

	1	10	20	30	40
QUERY	N R D	P A S D Q M K H W K E Q R A A Q K	P D V L T T T G G G N P V	G D K L N S L T	
UniRef90_R7U0D1	N R D	K A S E Q L N E Y K Q S N	G T P G V L T T T A T G A P I	G N K T A T Q T	
UniRef90_UPI00035944A2	N R D	K A A N Q L N E F K K S Q L G A	D G M T T T G T G A P V	G N K T A T L T	
UniRef90_M9UWB5	R D R A A E Q L N E F K K K Q T	T P E V L T T S Q G C P	V A D K L N S L P T		
UniRef90_G9C5E5	S R D	P A T D Q L V N Y K K K G K S K E	D Q G K I T T G S Q G N P V	D S H T A S L T	
UniRef90_K4MB62			N E K K P S S T L T T G F G I P V	G D D Q N S L T	
UniRef90_E2C018	R D	P A S E Q L N N Y K K N Y K G E	A P V L L T A N G A P I	S E K K A S L T	
UniRef90_L7M329	R D	K A S D Q L K E Y K E T H	K P E P L T T S W G A P I	G D K T N V L T	
UniRef90_J9HGP0	S R N	P A E N Q L N L F K E S Q	K D K T V S T T S T G T P V	G T K T A S V T	
UniRef90_UPI00046252BF			E P D A V T T A A G I P V	G D K L N V L T	
UniRef90_F6DQ92			K K K I L T T N L G N P V	Y E D Q A S I T	
UniRef90_UPI00040AFC23				S D N Q N S L T	
UniRef90_E3HUA7			T D K K T H L T T A A G A P V	A D N N N T L T	
UniRef90_W3AHJ1			S T D K R T L T T S W G A P V	G D N Q N S Q T	
UniRef90_S4REW1			P P E V L T T G A G N P I	S D K L N V Q T	
UniRef90_G7Q8R8			S E K K T L T T G F G A P I	G D D Q N T A T	
UniRef90_E0VNL6	R D	P A T E Q L S N Y K K N H P	K P E V L V T G H G A P I	D D K L N S L S	
UniRef90_J9IIR7			Q R K T L T N S Q G H P V	D D N Q N S L T	
UniRef90_UPI0003A87E3C		D P L D R V R V D A T	T G Q R L T T N Q G V P V	A D N Q N S L K	
UniRef90_W7CKT1			T N Q H N A K L T T N T G A P V	G D N Q N T M T	
UniRef90_K2HK23				A D N Q N S L T	
UniRef90_A9B4C7			D E Q E Q L T T T A H G A P I	A D N Q N S L T	
UniRef90_T1F193	D	L T S Q Q L E S Y K Q K K N	C V V D E L T T S L G V P I	G S K T A S M T	
UniRef90_H2EZP3			Q R P L F T T S H G S P V	H N D N N S L S	
UniRef90_S9PJ95		A R S K D E A L A K D R S N	P T G H R M T S D Q G V P I	E N D N N S L R	
UniRef90_H2B639	S R D	K A T N Q L E D F R S K T	K V P G T L T T G T G C P V	G D K L N S M T	
UniRef90_UPI00047B391B			P E N N Q Q P L T T A S G A P V	P D N Q N S M T	
UniRef90_I4MXB3			S Q S K T L T T A S G A P V	A D N Q N S R S	
UniRef90_UPI0003B34154			A D R K N V Q T T G S G A P V	A D N Q N S L T	
UniRef90_UPI000415AF42			V D S T G Q A L T T N Q G V P I	S D N Q N S L K	
UniRef90_I4DMH7	S R D	P A S D Q L V N Y S K G V K D S	P G Y I T T K F G A P V	G V K T A I Q T	
UniRef90_Q0V6G9		K L K D L E E F R E Y	P E G Q F L T T D Q G V R V	S E T D M S L K	
UniRef90_UPI000363CFEE			S T N N N K L T T N W G A P V	G D N Q N S I T	
UniRef90_UPI00037A9124			Q S A G G D V P V L T T S Q G I P V	S D D Q N S L K	
UniRef90_F6AI31	D R G N S N K K I E Q L E R	F R E D A T G Q A L T N D	H G T R I A D N Q N S L R		
UniRef90_K7SKB4			Q T A D G N T P T L T T G G V P V	A D D Q N S L K	
UniRef90_P17336	R D A A S N Q L I D Y K N S	Q T V S P G A I T T G N G A P I	G I K D A S Q T		
UniRef90_W2S118	D	P C D D Q L E N F K K	G C P R P K V I T T S N G A P I	N N K T N V L T	
UniRef90_F6F2H9			Q L P G S G S P V L T T Q Q G V P V	A D D Q N S L R	
UniRef90_UPI0002378E38				P D N Q N T L T	
UniRef90_UPI0004759BCF			Q A A E G D I A V L T T Q Q G V P V	A D D Q N S L K	
UniRef90_Q1QDB0			Q R A G D D T K V L T T Q Q G V P V	S D N Q N S L K	
UniRef90_A8CWF1	R G	P A E D Q L K L Y K K S Q K G A T	S T V T T K H G A P I	G V R S A A Q T	
UniRef90_Q9I1W8	D R G N S N A K L E Q L E A Y R E	D A T G E A L S T N T G T R I	A D N Q N T L K		
UniRef90_C5AP82			A D Q G P R L T T A F G N P I	S D N Q N S L T	
UniRef90_D2QLN8	N K T N T N A K L D E L D M N R E D S	S G Q F L T T N Q G L R V	N D D Q N S L K		
UniRef90_UPI00047BA364		N T N A K L K Q L D K Y R T D	P E H E A L R T D Q G V K I	S D N Q N S L K	
UniRef90_D8NYP9			S K D I L T T A A G A P V	V D N Q N S L T	
UniRef90_F0SCD5		N I K L E Q L E N H K V D A T N E Q M T	T D Q G V K I N D D Q H S L K		
UniRef90_E5Y7Y1			S N D L L T T N A G A P V	V D N E N A L T	
UniRef90_H8MMX5	D E K S K D Q Q L A R D R S E	P T G N F L T T D Q G I R V	E H T D D S L K		
UniRef90_UPI00040D302E	N E N S K N H Q L E S F R E E	P Q D Q Y M T T D Q G V R V	N H T D D S L K		
UniRef90_A1BAY0		K T E Q G N A G E T Q Q R G	G E T L T T N H G I P F	S D N Q N S L R	
UniRef90_V4RAM5			S K P T M T T A S G A P V	A D N Q N S Q T	
UniRef90_W8RNU0	D R K N H N A K L D D L E V S R S	D A T G E A L T T N Q G V K I	A D N Q N T L K		
UniRef90_A0A023H6A5			T D K P P L L T T M A G N P V	P D N Q N S I T	
UniRef90_A0A024Q4S1				P D Y Q N S M T	
UniRef90_E3HUX6			L E R V R A D S S G Q M L T T A A G A P V	P D N Q N S L K	
UniRef90_UPI000381A815				P D D N N T I T	
UniRef90_S2JRL0				D N D Q T S I T	
UniRef90_C3IQR3	D G K K N K K I E Q L Q S F T R E N E	G K E M T T N T G V K I	S D N S L T		
UniRef90_UPI0004003798			E E K K L T S V S G R P I	A E N Q N V K T	
UniRef90_F8JXN3			P K P T L T T E S G A P V	A D N Q N S A T	
UniRef90_A0DIN2		S D N S D N V L T Q S T G C P V	D D N Q N S L T		
UniRef90_G7UT56		Q S C G A S H P P L T T N Q G I P V	S D N Q N S L R		
UniRef90_X7F8D1		Q R A G G A R P A M T T D Q G A P V	G D N Q N S L K		
UniRef90_X6FKT1		Q I A E G D S E I L T T A Q G G P V	A D N Q N T L R		
UniRef90_Q1CZ54	P T T L K S E S L E P H R M H A	V G K V L T T D Q G I P I	S D T D N S L K		
UniRef90_UPI00040E7B0A			D R P I Q T T A G A P I	S D N Q N S L T	
UniRef90_N6UDL6	S E D K A S R Q I L D W K K E R A S	C A E S I Y R T A F G A P I	V V K D A S E T		
UniRef90_W4T962	N K K T D Q L Q S H	T T S N E G E K L T T N Q G L K I	N N N Q D S L K		
UniRef90_M4WVRV9			S D N T R L T T A A G A P V	A D N Q N V Q T	
UniRef90_I1AWF4		H Q T D A D A P R M T T A Q G T P V	S D D Q N T L T		
UniRef90_D2BF90	D N R T D K D R Q L D E A R V G F	Q D T A L T T D Q G I R V	D D T D N S L K		
UniRef90_B0T3B3	N Q D D F T T Q A G H G G E Q R V	P E K G P H L T T N Q G I R V	S D N Q N Q L K		
UniRef90_A6Q7E0			L T T A N G R K V	D N N Q N S L T	
UniRef90_UPI00036B0333			K S K P T L T T T A G N P I	A D N Q N T L T	
UniRef90_G0J593			N K H N K L T T A S G R I Y	V E N E N S K T	
UniRef90_G4SX84			Q T A T G D Q P A L T T N Q G L P I	S D N Q N S L R	
UniRef90_F8EUW4				S D N Q N S I T	
UniRef90_K9XD87			S D R N T L T T A N G T P V	A D N Q N S L T	
UniRef90_Q8PVL3	N E K S K E E Q L E K F	H E D P E R E F L T T N Q G V R V	N N T D I S L K		
UniRef90_K9HM57			E R P K L T T T A G A P V	G D N Q H A L T	
UniRef90_Q7VK49			K K F T T A T G T P L	G D N Q N S I T	
UniRef90_U4T8B3			I L T T S S G A P I	A D D Q N S L T	
UniRef90_I4X684	E N S K D E Q L E Q Y	R V D D S G K S L T T N Q G L K	M A E D E F S L K		
UniRef90_I7ZJC9	R G T G D E L H Q Q V P S Q G	P H D A Q G H L T T N Q G I R V	A D N Q N Q L K		
UniRef90_U5VZN7			Q S G E F L T T A E G L R I	G D T D H S L K	
UniRef90_E3BCN5			G N A M T T S Q G I P V	T D D Q N Q L R	
UniRef90_S9T5G8			S N P T K L T T N Q G A P V	A D N Q N S K T	
UniRef90_R4T003	E D A K D E Q L N	G S R V D P D Q S V L T T Q Q G V R V	D H T D D S L T		
UniRef90_U6MV97			K E C P V L T T S T G A P V	G D N Q N S L T	

QUERY	50										60										70										80										
UniRef90_R7U0D1	V	G	P	R	G	P	L	L	V	Q	D	V	V	F	T	D	E	M	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_UPI00035944A2	V	G	P	R	G	P	A	L	L	Q	D	F	V	F	T	D	E	M	S	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	S	G	A	F	G	
UniRef90_M9UWB5	V	G	P	R	G	P	I	L	L	Q	D	I	Q	L	L	D	E	M	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_G9C5E5	A	G	P	K	G	P	I	L	L	Q	D	F	T	L	I	D	E	L	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_K4MB62	A	G	E	R	G	P	V	L	L	M	Q	D	V	H	L	I	D	K	L	S	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G
UniRef90_E2C018	V	G	P	R	G	P	M	L	L	Q	D	F	V	Y	L	D	E	M	S	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_L7M329	A	G	P	R	G	P	V	L	L	Q	D	V	V	F	L	D	E	M	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_J9HGP0	V	G	E	R	G	P	L	L	L	Q	D	V	H	F	L	D	E	M	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_UPI00046252BF	V	G	P	R	G	P	L	L	V	Q	D	A	V	F	I	D	E	M	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_F6DQ92	A	G	E	S	G	P	T	L	L	Q	D	T	H	L	I	E	K	L	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	T	G	A	H	G	
UniRef90_UPI00040AFC23	A	G	P	R	G	P	V	L	L	Q	D	F	H	L	I	E	K	L	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_E3HUA7	A	G	P	R	G	P	A	L	L	E	D	F	W	L	I	E	K	L	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	S	G	A	F	G	
UniRef90_W3AHJ1	A	G	Q	R	G	P	V	L	L	Q	D	V	H	L	L	E	K	L	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_S4REW1	A	G	P	R	G	P	L	L	V	Q	D	T	V	F	T	D	E	M	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_G7Q8R8	A	G	P	R	G	P	A	L	L	Q	D	V	H	L	L	E	K	M	S	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_E0VNL6	I	G	P	R	G	P	L	L	L	Q	D	V	T	Y	I	D	E	L	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_J9IIR7	A	G	P	R	G	P	I	L	L	T	D	I	H	L	I	D	E	K	L	A	K	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G
UniRef90_UPI0003A87E3C	V	G	L	R	G	P	T	A	M	E	D	F	I	L	R	E	K	I	T	H	F	D	H	E	R	I	P	E	R	V	V	H	A	R	G	S	A	A	H	G	
UniRef90_W7CKT1	A	G	V	N	G	P	V	L	L	Q	D	V	H	F	I	E	K	M	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_K2HK23	A	G	P	R	G	P	L	L	V	Q	D	W	Q	L	F	E	K	H	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	S	A	A	F	G	
UniRef90_A9B4C7	A	G	P	R	G	P	L	L	M	Q	D	Y	Q	L	L	E	K	M	A	T	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	S	G	A	F	G	
UniRef90_T1F193	A	G	P	R	G	P	L	L	V	Q	D	F	V	F	H	D	E	M	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	T	G	A	H	G	
UniRef90_H2E2P3	A	G	P	D	G	P	L	L	L	Q	D	Y	Q	L	V	D	E	K	L	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G
UniRef90_S9PJ95	V	G	A	R	G	P	T	L	L	E	D	F	H	F	R	E	K	I	M	R	F	D	H	E	R	I	P	E	R	V	V	H	A	R	G	S	G	A	F	G	
UniRef90_H2B639	I	G	P	R	G	P	I	L	L	Q	D	N	V	F	L	D	E	M	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_UPI00047B391B	A	G	P	R	G	P	M	L	L	Q	D	L	W	F	L	E	K	L	A	H	F	D	R	E	R	I	P	E	R	R	M	H	A	K	G	S	G	A	F	G	
UniRef90_I4MXB3	A	G	P	R	G	P	L	L	L	D	D	F	H	L	I	E	K	L	A	H	F	D	R	E	R	I	P	E	R	R	V	H	A	K	G	S	G	A	F	G	
UniRef90_UPI0003B34154	A	G	T	R	G	P	A	L	L	Q	D	V	H	L	L	E	K	L	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	G	G	A	H	G	
UniRef90_UPI000415AF42	A	G	L	R	G	P	A	L	L	K	D	F	I	L	R	E	K	I	T	H	F	D	H	E	R	I	P	E	R	I	V	H	A	R	G	S	G	A	H	G	
UniRef90_I4DMH7	V	G	K	N	G	P	A	L	L	Q	D	A	N	F	L	D	E	I	S	T	S	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G
UniRef90_Q0W6G9	A	G	E	R	G	P	T	L	L	E	D	F	H	F	R	E	K	L	T	H	F	D	H	E	R	I	P	E	R	I	V	H	A	R	G	T	G	A	H	G	
UniRef90_UPI000363CFEE	A	G	S	R	G	P	T	L	L	Q	D	V	H	L	L	E	K	L	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_UPI00037A9124	V	G	R	R	G	P	S	L	L	E	D	F	H	F	R	D	K	M	F	H	F	D	H	E	R	I	P	E	R	V	V	H	A	R	G	F	G	V	H	G	
UniRef90_F6AI31	A	G	E	R	G	P	S	L	L	E	D	V	F	L	R	E	K	L	T	H	F	D	H	E	R	I	P	E	R	V	V	H	A	R	G	A	A	A	H	G	
UniRef90_K7SKB4	A	G	P	R	G	G	T	L	L	E	D	F	H	F	R	E	K	I	F	H	F	D	H	E	R	I	P	E	R	V	V	H	A	R	G	Y	G	A	H	G	
UniRef90_P17336	V	G	P	R	G	P	I	L	L	Q	D	V	N	F	L	D	E	M	S	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_W2S118	V	G	P	R	G	P	L	L	M	Q	D	V	V	F	M	D	E	M	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	G	G	A	H	G	
UniRef90_F6F2H9	V	G	E	R	G	P	T	L	L	E	D	F	H	F	R	E	K	I	F	H	F	D	H	E	R	I	P	E	R	V	V	H	A	R	G	F	G	V	H	G	
UniRef90_UPI0002378E38	A	G	P	R	G	P	A	L	L	Q	D	V	W	F	L	E	K	M	A	H	F	D	R	E	R	I	P	E	R	R	M	H	A	K	G	S	G	A	F	G	
UniRef90_UPI0004759BCF	Q	G	A	R	G	P	V	L	L	E	D	P	H	F	R	E	K	I	F	H	F	D	H	E	R	I	P	E	R	V	V	H	A	R	G	Y	G	A	H	G	
UniRef90_Q1QDB0	A	G	P	R	G	P	T	L	L	E	D	F	V	L	R	E	K	I	H	H	F	D	H	E	R	I	P	E	R	I	V	H	A	R	G	S	A	A	F	G	
UniRef90_A8CWF1	V	G	L	N	G	P	I	L	L	Q	D	H	N	F	L	D	E	M	S	A	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	F	G	
UniRef90_Q9I1W8	A	G	E	R	G	P	S	L	L	E	D	F	I	M	R	E	K	I	T	H	F	D	H	E	R	I	P	E	R	V	V	H	A	R	G	S	A	A	H	G	
UniRef90_C5AP82	A	G	S	R	G	P	V	L	M	Q	D	Y	H	L	I	E	K	M	A	H	F	D	R	E	R	I	P	E	R	V	V	H	A	K	G	Y	G	A	F	G	
UniRef90_D2QLN8	A	G	P	R	G	A	T	L	L	E	D	F	I	L	R	E	K	I	T	H	F	D	H	E	R	I	P	E	R	I	V	H	A	R	G	A	A	A	H	G	

QUERY	Y	F	E	V	T	H	D	I	T	R	Y	S	K	A	K	V	F	E	H	I	G	K	R	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A		
UniRef90_R7U0D1	F	F	E	V	T	H	H	D	I	T	K	Y	S	K	A	K	V	F	E	H	I	G	K	R	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A	
UniRef90_UPI00035944A2	Y	F	E	V	T	H	H	D	I	T	K	Y	S	K	A	K	V	F	E	H	I	G	K	R	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A	
UniRef90_M9UWB5	Y	F	E	V	T	H	H	D	I	T	K	Y	S	K	A	K	V	F	E	H	I	G	K	R	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A	
UniRef90_G9C5E5	Y	F	E	V	T	H	H	D	I	T	K	Y	S	K	A	K	V	F	E	H	I	G	K	R	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A	
UniRef90_K4MB62	Y	F	E	V	T	H	H	D	I	T	K	Y	S	K	A	K	V	F	E	H	I	G	K	R	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A	
UniRef90_E2C018	Y	F	E	V	T	H	H	D	I	T	K	Y	S	K	A	K	V	F	E	H	I	G	K	R	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A	
UniRef90_L7M329	Y	F	E	V	T	H	H	D	I	T	K	Y	S	K	A	K	V	F	E	H	I	G	K	R	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A	
UniRef90_J9HGP0	Y	F	E	V	T	H	H	D	I	T	K	Y	S	K	A	K	V	F	E	H	I	G	K	R	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A	
UniRef90_UPI00046252BF	Y	F	E	V	T	H	H	D	I	T	K	Y	S	K	A	K	V	F	E	H	I	G	K	R	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A	
UniRef90_F6DQ92	Y	F	E	V	T	H	H	D	I	T	K	Y	S	K	A	K	V	F	E	H	I	G	K	R	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A	
UniRef90_UPI00040AFC23	T	F	R	V	T	A	D	I	V	T	K	W	T	R	A	K	F	L	S	E	V	G	K	E	T	E	V	F	L	R	F	S	T	V	A	G	E	K	S	S	A	
UniRef90_E3HUA7	T	F	T	V	T	H	H	D	I	T	S	R	Y	T	R	A	N	I	F	S	E	V	G	K	Q	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A
UniRef90_W3AHJ1	Y	F	E	V	T	Q	D	I	L	T	K	Y	T	K	A	A	F	L	S	E	V	G	K	Q	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A	
UniRef90_S4REW1	F	F	E	V	T	H	H	D	I	T	K	Y	T	K	A	K	V	F	E	H	I	G	K	R	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A	
UniRef90_G7Q8R8	Y	F	E	V	T	A	D	I	V	T	R	Y	T	K	A	A	L	F	A	Q	V	I	G	K	Q	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A
UniRef90_E0VNL6	Y	F	E	V	T	H	H	D	I	T	R	K	Y	T	K	A	S	V	F	S	E	I	G	K	Q	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A
UniRef90_J9IIR7	Y	F	E	V	T	H	H	D	I	V	T	K	F	T	K	A	K	F	L	N	E	I	G	K	R	T	P	I	A	V	R	F	S	T	V	A	G	E	K	S	S	A
UniRef90_UPI00																																										

QUERY	D	T	V	R	D	P	R	G	F	A	V	K	F	Y	T	E	D	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	A	L	L	F	P	S		
UniRef90_R7U0D1	D	T	A	R	D	P	R	G	F	A	V	K	F	Y	T	E	D	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	A	L	L	F	P	S		
UniRef90_UPI00035944A2	D	T	A	R	D	P	R	G	F	A	V	K	F	Y	T	E	D	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	A	L	L	F	P	S		
UniRef90_M9UWB5	D	T	A	R	D	P	R	G	F	A	V	K	F	Y	T	E	D	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	A	L	L	F	P	S		
UniRef90_G9C5E5	D	T	V	R	D	P	R	G	F	A	V	K	F	Y	T	E	E	G	I	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	I	F	F	P	V		
UniRef90_K4MB62	D	A	A	R	D	P	R	G	F	A	V	K	F	Y	T	E	E	G	N	Y	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	L	K	F	P	D		
UniRef90_E2C018	D	T	V	R	D	P	R	G	F	A	V	K	F	Y	T	E	E	G	I	W	D	L	V	G	N	N	T	P	I	F	F	I	K	D	P	L	K	F	P	S		
UniRef90_L7M329	D	T	V	R	D	P	R	G	F	A	V	K	F	Y	T	E	D	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	F	F	F	P	S		
UniRef90_J9HGP0	D	T	A	R	D	P	R	G	F	A	V	K	F	Y	T	E	D	G	V	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	A	L	L	F	P	S		
UniRef90_UPI00046252BF	D	T	V	R	D	P	R	G	F	A	M	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	A	L	L	F	P	S		
UniRef90_F6DQ92	D	S	A	R	D	P	R	G	F	A	V	K	F	Y	T	E	E	G	N	F	D	M	V	G	N	N	T	P	I	F	F	I	R	D	A	I	K	F	P	D		
UniRef90_UPI00040AFC23	D	A	E	R	D	P	R	G	F	A	L	K	F	Y	T	E	D	G	N	Y	D	I	V	G	N	N	T	P	I	F	F	I	R	D	P	L	K	F	P	D		
UniRef90_E3HUA7	D	A	E	R	D	V	R	G	F	A	I	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	L	K	F	P	D		
UniRef90_W3AHJ1	D	T	V	R	D	P	R	G	F	A	I	K	F	Y	T	E	E	G	N	Y	D	L	V	G	N	N	T	P	I	F	F	I	R	D	A	I	K	F	P	D		
UniRef90_S4REW1	D	T	V	R	D	P	R	G	F	A	V	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	L	K	F	P	D		
UniRef90_G7Q8R8	D	T	A	R	D	P	R	G	F	A	L	K	F	Y	T	E	D	G	N	Y	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	L	K	F	P	D		
UniRef90_E0VNL6	D	T	V	R	D	P	R	G	F	A	V	K	F	Y	T	E	D	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	L	L	K	F	P	S	
UniRef90_J9IIR7	D	T	E	R	D	P	R	G	F	A	I	K	F	Y	T	E	E	G	N	Y	D	M	V	G	N	N	T	P	I	F	F	I	K	D	A	I	K	F	P	D		
UniRef90_UPI0003A87E3C	D	T	V	R	D	V	R	G	F	A	V	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	M	P	I	F	F	I	R	D	A	M	K	F	P	D		
UniRef90_W7CKT1	D	T	L	R	D	P	R	G	F	S	L	R	F	Y	S	E	E	G	N	Y	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	L	K	F	P	D		
UniRef90_K2HK23	D	A	E	R	D	V	R	G	F	A	L	K	F	Y	T	E	D	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	Y	K	F	P	D		
UniRef90_A9B4C7	D	A	E	R	D	V	R	G	F	A	V	K	F	Y	T	E	D	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	Y	K	F	S	D		
UniRef90_T1F193	D	T	V	R	D	L	R	G	F	A	T	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	S	P	I	F	F	I	R	D	P	L	L	K	F	P	S	
UniRef90_H2EZP3	D	T	A	R	D	P	R	G	F	A	V	K	F	Y	T	E	E	G	N	W	D	M	T	G	N	N	T	P	I	V	S	F	L	I	R	D	P	S	K	F	P	D
UniRef90_S9PJ95	D	T	A	R	D	V	R	G	F	A	V	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	A	I	K	F	P	D		
UniRef90_H2B639	D	T	A	R	D	P	R	G	F	A	V	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	M	L	K	F	P	S	
UniRef90_UPI00047B391B	D	A	E	R	D	I	R	G	F	A	L	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	L	K	F	P	D		
UniRef90_I4MXB3	D	T	E	R	D	P	R	G	F	A	L	K	F	Y	T	E	E	G	N	W	D	I	V	G	N	N	T	P	I	F	F	I	R	D	P	L	K	F	P	D		
UniRef90_UPI0003B34154	D	T	V	R	D	P	R	G	F	A	V	K	F	Y	T	E	E	G	N	Y	D	L	V	G	N	N	T	P	I	F	F	I	R	D	A	I	K	F	P	D		
UniRef90_UPI000415AF42	D	T	A	R	D	V	R	G	F	A	V	K	F	Y	T	E	Q	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	Q	D	A	M	K	F	P	D		
UniRef90_I4DMH7	D	T	V	R	D	P	R	G	F	A	V	K	F	Y	T	E	D	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	T	L	K	F	P	S	
UniRef90_Q0W6G9	D	T	V	R	D	A	R	G	F	A	T	K	F	Y	T	E	D	G	N	Y	D	L	V	G	N	N	T	P	I	F	F	I	Q	D	A	I	K	F	P	D		
UniRef90_UPI000363CFEE	D	T	V	R	D	P	R	G	F	A	V	K	F	Y	T	E	E	G	N	Y	D	I	V	G	N	N	T	P	I	F	F	I	R	D	A	I	K	F	P	D		
UniRef90_UPI00037A9124	D	L	A	R	D	V	R	G	F	A	V	R	F	Y	T	K	E	G	N	W	D	I	V	G	N	N	T	P	I	F	F	I	Q	D	A	I	K	F	P	D		
UniRef90_F6AI31	D	T	V	R	D	V	R	G	F	A	T	K	F	Y	T	E	E	G	N	F	D	L	I	G	N	N	M	P	I	F	F	I	Q	D	A	I	K	F	P	D		
UniRef90_K7SKB4	D	L	A	R	D	V	R	G	F	A	V	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	M	P	I	F	F	I	Q	D	A	I	K	F	P	D		
UniRef90_P17336	D	T	A	R	D	P	R	G	F	A	V	K	F	Y	T	E	D	G	V	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	I	L	K	F	P	S	
UniRef90_W2S118	D	T	A	R	D	P	R	G	F	A	V	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	I	L	K	F	P	N	
UniRef90_F6F2H9	D	L	A	R	D	V	R	G	F	A	A	K	F	Y	T	K	E	G	N	W	D	I	V	A	N	N	T	P	I	F	F	I	Q	D	A	I	K	F	P	D		
UniRef90_UPI0002378E38	D	A	E	R	D	I	R	G	F	A	V	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	L	K	F	P	D		
UniRef90_UPI0004759BCF	D	L	A	R	D	V	R	G	F	A	V	K	F	Y	T	N	E	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	Q	D	A	I	K	F	P	D		
UniRef90_Q1QDB0	D	T	P	R	D	V	R	G	F	S	V	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	M	P	I	F	F	I	Q	D	A	M	K	F	P	D		
UniRef90_A8CWF1	D	T	V	R	D	P	R	G	F	P	I	K	F	Y	T	E	D	G	I	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	I	L	K	F	P	S	
UniRef90_Q9I1W8	D	T	V	R	D	V	R	G	F	A	V	K	F	Y	T	E	D	G	N	F	D	L	V	G	N	N	M	P	I	F	F	I	Q	D	A	I	K	F	P	D		
UniRef90_C5AP82	D	T	A	R	D	P	R	G	F	A	L	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	A	I	K	F	P	D		
UniRef90_D2QLN8	D	L	A	R	D	V	R	G	F	A	V	K	F	Y	T	E	E	G	N	F	D	L	V	G	N	N	T	P	I	F	F	I	Q	D	A	I	K	F	P	D		
UniRef90_UPI00047BA364	D	T	V	R	D	I	R	G	W	A	T	K	F	Y	T	Q	E	G	N	F	D	L	V	G	N	N	T	P	I	F	F	I	Q	D	A	I	K	F	P	D		
UniRef90_D8NYP9	D	A	E	R	D	P	R	G	F	A	L	K	F	Y	T	E	D	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	L	K	F	P	D		
UniRef90_F0SCD5	D	L	S	R	D	V	R	G	F	A	V	K	F	Y	T	Q	E	G	N	F	D	L	V	G	N	N	M	P	I	F	F	I	Q	D	A	M	K	F	P	D		
UniRef90_E5Y7Y1	D	A	E	R	D	I	R	G	F	A	I	K	F	Y	T	D	Q	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	L	K	F	P	D		
UniRef90_H8MMX5	D	T	V	R	D	V	R	G	F	A	V	K	F	Y	T	E	E	G	N	F	D	L	V	G	N	N	T	P	I	F	F	I	Q	D	G	S	I	K	F	P	D	
UniRef90_UPI00040D302E	D	T	V	R	D	V	R	G	F	A	T	K	F	Y	T	E	D	G	N	Y	D	L	V	G	N	N	T	P	I	F	F	I	R	D	P	S	I	K	F	P	D	
UniRef90_A1BAY0	D	T	P	R	D	V	R	G	F	A	V	K	F	Y	T	E	D	G	N	W	D	L	V	G	N	N	T	P	I	F	F	I	Q	D	A	I	K	F	P	D		
UniRef90_V4RAM5	D	A	E	R	D	V	R	G	F	A	L	R	F	Y	T	D	A	G	N	W	D	I	V	G	N	N	T	P	I	F	F	I	R	D	P	L	K	F	P	D		
UniRef90_W8RNU0	D	T	V	R	D	V	R	G	F	A	T	K	F	Y	T	E	D	G	I	F	D	L	V	G	N	N	M	P	I	F	F	I	Q	D	A	I	K	F	P	D		
UniRef90_A0A023H6A5	D	A	E	R	D	V	R	G	F	A	I	K	F	Y	T	E</																										

QUERY	F	I	H	S	Q	K	R	N	P	Q	T	H	L	K	D	P	D	M	V	W	D	F	W	S	L	R	P	E	S	L	H	Q	V	S	F	L	F	S	D	R
UniRef90_R7U0D1	F	I	H	T	Q	K	R	N	P	Q	T	N	L	K	D	P	D	A	F	W	D	F	L	T	L	R	P	E	S	L	H	Q	V	S	F	L	F	S	D	R
UniRef90_UPI00035944A2	F	I	H	T	Q	K	R	N	P	V	T	N	L	K	D	P	D	M	F	W	D	F	L	T	L	R	P	E	S	L	H	Q	V	S	F	L	F	S	D	R
UniRef90_M9UWB5	L	I	H	T	Q	K	R	N	P	A	T	H	L	K	D	P	D	M	F	W	D	F	I	T	L	R	P	E	S	L	H	Q	V	S	F	L	F	S	D	R
UniRef90_G9C5E5	F	I	H	T	Q	K	R	N	P	E	T	N	L	K	D	V	D	M	F	W	D	F	I	T	L	R	P	E	S	L	H	Q	V	S	F	L	F	S	D	R
UniRef90_K4MB62	F	I	H	T	Q	K	R	N	P	A	T	N	L	K	D	P	D	M	F	W	D	F	I	T	L	R	P	E	S	L	H	Q	V	S	F	L	F	S	D	R
UniRef90_E2C018	F	I	H	T	Q	K	R	N	P	A	T	H	L	K	D	A	D	M	F	W	D	F	I	T	L	R	P	E	S	L	H	Q	V	S	F	L	F	G	D	R
UniRef90_L7M329	F	I	H	T	Q	K	R	N	P	A	T	H	L	K	D	V	D	M	F	W	D	F	I	T	L	R	P	E	S	L	H	Q	V	S	F	L	F	S	D	R
UniRef90_J9HGP0	F	I	H	T	Q	K	R	N	P	A	T	H	L	K	D	A	D	M	F	W	D	F	I	S	L	R	P	E	S	L	H	Q	V	S	F	L	F	A	D	R
UniRef90_UPI00046252BF	F	I	H	S	Q	K	R	N	P	Q	T	H	L	K	D	P	D	M	V	W	D	F	W	S	L	L	P	E	S	L	H	Q	V	S	F	L	F	S	D	R
UniRef90_F6DQ92	F	I	H	T	Q	K	R	H	P	A	R	H	T	Q	N	P	D	M	M	W	D	F	W	S	L	T	P	E	S	L	H	Q	V	T	I	L	F	S	D	R
UniRef90_UPI00040AFC23	F	I	H	T	Q	K	R	N	P	A	T	N	L	K	D	P	T	A	V	W	D	F	A	S	L	T	P	E	S	L	H	Q	F	T	I	L	F	S	D	R
UniRef90_E3HUA7	F	I	H	T	Q	K	R	D	P	K	T	N	L	R	N	A	T	A	V	W	D	F	W	S	L	N	P	E	S	L	H	Q	V	T	I	L	M	S	D	R
UniRef90_W3AHJ1	F	I	H	T	Q	K	R	D	P	R	T	H	L	K	N	P	N	A	V	W	D	F	W	S	L	N	P	E	S	L	H	Q	V	T	Y	L	M	G	D	R
UniRef90_S4REW1	F	I	H	T	Q	K	R	N	P	Q	T	H	L	K	D	P	D	M	F	W	D	F	F	S	L	R	P	E	S	L	H	H	M	C	I	L	F	S	D	R
UniRef90_G7Q8R8	F	I	H	T	Q	K	R	N	P	R	T	H	L	K	D	A	N	M	F	W	D	F	L	S	L	R	P	E	S	L	H	Q	V	T	I	L	F	S	D	R
UniRef90_E0VNL6	F	I	H	T	Q	K	R	N	P	A	T	H	L	K	D	P	D	M	F	W	D	F	L	T	L	R	P	E	S	L	H	Q	V	M	I	L	F	S	D	R
UniRef90_J9IIR7	F	I	H	S	Q	K	R	N	P	K	N	N	I	Q	D	P	N	M	V	W	D	F	W	S	Y	S	P	E	A	L	H	Q	V	T	I	L	F	S	E	R
UniRef90_UPI0003A87E3C	L	I	H	A	V	K	R	E	P	H	N	G	I																											

QUERY					210					220					230					240																								
UniRef90_R7U0D1	G	T	P	D	G	H	R	H	M	D	G	Y	G	S	H	T	F	K	L	V	N	A	D	G	E	A	V	Y	C	K	F	H	Y	K	T	D	Q	G	I	K				
UniRef90_UPI00035944A2	G	T	P	D	G	Y	R	N	M	N	G	Y	G	S	H	T	F	K	L	V	N	A	D	G	E	A	V	Y	C	K	F	H	Y	K	T	D	Q	G	I	K				
UniRef90_M9UWB5	G	T	P	D	G	Y	R	N	M	N	G	Y	G	S	H	T	F	K	L	V	N	A	D	G	E	A	V	Y	C	K	F	H	Y	K	T	D	Q	G	I	K				
UniRef90_G9C5E5	G	T	P	D	G	Y	R	N	M	N	G	Y	G	S	H	T	F	K	L	V	N	A	D	G	E	A	V	Y	C	K	F	H	Y	K	T	D	Q	G	I	K				
UniRef90_K4MB62	G	T	P	A	T	Y	R	N	M	N	G	Y	G	S	H	T	F	K	L	V	N	A	D	G	E	A	V	Y	C	K	F	H	Y	K	T	D	Q	G	I	K				
UniRef90_E2C018	G	T	P	D	G	Y	R	N	M	N	G	Y	G	S	H	T	F	K	L	V	N	A	D	G	E	A	V	Y	C	K	F	H	Y	K	T	D	Q	G	I	K				
UniRef90_L7M329	G	T	P	D	G	Y	R	N	M	N	G	Y	G	S	H	T	F	K	L	V	N	A	D	G	E	A	V	Y	C	K	F	H	Y	K	T	D	Q	G	I	K				
UniRef90_J9HGP0	G	T	P	D	G	Y	R	N	M	N	G	Y	G	S	H	T	F	K	L	V	N	A	D	G	E	A	V	Y	C	K	F	H	Y	K	T	D	Q	G	I	K				
UniRef90_UPI00046252BF	G	T	P	D	G	F	R	H	M	H	G	F	G	S	H	T	F	K	L	V	N	A	D	G	E	A	V	Y	C	K	F	H	S	K	T	D	Q	G	I	K				
UniRef90_F6DQ92	G	T	P	K	S	F	R	H	M	D	G	H	S	S	H	T	Y	M	W	Y	N	A	D	G	E	Y	Y	W	I	K	W	H	F	K	A	D	L	G	F	Q				
UniRef90_UPI00040AFC23	G	T	P	R	S	Y	R	H	M	D	G	F	G	S	H	T	F	S	F	I	N	A	D	G	E	R	V	W	V	K	F	H	F	K	T	K	Q	G	I	A				
UniRef90_E3HUA7	G	T	P	A	N	L	R	Q	Q	H	G	F	G	S	H	T	F	S	F	I	N	A	D	G	E	R	F	Y	V	K	F	H	F	K	S	K	Q	G	I	Q				
UniRef90_W3AHJ1	G	T	P	A	T	L	R	H	M	H	G	F	G	S	H	T	F	K	W	T	N	A	D	G	E	V	S	H	W	V	K	F	H	F	L	T	E	Q	G	I	Q			
UniRef90_S4REW1	G	T	P	D	G	Y	R	N	M	N	G	Y	G	S	H	T	F	K	M	V	N	A	D	G	E	A	V	Y	C	K	F	H	Y	K	T	D	Q	G	I	R				
UniRef90_G7Q8R8	G	T	P	D	G	F	R	H	M	H	G	F	G	S	H	T	Y	K	W	Y	N	A	D	G	E	Y	F	W	V	K	F	H	F	K	T	D	Q	G	I	K				
UniRef90_E0VNL6	G	T	P	D	G	Y	R	N	M	N	G	Y	G	S	H	T	F	K	L	V	N	A	D	G	E	A	V	Y	C	K	F	H	L	K	T	D	Q	G	I	K				
UniRef90_J9IIR7	G	T	P	D	G	F	R	H	M	N	G	Y	G	S	H	T	Y	K	W	V	N	A	D	G	E	V	H	Y	V	K	F	H	F	K	T	D	Q	G	I	K				
UniRef90_UPI0003A87E3C	A	I	P	R	S	Y	R	T	M	Q	G	F	G	V	H	T	F	K	L	V	N	A	D	G	E	A	S	V	F	C	K	F	H	S	K	T	P	V	G	T	H			
UniRef90_W7CKT1	G	T	P	A	S	F	R	H	M	H	G	F	G	S	H	T	Y	R	W	T	N	A	D	G	E	S	F	W	V	K	F	H	F	R	T	D	Q	G	I	Q				
UniRef90_K2HK23	G	L	P	R	T	F	R	H	M	H	G	F	G	S	H	T	Y	S	F	F	N	A	D	G	E	R	F	W	V	K	F	H	F	K	S	M	Q	G	I	E				
UniRef90_A9B4C7	G	L	P	S	Y	R	F	V	H	G	F	G	S	H	T	Y	S	F	I	N	A	D	G	E	R	F	W	I	K	F	H	F	R	C	K	L	G	V	H					
UniRef90_T1F193	G	T	P	D	G	Y	R	N	M	D	G	Y	G	T	N	T	F	K	L	V	N	A	D	G	E	P	V	Y	C	K	F	I	H	R	T	N	Q	G	I	Q				
UniRef90_H2EZP3	G	T	P	K	D	Y	R	N	M	N	G	Y	G	S	H	T	F	K	L	V	N	A	D	G	E	G	K	Q	Y	W	V	K	F	H	F	K	T	E	Q	G	I	E		
UniRef90_S9PJ95	A	L	P	R	S	Y	R	M	M	E	G	F	G	V	H	T	F	R	L	I	N	A	D	G	E	V	S	R	F	V	K	F	H	W	K	P	K	L	G	V	H			
UniRef90_H2B639	G	T	P	L	G	Y	R	F	M	N	G	Y	G	S	H	T	F	K	M	V	N	A	D	D	G	E	A	V	Y	V	K	F	H	Y	K	T	N	Q	G	I	K			
UniRef90_UPI00047B391B	G	T	P	A	S	Y	R	H	M	H	G	F	G	S	H	T	Y	S	L	I	N	A	D	G	E	R	F	W	V	K	F	H	H	R	T	K	Q	G	I	K				
UniRef90_I4MXB3	G	T	P	D	G	Y	R	F	M	H	G	F	G	S	H	T	Y	S	L	V	N	A	D	G	E	R	H	W	V	K	W	H	Y	K	S	V	Q	G	I	K				
UniRef90_UPI0003B34154	G	T	P	A	T	W	R	H	M	N	G	Y	G	S	H	T	F	K	W	V	N	A	D	Q	G	E	A	F	W	V	K	F	H	F	V	S	D	Q	G	I	K			
UniRef90_UPI000415AF42	A	I	P	R	S	Y	R	T	M	Q	G	F	G	V	H	T	F	R	M	V	N	A	D	G	E	G	R	A	F	V	K	F	H	W	T	P	V	L	G	T	H			
UniRef90_I4DMH7	G	T	P	D	G	Y	R	N	M	N	G	Y	G	S	H	T	F	K	L	V	N	A	D	G	E	A	V	Y	C	K	F	H	Y	K	T	D	Q	G	I	K				
UniRef90_Q0W6G9	G	T	P	R	S	Y	R	M	M	Q	G	F	G	V	N	T	F	R	F	V	N	A	D	G	E	K	G	R	F	V	K	F	H	W	I	P	K	L	G	V	H			
UniRef90_UPI000363CFEE	G	T	P	A	S	L	R	T	M	N	G	Y	G	S	H	T	F	K	W	V	N	A	D	G	E	G	V	W	V	K	F	H	F	K	T	E	Q	G	I	V	Q			
UniRef90_UPI00037A9124	T	I	P	R	S	F	R	F	M	E	G	F	G	V	H	T	F	R	L	V	N	A	D	G	E	K	S	T	F	V	K	F	H	W	K	P	V	L	G	V	Q			
UniRef90_F6A131	A	I	P	V	G	F	R	G	M	Q	G	F	G	V	H	T	Y	R	L	V	N	A	D	G	E	G	R	A	H	F	V	K	F	H	W	R	P	V	A	G	V	F		
UniRef90_K7SKB4	A	L	P	R	S	F	R	F	M	E	G	F	G	V	H	T	F	R	L	I	N	A	D	G	E	K	S	T	Y	V	K	F	H	W	K	P	K	Q	G	I	Q			
UniRef90_P17336	G	T	P	D	G	Y	C	H	M	N	G	Y	G	S	H	T	F	K	L	V	N	A	D	G	E	P	I	Y	A	K	F	H	F	K	P	T	D	Q	G	I	K			
UniRef90_W2S118	G	T	P	D	G	F	R	H	M	N	G	Y	G	S	H	T	F	K	L	V	N	A	D	G	E	N	P	V	Y	C	K	F	H	F	K	P	Q	K	I	R				
UniRef90_F6F2H9	A	I	P	R	S	Y	R	F	M	E	G	F	G	V	H	T	F	R	L	I	N	A	D	G	E	K	A	V	F	V	K	F	H	F	K	P	R	Q	G	I	Q			
UniRef90_UPI0002378E38	G	T	P	A	T	Y	R	H	M	H	G	F	G	S	H	T	F	S	L	I	N	A	D	G	E	N	S	D	N	R	F	W	V	K	F	H	F	K	T	R	Q	G	I	K
UniRef90_UPI0004759BCF	T	I	P	R	S	F	R	T	M	E	G	F	G	V	H	T	F	R	L	V	D	V	E	G	N	S	T	F	V	K	F	H	W	K	P	K	Q	G	I	Q				
UniRef90_Q1QDB0	G	T	P	R	S	L	R	M	I	E	G	F	G	I	H	S	Y	R	L	I	N	A	D	G	E	K	S	T	F	M	R	F	H	W	K	P	V	L	G	V	Q			
UniRef90_A8CWF1	G	T	P	D	G	Y	R	N	M	N	G	Y	G	S	H	T	F	K	T	I	N	A	D	G	E	A	F	Y	V	K	F	H	Y	K	T	D	Q	G	I	K				
UniRef90_Q91W8	A	L	P	I	A	Y	R	N	M	Q	G	F	G	V	H	T	F	R	L	V	N	A	D	G	E	S	V	L	V	K	F	H	W	R	P	K	S	G	T	C				
UniRef90_C5AP82	G	T	P	K	S	A	R	F	M	N	G	Y	G	S	H	T	F	S	L	W	N	A	D	R	G	E	R	H	W	V	K	F	H	F	H	T	K	Q	G	I	Q			
UniRef90_D2QLN8	A	T	P	R	S	Y	R	M	M	E	G	F	G	V	H	T	F	R	L	I	N	A	D	G	E	S	R	F	V	K	F	H	W	K	P	K	L	G	V	H				
UniRef90_UPI00047BA364	G	T	P	R	S	Y	R	M	M	E	G	F	G	I	H	T	F	K	L	I	N	A	D	G	E	K	C	H	F	V	R	F	H	W	K	P	V	I	G	A	A			
UniRef90_D8NYP9	G	T	P	R	T	Y	R	N	M	D	G	F	G	S	H	T	F	S	F	I	N	A	D	G	E	R	F	W	V	K	F	H	F	K	T	Q	Q	G	I	Q				
UniRef90_F0SCD5	A	I	P	R	S	Y	R	M	M	E	G	F	G	V	H	T	F	R	F	I	N	A	D	G	E	K	A	T	F	V	K	F	H	W	K	P	V	L	G	V	H			
UniRef90_E5Y7Y1	G	T	P	A	S	Y	R	H	M	H	G	F	G	S	H	T	F	S	F	I	N	A	D	G	E	N	E	R	F	W	V	K	F	H	F	R	T	Q	Q	G	I	K		
UniRef90_H8MMX5	A	I	P	R	S	F	R	M	M	Q	G	F	G	V	H	T	F	R	F	I	D	E	K	N	T	S	R	F	V	K	F	H	W	K	P	L	L	G	T	H				
UniRef90_UPI00040D302E	A	L	P	R	S	F	R	M	M	E	G	F	G	V	H	T	F	R	F	I	N	A	D	G	E	K	A	H	F	V	K	F	H	W	R	P	T	L	G	A	H			
UniRef90_A1BAY0	A	I	P	R	S	Y	R	M	M	Q	G	F	G	V	H	T	F	K	L	V	N	A	D	G	E	T	H	F	V	K	F	H	W	R	P	R	L	G	M	Q				
UniRef90_V4RAM5	G	L	P	Q	T	Y	R	H	I	H	G	F	G	S	H	T	Y	S	F	W	N	A	D	G	E	R	F	W	V	K	F	H	F	K	S	M	Q	G	I	R				
UniRef90_W8RNU0	G	T	P	R	S	L	R	A	M	E	G	F	G	V	H	T	F	R	L	I	N	A	D	G	E	V																		

QUERY	N	L	S	V	E	D	A	A	R	L	A	H	E	D	P	D	Y	G	L	R	D	L	F	N	A	A	T	G	N	Y	P	S	S	W	T	L	Y	I	Q	V							
UniRef90_R7U0D1	N	L	T	G	A	Q	A	D	A	L	L	A	G	S	D	P	D	Y	A	T	R	D	L	F	N	A	A	E	G	N	F	P	S	S	Y	T	L	F	I	Q	V						
UniRef90_UPI00035944A2	N	L	S	M	A	D	K	A	G	D	L	L	A	G	T	D	P	D	Y	A	Q	R	D	L	F	N	A	A	D	E	G	N	F	P	S	S	Y	T	M	F	I	Q	V				
UniRef90_M9UWB5	N	L	S	A	E	K	A	G	D	D	L	L	A	G	T	D	P	D	Y	A	I	R	D	L	F	N	A	A	E	T	G	G	N	F	P	S	S	Y	T	M	F	I	Q	V			
UniRef90_G9C5E5	N	L	P	A	K	Q	A	G	D	L	L	S	G	S	D	P	D	Y	A	I	R	D	L	F	N	A	A	A	E	T	G	G	N	F	P	S	S	W	T	M	Y	I	Q	V			
UniRef90_K4MB62	N	L	T	R	E	E	S	D	T	L	L	S	G	T	D	P	D	Y	H	A	T	R	D	L	F	N	A	A	K	E	G	G	N	F	P	S	S	W	T	L	E	M	Q	V			
UniRef90_E2C018	N	I	L	A	E	K	A	A	E	L	L	S	G	S	D	P	D	Y	S	I	R	D	L	F	N	A	A	A	S	K	G	G	N	F	P	S	S	W	T	L	Y	I	Q	V			
UniRef90_L7M329	N	L	P	V	E	K	A	D	E	Y	A	S	K	D	P	D	Y	S	I	R	D	L	F	N	A	A	A	A	S	A	N	K	Q	Y	P	S	S	W	T	F	Y	I	Q	V			
UniRef90_J9HGP0	N	M	D	V	K	R	A	D	E	L	A	G	A	D	P	D	Y	S	I	R	D	L	F	N	A	A	A	A	K	A	K	G	E	Y	P	S	S	W	T	L	Y	I	Q	V			
UniRef90_UPI00046252BF	N	L	T	V	E	E	A	E	K	L	A	S	K	D	P	D	Y	S	I	R	D	L	F	N	A	A	A	A	A	K	A	K	G	E	Y	P	S	S	W	T	L	Y	I	Q	V		
UniRef90_F6DQ92	T	L	T	R	E	E	A	T	E	L	A	G	K	N	P	D	S	A	T	K	D	L	F	N	A	A	A	A	A	Q	G	G	D	Y	P	S	S	W	T	V	Y	V	Q	I	Q	V	
UniRef90_UPI00040AFC23	N	F	T	A	E	Q	A	T	A	M	L	G	I	D	P	D	S	H	A	T	R	D	L	F	N	A	A	A	A	A	Q	G	G	E	F	P	A	W	K	V	S	V	Q	I	Q	V	
UniRef90_E3HUA7	C	L	S	D	E	E	A	A	Q	V	V	A	H	D	R	E	S	S	Q	R	D	L	F	N	A	A	A	A	A	E	E	G	G	N	F	P	A	W	K	V	S	V	Q	I	Q	V	
UniRef90_W3AHJ1	N	I	T	Q	E	V	A	D	K	I	A	G	E	N	P	D	F	S	H	T	E	D	L	F	N	A	A	A	A	E	E	G	G	N	F	P	A	W	K	M	Y	V	Q	I	Q	V	
UniRef90_S4REW1	N	I	P	V	E	V	A	E	R	L	S	G	T	D	P	D	Y	S	I	R	D	L	F	N	A	A	A	A	A	E	A	D	G	N	F	P	T	W	T	L	Y	V	Q	I	Q	V	
UniRef90_G7Q8R8	N	L	T	R	Q	A	G	E	L	A	G	A	A	P	D	D	Y	A	T	E	D	L	F	N	A	A	A	A	A	E	A	D	G	N	F	P	S	S	W	T	L	E	V	Q	I	Q	V
UniRef90_E0VNL6	N	C	L	P	S	K	A	N	Q	L	S	A	D	D	P	D	Y	A	T	E	D	L	F	N	A	A	A	A	E	E	N	G	Q	Y	P	S	S	W	T	F	Y	I	Q	V	Q	V	
UniRef90_J9IIR7	N	L	T	P	K	Q	A	S	D	L	K	A	T	N	K	D	Y	A	T	E	D	L	F	N	A	A	A	A	A	S	N	G	G	T	A	T	W	T	W	K	V	Q	I	Q	V		
UniRef90_UPI0003A87E3C	S	L	V	W	D	E	A	A	K	L	A	G	A	D	F	H	R	R	D	L	F	N	A	A	A	A	A	A	E	E	A	G	N	Y	P	E	W	E	L	G	V	Q	I	Q	V		
UniRef90_W7CKT1	N	L	T	A	E	A	A	E	R	L	A	G	Q	N	P	D	Y	H	T	E	D	L	F	N	A	A	A	A	E	E	D	G	E	F	P	S	S	W	T	L	S	V	Q	I	Q	V	
UniRef90_K2HK23	N	L	T	D	G	E	A	A	K	L	V	G	G	D	R	E	S	H	Q	R	D	L	F	N	A	A	A	A	A	E	E	N	G	D	Y	P	K	W	R	M	M	V	Q	I	Q	V	
UniRef90_A9B4C7	N	W	T	N	A	E	A	A	E	V	V	G	G	D	R	E	S	S	Q	R	D	L	F	N	A	A	A	A	A	E	E	R	G	E	Y	P	S	S	W	T	L	C	V	Q	I	Q	V
UniRef90_T1F193	N	L	T	T	S	Q	A	V	K	L	A	G	E	D	P	D	Y	A	T	K	D	L	F	N	A	A	A	A	E	E	Q	G	L	Y	P	S	S	W	T	T	N	I	Q	V	Q	V	
UniRef90_H2EZP3	N	L	T	Q	E	E	G	D	R	I	A	G	E	N	S	D	P	D	Y	H	A	T	E	D	L	F	N	A	A	A	E	A	K	G	E	F	P	A	W	R	A	F	I	Q	V	Q	V
UniRef90_S9PJ95	S	L	V	W	D	E	C	Q	K	L	G	G	K	D	P	D	Y	H	R	R	D	L	F	N	A	A	A	A	A	E	A	K	G	N	F	P	E	Y	E	L	G	L	Q	I	Q	V	
UniRef90_H2B639	C	F	S	R	K	E	A	D	E	M	A	S	T	D	P	D	F	S	I	R	D	L	F	N	A	A	A	A	A	A	T	G	D	Y	P	S	S	Y	T	M	F	I	Q	V	Q	V	
UniRef90_UPI00047B391B	N	L	T	D	E	E	A	A	K	L	V	G	D	D	R	E	S	H	Q	R	D	L	F	N	A	A	A	A	A	E	E	N	G	D	F	P	K	W	K	L	M	V	Q	I	Q	V	
UniRef90_I4MXB3	N	L	A	P	A	D	A	A	R	L	A	G	T	N	P	D	Y	A	Q	R	D	L	F	N	A	A	A	A	A	E	E	R	G	D	F	P	Q	W	R	V	C	I	Q	V	Q	V	
UniRef90_UPI0003B34154	N	L	D	E	P	T	A	N	Q	M	A	G	E	N	P	D	Y	H	T	E	D	L	F	N	A	A	A	A	A	E	E	G	D	Y	P	S	S	W	T	L	Y	V	Q	I	Q	V	
UniRef90_UPI000415AF42	S	L	V	W	D	E	A	V	K	L	S	G	A	D	P	D	Y	H	R	R	D	L	F	N	A	A	A	A	A	E	E	A	G	Q	Y	P	E	Y	E	L	G	L	Q	V	Q	V	
UniRef90_I4DMH7	N	L	P	V	D	K	A	E	L	A	S	S	D	P	D	Y	S	I	R	D	L	F	N	A	A	A	A	A	A	E	G	K	G	D	F	P	S	S	W	T	L	Y	I	Q	V	Q	V
UniRef90_Q0W6G9	S	L	V	W	D	E	A	A	K	L	A	G	K	D	P	D	Y	H	R	R	D	L	F	N	A	A	A	A	A	E	E	G	H	Y	P	E	Y	E	L	G	V	Q	I	Q	V		
UniRef90_UPI000363CFEE	N	M	D	A	N	V	A	Q	L	A	G	E	N	P	D	Y	T	E	E	L	F	H	A	A	A	A	A	A	E	E	S	G	N	F	P	A	W	K	L	S	V	Q	I	Q	V		
UniRef90_UPI00037A9124	S	V	V	W	N	E	A	L	K	L	A	G	M	D	P	D	Y	H	R	R	D	L	F	N	A	A	A	A	A	E	E	N	G	D	Y	P	E	W	E	L	G	F	Q	I	Q	V	
UniRef90_F6AI31	S	L	V	W	D	E	A	Q	K	L	A	G	K	D	P	D	F	H	R	R	T	L	W	D	D	A	A	A	E	E	N	G	D	P	L	E	W	E	L	G	L	Q	V	Q	V		
UniRef90_K7SKB4	S	V	V	W	N	E	A	V	K	L	A	G	A	D	P	D	F	H	R	R	D	L	W	Q	A	A	A	A	A	E	E	S	G	D	Y	P	E	W	E	L	G	V	Q	I	Q	V	
UniRef90_P17336	N	L	D	V	K	T	A	D	Q	L	A	S	T	D	P	D	Y	S	I	R	D	L	F	N	A	A	A	A	A	E	E	R	G	D	Y	P	M	W	N	F	F	I	Q	V	Q	V	
UniRef90_W2S118	N	L	M	A	D	E	A	A	R	L	S	G	E	D	P	D	Y	A	I	R	D	L	F	N	A	A	A	A	A	E	E	R	G	D	Y	P	M	W	N	F	F	I	Q	V	Q	V	
UniRef90_F6F2H9	S	V	L	W	N	E	A	V	K	L	A	G	A	D	P	D	F	H	R	R	D	L	W	D	A	A	A	A	A	E	E	D	L	G	S	P	P	E	W	D	F	G	V	Q	V		
UniRef90_UPI0002378E38	N	L	T	D	E	E	A	A	Q	I	L	S	G	D	R	E	S	H	Q	R	D	L	Y	D	A	A	A	A	A	E	E	D	G	D	F	P	K	W	T	L	Y	V	Q	V	Q	V	
UniRef90_UPI0004759BCF	S	V	L	W	N	E	A	V	K	L	A	G	A	D	P	D	F	H	R	R	D	L	W	D	A	A	A	A	A	E	E	N	G	G	D	F	P	E	W	E	L	G	V	Q	I	Q	V
UniRef90_Q1QDB0	S	T	T	W	D	E	A	V	K	L	S	G	A	D	P	D	Y	H	R	R	D	L	F	E	S	A	A	A	A	E	E	N	N	G	D	F	P	E	W	E	F	G	V	Q	I	Q	V
UniRef90_A8CWF1	N	L	D	P	V	K	A	N	E	L	A	A	N	D	P	D	Y	S	I	R	D	L	F	N	A	A	A	A	A	E	A	K	G	D	Y	P	S	S	W	T	F	Y	I	Q	V	Q	V
UniRef90_Q9I1W8	S	L	V	W	D	E	A	Q	K	L	A	G	K	D	P	D	F	N	R	T	L	W	E	D	A	A	A	A	A	E	E	K	G	D	Y	P	E	W	E	L	G	L	Q	V	Q	V	
UniRef90_C5AP82	N	F	S	A	D	E	A	D	E	V	A	S	G	K	D	P	D	Y	S	S	A	D	L	S	T	A	A	A	A	E	E	Q	G	D	F	P	K	W	K	V	S	V	Q	I	Q	V	
UniRef90_D2QLN8	S	V	V	W	D	E	A	Q	L	I	L	S	G	R	D	P	D	F	H	R	R	D	L	W	D	A	A	A	A	A	E	E	G	G	A	Y	P	E	W	E	L	G	V	Q	I	Q	V
UniRef90_UPI00047BA364	S	L	I	W	D	E	A	Q	L	I	T	G	R	D	P	D	F	H	R	K	E	L	W	E	A	A	A	A	A	E	E	A	G	D	Y	P	E	Y	E	L	G	L	Q	I	Q	V	
UniRef90_D8NYP9	N	Y	T	N	E	E	A	A	Q	V	V	A	G	D	R	E	S	A	Q	R	D	L	V	D	S	A	A	A	A	E	E	D	R	G	D	F	P	E	W	N	L	K	V	Q	I	Q	V
UniRef90_F0SCD5	S	V	A	W	D	E	A	Q	N	I	S	G	K	D	P	D	F	H	R	R	D	L	W	D	A	A	A	A	A	E	E	A	G	Q	F	P	E	F	E	L	G	V					

QUERY	MT	F	S	E	A	E	□	F	P	F	N	P	F	D	L	T	K	V	WS	H	G	D	Y	P	L	I	P	V	G	K	L	V	L	N	R	N	P	V	300				
UniRef90_R7U0D1	MT	F	E	E	A	E	K	H	R	F	N	P	F	D	L	T	K	V	WS	H	K	E	F	P	L	I	P	V	G	R	L	T	F	N	R	N	P	K					
UniRef90_UPI00035944A2	MT	F	E	E	A	E	K	F	R	W	N	P	F	D	L	T	K	V	WP	H	G	E	F	P	L	I	P	V	G	R	L	V	L	N	R	N	P	K					
UniRef90_M9UWB5	MT	Y	E	E	A	E	K	H	R	F	N	P	F	D	L	T	K	V	WP	H	K	D	F	P	L	I	P	V	G	R	L	T	F	N	R	N	P	K					
UniRef90_G9C5E5	MT	F	K	Q	A	E	N	W	K	F	N	P	F	D	L	T	K	V	WP	H	D	E	F	P	L	I	P	V	G	K	L	V	L	N	R	N	P	K					
UniRef90_K4MB62	MT	P	E	E	A	E	K	Y	R	F	D	□	T	D	I	T	K	V	WP	H	G	D	F	P	P	I	K	I	G	K	L	V	L	N	R	N	P	D					
UniRef90_E2C018	MT	A	E	Q	S	K	T	□	K	W	N	P	F	D	L	T	K	I	W	P	H	K	E	F	P	L	I	P	V	G	K	L	V	L	N	R	N	P	E				
UniRef90_L7M329	MT	F	E	Q	A	K	T	W	K	Y	N	P	F	D	L	T	K	V	WP	H	G	E	F	P	L	I	P	V	G	K	M	V	L	N	R	N	P	K					
UniRef90_J9HGP0	MT	F	E	Q	A	E	K	□	S	F	N	P	F	D	L	T	K	I	W	P	Q	A	E	F	P	L	I	P	V	G	R	M	V	L	N	R	N	P	K				
UniRef90_UPI00046252BF	MT	F	E	Q	A	E	N	F	P	F	N	P	F	D	V	T	K	V	WP	H	G	D	Y	P	L	I	P	V	G	K	L	V	L	N	R	N	P	V					
UniRef90_F6DQ92	M	P	P	E	E	A	K	N	Y	K	F	D	P	F	D	I	T	K	V	W	Y	H	A	D	Y	P	L	I	P	V	G	K	M	V	L	N	R	N	P	E			
UniRef90_UPI00040AFC23	MT	E	A	E	A	E	A	F	P	□	D	P	F	D	L	T	K	V	WP	H	A	A	H	P	L	I	E	I	V	G	E	L	V	L	N	R	N	P	E				
UniRef90_E3HUA7	M	P	E	A	E	A	A	T	Y	H	□	I	N	P	F	D	L	T	K	V	WP	H	G	D	Y	P	L	I	E	V	G	V	L	E	L	N	K	N	P	E			
UniRef90_W3AHJ1	M	P	□	E	D	A	N	T	Y	R	F	D	P	F	D	V	T	K	T	W	S	H	K	D	Y	P	L	I	E	V	G	R	M	V	L	N	R	N	P	Q			
UniRef90_S4REW1	MT	F	A	Q	A	E	□	H	R	W	N	P	F	D	L	T	K	V	WP	H	G	E	F	P	L	I	P	V	G	R	L	E	L	N	R	N	P	T					
UniRef90_G7Q8R8	MT	P	E	Q	A	R	D	Y	R	F	D	□	F	D	V	T	K	V	WP	H	G	D	Y	P	P	M	K	I	G	K	M	V	L	N	R	N	P	V					
UniRef90_E0VNL6	MT	F	E	Q	A	E	R	F	K	Y	N	P	F	D	L	T	K	I	W	P	H	S	E	Y	P	L	I	P	V	G	K	L	V	L	N	R	N	P	K				
UniRef90_J9IIR7	M	P	E	R	D	A	E	N	Y	K	F	D	V	F	D	V	T	K	V	WP	Q	S	D	Y	P	L	I	P	V	G	K	M	V	L	N	R	N	P	E				
UniRef90_UPI0003A87E3C	F	S	E	E	Q	A	E	Q	F	P	F	D	V	L	D	A	T	K	I	V	P	E	□	L	V	P	V	Q	P	I	G	K	M	V	L	N	R	N	P	D			
UniRef90_W7CKT1	M	P	□	E	D	A	A	K	Y	R	F	N	S	F	D	V	T	Q	V	W	S	Q	K	D	Y	P	L	I	E	V	G	T	M	T	L	N	R	N	P	E			
UniRef90_K2HK23	M	P	E	A	D	□	D	K	T	W	Y	N	P	F	D	L	T	K	V	WP	H	G	D	Y	P	L	I	E	V	G	□	L	E	L	N	R	N	P	E				
UniRef90_A9B4C7	M	P	E	A	D	A	E	T	Y	H	□	I	N	P	F	D	L	T	K	V	WP	H	G	D	Y	P	L	I	E	V	G	T	M	E	L	N	R	N	P	E			
UniRef90_T1F193	MT	Y	Q	Q	A	E	K	T	S	F	N	P	F	D	V	T	K	E	W	P	A	E	E	F	P	E	M	P	Y	G	R	I	V	L	N	K	N	P	Q				
UniRef90_H2EZP3	ME	Y	E	D	A	W	K	Y	K	F	N	P	F	D	V	T	K	I	V	W	S	H	K	D	Y	P	L	I	P	F	G	R	L	V	L	N	R	N	P	E			
UniRef90_S9PJ95	I	E	E	K	D	□	A	K	□	G	□	I	E	□	L	D	S	T	K	I	□	P	E	E	□	L	I	P	V	R	R	V	F	G	K	L	V	L	N	R	N	P	T
UniRef90_H2B639	MT	F	E	Q	A	E	N	W	E	F	N	P	F	D	L	T	K	V	WP	H	S	E	F	P	L	H	P	V	G	K	L	V	L	N	R	N	P	K	E				
UniRef90_UPI00047B391B	M	P	E	A	D	A	E	S	Y	R	Y	H	P	F	D	L	T	K	V	W	S	K	K	D	Y	P	L	I	E	V	G	E	W	E	L	N	R	N	P	A	E		
UniRef90_I4MXB3	M	S	E	A	Q	A	N	S	H	R	E	N	P	F	D	V	T	K	T	W	S	K	K	E	F	P	L	I	E	I	G	T	L	E	L	N	R	N	P	Q			
UniRef90_UPI0003B34154	M	P	Y	E	E	A	□	T	Y	K	W	D	P	F	D	V	T	K	I	W	S	K	E	D	Y	P	R	I	E	V	G	R	M	E	L	N	K	N	P	E			
UniRef90_UPI000415AF42	F	T	E	E	Q	A	E	Q	F	S	F	N	P	F	D	V	L	D	A	T	K	I	V	P	E	E	□	L	V	V	R	A	V	G	R	M	V	L	N	R	N	P	D
UniRef90_I4DMH7	MT	M	A	Q	A	E	N	F	□	K	F	N	P	F	D	L	T	K	I	W	P	H	A	D	Y	P	L	I	Q	V	G	K	L	V	L	D	K	N	P	K			
UniRef90_Q0W6G9	I	E	E	D	E	H	K	F	D	F	D	L	L	D	A	T	K	I	V	P	E	E	Q	V	P	L	K	I	I	G	K	L	T	L	T	S	K	P	D				
UniRef90_UPI000363CFEE	M	P	□	E	D	A	N	T	Y	K	W	D	P	F	D	V	T	K	V	W	S	Q	K	D	Y	P	L	I	E	L	G	R	M	V	L	N	R	N	P	E			
UniRef90_UPI00037A9124	F	D	E	E	F	A	Q	A	F	P	F	N	P	F	D	V	L	D	A	T	K	L	I	P	E	E	D	V	P	V	R	P	V	G	K	L	T	L	N	R	T	V	
UniRef90_F6AI31	I	P	E	E	D	E	H	K	F	D	F	D	L	L	D	A	T	K	L	V	P	E	E	Q	V	P	V	R	V	V	G	K	L	V	L	N	R	N	P	D			
UniRef90_K7SKB4	F	D	D	A	F	A	D	K	F	D	F	D	I	L	D	A	T	K	L	V	P	E	E	L	V	P	V	R	R	I	G	R	L	V	L	N	R	N	P	V			
UniRef90_P17336	MT	Y	E	Q	A	K	F	K	Y	N	P	F	D	V	T	K	V	W	S	Q	K	E	Y	P	L	I	P	V	G	K	M	V	L	N	R	N	P	K					
UniRef90_W2S118	MT	F	E	Q	A	E	K	S	T	M	N	P	F	D	V	T	K	V	WP	H	G	E	Y	P	L	I	P	V	G	K	M	V	L	N	R	N	P	K					
UniRef90_F6F2H9	F	D	D	D	A	D	N	F	E	F	D	□	V	L	D	P	T	K	I	□	P	E	E	Q	V	P	V	R	I	V	G	R	F	V	L	D	N	H	V	D			
UniRef90_UPI0002378E38	M	P	E	K	D	A	G	T	Y	H	□	I	N	P	F	D	L	T	K	V	WP	H	G	D	Y	P	L	I	E	V	G	E	L	E	L	N	R	N	P	E			
UniRef90_UPI0004759BCF	F	D	Q	A	F	A	D	S	F	P	F	D	□	V	L	D	A	T	K	I	□	P	E	D	□	L	P	V	R	V	G	R	L	V	L	N	R	N	P	V	D		
UniRef90_Q1QDB0	F	T	E	E	E	A	N	D	F	P	F	D	H	L	D	A	T	K	L	I	P	E	E	M	V	P	V	K	I	V	G	K	M	V	L	N	R	Y	P	D			
UniRef90_A8CWF1	MT	F	E	Q	A	E	K	F	R	F	N	P	F	D	L	T	K	I	W	P	Q	A	E	Y	P	L	I	K	V	G	K	M	T	L	N	R	N	P	N				
UniRef90_Q9I1W8	I	P	E	N	Q	Q	D	S	F	D	F	D	L	L	D	P	T	K	L	V	P	E	E	□	L	V	P	V	R	V	G	R	M	V	L	N	R	N	P	D			
UniRef90_C5AP82	M	P	E	□	D	A	D	T	Y	R	I	N	P	F	D	L	T	K	V	WP	H	G	D	Y	P	L	I	E	I	G	E	M	E	L	N	R	N	P	E				
UniRef90_D2QLN8	V	E	E	E	D	E	H	K	F	D	F	D	I	L	D	S	T	K	L	I	P	E	E	L	V	P	I	V	R	I	G	K	M	T	L	N	R	N	P	D			
UniRef90_UPI00047BA364	I	P	E	E	D	E	H	K	F	D	F	D	I	L	D	P	T	K	L	I	P	E	S	L	V	P	□	L	V	G	K	M	T	L	N	R	N	P	D				
UniRef90_D8NYP9	M	P	E	A	D	A	A	G	Y	R	I	N	P	F	D	L	T	K	V	WP	H	K	D	Y	P	L	I	D	V	G	V	L	E	L	N	R	N	P	D				
UniRef90_F0SCD5	V	P	E	E	D	E	G	K	F	E	F	D	L	D	P	T	K	I	□	P	E	E	□	L	V	P	V	Q	I	I	G	K	M	T	L	N	R	N	P	D			
UniRef90_E5Y7Y1	M	P	E	A	D	A	E	K	□	P	Y	H	□	P	F	D	L	T	K	V	W	Y	H	K	D	Y	P	L	I	E	V	G	E	L	E	L	N	R	N	P	E		
UniRef90_H8MMX5	L	E	E	K	D	A	Q	A	L	G	V	□	I	D	L	D	A	T	K	I	□	P	E	E	□	A	P	V	Q	P	V	G	K	L	T	L	N	R	N	P	T		
UniRef90_UPI00040D302E	V	P	E	E	D	E	F	K	F	D	F	D	I	L	D	A	T	K	L	I	P	E	E	L	V	P	L	K	P	I	P	G	K	M	V	L	N	R	N	P	D		
UniRef90_A1BAY0	F	D	Q	E	□	A	D	S	□	P	W	D	□	V	L	D	A	T	K	I	□	P	E	E	□	V	P	L	R	M	V	G	R	L	V	L	N	R	N	P	D		
UniRef90_V4RAM5	M	P	E	A	D	A	D	K	H	W	Y	N	P	F	D	L	T	K	V	WP	H	G	D	Y	P	L	I	E	V	G	L	E	L	N	R	N	P	E					
UniRef90_W8RNU0	V	E	E	A	D	E	H	K	F	D	F	D	I	L	D	P	T	K	I	□	P	E	E	□	L	V	P	V	Q	K	L	G	K	M	T	L	N	R	N	P	D		
UniRef90_A0A023H6A5	M	P	E	H	E	A	E	K	T	P	Y	N	P	F	D	L	T	K	V	WP	H	G	D	Y	P	L	I	E	V	G													

QUERY	N	Y	F	A	E	V	E	Q	L	A	F	D	P	S	N	M	P	P	G	I	E	A	S	P	D	K	M	L	Q	G	R	L	F	A	Y	P	D	T	H	R	
UniRef90_R7U0D1	N	Y	F	A	E	V	E	Q	L	A	F	D	P	S	N	M	P	P	G	I	E	A	S	P	D	K	M	L	Q	G	R	L	F	A	Y	S	D	T	H	R	
UniRef90_UPI00035944A2	N	Y	F	A	E	V	E	Q	L	A	F	D	P	S	N	M	P	P	G	I	E	A	S	P	D	K	M	L	Q	G	R	L	F	A	Y	S	D	T	H	R	
UniRef90_M9UWB5	N	Y	F	A	E	V	E	Q	L	A	F	D	P	S	N	M	P	P	G	I	E	A	S	P	D	K	M	L	Q	G	R	L	F	A	Y	S	N	D	T	H	R
UniRef90_G9C5E5	N	Y	F	A	E	V	E	Q	L	A	F	D	P	S	N	M	P	P	G	I	E	P	S	P	D	K	M	L	Q	G	R	L	F	A	Y	S	D	T	H	R	
UniRef90_K4MB62	N	Y	F	A	E	V	E	Q	A	A	F	D	P	S	N	M	P	P	G	I	E	G	S	P	D	K	M	L	Q	G	R	L	F	A	Y	H	D	T	H	R	
UniRef90_E2C018	N	Y	F	A	D	V	E	Q	M	A	F	D	P	S	N	M	P	P	G	I	E	P	S	P	D	K	M	L	Q	G	R	L	F	A	Y	G	D	T	H	R	
UniRef90_L7M329	N	Y	F	S	E	V	E	Q	I	A	F	D	P	S	N	M	P	P	G	I	E	P	S	P	D	K	M	L	Q	G	R	L	F	A	Y	S	D	T	H	R	
UniRef90_J9HGP0	N	Y	F	A	E	V	E	Q	I	A	F	D	P	S	N	M	P	P	G	I	E	A	S	P	D	K	M	L	Q	G	R	L	F	A	Y	T	D	T	H	R	
UniRef90_UPI00046252BF	N	Y	F	A	E	V	E	Q	L	A	F	D	P	S	N	M	P	P	G	I	E	P	S	P	D	K	M	L	Q	G	R	L	F	A	Y	Q	D	T	H	R	
UniRef90_F6DQ92	N	F	F	A	E	V	E	Q	A	A	F	D	P	S	N	M	P	P	G	I	E	A	S	P	D	R	M	L	Q	G	R	L	F	A	Y	P	D	T	Q	R	
UniRef90_UPI00040AFC23	N	Y	F	A	E	V	E	Q	S	A	F	D	P	S	N	M	P	P	G	I	E	S	F	S	P	D	K	M	L	Q	G	R	L	F	A	Y	G	D	T	H	R
UniRef90_E3HUA7	N	Y	F	A	E	V	E	Q	A	A	F	T	P	S	N	M	P	P	G	I	E	G	F	S	A	D	K	M	L	Q	G	R	L	F	A	Y	G	D	T	H	R
UniRef90_W3AHJ1	N	Y	F	A	E	V	E	Q	A	T	F	D	P	S	N	M	P	P	G	I	E	D	V	S	P	D	K	M	L	Q	G	R	L	F	A	Y	H	D	T	H	R
UniRef90_S4REW1	D	Y	F	A	E	V	E	Q	I	A	F	D	P	S	N	M	P	P	G	I	E	P	S	P	D	K	M	L	Q	G	R	L	F	A	Y	P	D	T	H	R	
UniRef90_G7Q8R8	N	Y	F	A	E	V	E	Q	A	A	F	D	P	S	N	M	P	P	G	I	E	A	S	P	D	K	M	L	Q	G	R	L	F	A	Y	H	D	T	H	R	
UniRef90_E0VNL6	N	Y	F	A	E	V	E	Q	I	A	F	D	P	S	N	M	P	P	G	I	E	P	S	P	D	K	M	L	Q	G	R	L	F	A	Y	A	D	T	H	R	
UniRef90_J9IIR7	N	Y	F	S	E	T	E	Q	I	A	F	D	P	S	N	M	P	P	G	I	E	P	S	M	D	K	M	L	Q	G	R	L	F	A	Y	P	D	T	H	R	
UniRef90_UPI0003A87E3C	N	F	F	S	E	T	E	Q	V	A	F	D	P	S	N	M	P	P	G	I	E	D	F	T	N	D	P	L	L	Q	G	R	L	F	A	Y	V	D	T	H	R
UniRef90_W7CKT1	N	Y	F	A	T	I	E	Q	A	A	F	S	P	A	N	I	V	P	G	I	E	D	F	S	P	D	K	M	L	H	G	R	V	F	A	Y	P	D	T	Q	R
UniRef90_K2HK23	N	Y	F	A	E	V	E	Q	S	A	F	S	P	A	N	V	V	P	G	I	E	S	H	S	P	D	K	M	L	Q	G	R	L	F	A	Y	A	D	T	H	R
UniRef90_A9B4C7	N	Y	F	A	E	V	E	Q	A	A	F	E	P	S	N	I	V	P	G	I	E	G	F	S	P	D	K	M	L	Q	G	R	L	F	A	Y	A	D	T	H	R
UniRef90_T1F193	N	H	F	A	E	V	E	Q	V	A	F	S	P	A	H	L	V	P	G	I	E	P	S	P	D	K	M	L	H	G	R	L	F	A	Y	S	D	T	H	R	
UniRef90_H2EZP3	N	Y	F	A	E	V	E	Q	S	A	F	S	P	A	S	L	I	P	G	I	E	A	S	P	D	K	M	L	Q	G	R	L	F	A	Y	N	D	T	H	R	
UniRef90_S9PJ95	N	F	F	A	E	T	E	Q	V	A	F	D	P	S	N	M	P	P	G	I	E	D	F	T	N	D	P	L	L	Q	G	R	L	F	A	Y	N	D	T	H	R
UniRef90_H2B639	N	Y	F	A	E	V	E	Q	I	A	F	D	P	S	N	M	P	P	G	I	E	P	S	P	D	K	M	L	Q	G	R	L	F	A	Y	A	D	T	H	R	
UniRef90_UPI00047B391B	N	Y	F	A	D	V	E	Q	A	A	F	A	P	S	N	L	V	P	G	I	E	S	Y	S	P	D	K	M	L	Q	G	R	L	F	A	Y	G	D	T	H	R
UniRef90_I4MXB3	N	Y	F	A	E	V	E	Q	A	A	F	G	P	S	N	M	P	P	G	I	E	G	L	S	P	D	R	M	L	Q	G	R	L	F	A	Y	A	D	T	H	R
UniRef90_UPI0003B34154	N	Y	F	A	E	V	E	Q	A	A	F	S	P	G	H	F	V	P	G	I	E	A	S	P	D	K	M	L	Q	G	R	L	F	A	Y	S	D	T	H	R	
UniRef90_UPI000415AF42	N	F	F	A	E	T	E	Q	V	A	F	D	P	S	N	M	P	P	G	I	E	D	F	T	N	D	P	L	L	A	G	R	I	H	S	V	D	T	H	R	
UniRef90_I4DMH7	N	Y	F	A	E	V	E	Q	I	A	F	D	P	S	N	L	V	P	G	I	E	P	S	P	D	K	M	L	Q	G	R	L	F	A	Y	S	D	T	H	R	
UniRef90_Q0W6G9	N	F	F	A	E	V	E	Q	V	A	F	D	P	S	N	L	V	P	G	I	E	D	F	T	N	D	P	L	L	Q	G	R	L	F	A	Y	L	D	T	H	R
UniRef90_UPI000363CFEE	N	Y	F	A	E	V	E	Q	A	T	F	S	P	G	S	F	V	P	G	I	E	A	S	P	D	K	M	L	Q	G	R	L	F	A	Y	N	D	T	H	R	
UniRef90_UPI00037A9124	N	F	F	F	E	T	E	Q	V	A	F	Q	T	G	N	V	V	P	G	I	E	D	F	T	N	D	P	L	L	Q	G	R	L	F	A	Y	L	D	T	H	R
UniRef90_F6AI31	N	F	F	A	E	T	E	Q	V	A	F	Q	M	A	N	I	V	P	G	I	E	D	F	T	N	D	P	L	L	Q	G	R	L	F	A	Y	T	D	T	H	R
UniRef90_K7SKB4	N	F	F	A	E	T	E	Q	V	A	F	D	P	S	N	M	P	P	G	I	E	G	F	T	N	D	P	L	L	Q	G	R	L	F	A	Y	L	D	T	H	R
UniRef90_P17336	N	Y	F	A	E	V	E	Q	I	A	F	S	P	A	H	L	V	P	G	I	E	P	S	P	D	K	M	L	H	G	R	L	F	A	Y	S	D	T	H	R	
UniRef90_W2S118	N	Y	F	A	E	V	E	Q	A	A	F	S	P	A	H	L	V	P	G	I	E	F	S	P	D	K	M	L	Q	G	R	L	F	A	Y	T	D	T	H	R	
UniRef90_F6F2H9	N	F	F	A	E	T	E	Q	V	A	F	D	P	S	N	L	V	P	G	I	E	G	F	S	N	D	P	L	L	Q	G	R	L	F	A	Y	L	D	T	H	R
UniRef90_UPI0002378E38	N	Y	F	A	E	V	E	Q	A	A	F	A	P	S	T	I	V	P	G	I	E	S	F	S	P	D	K	M	L	Q	G	R	L	F	A	Y	G	D	T	H	R
UniRef90_UPI0004759BCF	N	F	F	A	E	T	E	Q	V	A	F	D	P	S	N	M	P	P	G	I	E	D	F	T	N	D	P	L	L	Q	G	R	L	F	A	Y	L	D	T	H	R
UniRef90_Q1QDB0	N	F	F	A	E	T	E	Q	V	A	F	D	P	S	N	M	P	P	G	I	E	D	F	S	N	D	P	L	L	Q	G	R	L	F	A	Y	L	D	T	H	R
UniRef90_A8CWF1	N	Y	F	A	E	V	E	Q	I	A	F	S	P	S	H	V	P	P	G	I	E	A	S	P	D	K	M	L	Q	G	R	L	F	A	Y	A	D	T	H	R	
UniRef90_Q9I1W8	N	F	F	A	E	T	E	Q	V	A	F	H	V	G	H	V	V	P	G	I	E	D	F	T	N	D	P	L	L	Q	G	R	L	F	A	Y	T	D	T	H	R
UniRef90_C5AP82	N	Y	F	A	E	T	E	Q	S	A	F	E	P	S	N	V	V	P	G	I	E	G	F	S	N	D	P	L	L	Q	G	R	L	F	A	Y	A	D	T	H	R
UniRef90_D2QLN8	N	Y	F	A	E	T	E	Q	V	A	F	H	L	G	H	V	V	P	G	I	E	D	F	S	N	D	P	L	L	Q	G	R	L	F	A	Y	T	D	T	H	R
UniRef90_UPI00047BA364	N	Y	F	S	E	T	E	Q	V	A	F	D	P	S	N	I	V	P	G	I	E	D	F	S	D	D	P	L	L	Q	G	R	L	F	A	Y	L	D	T	H	R
UniRef90_D8NYP9	N	Y	F	A	E	V	E	Q	S	A	F	T	P	A	N	V	V	P	G	I	E	G	F	S	P	D	K	M	L	Q	G	R	L	F	A	Y	G	D	T	H	R
UniRef90_F0SCD5	N	F	F	A	E	T	E	Q	V	A	F	H	V	G	H	V	V	P	G	I	E	D	F	T	N	D	P	L	L	Q	G	R	L	F	A	Y	T	D	T	H	R
UniRef90_E5Y7Y1	N	Y	F	A	E	V	E	Q	A	A	F	N	P	A	N	V	V	P	G	I	E	S	F	S	P	D	K	M	L	Q	G	R	L	F	A	Y	G	D	T	H	R
UniRef90_H8MMX5	N	F	F	A	E	T	E	Q	V	A	F	H	V	G	H	V	V	P	G	I	E	D	F	T	N	D	P	L	L	Q	G	R	L	F	A	Y	L	D	T	H	R
UniRef90_UPI00040D302E	N	F	F	A	E	T	E	Q	V	A	F	H	P	G	N	V	V	P	G	I	E	D	V	T	N	D	P	L	L	Q	G	R	L	F	A	Y	V	D	T	H	R
UniRef90_A1BAY0	N	F	F	A	E	T	E	Q	V	A	F	L	P	S	N	I	V	P	G	I	E	D	F	S	D	D	P	L	L	Q	G	R	L	F	A	Y	L	D	T	H	R
UniRef90_V4RAM5	N	Y	F	A	E	V	E	Q	A	G	L	T	P	A	N	V	I	P	G	I	E	G	H	S	P	D	K	M	L	Q	G	R	L	F	A	Y	A	D	T	H	R
UniRef90_W8RNU0	N	F	F	A	E	T	E	Q	A	A	F	H	L	G	H	L	V	P	G	I	E	D	F	T	N	D															

QUERY	H	R	L	G	P	N	Y	L	Q	I	P	V	N	C	P	Y	R	A	R	V	A	N	Y	Q	R	D	G	P	M	C	M	M	D	N	Q	G	G	A	P	N			
UniRef90_R7U0D1	H	R	L	G	P	N	Y	L	Q	I	P	V	N	C	P	Y	R	A	R	V	A	N	Y	Q	R	D	G	P	M	C	M	M	D	N	Q	G <td>G<td>A</td><td>P</td><td>N</td></td>	G <td>A</td> <td>P</td> <td>N</td>	A	P	N			
UniRef90_UPI00035944A2	H	R	L	G	T	N	Y	L	Q	I	P	V	N	C	P	F	S	T	R	V	A	R	N	Y	Q	R	D	G	P	Q	N	V	D	D	N	Q	E	G	A	P	N		
UniRef90_M9UWB5	H	R	L	G	A	N	Y	T	Q	I	P	V	N	C	P	Y	R	S	K	I	A	R	N	Y	Q	R	D	G	P	M	T	V	D	N	Q	E	S	A	P	N			
UniRef90_G9C5E5	H	R	L	G	P	N	Y	L	Q	I	P	V	N	C	P	Y	R	S	K	I	A	R	N	Y	Q	R	D	G	P	Q	A	L	V	D	N	Q	G	S	A	P	N		
UniRef90_K4MB62	H	R	L	G	P	N	Y	L	Q	I	P	V	N	R	S	K	N	S	P	E	A	S	Y	Q	R	D	G	F	M	R	V	D	N	Q	G	S	G	A	P	N			
UniRef90_E2C018	H	R	L	G	P	N	H	L	Q	I	P	V	N	C	P	Y	K	T	I	S	A	M	N	Y	Q	R	D	G	F	G	N	M	P	L	L	Y	N	Q	G	G	A	P	N
UniRef90_L7M329	H	R	L	G	P	N	F	M	Q	I	P	V	N	C	P	Y	K	A	R	T	A	S	Y	E	R	D	G	F	M	T	V	K	E	I	Q	D	G	C	A	P	N		
UniRef90_J9HGP0	H	R	L	G	A	N	Y	T	Q	I	P	V	N	C	P	Y	R	V	S	L	A	R	N	Y	Q	R	D	G	P	M	N	C	T	D	N	Q	G	G	A	P	N		
UniRef90_UPI00046252BF	H	R	L	G	P	N	Y	L	Q	I	P	V	N	C	P	Y	Q	T	Q	V	A	S	Y	H	R	D	G	L	M	C	I	S	G	N	Q	G	G	A	P	N			
UniRef90_F6DQ92	H	R	L	G	P	N	F	H	Q	I	P	I	N	A	P	K	A	A	K	A	N	S	Y	Q	R	D	G	A	M	R	F	D	N	N	G	K	G	A	V	N			
UniRef90_UPI00040AFC23	Y	R	L	G	G	N	H	G	L	L	P	V	N	R	P	H	A	A	V	A	S	N	Y	Q	R	D	G	A	M	R	F	D	N	N	G	K	G	A	V	N			
UniRef90_E3HUA7	Y	R	L	G	I	N	H	H	Q	I	P	V	N	A	P	R	C	P	F	H	S	F	H	R	D	G	A	G	R	V	D	N	G	A	G	A	T	L	N				
UniRef90_W3AHJ1	Y	R	V	G	A	N	H	Q	M	L	P	I	N	A	A	K	N	E	V	N	N	N	Y	Q	R	D	G	A	G	R	M	F	G	A	N	G	G	S	V	Y			
UniRef90_S4REW1	H	R	L	G	A	N	Y	L	H	L	P	V	N	C	P	F	R	A	R	V	R	N	N	Y	Q	R	D	G	P	M	C	M	F	D	N	Q	A	G	A	P	N		
UniRef90_G7Q8R8	H	R	L	G	P	N	Y	Q	L	I	P	V	N	A	P	Q	K	A	T	T	V	A	N	Y	Q	R	D	G	F	M	R	T	D	N	G	G	A	G	A	P	N		
UniRef90_E0VNL6	H	R	L	G	A	N	Y	L	Q	I	P	V	N	C	P	Y	R	T	V	A	N	Y	Q	R	D	G	F	P	M	N	T	Y	D	N	Q	D	G	A	P	N			
UniRef90_J9IIR7	H	R	L	G	A	N	F	E	Q	I	P	I	N	C	P	Y	R	A	R	V	A	N	Y	Q	R	D	G	P	A	T	V	N	G	N	Q	G	N	G					

QUERY	Y	Y	P	N	S	F	S	A	P	E	H	Q	P	S	A	L	E	H	R	T	F	S	G	D	V	Q	R	F	N	S	A	N	D	D	N	V	T	Q	V					
UniRef90_R7U0D1	Y	F	P	N	S	F	T	G	G	P	Q	D	S	P	A	F	L	E	H	E	T	T	F	S	G	D	V	Q	R	F	N	S	A	N	D	D	N	F	T	Q	V			
UniRef90_UPI00035944A2	Y	F	P	N	S	F	T	G	G	P	V	D	S	P	A	F	L	E	H	E	T	T	F	S	G	D	V	Q	R	F	N	S	A	N	D	D	N	F	T	Q	V			
UniRef90_M9UWB5	Y	F	P	N	S	F	T	G	G	P	M	D	C	K	R	H	S	E	S	T	F	T	C	S	T	D	V	Q	R	F	N	S	A	N	D	D	N	F	T	Q	V			
UniRef90_G9C5E5	Y	F	P	N	S	F	T	G	G	P	T	E	V	P	G	V	G	L	S	K	F	T	T	V	G	D	V	Q	R	F	N	S	A	N	D	D	N	F	T	Q	V			
UniRef90_K4MB62	Y	W	P	N	S	F	T	G	G	P	A	D	P	S	K	A	L	E	S	K	F	K	I	S	G	M	A	R	T	P	Y	T	H	P	D	D	F	V	Q	V				
UniRef90_E2C018	Y	Y	P	N	S	F	N	G	P	K	E	C	P	T	V	R	S	P	S	F	P	V	S	G	D	V	Q	R	F	N	S	A	N	D	D	F	G	Q	V					
UniRef90_L7M329	Y	F	P	N	S	F	T	G	G	P	L	D	N	P	K	W	K	E	S	K	F	S	V	S	G	D	V	Q	R	F	N	S	A	N	D	D	F	G	Q	V				
UniRef90_J9HGP0	Y	Y	P	N	S	F	T	G	G	P	E	P	C	P	F	A	Q	N	S	K	H	S	V	S	G	D	V	Q	R	F	N	S	A	N	D	D	F	A	Q	V				
UniRef90_UPI00046252BF	Y	Y	P	N	S	F	T	G	G	P	V	D	H	P	N	L	K	N	S	H	V	Y	I	S	G	D	V	Q	R	F	N	S	A	N	D	D	N	V	S	Q	V			
UniRef90_F6DQ92	Y	Y	P	N	S	F	T	G	G	P	A	D	H	P	N	L	K	N	S	H	V	Y	I	S	G	D	V	Q	R	F	N	S	A	N	D	D	N	V	S	Q	V			
UniRef90_UPI00040AFC23	Y	E	P	N	S	F	T	G	G	P	K	Q	D	P	S	A	F	E	P	P	L	P	L	V	R	G	A	A	D	R	Y	D	H	R	V	L	G	N	D	D	Y	S	Q	V
UniRef90_E3HUA7	Y	E	P	N	S	A	G	Q	W	K	E	T	A	P	S	A	G	E	P	P	L	P	L	L	D	G	Q	A	A	R	W	N	H	R	V	L	G	N	D	D	Y	S	Q	V
UniRef90_W3AHJ1	Y	E	P	N	S	Y	G	G	P	V	E	E	A	P	A	S	K	E	P	A	L	L	A	V	E	G	F	T	D	S	V	P	Y	R	E	D	D	F	Y	T	Q	V		
UniRef90_S4REW1	Y	Y	P	N	S	F	T	G	G	P	E	Q	Q	P	H	L	R	E	H	K	F	A	V	E	S	A	D	V	Q	R	F	N	S	A	N	D	D	N	Y	S	Q	V		
UniRef90_G7Q8R8	Y	W	P	N	S	F	T	G	G	P	A	P	E	P	E	A	L	E	P	H	L	P	K	A	T	G	E	A	G	R	F	A	S	T	H	P	D	D	F	S	Q	V		
UniRef90_E0VNL6	Y	F	P	N	S	F	N	G	P	M	D	C	K	Q	V	Q	H	V	F	K	A	T	G	V	A	R	F	N	S	A	N	D	D	N	F	S	Q	V						
UniRef90_J9IIR7	Y	E	P	N	S	F	T	G	G	P	V	E	D	P	S	S	R	W	A	P	H	A	L	T	G	T	T	G	R	Y	K	H	S	H	P	D	D	Y	E					

QUERY	R	T	F	Y	L	K	V	L	N	E	E	Q	R	K	R	L	C	E	N	I	A	G	H	L	K	D	A	Q	L	F	Q	K	K	A	V	K	N	F	S					
UniRef90_R7U0D1	G	I	F	W	R	E	T	L	T	E	E	D	R	K	R	L	I	T	N	M	S	G	H	L	K	N	A	Q	E	F	L	Q	K	R	A	V	K	N	F	S				
UniRef90_UPI00035944A2	G	N	L	F	W	N	K	V	L	S	P	D	E	R	T	R	L	V	D	N	I	T	G	H	L	K	N	A	Q	E	F	L	Q	K	R	A	V	K	N	F	S			
UniRef90_M9UWB5	G	N	L	F	R	H	V	M	N	E	E	D	R	T	R	L	V	D	N	I	A	G	H	L	K	N	A	Q	E	F	L	Q	K	R	A	V	K	N	F	S				
UniRef90_G9C5E5	A	V	F	W	K	K	T	L	N	E	E	Q	R	K	R	L	V	D	N	I	V	D	H	L	R	H	S	V	G	F	L	Q	E	R	A	V	K	N	F	S				
UniRef90_K4MB62	G	N	L	F	Y	R	N	V	M	N	D	E	D	R	K	R	L	V	D	N	I	G	N	L	V	S	H	L	S	G	A	I	K	S	I	V	E	R	A	V	K	N	F	S
UniRef90_E2C018	T	T	F	W	Q	K	V	L	D	K	S	A	K	R	R	L	V	N	N	M	V	A	S	L	S	S	G	A	S	T	F	I	V	E	R	A	V	K	N	F	S			
UniRef90_L7M329	G	N	F	W	K	I	L	S	A	E	E	R	D	R	L	T	S	N	I	A	N	H	V	K	D	A	Q	D	F	I	R	Q	R	A	V	K	N	F	S					
UniRef90_J9HGP0	S	V	F	Y	R	V	L	D	E	A	E	R	K	R	M	I	S	N	L	V	N	H	M	S	N	A	S	P	F	I	Q	E	R	A	V	K	N	F	S					
UniRef90_UPI00046252BF	Q	D	F	Y	T	K	V	L	T	E	E	R	K	R	L	C	E	N	I	A	G	H	L	K	D	A	Q	L	F	I	Q	K	R	A	V	K	N	F	S					
UniRef90_F6DQ92	G	E	L	Y	R	R	V	M	S	D	Q	D	R	A	N	L	V	S	N	I	A	D	S	L	G	Q	A	Q	Q	R	I	Q	L	R	Q	T	A	L	F	S				
UniRef90_UPI00040AFC23	A	G	A	L	F	R	L	M	D	D	G	A	R	T	R	L	M	D	N	I	A	A	S	M	R	P	V	P	E	E	I	Q	R	R	Q	L	E	H	F	R				
UniRef90_E3HUA7	P	G	A	L	F	R	L	M	T	P	A	Q	Q	E	L	L	F	G	N	I	G	R	H	M	A	G	V	P	E	E	I	Q	R	R	Q	L	E	H	F	R				
UniRef90_W3AHJ1	G	D	L	Y	R	L	Q	T	P	E	E	Q	E	R	L	V	A	T	F	V	G	G	L	S	A	V	T	K	E	I	K	L	R	Q	I	S	H	L	Y					
UniRef90_S4REW1	N	T	F	Y	G	S	V	L	S	E	A	E	R	T	R	L	V	Q	N	I	A	G	N	L	K	E	A	Q	K	F	I	Q	E	R	M	V	K	Q	L	T				
UniRef90_G7Q8R8	G	E	L	Y	R	K	A	L	N	D	M	D	R	E	R	L	V	Q	N	I	V	D	H	L	K	D	A	L	P	R	I	Q	K	R	Q	C	A	L	F	H				
UniRef90_E0VNL6	N	D	L	W	S	K	V	L	N	D	E	E	R	E	R	L	V	S	N	I	A	D	H	L	K	S	A	S	G	F	I	Q	D	R	A	T	K	N	F	S				
UniRef90_J9IIR7	R	T	L	Y	R	K	V	L	S	E	A	S	R	Q	H	L	T	D	N	I	L	G	S	M	K	P	V	R	R	D	I	Q	E	K	C	L	K	N	F	S				
UniRef90_UPI0003A87E3C	R	L	F	W	L	S	Q	T	P	S	E	Q	T	H	L	I	N	A	Y	R	F	E	L	S	R	V	T	V	P	A	I	R	V	R	L	L	S	M	L	A				
UniRef90_W7CKT1	G	D	L	Y	R	L	L	S	E	D	E	K	Q	R	L	V	D	N	I	V	G	G	L	S	T	V	R	E	E	I	K	I	R	Q	T	K	Q	F	Y					
UniRef90_K2HK23	A	G	D	L	F	R	L	M	S	K	E	Q	K	Q	L	F	S	N	I	A	A	A	M	G	G	V	P	E	N	I	C	R	R	Q	L	E	H	F	T					
UniRef90_A9B4C7	P	G	N	L	F	R	L	M	N	A	D	Q	Q	Q	L	F	S	N	I	A	A	A	M	G	G	V	P	E	E	I	Q	L	R	Q	I	E	H	F	L					
UniRef90_T1F193	T	T	F	W	E	K	E	L	K	A	D	E	R	E	R	L	V	E	N	I	A	N	H	L	K	N	A	K	E	F	I	R	R	R	A	V	K	N	F	S				
UniRef90_H2E2P3	G	N	L	F	Y	R	N	V	M	T	P	E	Q	E	R	L	V	E	N	I	V	G	H	L	K	N	A	R	K	D	I	Q	L	K	M	V	E	L	F	S				
UniRef90_S9PJ95	G	M	F	F	R	N	S	M	S	R	P	E	Q	E	H	L	I	A	L	F	E	L	G	K	V	E	R	K	E	I	V	R	A	R	V	V	E	Q	L	A				
UniRef90_H2B639	G	V	F	F	R	N	V	L	N	K	E	E	R	E	R	L	V	D	N	I	A	S	H	I	V	N	A	Q	D	F	L	Q	E	R	A	I	K	Q	F	G				
UniRef90_UPI00047B391B	G	I	L	F	R	E	K	M	T	A	E	Q	Q	V	L	E	E	N	T	A	R	A	L	D	G	A	S	E	A	T	V	I	E	R	H	I	A	N	C	T				
UniRef90_I4MXB3	A	G	A	L	F	R	L	M	N	E	A	Q	K	A	L	L	I	D	N	I	A	N	A	M	S	S	V	S	G	D	V	I	E	R	Q	L	P	Y	F	Y				
UniRef90_UPI0003B34154	G	D	L	Y	R	M	M	S	E	D	E	K	Q	R	L	V	D	A	F	V	G	H	M	K	P	V	R	D	E	I	I	K	R	Q	L	D	I	F	Y					
UniRef90_UPI000415AF42	R	L	F	F	D	S	Q	T	P	I	E	Q	A	H	I	A	A	F	R	F	E	L	S	K	V	T	V	P	A	V	R	E	R	V	V	S	M	L	A					
UniRef90_I4DMH7	T	A	L	Y	K	Q	V	F	D	A	E	K	A	R	C	V	A	N	I	V	G	N	L	K	D	A	G	F	L	Q	E	R	A	V	K	M	L	T						
UniRef90_Q0W6G9	T	L	F	W	N	S	M	T	E	P	E	K	E	H	I	V	K	A	F	H	F	E	V	G	K	V	K	S	L	E	I	R	Q	R	I	A	D	M	F	A				
UniRef90_UPI000363CFEE	G	D	L	Y	R	L	M	S	E	E	E	R	A	R	L	V	A	T	F	A	G	A	M	A	V	E	S	D	E	I	K	L	R	Q	I	S	H	F	Y					
UniRef90_UPI00037A9124	R	Q	F	F	L	S	Q	S	E	T	E	Q	T	H	I	K	D	A	F	V	F	E	L	S	K	V	E	T	P	N	I	R	E	R	I	V	A	H	L	L				
UniRef90_F6AI31	R	L	F	F	N	S	M	S	D	A	E	K	A	H	I	V	A	A	Y	S	F	E	L	G	K	V	E	R	L	Y	I	R	E	R	Q	V	E	L	L	A				
UniRef90_K7SKB4	R	Q	F	Y	I	S	Q	T	K	P	E	Q	T	H	I	K	N	A	F	V	F	E	L	S	K	V	E	T	P	N	I	R	S	R	V	V	A	H	L	L				
UniRef90_P17336	T	D	F	W	H	V	L	D	K	C	A	K	R	K	L	V	Q	N	I	A	G	H	L	S	N	A	S	Q	F	L	Q	E	R	A	V	K	N	F	T					
UniRef90_W2S118	R	A	F	W	R	K	V	L	S	E	E	R	S	R	V	E	N	I	F	N	S	M	K	D	C	K	P	Y	I	Q	D	R	A	I	Q	N	F	G						
UniRef90_F6F2H9	R	Q	F	F	I	S	Q	T	P	I	E	Q	K	H	I	G	D	A	L	V	F	E	L	S	K	C	E	R	I	D	I	R	E	R	I	V	S	N	L	R				
UniRef90_UPI0002378E38	P	G	D	L	F	R	L	M	T	P	E	Q	Q	K	V	L	F	A	N	T	A	R	A	I	G	A	R	K	E	I	Q	I	R	H	I	S	N	C	L					
UniRef90_UPI0004759BCF	R	L	F	Y	I	S	Q	L	P	I	E	Q	K	H	I	A	D	A	L	V	F	E	L	S	K	V	E	R	P	D	I	R	A	R	M	V	S	H	L	L				
UniRef90_Q1QDB0	R	M	F	Y	R	S	Q	T	V	E	Q	A	R	H	I	A	S	A	Y	A	F	E	L	G	K	V	D	T	A	H	V	I	R	S	R	T	L	S	H	L	R			
UniRef90_A8CWF1	T	D	F	Y	R	R	V	L	D	A	P	A	R	E	H	I	A	Q	N	I	A	G	H	L	C	A	A	S	Q	F	I	Q	E	R	A	V	K	N	F	S				
UniRef90_Q9I1W8	A	L	F	W	H	S	M	S	E	A	E	Q	A	H	I	V	A	A	Y	S	F	E	L	S	K	V	E	R	Q	S	I	R	E	R	E	V	N	Q	L	L				
UniRef90_C5AP82	K	L	F	W	T	K	V	L	D	E	G	G	R	K	R	L	V	E	N	I	V	T	S	M	G	D	S	P	R	H	I	Q	E	R	M	I	A	H	W	F				
UniRef90_D2QLN8	K	L	F	W	N	S	Q	S	P	E	K	T	H	I	V	K	A	L	R	F	E	L	G	K	V	V	V	E	D	I	R	K	R	M	L	I	H	L	S					
UniRef90_UPI00047BA364	R	L	F	W	L	S	Q	T	D	V	I	E	K	N	H	I	V	G	A	Y	S	F	E	L	G	K	V	A	R	P	W	I	R	E	R	V	V	D	Q	L	T			
UniRef90_D8NYP9	A	G	A	L	F	R	L	F	D	A	G	Q	R	Q	R	L	F	A	T	F	A	G	A	M	A	G	V	P	E	D	I	Q	R	A	Q	I	E	H	F	T				
UniRef90_F0SCD5	R	L	F	F	R	S	Q	S	A	P	E	Q	A	H	I	L	D	A	F	S	F	E	L	G	K	V	R	D	V	N	I	R	K	R	M	V	I	G	V	L	S			
UniRef90_E5Y7Y1	P	G	K	L	F	R	V	M	T	P	E	Q	Q	E	A	L	F	G	N	T	A	R	A	M	A	G	V	P	R	E	I	Q	I	R	H	I	Y	N	C	S				
UniRef90_H8MMX5	G	L	F	F	R	S	L	S	E	P	E	Q	Q	K	H	I	A	A	C	A	R	F	E	L	G	K	V	E	T	K	A	I	Q	E	R	V	L	E	H	F	A			
UniRef90_UPI00040D302E	T	L	F	W	N	S	L	T	E	V	I	E	K	K	H	I	V	Q	A	A	H	F	E	L	G	K	V	E	T	K	A	I	R	E	R	M	L	I	G	F	N			
UniRef90_A1BAY0	R	L	F	W	R	S	Q	T	E	N	E	Q	A	H	I	A	S	A	F	V	F	E	L	S	K	V	G	L	D	H	V	R	S	R	V	V	S	H	L	R				
UniRef90_V4RAM5	P	G	D	L	F	R	L	M	S	E	E	Q	K	A	Q	L	F	R	N	I	A	G	A	M	G	G	V	P	E	E	I	I	R	R	Q	L	A	H	F	Y				
UniRef90_W8RNU0	T	L	F	W	N	S	M	S	A	P	E	K	E	H	I	L	G	A	Y	S	F	E	L	G	K	V	E	R	V	F	I	R	E	R	Q	V	E	L	L	A				
UniRef90_A0A023H6A5	P	G	N	L	F	R	L	F	T	P	E	Q	K	E	R	L	F	A	N	I	A	D																						

QUERY	D	V	H	P	E	Y	G	S	R	I	Q	A	L	L	D	K	Y	N
UniRef90_R7U0D1	K	Q	C	D	P	E	Y	G	R	R	L	Q	E	A	L	D	K	H
UniRef90_UPI00035944A2	K	A	D	P	E	Y	F	G	R	R	L	R	E	G	L	D	Q	K
UniRef90_M9UWB5	Q	A	D	P	E	Y	G	A	G	I	L	R	R	A	L	E	K	L
UniRef90_G9C5E5	K	V	D	A	E	F	G	K	R	L	L	E	G	L		R	K	H
UniRef90_K4MB62	K	A	D	P	K	Y	G	R	K	V	L	A	E	G	L			
UniRef90_L2C018	Q	V	D	V	D	L	A	Q	R	L	L	T	E	G	L	E	K	
UniRef90_E7M329	K	A	H	P	E	C	A	Q	R	I	L	A	K	K	L	E	K	L
UniRef90_J9HGP0	E	V	D	A	D	F	G	R	Q	L		S	E	G	L	E	K	
UniRef90_UPI00046252BF	D	V	H	P	E	Y	G	T	C	I	Q	A	H	L		D	R	H
UniRef90_F6DQ92	K	A	D	P	D	Y	G	Q	K	V	L	A	E	G	L			
UniRef90_UPI00040AFC23	K	A	D	P	A	Y	G	A	G	V	L	A	E	R	L			
UniRef90_E3HUA7	K	A	D	P	A	Y	A	A	G	V	L	A	K	A	L			
UniRef90_W3AHJ1	K	A	D	P	E	F	A	G	T	R	V	L	A	E	G	L		
UniRef90_S4REW1	L	A	H	S	E	L	G	A	R	V	L	K	A	L	L	N	Q	H
UniRef90_G7Q8R8	K	A	D	A	Q	W	G	E	R	V	L	A	A	G	L			
UniRef90_E0VNL6	S	V	N	A	A	M	G											
UniRef90_J9IIR7	K	V	D	P	D	Y	A	G	R	I	L	A	K	G	L			
UniRef90_UPI0003A87E3C	N	V	D	P	V	L	A	E	G	V	L	A	T	G	L			
UniRef90_W7CKT1	K	A	D	K	D	Y	G	E	R	V	L	A	K	A	L	N		
UniRef90_K2HK23	Q	A	D	P	A	Y	G	A	G	V	L	K	A	K	L			
UniRef90_A9B4C7	K	A	D	P	A	Y	G	R	G	V	L	A	A	A	L			
UniRef90_T1F193	S	V	H	E	E	F	G	R	R	L		Q	A	K	L	D	Q	L
UniRef90_H2EZP3	K	A	D	K	D	Y	G	A	R	I	L	R	D	G	L			
UniRef90_S9PJ95	K	I	D	E	E	L	V	T	Q	V	L	A	E	G	L			
UniRef90_H2B639	S	A	D	V	N	F	G	R	M	L	R	R	E	R	I	N	H	Y
UniRef90_UPI00047B391B	K	A	D	P	A	Y	G	E	G	V	L	R	K	A	I	E	A	L
UniRef90_I4MXB3	Q	A	D	P	A	Y	G	E	G	I	L	A	R	A	L			
UniRef90_UPI0003B34154	K	A	D	P	D	Y	G	R	I	L		A	E	G	L			
UniRef90_UPI000415AF42	N	V	S	D	M	L	A	E	G	V	L	A	A	G	L			
UniRef90_I4DMH7	Q	V	H	P	D	L	G	S	K	V	L	A	A	G	V			
UniRef90_Q0W6G9	N	V	D	P	E	L	G	R	M	I	L	A	E	G	V			
UniRef90_UPI000363CFEE	K	A	D	P	E	Y	G	E	R	I	L	A	K	A	L	N		
UniRef90_UPI00037A9124	N	I	D	E	D	L	A	A	K	V	L	A	D	G	L			
UniRef90_F6A131	N	I	D	D	L	A	K	Q	V	A	L	A	A	N	V			
UniRef90_K7SKB4	N	V	D	E	T	L	A	K	G	V	L	A	E	G	L			
UniRef90_V17336	Q	V	H	A	D	F	G	R	M	L		T	E	E	L	N		
UniRef90_W2S118	K	V																

	1	10	20	30	40
UniRef90_G7QIP3			S R K T L T T A G G H P V	S Q N Q H S L T	
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UniRef90_UPI000346B90F	D D A K N R D L E G A R V	Q P A S D S H P T M T T A Q G G C P V	I S D D Q N S L K		
UniRef90_W4QCZ0		R V D H K G T K L T T N G G V R V	E N T D D S L K		
UniRef90_UPI00031A2C75		Q Q A S G D A Q V L T T N H G M P I	S D N Q N S L K		
UniRef90_UPI000262689F	N G N S K D E Q L E Q F	R S D E R D K H M T T N Q G L K V	S G D E F S L K		
UniRef90_UPI000395C252		E Q A G D G H P V M T T Q Q G L P V	S D N Q N S L R		
UniRef90_H2K234		Q E A Y V T Q G P L T T E A G A P V	A D N Q N S E T		
UniRef90_I3TH56		T R P T L T T A A G A P V	A S N Q Y S R T		
UniRef90_J2EX86		K K L T T A A G A P V	G D N N N S Q T		
UniRef90_E6V5F0	R N T K Q L Q L D G F	T T E H P A H L T T N Q G L Q I	P D N H N S L K		
UniRef90_UPI0002881FA1	D N Q K K K Q L E Q Y T V	S D E G K D L T T N H G V K V	N D D E H S L K		
UniRef90_K6VNT1		H Q P A Q G G L V M T T A Q G A P I	S D D Q N S L R		
UniRef90_K9PRY5		E D K K L T T A T G S P I	F D N Q N A I T		
UniRef90_I1XFU8		K Q K L T T I G G A P V	V D N Q N S M T		
UniRef90_M9S9S8		S P D K N L T S K N G A P V	P D T E H S L T		
UniRef90_Q8EN31	D D N K K I D Q L K K F Y R D N T D K	I M T T D E G V K I	S N D E N T L S		
UniRef90_F6EG04		A D Q P V P A T T S N S G I P V	S S D E T S L T		
UniRef90_UPI00036DB826	S K N K K D L Q L E T F	R A A D E G K P M T T N E G L K L	S E D E F S L K		
UniRef90_UPI00031BFDF1		N D E T K R P F L T H A S G T P V	A D N V N I L T		
UniRef90_W5QM85		I E D L S L N T V S T E D H F L T T N Q G L R I	N D N Q N S L K		
UniRef90_Q1GYP5	D K K N T T A K T R D L E S Y K S	D A T G Q P L R T N Q G V K I	A D N K N S L R		
UniRef90_C6WK51		D S D N T D P L T T A A G A P V	A D N R N S L T		
UniRef90_UPI0003100AB3		H Q T A G A G S A L T T Q Q G V P V	A D D Q N T L R		
UniRef90_UPI00047DC8DD	N E D S K N W Q L D D V R A D H	N N Q L L T T N Q G L R V	S N T D D S L K		
UniRef90_G2EGD0		D N K P K L T R Q T G A P V	G D N Q N V Q T		
UniRef90_A9I9M7		M T H A A G A P V	A D N L N I L T		
UniRef90_V4PHY6		T T T A G A P I	A D N N S L T		
UniRef90_H2EZP4	K D A K S T Q L A G H T V E D P	Q K G N V I T T N F G V A V	D D T D N S L K		
UniRef90_M2U368		Q Q A R G A D D T M T S A Q G A P V	S D D Q N W L K		
UniRef90_A1WB07		Q Q A A G G Q H P V L T T Q Q G I A V	P D N Q N T L R		
UniRef90_UPI00036DECBE	N K N P E Q P Q I P A S S P L R T D	D S S P L T T N V G Q P I	A D D Q N S L K		
UniRef90_G0PMJ5	A S D Q L K S Y R D N H	K E P H M M T T S S G A P V	L Y T K T A V Q T		
UniRef90_V4PUK0		S P E G H L T T N Q G I R V	A D N Q N S L K		
UniRef90_K9UIE6	N E Q S K D R S L E N Y R V	E P G Q K L T T D E G H P L	S N T D D S L K		
UniRef90_R6Z6Q3		D K K K Q L T A E N G R P I	A D N Q N I Q T		
UniRef90_UPI000426D98E		Q Q K T L T T N T G A P V	A G N Q S S K T		
UniRef90_J0JM79		S K K T L T T A A G R P V	E E N Q N S M T		
UniRef90_UPI0003730308		T D S R L T T N Q G A P V	G D N Q N S R T		
UniRef90_I3YZZ5	K T E Q L K Q F E K S F E G Q	T M T T R Q G L K V	N D T N N S L K		
UniRef90_D8K9C6		T D Q T K P T T T D A G I P V	A S N E H S L T		
UniRef90_G8M439		L T T A A G A P V	G D N Q N A Q T		
UniRef90_U4WI49		D K K P R L T T N Q G V P V	G D N Q N S R T		
UniRef90_W7YL46	N P S T K D E Q L E Q Y R V D N N G E K	M T T N Q G L R V	S D D E H S L K		
UniRef90_UPI0004283473	N S N A K V E E L E R N R E Y S	E G Q F I T T D H G T R I	N D N H N S L K		
UniRef90_C2FTL4		E N K K K I T T A S G A P V	N Y E D T M T		
UniRef90_UPI000475DCC1		Q Q A Q G D T P N L T T T T G I V V	A D N Q N Q L S		
UniRef90_A0A011Q7R6		E D K N K L T T S T G A P V	G D N Q H S L T		
UniRef90_I0ER29		T S P F G A P I	G D D N N V F T		
UniRef90_D7C2L8	D R K E R Q R E M Y R A A D P A E G P	L T T D Q G V A V	D H T D D S L T		
UniRef90_C7HUS5		R N N T K G E N P K I T R A S G A P V	E N N Q D S M T		
UniRef90_U4LC02		D A P V Y T T S N G C P V	M N Q A A Q R		
UniRef90_F2SJ21		P V Y T T S N G C P V	M D P E S S Q R		
UniRef90_UPI000347C19C		T A P Y S T D D A G H P V	P S D G L S Q S		
UniRef90_J2H6Y0		P T P L T T A F G A P V	V D N S N S M T		
UniRef90_R2T3H4		K K I T T S E G Q P V	A N N Q H S Q T		
UniRef90_W9BR69		Q T H L T D N F G H R I	S D N Q N S L K		
UniRef90_H8KQI0	S S T D K T K D L I P D T E N A E	Q Q Q L S T N G G T L I	N D N Q N S L K		
UniRef90_B6K7V1		E F N E K K E V P D H P T Y T T S T G C P I	F N P L A S Q R		
UniRef90_D6U1X1		D Q V N K K P P V T T N D A G I P T	A N D E H S L S		
UniRef90_UPI0004101A64	R D E K Q E Q L E R W	R V S P E G S A L T T D Q G I Q V	A D D T D D S L T		
UniRef90_A9BLW0		L T T A A G A P V	A N N Q D S L T		
UniRef90_W1SRN8	E N K K A V Q L K K F T I D N E E Q A G	L T T N Q G L R M A	E D E F S L K		
UniRef90_G1Y091		S Q E A G S A L T T N Q G L K V	S D D Q N S L R		
UniRef90_UPI00034D909B	D D A Q K Q V D N L S K A N T T E S G A M L	T D N M G H P V	S D D Q N S L R		
UniRef90_K3X6X9		T A S N G A P L	P N T A S T T		
UniRef90_P55306		N S K D S N T V P V Y T T N T G C P I	F N P M A A A R		
UniRef90_I3Y0R4		K T M T T T A G N P I	A D N Q N S L S		
UniRef90_UPI0004753F12		M T T A V G R P V	T D D Q T S V T		
UniRef90_I2N5G6		S D T P Y T T N N A G I P V	E S D E H S L S		
UniRef90_S0NXC6		K E W L T T A D G A P V	Y D N Q N S A T		
UniRef90_UPI00036B8F83	T G Q P T G A P Q D A V A Q G G	A F L T T S A Q G V R L	P D T D H S L K		
UniRef90_I0JV87	D R D A K Q E Q L D G V R Q D L T D	T H L T T Q Q G V R V	D H T D D S L T		
UniRef90_P30265		N Q L T T N E G Q P V	A D N Q H S Q T		
UniRef90_K7Z8Q6		S K K G L T T N G A P V	S D N Q N S L T		
UniRef90_UPI0003061142	N K K Q D Q L N D V K K D N	D G K A L T T N N G V K V	S E D E N T L T		
UniRef90_A0AMY5	S R D T A S N Q L I D Y K N N D S E V Q R E I	T T S S G T P V	G V K D A I Q T		
UniRef90_E5XTU8		E Q P S A A N N K A T T N D F G I P I	A S D N S L S		
UniRef90_UPI00047D287C	D P A S A K Q K Q L E S F H Q P A E A	V L T T N E G V I	S D D H N S L R		
UniRef90_K9DAS9		S Q P R L T T A S G I P L	A D N Q N S L S		
UniRef90_E1VVN7		P G Q D S E F L T T N Q G A P V	S D T D H S L K		
UniRef90_Q0SJL1		N P N G L T T V A G A P V	P D N Q N S L T		
UniRef90_H1ZBT5		E N K K L T T A S G R P Y	V E H E N S M T		
UniRef90_J9Y6W2	E A Y E R S F I M A K K P Q L	T T S A G A P V	S N E T T K T		
UniRef90_UPI00047B95E5		S T H G P V L T T T A G A P V	S D N Q N S V T		
UniRef90_D5BZL5		D S D R K T L T N D A G I P V	S S D E F S L T		
UniRef90_D6X4D0	R Q P A A N Q L L E H A K K I E H E	D R E S A T T N S G N P I	S Y K D A T L T		
UniRef90_UPI000478DD2E		K K L T T N D F G N I V	S D N Q N S L S		
UniRef90_W9AJ40	D K N K K K D Q L D D Y K V	T D Q G K A L T T N Q G L K M	S E D E F S L K		
UniRef90_UPI0004646437	Q D V K D E Q L D G Y R V D R	R Q G K L T T Q G V R V	D N T D D A V K		
UniRef90_S3XXH9		K R L T T T F G N V V	A D N Q N S L T		
UniRef90_J9IZ85		Q R K T L T N S Q G H P V	D D N Q N S L T		

	A	G	P	R	G	P	V	L	I	Q	D	T	H	L	I	E	K	L	A	H	F	N	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	Y	G	
UniRef90_G7QIP3	A	G	P	R	G	P	V	L	I	Q	D	T	H	L	I	E	K	L	A	H	F	N	R	E	R	I	P	E	R	V	V	H	A	K	G	A	G	A	Y	G	
UniRef90_F4ANL2	A	G	V	R	G	P	T	L	L	E	D	F	V	F	R	E	K	L	A	H	F	D	H	E	R	I	P	E	R	V	V	H	A	R	G	Y	G	A	H	G	
UniRef90_UPI000346B90F	A	G	E	R	G	P	T	L	L	E	D	F	H	F	R	E	K	M	T	H	F	D	H	E	R	I	P	E	R	V	V	H	A	R	G	F	G	A	H	G	
UniRef90_W4QCZ20	A	G	E	R	G	P	T	L	L	E	D	F	H	F	R	E	K	M	T	H	F	D	H	E	R	I	P	E	R	V	V	H	A	R	G	T	G	A	H	G	
UniRef90_UPI00031A2C75	S	G	A	R	G	P	T	L	L	E	D	F	V	L	R	E	K	I	T	H	F	D	H	E	R	I	P	E	R	I	V	H	A	R	G	T	G	A	H	G	
UniRef90_UPI000262689F	A	G	E	R	G	P	T	L	L	E	D	F	H	F	R	E	K	M	T	H	F	D	H	E	R	I	P	E	R	V	V	H	A	R	G	T	G	A	H	G	
UniRef90_UPI000395C252	A	Y	G	R	G	P	T	L	L	E	D	F	V	L	R	E	K	I	T	H	F	D	H	E	R	I	P	E	R	I	V	H	A	R	G	T	A	A	Y	G	
UniRef90_H2K234	A	G	V	R	G	P	T	L	L	E	D	F	V	L	R	E	K	L	A	H	F	N	R	E	R	I	P	E	R	V	V	H	A	R	G	S	G	A	F	G	
UniRef90_I3TH56	A	G	R	R	G	P	V	T	L	D	D	V	H	L	I	E	K	L	A	H	F	N	R	E	R	I	P	E	R	V	V	H	A	K	G	S	G	A	F	G	
UniRef90_J2EXH6	A	G	P	R	G	P	V	L	L	Q	D	F	V	W	L	R	E	K	L	A	H	F	D	H	E	R	I	P	E	R	R	M	H	A	K	G	S	G	A	F	G
UniRef90_E6V5F0	A	G	V	R	G	P	T	L	L	E	D	F	V	L	R	E	K	I	T	H	F	D	H	E	R	I	P	E	R	A	M	H	A	K	G	S	A	A	H	G	
UniRef90_UPI0002881FA1	A	G	D	R	G	P	T	L	L	E	D	F	H	F	R	E	K	M	T	H	F	D	H	E	R	I	P	E	R	V	V	H	A	R	G	T	A	A	H	G	
UniRef90_K6VNT1	V	G	S	S	G	P	T	L	L	E	D	F	V	L	R	D	K	I	F	H	F	D	H	E	R	I	P	E	R	V	V	H	A	R	G	Y	G	A	R	G	
UniRef90_K9PRY5	A	G	P	R	G	P	T	L	L	I	Q	D	V	Q	L	R	E	K	M	Q	Q	F	N	R	E	R	I	P	E	R	V	V	H	A	K	G	S	G	A	Y	G
UniRef90_I1XFU8	T	G	P	R	G	P	L	L	L	Q	D	V	W	F	L	E	K	M	A	H	F	D	R	E	R	I	P	E	R	R	M	H	A	K	G	S	G	A	F	G	
UniRef90_M9S9S8	A	G	P	R	G	P	M	M	L	Q	D	V	W	F	L	E	K	L	G	H	F	D	R	E	R	I	P	E	R	R	M	H	A	K	G	S	G	A	F	G	
UniRef90_Q8EN31	A	G	D	R	G	P	Q	L	L	E	D	F	M	Y	R	E	K	L	A	H	F	D	R	E	R	I	P	E	R	N	M	H	A	R	G	Y	G	A	H	G	
UniRef90_F6EG04	L	G	E	Q	G	P	I	V	L	H	D	H																													

UniRef90_G7QIP3	T	L	T	I	T	Q	D	L	S	K	Y	S	R	A	S	I	F	S	K	K	G	K	Q	T	S	L	V	F	L	R	F	S	T	V	A	G	E	K	G	S	A				
UniRef90_F4ANL2	Y	F	F	Q	P	Y	E	A	L	S	D	L	T	C	A	H	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	N	K	G	S	A			
UniRef90_UPI000346B90F	Y	F	F	Q	V	Y	E	P	M	A	E	D	L	T	K	A	T	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	S	R	G	S	A		
UniRef90_W4QCZ20	Y	F	F	Q	V	Y	E	P	M	A	E	D	L	T	K	A	T	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	S	R	G	S	A		
UniRef90_UPI00031A2C75	V	F	E	A	T	Y	E	D	D	S	M	E	D	L	T	S	K	A	G	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	S	R	G	S	A
UniRef90_UPI000262689F	E	F	E	L	T	Y	K	S	D	S	M	E	D	L	T	S	K	A	G	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	S	R	G	S	A
UniRef90_UPI000395C252	Y	F	F	Q	V	Y	E	P	M	A	E	D	L	T	S	K	A	G	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	S	R	G	S	A	
UniRef90_H2K234	T	F	T	V	T	A	D	V	T	R	Y	T	K	A	K	I	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	N	L	G	A	A			
UniRef90_I3TH56	R	L	T	I	T	A	D	V	T	R	Y	T	K	A	K	I	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	E	R	G	A	A			
UniRef90_J2EX86	T	F	T	V	T	H	D	I	T	R	Y	T	K	A	D	I	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	E	R	G	A	A			
UniRef90_E6V5F0	Y	F	Q	V	Y	K	S	M	S	D	L	T	S	K	A	G	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	E	R	G	S	A			
UniRef90_UPI0002881FA1	V	F	E	C	Y	E	D	A	S	D	L	T	S	K	A	G	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	S	R	G	S	A			
UniRef90_K6VNT1	T	F	E	T	L	A	S	D	L	T	S	K	A	G	F	L	S	Q	R	K	S	G	V	P	P	V	P	P	V	F	V	R	F	S	T	V	A	G	N	K	G	A	F		
UniRef90_K9PRY5	T	F	T	L	T	R	A	I	P	E	Y	T	K	A	K	I	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	E	R	G	A	A			
UniRef90_I1XFU8	T	F	T	V	T	N	D	I	T	R	Y	T	K	A	K	I	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	E	R	G	A	A			
UniRef90_M9S9S8	K	F	T	V	T	H	D	I	T	R	Y	T	K	A	K	I	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	E	R	G	A	A			
UniRef90_Q8EN31	V	F	E	C	Y	E	S	Q	S	D	L	T	S	K	A	H	F	L	S	Q	R	K	S	G	V	P	P	V	F	V	R	F	S	T	V	A	G	S	R	G	A	N			
UniRef90_F6EG04	E	L	E	V	T	E	D	V	S	E	F	T	C	A																															

UniRef90_G7QIP3	D	T	E	R	D	P	R	G	F	A	V	K	F	Y	T	D	E	G	L	W	D	L	V	G	N	N	T	P	V	F	F	F	A	R	D	P	L	K	F	P	D		
UniRef90_F4ANL2	D	L	T	V	R	D	V	R	G	F	A	V	K	F	Y	T	E	Q	E	G	N	W	D	L	V	G	N	N	M	P	V	F	F	F	F	Q	D	A	M	K	F	P	D
UniRef90_UPI000346B90F	D	T	V	R	D	V	R	G	F	A	V	K	F	Y	T	E	D	G	N	Y	D	L	V	G	N	N	I	P	V	F	F	F	Q	D	A	I	K	F	P	D			
UniRef90_W4QCZ20	D	T	V	R	D	V	R	G	F	A	V	K	F	Y	T	E	D	G	N	Y	D	L	V	G	N	N	I	P	V	F	F	F	Q	D	A	I	K	F	P	D			
UniRef90_UPI00031A2C75	D	T	P	R	D	V	R	G	F	A	V	K	F	Y	T	E	E	G	N	Y	D	L	V	G	N	N	I	P	V	F	F	F	Q	D	A	I	K	F	P	D			
UniRef90_UPI000262689F	D	I	P	R	D	V	R	G	F	A	V	K	F	Y	T	E	E	G	N	F	D	L	V	G	N	N	M	P	V	F	F	F	Q	D	A	I	K	F	P	D			
UniRef90_UPI000395C252	D	T	P	R	D	V	R	G	F	A	V	K	F	Y	T	E	E	G	N	Y	D	L	V	G	N	N	I	P	V	F	F	F	Q	D	A	M	K	F	P	D			
UniRef90_H2K234	D	A	V	R	D	P	R	G	F	A	V	K	F	Y	T	E	E	G	N	Y	D	L	V	G	N	N	T	P	V	F	F	F	I	R	D	P	L	K	F	P	D		
UniRef90_I3TH56	D	A	E	R	D	I	V	R	G	F	A	V	K	F	Y	T	E	E	G	N	Y	D	L	V	G	N	N	T	P	V	F	F	F	I	R	D	P	L	K	F	P	D	
UniRef90_J2EX86	D	A	E	R	D	I	V	R	G	F	A	V	K	F	Y	T	E	G	N	Y	D	L	V	G	N	N	T	P	V	F	F	F	I	R	D	P	L	K	F	P	D		
UniRef90_E6V5F0	D	T	V	R	D	V	R	G	F	A	V	K	F	Y	T	E	R	E	G	N	Y	D	L	V	G	N	N	T	P	V	F	F	F	I	Q	D	A	M	K	F	P	D	
UniRef90_UPI0002881FA1	D	T	V	R	D	A	R	G	F	A	V	K	F	Y	T	E	D	G	N	Y	D	L	V	G	N	N	I	P	V	F	F	F	Q	D	A	I	K	F	P	D			
UniRef90_K6VNT1	D	L	A	R	D	V	R	G	F	A	V	K	F	Y	T	E	R	Q	E	G	N	W	D	L	V	G	N	N	I	P	V	F	F	F	Q	D	A	I	K	F	P	D	
UniRef90_K9PRY5	D	A	E	R	D	V	R	G	F	A	V	K	F	Y	T	E	E	G	N	Y	D	L	V	G	N	N	T	P	V	F	F	F	I	R	D	P	H	K	F	P	A	N	
UniRef90_I1XFU8	D	A	E	R	D	I	V	R	G	F	A	V	K	F	Y	T	E	E	G	N	W	D	M	V	G	N	N	T	P	V	F	F	F	I	R	D	P	L	K	F	P	D	
UniRef90_M9S9S8	D	A	E	R	D	I	V	R	G	F	A	V	K	F	Y	T	E	D	E	G	N	W	D	L	V	G	N	N	T	P	V	F	F	F	I	R	D	P	L	K	F	P	D
UniRef90_Q8EN31	E	T	L	R	D	V	R	G	F	A	V	K	F	Y	T	E	N	E	G	N	F	D	L	V	G	N	N	I	P	V	F	F	F	I	Q	D	G	I	K	F	P	D	
UniRef90_F6EG04	D	T	W	R	D	P	R	G	F	A	M	K	F	Y	T	E	Q	E	G	N	Y	D	L	V	G	N	N	T	P	V	F	F	F	I	R	D							

UniRef90_G7QIP3	F	I	H	S	Q	K	R	D	P	V	T	G	Y	K	N	P	I	R	M	W	D	Y	W	A	G	S	P	E	A	F	H	Q	I	T	L	L	F	G	D	R			
UniRef90_F4ANL2	L	I	H	S	A	K	R	G	F	P	H	Q	A	Q	T	A	H	D	N	F	W	D	F	I	S	L	S	P	E	S	T	H	H	M	M	W	L	M	S	D	R		
UniRef90_UPI000346B90F	L	V	H	S	A	V	K	R	G	F	P	H	N	E	I	P	Q	H	D	T	F	W	D	F	V	V	S	N	T	E	T	A	H	M	I	M	W	L	S	D	R		
UniRef90_W4QCZ20	V	V	H	A	I	K	P	E	P	H	N	E	I	P	Q	H	D	T	F	W	D	F	V	V	S	N	T	E	T	A	H	M	I	M	W	L	S	D	R				
UniRef90_UPI00031A2C75	L	V	H	A	V	K	R	G	Y	P	Q	A	G	S	A	H	D	T	F	W	D	F	A	S	L	M	P	E	S	T	A	H	M	L	M	W	A	M	S	D	R		
UniRef90_UPI000262689F	L	I	H	A	V	K	R	G	F	P	D	T	G	Y	P	Q	H	D	T	F	W	D	F	I	A	N	N	Q	E	S	A	H	M	M	M	W	L	M	S	D	R		
UniRef90_UPI000395C252	L	V	H	A	V	K	R	G	F	P	Q	A	A	S	A	H	D	T	F	W	D	F	I	S	L	M	P	E	S	T	M	H	M	I	M	W	A	M	S	D	R		
UniRef90_H2K234	F	I	H	T	Q	K	R	D	P	Y	T	G	S	T	E	A	D	N	V	W	D	F	W	S	L	M	P	E	S	T	H	H	Q	V	T	W	L	F	G	D	R		
UniRef90_U3TH56	F	I	H	T	Q	K	R	D	P	R	T	N	L	R	S	A	T	A	M	W	D	F	W	S	R	S	P	E	S	T	L	H	Q	V	T	I	L	F	S	D	R		
UniRef90_J2EX86	L	N	H	A	V	K	R	D	P	R	T	N	M	R	S	A	R	N	N	W	D	F	W	T	L	L	P	E	S	T	A	L	H	Q	V	T	I	V	M	S	D	R	
UniRef90_E6V5F0	L	I	H	A	V	K	R	E	P	H	H	A	M	P	Q	H	D	T	F	W	D	F	A	S	L	M	P	E	S	T	A	H	M	L	M	W	A	M	S	D	R		
UniRef90_UPI0002881FA1	F	V	H	A	V	K	R	E	P	H	H	A	M	P	Q	H	D	T	F	W	D	F	I	A	N	N	Q	E	S	A	H	M	L	M	W	H	M	S	D	R			
UniRef90_K6VNT1	L	V	H	S	V	K	R	A	F	P	Q	A	Q	S	A	H	D	N	F	W	D	F	V	S	F	T	P	E	A	I	H	M	T	L	W	Q	M	S	D	R			
UniRef90_K9PR5	F	I	H	T	Q	K	R	H	P	Q	T	N	L	R	D	A	N	A	Q	W	D	F	W	S	L	N	P	E	S	T	L	H	Q	V	T	I	L	F	S	D	R		
UniRef90_I1XFU8	L	N	H	A	V	K	R	D	P	K	T	N	M	R	S	A	Q	N	N	W	D	F	W	T	L	L	P	E	S	T	A	L	H	Q	V	T	I	V	M	S	D	R	
UniRef90_Q9S9S8	L	N	H	A	V	K	R	E	P	K	T	N	M	R	S	A	Q	N	N	W	D	F	W	T	M	I	P	E	S	T	A	L	H	Q	V	T	I	V	M	S	D	R	
UniRef90_M8EN31	L	I	H	A	L	K	P	E	P	Q	G	Q	T	A	H	D	T	F	W	D	F	I	T	G	S	N	E	S	T	A	M	M	M	W	I	M	S	D	R				
UniRef90_F6EG04	F	I	R	S	Q	K	R	M	P	D	S	G	L	R	D	H	N	M	Q	W	D	F	W	T	L	S	P	E	S	T	A	H	Q	V	T	W	L	M	G	D	R		
UniRef90_UPI00036DB826	L	V	H	S	F	K	P	E	P	H	N	E	I	P	Q	H	D	T	F	W	D	F	V	V	N	N	Q	E	T	A	H	M	I	M	W	H	M	S	D	R			
UniRef90_UPI00031BDFD1	L	N	H	A	I	K	R	H	P	R	T	E	G	V	R	D	P	M	N	N	W	D	F	W	T	L	L	P	E	S	T	A	L	H	Q	V	T	I	V	M	S	E	R
UniRef90_W5QM85	L	I	H	A	V	K	P	E	P	H	N	E	I	P	Q	H	D	T	F	W	D	F	I	S	L	M	P	E	S	T	M	H	M	I	M	W	V	M	S	D	R		
UniRef90_Q1GYP5	F	V	H	A	V	K	P	E	P	H	N	E	I	P	A	H	D	T	F	W	D	F	V	S	L	M	P	E	S	T	A	H	A	V	T	W	A	M	S	D	R		
UniRef90_C6WK51	L	N	R	A	V	K	R	D	P	R	T	N	M	R	N	P	E	N	N	W	G	F	W	T	R	L	P	E	S	T	A	L	H	Q	I	T	I	T	M	S	D	R	
UniRef90_UPI0003100AB3	M	V	H	A	F	K	R	G	F	P	Q	A	A	T	A	H	D	N	A	W	D	F	I	S	L	T	P	E	S	T	M	N	M	V	M	W	V	Y	S	D	R		
UniRef90_UPI00047DC8DD	I	V	H	S	T	I	K	P	E	P	H	N	E	I	P	Q	H	D	T	F	W	D	F	V	V	S	N	P	E	T	A	H	M	I	M	W	L	S	D	R			
UniRef90_G2EGD0	L	N	R	A	V	K	R	D	P	K	T	N	L	R	S	A	N	N	N	W	D	F	W	T	L	L	P	E	S	T	A	L	H	Q	V	T	I	T	M	S	D	R	
UniRef90_A9I9M7	L	N	H	A	I	K	R	D	P	R	T	G	L	R	S	A	D	N	N	W	D	F	W	S	L	L	P	E	S	T	A	L	H	Q	V	T	I	V	M	S	D	R	
UniRef90_V4PHY6	F	I	H	T	Q	K	R	E	P	K	T	H	L	R	S	A	T	A	M	W	D	F	W	S	L	L	P	E	S	T	A	L	H	Q	V	T	I	L	M	S	D	R	
UniRef90_H2EZZP4	V	I	H	A	G	K	P	E	P	H	H	E	M	P	Q	H	D	S	F	W	D	F	V	S	L	T	P	E	S	T	A	H	M	I	M	W	T	L	S	D	R		
UniRef90_M2U368	L	I	H	A	A	K	R	G	F	P	Q	A	Q	T	A	H	D	N	F	W	D	F	I	S	L	S	P	E	S	T	M	H	M	V	M	W	I	M	S	D	R		
UniRef90_A1WB07	L	V	H	A	A	V	K	R	A	F	P	Q	A	A	S	A	H	D	T	F	W	D	F	I	S	L	M	P	E	S	T	M	H	M	V	M	W	I	M	S	D	R	
UniRef90_UPI00036DECBE	L	I	H	A	A	K	P	E	P	D	R	E	I	P	Q	H	D	T	F	Y	D	F	I	S	L	M	P	E	S	T	M	H	M	L	M	W	I	M	S	D	R		
UniRef90_G0PMJ5	F	I	H	T	L	K	R	H	P	R	T	H	L	K	D	R	N	A	M	F	D	F	W	I	N	R	P	E	S	T	L	H	Q	V	M	F	L	F	S	D	R		
UniRef90_V4PUK0	L	V	H	A	V	K	M	E	A	D	K	G	Y	P	Q	H	D	T	F	W	D	F	A	S	L	M	P	E	T	T	H	M	L	M	W	A	M	S	D	R			
UniRef90_K9UIE6	I	I	H	A	V	K	P	E	P	D	N	E	M	P	Q	H	P	S	F	W	D	F	I	S	L	V	P	E	S	T	M	H	M	I	M	W	L	S	D	R			
UniRef90_R6Z6Q3	L	N	H	A	V	K	R	D	P	R	T	N	L	R	S	A	N	N	N	W	D	F	W	T	L	L	P	E	S	T	A	L	H	Q	V	T	I	T	M	S	P	R	
UniRef90_UPI000426D98E	M	V	H	A	F	K	P	S	P	V	I	N	R	Q	D	N	R	V	F	D	F	F	S	N	V	P	E	S	T	A	T	N	M	F	T	Y	L	Y	Q	D	L		
UniRef90_J0JM79	F	I	H	T	Q	K	R	D	P	R	S	H	L	R	N	M	S	A	A	W	D	F	W	S	L	S	P	E	S	T	L	H	Q	V	T	I	L	M	S	D	R		
UniRef90_UPI0003730308	M	V	H	S	L	K	P	D	P	Q	S	N	R	Q	E	P	S	R	Y	W	D	F	M	T	R	T	P	E	S	T	H	H	M	M	T	W	L	F	S	D	R		
UniRef90_I3YZZ5	L	V	H	S	V	K	P	E	P	N	K	E	I	P	Q	H	D	T	F	Y	D	F	V	S	L	T	P	E	S	T	L	H	N	Q	I	W	V	M	S	D	R		
UniRef90_D8KC9C6	F	I	R	S	Q	K	R	R	A	D	S	G	L	R	D	H	D	M	Q	W	D	F	W	S	L	S	P	E	S	T	A	H	Q	V	A	I	W	M	G	D	R		
UniRef90_G8M439	F	I	H	T	Q	K	R	D	P	Y	T	N	L	R	S	N	V	A	A	W	D	F	W	S	R	H	P	E	S	T	L	H	Q	V	T	I	L	M	S	D	R		
UniRef90_U4W149	M	V	H	S	L	K	P	E	P	D	T	N	L	Q	T	P	D	R	Y	W	D	F	M	T	L	T	P	E	S	T	H	H	M	L	T	W	L	F	S	D	Y		
UniRef90_W7YL46	L	V	H	S	F	K	P	E	P	H	N	E	M	P	Q	H	D	T	N	W	D	F	M	A	N	T	P	E	S	T	A	H	M	V	M	W	T	M	S	D	R		
UniRef90_UPI0004283473	L	I	H	A	V	K	P	E	P	H	N	E	I	P	Q	H	D	T	F	W	D	F	I	S	L	M	P	E	S	T	M	H	M	I	M	W	A	M	S	D	R		
UniRef90_C2FTL4	F	I	H	T	Q	K	R	D	P	Y	T	N	L	K	P	S	H	T	A	Q	W	D	F	W	T	L	L	P	E	S	T	L	H	Q	V	T	I	L	M	S	D	R	
UniRef90_UPI000475DCC1	L	V	H	S	V	K	P	E	P	D	S	E	F	P	Q	H	D	N	F	W	D	F	V	S	L	T	P	E	S	T	A	T	H	M	L	M	W	I	M	S	D	R	
UniRef90_A0A011Q7R6	F	I	H	T	Q	K	R	H	P	Q	T	N	L	K	D	P	N	M	V	W	D	F	W	S	L	S	P	E	S	T	L	H	Q	I	T	L	L	H	S	D	R		
UniRef90_I0ER29	F	I	H	T	Q	K	R	D	P	Q	T	N	L	P	N	A	T	M	V	W	D	F	W	S	N	V	P	E	S	T	L	H	Q	V	T	W	L	M	G	D	R		
UniRef90_D7C2L8	F	V	H	A	L	K	P	E	P	Q	N	E	I	P	A	H	D	T	L	W	D	F	V	S	L	N	Q	P	E	T	M	H	M	M	M	W	L	M	S	D	R		
UniRef90_C7HUS5	L	N	R	V	V	K	R	D	P	K	N	N	M	R	S	P	N	S	N	W	D	F	W	S	S	L	P	E	S	T	S	L	L	Q	V	T	I	T	M	S	D	R	
UniRef90_U4LC02	F	I	H	T	Q	K	R	N	P	Q	T	N	L	K	D	A	T	M	F	W	D	Y	L	S	Q	N	Q	E	S	T	V	H	Q	V	M	H	L	F	S	D	R		
UniRef90_F2SJ21	F	I	H	T	Q	K	R	N	P	Q	T	N	L	K	D	P	M	F	W	D	Y	L	S	T	H	Q	P	E	S	T	A	H	Q	I	M	H	L	F	S	D	R		
UniRef90_UPI000347C19C	F	I	H	S	Q	K	R	R	A	D	N	Q	L	R	D	N	N	M	Q	W	D	F	W	T	L	N	P	E	S	T	A	H	Q	V	S	F	L	M	T	D	R</		

[illegible]

[illegible]

[illegible]

[illegible]

UniRef90_G7QIP3	Y	R	L	G	I	Q	Y	Q	Q	L	P	V	N	R	P	K	N	S	P	V	N	V	Y	H	R	D	G	R	T	R	F	Q	N	C	D	G	N	Y	D	N				
UniRef90_F4ANL2	K	R	L	G	P	N	F	T	H	E	I	P	V	N	R	P	V	A	E	P	V	N	N	H	L	Q	Q	D	G	F	H	A	M	T	N	V	H	K	G	R	V	N		
UniRef90_UPI000346B90F	L	R	L	G	S	N	F	T	Q	H	E	I	P	V	N	R	P	V	A	E	P	V	N	N	H	L	Q	Q	D	G	F	H	A	M	T	N	V	H	K	G	K	T	S	Y
UniRef90_W4QCZ0	L	R	L	G	P	N	F	T	H	E	I	P	V	N	R	P	V	A	E	P	V	N	N	H	L	Q	Q	D	G	F	H	A	M	T	N	V	H	K	G	K	T	S	Y	
UniRef90_UPI00031A2C75	S	R	L	T	T	N	F	H	E	I	P	V	N	R	P	V	A	E	P	V	N	N	H	L	Q	Q	D	G	F	H	A	M	T	N	V	H	K	G	K	T	S	Y		
UniRef90_UPI000262689F	I	R	L	G	P	N	F	T	H	E	I	P	V	N	R	P	V	A	E	P	V	N	N	H	L	Q	Q	D	G	F	H	A	M	T	N	V	H	K	G	K	T	S	Y	
UniRef90_UPI000395C252	S	R	L	G	P	N	F	T	Q	H	E	I	P	V	N	R	P	V	A	E	P	V	N	N	H	L	Q	Q	D	G	F	H	A	M	T	N	V	H	K	G	K	T	S	Y
UniRef90_H2K234	Y	R	V	G	I	N	A	D	Q	L	P	V	N	R	P	H	A	T	E	A	R	T	H	S	R	D	G	F	L	Y	D	G	R	K	G	G	A	K	N					
UniRef90_I3TH56	Y	R	V	G	V	N	A	D	Q	L	P	V	N	R	P	V	A	Q	A	H	P	A	H	R	D	G	A	M	R	F	D	D	N	G	G	R	Q	P	N					
UniRef90_J2EX86	Y	R	V	G	V	N	H	H	Q	L	P	V	N	R	P	R	C	P	V	N	N	F	H	R	D	G	Q	M	R	T	D	A	N	A	G	S	A	I	G					
UniRef90_E6V5F0	S	R	L	G	G	N	F	H	E	I	P	V	N	K	G	V	C	P	F	H	N	N	F	Q	R	D	G	M	R	Q	T	I	A	R	G	G	V	A	Y					
UniRef90_UPI0002881FA1	I	R	L	G	P	N	F	T	H	E	I	P	V	N	R	P	V	C	P	F	H	N	N	F	Q	R	D	G	Y	H	R	Q	T	I	V	N	R	G	Q	V	S	Y		
UniRef90_K6VNT1	S	R	L	G	S	T	N	F	T	H	E	I	P	V	N	A	P	R	C	P	V	V	H	F	Q	R	D	G	H	M	Q	P	T	I	V	P	V	G	R	A	N	Y		
UniRef90_K9PRY5	Y	R	I	G	T	N	Y	Q	Q	L	P	V	N	R	P	H	S	C	P	V	N	H	Y	Y	Q	R	D	G	A	L	S	T	G	Y	G	G	S	P	N	Y				
UniRef90_I1XFU8	Y	R	L	G	V	N	H	H	Q	L	P	V	N	T	P	R	C	S	P	V	Y	H	S	Y	H	R	D	G	A	M	R	T	V	D	G	N	Y	G	S	T	K	G		
UniRef90_Q9S9S8	Y	R	L	G	V	N	H	N	L	I	P	V	N	A	P	R	K	C	P	V	N	S	Y	H	R	D	G	S	M	M	R	T	D	D	N	G	Y	G	S	R	K	S		
UniRef90_M8EN31	Y	R	V	G	T	N	F	K	Q	L	P	V	N	R	P	V	A	C	P	F	H	N	N	F	H	R	D	G	S	Q	R	Y	I	L	D	K	G	Q	V	A	Y			
UniRef90_F6EG04	Y	R	I	G	V	N	Y	T	Q	L	P	V	N	A	P	K	S	C	P																									

UniRef90_G7QIP3 Y E P N G F E G P V I Q D S S Y A E P P L S I S G D M D R Y N S H I G N D D Y S Q
UniRef90_F4ANL2 Y E P N S W D G G G E N N P G F K S S S E Q I S I G D K T R Y R S E T F D H Y S Q A
UniRef90_UPI000346B90F F P N S L L G R N S C P A L A Y R H Y A E K V E G D K I R K R A S S F N D H Y S Q A
UniRef90_W4QCZ0 S P N S L L R N S C P A L A Y T H Y A E K V E G D K I R K R A S S F N D H Y S Q A
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UniRef90_UPI000262689F H K N S P R P A P E E E G S R A V H Y Q E K V E G R K V Q A R S S F D H Y S Q A
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UniRef90_I3TH56 Y E P N G F G G P V I E D P A A G E P P L S L D G S A D R Y S H R E G N D D Y T Q
UniRef90_J2EX86 Y E P N S H E G Q W V E Q P D F R E P P L S L Q G S A W H W N H R E D D Y F T Q
UniRef90_E6V5F0 E P N T L L G S G T E F G F Q S F P E A I D A P K V R R R S A S F D D H F T Q A
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UniRef90_K6VNT1 E P N G W D G E Q R G P G F T S Y P A D E A G P R V R H R S P T F D H Y S Q A
UniRef90_K9PRY5 Y P N S D S S T P K E A P E Y R D P G L H L G D V V A D R Y E S R D Q D D Y T Q
UniRef90_I1XFU8 Y E P N S Y G E W Q E Q P N F S E P P L A I N G A A D H W N F R D D D D Y Y S Q
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	450	460	470	480
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UniRef90_I3TH56	A G D L F R L M S E A E Q D R L M T A I A G A M A P V P E D I Q R R Q I G H F A			
UniRef90_J2EXH86	P G A L F R L M D T A Q R Q A L F D N T A R S I H G A S T Q A K Q R Q I N H C Y			
UniRef90_E6V5F0	R L F F N S Q S V A E K E H I I T K A F C F E L S K V L E V P I A K R Q R M V D N L A			
UniRef90_UPI0002881FA1	R L F W N S M T P V E K E H I I T K A F C F E L S K V L E S K A D V R K Q R V V A M F A			
UniRef90_K6VNT1	R Q F W I S Q T A V E E Q A H I V D A Y T F E L S K G C E V E A D I V R Q R I V A H L R			
UniRef90_K9PRY5	A G N L W R I F S E E E K N R T A Q A T I A G A L S G A Q K D I Q L R Q L Q Q F F			
UniRef90_I1XFU8	P G N L F R L M T P E K Q Q V L F E N T A R A L I D G A D D E I V K K R H L R N C L			
UniRef90_M9S9S8	G D L Y R L M K P A E K Q D A L I D N T A R N M A A V T E N I K Y R H A A H C Y			
UniRef90_Q8EN31	R L F W N S M T D V E Q S H L L Q A F S F E L S K V N V N P I E V R Q R V V N L I G			
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UniRef90_UPI00036DB826	I L F W N S M S E P E K Q K H I I Q A F S F E L S K V K S K A V K Q Q A V A M F A			
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UniRef90_W5QM85	T L F Y K S Q S E P E Q N H I I N A L S F E L S K V T V I E S I K I R T L G L L N			
UniRef90_Q1GYP5	R L F Y K S L S A T E Q L H I A E A Y S F E L S K V K R Q H I R E V V E L L S			
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UniRef90_UPI00047DC8DD	A T L F W N S M S P A E K Q H I I E A F F E V S V I D K N I K Q R V V D M F N			
UniRef90_G2EGD0	G D L F R L I K A D G K A D L I F N T A A Q V G G A E K F I Q V R R N C F			
UniRef90_A9I9M7	P G N L F R L M S P A E Q R Q L L C E N T A R A M G D A R L E V K R R A H I E N C A			
UniRef90_V4PHY6	A G N L F R L F D A G E Q R R T C E N T A R S E M K G V P Q F I J N R A L V H F D			
UniRef90_H2EZP4	A T L F Y N S L S W E K A H L V A A A S F E L S K V D D V V R E R M I D M F N			
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UniRef90_G0PMJ5	R Q F W E K V L N E E A R E R L I Q N F S D S L A G C Y E R I V Q Q G M I E I F T			
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UniRef90_C7HUS5	P G M L Y R A M T D D Q K E V L C E N T A R H M K D T T L Q I K H R W I N H C Y			
UniRef90_U4LC02	P N A L W N V L T Q G Q D E N F V H N V S H L K G A R K E V R E R T Y			

490
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UniRef90_UPI000262689F N I D L K L A K K V A E N V
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UniRef90_J2EX86 Q A D P E Y G S G V A Q A I E Q L
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UniRef90_A9I9M7 K A D P E Y G A G I A R A L
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UniRef90_V4PUK0 N V D D G L A Q R V A D G L N
UniRef90_K9UIE6 N V D H E L A K R V A I G L
UniRef90_R6Z6Q3 Y A D P A Y G K G V A E A L
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UniRef90_Q0SJL1 Q A D P A Y G E G V R K A
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UniRef90_W9AJ40 N V N L E L A V T I A K R I
UniRef90_UPI0004646437 L I D A D L A T R V A G E L
UniRef90_S3XXH9 K I S P D Y A K G V E S A L K
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UniRef90_UPI000476DC7E		Q L R A H R I D K	Q D T V L T T D Q G I V V	F D D T D N A L R	
UniRef90_W4TDL1			D S K K L T L S S G A P Y	F D E H Q D S Q T	
UniRef90_U5HA99			Q V R N Q P D G A T Y T T S Q G A P V	N E P Y A A E R	
UniRef90_E7G1G3				L T T N A V G A P V	V G N N Q D L L T
UniRef90_L8LN69		A K T E S L E E F Q V	E A G E Q L T T N Q G V V V	E D T D N S L K	
UniRef90_V9FXS1			P P T L T T S N G A P M	P R Y T A S A T	
UniRef90_F4H7U1			P P T T T T N S G A P V	V A S D A H S L A	
UniRef90_UPI00035F0E6B			K P T T T N A G I P V	V S D D H S L T	
UniRef90_M0AZ21	D E E S K Q D Q L	D E V R E D A E G E Y L	T T D H G V R V V	T D T D N S L K	
UniRef90_E4N8W0			S Q H V P F T T N N A G V P V	E S D A D S L T	
UniRef90_A8QCZ0			Q Q H G G E G N L T T N N Q G I V	V S D N Q N S L K	
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UniRef90_K9XLS7			S N N E Q E V L T T N R Q G H P V	T D N Q N V R T	
UniRef90_UPI00036FD44A			T G N T T P P Q A T T Q S G A P V	V S D N N H S Q T	
UniRef90_K9P4E9	D A P A N N L S Q P A E T	H Q S V E A D T I T T N H G I P I	A D N Q N T L L		
UniRef90_UPI0003FFE9E3			T N K D N R L T T L F G N P V	G D R E N T M T	
UniRef90_F8E0J7			Q Q G S Y L T N S Q G A R Y T	T S D H S L R	
UniRef90_U2W5L9				D K L T T E A G Q P W A N N E H S Q T	
UniRef90_UPI0003665447			Q T T E D G Y K T L T T K N G T P V	V S D N Q N H L K	
UniRef90_UPI0004699F89			Q Q E V M T R S N G A P V	V G N N Q N S L T	
UniRef90_UPI00047C7379		E Q N T P T Q G S E I L	T T R Q G H P V Y D N Q N V R T		
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UniRef90_M1NUX0		D A R P D D M A Q Q G A Y L	T T A Q G G R L S E T D H S L R		
UniRef90_S9SA42				M T T N Q G V P I S D N Q N S L K	
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UniRef90_UPI0003F48E6E	D A K A R Q M E S F T I H Q D S T T P		L T T Y F G T K V S D T D K A L R		
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UniRef90_UPI00036C5404	E N G K Q N Q N N G G P S T G Q S T P S D	L L T T R Q G H P V S D N Q N L R S			
UniRef90_U2F524			L T N E V G A P V A E N E N A L T		
UniRef90_J0WW70			K Q V F E K K D G A V Y T T S N G A P V	S E P Y A A G R	
UniRef90_F0RZ65			R D G R D D S K K K P L T S I S G R P I	A Q N E N I Q T	
UniRef90_A6CRK1	S D N K G G Y I M K D	E K S Q D N Q S R T T L T N R Q G H P V	A D N Q N V R T		
UniRef90_G7CCT7			D T R A Q Q G R Y L T T A Q G A R L Y	D T D H S L K	
UniRef90_L8WJQ1			Q Q V L D N K D G A V Y T T S N G A P Y	P E P Y E A Q R	
UniRef90_F5SBH2		D D R R F S K G E G Q E T L T N R Q G H P V	A D N Q N I R T		
UniRef90_C5C810	R G P A T G Q D T G A D P A T A A Q G C P Y L	T T A H G V R L Q D S D H S L K			
UniRef90_A9TG35	P P S N Q A K S D G V H E G S K Q Q P T Y T	T L A G H P V S D D N N S L T			
UniRef90_UPI00036EB6F5		E D T S M S K R R L T S V S G A P V	A D N N N V K T		
UniRef90_UPI0003B6BD55	N E R K H D E E K N D D K Q Y K	N E D G T L T T R Q G H P V	R D N Q N S K T		
UniRef90_V8A5U9			T T D S G A P V A S T D Y S L T		
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UniRef90_D5UKE6			A Q E G A F L T T A G G V P L	R D T D H S L K	
UniRef90_Q42547			S A Y N A P F Y T T N G G A P V	S N N I S S L T	
UniRef90_F8JEZ5				A G A P V P D N N S L S	
UniRef90_B2GI42			E T G S F T T T Q E G L P V	P T N A H S L S	
UniRef90_G9ZMZ1				P K K L T T E A G Q P W A N N N H S Q T	
UniRef90_E2SFN2			T D E D Q R P A T T T D G G V P V	A S D E R S L S	
UniRef90_J2JCM6			Q Q K Q I T T N S G A P I	G D N Q N S K T	
UniRef90_W4QD70		M V N E E N V I G N E R E D E L	T N R Q G H P V T N N Q H V R T		
UniRef90_J1Z119				D A G I P V E S D E H S L T	
UniRef90_G8Y7H6				P V Y T N S N G C P I P E P F A T Q R	
UniRef90_R9LGD8			S T E A R H I L T T D R Q G H P	L T D N Q N V R T	
UniRef90_UPI00037EB100				S D N K I T T A S G Q P W A D N N H S Q T	
UniRef90_T1HTH7	S R D S V S N Q L I N Y Y K Q H Q G V I	D T L T T E S G N P V	D D V N N I L T		
UniRef90_UPI00037FC62E		H R S K R D Y D E D K Y L T T N N V G N P I	S N D K D S L T		
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UniRef90_Q2H890	D K L K D L A H N T K D T D K D R L	T T D Y G V K Q S T A D D W L K			
UniRef90_S7RGA6		K Q V F E T K D E A V Y T T S N G A P V	K E P Y A A E R		
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UniRef90_S3YIQ6				T N E A G A V R E S D A H S L S	
UniRef90_W7YP92			K R M A A N E T D E T L T N R Q G H P	V K D N Q N V R T	
UniRef90_Q8XPQ7				T L T R D N G A P V G D N Q N S Q T	
UniRef90_W1NLL7			S A Y N S P F M T T N A G A P V	W N D D S S L T	
UniRef90_A8GYR7				Q A E T L T R D N G A P V G D N Q N S I T	
UniRef90_B5FA38			S S V Q A Q T L T R D N G A P V	G D N Q N S L T	
UniRef90_UPI000365EF89			A Q Q G E F L T T A Q G A R L	R E T S H S L R	
UniRef90_UPI00041C764C	K D N Q N K S T A A S N G A D D K R T L	T T R Q G H P V T D N Q N I R T			
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UniRef90_W4JPD2		Q Q V F T S K D E A L Y T T S N G A P V	A K P Y G A Q K		
UniRef90_L8FTE8			D Q Q P T Y T T S N G A P V	H A E A Y Q R	
UniRef90_UPI000319EEAC			S D K R P L T T T R Q G H P V	S D N Q S L R S	
UniRef90_M7MTZ0			Q G K A L T T S Q G T P L	K D T D H S L K	
UniRef90_L7LN46			S E E T T N Y T T T D S G A P A	G S D E H S L T	
UniRef90_G8X4G5				Q N P L T T S G G A P V N G D L Q S L T	
UniRef90_P49318			S S N D T P F W T T N A G D P V	S N N N S S M T	
UniRef90_G8MVD5				D H N S A T L T T A A G A P V V D N D N T M S	
UniRef90_A6E919			E N N G I N K R K L T T A S G R P Y A E	H E N T Q S	
UniRef90_B8XYC4				N A P F M T T N A G A P V W N D D N A L T	
UniRef90_UPI000378023E			T T N P R P P L T T A G G A P V	A D S Q H S I T	
UniRef90_S3N472	N K Q P T S K I Q Q F E K Q T Y V	D P N E K V L T S L G T P V	S D N Q N S L K		
UniRef90_H6RPA5			S Q A G K P V L T N R Q G H P V	Y D N Q N Q R T	
UniRef90_A0A022MC77		M T D V S S K S P G D D P K V L	T N R Q G H P V Y D N Q N Q R T		
UniRef90_N8VLZ9	P K I D Q L S E	E A Y V D P I G K T L T S S L G V P V	A D N Q N S L K		
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UniRef90_A9UW79			S K C P Y T T D A A G H P L	D D Q N A A L R	

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UniRef90_U54TDL1	V	G	P	R	G	P	V	L	L	Q	D	F	V	L	R	E	K	L	A	H	F	D	H	E	R	I	P	E	R	I	V	H	A	R	G	S	G	A	Y	G	
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UniRef90_K9XLS7	V	G	D	R	G	P	T	V	L	E	N	Y	N	F	L	E	K	I	T	H	F	N	R	E	R	I	P	E	R	I	V	H	A	R	G	A	G	A	F	G	
UniRef90_UPI00036FD44A	V	G	P	D	G	V	A	A	L	T	D	H	Y	L	V	E	K	L	A	Q	F	N																			

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UniRef90_UPI000476DC7E	T	F	Q	P	Y	H	N	L	A	A	Y	T	K	A	D	F	L	I	D	P	S	V	G	N	S	Q	R	M	F	A	R	F	S	T	V	Q	G	E	K	S	A
UniRef90_W4TDL1	T	F	T	V	T	H	D	I	S	A	Q	Y	T	K	A	K	L	F	S	K	V	G	N	S	Q	R	M	F	A	R	F	S	T	V	Q	G	E	K	S	A	
UniRef90_U5HA99	E	F	I	V	T	H	D	I	S	D	L	T	C	A	K	L	F	S	K	V	G	N	S	Q	R	M	F	A	R	F	S	T	V	Q	G	E	K	S	A		
UniRef90_E7G1G3	A	L	T	V	T	S	S	I	S	T	K	Y	C	K	A	K	L	F	S	K	V	G	N	S	Q	R	M	F	A	R	F	S	T	V	A	G	E	K	S	A	
UniRef90_L8LNG9	Y	F	Q	A	Y	E	S	L	A	K	F	T	K	A	H	F	L	S	Q	D	P	S	I	Q	T	P	V	F	A	R	F	S	T	V	A	G	E	K	S	A	
UniRef90_V9FX51	Y	F	E	V	T	H	P	I	T	E	Y	C	C	A	K	M	F	S	Q	E	V	G	K	R	T	P	V	A	A	R	F	S	T	V	T	A	E	S	G	S	A
UniRef90_F4H7U1	F	T	T	T	G	D	V	S	A	Y	T	R	A	A	L	F	Q	K	P	G	V	T	T	D	M	L	A	R	F	S	T	V	A	G	E	N	G	S	A		
UniRef90_UPI00035F0E6B	F	L	E	V	T	E	D	V	S	Q	F	T	K	A	A	L	F	Q	K	P	G	A	K	T	D	S	L	V	R	F	S	T	V	A	G	E	N	G	S	A	
UniRef90_M0AZ21	Y	F	Q	P	Y	D	D	V	S	E	I	T	K	A	S	F	L	Q	D	P	G	Q	K	T	P	V	F	T	R	F	S	T	V	V	G	E	R	G	S	A	
UniRef90_E4N8W0	S	F	E	V	T	Q	D	V	S	R	F	T	R	A	D	L	F	Q	K	P	G	K	R	C	D	L	L	A	R	F	S	T	V	A	G	E	L	G	S	A	
UniRef90_A8QCZ0	Y	F	E	A	T	E	S	L	H	L	S	R	A	H	V	F	L	S	K	K	G	K	T	P	V	F	A	R	F	S	T	V	V	G	G	A	G	S	A		
UniRef90_UPI00022CADB5	Y	F	Q	V	Y	Q	S	L	A	N	Y	T	C	A	D	F	L	N	H	P	E	L	K	T	P	V	F	V	R	F	S	T	V	Q	G	E	R	G	S	A	
UniRef90_W8Z1Q1	Y	F	Q	V	Y	K	P	M	A	E	L	T	E	A	G	F	L	Q	D	H	P	S	V	K	T	P	V	F	V	R	F	S	T	V	A	G	S	R	G	S	A
UniRef90_Q59602	T	F	T	V	T	R	D	I	T	K	Y	T	R	A	K	L	F	S	K	V	G	K	K	T	P	V	E	M	F	G	R	L	A	S	V	A	G	E	R	G	A
UniRef90_D2B2R4	L	L	Q	I	L	T	E	D	V	S	Q	F	T	K	A	G	L	F	Q	K	G	K	E	T	P	L	F	L	R	F	S	T	V	A	G	E	L	G	S	A	
UniRef90_K9XLS7	Y	F	E	A	Y	G	S	I	N	K	Y	T	R	A	K	L	F	Q	E	K	G	K	I	T	P	V	F	V	R	F	S	T	V	T	H	G	H	S	P		
UniRef90_UPI00036FD44A	T	F	V	T	T	G	N	V	S	Q	Y	T	K																												

UniRef90_M5E898	D	T	A	R	D	P	R	D	V	R	G	F	A	L	K	F	Y	T	D	E	G	N	W	D	L	V	G	N	N	T	P	V	F	F	F	F	Q	D	A	L	K	F	P	D			
UniRef90_UPI0004187B5B	D	A	E	R	D	I	V	R	G	F	A	V	K	L	K	L	Y	T	S	Q	Q	G	N	F	D	L	V	V	G	N	N	T	P	V	F	F	F	F	R	D	D	G	L	K	F	P	D
UniRef90_UPI000476DC7E	D	T	A	R	D	P	R	G	F	A	L	K	F	Y	T	E	Q	G	N	W	D	L	V	G	N	N	T	P	V	F	F	F	F	F	F	Q	D	A	L	K	F	P	D				
UniRef90_W4TDL1	D	T	A	R	D	P	R	G	F	A	L	K	F	Y	T	E	Q	G	N	W	D	L	V	G	N	N	T	P	V	F	F	F	F	F	F	Q	D	A	L	K	F	P	D				
UniRef90_U5HA99	D	T	A	R	D	P	R	G	F	A	L	K	L	R	Y	T	E	E	G	N	W	D	L	V	G	N	N	T	P	V	F	F	F	F	F	I	R	D	D	P	A	K	F	P	H		
UniRef90_E7G1G3	D	A	E	R	D	P	R	G	F	A	L	K	L	R	Y	T	E	E	G	N	W	D	L	V	G	N	N	T	P	V	F	F	F	F	F	I	R	D	D	P	A	K	F	P	D		
UniRef90_L8LN69	D	S	V	I	R	D	V	R	G	F	A	V	K	F	Y	T	E	Q	E	G	N	Y	D	L	V	G	N	N	T	P	V	F	F	F	F	F	I	R	D	D	P	A	K	F	P	D	
UniRef90_V9FXS1	D	T	I	L	R	D	P	R	G	F	A	L	K	F	Y	T	E	E	G	N	Y	D	L	V	G	N	N	T	P	V	F	F	F	F	F	I	R	D	D	P	A	K	F	P	D		
UniRef90_F4H7U1	D	T	W	R	D	P	R	G	F	A	L	K	F	Y	T	E	E	G	N	Y	D	L	V	G	N	N	T	P	V	F	F	F	F	F	F	I	R	D	D	P	A	K	F	P	D		
UniRef90_UPI00035F0E6B	D	T	W	R	D	P	R	G	F	A	M	K	F	Y	T	E	E	G	N	Y	D	L	V	G	N	N	T	P	V	F	F	F	F	F	F	I	R	D	D	P	A	K	F	P	D		
UniRef90_M0AZ21	D	T	I	V	R	D	V	R	G	F	A	T	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	T	P	V	F	F	F	F	F	F	I	R	D	D	P	A	K	F	P	D	
UniRef90_E4N8W0	D	T	W	R	D	P	R	G	F	A	L	K	F	Y	T	E	Q	G	N	Y	D	L	V	G	N	N	T	P	V	F	F	F	F	F	F	I	R	D	D	P	A	K	F	P	D		
UniRef90_A8QCZ0	D	T	A	R	D	P	R	G	F	S	V	K	F	Y	T	D	E	G	N	W	D	L	V	G	N	N	T	P	V	F	F	F	F	F	F	I	R	D	D	P	A	K	F	P	D		
UniRef90_UPI00022CADB5	D	T	A	R	D	V	R	G	F	A	T	K	F	Y	T	R	E	G	N	F	D	L	V	G	N	N	T	P	V	F	F	F	F	F	F	I	R	D	D	P	A	K	F	P	D		
UniRef90_W821Q1	D	T	I	V	R	D	V	R	G	F	A	V	K	F	Y	T	E	E	G	N	F	D	L	V	G	N	N	T	P	V	F	F	F	F	F	F	I	R	D	D	P	A	K	F	P	D	
UniRef90_Q59602	D	A	Y	T	R	V	R	G	F	A	L	K	F	Y	T	E	E	G	N	W	D	L	V	G	N	N	T	P	V	F	F	F	F	F	F	F	I	R	D	D	P	A	K	F	P	D	
UniRef90_D2B2R4	D	T	Q	R	D	P	R	G	F	A	L	K	F	Y	T	E	E	G	N	Y	D	L</																									

UniRef90_M5E898	L	V	H	A	L	K	R	G	F	P	Q	A	S	A	H	D	T	F	W	D	F	N	S	L	L	P	E	A	T	H	M	L	L	W	L	M	S	D	R			
UniRef90_UPI0004187B5B	L	I	H	A	V	K	R	D	P	R	T	G	M	R	Q	H	E	N	N	W	D	F	W	T	L	Q	P	E	A	T	H	H	V	T	I	L	M	S	E	R		
UniRef90_UPI000476DC7E	L	I	H	A	V	K	R	D	P	R	T	H	H	E	Q	H	S	D	S	F	W	D	F	W	T	Q	P	E	A	T	M	H	H	Q	V	I	W	L	M	S	D	R
UniRef90_W4TDL1	F	I	H	T	Q	K	R	V	P	K	T	N	L	K	S	A	T	M	M	W	D	F	W	S	L	N	P	E	S	L	H	Q	V	L	I	L	M	S	D	R		
UniRef90_U5HA99	F	I	H	T	Q	K	R	D	P	Q	T	H	L	K	D	A	T	M	F	W	D	F	L	A	Q	N	P	E	S	F	H	Q	V	M	I	L	F	G	D	R		
UniRef90_E7G1G3	F	I	H	T	Q	K	R	H	P	Q	T	N	L	K	D	A	T	M	V	W	D	F	F	S	L	M	P	E	S	L	H	Q	I	T	I	L	M	S	D	R		
UniRef90_L8LNX9	V	V	H	S	L	K	P	E	P	H	N	E	I	P	Q	H	S	N	F	W	D	F	I	S	L	V	P	E	S	T	H	M	L	L	W	L	S	D	R			
UniRef90_V9FX61	F	I	H	S	Q	K	R	L	P	A	S	H	L	K	D	A	N	M	Q	W	D	F	W	S	L	R	P	E	S	L	H	Q	M	Q	T	W	L	F	S	D	R	
UniRef90_F4H7U1	F	I	R	S	Q	K	R	L	P	G	S	H	L	K	R	D	N	M	Q	W	D	F	W	T	L	S	P	E	S	A	H	Q	V	T	W	L	M	G	D	R		
UniRef90_UPI00035F0E6B	F	I	H	S	Q	K	R	R	A	D	T	H	L	R	D	N	M	Q	W	D	F	W	S	L	T	P	E	S	S	A	H	Q	V	T	W	L	M	G	D	R		
UniRef90_M0AZ21	L	V	H	A	L	K	P	E	P	D	D	A	G	L	R	D	H	D	M	Q	W	D	F	W	T	L	S	P	E	S	A	H	Q	V	T	W	L	M	G	D	R	
UniRef90_E4N8W0	F	I	R	S	Q	K	R	R	E	P	D	N	G	L	R	D	H	D	M	Q	W	D	F	W	T	L	S	P	E	S	A	H	Q	V	T	W	L	M	G	D	R	
UniRef90_A8QCZ0	L	I	H	A	A	K	R	G	E	P	Y	Q	A	T	A	H	D	T	F	W	D	F	I	A	T	L	M	P	E	S	T	H	M	Q	L	W	A	M	S	D	R	
UniRef90_UPI00022CADB5	F	V	H	A	I	K	P	E	P	H	N	E	V	I	P	Q	H	S	D	S	F	W	D	F	V	S	L	M	P	E	T	L	Q	N	V	M	V	M	S	D	R	
UniRef90_W8Z1Q1	F	I	H	A	V	K	P	E	P	H	N	E	V	I	P	Q	H	S	D	S	F	W	D	F	V	I	N	T	E	T	A	H	M	I	M	W	A	M	S	D	R	
UniRef90_Q59602	L	N	K	A	V	K	R	A	H	Q	Y	S	S	A	T	N	N	W	D	F	W	S	W	A	L	L	P	E	T	A	L	H	Q	V	T	I	V	M	S	D	R	
UniRef90_D2B2R4	F	I	H	S	Q	K	R	R	A	D	T	N	L	R	D	H	N	M	Q	W	D	F	W	T	L	S	P	E	T	A	H	Q	V	T	F	I	L	M	T	D	R	
UniRef90_K9XLS7	L	V	H	A	F	K	P	D	P	V	T	N	K	Q	D	P	N	R	I	F	D	F	I	S	L	T	P	E	A	T	H	M	I	T	W	L	F	S	P	W		
UniRef90_UPI0003																																										

[illegible]

UniRef90_M5E898	S	T	T	W	D	E	A	T	K	L	Q	G	A	N	N	D	Y	H	R	A	D	L	F	E	A	I	Q	N	G	Q	Y	P	A	W	E	F	G	I	Q	V	I	250			
UniRef90_UPI0004187B5B	N	L	S	W	D	E	A	A	K	L	S	G	Q	D	R	E	F	H	L	R	R	D	L	W	E	N	S	I	E	S	G	T	F	P	K	W	E	F	G	I	Q	V	I	260	
UniRef90_UPI000476DC7E	S	L	V	D	S	E	A	A	Q	K	L	S	G	Q	D	R	E	F	H	L	R	R	D	L	W	E	N	S	I	E	S	G	T	F	P	K	W	E	F	G	I	Q	V	I	270
UniRef90_W4TDL1	N	F	T	D	E	D	A	V	K	M	A	G	E	N	P	D	F	A	Q	E	D	D	L	C	N	A	I	Q	N	G	Q	Y	P	A	W	E	F	G	I	Q	V	I	280		
UniRef90_U5HA99	F	L	T	Q	E	Q	S	V	K	L	A	G	E	N	P	D	Y	A	T	Q	D	D	L	F	E	A	I	Q	N	G	Q	Y	P	A	W	E	F	G	I	Q	V	I	290		
UniRef90_E7G1G3	N	L	S	S	E	E	A	A	R	I	L	R	M	D	S	Y	A	T	Q	R	D	D	L	F	E	A	I	Q	N	G	Q	Y	P	A	W	E	F	G	I	Q	V	I	300		
UniRef90_L8LNX9	S	L	V	F	D	E	A	A	Q	K	L	A	G	K	D	P	D	F	H	R	R	D	L	W	E	S	A	I	Q	N	G	Q	Y	P	A	W	E	F	G	I	Q	V	I	310	
UniRef90_V9FXS61	N	M	P	V	D	E	A	A	F	L	A	G	A	D	P	D	Y	A	N	R	R	D	L	W	E	S	A	I	Q	N	G	Q	Y	P	A	W	E	F	G	I	Q	V	I	320	
UniRef90_F4H7U1	N	L	T	P	D	E	A	A	Q	L	A	G	S	D	A	D	Y	H	H	L	R	R	D	L	W	D	H	A	Q	N	G	Q	Y	P	A	W	E	F	G	I	Q	V	I	330	
UniRef90_UPI00035F0E6B	Y	L	T	Q	S	Q	A	T	D	E	L	A	G	T	D	A	D	Y	H	L	R	R	D	L	Y	D	A	I	Q	N	G	Q	Y	P	A	W	E	F	G	I	Q	V	I	340	
UniRef90_M0AZ21	Q	L	V	W	D	E	T	Q	K	I	A	G	K	N	P	D	F	N	R	R	D	L	F	E	A	I	Q	N	G	Q	Y	P	A	W	E	F	G	I	Q	V	I	350			
UniRef90_E4N8W0	F	L	P	Q	A	E	A	D	R	L	A	G	T	D	G	D	Y	H	R	R	D	L	F	E	A	I	Q	N	G	Q	Y	P	A	W	E	F	G	I	Q	V	I	360			
UniRef90_A8QCZ0	S	T	L	W	D	E	T	T	K	I	Q	G	A	N	D	Y	H	R	K	D	D	L	F	E	S	I	Q	N	G	Q	Y	P	A	W	E	F	G	I	Q	V	I	370			
UniRef90_UPI00022CADB5	S	L	I	W	D	E	A	Q	L	K	L	T	G	R	D	P	D	F	H	R	K	N	L	W	E	S	A	I	Q	N	G	Q	Y	P	A	W	E	F	G	I	Q	V	I	380	
UniRef90_W821Q1	S	L	V	W	D	E	A	V	Q	K	L	A	G	K	D	P	D	F	N	R	R	D	L	Y	E	A	I	Q	N	G	Q	Y	P	A	W	E	F	G	I	Q	V	I	390		
UniRef90_Q59602	N	L	T	N	E	E	A	A	K	I	T	A	G	D	R	E	S	H	Q	R	D	D	L	Y	E	A	I	Q	N	G	Q	Y	P	A	W	E	F	G	I	Q	V	I	400		
UniRef90_D2B2R4	N	F	T	D	A	E	A	A	G	A	V	I	A	Q	D	A	D	Y	H																										

[illegible]

	330	340	350	360
UniRef90_M5E898	N F F A E T E Q A S F C A S S I V P G I	D F S D D P L L L Q G R L F S Y L D T Q K		
UniRef90_UPI0004187B5B	N H F A D V E Q S A F S P A N I V V P G I	G F F T S D D R M L Q Q A R L F S Y G D T A R		
UniRef90_UPI000476DC7E	N F F A E T E Q I A F S V G N I V V P G I	D F T S D N D P L M Q Q A R L F S Y G D T A Q		
UniRef90_W4TDL1	N Y F A E H V E Q S T F S P S N L I V N G I	D F S P D P D K M L Q Q G R L F S Y P D A H R		
UniRef90_U5HA99	N Y F A E I E Q I A F S P S H L V V P G I	E P S P D P V L Q Q S R L F S Y P D T H R		
UniRef90_E7G1G3	N Y F A E V E Q S A F N P A H I V V P G I	G Y S P D D R M L Q Q G R L F S Y P D T H R		
UniRef90_L8LNX9	N F F A E E T E Q V A F A P S N V V P G I	D F S D D P L L Q Q G R L F S Y H D T Q Q		
UniRef90_V9F6S1	N Y F A E I E Q L A F S P S H M V V P G I	T P S P D D K M L Q Q G R L F S Y P D T L R		
UniRef90_F4H7U1	N Y F A Q I E Q A T F A P S N F V V P G I	G A S P D D K M L L A R L F S Y A D A H R		
UniRef90_UPI00035F0E6B	N Y H T D I E L A S F F E P S N L V V P G I	G T S P D D K M L Q Q G R L F S Y G Y A D A H R		
UniRef90_M0AZ21	N F F A E V E Q V A F F H P G N V V V P G I	D F T N D P L L Q Q G R L F S Y A Q D T Q		
UniRef90_E4N8W0	D H F V H I E Q A A F E P S N L V V P G I	G V S P D D K M L L G R L F S Y P D T H R		
UniRef90_A8QCZ0	N F F A E T E Q V A F C P S N V V V P G I	D F S D D P L L Q Q G R L F S Y L D T Q K		
UniRef90_UPI00022CADB5	N Y F A E T E Q V A Y F C P A N L V V P G I	D F S D D P L L Q Q G R L F S Y V D T Q		
UniRef90_W8Z1Q1	N F F A E T E Q I A F H P G H L V V K G I	D F S D D P L L Q Q G R L F S Y T D T Q		
UniRef90_Q59602	N F F A D V E Q S A F A P S N L V V P G I	G A S P D D K M L Q Q A R L F S Y A D A Q R		
UniRef90_D2B2R4	N Y F A E V E Q S S F E P A N L V V P G I	G P S P D D K M L Q Q G R L F S Y P D A H R		
UniRef90_K9XLS7	N Y F A E V E Q A A F G T G V L V D G L	D F S D D K L Q Q G R T F S Y S D T Q R		
UniRef90_UPI00036FD44A	N Y F A E I E Q A A F A P S N F V V P G I	A A S P D D K M L Q A R L F S Y A D A H R		
UniRef90_K9PAE9	N F F S E T E Q V A F L P T N L P P G I	E F S N D P L Q Q G R L F S Y Q D T Q		
UniRef90_UPI0003FFE9E3	N Y F A E T E Q A A F A P T N I V P G I	G F S P D D K M L Q Q G R L F S Y G D T Q R		
UniRef90_F8E0J7	N Y F A E T E Q A T F H P G V L P P G I	N V T A D P L Q Q G R L F S Y S D T Q		
UniRef90_U2W5L9	N N F T D I E E A A M S P A N F V V P G I	V E P S P D D K L L Q Q G R L F S Y K D T Q R		
UniRef90_UPI0003665447	N F F A E T E Q V A F C T A N V V P G I	G F S N D P L L Q Q G R N F S Y L D T Q		
UniRef90_UPI0004699F89	N F F Q E T E Q A A M S P A N L V V P G I	E P S E D R M L Q Q G R L F S Y A D A Q R		
UniRef90_UPI00047C7379	N Y F A E V E Q S A F G T G V L V D G L	D F S D D K M L Q Q G R T F S Y S D T Q R		
UniRef90_A1VNS4	N F F S E T E Q V A F H P G N L V V P G I	D F S E D P L L Q Q G R L F S Y T D A Q L		
UniRef90_M1NUX0	N F F A E T E Q V A F H P G H L V V P G I	D V S E D P M L Q Q G R L F S Y L D T Q L		
UniRef90_S9SA42	N F F S E T E Q V A F C A A N V V P G I	D F T N D P L Q Q G R L F S Y Q D T Q		
UniRef90_H5UT63	N Y F A E T E Q V A F H P G H L V V P G I	D V T N D P L L Q Q G R L F S Y L D T Q L		
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UniRef90_J0WWW70	N Y F A Q I E Q A A F S P S H T V V P G I	V E P S P D P V L Q Q S R L F S Y P D A H R		
UniRef90_F0RZ65	N Y F Q D V E Q A A F N P A N S V V P G I	G Y S P D D R M L Q Q G R L F S Y G D A Q R		
UniRef90_A6CRK1	N Y F A E V E Q A A F G T G V L V D G L	D F S D D K L L Q Q G R T F S Y S D T Q R		
UniRef90_G7CCT7	N F F A E T E Q V A F H P G H L V V P G I	D I T D D P L M Q A R L F S Y L D T Q L		
UniRef90_L8WJQ1	N Y F N E I E Q V A F S P S H L V V P G I	V E P S A D P V L Q Q S R L F S Y P D T H R		
UniRef90_F5SBH2	D Y H A E V E Q A A F G T G V L V D G L	D F S D D K M L Q Q G R T F S Y S D T Q R		
UniRef90_C5C810	N Y F A E T E Q V A F N P A N L V V P G I	D V T N D P L Q Q G R L F S Y L D T Q L		
UniRef90_A9TG35	N Y F A E V E Q A S F S P G H F V V P G I	E A S P D D R V L Q A R L F S Y A D D A S R		
UniRef90_UPI00036EB6F5	N Y F N E V E Q V A M N P A S V V V P G I	S F S D D K M L Q Q G R L F S Y G D A H R		
UniRef90_UPI0003B6BD55	D Y F N E V E Q V A F G T G V L V D G M	D F S D D K M L Q Q G R T F S Y S D T Q R		
UniRef90_V8A5U9	D F F A Q I E Q V A F E P N N Y V V P G T	G L S P D D K M L L A R S F S Y A D A H R		
UniRef90_D6U800	N F F A Q I V I Q A G F E V A N F V P G I	G P S P D D R M V L G R L M S A Y G D S I R		
UniRef90_D5UKE6	N Y F A E T E Q V A F H V G H L V V R G I	D V T D D P L L Q Q G R L F S Y L D T Q L		
UniRef90_Q42547	N F F N E T E Q L A F N P G L V V V P G I	Y Y S D D D K L L Q C R I L F S Y G D T Q R		
UniRef90_F8JE25	N Y F A E I E Q A A F S P S N I V V P G I	G F S P D D K M L Q A R L F S Y A D A H R		
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UniRef90_G9ZMZ1	N Y F D E V E E L A F S P A N F V V P G I	E A S P D D K L L Q Q G R L F S Y G K D A A R		

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UniRef90_W4TDL1	Y	R	V	G	V	N	A	H	Q	L	E	V	N	R	P	C	P	F	A	V	N	N	F	Q	R	D	G	F	M	A	D	S	H	Y	Q	D	K	P	N	Y	
UniRef90_U5HA99	H	R	L	G	V	N	F	H	Q	L	P	V	N	A	P	R	A	P	V	N	N	F	Q	R	D	G	F	M	A	F	Y	N	Q	G	A	R	P	N	Y		
UniRef90_E7G1G3	Y	R	L	G	V	N	F	H	S	Q	L	P	V	N	A	P	R	C	P	F	A	T	S	S	K	D	G	L	M	Q	S	G	L	Y	A	I	E	R	A		
UniRef90_L8LN69	H	R	L	S	P	N	F	A	N	L	P	I	N	Q	P	V	L	C	P	F	A	T	H	N	Q	D	G	R	M	Q	M	Q	V	I	K	T	S	R	V	N	
UniRef90_V9FXS1	H	R	L	G	K	N	F	Q	Q	L	P	V	N	R	P	L	N	E	P	Q	T	Y	Q	R	D	G	R	M	V	V	N	G	N	M	G	D	A	P	T		
UniRef90_F4H7U1	Y	R	V	G	T	N	H	A	Q	L	P	V	N	A	P	H	S	E	V	H	S	Y	S	K	D	G	A	R	I	S	F	H	G	P	D	V	P	V			
UniRef90_UPI00035F0E6B	Y	R	L	G	T	N	Y	M	D	L	P	V	N	R	P	Q	S	P	V	H	S	Y	A	K	D	G	A	M	R	F				Q	N	T	G	D	P	V	
UniRef90_M0AZ21	N	R	F	N	S	A	N	W	D	I	P	L	N	R	P	I	A	E	R	H	N	N	Q	R	A	D	G	F	M	R	Q	E	I	N	E	G	K	A	T	Y	
UniRef90_E4N8W0	Y	R	L	G	P	N	F	H	Q	L	P	P	N	R	A	H	V	P	V	H	S	Y	A	K	D	G	F	M	R	F	D	A	I	N	E	R	T	A	R	Y	
UniRef90_A8QCZ0	S	R	L	G	T	N	F	H	Q	L	P	I	N	H	P	K	V	P	V	R	N	F	Q	R	D	G	M	M	Q	M	S	I	P	K	G	R	A	N	Y		
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UniRef90_W8Z1Q1	S	R	L	G	P	N	F	H	E	I	P	I	N	K	P	M	C	P	V	H	N	N	Q	R	D	G	M	H	R	M	T	E	I	N	R	G	P	V	A	Y	
UniRef90_Q59602	Y	R	L	G	V	N	F	R	Q	L	P	V	N	R	P	R	C	P	V	H	S	Y	N	K	D	G	Q	G	R	A	T	E	P	L	S	R	Q	P	A	H	Y
UniRef90_D2B2R4	Y	R	I	G	A	N	F	L	Q	L	P	I	N	R	P	L	S	P	V	H	S	Y	N	K	D	G	Q	M	A	F	V	N	P	S			D	P	V		
UniRef90_K9XLS7	H	R	I	G	T	N	Y	L	Q	L	P	I	N	S	P	K	T	K	V	A	T	N	L	R	D	G	Q	M	T	Y	R	V	D	G	N	P	H	V	N		
UniRef90_UPI00036FD44A	Y	R	L	G	T	N	H	A	Q	L	P	V	N	A	A	K	A																								

UniRef90_M5E898	Q	Y	P	N	S	L	N	G	P	R	A	Q	P	F	G	F	G	T	Q	S	L	P	L	G	P	R	R	A	R	D	E	R	F	R	D	D	H	Y	S	Q	A			
UniRef90_UPI0004187B5B	Y	V	P	N	S	R	N	D	A	W	R	Q	C	P	F	D	F	T	E	Q	S	L	P	L	G	S	G	S	A	D	H	W	D	H	T	V	D	D	H	Y	S	E	Q	
UniRef90_UPI000476DC7E	H	P	N	S	T	T	G	G	G	C	P	F	Q	N	A	D	F	K	H	F	P	L	Q	A	L	S	G	V	K	L	R	K	R	A	E	T	V	D	D	H	Y	S	Q	A
UniRef90_W4TDL1	Y	F	P	N	S	I	F	D	D	T	E	A	D	V	S	Y	K	N	Y	E	Y	E	Y	E	L	D	S	A	H	V	A	N	Y	N	R	N	D	D	H	Y	T	Q	P	
UniRef90_U5HA99	Q	P	S	S	I	Q	P	L	G	Y	K	P	R	L	Y	E	H	E	Q	F	L	G	G	A	V	Q	D	L	S	V	V	T	E	L	D	F	V	Q	P					
UniRef90_E7G1G3	Y	E	P	S	S	L	G	G	Y	K	E	T	V	S	H	A	R	E	N	K	L	D	L	F	G	S	A	Y	A	Y	D	F	R	E	L	D	K	D	Y	T	Q			
UniRef90_L8LN69	Y	F	P	N	S	L	G	A	P	S	E	T	E	G	Y	V	H	S	E	R	V	Q	H	K	I	R	E	R	S	S	P	S	F	E	H	F	S	Q	A					
UniRef90_V9FXS1	Y	F	P	N	S	M	G	G	P	E	E	F	G	S	L	R	Y	A	T	Y	D	E	H	T	V	V	D	K	Y	S	S	A	Y	D	H	N	V	S	Q	V				
UniRef90_F4H7U1	Y	A	P	N	S	A	G	G	P	A	A	D	P	A	A	A	E	S	G	W	E	S	D	G	A	M	V	R	T	L	H	P	E	D	D	D	F	G	Q	A				
UniRef90_UPI00035F0E6B	Y	S	P	N	S	F	G	G	A	R	A	A	E	N	D	D	V	A	T	Y	G	I	E	A	E	I	V	R	R	L	H	S	E	D	D	D	F	G	Q	P				
UniRef90_MOAZ21	K	P	N	S	I	D	A	T	E	E	E	G	G	Y	E	H	A	E	R	L	I	D	G	K	K	L	R	N	R	S	E	D	F	Q	H	F	N	Q	A					
UniRef90_E4N8W0	A	P	N	S	Y	G	G	P	A	A	D	P	S	L	W	G	A	P	L	G	W	M	V	R	E	A	S	P	L	H	R	E	D	D	D	W	G	Q	A					
UniRef90_A8QCZ0	E	P	N	S	L	T	G	P	R	A	C	P	A	A	F	R	T	S	A	D	E	V	I	G	P	R	Q	R	R	D	E	R	F	A	D	H	Y	S	Q	A				
UniRef90_UPI00022CADB5	E	P	N	S	I	E	T	P	E	K	S	G	G	F	T	T	H	A	A	L	E	S	G	Q	K	V	R	Q	I	L	S	E	D	T	F	A	N	Y	F	A	P			
UniRef90_W8Z1Q1	H	K	N	G	I	A	G	G	S	P	H	T	T	G	Y	K	H	Y	Q	E	K	V	D	G	R	V	T	R	E	R	S	D	S	F	K	D	H	Y	S	Q				
UniRef90_Q59602	E	P	N	S	F	G	G	W	S	Q	Q	P	D	F	A	E	P	L	K	I	N	G	D	A	A	H	T	W	D	Y	R	Q	D	D	D	Y	F	S	Q	P				
UniRef90_D2B2R4	Y	A	P	N	T	V	G	G	P	A	A	D	A	L	F	E	E	N	Y	K	Q	V	S	G	E	I	L	T	R	L	H	R	E	D	D	D	Y	V	Q	P				
UniRef90_K9XLS7	Y	E	P	S	S	M	H	G	L	K	E	A	P	S	G	K	D	H	T	P	Y	V	E	G	P	V	T	R	Q	K	I	S</												

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UniRef90_E4N8W0 G T L V R D V L D D A A R D R L V A N I A G H L A G V S A P V L R A L E Y W R
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UniRef90_UPI00022CADB5 R L F W L S Q T D F E K Q H I I N G F S F E L G K V M R G Y I R E R V V D L L S
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UniRef90_D2B2R4 R A L W E N V L S D T D R S H L V S N V V G H A S E V T A E M K K R V V E Y W T
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UniRef90_UPI0004699F89 G E L Y R S F S E D E Q D D L I E V L G D L G K V K D E I R N I M V S H F Y
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UniRef90_A1VNS4 A T L F W N S Q S L A E K D H L V A A F R F E L S K V E P E I R Q R M V D N L A
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UniRef90_U2F524 G D L W R V M T P Q Q R D L L I E N T A R N I E P V S K N V K Y R H A V H C Y
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UniRef90_F0RZ65 S G K L F A L M K A D E K Q R L F E N T A R N M Q G T T L L V Q K R H I R H C Y
UniRef90_A6CRK1 G E T Y R R F T D W E R S E L I S N L V D A L S T C R K E I Q D A M I D I F T
UniRef90_G7CCT7 T L F Y R S L H P V I E Q A H V A A A F S F E I G K C Y E Q T I K E R A L A V L A
UniRef90_L8WJQ1 R A L W Q K V M K D D A K E R F V K N V A G H L G G A S A E I K A R Q L S V F A
UniRef90_F5SBH2 G Q T Y R A L E G W E R D E L I N N L V I G L G P C D P R I Q K K M V E M F T
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UniRef90_UPI0003B6BD55 G E T F R K F K E W E K D E L I K N L V D N L I P C K K E I Q E E M I A H F K
UniRef90_V8A5U9 N A L V N K V M D D A R E R L V Q N A A G H I G G V E E P V L S R V F E Y W S
UniRef90_D6U800 G T L Y R Q V M S P T D R D R H L V G N I V W H L S G V E R F I Q E R A V S Y L S
UniRef90_D5UKE6 R M F W R S L T P V I E Q A H T A Q A Y T F E L G R C F E Q A V K E R Q L Q A L A
UniRef90_Q42547 G D R Y R S W A P D R Q D R F V K R W V E I L S P R H E I R G L W I S Y W S
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UniRef90_B2GI42 G T L Y R E V F S D E E K A E A V E N I A G H V G D V D E T I K E A A F Q Y W E
UniRef90_G9ZMZ1 G D L Y R L M T A D E K D R L I Q T I A D L F G T F N D E I K T L A I Q N F Y
UniRef90_E2SFN2 G T L V R E V M D E A A R G R L V D N I V G H L N G V S E P V L Q R A F E Y W R
UniRef90_J2JCM6 G E F Y R S L S E N E K Q S L I K N L T G D L S S V T K D V V R K M V G Y F Y
UniRef90_W4QD70 G E T Y R R F T D D F E R D E L I K N L V N N L S T C D E R I Q Q Q M I E N F T
UniRef90_J1Z119 G T L V R D V F D D A E R E R L V N N I V G H L Q G V T E Q V L Q R A F E Y W R
UniRef90_G8Y7H6 G A L Y K V L A K P N Q Q K N L A H N V A V H V S A A D P H I Q D R V F E Y F S
UniRef90_R9LGD8 G D T Y R K F D D V E K N E L I S N L V N N L K V C S P K I Q E T W I S Y F T
UniRef90_UPI00037EB100 G A L Y N V M S E D E K R L V K T I K E N L G L V D D E V K I L E T K Q F Y
UniRef90_T1HTH7 A I F W R D E L T E D D R V R L V Q N M A Q D L R Q A S P F L W E R A L T N L H
UniRef90_UPI00037FC62E G D K F R A M S K K E Q E I L V D N I V A D M W E V D Y K I Q V K A I E N F K
UniRef90_G4EMM8 G L L F D K V M D D A K R S R L I H N T A S T L K L A D V S I Q Y R W T A L C Y
UniRef90_Q2H890 A Q L F W N S M T P I E K H H I I A A F A F E L D H C E D P V V I S R M V N R L A
UniRef90_S7RGA6 R E L W Q K V L D D T H K A H L V H N V A V H L V N A S A E V K A R Q L S V F A
UniRef90_G5RW46 R L F W L S Q T P I E Q Q H I I D A F S F E L G K V A R A Y I R E R V V D Q L A
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UniRef90_W1NLL7 G D R Y R S F A P D R Q E R F V K R I V D A L S D V T H E I R S I W I S Y W S
UniRef90_A8GYR7 G V L Y R S L S K Q D K R D L I T N L S A D L G K V T D S H V K H Q M L S Y F Y
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UniRef90_N4V2S9		E H V T N Y E V D D S Q G Y L T S D V G G P I E D Q V S L K			
UniRef90_W9WMW6	N K K I A D L E Q N K R D Q Q D T K Q N T		T T D W G V K V I S D V D H W L K		
UniRef90_K6XNM2			T M T R Q N G A P I G D N Q N S Q T		
UniRef90_N9CED1			P L T K D N G A P V G D N Q N S I T		
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UniRef90_E6JDU9			D D P I L T T R Q G H P V H D N Q N T R T		
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UniRef90_A8G8P5			A N A D P Q M T N D N G S P V G D N Q N S Q T		
UniRef90_C6X9F7			S K D I L T T S A G A P V P D D N N S I S		
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UniRef90_J3AI99	P K A A Q A V D A K G G E A S A A A P Q M T R D N G A P I G S N R N S L T				
UniRef90_G0S5M7	R D T D A T T D K F L E Q Y V I D D S S G Y M T S D V G G P I E E Q F S L K				
UniRef90_M4FLJ9	D K I A D L G R N T T P S T E G R M T S D F G T R M S S A D D W L R				
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UniRef90_V9DAQ5		R Q L I N H Q A S E D A P V Y T L A Q G R P V R D T S A V K			
UniRef90_B6Q1X3	D K K I I D L S R D T A D V H K K T F T T D H G V P V S D T D H W L K				
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UniRef90_U3GV17			H G A T T S L A G A P V A S E N H S I T		
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UniRef90_B8MT74	D S N A S D E T E A F L S E F Y L N D N N S F L T T D V G G P I E D Q N S L K				
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UniRef90_C7Z321			S R P V Y T L A E G Q P L R D P S V S T T		
UniRef90_M2RDG3		Q L Q T S E E D A A D V Y T T E N G A P Y S N P Y D A L R			
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UniRef90_G1X0L0			D T V P T Y T G A E G V P Y A S A T A Q H		
UniRef90_G7XJZ9	N M T T K Q D D L A R D T I Q L S G V Q P M T T D Y G I K I S D P D H W L R				
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[illegible]

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UniRef90_UPI000455DCB6	Y	F	E	V	T	H	D	L	V	S	D	I	T	R	A	K	V	L	F	Q	S	E	P	G	K	N	V	A	L	R	F	S	T	V	V	G	E	R	G	S	A	
UniRef90_S2XFJ1	T	F	V	V	K	N	S	M	K	K	Y	T	R	A	K	A	F	L	F	Q	S	E	P	G	K	N	V	A	L	R	F	S	T	V	V	G	E	R	G	S	A	
UniRef90_J7LHX2	T	F	R	V	T	E	D	V	S	A	Y	T	C	A	D	L	F	Q	S	E	P	G	K	N	V	A	L	R	F	S	T	V	V	G	E	R	G	S	A			
UniRef90_K5A4P9	Y	F	E	T	Y	G	P	A	E	K	Y	T	R	A	K	A	F	L	F	Q	S	E	P	G	K	N	V	A	L	R	F	S	T	V	V	G	E	R	G	S	A	
UniRef90_W7Z0T4	V	F	K	V	A	N	S	M	K	K	Y	T	K	A	K	A	F	L	F	Q	S	E	P	G	K	N	V	A	L	R	F	S	T	V	V	G	E	R	G	S	A	
UniRef90_K5UGP0	Y	F	K	V	H	N	D	S	M	K	K	Y	T	F	A	P	V	L	F	Q	S	E	P	G	K	N	V	A	L	R	F	S	T	V	V	G	E	R	G	S	A	
UniRef90_UPI000262585B	E	F	E	V	Y	E	C	A	D	V	S	A	Y	T	K	A	G	F	L	Q	S	E	P	G	K	N	V	A	L	R	F	S	T	V	V	G	E	R	G	S	A	
UniRef90_A0A022LEU6	E	F	E	V	T	E	D	V	S	A	Y	T	R	A	A	V	F	Q	S	E	P	G	A	V	S	E	T	L	I	R	F	S	T	V	V	G	E	R	G	S	A	
UniRef90_D7W1Q7	E	F	V	A	D	A	D	F	S	D	V	T	M	A	D	F	L	S	K	A	G	K	T	E	P	V	L	I	R	F	S	T	V	V	H	Q	G	S	P			
UniRef90_UPI0004664CB2	V	F	E	T	E	D	V	S	Q	F	T	M	A	A	L	F	Q	S	K	A	G	A	Q	T	E	M	L	A	R	F	S	T	V	V	A	G	E	M	G	S	P	
UniRef90_UPI0003B6F020	V	F	E	T	E	D	V	S	A	W	T	K	A	A	V	F	Q	S	P	G	A	Q	T	E	T	L	L	A	R	F	S	T	V	V	A	G	E	M	G	S	P	
UniRef90_V2TMD5	V	F	T	P	S	A	D	I	S	D	L	T	M	A	K	V	F	T	P	P	G	T	Q	T	E	P	V	F	V	R	F	S	T	V	V	H	G	N	H	S	P	
UniRef90_UPI0003B46807	T	F	T	V	T	E	D	V	S	K	Y	T	K	A	A	M	F	Q	S	P	G	V	E	S	E	M	L	A	R	F	S	T	V	V	A	G	E	L	G	S	P	
UniRef90_M5AE66	T	F	R	L	T	K	D	M	H	Q	Y	T	K	A	K	I	F	T	E	M	G	K	E	S	V	P	M	R	I	R	F	S	T	V	V	A	G	E	M	G	S	A
UniRef90_S61F2	T	F	T	V	T	N	D	L	S	D	L	T	K	A	R	V	F	T	A	S	G	E	T	T	P	V	F	I	R	F	S	T	V	V	H	G	N	H	S	P		
UniRef90_F8NK55	Y	F	K</																																							

UniRef90_UPI00036406C0	D	T	W	R	D	P	R	G	F	A	L	K	F	Y	T	T	E	G	N	Y	D	M	V	G	N	D	T	P	V	F	F	F	V	K	D	P	M	K	F	Q	H			
UniRef90_Q55MG2	D	T	V	R	D	V	R	G	F	A	L	K	F	Y	T	D	E	G	N	Y	D	M	V	G	N	N	T	P	V	F	F	F	V	K	D	A	P	M	K	F	Q	D		
UniRef90_R7WQ58	D	T	W	R	D	P	R	G	F	A	L	K	F	Y	T	D	E	G	N	Y	D	M	V	G	N	N	T	P	V	F	F	F	V	K	D	A	P	M	K	F	Q	D		
UniRef90_UPI000455DCB6	D	T	A	R	D	P	R	G	F	S	T	K	L	R	T	D	E	G	N	L	D	W	V	F	G	N	N	T	P	V	F	F	F	V	R	D	A	P	A	K	F	P	H	
UniRef90_S2XFJ1	E	T	A	R	D	P	R	G	F	S	V	K	F	Y	T	E	E	G	N	Y	D	F	V	G	N	N	T	P	V	F	F	F	V	R	D	A	P	A	K	F	P	D		
UniRef90_J7LHX2	D	T	W	R	D	P	R	G	F	A	L	K	F	Y	T	R	E	E	G	N	Y	D	M	V	G	N	N	T	P	V	F	F	F	M	R	D	A	P	Q	K	F	Q	D	
UniRef90_K5A4P9	E	T	A	R	D	P	R	G	F	A	V	K	M	Y	T	E	D	E	G	N	W	D	L	V	G	N	N	L	K	I	F	F	F	I	R	D	A	M	K	F	P	D		
UniRef90_W7Z0T4	E	T	L	R	D	P	R	G	F	S	V	K	F	Y	T	E	E	G	N	Y	D	F	V	G	N	N	L	K	I	F	F	F	I	R	D	A	M	K	F	P	D			
UniRef90_K5UGP0	D	T	V	R	D	V	R	G	F	A	V	K	F	Y	T	E	E	G	N	Y	D	I	V	G	N	D	L	K	I	F	F	F	I	R	D	A	M	K	F	P	D			
UniRef90_UPI000262585B	D	T	A	R	D	M	R	G	Y	W	G	T	K	F	Y	T	E	E	G	N	Y	D	L	T	T	I	D	M	P	V	K	I	N	Q	D	A	M	K	F	P	D			
UniRef90_A0A022LEU6	D	T	W	R	D	V	R	G	F	S	L	K	F	Y	S	T	E	E	G	N	L	D	I	V	G	N	N	T	P	V	F	F	F	L	R	D	A	P	M	K	F	P	D	
UniRef90_D7W1Q7	E	T	F	R	D	P	R	G	F	S	A	V	K	F	Y	T	D	Q	E	G	N	Y	D	L	V	G	N	N	T	P	V	F	F	F	L	R	D	A	P	M	K	F	P	D
UniRef90_UPI0004664CB2	D	T	W	R	D	V	R	G	F	S	L	K	F	Y	T	S	E	E	G	N	Y	D	L	V	G	N	N	T	P	I	F	F	F	V	R	D	A	P	M	K	F	P	H	
UniRef90_UPI0003B6F020	D	T	W	R	D	V	R	G	F	A	V	R	L	Y	T	D	E	E	G	N	L	D	I	V	G	N	N	T	P	I	V	F	F	F	V	R	D	A	P	M	K	F	P	N
UniRef90_V2TMD5	E	T	L	R	D	P	R	G	F	A	T	K	F	Y	T	Q	D	E	G	N	W	D	L	V	G	N	N	F	T	F	F	F	I	R	D	A	P	M	K	F	P	N		
UniRef90_UPI00003B46807	D	T	W	R	D	V	R	G	F	A	L	K	F	Y	T	S	E	E	G	N	F	D	L	V	G	N	N	T	P	I	F	F	F	V	R	D	A	P	M	K	F	P	H	
UniRef90_M5AE66	D	T	V	R	D	V	R	G	F	A	L	R	F	Y	T	D	D	E	G	N	Y	D	I	V	G	N	N	T	P	I	V	F	F	F	V	N	D	A	P	M	K	F	P	D
UniRef90_S61F2	E	T	L	R	D	P	R	G	F	A	T	K	F	Y																														

UniRef90_UPI00036406C0	F	I	R	S	Q	K	R	R	A	D	N	N	L	R	D	H	D	M	Q	W	D	F	W	T	L	S	P	E	S	A	H	Q	V	T	W	L	M	G	D	R		
UniRef90_Q55MG2	V	I	H	A	L	K	P	R	E	A	H	N	E	M	P	Q	H	D	N	A	W	D	F	W	T	L	S	H	Q	E	A	T	H	M	Q	Q	W	L	T	S	D	R
UniRef90_R7WQ58	F	I	R	S	Q	K	R	R	D	P	H	D	N	N	L	R	D	H	D	N	A	W	D	F	W	T	L	S	P	E	S	A	H	Q	V	T	W	L	M	G	D	R
UniRef90_UPI000455DCB6	F	V	H	T	Q	K	R	D	P	Q	T	H	L	K	D	A	D	M	F	W	D	Y	L	S	R	N	P	E	S	A	H	Q	V	A	I	V	F	S	D	R		
UniRef90_S2XFJ1	V	I	H	S	L	K	P	D	P	R	T	N	L	Q	D	A	S	R	L	F	D	F	M	G	L	S	P	E	A	T	N	M	L	I	H	L	F	T	D	E	R	
UniRef90_J7LHX2	F	I	R	S	Q	K	R	D	P	R	T	N	L	R	D	N	T	M	Q	W	D	Y	W	S	L	S	P	E	S	A	H	Q	V	T	W	L	M	G	D	R		
UniRef90_K5A4P9	M	I	H	A	F	K	P	D	P	A	S	N	V	P	N	P	Q	R	M	F	D	F	V	S	R	T	P	E	A	T	H	M	L	I	H	L	F	S	P	W		
UniRef90_W7Z0T4	M	V	H	S	L	K	P	D	P	R	T	N	L	Q	D	P	Q	R	Y	W	D	F	M	S	L	T	P	E	S	T	N	M	M	M	H	L	F	T	D	E	R	
UniRef90_K5UGP0	I	V	H	A	V	K	P	E	P	H	N	E	V	P	A	H	N	F	W	D	F	A	G	L	Q	P	E	S	A	H	M	I	M	W	V	M	S	D	R			
UniRef90_UPI000262585B	M	M	H	A	Y	F	P	N	P	R	T	G	M	P	A	D	N	F	W	D	Y	V	A	N	N	P	E	S	L	H	Q	V	M	W	I	M	S	D	R			
UniRef90_A0A022LEU6	F	I	H	S	Q	K	R	L	G	D	S	G	L	R	D	A	D	M	Q	W	D	F	W	T	L	S	P	E	T	A	H	Q	V	T	Y	L	M	G	D	R		
UniRef90_D7W1Q7	M	V	H	A	F	K	P	S	P	V	T	N	L	S	D	N	N	R	V	F	D	F	M	A	N	I	P	E	A	T	H	M	L	T	W	L	F	S	D	Y		
UniRef90_UPI0004664CB2	F	I	R	S	Q	K	R	L	P	D	S	G	L	R	D	N	N	M	Q	W	D	F	W	T	N	N	P	E	S	A	H	Q	V	T	Y	L	M	G	V	R		
UniRef90_UPI0003B6F020	F	I	R	S	Q	K	R	T	P	D	S	G	L	R	S	P	N	M	Q	W	D	F	W	T	A	N	P	E	S	A	H	Q	V	S	Y	V	M	G	D	R		
UniRef90_V2TMD5	M	V	H	A	F	K	P	N	P	Q	N	G	L	L	D	D	M	G	T	F	D	F	F	Q	H	V	P	E	A	T	R	T	V	L	T	E	L	F	S	D	R	
UniRef90_UPI0003B46807	F	I	R	S	Q	K	R	L	P	E	N	G	L	R	D	N	T	M	Q	W	D	F	W	S	Q	N	P	E	T	A	H	Q	V	T	Y	L	M	G	P	R		
UniRef90_M5AE66	F	I	H	S	Q	K	R	D	P	R	T	H	E	R	S	Q	D	M	Q	W	D	F	W	A	S	H	P	E	S	V	H	Q	V	T	I	L	M	S	D	R		
UniRef90_S61F2	M	V	H	A	F	K	P	D	P	R	T	N	L	D	D	D	S	R	R	F	D	F	F	S	H	V	P	E	A	T	R	T	L	T	E	L	Y	S	N	S		
UniRef90_F8NKG5																																										

[illegible]

UniRef90_UPI00036406C0	F	T	Q	H	E	A	D	Q	M	A	A	D	T	D	Y	H	T	R	D	L	F	E	H	I	R	D	G	E	Y	P	S	W	T	M	Y	V	Q	L						
UniRef90_Q55MG2	S	L	V	W	D	E	A	L	K	I	A	G	Q	D	P	D	F	H	T	R	D	L	W	E	H	I	R	D	E	A	K	E	F	P	S	W	T	L	H	V	V	Q	L	
UniRef90_R7WQ58	F	T	Q	H	E	A	D	Q	M	A	A	D	T	D	Y	H	T	R	D	L	W	E	H	I	R	D	E	A	K	E	F	P	S	W	T	L	H	V	V	Q	L			
UniRef90_UPI000455DCB6	F	T	D	G	P	T	E	A	G	R	L	S	G	E	N	D	F	Y	G	I	Q	S	L	F	E	T	A	I	E	A	G	K	Y	P	S	W	T	A	Y	I	Q	L		
UniRef90_S2XFJ1	N	M	T	I	E	E	A	A	E	Q	Q	G	K	D	F	S	H	A	T	R	D	L	F	E	A	I	E	E	A	I	E	R	G	E	Y	P	S	W	T	L	F	V	Q	L
UniRef90_J7LHX2	F	L	T	Q	E	E	A	S	D	R	I	A	G	E	D	A	D	H	H	A	T	R	D	L	F	E	A	I	E	E	R	G	E	Y	P	S	W	T	L	F	M	Q	L	
UniRef90_K5A4P9	N	L	T	Q	E	E	A	N	E	I	Q	A	K	N	V	I	G	H	A	S	R	D	L	Y	E	A	I	E	E	R	G	E	Y	P	S	W	T	L	F	V	Q	L		
UniRef90_W7Z0T4	N	L	S	A	E	E	A	A	A	V	A	Q	M	D	F	N	H	A	S	R	D	L	Y	E	A	I	E	E	R	E	D	Y	P	S	W	T	L	F	V	Q	L			
UniRef90_K5UGP0	S	F	V	W	D	E	A	L	K	I	C	G	Q	D	P	D	F	H	R	K	D	L	F	E	A	I	E	T	N	G	A	F	P	K	W	H	F	G	I	Q	A	L		
UniRef90_UPI000262585B	S	L	L	M	D	E	A	Q	K	I	G	G	D	D	D	Y	H	R	R	D	L	R	E	A	I	E	D	R	G	A	Y	P	S	Y	E	L	F	G	V	Q	L			
UniRef90_A0A022LEU6	T	M	E	A	D	E	A	E	K	L	A	G	S	D	A	D	Y	Y	R	R	D	L	F	D	A	I	E	D	R	G	E	N	F	P	S	W	T	D	V	F	V	Q	L	
UniRef90_D7W1Q7	N	L	T	Q	E	E	A	D	K	I	Q	S	T	Q	I	E	H	A	T	R	D	L	Y	N	S	A	I	Q	N	K	N	F	P	K	W	D	L	F	V	Q	M	L		
UniRef90_UPI0004664CB2	F	F	S	N	A	E	E	A	Q	M	A	G	E	D	A	D	F	H	R	R	D	L	F	E	A	I	E	Q	R	G	E	H	P	S	W	T	L	S	V	Q	V	Q	L	
UniRef90_UPI0003B6F020	N	M	T	N	E	E	A	G	L	I	A	G	Q	D	A	D	F	H	R	R	D	L	F	E	A	I	E	Q	R	G	E	Y	P	S	W	T	L	S	V	Q	V	Q	L	
UniRef90_V2TMD5	N	L	T	P	K	E	V	P	M	V	Q	G	Q	D	Y	S	H	M	T	H	D	L	V	N	S	A	I	Q	R	G	E	Y	P	S	W	T	L	S	V	Q	V	Q	L	
UniRef90_UPI0003B46807	H	L	S	N	D	E	A	E	R	M	A	G	V	D	A	E	Y	H	R	R	D	L	Y	E	A	I	E	A	R	G	D	N	F	P	T	W	K	V	I	Q	V	Q	L	
UniRef90_M5AE66	N	L	S	N	D	E	V	A	E	R	M	A	G	E	N	P	D	Y	L	Q	A	D	L	Y	E	A	I	E	A	R	G	D	F	P	K	W	D	L	Y	V	Q	V	Q	

UniRef90_UPI00036406C0	M	P	Y	E	D	A	A	T	Y	R	F	N	P	F	D	L	T	K	V	W	P	H	G	D	Y	P	L	I	E	V	G	R	M	T	L	D	R	N	P	S			
UniRef90_Q5MG2	I	K	E	E	D	E	H	K	F	D	F	D	L	L	D	S	T	K	V	I	P	E	E	L	L	V	P	V	Q	K	I	G	T	L	T	L	D	R	N	P	V		
UniRef90_R7WQ58	M	P	F	A	E	A	D	D	F	R	D	F	N	P	F	D	L	T	K	V	W	S	K	K	D	Y	P	L	I	E	V	G	T	M	T	L	D	R	N	P	D		
UniRef90_UPI000455DCB6	M	T	P	E	Q	A	E	K	F	R	D	F	N	L	L	D	L	T	K	V	W	P	H	A	D	F	P	M	R	P	F	G	K	L	T	L	N	E	N	P	Q		
UniRef90_S2XFJ1	L	K	P	E	D	M	D	N	K	F	D	F	D	P	L	D	A	T	K	D	W	L	E	K	D	F	P	Y	E	L	V	G	T	M	T	L	D	R	N	P	V		
UniRef90_J7LHX2	M	P	V	A	E	A	A	D	Y	R	D	F	N	P	F	D	L	T	K	V	W	P	H	A	D	Y	P	L	I	E	V	G	R	M	T	L	D	H	N	P	E		
UniRef90_K5A4P9	M	E	D	D	Y	H	P	E	L	D	F	D	F	D	L	D	D	T	K	L	W	P	E	E	D	R	F	P	W	L	P	V	G	R	M	V	L	D	R	N	P	V	
UniRef90_W7Z0T4	L	D	P	A	D	L	D	Q	F	D	F	Y	P	L	D	A	T	K	D	W	F	E	E	D	I	P	Y	Q	L	V	G	T	M	T	L	D	R	N	P	D			
UniRef90_K5UGP0	I	P	E	A	R	E	H	D	F	D	F	D	L	L	D	A	T	K	V	W	P	E	E	E	L	V	P	L	E	I	V	G	E	M	V	L	N	R	T	V	D		
UniRef90_UPI000262585B	P	M	E	D	E	F	K	Y	D	F	D	V	L	D	P	S	K	F	W	S	K	K	D	Y	P	L	I	E	V	P	H	P	V	G	K	M	T	L	N	R	N	V	D
UniRef90_A0A022LEU6	M	P	Y	D	E	A	K	D	Y	R	F	N	P	F	D	L	T	K	T	W	S	K	K	D	Y	P	R	I	K	V	G	T	F	T	L	D	R	N	P	Q			
UniRef90_D7W1Q7	L	K	K	D	D	F	E	K	L	D	F	N	P	L	D	V	T	K	I	W	P	E	S	I	A	K	S	V	K	A	G	T	M	T	L	N	Q	N	P	T			
UniRef90_UPI0004664CB2	M	P	Y	E	D	A	K	T	Y	R	F	N	P	F	D	L	T	K	V	W	P	H	A	D	Y	P	L	I	R	V	G	T	M	R	L	D	R	N	P	E			
UniRef90_UPI0003B6F020	M	P	Y	E	E	A	R	T	Y	R	F	N	P	F	D	L	T	K	V	W	P	H	A	D	Y	P	L	I	H	R	V	G	T	L	T	L	D	R	N	P	Q		
UniRef90_V2TMD5	L	K	P	E	D	L	A	K	F	D	F	N	P	L	D	A	T	K	V	W	P	N					V	P	E	H	K	I	G	Q	M	V	L	N	K	N	V	D	
UniRef90_UPI0003B46807	M	P	Y	E	D	A	K	T	Y	R	F	N	P	F	D	L	T	K	I	W	P	E	S	K	K	D	Y	P	R	I	K	V	G	T	M	E	L	D	R	N	P	A	
UniRef90_M5AE66	I	P	E	Q	A	G	L	D	Y	P	A	D	I	N	F	D	V	T	K	Q	V	W	S	Q	K	D	Y	P	L	I	E	V	G	E	F	T	L	D	N	K	N	P	D
UniRef90_S6I1F2	L	K	P	E	D	L	K	S	F	D	F	D	P	L	D	A	T	K	I	W	P					G	V	P	E	R	K	V	G	Q	M	V							

UniRef90_UPI00036406C0	D	N	F	H	A	E	I	E	Q	A	A	F	Q	P	N	K	L	V	P	G	I	G	P	S	D	P	R	M	L	L	A	R	N	F	S	Y	A	D	A	H	R					
UniRef90_Q55MG2	D	N	F	F	A	E	I	E	Q	A	A	F	Q	P	N	K	L	V	P	G	I	G	P	S	D	P	R	M	L	L	A	R	N	F	S	Y	A	D	A	H	R					
UniRef90_R7WQ58	D	Y	F	H	C	E	I	E	Q	A	A	F	Q	P	N	K	L	V	P	G	I	G	P	S	D	P	R	M	L	L	A	R	N	F	S	Y	A	D	A	H	R					
UniRef90_UPI000455DCB6	N	Y	F	A	E	I	E	Q	A	A	F	S	P	S	H	L	V	P	P	Y	I	G	E	A	S	F	D	P	V	L	Q	S	R	L	F	S	Y	P	D	T	H	R				
UniRef90_S2XFJ1	N	F	F	A	E	T	E	S	V	G	F	N	P	G	V	L	V	P	P	Y	I	G	E	A	S	F	D	P	V	L	Q	S	R	L	F	S	Y	S	D	T	H	R				
UniRef90_J7LHX2	N	F	H	F	I	H	I	E	S	A	A	F	E	P	A	N	L	V	P	P	Y	I	G	E	A	S	F	D	P	V	L	Q	S	R	L	F	S	Y	P	D	T	H	R			
UniRef90_K5A4P9	D	F	F	H	S	E	I	E	Q	A	A	F	G	T	G	V	L	V	P	D	G	M	D	F	S	D	D	K	M	L	Q	Q	G	R	T	F	S	Y	S	D	T	H	R			
UniRef90_W7Z0T4	N	I	F	A	E	T	E	S	V	G	F	N	P	G	V	V	V	P	P	Y	I	G	E	A	S	F	D	P	V	L	Q	Q	G	R	T	F	S	Y	S	D	T	H	R			
UniRef90_K5UGP0	E	Y	F	P	E	V	E	S	V	A	F	N	C	T	S	H	V	V	P	P	Y	I	G	E	A	S	F	D	P	V	L	Q	Q	G	R	N	F	S	Y	F	D	T	H	R		
UniRef90_UPI000262585B	N	E	F	A	E	L	E	Q	A	A	F	N	P	A	N	V	V	P	P	Y	I	G	E	A	S	F	D	P	V	L	Q	Q	A	R	N	F	L	A	Y	Q	S	D	T	H	R	
UniRef90_A0A0222LEU6	N	F	F	A	E	I	E	Q	A	A	F	S	P	G	N	Q	V	P	P	Y	I	G	E	A	S	F	D	P	V	L	Q	Q	A	R	N	F	L	A	Y	Q	S	D	T	H	R	
UniRef90_D7W1Q7	N	Y	F	Q	Q	V	E	Q	A	A	F	S	P	G	T	L	V	P	P	Y	I	G	E	A	S	F	D	P	V	L	Q	Q	A	R	N	F	L	A	Y	Q	S	D	T	H	R	
UniRef90_UPI0004664CB2	N	F	F	A	Q	I	E	Q	A	A	F	S	P	G	N	T	V	P	P	Y	I	G	E	A	S	F	D	P	V	L	Q	Q	A	R	N	F	L	A	Y	Q	S	D	T	H	R	
UniRef90_UPI0003B6F020	N	W	F	A	Q	I	E	Q	A	A	F	S	P	S	N	Q	V	P	P	Y	I	G	E	A	S	F	D	P	V	L	Q	Q	A	R	N	F	L	A	Y	Q	S	D	T	H	R	
UniRef90_V2TMD5	N	Y	F	Q	E	T	E	Q	V	A	M	A	P	A	N	L	V	P	P	Y	I	G	E	A	S	F	D	P	V	L	Q	Q	A	R	N	F	L	A	Y	Q	S	D	T	H	R	
UniRef90_UPI0003B46807	N	H	F	A	E	I	E	Q	A	A	F	S	P	G	N	M	V	P	P	Y	I	G	E	A	S	F	D	P	V	L	Q	Q	A	R	N	F	L	A	Y	Q	S	D	T	H	R	
UniRef90_M5AE66	N	Y	F	E	G	V	E	E	A	A	F	S	P	A	N	L	V	P	P	Y	I	G	E																							

UniRef90_UPI00036406C0	A	R	V	G	T	N	Y	Q	Q	L	P	V	N	A	P	R	A	T	E	A	H	S	Y	S	K	D	G	A	M	R	F	S	T	P	V	S	D	P	V	370								
UniRef90_Q55MG2	S	R	L	G	S	N	Y	H	D	L	P	V	N	R	P	L	E	C	P	V	M	T	Y	F	R	D	G	G	M	S	M	F	S	K	T	N	R	T	P	V	380							
UniRef90_R7WQ58	Y	R	I	G	S	N	Y	A	H	D	L	P	V	N	R	P	L	C	P	V	M	T	Y	F	R	D	G	G	M	S	M	F	S	K	T	N	R	T	P	V								
UniRef90_UPI000455DCB6	H	R	L	G	T	N	Y	Q	Q	L	P	V	N	R	P	L	A	P	I	A	N	F	Q	R	D	G	A	M	A	F	S	N	Q	Q	M	P	R	P	N	Y								
UniRef90_S2XFJ1	Y	R	I	G	A	N	Y	L	Q	L	P	V	N	A	P	K	C	P	F	S	N	N	Q	R	D	G	A	M	A	F	S	N	Q	Q	M	S	R	V	N									
UniRef90_J7LHX2	Y	R	I	G	V	N	Y	N	E	L	P	P	H	R	P	R	V	R	V	R	S	T	Y	S	K	R	D	G	G	H	M	R	H	D	A	P	D	T	G	A	V	Y						
UniRef90_K5A4P9	Y	R	I	G	A	N	Y	L	Q	L	P	V	N	A	P	K	A	Q	V	R	T	N	Q	Q	R	D	G	A	M	A	F	S	N	Q	Q	M	D	I	R	D	A	P	K	T	P	H	I	N
UniRef90_W7Z0T4	H	R	I	G	P	N	Y	L	Q	L	P	V	N	A	P	F	A	Q	V	S	N	N	Q	R	D	G	A	M	A	F	S	N	Q	Q	M	D	I	R	D	A	P	K	T	P	H	I	N	
UniRef90_K5UGP0	S	R	L	G	I	N	W	Q	E	L	P	I	N	R	P	V	I	C	P	Y	M	N	Y	Q	R	D	G	K	M	R	Y	H	K	I	H	Q	Q	D	Q	T	I	N						
UniRef90_UPI000262585B	H	R	L	G	A	N	F	Q	D	L	P	V	N	Q	P	H	A	E	V	Y	H	N	N	T	R	M	H	E	G	T	M	Y	R	F	N	P	A	E	H	R	T							
UniRef90_A0A0222LEU6	Y	R	I	G	A	N	Y	N	Q	L	P	V	N	Q	P	H	A	E	V	Y	H	N	N	T	R	M	H	E	G	T	M	Y	R	F	N	P	A	E	H	R	T							
UniRef90_D7W1Q7	H	R	I	G	G	N	F	Q	Q	L	P	V	N	A	A	K	N	D	V	T	Y	N	Q	N	G	Y	M	S	V	R	T	N	Q	N	G	E	V	N	Y									
UniRef90_UPI0004664CB2	N	R	I	G	T	N	F	H	Q	L	P	V	N	Q	P	K	V	P	V	N	T	Y	M	F	D	G	G	M	A	Y	H	H	S	G	S	A	P	V	Y									
UniRef90_UPI0003B6F020	H	R	I	G	A	N	F	T	H	L	P	V	N	Q	P	K	V	Q	V	N	A	Y	Q	F	D	G	G	M	A	Y	L	H	S	G	S	A	P	T	Y									
UniRef90_V2TMD5	H	R	I	G	T	N	G	M	S	L	P	V	I	N	R	P	V	V	A	V	N	N	G	N	Q	D	G	A	M	N	F	G	H	T	T	T	S	V	N									
UniRef90_UPI0003B46807	Y	R	I	G	T	N	F	Q	Q	L	P	V	I	N	R	P	I	N	E	V	H	T	Y	N	F	E	D	G	M	N	W	F	E	G	H	T	G	H	R	R	P							
UniRef90_M5AE66	Y	R	L	G	V	N	Y	E	Q	L	P	A	N	R	P	L	N	H	P	N	N	Y	E	R	D	G	F	M	Q	T	E	D	N	H	T	G	D	Q	V	N								
UniRef90_S6I1F2	Y	R	L	G	A	N	A	L	Q	L	P	I	N	A	P	R	V	A	V	N	N	G	N	Q	D	G	A																					

UniRef90_UPI00036406C0	Y	A	P	N	S	K	G	G	P	A	N	D	V	A	R	H	G	S	P	S	W	Q	A	R	T	A	Y	V	A	N	G	P	E	F	D	W	G	Q	A	410						
UniRef90_Q55MG2	H	V	P	N	R	H	D	S	L	P	A	N	D	P	S	Q	V	G	A	P	A	H	L	W	M	V	R	S	P	Y	L	V	P	H	A	E	K	D	D	F	Y	S	Q	411		
UniRef90_R7WQ58	Q	S	S	S	I	V	G	G	V	R	D	V	E	R	E	F	A	H	D	E	N	F	L	A	G	A	Y	L	D	L	S	E	I	T	E	D	D	F	E	Q	P					
UniRef90_UPI000455DCB6	Y	E	P	N	S	F	D	S	P	K	E	A	R	E	F	K	E	F	D	Q	P	L	S	G	V	A	G	K	N	A	L	E	K	T	N	N	F	G	Q	A						
UniRef90_S2XFJ1	H	E	P	N	S	F	G	G	P	D	A	E	R	Q	E	E	G	E	Q	A	G	W	R	V	R	E	A	Y	T	P	H	I	R	D	D	D	F	V	Q	P						
UniRef90_J7LHX2	Y	E	P	N	S	M	L	G	G	F	Q	E	K	E	D	R	V	P	H	Q	P	M	Y	H	A	A	A	M	S	A	P	I	L	E	R	K	P	N	N	D	F	G	Q	A		
UniRef90_K5A4P9	Y	E	P	N	R	Y	E	T	P	K	Q	E	A	P	A	E	V	P	F	H	V	Y	H	S	E	V	V	R	A	K	I	L	E	R	K	P	N	N	D	F	G	Q	A			
UniRef90_W7Z0T4	Y	W	P	N	R	R	P	V	S	P	K	E	D	G	G	Y	A	E	Y	P	E	G	V	A	G	M	K	A	R	M	R	G	E	K	F	K	E	H	F	N	H					
UniRef90_K5UGP0	H	K	N	S	P	N	T	T	P	P	E	E	G	G	Y	E	H	Y	P	K	K	V	E	G	Q	A	V	R	A	R	S	E	S	E	S	D	D	F	Y	T	Q	P				
UniRef90_UPI000262585B	Y	T	P	N	S	Y	G	G	P	E	A	D	P	A	A	V	E	A	S	W	E	S	D	G	E	L	M	R	T	L	H	S	E	D	D	D	F	G	Q	A						
UniRef90_A0A0222LEU6	Q	P	S	A	A	K	P	E	V	I	T	D	N	K	K	F	K	Y	S	Q	T	V	F	P	A	G	T	T	Q	G	K	I	D	K	E	N	N	F	K	Q	A					
UniRef90_D7W1Q7	A	T	N	S	Y	G	R	P	W	A	D	D	T	Q	T	G	R	M	E	D	G	W	E	T	D	G	E	L	V	R	N	A	Y	A	D	D	D	D	F	S	Q	P				
UniRef90_UPI0004664CB2	A	T	N	A	Y	G	R	P	W	S	D	R	T	G	P	V	E	N	G	W	E	A	D	G	E	L	V	R	Q	A	Y	A	D	D	D	D	F	G	Q	A						
UniRef90_U60003B6F020	Y	E	P	S	S	R	N	P	R	P	Q	V	A	S	A	R	Y	S	E	L	P	L	M	G	T	T	Q	Q	T	K	I	Q	K	E	Q	N	F	K	Q	A						
UniRef90_V2TMD5	Y	V	P	N	S	F	G	S	W	S	D	E	G	A	V	D	V	S	W	E	S	D	G	D	L	V	R	Q	A	Y	E	T	D	D	S	D	F	I	Q	P						
UniRef90_UPI0003B46807	Y	E	P	N	S	Q	G	G	P	Q	E	D	A	G	R	L	T	P	Y	T	V	S	G	K	A	G	N	Y	A	Y	Q	T	D	D												
UniRef90_M5AE66	Y	Q	P	S	R	L	E	P	K	R	E	E	P	Q	A	A	R	Y	S	E	M	P	L	S	G	S	T	Q	Q	A	K	I	Q	R	E	Q	N	F	K	Q	A					
UniRef90_S61F2	W	P																																												

UniRef90_UPI00036406C0 R T L V R E V M D E A A R E R L V D N V A G H L N G V T A P V L D R A F A Y W R
UniRef90_Q55MG2 A T L F W N S M S E T A R E R E H I I A A V N F E L S H C A E D I I Q N V I N S L N
UniRef90_R7WQ58 G T L V R E V L D D D A R E R L V D N V V G H L N G V T S E P V L I Q N V I N S L N
UniRef90_UPI000455DCB6 R S L Y Q T R V M N D D T D R Q R E R L I D N L A G H M G I S T E V K A R T L F E Y W A
UniRef90_S2XFJ1 G E I Y R S Y D E S T K Q A L I K N L V G D Q F S G I E R D I V G R A I L A N F H
UniRef90_J7LHX2 R A L T R D S V M D D A A R G R L V S N V V G H L S S V T D D V L S R A L D Y W R
UniRef90_K5A4P9 G H T Y R S F E D W E R D E L I K N L S E A L A I C D K R I Q E A M I D H F T
UniRef90_W7Z0T4 G A V Y R K Y S L E E Q Q D A L V K N L T A D L K H V S E Q T V L L V I C N F Y
UniRef90_K5UGP0 A Q L F Y N S L A E Y E R Q H T I E A L S Y F E L S H C D D S V V E S Y I K V L H
UniRef90_UPI000262585B R I F W N S M A P I E K Q H T I E A L S Y Q L G R V K N E S V R Q Q N V N L L V
UniRef90_A0A022LEU6 G T L Y R E V F D A E Q R A R F L E T L T G Q G R S I T D A I R E R F F Q Y W T
UniRef90_D7W1Q7 G E L Y R S F S K K D Q D Q L I K N L G D A L S V T N K K V V A K M I S Y F Y
UniRef90_UPI0004664CB2 G A L V R E V M D D A E R A A L V D T V A G L L G V R E P V L S R A F Q Y W K
UniRef90_UPI0003B6F020 R T L V R E V Y S E E A R E R L V Q T V A G M M G D C E P Q V R E R V Y A Y W R
UniRef90_V2TMD5 G E L Y R S F T T M E R R D L I D N F G G A L S G A D E P A K Y K I A S F L Y
UniRef90_UPI0003B46807 N I L Y N E V F S Q E E R D G L V E T V S G A L E T V I E P V L S N A I Q Y W K
UniRef90_M5AE66 A G K L Y R L L P A D E R Q R L I E T I V M N L G Q V S H D V K R L E T A Q F Y
UniRef90_S61F2 G D L Y R S F S K K E R Q D L I E N F G G S L A T T D D V S K H I L S F L Y
UniRef90_F8NKG5 A Q L F Y N S L A P E Y E K H L I N A S F E L S H C D D S V A V Y K S Y T T V L S
UniRef90_Q3ID55 G V L Y R G F S K Q E R T N L I N N L A G D L K I K D S N V K H K M L S H F Y
UniRef90_N4V2S9 P R L F Y N S L T P A E Q Q F L I N A I R F E T S H E S D V V K Q N V L A Q L N
UniRef90_W9WMW6 A Q L F F N S M S D I E K K H M I E A F S F E L D H C D D D I V E R L V T R L A
UniRef90_K6XNM2 G E L Y R S F S K G E Q E R L I E V L G G A L Q T S D R E T V K I N I S A F Y
UniRef90_N9CED1 G E L Y R S Y T A K E R D D L I M N L A A D L G N V K D E T K H I M L S Y F Y
UniRef90_UPI0003B4539A T M F Y R S L T P V I E Q E R H T A Q G Y A F E L G K C Y E T T V R Q R Q V N Q L A
UniRef90_E6JDU9 G Q R F R L M E D W E R D D L V K N F I D N I G Q A T R E V Q E R M V W H L F
UniRef90_S6ELD1 G N Q Y R S Y T K L E K D H L I D N I V N D L K E V D K R I Q L M A I N N F Y
UniRef90_A8G8P5 G I Y Y R S L T K P Q Q S D L I E A L G S N L K V K N A H V R Q T M L G Y F Y
UniRef90_C6X9F7 G E L F R L M N D D Q Q Q L F N N I A G G L S Q A N A D I Q A R V L A Q F E
UniRef90_Q5W14 G K I Y R N Y P K N V Q D A L I K N L A N D L K Q V A P E T A L R A I C N F Y
UniRef90_P25890 G E R Y R T W A P D R Q E R F L R R W E A L S D T D P E I R S I W V S Y W S
UniRef90_Q2V8E7 G S R W R S F D K A R Q E R F V Q R V G D A L D R V T P E V R R I W I G Y W S
UniRef90_E6J7B2 T I L Y R E V M N D E E R E R L A A N I A G H V S A I H P E L L E R V Y A Y W A
UniRef90_UPI00041CE0BF R I F W N S L T P I E K Q H M I K A L N Y Q I G S V K S K S V R Q Q S V D I V A
UniRef90_E5LAH2 G D R Y R S W D P D R Q E R F V R R F A D S L H K V S Q E L R A I W I D Y L S
UniRef90_W7BML1 R E V W K R Y S E A E Q K A L V K N I A D D W A N V R E E I K I R N L R N F Y
UniRef90_UPI00037F141D G D L V R N V F T D A E R D E F V N T V A G A L A T V Q E P V L S N A F Q Y W K
UniRef90_G8ZNE5 R V L W E V Y G K T R Q Q E A L I H N V A Q D I Q G A K P E I Q K R V M E Y F S
UniRef90_J3A199 G H F Y R S L K P A D K A D L V K N L A G D L G V V S M R T R V I M V S Y F A
UniRef90_G0S5M7 R I F Y N S L I P V I E K Q D L I N A I R F E T S L L K S T E V K N V L A Q L N
UniRef90_M4FLJ9 A Q L F F N S M S D V E R R H M L A A F S F E L D H C E E E V Y G N L V R L T
UniRef90_K1WQP9 Q T F W N S V T P I E Q A H I L A A L S F E L D H C D D P I V I E R M A T R L A
UniRef90_UPI0002B8E0C4 G T F W R K V L N E A E R K R L A E N I G N H M K A A Q P F L Q K R A I A N F A
UniRef90_U7KWD1 R D L Y E N I Y D D A A K E R L V T N I T N A M A G V S E E T E E R V Y D Y W T
UniRef90_T5AL96 P R L F Y N S L T K I E Q Q F L I D A I R F E T S Q V G A P V Q K N V L A Q L N
UniRef90_V9DAQ5 H D L W K L F K E Q G E D F V F L H N L S G H V A K A L P E V Q D K T V E M W R
UniRef90_B6Q1X3 A Q L F Y N S L T E Y E Q H H V A K A F S F E L D H C D D P V V Q R M A L R I A
UniRef90_U4LQC5 A Q L F Y N S L S E E K H H V Q A A L A F E L D H C D D P V V K R M V E R L A
UniRef90_UPI0003FAFCAD G D F Y R A L T K K E Q D N L I K N L C G D L G Q V D K E I Q K K M I T F F Y
UniRef90_Q0CFQ7 R I F Y N S L V P A E Q Q F V I D A M R F E N S N V K S E V V R S N V I M Q L N
UniRef90_UPI0003FD0DE3 G T M V R E V F D D A Q R E Q F V Q T V V G H L K G V H G E V L I E R A F Q Y W K
UniRef90_UPI00038127AE G D L Y R L M S D Q K R Q L I G N I A G G L K Q A T E S V Q Q R M I Q H F T
UniRef90_U3GV17 G T L V R E V L D D A A R E R L A G N I A R A M G V N E R V E Q Q C Y E Y W T
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UniRef90_G7E490	A	G F R G P V T I A	D N V A R E R I S N	F D H E R I P E R V I	H A R G T G L H G
UniRef90_W9CB14	I	G N R A T L L L	Q D F H L I E L I S	Q H I T H E R I P E R L V	H A R G T S A H G
UniRef90_G0S464	V	G G I P V A S D	V F L F Q K Q Q	H F N R S K P L E R M V	H A K G S G A F G
UniRef90_C5DLD8	S	R P D G P I L L	Q D V H L I E S I A	H F D R E R I P E R V V	H A K G G G C R L
UniRef90_Q876Y9	A	G L H G P L L L	Q D F H H I D L L A	H F D R E R I P E R V V	H A N A A G A H G
UniRef90_T1HV37	V	G P K G P V L I	Q D F G F I D E L A	H F D R E R I P E R V V	H A K G A G A F G
UniRef90_I8RNG3					
UniRef90_A7ELI9					V H A Q A A G A F G
UniRef90_A0A024G451					
UniRef90_B2VSL9	A	G E R G P T L L	E D F I F R Q K I T	H F D H E R I P E R A V	H A R G A G A H G
UniRef90_UPI000298E788	A	G P K G P L L L	Q D V V F T D E M A	H F D R E R I P E R V V	H A K G A G A F G
UniRef90_Q0U013	V	G E N G P L L L	Q D F H L V D L L S	H F D R E R I P E R V V	H A K G A G A H G
UniRef90_P06115	S	R P D G P I L L	Q D F H L L E N I A	S F D R E R I P E R V V	H A K G G G C R L
UniRef90_A0RFJ7	V	G S R G P V L L	E Q D S V L H E A L	Q E F I H E K I L E R P V	H V K G F G A F G
UniRef90_N1PLK8	A	G E R G P L L L	Q D T H L L D T L A	A F N R E R I P E R I V	H A R G A G A H G
UniRef90_C5DUL8	A	R P D G P L L L	Q D V H L I E S L A	H F D R E R I P E R V V	H A K G G G C R F
UniRef90_T1N7Q8	V	G S R G P I L L	E D Y H L V E K I A	D F D R E R I P E R V V	H A R G A
UniRef90_C5E1N5	A	G P G G P L L L	Q D F N L M D S I S	H F D R E R I P E R V V	H A K G G G A H G
UniRef90_M5DEU7					
UniRef90_W7Z0U4	V	G K R G P V L L	E Q D N V L H E T L	E T F V H E K I I E R P V	H V K G F G A F G
UniRef90_B1L17	V	G E R G P V V L	Q D N V L H E K L E	T F A H S K I L E R P V	H V K G G G A F G
UniRef90_V5FMB6	A	D G R K L Q L N	D A H L V D M L A	H F N R E K I P E R V V	H A K G A G A Y G
UniRef90_UPI000378A1FF	V	S E R G P V L L	E Q D N V L H E K L E	T F I H S K I L E R P V	H A K G Y G A F G
UniRef90_W9CUA4	V	G G L P V I T S	D P F L F E K Q T F	V R E K I V E R R V	H P A G S G H F G
UniRef90_W9X282	T	G S G G V L L T	S T Q L L E N L A	H F S R E R I P E R T V	H A K A A G A R G
UniRef90_E9BZ13	V	G N R G P V L L	Q D F Q L I E R L Q	H I N R E R I P E R N V	H A R G A L A K G
UniRef90_V5FJM5	V	S G G G V L L M	Q D T Q L I E T L A	H F S R E R I P E R V V	H A K A A G A Y G
UniRef90_F4RZE4	V	G E D G P V L L	Q D I H L I E N L A	S L V R E R I P E R V V	H A K G A G A H G
UniRef90_D4E3S2					
UniRef90_G4W900					
UniRef90_T1KVP3	V	G P S G P I L L	M E D G Q F I E E L	T H F T R E R I P E R V V	H A R G Y G A F G
UniRef90_W8A4B7	V	G E R G P I L L	K Q D T I E H E T L	Q T F I H E K I L E R P V	H V K G F G A F G
UniRef90_S0FS31	V	G V R G P V L L	Q D T A L H E T L E	T F V F S T T L A R R L	H T K G Y G A F G
UniRef90_H9JY91	L	N S N L I I	N E Y F M D S L T	H I V R E R I P E R L V	H T K A A G A F G
UniRef90_E9ECD0	V	G G L P L A S D	V F L F Q Y V V D T	G I L T H S N F S L S L G	
UniRef90_E6PTX0					
UniRef90_A9UCI8					E R I P E R V V H A K G G G A F G
UniRef90_E9IA56					
UniRef90_F7WC10					
UniRef90_E3JV15	I	G L D G P L L L	Q D S H L I D N Q A	H F N R K N I P N R V V	H A L G A G A H G
UniRef90_H9JPH5	I	N S D L F S N	P L H L D L T M	H F D A E R I P E R V I	Y A K G T G A H G
UniRef90_M1WA44			Q D S R L R D I L S	R F N R E K I P E R A V	H A R G A G A Y G
UniRef90_D4G360					
UniRef90_B9VR28					D F R L I N T L S Q F N R E K I P E R A V H A R G A G A Y G
UniRef90_Q68IQ0					
UniRef90_W1SE87					
UniRef90_A0A022NP60					
UniRef90_M7X4E9	V	G G I P T T I D T A	L F E K Q Q T F N R S K T R E R I	V H P C G S A A F G	
UniRef90_H2Y9Q5					
UniRef90_UPI0003D29E66					
UniRef90_I2CCM0					
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UniRef90_G8FGF0					G
UniRef90_E3KKP2					F D R K N I P A R P V H A A G A G A Y G
UniRef90_B5A9N5					
UniRef90_Q45Y78					
UniRef90_F5A698	A	G E R G P T L L	E D F H F R E K L T	H F D H E R I P E R V V	H A R G T G A H G
UniRef90_X0PRB7					
UniRef90_H5VAZ8					
UniRef90_W4RI56					
UniRef90_UPI0003DE7647					
UniRef90_F2S8W0	S	Q S R G P R D I	Y T L E A L S H	F N R E K I P E R A V	H A K G T G A Y G
UniRef90_E7CZG0					
UniRef90_B8P8C3					
UniRef90_X8B529					
UniRef90_C7AIN0					
UniRef90_H6UNQ5					
UniRef90_UPI0000167089	I	G N R G P A T L	E N Y H F I E K I S	H F D R E E V P E R V V	H A R G A G A F G
UniRef90_M1F7C1					
UniRef90_C9DE79					
UniRef90_D3J8V5					
UniRef90_K9IAJ0	A	G S R G P V L L	M Q D Y N L L E K L A	H F D R E R I P E R V V	H A K G A G A K G
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UniRef90_B6H7V0	E F E V T N D I S S L T S A K F L N G	V G K K T P I L F R F S T T G G E K G S A		
UniRef90_C4X751	Y F Q P Y K S L A A L T K A D F L S	S A D K I T P V F V R F S T V Q G G A G S A		
UniRef90_K2RQP5	Y F K T T D P L D D L S C A D I F S	K A G K Q C P L T I R F S T V G G E R G S H		
UniRef90_L2FK73	F F E C T N P I P E L S Q A D I F S T	K G K K C P I T V R F S T V G G E S G S P		
UniRef90_S4YEP9	Y F Q V I E D P L T R Y T K A K F L Q	D P S I K T P V F V R F S T V A G E S R G S A		
UniRef90_Q4JSN1	E L T I T E D V S K Y T K A D L F Q	P G R V T P M L A R F S T V A G E Q G F P		
UniRef90_D7WBE9	E L H V T E D V S Q Y T K A K L F Q	P G T V T P M A I R F S T V A G E A G S P		
UniRef90_U2AD19	T F T V T Q D V S A Y T R A A L F Q	P G T T T E M L A R F S T V A G E Q G S P		
UniRef90_UPI0002C2E092	Y F E V T H D I T R Y S K A K V F E	H I G K R T P I A V R F S T V A G E S G S A		
UniRef90_T1HTU8	V F E V T N D I T Q Y T K A D V F S K	I G K T T Q I L V R F S T V S G E K G S S		
UniRef90_V5ESA5	V Y R T T H P L P D L C L N S L F A E	Q T E C P I T A R F S T V G G E S G S P		
UniRef90_F9X5T5	Y Y Q T T N A M D D L S C A D M F	K A G K K V P I T V R F S T V G G E S G S H		
UniRef90_A0A024RWD4	E F E V L E D I S D L T D A D F L T G	I G K K T K L L T R I S T V G G E K G S S		
UniRef90_A5DQN0	Y F E L T D S L S D L T Y A D P F Q T	V G Y K C P V S I R F S T V G G E R G T P		
UniRef90_M2R709	Y F E T T K D V T H L T K A D F L K K	T P V F I R F S T V T P G R E Y P		
UniRef90_W9XL34	Y Y E V T D D V S D L T D A D F L N G	I G K R T E V L M R I S T V G P E R G S A		
UniRef90_G8Y847	Y F E L T D S L S D I T C A R P F Q S	V G Y K C P V S V R F S T V G G E R G S A		
UniRef90_T1G9Z8				
UniRef90_G7E490	F F K L H T S M E D V T C A K V L T E	V G K E T P M F V R F S T V L G S A G A A		
UniRef90_W9CBI4	Y F E V T D D I S D V T S A A F L N G	T V G K K T D L F C R F S T V A G R A D S A		
UniRef90_G0S464	Y F E C T K D V T A L T K A N L G T V	G E K T P V F I R F S T V T F G R E Y P		
UniRef90_C5DLD8	E F E L T D S L S D I T F A A P Y Q K	P G Y K C P G V V R F S T V G G E S G T P		
UniRef90_Q876Y9	Y F E V T H S C A D I T S N K L L C S	V G K K V R L T A R F S T V G G E S G S A		
UniRef90_T1HV37	Y F E V T H D V T K Y T K L S V F S K	I G K R T P V A V R F S T V G G E S G S A		
UniRef90_I8RNG3				
UniRef90_A7ELI9	E F E V T H D I S D L T S A A F L N G	I G K K T P C I V R I S T V G G E K G C P		
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UniRef90_UPI000298E788	Y F E V T H D I T R Y C K A K L F E	H I V G K T T P I A V R F S T V G G E S G S A		
UniRef90_Q0U013	V Y K T T D P L D D L S C A D I F S	K A G K E C P I S V R F S T V G G E S G S H		
UniRef90_P06115	E F E L T D S L S D I T Y A A P Y Q N	V G Y K C P G L V R F S T V G G E S G T P		
UniRef90_A0RFJ7	Y F Q T I Y P M S E H T K L S F L Q	H S N E K V P V M V R F S T L A V S T K G T P		
UniRef90_N1PLK8	F F E A T T D Y A E K F S V A D V F	K K G T R T S V T M R F S T V G G R S S A		
UniRef90_C5DUL8	E F E L T D S L S D I T F A A P Y Q K	P G Y K C P G T V R F S T V G G E S G S P		
UniRef90_T1N7Q8				
UniRef90_C5E1N5	Y F E L T D S L S D I G F A R I F Q D	P G Y T C P I T V R F S T V G G E S A S P		
UniRef90_M5DEU7				
UniRef90_W7Z0U4	Y F E T L Y G M G E Y T K L A F L Q S	P G Q Q V P V A V R F S L A V S T K G T P		
UniRef90_B1L17	Y F Q T I N S M R K Y T K L C F L Q T	P G Q Q V P V T V R F S F A V G N Q G T P		
UniRef90_V5FMB6	E F E V T E D I S D I C D I D M L V G	V G K K T P C V T R F S T T G L E R G S S		
UniRef90_UPI000378A1FF	Y F Q T V H A M T A Y T Q L C F L Q N	P G Q Q V P V T V R F S L A A S N K G T P		
UniRef90_W9CUA4	Y F E V T K D V S S L T K A R F L G E	V G K K T P V F L R F S T V T F G K E F P		
UniRef90_W9X282	Y Y E V A D D V S D V T D A D F L N G	I G K K T E V L M R I S T V G P A R G S A		
UniRef90_E9BZ13	Y F Q V T D D I S N L T F A E V F N G	V G K Q T P V A L R F S T V I H S L H S P		
UniRef90_V5FJM5	E F E V T H D C S D L T S A S F L N T	I G K K T G V L L R I S T V G P E R G S A		
UniRef90_F4RZE4	V F T V T T D A K N H T M M D L F S E	I G K K T P I S V R F S T I A G E S G S S		
UniRef90_D4E3S2				
UniRef90_G4W900				
UniRef90_T1KVP3	V F R P T N T I S R Y T K A P L F T T	P N V D T K V A I R F S T T M G S R G S P		
UniRef90_W8A4B7	Y F E T Y Y S M S P Y T S L S F M Q Q	A G T Q L P V F V R F S L A V S T K G T P		
UniRef90_S0FS31	Y F Y T T H S M Q E Y T K A G F L Q T	P G Q Q V P V A V R F S L A S S N Q G T P		
UniRef90_H9JY91	Y F E V T H D I T N I C K A K L F S K	I G K K T P V A A R L S V I T V E R G S S		
UniRef90_E9ECD0	S S S I S I D Q K T L S K A D F L S K V	G E K T P V F V R F S T V T L G R E F P		
UniRef90_E6PTX0				
UniRef90_A9UCI8	Y F E V T H D I T K Y C K A K I F E	H V G K K T P M L I R F S T V G G E S G S A		
UniRef90_E9IA56				
UniRef90_F7WC10				
UniRef90_E3JV15	I F T T T T D A S R Y T M M S L F Q R	V G Q T T P L T M R F S T A A G E K G D F		
UniRef90_H9JPH5	H F I V T N D V S K Y T K A D L F N G	V G K K T P L F V R F S Q G L Q S L G G S		
UniRef90_M1WA44	E F E V T H D V S D I C D I D M L L G	V G K K T P C V V R F S T T T L E R G S A		
UniRef90_D4G360				
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UniRef90_Q68IQ0				
UniRef90_W1SE87				
UniRef90_A0A022NP60				
UniRef90_M7X4E9	S F T V T H D V S K Y T K A D F S S Q A			
UniRef90_H2Y9Q5				
UniRef90_UPI00032D9E66				
UniRef90_I2CCM0				
UniRef90_M6MWP7	T L T I T Q D L T K Y S R A S I F R A	S K K G K Q T P L F L R F S T V A G E K G S A		
UniRef90_G8FGF0	F F E V T H D V S H L T C A D F L R A	P G V Q T P V I V R F S T V I H E R G S P		
UniRef90_E3KKP2	T F T V T T N F A Q S T S M D L F S N	V G Q T T P V T V R F S N A L G E K G S F		
UniRef90_B5A9N5				
UniRef90_Q45Y78				
UniRef90_F5A698	Y F E C Y E S M A E Y T M A S F L Q E	A G K K T P L A V R F S T V G G E S G S A		
UniRef90_X0PRB7				
UniRef90_H5VAZ8				
UniRef90_W4RI56				
UniRef90_UPI0003DE7647	E F E V T A D I S A F C N I D M L L G			
UniRef90_F2S8W0				
UniRef90_E7CZG0				
UniRef90_B8P8C3				
UniRef90_X8B529				
UniRef90_C7AIN0				
UniRef90_H6UNQ5				
UniRef90_UPI0000167089	Y F E T Y G P A E K Y T R A K V F S G	A G K K T P L M V R F S T V A G A K D S P		
UniRef90_M1F7C1				
UniRef90_C9DE79				
UniRef90_D3J8V5				
UniRef90_K9IAJ0	Y F K L E N D M S P Y T K A D L F N G	I G K Q T P L I V R F S Q V A G E K G Y P		
UniRef90_W4N419				

UniRef90_UPI00047E9EBD D T W R D V R G F A L K F Y T T E G N F D L V G N N T P V F F L R D P M K F P H
UniRef90_B6H7V0 D T V R D V R G F A L K F Y T T E G N H D L V G N N T P V F F L R D P V R F F P S
UniRef90_C4X751 D T V R D L R G F A T K F Y T D E G N F D L V G N N T P V F F L R D P A M K F P D
UniRef90_K2RQP5 D C A R D P R G F A L K F Y T D E G N W D M V A N N T P V F F L R D P A K F P H
UniRef90_L2FK73 D L Q R D P R G F A L K F Y T D E G N W D M V A N N T P V F F L R D P A K F P H
UniRef90_S4YEP9 D T V R D V R G F A V K F Y T Q E G N F D L V G N N M P V F F L R D G I K F P D
UniRef90_Q4JSN1 D A V R D V R G F A L K F Y T Q Q G N Y D I V G N N T P V F F L R D G I K F P D
UniRef90_D7WBE9 D T W R D V H G F A L R F Y T E D G N Y D I V G N N T P T F F L R D A V K F P D
UniRef90_U2AD19 D T W R D P R G F A L K F Y T T E G N Y D L V G N N T P V F F L R D G I K F P D
UniRef90_UPI0002C2E092 D T V R D P R G F A V K F Y T E D G N W D L V G N N T P I F F I R D A I L F P S
UniRef90_T1HTU8 D L D R D V R G F A I K F Y T R D G N W D L V G N D V P I F A V R D P L I F F S
UniRef90_V5ESA5 D C A R D P R G F S I K F R T Q D G N M D W V Y N N T P I F F L R D P A K F P H
UniRef90_F9X5T5 D C A R D P R G F S I K F R T E E G N W D V V A N N T P V F F L R D A A K F P Y
UniRef90_A0A024RWD4 D T V R D V R G W A T K F Y T Q E G I Q D F V F N D L P V F F I R D P I K F P S
UniRef90_A5DQN0 D T L R D P R G Y S I K F K T D I G N M D W V F N N T P V F F I R D P N K F A K
UniRef90_M2R709 D E A R N P R G F A I K F Y T G E G N Y D I V G L N F P V F F C R D P I Q G P D
UniRef90_W9XL34 D T V R D F R G F A V K F K T A Q G N N D W V F N N Q P V F F V R D P V K F P S
UniRef90_G8Y847 D T L R D P R G F S I K F K T D I G D M D W V F N N T P I F F I K D P L K F P R S
UniRef90_T1G9Z8 D T A R D P R G F A M K F Y T D D G N W D L V G N N T P I F F I R D P I L F P S
UniRef90_G7E490 E T A R E V R G F S T R F Y T D Q G N W D L V G N N I P I F F I N D G V K F V D
UniRef90_W9CB14 E T V R D T R G F A F K M F T E E G N L D W L F L S T P V F F I R D G A K F P S
UniRef90_G0S464 D Q G R N P R G F A I K F Y T L E G N Y D I P I F F C R D P L Q G P D
UniRef90_C5DLD8 D T A R D P R G F S V K F Y T E W G N H D W V F N N T P V F F I R D A N K F P H
UniRef90_Q876Y9 D T A R D P R G F A L K L R T E E G N W D W V F N N T P I F F I R D P A K F P H
UniRef90_T1HV37 D T A R D P R G F A V K F Y A E E G N W D V V G N N T P I F F I R D P I L F P S
UniRef90_I8RNG3 D V V R D V R G F A M K F Y T D E G N Y D M V G N N T P V F F I R D A I K F P D
UniRef90_A7ELI9 D T V R D V R G F A V K F Y S E K G N W D L V G N N T P V F F I R D P I L F P S
UniRef90_A0A024G451 D T V R D L H G F A L R F Y T D E G N F D I V G N N V P V F F I Q D A I K F P D
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UniRef90_UPI000298E788 D C A R D P R G F S V K F R T E E G N W D V V A N N T P V F F L R D L H Q F M
UniRef90_Q0U013 D T A R D P R G V S F K F Y T E W G N H D W V F N N T P V F F L R D A I K F P V
UniRef90_P06115 D T A R N V R G F S T K F Y T K E G I F D L L C N H I P V F S V R D P M R F P E
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UniRef90_L2FK73	G	I	P	D	G	Y	R	F	M	H	G	Y	A	G	H	T	L	K	L	V	N	A	K	D	G	D	W	V	Y	A	Q	F	H	M	K	S	Q	Q	G	T	K	A				
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UniRef90_U2AD19	G	L	P	S	S	W	R	H	M	D	G	F	G	S	H	T	Y	Q	W	I	N	A	A	G	E	R	F	W	V	K	Y	H	F	K	T	Q	Q	G	I	K						
UniRef90_UPI0002C2E092	G	I	P	D	G	H	R	H	M	N	G	Y	G	S	H	T	F	K	L	V	N	D	A	A	G	K	A	V	Y	C	K	F	H	Y	K	T	D	Q	G	I	K					
UniRef90_T1HTU08	G	T	P	K	S	F	R	Y	I	N	G	F	G	I	N	T	F	K	L	V	N	A	A	Q	G	N	A	T	Y	C	K	F	H	Y	Q	T	D	Q	G	I	R					
UniRef90_V5ESA5	G	I	P	K	S	W	R	H	M	Q	G	Y	S	G	H	T	F	K	F	V	N	K	Q	G	K	W	K	Y	V	Q	I	H	V	L	S	Q	Q	G	T	E						
UniRef90_F9X5T5	G	I	P	D	G	W	R	K	M	N	G	Y	Y	G	H	T	L	K	L	V	N	S	K	G	E	Y	V	Y	A	Q	M	H	M	K	S	Q	G	V	D							
UniRef90_A0A024RWD4	G	I	P	A	S	L	R	N	I	N	G	F	G	V	H	T	Y	T	L	N	K	N	D	G	S	Y	V	Y	V	K	W	H	F	K	P	D	D	G	I	K						
UniRef90_A5DQN0	G	T	P	K	T	W	A	G	M	H	G	Y	S	G	H	T	F	K	F	V	N	K	E	D	G	S	F	N	Y	I	Q	L	H	V	L	A	D	D	G	F	P					
UniRef90_M2R709	G	T	P	Q	S	W	R	F	N	H	G	Y	G	H	T	F	K	W	V	N	K	D	G	Q	F	V	Y	I	K	Y	H	F	I	A	E	H	Q	G	Q	K						
UniRef90_W9XL34	G	L	P	K	S	V	R	H	V	N	G	Y	S	G	N	T	Y	K	F	T	K	A	D	G	S	Y	V	Y	V	R	I	K	L	H	I	A	Q	Q	G	I	Q					
UniRef90_G8Y847	G	V	P	R	S	W	A	K	M	N	G	Y	S	G	H	T	F	K	F	V	N	A	K	E	E	I	T	Y	V	Q																

UniRef90_UPI00047E9EBD	N	F	S	A	D	A	E	A	L	A	G	A	N	A	E	H	H	R	R	D	L	F	D	A	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V				
UniRef90_B6H7V0	H	F	S	A	D	A	E	A	R	M	A	G	A	N	A	D	F	H	R	R	D	L	W	D	A	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V			
UniRef90_C4X751	S	L	V	W	D	E	A	Q	K	L	T	G	R	D	A	D	F	H	R	R	D	L	W	D	A	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V			
UniRef90_K2RQP5	F	L	T	Q	D	E	A	G	T	K	S				P	D	H	S	Q	K	D	L	F	Y	A	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V			
UniRef90_L2FK73	F	I	T	Q	E	D	S	L	T	M	S	A				D	Y	S	G	K	D	L	F	E	T	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V			
UniRef90_S4YEP9	S	L	V	W	D	E	A	Q	K	L	A	S	G	K	D	P	D	F	H	R	R	D	L	W	D	A	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V		
UniRef90_Q4JSN1	F	Y	T	E	E	E	A	A	K	L	A	S	G	N	A	D	F	D	S	S	R	D	L	Y	F	K	A	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V	
UniRef90_U7WBE9	T	F	T	D	E	E	A	A	K	L	A	S	G	N	A	D	F	D	S	S	R	D	L	Y	F	K	A	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V	
UniRef90_U2AD19	N	L	T	A	D	E	A	S	Q	L	A	G	S	D			D	H	H	I	R	D	L	Y	E	H	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V		
UniRef90_UPI0002C2E092	N	L	S	V	E	D	A	A	R	L	A	Q	E	N			P	D	Y	G	L	R	D	L	F	N	A	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V	
UniRef90_T1HTU8	N	F	T	N	E	E	A	M	K	L	K	A	E	N			P	D	Y	L	T	E	D	L	F	N	A	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V	
UniRef90_V5ESA5	N	L	T	N	D	E	A	A	Q	Q	S						P	D	A	H	Q	K	D	L	F	E	A	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V	
UniRef90_F9X5T5	F	I	T	Q	E	D	S	A	N	Y	S						P	D	Y	S	Q	K	D	L	Y	T	A	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V	
UniRef90_A0A024RWD4	T	M	D	S	K	T	A	V	R	L	A	G	E	E			P	D	Y	H	V	K	D	L	F	N	A	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V	
UniRef90_A5DQN0	T	L	S	I	E	E	A	N	E	L	A	G	A	P			P	E	Y	H	I	K	D	L	F	N	D	R	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V
UniRef90_M2R709	Q	F	T	Q	E	Q	A	T	Q	M	C						P	D	Y	S	K	R	D	L	Y	E	T	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V	
UniRef90_W9XL34	Y	Y	T	D	A	E	G	A	R	L	A	G	T	E			P	D	R	H	S	Q	D	L	Q	D	A	I	R	N	G	D	F	P	S	W	D	L	Y	V	Q	V	
UniRef90_G8Y847	G	M	S	P	D	E	S	A	E	Y	L	K	A	P			P	D	Y	H	I	K	D	L	Y	G	R	I	R	N	G	D	F	P	S	W							

	290	300	310	320
UniRef90_UPI00047E9EBD	M P Y D E A K S Y R F N	P F D L T K T W S K K D Y P R I K V G T L T L N E N P T		
UniRef90_B6H7V0	M E P E N E A E F Y G R F	A L F D L T K L V W P H K A D F P L V I Q R V V G R Q M T L N K N P E		
UniRef90_C4X751	I P E Q A E F A F D F D L	F D L T P T K L V W P H K A L V P L V L Q R V V G R Q M T L N K N P E		
UniRef90_K2RQP5	M T P K Q A E D A K I N I F D L T	H V W P P Q G E Y P L L R K Y G E F F T L N E N A K P		
UniRef90_L2FK73	M T P K Q A E N D K I N I F D L T	H V W P P Q G E Y P L L R K Y G E F F T L N E N A K P		
UniRef90_S4YEP9	I E E Q A E D T L G F D L F D A T K	L V P P E E V V P L V K R V V G K L V L H R N P T		
UniRef90_Q4JSN1	M P V A E A E D Y R W N P F D L T K T W S Q K D Y P L I P V V G F F T L N E N P Q			
UniRef90_D7WBE9	M P F E D A E N Y R W N P F D L T K T W S Q K D Y P L I V D V G Y F L N R N P K			
UniRef90_U2AD19	M P Y E D A K T Y R F N P F D L T K V W P H A D Y P L I E V G V M E L N R N P E			
UniRef90_UPI0002C2E092	M T F K Q A E T F F F N P F D L T K V W P H N D Y P L I P V V G K L V L N R N P V			
UniRef90_T1HTU8	M S L A Q A E Q S G F N P F D A T K F W P E N D Y P L L K V G K L V L N E N P K			
UniRef90_V5ESA5	M D P A D A P T S G V N V N D L T K V W P R D K F P L H P L G E F I E L N R N V A			
UniRef90_F9X5T5	M T A K Q A E T Q K I N I F D L T H V W P Q K Q F P L L R K V V G E F F L N E N V Q			
UniRef90_A0A024RWD4	M K P E E V N S A P L I D F D L T Y T W P Y E K Y P L L R R V L G R L T L N K N P D			
UniRef90_A5DQN0	M S P E Q A E N F R F S I N D L T K V W P H K E F P L R K F G K I V L D K N P E			
UniRef90_M2R709	M S P S D I A D K L G F D P F D V T K V W P R K Q F P M Q E F G R L V L N K N P E			
UniRef90_W9XL34	I H P S D I A N K P V D I F D M T K V W P K K Q F P L R K M G R V V L D R N P K			
UniRef90_G8Y847	M T P K Q A E E F R Y S I N D L T K I W P H S D F P M R K F G R I V L D K N P V			
UniRef90_T1G9Z8	M T F E E A K K H R F N P F D V T K V W S Q K E F P L I P V G K M V L D R N P N			
UniRef90_G7E490	L Q E E N E R D F D F D L T C K L V W P E E L V P L I K Y V G T M T L N R L P T			
UniRef90_W9CB14	I D P V K A E N Y H I N I F D A T K T F P L S E F P L R K F G K I T L N K N V D			
UniRef90_G0S464	M E P D D D P D L G F D P F D P T K V W P S Q F P L H E F G K I V L N K N P E			
UniRef90_C5DLD8	M T P A Q A E N F R Y S I N D L T K I W P H K E F P L R K F G K I T L T E N V D			
UniRef90_Q876Y9	M T P E Q A E N F R Y N I L D L T K V W P H K E F P L R P I G R F V L D E N P K			
UniRef90_T1HV37	M T K E Q A E K F R W N P F D L T K V W P H K E F P L I P V G K M V L D R N P K			
UniRef90_I8RNG3	M T A D D A K N Y K F D P F D L T K V W Y H A D Y P L I P V G K M V L N R N P E			
UniRef90_A7ELI9	M D P K D A E S F R W N V F D M T K V W P H S D V P L R P F G K M T L N R N P N			
UniRef90_A0A024G451	M D P E Q A Q H C S F N P F D V T K I W P H N E F P L I E I G R F V L N R N P Q			
UniRef90_B2VSL9	M E E A D Q L K Y G F D M L D P T K I V P E D I I M F Q P			
UniRef90_UPI000298E788	A Q V E Q M A H D P S N M P P G I E P S P D K M L Q G R L F S Y P D T H R			
UniRef90_Q0U013	M T A K E A E K Q G I N V F D L T H V W P S Q F P L R K V G E F T L N E N P Q			
UniRef90_P06115	M T P E Q A T K F R Y S V N D L T K I W P H K E F P L R K F G T I T L T E N V D			
UniRef90_A0RFJ7	M D P K D E A H L S Y D P L D D T K A W D E K A Y P L I P V G K M V L T N K N P E			
UniRef90_N1PLK8	K T V E E A K A Y R Y D V L D L T K D W P D A Q V H E I G R I V T L T Q N P D			
UniRef90_C5DUL8	M T P K Q A E E F R Y S V N D L T K V W P K K Q F P L R K Y G T I T L T E N V E			
UniRef90_T1N7Q8	I D P D H E E R F D F D P L D V T K T W P E D V V P L Q P V G R L V L N R N I D			
UniRef90_C5E1N5	M T P E Q A E N F T Y S I N D L T K V W P H K E F P L R K F G R I V L N Q N P D			
UniRef90_M5DEU7	M T F E Q A E K L K W N P F D L T K V W P Q K E F P L I P V G R F V L N R N P R			
UniRef90_W7Z0U4	M D P L D A D S L P F D P L D D T K V W D E Q Q Y P L H P V G R M V L N Q N P D			
UniRef90_B1IL17	M D P S D E C R L P F D P L D D T K V W D E Q Q Y P F I P V G R L V L N H N P W			
UniRef90_V5FMB6	V D P R D A P K L L G F N L D V T K H W N L G T Y P A K P F G K L T L N R N P Q			
UniRef90_UPI000378A1FF	M N P Q D E S F L P Y D P L D S T K V W D E R Q Y P L L P V G M L V L N R N P D			
UniRef90_W9CUA4	M T A I E A K Q S F D P F D V T K V W P R K E F P L Q E F G R I V L N K N P D			
UniRef90_W9X282	I R P E D I S K A P I N I F D M T K V W P K S L Y P L R K M G R I T L D T N P K			
UniRef90_E9BZ13	L D P S D T R K I E Y D Y L D T T K Q W Q V S D F P L Q R V V G T L V L N E N P R			
UniRef90_V5FJM5	M E P E Q A E S Y K W N I F D M T K V W P H Q D F P L R Q I G R L T L N R N P R			
UniRef90_F4RZE4	L T P A E A E K F K Y N V L D M T K E W P V D M V P H E I G E F F L N Q N P E			
UniRef90_D4E3S2	M P E H Q A S Q T P Y N P F D L T K V W P H A D F P L I D V I G Y F E L N R N P D			
UniRef90_G4W900	M T F E Q A E K F F N P F D L T K V W P H K D Y P L I P V G K L V L N R N P V			
UniRef90_T1KVP3	M D F E E A S K A D F N L D S T K T W W E H L Y P S T E I G K L T L N R N P E			
UniRef90_W8A4B7	M D M E I A K K T L P Y D P L D D T K V W D E Q Q F P F L P I G K M T L N K N P D			
UniRef90_S0FSJ1	M D P E D A K T L P F D P L D D T K L W D E A Q F P S L P V G R M V L N R N P D			
UniRef90_H9JY91	L T L D D V K N A K F D V F D V T K V L P Q D E F P L K P L G R L V L N K N P T		</	

UniRef90_UPI00047E9EBD	N	F	F	A	Q	I	E	Q	A	A	F	A	P	S	N	M	V	P	G	M	G	M	S	P	D	K	M	L	L	G	R	N	F	A	Y	A	D	A	Q	R		
UniRef90_B6H7V0	N	F	F	A	E	I	E	Q	A	A	F	A	P	S	N	M	V	P	G	I	A	M	T	S	P	D	P	M	L	Q	A	R	M	F	A	Y	P	D	A	Q	R	
UniRef90_C4X751	N	F	F	A	E	N	E	Q	A	A	F	H	P	G	H	I	V	P	G	I	D	F	T	S	P	D	P	L	Q	A	R	M	L	F	A	Y	P	D	T	Q	R	
UniRef90_K2RQP5	N	F	F	A	E	I	E	Q	I	A	F	N	P	A	H	M	P	P	G	V	E	P	S	A	D	P	P	V	L	Q	S	R	L	F	S	Y	P	D	T	H	R	
UniRef90_L2FK73	N	F	F	A	E	V	E	Q	V	A	F	N	P	A	H	M	P	P	G	I	D	F	T	S	P	D	P	L	M	Q	A	R	L	F	S	Y	P	D	T	Q	R	
UniRef90_S4YEP9	N	F	F	A	E	T	E	Q	V	A	F	A	P	S	N	L	V	P	G	I	G	L	S	P	D	P	K	M	L	A	R	S	F	A	Y	A	D	T	Q	R		
UniRef90_Q4JSN1	N	F	F	A	Q	I	E	Q	A	A	F	A	P	S	N	L	V	P	G	I	G	L	S	P	D	P	K	M	L	A	R	S	F	A	Y	A	D	T	Q	R		
UniRef90_D7WBE9	N	F	H	A	Q	I	E	Q	I	A	F	D	P	S	N	L	V	P	G	V	G	L	S	P	D	P	K	M	L	Q	A	R	V	F	A	Y	A	D	A	H	R	
UniRef90_U2AD19	N	F	F	A	Q	I	E	Q	A	T	F	A	P	S	N	F	V	P	G	V	A	T	S	P	D	P	K	M	L	A	R	I	F	A	Y	A	D	A	H	R		
UniRef90_UPI0002C2E092	N	F	F	A	E	V	E	Q	L	A	F	D	P	S	N	M	P	P	G	I	E	P	S	P	D	K	M	L	Q	A	R	L	F	A	Y	P	D	T	H	R		
UniRef90_T1HTU8	N	F	F	A	L	I	E	Q	A	A	F	A	P	S	N	L	V	P	G	I	E	A	S	P	D	P	K	M	L	Q	A	R	L	F	S	Y	V	D	T	Q	F	
UniRef90_V5ESA5	N	F	F	A	E	I	E	Q	I	A	F	N	P	A	H	L	I	V	P	G	L	E	P	S	P	D	P	V	L	Q	S	R	L	F	S	Y	P	D	T	H	R	
UniRef90_F9X5T5	N	F	F	A	E	I	E	Q	I	A	F	S	P	S	N	M	V	P	G	I	E	P	S	A	D	P	P	V	L	Q	S	R	L	F	S	Y	P	D	T	H	R	
UniRef90_A0A024RWD4	N	F	F	Q	D	I	E	Q	A	C	A	F	S	P	S	N	M	V	P	G	I	G	P	S	A	D	P	P	V	L	Q	A	R	M	F	S	Y	P	D	A	Q	R
UniRef90_A5DQN0	N	F	H	A	E	I	E	Q	L	A	F	S	P	A	H	L	V	P	G	L	E	P	S	P	D	P	V	L	Q	S	R	L	Y	S	Y	S	D	T	H	R		
UniRef90_M2R709	N	F	F	R	D	V	E	Q	A	A	F	S	P	G	S	M	V	P	G	V	E	D	S	P	D	P	V	L	Q	S	R	L	F	F	Y	R	D	A	Q	Y		
UniRef90_W9XL34	N	W	F	A	E	I	E	Q	A	A	F	S	P	S	N	M	V	P	G	I	A	P	S	P	D	P	M	L	Q	A	R	M	F	A	Y	P	D	S	A	R		
UniRef90_G8Y847	N	F	H	S	E	V	E	Q	I	A	F	S	P	A	H	L	V	P	G	I	E	A	P	S	P	D	P	V	L	Q	S	R	L	Y	S	Y	S	D	T	H	R	
UniRef90_T1G9Z8	N	F																																								

UniRef90_UPI00047E9EBD Y R I | G T N F Q Q V | P V | N K P | I | T E V | H S Y N F E G N M T | V | D H R G A A S | 400
UniRef90_B6H7V0 Y R L | G V | N Y T Q L | P P | N R A | I | C P | L | Y A P F E R D G M G T M T R N Y G G D P N
UniRef90_C4X751 S R L | G P | N F H E I | P I | N R P | T | C
UniRef90_K2RQP5 H R V | G V | N Y Q Q L | P V | N A P | R T | P Y R | I | A N F Q R D G S M A F Y N Q G S R P
UniRef90_L2FK73 H R I | G V | N Y Q Q L | P V | N A P | R L | N F N A G N F Q R D G A M A F F N Q G A R P N Y
UniRef90_S4YEP9 T R L | G P | N F A E I | P I | N R P | L | A P | V | H N | H Q Q D G F H R H T | I | D A G R A N Y
UniRef90_Q4JSN1 Y R L | G V | N F H Q L | P S | N R S | I | V A E K N Y Y T K D D G A G N Q E F P P A G T P V
UniRef90_D7WBE9 Y R I | G P | N Y K D L | P V | N Q P | I | V | P | V | N T Y A E R G P M Q Y F F N N E G E P N
UniRef90_U2AD19 Y R V | G T | N H A Q L | P V | N A P | H A A A E H S Y A K D G S M R Y S F S S A T T P V
UniRef90_UPI0002C2E092 H R L | G P | N Y L Q I | P V | N C P | F R A R V A S Y Q R D G P M C | V | L | D N Q G G A P N
UniRef90_T1HTU8 Y R L | G T | N H R Q L | P V | N Y P | H A T K V | Y N T Q R D G I | F T Y Y Q D D A P N
UniRef90_V5ESA5 H R I | G V | N Y Q Q L | P V | N Q A H P S H P T N F Q R D G P M A F Y N G G S P K P N Y
UniRef90_F9X5T5 H R L | G T | N Y Q Q L | P V | N V | P R V | P K M A N F Q R D G P M A F Y N Q G S R P N Y
UniRef90_A0A024RWD4 Y R V | G P | N Y F Q L | P P | N R P | I | N K V | Y A P Y V | R D G P G T M N G N Y G S D P D
UniRef90_A5DQN0 H R L | G T | N Y Q Q L | P V | N R P | R C P F L A G N L Q R D G P A V | F D N Q G S R P N
UniRef90_M2R709 H R I | G V | N L H Q I | P V | N C P | F M A K F A S L N F D G Q M R V D A N H A G N K Q
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UniRef90_W9HA58 L L L A V A A S G P N S P K P T K L E Q F V A A H P A V A K A G A T V
UniRef90_J1IQL4 M L K A G A P D P A T G K P N P A G M P A F F A A H P E T A P F L A W V K T A K
UniRef90_UPI000289DA14 Q L R A S M P D E Y G S G P D P K K M N A F K Q A H P E I Q P F E A W L A D H
UniRef90_B5XWA5 L Q T A T L P D A K T G K P N P E K V N A F V M S H P E I K P F F A W A K Q Y L
UniRef90_W6WR26 M L A A S R Q A H D T T Y G D N P G M D A F M K T H P E A A R F D Q W L R D H
UniRef90_X5LVV9 R M L A S R P Q P Q T G K P D P Q A M A D F L A A H P E T A A M T I I K Q N P
UniRef90_G8MHX8 L Q R A L A N K N D P E S M Q K F A A A H P E I G A F G A W A G S A P
UniRef90_UPI00035E14CE L Q I A S K P D P V T H K P D S A K M K A Y L A K H P E T Q A F L D Y M A A A
UniRef90_W5VG37 F L Q A A E P D V F T G S P D P E V L R R Y A T E H A S F R G L R A V K K T
UniRef90_S9P111 L T T A Q R P E G E K R K P N P L R L L G Y L A T H A S T L R G L I K G V A Q L K
UniRef90_UPI000367CD44 R L L A S K P V A G T G K P D P Q L M A D F L A S R H P E T A A A T A L V K K S P
UniRef90_UPI0004703994 L L Q A V A A S G P D A P Q K P I E Q F L G S H P A A L R F V T T P K
UniRef90_W9YM37 M L Q A I G A S S A P D A P K A P I E V F L G K T P S A A A F V G A P K
UniRef90_H5WKA0 R L E S L A P E P E T K K P N P E R I K A F A D A N P E V L L Q G R H F A S Q
UniRef90_A0A052IAS7 Q R K A F Q P D P A T G K P D P A R V A A F F E E Y P E A R K L T E Y K A T A
UniRef90_I03SM6 R L I A S A V K P G T G K P D P A A M S R F L A A H P E T R R A M K I V K P H P
UniRef90_UPI00037FF503 M L K A T A V D P A T G K P N P E R L T T F L K Q Y P E A E K F L A W R A Q A
UniRef90_E5XTM4 F N V A N R P D P A T G K P D P A K L A E F L A A N P E T A A A L A I A Q A A K
UniRef90_K0PS92 L L E A S K S K D P E V I K E F F A A H P E T A A A F G K W A T T A P
UniRef90_H5TBQ5 Q L Q A L A P D P D T K Q R D P S K I E A F F A N H P E S K T F L E W K D G Y T
UniRef90_UPI0003450569 Q L V A I K S G P K A I D A Y L Q A F F A E H P E S A D F L A W K D S Y Q
UniRef90_UPI0002F754A8 L L I A L G T S G P D V A K P T P L D A Y L G T H P V A K A F L T A P K
UniRef90_I1DT96 Q I Q A I Q A G P E A I Q Q F F A A H P E S S E F R T W A A Q Y K
UniRef90_UPI000367AC94 L L R A I G N S G P D A P K P T P I E S F L G S H P K A L E F V I Q A P K
UniRef90_W6IDS8 L L T A I S K S K D A P H P T P A E Q F I A T H P T V A G A V G A L
UniRef90_K0EXA4 R T L A F A P D P A T G K P D P E R M R R H L A T H P E K T A A A L A L I E Q G
UniRef90_UPI0002F5EF2A Q L V A A Q P D P A T G K P D P A K Q K A F L A A N P E S Q A L Q A W M R G H P
UniRef90_F8J7X5 L L K A S K D K A D A M K N F I A A N P E F S H F A S W A G S A P
UniRef90_F2KF29 L Q V A S A D K S H P D A L K H F A A V H P E I G A F S Q W A G S A
UniRef90_C5BIX5 Q L Q A A A P D P A T G K P D P Q K L Q A F F A A H P E T K N F L T W K A Q A
UniRef90_Q73WB6 L L K A M R P G L T T P L R L A T H L L T H P R L L G A L P L L R E A N
UniRef90_UPI0003633D9B L L Q T V A T K D K D K L D A F F K A N P E S T N Q K T W L T A R
UniRef90_UPI00030B5AC8 M L Q A G A P E A A T G K P A P G A M P A F F A A H P E T A A F L Q W V K T A K
UniRef90_V9DC55 L L G A I A S S A P E A P K N P S P I E A F L G S H P A A L A F V Q A P K
UniRef90_C7RQ30 L V A S R Q P D P A T K Q A D P A K V K A F N D A N P E V L L L L G K H F A S Q
UniRef90_UPI00029A7BC2 F L R A V A A S G P G S P E P P I A A F L A S H P I A A K A F A E A P K
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UniRef90_UPI00047CD7D4 L L L A L A E S P D A K P T K F E T F A K S H P Q V A R A Q A T V
UniRef90_E2XS16 Q V E A F E V A G T G Q P A P D K V A A F F Q K Y P E A R K S V E R E A N A
UniRef90_A0A024JX13 L L K A M R P G L T T P L R M A K Y F V T H P R L L L G T L P V V R D A N
UniRef90_F5SWG1 L L N A V A A S G P D T P A P K P I T Q F L A S H P A A K T F V E I E K
UniRef90_J2YLLH4 L L K A V A D S G P N A H P T A L L E R F A S A H P A A A T A G G T A
UniRef90_J2NM81 F L Q G I A A S V I A T P P D P A P L A A F L A E H P R A R Q F L D T P K
UniRef90_I4X6E1 M L G V V K S F K K G K P S L T E L A D L L A D Y P E S G A M I A N I R K M Q
UniRef90_B9XK93 F

[illegible]

UniRef90_C9DE73	N	I	L	A	G	D	A	S	R	L	A	A	G	R	D	P	D	Y	S	I	R	D	L	F	E	A	I	A	T	G	K	P	P	S	W	T	M	Y	I	Q	V	L		
UniRef90_R8Q5P6	Y	I	L	G	R	E	E	A	Q	V	L	A	A	G	K	N	A	D	F	H	A	R	S	D	L	W	N	A	I	A	E	A	G	G	N	G	P	E	Y	G	L	V	Q	L
UniRef90_R8BTQ8	S	L	L	V	W	E	E	A	Q	V	L	A	A	G	K	N	A	D	F	H	A	R	S	D	L	W	N	A	I	A	E	A	G	G	N	G	P	E	Y	G	L	V	Q	L
UniRef90_M02723	C	L	L	D	D	E	A	V	T	V	G	G	T	C	H	T	H	A	T	K	D	L	T	D	S	I	A	A	A	G	N	Y	P	V	W	K	V	F	I	Q	T	L		
UniRef90_Q24347	C	L	L	D	D	D	A	V	T	V	G	G	T	C	H	T	H	A	T	K	D	L	T	D	S	I	A	A	A	G	N	Y	P	V	W	K	V	F	I	Q	T	L		
UniRef90_UPI0002B43D35	N	L	S	D	K	E	A	G	L	L	A	G	Q	N	P	D	Y	Y	I	Q	D	L	Y	D	S	I	E	E	G	N	F	P	S	W	T	M	Y	L	Q	I	L			
UniRef90_C4JR77	K	P	E	P	H	N	E	A	V	P	Q	A	Q	T	A	H	S	N	N	F	W	D	F	V	Y	L	H	P	E	A	T	H	M	F	E	W	M	A	S	D	R	A		
UniRef90_UPI0002BCAE8D	S	L	L	E	E	E	A	D	R	V	G	G	A	N	H	S	H	A	T	X	D	L	Y	D	S	T	I	A	A	G	N	F	P	E	Y	W	K	L	F	I	Q	T	L	
UniRef90_Q941J0	N	L	L	E	D	E	A	I	R	V	G	G	E	N	H	S	H	A	T	Q	D	L	Y	E	T	I	A	A	A	G	N	F	P	E	Y	W	K	L	F	I	Q	T	L	
UniRef90_X1NC41	N	L	D	R	H	E	A	T	R	L	A	G	V	D	P	D	Y	L	T	R	D	L	H	N	A	I	A	A	A	G	N	E	V	E	Y	E	L	N	V	Q	I	L		
UniRef90_Q6DV43	C	L	L	E	E	E	A	I	K	V	G	G	A	N	H	S	H	A	T	K	D	L	Y	D	S	I	A	A	A	G	N	Y	P	V	W	K	V	F	I	Q	I	L		
UniRef90_I0LAW5	N	L	T	Q	A	E	A	D	A	I	Q	A	T	E	L	G	H	A	S	R	D	L	Y	E	A	I	E	A	E	R	G	E	Y	P	Q	W	E	L	N	V	Q	I	L	
UniRef90_Q9FEQ4	C	L	L	E	E	E	A	I	K	V	G	G	A	N	H	S	H	A	T	Q	D	L	Y	D	S	I	A	A	A	G	N	Y	P	Q	W	E	L	N	V	Q	I	L		
UniRef90_U4UM80	N	L	D	P	E	E	A	E	K	I	A	G	R	D	P	D	Y	A	V	R	D	L	Y	E	S	I	L	Y	I	K	K	Y	P	S	W	T	F	Y	V	Q	I	L		
UniRef90_H9JXL8	R	V	D	L	I	E	I	Y	Q	D	D	P	E	N	N	F	D	Q	A	R	E	L	Y	M	N	E	M	T	K	E	E	R	S	R	L	V	E	N	I	L	L			
UniRef90_L8WK53	E	Q	S	I	V	M	C	G	E	D	P	D	F	V	A	K	R	D	L	W	Q	H	I	E	G	Q	G	D	A	R	W	T	M	F	V	Q	I	L	L					
UniRef90_UPI00016A32CD	A	G	E	V	A	K	A	G	E	D	P	D	V	L	Q	A	D	L	A	K	R	L	L	A	A	G	P	L	R	W	Q	L	N	I	T	L	L	T	L	L				
UniRef90_G8PXT3	P	M	S	Q	D	A	A	D	A	T	P	P	Q	G	A	D	F	L	E</																									

	290	300	310	320
UniRef90_C9DE73	M T Y E Q A A A H K H N P F D V T K V W S H K K D Y P L I P V I E K M V L N E N P K			
UniRef90_R8Q5P6	M D P K D E A N L S Y D P L D D T K V W D E K E Y P L L I P V I G K M V L N K N P D			
UniRef90_R8BTQ8	V D E A D H E D R F D F D P L D V T K T W P E D I I P L Q Q P V I G R M V L N K N I D			
UniRef90_MOZ723	I V D A D H E D R F D F D P L D V T K T W P E D I I P L Q Q P V I G R M V L N K N I D			
UniRef90_O24347	V D A D H E D R F D F D P L D V T K T W P E D I I P L Q Q P V I G R M V L N K N I D			
UniRef90_UPI0002B43D35	M S L E Q A K K H P V N P F D I T K T W P E D I L R S Q L E Q V T V L K A L F L			
UniRef90_C4JR77	I P R S Y R M M Q G F G V N T Y V L V N N E G K R H F V K F H W M			
UniRef90_UPI0002BCAE8D	M D P A D H E D R F D F D P L D V T K T W P E D I L P L Q Q P V I G R L V L N K N T D			
UniRef90_Q941J0	M D P A D E D K F D F D P L D T T K T W P E D I P L Q Q P V I G R L V L N K N V D			
UniRef90_X1NC41	M D I A D E L K Q D F D P L D D T K T W P E D K F T L M P V I G K M V L N R N P D			
UniRef90_Q6DV43	I D P D H E D R F D F D P L D V T K T W P E D I I P L Q Q P V I G R L V L N K N M D			
UniRef90_I0LAW5	M S D D E H P E L D F D P L D D T K I W P E E Q F P Y L P V I G M M T L N R N I T			
UniRef90_Q9FEQ4	I D P D H E D R F D F D P L D V T K T W P E D I L P L Q Q P V I G R M V L N K N I D			
UniRef90_U4UM80	M T P E Q A K L Q K F N P F D Y T R V W P H K E F P L I E V I G R F V L N R N A S			
UniRef90_H9JXL8	I T P E D L A K L D F D P F D V T K V W P R N K F P M H E V I G E V L L N R N P A K			
UniRef90_UPI00016A32CD	A E P G D P V N D D A T K V W P A Q R T M I D A G T L V L D R V I A K			
UniRef90_G8PXT3	A N P G D P V N D A S K A W P A D R K V I D A G T L V L D R H T Q A			
UniRef90_U3HB32	A E A G D P S D D P S S P W P A S R Q R I D A G T L V L D Q A Q P			
UniRef90_UPI0002EA692D	G A P G D P T N D D A T K V W P A D R H V I D A G T L V I E S E Q P			
UniRef90_L8MCF4	A E A G D P T D D A T R Q W P A E R R Q V I D A G T L V V E R A E A			
UniRef90_UPI00036485150	A A P G D P V N D D A T R V W P A D R P H I D A G T L V I E R S V P			
UniRef90_Q471Q1	G Q P G D S E T D P T V L W P A E R P R I K A G T L T I S A E A			
UniRef90_UPI00047CCF4A	G Q P G D P T A D A T I A W P A D R R Q V I E V I G T L T I D R V I E A			
UniRef90_V7Z7A8	A E P G D A V D D P S Q P W P E S R K Q I V A G T V S I D H A E P			
UniRef90_WOPAR6	A D S G D P S N D A T K Q W P D S R R Q V I E A G T I V I E K S Q T			
UniRef90_UPI00047CD8F4	A A A G D R T D D N A T V Q W P A S R E R I I D V G T L V I E R A L P			
UniRef90_UPI00036A875B	G Q P G D P T A D D A T R P W P V E R Q S L D V G T V I V A D T Q S			
UniRef90_S6ARZ7	G Q P G D A E T D P S Q V W P A D R E R V K V G T L S I T Q A M A			
UniRef90_U3TS26	A Q P G D A V N D A S K V W P A D R R Q Q I V A G T L T I L R D S S P			
UniRef90_S6HCP6	A E A G D P I D D A S K Q W P A E R R A I N A G T L V I D S T Q P			
UniRef90_U5VGL7	A E A G D A V D D P A Q P W P A Q R R R V I D A G T L V I E R V D A			
UniRef90_U3QSH0	A Q P G D P T A D A T Q A W P A E R R Q Q I D A G T L V L E R K S A			
UniRef90_R9VG77	A Q P G D D G S N A A K V W P A D R Q T I I N A G T L V L T R A T E			
UniRef90_U5G7S3	M D I A D E D K F D F D P I D D A T I P W P A D R E R V I D A G T L V L K N I D			
UniRef90_UPI00016C56D8	G Q P G D P T D D A T I P W P A D R E R V I D A G T L V L D G V I S			
UniRef90_S4XR1M	A A P G D P T G D A T R E W P R D R E Q V E V I G A T L V E R A A T			
UniRef90_V6J177	A E P G D A I D D P A R P W P A N R R S V N A G T L V L E Q V D A			
UniRef90_A0A024JRM0	G E P G D P T N D D A T K P W P Q S R R S I I D A G T L T I D A V Q T			
UniRef90_K21UH2	G Q P G D P D N D P S H P W P Q D R Q Q V K V I G T L S I T Q A M A			
UniRef90_W9HA58	A E P G D A I T D A T I P W P E D R R V I E L G T L T I T K L A A			
UniRef90_J1IQL4	A N P G D P V D D A S K T W T G E H K V L N A G T L V L E S S Q P			
UniRef90_UPI000289DA14	A E P G D P T T D A T L R W P E E Q R R Q I D A G V L V L D R Q Q P			
UniRef90_B5XWA5	A Q A D D K G N D S T K A W P A N R K T I N A G T L V L N K A I P			
UniRef90_W6WR26	A Q P G D V T N D S T R Q W P A N R T Q I D V G T L V V Q R E E P			
UniRef90_X5LVV9	A E P G D P T N D P T L P W P Q N R A T I D A G T I T I D A V I H T			
UniRef90_G8MHX8	A N P G D P T A D P S K A W P E D R H T V E V G T L V V K T I E P			
UniRef90_UPI00035E14CE	A D P G D R T D D N A T I A W P A N R R H V I D V G T L V L D R A T P			
UniRef90_V5WG37	A G P G D A T D D A T A L W P A D R T E L T A G R L V T G E V I E D			
UniRef90_S9P111	A Q P G D P T H D A T R A W P E D R P L V T V I G R L V L E R P Y			
UniRef90_UPI000367CD44	G R D G D P T D P T L P W P A D R Q V I D A G V L T V L T E A Q T			
UniRef90_UPI0004703994	A K E G D Q L N D A T V S W P E D R Q V V E L G T L T V E K L R A			
UniRef90_W9Y3M7	A E E G D T T D D A T V H W P E D R K V V K L G T I K V E S V T D			
UniRef90_H5WKA0	A E P G D R I D S A V T P L P E A R K K V T L G R L T V K A V A P			
UniRef90_A0A052IAS7	A Q A D D P V D D P S Q P W P A T R R Q V V A G T L E V T K V R D			
UniRef90_I053M6	G A V S D P V R D P T L P W P A D R R A V I D A G V L T L T S A Q T			
UniRef90_UPI00037FF503	A Q P G D P I D D P S R P W P P E R			

	330	340	350	360
UniRef90_C9DE73	N Y F C R R G A A A F S P A N M P P G I E A S P D K M F Q G			
UniRef90_R8Q5P6	N Y M E Q V E K V I P F			
UniRef90_R8BTQ8	N Y F A E T E Q K I M F Q P G H I V R G I D F T E D P L L Q G R I F S Y L D T Q I			
UniRef90_MOZ723	N N F A E N E Q L A F C C P A V T V P G I H Y S D D K L L Q T R I F S Y A D T Q R			
UniRef90_O24347	N N F A E N E Q L A F C S			
UniRef90_UPI0002B43D35				
UniRef90_C4JR77	P E L G V H S L V W D E C L K V A G Q D P D			F
UniRef90_UPI0002BCAE8D	N N F T N E N E Q L A F C P S L V V P G V Y Y S D E K M L Q T R I F I Y S D T L R			
UniRef90_Q941J0	N N F T N E N E Q L A F Y P S A H V V P G I Y F Y S N D K M L Q A R T I F A Y A D T H R			
UniRef90_X1NC41	N N F F A E V E Q A A F C P A S I V P G I Y F Y S A D K L L Q Q R T I F S Y A D T Q R			
UniRef90_Q6DV43	N N F F A E N E Q L A F C P A I V P G I Y Y S D D K L L Q T R I F S Y A D T Q R			
UniRef90_I0LAW5	D H H N E N E Q I A F G T G V L V D G V D F S D D K M L V G R T I F S Y S D T Q R			
UniRef90_Q9FEQ4	N N F F A E N E Q L A F C P A L V V P G V Y Y S D D K L L Q T R I F S Y S D T Q R			
UniRef90_U4UM80	N N F A E I E Q L A F S P N N L T P G V G A S P D R L L Q G R I F A Y Q D A H R			
UniRef90_H9JXL8				
UniRef90_L8WK53	E V G I S C T F D S G N T W L M I K K R T T T E M W S K L L S L L V A R			
UniRef90_UPI00016A32CD	Q D S G P C R D I N Y D P T I L P P E G I E Q A S G E D P L L A A R S A A Y A D S Y L			
UniRef90_G8PXT3	Q D N G E C R D I N Y D P T I L P P E G I E Q A S G E D P L L A A R S A A Y A D S Y L			
UniRef90_U3HB32	E D Q G A C R D I N F D P T I L P P S G I E E P S A D P L L A A R S A A Y A V S F N			
UniRef90_UPI0002EA692D	Q D S G P C R D V N Y D P T I L P P S G I E I S D D P L L A A R S A A Y A D S Y L			
UniRef90_L8MCF4	Q D Q G A C R D I N F D P T I L P P S G I E A S D D P L L A A R S A A Y A V S Y N			
UniRef90_UPI0003485150	Q A V G A C R D V N F D P T I L P P A G I E P S D D P L L A A R S A A Y S V S F N			
UniRef90_Q47IQ1	Q K G A P C E P I N F D P L V M A P G I Q P T D D P V L R F R S P A Y A V S F G			
UniRef90_UPI00047CCF4A	E A A G N C R D I N F D P L V L P S G I E P S D D P L L S A R S A A Y A E S F R N			
UniRef90_V7Z7A8	Q A T G P C R D I N Y D P L I L P K G I A G S N D P L L A A R S A A Y S Q S F N			
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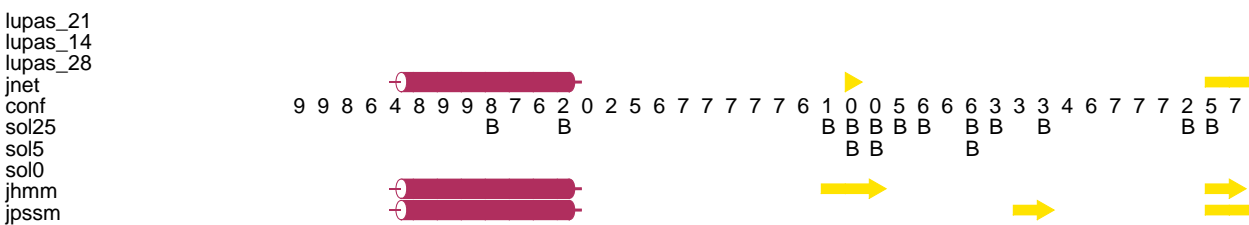
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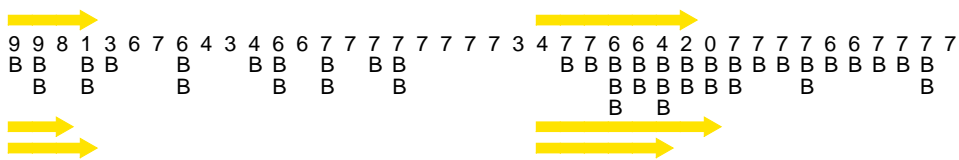
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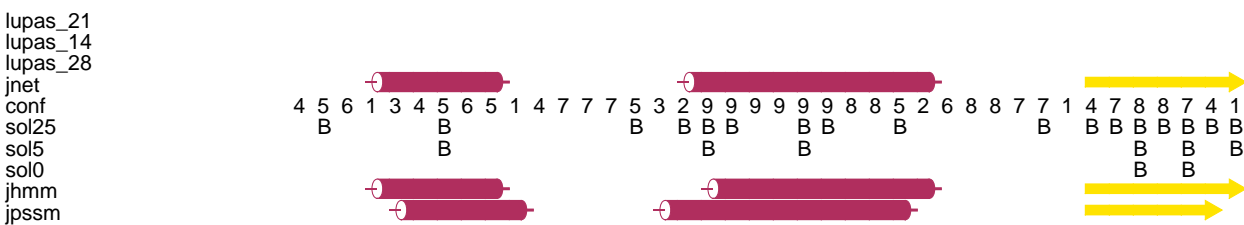


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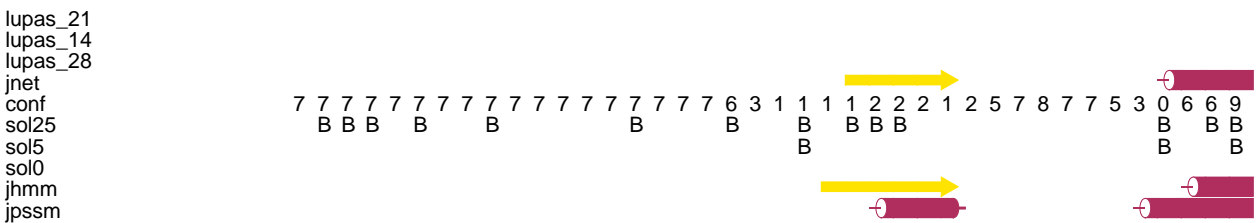
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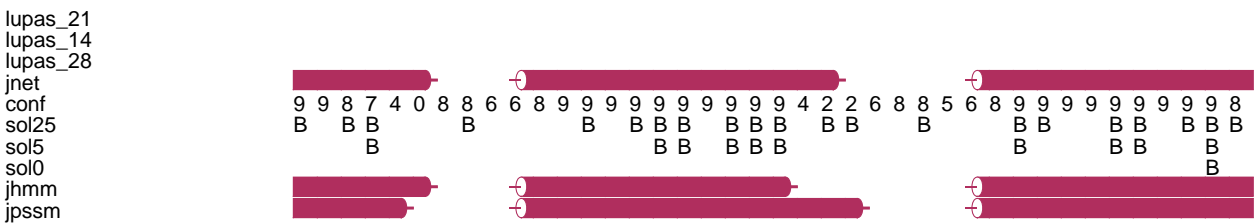
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