

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UniRef90\_V4A8E7 T V V A W N K A T N V M  
UniRef90\_V5YM44 G K E A W S L M D V V Y H  
UniRef90\_O97381 D L A A W R K G W D S I V D I L L E A G  
UniRef90\_O97381 D L A A W R K G W D S I V D I L L E A G  
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UniRef90\_A1CN79 V L D A W G A A Y W A L A N I M I D R  
UniRef90\_Q9I0H4 V L E A W G A A Y Q Q L A D L L I E A  
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UniRef90\_S2XKA8 V I Q T W A K A Y G V I A D A  
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UniRef90\_Q6CHJ2 M E T A W I K I Y S Y L A N K L  
UniRef90\_D8FWM6 V K Q A W V D A Y G A I A N L M L E G  
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UniRef90_B7DQP2	N	L	F	N	Q	A	N	Q	H	Q	R	T	Q	T	A	L																										
UniRef90_A3YCM6	D	V	F	N	M	A	H	Q	E	A	E	T	Q	S	L	A																										
UniRef90_V4ALZ1	H	Y	F	H	E	F	D	E	L	Q	G	M	S	D	M	R	A	H	A	T	A	L	F	N	A	I	A	A	Y	A	N	I	D	N	L	G	A	L	E	T	A	V
UniRef90_U6PAL5	Q	V	W	P	Q	F	R	A	E	L	P	D	S	S	L	M	N	A	H	A	S	V	Y	M	C	G	L	G	A	I	H	S	M	N	D	L	A	I	Q	M		
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UniRef90_W4QJ28	H	I	F	N	H	V																																				
UniRef90_V9HH89	P	L	F	N	M	D	R	Q	E	S	G	E	Q	P	K	A	L	A	M	A	I	L	S	S	A	Q	N	I	D	N	L	P	A	I	A	M	P	V	V			
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UniRef90_F3MBR1	N	I	F	N	H	A	N	Q	R	E	G	Q	P	F	A	L	A	N	A	V	Y	A	A	A	A	A	H	I	D	R	L	E	A	I	V	P	V	V				
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UniRef90_J1EIJ3	P	F	F	N	E	T	H	Q	A	K	G	D	Q	P	R	A	L	A	N	G	V	L	M	Y																		
UniRef90_E0VN13	E	S	F	M	S	F	E	D	L	K	H	S	K	Q	L	R	A	H	A	L	R	V	M	A	F	V	Q	K	A	V	H	E	P	E	K	L	E	T	L	L		
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UniRef90_W9VZS9	S	R	I	A	E	K	H	H	A	S	R	G	V	Q	T	D	D	Q	Q	F	V	N	L	R	Q	K	L	F	A	P	S	E	L	F	G	K	A	Y	T	T	E			
UniRef90_K9VX73	N	A	L	A	E	K	H	H	A	S	R	G	V	Q	T	D	D	Q	Q	F	V	N	L	R	Q	K	L	F	A	P	S	E	L	F	G	K	A	Y	T	T	E			
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UniRef90_A3YCM6	S	A	V	Q	R	I	A	E	K	H	H	A	S	R	G	V	Q	T	D	D	Q	Q	F	V	N	L	R	Q	K	L	F	A	P	S	E	L	F	G	K	A	Y	T	T	E
UniRef90_V4ALZ1	K	K	I	A	E	K	H	H	A	S	R	G	V	Q	T	D	D	Q	Q	F	V	N	L	R	Q	K	L	F	A	P	S	E	L	F	G	K	A	Y	T	T	E			
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UniRef90_C7QCW0							A	L	I	R	E	S	F	A	L	V	G	G	K	P	D	K	I	V	S	Y	F	Y	A	L	V	F	T	E	C	H	P	A	L	R				
UniRef90_UPI00045E96C6				Q	R	L	L	V	K	N	C	I	D	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_C3AJJ1	M	L	S	E	K	T	M	E	L	V	K	S	T	V	P	L	L	Q	E	K	G	V	E	I	T	T	R	F	Y	Q	I	M	F	S	E	H	P	E	L	L				
UniRef90_Q9Y0D5				T	E	G	E	R	A	A	V	R	A	S	W	A	V	L	M	K	D	Y	E	H	A	G	V	Q	L	D	K	F	F	K	A	N	P	A	A	K				
UniRef90_A0A059ITZ4				L	T	A	R	E	A	A	L	V	R	A	S	F	R	S	V	R	D	R	V	E	P	A	S	R	D	F	Y	A	A	L	F	R	R	R	P	D	L	R		
UniRef90_W5KPG1				L	S	K	E	Q	K	G	L	I	K	D	S	W	S	K	I	Q	Q	D	V	T	K	A	G	I	M	F	V	R	L	I	L	R	H	P	G	T	F			
UniRef90_I2G909				M	T	D	R	E	V	E	V	L	K	Q	S	W	N	H	V	P	S	Q	E	L	V	V	G	L	Q	M	F	X	T	L	F	Q	R	Y	P	Q	Y	Q		
UniRef90_UPI000370C764							D	A	V	L	I	R	R	T	L	A	E	M	E	P	V	A	D	E	A	T	S	F	F	Y	A	L	L	F	V	N	H	P	Y	L	R			
UniRef90_W9YS10				L	S	P	E	H	Q	A	I	V	K	S	T	V	P	V	L	A	E	H	G	V	A	I	T	S	H	F	Y	K	R	L	L	N	N	H	P	E	L	R		
UniRef90_UPI00047C7765	M	L	D	Q	T	T	V	A	V	I	K	S	T	I	P	L	L	E	S	A	G	P	A	L	T	Q	H	F	Y	Q	R	M	F	S	H	N	P	E	L	K	R			
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UniRef90_G8BNV9	M	L	S	E	E	T	R	T	I	V	K	A	T	I	P	V	L	E	A	Q	G	A	V	I	T	K	H	F	Y	A	K	M	L	G	S	N	E	E	L	L				
UniRef90_T1F484	V	L	T	I	R	E	K	Q	L	V	R	E	S	W	T	L	L	S	I	K	L	K	S	L	I	G	K	Q	V	F	L	R	I	F	E	L	R	P	S	T	K			
UniRef90_G2XJ88				T	E	A	Q	T	A	I	V	K	S	T	A	P	I	L	K	E	H	S	L	T	I	T	T	V	F	Y	K	S	M	L	G	A	H	P	E	L	R			
UniRef90_G8X712				M	T	T	T	E	K	E	L	I	K	A	T	I	P	V	L	R	E	N	G	V	L	L	T	K	H	F	Y	N	R	M	F	A	H	N	P	E	L	K		
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UniRef90_UPI000255986B																																												
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UniRef90_S1STT9																																												
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UniRef90_L0G369	M	A	S	K	S	T	I	E	L	V	K	S	T	A	P	V	L	K	E	Y	G	E	Q	I	T	K	V	F	Y	K	K	L	F	E	T	H	P	D	L	L	R			
UniRef90_UPI00046C2173				L	T	A	K	Q	K	Y	N	M	L	A	S	W	K	G	I	S	R	A	M	E	S	T	G	V	C	M	F	L	K	L	F	E	E	H	A	E	L	L		
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UniRef90_I2G909	K	T	L	Q	R	E	M	H	H	K	K	L	D	V	H	R	K	H	F	E	S	F	V	L	P	F	V	V	I	N	A	M	V	S	V	R	M	D	M	S	K	D	E	
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UniRef90_T1F484	A	Q	L	G	K	K	H	V	S	I	E	G	F	L	P	D	Y	A	D	V	Y	I	R	A	L	S	I	W	K	Q	E	L	K	D	V	L	T	N	E	E				
UniRef90_G2XJ88	E	R	I	A	G	K	K	H	V	S	L	G	I	T	P	D	Q	Y	A	I	V	G	E	N	L	M	T	A	S	I	K	E	V	L	G	D	A	A	T	P	E			
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L I D A W A A A Y G Q L A D L L I G R E R  
V K E A W L A V Y G I V K D T M  
G K A A W N D L L D T V Y H I F S  
V E R A W E E G L D L I T A T M  
T K N A W E D F I A Y I C R V  
V K Q A W E D A L A A I A A Q M  
V L D A W A K G Y G V L A G V F I E R  
I H I Q A W W K L I D V I C A V L K E  
I L A A W G E A Y G L L A K V  
T E A A W V R A Y T T I S Q V M I D A  
V E Q A W A D L F R Y I T H V M K E  
I L H A W G Q A Y W F L A G I L  
V R E A W T R L Y G A V V K A M S H G  
V L D A W G K A Y G V L A D V  
A R Q A W K N G M R A L V T G I T K  
I L Q A W T E A Y A V I A D A F I A V E R  
V L D A W G A A Y W C A N L L K D R  
V A A A W K K V Y F Y L C K H M  
V L D A W G R A Y G V L A D  
I A A A W T E V Y W L F A V I L I A  
V L D A W G K A Y N V L A D V F I K R  
M S R E W T G A L N A V A G L M L A G Y  
I L A A W G D A Y W F L A L I L I  
V L D A W K K A Y N V L A D  
V E E A W F T L F D V I G N L M K S K Y  
V L A A W G K A Y G V L A E V  
A Q G A M N K A L E L F R K D M A S N Y K  
F V D A W G K L I G V Q A S L A R  
V L A A W G E A Y W F L A D I L L I G K  
I Q I V W E K L L A A M A Q A L  
V L D A W A E A Y G V L A H V  
V K D A W E K L V K V I L A L L  
A R D A W K N L V G G V S K T L  
I L N A W G E A Y W F L A G I L  
I V I A W T A A Y N L L A E I L I N R E K  
F E T A W T K L Y L F L A N S I  
T E E A W T K L V S V I Q A T L D D R K R  
V L S A W G E A Y W A L A E I L L I G K  
H K A A W D A L L T M L I K A  
V I A D A W H V L T F I G N T M A D A  
M E E I Y T I T L K F I L A T L S E G  
V I E A W G I A Y Q K L A D  
V L D A W G K A Y G V L A N V  
V E Q A W V R M L R F A V A A M V S G  
V I R A W G E A Y W F L A N I L I  
T Q Q A W T G F L T D V A V K M  
L S C A W S I P Y D E L A A S I K K A  
T E A A C R R L L A L A S R L M V E G  
V I A A W A E A E A L A A  
A K A A W A A F Y D I I A I S L  
S Q A A W A K L V D H V Y A I I  
Y A N A W A K L V A V V Q A A I  
V R E A W I K L Y S V V K A M Q R G  
F S V A W E T A Y D E L A A I K K  
V I A A W D E V Y W L F A T A I L A  
L S N A W E I A Y D G L A V A I  
I L K A W G E G Y W F L A D I L I E R E R



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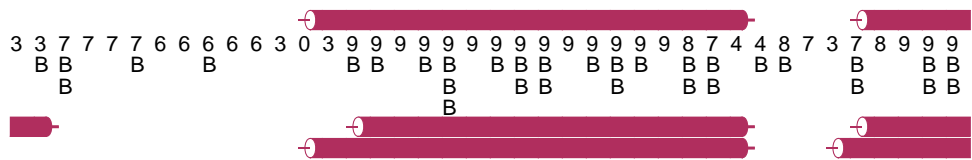
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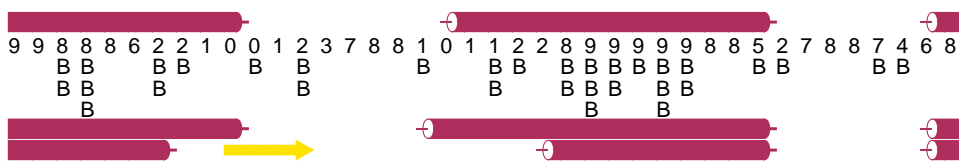
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