

[illegible]

		50	60	70	80
QUERY	L	G D A G S G Q Y S W I I N G I	E W A I A N N M D V I N M S	L	G G P S G S A A L
UniRef90_F5L5P2	L	D Q N G A G S G F E V I N G I	I W A T D H G A N K V I N M S	L	G D D E H S S D L L
UniRef90_W4QHH8	L	N E E G S G S Y E V A K G I	I W A V D H G A N V I N M S	L	G D N Y H S S D L L
UniRef90_W4BMG2	L	D N S G S G T T Y A V A E G I	I W A A D H G A K V I N M S	L	G N Y A D A S Q F L
UniRef90_A4IN34	L	N A D G Y G T S I D V A K G I	I W A V D R G A K V I N M S	L	G N Y Q P S S V L
UniRef90_UPI00047BC493	L	D E N G S G T S F E V A R G I	R W A V D N G A Q V I N M S	L	G D N Y H S S F A L
UniRef90_H3SC94	L	D S T G S G T T Y S V A E G I	I W A T D N G A K V I N M S	L	G N Y V D G A F L
UniRef90_C2ZHC0	L	D K Y T N G K Y S T V V K G I	D W A I E H N I N I V L M S	L	G G K K E S T F F
UniRef90_X2GRZ5	F	N G E E G A N D F V I A E G I	L Y A I E Q G A D V I N M S	L	G G Y G E S P L M
UniRef90_UPI00036193C8	L	D S T G A G T T Y S V A E G I	I W A T D H G A N I N M S	L	G G N Y A D A Q F L
UniRef90_T0B3T6	F	G G G W G A S D Y T I A Q G I	L Y A M E K G A K V I N M S	L	G G Y F S S P I L
UniRef90_UPI00030044F7	L	D K K E N G S K Y S N I I Q A I	E W S I K N N I R I N M S	F	G G Y Q K S S D A L
UniRef90_U1YI69	I	G S D G S G S S F D I A K G I	I W A A D H G A S V I N M S	V	G G N Y H P S N V L
UniRef90_J8FX91	L	D R Y A N G K Y S T V V K G I	D W A I E H K A N I I L M S	L	G G K K E S S V F F
UniRef90_UPI000475210A	L	S A Q G S G G T V A D I A E G I	R F A A D H G A D V I N M S	L	G G P G E S K L M
UniRef90_UPI0004645F84	L	D Q N G S G N L Q S L I Q G I	D W S I T N R M D I L N M S	L	G T T A D S Q I L
UniRef90_UPI000471F325	L	P K E G S G L I S Y V I A G L	E W C I R H K M N V A S M S	L	G N D P R K P V A M
UniRef90_UPI000364E7DA	L	G G D G S G L S G I A Q G I	E W S I D N N M D V I N M S	L	G G D F T G S Q A L
UniRef90_UPI0004717023	L	D S S G S G Y L S D V I A G I	D W A I T N Q M D I I N M S	L	G S P D T G S Q T L
UniRef90_UPI00037695D5	F	N G S M G A Y D Y T I A E G I	V Y S V D K G A D V I N L S	L	G G F M P S P L I
UniRef90_UPI0002F0D842	L	S D Y G G G T V A D I A E A I	K F A A D N G A D V I N M S	L	G G G G E S Q L M
UniRef90_C6Q0J0	L	N S K G E G Q S D I A K G I	E Y A A D K G A D I N L S	F	G C G E S T D I
UniRef90_UPI00041ADBC1	L	N S S G S G T Y S A I V S G I	E W A T S N G M D V I N M S	L	G G S S G S T A L
UniRef90_UPI0004704D65	L	K S D G D G Y I S D V I S G I	E W S I K H M N I N M S	F	G T L D Y S E A L
UniRef90_E5WN85	L	N K D G S G Q Y E W I N G I	H Y A I E Q N A D I N M S	L	G G P A D V P E L
UniRef90_UPI0003F88451	L	N N S G S G S Y A G I A E G I	E W S I N N G M D I I N M S	L	G G S Q S S S I L
UniRef90_W2EBT3	M	E A E G D G S E A K L G E G I	R Y A V D H G A K I V V L S	L	G L N K Y S S E Y M
UniRef90_Q46C21	F	D S E G D G Y L S T C I L G F	E W A V N N N A R I S F S	G	G S P E H D S L F
UniRef90_UPI0004177F74	L	D K T G S G D L K S I L K A I	D W S I Q H N I D I I N M S	L	V V S G D S Q I L
UniRef90_V2ZA94	Q	D E D G S I N D V D M I K A M	E Y F K E K G V K V I N M S	L	G G Y G Y D D N V
UniRef90_R8H3U1	L	D N Q G S G T L D A V A Q G I	R E A A D S G A Q V I N S	L	G A P D G G T A L
UniRef90_L5N7G7	G	D R S V Y T S A V L R G I	D Y A V D N H A D V I N S	F	G S F Y N D P A V
UniRef90_UPI0003672A94	L	N G E G S G A H S D W V I G I	D Y A V Q Q G V D I I N M S	L	G G P D D L P D L
UniRef90_UPI00037016B8	L	D D K N Y G S Y S W W I S A I	N Y A V N N G A K I N M S	V	G G N S F S K G M
UniRef90_K9PUK1	L	G A D G G G T I S D I A E G I	K F A A D N G A D V I N M S	L	G G G G E S R L M
UniRef90_UPI00034A590A	L	S S F G G G T V A D I A E A I	R F A A D N G A V I N M S	L	G G G G E S S I M
UniRef90_I3R9V5	L	N G D G S G S G D I A E G I	R W A A D Q G Y D V I N M S	I	G A T S S S S V I
UniRef90_F2G760	F	N D N G W T Y A S D L I D A I	T Q C Q D A G S N V V N M S	L	G G G S S S T T E
UniRef90_R7CBZ8	L	D E N N S A P T S R V I E A I	Y W A I D H N V N I N M S	F	G M K E D S Q A L
UniRef90_I0I6I9	L	D S G N K G T W G T V A A G I	Y Y A V D Q G A R V I N S	L	G A S V S R T L
UniRef90_UPI0003B45A28	Y	G G G G Y L Q N D D V A A A I	V Y A A D N G A R V I N M S	W	G D T V N A F I I
UniRef90_UPI0004686D0F	L	G D D G R G S L Y G I Q Q G I	L Y A A S S I G S D V I N M S	L	G G G G Y N Q G M
UniRef90_K4Z8Y7	L	D A R G Y G D E D K L V A G I	L Y A V D H G A K I V V M S	V	G L Y R Y S K Y M
UniRef90_A9BFY3	F	N Y V I G D Y A V A A G I	V W A V E N G A D I L S	N	S W G G G G Y S N I L
UniRef90_UPI0002FFECB2	L	D K G G M G T D W I I K A I	K Y A V E W K V S I I N M S	L	G G P Q G D D P A L
UniRef90_B7K129	L	S A G G G G T V A D I A E A I	R F A A D H G A D I I N M S	L	G G G G E S Q V M
UniRef90_W3A936	L	S D F G M G D V S D V I A G I	Q W A I D Q K M D I L N L S	L	T T E T N S Q A L
UniRef90_I6UJY8	H	S S S Q S A A Y S W I N G I	E W A I P H N M Y F S N M S	L	G G P S G S T A Q
UniRef90_S5AS21	L	D E N G S G V N I H I V E G I	E A V D D G A D V I N M S	L	G G P G D D D L V
UniRef90_K9SLN0	L	A S W G G G T I T D I A E A I	R F A A D H G A D V I N M S	L	G G G G E T S I M
UniRef90_H2AHR6	L	G N G S G K Y E W I N G I	N Y A V E Q K A D I I N M S	L	G G P S D V P E L
UniRef90_A4XZU0	F	N N S G W A Y G S D L V M A I	Q Q C R A G S T V I N M S	L	G G G A S S V T E
UniRef90_A7HLY3	F	D N G G W Y I D E Y T A K G I	I W A V N H G A K V L S	N	S W G G P G Y S Q I L
UniRef90_UPI000422D890	L	D K N G S G R I S T I A G I	D W C I S N R N I I S M S	L	G G G Q A T V P A K
UniRef90_UPI000379B9D4	G	F R G G Y L E D D D V I S A A I	V Y A A D N G A Q V I S I	S	I S W G D V T L A P I I
UniRef90_K9Y8H2	L	A N G L G F N S D I I A G I	N Y A V D N G A D I I N L S	L	G A S R A T P A I
UniRef90_E5YQ55	F	D H N G S A F V S D I I A G I	D W C V R A E I D I N M S	F	G M T Q T R S R A L
UniRef90_UPI0003681FA6	L	D Q G G S G Y L S D I V A G I	D W S I T N K M N V N M S	L	G T T G D S S A L
UniRef90_U1LEP0	L	D A S G S G D T E Q I A L G I	K Y A V D A G A K V I N M S	L	G G S E S R T I
UniRef90_A7VM14	F	N D S G N W T N S N L I Q A I	Q S C Q N A G A K V V N M S	L	G G G S S N T T E
UniRef90_M0NG72	L	N N D N W G H S S I A A G I	K W A A D Q G Y D V V S	L	I N G S S Y S Q M L
UniRef90_D7UXE6	L	D E S G E G E T D S I A L G I	Q Y A I K Q K A D V I N M S	L	G G D Y S P T L
UniRef90_D7E2S2	L	D K S G S G S Y A N A N G I	R Y A V D N G A V I N L S	L	G G N V S N N T L
UniRef90_F2R6N5	N	D E K N S G K S D T M A E A I	K W A V A K G A H V I	N I	S Q D T T D A D S P M
UniRef90_UPI00035DE18A	L	D S S G S G D E D K L G E G I	V Y A I E H D V K I V V L S	V	G L Y R Y S T Y M
UniRef90_UPI00028A19E3	G	D E A P S T I D I A E G I	Y Y A V D N G A N I N L S	L	G G A Y S K Y V
UniRef90_B3QT82	F	T A S G S T S D D K D I A S A I	L Y A A E N D Q V L N M S	F	G D V T L S T V V
UniRef90_V5M4L4	L	N N Q G S G T L D N V A K G I	T E A A D S G A K V I S L S	L	G A S N G G T A L
UniRef90_I6V1Q5	L	G A D G S G S I S T I K G V I	E W A V D N G I K V I N L S	L	G S S Q S S D G T
UniRef90_A6GBM9	L	G A S G G S V A S I A N A I	R Y A A D N D A D V I N M S	L	G G P S R V M
UniRef90_W9FTQ1	L	D D E G Y G E D S G I L A G I	M E W A V A Q G A D I V N L S	L	G G P D T D P L E
UniRef90_R8M5V3	L	G P N G S G A Y E W I I D G I	N Y A V N W K V R V I S M S	L	G G P N D V P E L
UniRef90_M3FCX8	L	S G E G G G Y Q G I I D G M	Q Y A I D W R V H V I S M S	L	G G P E D V E E L
UniRef90_E4RPQ1	L	N D R G S G N V S D L A A A I	L Y A A G L D V D I I N L S	L	G T S S D S S T L
UniRef90_W8F1V3	I	T P D G G D E R D K D V A N A I	R Y A V D N G A Q I I N M S	F	G K Y Y S P A V
UniRef90_UPI00037571A3	L	T G E S G E Y D W I I D A I	N Y A V E W R A R V I C	M	G G P N D V D E M
UniRef90_T0RZL4	M	D K K G R G D L E K A L K A T	K Y A V E N G A T V I N N S	W	G S L G H S E I L
UniRef90_T0RBB8	L	S D S G S G E T T E I A I K S I	E Y A I K N G A N I M S	N	S W G G G E R S E A L
UniRef90_I3IA42	L	A M G A G L L E N I N A G V I	K F A A D Q G A D V I N M S	L	G V S G G G L P H
UniRef90_UPI000423E906	L	S N E G Y G Q D S W I I E G I	M E W A A H N A K I V S M S	L	G G T E P S D G T
UniRef90_W5WUH5	L	S R S G S G S L D G A L K S I	D Y A T S M G A K I L S	N	S W G G G G Y S E T L
UniRef90_S4NF13	L	N K N G A G R D S H I A G I	E W C I K N N I H V A S L S	L	G S N G P S V A Y
UniRef90_L9XW36	L	G D D G S G R Y S E L I A G I	D W C M S N D V E I I S M S	L	G G K T E S A T L
UniRef90_I9BX5	L	D S S G N G G Y Q N L I R A I	D Y A A L Q W K V R I L S M S	L	G G E T D D S N Y
UniRef90_UPI00047D05D8	L	N Q D G G S I S D V I A G I	Q W A V D N N I K V L T L S	L	L G T A A K K S Y Q
UniRef90_J9YBX8	L	D S E G N G F N T Q T V E G I	E Y A V D D G A D I I N L S	L	G G P G D A D D I
UniRef90_UPI0003631A1D	L	N N G G V I G Y D S W I A G M	Q W A A E S G A D V V N M S	L	G F E A R T D V L I
UniRef90_M4V8C3	L	D R N G S G T L E N A L K S I	D Y A T K M G A K V M S	N	S W G G G F S Q T L
UniRef90_K8GMX0	L	G S N G G T Y N D V A A G I	F Y A V N N G A R V I N L S	L	G G A F S S R I V
UniRef90_P80146	L	D G S G S N S S V I A G L I	D W V T Q N H V K V I N M S	L	G G G A S T A L
UniRef90_M1WVL4	L	D N G S G G Y Y D S I N G I	R Y A V D N G A V I N L S	L	G G K F P A N N I
UniRef90_UPI00034984C9	L	N D S G S G S Y S A I A N G I	Y Y A V N H G A N V I N L S	L	G G D F P N S T L

QUERY	90	100	110	120
UniRef90_F5L5P2	K A A V D K A V A S G V V V V A A A G N E G S T G S S S T V I G Y P G K Y P S S V I L			
UniRef90_W4QHH8	Y D A V R Y A Y E H D V V V L I A A A G N D N N V E D P M V P M Y P A A R Y P E V I L			
UniRef90_W4BMG2	H D A I R Y A F D R D I V L I A A A T G N D N T T S E R P G Y P A A R Y P E V I F			
UniRef90_A4IN34	E E A I R Y A D A H D V V L V A A S G N D S T S Q T P M Y P A A R Y P E V I L			
UniRef90_UPI00047BC493	H D A I R Y A F E R D V V L I A A A T G N D N T V S T P G Y P A A R Y P E V I F			
UniRef90_H3SC94	H D A V K Y A F E R D V V L I A A A T G N D N T T K R P G Y P A A R Y P E V I F			
UniRef90_C2ZHC0	E E A M N K A Y Q K G I V L I S A A G N E G Y K E G N T I T Y P A K Y P S V V I			
UniRef90_X2GRZ5	K D A V K Q A I D K G I T I V A A A G N E S T D E Y R P G Y P A A Y P E V I			
UniRef90_UPI00036193C8	H D A V K Y A H D V A L V A A A G N D N T D R P G Y P A A Y P E V I			
UniRef90_T0B3T6	E E A V Q K A I D A G I T V V A A A G N E A T D M Y S I P A S Y E G V I S V G A			
UniRef90_UPI00030044F7	E S A I N K A H E K N I I L V A A A G N T G F F N E D T I T Y P A K Y K N V I			
UniRef90_U1Y169	H D A I R Y A F S K N V V M V A A S G N D H T S Q T S F P A A R Y P E V I L			
UniRef90_J8FX91	E E A M N K A Y E K G I L L V A A S A G N E G Y K E G N S I T Y P A K F D S V M			
UniRef90_UPI000475210A	Q D A V N Y A Y N K G V V I A A A G N E S R N S A S Y P A R Y P H V I S V S A			
UniRef90_UPI0004645F84	H D A V D K A Y E Q G V L V A A S G N D G N G F P V I S Y P A A Y S V V V			
UniRef90_UPI000471F325	A T I L V K A C Q D S G I T V V A A S A G N A N S F M Q G E S N A S P I A V G A V D			
UniRef90_UPI000364E7DA	E Q A S N N A D D A G I V V I A A A G N S G T D F G G S T I A Y P A Q Y D S V M			
UniRef90_UPI0004717023	H Q A V D K A Y N N G T L V V A A A G N S G I N G N G D T V E Y P A K Y D S A I			
UniRef90_UPI00037695D5	E E A V Q Y A I D S G A V V V A A A G N E S T D E Y A Y P A A Y P G V I S V G N			
UniRef90_UPI0002F0D842	K D A I E Y A H N K G V V I A A A G N E N Q N S A A Y P A R Y P H V I G V A A			
UniRef90_C6Q0J0	E N A I Q Y A R N K G S F I V A A A G N D N I D C D N S S P A G E A G A Y			
UniRef90_UPI00041ADBC1	K Q A V D N A Y A R G V V V V A A A G N S G S S G S N T I G Y P A K Y D S V I			
UniRef90_UPI0004704D65	K K E V D K A S R N G I L V V V A A A G N H S N S S G S K T D N I D Y P A R L S S T V			
UniRef90_E5WN85	H D A I K A A V K K N I L V V C A A A G N G D G D D S T D E F A Y P G C Y N E V I			
UniRef90_UPI0003F88451	K Q F S D L A Y E E G L L V V A A A N S G N R G G N D T V G Y P A K Y D S V I			
UniRef90_W2EBT3	K D T V K Y A E D H D V L L V A A T G N E A G S V K Y P A A Y P S V L			
UniRef90_Q46C21	T T M I K A V V A A G V P V I A A A G N D G D G S G T I T C P G D E L N S L T V			
UniRef90_UPI0004177F74	H D A D R A Y K K G L L V A A A G N D G N K T S V I Y Y P A A Y S V I			
UniRef90_V2ZA94	H K A M K A A Y D A G I T L I A A A G N D D T N K D S S P S S F K A A Y S E V L			
UniRef90_R8H3U1	Q E A V Q Y A W D K G A V I V A A A G N D G D S T P N Y P A A Y D K V I			
UniRef90_L5N7G7	Q E K L L E A Y D A G I T L V A A A G N E E T N V P A Y P A G Y P W V I A V G A			
UniRef90_UPI0003672A94	H A A I Q R A V E A G V L V V C A A A G N E G D A N E T T N Y A G Y P G Y Y N E V I			
UniRef90_UPI00037016B8	K D A V D N A H S N G V I V A C M M N F N N G S S Y Y P A A Y A N T I A V G S			
UniRef90_K9PUK1	Q E A I D Y A Y K N V V V I A A A G N A N Q N G A S Y P A R Y P K V I G V S A			
UniRef90_UPI00034A590A	K E A I N Y A N Q K G A V I I A A A G N S G S N A A A Y P A R Y P H V I			
UniRef90_I3R9V5	E D A V Q Y A Y D K G V L L V G A A G N E G P C N D C V H Y P A Y D E V I			
UniRef90_F2G760	R N A M Q S F T D A G M L L V A A A G N D G N S A K T S Q V E Y P A A Y E V V			
UniRef90_R7CBZ8	H N A I K D A Y N A G I L L I A A A G N T S T E P F Y P A A L Y V I			
UniRef90_I01619	E R A I Q Y A E A H D V I V V A A A G N A A V G S W Y P A G L E T V I			
UniRef90_UPI0003B45A28	E D A I A Y A D A H G C I L I A A A G N A G A V G S W Y P A G L E T V I			
UniRef90_UPI0004686D0F	D E A C R T A V A R G T I V V A A T G N D Y R G S I S Y P A A Y S V I			
UniRef90_K4Z8Y7	E E I V N Y A E Q K G V L I A A T G N D R Y G K I A V K Y P A A Y P T V L			
UniRef90_A9BFY3	K D A F D Y A L T H N V V V V A A S G N F T T D Q H V W F Y P S G F P G V I			
UniRef90_UPI0002FFECB2	H K A V Q E A V A N I L V V C A A G N G D G N D Q T D E Y A Y P G A Y E V V			
UniRef90_B7K129	K E A I D Y A D S K G V V I A A A G N A N Q N S A S Y P A R Y P K V I			
UniRef90_W3A926	Q E V V K K A Y D K G I V I A A A G N D R A N T K I K D V L F P A R L S S V I			
UniRef90_I6UJY8	E T V V D K A V S S G I V V A A A A G N E G S S G S S S T V I G Y P A K Y P S T I			
UniRef90_S5AS21	A S A V D A A T A S G V A V I V A A A G N G G E Y E I G G L S P A S A R S A I T V			
UniRef90_K9SLN0	R E A I E Y A H Q K G V V I A A A G N S E N A A S Y P A R Y P H V V			
UniRef90_H2AHR6	K E A V T N A V K S G V L V V C A A G N G D G D E R T E E L S Y P A A Y N E V I			
UniRef90_U4XZU0	R N A M D A A Y Q N G V L V V A A A G N S G T S N L S Y P A A Y D S V V			
UniRef90_A7HLY3	K D A F D Y A L E K G V T V V A A A G N S T S S Q T F L Y P A N Y P G I I Q V A			
UniRef90_UPI000422D890	E D A V E S A W D N G I V V V A A A G N E G P A E R T I S S			

QUERY	A	V	G	A	V	D	S	S	N	Q	R	A	S	F	S	S	V	G	P	E	L	D	V	M	A	P	G	V	S	I	Q	S	T	L	P	G	N	K	Y	G		
UniRef90_F5L5P2	A	V	S	A	V	D	H	L	Q	E	K	A	A	F	S	S	N	Y	G	D	Y	I	D	V	T	A	P	G	E	H	I	P	S	T	F	I	N	N	Q	Y	V	
UniRef90_W4QHH8	T	V	A	A	V	D	D	K	R	N	K	A	A	F	S	S	N	Y	G	D	Y	H	I	D	V	T	A	P	G	E	H	I	P	S	T	F	I	N	N	Q	Y	V
UniRef90_W4BMG2	A	V	S	A	T	D	P	D	M	S	K	A	S	F	S	S	N	Y	G	D	Y	V	D	V	M	A	P	G	S	S	I	A	S	T	Y	P	N	N	Q	Y	A	
UniRef90_A4IN34	S	V	G	A	V	D	P	D	L	S	Y	A	L	Y	S	S	N	Y	G	D	Y	V	D	V	A	P	G	T	N	I	A	S	T	F	T	G	H	R	Y	A		
UniRef90_UPI00047BC493	T	V	G	A	V	T	E	N	R	E	R	A	S	F	S	S	N	Y	G	D	H	I	D	V	T	A	P	G	E	H	I	P	S	T	F	I	N	N	Q	Y	V	
UniRef90_H3SC94	A	V	S	A	T	D	E	N	D	K	R	A	S	F	S	S	N	Y	G	N	Y	V	D	V	V	A	P	G	T	S	I	A	S	T	Y	P	N	N	Q	Y	A	
UniRef90_C2ZHC0	A	V	G	A	L	N	K	N	D	T	R	G	F	L	S	S	R	G	D	E	L	E	L	M	A	P	G	V	D	I	L	S	T	W	K	D	G	S	F	V		
UniRef90_X2GRZ5	S	V	G	S	T	N	D	L	N	K	L	S	S	Y	S	S	N	Y	G	P	S	V	D	V	V	A	P	G	E	S	I	Y	S	T	V	H	G	S	F	V		
UniRef90_UPI00036193C8	A	V	S	A	T	D	P	D	E	T	R	A	E	Y	S	S	N	F	G	D	Y	I	D	V	A	A	P	G	S	S	I	A	S	T	Y	P	G	S	R	Y	A	
UniRef90_T0B3T6	T	D	S	K	N	K	L	A	E	F	S	N	Y	G	P	S	V	D	I	V	A	P	G	V	D	V	Y	S	P	I	Y	D	Y	T	K	G	S	S	F	A		
UniRef90_UPI00030044F7	S	V	G	A	V	N	K	Q	K	Q	R	A	F	A	S	S	Q	G	N	K	I	D	I	M	A	P	G	E	K	I	L	S	T	S	T	K	Q	K	Y	T		
UniRef90_U1YI69	S	V	A	A	V	D	W	Q	G	K	Q	W	A	E	F	S	N	F	G	S	H	I	D	I	S	A	P	G	V	D	I	P	S	T	Y	T	Q	N	H	Y	A	
UniRef90_J8FX91	A	V	G	V	L	D	N	K	N	Q	R	G	F	L	S	S	K	G	E	Q	L	E	V	M	A	P	G	V	D	I	W	S	T	W	N	N	G	D	Y	R		
UniRef90_UPI000475210A	L	D	S	A	G	N	K	A	P	Y	S	N	F	G	A	G	V	D	I	L	A	A	P	G	G	S	D	G	G	K	I	L	Q	N	T	I	D	P	R	T	A	
UniRef90_UPI0004645F84	A	V	S	A	T	N	E	N	Q	L	A	S	F	S	S	T	G	N	E	V	E	F	S	A	P	G	S	S	I	I	L	S	T	Y	L	H	Q	Y	A			
UniRef90_UPI000471F325	R	N	G	V	I	A	P	F	S	S	R	G	S	C	V	N	E	S	N	P	V	T	C	V	A	P	G	V	S	I	V	E	S	T	Y	C	L	N	N	S	Y	T
UniRef90_UPI000364E7DA	A	V	G	A	V	D	Q	N	N	N	R	A	S	F	S	S	V	G	N	T	L	E	V	M	A	P	G	V	N	I	E	S	T	M	P	G	N	N	Y	A		
UniRef90_UPI0004717023	A	V	A	A	V	D	S	S	N	N	R	A	S	F	S	S	T	G	P	K	V	E	V	S	A	P	G	V	S	I	Y	S	T	Y	L	N	N	G	Y	T		
UniRef90_UPI00037695D5	V	D	G	K	K	L	S	D	S	N	Y	G	A	S	S	V	D	V	V	A	P	G	E	N	I	Y	S	T	A	Y	G	S	E	S	G	S	K	F	A			
UniRef90_UPI0002F0D842	L	G	P	D	G	E	K	A	P	Y	S	N	F	G	A	G	V	D	I	L	S	A	P	G	G	S	D	A	G	K	I	P	E	N	K	G	V	G	V	F	M	
UniRef90_C6Q0J0	T	V	S	A	I	N	P	S	Y	M	K	A	Y	F	S	S	D	Y	G	N	S	V	K	I	A	A	P	G	V	G	I	V	S	T	V	P	G	N	K	Y	E	
UniRef90_UPI00041ADBC1	A	V	G	A	V	D	S	N	S	N	R	A	S	Y	S	S	V	G	S	E	L	E	V	M	A	P	G	S	G	V	Y	S	T	Y	P	S	N	T	Y	A		
UniRef90_UPI0004704D65	A	V	G	V	G	V	K	N	L	K	K	A	S	F	S	S	I	G	K	E	I	E	F	T	A	P	A	V	D	I	L	S	T	Y	I	G	N	Q	Y	A		
UniRef90_E5WN85	S	V	G	A	V	N	L	E	R	D	S	S	E	F	T	N	S	H	K	E	I	D	L	V	A	P	G	E	N	I	L	S	T	F	L	N	G	K	Y	A		
UniRef90_UPI0003F88451	A	V	A	A	V	D	Q	N	N	R	A	T	F	S	S	T	G	P	A	V	E	I	S	A	P	G	V	S	I	L	S	T	T	P	G	N	N	Y	A			
UniRef90_W2EBT3	S	V	G	V	D	A	N	K	Q	K	S	P	L	S	N	F	G	P	E	L	D	I	V	A	P	F	D	V	I	Y	T	T	W	M	G	G	V	Y	D			
UniRef90_Q46C21	G	A	T	D	S	D	A	L	A	D	F	S	S	R	G	P	V	T	K	P	D	I	L	S	A	P	G	V	S	I	P	S	T	Y	P	G	D	G	Y	A		
UniRef90_UPI0004177F74	A	V	S	A	T	N	E	K	N	Q	L	A	S	F	S	N	T	G	T	A	V	E	F	S	A	P	G	T	S	I	I	S	T	Y	V	N	R	K	Y	A		
UniRef90_V2ZA94	S	V	N	S	D	S	D	N	Q	T	S	Y	F	S	S	N	Y	G	F	T	S	D	I	S	A	P	G	S	S	I	P	S	T	V	P	G	S	T	Y	V		
UniRef90_R8H3U1	S	V	A	S	T	D	Q	Y	D	K	S	Y	F	S	T	Y	G	K	W	V	D	V	A	A	P	G	S	N	I	Y	S	T	Y	K	G	S	D	R	Y	A		
UniRef90_L5N7G7	T	D	T	S	S	S	P	R	H	A	P	F	S	N	I	G	S	H	I	D	V	A	A	P	G	V	D	I	F	S	T	S	Y	D	G	T	Y	G				
UniRef90_UPI0003672A94	S	V	G	S	V	N	L	A	L	Q	A	S	A	F	S	S	N	S	N	E	V	D	L	V	A	P	G	E	G	I	F	S	T	Y	P	G	G	Y	A			
UniRef90_UPI00037016B8	T	D	S	N	D	E	R	T	N	S	T	S	G	S	N	Y	G	V	H	I	D	V	I	A	P	G	N	Y	I	Y	S	S	D	T	N	G	Y	N	G			
UniRef90_K9PUK1	I	D	A	A	G	T	K	A	P	Y	S	N	Y	G	A	G	V	D	I	T	A	P	G	G	S	E	S	G	G	I	L	Q	E	T	I	D	P	S	S	G		
UniRef90_UPI00034A590A	G	V	S	A	T	A	P	S	N	A	K	A	P	Y	S	N	Y	G	A	G	V	D	I	A	A	P	G	G	A	I	A	G	E	D	R	S	G	G	F	S		
UniRef90_I3R9V5	A	V	S	T	N	P	D	D	A	L	S	E	F	S	T	S	T	G	P	E	V	N	I	A	A	P	G	S	D	I	T	S	T	I	I	G	G	Y	R			
UniRef90_F2G760	S	V	A	A	V	D	S	N	E	N	R	A	S	Y	S	Q	Y	N	D	Q	V	E	I	A	A	P	G	S	A	V	Q	S	T	Y	P	T	N	T	Y	A		
UniRef90_R7CBZ8	A	V	G	A	V	D	S	D	G	I	V	C	D	N	S	A	K	G	D	E	I	E	L	V	A	P	G	E	K	I	A	S	T	G	G	Y	E	I	L			
UniRef90_I0I6I9	A	V	G	A	T	T	D	Q	D	L	W	P	L	S	N	F	G	A	T	I	D	I	A	A	P	G	E	E	I	I	S	T	D	L	N	G	G	Y	Q			
UniRef90_UPI0003B45A28	S	V	A	A	L	G	K	E	K	Q	L	S	G	L	S	N	F	G	A	T	I	D	I	A	A	P	G	E	E	I	I	S	T	D	L	N	G	G	Y	A		
UniRef90_UPI0004686D0F	A	V	G	S	V	T	S	N	R	T	R	S	A	F	S	S	N	Y	G	S	G	L	E	I	M	A	P	G	S	G	I	Y	S	T	Y	P	N	N	Q	F	R	
UniRef90_K4Z8Y7	A	I	G	G	N	N	S	Q	R	V	E	P	R	S	N	Y	G	A	G	V	D	L	V	A	P	W	H	I	F	T	T	A	L	G	G	Y	A					
UniRef90_A9BFY3	A	V	A	A	S	D	D	K	D	N	I	A	Y	F	S	S	R	G	D	Y	V	S	V	S	A	P	G	V	D	I	I	S	T	I	P	G	N	P	Y	I		
UniRef90_UPI0002FFECB2	Q	V	G	S	V	N	L	R	G	Q	L	S	E	F	S	N	T	N	D	K	I	D	L	V	A	P	G	E	E	I	L	S	T	Y	L	K	G	K	F	A		
UniRef90_B7K129	S	V	S	A	L	D	P	A	G	K	K	A	P	Y	S	N	Y	G	A	G	V	D	I	S	A	P	G	G	T	I	D	P	K	T	G	E	S	V	F	A		
UniRef90_W3A936	A	V	G	S	V	S	P	L	N	K	L	S	Y	F	S	N	Y	G	P	N	Q	E	L	V	A	P	G	E	N	I	K	S	T	S	T	Q	D	D	Y	F		
UniRef90_I6UJY8	A	V	G	A	V	N	S	S	N	Q	R	A	S	F	S	S	A	G	S	E	L	D	V	M	A	P	G	V	S	I	Q	S	T	L	P	G	G	T	Y	G		
UniRef90_S5AS21	G	S	V	E	P	N	G	N	I	S	S	F	S	S	N	S	S	F	G	K	P	E	L	A	A	P	G	G	N	I	Y	S	T	A	I	G	E	S	Y	T		
UniRef90_K9SLN0	G	V	S	A	T	G	P	N	G	E	K	S	F	Y	S	N	Y	G	A	G	I	D	I	A	A	P	G	N	T	I	D	P	Q	T	G	Q	S	I	F	A		
UniRef90_H2AHR6	A	V	G	S	V	S	I	A	R	K	S	S	E	F	S	N	A	N	K	E	I	D	L	V	A	P	G	E	N	I	L	S	T	L	P	N	H	K	Y	G		
UniRef90_A4XZU0	S	V	A	A	V	D	S	S	G	N	H	A	S	F	S	S	Y	N	S	Q	V	E	V	A	A	P	G	V	G	V	R	S	T	L	P	N	K	R	Y	A		
UniRef90_A7HLY3	A	A	E	F	N	G	G	N	V	K	T	A	Y	F	S	N	G	S	P	M	I	T	V	A	A	P	G	R	D	I	L	S	T	M	P	G	G	Y	Y	G		
UniRef90_UPI000422D890	G	A	G	R	S	D	D	A	V	A	S	F	S	S	R	G	P	T	V	D	P	D	L	V	V	G	P	G	V	N	I	L	S	T	L	R	S	P	G	Y	T	
UniRef90_UPI000379B9D4	S	V	T	A	V	D	S	N	L	K	I	C	S	S	S	Y	G	E	G	I	D	L	C	V	G	P	G	L	S	I	Y	S	T	Y	L	H	N	E	Y	T		
UniRef90_K9Y8H2	G	A																																								

QUERY	A	Y	N	G	T	S	M	A	S	170	V	A	G	A	A	L	I	S	K	H	P	N	W	T	N	T	Q	V	R	S	S	L	Q	N	T	T	T					
UniRef90_F5L5P2	F	M	S	G	T	S	M	A	S	P	H	V	A	G	L	A	A	L	R	S	F	N	P	D	L	S	N	R	E	V	M	D	L	I	R	Q	N	T	T	D		
UniRef90_W4QHH8	V	M	S	G	T	S	M	A	S	P	H	V	A	G	L	A	A	L	R	S	N	N	P	D	L	S	N	R	E	V	M	D	L	I	R	Q	N	T	T			
UniRef90_W4BMG2	A	L	S	G	T	S	M	A	S	P	H	V	A	G	L	A	A	L	R	S	N	N	P	D	L	S	N	R	E	V	M	D	L	I	R	Q	N	T	T			
UniRef90_A4IN34	A	L	S	G	T	S	M	A	S	P	H	V	T	A	L	A	A	L	R	S	V	N	P	R	L	T	N	D	E	V	R	N	I	I	I	Q	S	A	D			
UniRef90_UPI00047BC493	V	M	S	G	T	S	M	A	S	P	H	V	A	G	L	A	A	L	R	S	K	A	N	P	E	L	T	N	K	E	V	Y	R	I	I	K	S	S	E			
UniRef90_H3SC94	A	L	S	G	T	S	M	A	S	P	H	V	T	A	L	A	A	L	R	S	I	N	P	E	G	L	K	N	K	E	V	Y	R	I	I	K	S	S	E			
UniRef90_C2ZHC0	L	D	S	G	T	S	M	A	A	H	V	A	G	V	A	S	L	I	L	E	K	N	P	Y	L	S	N	Q	K	V	R	E	I	M	N	Q	T	A	I			
UniRef90_X2GRZ5	K	F	S	G	T	S	M	A	A	P	V	V	A	G	V	A	S	L	L	K	S	K	H	P	N	L	K	P	H	V	E	A	I	L	E	M	K	T	A	N		
UniRef90_UPI00036193C8	A	L	S	G	T	S	M	A	S	P	H	V	A	G	L	A	A	L	R	S	K	A	N	P	N	L	K	P	D	Q	M	A	D	V	I	L	E	R	K	T	A	R
UniRef90_T0B3T6	E	L	S	G	T	S	M	A	S	P	V	V	A	G	V	A	S	L	L	L	S	K	D	P	N	L	K	P	Y	Q	V	E	W	I	L	E	R	K	T	A	T	
UniRef90_UPI00030044F7	I	K	S	G	T	S	M	A	A	Y	V	T	G	S	I	S	L	L	L	E	K	K	P	Q	L	T	N	T	E	V	E	N	I	L	K	K	T	A	T			
UniRef90_U1YI69	S	L	S	G	T	S	M	A	C	H	V	V	A	G	L	A	A	L	R	S	L	N	P	S	L	K	N	T	E	V	M	K	I	M	R	K	Q	A	T	R		
UniRef90_J8FX91	L	D	S	G	T	S	M	A	A	H	V	V	A	G	V	A	S	L	L	L	E	K	D	R	M	M	S	N	Q	K	L	R	S	A	L	L	K	K	S	A	T	
UniRef90_UPI000475210A	E	Y	Q	G	T	S	M	A	A	P	H	V	A	G	V	A	A	L	L	K	A	T	G	V	K	D	P	A	E	V	L	F	S	L	K	K	S	A	Q			
UniRef90_UPI0004645F84	T	G	S	G	T	S	Q	A	T	P	H	V	A	A	M	F	A	L	L	K	Q	R	D	P	A	E	T	N	V	Q	L	R	A	D	M	Q	K	N	I	V		
UniRef90_UPI000471F325	K	M	S	G	T	S	M	A	C	H	V	V	S	G	L	A	A	L	I	I	Q	R	Y	P	S	I	T	P	A	Q	V	K	R	L	I	T	R	T	A	I		
UniRef90_UPI000364E7DA	S	L	D	G	T	S	M	A	A	P	H	V	A	G	T	A	A	L	M	L	E	Q	N	P	F	I	S	N	N	A	V	R	T	E	L	N	D	N	A	I		
UniRef90_UPI0004717023	R	L	S	G	T	S	M	A	T	P	Y	T	T	G	I	A	L	L	L	K	Q	N	P	A	L	T	N	I	E	L	R	D	K	L	D	Q	N	V	V			
UniRef90_UPI00037695D5	R	L	T	G	T	S	M	A	S	P	V	V	A	A	A	G	L	L	K	S	K	Y	P	D	L	T	A	F	E	I	L	E	Y	I	L	E	Q	T	A	T		
UniRef90_UPI0002F0D842	G	F	Q	G	T	S	M	A	A	P	H	V	A	G	V	A	A	L	V	K	A	S	G	V	N	N	P	S	D	E	I	L	L	E	V	L	K	S	A	R		
UniRef90_C6Q0J0	A	W	D	G	T	S	M	A	A	P	V	V	A	G	V	A	A	M	V	K	A	E	N	P	S	V	T	P	S	E	M	E	D	V	L	D	K	S	A	V		
UniRef90_UPI00041ADBC1	T	L	N	G	T	S	M	A	S	P	H	V	A	G	A	A	A	L	I	L	S	K	Y	P	T	L	S	A	S	Q	V	R	N	R	L	S	S	T	A	T		
UniRef90_UPI0004704D65	W	M	D	G	T	S	M	A	T	P	F	V	T	G	A	L	A	L	L	K	Q	E	Y	P	H	L	S	N	Q	A	L	J	A	K	L	Y	T	T	I			
UniRef90_E5WN85	T	L	S	G	T	S	M	A	A	P	H	V	S	G	A	L	A	L	L	K	Q	F	E	R	K	L	S	E	P	A	E	L	Y	A	Q	L	I	R	R	T	V	
UniRef90_UPI0003F88451	A	F	N	G	T	S	M	A	S	P	H	V	A	G	V	A	A	Q	V	W	Q	A	K	P	E	L	S	N	V	E	L	R	N	L	L	N	E	T	A	V		
UniRef90_W2EBT3	Y	N	R	G	T	S	M	A	A	P	Q	V	A	G	V	A	A	L	V	W	G	K	Y	P	T	M	K	S	Y	E	V	A	D	L	L	E	K	T	A	E		
UniRef90_Q46C21	Y	G	D	G	T	S	M	A	A	P	H	V	S	G	T	V	A	L	I	L	E	K	K	P	T	M	T	P	A	E	V	K	K	E	L	E	S	T	A	V		
UniRef90_UPI0004177F74	S	S	S	G	T	S	Q	A	V	P	H	V	A	G	M	F	A	L	L	K	Q	M	Y	P	A	S	T	N	S	E	L	R	R	K	M	Q	F	F	T	S		
UniRef90_V2ZA94	A	Y	S	G	T	S	M	A	S	P	V	V	A	G	V	A	S	L	V	L	S	A	N	K	D	L	T	P	R	Q	V	Y	N	I	L	C	E	D	T	A	D	
UniRef90_R8H3U1	T	L	S	G	T	S	M	A	T	P	H	V	A	G	L	A	A	L	L	L	K	S	K	H	R	D	W	K	P	A	D	V	E	Y	A	L	Q	A	S	S	D	
UniRef90_L5N7G7	V	G	S	G	T	S	Y	S	A	P	I	V	S	G	L	A	A	L	L	I	S	K	H	R	D	W	K	P	A	D	V	E	Y	A	L	Q	A	S	S	D		
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UniRef90_UPI00034A590A	S	F	Q	G	T	S	M	A	A	P	H	V	A	G	V	A	A	L	L	E	A	A	G	I	K	K	N	D	E	V	L	S	I	L	L	Q	Q	S	A	R		
UniRef90_I3R9V5	A	F	S	G	T	S	M	A	T	P	H	V	S	G	V	G	A	V	L	M	A	N	P	S	G	A	S	N	T	E	A	R	E	R	L	T	S	T	A	S		
UniRef90_F2G760	S	L	S	G	T	S	M	A	T	P	H	V	A	G	G	A	A	L	V	W	S	Y	F	P	Q	C	S	N	N	Q	I	R	S	A	L	N	A	T	A	E		
UniRef90_R7CBZ8	I	S	S	G	T	S	M	A	A	P	H	V	T	G	L	A	S	L	L	W	Q	K	D	M	S	M	S	S	E	F	I	R	S	L	L	K	A	S	A	N		
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UniRef90_K4Z8Y7	A	E	E	G	T	S	M	A	A	P	Q	V	A	G	V	A	A	L	L	W	S	Q	Y	P	E	L	K	P	Y	Q	I	R	K	M	I	E	V	G	A	E		
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UniRef90_I6UJY8	A	Y	N	G	T	S	M	A	T	P	H	V	A	G	A	A	A	L	L	S	K	H	P	T	W	T	N	A	Q	V	R	D	R	L	E	S	T	A	T			
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UniRef90_K9SLN0	A	Y	Q	G	T	S	M	A	S	P	H	V	A	G	V	A	A	L	V	K	A	A	G	V	N	N	P	D	E	I	E	A	Q	L	L	L	Q	S	A	R		
UniRef90_H2AHR6	K	L	T	G	T	S	M	A	A	P	H	V	S	G	A	L	A	L	I	K	G	L	E	Q	D	L	S	N	E	A	E	V	A	Q	L	V	R	R	T	L		
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UniRef90_A7HLY3	F	M	S	G	T	S	M	A	T	P	Y	V	S	G	F	V	A	L	L	L	Q	K	Y	P	S	A	K	P	W	Q	I	R	K	I	I	E	S	S	A	L		
UniRef90_UPI000422D890	S	L	S	G	T	S	M	A	T	P	L	C	A	G	V	I	A	L	L	L	Q	K	E	P	D	L	T	P	D	E	V	K	D	R	L	T	G	V	C	E		
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QUERY 210 220
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UniRef90_M0LC29				W	D	D	D	N	D	H	G	T	H	Y	A	G	T	A	V	A	T	D	N	D	G	V	G	V	G	V	A	T	Q	S	T	L	H	A	V	K	V						
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UniRef90_Q67RJ0		P	Q	P	Y	D	D	D	G	H	G	T	H	T	M	G	T	M	V	A	E	R	P	D	N	G	Q	V	Q	I	G	V	A	P	G	Q	W	I	A	V	K	I					
UniRef90_D1YVK3				Y	D	D	F	G	H	G	T	H	Y	A	G	T	I	G	G	S	G	S	N	G	K	Y	K	G	V	A	P	E	A	Q	F	I	A	G	V	K	V						
UniRef90_C0G DG5			N	P	Y	D	D	N	G	H	G	T	H	V	A	G	C	A	A	A	S	G	S	N	G	K	Y	K	G	P	A	P	E	A	G	I	L	V	A	G	V	K	V				
UniRef90_W019B0				D	W	Y	D	D	G	N	G	H	T	H	V	I	G	T	I	A	A	L	N	D	I	G	V	V	G	V	A	P	K	V	E	I	L	A	V	K	V						
UniRef90_M0H117		P	D	V	L	S	D	E	Y	H	G	T	H	V	A	G	I	A	A	G	T	T	D	N	N	E	G	V	G	G	I	S	N	S	T	L	L	S	G	R	A						
UniRef90_H0AB60				V	E	D	K	N	G	H	G	T	H	V	A	G	S	A	L	G	D	G	S	S	Q	Y	A	G	T	A	P	E	A	S	L	M	S	V	K	V							
UniRef90_UPI0003B38F59				I	E	D	N	N	G	H	G	T	H	V	A	G	T	I	A	A	D	N	G	F	G	I	A	G	V	A	P	K	A	R	L	L	I	L	K	A							
UniRef90_U3BZK0										H	G	T	H	V	A	G	T	I	A	A	R	G	N	G	I	G	I	D	G	I	A	E	N	V	E	I	M	S	V	R	V						
UniRef90_W7AHT0			N	P	S	D	T	S	G	H	G	T	H	V	A	G	T	I	V	A	S	G	L	V	G	A	S	A	N	S	L	G	M	V	G	V	A	P	N	I	R	L	M	S	V	R	V
UniRef90_UPI00046257D0				P	V	D	K	R	G	H	G	T	H	V	T	G	T	I	L	G	S	H								T	G	V	A	P	G	A	K	W	I	G	A	R	V				
UniRef90_K9V2Z3					D	T	H	G	H	G	T	H	V	A	G	T	I	A	G	V	R	N	N	F	G	V	T	G	I	A	Y	D	A	K	I	M	S	V	K	V							
UniRef90_A0YYI6			D	P	M	D	Y	G	H	G	T	H	V	A	G	T	I	A	A	E	A	N	E	F	G	V	T	G	V	A	P	N	A	Q	I	M	P	V	Q	V							
UniRef90_A0A022MS30					T	D	D	Q	V	G	H	G	T	K	V	A	G	I	A	A	R	P	R	G	T	G	F	V	G	L	A	P	N	A	T	V	I	P	V	R	Q						
UniRef90_U5BK75				P	F	D	E	V	G	H	G	T	H	V	C	G	L	L	C	A	K	G	I	K	M	N	K	G	V	V	P	R	C	K	I	L	P	V	R	V							
UniRef90_UPI000369A043				V	Q	D	G	F	G	H	G	T	H	V	A	S	T	I	V	G	S	G	A	A	S	G	G	R	G	V	A	P	G	A	K	I	L	V	G	K	V						
UniRef90_F4L0Y2			D	L	S	D	T	F	G	H	G	T	H	V	A	G	T	I	A	A	V	G	N	N	Q	G	V	I	G	V	A	P	E	A	K	I	M	P	V	K	A						
UniRef90_G8S904					T	D	P	Q	G	H	G	T	H	V	A	G	T	I	A	A	T	G	N	G	I	G	V	S	S	V	A	P	G	V	K	I	L	P	V	R	V						
UniRef90_L1PCN0		P	D	P	E	E	A	L	H	G	T	H	V	A	G	T	I	V	A	A	R	D	N	G	I	G	M	N	G	V	A	N	A	I	L	M	P	V	R	V							
UniRef90_UPI0002E4D138						D	Y	G	H	G	T	H	V	A	G	T	I	A	G	E	N	N	G	F	G	V	T	G	I	A	Y	D	S	K	I	M	P	V	K	V							
UniRef90_I0U343				P	Y	D	D	N	G	H	G	T	H	Y	A	G	D	A	A	G	N	G	S	S	G	L	Y	R	G	P	A	Y	E	A	N	V	V	G	V	K	V						
UniRef90_R8GWR8				V	T	D	T	L	G	H	G	T	T	I	A	G	I	L	A	A	Q	N	N	T	I	G	I	S	S	G	I	S	S	C	V	E	L	I	S	V	K	V					
UniRef90_R2S766			D	P	M	D	T	M	G	H	G	T	H	I	A	G	I	L	A	T	N	N	E	I	G	V	A	G	I	S	S	I	N	D	V	T	M	V	I	R	V						
UniRef90_Q2FUI8		P	N	P	M	D	E	H	G	H	G	T	H	Y	A	G	T	I	G	A	V	N	N	G	I	G	V	T	G	V	N	W	N	V	K	I	M	P	L	R	F						
UniRef90_UPI0003724F30		P	D	A	V	D	R	F	G	H	G	T	H	V	A	S	T	I	A	G	T	G	A	K	S	G	G	T	G	V	A	P	G	A	R	L	L	V	N	G	K	V					
UniRef90_G7WJX6			D	V	Y	D	D	H	G	H	G	T	H	C	A	S	L	I	A	G	T	G	D	G				R	G	I	A	P	G	A	G	L	V	V	I	K	V						
UniRef90_Q5JEH9					D	L	N	G	H	G	T	H	V	A	G	T	I	A	A	G	R	G	K	E	V	Y	V	S	G	V	A	P	E	A	N	I	L	A	V	K	V						
UniRef90_L0ALV2					D	D	L	G	H	G	T	H	V	A	G	T	I	A	A	G	D	G	D	G	G	V	V	G	V	A	P	D	A	T	L	H	A	L	K	V							
UniRef90_B7RTP5		P	N	P	E	D	S	S	Y	H	G	T	H	V	A	G	T	I	A	A	G	N	N	G	I	G	V	A	G	V	A	P	D	A	R	I	M	P	L	R	A						
UniRef90_I0L1H5					R	D	G	H	G	H	G	T	H	V	A	T	I	A	G	S	G	A	A	S	A	G	L	G	V	A	P	G	A	R	L	L	V	G	K	V							
UniRef90_G7FYD2			D	P	M	D	D	Q	G	H	G	T	H	V	A	S	T	I	G	A	S	G	N	S	G	I	V	G	V	A	N	Q	E	N	S	I	V	G	C	K	F						
UniRef90_I6Z554									H	G	T	H	V	A	G	T	I	A	S	A	T	N	N	S	I	G	I	A	G	V	G	F	N	C	T	I	M	P	V	K	V						
UniRef90_D7UWH1			D	P	M	D	K	D	S	H	G	T	H	V	A	G	T	I	A	A	G	A	N				G	I	G	L	D	T	N	V	E	I	M	P	L	K	V						
UniRef90_D6K2S6					T	T	D	T	V	G	H	G	T	R	V	A	G	I	L	A	A	R	P	A	G	T	G	F	V	G	L	A	P	D	A	T	I	P	V	K	Q						
UniRef90_UPI00037BC734		P	D	A	K	D	R	V	G	H	G	T	H	V	A	S	T	I	A	A	G	T	G	A	K	S	G	G	T	G	V	A	P	G	A	R	V	L	D	G	K	V					
UniRef90_W71XV6				D	A	V	D	R	F	G	H	G	T	H	V	A	S	T	I	A	A	G	T	G	A	K	Y		R	G	I	A	H	G	A	R	L	L	D	G	K	V					
UniRef90_A4X4V3				V	D	D	C	P	G	H	G	T	F	V	A	G	L	I	A	A	R	P	S	G	T	G	F	S	G	V	A	P	A	S	T	I	L	P	V	R	Q						
UniRef90_C6WAY5		P	D	N	T	D	L	D	G	H	G	T	H	V	A	A	T	I	A	A	G	D	P	K	Y		R	G	V	A	P	D	A	R	I	L	D	G	K	V							
UniRef90_U6LG27				P	M	D	D	N	G	H	G	T	A	S	A	G	T	I	A	A	E	N	N	G	I	G	L	T	G	V	C	W	G	C	D	I	L	V	L	K	A						
UniRef90_UPI00026267F7					D	Y	S	D	G	N	G	H	T	H	V	A	G	T	A	A	A	A	K	E	E	G	I	A	G	V	A	P	N	A	K	I	L	V	V	K	V						
UniRef90_UPI00036D7426		P	R	G	R	D	N	S	W	H	G	T	H	V	S	G	T	I	A	A	A	N	N	I	G	V	A	G	V	A	P	Y	Q	A	N	I	V	P	V	R	V						
UniRef90_Q647R6					D	N	N	G	H	G	T	H	V	A	G	T	I	A	A	A	N	G	D	M	G	I	Y	G	V	A	P	E	A	K	I	M	T	I	K	V							
UniRef90_A3ZU35		P	D	M	D	D	N	M	H	G	T	H	V	A	G	T	I	A	A	E	G	N	A	T	G	V	V	G	V	A	S	A	S	I	M	A	L	K	F								
UniRef90_L0JIW6		P	Y	P	V	D	A	S	N	H	G	T	H	V	G	G	I	A	G	G	T	D	N	G	T	G	H	A	G	I	S	N	C	S	L	S	A	R	A								
UniRef90_UPI00036C9D34				P	Y	D	D	N	G	H	G	T	H	V	S	G	I	I	A	G	T	G	E	G	N	A	Y	G	V	A	P	G	A	A	M	V	G	I	K	V							
UniRef90_Q8IHZ5			N	P	T	D	A	S	G	H	G	T	H	V	T	G	L	I	G	G	V	A	N	D	L	G	V	V	G	V	A	P	N	I	T	L	L	S	V	R	F						
UniRef90_Q093R9			D	P	L	D	D	N	E	H	G	T	H	C	A	G	T	I	A	G	R	G	N	T	G	V	V	G	V	N	W	S	A	Q	L	M	G	C	K	F							
UniRef90_UPI00036A8074		P	D	A	A	D	L	Y	G	H	G	T	H	V	A	S	T	I	A	A	G	S	G	A	A	S	G	G	R	G	V	A	P	G	A	K	I	N	A	K	A						
UniRef90_T0RLD7			D	I	M	D	K	H	S	H	G	T	H	V	S	G	T	I	A	A	A	Q	N	N	G	L	G	I	A	G	V	A	A	N	A	R	I	M	G	I	R	T					
UniRef90_T0CEK8				D	M	M	D	G	H	S	H	G	T	H	V	S	G	T	I	A	A	T	N	N	G	V	I	A	G	V	A	S	N	V	R	I	M	G	L	R	S						
UniRef90_W4ZAG5					E	D	C	N	G	H	G	T	H	Y	A	G	T	I	G	G	T	Q				Y	G	V	A	K	A	K	I	L	I	G	V	R	V								
UniRef90_D6K8I5		P	G	D	R	D	W	A	R	H	G	T	H	V	A	G	T	I	A	A	G	H	G		D	G	V	M	G	V	A	P	Q	A	K	I	L	P	V	R	V						
UniRef90_UPI0003825DFD						D	E	S	H	G	T	H	V	A	G	T	I	L	A	A	R	D	N	G	L	G	I	K	G	V	A	N	N	V	Q	I	M	S	I	R	A						
UniRef90_Q3JCZ6			N	T	S	D	I	H	G	H	G	T	K																																		

UniRef90_H0B584	L	D	D	R	G	V	G	D	D	S	S	I	I	A	G	V	D	W	A	V	A	Q	G	A	V	I	N	M	S	L	G	G	P	G	I	D	P	L	E							
UniRef90_M0LC29	L	D	D	C	D	G	S	G	T	Y	S	S	I	I	A	G	I	Y	T	A	D	Q	Q	G	W	D	V	I	C	S	M	S	L	L	G	G	T	S	D	V	V					
UniRef90_R9C5L0	L	D	S	Y	G	G	S	G	S	F	E	S	I	I	A	G	I	K	Y	T	A	D	W	K	V	N	I	V	I	S	M	S	L	L	G	G	T	Q	T	N	D	V	L			
UniRef90_Q67RJ0	L	D	E	T	G	S	G	Y	T	S	W	I	I	I	A	G	A	Q	W	A	P	A	N	A	P	D	V	V	I	S	M	S	L	L	G	G	G	P	G	T	S	N	E	W	F	
UniRef90_D1YVK3	L	D	G	K	D	G	S	G	S	L	D	A	I	I	A	G	L	N	Y	A	A	K	S	D	A	K	I	V	I	S	M	S	L	L	G	S	D	E	A	Y	Q	S	S	M	R	
UniRef90_C0GDG5	L	N	K	S	G	S	G	S	L	D	A	I	V	I	I	A	G	I	L	W	A	C	V	Q	N	K	I	R	I	V	I	S	M	S	L	L	G	S	N	A	Y	Q	S	S	H	R
UniRef90_W0I9B0	L	D	D	R	G	S	G	T	Y	S	D	I	I	I	M	L	G	I	E	Q	A	D	D	A	A	E	D	V	I	I	S	M	S	L	L	G	G	P	V	D	I	T	A	S	T	
UniRef90_M0H117	L	L	S	E	G	G	S	G	A	T	S	D	I	I	I	A	D	A	E	W	A	A	D	D	Q	G	A	D	V	I	I	S	M	S	L	L	G	G	G	T	E	Y	T	P	L	M
UniRef90_H0AB60	L	L	E	E	S	G	S	G	N	L	D	T	I	I	I	S	G	I	D	Y	A	A	N	N	S	A	D	V	I	I	S	M	S	L	L	G	G	G	T	E	Y	T	P	L	M	
UniRef90_UPI0000338F59	L	N	E	A	G	S	G	S	M	Q	K	D	I	I	I	E	A	V	R	Y	A	V	S	W	R	V	R	V	I	I	S	M	S	L	L	G	G	P	Q	D	V	P	L	E	L	
UniRef90_U3BZK0	L	V	P	N	G	D	E	R	S	D	K	D	I	I	I	A	N	A	V	R	Y	A	V	D	N	G	A	N	I	I	S	M	S	F	G	G	Y	S	P	R	K	T	F	V	V	
UniRef90_W7AHT0	L	D	G	D	N	Y	G	S	F	H	V	I	K	A	I	N	V	C	I	L	N	K	S	P	I	I	I	I	I	N	S	A	S	W	G	S	R	N	Y	D	S	T	N	M		
UniRef90_UPI00046257D0	F	D	D	N	G	E	T	S	D	D	R	L	D	A	A	Q	W	M	P	E	L	A	P	R	I	I	I	I	I	N	S	S	W	G	S	S	Q	S	P	S	E	F	F			
UniRef90_K9VZ23	L	D	G	N	E	G	S	S	L	S	V	A	G	G	I	R	Y	A	V	N	N	G	A	N	V	I	I	I	I	N	S	M	S	L	L	G	S	N	S	P	S	S	F	L	M	
UniRef90_A0YYI6	L	T	D	Y	L	G	D	V	D	S	L	A	S	G	I	R	Y	A	V	N	N	G	A	N	V	I	I	I	I	N	S	M	S	L	L	G	F	D	T	S	Y	S	S	F	L	M
UniRef90_A0A022MS30	N	D	A	E	N	S	G	D	S	D	T	M	A	A	I	T	Y	A	V	D	R	G	A	Q	V	I	I	I	I	N	S	I	Q	D	T	T	S	A	T	S	S	A	L	L		
UniRef90_U5BK75	L	D	S	V	N	G	A	G	L	K	G	N	I	N	G	I	K	W	A	V	D	Q	G	V	D	V	I	I	I	N	S	M	S	L	L	G										

	90	100	110	120
UniRef90_H0B584	A Q V N K V S A E K G V L F A I A A G N N G P D R G T V A S P Y G S A D A A L T V			
UniRef90_M0LC29	S D A V T T Y A R S D R G V L F A I A A G N N G D G N E D T D C V I S Y Y P A A F E V T V			
UniRef90_R9C5L0	H R A I T K Y A R S D R G V L F A I A A G N N G D G N E D T D I E I S Y Y P A A F E V T V			
UniRef90_Q67RJ0	R S V V E A W R A A G I L V P I F A A G N S G P E P G T V A V I P A N Y P E S A I T A V			
UniRef90_D1YVK3	D D A V N N A V K A G K V V I C A A A G N S G P Q P S K T I N S G P A D T P S A L T V			
UniRef90_C0GDG5	D D A A V R A W E A G I V V V C A A A G N S G P Q P R T I N S G P A I E P G I L T V			
UniRef90_W0I9B0	H D M I T A Y N Y G V V I V A A S G N E A A D D Q P S Y P A I Y P E V T A V G A			
UniRef90_M0H117	K N A V T T Y A T Q Q G S L V I V A A A G N D G R R N V S Y P A A Y S E C A I			
UniRef90_H0AB60	T S S V Q N A R D N G S L V I V A A A G N D G Y Y N Y T S V P A A I E G A I			
UniRef90_UPI0003B38F59	H E A I K E A V A V D I A V I V C A A A G N G D G D A D T E E F A Y P G A Y N E V I			
UniRef90_U3BZK0	D H A F R Y A A K K G V L I V H S A A G N S K S D N D L K P S F Y P N T W M D V G A			
UniRef90_W7AHT0	Y L A L Q R F K G K G T V V V A A A G N S K S D N D L K P S F Y P N T W M D V G A			
UniRef90_UPI00046257D0	R P V L K Q Y R S A G I L V F S A A G N A S N N G G E G S I I G T P A S F P E A F			
UniRef90_K9VZ23	L A A L Q Y A S S K G V V V M A A G N D R L T L P G F P A R Y A D K W G I A V			
UniRef90_A0YYI6	Q E A V Q F A T E N G V V V V S S A G N N Y G F S P T Y P A Q Y A T D W G I A V			
UniRef90_A0A022MS30	A R A V R E A I S G H G V V V V A S A G N D G L D G T A R N T Y P A G L D G V L			
UniRef90_U5BK75	E E V I K Y A L S K G V T I V A S A G N D G N K D L Y Y P G A L P D G V I			
UniRef90_UPI000369A043	E T V D E L S A S T G A L F V I A A G N A G P G E Q T V G T P G I A D S A L T V			
UniRef90_F4L0Y2	L Q A I N Y A L K Q K G V V C V F A A G N K N E N V R N Y W I A L H P E L I			
UniRef90_G8S904	S D A V T T Y A R K G V V V V A A A G N D R A A G S P A N Y P G A D D G V I			
UniRef90_L1PCN0	Y E A I K Y A S S K D V L I V N A A G N D S N D E V D G K E I A D N F L T V G A			
UniRef90_UPI0002E4D138	E E A I E Y A S S K G V V V V M A A G N D G D S Q P G Y P A G Y A D T T G I A V			
UniRef90_I0U343	V Q A A E K A W D K G I V V C A A A G N A G P E Y R T I S P G I S D K I T V			
UniRef90_R8GWR8	E N V I K K A L Q A G I I V V A S A G N N Y G G N V I E Y P A N Y K D V I			
UniRef90_R2S766	E E A I K N Y S G L F V A A A G N N G I D T S Y K P H Y P S S L D I T P N I I			
UniRef90_Q2FUH8	R D S I N L Y P D A L F V C A A G N G D Y N T D T S Y K P H Y P S S L A N V N I L S			
UniRef90_UPI0003724F30	E A A V N R A E S G A L F V I A A G N N G E Q Q A G T V I G S P G S A D A A L T V			
UniRef90_G7WJX6	D E A C D R M V D A G I V V S V A A G N A G P A T R S I V T P G T A E K V I T V			
UniRef90_Q5JEH9	K Q V E K I R E E H I P V I A A G N E F A D S P G I A T G A I T V A A V D R			
UniRef90_L0ALV2	Q V A G E Y A L E A G V L P V A A A G N Y G R P D S V G Y P A A Y D E F V			
UniRef90_B7RTP5	Q Q L Y N Q V I A N G T I V V A A G N E A S S V P Q Y P A S Y D G V F S V S A			
UniRef90_I0L1H5	Q A V N D L T A E T G A L F V V A A G N S G A A R T Q Y G S P G A A A A L T V G			
UniRef90_G7FYD2	A D A I T V S E Q A D I L F V A A A G N D A V D N D A N P H Y P S S Y E S V F S			
UniRef90_I6Z554	K E I I D Y A I E N G V I A A A G N E N S G L F Y P A S Y E G V L S V G L			
UniRef90_D7UWH1	K K T I D K A K N V L F A A A G A G G T N V N L M T P L Y P A S F D S P N I I			
UniRef90_D6K2S6	E Q A V D Y A L A H Q V V V A S A G N D G L G G N V Q I T Y P A S Y D G V L			
UniRef90_UPI000037BC734	E A V D R V T T E S G L L V A A A G N T G P D A G T V S S P A S A E K A L A V			
UniRef90_W7IXV6	E E A V N R L S A S S G T L F V I A A G N S G A A K T I G S P G S A D A A L T V			
UniRef90_A4X4V3	R R A V E Y A S S K D V L I V A A V A N E R G S G N T R P Y P A A Y P E V L			
UniRef90_C6WAY5	E A L T T L S E R S G T L F V A A A G N D G A D R S V G S P G S A D A L T V G			
UniRef90_U6LG27	Q E A V Q R A R Q A G M I V V A A A G N Y N G N D P V I F P A S Y D L D N V G			
UniRef90_UPI00026267F7	Y E A V K R A I N S G I P V V C A A A G N Q G D D R D T D E T A F P G A Y N E V I			
UniRef90_UPI00036D7426	Q D A I N F A R S G T V I V T A A G N E S I S A D R A N G N C N G V I			
UniRef90_Q647R6	R D A I D Y A T K E G V L V V A A A G N D G P A D G S I D Y P G A N V E I A V			
UniRef90_A3ZU35	Y N A I K A S G D E D I L F V A A A G N N G T N D N D V N P P A S Y G L D N V I S			
UniRef90_L0JIW6	R Q A C E Y A Q S G S L L V A A A G N D Y G S P V I S Y P A A Y D T V L			
UniRef90_UPI00036C9D34	D S A V N N A F A S G I L P V V A A G N D G P A R Y T I G S P G A A R D A L T V			
UniRef90_Q8IHZ5	H L A V E R L G K G S V L I A A S G N K S N D N D I S P L Y P A T F T F P H V Y			
UniRef90_Q093R9	Q D A I I Q H R D G I L F V A A A G N N T D N D A T S Y G S Y F L S N V I			
UniRef90_UPI00036A8074	L E L N R L T A E T G A L F V V A A G N T G E F G P V T V G S P G A A Q A A L T			
UniRef90_T0RLD7	E T I D Y I G R E Y G V L V V A A A G N E S S N I D D R Y W P A S Y E S E N L L V			
UniRef90_T0CEK8	I D Y I A K T Y N T L V V S A A G N S Q N I D T K L T Y P A S Y D S E G M L V			
UniRef90_W4ZAG5	D D A I Q R M I D A G I L T V V A A A G N D N G N A C N S P A R S E P A			

[illegible]

	170	180	190	200																																								
UniRef90_H0B584	S	L	N	G	T	S	M	A	T	P	H	V	A	G	A	A	I	L	K	Q	K	N	P	T	W	T	G	A	Q	L	K	A	R	L	T	H	G	S	A	K				
UniRef90_M0LC29	T	F	S	L	T	G	T	S	M	A	T	C	H	V	A	G	A	A	G	H	L	N	R	S	N	E	P	D	Y	T	N	E	A	V	K	A	R	N	E	T	A	E		
UniRef90_R9C5L0	E	L	T	G	T	S	M	A	T	S	P	F	V	A	G	A	A	I	L	V	L	N	R	S	N	E	P	D	Y	T	N	E	A	V	K	A	R	N	E	T	A	E		
UniRef90_Q67RJ0	L	M	N	G	T	S	M	A	A	P	H	V	A	G	V	A	A	L	L	N	R	S	N	E	P	D	Y	T	N	E	A	V	K	A	R	N	E	T	A	E				
UniRef90_D1YVK3	S	M	S	G	T	S	M	A	T	P	V	M	V	A	G	S	V	I	L	L	L	Q	K	N	P	D	Y	T	N	E	A	V	K	A	R	N	E	T	A	E				
UniRef90_C0GDG5	S	L	S	G	T	S	M	A	T	P	V	C	H	V	A	G	V	I	A	Q	L	L	Q	K	N	P	D	Y	T	N	E	A	V	K	A	R	N	E	T	A	E			
UniRef90_W0I9B0	T	L	S	G	T	S	M	A	T	P	H	V	A	G	V	I	A	L	I	Q	A	A	L	D	V	D	M	T	T	N	T	I	R	K	G	L	H	V	T	A	D			
UniRef90_M0H117	E	I	S	G	T	S	M	A	T	P	V	V	S	G	V	A	G	L	A	L	D	V	Y	D	D	L	S	P	N	E	E	L	R	N	A	L	T	K	N	T	A	V		
UniRef90_H0AB60	E	K	S	G	T	S	M	S	T	P	L	V	S	G	I	A	L	A	L	E	E	N	T	G	W	T	S	N	E	E	L	R	N	A	L	T	K	N	T	A	S	N		
UniRef90_UPI00033B38F59	R	L	S	G	T	S	M	A	A	P	H	V	S	G	A	L	A	L	V	T	N	W	A	E	A	I	L	T	S	E	E	M	Y	A	Q	L	T	L	R	T	V			
UniRef90_U3BZK0	S	L	S	G	T	S	M	A	A	P	V	V	S	G	V	A	A	L	V	W	S	H	H	P	N	Q	G	F	I	P	E	E	L	K	S	V	I	M	D	T	Q	A	R	
UniRef90_W7AHT0	M	N	T	G	T	S	M	A	A	P	H	V	S	G	V	A	A	G	L	I	Y	C	H	N	Q	G	F	I	P	E	E	L	K	S	V	I	M	D	T	Q	A	R		
UniRef90_UPI00046257D0	L	H	T	G	T	S	M	A	A	P	H	V	S	G	V	A	A	L	V	L	S	A	N	R	P	S	K	L	N	T	D	S	Q	V	L	E	Q	T	I	L	S	S	A	T
UniRef90_K9VZ23	F	M	S	G	T	S	M	A	A	P	H	V	A	G	V	V	A	L	M	L	S	A	N	R	P	S	K	L	N	T	D	S	Q	V	L	E	Q	T	I	L	S	S	A	T
UniRef90_A0YYI6	Y	F	E	G	T	S	M	A	A	P	H	V	A	G	V	A	A	L	M	L	S	A	N	R	P	S	K	L	N	T	D	S	Q	V	L	E	Q	T	I	L	S	S	A	T
UniRef90_A0A022MS30	T	D	N	G	T	S	F	S	A	P	F	V	A	G	V	A	A	L	V	L	S	A	N	R	P	S	K	L	N	T	D	S	Q	V	L	E	Q	T	I	L	S	S	A	T
UniRef90_U5BK75	L	S	S	G	T	S	Q	A	S	P	F	V	A	G	A	I	A	L	L	K	S	Y	A	H	P	N	L	G	V	Q	Q	I	V	K	E	A	L	K	H	T	A	D	K	
UniRef90_UPI000369A043	T	A	S	G	T	S	M	A	T	P	H																																	

UniRef90_H0B584 D G S H S F Q Q G A G R L T V D R A I D 210 220
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UniRef90_R9C5L0 P L E N M N Q V I G N G F I Q L
UniRef90_Q67RJ0 P L T S D Q Y Y G Y G V V D A H K A
UniRef90_D1YVK3 Q L G P N N N F G Y G R I S I V N A I
UniRef90_C0GDBG5 P L T G E N D Q G A G V V N A H R A S Q
UniRef90_W0I9B0 D L G D P G Y Y G Y G I V R A D L A V Q
UniRef90_M0H117 D V G L S T A Q G S G R V D A A N A V
UniRef90_H0AB60 K L D N S F Q V I G T G V V N A S R V V
UniRef90_UPI0003B38F59 P L G Y P S A E G S G L L
UniRef90_U3BZK0 P Y A D
UniRef90_W7AHT0 K I K E K K T M H N S L V N A E A A V
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UniRef90_K9V2Z3
UniRef90_A0YYI6
UniRef90_A0A022MS30 R S G H D D F V I G W G I V D P V R A V Q
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UniRef90_F4L0Y2 Y I A T S V P L G S G R L N
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UniRef90_L1PCN0 R I P L K V Y V I G
UniRef90_UPI0002E4D138 D
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UniRef90_R2S766 S L S D L C L T G G R L N T N N V V R
UniRef90_Q2FUI8
UniRef90_UPI0003724F30 P G G T P F E Q G S G R V D L R K A I K
UniRef90_G7WJX6 D I G P D N T F G Y G A L N L S R A I
UniRef90_Q5JEH9 P L D G P T W S G A G V V D A Y A A V K
UniRef90_L0ALV2 D L E D D T N Q G A G L V D V A A A
UniRef90_B7RTP5 P P G R D D S Y G H G M I N A Y K S V
UniRef90_I0L1H5 P A L T V F E Q G G R V D V A R A L
UniRef90_G7FYD2
UniRef90_I6Z554 P L K S S Y L L G T G R I D A Y N A V K
UniRef90_D7UWH1 K L S N G K M T T G G L L D A Y K A F
UniRef90_D6K2S6 R P G H D R L V I G W G V V D P V R A L
UniRef90_UPI00037BC734 P V A G A F A E G G G R V D V A A A I
UniRef90_W7IXV6 P T P S S F A Q G S G R V D V P A A L
UniRef90_A4X4V3 R P S P D P R L G W G V V N P Y A A V
UniRef90_C6WAY5 P T A S V F A Q G A G R V D L A R A I
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UniRef90_UPI00026267F7 P L G Y P S A E G N G L V
UniRef90_UPI00036D7426 D S G C N Q C G D G L V D A N A A V E
UniRef90_Q647R6 T E G D D T A T G F G L
UniRef90_A3ZU35 D I A
UniRef90_L0JIW6 D I G D A T E Q G N G R V D A A N A V
UniRef90_UPI00036C9D34 D W G P D I D Y G Y G R L Q A Y E A I K
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UniRef90_T0RLD7 T V S K S N K V I G S G L V N L L D S M R
UniRef90_T0CEK8 T M D G D I L T G G V V D L Y S A L E
UniRef90_W4ZAG5
UniRef90_D6K8I5 D A G R D D S R G F G M I D P V A A L D
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UniRef90_Q3JCZ6 D L G W D S F Y G H G R I N A Y R A V
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UniRef90_UPI00036E626 P A Y T P Y Q A G T G R L D V G A A Y
UniRef90_G0VG86 K
UniRef90_C6D5D1 D I G A D D K S G Y G L L Q V D K A V
UniRef90_G7DSU1
UniRef90_A4J0N6 K I K E K D G Q G A G V V R V D V S L K
UniRef90_UPI00030F830B P L T N D D Y F G H G L I D A Y A A V
UniRef90_F0P238 K N D K D I S V I S G V V D S Y N A V Q
UniRef90_UPI00035FEE7A K L A D I S V T G G V V D A Y K A V Q
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UniRef90_R9PPV6 D I G S D G F Y G Y G L I N A E K A V R
UniRef90_B0VIM7 D V G W D R Y T G Y G M V N A N A A L
UniRef90_V4HY37 P I A D G K T V S G K R L D A H Q A L
UniRef90_UPI000319FB2E T Y P E
UniRef90_H5SNB2 S T G W T N T S G H P H L E P
UniRef90_L7U571 P
UniRef90_H2JL56 P R Y T P F E A G A G R L D I
UniRef90_Q8ENV1 D L G S P N V Q G A G Y L N A A N L I
UniRef90_UPI00035D7458 P A G P E Q G Y G G V L S P Y R A I
UniRef90_UPI0003693F75 K L T D N Q Y Y G Y G L V N A Y D A V
UniRef90_D6ENQ2 N A G R D D S R G F G F V D P A A A I E
UniRef90_M5RCI6 M S S D P A D Y G H G M
UniRef90_V5M493 N I N W I P F Y G Y G L L H A S E A V K
UniRef90_V4ZN45 P S S H S L A T C G G T L D A N K S L
UniRef90_A7BWZ2 D L G R D D E F G Y G L I N A K K A V
UniRef90_S9PQT6 D P G D N N V W G E G Q L D A F A A V E
UniRef90_UPI000467AEC9 G G D T A F Q Q G S G R V Q V D R A L
UniRef90_V5BCJ7 K M R E G R V A S S G V V N A Y A A V
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UniRef90_U1JMC5 K
UniRef90_I3EE24
UniRef90_UPI000375D73F D A G R D T S Y G Y G I V Q A K A A V D
UniRef90_Q8RJP4 K T D P K T G I R V I G V V D A L S A V K
UniRef90_L1N1V9 P L T D S N G Y G H G L V N V F D A V
UniRef90_Q65JX1

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UniRef90_M0NZ82	D	W	D	D	N	D	H	G	T	H	C	A	G	T	A	A	A	D	D	G	T	G	V	L	G	V	A	P	E	A	T	L	H	A	V	K	V					
UniRef90_UPI00039FC86D		R	D	G	N	G	H	G	T	H	T	L	S	T	V	G	G	S	G	N	A	S	G	G	R	G	V	A	P	G	A	D	L	L	V	G	K	V				
UniRef90_R5R043	P	Y	D	D	N	G	H	G	T	H	V	A	G	T	I	V	G	G	N	K	A	S	G	G	R	G	I	A	P	G	C	S	L	L	V	S	K	I				
UniRef90_S0FR24							H	G	T	H	T	A	G	I	L	A	A	A	S	N	S	E	G	T	S	G	T	A	P	K	A	K	I	L	L	P	L	K	F			
UniRef90_C3IUP3	D	I	M	D	R	Q	G	H	G	T	H	C	A	G	T	I	A	G	C	D	N	S	I	G	I	V	G	L	A	P	K	A	E	L	Y	I	A	K	V			
UniRef90_Q5SLK7							H	G	T	Y	V	A	S	T	V	S	A	P	R	D	G	Q	G	I	A	G	L	A	P	K	T	K	F	L	P	V	A	I				
UniRef90_UPI000405A8FB							H	G	T	H	V	A	G	T	I	V	A	G	R	G	N	N	L	G	G	D	G	V	A	T	D	V	V	E	I	M	G	V	R			
UniRef90_UPI0003738EF0							H	G	T	H	V	A	G	T	I	V	A	G	R	G	N	D	L	G	M	D	G	V	A	S	N	V	R	I	M	S	V	R	A			
UniRef90_UPI0004774CCA	P	D	A	D	D	T	I	G	H	G	T	H	V	A	G	T	I	A	G	A	G	A	K	Y	K	G	V	A	P	G	A	K	L	A	I	G	K	V				
UniRef90_A0JTS4		E	D	N	Y	G	H	G	T	H	V	A	G	T	I	V	A	A	T	N	N	T	M	G	V	A	G	V	C	G	C	T	I	L	A	G	K	V				
UniRef90_I2JYF6		D	D	G	N	G	H	G	T	H	C	A	G	T	I	A	S	K										V	I	S	K	N	A	K	L	V	A	V	K	V		
UniRef90_UPI00031AF888		D	R	G	G		H	G	T	H	V	T	S	T	V	G	S	G	A	A	S	D	T	Y	G	I	V	A	P	G	A	T	L	A	V	A	G	K	V			
UniRef90_UPI00031803E1							H	G	T	A	M	A	G	T	I	A	G	H	G	E	G	V	L	G	I	A	P	E	A	R	I	L	L	P	V	R	V					
UniRef90_S9TWH3	P	T	D	G	S	G	H	G	T	H	V	M	G	T	M	V	G	S	K	D	G	S	N	K	I	G	V	A	P	N	A	K	W	I	A	A	R	V				
UniRef90_B6K2G3		D	G	N	G	H	G	T	H	V	A	G	T	I	V	A	S	R	A								Y	G	V	A	K	A	K	V	I	A	V	K	V			
UniRef90_F8EBE6		D	D	N	N	G	H	G	T	H	V	A	G	T	I	G	A	L	N	N	T	I	G	I	V	G	V	A	S	G	V	K	L	V	A	L	K	A				
UniRef90_UPI000305F048		D	A		H	G	H	G	T	H	V	A	G	S	A	L	A	D	G	D	G	A	G	I	Y	G	V	A	P	S	S	D	L	W	A	Y	K	V				
UniRef90_UPI00037CEDFE							S	H	G	T	H	V	A	G	S	A	L	A	R	N	N	G	K	G	A	N	G	V	A	N	N	V	E	I	M	S		R	A			
UniRef90_UPI000363E53B		T	E	D	R	N	G	H	G	T	H	V	A	S	L	V	A	A	T	G	A	A	S	G	G	A	G	V	A	Y	D	A	R	L	L	S	G	R	V			
UniRef90_C0EGJ6	D	V	G	D	Q	V	G	H	G	T	H	F	V	A	G	I	A	A	Q	G	N	Q	L	G	I	A	G	L	A	E	D	V	S	I	L	P	I	K	C			
UniRef90_W6TWY9							H	G	S	F	V	A	G	I	I	A	R	K	N	D	L	G	I	D	G	I	A	D	N	V	A	I	M	A	V	R						
UniRef90_UPI00041FF058		T	T	D	Q	I	G	H	G	T	H	V	A	G	L	I	A	G	T	G	A	A	S	G	G	R	G	V	A	P	D	A	K	L	V	S	G	K	V			
UniRef90_B1KDE2	D	P	M	D	G	N	G	H	G	T	H	V	S	G	T	I	A	G	A	K	N	N	G	V	G	V	A	N	W	D	V	S	I	I	G	C	Q	F				
UniRef90_LOAD47	D	P	I	D	Y	D	G	H	G	T	H	V	S	G	I	V	A	G	K	D	E	S	V	T	G	I	G	V	A	P	E	A	E	L	V	H	G	A	I			
UniRef90_R5HV75		P	Y	D	D	N	G	H	G	T	H	V	A	G	L	A	A	G	D	G	S	M	G	K	Y	R	G	A	P	G	C	G	I	I	A	L	K	V				
UniRef90_I1DCH9		D	A	T	D	C	N	G	H	G	T	H	V	A	G	T	I	G	G	T	Q						Y	G	V	A	K	N	V	N	I	V	G	V	R	V		
UniRef90_V6KDQ8		T	T	D	V	V	G	H	G	T	K	V	A	G	I	I	A	A	R	G	D	D	T	G	F	V	G	L	A	P	D	A	T	I	I	V	I	Q	Q			
UniRef90_R5IQZ2		P	Y	D	D	N	G	H	G	T	H	I	A	A	M	I	A	G	S	G	L	A	S	G	G	L	G	I	A	P	G	S	S	I	T	A	I	K	V			
UniRef90_D9UJV5							D	R	N	G	H	G	T	H	T	A	S	T	V	G	G	S	G	A	A	S	D	G	K	G	V	A	P	D	A	D	L	A	V	G	K	V
UniRef90_I0L3Q7	D	P	A	D	A	V	G	H	G	T	H	V	A	S	T	I	V	G	S	G	A	A	S	G	R	G	V	A	P	G	A	K	L	L	V	G	K	V				
UniRef90_D0LMP5		V	E	D	C	Q	G	H	G	T	H	V	A	S	T	A	A	G	T	Q						Y	G	V	A	D	H	A	T	V	H	G	I	R	V			
UniRef90_E4NUH8		P	H	A	T	S	G	H	G	T	H	V	S	G	T	V	A	A	G	G	T	A	S	G	K	A	I	G	V	A	P	D	A	D	M	M	H	G	L	V		
UniRef90_A1U4F2							H	G	T	H	V	A	G	T	I	G	A	A	L	N	N	E	G	I	G	I	A	F	E	S	K	I	V	P	R	V	R					
UniRef90_UPI0004758F83		N	G	G	D	Q	V	G	H	G	T	H	V	A	S	T	I	V	T	G	T	G	A	A	S	G	G	R	G	V	A	P	D	V	K	L	L	D	A	K	V	
UniRef90_J2FYPO	P	P	E	S	D	Y	L	G	H	G	T	S	V	A	G	I	I	A	R	N	N	D	K	G	Y	V	G	I	A	P	G	A	S	L	Y	C	A	K	I			
UniRef90_UPI00040F4CFE							H	G	T	H	V	A	G	I	V	A	G	R	Y	N	N	I	G	D	G	I	A	S	N	N	V	E	I	M	A	V	R					
UniRef90_UPI000365E517							D	T	E	G	H	G	T	H	V	A	S	I	A	A	G	S	G	D	D	G	T	Y	R	G	V	A	P	G	A	D	L	L	I	G	K	V
UniRef90_K2A8N2		P	A	D	D	V	G	H	G	T	H	I	A	G	I	I	A	K	N	A	E	N	S																P	F	K	I
UniRef90_E7C3W8	P	S	P	G	G	S	D	A	H	G	S	A	C	A	G	V	V	G	A	I	G	N	G	E	G	I	V	G	V	C	P	G	C	S	L	M	P	I	R	I		
UniRef90_W4RNC6		T	D	R	Q	G	H	G	T	H	V	A	G	S	A	V	A	N	G	D	G	A	G	I	Y	G	V	A	P	Q	A	E	L	W	G	Y	K	V				
UniRef90_W9GA39		T	E	D	V	N	G	H	G	T	H	V	A	S	T	I	A	G	T	G	S	S	G	K	L	K	G	V	A	P	G	A	D	L	L	V	G	K	V			
UniRef90_L8JXM2							S	H	G	T	A	C	A	G	I	I	A	A	T	G	N	N	T	G	V	T	G	V	A	P	N	A	R	L	M	S	V	S	N			
UniRef90_B4W6G3							N	D	S	H	G	T	L	V	S	G	V	I	A	S	N	F	N	G	L	G	S	V	G	V	A	Y	E	S	T	I	L	S	I	R	T	
UniRef90_E8VZK3	D	G	E	D	C	N	G	H	G	T	H	V	A	G	T	I	V	A	G	A								Y	G	V	A	P	A	A	S	L	V	P	V	R	V	
UniRef90_L8PLA4		T	D	D	G	N	G	H	G	T	H	V	A	S	T	I	V	A	G	S	G	A	R	S	G	G	V	G	I	A	P	G	A	R	L	L	V	G	K	V		
UniRef90_UPI0002F2EEE8		P	Y	D	D	I	A	H	G	T	H	V	T	G	T	M	V	I	G	S	A	N	G	S	N	Q	I	G	V	A	P	G	A	K	F	I	A	V	K	A		
UniRef90_D8QAB1							E	D	G	N	G	H	G	S	H	C	A	G	T	I	A	S	R	S				Y	G	V	S	K	A	A	N	V	I	A	V	K	V	
UniRef90_UPI0003760C00	D	V	T	D	R	N	G	H	G	T	H	V	A	S	T	I	A	G	T	G	A	A	S	D	G	R	G	V	A	P	G	A	D	L	H	V	G	K	V			
UniRef90_H1KJ45							H	P	H	G	T	A	I	A	G	T	V	A	R	A	Q	L	T	S	A	A				P	E	A	S	L	L	A	V	R	A			
UniRef90_K4KH50		N	S	S	D	C	Q	G	H	G	T	H	V	A	G	T	V	A	S	N										P	E	A	S	L	L	A	V	R	A			
UniRef90_R7CME5		P	Y	D	D	N	G	H	G	T	H	V	C	G	I	I	A	G	D	G	S	E	G	R	I	R	G	I	A	P	G	C	S	L	L	V	L	K	V			
UniRef90_C5ELD6							E	D	N	H	G	T	H	A	A	G	T	I	A	A	S	R	N	N	G	G	S	V	G	I	N	Q	Y	V	K	I	M	S	I	K	A	
UniRef90_R5YQN0							Y	D	D	N	G	H	G	T	H	V	A	G	S	K	D	M	N	I	N	G	I	A	K	R	S	Q	L	V	V	L	K	V				
UniRef90_E5WTB0	D	P	Y	D	D	N	G	H	G	T	H	V	A	G	C	A	L	I	G	N	G	T	S	D	G	K	G	A	A	P	Q	A	N	L	V	A	A	K	V			
UniRef90_UPI00037183DC							N	A	H	G	V	N	V	A	G	C	V	A	A	T	N	N	N	F	G	M	A	G	V	G	Y	N	C	K	F	I	A	T	K	H		
UniRef90_UPI00036901F4		Q	D	V	Q	G	H	G	T	E	M	A	G	L	I	A	A	H	G	D	G	T	G	A	L	G	I	A	P	K	A	K	I	L	P	I	K	T				
UniRef90_Q6CED6							E	D	G	N	G	H	G	T	H	C	A	G	T	I	G	G	T	K				Y	G	V	A	K	A	N								

UniRef90_L9W8W5	L	N	E	T	S	G	S	F	A	Q	I	I	A	G	M	E	W	A	L	E	E	A	D	V	I	S	M	S	L	G	A	T	G	T	H	S	P	L			
UniRef90_MONZ82	L	A	C	D	G	S	G	S	F	D	Q	I	I	A	G	M	E	W	A	L	E	E	A	D	V	I	S	M	S	L	G	A	T	G	T	H	S	P	L		
UniRef90_UPI00039FC86D	L	A	S	D	Q	G	S	G	S	F	D	Q	I	I	A	G	M	E	W	A	L	E	E	A	D	V	I	S	M	S	L	G	A	T	G	T	H	S	P	L	
UniRef90_R5R043	L	D	K	R	G	N	G	N	M	K	D	V	I	I	A	G	M	E	W	A	L	E	E	A	D	V	I	S	M	S	L	G	A	T	G	T	H	S	P	L	
UniRef90_S0FR24	I	L	N	G	N	W	G	Y	T	C	D	V	I	I	A	G	M	E	W	A	L	E	E	A	D	V	I	S	M	S	L	G	A	T	G	T	H	S	P	L	
UniRef90_C3IUP3	L	V	D	D	G	S	G	S	F	E	A	I	I	A	G	M	E	W	A	L	E	E	A	D	V	I	S	M	S	L	G	A	T	G	T	H	S	P	L		
UniRef90_Q5SLK7	F	Q	P	D	Y	V	G	D	F	Y	V	I	I	A	G	M	E	W	A	L	E	E	A	D	V	I	S	M	S	L	G	A	T	G	T	H	S	P	L		
UniRef90_UPI000405A8FB	A	V	P	D	G	D	E	Y	D	K	D	V	I	I	A	G	M	E	W	A	L	E	E	A	D	V	I	S	M	S	L	G	A	T	G	T	H	S	P	L	
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UniRef90_UPI0004774CCA	C	F	R	S	F	G	C	P	S	E	S	A	I	I	A	G	M	E	W	A	L	E	E	A	D	V	I	S	M	S	L	G	A	T	G	T	H	S	P	L	
UniRef90_A0JTS4	L	N	D	S	G	G	L	G	S	S	G	L	I	A	G	M	E	W	A	L	E	E	A	D	V	I	S	M	S	L	G	A	T	G	T	H	S	P	L		
UniRef90_I2JYF6	L	G	S	N	G	S	G	T	S	M	S	D	V	I	I	A	G	M	E	W	A	L	E	E	A	D	V	I	S	M	S	L	G	A	T	G	T	H	S	P	L
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UniRef90_UPI00031803E1	L	L	E	K	D	P	Q	R	A	A	L	A	D	G	I	R	W	A	A	D	H	G	A	D	V	I	N	L	S	L	G	D	S	R	E	D	S	A	H	E	
UniRef90_S9TWH3	F	D	S	N	G	Q	T	T	D	A	D	L	I	I	K	A	G	E	W	H	P	E	L	A	P	D	V	I	N	N	S	W	G	P	A	G	K	N	E	F	
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UniRef90_F8E8E6	L	D	Q	V	G	E	G	R	L	S	S	V	A	I	A	V	S	Y	V	S	K	N	G	K	D	V	I	N	M	S	L	G	L	D	G	I	S	T	T		
UniRef90_UPI000305F048	L	G	D	N	G	S	G	Y	S	D	D	I	A	A	I	R	H	A	A	D	Q	A	K	T	V	I	N	M	S	L	G	S	A	G	N	S	D	S	T	I	
UniRef90_UPI00037CEDFE	V	P	N	G	D	E	Y	D	K	D	V	I	I	A	G	M	E	W	A	L	E																				

UniRef90_L9W8W5	I	D	P	V	Q	N	A	V	D	S	G	A	V	V	V	A	A	I	G	N	D	G	E	T	S	N	S	P	G	N	V	Y	E	A	I	S	V	G	A				
UniRef90_MONZ82	A	D	A	L	G	Y	R	A	A	D	R	G	V	V	M	V	A	A	G	N	S	G	P	S	E	A	T	D	C	V	G	F	P	A	R	D	A	R	V				
UniRef90_UPI00039CF86D	S	Q	A	V	G	N	R	L	T	E	Q	T	G	V	L	F	V	V	A	A	G	N	G	P	S	E	A	A	I	S	A	P	G	F	A	D	D	A	L	T	V		
UniRef90_R5R043	I	Q	G	V	E	E	L	W	D	E	G	F	I	V	V	T	A	A	G	N	M	G	P	E	P	G	S	I	T	A	P	P	G	S	R	K	V	L	T	V			
UniRef90_S0FR24	K	D	T	M																																							
UniRef90_C3IUP3	H	N	A	I	K	R	A	H	E	A	G	I	I	I	V	A	A	T	G	N	E	N																					
UniRef90_Q5SLK7	K	E	A	F	D	Y	A	L	A	N	G	V	V	V	V	A	A	S	A	G	N	S	Y	K	D	E	V	R	T	P	A	G	Y	P	G	I	T	A	S	A			
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UniRef90_A0JTS4	E	T	A	V	N	N	A	W	G	K	G	V	L	V	V	A	A	S	A	G	N	G	N	G	N	Q	T	K	I	S	Y	P	A	T	A	D	A	A	L	A	V	G	A
UniRef90_I2JYF6	D	M	A	V	N	N	A	V	K	A	G	I	H	F	A	V	A	A	G	N	S	D	N	S	A	C	D	S	S	P	A	A	A	T	G	V	T	V					
UniRef90_UPI00031AF888	D	P	M	A	C	A	V	N	A	L	G	A	L	F	V	V	A	A	S	A	G	N	S	G	A	P	G	S	I	G	S	P	G	A	A	D	S	A	L	T	V	G	
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UniRef90_S9TWH3	Q	D	I	V	K	A	W	I	A	A	D	I	F	P	A	F	S	A	G	N	T	Q	N	N	G	G	P	G	S	I	I	A	A	P	A	N	Y	P	E	S	F		
UniRef90_B6K2G3	D	F	A	V	D	V	A	V	R	S	G	V	S	F	A	V	A	A	G	N	E																						
UniRef90_F8EBE6	D	R	Q	V	Q	A	A	A	D	K	G	I	L	F	A	I	A	A	G	N	E	K	K	S	A	N	T	S	S	S	P	G	R	V	N	H	A	N	V	T	V		
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A A V D S D D Q L A A F S S M G P R I G P D I A A P G V D T L G G S T A T T G W Y Q
G S S D L D D P T A G I S S M G P T P D I V T P G L G I V A C S P G I P Y G Y A
S V A S I D S K G V L S P Y S S Y G S K I N V A A P G V N I L S T T P G N A Y D
A V G A I N Q N L D R A N F S N F G S E T D I A A P G V D I L Y S T T Y P V G R Y A
A D G N R N K T D F S Y G R H I S S A A P G L D V L L A N P T W L G G G Y G
L T Y E Y G P E L V A D F S N Y G K T K V D V F S P G V R I Y A T T P N N T Y S
M A A S N D E N L T A G F S N W S A D K V D V F A P G V E I Y A T V P D D N Y Q
V D S A D K V A P F S S G G P D G A I K P E I S A P G V G I V G P I D E R Y T
T D N N D A K A S F S T Y G A S W V D V A A P G V N V Y S T F P N H G Y D
G A S T L S D S R A Y F S N Y G K C V D I F A P G L N I L S T Y T G S D S A T A
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A V A A V D R N G A R A S F S T R R W Y A T V A A P G Q D I L I A D P D R S Y Y
A T G A V D M N K L A D F S Y G Q M K P E V S A P G V H I R S A V P G G Q Y A
G A S T I N D A R A Y F S N Y G D C V D V F A P G L N I L S T W L G S N V S T N
V S A I D S M G R F A D F S N Y G N D A V D V A A Y G V R T L S T Y A N G R Y A
D F S S R G Y A S T D G D Y Y I N Q K D V E I S A P G A A I Y S T W N N G G Y R
V T D T Y G S S M V A G D Y S N Y G K Q N V D I F A P G A S V Y S T T P E N E Y D
G A R A D G G A P R F T S V G P T T G A D L S A P G V A I T G A R A G G G Y T
G V G S V T E S L K H A S G S Q V N Q S V F V T A P G K S I F G P W T G G G Y R
S G P T N D E T I K A S F S N Y G K N T V D V F A P G V N I N S T V P G S K Y E
A V I G S V T K E D T T S P F S D Y A V K P D L A A P G S D I V S D R V V I G T Y A
V A S T D R N D N M S G F S Q Y G L T S V D I G A P G S A I L S T T P G N N Y S
S T G S D S I V D F S S D W P A S Y V V P D V V A P G V G V K G P V P G G D Y A
G S S D L L E G R S A I S G R G P T T K P D I V A P G N R I M S C V P G K S Y G
T V G S T T S N D S R S F S S N W G S C V D V F A P G S S I K S A W Y D G Y R
A V A A S D R N N E R A P F S Q P G D F V G I A A P G V D M V T T V P G G G H C
G C S D D D Y S G R G P T N A C V C K P D L V A P G C G I T S C C N E P G R Y F
A V D S S D Q A A Y F T S K G D N A L K P D V S A P G V D I L A A R S S G D A Y T
A V D A D D Q R A Y F S V G D N H I K P E I S A P G V D I V A A A P G G D Y A
G A V D D N D N R A S F S N F G N C V D L F A P G V S I L G A S I A N D N A T A
R T E R D W G D A P S D W P D E Y V M P D I A A P G V D T Y S T L P G G K Y R
V D A G G R P A S Y S N F G S W I D I A A P G G D A S R D G N G V S V P G Y R
T V G A V D K E D G L A E F S S R G P T V D L T A P G V E I V A A G G D G Q Y V
S V G C L K A N K E P A V Y S S R G P E L D V S A P G H N V M T T P S S E Y G
E F A D N G E K V M A N F S N F G A L N V D V F A P G V Q I Y A T T P E D T Y Q
G A V D R D D T V G D F S A G P V P K P D L S A P G V E I T G T P V T D G Y L
S V A A T Y Y S G K K L E S S N Y G D W I D V A A K G Y H I Y T S S V P Y N D Y G
S V G A T T F R D T R E G Y S N Y G P E L D L V A P G S A S V T T D N S G D Y S L
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G I I D Y S D H I A S F S S G Y G R V K P D I V A Y G R E I M G S K I S T G C K
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V G A A T R Q N A L W A R S N Y G T Q T V H I M A P G V N V L S T G L G G L Y V
G S T T N T D A R S F S N F G S C V N I F A P G T N I T S A W H T G T S A T N
L N E K L K I D P I S A K G K I D F S A P G V N I K T T D I H G G Y T
A V S A T D Q S D Q L F A Q S N R G K Y V A I S A P G V D I L S P A P D G K Y Q
L A K S S L N T K A G F S N T G T N V D I V A P G Y V Y V P T I G S A T S Y K
S V N S G K K D D T A G F S S F S N Y G D V D I T A P G D P I Y S H T S S G R Y A
T V G A L N Y E Y G S S F S N F G K T N V D V F A P G T K I W S T T P N N T Y E
I D S D G S V A Y F S N D A G S V D Y Y V A P G V S V Y S T Y L D D S Y A
A V A A V D E Q R V R T S W S N Y G P W V T L A A P G E G I T S T F P S G Y A
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A S S T K E D G Q S E F S N F G E V D I S A P G S D I T S A W N D G D E G T K
A I D K N S Q N L A K A N F S N Y G S Y S K I S A P G V G I Y S T V I G A D N Y E
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T E D C N G H G T H V A G T V G S S T Y G V A K G V N L V P V R V
D H G T H V A G V I A A E G E G V A G V N L Q V S L Y S H A A
C S S H G T H V A S I A C H G P D N P E L D G V A P A A K V V S L T I
Y E D Q N G H G T H V S G T I A A L N N T I G V I G V A P G A K V V P V R V
D N T D G A G H G T H C A G T I G G L T Y G I I S R K V S L V A V K V
P M G D P Q N T H G T A T L S T I G G F V P G V M V G P A Y L A H Y L A K T
V T D C S P H A T H V A G I A A A F H P E E P L L G V A P G A Q L I S C R I
D G N G H G T H C S G T V A G K K F G V A K K A H V Y A V K V
H G S H V A G T I G A N N N Q E G V A G V A W N A R L L P V R V
P V Y D D P L K H G T A T L S V L G G Y K P G V L V G A Y A R A S Y L L A K T
P T S D D L Y G H G T H M A G T I A A I A P E C R L M N V K V
D A N G H G S H C A G T I A S R R Y G V A K N A A I I V A V K V
N D T D G H G T H I A G T I A G K R F G V A K A A S I I A V K V
D C N G H G T H V A G T V G G A T W G V A K N V R L H A V R V
N N T D E N G H G S H V A G T I G G A T F G V A K N V K L V A V K V
D A K D C Q G H G T H V A G T V G S A T Y G V A K G A K I V A V R V
Q N D H G T A T L S V L A G F K K G H L V G T A Y N A S F L L A R T
H S H G T H V A G T V G A N N N G I G V C G V K G V K M M V C Q V
D Q N G H G T H V A G L V G S K T Y G A A K R V N I L V E V K V

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UniRef90_UPI0001CBA779	V	N	C	L	G	A	P	T	D	W	V	I	A	G	M	D	W	V	L	A	G	H	L	P	A	V	A	N	M	S	L	A	Y	P	A	Y	Q	A
UniRef90_C4RK66	L	S	C	L	G	A	P	T	D	W	V	I	A	G	M	D	W	V	L	A	G	H	L	P	A	V	A	N	M	S	L	A	Y	P	A	Y	Q	A
UniRef90_A5JST4	L	S	D	Q	G	S	T	S	A	L	I	A	G	M	D	F	A	V	Q	D	S	R	K	V	A	V	A	N	M	S	L	L	G	G	A	S	A	
UniRef90_U6I256	F	T	D	T	Q	L	S	M	T	S	W	F	L	D	A	F	N	Y	A	I	V	K	R	H	V	A	N	N	L	S	N	L	G	G	P	D	F	F
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UniRef90_UPI000377A8DA	L	G	R	C	G	G	L	T	S	D	I	A	D	A	I	V	W	A	A	A	N	P	A	Q	V	A	N	N	L	S	L	L	G	G	T	C	G	A
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UniRef90_Q6FKK7	L	D	S	V	G	S	G	T	L	D	T	V	M	S	G	L	E	F	V	V	E	S	K	R	C	V	A	N	N	L	S	L	L	G	G	T	F	I
UniRef90_M9SRR9	L	N	N	A	G	S	G	T	T	A	Q	V	V	A	I	R	D	W	V	T	Q	N	A	V	K	V	A	N	N	L	S	L	L	G	G	T	F	I
UniRef90_A4CI65	V	P	N	G	D	E	Y	D	K	D	V	A	L	A	I	R	Y	A	V	D	N	G	A	R	V	I	N	N	L	S	F	G	K	P	F	S	A	
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UniRef90_C6HE36	L	N	C	K	G	S	G	S	A	V	A	I	L	K	G	V	T	Y	A	V	S	H	K	K	S	V	M	N	N	L	S	L	G	M	D	S	F	
UniRef90_A9DT97	L	S	S	Y	G	N	E	N	D	K	D	I	A	L	A	I	R	Y	A	V	N	N	G	A	K	I	V	I	N	N	L	S	I	G	M	S	I	N
UniRef90_UPI000248CB19	G	N	N	K	D	Y	L	P	S	S	A	V	A	Q	G	L	R	W	A	A	N	K	A	D	V	I	N	N	L	S	I	L	G	F	M	P	Q	N
UniRef90_K3VMA7	L	D	A	S	G	G	S	N	S	G	V	L	Q	G	M	Q	F	V	V	D	D	G	K	A	V	M	N	N	L	S	L	L	G	G	D	K	E	
UniRef90_W4YYC4	L	N	C	F	G	R	G	S	W	A	D	I	S	G	C	E	W	V	A	G	N	A	V	A	V	V	V	N	N	L	S	L	L	G	G	A	E	
UniRef90_B6K7R9	L	N	A	E	G	S	G	L	V	S	D	I	I</																									

UniRef90_UPI0003B7A646	Q	D	A	I	Y	A	A	V	N	H	D	V	V	L	V	A	S	A	G	N	T	N	A	E	L	D	F	Y	P	A	S	Y	D	H	V	L	S	V					
UniRef90_UPI0001CBA779	D	D	A	A	V	R	L	T	S	G	G	V	T	T	V	V	A	G	A	G	N	D	N	D	N	A	D	A	C	L	T	T	P	A	G	A	V	D	T	Y	T	A	
UniRef90_C4RKG6	E		A	V	R	R	S	I	T	A		G	V	T	Y	A	V	A	A	G	N	E	N	D	N	A	D	A	C	L	T	T	P	A	G	A	V	P	E	A	I	T	V
UniRef90_A5JS74	N	N	A	A	A	K	M	I	T	Q	D	G	V	F	L	A	V	A	A	G	N	S	D	N	D	A	A	S	F	S			P	A	S	E	P	T	V	C			
UniRef90_U6I256	V	D	K	V	N	E	L	S	A	N	G	I	L	L	V	S	A	I										L	S		N	P	A	D	L	M	D	V	L	G	V		
UniRef90_A7T181	D	L	A	V	N	A	E	S	A	G	A	G	V	H	F	A	V	A	A	G	N	E	N	Q	D	A	C	L	N	T	S	P	A	A	A	E	R	A	I	T	V		
UniRef90_UPI000377A8DA	Q	T	A	I	N	T	A	R	S	L	G	A	T	V	V	V	A	A	G	N											S	R	Y	T	P	A	S	C	D	G	V	I	
UniRef90_UPI00047637C2	E	T	A	V	R	G	S	I	A	A	G	I	T	Y	A	L	A	G	G	N	N	N	Q	S	A	C	L	N	T	S	P	A	S	V	A	D	V	I	T	V	G		
UniRef90_Q6FKK7	N	E	A	I	E	E	L	I	K	Q	G	I	V	V	V	V	A	A	G	N	S	N	M	N	A	C	L	W	T	S	P	A	S	V	A	D	V	I	T	V	G		
UniRef90_M9SRR9	D	Q	A	V	R	N	S	I	A	S	G	V	T	Y	G	V	A	A	G	N	E	N	Q	N	A	G	N	V	S		P	A	R	V	T	E	A	I	T	V			
UniRef90_A4CI65	Y	E	A	I	K	Y	A	A	A	N	D	V	L	I	V	H	A	A	G	N	D	S	Q	N	E	G	T	G	P	E	I	A	D	N	V	L	T	V	G	S			
UniRef90_UPI0003732702	H	N	A	V	R	Y	A	Y	E	Q	D	V	V	V	V	A	A	A	G	N	T	G	G	Q	C	Q	K	N	A	P	G	S	P	S	T	A	V	Y	V	L			
UniRef90_UPI0003737221	H	Q	A	I	C	N	S	V	A	A	G	V	T	Y	A	V	A	A	G	N	D	Y	A	D	A	A	N	S	V		P	A	A	Y	A	S	G	G	A	G	V		
UniRef90_M4V702	H	E	A	Y	A	Y	A	Y	N	N	G	V	V	I	V	S	A	A	G	N	S	N	T	N	N	D	S	T	P	M	Y	P	A	N	N	S	P	N	N	I			
UniRef90_C6HE36	N	E	G	I	A	A	V	V	R	A	G	I	F	V	S	V	S	A	G	N	A	H	R	D	A	S	N	D	S			P	A	S	E	S	T	V	C				
UniRef90_A9DT97	S	D	A	I	K	Y	A	E	K	K	D	V	L	I	V	S	A	A	G	N	E	G	L	N	L	D	D	K	K	N	Y	Y	Y	P	Q	V	N	D	N	F	I		
UniRef90_UPI000248CB19	K	E	A	V	D	Y	A	L	K	A	R	N	V	V	I	V	A	A	G	N	E	S	N	F	A	W	T	V	S			P	A	R	Y	Y	Q	G	V	S	V	G	
UniRef90_K3VMA7	N	R	A	I	E	A	L	F	K	A	G	I	V	P	V	V	A	A	G	N	E	N	R	E	T	A	L	T	V	S	P	G	S	A	P	N	A	I	T	V	G		
UniRef90_W4YYC4	D	D	A	I	R																																						

UniRef90_UPI0003B7A646 G W T G A D D V R A S R A T Y S T R I L V A P G D N I Y T T W G D T D S D Y V
UniRef90_UPI0001CBA779 G A T D N N D V R A Y F S N Y G T C V D I L F A P G G V D I V S A G H L S D D D E A
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UniRef90_C4Z510 G S T D G K D F Y S G R G P T S E C I V K P I V N G S Y I R S C N N S A N G Y S
UniRef90_I4AQJ2 V S G M D I A N R Y Y T S S N Y A N P I D I C A P G V S V Y S T Y T G G Y A
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UniRef90_H5UPA2 T V S A I D A E S N L A S F S N Y G G V I D V A A P G R R I L S T Y Q G Q R W A
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G Q G H G T H V A G L A V G S T E F Y G A A G V A P K C K I M P V Q V
Q D I N G H G T H V S G T V A G K T V G V A K Q A S V F M I K C
N A V A G S A H G V S C A G S I A A S H N S L G V R G V A P L V N L I S V N I
P R L Y D D K H G T R C A S G E I A A A K N D V C G V G V A Y D S R I A G L R I
P T A M D D N G H G T A A G V I A A A D D D H G V V G V A P G V E L Y A M K V
P R L F D D Y H G T R C A G E I A A A V K N D V C G I G V A W K S Q V S G I R I
V T D C S P H G T H V A G I T A A H H P E E P L L G V A P G A Q I V S C K I
N N T D T S H G T H V S G I V A G K T Y G V A K K A R L V N V K V
V Q D L N G H G T H C I G T A C G P K S P R G R Y G V A F D A Q V L V G K V
P A D P A T H G T H V A G T I V L G D A S G T R I Q I A P D A E L M A V N A
G H G T A V A G T I H Q I A P R A R L L P L R V
D E D G H G T H V A S I V G G S G A A A G S G V A P G A D L L V G R V
D S V G H G T H V A G T I G G E T Y G V S K K A N L L S V K V
D C N G H G T H C A G T I G G S N T Y G I A R E A N L I G I R L
N S D P S S W H G T H V A G T I G A A N N S Q G I A G V A Y D S Q I Q P I R A
D G A D C N G H G T H V A G T V G G A T T G V A R A T K L V S V R V
D H G T H V A G T I A A A K N G K G M V G V A P G V R I A S V R V
S W H G T H V A G T I A A T N N A K G V A G I A Y G A K V Q P V R A
T D R T G H G T G I A S L I A A H G H G D G V L G I A P K A K I L P I T V
N G E D C N G H G T H C G G T V G G S V G I A P D T L L Y S V R V
P D D Q C G H G T A M S G V I A S P R N T V G A V G V A Y N S N L I S V R G
E D C F G H G T H V S G T I G G K T V G V A K K V K L V S V R M
T D L H G H G T H V A G I I G G S R V G V S G T A R I I A V K I

UniRef90_W3XFP2	L	R	S	N	G	T	S	G	S	M	A	S	D	V	L	M	K	G	V	E	W	A	A	E	S	H	L	N	V	A	N	M	S	L	G	G	S	G	K	S	P	S	L			
UniRef90_S2JRT9	L	N	N	E	G	T	S	G	S	I	V	S	L	L	L	A	G	V	L	W	V	T	A	E	H	G	K	A	D	I	I	N	M	S	L	L	G	M	S	E	T	K	A	V	F	
UniRef90_UPI0004676544	F	E	R	N	G	A	R	E	T	I	V	S	T	Y	I	L	Y	D	A	V	L	T	A	A	V	E	D	G	A	D	I	I	N	M	S	L	L	G	M	S	E	T	K	A	V	F
UniRef90_W4B1G2	F	N	P	E	F	T	T	D	A	I	I	L	D	G	G	Q	W	L	I	E	L	A	P	D	V	V	V	V	V	V	V	N	N	S	L	L	G	G	G	A	D	E	W	F		
UniRef90_UPI00036F4F1C	F	E	P	E	F	V	G	D	Y	Y	V	A	R	A	A	I	W	S	V	I	N	Q	S	Q	V	I	N	N	S	L	L	G	G	G	L	G	Y	S	P	L	V	M				
UniRef90_T0RKJ2	L	G	Q	C	G	G	K	T	S	D	I	A	D	A	I	R	W	A	A	Q	N	Q	S	P	A	K	V	I	N	N	S	L	L	G	G	G	S	W	P	S	E	A	L			
UniRef90_S8F5S3	L	A	Y	T	G	R	G	Y	S	S	D	A	V	R	Q	D	Y	C	V	I	K	R	G	A	D	I	V	N	H	S	L	L	G	G	G	S	W	P	S	E	A	L				
UniRef90_N4W2S6	L	D	G	D	G	A	G	S	N	S	G	V	L	E	G	M	Q	F	I	D	D	G	K	A	D	I	V	N	M	N	S	L	L	G	G	G	S	W	P	S	E	A	L			
UniRef90_S0E616	L	D	K	D	G	L	S	S	M	S	T	L	Q	G	L	Q	W	A	V	N	H	K	K	S	I	I	N	A	M	S	L	L	G	G	P	Y	T	S	K	I	G					
UniRef90_A8LWF7	L	N	C	A	G	S	G	S	T	A	G	V	I	A	G	V	D	W	A	N	A	D	K	P	A	V	A	N	M	S	L	L	G	G	G	A	N	S	T	V	D					
UniRef90_D7BHL5	L	G	C	A	D	G	S	G	T	V	A	D	V	A	G	V	E	W	V	T	K	N	K	P	A	V	A	N	M	S	L	L	G	E	A	G	N	S	T	A	L					
UniRef90_G9MN19	F	A	D	D	P	W	D	T	D	E	D	V	I	Q	A	F	C	D	A	Y	G	A	G	A	D	V	I	T	A	S	I	L	G	R	P	D	G	F	A	D	D					
UniRef90_C4QXW2	L	S	G	N	G	S	G	S	L	S	E	V	L	E	F	A	V	T	K	H	K	P	G	V	A	N	M	S	L	L	G	A	P	K	N	S	I	L								
UniRef90_Q6UKM3	L	G	F	N	G	S	G	T	E	W	A	V	Y	G	A	L	I	F	Q	I	T	K	T	V	P	I	N	M	S	L	L	G	S	G	V	A	S	E	F	A						
UniRef90_E8U3R1	L	A	P	D	G	S	G	D	V	S	S	V	V	Q	A	I	D	W	A	V	A	K	G	A	N	V	I	N	N	S	L	L	G	S	D	E	R	T	S	K	A	V				
UniRef90_UPI000372415C	L	D	Q	C	G	N	G	E	W	S	Q	V	I	G	G	I	D	W	V	A	K	N	A	K	V	V	A	N	M	S	L	L	G	G	E	A	N	S								
UniRef90_B7RY89	F	E	Q	D	A	E	A	S	T	V	S	L	R	A	L	D	W	L	M	S	A	E	V	D	V	V	N	I	N	S	L	L	A	G	P	P	N	R	L	L						
UniRef90_W0BBN5	P	D	E	S	G	M	F	Y	E	S	A	V	I	N	A	I	R	W	S																											

	90	100	110	120
UniRef90_W3XFP2	D	Q	A	V
UniRef90_S2JRT9	N	A	A	I
UniRef90_UPI0004676544	E	Q	A	I
UniRef90_W4B1G2	R	P	M	V
UniRef90_UPI00036F4F1C	K	Q	E	A
UniRef90_T0RKJ2	Q	E	A	V
UniRef90_S8F5S3	R	E	A	V
UniRef90_N4W2S6	N	R	A	I
UniRef90_S0E616	N	D	A	V
UniRef90_A8LWF7	N	A	V	T
UniRef90_D7BHL5	D	D	A	V
UniRef90_G9MNL19	P	W	A	L
UniRef90_C4QXW2	E	K	A	I
UniRef90_Q6UKM3	F	D	V	L
UniRef90_E8U3R1	Q	D	A	I
UniRef90_UPI000372415C	D	D	A	V
UniRef90_B7RY89	E	A	A	L
UniRef90_W0BBN5	Q	E	A	L
UniRef90_M5EXR3	G	V	A	L
UniRef90_J5J4B2	S	Q	A	I
UniRef90_A8QMW6	D	G	A	L
UniRef90_UPI000365F04C	D	D	A	V
UniRef90_UPI0002D81AB1	D	K	A	F
UniRef90_F9G0Y1	N	A	A	V
UniRef90_K2B7D0	K	S	A	I
UniRef90_D8RJZ2	D	G	L	A
UniRef90_D2B0L6	R	A	A	I
UniRef90_K9TDZ6	R	A	A	T
UniRef90_H6C8Q2	D	L	A	V
UniRef90_I0R1D7	S	W	N	A
UniRef90_E2EY6	N	D	A	V
UniRef90_UPI0002E9ED10	E	L	A	F
UniRef90_F0LPJ2	D	T	A	I
UniRef90_K5WNG6	D	S	A	V
UniRef90_C5KRN5	E	N	A	I
UniRef90_M0E417	I	E	P	V
UniRef90_B1Y693	Q	S	A	I
UniRef90_C5PCX1	N	M	A	V
UniRef90_T0CAD6	K	K	I	L
UniRef90_L1KXW4	D	T	A	V
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UniRef90_A0A059DJY9	D	L	A	N
UniRef90_UPI00016A4143	Q	Q	A	I
UniRef90_F2F3V8	R	R	A	L
UniRef90_Q0TVA9	D	E	V	I
UniRef90_E8JGL0	S	R	A	V
UniRef90_UPI0003FEA005	S	A	R	Q
UniRef90_Q15PZ2	D	D	A	V
UniRef90_B7G7C5	N	N	A	I
UniRef90_K4N6R6	F	A	L	I
UniRef90_K2R445	Q	A	V	R
UniRef90_R7K4E9	A	S	L	D
UniRef90_D9T6P2	R	A	A	V
UniRef90_UPI00046FA2B4	D	Q	A	V
UniRef90_K3W9M2	A	A	I	A
UniRef90_A4AQ33	Q	R	A	I
UniRef90_UPI0002626157	R	D	A	I
UniRef90_S3C0U7	D	T	A	V
UniRef90_UPI0002D560E2	Q	N	A	I
UniRef90_M0PJK9	I	E	P	T
UniRef90_A0A023BV14	A	Y	E	T
UniRef90_K6VK50	Q	S	A	I
UniRef90_R4LFU6	D	T	A	L
UniRef90_D4CZQ4	N	D	A	A
UniRef90_U1RGL8	S	R	A	V
UniRef90_D2ET26	R	H	I	L
UniRef90_G4TF15	D	R	A	V
UniRef90_UPI00036006AC	N	A	M	S
UniRef90_A0A017S7F5	E	G	P	I
UniRef90_F7PQV4	A	D	V	I
UniRef90_B9W8S2	S	E	I	V
UniRef90_A9RCQ9	Q	L	A	E
UniRef90_S8BJ01	N	T	A	V
UniRef90_UPI0002EC2FCB	Y	T	H	A
UniRef90_UPI00046A533E	L	L	E	V
UniRef90_L0A107	T	A	I	E
UniRef90_UPI00037BF294	D	P	L	A
UniRef90_Q00208	N	Q	A	V
UniRef90_W4YCM8	R	A	A	E
UniRef90_UPI000380B8AF	Q	T	A	I
UniRef90_UPI0003804A5E	D	R	A	V
UniRef90_UPI00036A4797	R	R	A	S
UniRef90_UPI0003739679	Q	R	A	I
UniRef90_UPI00036509A6	D	Q	A	V
UniRef90_UPI0001CBAEF4	D	N	A	V
UniRef90_UPI00036FF62	A	D	A	V
UniRef90_X8J9X1	D	I	I	A
UniRef90_E8LZ00				
UniRef90_K9DHS6	Q	N	A	I
UniRef90_R4G374	E	V	I	N
UniRef90_F4BWJ6	T	M	A	D

UniRef90_W3XFP2	G	A	S	A	L	D	D	S	R	A	Y	F	S	N	W	G	K	C	V	S	I	F	G	P	G	L	S	I	Q	S	T	F	I	G	S	N	K	T	A	I	N		
UniRef90_S2JRT9	A	A	S	D	K	D	K	F	A	Y	Y	F	S	N	W	G	K	C	V	S	I	F	G	P	G	L	S	I	Q	S	T	F	I	G	S	N	K	T	A	I	N		
UniRef90_UPI0004676544	V	G	R	I	G	T	F	P	A	D	S	V	P	F	S	F	N	H	G	K	V	E	I	A	P	G	T	D	V	I	K	S	T	F	I	G	S	N	K	T	A	I	N
UniRef90_W4B1G2	A	T	G	A	T	D	I	N	G	N	L	A	S	F	S	L	L	G	P	S	P	Y	V	S	A	P	G	V	N	I	R	S	S	V	P	G	G	V	I	G	Y	G	
UniRef90_UPI00036F4F1C	L	D	I	N	N	K	A	G	F	S	T	F	G	R	N	V	S	V	A	A	P	G	V	G	A	P	G	S	R	K	S	G	Y	T	A	P	G	G	S	G	Y	Q	
UniRef90_T0RKJ2	R	V	G	A	V	N	T	Y	R	G	E	S	T	Y	S	N	Y	G	S	I	I	D	I	V	A	P	G	S	P	R	K	S	G	Y	T	A	P	G	G	S	G	Y	Q
UniRef90_S8F5S3	G	L	I	T	V	A	N	V	K	G	D	P	S	S	N	Y	G	I	Q	R	V	I	Q	V	A	C	P	G	M	W	I	L	S	T	V	P	T	S	G	Y	A		
UniRef90_N4W2S6	A	I	D	A	R	N	D	R	K	A	S	F	S	N	F	G	N	V	G	N	V	D	I	F	A	P	G	V	N	I	L	S	V	G	I	A	S	N	T	A	T	N	
UniRef90_S0E616	T	V	G	A	I	D	S	S	G	Y	R	T	S	M	W	S	N	Y	G	K	V	V	D	I	F	A	P	G	S	S	I	T	A	P	W	N	D	S	D	S	S	L	
UniRef90_A8LWF7	G	S	T	S	T	D	G	R	S	W	F	S	N	Y	G	T	C	L	D	L	F	A	P	G	S	S	I	T	A	P	W	N	D	S	D	S	D	S	S	L			
UniRef90_D7BHL5	T	V	G	S	T	I	G	P	A	D	T	R	S	S	F	S	N	G	T	G	N	C	L	D	L	F	A	P	G	S	S	I	T	A	P	W	N	D	S	D	S	L	
UniRef90_G9MNL19	V	A	A	I	N	V	T	G	N	P	N	I	S	T	S	D	P	R	A	A	P	I	D	I	G	A	P	G	L	E	I	L	S	T	V	P	D	N	D	Y	T		
UniRef90_C4QXW3	A	I	G	D	H	N	E	I	T	R	F	S	N	W	G	A	C	V	D	L	F	A	G	G	D	T	I	V	S	V	I	G	L	N	G	V	A	V	I	G	Y	G	
UniRef90_Q6UKM2	T	N	G	R	D	K	K	A	V	F	S	N	K	G	A	W	I	S	V	A	A	P	G	E	G	I	V	S	S	T	P	Y	G	N	S	T	D	S	Y	V			
UniRef90_E8U3R1	S	V	G	S	V	D	A	Q	D	R	K	S	S	F	S	N	Y	S	D	R	L	E	V	V	A	P	G	E	N	V	Y	A	P	A	P	G	N	A	M	A			
UniRef90_UPI000372415C	T	V	G	S	T	D	N	G	H	R	S	S	N	I	G	S	C	L	D	L	I	F	A	P	G	S	G	V	I	S	T	W	N	G	G	T	N						
UniRef90_B7RY89	A	V	T	A	V	D	E	G	K	Q	V	F	R	L	A	N	G	S	D	Y	L	D	I	A	A	P	G	V	G	L	L	H	A	K	A	G	G	Y	V				
UniRef90_W0BBN5	K	V	A	A	T	G	P	Q	G	W	R	A	Y	S	N	Y	G	P	A	V	T	F	A	A	P	G	G	D	L	S	G	Y	L	Q	S	G	F	D	</				

UniRef90_W3XFP2	T	I	S	G	T	S	M	A	S	P	H	L	C	G	I	T	A	Y	Y	L	S	L	Q	P	S	I	T	P	E	Q	L	K	K	D	I	L	K	V	A	S						
UniRef90_S2JRT9	V	L	S	G	T	S	M	A	S	P	H	V	A	G	V	A	A	L	L	I	N	K	N	D	N	P	T	P	E	Q	L	K	K	E	L	I	T	K	L	A	S					
UniRef90_UPI0004676544	A	L	D	G	T	S	M	A	S	C	P	V	V	S	G	F	A	A	M	L	E	N	A	N	E	V	T	K	P	G	R	E	L	K	Y	R	A	T	N							
UniRef90_W4B1G2	G	W	N	G	T	S	M	A	G	P	H	T	T	A	L	A	A	L	L	Q	A	N	H	S	E	L	T	V	D	I	E	Q	L	I	E	T	D	T	A	T						
UniRef90_UPI00036F4F1C	L	I	S	G	T	S	F	S	G	P	Y	T	S	G	A	A	A	V	I	L	G	A	K	P	G	L	D	P	Y	Q	V	R	L	I	E	E	T	A	D							
UniRef90_T0RKJ2	T	M	S	G	T	S	M	S	A	G	F	I	T	S	A	T	A	A	M	I	F	S	I	N	P	G	L	Y	V	D	Q	V	K	D	I	M	V	R	T	A	Q					
UniRef90_S8F5S3	E	K	S	G	T	S	M	A	A	P	A	L	S	G	I	V	A	L	M	L	A	V	N	P	G	L	S	T	R	Q	V	R	E	G	L	R	Q	C	S	V						
UniRef90_N4W2S6	T	L	S	G	T	S	M	A	S	P	H	V	A	G	L	A	A	Y	F	M	A	K	E	N	L	N	T	V	K	G	V	T	D	R	M	L	A	L	A	E						
UniRef90_S0E616	Y	M	S	G	T	S	M	A	A	P	H	V	A	G	L	A	A	Y	F	M	A	K	E	N	L	N	T	V	K	G	V	T	D	R	M	L	A	L	A	E						
UniRef90_A8LWF7	T	I	S	G	T	S	M	A	S	P	H	A	A	G	A	A	A	L	V	L	E	N	S	A	N	P	S	Y	T	P	Q	D	A	I	V	D	N	G	A	T						
UniRef90_D7BHL5	L	Q	S	G	T	S	M	A	A	P	F	V	A	G	V	A	A	L	V	L	E	N	H	K	G	A	S	P	Q	D	A	I	V	D	N	G	A	T								
UniRef90_G9MNI9	S	M	S	G	T	S	M	A	A	P	Y	I	A	G	I	A	A	L	Y	I	L	E	N	S	K	H	K	G	R	E	A	K	D	Q	L	V	N	A	R	I	L	V	E	S	G	V
UniRef90_C4QXW2	R	M	S	G	T	S	M	S	A	P	I	V	A	G	L	A	G	I	L	L	D	Q	G	V	A	P	E	D	I	V	K	G	K	L	I	E	L	S	D							
UniRef90_Q6UKM3	S	M	S	G	T	S	M	A	A	P	F	V	T	G	L	I	S	Y	L	F	D	N	A	R	N	L	T	P	Y	Q	I	K	T	L	I	E	N	T	A	D						
UniRef90_E8U3R1	A	W	S	G	T	S	M	A	A	P	M	V	S	G	G	L	A	L	A	L	A	E	G	S	L	N	P	R	D	L	A	A	N	I	T	D	K	A	D							
UniRef90_UPI000372415C	S	L	N	G	T	S	M	A	T	P	H	V	S	G	A	V	A	L	Y	L	A	G	N	P	T	A	T	P	A	A	V	A	S	A	L	T	G	N	A							
UniRef90_B7RY89	A	S	S	G	T	S	F	A	V	P	F	A	V	T	A	A	A	N	L	M	S	G	H	P	E	A	K	D	V	M	T	S	L	Y	Q	S	A	E								
UniRef90_W0BBN5	F	Y	Q	G	T	S	M	A	A	P	H	V	A	G	V	A	G	L	I	F	A	V	S	P	K	V	S	P	E	K	V	E	Q	I	L	Y	T	T	T	H						
UniRef90_M5EXR3	V	V	T	G	T	S	F	A	A	A	I	V	T	G	A	I	A	N	L</																											

UniRef90_W3XFP2 K
 UniRef90_S2JRT9 K
 UniRef90_UPI0004676544 S L G G R S D V G S G L
 UniRef90_W4B1G2 P R T D S Q Y Y G H G I I N A L D A V
 UniRef90_UPI00036F4F1C A A G F D R E T G Y G L I R M D R L A E
 UniRef90_T0RKJ2 S V Y R N I N C S K G T V D A Y E A V
 UniRef90_S8F5S3 Q L Q G K V E W G S M P D A K R C V E
 UniRef90_N4W2S6 A S G A S V Q
 UniRef90_S0E616 T S G
 UniRef90_A8LWF7 D
 UniRef90_D7BHL5 S I G P P F Q V G T G L V N A L K V I D
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UniRef90_I3X694	F	D	D	D	G	T	A	E	F	A	Y	F	V	D	A	L	L	D	C	A	D	A	G	I	D	V	V	N	L	S	L	L	G	G	G	G	P	D	P	T	E			
UniRef90_S8AQM9	L	D	A	Q	N	R	G	N	A	A	W	Y	S	Q	G	L	E	A	A	L	K	N	G	D	S	V	V	N	M	S	L	L	F	G	G	D	N							
UniRef90_Q8TGH1	L	D	N	A	G	S	G	S	Y	A	G	V	I	A	G	M	E	F	V	S	K	H	N	G	A	I	A	V	N	M	S	L	L	G	G	P		R	S	T	A	V		
UniRef90_N4UQL5	L	D	A	N	G	E	G	T	N	S	A	V	M	A	G	M	D	F	V	T	A	D	A	A	S	V	V	N	M	S	L	L	G	G	S	G	E	S	T	A	V			
UniRef90_W3AHK2	L	G	D	D	G	S	G	Y	S	D	D	I	A	A	A	I	R	H	V	A	D	Q	A	T	A	V	I	N	M	S	L	L	G	G</										

[illegible]

UniRef90_W7IV22 A V G A V D A A G A R A D F S Q T G P Y L S L V A P G V D V V S T G P G P G H W
UniRef90_R9KN32 G C F D D T Y S G Q G P T D S H C I V K P E L V L P G T N V T S C A P Y P V M Y T
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UniRef90_N1UZR7 T V A A S D R Q G N R A P Y S N Y G S A V D V T A P G G S M E I E V S G G T Y A
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UniRef90_S8A1T7 G A T D S Y D E M A Y F S N Y G F Y I D I L A P G V E V L S A W C T S D T A T N
UniRef90_A0YSJ1 A W Q G F N R A E Y S N Y G N G L D I V A D S G T L E N P V I S T V I G D G I G
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UniRef90_W3AHK2 A A S S R G Y D S T D G D Y V I N K G D V E I S A P G S S V Y S T W Y T G G Y S
UniRef90_C7ZG07 T V G A I D S D W N P T S F T N Y G P E V D I M A P G D H I E S I G S S N A V A
UniRef90_C5AIK9 T G K R A W S N F S S E T L S A P G S S I L S T S N T G T T P G S D T Y A
UniRef90_R9C572 S G Y D S T S K I K P Y T Y S S I G G C V D I V S D G K L Y P S K L D S S Y K
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UniRef90_B8K742 V D T N N D H A A F S Q A T D Q V D I A A P G V A V L S T V T V I G E V L S D I
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UniRef90_M4VNH6 V A A T D K D G E L V S F S N Y G S N S I D I A A I G Q Q V L S T L P N N K Y G
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UniRef90_T5K9H8 T V I G V D Q T G A S T E A S T Q G L T I G I S A P S E G L I G V S A D G S V V
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UniRef90_W5WDV3 S V T A D T I D K K L A S Y S N Y G V T A P G G E G S A M I N T T A L G G G Y T
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UniRef90_UPI0001CBBEED G A T E S S D K R A S Y S C Y G T C L D V F A P G S L V R S S Y H T S D D A Y A
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UniRef90_L7IK23 A I S S Y E A S L A P T Y D A K G T V V G A P G G Q I L S L W T T L I G G Y A
UniRef90_K5CIR0 V A S S D E K G N V M N T N Y G A N S V D L Y A P G T N L Y S T Y M G D T Y Q
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UniRef90_F4FHL2 N A S T I G D T R A L F S N W G R C T D I F A P G Q E I R S A W Y T S D N S S Y
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UniRef90_UPI00046D7A4E A V I T S Y D E E G Y W D E G N F G T T V D I M A P G N D V H L P A E G D G Y Y
UniRef90_Q1IW68 P T G N T I S S F S S G M S A E L E L K P D I A A P G G N T Y S S Y P S G Y A
UniRef90_A4YLF3 V G A V I E K S T N G F E V A S F S N A N A K L W A P G V G I V S A R V G G L A
UniRef90_UPI00037A871E A V G A T G L D R V T L F S S N G N H I A V A P G K A I W S T L P R Y N Y D
UniRef90_A8P8Q1 G A T A I T D A R S S F S N Y G P G I D I F A P G Q S V I S A W H T S D T A Y Q

UniRef90_W7IV22	Q	G	S	G	T	S	Y	A	A	P	F	V	A	G	T	A	A	L	V	R	A	Y	R	P	T	L	T	A	A	Q	V	K	H	R	L	E	A	T	A	N	170	
UniRef90_R9KN32	K	Q	S	G	T	S	M	A	A	P	M	V	A	G	A	V	A	L	L	L	S	K	Y	P	Q	F	S	A	A	D	V	K	L	N	L	E	A	T	A	180		
UniRef90_Q9RUD0	A	M	S	G	T	S	M	A	A	P	I	T	A	G	A	V	A	L	L	L	S	A	K	P	Q	F	S	V	D	A	V	K	L	N	L	E	A	T	A	190		
UniRef90_N1UZR7	Y	S	V	G	T	S	M	A	A	P	H	V	A	G	L	A	A	L	M	L	S	T	A	N	E	Q	L	T	P	Q	Q	V	E	E	Q	L	K	N	S	A	200	
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UniRef90_UPI00037AF895	Y	K	A	G	T	S	M	A	A	P	H	A	A	G	V	A	L	L	I	K	S	K	H	P	K	A	S	P	A	R	V	K	E	M	L	Y	D	Q	A			
UniRef90_UPI000380DFCE	Q	A	T	G	T	S	D	A	T	A	Y	V	S	A	G	A	A	L	V	R	S	K	F	P	D	L	T	A	G	Q	V	A	N	R	L	T	K	T	A			
UniRef90_Q2N8H2	L	F	S	G	T	S	F	S	A	P	Q	V	A	G	A	V	A	L	L	A	Q	A	F	P	D	N	L	S	G	A	Q	I	V	E	L	L	D	T	A			
UniRef90_S8A1T7	I	E	D	G	T	S	M	A	S	P	H	V	A	G	L	A	A	L	L	A	Y	L																				
UniRef90_A0YSJ1	A	M	D	G	T	S	V	A	T	A	K	V	T	G	A	L	S	Q	V	W	A	A	N	P	E	L	N	Y	R	Q	V	I	D	I	K	A	T	A				
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UniRef90_Q488L4	V	G	S	T	T																																					
UniRef90_Q0TXC6	V	L	S	G	T	S	M	A	T	P	H	V	T	G	L	A	A	Y	L	L	A	Y	E	G	I	R	T	P	A	A	L	S	S	R	M	T	S	L	A			
UniRef90_I3X694	A	W	P	G	T	S	M	A	S	P	H	V	S	A	A	A	L	Y	L	I	A	N	G	G	A	R	D	P	A	V	I	R	S	Q	A	L	E	S	S	A	D	
UniRef90_S8AQM9	Y	M	S	G	T	S	M	S	A	P	I	V	S	G	L	I	A	D	L	L	P	R	F	P	E	L	N	P	A	M	G	M	K	Q	F	I	E	R	N	G	V	
UniRef90_Q8TGH1	S	I	S	G	T	S	M	A	T	P	H	V	A	G	L	A	A	Y	L	N	A	L	Q	G	V	V	S	P	A	A	L	C	K	C	Y	I	E	D	N	T	A	
UniRef90_N4UQL5	T	I	S	G	T	S	M	A	S	P	H	V	A	G	L	A	A	Y	L	G	V	G	Y	A	P	R	D	P	V	E	L	C	S	Y	I	E	S	E	T	A	L	
UniRef90_W3AHK2	S	I	S	G	T	S	M	A	T	P	H	V	A	G	L	A	A	K																								

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210 220
 H P A P D P G L G W G T V N P M A A V
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G M D Y N E Y M G L G Y V D A L M A L
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K C D H S H Q H G F G V L N A W R L V
P L P
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UniRef90_D7AU9					
UniRef90_F4PYN0					
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