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QUERY

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R L D K E N E F P T E	Q V K M A E L	G P Y P E Y G G A G G A D V I S Y A		
E W F E D G T F P R E L	A P E L G E L	G L G I P F P E Y G G S G G D T	V I S Y A	
R W F A D G T F P R E L	A P E L G E L	G L G I P F P E Y G G S A G L D Y L A Y A G		
A W D R A E S V D K S I	V R R L G E	V G F L G L T I E E Y G G S G G D H L A Y C		
E Y D A S G E Y P W P Q	R K M A E L	G L G I T P E W G G A G L D T V T W A		
E I D K E N N F K R P F	W F K K L G D L	G L G I T A S D Y G G T G G K Y S D H C		
E A F R H E V F H R E	I M N E L G E	G Q F G L G S T I D G Y G C A G V N Y V C Y G		
Q W Y E A G E L P R E L	A Q E L G R I	G Q F G L G M S L T G Y G C A G A T A V Q Y G		
E R D K T G T F P T D V	F K A L A E L	G M L P F P E Y G G A G A D T T C F A		
Q I D R D N A S P K D I	W T K L G D M G L L	G I T P E Y G G G L G K G Y L D H T		
K W D I H T F P A E A I A	I A G L G E L	G G M L V P E Y G G A G G M D H V A Y A		
K V D A E E Y F P K E T	V E K M G K L	G M M G I Y F P E V G G A G G D V L S Y V		
E W F E A G T F P R E L	A P E L G K L	G L G M H L E G Y G G C A G M S A T A Y G		
K I D K S H E F P M E T	W N K M R E L	G L G F P I P E W G G G G G T Y L D F A		
D W F E E E G S I P R D L	A K A F A A L	G L G M H L Q G Y G C A G T S A V A Y G		
A W D R E R V F P A Q V	H R K L A Q L	G A Y G V M V P A Y G G A G L D A L A L A		
E W F A A G T I P D P L	A R K F G Q L	G L G M H L D G Y G C P G A G A V A Y G		
L M E S T D E F P E R	I K M K G E A G L	G L G M H I P V P E Y G G A G A D T T S Y I		
E Y D T E E K F P H E L	V D K A A E M	G L G M H L Q G Y G C A G Y S T L E S A		
D R D N A Q Q F P T E	Q V K R M G E L	G L G F L G M M V P E Y G G G G M D T I V S Y A		
A W D R A E S V D R S	V V K R L G D L	G L G F L G M T I P E Y G G G S E G D H L S Y C		
UniRef90_M1KPN9	V V K R L G D L	G L G F L G M T I P E Y G G G S E G D H L S Y C		
UniRef90_L0JPB0	V V K R L G D L	G L G F L G M T I P E Y G G G S E G D H L S Y C		
UniRef90_I0K310	V V K R L G D L	G L G F L G M T I P E Y G G G S E G D H L S Y C		
UniRef90_C7Q1R4	V V K R L G D L	G L G F L G M T I P E Y G G G S E G D H L S Y C		
UniRef90_U4WGG9	V V K R L G D L	G L G F L G M T I P E Y G G G S E G D H L S Y C		
UniRef90_U1X4J9	V V K R L G D L	G L G F L G M T I P E Y G G G S E G D H L S Y C		
UniRef90_UPI0001D2E14F	V V K R L G D L	G L G F L G M T I P E Y G G G S E G D H L S Y C		
UniRef90_UPI000381F6EF	V V K R L G D L	G L G F L G M T I P E Y G G G S E G D H L S Y C		
UniRef90_D7CKQ0	V V K R L G D L	G L G F L G M T I P E Y G G G S E G D H L S Y C		
UniRef90_C1DIJ6	V V K R L G D L	G L G F L G M T I P E Y G G G S E G D H L S Y C		
UniRef90_B0Y444	V V K R L G D L	G L G F L G M T I P E Y G G G S E G D H L S Y C		

QUERY	90	100	110	120
UniRef90_W4QA77	L A C M E L E A G D S G F R S F V S V Q G S L S M F S I Y R Y G S E E Q K N E W			
UniRef90_UPI00040B6FBD	V A V E E E L L S R V C A S T G V T L S A H T S L A G W P I Y K F G T E E E Q K Q T Y			
UniRef90_UPI00041BBA44	I T V E E E L L S R V C A S T G V T L S A H V S L A S W P I Y K Y G N E E E Q K K N F			
UniRef90_I8AN95	I A V E E E I L L S R V C A S T G V T L S A H V S L A C V P L L L Y G T E E E Q K Q K Y			
UniRef90_M1YVK8	I A V E E E I L L S R V C A S T G V T L S A H V S L A C V P L L L Y G T E E E Q K K T K Y			
UniRef90_U5Q3R7	I A V E E E I L L S R V C A S T G V T L S A H V S L A C V P L L L Y G T E E E Q K K T K Y			
UniRef90_M3F479	M A V E E E I L L S R V C A S T G V T L S A H V S L A C V P L L L Y G T E E E Q K K Q E W			
UniRef90_UPI0003677ED0	L A C L E E L E A A D S G F R S F V S V Q G S L S M F S I W K W G S E E E Q K K Q E W			
UniRef90_UPI000377E761	I A V E E E I L L S R V D A S I G V T L S A H I S L A S W P I F K F G T E E E Q K K Q K Y			
UniRef90_E8RDQ3	I A V E E E I L L S R V C G S T G V T L S A H L S L C A N P I Y M F G T E A Q K K Q K F			
UniRef90_C7H0J2	I T V E E E I L L S K K C A T T G V I C S A H T S L C C W P I F K W G N E E D Q K M K Y			
UniRef90_Q17GD3	V I N E E E I I S R A S G A I S L S Y G A H S N L C V N Q I H R N G T E E E Q K K Q Q Y			
UniRef90_M4ZRH5	L A C L E E V E A G D S G L R S F V S V Q G S L A M F P I R A Y G S E E E Q R E T W			
UniRef90_F4XET7	M C V E E E L L S K V C G T T G V I V S A H T S L C C A P I Y E H G T E E E Q K M K Y			
UniRef90_UPI00026588C0	I I M E E E I I S R A S G S I A L S Y G A H S N L C V N Q I H K N G T E E E Q R R K Y			
UniRef90_A0A031MFY5	L V M E E E I I S R A S G S V A L S Y G A H S N L C V N Q I S R N G S D E E Q K K A R Y			
UniRef90_D6Y9M6	V A C R E E L L E A G D S G L R S F V S V Q G S L A M F P I W K Y G S E E E Q K Q E W			
UniRef90_UPI00028820A7	I A I N E E I I S K V S A T I G V I L S V H T S V G T N P I L Y F G T E E E Q K K Q K Y			
UniRef90_G2EGH3	L V M E E E I I S K I D A S A S V I V S V N N S L V C Y G L E T Y A N Q A Q K D K Y			
UniRef90_G2TB68	L A M E E E I I S R A S A S V G L S Y G A H S N L C V N Q I R L N G S A E E Q K R R Y			
UniRef90_S8E1H6	L A M E E E I I S R A S G S V A L S Y G A H S N L C V N Q I Y R W G T D T Q K S K Y			
UniRef90_U2L0S3	M A V E E E I I S R V C A T T G V I V S A H T S L C A W P I M T F G T E E E Q K K Q K Y			
UniRef90_N6U0F0	V V M E E E I I S R A S G S V G L S Y G A H S N L C V N Q I H R N G T T A Q K E R Y			
UniRef90_H1ZCQ6	T I V E E E I I S K V D S S I I G L S V A A H N S L C T N H I L T F G N E E E Q K K K W			
UniRef90_D2UXG9	L A V E E E I I S R G S G S I I A L S Y G A H S N L C V D R I F R I G N K E E Q K K E K Y			
UniRef90_F2IV03	I I A M E E E V S R A S A S I I G L S Y G A H S N L C V N Q I R R W G N D D Q K K R Y			
UniRef90_M4WV1	I I A I E E I I S R G S S V G L S Y G A H S N L C V N Q I K R N G S A S Q K A K Y			
UniRef90_M7A3K2	I I G M E E E I I G H A D S S V V R G I V S V S M G L F G K I V L S H G T E E E Q K K Q R W			
UniRef90_G9QH70	I A V E E E I I G K A C G G T G L S Y A A A I S L G A S P I Y Y F G T E E E Q K K Q Q W			
UniRef90_E0NJ77	M A I E E E I I S K K K C A T T G V I V S A H T S L C C A P I Y E N G T E E E Q K K K Y			
UniRef90_I6ZX77	L A M I E E I I S K V D A S L G V I M S V N N S L V C Y G L E E W G S D Y Q K E K Y			
UniRef90_I3KW23	I I V M E E E I I S R V S A V A V L S Y G A H S N L C V N Q I V R H A N E K Q K E K Y			
UniRef90_A9KCF0	I I A M E E E I I S R A S G S V G L S Y G A H S N L C V N Q I N R F G T E T T Q K K R Y			
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UniRef90_A0A017RXU4	M A V E E E I I G K A C A S T S V I L S A H V S L A C T P I Y M F G T E E E Q K K K Y			
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UniRef90_H5SAZ1	L A M Q E E L L E R G D S G V R S F A S V Q S S L V V M Y P I Y A Y G S E E E Q R Q R W			
UniRef90_U1Y2Q4	L I V E E E I I V A R V C A S S S S Q I I T V Q E G S P V V L L S G N E E E Q K Q Q R F			
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UniRef90_UPI0002FD2B13	I I A V E E E I I G K A C G G T G L S Y A A A V S L G S S P I Y Y F G T E E E Q K Q Q N Y			
UniRef90_U1YG97	I I V C E E E I I E R G D T A F R T A V S V S V H T G L N S M T L L Q W G N E E E Q K K Q K Y			
UniRef90_G2LHN1	T I I E E E I I A R V D P S V A L G V A A H N S L G T N H I F M A G T E A Q R E T F			
UniRef90_Q8EQK3	L A V E E E I I G R I C G T S L T G L S Y A A A V S L G A S P I Y Y F G T E E Q K L D F			
UniRef90_B6A2G3	V A M E E E I I V S R A S A S V G L S Y G A H S N L C V N Q I R R W A S P E Q K H R H			
UniRef90_D8Y3Y1	I I A M E E E I I S R A S A S V G L S Y G A H S N L C V N Q I K R N G N E E E Q K R K Y			
UniRef90_C7HSM3	I I T V E E E I I S R V D G G V V G V I C S A H T S L G S W P I Y A F G T E E E Q K K K Y			
UniRef90_M4QWS3	I I A M Q E E I I S R A S A A I L G L S Y G A H S N L C V N Q I I N R N G N E Q Q K Q K Y			
UniRef90_J1FJ41	L L A M E E E I I S K V D A S A S V V M S V V N N S L V C W G L E K Y G S E E E Q K Q K Y			
UniRef90_Q892L5	L L A V E E E I I S K A C A A T G I S Y S V V S T S L C A S P I L Q Y G T E E E Q K Q K Y			
UniRef90_A1WHJ3	V A M E E E I I S R A S A S V G L S Y G A H S N L C V N Q I I N R N G S P E Q K R K Y			
UniRef90UPI0003FDA8B5	L L A V E E E I I G K A C G G T G L S Y A A A V S L G A S P I Y H F G T E E E Q K R Q W			
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UniRef90UPI00037C3253	V A C M E E L L E A A D S G V R S L V V S V Q G S L A M Y A I W R F G S E E E Q K Q R W			
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UniRef90_H0Q5H6	I I V F E E E I I A K C G Y T G P G F L I H C D L V A T Y I K S F G N E E E Q K R Q W			
UniRef90_H3BDT7	I I V M E E E I I S R V S A A V G L S Y G A H S N L C L N Q I V R N G S E E E Q K K E K Y			
UniRef90_A6CNY0	I I V T E E E I I S K A C A S T G I T Y S A H I S L G G A P I I N M F G T E E E Q K H K Y			
UniRef90_A0A024JT33	L L A C T E E E I I A A D S G V R S M V S V Q G S L A M F A I W N F G S E E E Q K Q Q W			
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UniRef90UPI00004BE622	I I A M E E E I I S R G C A S T G V I M S V V N N S L Y L G P I L K F G S K E E Q K Q Q W			
UniRef90_W7SS45	I I A C M E E L L E A V D S G L L R S F V S V Q G S L A M T A I H K F G S E E E Q K Q A W			
UniRef90_S3ZFS9	L L V T E E E I I G R G D S S V V R G I V S V V S L V A K S V A A W G S E E E Q K R R W			
UniRef90_F2NM15	L L A M E E E I I I A A A D P S V A V I L S V T S G L P Q Y M L L K F G T D A Q K E K Y			
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UniRef90_K2K462	L L V A R E E V E R V D S G Y R S A M S V V Q S S L V M H P I H A Y G S E A Q R Q K Y			
UniRef90_F8JX35	L L A C L E E L E A A D S G I R S L V S V Q G S L A M Y A I H R F G S E E E Q K R E W			
UniRef90UPI000478E030	I I V V E E E I I S R V C G S T G I T Y S A H I S L G G A P I Y L F G T E K Q K E M F			
UniRef90_V5GRZ5	I I V M E E E I I S R A S G S V A L S Y G A H S N L C V N Q I N R H G T K A Q K D K Y			
UniRef90_K2LLA6	L L A L E E E I I A A G D G A T S T I M S V H N S V G C M P I L K F G T E A Q K Q Q E F			
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UniRef90_U5E8C8	L L A C Q E E L E A V D S G V R S M V S V Q G S L A M S A I H F F G S E E E Q K Q H Y			
UniRef90_J7ITR6	I I I A E E E I I A K A C A S T A V I T S V H T G L G C M S I Y L Y G S Q R I K E K Y			
UniRef90_A0A051TK49	V A C R E E L E A I D S G L R S F V S V Q G S L A M F A M H H W G S D E H R Q E W			
UniRef90UPI000347E930	V M L E E E I I A A G D G G T S T A I S V V N N C P V C S I L L A Y G N D D Q K R D W			
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UniRef90_M1KPN9	L L A I H E E I I S K V S A A V G V I L S V H T S V G T I P I L H F G T E A Q K Q Q T Y			
UniRef90_L0JPB0	L L A E E E I I F S Y D P G L A L S I M A C S F G T E A I S F G T E D Q K E R Y			
UniRef90_10K310	I I A I E E I I S K I D A S A S V I M S V V N N S L V C Y G L E A F G T E E E Q K Q K Y			
UniRef90_C7Q1R4	L L V M E E E I I G R G D S T A V R G I V S V V S L V G L V T K P L L A Y G T E D Q K R R W			
UniRef90_U4WGG9	I I V T E E E I I S R A C A S T G I T Y S A H I S L G G A P I H L F G T K Q Q K E A Y			
UniRef90_U1X4J9	I I V T E E E I I S R V C A S T G I T Y S A H I S L G G A P I I N M F G T H E Q K Q T Y			
UniRef90UPI0001D2E14F	V V M E E E I I S R A S A S V G L S Y G A H S N L C V N Q I R R N G S C E Q K R R Y			
UniRef90UPI000381F6EF	V A M E E E I I S R A S G S I G L S Y G A H S N L C V N N I L H N A S E A Q K Q K Q Y			
UniRef90_D7CKQ0	L L V V E E E I I A R G D A G I C T T M A A S T L L A A D P V L L I A A T D E Q K K R R W			
UniRef90_C1DJ6	L L I A R E E V E R V D S G Y R S R M S M V Q S S L V M L P I N E F A T Q A Q K E K Y			
UniRef90_B0Y444	I I V M E E E I I S R A S G S I A L S Y A A H S Q L C V N Q I S L N G T E E E Q K K A R F			

	P	R	L	A	A	G	D	A	I	G	C	F	G	L	T	E	P	D	F	G	S	N	P	A	G	M	R	T	R	A	R	R	D	G	S	D	W	I	L		
UniRef90_W4QA77	L	R	A	L	A	E	G	S	K	I	G	A	Y	A	L	T	E	P	G	G	S	D	A	A	M	K	T	T	A	Q	D	H	E	Y	V						
UniRef90_UP100040B6FB	L	T	R	L	A	T	G	E	A	L	G	A	Y	A	L	S	E	P	G	A	G	S	D	V	V	S	M	K	T	T	A	E	A	D	H	F	V				
UniRef90_UP100041BBAA4	L	V	P	L	A	S	G	K	G	L	G	S	F	G	L	T	E	P	G	A	G	S	D	A	G	G	T	R	T	T	A	V	R	D	G	D	E	W	V		
UniRef90_I8AN95	L	R	P	M	A	E	K	K	M	G	A	Y	G	L	T	E	P	G	S	G	D	S	S	N	M	K	T	T	A	K	R	D	G	S	D	Y	I				
UniRef90_M1YVK8	L	V	P	M	A	K	E	K	L	G	F	G	L	T	E	P	N	A	G	T	D	A	S	A	Q	Q	T	V	A	V	L	D	G	D	N	Y	I				
UniRef90_U5Q3R7	L	P	K	L	C	S	G	E	W	I	G	C	F	G	L	T	E	P	D	F	G	S	N	P	S	D	M	R	T	K	A	V	R	D	G	D	E	W	V		
UniRef90_M3F479	L	P	R	L	A	A	G	E	A	I	G	C	F	G	L	T	E	P	D	F	G	S	N	P	S	D	M	R	T	K	A	V	R	D	G	D	E	W	V		
UniRef90_UP10003677ED0	L	R	P	L	A	E	G	E	A	I	G	C	F	G	L	T	E	P	G	S	G	D	V	V	S	M	K	L	R	A	E	K	K	G	D	Y	R				
UniRef90_UP1000377E761	L	P	K	L	I	S	G	E	H	V	G	A	L	A	M	S	E	P	G	S	G	D	V	V	S	M	K	L	R	A	E	K	K	G	D	Y	R				
UniRef90_E8RDQ3	L	V	P	L	A	K	G	E	K	I	G	F	G	L	T	E	P	S	A	G	S	D	A	G	G	T	K	T	T	A	T	R	D	G	N	D	W	I			
UniRef90_C7H0J2	L	P	D	L	L	S	G	K	K	I	G	A	F	G	L	T	E	P	N	A	G	T	D	A	G	Q	Q	T	R	A	E	E	R	G	D	H	F	V			
UniRef90_Q17GD3	L	P	K	L	I	S	G	E	H	V	G	A	L	A	M	S	E	P	N	A	G	S	D	V	V	S	M	K	T	K	A	V	R	D	G	D	E	W	V		
UniRef90_M4ZRH5	L	R	P	M	A	G	E	A	I	G	C	F	G	L	T	E	P	D	S	G	D	P	G	S	M	R	T	K	A	V	R	D	G	D	E	W	V				
UniRef90_F4XET7	L	P	D	L	L	S	G	K	K	I	G	A	F	G	L	T	E	P	N	A	G	S	D	A	S	G	G	Q	T	T	A	V	L	E	G	D	H	Y	V		
UniRef90_UP100026588C0	L	P	K	L	C	N	G	E	H	V	G	A	L	A	M	S	E	T	G	A	G	S	D	V	V	S	M	K	L	T	A	V	R	D	G	D	E	Y	V		
UniRef90_A0A031MFY5	L	P	G	L	I	S	G	E	R	V	G	A	L	A	M	S	E	P	N	A	G	S	D	V	V	S	M	Q	L	R	A	E	R	R	G	D	H	F	V		
UniRef90_D6Y9M6	L	P	R	L	A	S	G	E	A	I	G	C	F	G	L	T	E	P	D	H	G	S	D	V	V	S	M	K	T	R	Y	A	K	Q	D	P	S	D	W	I	
UniRef90_UP100028820A7	L	P	K	L	I	S	G	E	H	V	G	A	L	A	M	S	E	P	N	A	G	S	D	V	V	S	M	K	L	R	A	E	K	K	G	D	Y	R			
UniRef90_G2EGH3	L	T	K	L	A	T	G	E	F	I	G	A	F	C	L	S	E	P	A	G	S	D	A	T	S	Q	A	T	A	I	D	K	G	D	H	Y	V				
UniRef90_G2TB68	L	P	G	L	I	A	G	T	H	V	G	A	L	A	M	S	E	T	G	A	G	S	D	V	V	S	M	R	T	R	A	E	R	R	G	D	T	F	V		
UniRef90_S8E1H6	L	P	D	L	I	A	G	K	K	V	G	S	L	A	M	S	E	P	G	S	D	V	V	S	M	Q	L	R	A	K	V	D	G	F	K						
UniRef90_U2L0S3	L	V	P	L	A	K	G	E	H	V	G	A	L	A	M	S	E	P	N	A	G	S	D	V	V	S	M	Q	T	T	A	V	L	E	G	D	H	Y	V		
UniRef90_N6U0F0	L	P	K	L	I	S	G	E	H	V	G	A	L	A	M	S	E	P	N	A	G	S	D	V	V	S	M	K	L	R	A	E	K	R	G	H	Y	V			
UniRef90_H1ZCQ6	L	P	K	L	A	T	A	E	W	V	G	A	W	G	L	T	E	H	N	T	G	S	D	V	V	S	M	K	T	T	A	V	K	D	G	D	H	W	V		
UniRef90_D2UXG9	L	P	K	L	I	S	G	E	H	V	G	A	L	A	M	S	E	P	N	S	G	D	V	V	S	M	K	T	R	A	E	K	K	G	D	Y	I				
UniRef90_F2IV03	L	P	R	M	A	G	E	A	I	G	C	F	G	L	T	E	P	D	R	G	S	D	P	G	M	R	T	R	A	R	D	G	T	D	W	V					
UniRef90_Q0VQ60	L	P	K	L	I	S	G	E	H	V	G	A	L	A	M	S	E	P	N	A	G	S	D	V	V	S	M	K	L	R	A	E	K	R	G	H	Y	V			
UniRef90_H5SAZ1	M	T	K	L	T	G	E	H	V	G	A	L	A	M	S	E	T	E	A	G	S	D	V	V	S	M	K	L	R	A	K	E	R	G	D	Y	I				
UniRef90_A0N077	L	P	K	L	I	N	G	E	H	V	G	A	L	A	M	S	E	T	E	A	G	S	D	V	V	S	M	K	L	R	A	E	Q	K	G	D	I	F	I		
UniRef90_R9B205	L	P	R	M	A	G	E	A	I	G	C	F	G	L	T	E	P	D	R	G	S	D	P	G	M	R	T	R	A	R	D	G	T	D	W	V					
UniRef90_A0A017RXU4	L	P	D	L	S	G	R	K	V	G	A	F	G	L	T	E	P	N	A	G	S	D	V	V	S	M	K	L	R	A	E	Q	K	G	D	Y	I				
UniRef90_W0SF76	L	K	K	L	A	S	G	E	W	V	G	C	F	C	L	T	E	P	H	V	G	S	D	V	V	S	M	K	L	R	A	E	K	R	G	H	Y	V			
UniRef90_UP10003736A61	L	P	K	L	I	S	G	D	H	V	G	A	L	A	M	S	E	P	N	A	G	S	D	V	V	S	M	K	L	R	A	E	K	R	G	H	Y	V			
UniRef90_U1Y2Q4	L	P	R	L	A	R	E	A	I	G	C	F	G	L	T	E	P	D	N	G	S	D	P	S	N	L	T	T	A	V	L	D	G	N	D	H	Y	V			
UniRef90_S6GH15	L	P	K	L	I	S	G	E	H	V	G	A	L	A	M	S	E	P	N	A	G	S	D	V	V	S	M	K	L	R	A	E	Q	K	G	D	I	F	I		
UniRef90_UP10003B51552	L	V	P	L	A	T	G	Q	I	G	A	F	C	L	S	E	P	E	A	G	S	D	V	V	S	M	K	L	R	A	E	Q	K	G	D	Y	L				
UniRef90_L8MDE0	L	P	Q	L	A	S	G	A	I	G	C	F	C	L	T	E	P	P	Q	A	G	S	D	V	V	S	M	T	L	R	A	D	L	I	D	G	H	Y	V		
UniRef90_Q0VQ60	L	P	K	L	V	S	G	E	H	V	G	A	L	A	M	S	E	P	P	D	Y	G	S	N	P	A	M	I	T	T	A	K	D	G	Y	L					
UniRef90_UP10002FD2B13	L	T	P	L	A	Q	G	K	T	L	A	S	F	G	L	T	E	P	N	A	G	S	D	V	V	S	M	K	L	R	A	E	K	R	G	D	Y	V			
UniRef90_U1YG97	L	T	P	Q	A	K	G	E	K	I	G	A	F	G	L	T	E	P	N	A	G	S	D	V	V	S	M	K	L	R	A	E	K	R	G	D	Y	V			
UniRef90_G2LHN1	V	T	P	L	A	R	G	E	K	I	G	A	W	A	L	T	E	P	G	S	D	S	A	G	L	S	T	T	A	V	R	Q	N	G	H	F	V				
UniRef90_Q8EQK3	L	K	P	L	A	S	G	E	G	V	G	A	F	G	L	T	E	P	N	A	G	S	D	V	V	S	M	K	L	R	A	E	K	R	G	H	Y	V			
UniRef90_B6A2G3	L	P	K	L	I	A	G	E	H	V	G	S	L	A	M	S	E	P	N	A	G	S	D	V	V	S	M	R	L	R	A	E	K	R	G	H	Y	V			
UniRef90_D8YJ31	L	P	R	L	I	S	G	D	F	V	G	A	L	A	M	S	E	P	N	A	G	S	D	V	V	S	M	K	L	R	A	E	K	R	G	H	Y	V			
UniRef90_C7HSM3	L	T	P	L	A	K	G	E	K	I	G	A	F	G	L	T	E	P	N	A	G	S	D	V	V	S	M	K	L	R	A	E	K	R	G	H	Y	V			
UniRef90_M4QWS3	L	P	K	L	I	S	G	E	H	V	G	A	L	A	M	S	E	P	N	A	G	S	D	V	V	S	M	K	L	R	A	E	K	R	G	H	Y	V			
UniRef90_J1FJ41	L	T	K	L	A	T	G	E	I	V	G	A	F	C	L	S	E	P	E	A	G	S	D	V	V	S	M	T	L	R	A	E	K	R	G	H	Y	V			
UniRef90_Q892L5	L	S	Q	I	A	S	G	K	V	L	G	G	F	G	L	T	E	P	N	A	G	S	D	V	V	S	M	K	L	R	A	E	K	R	G	H	Y	V			
UniRef90_A1WHJ3	L	P	R	L	I	S	G	E	H	V	G	A	L	A	M	S	E	P	D	H	G	S	D	V	V	S	M	K	L	R	A	E	K	R	G	H	Y	V			
UniRef90_UP10003FDA8B5	L	V	P	L	A	S	G	A	S	G	V	A	F	C	L	S	E	P	D	H	G	S	D	V	V	S	M	T	L	R	A	E	K	R	G	H	Y	V			
UniRef90_H5XMG4	L	P	A	L	S	G	E	A	I	G	C	F	G	L	T	E	P	D	A	G	S	D	P	A	M	K	T	H	A	R	R	D	G	S	D	W	V				
UniRef90_UP100037C3253	L	P	G	M	A	R	G	E	F	I	G	C	F	G	L	T	E	P	D	H	G	S	D	P	A	S	M	T	R	A	K	D	G	D	N	Y	V				
UniRef90_F9DT4	L	V	P	C	Q	G	E	K	I	G	A	F	C	L	T	E	P	P	N	G	G	T	D	V	V	S	M	K	L	R	A	E	K	R	G	H	Y	V			
UniRef90_H0Q5H6	L	V	P	R	M	V	S	G	E	A	G	A	G	M	T	L	S	E	P	D	H	G	S	D	V	V	S	M	K	L	R	A	E	K	R	G	H	Y	V		
UniRef90_H3BDT7	L	T	P	I	C	T	G	E	S	F	G	A	F	G	L	T	E	P	N	A	G	S	D	A	G	G	T	Q	T	T											

QUERY	170	180	190	200
UniRef90_W4QA77	N G T K M W	T N G N L A D V A T V W A Q T D D G	L R G F	P T D T P G F T A
UniRef90_UPI00040B6FBD	N G S K I F	T N G G V A D I Y V V F A V T D D K G	V T A F	V D A D L P G F S V
UniRef90_UPI00041BBAA4	N G N K I V	T N G G V A D I Y I V F A K T D D K G	S A F	V E K G T K G F T F
UniRef90_I8AN95	N G S K I F	T N A G E A E I Y V V F A Q T D R G	S A F	V E K G T P G F S F
UniRef90_M1YVK8	N G T K L F	T N G G E A D V Y I I F A M T D R G	S A F	V E K D T P G F T I
UniRef90_U5Q3R7	N G S K I F	T N A G Y A H V Y I I M A M T D R G	S A F	V E S G T P G F S I
UniRef90_M3F479	N G S K M W	T N G G I A D V A T V W A Q T E D G	R G F	V P R G T P G F T T
UniRef90_UPI0003677ED0	N G S K I F	T N G G E A E I Y I V F A S T D R G	T A F	V E K G F E G F S I
UniRef90_UPI000377E761	N G N K M W	T N G P D A D T L V V Y A K T D D K G	I	E E K G F K G F S T
UniRef90_E8RDQ3	N G S K I F	T N A G E A E T Y V V L A R S D D K G	S A F	V E K G T P G F S F
UniRef90_C7H0J2	N G A K V F	T N G G Y A D V F V V M A M T D D K G	T A F	V E K G D E G F S I
UniRef90_Q17GD3	N G S K F W	T N G P D A D T Y I I Y A K T D H G	S A F	V E R G S P G F S R
UniRef90_M4ZRH5	N G T K M W	T N G G I A D V A V V W A R A E E G V	R G F	V V P T D T P G F S T
UniRef90_F4XET7	N G S K C F	T N G T V A S T M V V F A M T D P G	S A F	V E S S F P G F S V
UniRef90_UPI00026588C0	N G S K F W	T N G P N C D V L F L Y A R T D P G	S A F	V E K G T P G F T V
UniRef90_A0A031MFY5	N G S K M W	T N G P D A D V Y V Y A K T E P G	T A F	V L E G D S P G F S R
UniRef90_D6Y9M6	N G S K M W	T N G S I A D V A V V W A Q T D S G	R G F	V V P A S T P G F S A
UniRef90_UPI00028820A7	N G S K V F	T N G G E A D V Y I V F A R T S K G	T A F	V E K N T P G F V F
UniRef90_G2EGH3	N G T K N W	T S G G R A D V F L V I A Q T D R G	N A F	V D D K G L P G F D V
UniRef90_G2TB68	N G S K M W	T N G P D A D V L V V Y A K S D P G	T A F	V E K G W K G F T T
UniRef90_S8E1H6	N G N K F W	T N G P T A S T L V V Y A K T E P G	T A F	V I E R G F P G F S T
UniRef90_U2L0S3	N G S K I F	T N A G K A D T Y V V M A M T D K G	T A F	V E K D F Q G F S V
UniRef90_N6U0F0	N G S K M W	T N G P D A D V L V V Y A K T S P G	T A F	V E K G F P G F S S
UniRef90_H1ZCQ6	N G A K F N	T H A I S G N V A V V L A R T G E G M	T A F	V I E K G T P G F S S
UniRef90_D2UXG9	N G N K M W	T N G P D A D V L V V Y A K T D K G	I	E E K G F K G F S T
UniRef90_F2IV03	N G S K M W	T N G P C Y A D T L I V Y A K T D K G	T A F	I V E K G F A G F S V
UniRef90_M4WV1	N G S K T W	T N G P D A D V Y V Y A K T E P G	T A F	V E R D W K G F S R
UniRef90_M7A3K2	T G S K I F	T N G T W A D V C Y V F A R T G K G	S A F	V P T D T P G F G R
UniRef90_G9QH70	N G E K C W	T N A G F A R Q V I V T A V T G R R	V S A I	V P S N T P G V Q I
UniRef90_E0NJ77	N G T K I F	T N A G F A D V F I I I A M T D K G	S A F	V E R G F E G F R V
UniRef90_I6ZX77	N G V K N W	T N G I N A D Y Y L V F A Q T D K G	T C F	V E K G T P G F T H
UniRef90_I3KW23	N G N K F W	T N G P D A D V L V V Y A K T D K G	T A F	V E K G T P G F S T
UniRef90_A9KCF0	N G T K M W	T N G P E A D V V V Y A K T D P G	T A F	I E K D F P G Y R T
UniRef90_UPI0003643BCD	D G A K M W	T N G S I A D V A V V W A Q T D E G	R G F	V P A G T P P G F T T
UniRef90_R9B205	N G T K Q F	T T G K H Q A L I V F A V T D K G	S C F	V P T D T P G Y I V
UniRef90_A0A017RXU4	N G S K V F	T T G G A A D V F V F A M T D R G	S A F	V E K E F E G F S I
UniRef90_W0SF76	N G V K Q F	T T G K N A Q V A V V F A V T D K G	S A F	V P A D A P G Y I V
UniRef90_UPI0003736A61	N G S K M W	T N G G D A D T L V V Y A K T D K G	T A F	V E K G F K G F S A
UniRef90_H5SAZ1	N G A K M W	T N G S I A D V A V V W A K L D G E	R G F	V E K G M K G F S A
UniRef90_U1Y2Q4	N G Q K C F	T N G N I A D V Y T V F A K T D K G	T A F	I E K G T P G L S V
UniRef90_S6GH15	N G N K M W	T N G P D A N T Y V I Y A K T D K G	T A F	V E R D F P G F S R
UniRef90_UPI0003B51552	N G T K N W	T N G S T A S T Y I V M A Q T D H G	N A F	V E K G L P G F T I
UniRef90_L8MDE0	N G A K Q F	S N G K R A K L A I V F A V T D K G	S A F	V P T D T P G F A V
UniRef90_Q0VQ60	N G N K M W	T N G P D A D H T Y V I Y A K T D R G	T A F	V E R S F A G F S Q
UniRef90_UPI0002FD2B13	N G E K C W	T N A G Y A S F V T V T A V T G K D	S A I	V P T D T P G F T I
UniRef90_U1YG97	N G Q K T W	S L C D V A D H F L V F A Y T D K G	S C F	V E R T F E G F S S
UniRef90_G2LHN1	N G N K N F	T H A S Y A D T C V L V A S T D R G	S A F	V P T D T P G F V R
UniRef90_Q8EQK3	N G E K C F	T T N A S Y A K F I T V T A V T E D G	S A I	V P T D T P G L T I
UniRef90_B6A2G3	N G T K F W	T N A P H A D V L V V Y A K T D K G	S A F	I E K G L P G F S V
UniRef90_D8IY31	N G S K M W	T N G P D A D V L V V Y A K T D R G	M T A F	V E K G Y K G F S V
UniRef90_C7HSM3	N G K K I F	T N A P K A D T Y V V F A V T T P G	S A F	V E K G M E G F T C
UniRef90_M4QWS3	N G S K M W	T N G G D A D V L V V Y A K T D K G	M T A F	I E K G M K G F S H
UniRef90_J1FJ41	N G T K N W	T N G S T A S V Y L V I A Q T D P G	I N A F	V E R G M E G F Q I
UniRef90_Q892L5	N G E K K F	T N N S P V A D I F V V F A M T D K G	S A F	V E K S F P G F S I
UniRef90_A1WHJ3	N G E K K M W	T N G P D A D L L V V Y A R T G P	I T A F	I E K G M P G F G C
UniRef90_UPI0003FDA8B5	N G E K C W	T N A T Y A S T V I V T A V T G K	S A F	V P T D T P G M S I
UniRef90_H5XMG4	D G S K M W	T N G T V A D V A V V W A Q T D D G	R G F	V V P T D T P G F S A
UniRef90_UPI00037C3253	H G S K M W	T N A P L A D V A V I W A R A D E G	V R G F	V V P L D T P G V T V
UniRef90_F9DTJ4	N G S K I F	T N G A Y A D T L V V Y A K T D K G	S A F	V E K G T P G L S F
UniRef90_H0Q5H6	N G Q K V F	S N G Q M C D V L V L V A A K T D K G	T L F	V D T S L P G F K R
UniRef90_H3BDT7	N G N K F W	T N G P S A D V L V V Y A K T S H G	T A F	I E K G M P G F S T
UniRef90_A6CNY0	N G N K S F	T N A S Y A K H L A L T A R S E D G	S A I	V P T D A E G F T V
UniRef90_A0A024JT33	N G R K M W	T N G S V A D V A V V W A D E D G	R G F	V P T R T P G F T A
UniRef90_F7V985	N G G K I F	T N A P K A D L Y V V F A V T T P G	S A F	V E K G W K G F E F
UniRef90_UPI00004BE622	N G T K A W	T N S W E A S A A V V F A S T D D G	S A F	V P P M P T S G L T L
UniRef90_W7SS45	N G G K L W	T N G G I A D V A V V W A R A E D G	R G F	V P R G T K G F T T
UniRef90_S3ZFS9	N G S K M F	T N G T W A D V V V L F A R T H K G	V S A F	L L P T D T P G L T R
UniRef90_F2NM15	N G V K S W	T S G G Q A Q L Y V V M A R T G R G	T A F	L L V E K D T P G L S F
UniRef90_B5UB85	N G N K F W	T N G P D A D V L V V Y A K T N H G	S A F	I E K D Y P G F S T
UniRef90_K2K462	S G A K M W	T N S P I A D V F V V W G K T E D G	R G F	I L E K G M K G L S A
UniRef90_F8JX35	T G R K M W	T N G S V A G V A V V W A R T D E G	R G F	V V P T D A P G F S A
UniRef90_UPI000478E030	T G S K C F	T N G S F A K H L A V T A V T E Q G	S A F	V V P T D A T G F T I
UniRef90_V5GRZ5	N G G K M W	T N A P I S S T F I V Y A K T E Q G	T A F	L L E K G M P G F T Q
UniRef90_K2LLA6	N G A K Q F	T S G S E G D V A I V F A V T D P G	S A F	V P T D T P G Y V V
UniRef90_D4K638	N G S K I F	T N A G F A D V F V I V A V T D N V L	S A F	V E R T D P G F S V
UniRef90_U5E8C8	N G S K M W	T N G S V A D V A V V W A Y V D E G	R G F	V P A G T P G F T T
UniRef90_J7ITR6	N G S K I F	T N G G H A T T Y C T F V K T D K G	T C L	I E K D T P G F T I
UniRef90_A0A051TK49	N G A K M W	T N G T F A D V A V I W A R T D D G	R G F	V V P T D T P G F T A
UniRef90_UPI000347E930	N G V K Q F	T S G K N G Q V A I V M A V T D K G	S A F	V V P T D T P G Y V V
UniRef90_Q47R11	T G T K M W	T N G S V A D V A V V W A G T E E G	R G F	V V P A G T P G F T A
UniRef90_M1KPN9	N G S K I F	T N G G A A D L Y L T F A V T D K G	S A F	V E K N T P G F S V
UniRef90_L0JPB0	N G N K M W	T N G S V G D Y F V V L C K T D P G	F S Q I	I V E S D R D G F S A
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UniRef90_C7Q1R4	T G S K L F	T N G T W A D L A L I F A R T G R G	T A F	V V P T D T P G F Q A
UniRef90_U4WGG9	N G S K C F	T N A S Y A T F L A L T A V T D D G	T A L	V V P T D A P G F K V
UniRef90_U1X4J9	N G S K C Y	T N A S Y A K A L A L T A V T D D G	T A F	V V P T D A K G F S V
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UniRef90_UPI000381F6EF	N G S K M W	T N G P D A D V L V Y M R T S R C	M T A F	V E K G M K G F S T
UniRef90_D7CKQ0	N G T K Q F	S N G G G Q V A G Q Y T V F A T L D K G	C M	V D R D T P G I S V
UniRef90_C1DJ6	S G S K T W	T N S P I A D V F V V W A K T D D G	R G F	I L E K G W Q G G L S A
UniRef90_B0Y444	N G T K M W	T N G P D A D Y I V V Y A K T E K G	S A F	V V E K T F K G F S C

	N	E	I	H	R	K	L	S	L	R	A	S	V	T	S	E	L	V	D	N	V	R	P	A	S	A	Q	L	P	L	A	E	G		
UniRef90_W4QA77	G	K	K	E	H	K	L	G	I	R	S	S	P	T	T	E	I	F	D	N	V	R	P	V	A	S	Q	L	P	L	G	E	G		
UniRef90_UPI00040B6FBD	G	K	K	E	K	K	L	G	I	R	S	S	P	T	T	E	L	V	F	E	N	C	R	V	P	K	E	N	L	L	G	E	G		
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UniRef90_18AN95	G	K	K	E	K	K	L	G	I	R	G	S	S	P	T	L	E	I	M	E	D	C	R	V	P	E	E	N	R	L	G	E	G		
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UniRef90_C7H0J2	G	K	T	E	D	K	L	G	M	I	C	A	S	S	T	T	E	L	I	F	Q	N	C	K	I	P	K	D	R	M	L	G	G		
UniRef90_Q17GD3	G	P	K	L	D	K	L	G	I	R	G	S	S	T	C	E	L	V	F	E	D	V	K	V	P	A	K	N	M	L	G	G			
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UniRef90_F4XET7	G	K	K	E	K	K	L	G	M	I	R	G	S	S	T	C	E	L	V	F	E	D	V	K	V	P	A	K	N	M	L	G	G		
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UniRef90_D6Y9M6	Q	E	I	H	R	K	L	S	R	A	S	V	T	S	E	L	H	F	D	D	V	R	L	P	G	V	T	G	G						
UniRef90_UPI00028820A7	G	K	D	E	K	H	M	G	L	G	R	S	R	T	L	Q	T	L	E	D	V	K	V	P	A	N	L	L	G	G					
UniRef90_G2EGH3	G	P	K	E	D	K	L	G	I	R	G	S	S	D	T	H	L	Q	F	N	D	V	K	V	P	K	E	N	R	I	G	G			
UniRef90_G2TB68	G	P	K	L	D	K	L	G	M	R	G	S	S	N	T	G	E	L	V	F	E	D	C	E	V	P	A	E	N	V	L	G	G		
UniRef90_S8E1H6	H	Q	K	L	D	K	L	G	M	R	G	S	S	D	T	C	E	L	V	F	E	D	C	E	V	P	V	E	N	V	L	G	G		
UniRef90_U2L0S3	G	L	P	E	K	K	L	G	I	R	G	S	S	T	C	E	L	F	F	D	D	V	Q	V	P	L	G	N	V	L	G	G			
UniRef90_N6U0F0	G	Q	K	L	D	K	L	G	M	R	G	S	S	T	C	E	L	I	F	D	N	C	R	V	P	A	S	N	R	I	G	G			
UniRef90_H1ZCQ6	G	R	K	E	N	K	L	G	M	R	A	S	S	T	E	A	E	L	F	D	N	C	R	V	P	A	N	R	I	G	G				
UniRef90_D2UXG9	A	Q	K	L	D	K	L	G	M	R	G	S	S	N	T	C	E	L	V	F	Q	D	C	E	V	P	V	E	N	V	L	G	G		
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UniRef90_M7A3K2	T	E	I	H	G	K	L	G	I	R	G	S	S	T	C	E	L	N	L	D	G	V	R	L	P	A	D	A	M	L	G	G			
UniRef90_G9QH70	S	C	D	Y	E	K	M	G	V	R	A	S	S	N	T	C	Q	L	V	L	D	N	V	R	P	K	E	N	L	G	G				
UniRef90_E0NJ77	G	E	P	E	D	K	M	G	I	R	A	S	S	T	C	E	L	I	F	E	D	C	E	V	P	V	E	N	L	G	G				
UniRef90_I6ZX77	A	Q	K	L	D	K	L	G	M	R	G	S	S	D	T	C	E	L	V	F	Q	D	C	E	V	P	V	E	N	L	G	G			
UniRef90_3KW23	G	S	R	I	E	K	H	M	G	Q	H	C	S	D	T	C	E	L	V	F	Q	D	C	E	V	P	V	E	N	L	G	G			
UniRef90_A9KCF0	U	N	Y	E	K	M	G	V	R	A	S	S	N	T	C	E	L	F	D	H	C	E	V	P	K	E	N	L	G	G					
UniRef90_UPI0003643BCD	S	D	I	H	R	K	L	S	R	A	S	V	T	S	E	L	V	L	S	G	V	R	L	P	G	V	T	G	G						
UniRef90_R9B205	S	R	I	E	K	H	M	G	Q	H	C	S	D	T	C	E	L	I	F	K	D	C	R	V	P	A	D	A	V	L	P	G	V	G	
UniRef90_A0A017RXU4	G	K	E	D	K	M	G	I	R	A	S	S	T	E	A	E	L	F	E	N	C	R	V	P	A	E	N	L	G	G					
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UniRef90_UPI0003736A61	G	T	H	D	L	K	G	M	R	G	S	S	N	T	F	P	L	F	F	D	D	C	E	V	P	E	E	N	L	G	G				
UniRef90_H5SAZ1	P	E	M	N	K	H	S	L	R	A	S	V	T	S	E	L	F	F	D	D	C	E	V	P	E	E	N	L	G	G					
UniRef90_U1Y2Q4	G	K	I	E	K	M	G	I	R	G	S	S	T	C	E	L	F	F	E	D	C	E	V	P	E	E	N	L	G	G					
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UniRef90_UPI0003B51552	G	P	K	E	N	K	M	G	V	R	G	S	S	D	T	H	S	L	M	F	D	D	V	K	V	P	A	E	N	R	L	G	G		
UniRef90_L8MDE0	D	R	S	E	H	K	M	G	I	R	A	S	S	T	C	A	V	L	T	S	N	C	R	V	P	E	E	N	L	G	G				
UniRef90_Q0VQ60	A	Q	K	L	D	K	L	G	M	R	G	S	S	N	T	C	E	L	V	F	Q	D	C	P	V	P	E	E	N	L	G	G			
UniRef90_UPI0002FD2B13	N	S	N	Y	E	K	M	G	V	R	G	S	S	N	T	S	E	L	I	L	E	D	V	R	P	K	G	N	L	L	G	G			
UniRef90_U1YG97	K	A	I	K	G	K	L	G	I	R	A	G	N	T	G	E	L	F	F	D	D	M	R	V	P	A	A	N	L	V	G	G			
UniRef90_G2LHN1	G	K	K	E	N	K	M	G	I	R	A	S	S	D	T	A	S	L	A	F	V	D	M	K	V	P	A	E	N	R	L	G	G		
UniRef90_Q8EQK3	T	S	N	Y	D	K	M	G	V	R	G	S	S	D	T	A	S	E	L	V	L	N	D	V	R	P	S	N	L	L	G	G			
UniRef90_B6A2G3	S	K	K	L	S	K	L	G	M	R	G	S	S	D	T	A	E	L	V	F	Q	D	C	P	V	P	E	E	N	L	G	G			
UniRef90_D8YJ31	A	Q	K	L	D	K	L	G	M	R	G	S	S	T	C	E	L	H	F	D	D	V	K	V	P	E	E	N	L	G	G				
UniRef90_C7HSM3	S	D	H	Y	D	K	L	G	I	R	S	S	T	C	E	L	H	F	D	D	V	K	V	P	E	E	N	L	G	G					
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UniRef90_J1FJ41	G	P	K	E	N	K	M	G	I	R	A	S	S	T	C	E	L	M	F	T	D	V	K	V	P	E	E	N	R	L	G	G			
UniRef90_Q892L5	G	K	L	E	D	T	M	G	L	R	A	K	V	A	E	T	I	Y	K	D	C	K	V	P	E	E	N	R	L	G	G				
UniRef90_A1WJH3	A	Q	R	L	D	K	L	G	M	R	G	S	S	T	C	E	L	H	F	D	D	V	K	V	P	E	E	N	R	L	G	G			
UniRef90_UPI0003FDA8B5	R	A	E	Y	E	K	M	G	V	R	G	S	S	N	T	G	E	L	I	L	N	D	V	R	P	E	A	Q	V	L	G	G			
UniRef90_H5XMG4	H	E	I	T	R	K	L	S	L	R	A	S	V	T	S	E	L	V	L	D	G	V	R	L	P	Q	E	A	T	G	G				
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UniRef90_H0Q5H6	U	I	R	E	K	M	G	V	R	G	S	S	T	C	E	L	H	F	D	D	V	K	V	P	E	E	N	R	L	G	G				
UniRef90_H3BD7	G	K	N	L	E	K	M	G	L	R	A	S	S	T	C	E	L	F	F	D	D	V	K	V	P	E	E	N	R	L	G	G			
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UniRef90_A0A024JT33	N	T	I	H	H	K	L	S	L	R	A	S	S	T	C	E	L	V	L	D	D	V	R	L	P	Q	E	G	G						
UniRef90_F7V985	G	D	H	Y	D	L	K	G	I	R	S	S	T	C	E	L	I	F	N	N	V	R	L	P	Q	E	G	G							
UniRef90_W7SS45	G	K	A	E	D	K	M	G	I	R	A	S	S	T	C	E	L	I	F	D	D	V	K	V	P	E	E	N	R	L	G	G			
UniRef90_S3ZFS9	R	P	V	H	G	K	L	G	I	R	G	S	S	T	C	E	L	V	L	E	D	V	R	L	P	Q	E</								

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UniRef90_A1VJF3	L N D D Q E Q V R D A V R A F A Q A E L W P H A A	
UniRef90_B0WWQ1	D A L P E T H Q M L Q K T C R D F A D S E L V V P V A A	
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UniRef90_UP100047B8EDF	M D F D L P E S H R A L Q S S I R D F C E R R V K P Y A R	
UniRef90_F8CDH5	M D F A L S E E Q R A Y A A S A R E F A Q S E F R P H A A	
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UniRef90_G8ATV2	M D F A L S E E Q Q A F R D T A R D F A Q Q E M A P N A A	
UniRef90_W8FBK7	D Y Y D D D L T T E E H K L I R Q S I R D F V K K E I S P N V E	
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UniRef90_K0CBD5	M S E E L E F F R E N V R R F V K E E V A P N Y L	
UniRef90_E7QQ92	M D F E L T D E Q Q A I R D E V R A F A K N E V E P I A K	
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UniRef90_W0JMX5	M S F Q L T D E Q R A I R Q S V R E F G A E E I E P V A R	
UniRef90_Q898H5	M N F N L T P E Q E L L R E T V A S F A Q R E I A P I A A	
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UniRef90_UP10003595563	D L P E T H E L L R K T C R D F A D N E L I P V A A	
UniRef90_UP10002DEBB59	M D F E L S E P Q R L V R A M V R D Y V A R R V A P G A A	
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UniRef90_R7U9G5	L S E Q H Q M I L R D A L R A F S Q E R L L P N A A	
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UniRef90_UP10004779A90	F P L G E E I D A L R D A V V R R F F A D A Q I A P R A E	
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UniRef90_T0RG72	M D F E L P A E H R M I R D T V R E F C E E E I A P V A Q	
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UniRef90_UP1000362494B	D W T D P F L L E Q Q L T D E Q R M V R D S A H Q Y A Q A K L L P R V R	
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UniRef90_UP1000470B8F0	F Q E E H E A F R R T V R A V V D K E L L R P F A A	
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UniRef90_H8MPW3	M T E E L D E V R D L A R T F C R N E L V P H Q Q	
UniRef90_A6M221	M D F N L T E Q K E K I V K M V R E F A E N E I K P K V V	
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UniRef90_Q5QWK5	M D F T L D K K H E M A R E L F K N F A E N E V K P L A K	
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UniRef90_C4GBX4	S L S E T H R L L Y K T C R D F A E G E L K P V A A	
UniRef90_W5IXH5	M N F E L T N E Q K M I Q R T L R E F S E A E V A P N A L	
UniRef90_D5WSU6	M D F A L N E E Q R A F Q E V I A A S F A R D E M E P H A R	
UniRef90_B5Y5R5	M D F A L T D D Q R A I Q Q D A A R A F A D A E L A P H S A	
UniRef90_J9K8V9	L F E P E H E L F R E S Y R K F L D L E V A P N H D	
UniRef90_D5DML9	D F D F G L P E M A E Q I R E T V V R F F A D E Q I A P L A D	
UniRef90_I3TH26	F E F S P E Q Q Q I Q E L C R K F A K E E I I P K A A	
UniRef90_UP10003684FA8	Q S D Y R W D D P L L F E E E L T S E E R M I R D A A R T Y A T E K L Q P R I Q Q	
UniRef90_D9QHM0	M D F R L E K K Q E N V R N M V R E F T T E N E I K P I A G	
UniRef90_M2XJP9	M D F F L L D D Q K H E M A R S L F R E F A E K E V K P L A I	
UniRef90_UP10003B3EEA9	M D F S L T E E I K F L C K G V Q K F V K E E V E P V A M	
UniRef90_UP10001CBA4C1	P I P N M L P R H L F N E E E H E A F R E T V V R K F Y E K E V V V P N I E	
UniRef90_K1ZVZ3	L S E D H L M I Q K T C R D F A E R E L K P I A A	
UniRef90_A3R4S5	F N D D H E A F R E T V V R A F L T K E V V V P Q Y A	
UniRef90_C6PUC2	M D F R L E K K Q E N V R N M V R E F T T E N E I K P I A G	
UniRef90_UP10003FB2595	M D F F L L D D Q K H E M A R S L F R E F A E K E V K P L A I	
UniRef90_UP1000410EEDA	M D F S L T E E I K F L C K G V Q K F V K E E V E P V A M	
UniRef90_A0A023RVRS5	P I P N M L P R H L F N E E E H E A F R E T V V R K F Y E K E V V V P N I E	
UniRef90_D6WXB7	L S E D H L M I Q K T C R D F A E R E L K P I A A	
UniRef90_G0L9P3	F T E E H Q K L F R E S L R D F L S K E V I P H I D	
UniRef90_UP10003B74662	L S E E H Q K L R D T V A Q F I D R E I I N P H A D	
UniRef90_M0MJA3	D L T D E Q R A I R D L V R E F A R E E I I R P G A E	
UniRef90_D2RVN7	G L N F D L G D T I D S L R S A I Q D F A A N E I A P R A A	
UniRef90_C5CM70	L L R Q E H D I F R K A L R K F L E K E A Y P Y Y D	
UniRef90_UP10003708164	F L F T E E H D R L R E S I S R F F V A K E L A P H A E	
UniRef90_D3F042	Q F T Q E E H E L L R R T V V R N F V D K E L N P H V R	
UniRef90_Q0VQW2	L F S E D H E T F R D S V V R K F V A Q Q V L P H H P	
UniRef90_K2GKG3	M K F D L G E D V G A L R D M V H R W A Q D R L K P M A A	
UniRef90_F4KYA5	S Y Y P L D Y F G M D A L L T E E H K L I R Q S V R E W V E S F V M P K I D	
UniRef90_X7FBJ8	F N E T Q R M L M D T C R G F A E T E L M P K A K	
UniRef90_G8PIB3	M D M D E D L K G E L E L F R D N V K R F I E A E I L P H Y D	
UniRef90_K1L559	UniRef90_J9S183	D D D L T A L R D L A R S F C E K E I I K P N A E
UniRef90_C1C056	E D R F Q G H D Y Y N I D D L L S E D H L L A R E A V R T W V K Q E V T P I I E	
UniRef90_D5WQ20	M D F E L T Q E Q K D I Q R A A R E F A Q A E E F T P R G R	
UniRef90_D3RZ15	UniRef90_I2JQ91	UniRef90_F4L413

50                    60                    70                    80

UniRef90_L0A4A9	E W F D S G D [V] P R D I M L K L G E M G L L G P N L P E Y G C A G V S G T A Y G
UniRef90_UP1000402728B	R M E A E D R F P R E V L K K M G D L G L M G I P I P E Y G G A G M D Y T S Y I
UniRef90_E3L433	K V D Q E N Q F P S H W T K F G E M G I L G I T V P E Y G G L D R S Y L E H T
UniRef90_A1VJF3	R W D K E H Y F P K E A H K G L A A L G A Y G I C V P E F G G A N L D Y V T L A
UniRef90_B0WWQ1	K I D R E H C Y P A E Q I A R A G D L G L M A I T L S E Y G T G L D Y M A Y A
UniRef90_R6EZJ7	E T D R T A Q F P A E N I E K L F H Y G V M G M G V P E Y G G A G A D D I S C A
UniRef90_H3NUF6	Q W D E E S I F P K A A L K A A G D L G F M G M Y T P E A G G L G M S R L D A S
UniRef90_UP100047B8EDF	E W D D Q N H F P L P V F K K L G E L G L M G V L V P E Y G G S G F G Y F E Y V
UniRef90_F8CDH5	E W D K D E K F P M E V V R E L G Q L G V M G M L V E E Y G G A A M D S L A V A
UniRef90_Q6C643	E K D V D N A F P P N H L W E K F G E A G F L G M T A P E Y G G G L N L G Y L A H S
UniRef90_G8ATV2	H W D E E N S V F P V D T L R Q A A A L G F A G I Y V E E F G G S G L G R L L D A A
UniRef90_W8FBK7	K W A Q D A Y F P S D I V R K F G D V G A F G P T V P E Y G G G G L D Y I S Y Y G
UniRef90_Q0B088	E I D E S S R Y P A E V I E Q L A A A G G W M G M P Y P E Y G G A G L D Y V S Y A
UniRef90_UP10003728205	Q W F E R G E I P R E L A V E L G S G V L G M H L E G Y G C A G T S A T A Y G
UniRef90_A0Y865	Q W E K D G I F P R H L W N K L G E Q G L L A V D L P E Y E G V G A D F L F S M
UniRef90_K0CBD5	Q W D E E G T F P R E L Y R K A A E V G L F A A G Y P E Y G G L D L D L F Y M L
UniRef90_E7QQ92	E Y D Q K E K Y P W E I L D K A A E M G L T G A N I P E Y G G A G Y S P L E V A
UniRef90_B6A3L9	D A F R N E K T D P A I F R E M G E L G L L G P T I P P D Y G G A G L G Y T A Y G
UniRef90_W0JMX5	E H D E N G E Y P A E L V E K A A D L D L V G T S P E Y G G A G M D L L S G V
UniRef90_Q898H5	E N D E N K E F P M E A Y K K L G E M G I L G L P F P E Y G G T G G G Y M S Y V
UniRef90_M7XGJ1	E V D R K N E F P M E M W K L G E M G L L G V T V K E D G G L G K G Y L D H
UniRef90_UP100047AE8C2	E I D Q T E R F P I E N V K K M A K C G M M G I P F K E L G G A G G D V L S Y I
UniRef90_UP10003595563	Q L D R D H M F P K E Q V R Q M G E L G L L M C M D V P E D G G T G L D Y L A Y A
UniRef90_UP10002DEBB59	R M E K G E F S K E L I S K M G E L G L L M G I P I P E Y G G A G M D F V S Y I
UniRef90_E6SK20	E R D R T G R F P A E Q F R E L G E L G V L G L P F P E E G G S G G D T V S F A
UniRef90_A6UUI8	E A Y R E E T T D P A I F R E M G D L G L L G V T V P D Y G G V G A S Y V A Y G
UniRef90_A9VBZ6	A W E K E G Q V P R A I W E K A G E N G L L G I P P E Y G G P G L D V Y G A A
UniRef90_R7U9G5	E W E K A Q G I S R E A W E K A G E N G L L G V T A E K Y G G G D F L S T M
UniRef90_UP1000473DBF8	R W D K E H H F P Q E E L K E L A A L G A F G G V A V P E H G G A G L D Y V S L A
UniRef90_C1B3T7	Q W E R D G I V P R K V F R E A G D L G F L G M E I P E F G G G G V S D F R F N
UniRef90_DOLV26	K Y D E S G E F P R D V L K R A W D T G L L N I E V P E Y G G L G G S C L D H S
UniRef90_UP10004779A90	Q W E K D G I V D R D L W R R A G A A G L L G M D A P E Y G G G G E D F R F H A
UniRef90_A0A021W6E8	Q I D H D N A F P Q D L W L K L G E M G L L G M T V P E F G G S E M G Y L A H C
UniRef90_UP1000300B769	E I D E S G E F P W D I V E L F R E Y G L L G V A M P E Y G G G G A D L L T F C
UniRef90_A0A059ML41	R I I E Q R F I I D R E I W I E A G K L G L L G L E V P E Y G G A A G D Y R F N A S
UniRef90_T0RTG2	S I D K N E K I P A D L V A K L G E N G F L G S Y V P E Y G G A G M D Y T S Y S
UniRef90_A6FJB4	Q I D R D N L U F P A D M W Q K F G D M G L L G I T I E E Y G G V N M S Y L A H V
UniRef90_J3JGF8	E Y E D E H Q F P A D V F G Q L A D L D M M G V P I E E Y G G L G G D Q L M Y A
UniRef90_W2TPS6	E I D R D N T F M R S F W K K L G D H G L L G V T A P A Y G G S H M N Y F S H V
UniRef90_UP1000372006B	E W D E K K H F P V D T L R A A Q M G F A G I Y V D D V G G S G L S R L D A A
UniRef90_S7192	Q I D H D N Q F V P H L W P M F G D M G L L G V T V D E A G G A E M G Y L A H V
UniRef90_UP1000362494B	A W E E A H W L G D D V I Q Q M G E L G F L G M V V P E Y G G T Y S D Y I A Y A
UniRef90_D3PPW9	E W W E S A E F P V H L I R K F G E M G F L G T T I P P E Y G G M G A S S A A Y G
UniRef90_UP1000470B8F0	E W Y E G A I F P T E I V R E M G E L G L L G M H L Q G Y G C P G R S A V E Y Y G
UniRef90_UP1000403D2DC	Q I E N D Q V P D T L L E K S K E L G L F G L S I P E Y G G M G L N M V G K C
UniRef90_B8KY51	D A F Q K E Q T D P E I F R E M G E L G L L G S T I D G Y G C P G V D Y V S Y G
UniRef90_K9H0G1	E W D R K H Q F P A D A V K Q M G E L G F M G M L V P E W G G V G A D N V T Y A
UniRef90_H8MPW3	D W E A R E E F P R E L F T R F G E L L G F L G L K Y P E Y G G T A A G E L L Y E A
UniRef90_A6M221	A Y D E S G E F P I D T Y K K M G E L G L I L G P Y P E Y G G T G G D Y L S Y V
UniRef90_UP10003B6EE12	Q W D A E E T F P L E T T L R K A G D L G F C G L Y I P E Y G G L G L S R L L D A A
UniRef90_Q5QWK5	E A N R N E N F D R Q I M N E L G E M G L L G A T L L P E Y G G S G V N H V S Y G
UniRef90_I1D3Z1	R W A R Q K H V D R E V W T K A G E V G L L A L S I P E Y G G G G G T F A H E A
UniRef90_L9W0Y5	A I E D E H R F P A E I F D Q L A E L D I M G V P I P D E Y G G G G D T L M Y A
UniRef90_V4A7E5	E I D K T N D F K R K F W L D C G K M G L H G I T A P Q F G G S E M G Y L D H C
UniRef90_C4GBX4	D V D E E R F P R E T I I E K M A K A G F L G I P A V P E Y G G Q G C D P L T Y V
UniRef90_W5IXH5	A W E R Q K V F P Y Q A L R G L A E L G A F F G I T V P Q W G G A G M D Y R S L V
UniRef90_D5WSU6	E W E R A E Q V P R T V L R K M G E L G L Y F G N I L E E Y G G G G E N P L A E A
UniRef90_B5Y5R5	K V D K E H L F P E K Q I K E M G E L G L M A I D I P E L G G T G L D Y L A Y A
UniRef90_J9K8V9	E R D R S K Q F P L D V F K K L G E L G V M G L P F P E Y G G G G A D T V S F A
UniRef90_D5DML9	Q V A D T D E I P H E V V A E M R E L G L F G L S I P E F G G L G L S M S E E V
UniRef90_I3TH26	E W D E K S I F P V E T L R K A A E L G F G G I Y V R E D G G S G L T R L D A A
UniRef90_UP10003684FA8	E W D E T K H F P V D V M R R A E T G F A A I Y T E E H G G M A L G R V E A A
UniRef90_D9QHM0	R W E E Q N V V D R E V W K K A G E Q G F L G M A V P E Y G G G G V L D F R Y N
UniRef90_M2XJP9	R V D R E D W F P D E L W K Q M G D L G L H G I T V E D D G G L G L G Y L E H V
UniRef90_UP10003B3EEA9	E W D K A G E F P K E S L K K L W E L G L L N P E I P E Y G G P G L N I V E A C
UniRef90_UP10001CBA4C1	K A F H E E T F D R E I I S E M G Q Q G F L G A T I K G Y G C A G I N Y V S Y G
UniRef90_K1ZVZ3	Q W E Q L G H P P R E F Y R R M G A L G L L G I A V P E F G G G G A S G L R F S
UniRef90_A3R4S5	E A D K T G E Y P M E V F K K M A D I G L V A L P F S E Y G A G D G Y L A Y V
UniRef90_C6PUC2	D T D E T E T F P R E T V N K M A K A G F L G I P V P E L G Q Q G C D P L T Y V
UniRef90_UP10003FB2595	E I E Q S N E I P E I V K E K S K E L G L F G I S I P E Y G G L G L D M V G K C
UniRef90_UP1000410EEDA	K Y E K Q Q H V D R D L W N K A G A L G L L C T T M P E Y G G A G V D R L L Y S M
UniRef90_A0A023VRV5	Q I D R E H K F P E K Q I K Q L G K L L A V S V K E Y G S G Q D N L A L A
UniRef90_D6WXB7	K W E A T G T I E S F I W K K F G E M G Y F G L L A T D E Y G G L G L D F Y T V
UniRef90_G0L9P3	E W E E A G I F P H E L F K K M G D L G L L G I S K P E Y G G L G L D Y S Y Q T
UniRef90_UP10003B74662	R A D R D E E F P E D A W D G L A D L D L T G L T V P E Y G G F D A D T F T Y S
UniRef90_M0MJA3	E H D Q E G K Y P E D L R R K A A K Y D F V A P S I P E Y G G A G M D K I A S T
UniRef90_D2RVN7	D I D R D N L U F P H D L W Q K M G E L G L H G M T V E E F G G T E L G Y L A H I
UniRef90_C5CM70	Q W E E D R I I P R S F W K K M G D N G F L C P D V P E Y G G T G V D W G F S V
UniRef90_UP10003708164	E W E E T T T F P D S V I R R M G E L G F L G L S V P E Y G G Q G G D Y Y A N L
UniRef90_D3F042	E W E D A G R F P H E V F K K M G D L G L L G V T P E E F G G M G L D Y S Y G M
UniRef90_Q0VQW2	Q W E Q D G L V S R D I W R Q A G A Q G L L C D V P E Y G G P G A D F L F S V
UniRef90_K2GK3	E W D E V S H F P L D L F H S M G H Y G F L G V L V P E Y G G A G L G Y Q E Y I
UniRef90_F4KYA5	E I D R E N A F P H A L W R E M G D L G L L G I T V E Q Y G G S D M G Y L A H V
UniRef90_X7FBJ8	E W E K A D I F P R D I W N K M G E Q G L L S V T P E E Y G G F G T N F L F S M
UniRef90_G8PIB3	E W E K A D I F P R D I W N K M G E Q G L L S V T P E E Y G G F G T N F L F S M
UniRef90_K1LS59	D A A Q H H K D L P G L M Q E L G S I G A L G P Y I P E Y G G P G A D F L F S V
UniRef90_J9SI83	K F I E Q H H V D R D L W N K A G G D L G L L C M S I P E Y G G G G G T F A H E A
UniRef90_C1C056	S I D Q E H R F P E E C V I E M G K L G L M G I T P E E Y G G S G L G A M E Y A
UniRef90_D5WQ20	E W E R E G R V P R E M Y R R A G E L G Y L G L K F P E A Y G G S D D L L A D A
UniRef90_D3RZ15	E Y D E K E E F P F D L W K K A C E L G F I G V H P E Y G G A G L G Y L E N V
UniRef90_I2JQ91	Q W E K D G V V P R E L W L K A G E A G M L C C T I E E Y G G L G A D Y L L Y D V
UniRef90_F4L413	E Y S D R A Q C P T H L F K G L A E I G A F G P S L P E Y G G G G M D E I A Y G

	90	100	110	120
UniRef90_L0A4A9	A M M Y E L   E R C D S G   L R S T A S   V Q G S   L V M Y P   I Y A Y G S E E Q R R T Y			
UniRef90_UPI000402728B	Q T I H E I   S K V S A T I G V I L S V H T S V G T N P   I L Y F G T D K Q K Q Y Y Y			
UniRef90_E3L433	L V M E E I S R G S G S I G L S Y G A H S N L C I N Q   I N R H G T E A Q K T K Y			
UniRef90_A1VJF3	L V L E E I A A G D G G T S T A I S V T N C P V N A I L   M R Y G N P A Q K K Q W			
UniRef90_B0WWQ1	I A M E E V S R G C P S I A V T M S I H N S L Y L G   E K Y G S E E Q K E R F			
UniRef90_R6EZJ7	I I A V E E L S K Q C A S T G D I V A T H N G L C C G P   I E Y G S E E Q K Q K Y			
UniRef90_H3NUF6	L I V E E L A R G C T T T A A F L T I H N M A T A M   G K Y C Q S V I D E W			
UniRef90_UPI00047B8EDF	T A I V E L A K D P S V G L S M A A H N S L C T G H   M M F G N E E Q K K K Y			
UniRef90_F8CDH5	V A V E E L I A R Y D G S L A L T V A S H H N G L G T S H   R V F G T D A Q R Q K Y			
UniRef90_Q6C643	V V M E E L S R A S G S I A L S Y S A H S Q L C I N Q   S L H T T P E Q G E K Y			
UniRef90_G8ATV2	L I F E E L S A A C P S T A A Y I S I H N M A S W M   D R F G N A E Q R E R F			
UniRef90_W8FBK7	L I M Q E E L E R G D S G M R S T A S V Q G S L V M F P   Y Q Y G S E E E Q R R K Y			
UniRef90_Q0B088	M V I E E L I S R S C A A T G F T V S C H T S L A S G P   F N F G N E E E Q K Q K Y			
UniRef90_UPI0003728205	L T C L E E L E A V D S G I R S L V S V Q G S L A M F S   H H W G S E E E Q K Q R W			
UniRef90_A0Y865	V I Q E E F S K A N C A V V G G P M A V H S D I V S H Y   L N Y G T Q S Q K Q T Y			
UniRef90_K0CBD5	I N A Q E E L A R A G V G G L H A S L M S H H L G   P P I I R A G L P A Q K D K W			
UniRef90_E7QQ92	I I V E E L F A V D P G I G L C I L T S T A F G G D A   R E F G T E E Q K E K Y			
UniRef90_B6A3L9	L I A R E E L V E R V D S G Y R S M M S V Q S S L V M V P   D T F G S E A Q K L K Y			
UniRef90_W0JMX5	V V T E E L W R A D P G I G S A I G S R A F G A T M   D A F G D E W M K E E W			
UniRef90_Q898H5	L A V E E I S K V H A S L G I S Y S V N A S L C S G A   Y N N A S E E E Q K K Y			
UniRef90_M7XGJ1	I V M E E I S R A S G S I A L S Y S A H S N L C V N Q   N R H G T P E Q K A K F			
UniRef90_UPI00047AE8C2	I A V E E L S K V C G T T G V I L S A H T S L C A S   I N E F G T Q D Q K E E K Y			
UniRef90_UPI0003595563	I I A M E E I S R G C A S T G C I M S V N N S L Y L G P   I L K N A T A A A Q K E K F			
UniRef90_UPI0002DEBB59	I A I H E E I S K I S P T L G V I L S V H T S V G T N P   V Y F G T E K Q K E K Y			
UniRef90_E6SK20	I A L E E E I A R A C A S T A T L T V A A H V S L   G C T P L Y L F G S D E Q K A R W			
UniRef90_A6U1I8	L V A R E E V E R V D S G Y R S M M S V Q S S L V V Y P   I Y A Y G S E E D Q K R K Y			
UniRef90_A9VBZ6	I M W E E Q A Y A G C Y G P G Y A I H S D I V L P Y V L H Y G T E E E Q K H K Y			
UniRef90_R7U9G5	I V I E E E Q M Y S N C S G P G F A L H S D I V L P Y V L H Y G T P E Q I E K F			
UniRef90_UPI000473DBF8	L V L E E L I A A G D G T S T V I S V N N C P V C S I A A M M Y A N D A Q K E Q F			
UniRef90_C1B3T7	A V I A E E I A R T G T V S V G I N L H N D C V P Y F L A Y A N D D D Q R K R W			
UniRef90_DOLV26	L V L E E E V S Y G C L G F N T S L A A N M L G A M P V I I I A G T T D E Q K K K Y			
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UniRef90_A0A201W6E8	V A M E E I I S R A S G S V G L S Y S A H S N L C V N Q   I Y A N G N Q A Q R E K Y			
UniRef90_UPI000300B769	I I A V E E I I A R V V C A T S A L I I A A Q H L G A M P I L I I A G N T D Q K R R Y			
UniRef90_A0A059ML41	V V I G E E E L S R V S A A I A S S F G I H Y D I V A P Y L V I E L T T E E Q K K Q R W			
UniRef90_T0RTG2	I I I V E E I I S R A C A S T G V L I S A H T S L L G I Y P   I L A F G N E E E Q K K Q Y			
UniRef90_A6FJB4	I I A M Q E E I I S R A S A S V G L S Y S A H S N L C V N Q   I Y R H G N A Q Q K Q Q Y			
UniRef90_J3JGF8	L V I T E E L L G R V S G G I G L S Y S Y A A H V S L L G S K P   E L F G T D E Q K E R W			
UniRef90_W2TPS6	L V M E E L L S R A S G A V A L S Y S Y G A H S N L C V N Q   I V R N G T Q K Q K E K Y			
UniRef90_UPI000372006B	L I I F E E Q L S Q G C V S T A A F I S I H N M V S W I V   D S W G S E A Q R Q K W			
UniRef90_S7192	L A M E E E I I S R A S A S V G L S Y S Y G A H S N L C V N Q   I F R N G N A K Q R E A Y			
UniRef90_UPI000362494B	L V I E E E I I A A A D A A M A T T M M S V H S S V G C G T I   I L N S G S E E E Q K K R E W			
UniRef90_D3PPW9	V I G Y E E L E R I D S G L L R S F C S V Q S S L V M Y P   I W A Y G S E E E Q K K R E Y			
UniRef90_UPI000470B8F0	L A A L E E L E A G D S G L R T F V S V Q G S L L A M S A I H K F G S E E E Q K N R Y			
UniRef90_UPI000403D2DC	A L F F E E E L G K T I N G Y T T I L G A H N G I G S V G I   I V E F A N E E E Q K K Q R Y			
UniRef90_B8KY51	L V A R E E V E R V D S G Y R S M L S V Q S S L V M Y P   I H A F G G S E A Q R E K Y			
UniRef90_K9H0G1	MA L E E E I I A V G N G A V V S T I M S V H N S V G C M P   I L K F G T D E Q K K Q R F			
UniRef90_H8MPW3	V L L E E E L G R C G S G V A A G L G G Q F T I A T G P   I H L F G T E A Q K Q R W			
UniRef90_A6M221	U N I F O R M A T I O N   I L A V D S G Y R S M L S V Q S S L V M H P   I Y T F G T E A Q R K K Y			
UniRef90_UPI0003B6EE12	U N I F O R M A T I O N   I I V F E E E I A A G C T S T T A Y I T I H N M M T W M   I A T F A E P D V A A E W			
UniRef90_Q5QWK5	U N I F O R M A T I O N   I I I A V D S G Y R S M L S V Q S S L V M H P   I Y T F G T E A Q R K K Y			
UniRef90_I1D3Z1	U N I F O R M A T I O N   I V L Y E E E Q A R A G D S A V W G V T V H N G I V A H Y L   I A Y A S E E E K K R E W			
UniRef90_L9W0Y5	U N I F O R M A T I O N   I L V A E E E L G R V S G S I G L S Y V A H T S L L G S K P   I E L F G T E S Q K K R E W			
UniRef90_V4A7E5	U N I F O R M A T I O N   I L V M E E E I I T R G S A I A L A L S Y G A H S N L C L N Q   I V R N G T E K Q K E K Y			
UniRef90_C4GBX4	U N I F O R M A T I O N   I M A I E E E I I A K V C G T T A V A L S A H S S L C C D P   I L N Y G T E E E Q K K Q K F			
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UniRef90_D5WSU6	U N I F O R M A T I O N   I V L H E E E I I G R L N S G F A G T V G H N G I A M R P   I Y R F G T E E E Q K Q A Y			
UniRef90_B5Y5R5	U N I F O R M A T I O N   I I A M E E E I I S R G C A S V G V I M S A H N S L Y L Y P   I Q T F G T D A Q K E E W			
UniRef90_J9K8V9	U N I F O R M A T I O N   I I A I E E E I I S R G C A S A G V I M S V N N S L Y L G P   I N K F G N D Q Q R E E F			
UniRef90_D5DMIL9	U N I F O R M A T I O N   I V V E E E I I S K A C G S T G I T Y S A H V S L L G G A P   I Y L F G T K E Q K E Q Y			
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UniRef90_UPI0003684FA8	U N I F O R M A T I O N   I I I I F E E E I I A K G C T S T A A Y I S I H N M T G W M   I D R F G S Q E E L R E Y			
UniRef90_D9QHM0	U N I F O R M A T I O N   I V I F E E E I I S R G D V S T A A F I S I H N M A T W M   I D R F G S D D E L R A R Y			
UniRef90_M2XP9	U N I F O R M A T I O N   I A I V T E E E T T R R G F S G I G F M L H N D V V V A P Y L   I M D L A T E E E Q K K R R W			
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UniRef90_K1ZVZ3	U N I F O R M A T I O N   I I I I L A R E E I I R I D S S Y R S V L S V Q S S L V M Y A I   I D A Y G S E E E Q K K Q K Y			
UniRef90_A3R4S5	U N I F O R M A T I O N   I A V L S E E E T A R H G V T L G A S R V H S D L V L P Y L   I L I E Y A T P E Q K K Q R W			
UniRef90_C6PUC2	U N I F O R M A T I O N   I I A V E E E I I I S K A C A L G I S Y S V D V S L L C A S P   I Y M F A S E G Q K K K Y			
UniRef90_UPI0003FB2595	U N I F O R M A T I O N   I M C V E E E I I I L A K C C G T T S V I V S A H T S L C I D P   I L T Y G T Q E E Q K E K Y			
UniRef90_UPI000410EEDA	U N I F O R M A T I O N   I A I Y E E E I I I L G K T H N G Y T T I L I G A H T G I I G S V G I   I V E L G T E D Q K Q K Y			
UniRef90_A0A023VRV5	U N I F O R M A T I O N   I I I I I E Q A Y A M D S S T G F S L H S D I V A N Y I N N F G N E E E Q K K Q K W			
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UniRef90_UPI0003B74662	U N I F O R M A T I O N   I V F S E E E I I L G R I K T G V S M A I G V Q T D M A T P A L   I A K F G S D A E L R A E F			
UniRef90_M0MJA3	U N I F O R M A T I O N   I L V N E E E I I L A G G M L A V A T A L S V H C L A T S C I   I A E F G D E D Q R E R W			
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UniRef90_C5CM70	U N I F O R M A T I O N   I V A M E E E I I V S R A S A S V G L S Y G A H S N L C V N Q   I H R N G S D A Q K K K Y			
UniRef90_UPI0003708164	U N I F O R M A T I O N   I V I N E E E I I I E R V G V S G L V G I G L H N D I V V P Y I T A Y G S E E E Q K K Q R W			
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UniRef90_K1LS59	U N I F O R M A T I O N   I L I M Q E E L E R G D S A V R S A A S V Q S S L V M F P   I N E F G S D E E Q K K K Y			
UniRef90_J9S183	U N I F O R M A T I O N   I V L I E E E I I V Q A R V A D S S W G V S L H N G I V A H Y I E Y G S E E E Q K K K T W			
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UniRef90_D3RZ15	U N I F O R M A T I O N   I L I A E E E F C R A D S T I G G S A I I L S D F S S E V   I M K F G S D E E Q K K E E V			
UniRef90_I2JQ91	U N I F O R M A T I O N   I V V F E E E I I V F R S R G Y S G P G F L I H T D L V A T Y I N S F G T E E E Q K K R L			
UniRef90_F4L413	U N I F O R M A T I O N   I I I M Q E L E R G D S G I R S M A S V Q G S L V M Y P   I Y R F G S E E E Q R R R K Y			

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	130	140	150	160
L P E L   A S G R M I   G C F G   L T   E S D G G S D P   G A M R T R A R R D G D H Y   V L				
L P K L   A S G Q Y I   G A F A L   T T   E S G A G G S D A S G   L R T R A V R H G D K Y   I L				
L P D L   I S G K K V   G S L A M S   E A G S G S D V V S M R   L T A V K K E G R Y   I L				
L M P L   A Q G D   L L   G A F C   L T   E P H T G S D A S S   L R T T A V K D G D G Y   V L				
L P G F   L D G R R   I A C   F A L   S E   E P G N G G S D A G A A S T T A T L   K G D R W V   L				
L P M L   T K G H K   I G A F C   L T   E P N A G G S D A S K G T T E A V D M G D H W V   M				
C P A L   V S G E K   L A S Y C   L T   E P G A G G S D A A S   L R T S A K R D G D V Y   R I				
L P K L   A T C E W   L G A W G   L T   E P N T G S D A G N M R T   V A K K E G E Y F   I L				
L P K L   A T G E Y   L G A W G   L T   E P G S G S D A S S   M K T T A V R K G D G W   V L				
L P D L   I A G K K   I G A L A M   S E A G A G G S D V V S M K T T A K K V D G G Y   V L				
L P K L   T T M E H   F A S Y C   L T   E P P G A G G S D A A S   L R T R A E R V G D H Y   V L				
L P K L   A S G E W   L G C F G   L T   E P P D H G S D P   G G M R T N   I K D M G D Y Y   L L				
L V P L   A K G Q H   I G A F A   V T   E P P G A G T D V G A A T T T A T L   D G D S Y   V L				
L P G M A A G T A   I G C F G   L T   E P P D F G S N   P G G M R T H   A K R S G G D W   V L				
L P K M   V S G D C   I G A V A   M T   E P P G T G S D L   Q G V R T S A K R D G D D Y   V I				
V P A V   L R G D K   I S A L A   I T   E P P G G G S D V V A A L T T A R R D G D H Y   V V				
L A P V A A G D A   V M G T A   I S E P P D T G S D V V S S V   S T T A E K D G D E W   V I				
L P K L   A T G E W   L G C F G   L T   E P P D H G S D P   G G S M A T R A K K V D G G Y   S L				
L P A I   A S G E S   C A S A   I S E P P A H G S N   V A G I E   T T A E R T D D G Y   L L				
L P D L   S T G R K   I G A F N   L T   E P P E A G G S D A A N G S   V T A   K E G N H Y   I I				
L P N L   L S G K F   V G S L A   M S E T P T G S G S D V V S M K   L K A T K T T R E   W V L				
L V P L   A K G E K   L G A F G   L T   E P P P N A G T D A A G Q Q   T V A V L N G D H Y   V I				
M T P F   L S G E Q   V G C   F A L   S E P P G N G S D A G A A S T T A Q   L Q S G Q   W V L				
V S K L   A S G Q Y   L G A F C   L T   E P P H A G G S D A A S L K   S R A V L Q Q G D H Y   I I				
L A P A L   R G E Y   V A A   G F G   L T   E P P E V G S H T A   I R T R A V V Q D G D A W   V I				
L P K L   I S G E W   I G C F G   L T   E P P P D A G G S D P   A G M K T R A I R T E G G Y   R I				
L P G A   C A G T Q   I A I   G M T   E P P P G A G G S D L   Q G I S T T A V K D G D H W   V I				
L A P M   V S G K C   I T A I A   M T   E P P P G A G G S D L   Q G V R T N A K K D G D D W   I I				
L K P L   A S G A M   L G A F C   L T   E P P P H T G S D A A A A   R T T A E R D D D D Y Y   V L				
L P G L   A S G E L   I A I   A M T   E P P P G T G S D L   A G I G T T A T L   D G D H Y   V L				
L T R L   T T E E   P I F A A Y   C C S   E P P P D A G G S D V V A G L   S T R V E K H G D D Y   V I				
L P G L   C S G E   V A A   I A M S   E P P P E T G S N V   V A D I R T T A V R D G D S Y   V L				
L P K L   C T G E   V A A   I A M T   E P P P E P G A G G S D V V S M S   C R A E L   R D G V   W V A				
L P A I   A R G E R   L S A F A   L T   E P P P E A G G S D A A G G T K   T R A I R E G D H Y   R I				
L P G F   C T G E   L V A A   I A M T   E P P P P A A G G S D L   A G L   K T T A R R D G E D W   I I				
L P K L   I S G E   H I   V G A   L A M T   E P P P P N A G T D A D G S   L T T Y A E D K G D D Y Y   E I				
L T P L   A T G E E   M G A   W A   L T   E P P P P G S G S D V V S M K   L S A V L D G D D Y   I I				
L P K L   I S G E   H V   G A   L A M S   E T P T N A G S D D V V S M K   L K A E K H G D R Y   V L				
L P K L   T T M E   L I   G S Y C   L T   E P P P P G A G G S D A A S L R   T K A V R D G D H   V L				
L P K L   L D G S W   V G   L A   M S   E P P P P N A G S D D V V S M Q   L K A E R Q G D R F   V L				
L P R M   C T G E   I I   G A F C   L T   E P P P P Q A G G S E A H   N L K   T R A E R V G D K W   V L				
L P K L   A T G E Y   V G C   F G   L T   E P P P P D S G S D P   A N M K T R A R R D G D Y   V L				
L P G M A K   G E I   I G C F G   L T   E P P P P T A G G S D P   A S M A T T A A R N S D S   W T L				
L P K M   A S G E Y   I G A F A   L T   E P P P P E A G G S N A A N L   K T T A V K K G D R Y   I I				
L P K L   A T G E W   I G C F G   L T   E P P P P D Y G S D P   P G G M V   T R A R T V E G G Y   S L				
L T P M A E   G R M   I G A F C   L T   E P P P P Q A G G S D A A A A L   K T R A V K D G D H   W   V L				
L A P A I   R G E K   I G A L   G   T   E P P P P D A G G S D V V A G L   R T T A R R D G D H Y   V V				
L P D I   L S G K K   F G S F   G L   T   E P P P P P N A G S D A A S   L R   T K A R R D G D H Y   V I				
V P K L   A S G A L   W G S Y C   L T   E P P P P P G A G G S D A A S   L R   T K A E R D G D H Y   L L				
L P K L   A S G E W   V G C   F G   L T   E P P P P D S G S D P   A S M R T T A K R T D K G Y   V L				
L P K L   A S G E Y   V G A   L A M T   E P P P P P G T G S D L   Q A   S T R A V R D G D H Y   V V				
L R P L   A E G E T   L G G   W A   L T   E P P P P D S G S D D A S M D T T A T K D G D E W   V L				
L P K L   I S G E   H I   V G A   L A M S   E P P P P P G S G S D D A S D M D T M A V K D G D E Y   V L				
L P K L   T T M E   L I   G S Y C   L T   E P P P P P T N A G S D D V V S M K   L K A E K H G D R Y   V L				
L P K L   L D G S W   V G   L A   M S   E P P P P P N A G S D D V V S M Q   L K A E R Q G D R F   V L				
L P R M   C T G E   I I   G A F C   L T   E P P P P P Q A G G S D A A A A L   K T R A E R V G D K W   V L				
L P K L   A T G E Y   V G C   F G   L T   E P P P P P D S G S D P   A N M K T R A R R D G D Y   V L				
L P K L   I S G E   H V   G A   L A M T   E P P P P P G S G S D D A A S   L R   T K A E R D G D H Y   V I				
L T P L   A T G E E   M G A   W A   L T   E P P P P P G S G S D D A A A A M R T S   A T L   D G D T W   V L				
L P G F   C S G E   I I   G A F C   L T   E P P P P P G T G S D D L   Q G I K   T R A V R D G D H   W   V L				
L P G L   I S G A H   V G S L A   M S   E A G A G G S D V V S M K   L K A D A V Q G G Y   L L				
L G R M   E E P   L F C S Y G   V G T   E P P P P P G G G S D V V A G I R T R A E K K G D H Y   V I				
L P R L   A S G E L   V G C   F G   L T   E P P P P P N H G S D P   P G S L E   T R A K K N N K G   H M   L				
L P G F   A S G D   L M T   A I   A M T   E P P P P P G T G S D D L   A G I   T T T A R R D G D V Y   V L				
L P D L   L S G K K   I G A F G   L T   E P P P P P A N A G T D V V S G Q   A T V L D G D D Y Y   I L				
L P D L   A S G R K   L G F G   L T   E P P P P P G A G T D V V S G Q   A T V L D G D D Y Y   I L				
L P K M   A T G E W   I G A F A   L T   E P P P P P P S A G S N A A N L   K T R A E K K G D K Y   I L				
L L P K M   A T G E T   V T   A I   A M T   E P P P P P P G T G S D D L   Q A   V R T T A V L D G D E Y   V I				
L R P F   T D   C E L   G C F   C   L S   E P P P P P P D A G G S D D V V A G M S T   A V A D G D D C F   V L				
L P S V   N G E K   I G L   G V   G T   E P P P P P P F P G G G S D V V A G M R T T A V R D G D E Y   I I				
L A P A I   S G E A V   V F S I A   V S   E P P P P P P H A G G S D V V A A I   K T T A R K E G D D Y Y   V I				
L P E M   V D G R   P   V G A   F A   L S   E P P P P P P H A G G S N   P A A M T T E A R R E G D E Y   V I				
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L P G   C V S G D   T I   S A I   A M T   E P P P P P P P G A G G S D L   A N I   K T T A L E S D H   Y   V V				
L T P A M   R G E K   I S C   I G   T   E P P P P P P P D A G G S D V V A G I K   T R A V R D G D D Y Y   V I				
L A P A I   A G D M V   A S I A   A V S   E P P P P P P P H A G G S D V V A A V K T T A V K D G D D Y Y   L I				
L P K M   V D G R   P   V G A   F A   L S   E P P P P P P P H A G G S N   P A A M T T E A R R E G D E Y   V I				
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L P R L   V S G E   H V G   A L   A M S   E P P P P P P P P N A G S D D V V S M K   L K A E K K N N G Y Y   V L				
L P G   C V S G D   T I   S A I   A M T   E P P P P P P P P G A G G S D L   A N I   K T T A L E S D H   Y   V V				
L T P A M   R G E K   I S C   I G   T   E P P P P P P P P D A G G S D V V A G I K   T R A V R D G D D Y Y   V I				
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L P K M   V D G R   P   V G A   F A   L S   E P P P P P P P H A G G S N   P A A M T T E A R R E G D E Y   V I				
L P K I   A D G E I   L A S V S   V M   S   E P P P P P P P H A G G S N   V A G I E   T V A E K K D G D E Y   V A				
L P R L   V S G E   H V G   A L   A M S   E P P P P P P P P N A G S D D V V S M K   L K A E K K N N G Y Y   V L				
L P G   C V S G D   T I   S A I   A M T   E P P P P P P P P G A G G S D L   A N I   K T T A L E S D H   Y   V V				
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L P K M   V D G R   P   V G A   F A   L S   E P P P P P P P H A G G S N   P A A M T T E A R R E G D E Y   V I				
L P K I   A D G E I   L A S V S   V M   S   E P P P P P P P H A G G S N   V A G I E   T V A E K K D G D E Y   V A				
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L P G   C V S G D   T I   S A I   A M T   E P P P P P P P P G A G G S D L   A N I   K T T A L E S D H   Y   V V				
L T P A M   R G E K   I S C   I G   T   E P P P P P P P P D A G G S D V V A G I K   T R A V R D G D D Y Y   V I				
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L P K M   V D G R   P   V G A   F A   L S   E P P P P P P P H A G G S N   P A A M T T E A R R E G D E Y   V I				
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L P G   C V S G D   T I   S A I   A M T   E P P P P P P P P G A G G S D L   A N I   K T T A L E S D H   Y   V V				
L T P A M   R G E K   I S C   I G   T   E P P P P P P P P D A G G S D V V A G I K   T R A V R D G D D Y Y   V I				
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L P G   C V S G D   T I   S A I   A M T   E P P P P P P P P G A G G S D L   A N I   K T T A L E S D H   Y   V V				
L T P A M   R G E K   I S C   I G   T   E P P P P P P P P D A G G S D V V A G I K   T R A V R D G D D Y Y   V I				
L A P A I   A G D M V   A S I A   A V S   E P P P P P P P H A G G S D V V A A V K T T A V K D G D D Y Y   L I				
L P K M   V D G R   P   V G A   F A   L S   E P P P P P P P H A G G S N   P A A M T T E A R R E G D E Y   V I				
L P K I   A D G E I   L A S V S   V M   S   E P P P P P P P H A G G S N   V A G I E   T V A E K K D G D E Y   V A				
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L T P A M   R G E K   I S C   I G   T   E P P P P P P P P D A G G S D V V A G I K   T R A V R D G D D Y Y   V I				
L A P A I   A G D M V   A S I A   A V S   E P P P P P P P H A G G S D V V A A V K T T A V K D G D D Y Y   L I				
L P K M   V D G R   P   V G A   F A   L S   E P P P P P P P H A G G S N   P A A M T T E A R R E G D E Y   V I				
L P K I   A D G E I   L A S V S   V M   S   E P P P P P P P H A G G S N   V A G I E   T V A E K K D G D E Y   V A				
L P R L   V S G E   H V G   A L   A M S   E P P P P P P P P N A G S D D V V S M K   L K A E K K N N G Y Y   V L				
L P G   C V S G D   T I   S A I   A M T   E P P P P P P P P G A G G S D L   A N I   K T T A L E S D H   Y   V V				
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	170	180	190	200
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UniRef90_A1VJF3	S G V K Q F I	T S G Q N G Q V A I V A □ T D K G M S A F I   V P T D A P G Y S A		
UniRef90_B0WWQ1	N G T K C W I	S G G Y E A T N G I V F A T T D K G I   S A F I   V P M D S K G L S R		
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UniRef90_E6SK20	H G T K A F I	T N G S R A D Y V V V A A V T D P G I   S N I L   V P R D A P G W R A		
UniRef90_A6U1I8	I G S K M W I	S N A P L A D V F V V W A K S D N A I   R G F V L E K G T K G L S A		
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UniRef90_L9W0Y5	N G T K Q F I	T N A S E A G S I L V K A V T D P G I   S T F I   V P R T D D G F E V		
UniRef90_V4A7E5	N G N K F W I	T N G P D A D V L V V Y A K T D H G I   S A F I   V E K D Y P G F K S		
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UniRef90_W5IXH5	N G V K Q F V	T S G S T A Q A L V F A V T D K G I   S C F   V V P T S T P G Y Q V		
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UniRef90_B5Y5R5	N G T K A W I	T N A H E S G A A I V F A T T D K G I   S A F I   V P M D A P G F S L		
UniRef90_J9K8V9	N G T K S W I	T N A H E A K A S V V F A T T D K G I   S A F I   V R R E Y P G F S L		
UniRef90_D5DML9	N G S K C Y I	T N A S Y A K F L A L T A V T N K E I S A I I V P T E A R G F T V		
UniRef90_I3TH26	N G T K R Y I	T N A P E A G I Y T V M A R T D P G I   S A F I   V E R G T P G L T V		
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UniRef90_D9QHM0	N G S K A F I	S G A G T S D V Y V V M A R T G K G I   S A F V V E K G T P G L S F		
UniRef90_M2XJP9	N G S K T F I	T N G I N A D L V I V V I A Q T D P G F S L L V V E R G M D G F E R		
UniRef90_UP10003B3EEA9	N G T K Y W I	T N A P Y A E T L V V Y G K T D K G I   T A F I   I E K G M P G F S I		
UniRef90_UP10001CBA4C1	N G Q K M W I	T N S G Y A N W Y F V L V A R T S G A F T G F I   V D R D T P G L T P		
UniRef90_K1ZVZ3	K G T K M W I	T N S P I A D V F I V W A K N E A G I   R G F I   L E K N M P G L S A		
UniRef90_A3R4S5	N G S K T F I	T G G A L A D L V L V V C R T A P G L S I L V V E A T S P G F S V		
UniRef90_C6PUC2	N G E K K F T	T N G P I A D T L M V F A L T D K G M S A F I   V E K D F P G F S I		
UniRef90_UP10003FB2595	N G S K C F I	T N G K E A D V Y I I I A Y T D K K F T A F I   V E K D T E G F T F		
UniRef90_UP1000410EEDA	N G S K H Y I	T N A V D D G H V F T V M A V T D K G I   T S F I   V E K D F P G F Q L		
UniRef90_A0A023VRV5	N G S K □ F I	T N G Y L C D M A I V V C K T D K G L S L I   V E A D R A G F T K		
UniRef90_D6WXB7	N G T K S W V	T S G P V G K A A I V F A T V D K G I   T A F I   V P L P S D G V T L		
UniRef90_G0L9P3	N G S K T F I	T N G V Y G D Y C I L A A K T D K G I   S I F I   V P D L D S K G V V S A		
UniRef90_UP10003B74662	N G T K M W I	T N S T Q A D Y L C L L A N T S E G K S L I I V P T K T P G V S F		
UniRef90_M0MJA3	N G T K Q W I	T N G E R A G V V I L F A R T D R D I T Q F V   V P K D T E E G L S V		
UniRef90_D2RVN7	N G N K M W I	T N G T V A D I G V L M A K T H R G I   T A F I   V E M D W D G I T T		
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UniRef90_UP10003708164	N G Q K T F I	T N G I H A D L V I V A C K T H R G V S L L V I V E R G T P G F S R		
UniRef90_D3F042	N G S K T Y I	T N G H R A D Y I L V L M T K T G D G F T V F I   V D M D L P G V I R		
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UniRef90_K2GK3	S G Q K V F I	S N G Q L A D L V L V V A C K T D R G I S L L I V E T D R D G F A R		
UniRef90_F4KYA5	N G S K N F I	T H G A S G N V A V V V R T G E G M S A F I V V E R G T P G F L A		
UniRef90_X7FBJ8	N G T K Y W I	T N G P D A D T L V V Y A K T D K G I   T A F I   I E K T M A G F S A		
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UniRef90_C1C056	N G T K A W I	T N A P E A K S M V V F A T T D K G I   T A F I   V P K D L P G V G L		
UniRef90_D5WQ20	T G S K M F I	T G G A S A D Y V C V A A K T D P G V V S M F I   V E A G M P G F S V		
UniRef90_D3RZ15	N G T K T F I	T N A P I A D Y F V V L A V T D P G F T T F L I V R K N A E G L K I		
UniRef90_I2JQ91	N G Q K V F I	S N G Q N C D L V C A T K T D N G V T L F I   V E G D M K G F V R		
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UniRef90\_K0CBD5  
UniRef90\_E7QQ92  
UniRef90\_B6A3L9  
UniRef90\_W0JMX5  
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UniRef90\_D5DML9  
UniRef90\_I3TH26  
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UniRef90\_F4KYA5  
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UniRef90\_C1C056  
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UniRef90\_D3RZ15  
UniRef90\_I2JQ91  
UniRef90\_F4L413

	210	220	230
P K I K R K M S L R A S V T G E I I V L E D C R V P A S S M I L P N V K G	G K R E K K M G L H G S N T V S L T F D Q C E I P Q E E Q L L G E G E G		
H Q K L D K L G M R G S N T C E L V F E N C E V P E E N V L G E V D	S R L E D K L G Q H S S D T A Q V N F D N C R I P A E E N L I G E G E G		
G K N E D K L G L N G S S T C Q L I F E D C E I P K D N L I G	G K H E V K M G L H G S P T A E I V F Q D C I I P K E N L L G		
G K H E V K M G L H G S P T A E I V F Q D C I I P K E N L L G E E	G K R E D K L G M R A S E T A E I I F E D C K V H E S Q V L G K V		
R P I H G K L G M R S S D T A E L I I F E D V F V P E G N V L G K I N G	A R K L D K L G M R G S N T G E L I I F E D V F V P E G N V L G K I N G		
G K Q E H K L G W K S P T S A V I V F E N C R V P V A N R I G E G E G	P E I H N K W S L R A S I T G E V V F D N V K I P K E N I L P N I D G		
G Q H F Y K M G I R A S Q T S E I I I L K D C R V P R E D L L G E G Q G	G Q H F Y K M G I R A S Q T S E I I I L K D C R V P R E D L L G E G Q G		
P E I R S K L S L R A S V T S E L V L D D V R R L P G D A L L P R A R G	G R N L E K I G L H A S D T S E L L F F E D V R V P P A S A I L L G E		
G R N L E K I G L H A S D T S E L L F F E D V R V P P A S A I L L G E	T Q L E K K M G W N A Q P T R Q I S F D D V C V P A A N R I L G E E		
T Q L E K K M G W N A Q P T R Q I S F D D V C V P A A N R I L G E E	D K I T G K L G I R A S S T A E L I I F D D V R V P P E E N L L V G		
D K I T G K L G I R A S S T A E L I I F D D V R V P P E E N L L V G	P A I H G K V G L R A S I T G E E V V M D G V F V P P E E N L L L P G V T G		
P A I H G K V G L R A S I T G E E V V M D G V F V P P E E N L L L P G V T G	T K I T N K L G I R A S D L A E I V L L D D V F V P P E A N V V G T E N G		
T K I T N K L G I R A S D L A E I V L L D D V F V P P E A N V V G T E N G	G K V E D K L G I R A S S T T C Y L I I F E D M I V P V E N M I G E G K G		
G K V E D K L G I R A S S T T C Y L I I F E D M I V P V E N M I G E G K G	G K K E D K L G I N A T S T C Y L I I F E D C A I P E D Y L L G		
G K K E D K L G I N A T S T C Y L I I F E D C A I P E D Y L L G	G K D E H K M G L S G S R T V Q I M F E D M I M V K P K E N I L L G E E		
G K D E H K M G L S G S R T V Q I M F E D M I M V K P K E N I L L G E E	V R R Y E E M G L H A S D T A E I V L V D D V F V P P L D H L V G		
V R R Y E E M G L H A S D T A E I V L V D D V F V P P L D H L V G	P K I A G K L S L R A S I T G E I V L D N V E V G E E A L L P D V E G		
P K I A G K L S L R A S I T G E I V L D N V E V G E E A L L P D V E G	G A N L D K M G L K A Q D T S E L L F F D D C R V P P E S A I L L G E V		
G A N L D K M G L K A Q D T S E L L F F D D C R V P P E S A I L L G E V	G K K L E K I G M K A Q D T S E L L F F D D V R V L P Q S A V L G E V		
G K K L E K I G M K A Q D T S E L L F F D D V R V L P Q S A V L G E V	A R L E E K L G Q H S S D T A Q I L F E N C R V P P A A N L I L G E G Q G		
A R L E E K L G Q H S S D T A Q I L F E N C R V P P A A N L I L G E G Q G	G R N L E K I G M H A Q D T A E L L F F D N A R V P P A A N V L G		
G R N L E K I G M H A Q D T A E L L F F D N A R V P P A A N V L G	G R K E D K M G Q R A S S N T T D V I F E D V V K V P P K S A L I I G P E N G		
G R K E D K M G Q R A S S N T T D V I F E D V V K V P P K S A L I I G P E N G	G P R M E K L G W Q A S D T C E L L F F D D C R V P P A S H H L I G K E		
G P R M E K L G W Q A S D T C E L L F F D D C R V P P A S H H L I G K E	A Q K L D K L G M R G S S N T C E L L V F E D D C E I P A E N V L L G E V		
A Q K L D K L G M R G S S N T C E L L V F E D D C E I P A E N V L L G E V	M K C E D K L G I K G S S T A Q I L A F D K V V K P K T N I L L G E Y E		
M K C E D K L G I K G S S T A Q I L A F D K V V K P K T N I L L G E Y E	A Q K L D K L G M R G S S N T C E L L V F Q H C R V P P K T N I L L G		
A Q K L D K L G M R G S S N T C E L L V F Q H C R V P P K T N I L L G	T T V W D K M G L N C S P T C E I A L D D V R L S E D R L L G E G E G		
T T V W D K M G L N C S P T C E I A L D D V R L S E D R L L G E G E G	S P K L N K M G M R G S S N T C E L L V F E N C C R V P P E E N V M G G V		
S P K L N K M G M R G S S N T C E L L V F E N C C R V P P E E N V M G G V	G A N E K K M G W N S Q P T A V V N F E D C R V P P A E N L I I G E E		
G A N E K K M G W N S Q P T A V V N F E D C R V P P A E N L I I G E E	T R V E D K L G I K A S D T C A V S L D N C E L S A D M I L G E E		
T R V E D K L G I K A S D T C A V S L D N C E L S A D M I L G E E	N K I Q H K A S L R A S V T S E L V L E D V R V P P A S A M I L P G V K G		
N K I Q H K A S L R A S V T S E L V L E D V R V P P A S A M I L P G V K G	T P I E Q K L S M R A S I Q C D I D L K D V E L P A E A V L L P E V T G		
T P I E Q K L S M R A S I Q C D I D L K D V E L P A E A V L L P E V T G	G S I E K K M G L H G S H T A Q I L Y F E D D L E V P E E N V L G		
G S I E K K M G L H G S H T A Q I L Y F E D D L E V P E E N V L G	P K I E G K L S L R A S I T G E I V M E D V V V G E D A M I L P G V E G		
P K I E G K L S L R A S I T G E I V M E D V V V G E D A M I L P G V E G	V R V E D K L G Q H A S D T C S I A F T D C R I P T D L M L G E G D G		
V R V E D K L G Q H A S D T C S I A F T D C R I P T D L M L G E G D G	G R K L Q K V G W R A S D T A E L L F F D D V R V P P A E N L L G		
G R K L Q K V G W R A S D T A E L L F F D D V R V P P A E N L L G	G K I L E K I G Q I R S A Q V S E L V F E N C C K V P V E N L V G A E G		
G K I L E K I G Q I R S A Q V S E L V F E N C C K V P V E N L V G A E G	G K K E H K M G W N S Q P T R A I T F D N V A I P A A Y R I L G E G E G		
G K K E H K M G W N S Q P T R A I T F D N V A I P A A Y R I L G E G E G	P K I D G K F S L R A S I T G E I V M D G V E V S E D H I F P E V K G		
P K I D G K F S L R A S I T G E I V M D G V E V S E D H I F P E V K G	G R V L D K V G M H G Q D T A E L L F F D D V R V P P V E N L L G G E E G		
G R V L D K V G M H G Q D T A E L L F F D D V R V P P V E N L L G G E E G	T T I W E K L G L N A S P T C E I R L E N V R L P E D R L L G		
T T I W E K L G L N A S P T C E I R L E N V R L P E D R L L G	G K I K E H K M G I R G S A T Y E L I F Q D C K I P K E N I L L G		
G K I K E H K M G I R G S A T Y E L I F Q D C K I P K E N I L L G	G T K E E K M G I R G S A T Y E L I F Q D C K I P K E N I L L G		
G T K E E K M G I R G S A T Y E L I F Q D C K I P K E N I L L G	A R L E E K M G Q H A S D T A Q I L L E D C R V P G T D H L L G E		
A R L E E K M G Q H A S D T A Q I L L E D C R V P G T D H L L G E	Q R K L E E K V G H H A S D T A E L L F F D D C R I P A D R L L G G E E		
Q R K L E E K V G H H A S D T A E L L F F D D C R I P A D R L L G G E E	G A K E D K L G I R G S S T S N L I F E D C S I P P E E N I L G		
G A K E D K L G I R G S S T S N L I F E D C S I P P E E N I L G	I D N Y E E K M G L H A S N T T E L V L E D V V P E E N L L G R G E G		
I D N Y E E K M G L H A S N T T E L V L E D V V P E E N L L G R G E G	A K P D R K M G Q R G A H T A D V I F E D C R V P P A S A V I G G V E G		
A K P D R K M G Q R G A H T A D V I F E D C R V P P A S A V I G G V E G	G A Q E K K M G W N S Q P T A V V Q F D D C R V P P A A N R I G E G E G		
G A Q E K K M G W N S Q P T A V V Q F D D C R V P P A A N R I G E G E G	G R N L D K I G L K A Q D T A E L S F T D V R V P P A A N L L G E E		
G R N L D K I G L K A Q D T A E L S F T D V R V P P A A N L L G E E	G Q K I E K V G M R G S P T A E L V F D D C H V P P A E N L L G		
G Q K I E K V G M R G S P T A E L V F D D C H V P P A E N L L G	G R K E W N M G Q R S S D T R G I T F E D V V V P K E N I L L G E G A G		
G R K E W N M G Q R S S D T R G I T F E D V V V P K E N I L L G E G A G	P I M H G K M S M R A S I T G E I V M D N V L V P A E N E L P N A D G		
P I M H G K M S M R A S I T G E I V M D N V L V P A E N E L P N A D G	G R K L E K I G L R T Q D T A E L L F F D E V V R V P P A A N L L G E E		
G R K L E K I G L R T Q D T A E L L F F D E V V R V P P A A N L L G E E	G K L E D K M G I R A A Q V S E T L Y K N C H V P P K E N I L L G E G E G		
G K L E D K M G I R A A Q V S E T L Y K N C H V P P K E N I L L G E G E G	G T K E H K M G I R G S A T Y E L I F Q D C K I P K E N I Q L G		
G T K E H K M G I R G S A T Y E L I F Q D C K I P K E N I Q L G	G A V E E K M G L R G S H S A E L L F F E D M E V P V E N V L G E E		
G A V E E K M G L R G S H S A E L L F F E D M E V P V E N V L G E E	G K P L N K I G M K Q D D T C E L L F F D N V R V P P K E N I L L G		
G K P L N K I G M K Q D D T C E L L F F D N V R V P P K E N I L L G	G K E D K L G I R A S P T C N I M D N V R V P P K S N V I G D V		
G K E D K L G I R A S P T C N I M D N V R V P P K S N V I G D V	S K L N K L G W R A S D T A E L L A F D N V R V P P A S N L M G E G K G		
S K L N K L G W R A S D T A E L L A F D N V R V P P A S N L M G E G K G	S P R L N K L G M R S S D T A Q V V F F D D V R V P P Q R Y R I T E E		
S P R L N K L G M R S S D T A Q V V F F D D V R V P P Q R Y R I T E E	G P T E D K L G I R A S D T T S L E F D D A R I P P A E N R I T E E		
G P T E D K L G I R A S D T T S L E F D D A R I P P A E N R I T E E	D K I D N K L G I R A S D L A E V V I D D V R V I P P E E N V I G E V D		
D K I D N K L G I R A S D L A E V V I D D V R V I P P E E N V I G E V D	G T K L L N K V G L H S Q D T A E L I F E D C R V P P E E N V L G G E E		
G T K L L N K V G L H S Q D T A E L I F E D C R V P P E E N V L G G E E	G R K L L N K V G L H S Q D T A E L I F E D C R V P P E E N V L L G E E		
G R K L L N K V G L H S Q D T A E L I F E D C R V P P E E N V L L G E E	E K R L L E K K L G M H A S D T A L L A F Q D V R V P P A D A V L L G E V		
E K R L L E K K L G M H A S D T A L L A F Q D V R V P P A D A V L L G E V	D K P L N K L G M R C S E T A Q V V F F D N V R V P P Q R N L I G E T E G		
D K P L N K L G M R C S E T A Q V V F F D N V R V P P Q R N L I G E T E G	UniRef90_G0L9P3 UniRef90_UP10003B74662 UniRef90_M0MJA3 UniRef90_D2RVN7 UniRef90_C5CM70 UniRef90_UP10003708164 UniRef90_D3F042 UniRef90_Q0VQW2 UniRef90_K2GKG3 UniRef90_F4KYA5 UniRef90_X7FBJ8 UniRef90_G8PIB3 UniRef90_K1LS59 UniRef90_J9S183 UniRef90_C1C056 UniRef90_D5WQ20 UniRef90_D3RZ15 UniRef90_I2JQ91 UniRef90_F4L413		

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

50            60            70            80

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UniRef90_U3KM39	E Y D K T G E Y P V P   L I K R A W E	G L   I N T H   P E C G G G   L G L G S F D A   C
UniRef90_C0BK0	E R D E T Q T F P I Q E I K Q L A E	G F   M G M M V P   S Y G G S G L D T M S Y V
UniRef90_U3BAG0	E W D E Q H   F P K D V L   R E A G E	G F   L S   L Y T P   E E G G G   L A L S R   L D A S
UniRef90_UPI00036DAA46	K W D E L   Q E F P L D V F K K L   G E	G L   M G V L V P   E Y G G A G   L S Y F E Y N
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UniRef90_W0P8X6	E   V   A E T D E I   P Q Q I   R D Q M K E	G L   F G L A L   P   E Y G G G L G L T M E E E A
UniRef90_R6QHY4	K D D E E G K F P E K A Y A K M Q M G L I	P   F   P   P   E Y G G Q G A D Y L S Y V
UniRef90_A1ZFB3	E W E T K G E I P R E I   F K R F G D M G Y	G L   P   A L   P   E Y G G T D L D Y F Y S I
UniRef90_X5MHS0	E W D E K A I   F P V D T M R K A A A	G F   A G I Y V   P   E Y G G G S A L T R L D A A
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UniRef90_H0E4R0	E W E E T T F P D W V F T R M G E	G F   L G L S   Y P   E Y G G Q G G D Y A Y N L
UniRef90_B5X0X2	E W E K A G M V S R E   L W Q K A G E	Q   G   L L G   T P   E E H   G G   G G D   L L S A A
UniRef90_UPI0004257033	A W E R Q R M   P R A F W R K L   G D H   G Y	C   P   M   P   E Y G G V G A D F G Y S V
UniRef90_UPI0004790BE5	D W E N A G H P P R D F Y N Q L	G L   V F G   I Q V   P   E F G G A G E T S F K Y Q
UniRef90_G0HXZ6	Q H W   D G T F P T D L   I T E M G E	G F   Y A P   P   N   D G Y G L   P   G L S E T A Y G
UniRef90_J6L9D8	A   D R T N T F P R D L   W P E   L G G   L L G	G L   G I T   V   E E F   G G A G L G Y   L A H C
UniRef90_A3XGR9	K W E T K G E   E R F I   W K K M G D M G Y	F   G   L   D   D   I F Y T L
UniRef90_J3J75	D   D A N D E F P Q D L   V D E M S K L	G L   M G M P   F   P   E Y G G G A G L D Y H S Y A
UniRef90_U7USK7	E R D E K E   V F D R K L   I D E M G E	G L   L G   I P   Y   V   P   E F G G G L G L D Y H S M A
UniRef90_A9TJ89	A   D H H N S F P T D L   W K L   M G D F N L	H   G I T   V   P   E F G G G L G L G Y L L Y H C
UniRef90_Q5XJA7	M A N R N E   F H R E   I V S E M G E	L G V   G P   T   K   G Y   S   V A Y G
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UniRef90_F7NW86	A W D R D H H F P K A   V I Q K A G E	L G F   C   S   L Y   T   P   E D G G M G   L S R   L D S S
UniRef90_M0LV66	E A D E N Q E F P E E   V W D G   L A E	L G L   T G L   T V   P   E Y G G F D A D R R   L T Y S
UniRef90_E1QRM1	E F D D K D E   V P R E   I L K K L   G E	Q   G   L W G   I G   I   D E   L G   G Q G G D T V S A V
UniRef90_E5ACZ2	K T D   D   D N A F P P N E L   W R K   F G E   A G F	G L   V T A   D E F   F G G   L A M G Y Q A H C
UniRef90_UPI0003809D4B	D A Y A R E   H F D R E   M N E M G E	L G L   G S T   L   P   E Y G G A E   L N   H   V A Y G
UniRef90_C7MW87	E   V   D E Q E R Y P   V E A   L R A L   T E A G F   H   A L   H	P   E Y S   G Q G   A D A V   V   A T C
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UniRef90_UPI00036939C8	E W D R D K H F P   V D V L   G E A G E	L G M G G   V Y   I   D E   Y G   G S G L S   R   F D A A
UniRef90_UPI0003B408A5	Q W D   L   E Q T F P   L Q A L   R Q G G Q   L   G F   C   G   L   Y   S   P   E A   G G   L   G L   S   R   L   D A A	
UniRef90_UPI000374130D	D W E K A Q G M P R S I   F E Q M G A	L G M   L G M   G M A     P   E Y G   G S G L P   D Y R Y N C
UniRef90_UPI00036B2AE4	T W E K E G M V S D E   V W L   G A G G S   Q G F   L   C   P   T   V   P   E K   Y   G   G V   D   A   D   F   R Y N C	
UniRef90_A4XS24	D W D R D H H F P   L E   V I R R A A E   Q G Y   L   A   Y   L	
UniRef90_C0BJ82	D W D E A Q Y F P K D I   F E K A G A	L G F   M G M   L   I   P   E Y G   G S G M G Y   H E Y   V
UniRef90_UPI0003720A0B	E W D E T Q H F P   P A E   V F   H   Q   L   G E   L   G   I   M   G   M   L   V   P   E Y G   G A G   L   N   Y   R   A   Y   V	
UniRef90_B1HZ65	Q W E K D H   I P   L T F W R   R L   G D   M G Y   L   C   P   Q   V   E   E Y G   G   L   G   L   D   F   S   F   G   V	
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UniRef90_W7WM84	G W E E Q G Y   V D R E   V W R   K   A G E	G F   L   C   M   T   M   P   E Y G   G G   A   D   K   L   Y   S   V
UniRef90_UPI000364D291	A W R E Q Q H   V D R A L   W R K   A G E	L G L   L   L   A   D   I   V   P   E Y G   G S G G N   F   A   H   M   A
UniRef90_M3FKL3	E A D A S S N Q F P   P L A L   W P   K   L   G   E   Q   G   Q   L   G   L   T   V   E   E Y G   G   T   G   M   G   Y   L   A   H   V	
UniRef90_A0A059IIQ7	A W E A Q G T   I P   K G   L   W P   K   V   G   A   L   G   G   I   Y   V   E   E Y G   G   S   G   L   T   R   L   D   A   T	
UniRef90_V9XPU1	E W E K S G R Y   P T E   I V E   H   H M   K   A   M   G   L   F   G   I   T   T   P   E   Y   G   G   D   L   D   K   V   S   F   T	
UniRef90_C5CW83	E G F R S G E T   D P   B   A   I   F   R   E   M   G   A   L   F   G   P   T   I   P   E   Y   G   G   P   G   L   N   Y   V   A   Y   G	
UniRef90_F7ZDF9	E W E T A G T   I P   K   A   D   I   I V   Q   M   Q   E   M   G   L   F   G   L   T   I   P   E   F   D   G   L   G   V   T   M   E   E   V	
UniRef90_S6GVY6	E   V   A E T   D   N   P   A   D   I   I V   Q   M   Q   E   M   G   L   F   G   L   T   I   P   E   Y   G   G   T   G   S   S   F   F   S   S   I	
UniRef90_M4AQE1	E   L   D   E   I   G   K   F   P   F   D   N   V   K   K   L   A   Q   R   G   L   L   G   V   V   P   E   Y   G   G   L   G   K   T   S   R   H   F   A	
UniRef90_TOLHW4	K W E E D   G   L   V   P   R E   I   W   R   A   G   E   A   G   L   L   L   P   G   I   P   E   Y   G   G   G   G   D   F   L   H   S   A	
UniRef90_H1S627	Q W E K D E   K   F   P   R   E   I   W   N   K   M   G   E   N   G   L   L   C   V   D   P   E   Y   G   G   F   G   A   T   F   T   L   S   A	
UniRef90_U7FUV5	Q W E Q E G   L   V   P   R   D   I   W   R   K   A   G   A   G   I   I   L   P   T   P   E   E Y   G   G   G   G   G   D   F   L   H   T   I	
UniRef90_E3HVN7	K W E K E K M   V   P   R   E   A   W   E   K   A   G   S   L   L   G   M   C   P   N   P   E   Y   G   G   S   G   T   D   F   L   Y   N   L	
UniRef90_H2CEM1	E A N R R E   Q   F   D   R   T   I   M   N   E   L   G   E   L   G   L   G   L   G   T   V   P   E   Y   G   G   L   G   K   V   N   H   V   A   Y   G	
UniRef90_A0A023S757	E W D R A G   I   F   P   K   E   L   F   K   Q   A   G   E   L   G   F   L   G   I   H   D   P   K   Y   G   G   S   G   L   D   Y   W   Y   V   T	
UniRef90_F8CK34	D   L   E   A   T   D   R   F   P   A   E   L   V   P   V   F   G   D   M   G   L   L   Q   L   W   L   P   E   Y   G   G   P   G   G   N   L   T   L   V   C	
UniRef90_UPI00037E9983	E Y   A   E   N   K   L   L   A   R   E   V   W   H   E   A   G   K   Q   G   I   I   L   G   L   E   I   I   P   E   A   Y   G   G   G   G   D   Y   R   F   N   A	
UniRef90_E4WE22	E   I   D   Q   A   N   S   F   P   N   Q   L   W   P   L   L   G   E   M   G   L   L   G   V   T   V   S   E   Y   G   G   A   G   M   G   Y   L   A   H   V	
UniRef90_E8LZZ7	S A Y   S   E   E   R   F   D   R   E   I   F   E   N   E   M   G   G   L   L   G   L   G   A   M   V   D   E   Y   G   G   G   H   A   S   H   V   Y   Y   G	
UniRef90_UPI000425E730	A Y   D   R   S   G   E   Y   P   V   P   I   I   K   K   A   W   E   L   L   G   L   I   N   S   H   I   P   Q   Y   G   G   M   G   L   S   I   F   D   A   C	
UniRef90_M4AKL7	R   W   F   E   D   G   A   P   P   R   G   L   M   R   S   L   G   S   L   G   V   L   G   M   H   L   E   G   Y   G   G   C   G   G   M   T   A   T   E   Y   G	
UniRef90_D5UWT6	L   W   D   R   E   H   I   F   P   K   D   V   I   K   K   A   G   E   L   G   F   C   G   L   Y   T   P   E   E   G   G   L   G   S   R   L   D   S   S   G	
UniRef90_U1KQ07	D   C   A   E   R   N   I   F   P   E   Y   L   V   P   E   F   G   K   L   G   F   P   T   V   S   T   D   Y   N   G   G   L   D   Y   I   S   Y   G	
UniRef90_A1ZSL0	T   L   E   E   T   D   D   V   P   A   E   I   V   A   D   M   K   E   M   G   L   F   G   I   S   I   P   E   Y   G   G   G   L   S   M   S   Q   E   C	
UniRef90_Q0JY37	E   W   E   E   L   G   T   V   P   I   E   V   Y   R   R   T   A   D   I   G   I   N   G   L   Q   I   P   E   Y   G   G   A   G   M   D   F   L   F   N   M	
UniRef90_UPI0004025A33	E   W   D   Q   A   G   E   F   P   R   D   V   F   R   R   C   G   E   L   G   F   F   G   I   H   D   P   A   Y   G   G   S   G   L   D   Y   W   Y   V   A	
UniRef90_H8MJ07	Q   Y   D   K   S   G   E   Y   P   W   P   I   I   K   K   A   W   E   L   L   G   L   M   N   N   H   I   P   A   D   G   G   L   D   D   V   F   T   T   C	
UniRef90_Q9VSA3	D   Y   A   Q   R   A   E   F   P   V   Q   I   V   K   Q   M   G   E   L   G   G   C   F   G   P   T   V   P   E   Y   G   G   G   G   L   D   Y   I   S   Y   G	
UniRef90_UPI000472208D	Q   W   E   K   D   G   I   V   S   R   E   A   W   L   A   A   G   R   Q   G   L   L   G   L   A   V   E   E   Y   G   G   G   G   N   P   D   F   R   Y   G	
UniRef90_F2RF12	E   S   A   Q   N   A   I   F   P   E   H   L   L   A   K   F   G   E   L   G   L   F   G   T   T   I   P   Q   Y   G   G   G   G   G   L   D   Y   I   S   Y   G	
UniRef90_UPI000470D1EC	T   T   W   Y   D   E   A   S   V   P   R   E   I   W   Q   K   A   G   E   L   G   L   G   L   M   H   L   D   G   Y   G   C   A   G   S   S   A   T   A   Y   G	
UniRef90_E3BDK7	R   R   W   E   A   E   G   I   V   D   R   E   I   W   R   Q   A   G   R   A   G   F   L   G   T   A   I   P   A   Y   G   G   G   G   E   P   D   F   R   Y   A	
UniRef90_R9F6V9	K   H   D   T   E   E   S   F   N   I   E   A   F   R   K   M   G   E   L   G   V   L   G   G   I   T   A   P   K   Y   G   G   A   G   M   G   A   V   A   A   T	
UniRef90_E1WXK7	K   W   E   E   D   R   L   I   P   K   S   F   W   R   K   L   G   E   M   G   Y   L   C   P   Q   V   K   P   E   Y   G   G   G   L   E   T   D   F   R   Y   A   V	
UniRef90_UPI00030277C1	D   W   R   R   A   G   L   V   P   R   D   I   F   T   A   L   G   K   G   I   G   T   S   I   P   E   Y   G   G   G   G   Q   D   D   Y   R   Y   N	
UniRef90_UPI0003807DB2	Q   I   E   E   E   D   R   L   I   D   K   A   K   E   L   G   L   F   G   I   S   I   P   E   Y   G   G   G   G   L   S   T   T   A   K   S	
UniRef90_UPI0003665598	E   W   D   E   A   Q   T   F   P   V   E   L   F   R   K   M   G   S   Y   G   F   M   G   I   I   V   P   E   Y   G   G   A   G   L   G   Y   Q   E   Y   I	
UniRef90_C2FUC8	E   Q   W   E   K   D   G   Q   V   S   R   E   I   W   Q   K   A   G   E   L   G   F   L   C   P   C   L   P   E   Y   G   G   V   G   A   D   F   R   Y   S   A	
UniRef90_N6X038	L   W   D   E   T   K   Y   P   F   V   E   I   V   M   R   E   A   A   G   L   G   F   A   I   Y   T   E   E   H   G   G   S   G   L   S   R   H   D   G   V	
UniRef90_V4Q6Z2	E   A   N   R   H   E   I   F   H   R   E   I   M   T   E   M   G   A   L   G   L   G   L   G   L   G   C   T   L   P   E   Y   G   G   C   A   G   L   S   Y   V   A   Y   G	
UniRef90_I3TUW9	G   W   D   I   D   H   T   F   P   V   E   V   I   R   E   A   G   E   L   G   F   C   G   I   Y   T   P   E   Y   G   G   M   G   L   S   R   L   D   T   S	
UniRef90_N6W247	E   F   Y   E   R   E   E   F   P   Y   E   I   V   V   A   R   M   G   E   M   G   L   F   G   L   P   F   C   P   E   Y   G   G   M   G   G   D   Y   F   A   L   C	
UniRef90_C7MXU7	Q   M   D   E   Q   S   H   M   D   E   S   V   I   R   G   L   F   G   I   Q   G   L   M   G   I   E   I   E   E   H   G   G   S   E   S   N   F   F   A   S   I	
UniRef90_D7BD72	Q   Y   D   K   S   G   E   Y   P   W   P   Q   L   R   I   L   A   E   L   L   G   L   L   G   M   T   T   P   E   W   G   G   A   G   L   D   S   V   T   W   V	
UniRef90_L9U611	E   M   E   E   T   D   E   F   P   E   E   L   I   E   V   F   G   D   L   G   L   L   Q   M   W   V   P   E   Y   G   G   P   G   G   D   L   T   S   V   C	
UniRef90_F6B078	E   V   A   E   T   D   E   P   E   S   I   V   Q   E   M   R   N   L   G   L   F   G   M   T   I   P   P   E   F   G   G   L   E   T   T   M   E   E   E   V	
UniRef90_B3RK78	E   M   E   E   T   K   M   F   P   K   D   L   L   E   E   V   G   K   L   G   W   F   G   F   R   I   P   P   E   Y   G   G   S   G   G   S   L   F   Q   L   L	
UniRef90_UPI00039ABDBF	E   V   D   E   Q   S   R   F   P   Q   E   A   L   D   A   L   S   A   N   D   L   H   A   V   H   I   P   P   E   Y   G   G   A   G   A   D   A   L   A   T   V	
UniRef90_U6DR97	E   W   E   K   A   G   E   V   S   R   E   L   W   E   K   A   G   K   Q   G   L   L   G   I   N   I   A   E   H   G   G   V   G   G   D   L   Y   S   A   A	

	90	100	110	120
UniRef90_B8IQ44	L A I E E I A A G D G A V S T I M S V H N S V G C M P I L R F G T E E Q R R R F			
UniRef90_U3KM39	L I A E E L A Y G C T G I Q T A I E A N S L G Q I P V I I A G N E E Q Q K Q K Y			
UniRef90_C0BK0	L A M E E L S K I D A S A S V I M S V N S L V C W G L E K Y G N T Q K E K Y			
UniRef90_U3BAG0	L I V F E Q L A M G C T S T T A F M T I H N M V T W M I A S F A T P E V K D D I			
UniRef90_UPI00036DAA46	A A I Q E I S K V C G S I G L S V A A H N S L C T G H I L L F A S E E Q K R K Y			
UniRef90_F2L6U3	L T F E E I S R G W M G I A G I L G S H S V S S W M L A H H G T E E Q K R K Y			
UniRef90_J2MA53	V V F E E L A H A C P S T A A F L T I H N M V S W M I A S W A T P E V K A T W			
UniRef90_A0A021X8Q9	L V A F E L G Y A S P A F R S V I G T N N G I G S Q G V I V D G T E A Q K Q Y W			
UniRef90_W0P8X6	R I A M E L G R T S P A F R S Y I G T N N G I G S S G I V I D G T P E Q K E Q Y			
UniRef90_R6QHY4	L A V E E I S K V N S S V G I A Y S V C T S L F S G G L I N S A S E E K K K Y			
UniRef90_A1ZFB3	I F N E E M V R V N S S G F G A A I G A H A S L A L V H M N A E G N E A A Q K Q K Y			
UniRef90_X5MHS0	L I F E A L S Q G C T S T A A Y I S I H N M A S W M I D T F G N E E D Q R Q K W			
UniRef90_A3VWS4	L V A R E I E R V D S G Y R S M M S V Q S S L V M Y P I Y A Y G S E E Q R R K Y			
UniRef90_H0E4R0	V L A E E L A R S H S S G G M V M V A V H T D M A N P P I K M L G T H E Q K L R Y			
UniRef90_B5X0X2	V M W E E Q M Y S N C S G P G F A L H S E I C M P Y S N Y G S K E Q I D R F			
UniRef90_UPI0004257033	V L C E E L E R I G S G M V G V S L H S D I V V P Y L V S Y G T E E Q K R R W			
UniRef90_UPI0004790BE5	A V I A E E C A R A G V G F G G Y S V H V N L C L P Y L M K Y A N E E Q R K R W			
UniRef90_G0HXZ6	L L L Q E L E A G D S G L R S M A S V Q G A L V M Y P I H A Y G S D A Q K E E W			
UniRef90_J6L9D8	V A M E E I S A A S A S V G L S Y G A H S N L C V N Q I R R N G T V E Q K Q R H			
UniRef90_A3XGR9	I F L E E L Q R I N S G F A A A M W A H A Y L A M T H L K A E G D A A I K E K Y			
UniRef90_J3J75	L G L E E I S R G S G G L G T V A A H T S L A G N M L Y E F G N E E Q K Q E Y			
UniRef90_U7USK7	M A C E E I S K T D P S I G L S F E V H T T C S W P I W K F G T E E Q K Q K F			
UniRef90_A9TJ89	I A M E E I I S R A S G A V A L S Y G A H S N L C V N Q I V I R N G T Q A Q K E K Y			
UniRef90_Q5XJA7	L I A R E E V E R V D S G Y R S V M S V Q S S L V M H P I N A Y G T E E Q K Q K Y			
UniRef90_A1TE46	L V C Q E L E A V D S G Y R S A M S V Q S S L V M Y P I H R W G S E E Q R T R W			
UniRef90_F7NW86	I I F E Q L S M G C T A T T A M L T I H N M A T W M I A T W G T E D A K A Q W			
UniRef90_M0LV66	I A N E E V V A Y G D L S L A T A L S V H C M A A S C I R E F G S E E Q H R E E W			
UniRef90_E1QRM1	I L M E E L S R V A P P L A V I R G T N D L F I P L L F G N E E L K R R W			
UniRef90_E5ACZ2	V I M E E L S R V A S G I G L S Y A A H S Q L C V N Q I M L N G S A E Q K S R Y			
UniRef90_UPI0003809D4B	L I A R E V E A V D S G Y R S A M S V Q S S L V M Y P I Y A F G S E E Q R K K Y			
UniRef90_C7MW87	I V I E E V V A R V D A S A S L I P A V N K L L G T Q P I L L S A S E E L K Q L V			
UniRef90_A0A023WU36	M A L E E I I A A G D G A C S T I M S V H N S V G C V P L R F G N D Q Q K S D F			
UniRef90_C1D4T1	L V A R E E V V R V D S G Y R S A M S V Q S S L V M Y P I A T Y G S P E Q Q Q A R W			
UniRef90_UPI00036939C8	L I F E E L L A T G C P T I A A Y V S I H N M V A W M I D A Y G D Q R Q R A E W			
UniRef90_UPI0003B408A5	L V I F E E L L A A A D P S T A A F F T I H N M A T W M I L C T W G Q D A L Q A A W			
UniRef90_UPI000374130D	V V L Q E E A A R A L V T L S T V R T Q L D V I L P Y F L H Y A N D E Q R A R W			
UniRef90_UPI00036B2AE4	I V N E E I I A R S G C S G L G W T L H S D I L A V P Y I E R Y G T E Y Q K E K Y			
UniRef90_A4XS24	S L I F E Q L A A G C V A T T A Y L T I H N M A T W M I A S F A S A E L K D A W			
UniRef90_C0BJ82	T L I E T T I S I V D P S I G L S I A A H N S L C T N H I Y T F G T E D Q R N R W			
UniRef90_UPI0003720A0B	S A I V E L S K V C G A V G L S M A A H N S L C V N H I L L F G N E A Q K Q T Y			
UniRef90_B1HZ65	I I Q E E L E R I V G S S L L G I G L H N D I V V P Y I E S Y G T H E Q K S R W			
UniRef90_V8G958	L I A R A V E R V D S G Y R S A M S V Q S S L V M Y P I Y A Y G T E E Q K Q K Y			
UniRef90_W7WM84	A Q M E E I A H A G V S G I G F G L H S E I V A P Y I L H Y G T E A Q K Q R R Y			
UniRef90_UPI000364D291	V V F E E L L A Y G G D T A F G I H V H A I V A H Y L L N Q G T E E Q K Q K Q			
UniRef90_M3FKL3	V A M E E I S R A S G G I G L S Y G A H S N L C V N Q I R K N G N E E Q K Q R F			
UniRef90_A0A059IIQ7	L V F E A L L A M S C P A V G S F L S I H N M C G G M I D K F A S A E V K S A W			
UniRef90_V9XPU1	L V Y E E L A R G W M G I A G I L G S H N L S C V W M I N R H G T E E Q K Q Q T			
UniRef90_C5CW83	L I A R E V E R V D S G Y R S M A S V Q S S L V M Y P I N E F G T E A Q K Q K F			
UniRef90_F7ZDF9	L V F E A L L A M C P S V G S F L S I H N M C G G M I D T Y G S D A M K T H W			
UniRef90_S6GVY6	S I A F E L L G R T S P A F R S Y I G T N N G I G S S A L V I D G T A E Q K S H			
UniRef90_M4AQE1	L V I E E L L A K V D P S V A V L C D I Q N T L I N T L F V K L G T P A Q K E K Y			
UniRef90_TOLHW4	I V I E E L L A R V C G S T C L T V A A H N S L A I G P I L K F G N E T Q K K K Y			
UniRef90_H1S627	I V V E E I I A R A L V T G V T F T T H S E N V A P Y I L E F G T E A Q K A E F			
UniRef90_U7FUV5	V I V E E E C S R A G Y G L A S N L S V H S D I V A P Y I L L H L G S E D Q K Q T W			
UniRef90_E3HVN7	I V V E E E I A R A L A T G V T G F T T H S D I V A P Y I L L N F G S E R Q K L R D			
UniRef90_H2CEM1	I V I E E L L A R V G A T G L F L S L H G D V I A P Y I L H H A S E E Q K Q Q A W			
UniRef90_A0A023S757	L I A R E V E R V D S G Y R S A M S V Q S S L V M H P I H A Y G D E A Q R Q R W			
UniRef90_F8CK34	V F A E E L L S R S N A G V N M A L L V Q S Q M A T P I I N E I G T D E Q K R E F			
UniRef90_UPI00037E9983	I A K E E I I A K V S L A A S T L C A N N S I S F I L P I L N H G T E E Q K R K Y			
UniRef90_E4WE22	V A T E E L L A A V N M A L A S S F G I H F D I V T P Y V V I D L A S E E Q K Q Q W			
UniRef90_E8LZZ7	V A M E E I S R A S A V A L S Y G A H S N L C V N Q I F R N G N Q Q R E K F			
UniRef90_UPI000425E730	L V A R E V E R D S G Y R S M S M V Q S S L V M Y P I E S F G S E E Q K K K Y			
UniRef90_M4AKL7	L I T E E L L A Y A C T G M Q T A I E A N S L G Q M P V I L A G N E E Q K K K Y			
UniRef90_D5UWT6	V A C L E E L E A C D S G L R S M V S V Q G S L A M F A I W R W A S E A E K Q R W			
UniRef90_U1KQ07	I I F E Q L L A M G C T A T T A M L T I H N M A T W M I A S F G S A A V K E S Y			
UniRef90_A1ZSL0	L M M Q E L L E R G D S G M R S T A S V Q G S L V M F P I Y T F G S E E Q K K K Y			
UniRef90_Q0JY37	D V V Y D L G H T A F A F R S V F G T N V G I G S Q G I L M D G T E E Q K Q Q Y			
UniRef90_UPI0004025A33	I I A F E E I I G Y A A C S C L L G Q V H L N T V L P Y F L H Y C N E E Q R Q R W			
UniRef90_H8MJ07	A F A E E L L A R A R N G V A M S L L V Q G Q M A T P V I N E L G T D E Q K R E F			
UniRef90_Q9VSA3	L S A E E L L A Y A G C T G I M T A L E A S G L Q T P V I L S G N K E E Q K K K Y			
UniRef90_UPI000472208D	L M M Q E L L E R G D S G M R S T A S V Q G S L V M F P I Y A Y G S E E Q R K K Y			
UniRef90_F2RF12	A V L A E E F T R A G A P G L A I G L H N D I I G P Y L T S L G T E E Q K R R W			
UniRef90_UPI000470D1EC	L M C Y E V E K G D S G M R S T I S V Q S S L V M W P I F A Y G T E A Q K R K Y			
UniRef90_E3BDK7	M A C H E L E L A A D S G I R S L V S V Q G S L A M F A I W R W G S E E Q K T E W			
UniRef90_R9F6V9	I I T E E C A R A G M S L S S G F G V H N D V V T P Y I L L S L A S E E Q K Q R W			
UniRef90_E1WXK7	I V M E E E F G K A C A S S T L S Y L A H S I L C V N N I Q N N A S E E Q K E K Y			
UniRef90_UPI00030277C1	I I I G E E L L E R V G A S L T G V G L H N D I V V P Y I E A Y G T E Q Q K S R W			
UniRef90_UPI0003807DB2	A V I Q E E C A R A C V T L G G L H N D I V V P Y I F T G L A N A E Q R A R W			
UniRef90_UPI0003665598	V V L E Q L G R T H N G Y V S L I S A H T G I G S T G L V K L G S E E E L K H K Y			
UniRef90_C2FUC8	T I L D E E I I S K V C G S I G L S V A A H N S L C T N H I L S F A N E E Q K K K Y			
UniRef90_N6X038	V I M E E I I V K A S A S G L G W A L H S D I V A P Y I L N Y G T E E Q Q K K Y			
UniRef90_V4Q6Z2	I I F E Q L L S R G C I A T A A F L S I H N M C T W M I D S F G A P D R A H W			
UniRef90_I3TUW9	L V A R E V E R V D S G Y R S A M S V Q S S L V M Y P I Y A F G T E E Q R R K Y			
UniRef90_N6W247	I I V E E L L A A A C P S T A A Y I T I H N M A T W M I V A Q F G S E A V K D A I			
UniRef90_C7MXU7	L A I L E E L L A R V D S S V A I T L E A G V S L G A M P I Y R F G T E E Q K R E W			
UniRef90_V9KYQ0	L A I E E L L A K V D A S V S V L C D I Q N T L I N T L R K F G S E Q Q K R K Y			
UniRef90_D7BD72	L A M E E I I A A A D P S V A V I S L V T S G L P Q Y M L G K F G S L E Q K K K Y			
UniRef90_L9U611	I A K E E I I G K A S L L A A S T L C A N N S I G L I L P L L H F G T E E Q K R R Y			
UniRef90_F6B078	R V L F E L L C Q T A P A F R S V I G T T V G I G S Q G I L L D G T P E Q Q A A W			
UniRef90_B3RK78	L I A E E E V C K V D P G F S S C F G Y Q N T L T S K I I L G Y A S E E Q K Q E Y			
UniRef90_UPI00039ABDBF	I V I E E E V A R V C A S S S I L P A V N K L G T M P L M L S G S E D L K R R Y			
UniRef90_U6DR97	V V W E E Q A Y S N C T G P G F T L H S D I I M P Y I V N Y G S E E Q I K R F			

130            140            150            160

UniRef90_B8IQ44	L V P L A K G E K L A A F C L T E P S A G S D A A A L K T R A R R V G D R W I L		
UniRef90_U3KM39	L G R M T E Q P L M C Y C V T E P G T G S D V A G I K T R A E K K G D E Y I I		
UniRef90_C0BK0	L P D L C N G K K I G A F C L S E P E A G S D A T S Q K T R A V K K G D Y Y E I		
UniRef90_U3BAG0	C P K L V T G E W L G S Y C L T E P N A G S D A A S L T T S A R K E G D G Y V L		
UniRef90_UPI00036DAA46	L P K L A V A D F L G A W G L T E P N T G S D A A N M K T T A V R D G D E W I L		
UniRef90_F2L6U3	L P E L A T G A R R T G I A L T E P G A G T D L Q G I T T V A K R D G D D Y V V		
UniRef90_J2MA53	C G D L A V G K K I G S Y C L T E P P G S G S D A A S L T T S A R K E G D G Y V L		
UniRef90_A0A21X8Q9	L P R M A T G E A I G S F A L T E P D V G S D A G A V K T T A R R D G N H Y I I		
UniRef90_W0P8X6	L P R L A S G D L I G S F A L T E P E A G S D A G S L R T T A V R D G D H Y I I		
UniRef90_R6QHY4	L P D V L S G K K M G A F C L T E P E A G S D A A G C K T T A L W D G E A Y V L		
UniRef90_A1ZFB3	L E P G I K G E L I G C L A I S E P P F G G S D V A G M R T T A V R E G D H Y I I		
UniRef90_X5MHS0	L P S L T S M D L I A S Y C L T E P S A G S D A A S L T T A V R D G D H Y V I		
UniRef90_A3VWS4	L P G L A S G D L I G C F G L T E P D A G S D P A G M K T R A V R T D S G Y R I		
UniRef90_H0E4R0	L V P A M K G E K I A C L G L T E P D A G S D V A G I K T T A V R D G D E F V I		
UniRef90_B5X0X2	I P Q M A A G T C I G A I I A M T E P G A G S D L Q G V R T Y A K K D G D D W I		
UniRef90_UPI0004257033	L P R C V S G E L I T A I A M T E P G A G S D L A A I R T T A R D G D T Y V L		
UniRef90_UPI0004790BE5	L P A F V I A G D A M F A L A M T E P G T G S D L A G L A T T A K R D G D H Y V L		
UniRef90_G0HXZ6	L P A L G S G E R V G C F G L T E P E H G S N P S A M E T T A E R D A D G Y V L		
UniRef90_J6L9D8	L P K L I S G E H V G A G A L A M S E P E A G S D V V S M R T F A E R R G D R F V L		
UniRef90_A3XGR9	L A P S I S G D K I G C L C I T E P F G G S D V A G M R S T A V R Q G D H Y V L		
UniRef90_J3J75	L L P V N E G T D I P V A F A L S E A G A G S D V P A M T T A E K D G D E Y V V		
UniRef90_U7USK7	L K P L A S G E K L G A F G L T E P N A G T D A L I N G S T T A V K D G D S Y I L		
UniRef90_A9TJ89	L P K L I S G E H I G A L A M S E P N S G S D V V S M K C R A G K V E G G Y V L		
UniRef90_Q5XJA7	L P R L A Q G E I L G C F G L T E P N H G S D P G G S M E T K A K Y N S H T F T L		
UniRef90_A1TE46	L P G M A M G E I L G C F G L T E P D F G S N P G G M R T T A R R D G S D W I L		
UniRef90_F7NW86	C P E L V T G E K L A S Y C L T E P G S G S D A A S L R T S A K K D G D H Y V L		
UniRef90_M0LV66	L P Q M V D G R P V G A F A L S E P E A G S N P A E M S T Q A R L D E E N Y V I		
UniRef90_E1QRM1	L P P I A R G E A F G A H A M T E P C C G S D V A G I Q T R A V K K G D R W V I		
UniRef90_E5ACZ2	L L P G L I S G D K V G A L A M S E H S A G S D V V S M K T T A K E V D G G Y L L		
UniRef90_UPI0003809D4B	L P K L A S G E W V G C F G L T E P D D G G S D P G A M R T T A K K V D G G Y I L		
UniRef90_C7MW87	L L P S I I A S G E A S A S Y A L S E R E A G S D T A S M R T R A H L D G D H W V L		
UniRef90_A0A023WU36	L L T P L A R G E Q I G A F A L T E P Q A G S D A D S S L R T A R R D G D Y Y I L		
UniRef90_C1D4T1	L L P G L L A R G E L V G C F G L T E P D A G S D P G S M H S R A R K V D G G Y L L		
UniRef90_UPI00036939C8	L L P E L C S M R R L G S Y C L T E P D A G S D A A A L K T R A V R D G D D Y V V		
UniRef90_UPI0003B408A5	G P R L L T S G E Q L I A S Y C L T E P D A G S D A A N L K T V A V R R D G D H Y V L		
UniRef90_UPI000374130D	FF P G L L A D G T L L T A I A M T E P G T G S D L A G V R T T A V R D G D S Y V L		
UniRef90_UPI00036B2AE4	L S R C V S G E L I T A I A M S E P G A G S D L Q G T Q K T N A V L D G D H Y I L		
UniRef90_A4XS24	L A G L L A S G Q L L A S Y C L T E P D A G S D A A N L R T A R R D G D D Y V I		
UniRef90_C0BJ82	L P D L C S G V S I G A W G L T E P H N T G S D A K G M S T T A K K D G D N W I L		
UniRef90_UPI0003720A0B	L P R L A S G E W I G A W G L T E P N T G S D A G N M R T T A V R D G D D W I L		
UniRef90_B1HZ65	L P K L C I S G H Y I V T A I A M T E P G T G S D L A N I Q T T A L R D G D H Y I V		
UniRef90_V8G958	L P K L L A K G E M V G C F G L T E P N A G S D P P S S M Q T R A R K T D G G Y L L		
UniRef90_W7WM84	L P P L L A T G E M V G A I I A M S E P A A G S D L Q G V K T T A L K Q P D S Y L L		
UniRef90_UPI000364D291	L P R R L A S G E M I A A I A M T E P P G A G S D L K G I R T T A R R T D E G Y R V		
UniRef90_M3FKL3	L P G L L C D G S L V G A L A M S E P G A G S D L V V S M K L R A D K R G D R Y V L		
UniRef90_A0A059IIQ7	L P A L T R M D K V F S Y A L T E P G S G S D A A A L R C R A E K T N D G Y V M		
UniRef90_V9XPU1	L P K L L A T G E W R T G I G L T E P P G A G T D L Q G I R T T A R R D G D H Y I V		
UniRef90_C5CW83	L P K L L A T G E W I G C F G L T E P P D H G S D P G S M V T R A K K V P G G Y S I L		
UniRef90_F7ZDF9	L P P K L C A M E T V F S Y C L T E P P G S G S D A A A L R T R A E R S N A G Y V L		
UniRef90_S6GVY6	L P P K L L A S G E L I S S C C L T E P D S G G S D A A S L K T T A V R D G D H F V I		
UniRef90_M4AQE1	L L N R L S T D M I G S F C L S E A E S G S D A F S L K T R A E K H K D Y F I I		
UniRef90_TOLHW4	L P D L A S G R K I G A F G L T E S E A G S D A G G T K T F A S L N G N Y Y S I L		
UniRef90_H1S627	L P K M A S G E V V G S L A M T E P P G A G S D L K A I R T S A V K V D G G Y R L		
UniRef90_U7FUV5	L L P K M V I S G E A V G A I I G M T E P P G A G S D L Q G M K T R A D K S G D N Y V I		
UniRef90_E3HVN7	L L P G M A Q G D I V V A S I I A M T E P P G A G S D V K A I R T A A A K A Q G G Y V I		
UniRef90_H2CEM1	L P D V I A G K K I L I A L A M T E P N A G S D L A G I Q S T A D K G D H Y L L		
UniRef90_A0A023S757	L P G L L A R G E L V G C F G L T E P D A G S D P G S M K S R A E R V D G G Y L L		
UniRef90_F8CK34	L L E P A L K G E K I A A L G V S E P P G C G S D V A S I K T T A R R D G D D Y V I		
UniRef90_UPI00037E9983	L L P L A A E G R L I S A I A A L T E P P Q T G S D V V S S L R T R A V R D G D A W V I		
UniRef90_E4WE22	L L P R M A A G E A V V A A I G M T E P S A G S D L A N L K T S A V R D G S D W I L		
UniRef90_E8LZZ7	L L P K L L I D G S H V G A L A M S E P N A G S D V V I S M Q L K A E L N G D H Y L L		
UniRef90_UPI000425E730	L L P K L L A T G E W I G C F G L T E T D D G G S D P P G A M R T T A V A A P G G Y I L		
UniRef90_M4AKL7	L L G R M T E E P L M C A Y C V T E P P G A G S D V A G L K T R A E K V G D E Y V V		
UniRef90_D5UWT6	L L P G M A A G E V V G C F G L T E P P D H G S D P A A M R T R A R R D G A D W V I		
UniRef90_U1KQ07	L L I D Q L V M G E L L A S Y C L T E P P G A G S D A A S L K T K A V L E G D E Y V L		
UniRef90_A1ZSL0	L L P K L L A S G E Y L I G C F G L T E P P N H G S N P S G M E S R L E D K G D H Y V L		
UniRef90_Q0JY37	L L P R I A S G E L I I S F A L T E P N A G S D A A S L Q T K A E L D G D H Y V I L		
UniRef90_UPI0004025A33	F P G F A D G S L I A S I A M T E P P G T G S D L A G M A T T A V R D G D S F I L		
UniRef90_H8MJ07	L L A P A L T G E R I A A L A M S E P P D A G S D L A R L R T A R K D G D D Y V I		
UniRef90_Q9VSA3	L L G R L L E E P L V V A A Y C V T E P P G A G S D D V S G I K T R A E K K G D E W V I		
UniRef90_UPI000472208D	L L P K L L A S G E W L G C F G L T E P P N H G S D P S S M L S N F K D A G D H V I L		
UniRef90_F2RF12	L L P G F C S G E I V T A I A M T E P P G A G S D L Q G I R T T A E D H G D H W I L		
UniRef90_UPI000470D1EC	L L P P L L A S G E W L G C F G L T E P P D H G S N P P G G M Q S R L V R D G G Y R I L		
UniRef90_E3BDK7	L L P R M A A G D A V G C F G L T E P P D F G S D P P A G M R T R A R R D G D W V I		
UniRef90_R9F6V9	L L P G L C S G D L V T A I A M T E P P G A G S D L K A V R T T A V R D G D S Y V I		
UniRef90_E1WXK7	L L P K L L I S G E H I G C M G M S E P P E Y G G S D A V G I Q T K A E K K D D H Y L L		
UniRef90_UPI00030277C1	L L P G C V T G Q H I T A I A M T E P P G A G S D L A A I Q T T A E K K G N H Y V V		
UniRef90_UPI0003807DB2	L L P G L L A S G E L I Y T A I A M S E P P A T G S D L A G I T T R A V R D G D H F V I		
UniRef90_UPI0003665598	L L P A M A A G E K I I G C F A L S E P P G A G S D A T N L S T T A V K E G K Q W V I		
UniRef90_C2FUC8	L L P K L L A T A E W I G A W G L T E T T G S G S D A G G L T T V A E R D G D Y F I L		
UniRef90_N6X038	L L P K L L V T G E M I G A I A M T E P P G A G S D L Q G V V K T S A I K H D D H Y L L		
UniRef90_V9Q6Z2	V P K L L A T M E T I I A S Y C L T E P P G S G S D A A S M K T R A V R D G D S F V I		
UniRef90_I3TUW9	L L P R L L A T G E L I Y T A I A M S E P P D A G S D P S S M R T R A R K V E G G Y F I		
UniRef90_N6W247	A P R M A S G E Y L I G S Y C L T E P P G A G S D A A N L Q T K A V R D D N G Y R I L		
UniRef90_C7MXU7	L L P A L C E G R A L G A F G L T E P P G G G S D A S A T R T T A L D N G E W V V		
UniRef90_V9KYQ0	L L P Q L A K D M V G S F C L S E P P E A G S D A F S L R T C A E K H E D Y Y I I		
UniRef90_D7BD72	L L V P L A K G E W I G A F C L S E P P E H A G G S N P A S M K T T A K R V P P G G W Q L		
UniRef90_L9U611	L L P E A A K G R T I I A S V A I T E P P E A G S D V A S I R T T A K R D G A S Y V I		
UniRef90_F6B078	L L P K L L A T G E I I M A S F A L T E P P E A G S D A A S L R T T A I R D G D H Y V V		
UniRef90_B3RK78	L L P R I A K G M F T S V C L S E P P D S G S D A F S L Q T R A V P D G D D Y V I		
UniRef90_UPI00039ABDBF	L L G A V A R G D G M F S Y C L S E P P E A G S D D A A A M K T R A V R D G D S W V I		
UniRef90_U6DR97	I P Q M T S G K C I G A L A M T E P P G A G S D L Q G I R T N A K K D G S D W I L		

		170	180	190	200
UniRef90_B8IQ44	S G T K Q F I	T S G R N A D V A I I V F A V T D K G I L S A F V V P T D T P G Y T V			
UniRef90_U3KM39	N G Q K M W I	T N G G K A N W Y F L L A R S D K A F T G F I V E A D T P G V Q I			
UniRef90_C0BKR0	T G T K N W I	T N G S S A S I Y L V I A Q T D K G I S A F I V E K E S P G F V I			
UniRef90_U3BAG0	N G A K T F I	S G A G D T D V L V V M A R T D G I S A F I V P A N A E G I T Y			
UniRef90_UPI00036DAA46	N G T K S W I	T H G I S G D I A V V I A R T G E N S T A F I V E R G T P G F S G			
UniRef90_F2L6U3	N G T K M W I	T N A R H A D P L P V L V K T D P G M S I L L V E A D S A G F E V			
UniRef90_J2MA53	N G S K A F I	S G A G A T D V L V L M A R T G K G V S A I V P A N T P G I G Y			
UniRef90_A0A21X8Q9	N G T K R Y I	T N A P V   A D V F T V M A R T G G G V T A F I V P K D S P G L S I			
UniRef90_W0P8X6	N G T K R F I	T N A P H A G I F T V M A R S N P G I S A F I V E A G T P G L T I			
UniRef90_R6QHY4	N G L K C F I	T N G P L A D Y F L V F A L T D K G L S A F V V E K A M P G V S V			
UniRef90_A1ZFB3	N G S K T F I	T N G V S S D F I V A A V K T N P G I S M I V I D R D T P G L T A			
UniRef90_X5MHS0	N G S K A F I	S G S G S S D V Y V C M I R T G G G V S C I V E K G T P G L S F			
UniRef90_A3VWS4	S G T K M W I	S N S P   A D V F V I W A K S D G K I R G F V L E K G M K G L S A			
UniRef90_H0E4R0	N G S K V F I	T N G H R A D Y I V L V T K T D P G F S L F I V D M D S P G I V R			
UniRef90_B5X0X2	N G N K V F I	T N G C M A D M V I V V T V T N R G I S S L F I V E K G M P G F Q A			
UniRef90_UPI0004257033	N G Q K T F I	T N G I Q S D L V V V C K T H R G I S S L L V V E E G T S G F S R			
UniRef90_UPI0004790BE5	N G A K T F I	T G G V L I A D R M L V I A R T S P G L S I L V V D T K S E G Y S V			
UniRef90_G0HXZ6	N G S K T W I	T N A P   S D L A V V W A K V G D P V R G F L V E T D R D G V T T			
UniRef90_J6L9D8	N G S K M W I	T N G P C A D T L L V V Y A K T D R G I T A F L I E R G M K G F S A			
UniRef90_A3XGR9	N G S K T F I	T N G V F S D Y L I V A A K T S K G L I S I F V V D R E A E G V S A			
UniRef90_J3J75	N G G K L W I	S N G S V I A D T V T L F A K T D K G L S S L I V P E E D D G F I V			
UniRef90_U7USK7	N G S K V F N	T N G G E A E I T V V F A A T D K G M S A F I V E K G T P G F T Y			
UniRef90_A9TJ89	N G N K M W C	T N G P K A N T L I V Y V K T D H R G I T A F I I E K G M E G F S T			
UniRef90_Q5XJA7	T G S K T W I	T N S P   V A D I C V V W A K C E D G P V R G F I L E R G M K G L S T			
UniRef90_A1TE46	N G S K M W I	T N S A V S D V A I V I W A R S K E G V L G F A V P T S T P G F H A			
UniRef90_F7NW86	N G S K M F I	S G A G E T E V L V V M A R T G K G I S A F I V P A D A Q G V I Y			
UniRef90_M0LV66	N G K K Q W I	T N G K R A G V V I L F A K T D R D V T Q F I L V P K D A E G L E V			
UniRef90_E1QRM1	S G R K Q F I	S N A D I A D Y I M V F A R T S E G I T A F I V E K G T P G L K I			
UniRef90_E5ACZ2	N G T K M W I	T N G P D A H T I V Y V A K T S K G I T A F I V D T T P G F S V			
UniRef90_UPI0003809D4B	N G A K M W I	T N S P   S D L A V V W A K L D G K I R G F V V E K G V K G F D C			
UniRef90_C7MW87	N G T K C W I	S N A G E S S S W Y T V M A V T D P G I S A F V V H K D D P G F S V			
UniRef90_A0A023WU36	N G A K Q F I	T S S G K H A G T V I V F A V T D P G I S A F I V P T D S P G Y Q V			
UniRef90_C1D4T1	S G S K M W I	S G S P   A D V D L V L V W A R D D A G V R G F V L E R G M A G L S T			
UniRef90_UPI00036939C8	N G V K Q F I	S G S G Y A G V Y V V M V R T G K G I S T L V I D G R S E G I S F			
UniRef90_UPI0003B408A5	T G S K M F I	S G A G D T D L L V V M A R T G K G I S A L A V P A D T P G I R Y			
UniRef90_UPI000374130D	N G A K T F I	T G G G L L A D L V I V V A R T S R G I S L V V E D G M P G F E K			
UniRef90_UPI00036B2AE4	N G S K T F I	T N G Q Q K S G L V I V V A K T D K G I S L S F L V E S E F E G F S K			
UniRef90_A4XS24	D G S K C F I	S G A G S T D V L I V M A R T G K G I S C F L V P A D A P G V R Y			
UniRef90_C0BJ82	N G T K N F I	T H G I S S G A I V A V V I A R S G E G M T A F V V E R G T P G F A G			
UniRef90_UPI0003720A0B	N G S K N F I	T H G R S Q G V A V V I A R T G E N A T A F V V E R G T P G F A G			
UniRef90_B1HZ65	N G Q K T F I	T N G L H T N L V V V A V K T H Q G I S L L V I E D G T P G F T K			
UniRef90_V8G958	N G S K M W I	T N S P   I A D V M V W A K D D Q N I R G F T L E R G M K G L S T			
UniRef90_W7WM84	S G S K T F I	T N G W H A D L V I V V A K T D K G T S L L L V E Q G M A G F S K			
UniRef90_UPI000364D291	S G S K T F I	S N G Y L   A D L V L V V W A K T D P G V S L L L L E R D N P G F R V			
UniRef90_M3FKL3	N G N K M W I	T N G P D A D V L V V Y A K T D K G I T A F L V E K G M K G F S T			
UniRef90_A0A059IIQ7	N G T K A F I	S G G G Y S D V Y V V M C R T G K G I S T L I V E D G S A G L S F			
UniRef90_V9XPU1	S G A K T W I	T N A R H A N V L P V L V K T D K G M S I L L I D T T L P G F E V			
UniRef90_C5CW83	S G A K M W I	S N S P   I A D V F V V W A K T V G P I R G F V L E K G T K G L S A			
UniRef90_F7ZDF9	N G T K A F I	S G G G Y S D A Y L T M V R T G D G I S A M L I V E N G R A G L S F			
UniRef90_S6GVY6	N G T K R F I	T N A P H A G I F T V M A R T N P G I S A F V V E R A T P P G I S L			
UniRef90_M4AQE1	N G S K M W I	S N A E L S G V F L V M A N V D R G I T C F I V D R D T P G L E I			
UniRef90_TOLHW4	N G S K C F I	T N G S V I A D T Y V I T A R T S K I S S S F L V E R D S K G F S V			
UniRef90_H1S627	N G Q K T F I	T N G Y H A D R V L V F A K T N P G I S L F W V N A T A Q G F S R			
UniRef90_U7FUV5	N G Q K T F I	T N G Q H C D V I V L V A T K T D K G M T L F T V D C T L P G F S R			
UniRef90_E3HVN7	N G Q K T F I	T N G F H A D R V L V V A K T D P G I S L F W V D A A T P G F T R			
UniRef90_H2CEM1	N G S K T F I	S N G Y L I S D L V I T V A K T D D N G I S L L M V E R G M E G F E R			
UniRef90_A0A023S757	S G N K M W I	T N S P   A D F V W A K L D G E V S L V T F P T D V K G F G V			
UniRef90_F8CK34	N G S K M W I	T N G T R A D F I L T L A V R T G E G I S L V T F P T D V K G F G V			
UniRef90_UPI00037E9983	N G Q K S W I	T W G A D A H Y A M V F A R T S D G I S A F I V D T T T P G F R V			
UniRef90_E4WE22	S G S K T F I	T N G Y T A D V V V V A A R T D K G I S L F L V D T S L P G F E R			
UniRef90_E8LZZ7	N G S K M W I	T N G P D A D V V V V Y A K T E P G I T A F I V V E R S V S Q F Q H			
UniRef90_UPI000425E730	N G S K M W I	T N S P   V A D V A V V W A K L D G V I R G F I L E R G M K G F S T			
UniRef90_M4AKL7	N G Q K M W I	T N G G K A N W Y F L L A R T S K A F T G F I V E A D T P G I Q I			
UniRef90_D5UWT6	D G R K M W I	T N G S V I A D V A V I W A Q T D D G I R G F A V P T E T P G F T A			
UniRef90_U1KQ07	N G S K M F I	S G A G E T D V L V V M A R T G K G I S A F F V P A D A A G V E Y			
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UniRef90_Q0JY37	N G T K R F I	T N A P R A G A F T L M A R T G G G I S S F I V P A D T P G I S L			
UniRef90_UPI0004025A33	N G S K T F I	T G G T N A D L V I V V A R T S S G L T L L V V E D G M E G F T K			
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UniRef90_E3BDK7	N G T K M W I	T N G A I L A D I A V V W A Q T D D K I R G F V P T D T P G F E A			
UniRef90_R9F6V9	N G T K T F I	T N G I H A D L V I V V A K T D P G I S L V V V E R G M P G F C R			
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UniRef90_UPI000470D1EC	N G S K T F I	T N A P I A D L F T V F A V T D K G I T A F L I E K D F P G L I I			
UniRef90_E3BDK7	N G T K M W I	T N G A I L A D I A V V W A Q T D D K I R G F V P T D T P G F E A			
UniRef90_R9F6V9	N G T K T F I	T N G I H A D L V I V V A K T D P G I S L V V V E R G M P G F C R			
UniRef90_E1WXK7	N G T K M W I	T N A E Y A D V A Y V Y T R T G K N L S T F I V E K G A E G F S I			
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UniRef90_V4Q6Z2	N G S K Q F I	S G A G A S D L Y V V M A R T D D G I S T F L V M K D A P G L S F			
UniRef90_I3TUW9	S G T K T W I	T N A P   A D V F V V W A K D D H G I R G F V L V E K G M T G L T A			
UniRef90_N6W247	T G S K V F I	S G A G A T Q M L V V M A R T G K G I S A F V V P A N A E G I H Y			
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UniRef90_V9KYQ0	N G S K M W I	S N A D Y A G V F L V M A N A N R G I T C F I V D Q G T E G L Q I			
UniRef90_D7BD72	D G V K S W I	T S G Q G O A H L Y V V M A R G E A G I C S F I V E K D T P G L S F			
UniRef90_L9U611	N G Q K S W I	T W A A Q A H Y V L L F A R T H D G I S V F L V D T S T P G F Q V			
UniRef90_F6B078	N G N K R F I	T N A P H A G M F T L M A R T D P G V I S A F I V D A K S P P G I S F			
UniRef90_B3RK78	N G R K L W I	T N A E K A D L Y L I M A N A A K G I T C F I V D A G T P G L S V			
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	210	220	230
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UniRef90_C0BK0	G P K E N K L G I R S S D T H S I L Q F N Q V K V H E E N R I G E E		
UniRef90_U3BAG0	G R R E P K M G W N S Q P T R A I T F D N V K I P A S H L M G E E		
UniRef90_UPI00036DAA46	G K K E N K L G M R A S E T A E M I F D N C R I S D W Q R I G E V		
UniRef90_F2L6U3	T A D I G K L G Y K G T E S C E V V L A D V R V P A S Q L L G G V E G		
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UniRef90_A0A21X8Q9	G A I D R K M G Q R G T R T C D V I F D N C R I P A D S V I G G V E G		
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UniRef90_A1ZFB3	T K L N K L G W R A S D T G E I A F S D V K V P V T N L L G G E		
UniRef90_X5MHS0	G A T E K K M G W N S Q P T A A V I F E D D C R V P V E N L I G E G D G		
UniRef90_A3VWS4	P K V G G K L S L R A S V T G E I V M D N V E V P E S A L L P N V Q G		
UniRef90_H0E4R0	E K K L L M K A G M A A S D T A L L S F T D V R V P A A N L L G E E		
UniRef90_B5X0X2	G K K L E K I G Q M A Q D T A E L L F F E D V R L P A S A L L L G Q A		
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UniRef90_J6L9D8	A Q K L L D K L G M R G S D T G E L L F F E D C E V P E E N V L L G T V G G		
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UniRef90_J3J75	E G T E H K L G D K G C P T A E L L R F D D M R I P E A D R L L G E E		
UniRef90_U7USK7	G K K E V K M G I H G S V Q R E L I F Q D V K I P A A H L L G E G E G		
UniRef90_A9TJ89	A Q K L D K L G M R G S D T C E L L V F E N C C F V S N D Q I L L G E G K G		
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UniRef90_F7NW86	G K A E E K M G W N A Q P T R L I T F D N V R I P A H Y L L G E G E G		
UniRef90_M0LV66	G K K E D K L G R A S D T T T T L I F D D V R I P E E N R I L T E V		
UniRef90_E1QRM1	G A K F E K R G L R G S H A M E V I L D D V E V S D E N R V G E V		
UniRef90_E5ACZ2	T K K L D K L G M R G S N T G E L V F E D V F V P R E N V L G		
UniRef90_UPI0003809D4B	P K I E G K F S L R A S V T G S I S L N D A F V P D D A I L P N V E G		
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UniRef90_M3FKL3	A Q K L D K L G M R S S P T C E L V F Q D C E E V P E E N V L G Q V G G		
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UniRef90_V9XPU1	Q R D L G K L G Y K G T E S C E I L L D D I R V P A D A L L G G T E G		
UniRef90_C5CW83	P A I H G K V G L R A S I T G E I V M D G V F C P E E N A F P E V Q G		
UniRef90_F7ZDF9	G A L E I N M G W R A Q P T A Q V Q F D D C A I P A D N L V G E E		
UniRef90_S6GVY6	G K C D H K M G Q K G A H T S D V I F D N V R V P V S A L I G V E G		
UniRef90_M4AQE1	C K K E N K L G L R A S S T C P L N F D N V K V P E A N I L G E V		
UniRef90_TOLHW4	G K T E K K M G L K G S D T A T I F F E E V K V P K E N L L G E G E G		
UniRef90_H1S627	G R L L D K V G Q K A Q D T A E L L F F D D V F V P D D M L L V G E		
UniRef90_U7FUV5	G R N L E K M G H H A A D T S E L L F F E D V T L S A D Q L L G G E		
UniRef90_E3HVN7	G R L L D K V G Q K A Q D T A E L L F F Q D M F V P D E D M L G E		
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UniRef90_A0A023S757	P K I E G K F S L R A S I T G E I V M E R V F V P E A N R I L A G V S G		
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UniRef90_UPI00037E9983	G S K E H K M G R H G S P S H E L L F E D M R V P A D C L L G E E		
UniRef90_E4WE22	G R K L D K V G Q P E A D T A E L L F F D E I R L P A D A M L G E		
UniRef90_E8LZZ7	A Q K L D K L G M R G S N T C E L V F N N C P V P I E N I L G E V		
UniRef90_UPI000425E730	P E I K G K L S L R A S I T G E I V A F D D C P V P A E N I L M P N V K G		
UniRef90_M4AKL7	G R K E M N M G Q K C S D T R G I T F E D V R V P K E N V L G E G A G		
UniRef90_D5UWT6	N T I K H K M S L R A S V T S E L V L D G V R V P E S A A F P E V R G		
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UniRef90_UPI00039ABDBF	G A P E K K G L K G K S P T R E V Y L D N V R I P A D R I V G A E G		
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 M P F E F S F T A D Q E A A F R A A V R S F L E R E V V P I L V  
 D [L] F T P D H E A F R G L V R D F V A N E V V P Y Y A  
 Q W D D I [F] L L D A Q L N D E E R M V R D A A N A Y [C] Q D K L A S R V L  
 F E [L] S A D H E D F R R T V R D F A E S E I A P H A A  
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 M D F N L P D D L R E V Q A T I R D F M L T R V E D R A Q  
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 L L D T I S R F V R E R L V P Q E A  
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 F P F E G [Q] D F E I K L T E D H E L F R R S V R E F A E R V L A P N V M  
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 F E E D D H E A L R A T A R T F A E R V L A P G L D  
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 A S F D W A D P L R L E A E L S E E R A L R D T A H A Y A Q E K L Q P R V L  
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 Y T D E H L E L Q S S L S K L I E K E N P Y V D  
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50            60            70            80

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UniRef90_UPI00047CEEED	E W D E A G T F P R E I Y K K A A D I G L L G L G V P E Y G G G P D V D A F Y T M			
UniRef90_D7C1H9	E W R E A G Q A P R E F Y K K L G E L G I F G I E V P E Y G G G A G T S F K F N A			
UniRef90_M2VH91	S W E A A H Q V P R E L W H R L G E A G L L G V D L P E A G G S G A G V E I C L			

	90	100	110	120
UniRef90_D6Z359	L A L E Q V A R G C T G V A T A F	A A S G L G A Y P I	L V S G S E E	L K Q K Y
UniRef90_UPI0003757560	L V F E E L A Q A C P S T T A F I T	I H N M A T W M V	T D F A R A E V I A Q V W	
UniRef90_T1AWR5	I L L E E I G R V D A S H G T I L G A	H T S L G T T P L	G T E A Q K R R W	
UniRef90_L7FFQ4	V V L Q E E A A R A L V T L G T V R T Q	L D V V L P Y F I	L Y Y G T E A Q Q R Q K Y	
UniRef90_S6HYD2	L V A R E V E R V D S G Y R S A M S	V Q S S L V M H P I	I Y S Y G T E Q Q R Q K Y	
UniRef90_D4YK89	V L A E E L G K A D A G V G L G L T	A H A N M A T P T L	P T L N Q L G T P E Q K E K Y	
UniRef90_H5UTZ4	L A I E E L G R V D Q S M G I T L Q A G V G L G I N P I	L T Y G T Q E Q K E K Y		
UniRef90_U7UDK8	I I M E E I S R R C A S T G T F I T A	G A S L A L P L N F G T	E E Q K Q K Q K Y	
UniRef90_UPI00037F5A8C	L I A R E V E R V D S G Y R S F M S	V Q S S L V M Y P I	S I F G T E E Q K Q K Q K Y	
UniRef90_Q9RVV0	A V Y E A M G Q G H M G F G G M I S A	H A S I G T S G L	V K L G N E E Q K Q R F	
UniRef90_T0RH57	I A H E E L S S D P A F C L S F L A	H S M L F T N N L	A R N G S D E Q C A K Y	
UniRef90_C7M0E1	V M I E E I A R V C A S T S L A L L I	S K L G M T P V	M V W G S E D Q K R R Y	
UniRef90_Q5Z108	R I F E Q L A T G C P S V A A Y I S I	H N M A T W M I	D A Y G S P E Q R S R W	
UniRef90_E8WY33	L A I E A I S E V D P A V G V M V D V	Q N T L C I N A L	N K W G S D E Q K K R Y	
UniRef90_S4LY7	A K A E E L H C A M A G V S M G L L	V Q S S L D M A T	P V I S D I G T K E Q I E E F	
UniRef90_UPI00035A1181	T I T E E L A Y Y G C T G I Q T A I E A	N S L G Q M P V I	I A G N E E Q K K K Y	
UniRef90_D9R7A6	L V M E E I A R V S G V A S I Y V	S S P N S L S G G P I	L L L S G T E E Q K R N Y	
UniRef90_R7XUV2	I V I E E V A R A C V A S S L I P A	V N K L G S L P V Q I	G G G E E I K K K Y	
UniRef90_A9C2H6	M V F E E L A A V D P S T T A F I T	H N M A T W M L	G T W A T D A V R A E W	
UniRef90_UPI00026C9774	L V A R E V E R V D S G Y R S M M S	V Q S S L V M Y P I	L A Y G S E E Q K K R T Y	
UniRef90_G7GT37	V V A E E L A D A A T A P A F T L	Q L N D V V T P Y F I	S L S N D E Q K Q R W	
UniRef90_M2WVA1	A I A M E E A S R A G V S F G N A S	V H T N L I L P Y	L L A Y A T D E Q K Q R W	
UniRef90_F1YF97	I V I E E V A R V D V S A S L I P A	V N K L G T M G L	L I L S G S D E L K A K V	
UniRef90_UPI000471E0A4	I I F E E L A A G C T S T A A Y I S I	H N M A S W M I	D R F G S D T V R S K F	
UniRef90_H0Q206	L A T F E E I Q G T S P C F R S L	F A T N N G I G A Q G I	V I D G T P E Q K R D Y	
UniRef90_UPI0003F49E68	L I A R E V E R V D S G Y R S A M S	V Q S S L V M H P I	N E F G S E A Q K E K Y	
UniRef90_H2C5H0	I A N E E L S R I L S P A F M V R I G A	N H L F T T P V L L F	G T E E Q K R K Y	
UniRef90_H1W2A9	V V M E E I S R A G S I G L S Y A A	H S Q L C V N Q L Q L	N G S P E Q K Q K Y	
UniRef90_M1VXY9	V G I E E L A R V D P S V S V L D V	H N T L C N T A I I K Y G S A T	L K K K W	
UniRef90_C1BDR2	V V A E E I A R G T T S F G A G M S	L Q D D V A L P Y I I	I D L G T D D Q K Q R W	
UniRef90_UPI0003785948	V V A E E F A A V S L G Q A S S W G V	H A D V C A P Y L V R L	T S D E Q R A R W	
UniRef90_H6N4I1	V L Q E E I N R A A F T L G T L R T	H M D V I L P Y F I E L S	N D E Q R A R W	
UniRef90_F2U2T9	L L A R E V E R I D S A Y R S A M S	V Q S S L V M F P I	I N E F G T E A H K E K Y	
UniRef90_A9WA59	L I A A E L A R G D G S V V G T F V G	V T S G L A M G A I	A A C G S E E Q K Q R W	
UniRef90_UPI0001FFE3A	V L T E E V V R A R G V I H L G G	L G V H M M V V L P Y L	L L R Y A T E E Q R R R W	
UniRef90_UPI0003664413	M A L E E I A A G D G A V V S T L V S	V H N S P T C L I L E	E R F G T E A Q K E R F	
UniRef90_L8HA16	L A I E E E V A K V D G S V S V F	M D N T L V N N A V I	I R W G T E K Q K E Q W	
UniRef90_K0EP39	V V Q E E L V Y A H D N G F G F	S V H S P I V S H Y I	Y T Y G N E E Q R Q R W	
UniRef90_U1H8G0	I A R E E I S K V S P A C A S I A	A A L N T M F I M P L	L H F F G S E E Q R R R Y	
UniRef90_Q4JTY5	V A L E E L A R V D Q S V A I T L E	A G V S L G I M P I	Y R F G S D E Q K Q T Y	
UniRef90_K6VB13	L A C L E E A V D S G I R S L V S	V Q G S L A M Y A I	H R W G S E E Q K Q E W	
UniRef90_UPI00021A6E2C	L V G I E E F A V Y G C T G I	I S T A L E G S G L G Q A P	V I A F G T K E Q H K K Y	
UniRef90_A6GS02	V L F E E L L A Y S G D R S F G V	H V H A I A A Q Y I	L N H G T E E Q K Q Y F	
UniRef90_UPI0003B35ADB	L I F E Q L S K G D I S H A T F L S I	H N M A G A M I	D K F A S E E E L R Q H Y	
UniRef90_F2IVH0	L V A R E I E R V D S G Y R S M N S	V Q S S L V M Y P I	Y A Y G S E E E Q R K K Y	
UniRef90_FONYJ7	L V C D Y I S G A T G S L A T A F G A	H T G I G T M P I	L L Y G T E E Q K Q K Y	
UniRef90_E4NDP4	A V I Y E E T A R A G V T F G S S G	V H T G L V L P Y L	L E Y A T E E Q K R R W	
UniRef90_UPI00046EC22B	L I C Q E M E R V D S A L R S F K E	V T S G L V M Y P I	W Q F G S E E E Q K D K W	
UniRef90_A4EKC4	L V F E E A L A Q S C A V S A F L S I	H N M C A R M I	D A Y G T D A L K D R V	
UniRef90_A4A3R8	M L I E E L S R G F G G I A T G Y G I	H S N I V A P Y I	S R H G T E E Q K Q Q W	
UniRef90_I4D347	L I T E Q L S R I D M G L G L A V	M A A T F G S E N I	L N Y G T E E Q K K K Y	
UniRef90_K7XR3	I A V E E L A K V D A S I A V L V D	I Q N T L I N A I V R N V	G S E E E Q K R E Y	
UniRef90_D5URT1	V L I A A Q Q A F D T S W G V S L	H N G I V A H Y I	L A Y G T E E Q K Q A W	
UniRef90_UPI0002DD248A	L V V G E E L F W G C A G I A T A I G G	I G L A S I P I	L E M G S E E E Q K K K W	
UniRef90_F7ADR7	I V H E E Q Q Y V N C S G P G F A	L H S D I V M R Y I	T K Y G T P E Q I E K Y	
UniRef90_N0CQV2	I A L E E E L A R V D S S V A I T L E	A G V S L G A M P L	H L F G T E E Q K R Q W	
UniRef90_C0ZPE1	A V I R E E T A R A G V T F G A D V	V H T C L V L P Y L	V E Y G N D E Q K A R W	
UniRef90_E2XVU1	V A A E E F G T I H C G I P M S I	G V Q T D M C T P A L	A R F G S D E L R D E F	
UniRef90_I8TDZ4	I I L E E E L A A G C T S T A A Y I S I	H N M V S W I V A T Y A S P A	F A R E W	
UniRef90_UPI0003B3EC8A	I I D E E E L A A Y A G S S A G I T L Q	S D I V A D Y L V I A Y G S P E	K A K Y	
UniRef90_D8G9C8	L L N E E I G R G C S L R C L T V H S	M V A H A I L K W G S K F	Q K E Y W	
UniRef90_E9V234	V A I E E E L G R V D Q S I G I T L E	A A V G L G I N P I	T N E Q K R R W	
UniRef90_Q22347	L I V E A L S Y G C T G I Q L G I M	G P S L A I A P V	Y I S G N E E E Q K K K Y	
UniRef90_H6RBD3	V V L E E E Q Q R I D E P G F G N	H V H S G I V A P Y L	V I A Y G T E E E Q K R R W	
UniRef90_UPI000263169D	L I F E A A M A Y G C P S T S A F I S I	H N M A A W M I	D R F G A P A V K D K Y	
UniRef90_D3D2R1	R L V A E L L G Y T T P S F R S M F	G T N G I A G H V L	L E G A T E E Q R Q T Y	
UniRef90_W4T8N8	I I F E E E L A A A C P S T A T Y I T	H N M V S W M I	D Q F G K D P V R Q Q L	
UniRef90_UPI000465140D	V V A V E Q T R A M S P S L G N P V	H S T I V A H Y L	N S Y G T E E Q K R A W	
UniRef90_UPI0003790C39	A V F A E E A Q A L G L A I S G V R	V H Y D I C A P Y F L	H C T N T E Q K Q R W	
UniRef90_K6ZU89	U L L A R E V E R V D S G Y R S A M S	V Q S S L V M Y P I	F T F G S D E Q K Q R Y	
UniRef90_UPI000378CAAD	V L V E E V H R A G V S L L G G S	G V H V G L C L P Y L	K K L A G E E E Q K Q R W	
UniRef90_D3F110	V I E E E L L A W G C S G I Q T S V G	C N G L A T A P L I L G G S	H E E K K E Y	
UniRef90_A6GB54	T I M L E E L R V D S G I R S F C	S V Q T A L A M Y P I	W A Y G T E E E Q K Q K W	
UniRef90_I7HWM9	L I F E Q L L A T G C I P T S A Y L S I	H N M V A S L V D R Y G S Q E I	R K K W	
UniRef90_K6ULG2	V L G E E E L G K F T A A V S S C	F G I H S D I T A P Y L	V H L G T E E Q K S R W	
UniRef90_S4XX52	L A L Q E L E Y G D S G L R S F V S	V Q G S S L A M Y P I	W K Y G S E E E Q K Q R W	
UniRef90_D2QQA1	T A I V E L S R V D G S I G L S M A A	H N S L C T N H	L L F G N D A Q K S A Y	
UniRef90_UPI00047501CF	L I M Q E L E R G D S G L R S F A S	V Q G A L A M Y P I	Y R Y G S E E E Q R Q Y	
UniRef90_G2E911	L F I E E E L G K E G I T G V F G S L	H S D I V A P Y L	L I K Y G T E A Q K Q K Y	
UniRef90_D5BN31	L V A R E V E R I D S G Y R S M M S	V Q S S L V M F P I	Y E Y G S E E E Q R L K Y	
UniRef90_K5YR11	L I A R E E I R V D S G Y R S A Y S	V Q S S L V M Y P I	Y A F G S D A Q K N K Y	
UniRef90_UPI0002653ED9	A F A E E E L G S R C G G I P M A V	G V G Q T D M A T P A L	A R F G S D E L K R K F	
UniRef90_R7TFW8	A T A E A M G S L K C G V P M S I	G V G Q T D M S T P A L	A R F G S D E E L C R N F	
UniRef90_K0C800	L A A M E L S Q C A T A F R A R V	G T N T G I G S E A L	V A D G T Q E Q K A K Y	
UniRef90_Q46MA8	L A L E E E L A R V D C A V A V A I	M A N S T A A S L L	N N Y G T D S Q K A R F	
UniRef90_X5MP89	A W M E E E M G K S G A N G V L A	L V G R T I S L D P I	Q K L A T E E I R E R V	
UniRef90_E9IU65	L T I L E E E I S K V D M A V S V P	D I H N T L T N S L I	L K I G S E E E Q K R K Y	
UniRef90_L0T4W5	L A M V E I I A A G D A A H S T I	V S V N N S L F C A G I	L K N G D E A Q K Q K Y	
UniRef90_V8QR90	L A A M E L S Q C S V A F R A R V	G T N T G I G S E G L	V I A D G T P E Q K Q R Y	
UniRef90_UPI00047CEEEED	L A S I E E L A C S S G G L A S L S	H S I G A P P I	K N F G S D E L K A R V	
UniRef90_D7C1H9	I I T E E E T A R A G V S F G G S	G V H T A L C P Y L	L I K Y G T A T E E Q K R R W	
UniRef90_M2VH91	M I C E E I G Q G F G G L A S G Y N I	H A N I V M P Y I	L H L G S E Q Q Q R H W	

130            140            150            160

UniRef90_D6Z359	L P D I A A G K R F A A F A L T E S G A G S D A S G I Q T T A V K D G D H W V L
UniRef90_UPI0003757560	G P Q L A S G K A L A S Y C L T E P P G A G S D A G S I T T S A R L E G E S Y V L
UniRef90_T1AWR5	L V P A A K G E K L L A F A L T E P P G S G D S G A V H T I A E A T G D R W R I
UniRef90_L7FFQ4	F P G L A A G K L L T A V A M T E P G T G S D L A G I R T T A V R D G D S Y V L
UniRef90_S6HYD2	L P K L A S G E W I G C F G L T E P D H G S D P S G M L T R A K K V D G G Y L L
UniRef90_D4YK89	L R P A I S G E A I A S I G V T E P D A G S D V A A I R T T A K R D G D H W V I
UniRef90_H5UTZ4	L P D L A A G R A M A G F G L T E P D A G S D A G A T K T R A R L E D G Q W V V
UniRef90_U7UDK8	L R P L A T G E Y I G C F G L T E P G A G S D A S A T A T V A K F D G E N Y I L
UniRef90_UPI00037F5A8C	L P K L A S G E M I G C F G L T E P D H G S D P G S M V T T A V K T D G G W K I
UniRef90_Q9RVV0	L P R M A A G E C I A G F A I L T E P S S G S D A G N I R T K A V K K G D V Y V L
UniRef90_T0RH57	L P A A C S G E A I C G M A M S E P A V G T D V L G M K T T A T K V G D E Y V L
UniRef90_C7M0E1	L R V A S G E A Q A S Y C L S E P D A G S D V A S M T T R A V R D G D S Y V L
UniRef90_Q5Z108	L P G L T A M E L L L G S Y A L T E P G V G S D A A A L S T K A V R D G D D Y I L
UniRef90_E8WY33	L P R M A K D T I G S Y C L S E S A A S G S D A F A L Q T R A T Q R G S D Y V L
UniRef90_S4LY7	L R P A L A G D K I A A L L G V S E P P G A G S D V A G I R T T A R K D G D D Y V L
UniRef90_UPI00035A1181	L G R M T E E P L M C A Y C V T E P V A G G S D V A G I L K T R V E K K G D E Y I L
UniRef90_D9R7A6	L P S L I S G N K K L C F A L T E P G A G S D A G G M Q S T A V K D G D S Y I L
UniRef90_R7XUV2	L S K L A A G E G G F G S Y C L S E P D A G S D A A A N Q K T T A V R D G D F W V L
UniRef90_A9C2H6	G E A L T S G R K I L A S Y C L T E P P G A G S D A G S L K T R A E L A G H E Y I I
UniRef90_UPI00026C9774	L P K L A T G E W I G C F G L T E P D A G S D P G S M T T R A K K V D G G Y L L
UniRef90_G7GT37	L P G F A S G E T I G A I A M T E P G A G S D L A G I L K T S A V R D G D H Y V L
UniRef90_M2WVA1	L P G F A S G E I M T A I A M T E P G T G S D L A G M A T T A K K D D G T H W I L
UniRef90_F1YF97	L P S I I A S G E A M A S Y A L S E R E A G G S D A A S M K T R A R K D G D S W V L
UniRef90_UPI000471E0A4	L P K L T T M E H F A S Y C L T E P P G S G S D A A S L R T R A E R V G D E Y V I
UniRef90_H0Q206	L P R R L A S G E I I G S F A L T E P D A G S D A G S L R T T A R R D G D H Y V L
UniRef90_UPI0003F49E68	L P R L A K G E M I G C F G L T E P N H G S D P S S M E T T A K K T S D G W V L
UniRef90_H2C5H0	V P P V A R G E V V F A A H A N T E P G A G S D V A G I K T V A K K D G S H W V L
UniRef90_H1W2A9	L P G L I A G T S V G A G L A M S E S G A G S D V V S M R T T A T A V D G G Y V L
UniRef90_M1VXY9	L K K L A I D T V A S F C L S E P G S G S D A A F A L T T R A E P D G G G Y K I
UniRef90_C1BDR2	L P G M A A G E L I G A I A M T E P G T G S D L L Q G I K T T A V R D G D D W I L
UniRef90_UPI0003785948	L P G V I C S G E L L W T A V A M T E P S G G S D L S A L R T T A V R D G G D W V L
UniRef90_H6N4I1	F P G F A A G E L I F T A I A M T E P G T G S D L A G V T T N A R R D G D R F I L
UniRef90_F2U2T9	L P R L A T G E L V V G A F G L T E P P N H G S D P A G M E T K L T K V D G G F L L
UniRef90_A9WA59	L P A M A R L E K I G A F A L T E P P Y V G S D A A H H I R T T A K R V S G G Y L L
UniRef90_UPI0001FFE3A	L P G I A R G E L L M T A I A M T E P G T G S D L A G M T T R A R R A G D R F V L
UniRef90_UPI0003664413	L R P M A T G K A V S C F A L T E P P Q A G G S D A S A L R T R A V R D G D H W V I
UniRef90_L8HA16	R P L A Q D T V G G S F C L S E P W S C G S D A F A L K A T A K K D G D G Y L L
UniRef90_K0EP39	L P G I I S G E L L V L A I A M T E P P G T G S D L L Q S V R T T A I R E G D H Y V I
UniRef90_U1H8G0	L P I I A K G G V V T A I A I S E P P Q A G G S D V A A L N T R A R R D G D S Y I L
UniRef90_Q4JTY5	L P N L V A G G K N L A G F G L T E P P E A G G S D A G G T K T T A K L D G G E W V I
UniRef90_K6VB13	L P P M A A G E T I G C F A L T E P P D C G S N P A G M R T R A R Q D G G D W I L
UniRef90_UPI00021A6E2C	L G R L I E E P L V A A Y C V T E P P G A G G S D V A G I K T K A E K K G N E W I I
UniRef90_A6GS02	L P K M A S G E M I G A I A M S E P P G A G G S D L L Q G I R T S A V K D G N H Y V V
UniRef90_UPI0003B35ADB	I P K F A S C G E L I A S Y C L T E P P G S G S D A A S L R T R A V R D G D D Y V L
UniRef90_F2IVH0	L P R L A S G E F V G C F G L T E P P D A G S D P A G M R T R A E K I D G G Y R L
UniRef90_FONYJ7	L P K L A T G E W F S S Y C L T E P P E A G G S D A N S G K T K A V E D G K E Y I I
UniRef90_E4NDP4	L P G F V S G E I M T A I A M T E P P G A G G S D L A G I A T T A K L D G T H Y V L
UniRef90_UPI00046EC22B	L P L L T R G E K I G C F G L T E P P P N R G S D V A S M E T V A K R D G S G W I L
UniRef90_A4EKC4	L P K A L T M E T I L S Y C L T E P P G S G S D A A A L K T K A I R D N A G Y Q L
UniRef90_A4A3R8	L P K M V S G E A F G A L A M T E P P G A G G S D V Q G I R T S A V R D G D E W V L
UniRef90_I4D347	L S L L P T G Q A I F A G A Y T E P P N A G G S D V A G T T T K A V K D G S D Y V I
UniRef90_K7XR3	L P R L A Q G Q Y A G S F C L S E V V S G S D A F A L K S S A K R D G E H Y V L
UniRef90_D5URT1	L P K M A S G E A V G A I A M T E P P G T G S D L L Q N V K T R A I K T G G E Y V I
UniRef90_UPI0002DD248A	L P L F C D P D R L G A M C L T E P P G A G G S D V V S M T T R A V R Q G D E Y V I
UniRef90_F7ADR7	I P D M T A G K K I G A I A M T E P P G A G G S D L L Q G V R T F A K K D G D D W V L
UniRef90_N0CQV2	L P K L C G A E G A L G A F G L T E P P D G G S D A A G G T R T T A V L D R D E W V I
UniRef90_C0ZPE1	L P G F L S G E L L M T A I A M T E P P P G A G G S D L A G I K T T A R L D G S H Y M L
UniRef90_E2XVU1	L P R A I S G E Q V V G C I G V S E T P P G A G G S D V A G L K T H A R K D G A D Y V I
UniRef90_I8TDZ4	S P M L A S G R K L G S Y C L T E P P P N A G G S D A A S L R T S A E K R G D R Y L L
UniRef90_UPI0003B3EC8A	L P K M I S S G E V I T A I A M T E P P G A G G S D L L Q G I K T T A R K D G N H Y V I
UniRef90_D8G9C8	L T K L A S G D A I A A F A L S E P P P N I G S D A K A V E T T A K L S G D S Y I L
UniRef90_E9V234	L P D L V I A G K K L A G F G L T E P P G A G G S D A A G A T A T K A V L D G D D E W V V
UniRef90_Q22347	L G A L A A E P I I A S Y C V T E P P G A G G S D V V N G V K T K C E K K G D E Y I I
UniRef90_H6RBD3	L P S M A T G E V I A A I A M T E P P P S G G S D L A S M R T R A V R E G D D Y V V
UniRef90_UPI000263169D	L P S L V T M D R L A S Y C L T E P P P G S G S D A A A L K T K A I R V R D G D H Y V V
UniRef90_D3D2R1	L P K I A S G E W T A S F A L T E P P E G A G G S D P A G L A T T A V R K T D D G W V I
UniRef90_W4T8N8	C P E L A S G R L L G S Y C L T E P P P G S G S D A A G L K T T A V K K G N K Y I I
UniRef90_UPI000465140D	L P K M A S G E I V V G A I A M T E P P P G T G S D L L Q N I R T R A V A D G D D Y V L
UniRef90_UPI0003790C39	L P R I A S G Q A L T A I A M S E P P P G A G G S D L K A M A T S A R R E G E V Y V V
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UniRef90_K6ULG2	L P G V A A G E K I M S I G M T E P P P S G G S D L A A L K T S A V D G T G D W I I
UniRef90_S4XX52	L P R M A S A E L I G C F G L T E P P P D S G G S D P S S M K T R A R K D G S S Y V L
UniRef90_D2QQA1	L P R L A A G E W L G A W G L T E P P P N T G S D A G N M R T T A H R D G D D W V L
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UniRef90_D7C1H9	L P P F I L A G D M M T A I A M T E P P P G T G S D L A G M K T T A K E D G T H Y V L
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UniRef90_H1W2A9	N G S K M W I	T N G P D A D L I V V Y A K T E T K G I V T A F I V	E T K T K G F S C	
UniRef90_M1VXY9	N G S K M W I	T N G H E A E L F I V F A N L D P G I V T A F I V	E K S T P G F S V	
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UniRef90_F2IVH0	K G S K M W I	S N S P I A D V F V V W A K S D G A I R G F V L	E K G M K G L S A	
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UniRef90_A4A3R8	N G S K I F	T N G I H A D I V V V A A I T D K G T S L L L	D T T L P G F E K	
UniRef90_I4D347	N G S K M F I	T N G T I C D Y M V A L C V T N P R H S L I I V	D A N T P G I T R	
UniRef90_K7XR3	N G S K M W I	S N S D I A G L F V V F N A D P G I T A F I V	V E R D T P G L K I	
UniRef90_D5URT1	N G S K T F I	T N G Q Q A D I V V L V C K T N P G I S L I L V	E A D R E G F R K	
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UniRef90_F7ADR7	N G S K V F I	T N G W M A D V V I V V A I T D K G I S L F L V	D G D N P G F I K	
UniRef90_N0CQV2	N G S K C F I	T N S D I T E L V T V T A V T G P R I S A I I V P	P S G T P G F T V	
UniRef90_C0ZPE1	N G S K T F I	T G G V Q A D I L I V V A R T S P G L S I L C	D T T S E G F S V	
UniRef90_E2XVU1	N G S K M W I	T N S P S Q A D F I C L L A N T S D D K S L I M V	P M N T P G I S V	
UniRef90_I8TDZ4	N G S K V F I	S G A G A T D L L V V F A R T G R G I S V F A V	P A D T P G I R Y	
UniRef90_UPI0003B3EC8A	N G S K T Y I	T N G Q N A D L L I V V I A K T D K G T S L I L V	E A D R E G F A R	
UniRef90_D8G9C8	N G Q K K W I	T Y Q G I A D V F L V F A K W E G K P S A F L V	E K N S P G L S I	
UniRef90_E9V234	D G A K Q F I	T N S G S S S V V T V T A R T G P E I S T I M I	P S G T P G F T A	
UniRef90_Q22347	N G S K A W I	T G G G H A K W F F V L A R S D K A F T A F I V	D G D T P G I T R	
UniRef90_H6RBD3	N G A K T F I	T N G G S A D V V V A A K T D P G V S L L L V	D T D C P G F R R	
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UniRef90_UPI0003790C39	N G A K T F I	S N G M H A D L I V L A V K T D D G I S L L V V	E E G M P G F S R	
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UniRef90_K6ULG2	N G S K T F I	T N G H Q C D L A V V A A R T D P G I S L F I L	E T G T H G Y T K	
UniRef90_S4XX52	T G T K M W I	T S A P I A D L C V V W A K V D D G I R G F V V	E R G M K G L E T	
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210      220      230

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UniRef90_S6HYD2	P K I E G K F S R A S V T G M I M M D E V F V P D E N L L P N V A G		
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UniRef90_H5UTZ4	E P A Y D K L G W N I S D T H G L T F E D A R V P E E N L L G E		
UniRef90_U7UDK8	G A H E N K M G I R G T Q T S D I I L D S V V V P K E N L L G E G K G		
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UniRef90_T0RH57	G R I K D K C G M R A S M T A E L V F E N C R V P A A N L I G K E		
UniRef90_C7M0E1	A K L E H K G V R G S P T G Q I V L D E V R V P V A N R I G E E		
UniRef90_Q5Z108	G P N E K K M G W N A Q P T R Q V I L E D A R V P V A N R L G E G D G		
UniRef90_E8WY33	G K K E D K G I R A S S T C E L V F Q D C V V G A D Q V L G E		
UniRef90_S4XL7	A K K L K K I G N K S S D T A E L F L E D V R V P R R Y L L G E Q D		
UniRef90_UP100035A1181	G R K E L N M G Q K C S D T R G I T F E D V R V P K E N L L G A E G		
UniRef90_D9R7A6	G K P E H K M G V I G C A T S D I I M D N A R I P A E N L L G E E		
UniRef90_R7XUV2	G A P E K K G I K G S P T R E V Y F D D N V R V P A D R I I G E E		
UniRef90_A9C2H6	G K K E E K M G W N S Q P T R V I S F D D N V R V P A Q N L L G E G E G		
UniRef90_UP100026C9774	P K I E G K L S R A S I T G M I L M D E I L S D D A L L P N V Q G		
UniRef90_G7GT37	G R K L D K M G L K S Q D T S E L H F D D N V R V P V A N L L G Q E		
UniRef90_M2WVA1	G R K L N K I G M K A S D T A E L S F T D V K V P V A D V L G E E		
UniRef90_F1YF97	G P L E H K G I K G S P T A E L Y F E N C T I P E D R V I G D E		
UniRef90_UP1000471E0A4	G A Q E R K M G W N S Q P T R V I S F D D N V R V P A E N L I G E G Q G		
UniRef90_H0Q206	G Q I D K K M G Q K G A H T C D V I F E D C R V P A V N L I G G R E		
UniRef90_UP10003F49E68	P A I K N K I A L R A S I T G S V F L E D V R V P A D A L L P K S S G		
UniRef90_H2C5H0	G G K I N V M G L R G E Q P N E V I L E D V K V P P E E N V L L G K V D		
UniRef90_H1W2A9	A R K L D K M G M R G S N T G E L N F D S V F V P K E N V L G K I N G		
UniRef90_M1VXY9	A K K E K K G I R A S S T C V L T F D D V H I P K E N L L G		
UniRef90_C1BDR2	G R K L H K V G L A G Q D T A E L L S F D Q V R V P G S N L L G E G R G		
UniRef90_UP10003785948	G A P L D K I G Q H E S D T A E L F F A D A R V P G A N L I G		
UniRef90_H6N4I1	G R A L P K I G I K V Q D T V E L S F S D V S V P V A N L L G E E		
UniRef90_F2U2T9	P K I E G K I A K R S V I N A D I T L E N V F V P P E E N R L P L A		
UniRef90_A9WA59	G R K L D K L G H T Q D D T A E L F F D G V E V P E D N L L G E E		
UniRef90_UP10001FFE3A	G R K L D K L G I R A S S T C E V L F F S D M R V P V A N L L G A Q E G		
UniRef90_UP10003664413	A R V E E K L G Q H A S D T C A L A F Q G M R V P A D A L V G E G		
UniRef90_L8HA16	G K K E D K L G I R A S S T C E V L F F S D M R V P V A N L L G E V		
UniRef90_K0EP39	G R V L A K M G Q H A Q D T R E L F F S D M R V P V A N L L G A Q E G		
UniRef90_U1H8G0	G R H E R K M G F R G A P N T P I F F D D N V R V P A E N L V G E E		
UniRef90_Q4JTY5	E P S Y N K V G W N A S D T H P L T F D N V R V P E E N L V G E		
UniRef90_K6VB13	P Q I H K M S R A S V T S E L V L D G V R		
UniRef90_UP100021A6E2C	G R K E L N M G Q R A S D T R M I T F E D V R V P Q E N V L G E G E G		
UniRef90_A6GS02	G R I L E K G Q K Q G D T C E L F F D D N V R V P T Q N V L G A E G		
UniRef90_UP10003B35ADB	G K K E E K M G W H A Q P T A V V S F D N C R I P A T N R V G E G D G		
UniRef90_F2IVH0	P K I G G K L S R A S I T G E I V M D G V E V S E D A L L P N V S G		
UniRef90_FONYJ7	G E E E D K L G I V V S S S T R Q V V F F N E V R V P V E N L L G E R N G		
UniRef90_E4NDP4	G R K L L Q K I G L R T S D T A E L L S F S D V K V P V E N L L G E E		
UniRef90_UP100046EC22B	A F Q I R K G S M R V G D V G E L A F S D C K I P S E N L L P Q S G G		
UniRef90_A4EKC4	G G L E D K M G W R S Q P T R Q V Q M D N C C P A P A D N L L G E E		
UniRef90_A4A4R38	S R K I E K I G Q H T S D T A Q L F F Q D V R V L P A N A L L G E E		
UniRef90_I4D347	T K I K G K M G I R A S D T A E I I N F E D V R V P Q E N L V G E G N G		
UniRef90_K7XR3	A R P E S K L G L E A S S G T C A V H I E D V R V P V A S A V L G K V		
UniRef90_D5URT1	G N I L N K I G Q K G Q D T S E L F F D D V H P V P V E N L L G T Q E G		
UniRef90_UP10002DD248A	G K K F K K L G L R A S H T A E L V R F D D V H P V P V E N R L G E E		
UniRef90_F7ADR7	G K K L K K M G L R A Q D T A E L F F E D C R L P S S A L L G G K A G		
UniRef90_N0CQV2	A A P Y S K V G W N A S D T R E L S F T D V R V P A A N L L G E E		
UniRef90_C0ZPE1	G R K L E K L G L R A Q D T A E L S F T D V R V P I Q R N R I G H E		
UniRef90_E2XVU1	S P P L E K L G M H S S E T A Q V F F D E V R V P Q R N R I G H E		
UniRef90_I8TDZ4	G K L E H K M G W N A S P T R A I I A F D D V E V P A S Q L L A E G E G		
UniRef90_UP10003B3EC8A	G R N L D K I G Q N S A D T S E L F F N D V R V P M T N C L G E E		
UniRef90_D8G9C8	K P I F G M L G V K G S M L A E L H L N N C R I P Q E N L V G E		
UniRef90_E9V234	E K A Y D K L G W H A S D T H P L S F D G A R V P A D H L L G E		
UniRef90_Q22347	G K K E K N M G Q R C S D T R V I T F E D V R V P A E N V L G		
UniRef90_H6RBD3	G R V L D K G Q H S G D T A E L F F D D A R V P A A N L L G V E G		
UniRef90_UP1000263169D	G A Q E R K L G W H S Q P T A Q V I L D N V R V P V E N L L V G E G E G		
UniRef90_D3D2R1	A P K D V K M G Q A G S L T A D V H F F D D V R V P G E T L L V G G E A G		
UniRef90_W4T8N8	G E K E K K L G W N T Q P T R F V F L D H V E I D E N F L L G L G E G		
UniRef90_UP1000465140D	G R N L E K V G Q H G Q D T C E L F F D D V R V P R S N L L L G T A E G		
UniRef90_UP10003790C39	G R K L E K V G L H A Q D L A E L F F D D V E V P V A N L L G E E		
UniRef90_K6ZU89	A K I E G K F S L R A S I T G E I V M Q S V F V P T E N I L L P H V Q G		
UniRef90_UP1000378CAA	G R K L D K L G L R T S D T A E L S F T D V R V P V E D L L G E E		
UniRef90_D3F110	D K K E D K M G Q R A S N T A T I T F P E V E I P A D H L I G E E		
UniRef90_A6GB54	P E T H G K L S R A S I T G E I V L D D V R V P K E N N M L P G V R G		
UniRef90_I7HWM9	G K L E K K L G W R N Q P T C M L Y F E N C R V P I A N R V G E E		
UniRef90_K6ULG2	G N K L D K V G Q P E S D T A E L F F D N V R V P S A G N L L G E A		
UniRef90_S4XX52	P L I H G K M S L R A S P T G E I V L N E V R V P E E N M L P G A V G		
UniRef90_D2QQA1	G R K E D K L G M R A S E T A E M I F Q E C R I S D S Q R I L G A G E G		
UniRef90_UP100047501CF	R P I H T K A S M R M S T A E L Y L D G V H D Q S L Q L P H A K G		
UniRef90_G2E911	G V P F K K I G M K S Q D T C E L F F D N V K V P K E N L L G E E		
UniRef90_D5BN31	P K I G G K L S L R A S V T G E I V M D A V E V G E D A I L L P N V E G		
UniRef90_K5YR11	P K I E G K V S L R A S I T G M I M L D E V F V P D E A M I L G E E		
UniRef90_UP10002653ED9	G R R I D K L G M H C S D T A Q I Y F E D V R V P Q S Y L I G Q E		
UniRef90_R7TFW8	A K R L D K M G M F C S D T A Q I Y F E D V R V P Q K N V I G E E		
UniRef90_K0C800	G K A Y K K M G Q A G S P V S E V Y F Q D C R V P A A N L L I G G V E G		
UniRef90_Q46MA8	G K K L H K I G W R G S T T F E L F F E D C A I P A D H L L G E V		
UniRef90_X5MP89	T K L G K K M G W W A S D Q A T L Y F D N C R V P A E N L L M G E E		
UniRef90_E9IU65	D K P E D K M G I R A S G T C M V H F D D V K V I P E G N L L G P G E G		
UniRef90_L0T4W5	G K T E P K L G I R A S A T C E I E F Q D Y V A S A D E V L G P G E G		
UniRef90_V8QR90	G H P Y E K M G Q A G S P V S E V H F D H C R V P A C N L I G G V E G		
UniRef90_UP100047CEEEED	S P L D K M G W W A S D T A H R F D E C R I P V S N L L G P E		
UniRef90_D7C1H9	G R K L E K L G L K T S D T A E L S F T D V K V P V A D L L G E E		
UniRef90_M2VH91	G K A I R K I G Q H A S D T A E L F F D E L L V P E E A L L G E A		



	50	60	70	80
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UniRef90_UPI0003B4DC71	E W D A K H I F P E E T L R K A A E L G F A A I Y T D E Y G G S G L G R H D A V			
UniRef90_D7CKK5	R I E S E N A V P K E V I E G L A E L D L   F G M P M P E Y G G A G A G Y D T Y V			
UniRef90_Q21UM4	Q W E A A G Q F P H E L F K K M G D L G L   G I K Y P E Y G G M G L D F S Y S M			
UniRef90_R7YYW9	D M D E A E K K M D P E I I E Q C F E Q G G L M G I E I   P E Y G G A G M N F T A A I			
UniRef90_T0H477	R F R E Q R C V D R D L W R K A G E A G L L   L C G I   P E P W G A G G D I R H E V			
UniRef90_A1T4U5	E W D E T H H F P A D V L R E A A E L G M A A I Y C D   D D V G G S G L R R I D A V			
UniRef90_UPI00026578EC	K N D E H K I F P R E I L L G K L G D L   G L M S I H I   P E A G G S G F D S L S Y A			
UniRef90_A3WHX3	D H E A D G L V P R K A W K A L G E A G M L C P T V E E N G G L G L D F G F N C			
UniRef90_M1F902	H W D E E S I F P K D V L R E A G E M G F C G L Y T P E F G G M G L S R Q D T A			
UniRef90_V1CQC1	K M D R E G E M P Q E F V D K L A R Y K F S C P I V P E Y G G A G V D Y V S Y V			
UniRef90_K4KRF0	M L D E T G G R E Q L L L K Q L A A L G F M G L N I   K E Y Y G G T E A G V V A F S			
UniRef90_A5BIU6	R I D R T N Y F P E E L W K L M G D F N L H G I T A P E E Y G G L G L G Y L H C			
UniRef90_E2BX37	E Y D K S G K Y P W D I I K K K A W N V G L L N L H   P D Y G G L E N G V F D G C C			
UniRef90_D2B0B8	D L Y E R E E F P Y P D I V R Q M G A M G L F G L P I   P E Y G G M G G D Y F A L C			
UniRef90_F4CP32	A L E H A D T Y P Q D I V D G M K M E M G L F G L T I   P E Y G G L G E S L L T Y A			
UniRef90_Q5YXR8	R F I D Q H Q V D R D L W R A A G E L G L L G L S I   P E Y G G G G T F A H E A			
UniRef90_I8TWU1	E M D R T G I H P S A V V Q Q Q M A E H D F L G L Y L   P E F G G T E A G Y L L S Y V			
UniRef90_W0FLT1	K L E E T G D F D W D I F K K M A K Y G F C G V K I   P E Y G G A G G D Y L S Y A			
UniRef90_H5TYB3	E W E K Q G H P P R D F Y R K L G E L G V L G I E V   P E Y G G G G V H D F T Y S			
UniRef90_U5H3L1	A M D E A E K M D P V I I K G L F D Q G L M A I T D P E   L G G A G A S F T S A I			
UniRef90_A4SM66	R W D R D H E F P I P T I K Q A A A L G F C G L Y T P E Y G G L G L P R L D A S			
UniRef90_UPI000380DB50	L R D R E S R F P R D E L R E M G E L G F L G M L V   E D Y G G S D A G T V A Y A			
UniRef90_B6HAP0	E M D E A E T M D A K V V E Q L F E Q G L M G I E V   P E F G G A G M N F T A A I			
UniRef90_I3TUD8	E W D D A G I F P H E I F K K M G D Q G F L G I N K   P E Y G G L G L D Y T Y Q L			
UniRef90_R7WNH2	K W D D L G R P D R D F F R R L G E L G I L G I Q V   P E Y G G G G A S F A Y S A			
UniRef90_C0ZVS6	Q W E R D G E I P R E L L H R K A G A L G L L G A S A P E   A G G E G G D A V D S I			
UniRef90_T0NU31	H A A Q H H E D I P N L M L K L G A I G A L G P Y I   P E Y G G A G L D H I A Y G			
UniRef90_C8XAL0	R D E A A E Q F P R D V F R M L G Q T G L L G L P Y P   P E E G G G G Q P Y E V Y L			
UniRef90_B0VAC8	Q W E H D G L I P R D L W L R L G E N G F L C V D V   P E Y G G Y G A P V H Y S L			
UniRef90_Q0ASA5	R W E E Q G M V D R E I W T K A G K A G I L C P S V   P E Y G G A G G D W G H E Y			
UniRef90_V5XGF8	K W E A N R L V D R E A Y V A A G N Y G L I G F N M P   P E Y G G G G V D D F R F N			
UniRef90_J9K4E8	K L D K M Q M F P S D Q I K Q L A D L G I L G V V V   D K Y G G S G A D S L A L S			
UniRef90_UPI00045E67A8	E W D E K K H F P V E Q L R A A A A L G M G G I Y V   R E D G G S G L S R L D A A			
UniRef90_K6W1K0	S W E K A G Q W D R T L F T E A G K N G L L G F P V   P E F G G G P V D D F R Y A			
UniRef90_D0NT67	S M D E A G E M T P E V I Q G L F E N G L L S V E I   P E Y G G V G A S F M S L I			
UniRef90_B1H0P9	H Y D E K E E F P P W E I V K F E F A Q S D L C G A Y I   P E Y G G F G K G I M G L V			
UniRef90_U4LU86	E M D E A E Q M D K G I V S Q L F E Q G L L M G I E I   P E Y G G S E M N F G S C I			
UniRef90_I9KEL7	R W D Q T K H F P V D V L R K A A Q L G M G G I C V   A E D G G S G L R L D S A			
UniRef90_E8WJN8	Q R D A S G E F P A Q P V Q K L Q E M G L F G L P   P E F R Y G G G G S D F V S Y V			
UniRef90_UPI00037C54EB	M A F R E E R F D R E I M N E M G E L L G L L G P T V   P E Y G G P G V N H V A Y G			
UniRef90_C4LHN7	Q W H E Q G G Y C D R D M Y K K A G E L G L L G I T A D E F G G G G M D D W R F A			
UniRef90_Q6KZ71	E I D E K M Y V P E D I I Q G M R D M G L F A S Y I   P E Y N G Y G L G F K F L M			
UniRef90_C8XG09	Q W D R D H Y F P V D V V R S M G E L L G F L T A P E   P E F G G A G G D F T A L C			
UniRef90_K6VQ22	E W D E S H H F P V P A E L R E A A E L L G M G A I Y C   S E D G G S G L R R L D G V			
UniRef90_M8HWR5	E W E E A G R F P H D V F K K M G D L G L L G I C K   P E E E G G G L A L D Y S Y N L			
UniRef90_UPI0003B6C8AD	E L D A K E E F A W P I W E K F K E F L G L G F P F P   P E Y G G Q G A S A L L A T T			
UniRef90_UPI00037614B0	E F E K N E M V D R A S W E K A G A A G L L C A S M P   P E Y G G S G G T F A H E S			
UniRef90_C1COL1	M G N R N E V F Q R E I M N E M G D L L G V L G A T I   K G Y Y G C A G T S S V S Y G			
UniRef90_A4XKE7	K Y D K E G I F P R D I L D L L A Y T E L T G V Y I   P E Y G G G G V M E M C			
UniRef90_UPI00036C87CD	E V D E N H R F P V E A A E A L V A S G F N A V H   P E Y G G A G A D S V M V A			
UniRef90_UPI00041F7112	D W E E A R A T G R E V W K T A G S L G I L G L R F P E   E F G G G G D Y R F R C			
UniRef90_UPI00034CBAE9	A W R A A G M V P R E L F R K M G E L G Y L L I W A D E Y Y G G L G V E D F R F Q			
UniRef90_UPI0003762217	E L E R A D A Y P E R I V A G M R D L G L F G L M I   E E H G G L G A S S L L T Y A			
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UniRef90_B7GW68	E W D E A E T F P R E L Y K K A A E I G L L I G L G F   P E E E Y G G G P G D F L Y S V			
UniRef90_B8FA16	Q W E K D G V T P R E I W K K M G A E G F L C T W   D E Y Y G G P G G D F L Y S V			
UniRef90_M1PBU5	E L D E K D E F P R E I L E S M G Q A D L F G V P   P E Y G G F G G G C F D I L V			
UniRef90_F4P3J4	E M D E K E M L D K R V L K G L F D Q G L L M G I E T P   D Y G G S E S S F M S A L			
UniRef90_Q488U8	K W E D D A W M P R E I W N K L L G Q A G L C V D   D M P E Y G G F G V D F K F A A			
UniRef90_X7FF41	S W E A E G S I F P R A L W P K V V S G L G L A G I F V   E D A G G A G L S R L D G T			
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UniRef90_J3PK81	D M D E A E A M D P A I V E Q L F E Q G G L M G I E I   P E Y G G A G M N F T S A I			
UniRef90_F8MI30	D M D E A E A M D P A I V E Q L F E Q G G L M G I E I   P E Y G G A G M N F T S A I			
UniRef90_B2GIU5	K H D E E H S F P Y P E I I Q S Q M A E M G L F G L P   F P E Y G G Q G G D Y F A L C			
UniRef90_V7ANB0	E Y W E K A K F P F H V I P K L G A L H I A G G T   I K D Y G C P G L S L I G S A			
UniRef90_I4B6E7	A L D E K E E Y P F E I I F A K F K E A G L P G I   M Y D E Y Y G G M G A D L F A S I			
UniRef90_M0M7Q3	D H F E A G T F P T E L I P E M G E R G F F A P N   L D G Y G L A D C S Q K A Y G			
UniRef90_UPI000377BA41	K W E E Q A Y I D R S F Y K Q A G E L G L I G F A A   P E F G G S D M N D F R Y N S			
UniRef90_W7U300	K W D S K E I F P V E T T M R K A A Q L G F G A V F   V R E D G G S G M S R L R E G S			
UniRef90_UPI00041434EA	E A D E T A S F P T A S Y E A L R A A D L H A P H   L P E H G G V G I D A L G T A			
UniRef90_UPI00045D567D	T M D E N S E M D K S V I R G L F Q Q G L M G I E V   E D K Y G G A G A S F F S S I			
UniRef90_G4HQ54	E W E H A G I V D K T A F K K A G Q S G F G L G M P   V P E Y G G A G A D F R F N A			
UniRef90_UPI00040ED98E	D I R D E R M L R R E V W L E A G Q Q G Q F L G M Q   V P E F G G G Q D G D F R F N A			
UniRef90_A7SHB8	E M D Q N S Q M D P G I I K G L F E Q G G L M G I E I   S E Y G G T D S T F F A A N S			
UniRef90_UPI000237649E	R L D R E E V F A G D I Y K A M G E N G L F G I T   V P Q D G G A G L D A L A Y S			
UniRef90_Q0SB93	E H E K S E T Y P E G V F A T L G E A G L L S P   Y P E E E W G G G G A P Y E V Y L			
UniRef90_K0EWK1	E W E Q T E M M P H E I I F A D M A K L G L P G I   M Y D E Y Y G G M G A D L F A S I			
UniRef90_L8EUJ0	A W D Q D K H F P V D V L R R A A A L G L G G I Y   V R E R G G S A L S R A D G V			
UniRef90_U5ER60	I A N R D E V F H K E I I M S E M G S F G V L G C T   I K G Y G G C A G V N N V A Y G			
UniRef90_F9MMY6	E M D E T E K L H D G L L E K L A A Q G L L G G I Y   V P E Y G G I G L D T V T I A			
UniRef90_UPI0003643766	T M D K E N K M H P E L G K L A K I G L L D L V   V P E N G G V G L L D S V T L A			
UniRef90_M0QGW8	A W E V E G L I P R E V H R E A A K L G L F G L G V   P P E D G G S G G D L I D G T			
UniRef90_J5K8Y3	D A N R N E T F D I G I Y K E M G S L G F L G A P   I K G Y G G C A G T N Y V S Y G			
UniRef90_UPI00037E9CE9	H L E K D Y D L T V K L M R K A G E L G L L S S D I   P E Y G G G L D K V S S T			
UniRef90_B2TCP7	E R D L Q S A W P R S E L K A L A E L G F L G M L   V P E Y G G S G A G I L D F C			
UniRef90_UPI000388B5E1	K W E E E G Q F P A H V F K T L G Q A G F L G V N K   P E Y G G M G L D F S Y S I			
UniRef90_Q72L25	A Y E E E E A F P W P L V E E M A E L G F L G V F   V P E A G G G A G L D F F A Y L			
UniRef90_Q72VD5	E H D D Y E T F N L S L F R R I G E L G L F G V T   V P E E E G G G M G M D A V A A V			
UniRef90_H2ZID1	H D D K T K F P P W R L I K K A W G L G F M N L H   P Q F G G M D F G S M E G C C			
UniRef90_G7WGP9	Y Y D E E E E F P W P V F Q K M A E I G V L C M S G P E S S G Y P W D N L T R C			

	90	100	110	120
UniRef90_D9SYQ3	A V L D E E I V A A G C T G L G F G L H N D V V A P Y L T E L T G D Q R K R W			
UniRef90_F6SP29	L A I E E L A K V D A S V A L F C D L Q N T L I N T L I M K H G T E E Q K A T Y			
UniRef90_UPI0003B4DC71	V I F E E L A A A C P S T A A Y I S I H N M A C W M D S F G T D A Q R A R F			
UniRef90_D7CKK5	V A L E Q I A R I S C G P A M I S A H T L G L G A I N N F G T E E Q K Q R Y			
UniRef90_Q21UM4	V M A E A L G E C N G G V P M A I G V Q T D M C T P A L A R F G S D E L K R E F			
UniRef90_R7YYW9	V A I E E L A R V D P S V S V M V D V H N T L V N T A I I K F G K E Q D R K K W			
UniRef90_T0H477	V F I E E L A R A G F P D F G V P I H S G I V A P Y I A H Y G T D A Q K D R W			
UniRef90_A1T4U5	R I F E K L A T A D P T V A A F L S I H N M C A W M V D S F G T E E Q R K E W			
UniRef90_UPI00026578EC	I A I E E I S N A C A G T G V I M A V Q H L Y L A V V S Q W G T P K Q I D D F			
UniRef90_A3WHX3	V L A E E L A Y M G S S A G F T L Q N D I T V N Y F E R L G S E E Q K A K Y			
UniRef90_M1F902	V I V E E L A A A C P S T A A F I T I H N M A T W M L A S F G T D E V K Q N V			
UniRef90_V1CQC1	I I M E E L S R A D M S C G T I L T A G T L V A L P I N F G T S E Q K E K Y			
UniRef90_K4KRF0	L A I T E L A K A C A S T A V T V S V S N M V A E V I Q A M G T E A Q Q K R Y			
UniRef90_A5BIU6	I A M E E I S R A S G S V A L S Y G A H S N L C L N Q L V R N G N P A Q K Q K Y			
UniRef90_E2BX37	L L V E E L G Y G C T G I T T A I A T T N L G Q T P V I A G N K E Q Q K K Y			
UniRef90_D2B0B8	L V L E E L A R V D S S V S T V E A A V S L G A M P I Y F G T A E Q R A T W			
UniRef90_F4CP32	L V V E Q L A R G W M S S G V I N T H F V A Y M L T Q H G T D E Q K Q R L			
UniRef90_Q5YXR8	V L V E E Q A R I G D T A W G A A M H N A I V A H Y L L A Y G T E E Q K R T W			
UniRef90_I8TWU1	L I I E E I S R M S G A V A S I L N H A S L A A Y T M Y R F G S A V Q K Q E C			
UniRef90_W0FLT1	I L V E E F A R V S P V L S I Y A N T S N L G G P L M L A G S E E Q K Q R W			
UniRef90_H5TYB3	L V V E E S E T A L A G V T F G S E S V H T N L I P Y L M E Y A T D E Q K Q R W			
UniRef90_U5H3L1	L V I E E L A K V D P S V S V L C D V H N T L V N T I L R H Y A T P E L R E K Y			
UniRef90_A4SM66	L I F E R L A M G C T S T A Y L T I H N M V S W M L G S W L P A A V I A E E W			
UniRef90_UPI000380DB50	L A L E E I A A A D G A C S T I V S V H S S V G C V P I L R F G T D E Q K A R F			
UniRef90_B6HAP0	V A I E E L A R V D P S V S V L D V H N T L V N T I L M K Y G D A K A Q R T W			
UniRef90_I3TUD8	A F C E A I S A A R S P V V M A I G V Q T D M A T P A L A K H G S D E L R Q E F			
UniRef90_R7WNH2	I V F E E V A R A G V S F G S Y T V H C C I L P Y L I E Y G T E E Q K T R W			
UniRef90_C0ZVS6	V I C E E M H Q A G A S G G L F A S L F T C I A V P H I A A G D E A Q I E K W			
UniRef90_T0NU31	I I M Q E L E A G D S A I R S A A S V Q S S L V Y M P I F T F G S E E Q K K Q Y			
UniRef90_C8XAL0	Q V L E E V G A V W A S V G V G M S V H V L S C F P L A H Y G T D A Q R A Q W			
UniRef90_B0VAC8	M L V Q E T A A G F A S L A V A I G G Q N E L L V S P Y L Q N I G S E E Q K K R Y W			
UniRef90_Q0ASA5	V F H A E I G A G G W G V G L H N S I I A P Y V T H Y G S E D Q K K S V			
UniRef90_V5XGF8	A V V E E F A F K G F L A C P G I S L Q N D I V G P Y F K N L A T K E Q L D R W			
UniRef90_J9K4E8	I A V E E I S R C C G T G S I V S I H N A L Y A G I I N R V G T P E Q K L Q F			
UniRef90_UPI00045E67A8	L I F E Q L A T G C P G T S A Y L S I H N M S T W M D R F G D D A Q R R K W			
UniRef90_K6W1K0	I V I E E T A R G A A A E A I A F S L Q N D V V L P Y L V E M T D D E Q K A R W			
UniRef90_D0NT67	L T I E E L L S R V D A S V G L L C D L Q N T V V S N L F L R Y A T E E Q R Q E Y			
UniRef90_B1H0P9	L V V E E L L C K V D G A I A L S L A T A L G T L P I L S G S E E Q K K K Y			
UniRef90_U4LU86	V A I E E L A R V D P S V S V M V D V H N T L V N T V F K T Y G S E A K N K Y			
UniRef90_I9KEL7	V I F E A L A T G C P S I A A Y L S I H N M V T S M D R Y G D A A Q R A R F			
UniRef90_E8WJN8	T V V E E L A R C D A S V A T L L A H T L C A S H I D A F A S H E Q K E R F			
UniRef90_UPI00037C54EB	L I G R E V E R V D S G Y R S A M S V Q S S L V M H P I F A Y G S E E Q K M K Y			
UniRef90_C4LHN7	I L S E E L A Q S D C S V I V S V Q T I N D L V V P Y L E R F A N D E Q K E R F			
UniRef90_Q6KZ71	N V I E E I S K A C P S T A V L D G A L T L F A E P V I M F G S E D L K K R Y			
UniRef90_C8XG09	V A I E E L G R V D Q S L G V T L E A G V G L G N P I L T F G T P E Q Q Q L W			
UniRef90_K6VQ22	R I F E Q L A Y A D P A V A A F L S I H N M C T W M V D Q Y G T D E Q R S T W			
UniRef90_M8HWR5	V V A E E I G R A C G G V P L A I G V Q T D M A T P A L A R F G S K E L R D F			
UniRef90_UPI0003B6C8AD	L A W E A L G L A G V D G G M V M S A H T I L C G V P I M V Y G T E D Q K R R Y			
UniRef90_UPI00037614B0	A I I E A I G H V G V D G F G I A L H N S I V A P Y I L H Y G S E E Q K K R W			
UniRef90_C1COL1	L I A R E V V R V D S S Y R S A M S V Q S S L V Y M P I S D F G T E E Q K E K Y			
UniRef90_A4XKE7	L V V E E L S R N C A G I A V S Y A A S A L G A Y P I M L Y G T Q E Q K E K Y			
UniRef90_UPI00036C87CD	V V I E E V A R V C V S S S L P G V N K L G T M G L L I N G S E E L K Q Q V			
UniRef90_UPI00041F7112	V V H E E L A L K G A A L G G S L G S L S I N E D V G S Y I T E L G T E N Q K R R W			
UniRef90_UPI00034CBAE9	Q V M L E E D A L Y G E A G F Y H T L H S R L V A P Y I K H F G N A E Q Q A R I			
UniRef90_UPI0003762217	L V V E E L S R G W M S V S G I V N T H F I V A W M I A H H G T D E Q K A H L			
UniRef90_I3TSW7	I A G R E L A R C G A G G V P A S L L S H T I G A P P I L K A G S D A L K A R V			
UniRef90_B7GW68	I A G E E L E M A K G S G G V H I S L M V H T I G A P P I Q Y F G S E E L K A R V			
UniRef90_B8FA16	I A L E E L V R T N Q Y G L D A F L H S D V T P Y I A S F G N E E L Q R E K Y			
UniRef90_M1PBU5	L A L E Q L G R G C I G V A T A F A A S A L G I Y P I M I S G S E E M K Q K Y			
UniRef90_F4P3J4	L T I E E L A K V D P S V S V C D V Q N T L V N T L F K R Y G T A S Q K E K Y			
UniRef90_Q488U8	L I N D I F Y R R G V G A I A G G G I A V H V G H Y I L N M G T E A Q K Q K Y			
UniRef90_X7FF41	L V F E A L S M A C P S V A A F L S I H N M C A S M I D F F G S Q D M A A R L			
UniRef90_F6F1J5	E I V I M E M C W S S A A F R S V V G I N L G L G S Q G I L M D G T E E Q R D Y W			
UniRef90_J3PK81	V G I E E L A R V D P S V S V L D V H N T L V N T T V L R W G S A D L K K R F			
UniRef90_F8MI30	V C I E E L A R I D P S V S V M V D V H N T L V N T A V I R W G S E A L K K Y			
UniRef90_B2GIU5	L A L E Q I A V A R V D A Q S V A L T L E A G V S L G A M P V Y L F G T E E Q K Q Q W			
UniRef90_V7ANB0	I A I A E V A R V D A S C T F I L V H S S L A M L T I A L C G S E A Q K Q K Y			
UniRef90_I4B6E7	V F S E I V S E Y C L G V N T A I S A T K L G A L P I E H G G T E E Q K K K Y			
UniRef90_M0M7Q3	L L M Q E L E A G D S G V R S M A S V Q G A L V M Y M P I H T Y G S E A Q K E R W			
UniRef90_UPI000377BA41	I I L A E E F A Q A D C S I I V G I G T I N D L V V P Y I R K F A N E E Q C E R F			
UniRef90_W7U300	V I F E A L A A G C T S T A A Y M T I H S M C G W M L D S F G T E A Q R Q R W			
UniRef90_UPI00041434EA	I V I E E V A R V C A S S S L P I A V N K L G T M P I L L D A S D A L K E R C C			
UniRef90_UPI00045D567D	L V I E E L A R V D P S V A V L C D Q N T I N T L I R K Q G T E E Q K A A Y			
UniRef90_G4HQ54	V M A E E F C R A Q V G A A S S I L H N D T C L P Y F L S A A N E E Q R K R W			
UniRef90_UPI00040ED98E	V I G E E L A R V A V A Y N S I F S I H I D I C A P Y L L E L A T D E A K K K W			
UniRef90_A7SHB8	L V I E E L A R V D P S V S V M C D V Q N T L I N N L I M T Y G T K E Q K Q E Y			
UniRef90_UPI000237649E	I V I E E L A R S G Y A S I A D Q C G L V E L V T L L C T H G S A A Q K A Q W			
UniRef90_Q0SB93	Q V L E E L A A R W A S V A V V S V H S L A C H P L M A F G T D E Q K Q Q W			
UniRef90_K0EWK1	V L C Q E L G R V T H S F P M A L G V H V A M A T P S L H A H G S E E L K Q E Y			
UniRef90_L8EUJ0	L V F E V L A T A C P S I A G Y L S I H N M V A W M I D R Y G D E A Q R A R W			
UniRef90_U5ER60	L L T R E V R L D S G Y R S A V S Q S L S M G A I Y D Y G S D A Q K E K Y			
UniRef90_F9MMY6	A L Y E E L A K G C A G V A T V V A A N A L A S Y P V I L A G T D K Q K Q Y			
UniRef90_UPI0003643766	L L Y E E L A K G C A G V A T V V A A N A L A S Y P V I L A G D P Q I D R W			
UniRef90_M0QGW8	I L A E E L H Y A G V A G G V F A S L F T H I A L P H I A G F G S E E Q K D F Y			
UniRef90_J5K8Y3	L I A E E I E R V D S S Y R S A F S V Q T S L A M H A I Y E F G S E E Q K D F Y			
UniRef90_UPI00037E9CE9	I I N E V L A G S F A L S V G A H V G I G T L P I V F G T P E Q K K R Y			
UniRef90_B2TCP7	I A Q H E F A A V D A G L A T L M H V H N F T A L T V I E H G T E T Q K Q R Y			
UniRef90_UPI000388B5E1	A V A E E L G N R C G G V P M A I G V Q T D M A T P A L T R F G S D E L K Q Q F			
UniRef90_Q7L225	A L L E E L M G G W A S L R S V L S V Q Q S L V T P L L A Y G T E A Q K A R Y			
UniRef90_Q72VD5	I I H E E L S A Y D P G F T L S Y L A H E V L F V N N F Y H S S N A Q R A K Y			
UniRef90_H2ZID1	L I A E E L A Y G C S G I S T A V L A N D L A Q A P V I Y A G N K E Q R K K Y			
UniRef90_G7WGP9	L V M E E L A R G C G G I A T P M A N I L A S E P I E I A G T A E Q K K Q W			

130                  140                  150                  160

UniRef90_D9SYQ3	L P G F C S G D L V T A I A M S E P G A G S D L A G I R T S A V R D G D S L V L
UniRef90_F6SP29	L T K L A T E E I G S F C L S E A G A G S D S F S L K T R A D K K G D Y F V I
UniRef90_UPI0003B4DC71	L P K L V T M E H F A S Y C L T E P G A G G S D A G A L R T S A V R D G D H Y I L
UniRef90_D7CKK5	M P K C C R G E H I A S F A T E P G T G S D P K Q I T T T A V R D G N H F V I
UniRef90_Q21UM4	L A P S I A G D M V G C I G V S E V G G G S D V A A L K T T A K K D G D D Y L I
UniRef90_R7YYW9	L P K L A T D T I G S F C L S E P V I S G S D A F A L A T K A E K T S S G Y K I
UniRef90_T0H477	L P A M A A G E K V G A M A M T E P E G G S D L R G I R T S A K L Y G D E W V I
UniRef90_A1T4U5	V P R L A S M D A L A S Y C L T E P G A G G S D A S A L R T K A V R S G D D Y V L
UniRef90_UPI00026578EC	V K P F A N G R K F A C Y A L S E P G N G G S D A G A V A T T A T V R N D E I L L
UniRef90_A3WHX3	L P G M I S G D I I S A I A M T E P G T G S D L Q G I K T T A I E D G N H L V V
UniRef90_M1F902	V P T L A S G E K L A S Y C L T E P G A G G S D A A S L R T K A E R D G D D Y V I
UniRef90_V1CQC1	L P R L A E G K F V G A F G L T E P G A G G S D A G A T Q T T A V L D G D H Y I L
UniRef90_K4KRF0	L P R L C G G E F Y A G G F C T E S G A G G S D P A G M K T R A V K D G D H Y V L
UniRef90_A5BIU6	L P K L I S S G E H V G A L A M S E A Q C M K C K A D R V D G G Y I L
UniRef90_E2BX37	L G R L I E E P H V T A Y C V T E P G T G S D V A G V K T K A E K K G K E W I L
UniRef90_D2B0B8	L P R L T S G E M L M G A F G L T E P G G G S D P G G M R T T A V L D G D E W V I
UniRef90_F4CP32	L P Q M A A G E V R G A F S M S E P D L G G S D V A A I K T K A V R D G D D Y V I
UniRef90_Q5YXR8	L P R L C S G E V V V G A L A M T E P G T G S D L Q A I R T R A V R E G D D Y V I
UniRef90_I8TWU1	L P A L C S G E K L A A F A L T E P G A A P G V G S H K V I A T K E G D H Y V L
UniRef90_W0FLT1	L P P V A K G E Q I M A M A F A L T E P G A G G S D A G G T T T R A V Q E D G S F I L
UniRef90_H5TYB3	L P G F A S G D I M F A I A M T E P G T G S D L A N I I S T T A K E D G S H Y I L
UniRef90_U5H3L1	L P Q L S A D K L G S F C L S E P N S G G S D A F A L K T T A I K D G S H Y Y V I
UniRef90_A4SM66	V P R L A S G E L L G S Y C L T E P G A G G S D A A A L K T R A V R D G D D Y L I
UniRef90_UPI000380DB50	L P K L A S G E W I G G F A L T E A Q A G G S D A S A L R T R A R R E G D H Y V I
UniRef90_B6HAP0	L P K L T T G T V G G S F C L S E P A S G G S D A F A L Q T K A E K T A D G Y K I L
UniRef90_I3TUD8	L A P A I T G D R V A C I G V S E P G A G G S D V A S I K T R A R K D G D D Y V I
UniRef90_R7WNH2	L P T F A S G D L M T A I A M T E P G A G G S D L A G I T T T S A K E D G S E W I V
UniRef90_C0ZVS6	V K P T L R G D K I G S L A I T E P G G G S D V G H T T T A K R D G D H Y V V
UniRef90_T0NU31	L P K L A L G E Y I L G S F G L T E P N H G S D P A A M E T R I L L K K D G Q Y I L
UniRef90_C8XAL0	L P D L L A G D I L L G A Y C L S E A Q A G G S D P A A L R T T A R R D G D E Y V L
UniRef90_B0VAC8	L P K M V T G E V V V T A I A M T E A N A G G S D L Q A I R T T Q A I L E N D H Y R I
UniRef90_Q0ASA5	L P R M I S G D L I G A I A M S E P G T G S D L Q S V K T T A I K D G N G Y R I
UniRef90_V5XGF8	M P G F A S G E L I G A I A M S E P G A G G S D L A G I R T T A V R D G D D W I V
UniRef90_J9K4E8	L P D F I S R G I V G C F A L S E P G S G S D A A N M H T I A K R E G D H W I L
UniRef90_UPI00045E67A8	V P R L A S M E H F A S Y C L T E P G A G G S D A A A L K T K A V R N G D H Y I V
UniRef90_K6W1K0	L P G V V S G E T V L G I A M T E P G A G G S D L T K G I R T T A V R D G D H Y T I L
UniRef90_D0NT67	L P R L L S T N T V G S F C L T E A E S G G S D A F A L K T K A D V D G S H Y T I L
UniRef90_B1H0P9	L P D I A S G K K L A A F G L T E A G A G G S D A T G M A T V A V K D G D Y Y V L
UniRef90_U4LU86	L P R R L A T S S V V G S F C L S E P A S G G S D A F A L K T K A T K S Q S S Y T I
UniRef90_I9KEL7	V P A L C S M E H L A S Y C L T E P G A G G S D A A A L S T R A R R E G A S Y I L
UniRef90_E8WJN8	L P T P L A S G Q Q L G A W A L T E P E A G G S D A A G I K T R A I Y D D G R W R L
UniRef90_UPI00037C54EB	L P K L A S G E W V G C F G L T E P N H G S D P G S M I T R A K K V D G G Y I L
UniRef90_C4LHN7	L P R P L C A G E K I A A I A M T E P G A G A D L A G I R T L L A K K D D G N Y I V
UniRef90_Q6KZ71	L P R V A S G E V V G G L A I T E P G A G G S D A A S I K T T A V R S G N K Y V L
UniRef90_C8XG09	L P D L V A G R T L A G F G L T E P G A G G S D A G A T R T K A D L V D G E W I I
UniRef90_K6VQ22	V P K L A S A M E T V V A S Y C L T E P G A G G S D A A A L A T R A V V K S G D E Y V I
UniRef90_M8HWR5	L T P A I A G E Y V V A S I A V S E V H A G G S D V A A I K T T A K K D G D D Y V I
UniRef90_UPI0003B6C8AD	L T R L A S G D M I G C F A L T E P H G G G S D I H L K T T A V K K G D R Y I L
UniRef90_UPI00037614B0	L P K M A T G E L I G A I A M T E P G A G G S D L Q G V K T R A D R D G N Q Y R I
UniRef90_C1COL1	I P R L A T G E L I G C F G L T E P N H G S D P S S M E T K A V K N P D S W T I
UniRef90_A4XKE7	L T K I A R G E A I L A A F A L T E A D A G G S D V V S N I K T V A E K N G D F Y I L
UniRef90_UPI00036C87CD	L P S I A D G S A M A S Y A L S E R E A G G S D A A S M R T K A R R D G D N W I L
UniRef90_UPI00041F7112	L P A M A Q G E V V V A S I A V S E P A I G S D L R G M K T T A V R D G D E W V I
UniRef90_UPI00034CBAE9	L P K C V S G E C I L A I A M T E P D A G G S D L A G M K T R A V D Q G D H Y W L
UniRef90_UPI0003762217	L P R M A T G E I T G A F S M S E P G C G S D V V A A I R T R A V V P D G D H Y V V
UniRef90_I3TSW7	L P G I L A G E K I S A L A I T E P N G G G S D V V A S I R T K A R R E G D H Y Y I V
UniRef90_B7GW68	L P G I L I S G E K I S A L A I T E P P G G G S D V V A A L Q T K A V R D G D D H V L
UniRef90_B8FA16	L P G C V S G E C I T A V A V A M S E P D A G G S D L A S M T M T A L D D G D H V L
UniRef90_M1PBU5	L P S V A A G K K F A A F G L T E A N A G G S D A S G I Q Q T T A T L D G D E W V I
UniRef90_F4P3J4	L T G L A T D K V G C F C L S E A G S G S D A F A L Q T S S A V V K K N G K Y I I
UniRef90_Q488U8	L P K M A C G E C V G A I G M T E P G A G G S D L K A L K T A K K V D G G Y V I
UniRef90_X7FF41	L P G A L S M E T V V A L Y C L T E P G S G S D A A A L R T R A E R T N A G W R L
UniRef90_F6F1J5	L P R M A S G E V I T S F C L T E P D S G S D S A A L Q T R A V V R D G D D Y I L
UniRef90_J3PK81	L P R L A T Q T V V G S F C L S E P V S G S D A F A L A T R A T E T A D G F T I
UniRef90_F8MI30	L P K L A T N T V V G S F C L S E P V S G S D A F A L A T R A V V E T E N G Y K I
UniRef90_B2GIU5	L P Q L A S G Q A L A G F G L T E P E A G G S D A G G T R T R A A L T D G N N W V I
UniRef90_V7ANB0	L P S L A Q L H T I A C W A L T E P D Y G S D A S A L K T T A I K V E G G W I L
UniRef90_I4B6E7	L S A F A S G E K I V G A F G L T E P N A G G S D V P N L S T T A V V K K G D R Y I I L
UniRef90_M0M7Q3	L P D M G T E A V G A F A L T E P E H G S N P A G M E T A E K E G G E Y V V
UniRef90_UPI000377BA41	L P R P L T T G D A I A A L A M T E P G A G G S D L A G M R T T A L P D G D D F I
UniRef90_W7U300	L P R M A T M D L L S S Y C L T E P N S G S D A A S M R T R A K R D G D G W V I
UniRef90_UPI00041434EA	L P P V A S G E A M F S Y C L S E P E A G G S D A A S M R T R A K R D G D D G W V I
UniRef90_UPI00045D567D	L P Q L A S E K V V G S F C L S E A G A G G S D S F A L K T T A I R D G D H Y Y L L
UniRef90_G4HQ54	L P G I C S G E F V T A V A V M T E P G A G G S D L A A I K T T A I R D G D H Y I L
UniRef90_UPI00040ED98E	L P G F C S G E T I T A I G M T E P S G G G S D L A A I K T T A V V R D G D S W V I
UniRef90_A7SHB8	L P Q L A Q H M V V G G F C L S E E S S G G S D A F A L K T V A L E K D G H F V L
UniRef90_UPI000237649E	I G P I I R A E Q R A A Y C I T E A G A G G S D M S G V K T V A V R R G A G W A L
UniRef90_Q0SB93	L P E M L G G N T I I G A Y C I T E P Q A G G S D A A A L T C K A S A T E G G Y V V
UniRef90_K0EWK1	L P A P A M R G E T V C G V A V T E P E A G G S D V V A G I R T H A R R D G D D W V I
UniRef90_L8EUJ0	L P G L C S M A D L G S Y C L T E P P G A G G S D A A A L R T R A V V R D G D D Y V I
UniRef90_U5ER60	L P R R M A S G E L I G C F G L T E P N H G S D P G G M E T K A V H D P K T Y I I L
UniRef90_F9MMY6	F D V I N G E R L A A A F A L T E P P T G G S D A G S V V S T R A I K D G S G Y V I L
UniRef90_UPI0003643766	F D I I K Q G K L A A A F A L T E P P N A G G S D A G G V V A T S A V V K D G N K Y I L
UniRef90_M0QGW8	V R P T L A G E K I G S L A I T E P P G G G S D V V G H L T T S A V V R D G D H F V V
UniRef90_J5K8Y3	L P V M A K G D K L G C F G L T E E A D A G G S D P A S M K T K A L E K D G G G Y V I L
UniRef90_UPI00037E9CE9	L P D L A T G V K I A A Y C L T E P T S G G S D A L G A K T T A K D D G Q H Y I L
UniRef90_B2TCP7	L P A M A C G E S I I G A F L T E P P H A G G S D T A S L R A S A R R E G D H Y V I L
UniRef90_UPI000388B5E1	L V P T I A G E V V A C L G V S E P P G A G G S D V V A S I K T T A V V R K G D D Y V I
UniRef90_Q72L25	V P R L A R G E V V L G A F A L T E P P E A G G S D A A S L K T R A R R E G D F Y V L
UniRef90_Q72VD5	L L K V I S G E W I G M G M T E P P E A G G T D V L G M R T I A V V K K G D K Y V I L
UniRef90_H2ZID1	L G R M I E E P L A C Y G V T E P P E A G G S D V V A S I Q T K A V V K G D E Y V I L
UniRef90_G7WGP9	F S G L C L K G E M G A Y C V T E P P E A G G S D V V A G L S S S V R R E G N H Y V L

	170	180	190	200
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UniRef90_F6SP29	N G S K M W I	S H A E Y A G L F L V M A N V D K G I T C F L V D R G T E G L H I		
UniRef90_UPI0003B4DC71	N G E K A F I	S G G S R S D I Y V V M A R T G D G I S T F I V P K D A V G L S F		
UniRef90_D7CKK5	N G T K R F I	S N G T Y P G P V L F A R D Q E K I T A F I V E K F C E G Y S V		
UniRef90_Q21UM4	N G S K M W I	T N G M Q A D W C C L L A N T S E G S S L I M V R L D S P G V T R		
UniRef90_R7YYW9	N G S K M W I	T N S L E A G F F I V F A N M D K G I T A F I V E K G T P G F A I		
UniRef90_T0H477	N G A K T F I	T N G H L A D I I V A C Q T E P G L S L I V V E T G L E G F R R		
UniRef90_A1T4U5	D G V K Q F I	S G A G S S D V Y V V M A R T G K G I S A F V V P K D T P G L S F		
UniRef90_UPI00026578EC	N G T K A W I	T N A E Q G E A A V V F A K K H K G I V N C Y L V P M P T D G L S R		
UniRef90_A3WHX3	N G S K T Y I	T N G Q N A D V V I V V A K T N K G T S L V L V D A G T P G F E K		
UniRef90_M1F902	N G S K V F I	T N G P T C D F A I V T A V T E K G I S T F I V E S K W E G F S H		
UniRef90_V1CQC1	N G R K C W I	T N G P T C D F A I V T A V T E K G I S C F L V D A G T P G L T I		
UniRef90_K4KRF0	S G A K L Y I	T S A E Y A G V F V V W A V T D K G I T A F I I E K G M P G F S T		
UniRef90_A5BIU6	N G N K M W I	T N G P I A Q T L V V Y A K T D K G I T A F I I E K G M P G F S T		
UniRef90_E2BX37	N G T K M W I	T N G G V A N W Y F V L A R T S K A F T G F I V E R D W P G V T P		
UniRef90_D2B0B8	N G S K A F I	T N S D I L T G V V G V A A I T G K E I S T I L V P S G T P G F T V		
UniRef90_F4CP32	D G A K M W L	T N G G T S N L I A L L V R T D E G L T A F I V E K P T P G L T I		
UniRef90_Q5YXR8	N G A K T F I	T N G G Q A D L V I V V A K T G A G T S L I L M E T D R P G F R R		
UniRef90_I8TWU1	N G H K C Y V	T A N G G V A D I Y V V F A L T N K G M S A F I V D A K A A G L S I		
UniRef90_W0FLT1	N G R K T F I	S G A P M S D Y C I V F A K T D P G I S M F V L D M H L P G V S L		
UniRef90_H5TYB3	D G A K T F I	T G G A L I A D R I L V V C R T D P G I S I L V V D T T S E G F A V		
UniRef90_U5H3L1	N G S K S W I	T N S A E A G L F L V F A T S D K G I S C F L V E K E M G V E I		
UniRef90_A4SM66	D G S K V F I	S G A G S T D V L V V M A R T G K G I S A F M V P A D S D G I V Y		
UniRef90_UPI000380DB50	D G S K Q F I	T S G R N Q M V I V F A V T D K G I S A F I V P T D T P G Y E V		
UniRef90_B6HAP0	N G S K M W I	T N S M E A G V F V I F A N D D K G I T A F I V E K D T P G F S I		
UniRef90_I3TUD8	D G G K M W I	T N G T Q A D W I C L L A N T G E G P S L I C V P M K T K G V T I		
UniRef90_R7WNH2	N G A K T F I	T G G V T A D L I L T V C R T A P G I S L I I A V P T D S P G F G V V		
UniRef90_C0ZVS6	N G A K T F I	T S G V R A D F V T A V R T G G D V S L L V I E K G T P G F T V		
UniRef90_T0NU31	N G A K M W I	T N A P I C D L A I V V A R D E D E K I R G C I V E R G M D G F S T		
UniRef90_C8XAL0	N G A K A W I	T H G G H A D F Y L V M A R T S D G I S S F L V P A D T A G L I A		
UniRef90_B0VAC8	N G S K T F I	S N G L H A D L I V L V I A K T D D K G I S I L L V D A A L D G V K K		
UniRef90_Q0ASA5	N G Q K T F I	T N G G S A N F I I V V A K T D D D G V S L L V I M V E T D V E G F R R		
UniRef90_V5XGF8	N G S K T F I	S A G I N S D L V V V V A R T D D K G I S F L L V V E R D M E G F T R		
UniRef90_J9K4E8	N G T K A W V	T N G I E G G A I I V M A R S D N G V S A F I V P T N T P G L T K		
UniRef90_UPI00045E67A8	D G Q K Q F I	S G A G S A D I Y V V M V R T G K G I S T L V I E A G A P G L S F		
UniRef90_K6W1K0	N G S K T F I	N G S R N G D I L F V V A T R T H K G I T L F V V E A D T P G F E R		
UniRef90_D0NT67	N G E K M W I	S N V A H A D V F L V M A T V D K G I T C F I V E R G T P G L S F		
UniRef90_B1H0P9	N G T K C F I	T N G G D A E I Y T I F A K T N P G I S C F I V E K G T P G F E F		
UniRef90_U4LU86	S G Q K M W I	T N A N E A D I F I V F A R G Y K G I S A F V L E K G M P G F N I		
UniRef90_I9KEL7	D G V K Q F I	S G A G A A D I Y V V L A R T G K G I S A F V V D R A T P G L S F		
UniRef90_E8WJN8	E G T K Y F I	S N G S R A A V L V V M A L T D P G I S A F I V P G E A E G L E K		
UniRef90_UPI00037C54EB	T G Q K M W I	T N S P I S D I A I V W A K S D N K I K G F I V D R E T P G F S T		
UniRef90_C4LHN7	N G A K T F I	S N G V Q A D F T I I V V A V T D P G V S L L I V E D G M E G Y T K		
UniRef90_Q6KZ71	N G T K V F I	S N G R L A R F F V V D A S T D K G I T S F V V D A D A P G L K I		
UniRef90_C8XG09	N G A K Q F I	T N S G S S S L V T V T A R T G P E I S T V I V P A G T P G F L V		
UniRef90_K6VQ22	T G V K Q F I	S G A G S S D L Y V L M A R T G D G I S T F L I E K G T P G L S F		
UniRef90_M8HWR5	N G S K M W I	T N S L Q A D F F C L L A N T S D D K S M I I V P A K T K G I S F		
UniRef90_UPI0003B6C8AD	N G S K I Y F I	T N A P I G D L F L V L A A Q D K G I T A F L V E K N F K G F K V		
UniRef90_UPI00037614B0	N G S K T F I	T N G Q H U A N L I I V V T K T D D G T S L I V V E T D V D G F E R		
UniRef90_C1COL1	N G S K N W I	T N S P I A D V F M V W A S T K D D G V Q G F I L E K G M P G L S A		
UniRef90_A4XKE7	N G N K H W I	T N G G E A D I Y V V F A V T D D K G I S A F I V E K G Y E G F Y F		
UniRef90_UPI00036C87CD	N G S K C W I	T N G G K S T W Y T V V M A V T D P G I S S F I V H K D D P G F S V		
UniRef90_UPI00041F7112	N G A K T F I	T S G F S S D V V L T A A R T G P Q L S L I V P T D V P G F E R		
UniRef90_UPI00034CBAE9	N G A K T Y I	S N G L I S D L V L V A A K T S R Q L G F L V E R G M E G F E R		
UniRef90_UPI0003762217	D G Q K M W I	T N G A T S T L V A V L V K T D P G M T T L L V E K P A P G L T V		
UniRef90_I3TSW7	S G E K T F I	T S G M R A D Y Y T V A V R T G D G I S L M V I E A G S P G F A R		
UniRef90_B7GW68	S G E K T F I	T S G I R A D Y Y T V V A V R T D P G I S M L I I D A H S E G I T K		
UniRef90_B8FA16	N G T K T F I	S N G L L C D V A V V A A N R H H A V S L F L V D E E G T P G F T C		
UniRef90_M1PBU5	N G T K Q W I	T N G G E A Q I Y T V V A I T D R G A S M F V V E E G D P G F T C		
UniRef90_F4P3J4	N G S K M W I	T N S Y E A E I F L V F A N V D K G I T C F I V E K D M G V K V		
UniRef90_Q488U8	N G S K T F I	S N G Q H C D L V V A C K T D K G I V S L F I V D A D T K G F V K		
UniRef90_X7FF41	D G T K A F I	S G G G Y S D A Y V V M C R T G R G I V S A I V P D G A E G L S F		
UniRef90_F6F1J5	N G T K R F I	T N A P I A G L F L V M A R T H P E V T A F I L V P A D T P G V R L		
UniRef90_J3PK81	N G S K M W I	T N S V E A D F F I V F A N L D P G I S A F I I V E K G T K G F S I I		
UniRef90_F8MI30	N G S K M W I	T N S M E A D F F I V F A N V D P G I T A F I I V E K G M K G F S I I		
UniRef90_B2GIU5	N G S K E F I	T N S G T D I T K L V T G R E K K E I S T I L V P T D T P G F T A		
UniRef90_V7ANB0	E G Q K R W I	G N S T F A D V L V V F A R T T N Q I N G F I I K K D A P G L T V		
UniRef90_I4B6E7	N G T K Q W I	S N A G V A D V Y T I F A L T D K G M S C F I I V E K G T K G L S Y		
UniRef90_M0M7Q3	T G Q K R W S	T G Q K R W S T N A S I A D V V L V W A R D G D P V R G F I V E T D S E G L D V		
UniRef90_UPI000377BA41	N G S K T F I	N G S K A F I S N G M Q A D F T I V V A I T D P G V S L L I V E D G M E G Y T K		
UniRef90_W7U300	N G S K A F I	S G A G V S D V Y L V M C R T G E G I S C I L I V E K G T E G L S F		
UniRef90_UPI00041434EA	D G V K R W I	T N A G V S D Y Y T V V F A V T D D K G I S A F V V V E K A D Q G V S F		
UniRef90_UPI00045D567D	N G S K M W I	D G V K R W I S N A E H A G L F L V M A N V D K G I T C F I V D R D T E G F H V		
UniRef90_G4HQ54	N G T K T F I	T N G L N S D L I I V V A C K T D P G M S L I V V E A G T A G F E R		
UniRef90_UPI00040ED98E	N G S K T F I	T N G G H A D L V I V V A A K T E K G I T L F G V E A G T P G F A R		
UniRef90_A7SHB8	N G S K M W I	T N A E Y A G V F L V M A N V N K G I T T F I V P R E T P G L S I		
UniRef90_UPI000237649E	S G S K L W I	S G S K L W I H N A P V A D V A F V L A R T D P G M G I F I V D C T R P G V A R		
UniRef90_Q0S9B3	N G A K A W I	T H G G I A D F Y N L V F A R T G K G I S C F L I V P K D T E G L T F		
UniRef90_K0EWK1	N G S K M F I	T N A V Q A D W L C T L V R T S P G M S Q I I I P T D A P G F R V		
UniRef90_L8EUJ0	T G V K Q F I	S G A G T S R V V Y V V M A R T G E G I S A F I I V E R D D P G L S F		
UniRef90_U5ER60	N G S K T W I	T N S P I A D L C I V W G K T E D G V R G F I I I D R S E K G L S T		
UniRef90_F9MMY6	N G T K C F I	T N G A L A E M F V V F A N T R K G L T A F I V V R K G T P G F M I		
UniRef90_UPI0003643766	N G T K A F I	T N G G V I A E V Y I L V F A N T R K G L T A F I V E K D T P G F S I I		
UniRef90_M0QGW8	N G S K T Y I	T S G G T R A D F V V T A V R T G G G V S L L V V E K D T P G F T V		
UniRef90_J5K8Y3	N G S K N W I	T N S P I A D V L I I W A K D E Q E L I R G F I I V D R D S K G L S T		
UniRef90_UPI00037E9CE9	N G S K V F I	T N G A G F A D L F I V V Y A K V D G Q H S A F I I V E K D T P G F T L		
UniRef90_B2TCP7	N G T K Q F I	T S G N S E A G V G I A F A I T D K G A S T F I I D P N A P G Y S V		
UniRef90_UPI000388B5E1	N G G K M W I	T S G C Q A D W M C L L A N S S E G P S L I C L P M N L P G V H		
UniRef90_Q72L25	E G Q K T F I	S H A N V A E V F L V F A K T D K G I T C F I L V E R G D G V K T		
UniRef90_Q72VD5	N G S K Q Y I	T N G N V G S V F L V V Y A K M D K R T S F I I V E S S F P G F S V		
UniRef90_H2ZID1	N G Q K M W I	T N G A G I A D D F V F L V L A R T S K S L T G F I I V D G D S P G I V R		
UniRef90_G7WGP9	N G T K C F I	S N G G V A S K Y V V L L A R L N K G L T F F I I V D R H W D G V S H		

	210	220	230
UniRef90_D9SYQ3	G R R   L   A K   V   G   L   K   A N D   T   A E   L   F   F   D   D   C   R   V   P   A   E   N   L   I   G		
UniRef90_F6SP29	G K P   E N K   L   G   L   R   A S   S   C   T   C   P   L   T   F   D   N   V   K   V   P   E   A   N   V   L   G   E   G   G		
UniRef90_UPI0003B4DC71	G K   L   E   E   K   M   G   W   N   S   Q   P   T   S   A   V   I   F   S   N   C   K   V   P   A   E   N   R   L   G   E   G   G		
UniRef90_D7CKK5	S K   P   W   E   K   V   G   W   H   G   G   D   L   V   D   I   Y   L   K   N   V   R   I   P   A   E   N   V   L   G   E   G		
UniRef90_Q21UM4	Q   K   I   H   K   I   G   M   D   S   S   D   T   A   Q   L   F   F   D   N   V   R   V   P   Q   R   N   L   I   G   Q   E   E		
UniRef90_R7YYW9	S   K   K   E   K   K   L   G   I   K   A   S   S   T   C   V   V   T   F   D   D   V   E   I   P   H   D   H   L   L   G   E   E		
UniRef90_T0H477	G R   N   L   E   K   I   G   F   K   K   A   S   S   D   T   A   E   L   F   F   D   D   C   R   V   P   A   S   N   L   L   G   E   G		
UniRef90_A1T4U5	G T   D   E   Q   K   M   G   W   N   A   Q   P   T   K   Q   V   I   F   E   G   A   R   V   P   A   D   A   L   L   G   G   P   D   G		
UniRef90_UPI00026578EC	P   K   F   E   D   K   L   G   I   R   A   S   S   T   G   Q   L   V   F   E   N   V   A   L   P   K   E   N   Q   L   G   G   G   D   G		
UniRef90_A3WHX3	G R   N   L   D   K   I   G   Q   H   S   A   D   T   S   E   L   F   F   A   D   V   R   V   P   K   T   N   I   L   G   G   E   G		
UniRef90_M1F902	G   K   N   E   K   K   M   G   W   H   S   Q   P   T   R   S   V   T   L   E   N   V   R   V   P   V   A   N   R   I   L   G   E   G   G		
UniRef90_V1CQC1	G   A   H   E   D   K   M   G   I   R   G   T   R   T   S   D   I   F   E   N   V   K   V   P   K   E   N   L   L   G   G		
UniRef90_K4KRF0	G   K   A   E   H   K   M   G   Q   K   A   S   A   T   N   E   V   H   F   D   Q   C   R   V   P   A   S   A   M   L   G   E   N   D   G		
UniRef90_A5BIU6	A   Q   K   L   D   K   L   G   M   R   G   S   S   D   T   C   E   L   V   F   E   N   C   F   V   P   E   E   N   V   L   G   E   G   K   G		
UniRef90_E2BX37	G   R   K   E   L   N   M   G   Q   R   A   S   S   D   T   R   M   I   T   F   E   D   V   R   V   P   E   E   N   V   L   G   E   G   Q   G		
UniRef90_D2B0B8	S   K   K   Y   S   K   V   G   W   N   C   S   D   T   R   L   S   F   S   D   C   R   V   P   A   E   N   L   L   G   E   G		
UniRef90_F4CP32	P   G   K   I   D   K   M   G   Y   G   V   G   D   T   T   E   A   V   F   D   G   Y   R   I   P   A   S   A   I   L   G   G   E   T   G		
UniRef90_Q5YXR8	G   R   R   L   D   K   I   G   Q   R   G   Q   D   T   S   E   L   F   F   D   D   V   R   V   P   V   G   N   L   L   G   E   S   E   G		
UniRef90_I8TWU1	Q   R   T   I   G   K   M   G   L   R   G   C   Q   S   A   E   L   I   F   E   N   V   M   V   P   Q   S   N   L   L   G		
UniRef90_W0FLT1	G   K   P   E   H   K   M   G   I   K   G   Y   P   T   C   D   V   I   M   E   D   V   H   V   P   A   D   A   L   V   G		
UniRef90_H5TYB3	G   R   K   L   E   K   I   G   L   K   A   S   S   D   T   A   E   L   S   F   S   S   V   R   V   P   V   E   D   R   I   L   G   E   E		
UniRef90_U5H3L1	A   K   K   E   K   K   L   G   I   R   A   S   S   T   C   T   L   N   F   D   N   V   K   V   P   A   A   S   L   I   G   E   G   E		
UniRef90_A4SM66	G   K   A   E   E   K   M   G   W   N   S   Q   P   T   R   E   V   A   F   N   G   V   R   I   P   A   S   Y   R   I   L   G   E   G   G		
UniRef90_UPI000380DB50	V   T   V   E   H   K   L   G   L   H   S   S   D   T   C   A   L   F   A   F   D   G   M   R   I   P   A   E   N   R   I   L   G   E   E   G		
UniRef90_B6HAP0	A   K   K   E   K   K   L   G   L   R   A   S   S   T   C   V   L   N   F   D   D   C   V   I   P   K   S   N   L   L   G   E   E		
UniRef90_I3TUD8	A   R   K   L   D   K   M   G   M   R   A   S   S   D   T   A   Q   I   H   F   D   G   V   R   V   P   Q   R   Y   R   I   G   D   E		
UniRef90_R7WNH2	G   R   T   L   D   K   L   G   H   Q   Q   D   T   A   E   L   S   Y   N   D   V   R   V   P   V   D   N   L   L   G   E   E		
UniRef90_C0ZVS6	S   R   K   L   E   K   M   G   W   R   A   S   S   D   T   A   E   L   S   F   V   D   A   R   V   P   V   E   N   L   V   G   A   E		
UniRef90_T0NU31	P   E   T   L   N   K   W   S   L   R   A   S   K   T   G   E   L   I   F   Q   N   V   J   A   I   P   A   E   N   I   L   P   E   V		
UniRef90_C8XAL0	D   P   P   E   R   K   M   G   L   T   G   S   A   T   A   T   V   R   L   E   Q   A   R   V   P   V   E   R   R   I   G   E   G   E		
UniRef90_B0VAC8	G   R   S   L   Q   K   I   G   L   H   A   Q   Q   D   T   A   E   L   F   F   D   D   V   C   V   P   A   T   Q   R   I   L   G   E   E		
UniRef90_Q0ASA5	G   R   L   L   D   K   V   G   M   K   A   Q   Q   D   T   A   E   L   F   F   F   D   D   V   W   V   P   A   D   A   L   L   G   Q   E   E		
UniRef90_V5XGF8	G   R   K   L   D   K   M   G   Q   H   A   A   D   T   S   E   L   I   N   F   E   D   D   V   R   V   P   A   A   N   L   L   G   E   G   R   G		
UniRef90_J9K4E8	G   K   R   D   D   K   L   G   I   R   A   S   S   S   C   N   I   I   L   D   N   V   I   V   P   A   E   N   M   L   G   E   G   D   G		
UniRef90_UPI00045E67A8	G   A   N   E   R   K   M   G   W   N   V   Q   P   T   R   T   V   T   F   E   G   V   R   V   P   V   E   N   R   I   L   G   E   E   G		
UniRef90_K6W1K0	G   R   K   L   D   K   I   G   L   H   A   Q   Q   D   T   A   E   L   S   F   T   D   M   R   V   P   V   A   N   R   I   L   G   K   V   G		
UniRef90_D0NT67	G   P   P   E   K   K   L   G   L   N   A   S   S   T   C   S   V   I   L   E   D   V   K   I   P   K   E   K   V   L   G   K   V		
UniRef90_B1H0P9	G   K   K   E   K   K   M   G   I   R   A   S   S   T   R   E   L   I   F   D   D   C   R   V   H   K   D   Q   L   I   G   E   G   H   G		
UniRef90_U4LU86	A   K   K   E   K   K   L   G   I   R   A   S   S   T   C   V   L   T   F   D   D   V   E   V   P   A   E   N   L   I   G   E   G   E		
UniRef90_I9KEL7	G   P   N   E   T   K   M   G   W   N   A   Q   P   T   R   Q   V   I   L   D   G   A   R   I   P   A   D   R   R   I   L   G   P   E   G   G		
UniRef90_E8WJN8	G   K   N   L   D   K   L   G   Y   R   S   S   S   D   T   V   A   L   F   L   K   G   V   R   L   H   E   E   A   L   V   G		
UniRef90_UPI00037C54EB	P   K   I   E   G   K   L   S   L   R   A   S   V   T   G   E   I   V   L   D   G   A   F   V   P   D   E   N   L   M   P   N   T   T   G		
UniRef90_C4LHN7	T   G   P   L   K   K   V   G   L   K   A   Q   Q   D   T   A   E   L   S   F   E   N   V   T   V   P   A   E   N   L   L   G   E   E		
UniRef90_Q6KZ71	S   R   D   I   H   K   L   G   L   N   A   S   S   T   C   S   V   I   L   E   D   V   K   I   P   K   E   K   V   L   G   N   V   E   G		
UniRef90_C8XG09	E   P   A   Y   H   K   L   G   W   H   I   S   S   D   T   H   P   L   T   F   I   D   C   R   V   P   E   S   N   L   L   G   E		
UniRef90_K6VQ22	G   A   Q   E   R   K   M   G   W   H   A   Q   P   T   A   Q   V   I   L   D   E   V   R   V   P   A   A   N   L   L   G   Q   E   G		
UniRef90_M8HWR5	S   E   P   L   N   K   L   G   M   R   S   T   T   T   A   Q   V   Y   L   D   N   V   R   V   P   Q   R   N   L   L   V   G		
UniRef90_UPI0003B6C8AD	S   R   K   L   E   K   M   G   N   R   L   S   P   T   G   E   I   V   F   E   D   C   E   V   P   Q   E   N   V   L   L   G   Q   E		
UniRef90_UPI00037614B0	G   R   N   L   D   K   I   G   L   K   A   N   D   T   S   E   L   F   F   N   D   V   R   V   P   T   S   N   L   L   G   S   E   E   G		
UniRef90_C1COL1	P   R   I   E   G   K   F   S   L   R   A   S   S   T   T   G   M   I   F   M   E   D   V   H   V   G   D   E   Q   R   I   L   P		
UniRef90_A4XKE7	G   K   K   E   D   K   M   G   I   R   A   S   S   T   T   E   L   V   F   E   N   C   K   V   P   K   E   N   L   L   G   E   G   T   G		
UniRef90_UPI00036C87CD	T   G   Y   E   R   K   L   G   I   K   G   S   P   T   A   E   L   A   F   E   N   C   V   I   P   G   D   R   I   I   G   D   E		
UniRef90_UPI00041F7112	G   R   K   L   L   R   K   L   G   L   H   A   Q   Q   D   T   A   E   I   S   F   T   D   V   R   V   P   A   T   N   L   V   G   E   E		
UniRef90_UPI00034CBAE9	G   R   T   L   A   K   M   G   L   K   A   Q   Q   D   T   A   E   L   F   F   R   D   V   R   V   P   K   A   N   V   L   G		
UniRef90_UPI0003762217	P   G   K   I   S   K   M   G   Y   R   G   I   D   T   T   E   L   V   F   D   G   Y   R   V   P   A   D   R   V   L   G   G   T   P   G		
UniRef90_I3TSW7	T   P   L   K   K   M   G   W   W   A   S   S   D   T   A   T   L   H   F   D   E   V   R   V   P   V   A   N   L   I   G   E   E		
UniRef90_B7GW68	T   P   L   K   K   M   G   W   W   A   S   S   D   T   A   T   L   H   F   D   Q   V   R   V   P   V   S   N   L   L   G   K   E		
UniRef90_B8FA16	G   K   A   M   K   M   G   A   S   S   D   T   A   T   L   E   F   F   R   D   C   R   I   P   Q   S   N   R   I   L   G		
UniRef90_M1PBU5	G   P   K   E   K   K   M   G   I   R   A   S   S   T   T   E   L   I   F   K   D   C   R   I   P   K   D   R   L   I   G   E   V		
UniRef90_F4P3J4	A   K   K   E   I   K   L   G   I   R   A   S   S   T   C   S   L   S   F   D   D   V   E   V   P   A   E   N   V   L   L   G   E   V		
UniRef90_Q488U8	G   Q   K   L   K   L   G   I   H   C   S   L   S   F   D   D   T   S   E   L   F   F   D   D   M   F   V   P   D   D   A   L   L   G		
UniRef90_X7FF41	G   G   L   E   D   K   M   G   W   R   A   Q   P   T   R   Q   V   Q   F   D   R   C   E   V   P   A   D   A   L   L   G   E   E		
UniRef90_F6F1J5	G   K   K   D   R   K   M   G   Q   S   G   A   W   S   S   D   V   Y   L   E   D   V   R   V   P   A   S   A   I   V   G   G   V   E   G		
UniRef90_J3PK81	A   K   K   E   K   K   L   G   I   K   A   S   S   T   C   V   L   N   F   D   D   V   E   I   P   R   E   N   N   L   L   G   E   G		
UniRef90_F8MI30	A   K   K   E   K   K   L   G   I   K   A   S   S   T   C   V   L   N   F   D   D   V   E   V   P   K   E   N   I   L   G   K   G   E   G		
UniRef90_B2GIU5	Q   K   A   Y   N   K   V   G   W   N   A   S   S   D   T   H   P   L   T   F   E   D   V   T   V   P   E   A   N   L   L   G   E		
UniRef90_V7ANB0	T   K   I   E   N   K   I   G   L   R   I   V   Q   N   G   D   I   V   M   R   K   V   F   V   P   D   E   D   R   I   A   G   V		
UniRef90_I4B6E7	G   K   L   E   Q   K   M   G   I   R   C   S   H   T   R   Q   V   I   M   E   D   V   E   V   P   E   E   N   L   L   G   V		
UniRef90_M0M7Q3	R   S   I   D   E   K   L   S   L   R   A   S   V   S   S   E   L   D   L   D   G   V   R   V   P   S   E   D   V   L   P   G   V   S   G		
UniRef90_UPI000377BA41	S   G   P   L   K   K   V   G   L   H   A   Q   Q   D   T   A   E   L   H   F   D   N   V   R   I   P   A   A   N   L   I   G   E		
UniRef90_W7U300	G   A   P   E   K   K   L   G   W   K   S   Q   P   T   A   T   V   T   F   T   D   C   R   V   P   A   S   N   L   I   G   E   G   E		
UniRef90_UPI00041434EA	G   A   P   E   K   K   L   G   I   K   G   S   P   T   A   E   V   Y   F   D   S   V   R   L   P   A   D   R   L   I   G   E   E		
UniRef90_UPI00045D567D	G   K   P   E   N   K   M   G   I   R   A   S   S   T   C   S   L   T   F   E   N   V   K   V   P   V   E   N   L   L   G   K   V		
UniRef90_G4HQ54	G   R   K   L   K   K   G   Q   H   S   Q   D   T   A   E   L   A   F   V   N   A   R   V   P   V   E   N   L   L   G   E		
UniRef90_UPI00040ED98E	G   T   K   L   D   K   V   G   Q   P   E   A   D   T   S   E   L   F   F   E   N   V   R   V   P   D   S   H   V   I   G   E		
UniRef90_A7SHB8	G   K   K   E   D   K   L   G   I   R   A   S   S   T   C   P   V   H   F   F   D   N   V   K   V   P   S   S   S   V   L   G   E   V		
UniRef90_UPI000237649E	G   P   A   E   H   K   L   G   Q   R   S   S   Q   V   G   E   L   H   F   F   E   N   V   E   L   P   A   D   A   L   L   G		
UniRef90_Q0SB93	G   K   P   E   E   K   M   G   L   H   A   V   P   T   T   S   A   H   Y   D   A   F   V   P   A   E   R   R   I   G   E   G   Q   G		
UniRef90_K0EWK1	D   R   K   L   D   K   L   G   M   R   A   S   S   D   T   G   L   T   F   E   D   V   R   V   P   V   R   N   T   I   G   E		
UniRef90_L8EUJ0	G   P   N   E   K   K   M   G   W   N   A   Q   P   T   R   Q   V   I   L   D   E   V   R   V   P   A   D   R   R   I   L   G   D   G		
UniRef90_U5ER60	P   K   I   E   G   K   F   S   L   R   A   S   A   T   G   M   L   L   M   D   D   V   R   I   P   E   D   N   I   L   P   N   A   I   G		
UniRef90_F9MMY6	G   K   A   E   N   K   M   G   I   R   A   S   N   T   T   E   L   I   F   Q   D   C   F   I   P   V   E   Q   R   I   L   G   E   Q   G		
UniRef90_UPI0003643766	G   K   K   E   D   K   M   G   L   R   A   S   S   T   T   E   L   I   L   Q   N   V   E   V   S   E   D   Q   R   I   V   G   E   G   E		
UniRef90_M0QGW8	T   R   R   L   D   K   M   G   W   R   S   S   D   T   A   E   L   A   Y   V   D   A   R   V   P   V   G   N   L   V   G   P   E		
UniRef90_J5K8Y3	P   K   I   D   G   K   F   A   L   R   A   S   T   T   G   Q   I   F   L   E   D   V   F   V   P   K   D   K   M   L   P   N   V   Q		
UniRef90_UPI00037E9CE9	G   P   E   E   K   M   G   I   K   G   M   S   S   T   T   R   P   L   F   F   E   E   A   H   I   P   V   E   N   L   L   G   E   V   D   G		
UniRef90_B2TCP7	T   R   I   E   S   K   L   G   Q   H   T   A   H   T   A   Q   I   A   L   E   G   Y   R   V   P   A   E   N   L   L   G   E   G   D   G		
UniRef90_UPI000388B5E1	A   K   K   I   D   K   M   G   M   R   S   S   D   T   A   Q   I   F   F   E   D   V   R   V   P   S   K   Y   L   I   G   E   E		
UniRef90_Q72L25	S   P   L   K   G   K   L   G   R   A   A   D   T   G   M   V   F   L   D   G   V   R   V   P   K   D   R   V   L   G   E   G   E   G		
UniRef90_Q72VD5	G   K   K   E   K   M   G   M   R   S   S   P   T   T   Q   L   I   F   E   D   C   E   V   P   A   E   N   L   L   V   G   Q   E   D   G		
UniRef90_H2ZID1	G   K   K   E   K   N   M   G   R   A   S   S   D   T   S   E   V   I   F   T   D   V   K   V   P   E   E   Y   L   L   G   E   E   G   G		
UniRef90_G7WGP9	G   K   K   E   K   K   M   G   N   R   A   S   S   D   T   S   E   V   I   F   T   D   V   K   V   P   E   E   Y   L   L   G   E   E   G   G		

UniRef90\_A9NUS2  
 UniRef90\_V8P5T0  
 UniRef90\_UPI000455EA9A  
 UniRef90\_H2UQX6  
 UniRef90\_U4V841  
 UniRef90\_UPI00038116CE  
 UniRef90\_E9BSE8  
 UniRef90\_A0A059MJ45  
 UniRef90\_UPI000161E9D3  
 UniRef90\_E4RSK2  
 UniRef90\_D9PZS5  
 UniRef90\_Q2LPR7  
 UniRef90\_E4TQX1  
 UniRef90\_B3S2X4  
 UniRef90\_F8JYK4  
 UniRef90\_W4LW31  
 UniRef90\_B6lQT2  
 UniRef90\_K7GAW3  
 UniRef90\_UPI0003B75D2C  
 UniRef90\_D3FY07  
 UniRef90\_E8RF71  
 UniRef90\_D2Q1G0  
 UniRef90\_D9PTM6  
 UniRef90\_I0S2S1  
 UniRef90\_W8R4D2  
 UniRef90\_C0CV19  
 UniRef90\_A5V7U2  
 UniRef90\_B5EIC8  
 UniRef90\_A0A009MV9  
 UniRef90\_UPI0004651A45  
 UniRef90\_G7GU17  
 UniRef90\_I4C4P7  
 UniRef90\_UPI00036BF613  
 UniRef90\_M9LQB4  
 UniRef90\_W9GZB2  
 UniRef90\_B9QTX2  
 UniRef90\_D8WWS3  
 UniRef90\_I0S2E3  
 UniRef90\_L1K2D9  
 UniRef90\_O32176  
 UniRef90\_T1B1S6  
 UniRef90\_D3CZY5  
 UniRef90\_A7HC94  
 UniRef90\_UPI0003FB6027  
 UniRef90\_F8AWI4  
 UniRef90\_UPI0004771DC7  
 UniRef90\_UPI0004255E20  
 UniRef90\_U7UQN5  
 UniRef90\_W5W483  
 UniRef90\_UPI000375C883  
 UniRef90\_UPI0003B4EBDB  
 UniRef90\_X1U5U0  
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  Q | Q W D E E K H F P V E T M R E A A A L G | G G I C | V P R D V G G S A L S R L D G T
  A | A W R Q A G M M D R H A W E E A G A N G F L C A S M P E Y G G A G G D F G H E A
  K | K W I D Q K R V D R E F W L K A G E Q G L L C A A P E Y G G G G G F A H L A
  R | R W D R A H Q P A F I Q A L R D M G L F G L I P E F G G L G L E L S N A A Y A
  R | R V E D G D E V P A D I V A T M R E E G F F G W S I P E Y G G A G L T T E E L V
  K | K I D Q E G K I P P E T T M K G L K E L G L F G I M V P E Y G G L G L S N T M Y A

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90                    100                    110                    120

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UniRef90_UPI000455EA9A	I A I E E L A K V D P S V S V M C D V H T N L V N T V L R K Y G S K E Q C D K W		
UniRef90_H2UQX6	A V S E E L G N R C G G I P M A L G V Q T D M A T P A L A R F G S E E L K Q Q F		
UniRef90_U4V841	V I L M E G S R A N L A S W G H G I H S G I V A H Y V L A Y G T E D Q K K R W		
UniRef90_UPI00038116CE	L A V T E I A R A C A S T A V T M S V T N M V A E V I Q A V A S E E Q K R Y		
UniRef90_E9BSE8	L A I E E L A R R H D P A V S V T V D V Q N T L V N N I F F N F A N D A Q R R K Y		
UniRef90_A0A059MJ45	E L A M E L G Y T T L S L R S M F G T N N G I A G Q V L V G F G T D E Q K A Q W		
UniRef90_UPI000161E9D3	L I V E A L A Y G C S A I Q L C I M G P S L A V A P F I I A G N E E Q K K K Y		
UniRef90_E4RSK2	L V A E V L G A G H S F S V A Q S A H T G I G T L P I V Y Y G N E E Q K A K Y		
UniRef90_D9PZS5	I A M E E I A R A V P S L A V A I G V N H F A V P V L E F G T E E L K K K Y		
UniRef90_Q2LPR7	L I M Q G L G Y A C R D A G L I F N T Q L W T C E C P I L K F G T D E Q K E K Y		
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UniRef90_B61QT2	V L I D A R M K A G A G H F G I S L H N G I V A P Y I L H Y G S E E Q K R R W		
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UniRef90_UPI0003B75D2C	Q V L E E L A S A W A S V A V G V S V H V M S C Y P L A T F G T A E Q Q A R W		
UniRef90_D3FY07	I V G E E I G G S S G Y G V A H S N H T C I A T L P I T Y F G N E R Q K N K Y		
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UniRef90_D2Q1G0	Q M L E E I I A A A W M S V G V G L S V H T M T S Y A V A T R G T D E Q R E Q L		
UniRef90_D9PTM6	L V A R E I I E R V D S G Y R S M A S V Q S S L V I Y P I L A Y G S E E Q K R K Y		
UniRef90_I0S2S1	I V I E E I V A R V C A S S S L I P I C N K L G T T G L L M R G S D E L K Q L V		
UniRef90_W8R4D2	R I V E R L S C T W M S L S G I N S H L I M A S I Q R H G T P E Q K E R F		
UniRef90_C0CV19	L M V E E F A R V C P V L S I Y A N T P N S L G S G P L L T C G T P E Q K K K Y		
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UniRef90_UPI00036BF613	L I F E E I L A K G D P A I A A Y I S I H N M V A W M I D S Y G T D A Q R Q E W		
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UniRef90_O32176	L I T E K F S R A G S F S L S Y G A H V G I G S L P I V F F G S E E Q K K K Y		
UniRef90_T1B1S6	N V I E E I S K A C P S T A L V L D G A L T L F A E P V L M F G S E E L K K K Y		
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UniRef90_UPI0004255E20	L V L E E M S K Q G S F A V S Y S A N T G I G T L P I V Y F G T E A Q K K A Y		
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UniRef90_W5W483	V A T E E L L Q A G G S S G L V A G L M T H G I A V P H V D A G D P Q L I D R F		
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UniRef90_UPI0003B4EBDB	I A V E E I S R V S A A I G L C I T V H N S V G I Y P I L R F G T R E Q K K K F		
UniRef90_X1U5U0	L V V E E L L S R A C P G V A V S Y A G S L L G S F D L L K Y G S E E Q K R K Y		
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UniRef90_A0A024E8B1	L I E R E L S K V S W A L H V F V A R P S K I L M A C T G E Q I N D Y		
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UniRef90_G4HY86	V V C E E M A R A R T S V S I S F T N Q D D L I L Y Y L L D L G T E E Q L R R W		
UniRef90_U8K3F4	I V T E E L L A W H A A P N G F Q T H S D V A L E Y L L H Y G S E A L K Q R W		
UniRef90_U1IIJ3	I F E Q E T T R A G T M P P L A F S V T M V G P V I Y T F G N A T Q K A K F		
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UniRef90_UPI0003F8D9BA	L L E R E L L G R A S M A L T V F W G R P S N I C A G T A E Q R E R Y		
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UniRef90_A5FW63	L I F E E A L L A T G C P A V S A Y M S I H N M V A W M V D R F G D D A Q R R D V		
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UniRef90_K6CQR2	V I T E K M S G A G G F S L S Y G A H V G L G S L P I V L F G N D E Q K K K Y		
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UniRef90_UPI000366A20F	L A A F E L S Q C S V A F R A R V G T N T G I G S E G I V A D G T E Q Q K K K A Y		
UniRef90_H2S1Q7	R L A E L I S L D G S I A V T L A A H H Q A I G L K G I L I A G N E A Q K Q K Y		

130            140            150            160

L P S L A Q [L] H T I S C W A L T E P N Y G S D A S S L N T I A T K V E G G W K L			
L P R L A K D M M G A [I] C I S E P E A G S D A F S M K T R A E K Q G D Y Y I			
L P Q L A T E T K L G S F C L S E P A G S D A F A L Q T R A K K E G N E W V V			
L P S I A G D V V A C L G V S E V G A G S D V V S S I L K T R A V K E G N S Y R I			
L P K M V S G E L V G A L A M T E P S G G S D P S N M K T T A V L E G D E W I			
L P K L C S S G E Y P A G G F C T E T T A G S S D P S N M K T T A V L E G D E W I			
L P K L C S S G E Y P A G G F C T E T T A G S S D P S N M K T T A V L E G D E W I			
L E K I A S G E V V V A S F A L T E P G A G S N P A G L R T K A V R D G D D W I			
L G M L A A E P I I A A Y C V T E P T A G S S D V V S G I K M K A E K K G D S Y V L			
L P K L A S G E W K A A Y C L T E P D S G S D A N S G K T K A E E D G K F Y K I			
L P K M A T G D I R G A F S M S E P G L G S D V S A I R T K G V R D G D G Y L L			
L S K M L N C E E I W C Q G Y S E P G S G S D L A S L Q T R A V Q D G D D E F V V			
L P R L I S G S I V V G G H A M T E P D S G S D A F S M K T R A V R D G D R Y I L			
L P K L A S G E W K A S Y C L T E P D S G S D A N A A K T K A V E D K K H Y I V			
L S Q L A T K S V G C F C L S E F G S G S D A F A L Q T R A V A D G D H F V L			
L P K M A T G D I R G A F S M S E P G L G S D V S A I R T K G V R D G D G Y L L			
L S K M L N C E E I W C Q G Y S E P G S G S D L A S L Q T R A V Q D G D D E F V V			
C P S L C S M E K L A S Y C L T E P G S G S D A A S L I T S A K R K G D T Y I L			
L P E M L I G G T K L L G G Y C L S E A Q A G S S D P A A M R T T A R P A D G G Y V L			
L P K L A S G D Y L G A Y C L T E P S S G S D A L A A K T T A V Q E K T H Y I L			
M P D I A S G S R W A A F G L T E A N A G S S D A S G I L R T T A V L D G D E W V L			
L P D M I G G E L L L G A Y A L S E P Q A G S S D I S A M T T K A V R D G D E Y V L			
L P G L I A S G Q L I G C F G L T E P D A G S S D P G G M R T V V A K K D G D G Y V L			
L P S I A S G E A M A S Y A L S E R E A G S S D A A M R T R A Q K V G D E W V L			
L P R M A S G E L R G A V G F T E P D A G T D L Q A I R T T A R R E G D H Y V V			
I P P L A S G E K K I V F A L T E P G A G S S D A G G T L T R A V K V D G E Y Y I L			
L P G V V T G E T I L L A V A M S E P P G A G S S D L Q A M K T S A R R E G D H Y V I			
P R I C S G E A A G A F A L T E T G A G S S D P A G M T T S A V A E G D Q Q W V L			
L P K M V S G E V V V G A I G M T E P G A G S S D L Q S M R T N A I L L Q D D S Y I L			
I P K I L D G S A V F A T A V S E P D H G S D V A S I T T A R R T E S G W V L			
L P D L L A G K A L A G F G L T E P G A G S S D A G A T A T T A K Q D G H E W V I			
F L P A M R G E K I G C F C M T E P D A G S S D L G A I T T A T Q A E G G Y L I			
V T R L A A M E G F G S Y C L T E P G A G S S D A A A I T T S A I R S A D E H V L			
L P R L A K G E L V G C F G L T E P N H G S D P S S M E T T A T D T D G H I I L			
L P V F A T G E I L R G G L A L T E P D C G T D L Q A I R T V A R K D G D G Y L I			
L P R I L S G E D W W O Q G Y S E P P G A G S S D L A A L K T R A V R D G D H Y V V			
L I P A V V G Q N I I G A F A L S E S E A G S S D A W N I K A T A R K E G D H Y V V			
V R P T L R G E K I I G S L A I T E P P G G G S D V V G H L C T R A V K V D G D D F I V			
F P R L C K S A L S S F C L S E S G S G S D A F A L K T K A E W D E Q E W V L			
L P G L A S G E K I I A A Y A L T E P P G S G S D A L Q A K T T A V L N E T H Y V L			
L S R I V E G D I I G G L A L T E P P G A G S S D A A A I K T T A K K V G D E Y I I			
L P S M A T G A L R A T M A L T E P P G G G S D L Q A M R T V V A R A D G D G Y L I			
L P P L A S G E W A A A F G L S E P P Q A G S S D A A S M R T R A V V R R G D V W V L			
L P K L A T G E W I A A Y A L T E P P G S G S D A L G A K T V V A K E D G K Y W I L			
L P K M A T G E I R G A F S M S E P P G C G S D V S A I T T R A T P D G D D Y V I L			
L E P L A K G K K L G A F G L T E P S A G T D I Y G M E T T A A E D Q G Q W V L			
L P K L A T G E W L A A Y A L T E P A G S G S D A L G A K A T T A V M D G D H W V L			
L A D T L M A G G M G A F C L T E P P G A G S S D A D G A G T T T A V R D G D E Y V L			
V R P T L A G E K I I G S L G V T E P D D G G S S D V V A S I R T R A V V R D G D H Y I V			
L P G I L R G D D V W C Q G F S E P P G A G S S D L A S L R T R A V V R D G D D Y V V			
I P D M A A G D S I I G A F C L T E A N A G S S D A D G G V V E T S A R K E K D G Y V I			
L P D I A S G K R L I A A F A V T E P P N H G S N P G G M E T T A E R D G D G Y V I			
L P E L K T G E A V G S F A L T E P P N H G S N P G G M E T T A E R D G D G Y V I			
L E K I I S G E W C A A Y C L T E P P G S G S D A L Q A R A T A T E D G S H Y I L			
L R P Y A R G A L G P A S F A T E P P Q G G G S D A A T L R T S A R L D G D A W V L			
L P G M A K G K I I I G A F G L T E P P N H G S D P G S M E T V V A R P H P T K Y L L			
L P G F V S G R L I I A A I G M T E P P G A G S S D L S G I R T S A V V D K G D H F L V			
L P K L S S G E M L I A G I A M T E P P G C G T D L K A I A T R A R R D G D H Y V I			
L P K M A T G E I R A T M A L T E P P G G G S D L Q A M T T V V A V R D D D G Y T V			
L A P S I S G D A V A C L G V S E P V G S G S D V V A S I Q T R A S R K G D D L I I L			
L L P C I Q G E K I D C F A L T E P P G A G S S D A N A I K T R A V R D G D D F I L			
L P M V A S G E K I I A A Y C L T E P T S G S S D A N S L R S R A V V K D G K H Y V I			
I P G M A S G D L I I G A L A M T E P P G A G S S D L R G M R S T A T R D G D D W I L			
L P G T V D G S C I S A I A M T E P P G A G S S D L R A M K T T A R R D G D H F I V			
L P R I L S G E D W W C Q G Y S E P P G S G S D L A T V R T K A V R D G D H Y I V			
L P L L A S G K A L I G A F G L T E A G G G T D A G A T K T T A R L L D D G H W I I			
L P R L C K D T I I A S F C L S E V E S E G S S D A F A L K T R A I D K G D H F V I			
L P K M A S G E A I I G A I C M S E P P S T G S S D L K N I R T K A T P V E G G F L L			
L P Q M A R A E K L I G A F A L S E P P N V G S D A D K A N V Q T T Y R K E G D R Y I L			
L P S L C D G T A I I G A L A L T E P P G A G S S D L Q G I R T T A T R D G D D W I L			
V T P F T S G D K I I G C F A L S E P P G N G S S D A G A A S T T A R A E G D S W V L			
L P R N I L T A D E I I W C Q L F S E P P N A G S S D L A S L R T R A V V L E G D E F V I			
L P K L G T G E W L I A A Y A L S E P P G S G S D A L G A R A K A V L E G T H Y I L			
L P L P C V R G E A I I D A L A M T E P P D A G S S D L R G M S C S A R R A G G D W V I			
L P K F V G A G E Y I I G S I A M S E P P V A G S S D L A G I K T T A Q D Q G D H W V V			
T P L T G S E P P V T S V A V T E P P G V G S S D A A G L Q T R A V V R D G D H Y V I			
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UniRef90_F1TDH2			
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UniRef90_B5EIC8	N G S K I F I	T S A P Y A G V F V V W A V T D K G I S C F L V E Q G A P G L V I		
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UniRef90_D8WWS3	N G I K D W V	S L I D V A N D N F L V F A R T D G K K I S C F I V E R N F P G V E T		
UniRef90_I0S2E3	N G A K T Y I	T S G V R A D Y V V T A V R T G G G V S L L V V D K G T P G F E V		
UniRef90_L1K2D9	N G T K S W I	S N S K E A E I F I I F A N T D D K G I T A F I V D K S N P G I A V		
UniRef90_O32176	T G E K Q W I	T N S A F A D V F V V Y A K V D D K F S A F I V E K E F P G V S T		
UniRef90_T1B1S6	N G T K L F I	T S N G R L A K F Y V V D V V T T H K G I S T F V V D A D A P G L R I		
UniRef90_D3CZY5	N G S K T W I	T N A R R S G L V A L L C R T D P G M S I L L V E R V E G Y T V		
UniRef90_A7HC94	D G E K Q W I	T S G D V A G V I V V W A K T D P G V T A F I V E R D A P G L V V		
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UniRef90_UPI0004255E20	N G T K M W I	T N A G F A D V F V I F A K V D K D F S A F I V E K T D P G V S T		
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UniRef90_A0A017T6F3	T G S K M W I	T S G A H A G I H L V F A R T E P G I G C F V V E R G T P G L T V		
UniRef90_F7WAR1	S G A K T W I	T N S P I A D V L V V W A K L Q E K I R G F I V E R S A P G L E T		
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210      220      230

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1                    10                    20                    30                    40

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UniRef90_H2BVZ1		H   D   L   T   A   D   Q   R   T   I   L   S   A   L   T   A   F   L   K   Q   K   V   A   P   G   A   A		
UniRef90_E8U8M8		M   D   M   Q   F   T   P   E   P   D   L   A   F   R   D   E   V   R   Q   F   I   A   D   E   H   P   K   D   L   L		
UniRef90_W4M3U0		I   P   E   E   F   T   E   E   Q   N   M   M   A   Q   T   K   D   F   I   E   T   E   I   I   A   P   K   V   E		
UniRef90_UP100035E04FA		Q   L   S   D   E   H   R   Q   L   R   E   V   L   R   E   L   C   D   K   R   I   A   P   H   A   A		
UniRef90_UP10004163967		T   P   P   E   V   S   D   N   E   S   F   T   P   E   H   V   E   L   R   R   A   L   R   K   L   L   E   K   E   I   I   P   H   V   N		
UniRef90_UP100030A1BE3		F   A   P   E   D   M   D   G   M   D   E   E   S   F   E   Q   F   A   E   Q   L   A   R   Y   V   R   E   R   L   I   I   P   H   V   N		
UniRef90_UP10001925FD3		M   D   Q   Y   N   E   A   E   L   A   F   R   D   E   V   R   A   F   D   F   I   E   T   E   I   I   A   P   K   V   E		
UniRef90_W7ZBS2		M   D   F   S   E   E   Q   Q   M   M   K   E   S   V   K   E   F   I   D   R   E   V   W   P   H   K   E		
UniRef90_U2EME8		M   N   F   L   L   T   R   E   Q   K   M   L   R   V   S   I   E   K   F   A   R   E   E   I   I   K   P   L   L   E		
UniRef90_UP10002557758		M   T   D   E   E   T   E   I   V   A   V   L   V   A   E   F   F   V   D   R   E   V   R   P   V   A   R		
UniRef90_UP10003694879		T   E   E   H   T   D   L   R   E   M   A   R   D   F   I   A   S   E   L   T   T   P   N   Q   E		
UniRef90_R4SVY5		Q   L   P   D   H   Y   Q   Q   L   V   K   S   V   A   D   F   A   T   S   V   V   A   P   V   A   A		
UniRef90_UP10003B6D420		V   R   D   T   V   R   D   Y   C   Q   T   R   L   Q   P   R   V   L		
UniRef90_R7WTP6		M   S   S   N   L   T   E   E   V   L   L   I   E   M   V   R   G   F   I   D   R   D   V   K   P   T   V   R		
UniRef90_L7MF07		M   D   F   S   W   S   D   E   Q   L   A   F   K   N   R   V   I   Q   F   A   Q   E   N   L   N   G   D   V   V		
UniRef90_UP100030338EC		R   S   F   T   E   D   Q   V   I   F   R   D   S   Y   R   K   F   L   A   S   E   I   I   A   P   H   M   E		
UniRef90_U9W680		T   E   E   H   V   A   L   R   Q   M   V   R   S   F   A   E   Q   E   V   D   P   Q   R   A   Q		
UniRef90_U1IE68		M   P   V   D   R   L   L   T   E   D   A   R   D   L   I   E   L   T   R   D   I   C   N   K   V   L   D   P   I   V   D		
UniRef90_F0LY4		Y   T   D   Q   H   F   A   F   A   D   S   V   R   K   F   V   Q   K   E   L   L   M   P   H   I   N		
UniRef90_UP100037AA460		M   D   L   N   Y   T   P   E   Q   E   A   F   R   A   E   V   R   Q   F   L   Q   D   N   L   I   P   D   D   I   R		
UniRef90_L0IQN0		M   D   F   S   L   T   H   E   Q   E   M   L   V   S   S   L   R   Q   F   F   V   E   K   E   L   L   Q   P   H   E   F		
UniRef90_N8YLI9		E   D   L   Y   R   F   E   E   L   L   D   E   G   E   C   K   T   L   H   R   V   R   E   F   L   R   E   E   V   A   P   H   A   D		
UniRef90_N6W589		M   S   F   N   M   G   L   N   E   D   Q   I   A   I   Q   K   M   L   R   K   F   V   E   N   E   I   I   P   V   R   A		
UniRef90_F0GJ90		M   N   L   D   F   S   P   E   E   V   A   F   R   D   E   V   R   T   F   I   D   A   N   Y   P   K   E   L   M   P   V   R   E		
UniRef90_UP10003FDC1A2		M   D   A   Y   F   T   E   H   D   L   L   R   Q   E   V   R   A   F   A   E   T   E   V   R   L   R   I   G		
UniRef90_G7WGT5		D   L   T   D   V   Q   R   D   M   L   V   T   I   R   A   F   V   D   E   Q   I   L   P   V   A   T		
UniRef90_A0A059FVE4		E   L   S   A   D   H   E   E   F   R   A   H   I   R   D   F   A   T   A   E   I   I   E   P   H   V   A   R		
UniRef90_UP10003661727		E   I   N   Q   F   V   G   P   L   E   K   F   N   E   E   V   D   S   R   R		
UniRef90_U5VU91		A   P   E   R   L   F   T   P   E   D   F   S   E   E   H   K   M   V   G   D   M   T   A   K   F   V   E   D   R   V   V   P   V   L   D		
UniRef90_G7H671		A   T   F   N   W   E   D   P   L   A   S   E   L   Y   T   E   E   E   L   A   I   Q   D   T   A   R   Q   Y   C   Q   E   R   L   I   M   P   R   V   L		
UniRef90_Q17BX4		D   F   F   F   L   L   D   Q   Q   L   S   A   E   E   T   A   L   R   D   R   V   R   T   Y   G   Q   E   H   V   L   P   A   I   N		
UniRef90_A0Z8Y6		M   D   F   S   L   N   D   E   Q   K   M   M   I   D   T   V   R   R   F   I   A   E   E   L   K   P   L   E   D		
UniRef90_A0A011Q936		D   F   Y   D   L   S   G   M   L   S   P   E   D   R   A   L   Q   L   K   V   R   E   F   M   E   S   E   V   Q   P   I   V   N		
UniRef90_UP100036ED0B7		K   G   Q   L   T   T   E   H   V   F   P   Y   P   A   V   L   S   E   E   Q   T   Q   F   L   K   E   V   S   R   F   F   E   E   V   N   N   P   A		
UniRef90_K6UKX7		R   G   Q   A   V   T   E   Q   I   P   Y   P   L   K   L   D   D   D   Q   R   M   F   I   A   P   T   E   K   F   F   E   T   V   N   D   V   V		
UniRef90_UP10003D0A2D3		L   N   D   E   E   R   S   F   Y   N   T   V   F   Q   F   S   E   E   K   V   Y   P   T   S   E		
UniRef90_B9NSD7		D   I   F   M   D   V   T   V   P   S   E   Q   R   A   M   L   E   E   I   R   R   F   G   E   N   E   I   I   D   P   V   T   D		
UniRef90_K8P6W7		I   L   Q   Y   V   Q   Y   V   R   G   V   A   R   K   E   I   A   P   Y   A   T		
UniRef90_D7CIX6		L   N   D   E   E   R   S   F   Y   N   T   V   F   Q   F   S   E   E   K   V   Y   P   T   S   E		
UniRef90_H0RML7		L   N   D   E   E   R   S   F   Y   N   T   V   F   Q   F   S   E   E   K   V   Y   P   T   S   E		
UniRef90_E4X697		G   T   R   S   D   V   F   H   T   L   T   S   E   Q   R   E   L   Q   L   K   V   R   D   F   M   E   K   E   V   K   P   I   V   N   D		
UniRef90_UP100036B8118		A   P   E   R   L   F   T   P   E   D   F   S   E   E   H   K   M   V   G   D   M   T   A   K   F   V   E   D   R   V   V   P   V   L   D		
UniRef90_B1YL00		D   F   Y   D   V   F   H   T   L   T   S   E   E   Q   R   E   L   Q   L   K   V   R   D   F   M   E   K   E   V   K   P   I   V   N   D		
UniRef90_X1XW64		A   E   V   F   P   Y   P   E   P   L   N   E   E   Q   R   A   F   I   D   P   T   L   K   F   Y   Q   A   M   N   D   A   A		
UniRef90_A0A017SGY2		A   T   F   N   W   E   D   P   L   A   S   E   L   Y   T   E   E   E   L   A   I   Q   D   T   A   R   Q   Y   C   Q   E   R   L   I   M   P   R   V   L		
UniRef90_B2GHL4		D   F   F   F   L   L   D   Q   Q   L   S   A   E   E   T   A   L   R   D   R   V   R   T   Y   G   Q   E   H   V   L   P   A   I   N		
UniRef90_A1VQS5		M   D   F   S   L   N   D   E   Q   K   M   M   I   D   T   V   R   R   F   I   A   E   E   L   K   P   L   E   D		
UniRef90_Q5P288		M   D   F   A   Y   S   E   E   Q   K   L   L   R   D   N   I   I   K   F   A   R   G   S   L   N   A   H   V   V		
UniRef90_C7PRZ6		D   F   Y   D   L   S   G   M   L   S   P   E   D   R   A   L   Q   L   K   V   R   E   F   M   E   S   E   V   Q   P   I   V   N		
UniRef90_UP100037750AF		K   G   Q   L   T   T   E   H   V   F   P   Y   P   A   V   L   S   E   E   Q   T   Q   F   L   K   E   V   S   R   F   F   E   E   V   N   N   P   A		
UniRef90_UP10003F0DDB8		R   G   Q   A   V   T   E   Q   I   P   Y   P   L   K   L   D   D   D   Q   R   M   F   I   A   P   T   E   K   F   F   E   T   V   N   D   V   V		
UniRef90_B0SF10		L   N   D   E   E   R   S   F   Y   N   T   V   F   Q   F   S   E   E   K   V   Y   P   T   S   E		
UniRef90_M0AG49		D   I   F   M   D   V   T   V   P   S   E   Q   R   A   M   L   E   E   I   R   R   F   G   E   N   E   I   I   D   P   V   T   D		
UniRef90_H1YQG7		I   L   Q   Y   V   Q   Y   V   R   G   V   A   R   K   E   I   A   P   Y   A   T		
UniRef90_V5BCR0		L   N   D   E   E   R   S   F   Y   N   T   V   F   Q   F   S   E   E   K   V   Y   P   T   S   E		
UniRef90_R7WJ60		M   E   F   S   F   S   K   E   L   L   Q   L   K   A   M   V   S   K   F   V   D   K   D   L   A   P   F   A   A		
UniRef90_B8I214		M   P   L   E   L   T   E   E   Q   K   L   I   K   N   I   A   R   E   F   A   V   T   E   L   R   P   R   A   Q		
UniRef90_G9XGS5		L   T   E   E   T   S   Q   T   E   I   V   V   A   V   R   A   F   V   D   K   E   V   I   I   P   H   A   A		
UniRef90_UP1000406DD15		M   P   A   D   R   L   P   D   A   E   D   L   L   K   L   V   R   E   I   A   R   E   E   L   A   P   D   A   A		
UniRef90_W7IY91		M   T   T   F   D   H   G   W   S   P   E   R   L   A   L   K   R   S   A   I   E   F   T   Q   R   E   V   T   P   H   L   D		
UniRef90_R7XSY2		E   L   S   A   E   H   R   E   L   Q   R   I   C   R   Q   F   S   D   R   E   L   K   P   A   A   S		
UniRef90_W5JVM3		M   H   F   G   L   T   D   E   Q   E   M   V   G   A   V   R   R   F   F   V   E   N   E   I   Y   P   H   E   P		
UniRef90_A6DWU8		F   T   E   E   H   K   M   I   A   K   T   T   E   D   F   V   D   R   D   V   K   P   T   V   Q		
UniRef90_K6DHMO		F   Q   Y   T   H   E   R   E   I   Q   N   T   L   K   R   F   V   D   R   D   V   K   P   T   V   Q		
UniRef90_UP10002F30868		F   D   F   M   L   T   P   E   Q   L   K   L   R   D   E   V   R   Q   F   V   K   S   V   P   R   Q   L   V   L		
UniRef90_UP1000363C91D		T   L   D   F   E   T   Y   R   Q   V   I   R   D   F   T   D   D   E   L   I   P   R   E   N		
UniRef90_L2TIN9		S   E   E   D   N   L   I   I   E   T   V   N   K   F   L   E   R   D   V   K   P   F   V   K		
UniRef90_UP10003B5AC52		D   F   Y   N   L   A   Q   K   L   T   P   E   E   E   I   Q   M   K   M   R   N   F   M   E   D   E   V   K   P   I   A   N		
UniRef90_A3XH21		M   T   E   E   R   R   M   I   Q   E   V   A   R   F   A   Q   E   Q   I   R   P   R   S   Q		
UniRef90_F6AN99		L   S   E   T   Q   S   A   I   Q   E   A   V   R   A   F   A   Q   E   Q   I   R   P   R   S   Q		
UniRef90_A5VCD3		M   D   L   C   L   T   P   S   Q   L   A   F   R   D   D   V   R   A   F   I   I   A   R   L   P   A   G   I   R		
UniRef90_A0A022MB62		M   D   F   D   Y   T   P   E   Q   L   K   L   R   D   E   R   R   R   L   E   A   V   M   T   P   E   R   R		
UniRef90_Q0K4A3		M   D   L   T   D   Q   T   D   I   V   A   N   V   R   R   F   V   D   T   Q   I   I   P   N   A   Q		
UniRef90_G7CN55		M   D   L   T   Y   N   E   E   D   E   A   F   R   A   E   L   R   T   W   Q   A   E   V   P   A   H   G   A   R		
UniRef90_H6MS32		M   S   L   D   F   D   L   T   A   D   H   E   S   W   R   A   Q   L   R   R   F   L   E   K   E   V   A   P   N   L   D		
UniRef90_D3D828		D   T   G   L   E   E   T   Y   D   A   I   R   D   Q   M   R   F   A   D   A   E   V   M   P   H   A   H		
UniRef90_D6KDD2		I   Y   D   V   P   W   A   F   D   D   E   H   R   E   W   Q   K   A   V   R   R   F   F   C   A   D   V   V   S   P   G   A   S		
UniRef90_F4CMN2		M   R   L   Q   L   S   P   E   L   E   A   F   R   E   E   M   M   R   T   F   F   T   T   Q   V   P   Q   E   I   R		
UniRef90_D2SFV7		M   D   F   D   F   D   S   N   Q   Q   A   L   R   D   S   I   R   R   Y   L   K   A   E   V   A   P   R   O   D		
UniRef90_B7RTY2		M   D   F   D   F   D   S   N   Q   Q   A   L   R   D   S   I   R   R   Y   L   K   A   E   V   A   P   R   O   D		
UniRef90_A7HTJ9		M   D   F   D   F   D   S   N   Q   Q   A   L   R   D   S   I   R   R   Y   L   K   A   E   V   A   P   R   O   D		
UniRef90_J6UE96		M   D   F   D   F   D   S   N   Q   Q   A   L   R   D   S   I   R   R   Y   L   K   A   E   V   A   P   R   O   D		
UniRef90_K4TTV7		M   D   F   D   F   D   S   N   Q   Q   A   L   R   D   S   I   R   R   Y   L   K   A   E   V   A   P   R   O   D		

50            60            70            80

UniRef90_H9ITY5	Q Y D K T G E Y P W P [V V K K A W E   V G L M N G H   P E H G G L   G L G V F E A C		
UniRef90_A6UBH8	E V E R T G V V P R E I   A R K C K E L   G F F G C N F P E E E G G A G L   D H L T F T		
UniRef90_W7TQM7	V F N R R E E F N L P L F R K L G E L   G L G L G L S V P E Y G G S G M D A T A V A		
UniRef90_D9SLH6	E N D R L G R T E P S L I E K I A E K G Y L G A M I P K Y D G M G L   D N I T L G		
UniRef90_N1ME07	K H D E A R E F P E E A Y Q K I A D R G W L G L L I P E Y G G L   E A D P V M Y A		
UniRef90_UP10002E1F66A	Q W E A T G E L P R E L H K K A A D A G   L L G L G Y P E Y G G H   G F D V F H G L		
UniRef90_A7SA87	K N D E L E T V E E H V M E S L K E M G A F G L Q V P A D G G V G L T N T Q Y A		
UniRef90_S7Q713	T M D E N A K M E K S V I Q G L F Q Q G F M A V D I D A Y G G T G A S F F S L I		
UniRef90_H2BVZ1	D H W N R A K F P F E I I E K F A K L N V A G V P Y E G Y G C P N H S F L M E G		
UniRef90_E8U8M8	E R D Q T G E F F P L D I V R E L G D L G I M G A T P E E Y G G A G L   D T A T F A		
UniRef90_W4M3U0	G I R Y R Q H L K R E W H Q I L Y K K G W A P N W P E Y G G T G W T P M Q R Y		
UniRef90_UP100035E04FA	E I D S K D G L M R S I L N K A G E G L G L G I S I P E Y G G L   G M S F N T S M		
UniRef90_UP10004163967	G V D A T G R Y P T E A L T A L N E A S L A A V H I P E Y G G Q G A D A L A G C		
UniRef90_UP100030A1BE3	Q V I A E D R V P E D I V G E M R E M G L F G L S V P E Y G G A G L   N M T Q Y A		
UniRef90_UP10001925FD3	G W E E A G G F P A H V F K T L G S A G F L G V N K P K Y G G L   G L D F S F T M		
UniRef90_W7ZBS2	A I E H E F Q H T T R L K K A G D G L G L G A D V P E Y G G I G L   G L D K I S S S		
UniRef90_U2EME8	D K V K E H V S P E D W Q R A L Y E K G W L A I N W P E H G G P G W S P I L Q K H		
UniRef90_UP10002557758	K F E K K D Y F T E E L M V K A G E M G F L S I A V P E Y G G M G M S F M S T I		
UniRef90_UP10003694879	K R V R K E K C A G E L I C K L A R M G L L G I N V P E Y A G S A Y S N V D N I		
UniRef90_R4SVY5	E L D H T N T Y P G E L I D R M K A M G V F G L A V P P E P W G A H V S A Q C Y A		
UniRef90_UP10003B6D420	R F A E N H E V D R E L W N K N A G D N G L L L V S V P E Y G G G G A D F S H E A C		
UniRef90_R7WTP6	K H Y A E H T F D R D I V H E L G E L G V L G S T L Q G Y G C A G T S Y V A Y G		
UniRef90_L7MF07	L A N R H E T F D R D I V V A G M G Q M G L F G L P F P E D G G M G G D Y F A L C		
UniRef90_UP100030338EC	U V E H A N E Y P A G W I E A M Q I G I F G L A I P E Y G G S P V S T P C Y V		
UniRef90_U9W680	E R D Y H G K F S W E N W K K C A E F G I Q G M C P E D G S P A L D I M T A V		
UniRef90_U1IE68	E W R E A G I V D R N A F K K A G D L G F L M I W P E E Y G G M G E D F R Y E Q		
UniRef90_F0LY4	E Y N E K E Q F N R A L F A R C C G E L G L G V T A D E C C G G S G M D A V A A C		
UniRef90_UP100037AA460	E L E H G D I Y P Q E I V D G M K E M G L F G L T I P E Y G G L G E S L L T Y A		
UniRef90_L0IQN0	A H E K A E T Y P E G V F A Q L G Q A A G L L S L P Q P E W G G G Q P F E V Y L		
UniRef90_N8YLI9	E W E E A E T F P K E L Y Q K A E I G L G I G F D E Y G G P E T D A F H V L		
UniRef90_N6W589	Q R V K K R L R P D R W Q K I L F D Q G G W G A S T W P E Y G G P G W S P I E Q L		
UniRef90_F0GJ90	A V D R A D D V P P E L R R K S I E L G F Y A F N M P E A G G P G L D Y V T Q A		
UniRef90_UP10003FDC1A2	N N W G K A S F P H H I P R Y G E L G I A G L A F E E C G T S T A S S L L S G		
UniRef90_G7WGT5	Y Y D E K E E F P W P I V K K L Q D G L N C V I A P E Y N G F Y Y D T L T C S		
UniRef90_A0A059FVE4	E A G T R E D L T R E W H K I L G K K G G W S T P A W P E Y G G T G W T S T Q R Y		
UniRef90_UP10003661727	K Y D E E G I F P W D I V K Q M A Q T D L F R V L L P E Y E G F G G K V M D L V		
UniRef90_U5VU91	E M E E S R D V Q H D L S R L I A R Q G W I G V T I P E H G G L G L G H L A K T		
UniRef90_G7H671	E L E H R D E Y P T A I V E Q L K Q L G I F G L T I P E F G G L G E S L L T Y A		
UniRef90_Q17BX4	K N D S T A N D E A T A D A L W E L G A F S L Q V P E Y G G L G L N N T Q Y S		
UniRef90_A0Z8Y6	E F D Q A D E Y P K E L V E Q M K T L G L F G A T I S E Y G G G L S A T T Y A		
UniRef90_A0A011Q936	E S F R H E R T D T T I Y R E M G A M G F L G P T I P E Y Y G G A G L G H H V S Y G		
UniRef90_UP100036ED0B7	E W D D Q Q I F P V S V F K E L G K L G L L G V L V P E Y Y G G S G F S Y H E Y V		
UniRef90_K6UKX7	R W T K E Q R F P A E L I P Q M G E L G L F G L V V P E Y E G A G M T F T Y L C		
UniRef90_UP10003D0A2D3	K I D Q E G K I P A D T L A K L K S L G L F G I Q V P E Y G G L G L S N T M Y A		
UniRef90_B9NSD7	Q W E T D G T I P K D L W P K I G E L G F G G L V Y S E E G G G S G L G R L D A		
UniRef90_K8P6W7	Q L V E G R H T S K E W Q R I L N K K G W A V P H W P E Y Y G G T G W S P V Q Q Y		
UniRef90_D7CIX6	E C D E K Q E F P T P I W R K M A S Q G Y C G L P I P T G Y G G A G L G A L D T		
UniRef90_H0RML7	K W E A Q G L V D R F W S L A A A Q G F V G F S A P E F G G A G Q R D F R F N		
UniRef90_E4X697	E W E K Q G M C D R E A W L K A G E M G L V D A P E E G G G G D F F L S A M		
UniRef90_UP100036B8118	D Y W L R D Q F P F E L I P K F K E L N I C G V T Y N G Y G C P N L P F I M E G		
UniRef90_B1YL00	R I E K H E F L S V G L L R E A G E L G L L G A D V P E Y Y G G Y Q M D K I S S S		
UniRef90_X1XW64	R N D T T A N V E P A V V D A L W E G G F L G A F V P E Y G G L G L S N A Q S V		
UniRef90_A0A017SGY2	R N D T T A N V E P A V V D A L W E G G F L G A F V P E Y G G L G L S N A Q S V		
UniRef90_B2GHL4	I N W A K G E F P K E L I G L F R E S G L A G L P Y E G Y G G P A V S N L L S G		
UniRef90_A1VQS5	N N D S L E Q V E E T T M Q G L K E L G A F G L Q V P D L G G V G L C N T Q Y A		
UniRef90_Q5P288	K N D E T M E I P M E V L K Q F G E L G G F G A V V P E Y E G A G L C N S Q M A S		
UniRef90_C7PRZ6	E R D E K I W S D E L W K E F S K A G L T G L T I P E Y G G E G A S C L L C S		
UniRef90_UP100037750AF	E F N R A E E Y P A A I V D E A A M E G L L G L L G S H F P E Y G G A G Y S M R E R A		
UniRef90_UPI0003F0DDB8	R I D Q E E G L M P T L M D K A G E L G L L S V S I P E Y G G F G K N F N T S M		
UniRef90_U6P017	K W D K E N S F P K V C H R K F G S F G L L G P T A P E H G G L G L D F L S H V		
UniRef90_B0SF10	Q V E H A N D Y P E K W I E Q M K Q I G I Y G L A V P E Y G G T P V S M P C Y A		
UniRef90_M0AG49	A F W E R G E H P L P V F K G L A D L G I V G T F L E G Y G G C P G L S R Q A A G		
UniRef90_H1YQG7	G I E E H G F L D K A V H E K A K E L G L Y A M N M P E L G G G G L S N L D R I		
UniRef90_V5BCR0	E R D R E Q V F S R D L W R E C A N V G I Q G L P V P E Y G G T G T G L D A L S C A		
UniRef90_R7WJ60	E H W V K S D F P F Q L L P K L A A L D I C G S T Y E G Y G G Q S S F L L M E G G		
UniRef90_B81214	E Y D K K E C I P W S I E K I E K A M G L L G L G S A A V P E F G G S G L L S S L E I L		
UniRef90_G9XGS5	Q I D E D D E F P M D L V Y R A T E L G F R G A G Y P E Y G G N G G G L T E Q C		
UniRef90_UP1000406DD15	D L E R A D A Y P Q Q I V D G M R Q L G L F G L L M I P E Y Y G G L G E S L L T Y A		
UniRef90_W7IY91	K H E E A Q G F P P R E F R L L G R S G L L G P Y A E R W G G A D L S Y E V Y L		
UniRef90_R7XSY2	A W E R E G E I P R D F Q K K L A H A G L L G V G V E E V G G D G G D L L D V C		
UniRef90_W5JVM3	E I D R L G F F P A Q H I A K L A S M G L M R V T V P Q F G G S G M D M L S L S		
UniRef90_A6DWU8	L V E R S G E V P P E V A Q A I K D L G F Y A C N F P E A G G A G G L S H L E F A		
UniRef90_K6DHMO	D L E N H Q F D K Q L L K K A G D L G L L G A D V P E Y G G V G L D K I S S A		
UniRef90_UP10002F30868	E W E A A E I F P H E V F K M G M N L G L L G L T K P E Y Y G G A G L D Y S Y S M		
UniRef90_UP1000363C91D	D M D E E K Q F P R S F I E E A G A R N L L G L R F P E Y Y G G R G L L D W A S E V		
UniRef90_L2TIN9	E M V A A G A V P P D L V R R M S E L G L F G I T L P S V G G L G W T V E Q Q V		
UniRef90_UP10003B5AC52	E F E S E D K Y P Q L I A D K M A D L G L F G A T I P E Y Y G G L G L S A V T Y S		
UniRef90_A3XH21	D F W N R A E F P H E I P K F A E L N L A G I A Y K G Y G C P G Q S F L L E G		
UniRef90_F6AN99	K L D P Q G D I P M E L R D K M A E M G Y F G I L M P E Y Y G G M G L G C F E Y C		
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UniRef90_A0A022MB62	E E E D A D G R F P R E V F A F L L S R S G L L G P Y P D E H G G E Q P Y E V Y L		
UniRef90_Q0K4A3	E R L R R G M R P R M W H Q T L N E R G W V A P H W P K Y G G A G L G A I E R I		
UniRef90_G7CN55	A A L E G G P A V A E C R R A L G E A G L L G V S W P E Y Y G G G G L S A L E Q Y		
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UniRef90_D3D828	D W P B A R R A Y D T A W Q R K L H D A G Y A G L H W P A F G G R G A P V T Q Q L		
UniRef90_D6KD22	E I A D A D A I P D D L R H K A A M G L F G Y A L P E Y Y G G L G L V I T Q D V		
UniRef90_F4CMN2	Q R H V E A R F S P E L V E A A G E L G A F G L L J A P E Y Y G G A G A D L R S A C		
UniRef90_D2SFV7	T V A A H R H V T K E Q Y R V L N A A G L A V P H W P E W G G K D W S P L Q R H		
UniRef90_B7RTY2	D W D E N G N I P D E M W A K A A G I G L L I Q L G Y P E Y Y G G E G I D Q H Y K N		
UniRef90_A7HTJ9	E W H K D D Y I P M P V V K Q M A E L G V F G L T I P E F G G L G L G K E S M C		
UniRef90_J6UE96	A R E T T K S F G A D L V R E M G A L G L I A P E L P E Y Y G G A G A S V L C S G		
UniRef90_K4TTV7	A C E A E R R I P Q D V L Q G L A Q F G Y I G L L P E E A G G F D L D F V T W A		

90                    100                    110                    120

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UniRef90_W7TQM7	I A H E E L S A A D P A F C L A Y L A H S L L F V N N L A Q N G S H A Q K S K Y		
UniRef90_D9SLH6	I L N E E F A K G C S S M R N L T V H G M A A L A L L R W G T E T T Q R D T W		
UniRef90_N1ME07	I F C E A I A K Y S L D F A A A I M T S M F T A T N I A F H G T D E Q R Q K Y		
UniRef90_UP10002E1F66A	T Q S E E L A A A G A G G G L G A S S L M T H G I G L P P I L A L G S D E M K R R I		
UniRef90_A7SA87	R M V E I L V G A H D L A V G I V L G A H Q S I G F K G I L L F G N K E Q K E K Y		
UniRef90_S7Q713	L V V E E L L A K V D A S V A L I C D I Q N T V V N G L V R K H G T E E Q K A T Y		
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UniRef90_E8U8M8	L I I E E I A A V D G S L C L T V A S H N S L C Q G H I L I G G T E E Q K Q K K F		
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UniRef90_UP100035E04FA	M V I E E V A R V C A S S S L I P V C N K L G T M G L L L H G S E T L K H Q V		
UniRef90_UP10004163967	R V V N I L M A Y A A P A Y R S I F S I N V G M F A S A L K N G A T E A Q K A E W		
UniRef90_UP100030A1BE3	A V H E E E M G N I P C G L P M A I G V Q A D M C T P A L T N F G S D E I K K L F		
UniRef90_UP10001925FD3	L I S E R F S R A G A F G L S H G A H V G I G T L P I V F F G S H E Q K S K Y		
UniRef90_W7ZBS2	I F E E E T A E A G A P R I L P F G L N M V A P V I I K F G T Q E Q K Q D Y Y		
UniRef90_U2EME8	L V C D Y I S G A T G S F A T A F G A H T G I G T M P I V L Y G T E A Q K Q K Y		
UniRef90_UP10002557758	I I L E E I S I S R A D P T I G L L V V A H N S L S V N H N M F G S K E Q K K K Y		
UniRef90_UP10003694879	S V T E E L A R G W M S L A G A M G G H T V V V A K L L A L F G T E E Q K K R A Y		
UniRef90_R4SVY5	A I L Y E Q G Q L A G D D S W G Y S I H S T I V A H Y I V I A Y G T E E Q K Q R W		
UniRef90_UP10003B6D420	L A L E E L A K V D Q S T A T L E A G V S L G A M P V F R F G T E E Q K Q R W		
UniRef90_R7WTP6	L T A R E V E R V D S G Y R S T M S V Q S S L V M L P I Y L F G T E E Q K Q R Y		
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UniRef90_UP100030338EC	U 9 W 6 8 0 L A M E A L G Y G C E D D L T L G L N A Q M W T V Q I L L Q Q F G T D D Q K Q R Y		
UniRef90_U1IE68	I I I E E T A R S G S C K G W F N T L H S R L V G S Y F K R F G T E E Q R D R F		
UniRef90_F0LY4	V V H E E L S A A D P A F A L S Y L A H S M L Y V N N V N L N A S E D Q K K R R W		
UniRef90_UP100037AA460	L V V E E Q I A R G W M S V S G I N T H F I V A Y M L M Q H G T D E Q K Q K Y		
UniRef90_L0IQN0	Q V L E E I A A R W A A V A V A V S V S L S S H P L L A F G T D E Q K Q R W		
UniRef90_N8YL19	L S S I E E L A K T G S G G L C A S L L S H S I G A P P I N H F A S D E I K E T V		
UniRef90_N6W589	I F E E E C A L A G A P R Q L D F G L R M V A P V I M T F G N E A Q K E R F		
UniRef90_F0GJ90	L V E R E L G R T S W A L H V F V A R P S K I L M A C K G D Q I E R Y		
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UniRef90_G7WGT5	I I A E E L C R G C V G I A L G V L N N C L A A K P V M I A G T E E Q Q D W W		
UniRef90_A0A059FVE4	I W S E E E N A R V D A L M P L P F G V S M V A P V I Y T F G T E E Q K A K Y		
UniRef90_UP10003661727	I L M E E L S R V D G G I A L A L G G T G L G M Y P I L L S G N E E Q K Q K Y		
UniRef90_U5VU91	I I I E E L L A R V S G A M G A M V Q A S Q L L G V A K I L H F G S A E Q Q A T W		
UniRef90_G7H671	L V V E E L L S R G W M S V S G V V N T H F I V A Y L L Q Q H G T P A Q Q A E Y		
UniRef90_Q17BX4	R M C D I I G G Q D L G L G I F I G A H Q S I G F K G I L L Y G T K E Q K E K Y		
UniRef90_A0Z8Y6	K I V S R I C E V W M A P S G I F N S H L I M A N C V E R G G T Q A Q K E Y F		
UniRef90_A0A011Q936	L I A R E E V E R V D S G Y R S S M M S V Q S S L V M L P I L R F G T E E I R S R Y		
UniRef90_UP100036ED0B7	T A I A E L L A K F D P G I A L S M A A H N S L C T G H I L L Q F G S E E Q K Q N W		
UniRef90_K6UKX7	L A I E E L L G R V D Q S I I G I T L E A G V G L G I N P I L L T Y G T E E Q K T T H F		
UniRef90_UP10003D0A2D3	R L G E I L I S M D A S I T V T L A A H Q A I G L K G I I L V G N E E Q K A K Y		
UniRef90_B9NSD7	L V F E A I L S M A C P S V A A F L S I H N M C A K M L D S F A S D D I K S R I		
UniRef90_K8P6W7	I F L E E L L Q S A P A P S P L P F G V N M V G P V I Y T F G N E E Q K K H Y		
UniRef90_D7CIX6	Y M C L E A G G A A A G H L L S W A V S M V L G S V A L I K F G T E E Q K K R Y		
UniRef90_H0RML7	A I L D E E V V R T G T V G D G F S L T N D I V L P Y F I L D I A S A E Q Q A R W		
UniRef90_E4X697	I V N E E Q A Y H N C S G L G F G S V H S D I C L P Y I Y K Y G T A E Q R E L		
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UniRef90_B1YL00	I I T E K F A R G R S F A L S Y G A H V G I G S L P I V F F G N E E E Q K K H Y		
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UniRef90_A0A017SGY2	L I T K E V E R V D S G Y R S G M S V Q G S L A M T G I Y E F G S E E E Q K Q R L		
UniRef90_B2GHL4	L I V A R E M G R I D G S S V N T F F G V H S N L C M G S I Y M L G N E E Q R Q R W		
UniRef90_A1VQS5	L C E E Q F G G H T T D I L I R R A F G N V Y E P L L H C K G E Q V E R W		
UniRef90_Q5P288	M V L E A L G Y G C R D G G L V F S L C A H C V V P V W R H G S E E E Q K R R Y		
UniRef90_C7PRZ6	I I T M E I A R V D C S M A T F F G V Q S G L A M Y S I Y L G S E E E Q K K E W		
UniRef90_UP100037750AF	T M A M E M A R V D A S V T S F F G V H N G L A M Y S I Y S G G D Q E Q R D R W		
UniRef90_UP10003F0DDB8	R L V E I L V G M H D L G V G I T L G A H Q G I G F K G I L L F G T K A Q K E K Y		
UniRef90_U6P017	K L A E T I L G A H D L G F G V V M G A H Q S I G Y K G I L L Y G T E E E Q K S K Y		
UniRef90_B0SF10	I A T D A F A S G D G G I G L S W V A H L V I G T M P V F Q G T E S Q K T K Y		
UniRef90_M0AG49	L L I E E L L F A I D P G I A L W L T S A D F G S E A I L F G F T E E E Q K A E Y		
UniRef90_H1YGQ7	L V A D A I I G A G Y S F A V A L S A H T G I G T L P I L Y Y G N E E E Q K A K Y		
UniRef90_V5BCR0	L I I M E E I I S R A S A G I G L S Y G A H S N L C I N Q I T R W G T P E Q Q G R L		
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UniRef90_B81214	T I I E E L L A R G D A G F A Y T L L S T I T G A Q L I T K F G T D E Q K N Q W		
UniRef90_G9XGS5	L I I E E L L C K E S A L G A L I G P S I L A T G I I S S N N Q A I L I E K Y		
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UniRef90_R7XSY2	A M Q E E G F M E G G W S G G L M A G A F T H I A L P H I V A N G S P H L V D T Y		
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UniRef90_A6DWU8	L V E R E E L L G R G S M A L T H F F G R P Q N I L M A C T G E Q I E R Y		
UniRef90_K6DHMO	L I A E K F S V A G G F S S H G A H V M G I G S L P I V F F G N E E E Q K R K Y		
UniRef90_UP10002F30868	A M A E A L G H I D C G I P M A I G V Q T D M A T P A L A R F G S D E I R A Q F		
UniRef90_UP1000363C91D	V A L E E E V G V L S M S L S C L Y S M P S I V G E A I N K F G T P A Q K E K F		
UniRef90_L2TIN9	L L T F E F T R S S A V Y R S R F S T S I G L A S Q I L L E Y G T A V Q R E R Y		
UniRef90_UP10003B5AC52	Q V L E E E L L A A R L T V G L G L S V H T L A A Y G L A T Y G S K E Q R A E H		
UniRef90_A3XH21	I L T D E E L L Y R A C A P Q P L V M N I M L G T L L L R Y G T E A Q K Q Y F		
UniRef90_F6AN99	U V T E E E L L A R A W M S V V S S I I A R G N G M I G W Q L H M S P E Q K K Q Y		
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UniRef90_Q0K4A3	I F A E E E A R R V N A P L P M L T L N T V G P T L M Q F G T E E E Q K Q K E		
UniRef90_G7CN55	L C V E E E L L A R G W M S V V S G V I N T H F I V A Y M L R Q H G T D E E Q K Q R L		
UniRef90_H6MS32	V Y L E E E Y R A G A P Y I S V N F V G M M H A G P T L I A E G T D A Q R A Y H		
UniRef90_D3D828	E L A F E E F G Y T A L A F R S L F G T N N G I A G Q V I A G F G T D A Q K K R W		
UniRef90_D6KD22	L A A E E I I A T V D S S L A V T V H V Q I S V A L L V H L I A D R T D L L K E I		
UniRef90_F4CMN2	I W R E E E L L Q L A C V P E P L A F N T S M I G P V I A A F G N Q E Q K E R F		
UniRef90_D2SFV7	I V S E E E L L A R I G S A G G S S T L L V H G I G L P P V V H F A S D D I K E E V		
UniRef90_B7RTY2	V V S E E E L L S R G Y I G V G S L G T R S E I A A E L I L G G G T K E Q K D K W		
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UniRef90_K4TTV7			

130            140            150            160

UniRef90_H9ITY5	L G R L I D E P [L V A A Y G V T E P G A G S D V   A G I K T R A E K K G D E W I L		
UniRef90_A6UBH8	L L P A V R G D K F D A L A M T E P D A G S D V R G M K C F A R P D G D D W I V		
UniRef90_W7TQM7	L P A A C A G T A V G G M C M S E P G A G T D V L G M G T A A T K D G S H Y I L		
UniRef90_D9SLH6	L N K M A K G E A I G A F A L T E P R I L G S D A A K S I E A T A V A D G D D Y V I		
UniRef90_N1ME07	L P D F M E G K I K F S I S I T E P N A G S D A A G L R T R A V Q D G D S W I I		
UniRef90_UP10002E1F66A	A P A V L A G E K L I S L A I T E P S G G S D V A Q L K T R A E K V G N K Y V V		
UniRef90_A7SA87	L P Q V A T G K K Y A A F C L T E P S S G S D A A S I K T R A E K D G K H W I L		
UniRef90_S7Q713	L S Q L A T A K V G S F C L S E A G A G S D S F A L K T R A E K K G G H Y V L		
UniRef90_H2BVZ1	L P A M Q K L E K I G A F G L T E P N V G G S G A G G M E T T C S F D G E N W V L		
UniRef90_E8U8M8	L P D L A S A R K L G A W G L T E P G S G S D S G G L Q T R A E Q Q P D S W I I		
UniRef90_W4M3U0	L P K I L S A E H W W C Q G Y S E P E A G G S D L A S L R T T A V L D G D E Y V I		
UniRef90_UP100035E04FA	L P K L A S G E W A A C Q Y C L T E P D A G G S D A N S G K T K A E E D G K F Y K I		
UniRef90_UP10004163967	L Q D I A A G A T A S Y A L S E R E A G G S D A A S M R T R A V A D G N R W V L		
UniRef90_UP100030A1BE3	F P R V A E G R I A C F G L T E P G S G S D S A A M A T T A T P D P N G W I L		
UniRef90_UP10001925FD3	L A P N I A G D I V G C L G V S E V G A G G S D V S A I K T T A V K R G D D Y V I		
UniRef90_W7ZBS2	L P G L A T G E K F A A Y A L T E P S S G G S D A L G A K T T A L E E K T H Y V L		
UniRef90_U2EME8	L P R I L K S E D W W A Q G Y S E P G A G G S D L A S L R K C R A E R D G D H Y V L		
UniRef90_UP10002557758	V P K L A S G E W F G A Y C L T E P E A G G S D A N S G K T K A V E D G T H Y K I		
UniRef90_UP10003694879	L I R L A S G R A L G T W G F K E A R M G T D T S T M K T R A E K K D D Y W I		
UniRef90_R4SVY5	L P K L A T G E I R A T M A L T E P G G G S D L Q A L R T T A R R E G D E Y V I		
UniRef90_UP10003B6D420	L P K L A T G E L V A A I A M T E P T T G G S D L Q A L R T T G T P D G D D L V I		
UniRef90_R7WTP6	L P E L T A G R A I A G F G L T E P G A G G S D A G A T A T T A R L D G G E W V I		
UniRef90_L7MF07	L P R L A T G E L L G C F G L T E P N H G S N P G G L E T R A R H D P R T Y T L		
UniRef90_UP100030338EC	L P A M A T G E I R A T M A L T E P G G G S D L Q A M T T A V R D G D D L V I		
UniRef90_U9W680	L P R L C R G E W I G V H A L S E P N A G G S D V Y S L K T H A Q K C D G G Y M L		
UniRef90_U1IE68	L P K C V S G E T I L A I A T T E P G A G G S D L A G M R T T A E D K G D H F L L		
UniRef90_F0LY4	L P G A C D G G S K V C L A M A M S E P G A G G T D V L G M R T A V D A G D H Y V L		
UniRef90_UP100037AA460	L P R M A E G V R G S F S M S E P G C G S D V S A I K T K A K E D G E D F V V		
UniRef90_L0IQN0	L P G M L S G E Q I G A Y S L S E P Q A G G S D A A A L Q C K A V K T A D G Y V L		
UniRef90_N8YLI9	L T Q I L A G E K I S A L A T E P S G G G S D V A A L K T K A L R D S D D Y I V		
UniRef90_N6W589	L P G I L S G E D W W C Q G Y S E P G S G G S D L A S L K T K A V L E G D H Y V V		
UniRef90_F0GJ90	L K P T V R G E R V D C F A L T E P P G A G G S D A M G I R T R A V R D G D D Y V I		
UniRef90_UP10003FDC1A2	L P A M G R M E K I G A F A L T E P Q G G G S D A A G L R T T A R R D G D T W V L		
UniRef90_G7WGT5	F T K A I Q E G A I G A F A M T E P P G A G G S D V A G I T T T A K K D D Y Y I L		
UniRef90_A0A059FVE4	L P G I R S G D V V W W C Q G Y S E P P G A G G S D L A S S V K T T A V R D G D H W V I		
UniRef90_UP10003661727	L P P I A I D G A K L A A F A L T E E A N A G S D A S G I Q T T A V K D G D H Y I L		
UniRef90_U5VU91	L P A I A A G D C L P T I A V T E E A S G G H V L G M S A S A V R D G D E Y V L		
UniRef90_G7H671	L P H L A A G E L T G A F S M S E P P A L G S D D V A A I T T T A T R D G D D Y V I		
UniRef90_Q17BX4	L P K V S T G R T Y A A F A L T E P P S S G G S D A A G S I R C R A V K D G K H Y V L		
UniRef90_A0Z8Y6	L P R F A T G E L R G G I G L T E P P D A G G S D L Q S I R L Q A K R Q G D H Y I L		
UniRef90_A0A011Q936	L P R L A T G E L I G C F G L T E P P N H G S D P G S M E T R A H A V A G G F R L		
UniRef90_UP100036ED0B7	L P K L A S G E W I G A W G L T E P P N T G S D A G N M K T I A K E D G D Y W V L		
UniRef90_K6UKX7	L P D L A T G R A L A G F G L T E P P E A G G S D A G S T R T R A T L D G D S W I V		
UniRef90_UP10003D0A2D3	L P K L L S S G E H I A A F C L T E P P A G G S D A A S I Q T R A T E D K K Y F V L		
UniRef90_B9NSD7	M P G I L S L E T V L S Y C L T E P P G S G G S D A A A L K T K A E R T N E G F T L		
UniRef90_K8P6W7	L P R I A N L D D W W C Q G F S E P P G A G G S D L A S L K T T A K R K G D V Y V I		
UniRef90_D7CIX6	L L P R I A N G D L I C A F C L T E P P D A G G S D A G S I R T Q A V R R G D Y Y I L		
UniRef90_H0RML7	L P G I V N G D T A I A V S M S E P P G T G S D L R A I T S T A V R E P G G W R I L		
UniRef90_E4X697	I P S F V S G E K I L C I G M T E P P G T G S D L L Q G L K T T A V A D G D D Y V I		
UniRef90_UP100036B8118	L P L M Q K F E K I G A F G L T E P P E V G G S G A A G G T T T C K K T S E G W I L		
UniRef90_B1YL00	L P K L L S S G E W I A S Y A L T E P P G S G S D A L G A K T T A V L N E T H Y I L		
UniRef90_X1XW64	L P Q L L S S G G R V F G A F A L T E P P E P G T G S D A A S V K T K A V P C G K Y Y I L		
UniRef90_A0A017SGY2	L P G L A K G K L S G C F G L T E P P N H G S D P G S M E T V A R E H P T Q Y L L		
UniRef90_B2GHL4	L P T M A K I E K T G A F A L T E P P T H G S D S V S I L E T S A R R D G D H W V L		
UniRef90_A1VQS5	L K P A I E G T R T C A I T I T E S G A G G S D A A G I K T H A K K T D T G W V L		
UniRef90_Q5P288	L P G L C D G T L V G A H A I T E P P D S G S D S F S F S M R T H A E R D R D G W R I L		
UniRef90_C7PRZ6	L P G M Q R L E K I G A F G L T E P P E V G G S G A A G G T T T A K R D G D T W I L		
UniRef90_UP100037750AF	L P A M A A M D R I G A F A M T E P P L G G S D A G G M R T T A R R E G D T W V L		
UniRef90_UP10003F0DDB8	L P K L A S G E I L A A F C L T E P P S S G G S D A A S I R S T A V P C G K Y Y T L		
UniRef90_U6P0I7	L P D L A T G R K F A A F C L T E P P P G S G S D A N S I K T R A E K D G K Y Y I L		
UniRef90_B0SF10	L T K L L A T G E W M A G F A L T E P P A G G S D A A S L T K A E E V E G G W K I L		
UniRef90_M0AG49	L P P I T T G D A I V M G A A I S E P P Q A S S D V T S L S T R A E K D G G E W V I		
UniRef90_H1YQG7	I P K L L A S G E W K A A Y C L T E P P N S G G S D A N S G R T K A L E G T H Y I L		
UniRef90_V5BCR0	L L P G L I R G N A V G A L A M S E P P E A G G S D V V M G M R S Q A T R E D G S Y T L		
UniRef90_R7WJ60	L P R M A T G E M R A T M A L T E P P P G G G S D L L Q A M K T V A R A D G D D L V V		
UniRef90_B81214	L T K L L A N D R F L M G F A L S E P P Q T G G S D D N A G M L T T A E L T D G Q Y I I		
UniRef90_G9XGS5	A I P F I D G K I L M A M G W T E P P Q A G G S D A S N I Q T R A V K E G D A W I L		
UniRef90_UP1000406DD15	L P A M A T G D V R G A F S M S E P P E L G S D V V A A I R T R A T P T G D D Y L I		
UniRef90_W7IY91	L P D M L G G D L L G G A Y A L S E T H A G S D A A A L S T R A R R D G A E Y T I V		
UniRef90_R7XSY2	A R P V L A G D L I G S L G V T E P P G T G S D V V A G I T T R A V R D G D D W V I		
UniRef90_W5JVM3	F S K Y P S D T I G A F A L S E A G A G G S D V V A A M T T R A A Q S S D S W L L		
UniRef90_A6DWU8	L L P L A V R G E R M D A L A M T E P P P G A G G S D V V R G M K C A A R R D G G D W V L		
UniRef90_K6DHMO	L P Q L A T G E K L A A Y A L T E P P P G S G S D A L G A K T T A K Q E G T H Y I L		
UniRef90_UP10002F30868	L P A P I A G D M V G C I G V G S E P P P G A G G S D V V A G I K T V A R K D G D D Y V I		
UniRef90_UP1000363C91D	L K P T L A G R L A S A E G L T E P P P R G G S D F F F G A T T V A V K K G D K Y I L		
UniRef90_L2TIN9	L P A M A A G E C V M A F A L T E E N A G G S D A S A V R T T A T R T R G G Y V I		
UniRef90_UP10003B5AC52	L P K F A S G E I R G G I A L T E P P P D C G T D L Q S I K T K A K K V G D D Y I I		
UniRef90_A3XH21	L P K M Q K F E K I G A F G L T E P P E V G G S G A A G G G T S C K K V G D E W I L		
UniRef90_F6AN99	L P R V A R G E F F V G A F A M S E P P P G T G S D I S S M S T R A K K D G D S Y L I		
UniRef90_A5VCD3	L P E L I G G R M I G A F A L T E E A D A G G S D A A A L R T R A T R A E G G W V L		
UniRef90_A0A022MB62	L P A M L G G G G L L G A Y A L S E P P P A G G S D A A S L S T R A V R D G D G W V L		
UniRef90_Q0K4A3	L P K L L D M M N V I F C Q G F S E P P P N S G G S D L L A S L S T R A R R E G D H Y V V		
UniRef90_G7CN55	L P A I L R G T V D F A I G Y G F S E P P P G A G G S D L L A S L R T T A V R D G D E W V I		
UniRef90_H6MS32	L P R M A T G E V R G A F S M S E P P P D L G S D V V A A I T T S A K R D D G T Y T I		
UniRef90_D3D828	L P R I L S G E D I W C Q G F S E P P P S A G G S D L L A S L R T S A V R V G D E Y I V		
UniRef90_D6KD22	L E P M A E G A C L A S A F A L T E P P P E A G G S D P S G M R T T A T W S A E G W S I		
UniRef90_F4CMN2	V P G A A A G S T F V S F G L T E P P P S G G G S D A G N I G T R A R R V G D D W V I		
UniRef90_D2SFV7	L P R T A N D I W W C Q Q G F S E P P P D A G G S D L L A S L R T T A V R D G D D W V V		
UniRef90_B7RTY2	V P P A V L S G E K R I S L G I T E P P P S G G G S D V V A G I Q T T A K A E G G D F Y I V		
UniRef90_A7HTJ9	L P K I A S G E V L P T A V F T E P P P N T G G S D L L A S L K T R A R R V G D D V Y K V		
UniRef90_J6UE96	L P R L R T A G E L V L S I A L T E P P P R G G G S D A A N L G L R M E R D G D H F V L		
UniRef90_K4TTV7	L A P V L A S E K G V C V A I S E P P P N H G S N V A G I E C R A D D R G D H Y L L		

170            180            190            200

UniRef90_H9ITY5	N G Q K M W I	T N G G V A N W Y F V L A R T S K A F T G F I V E R E W P G V T P
UniRef90_A6UBH8	N G T K H F I	S H A D I A D F V I V F I A T G K K I T C F L V D R G T P G F E I
UniRef90_W7TQM7	N G A K M W I	T N G T V G D V Y L V Y A K T G K D V S M F L V E K G S P G F R L
UniRef90_D9SLH6	N G K K K W I	T M G Q I A D F F I L F A K C E D K P T A F I V E K D R V G F S K
UniRef90_N1ME07	N G N K V F C I	S G A H L P G T V I V M A R T H K G L S M I L V P N T T E G V D V
UniRef90_UP10002E1F66A	N G Q K M F I	T T G M R A D Y M T V A V R T G K G I S L M I V E T D R P G V S R
UniRef90_A7SA87	N G K K L W I	S N G G I A D I F T V P D K V T A F I V E R G F G G V E S
UniRef90_S7Q713	N G S K M W I	S G A R E A E L F L V M A N A D P G I T C F V V D R D T E G F H V
UniRef90_H2BVZ1	N G Q K K W I	G N A T F A D V I I I W A R D E D R V K G F I V R K E N P G F K A
UniRef90_E8U8M8	N G S K N F I	T Q G S V G G T Y V I L A R T D D G I S A F V F N R D V Q G F S I
UniRef90_W4M3U0	N G Q K T W T	T L A Q F A N W I F V L A R T D P G I S F F L V D M N T P G V S V
UniRef90_UP100035E04FA	N G Q K M W I	S N A G F A D L F I V F A K D K N L T A F I V E K S F G G I T M
UniRef90_UP10004163967	N G A K C W I	S N G G Q S T W Y T V M A V T D P G I S A F M V H K D D P G F V V
UniRef90_UP100030A1BE3	N G T K R Y I	T N A P Y A D V A L I M A R T N K E V S A F I V P M D S P G I S R
UniRef90_UP10001925FD3	N G G K M W T	T N G A Q A D W M C L A N T S E G K S L I C V P M K T K G I V V
UniRef90_W7ZBS2	N G Q K Q W I	T T N S A F A D V F V V Y A K V D E K F T A F I V E K E F D G V S T
UniRef90_U2EME8	N G Q K T W T	T L G Q H A N M I F L V L V R T D E G I S F L L V D M N T P G V T V
UniRef90_UP10002557758	N G Q K M W I	S N A G F C S L M I V F A R D D K N L T A F I V E Y D A E G I T L
UniRef90_UP10003694879	N G S K L F I	T D V D F A E I Q V V M A L T D P G I S S F I L E K G M K G L K P
UniRef90_R4SVY5	N G S K T W I	T N A R R S Q N L V A L L C K T D K G I S V L V V A E T D L E G F A R
UniRef90_UP10003B6D420	N G S K T F I	T N G S Q A N L I V I V A R T D G K G V S L V V A E T D L E G F A R
UniRef90_R7WTP6	D G A K Q F I	T N S D I T S L V T V T A V T G K R I S T I L V P A G T P G F T V
UniRef90_L7MF07	N G S K T W I	T N S P E A D V F V V W A K C E E D I R A F V L E K G T P G L T A
UniRef90_UP100030338EC	N G T K T W I	S N A R R S S L I A L L C K T D R G I S I V L A E H R P G L T V
UniRef90_U9W680	N G S K K F V	T C A P I C D A L V A T D P G V T A F I V E R T A A G F S T
UniRef90_U1IE68	N G S K T Y I	S N G I N S D V V I V A A K K K H A M V L L I V E R G M D G F E R
UniRef90_F0LY4	N G S K M W I	T N G C V G D G A L V Y A R T G P G V S L F H V G P E N P G F S L
UniRef90_UP100037AA460	N G A K M W L	T N G G S S N L T A V L V R T D E G M T V L L V E K E A P G L T V
UniRef90_L0IQN0	N G S K S W I	T H G G R A D F Y T L F A R T D E G E S C F L V P G D L D G L S F
UniRef90_N8YLI9	S G E K T F I	T S G C R A D Y Y T V A V R T D N G I S M L L I D A H S K G I S K
UniRef90_N6W589	N G Q K T W T	T L G Q H A D W I F C L V R T S Q G I S F F L L I D M N T P G I D V
UniRef90_F0GJ90	N G S K H F I	I S H A D T A D F V I L F A V T G K R V I T C F L V D K D T P G M T V
UniRef90_UP10003FDC1A2	N G E K R W I	G N A T F A D V L V V V W A R E D G G V L G F V V D S S T P G F S A
UniRef90_G7WGT5	N G A K C F I	T T N A G V A S Q M V V L T T L D K G M A F F I L P S E V E G L T I
UniRef90_A0A059FVE4	N G Q K T W T	T L A Q H A D W G F F L C R T D P G I S F I L V D M K T P G I E V
UniRef90_UP10003661727	N G T K Q W I	T N G G E A D I Y T V F V L T N K G A S A F I L V E K G T E G F S F
UniRef90_U5VU91	N G R K V F V	G N S H V G D V L V H G V V L R T G K G L S A F I L V E A D R P G F S L
UniRef90_G7H671	N G Q K M W L	T N G G T S S L V A V L V R T H Q N L T T F I L I E K S A P G L T I
UniRef90_Q17BX4	N G S K I F W I	S N G G I A D I M T V F A Q T E D K V T A F I V E R G F G G V T S
UniRef90_A0Z8Y6	N G T K T W I	S N G I N G N C L A V L T K T H R G M S L F C E K G D G F S V
UniRef90_A0A011Q936	F G S K M W I	T N A P I A D V F V V W A K D D S A I R G F V L D R G M R G L T A
UniRef90_UP100036ED0B7	N G A K N F I	T H G K S G N L A V V I I A R T G E N A T A F V I E K G T N G F Y S
UniRef90_K6UKX7	D G A K A F I	T N S P L T S V V T V T A R T D D D G I S T I M I P S G T D G L T V
UniRef90_UP10003D0A2D3	N G S K V W I	T N G G L A N I F T V F A K T E D K M T A F I V E R D F G G I T N
UniRef90_B9NSD7	N G T K A F I	S G G G Y S D A Y V C M V R T G K G V S T V Y V E D G T P G L S F
UniRef90_K8P6W7	N G Q K T W T	T L A Q H A D W I F C L C R T N P G I S F I L F D M K S R G V T V
UniRef90_D7CIX6	N G T K S F V	T N G P I A D L C L V F V S T N P G I S V F L V E S S F P G F S R
UniRef90_H0RML7	S G S K T F V	T R G I Q A D L V I V A A R I G E G F G L F V V P D G A P G F T R
UniRef90_E4X697	N G S K V F I	S N G I L M A D Y C I L A V V T D P A M S L F L V D T S F N R
UniRef90_UP100036B8118	N G Q K K W I	G N A T F A D L V I I W A R D D G E V K G F I V E K D N P G F S V
UniRef90_B1YL00	N G E K Q W I	T N A G F A S L F V V V Y A K C D D K F T A F I V E G S Y P G V S T
UniRef90_X1XW64	N G S K L W I	S G G G I A N I F T T F A Q T E T K M S A F I V E R A F E G V S T
UniRef90_A0A017SGY2	S G S K T W I	T N S P I A D V M I L V A K W K S T G K I R G F V V E R S R P G L E T
UniRef90_B2GHL4	N G H K R W I	G N G H A A D V I L V Y A R A D G Q V K C F V V E K Q E D G Y R P
UniRef90_A1VQS5	N G S K H F I	S D G E W S D F F L V S A K T E K E I S M F M D K G L P G F T V
UniRef90_Q5P288	N G T K T F I	S N G P V I A D V A V V F A V T E P G V T A F I L V E S D T P G F S A
UniRef90_C7PRZ6	N G Q K K W I	G N A T F A D V L V I I W A R D D D E V V K G F V V E K D M P G F D P
UniRef90_UP100037750AF	N G A K K W I	G N A T F A D Y V V V V W A R D D D E V V K G F V V E R S F G G I T H
UniRef90_UP10003F0DDB8	N G S K I W I	S N G G L A E I F T V F A K T P E K I T A F F V V E R A F G G V T S
UniRef90_U6P017	N G G K L W I	S N G G F A D V F T V F A Q T P D K V I S A F I V E S D T P G F K V
UniRef90_B0SF10	N G S K T F I	T N G P V Q G V F I V M A R T S E G I S A F I V E R A F G G V T S
UniRef90_M0AG49	N G S K M W I	T N G T V G D Y F V V L C E T D P G Y S Q I V E A D C D G F S A
UniRef90_H1YQG7	T G Q K M W I	T N G G F A D V F V V F A K C D D D L S A F I V E K A F G G I T S M
UniRef90_V5BCR0	R G S K S W I	T N G T L A D V I I V Y A K S S R S V T A V I V E N G M D G L T R
UniRef90_R7WJ60	N G A K T W I	S N A R S G L I A L L C K T D P G I S I L L V E H G R G L T V
UniRef90_B81214	N G T K S F I	T N A G I A G L Y L V W A R T D K G I S V F L V P A D A P G L K V
UniRef90_G9XGS5	N G N K S F I	T G S S W A D A F Y I S A R T E E G I S V F I I T D K S M P G F Q E
UniRef90_UP1000406DD15	T G Q K M W L	T N G A T S S L V A V L V H T D E G M T A F I V E K P T P G L T I
UniRef90_W7IY91	S G T K A W I	T H G G E A D F Y T T M V R T S D G I S C L L V D A A T P G L T A
UniRef90_R7XSY2	N G A K T F I	T S S S V R G D F V T T A V R T G G G I S L I V V P K G T P G F T V
UniRef90_W5JVM3	N G R K A W V	T S G V E A V A G I V F G T C D K G I S A F I V D A K A K G L S L
UniRef90_A6DWU8	N G T K H F I	S G A D H A D F V I V F V Q T D K G I T T F F L V D R G T P G F T I
UniRef90_K6DHMO	N G E K Q W I	T N S A F A D I F V Y A K C D E H F T A F I V E R G F P G V L T
UniRef90_UP10002F30868	S G Q K M W I	T N S L Q A D W M C M L V N T G E G P S L V M P M R L P G I E V
UniRef90_UP1000363C91D	K G Q K R F I	V G A E G A D Y F M I Y A K T D P A L S A F I V E R G P P G V K V
UniRef90_L2TIN9	D G E K R Y I	T N G G W A D V L V V F A R T D D G G V S S F L V D R D T P G V Q T
UniRef90_UP10003B5AC52	N G T K T W I	T N S V Q V G S I L A V L V K T D K G M S L I L V E K K H G F V
UniRef90_A3XH21	N G E K K W I	G N A T F S D I L I I W A R D D E S G S G S F I V R K E N P G F H A
UniRef90_F6AN99	T G N K Y W C	C T F A D G A D Y L M V V I A R T S P G M S M F I I P K K R E G V Q G
UniRef90_A5VCD3	N G A K Q F I	T S G K I A G V A M V F A V T D K G I S A F I V P T D S P G Y A V
UniRef90_A0A022MB62	S G T K S W I	T H G G I A D F Y T V M A R T G R G I T A F I V P G D A E G L S A
UniRef90_Q0K4A3	D G Q K I W T	S H A H N W M F A L V R T Q D G I S F I L I D M K S P G V S V
UniRef90_G7CN55	D G S K M F I	T S G A E Y A D Y I W L A A R T D K G I T L F I V P T D S P G F S W
UniRef90_H6MS32	N G A K M W L	T N G A S S T L V A A L V R T D E G I T T F I I E K P A A G L T I
UniRef90_D3D828	N G Q K I W S	T R A H V A D Y C E L L V R T D P G I S W L I L D M R S P G V E V
UniRef90_D6KD22	S G Q K R F I	T N A P I A D L F V T F A R T V D G K I A V F L V P A G S A G L T V
UniRef90_F4CMN2	N G A K Q F I	T N S P F S R Y V I L F A A T D D D V I S A F I V P L D A P G V T V
UniRef90_D2SFV7	N G Q K T W T	T L G Q H A D W I F C L V R T D P G I S L L V F P M D T P G V T L
UniRef90_B7RTY2	N G S K T F I	S G G M G A N W V S T A V R T G K G V S M L L I P M D L P A G V S R
UniRef90_A7HTJ9	N G N K T W I	T H A A R A D V M T L L C R T N D G L S M L L A E K P A K G M S G
UniRef90_J6UE96	N G E K T S I	S A A Q D A A A C C V V F A R T G R G I S A V L V P M D A P G V S T
UniRef90_K4TTV7	N G S K L W I	T N G V N A D Y A I V L A R T A G K P S L F I V E R A A S P Y A

	210	220	230
UniRef90_H9ITY5	G R K E Q N M G Q R A S D T R G I	T F E D V   R I   P K E N	V L   G E G A G
UniRef90_A6UBH8	R E G Y N S V   S H R G Y K N C   L	T F D D C R   L   P S A Q I	L   G E V
UniRef90_W7TQM7	G K   L E D K L   G M R A S M T A E L	C   L   C R   V   P L   E N	L V   G K E D G
UniRef90_D9SLH6	K P   M S G   L   G V R A S M   A E L	T   L   E N C   R   I   P K E N	L V   G
UniRef90_N1ME07	R K   L D T   I V R R S   L G T   T E I	F F T D A R   V   P V E N   I	I   G P   G D G
UniRef90_UP10002E1F66A	T R   L D K M G W R   C S D T A A V	Y F F D N   V   E V   P P   E N   M I	G P   E N G
UniRef90_A7SA87	G P   P E K K M G I   K A S N T A E V	Y F F D N   V   E V   P V   E N   V L	G G E
UniRef90_S7Q713	G K   P E N K   G I R A S S T   C P   L	T   L   E D V   K   V   P E A N   V L	G Q   V
UniRef90_H2BVZ1	E K M E D K M A L R I V Q N A L I	T   L   T   N C   K   I   P E N D   R   L	
UniRef90_E8U8M8	G R K E D K   L G   R S S D T A Q L   I	F E D M R   V   P E T A   L   L	G
UniRef90_W4M3U0	R P   I K   L D G   S Y E V N D T   F F	D N   V   R   V   P R E N   M I	G E A
UniRef90_UP100035E04FA	N D E E K K M G I   K G S S T R Q   V	F F N D C   M   V   P V   E N   M I	
UniRef90_UP10004163967	G A K E H K M G I   K G S P T T D L   Y	F F E E C   T   I   P A G R   I   I	G
UniRef90_UP100030A1BE3	G S   P D K K M G Q S G S H   C   D   I	M   L   D   D   V   R   V   P G D A   L   L	G G E T G
UniRef90_UP1001925FD3	Q P R M K K   L G M H   S S D T V   Q   I	F F E D V   V   V   P Q K Y   R   I	G E E
UniRef90_W7ZBS2	G P   E E K K M G I   K G S S T R T   L   I	L   E D A Q   V   P V   E N   V L	G E
UniRef90_U2EME8	R P   I L T   L D G   A H E V N E V   F F	D N   V   K   V   P V   E N   L   V	G E E
UniRef90_UP10002557758	G D E E K K   L G   R A S S T R Q   V	F F N E T V V   V   P V   E N   M I	
UniRef90_UP10003694879	R K R E E K S G K K A D   C   T   S   E   L	F F K N   V   K   V   P A S N   L   I	G E G K G
UniRef90_R4SVY5	S R D   L P   K   L G Y K G   V E S   C   E   L	S F D G   F   R A   P V   T A   L   L	G G   V E G
UniRef90_UP10003B6D420	G R V   L E K   L G A H   G Q D   T   R   E   L	S F T D M   R   V   P A A N   I   I	G G E A G
UniRef90_R7WTP6	E S A Y D K V   G W N S S D T   H   P   L   T	F D G   V   R   V   P E A N   L   L	G E
UniRef90_L7MF07	P R I   E G K F S   L R A S A T   G M   I   I	M E D V   T   V   P E D A   L   L	P A S R G
UniRef90_UP100030338EC	S K D   L P   K   L G Y K G   V E S   C   E   L	A F T D Y   R   V   P A T A   V   L	G G   V P G
UniRef90_U9W680	G P   V   K   D K M G   L   R T   V   P   F   G   E   I	F F D D C   F   V   P E E D   R   L	G P E
UniRef90_U1IE68	G R N   L K K M G M P   A Q D   T   A   E   L   F   F   Q   N   V   K   V   P K   G   N   V   L	G E	
UniRef90_F0LY4	G R I   T   G   L   G M R A S   P   T   A   E   L   V   F   E   D   C   V   V   P   K   E   D   L   V   S   E   W   N   G		
UniRef90_UP100037AA460	P G K   I   E K M G Y   K G   V   D   T   T   E   M   V   F   D   D   F   R   I   A   Q   A   Q   V   L		
UniRef90_L0IQN0	G K   P   E E K M G   L   H   A   V   P   T   T   S   A   F   Y   D   N   A   H   L   E   A   D   R   L   I	G E   G Q G	
UniRef90_N8YLI9	S K   L   D K M G W W A   S   D   T   A   H   L   H   F   D   Q   V   R   V   P   A   H   H   L	G A E	
UniRef90_N6W589	R P   I   I   M   L   D   G   E   H   E   I   N   E   V   Y   F   D   N   V   K   V   P   V   E   N   R   V	G E E	
UniRef90_F0GJ90	R R G   P   H   C   T   S   L   R   G   Y   H   Q   S   E   I   F   L   S   C   R   V   S   A   A   Q   I   L	G E E	
UniRef90_UP10003FDC1A2	S   I   E   N   K   I   A   L   R   T   V   E   N   A   D   V   L   K   D   C   R   V   P   E   E   N   R   L   Q   E   A   H   G		
UniRef90_G7WGT5	G K   H   E K K M G   I   R   A S D   T   V   E   V   I   F   D   N   V   R   V   H   K   K   W   L   I   G   E   G   E   G		
UniRef90_A0A059FVE4	R P   I   K   L   I   D   G   T   H   E   V   N   E   T   W   L   T   D   V   R   V   P   V   E   N   L   V   G   E   N   E   G		
UniRef90_UP10003661727	G K   K   E N K M G   I   R   A S   C   T   R   E   L   I   F   E   D   V   K   V   P   A   E   N   L   I   G   K   E		
UniRef90_U5VU91	G P   H   R   A   A   M   G   L   H   G   F   S   G   E   L   V   F   D   N   C   R   V   P   A   A   N   R   L   G   E   G   D   G		
UniRef90_G7H671	P G K   I   E K M G Y   K G   I   D   T   T   E   L   F   D   G   F   R   I   G   A   D   Q   I   L   G   G   E   P   G		
UniRef90_Q17BX4	G P   P   E N K M G   I   K   C   S   N   T   A   E   V   Y   F   E   D   C   K   I   P   I   E   N   V   L   G   G   E   E   G		
UniRef90_A0Z8Y6	G K   K   L   K   L   G   Y   R   A   I   D   S   A   E   L   I   F   D   D   F   H   V   S   A   D   N   L   I   G   G   E   E   G		
UniRef90_A0A011Q936	P A   I   H   G   K   G   F   G   R   T   S   L   T   G   E   I   V   M   N   D   V   F   P   E   E   N   V   F   P   E   I   R   G		
UniRef90_UP100036ED0B7	G R   K   E   D   K   L   G   M   R   S   S   E   T   T   E   L   I   F   D   N   C   M   V   H   K   S   N   I   L   G   K   G   E   G		
UniRef90_K6UKX7	E   P   P   Y   D   K   L   G   W   W   I   S   D   T   H   G   L   T   L   D   S   V   R   V   P   Q   E   N   L   L   G		
UniRef90_UP10003D0A2D3	G K   P   E   D   K   L   G   I   R   G   S   N   T   C   E   V   H   F   E   N   T   R   V   P   V   E   N   V   L   G   E   V   G   G		
UniRef90_B9NSD7	G A   L   E   Q   K   M G W   K   S   Q   P   T   A   Q   V   Q   F   D   D   C   K   I   P   A   D   N   L   V   G   E   G   D   G		
UniRef90_K8P6W7	R   P   I   Q   T   I   D   G   G   F   E   V   N   E   V   F   F   D   D   V   E   V   P   V   E   N   L   V   G   Q   P   D		
UniRef90_D7CIX6	G K   K   L   L   N   K   L   G   V   R   S   S   P   T   S   E   L   I   F   S   D   C   E   V   P   A   E   N   L   L   G   E   G   E   G		
UniRef90_H0RML7	G R   K   L   L   D   K   L   G   R   R   A   Q   D   T   A   E   L   F   F   A   D   V   R   V   P   D   T   D   V   L   L   G   E		
UniRef90_E4X697	G K   N   L   K   K   V   G   V   K   A   N   D   T   A   E   L   F   F   D   D   L   R   V   P   K   S   A   I   L   G   G   P   D		
UniRef90_UP100036B8118	E   K   I   K   G   K   M   A   L   R   I   V   Q   N   G   L   I   T   L   K   D   C   L   I   T   E   E   N   R   L   G   E		
UniRef90_B1YL00	G   L   E   E   Q   K   M   G   I   K   G   S   S   T   R   T   L   I   L   E   D   A   E   V   P   V   D   D   N   V   L   G   E		
UniRef90_X1XW64	G P   P   E   D   K   M   G   I   K   C   S   V   T   T   E   V   F   F   D   D   A   K   V   P   V   E   N   L   L   P   D   V   E   G		
UniRef90_A0A017SGY2	P   A   I   K   N   K   S   A   L   R   A   S   I   T   L   G   T   M   I   Q   M   D   E   C   P   V   P   V   E   N   M   L   P   D   V   E   G		
UniRef90_B2GHL4	T   V   I   D   G   K   I   G   K   R   A   I   N   Q   A   D   I   V   E   D   L   R   I   P   E   E   N   R   L   G   E   E		
UniRef90_A1VQS5	G K   D   Q   K   M   M   G   L   R   G   T   P   H   L   E   L   F   F   D   N   V   P   L   E   A   V   T   L   L   G   E   E		
UniRef90_Q5P288	G Q   K   F   E   K   L   G   L   R   T   S   P   V   G   E   L   V   F   T   D   M   Y   V   S   P   S   A   V   L   G   Q   V   G   G		
UniRef90_C7PRZ6	E   K   M   H   D   K   M   A   L   R   I   V   Q   N   G   V   I   T   L   K   D   C   L   I   T   E   E   N   R   L   G   G   P   D		
UniRef90_UP100037750AF	G K   K   I   E   N   K   L   K   A   F   R   I   V   E   N   A   E   I   T   L   T   D   V   R   V   P   E   A   N   R   L   G   E   V   G   G		
UniRef90_UP10003F0DDB8	G P   P   E   K   K   M   G   I   K   A   S   N   T   A   E   V   Y   F   D   G   V   R   V   P   S   E   N   V   L   G   E   V   G   G		
UniRef90_U6P0I7	G P   Q   E   K   K   M   G   I   K   G   S   N   T   T   E   V   H   F   D   N   V   K   V   P   V   E   N   L   L   G   E   G   E   G		
UniRef90_B0SF10	S   K   V   L   K   L   G   H   H   T   S   M   T   A   E   L   V   F   E   D   M   I   I   P   K   E   N   L   L   G   E		
UniRef90_M0AG49	E   K   I   T   G   K   T   G   V   R   A   S   P   T   A   E   L   V   L   D   D   D   V   R   V   P   P   E   E   N   L   V   G   E   G   E		
UniRef90_H1YQG7	N   P   E   E   H   K   G   I   K   G   S   S   T   R   Q   V   F   F   N   D   C   P   V   P   V   E   N   L   L   S   E		
UniRef90_V5BCR0	G K   K   L   D   K   L   G   M   R   C   S   E   T   C   A   L   Y   F   D   D   I   R   I   P   P   Q   N   I   L   G   E		
UniRef90_R7WJ60	S   R   D   L   P   K   L   G   Y   K   G   V   E   S   C   E   L   I   S   F   D   D   F   R   V   P   A   S   A   V   L   G   G   T   P   G		
UniRef90_B81214	G   K   I   E   D   K   M   G   N   R   L   S   S   Q   Q   G   E   L   I   F   E   N   C   L   I   P   A   S   N   L   L   G   K   E		
UniRef90_G9XGS5	G   A   V   C   H   K   Y   W   W   R   G   S   G   T   G   E   I   Y   L   K   N   C   R   V   P   E   G   S   M   I   G		
UniRef90_UP1000406DD15	P   G   K   L   E   K   L   G   Y   K   G   I   D   T   T   E   M   I   F   D   D   Y   R   A   G   S   A   D   I   L   G   G   K   T   G		
UniRef90_W7IY91	A   P   P   E   R   E   K   M   G   L   T   G   S   T   T   A   Q   V   V   F   F   D   G   A   R   V   P   A   D   R   L   I   G   E   G   D   G		
UniRef90_R7XSY2	S   R   K   L   E   K   M   G   W   L   C   S   D   T   G   E   L   S   Y   A   D   V   R   V   P   A   A   N   L   L   V   G   E   E		
UniRef90_W5JVM3	G   R   P   E   D   K   L   G   I   R   G   T   S   T   C   D   L   V   L   E   N   V   S   I   P   A   E   N   V   L   G   P   V   G   G		
UniRef90_A6DWU8	R   D   G   Y   K   S   V   S   H   R   G   Y   K   N   M   V   L   E   F   D   D   C   R   L   P   D   A   Q   V   L   G   E   V   D   G		
UniRef90_K6DHMO	G   S   E   E   K   K   M   G   I   K   S   S   S   S   T   R   T   L   I   F   D   E   D   V   P   V   P   T   Y   N   V   L   G   E   V		
UniRef90_UP10002F30868	G   K   K   I   K   K   I   G   M   N   S   S   S   D   T   G   L   I   Y   F   D   E   V   P   V   P   Q   R   Y   R   I   G   E   Q   Q   G		
UniRef90_UP1000363C91D	E   Y   I   Y   G   L   M   G   T   R   G   G   G   A   G   R   L   V   L   D   N   C   E   V   P   A   E   N   L   L   G   R   E   N   G		
UniRef90_L2TIN9	R   L   P   E   L   M   N   G   H   A   E   G   P   V   A   E   V   S   L   R   G   V   R   V   P   D   A   D   R   L   I   G   G   A   E   G		
UniRef90_UP10003B5AC52	A   R   K   L   K   K   L   G   Y   R   G   I   D   T   G   E   V   Q   L   E   N   V   K   V   P   K   S   N   L   I   G   K   I   E   G		
UniRef90_A3XH21	E   K   M   K   D   K   M   A   L   R   T   V   Q   N   A   L   I   T   L   T   D   C   L   I   P   E   S   D   R   I   L   G   E   E		
UniRef90_F6AN99	S   P   I   P   K   I   G   Y   F   G   F   K   T   W   E   L   A   F   D   N   F   R   V   P   A   E   N   L   I   G   E   E		
UniRef90_A5VCD3	D   K   V   E   H   K   L   G   Q   A   A   S   D   T   C   A   I   R   F   D   D   L   F   V   P   D   G   L   L   F   G   A   E   G		
UniRef90_A0A022MB62	A   A   P   E   K   K   M   G   L   K   G   S   P   T   A   Q   L   H   L   D   G   V   R   V   P   G   D   R   R   R   I   L   G   E   E		
UniRef90_Q0K4A3	R   P   I   M   T   I   D   G   Y   H   N   V   N   E   V   F   F   D   V   R   V   P   V   E   N   L   V   G   E   E		
UniRef90_G7CN55	K   P   L   H   T   M   P   G   V   S   T   Y   Y   T   F   Y   D   D   V   R   V   P   D   D   N   I   V   G		
UniRef90_H6MS32	P   G   K   I   D   K   M   G   Y   K   G   I   D   T   T   E   L   I   F   D   G   Y   R   T   D   A   E   H   I   L   G   G   T   P   G		
UniRef90_D3D828	R   P   M   R   T   I   D   G   E   S   H   F   C   E   V   F   L   T   D   V   R   V   P   V   A   N   L   V   G   E   N   D   G		
UniRef90_D6KDD2	G   P   K   D   R   K   M   G   Q   E   G   A   T   T   A   D   V   Y   F   D   A   V   R   V   P   V   G   H   D   A   L   I   G   E   V   E		
UniRef90_F4CMN2	G   P   A   Y   A   K   Q   G   W   R   S   S   D   T   H   P   L   Y   F   F   D   V   R   L   P   A   D   A   L   L   G   E   E		
UniRef90_D2SFV7	R   P   I   E   L   I   D   G   G   F   E   V   N   E   V   F   F   E   D   V   R   V   P   A   E   N   L   I   G   E   E		
UniRef90_B7RTY2	T   P   L   D   K   K   Q   G   W   W   C   S   D   T   A   T   L   Y   F   D   N   V   K   V   P   K   K   Y   L   M   G   E   E   E		
UniRef90_A7HTJ9	G   E   I   V   V   L   G   Y   R   G   M   K   E   F   E   I   G   F   D   D   F   E   V   P   K   A   E   N   L   L   G   G   E   E   G		
UniRef90_J6UE96	T   R   F   T   D   M   G   E   H   A   V   G   R   G   S   I   F   F   D   D   V   R   V   P   V   E   N   L   I   V   G   E   E		
UniRef90_K4TTV7	A   R   L   V   D   K   M   V   L   K   A   S   G   T   A   E   L   S   F   D   D   V   R   V   P   K   E   N   L   L   G   A   E   G		

1 S Q T D P Q D IF 10 T P E D F S LE H K M L Y R M V S G F V T D S V L S R M D 20 M H L A F T E G E Q A F R E E V R Q F L R D S V P P A M R M N L D F S P E D I A F R E E V R A F I E E N Y P E D I K L V D V A K N F S D N I L R P S A G M H P F S T E E D R A V A E G V R R F A E R V V A P R A R D Y Y Q DE L L T P E E N D L R I K I R L F M E N D V A P I I P E L S A L H Q E F R A A A R D L A R K E L A P R S A M D F Q L N E E H R A F S D S V A R F A R Q E L A P G A L S P E T V S D A D F A D I L A A T K Q F I R T Q V V P R E L Q L N E E E R M I L A M V D S V C A D V V S E R A A T F D W T D P L S S K T L L T E E K A I S D M A E R Y C Q E Q L L P R L E P R F K W D D P L N I Q A Y L T E E E I A I Q Q T T E S Y C Q E K L R P R V L T L S N E Q A A W R E E F R A Y V D T E V I P F A D D F Y E F E A L L D D D R A T V H R V R T F M D E Q V Q P I I N M E L R F T P E E N T F R K E V R H F F R T A I P E E I R M D L N F T P A A E E A F R D S V R A F L A E K L P A L S D F T P E E W T E E H R M M L Q T G L D F V A Q R I I P N L E R S L F P D E R G L E V D S N L T G E D K E I V D M V H D F V L K E V R P K A A D F Y E L G K S L P P H E R E I Q L Q R V R E F M E R E I K P I A N S P T A P Q P H A D L D P L T D A D F R A A V R N W I A A S Y P Q N L R Q L S S D E E E M I A L V R D F V D E R V K P D V R R G I L A S K E V F P Y P D V L T L E Q K E T V D S M L D P F Q R F F T E N A G M N L E F T D E E I A F R N M V R A W M K E N V S D D L R M D F Q A D P G L E A F R Q E V R Q F L R D N V P Q E L K M D F N L S E E H Q A F A D S V A R F A R D K L A A G A L M E F F E N E E Q K M I A S S A R D I A K D F P P E Y W R F E L T E A H H E H R E E V R Q F C K A E I D P Y V E P G D V Y G Y V E L L D D E E Q E I L A R V R T F A E K R I A P I A N M D L S F T P Q E E A F R N Q V Q A F L A E H L P S E L S M E F G L S T E Q K L V I D T V R S F V E N E M Y P H E A L T K D E E E M V A L V R D F I D Q R V V G N V R L T E E R R M I Q E A A R Q F T M E R V V L P I A N L N E E Q K E F Q R V I A F S F A A Q E E M M P N M A D F Y S F E E L L D T D E R A V L H R V R E F F L R S E V A P I A N M D F R P D P S L Q A F R Q E V R E S L P P D L P M Q L A L T D E E I I A F R D Q I R N T L T T K I P K E I R H I D F L L D D E L R A F R R D V R A F L R D A V P Q E T R L E R L D A R L P L S S E E T M L L D S V K E L C N S Q I A P R A A U n i R e f 9 0 \_ D 2 B 9 Q 0 U n i R e f 9 0 \_ U P I 0 0 0 4 1 3 6 8 E 3 U n i R e f 9 0 \_ E 9 B Y G 7 U n i R e f 9 0 \_ U P I 0 0 0 4 2 7 F 3 6 3 U n i R e f 9 0 \_ D 9 X F 0 6 U n i R e f 9 0 \_ B 0 S 9 L 3 U n i R e f 9 0 \_ A 1 T V 6 5 U n i R e f 9 0 \_ U P I 0 0 0 3 3 4 4 A 7 C U n i R e f 9 0 \_ U P I 0 0 0 1 F F D E 0 D U n i R e f 9 0 \_ D 6 K D H 7 U n i R e f 9 0 \_ H 3 N Y 2 0 U n i R e f 9 0 \_ Q 1 9 0 5 U n i R e f 9 0 \_ A 9 W Q X 1 U n i R e f 9 0 \_ U 9 J U Z 5 U n i R e f 9 0 \_ K O C H I 0 U n i R e f 9 0 \_ A 0 A 0 2 2 L R 1 7 U n i R e f 9 0 \_ X 6 H A 4 7 U n i R e f 9 0 \_ B 7 W R J 2 U n i R e f 9 0 \_ W 8 H F K 2 U n i R e f 9 0 \_ Q 8 9 J 2 9 U n i R e f 9 0 \_ R 7 B M H 8 U n i R e f 9 0 \_ E 0 1 7 E 8 U n i R e f 9 0 \_ N 1 M P C 2 U n i R e f 9 0 \_ B 1 M 3 H 7 U n i R e f 9 0 \_ B 1 K C N 7 U n i R e f 9 0 \_ U P I 0 0 0 4 6 7 E E 6 C U n i R e f 9 0 \_ K 6 W 7 S 4 U n i R e f 9 0 \_ D 8 D C I 3 U n i R e f 9 0 \_ M 0 J J X 9 U n i R e f 9 0 \_ V 4 X Z E 9 U n i R e f 9 0 \_ U P I 0 0 0 3 0 8 9 5 5 3 U n i R e f 9 0 \_ L 0 J 3 U 2 U n i R e f 9 0 \_ E 2 P Z 6 6 U n i R e f 9 0 \_ V 2 I D S 3 U n i R e f 9 0 \_ U P I 0 0 0 3 7 1 F 1 D 4 U n i R e f 9 0 \_ A 0 A 0 2 4 J Y D 1 U n i R e f 9 0 \_ U P I 0 0 0 4 6 C D 5 2 8 U n i R e f 9 0 \_ K 5 B 7 A 4 U n i R e f 9 0 \_ U P I 0 0 0 4 0 E 1 F C F U n i R e f 9 0 \_ W 3 A 9 E 3 U n i R e f 9 0 \_ U P I 0 0 0 1 D D 0 6 E 1 U n i R e f 9 0 \_ U P I 0 0 0 3 6 7 8 F 0 U n i R e f 9 0 \_ X 6 J H P 8 U n i R e f 9 0 \_ V 6 L 3 Y 6 U n i R e f 9 0 \_ B 1 M 0 U 9 U n i R e f 9 0 \_ L 8 D L I 3 U n i R e f 9 0 \_ U P I 0 0 0 2 5 5 C 9 7 7 U n i R e f 9 0 \_ U P I 0 0 0 3 7 1 6 9 5 F U n i R e f 9 0 \_ U P I 0 0 0 1 D D 0 4 9 7 U n i R e f 9 0 \_ U P I 0 0 0 3 4 5 C E 8 7 U n i R e f 9 0 \_ Q 0 C 3 4 0 U n i R e f 9 0 \_ K 1 Q H Q 6

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 K M V E G R D V S K E W W R I L N E K G W G V S H W P E Y G G T G W T S V Q H Y  
 G K H R E E L T K E Q W H Q I L G K K G W S V P S W P Q Y G G T G W T P T Q K Y  
 L I D H Q G K V P D E I T E M A T L G L L G A I L P E Y G G Q G I D P L S Y G  
 A I D E D G V F A G E H L A A L A E I G L L G M N L P E W G G A G V S A V G L Y  
 Q Y W E T A V F P F H L I P K L G S L G F L G G G I K G H E C P G L S A T A Y A  
 E V D E R G G F P H D T Y A I L T A A G L H A T G I P E Y G G D G V D A L A A A  
 E R A H S K S Y P W E T A K K L A D N G L L G I T F E K D G G H G G T L M H A V  
 E I M S T D R V P D D L R D Q A K K M G L F G Y A I P E W G G L G L N L V Q D V  
 Q I D E D D E F P Q D M Y D L V A E Q G L F G L S M P E F G G F A V S V N C W A  
 E G Y R N E S Y D K S Q L E E M G Q L G L L G A T I Q G Y G C A G V S S V A G G  
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 A W H R D Q Q M P P S V I G T L A E R G Y L G L V I P E F G G R G V G P V A L G  
 E Y W T R A Q T P R H L I P E I A K L G L A G T P Y S G Y G C P G K S T L L D G  
 K V I S E G R K L E R E D Y R I L N D K G W A A P H W P E Y G G Q D W T P V Q R Y  
 K V A S G K H L S R D W H A I L N E R G W L A N H W P E Y G G T G W T V I E K F  
 R I E A E E G L T P K L L E E V G E L G L L G S S V P E E D G L G L D F K S T M  
 E H D I S G E L D W D A Y N K A F E M E G L V C A D L P E Y G G Q G L S N V S A A  
 Q L D H D Y T L Q K K R M K E V G Q L G L M G A E V P E Y G G L E A G K R M S G  
 E W H N D E L I P M E I I E L A E M G V F G L T I P E Y G G F G L S K A S M V  
 H Y W N K A E F P M Q L I P K M A E L D I A G L T Y Q G Y G C P G H S A L L E G  
 R L H A A E A M P W Y R I L S Q Q G W L A P G W P E Y G G M G L S P S K L L  
 R F E E S D T Y P E A F I E E M K K L G F F G L L V P E Y G G V D V S M A A F S  
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 S V T A R G D M T Q R W K Q L G D K G W L A L T W P E Y G G P G W T A T Q R Y  
 G Q P R C T R S P R E W Q K V L A A H G W G A P Y W P E H G G T G W S V A Q T L  
 E R A H S S H Y P W E T A Q L L A Q Q G L L G I A F P E D G G Q G G G T L M H A V  
 E K D E K G E F A E E F W K A L S D A G F T G I V I P E Y G G A G M G M T E L L  
 T H E S E G T F P F D I V E T V G E A G F N G V Q Y T E Y D G L G L D Y R S Y A  
 R Y W A D A E F P H E L I E G F A E L D V V G L A R E W P D R R R A Y S R L L T S  
 D K V A N G E R M E H W H S T L N T R G W L A N H W P E F G G P G W S A V E K F  
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 K L D E K G K I P R E L I D E M A E L G Y F G I L I P E Y G G L G L G A Y E Y C  
 E W D Q K E L F P V D M M R K A A R L L G F G G V Y V R D V G G S G L S R L L D T S  
 E Y W A R A E F P T E L V K S Y A E L G I A G R A Y P D V R G P K P T S L L S G  
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 I E R T A Q V P D E V V K G L A E L G A F G I T I E Y G G L G L S H L D Y G  
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 A T E H A D S Y P E R W I E E Q M K Q I G I Y G L A V P E Y G G M P V S M P C F V  
 L L E R T S E L P R E L R R K A M A L G L H A C N M P E V G G A A L D C V S F T  
 E Q R A H N W T G R D M T R K M A Q Q G W L G M T W P K Y G G A E R S M L E R Y  
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 L F E E R R R I V D P L K Q R V R E Q G L W A P H L P E L G G Q G F G A V K L T  
 H E H E S G Q Q A S R A L L R K M G E Q N L L A P A W P K Y G G R G L S P V T R F  
 K I D K N H E Y P E E F I Q A L T D E G W L S V L I P E Y G G A G L G L A E A G  
 G G A K E T P A Q K S W R E A M G Q R G W G T P T W P E Y G G G G L N R K Q A A  
 A W P H Q Q F V P D P L K Q Q V R D Q G L W A T H L P D L G G Q G Y G Q L Q L A  
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 E E F E A A D F R R R W S L A A G Q G L V G A T V P A F G G S G L D A V T A A  
 R K V S E G R S L L Q R I L N A K G W A V P H W P E W G G R D W T P I Q R Y  
 E K S A T G Q S K D E V V T T M R E E N G L A V P H W P E F G G R D W S A V Q R H  
 E W D A A H L M D R A V W E A A E N G L L G L A V E D H G G M G L D Y R F R M  
 I V E S K G H V P R D I R Q K V L D M G F Y A A N I P E F G G G G L D H V T M T  
 R V F A E P D V A V P F M A K L N E E G W L A Y Q W P E H G G T G W S A T K K Y  
 E M V R T G E V P P E V M D A L A A N G L F A V S I P E Y G G L G W S M S R Q T  
 A A G R E P E F T L P W Q R I L H E R G W V A P H W P E Y G G T G W T E M Q R Y  
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	90	100	110	120
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UniRef90_UPI0003B6D026	I W S E E N A R A D T I M P L P F A V S M V G P V I	Y T F G S Q E H K D R F		
UniRef90_D3VCB4	Y L T E E I G K G C N S T R A L L T V H T S L V G E T I	V K   L G S Q I Q K E K Y		
UniRef90_W9GTI2	L A V E A L A G A C A S T T S M V T A H F L A G D A I	L I G G D D V Q R A E W		
UniRef90_K3XX72	M C I S E V A R V D A S I A S F C L V Q S C L A M L C I	A Q L G S E S S Q K D K Y Y		
UniRef90_D9UP37	L A V E E V A R A C A S S S T V L T S N K L G V T P L	L L H G T E E Q K R R Y		
UniRef90_V8QR89	L A L I Q Q V A L S C P K S A D I V Q A G N F G P I R T F V	E Y A T A E Q K E R F		
UniRef90_V5XB43	E L A F E F G Y T S L A L R S M F G T N N G I A G Q V L V I G F G T D E Q K T R W			
UniRef90_R7BN18	Q C V A R L A Q E S P A V A L L L F V N A V G S D A L	V I R Y G N D E Q K A A Y		
UniRef90_S3CB34	L I T K A V E R V D S G Y R S G M S V Q S S L V M G G I	H E F G S E E Q K E R F		
UniRef90_N1J591	L I T K A V E R V D S G Y R S G M S V Q S S L V M G G I	N A F A T Q A Q R E R F		
UniRef90_DOLPU9	L L A G E L G R G C S S L C S L L T V H T M V G W A I	T R W G S A P Q K K R W		
UniRef90_UPI00047D91AE	M I A M E L A K G D P S I S T F M G V H G G L A M G T I	Y L C G S E E Q K E R W		
UniRef90_UPI0002D3AFF8	I F M E E L M Q A A V P L P Q F N C F M V G P V I	A T F G N Q Q K D R F		
UniRef90_I3CY02	I F E H E C C L A H A P R V V P F G V N M L G P V I	L I K Y G N E A Q K R Y W		
UniRef90_F4MMS1	L I T E S M G G A H S F A V S F S A H T G I G T L P I	L I L Y Y G N D A Q K K K Y		
UniRef90_R5IE93	W I R E E L M Y G D A G F G L T C G T N N L G I K P V L I	A G T E E Q K K K W C		
UniRef90_Q8ES29	I I A E K M G Y A A S F S V A F N I H S G V G T L P Y	V Y F G N E A Q K N Q Y		
UniRef90_A0A058ZLT8	I V S E E L S R G Y I L G V G S L G T R S E I A A E L I	E G G G T D E Q K E Y W		
UniRef90_A3HXX0	F I A M E M A R I D T S I S T F G V Q G S G L A M G S	Y I C G S E E Q K K E W		
UniRef90_UPI0004708351	I M I E E M E R Y G C A R L P D T G L T M V G P L L I	A H G T D A Q R A Y H		
UniRef90_UPI00037F9D6A	G V T E E L A R G W M S L A G A I G G H S V I T Y L I	R T F G T S E Q Q A K Y		
UniRef90_B4IXX5	R L C Q I V G A H D L G L G V L G A H Q S I G F K G I	M L Y G T P E Q K E K Y		
UniRef90_UPI0003B7088B	I F D L E E R A M A G A P P T S P F G V S M V G P V I	Y T F G S E A Q K Q R W		
UniRef90_L2E721	V F D D E C T R A G V P T Q D G F V V Q K M L G P V L	N A F A T P A Q K A E H		
UniRef90_UPI000381F664	L A I Q Q V A L V I C P K S A D I V Q A G N F G P L R T	F V I E Y A T P E Q K A R F		
UniRef90_N0BJ59	I A I E E L C A N G C G M A G N W Y L T E V F G G M T I	V R H G T E E Q K E K Y		
UniRef90_D3T1J8	I T I E E L L A R S W K P L A G T A S I C G S L V G Y P I	H E F G A E W Q R E E W		
UniRef90_UPI00036D2367	F V S L E L S R I D P S M A T F F G V H A G L A L T S I	D L G S E E Q K E R W		
UniRef90_Q4KGM9	I F E E L E C G L A N A P R I V P F G V N M L G P V L	I K Y G T P Q Q Q D Y W		
UniRef90_UPI00037D8D12	L L E R E L G R P S M A L S V F F G R P S G	V I L L A C E G E Q R E R Y		
UniRef90_G7H679	R V C E E L L A R G W M S L A G A I G G H S V I T Y L I	K T F G T Q E Q R D K Y		
UniRef90_Q46UK1	L V A E Q L S R G W M S V G S L I A R G N G L I G A	L K G L S P E R K A E Y		
UniRef90_I3LHA3	V I F E A L A L T G C T S T T A Y M S I H N M C V W I I	D A F G N E E Q R H R F		
UniRef90_UPI000380FA23	F L A L E M A H T D A S M A T F F G V H S G L A M G S I	A D C G D A A Q R A R A W		
UniRef90_L2EPK1	I F D E E C S A A G A P T Q D G F A Q K L V G P V L	N Y F A T P E Q R A A H		
UniRef90_UPI0003763711	I W Q N E M I L A S V P D P L P F N T S M V G P V I	A A F G S Q E Q K E K F		
UniRef90_A3VLN3	V Y S T E L L A R N A A P S I P P F G V S M I G P V I	Y T F G T Q A Q K D K Y		
UniRef90_U3QM26	A C V R E I S K A C A S T G I I W A T N F H A I K P L I	E F G S E A Q K Q R L		
UniRef90_D2B9Q0	R A L M L V G S Y C P A L S T L L S A H Q S I G P V L	P K E F G T E E Q K R K Y		
UniRef90_UPI00041368E3	L A F I E L S Q C S V A Y R A H L A T N A G I G A E G L I Q D G T E E Q K R K Y	T L F G T K E Q K A K Y		
UniRef90_E9BYG7	R L V E I V G M H D L G V G A L G A H Q S I G F K G I	H G T E E Q K Q K Q W		
UniRef90_UPI000427F363	A L I I Y A Q S E A N Q A G F G G F L H S G I V A P Y I L H	L A A A G S P G R R D Y		
UniRef90_D9XF06	V F L E E L G R G F G G L R A A V S V H A Y M A T H Y L			
UniRef90_B0S9L3	I I M E E T A K E L I Y G P Q N L I Q A Q Q G	L L A V G T E E Q Q K R K W		
UniRef90_A1TV65	I F E N E C A L A G A P R I V P F G V N M L G P V I	I K Y G N E A Q K Q Y W		
UniRef90_UPI0003344A7C	L L A R E L L E R V D S G Y R S A M S V Q S S L V M H P I	Y A Y G S E E Q R Q K Y		
UniRef90_UPI0001FFDE0D	V L A R E L A R S L G G L S W V W G I P S F A G A K A V	T H G G T E E Q Q K R E Y		
UniRef90_D6KDH7	L M A E G L G K F G F D F A C S V L V P T F T A M N I	I I K F G T A E Q K A K Y		
UniRef90_H3NY20	I W K Q E E A K Y N V I P A G F F V I G Q G M M A P T L	M A Y A Q P Q H L E R Y		
UniRef90_Q19057	R V A E I V G A Y D L G F G V V M G A H Q S I G Y K G I	L L E G T D A Q K Q K Y		
UniRef90_A9WQX1	L M Y F E V A R A D V S L S L A V G I H N E L I V G M I	D R L G S E A Q R E R W		
UniRef90_U9JUZ5	V I I E E L L A A G A P V S A H W L A D R Q S G P L I	N R F G S E A Q K E R Y		
UniRef90_K0CH10	P L C E I M G R V M W A P E V F C S A P D T G N M E V L	A R Y G T P E Q Q K Q W		
UniRef90_A0A022LR17	H V T E E L L A R G W M S L A G A M G G H T V V A T L	T R F G T A E Q K S A Y		
UniRef90_X6HA47	L V E K G L S R A S L A L A E C V R R P N N	I A C Q G E Q I A H F		
UniRef90_B7WRJ2	V M L E E M L A V G A P M G A H W S A D R Q M G P L L	M R Y A A E T L A P R I		
UniRef90_W8HFK2	Q L T F E F T R A S C V Y R S R F S T V I G L C S Q A I L	D H G T E D Q R R R M		
UniRef90_Q89J29	L L S E E M G R V T W A S E V F C S A P D T G N M E V F I	R Y A T K E Q K R K W		
UniRef90_R7BMH8	M L F E E L A K V D A G Y A I T F V T T F V A L R N V I	L A G T P E Q A Q F		
UniRef90_E0I7E8	I V N E I F G T A C S S V R G I L T V Q G M V A M A I	W R G T E E Q R R K W		
UniRef90_N1MPG2	I L A E E M W A G E P R G G Q Y M N V N W I G P T L	I R Y G S P D Q Q A R Y		
UniRef90_B1M3H7	V V S E E L L S R A Y I G V G S L G T R S E I A A E L I	C G G T E E Q Q K Q R F		
UniRef90_B1KCN7	I F M E E L Y N A D A M D Y G W Q S T Q M V A P V I	I A F G S D W Q R E R F		
UniRef90_UPI000467EE6C	Q V V E E I I A S A W M S I A V G V S V H S L T C N P I	A A F G T D E Q K E D L		
UniRef90_K6W7S4	L V N I E I V S Q V A T T F R A R F G G N T G I A S E S L	V V D G T L E Q K R K Y		
UniRef90_D8DC13	L M I E E L L S A G L M S V A S A I G L H I G V A T V	E R F G T K A Q R E D F		
UniRef90_M0JJX9	A L M E E E L F R G D A G I A L T L Q L A S F A A E V E A F G T A E Q K E R L			
UniRef90_V4XZE9	A M S Q T L L A R Y S G S G G V M A S F S H N I G L P P V I	M A H G S A E L Q A E V		
UniRef90_UPI0003089553	U I N E E L L V I Q E L A R S C A N T A M L F S C T D G A T P R A I L	H I G S D D I R R R Y		
UniRef90_L0J3U2	V I I E E L L S R V S G A M G A M V Q A S Q L Q G V A K I	I H F G D A A Q K R T W		
UniRef90_E2PZ66	V I F E T E C A L A G A P L V H P M G V R L L G P V I	I H F G D A A Q K R H Y		
UniRef90_V2IDS3	Q V L E E L L A A R W A A V A V G V S V H T L S C H A V	A S F G S A S Q R Q T L		
UniRef90_UPI000371F1D4	L L M S E F E Y W G V P G P D L T V T S V A P M I M R H	G T E Q N K T E W		
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UniRef90_UPI00046CD528	L I N E E L L G R T A W G P I V F T Q A P D T G N A E I L	A R F G T P E Q K E R Y		
UniRef90_K5B7A4	I L S E E L L A Y H H G P Y P L S C I E V A G P G I	R H Y G T E E Q K K K E F		
UniRef90_UPI00040E1FCF	A I L E E I I N R S G G N A G A G H A Q M Y T M G A	L L N H G S E E Q K K Q E H		
UniRef90_W3A9E3	I L I N E E L L A R A G A Y N P I G G M G V V M M F G P T L	L I E Y G S E A Q K Q E H		
UniRef90_UPI0001DD06E1	I L D E E E L L G R S S W A P I V F C Q A P D T G N A E I I	A H Y G T P E Q K E Q Y		
UniRef90_UPI0003678FF0	L L I E E R E L L G R A S Q A L S V I F G R P S N I L C G C K G E Q V E K Y			
UniRef90_X6JHP8	I F E E E V R A F P A L V K F G M G E D L V G P V I	T F G N I L A Q K Q Y Y		
UniRef90_V6L3Y6	A M M E A L L G F A C P D T G F A F S V A A H L A V M P L	V E F G S E E Q K K T W		
UniRef90_B1M0U9	I Y T E E L L F Q A A V P L P Q Q F N C Y M F G P V I	I T F G R Q D Q K E R F		
UniRef90_L8DLI3	I I W L D E M Q L A S V P E P L A F N S M V G P V I	I T F G S Q E L K E K F		
UniRef90_UPI000255C977	I L D E E E A R A D A L G L A L A L H D D W V L P A L	R R F G T A E Q Q Q Q T W		
UniRef90_UPI000371695F	L L I E E R E L L G R A S Q A L S V I F G R P S N I L C G C K G E Q V E K Y			
UniRef90_UPI0001DD0497	I F E K E L L A L A G A P N S A V V M G T K L V A P V I	W T F G S D A Q K D Y Y		
UniRef90_UPI000345CE87	A L T M E F T R A S C V Y R S R F S T V I G L C S Q G I L D H G T D R Q R R E L			
UniRef90_Q0C340	I F A S E C A R A G A P G L A P M G L G M V G P C I I G Y G T P E Q K A H Y			
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130            140            150            160

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UniRef90_UPI000377B983	P R I A N I D D W W C Q G F S E P G S G S D L A S L K T K A E R K G D K W I I	
UniRef90_UPI0003B6D026	P G I V D G T T W W C Q G F S E P G A G S D L A G L K T T A V R D G D E W V I	
UniRef90_D3VCB4	P A M A R G E K I A C F A L S E P E A G S D A N A L K T R Y E V T E N G F R I	
UniRef90_W9GTI2	P A M A A G R A L G A F A L T E P R A G S N P A D M S T K A V P D Q G G Y R I	
UniRef90_K3XX72	P P S L S K H K V C A Y A L T E P D Y G S D A S S L N T V A R K V P G G W V L	
UniRef90_D9UP37	P E V A A G E A L M A Y A I S E R E A G S D V G A M R C R A T E D G D G W V L	
UniRef90_V8QR89	P D L L G G K K V I A L G M T E P G A G S A V T Q L Q T S A R K D G N D Y L I	
UniRef90_V5XB43	E G I A S G A V V A S F A L T E P G A G S N P A G L R T K A V R D G D G W V I	
UniRef90_R7BN18	P D L I S G E K K I S F A L L T E P N A G S D V W S L G T T A K P K G D R Y V I	
UniRef90_S3CB34	P G M A Q G K I L G A F G L T E P N H G S D P G S L E M A T E H P T K Y N L	
UniRef90_N1J591	P D M A M K G K L L G A F G L T E P H G S D P G S M E A T A R R K K G Y F L L	
UniRef90_DOLPU9	P E L A S G R V L G A L A L T E P D T G S D A K S V R T S V Q R H G T E L A L	
UniRef90_UPI00047D91AE	P A M A R M E L I G A F G L T E P D S G S D A R G L K T T C R R D G D S W V L	
UniRef90_UPI0002D3AFF8	P R T R S L D D W W C Q G F S E P G A G S D L A S L K T R A I R E G D H Y I V	
UniRef90_I3CY02	P R I L S G E D W W C Q G F S E P G A G S D L A A V T H A V R D G D H Y I V	
UniRef90_F4MMS1	I P G L A T G Q L K G C Y C L T E P G S G S D A N S G K T S A K E T G T H Y V L	
UniRef90_R5IE93	V E I L T S D K P F A A F A L T E P E A G S D A G A C K T T A D K N V K E Y V L	
UniRef90_Q8ES29	L P K L A S G E W V V G A Y A L T E P N A G S D D A L A S K T T A K D E N Q T W T I	
UniRef90_A0A058ZLT8	L P K L A S A E L I L P T A V F T E P N T G S D L L G S L R T R A V K D G D D Y T V	
UniRef90_A3HXX0	L P K I L S G E I I W C Q G G Y S E P D A G S D L A A L R T S A V R E A D Q W V I	
UniRef90_UPI0004708351	L P R M A T G E L L R A T M A L T E P S G G S D L L Q A M S T Y A T R D G D D W V I	
UniRef90_UPI00037F9D6A	L P K V A S E T V Y A B A F A L T E P S S G G S D A N S I R S R A V K D G K H Y V L	
UniRef90_B4IXX5	L P G I V K G D T L W C Q G G Y S E P N A G S D L A S L K T R A E R K D D H Y L V	
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UniRef90_L2E721	L P D L L A G R K L I S L G M S E P D A G S A V T E L K T T A T P D G D Y Y R I L	
UniRef90_UPI000381F664	L P G I A K G E L E F C M A L T E P D A G T N T L S I K T R A E K D G D E W V I	
UniRef90_N0BJ59	UniRef90_D3T1J8	L G S I C A G D W I P A L S L T E P D A G S D D A A A L E T T A E R D G D E Y V I L
UniRef90_UPI00036D2367	L P A M R R M E K I G A F G L S E P H G G S D A A G G L E T T A R R E G D E W V L	
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UniRef90_UPI00037D8D12	L L P A V R G E R F D A L A M T E P D A G S D V R G M K C Y A K Q D G D D W I	
UniRef90_G7H679	L V P M A E M G K I R A T M A L T E P G G G S D L L Q A M R T N A A P S G D G Y V I	
UniRef90_Q46UK1	L P R M A R G E F L G A F S L S E P N A G S D D V A N I S C R A V R D G D D W L I	
UniRef90_I3LHA3	C P P L C T M E K F A S Y C L T E P G S G S D A A S L L T S A E R Q G D H Y I L	
UniRef90_UPI000380FA23	L P P M S R M E L L G Q A F A L T E P E G G S D V A G R T T A H R S G D D E W V I	
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UniRef90_E9BYG7	L P P K L A A G E N I A A F A L T E P S S G G S D A N S I R S R A K L D G K H W V L	
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UniRef90_B0S9L3	L P E L A K G K M M A A Q A I S E P D A G S S F Q N I Q T T A V K D E N E W V L	
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UniRef90_UPI0003344A7C	L P R L A T G E L L L G C F G L T E P E P N H G S D P G S M E T R A R H N P K S Y T L	
UniRef90_UPI0001FFDE0D	L P R L L A A G D I R F S I A V T E P E P G G G T D L L G A M T T R A K K V D G G W V V	
UniRef90_D6KDH7	V K P F I D G E I R F S V S I S E P E P A G G S D A S A N T K T H A R R D E N D W I V V	
UniRef90_H3NY20	L P K L A S G E E I I W C Q L F S E P E P A G G S D L L A A L R T K A E K D G D E W V I	
UniRef90_Q19057	L P D L A T G R K F A A F A L T E P P T T G S D A S S V R T R A E L D G K H Y V L	
UniRef90_A9WQX1	L P P G L R N F R E L L G A F A L T E P D H G S D A G G L E T T A E L L D G E W V I	
UniRef90_U9JUZ5	L P P I C P R G E S Y F C I G M S E P E P N S G G S D L L A S I K T S A Q R N E A G W L L	
UniRef90_K0CH10	L Q P L L D G E I R S C F A M T E P D V S S D A T A N L Q S A I V R D G D D Y V I	
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UniRef90_X6HA47	L E P V M R G E K R E C I A M T E P D A G S D L L K G M K T R A V E D G S D W I	
UniRef90_B7WRJ2	V P R I V S G E C C A F C I G M S E P E P D S G S D L L A S I R T R A V K V E G G W K I	
UniRef90_W8HFK2	L P A M A A G E L L V T A F A L T E E V V A G S D A A H L R T T A V R R G D V Y L L	
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UniRef90_M0JJX9	L P E M V S F D T V G A L G L S E P E P A N A G S D C N K L E M E T T A E R N E D E W V L	
UniRef90_V4XZE9	L P V P A E G D Q L S G L G A S E P E P Q S G S D D L L A G M T A L A E R D G D G Y A I L	
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	170	180	190	200
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UniRef90_N1J591	S G S K T W I T N S T I A D	V L L V W A K L A E K I R G F L V E R S S G T	L E T	
UniRef90_DOLPU9	D G H K S W V T Y G Q S A D	L F L V F G R A E E G P A A V L V E R D R K G	L R T	
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UniRef90_Q46UK1	N G S K A F I S G G G E A	D I Y V V M C R T H K G I S C V V V E K G T P G	L S F	
UniRef90_I3LHA3	H G R K R W I G N A T F A	D D L V V W A R D D D Q Q V K G F I V R D T P G	L T A	
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UniRef90_E9BYG7	N G S K I W I S N G G I A	E I I F T V F A Q T Q D K V T A F I V E R S F G G	G L T N R	
UniRef90_UPI000427F363	N G S K T F I T N G Q L G	N I I V A C K T D K G V S L I V V E T D A P G	F E R	
UniRef90_D9XF06	R G V K T M V S N G T G A	D F H V V A V R T S P G I S L L V I D S G L P G	I T I	
UniRef90_B0S9L3	N G L K V H I N L G K E A	Q L M M V L A K T D K G L T E F I V D R D S K G	I R Y	
UniRef90_A1TV65	N G Q K T W T T L Q G Q H A	N M I F C L V R T D R G I S F I L V D M R S P G	V E V	
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UniRef90_K0CH10	N G R K K W F S S G S P	R C K I F I F M G K T D K Q Q S M I V P R D T P G	I T V	
UniRef90_A0A022LR17	T G A K T W I S N A R R S	G L I A L L I C K T D P G I S I S V L V E H G P	G L T V	
UniRef90_X6HA47	N G T K H F I S N A Q N S	D F V I I L F A A T Q D K R I S C S C I F L V D L D T P G	L E V V	
UniRef90_B7WRJ2	N G T K V W T S G A H A Q	Y M V A L V R T R D G M T Q F L V E M D R P G	G L K V	
UniRef90_W8HFK2	N G S K R Y I T N A A W A	D A F I V F A R T D E G V S A L I V D A A S P G	V R T	
UniRef90_Q89J29	N G R K K W W S S G V P	R C K I A I L M G K T D P Q Q S Q I L V P L D T P G	I K V	
UniRef90_R7BMH8	N A N K K V F I T N G G L	A S I Y V F C K T D H G I T A F I V E R E R E	E G V R	
UniRef90_E017E8	Q G T K K W I S L Q G Q L	A D C E G Q I S L E F I V E R N T P G L I T V	V T V	
UniRef90_N1MPG2	T G Q K I W T S Y A G L A	D T C F L V C R T S D G I S I L L V P M D T P G	I S G	
UniRef90_B1M3H7	T G N K T W I T H P V R A	D I M T V L V R T H K G L S M L I A P R G T D G	G I T V	
UniRef90_B1KCN7	N G Q K I W T S D A T I	A D W G F F I V L V R T D R G I S F I L V K M D T P G	I T V	
UniRef90_UPI000467EE6C	N G S K L W C S G A Q V A	D V F L V L V R L S D G V L S G A L V V E R G A P G	F S V	
UniRef90_K6W7S4	K G T K A W I S H A G H A	D F Y T L F A R T S D G I S C F H V P A G T P G	G M S F	
UniRef90_D8DC13	T G K K C F I T N A P I A	D L F T V V I A R T D P G I T A F I I E R G T P G	L T T	
UniRef90_M0JJX9	N G H K Q W V T N F F D	A D Y V L V T Y A K T G P N I S A F I V P T D D F	E I	
UniRef90_V4XZE9	N G E K Y W V S N G G V E	A D W V L V L Y C R T D D G H I T L F A V P T E T P G	Y E A	
UniRef90_UPI0003089553	D G E K V F I T S G L R A	D W D V L V T L A V R T D S G I I S M V V V P G D T P G	I S R	
UniRef90_L0J3U2	Q G Q K I W T S R A Q L A	A H A I L L A R T H R G I I T Y F L L V P M D A A G	V E V	
UniRef90_E2PZ66	N G R K V Y V G N S H V	G D L H G V A R T G P G I T A F I I E A G R P G	C V L	
UniRef90_V2IDS3	T G S K L W T T N H A H A	H H P D L V T L A V R T D S G I I S F L L I D M D S P G	I T V	
UniRef90_UPI000371F1D4	R G T K A W V T H G G E A	D F Y T A F I I R T S D G I I S C F H V D A G S P G	G L S A	
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UniRef90_UPI00046CD528	N G Q K I W T T L A T D A	D W I F M L V R T D K G I I S F V L V P M D S P G	V T V	
UniRef90_K5B7A4	N G Y K Y F S S N A T V A	S F F I V L A I T D K G A S M F L I V P A G T P G	L T I	
UniRef90_UPI00040E1FCF	N G Q K V F N T H A H Y A	D Y M W L A T R T D K G I I S V F I I D M E T P P G	G I E I	
UniRef90_W3A9E3	N G Q K I W T S R A E H S	D M L L A R T T D G L I S L F L I D M K D D N	I I T I	
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UniRef90_UPI0003678FF0	N G Y K Y F S S N A K T A	S F L I V M V V T N K G M S M F L I V P T D T P G	V G V I I	
UniRef90_X6JHP8	D G Q K I W T S S A H Y A	D W I F C L V R T N P G I I S F L F L I D L K S P G	G V T V	
UniRef90_V6L3Y6	D G A K C F T T N A P V A	D V F V V Q A A T T P G I I S F L F L I K A G T P G	G L R V	
UniRef90_B1M0U9	D G Q K T W T T L Q G Q H	A D W I F C L V R T D R G I I S F L F L I D M K T P P G	I T V	
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UniRef90_UPI000255C977	T G Q K T F I G N A V S G	D G D A L V L A R T D G S F S L F L I V E K D D D S G	G Y Q V	
UniRef90_UPI000371695F	N G T K H F I T H A D E A	D F A I V F I A T G K R I I T C F L I I D R D T A G	F G E I	
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UniRef90_K1QHQ6	N G G K I W I S N G G I A	D F T V F A K T K D K V I T A F I I V E R E F G G	G I T S	

210            220            230

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UniRef90_D3VCB4	K P M S G L M A S R G A Y L S E L N F D N V E I P K E S L V G E G E G	
UniRef90_W9GTI2	G K A E P T M G L R G G H V F E V A F E D C A L P P G R R I L G E G S G	
UniRef90_K3XX72	S K I E N K V S M R M V I Q N C D I E K N V F V P E D D S L	
UniRef90_D9UP37	G E P E R K M G L K G S V T R E V Y F D R T R L P A G R L L G E	
UniRef90_V8QR89	G K P A D F M N G E Q W C Q L Y F E D A R I V P A A N V L L G P G G	
UniRef90_V5XB43	G A K D S K M G Q E G A W T A D V N F D E V R V G N D T L I G G S E	
UniRef90_R7BN18	S A H E K K L G L H G S P T C P L F F E N M E V P A S A I V G E V	
UniRef90_S3CB34	P K I I S N K L G L R A S I T G M I H L D N C P V P A E N M L P H A E G	
UniRef90_N1J591	P A I K N K S G L R A S T T G M I H L D E C P V P A E E N M L P G V E G	
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UniRef90_UPI0002D3AFF8	R P I I T I D G R H E V N E V F L D N V K V P V E N L V G E E	
UniRef90_I3CY02	R P I I T L D G G E H E V N E V F T D V R V P V V Q N L L V G E E D	
UniRef90_F4MMS1	N P E E K K M G I K G S S T R Q L F F N D V E V P V E N L L G E G	
UniRef90_R5IE93	G K H E D K M G I R Q S A T C D V L F E D V H I P A S A L I L G E G E G	
UniRef90_Q8ES29	G P E E K K L G L K G S S T A T L L I L E D V E L D S A Q V L L G E V	
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UniRef90_A3HXX0	E K L E D K M A L R T V Q N A L I T L T K C E V P E S D R L Q E A	
UniRef90_UPI0004708351	R S I V N I D L H A E F A E V F F D D V R I P A D A I V G E V E G	
UniRef90_UPI00037F9D6A	S P K I P K L G Y K G V I E A C T L S F D G V R V P A A A V L L G G E	
UniRef90_B4IXX5	G Q P E K K M G I K A S N T A E V Y F D N V K I P I E N V L G E G E G	
UniRef90_UPI0003B7088B	R P I I T I D G H H H L N E V Y F S D V Q V P L L V G	
UniRef90_L2E721	R P I R S I D D A H H L N E T F F E D V R V P V G N L I G E E	
UniRef90_UPI000381F664	G K P S S F M N G E Q W S P L F F D D C R I P A S N V L L G E G G	
UniRef90_N0BJ59	N P I P K H G I N Y S K T C E V S I N N L R P E S A L V P P L D G	
UniRef90_D3T1J8	V R D I P S M E G E A A I E S E I K Y D G L R V P A E N V I G E E	
UniRef90_UPI00036D2367	T K M E G K L A L R S V Q N A D L T F E G A R V P E A N R L P G A	
UniRef90_Q4KGM9	R P I I T L E G D H E I N E V F F T D V R V P V A N L L V G E E	
UniRef90_UPI00037D8D12	R K G Y Q S V S H R G Y H N C I L N F D N C R V P A A Q I L G E V	
UniRef90_G7H679	S S K L P K L G Y R G V E A C E L V F D G M K V S A D A V L L G G E	
UniRef90_Q46UK1	G S V I P K I G Y H G W T T W E L A F D G C R V P H S K M V G E E	
UniRef90_I3LHA3	G K K E K K V G G R S Q A T K S Q I F R D T K I P	
UniRef90_UPI000380FA23	T K I E N K I A L R S V Q N A D V L L D G C R V P E A N R I L Q G A	
UniRef90_L2EPK1	R P I I S I D G A H H L N E T F F E D V R V P V G N L I V G E G E G	
UniRef90_UPI0003763711	R P I I Q L I D G S F E V N E V F F E N V R V P A E N L L V G E E	
UniRef90_A3VLN3	K P I I S I D M N H S L N E V F F E D V K I P A D G L L V G E	
UniRef90_U3QM26	L G T E H K M G T R A S S T A S L A F D N C R V P R A N L I I G P G D G	
UniRef90_D2B9Q0	E R R N A F M G L R G I E N G V T R F H R V P A A A N L I I G E Q Q G	
UniRef90_UPI00041368E3	G G S T P K M G Q E G A P I G E I V L D N C R V P A S C I V G G A P G	
UniRef90_E9BYG7	G K P E N K M G I K C S N T A E V Y F D D V K I P V E N V L L G Q G E G	
UniRef90_UPI000427F363	G K K L P K K L G M A S Q D T S E L F F S N M R V P Q K N L L G T V E G	
UniRef90_D9XF06	T A T P T L G W R A A G T A T V A Y E D V R V P A D H L I G R A D	
UniRef90_B0S9L3	E K Q D P I G L R S A P M Y D V H F E D C R I P L D S V L G E G R G	
UniRef90_A1TV65	R P I I T L D G E H E V N E V F F T D V K V P A E N L L V G E E	
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UniRef90_UPI0001FFDE0D	R Y I P K L G M R A M G S C E V F L D D V R V P D S Q L L G	
UniRef90_D6KDH7	R K L P T L S R H A T G T T E I F L D D V R V P G E N L L G E V	
UniRef90_H3NY20	K P I K Q L T G E S D F N E V Y F T D V R V P D S Q R I L G E V	
UniRef90_Q19057	G P Q E K K M G I K G S N T T E V H F D N L K I P V E N L L G E G E G	
UniRef90_A9WQX1	S K I E H K M G L R I M Q N A H I V L D N V R I P E A N L L P E A	
UniRef90_U9JUZ5	R P I R D L L A G G E H F N E V F F D N V Q L S A D A L I G E G K G	
UniRef90_K0CH10	V R P L P V F G F S G T P T G E V R F E N V R V P A S N L L G D G R G	
UniRef90_A0A022LR17	S R D L S K L G Y K G V I E T C E L A F D G Y R T P V T Q L G G E P G	
UniRef90_X6HA47	A R G Y D H M G H R G Y Y N N I L N F D S V R V G A W Q M V G E G E G	
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UniRef90_W8HFK2	V L P T I M N G H A E A P V G E I Y F D R V E V P A A N L L L G I E G	
UniRef90_Q89J29	E K M L P V F G F D P H G H A Q V L L D D N V R V P K E N L L G E G R G	
UniRef90_R7BMH8	G A K E D K M G L R L S N T T E V I L E D V W V P E S H V L G K I G G	
UniRef90_E0I7E8	E P I P P L A G L R G S M L A E L R L E Q C R V R E D S L V G	
UniRef90_N1MPC2	R Q I P S L I I G E G D I H E V F F D D V I V P V T A R I L G D E	
UniRef90_B1M3H7	G E I E V L G Y R G M K E Y E E L A F E G F A V P G D N L L G E V E G	
UniRef90_B1KCN7	R P I V S I E G G K G L N E V F L E N V R V P K A H L V G E A	
UniRef90_UPI000467EE6C	G R H I D L L G L R G T G M A E L V F Q D C P V P A G N L L G	
UniRef90_K6W7S4	A P P E R K M G L D C D T V G Q V L F D G A A L S P Q A L I G E G Q G	
UniRef90_D8DC13	P T P P R K M G Q H G S P V G E V L L D S V R V P H K S A I V G E L E G	
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UniRef90_UPI0003089553	T R I L H K M G W H S S D T A Q L R F D S V R V P Q R Y R I L G N E	
UniRef90_L0J3U2	R P L S H M L G E A E F N E V F L D D V F V P D E G V L G E V D	
UniRef90_E2PZ66	G E Q R P S M G L H G F S F G E L S F Q D C R I P A A N R L G E G D G	
UniRef90_V2IDS3	R P I A T I G G D H D V N E V F F D E V P Q A N R I G E E	
UniRef90_UPI000371F1D4	G A P E R K M G L R S S T T A V M N F D D V R I P E D R L I G E	
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UniRef90_W3A9E3	V P I E T M V N H A T T E V F F N N V E I P V E N L I G E E	
UniRef90_UPI0001DD06E1	R P I T M I S G T S P F C E T F T D V K V P K E N L L V G E E E	
UniRef90_UPI0003678FF0	E R N V G L H G M D Q G T H A L I H Y D N V R V P D S A L L G G E	
UniRef90_X6JHP8	R P I L H L L N G G H E V S E V F F D N V H V P V E N L V G E E E	
UniRef90_V6L3Y6	G P R Y D K L G L R G S P M A D V Y F D D C R V T E E S V L D E E	
UniRef90_B1M0U9	R P I L T L E G R H E V N E V F F D A V V R V P V E N L V G E E E	
UniRef90_L8DLI3	R P I K L V D G S V E V N E V F F E N V R V P A E N L V G E E E	
UniRef90_UPI000255C977	G S Q L E K M G L K A S D T A E L F F S E A R V P A E N L I G G E	
UniRef90_UPI000371695F	R D G Y Q C V S H R G Y Y N N S I L N F D N C R V S S A Q I L G E E	
UniRef90_UPI0001DD0497	R P I H N I A G D H D V N Q V F L E N V E V P V E N L V G E E E	
UniRef90_UPI000345CE87	R I P E L M N G H A E G P V A E I D L D D V A V V G G D A L V G G E P G	
UniRef90_Q0C340	D P I I T L A G E H E L L N Q V F F D D V R V P R S G R I L G E E	
UniRef90_K1QHQ6	G K P E D K L G I R G S N T C E V H F D N T P V P L E N V I G E V G G	

Sequence logo showing the conservation of amino acids at each position of a protein sequence. The x-axis represents positions 1, 10, 20, 30, and 40. The y-axis lists UniProt entries.

Position	1	10	20	30	40
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UniRef90_H3FS96			L T A E Q E M Q N T S R S F A M N E M R P H M V		
UniRef90_W0PFY5		M N I A S S P E M E S I R D M V I R F M E N E V V P V I A			
UniRef90_I1AYM4			Q V A L R A E V V R A F L S D A L V P A R E		
UniRef90UPI000375A276		E S I S E E L L Q F R D S I R R F V E R E L L P L E H			
UniRef90UPI00039C7179		M D L K T D P K L E D F R A D V R A F F A N D F P K D V A			
UniRef90_R1FVX0		Q W T D K Q Q A L R E V F V R A W G A D H L			
UniRef90_M7A6G1		L T D E Q R A I I A L C T E F A E K E I H R P R G R			
UniRef90_I0HCF9	D L Y A F Q G L L T D D E S A I V Q R V R V D F L A S E E		T P I A N		
UniRef90_W2F4E2	M S V D R V L T P E A R E L L E V R E L A A K E V P A R A A				
UniRef90_K5BDV7		E R E F R E R V R A W C A E H P K D W R			
UniRef90UPI000378BE98	M D L R F T P Q E L D F R E Q V R A F L K A R L P A A L A				
UniRef90_A0A022FGI0	M T E Q R R M I R D A A R E F T M K E V L P V A N				
UniRef90UPI00036A55DE	E L G F T A Q E M F R T M A R D F A R R E L M P A T K				
UniRef90_C6XS82	D F Y Q L E E A L K D E D R A L Q L K V R A F F L E K E V K P V V N				
UniRef90_F8LEQ8	E E T A R F V G K V S E F A S V H L N A A				
UniRef90_S8AF01	Y T E K H Q R L R A F V R N F V D K E L A S H A Q				
UniRef90UPI00036C8061	R D F A R E H P A P H A				
UniRef90_A0A017SJT6	Y T P L H Y N L R A S I I R S Y I E A S I I A P Y A Q				
UniRef90_W9GK98	M R L R S D E D A T F R A E L R E F F T T K V P Q Q I R				
UniRef90_Q11E54	N D D E R A V I D Q V E R M V E K V I R P N A A				
UniRef90_K8RMA6	M D L T F N A D E E A F R A E V L A F L R T S L P E H V A				
UniRef90_W8HFN5	D F Y A F E Q M L S D S E R A L L H S V H D F M T T E V D P I I N				
UniRef90_G2TRF5	M D F D Y S P K V K A L I S K L E R F M E E N V Y P G E K				
UniRef90_A0A014QD45	M D L A Y T P E E Q A F R E E V R A W I N Q H L D P A L A				
UniRef90_G7CFS7	E H V E Q L R A S V R S W L A D N L P D E F R				
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UniRef90_D9V2E7	M D F E I P S E L A L F V D G V R Q F R R E E L M P L E P				
UniRef90_Q0UZR4	F D W T D P L D A K S L F T E E E L A I S E T A E A Y C Q E				
UniRef90_U5W6A2	M D F A F D E K T E D Y R K R L L G F D D E Y V Y P A E A				
UniRef90_F1ZBU9	M A H S L S A A D E A A I A A V E R L A R E E E L A P S A S				
UniRef90_A0Y7Z4	M N F D D T P Q E A E F R S S V R H W I D D N A P K Y L L				
UniRef90_A0A059KPH7	M Q L S F T D E E I A F R A E V V R T W V A E N L P A D A A				
UniRef90_W3RJY6	M D L S Y S K E E V I F R Q E V R D F F Q T A V P K E T R				
UniRef90_A3JR23	P M D N S Y N D L R E A V A K L C A E F P G S Y W R				
UniRef90_G8PIU1	Q F Q A N V R A F V E K T L L P E V S				
UniRef90_U2ZXF8	M D F T L T E Q Q E A I R E A V A G I C R C N F G D D Y W L				
UniRef90UPI000359332B	D M S H G L N E E Q V Q I Q Q M A L D F K C N E M A P N M Q				
UniRef90_A8LBK0	M H F E L T P D Q E Q L R A G A R E L A R S F A D D Y W A				
UniRef90UPI0003458EE5	T P E G E G E D L L G L V R D L A G K E I A P R A A				
UniRef90UPI0002F84A1D	M N F Q L N E D Q L A I R D S I Q R I C K A F G D E Y W L				
UniRef90_A7HWK9	M D E R E S E D Q O A I R D A V A B R I C K V K Y D D A E W I				

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jnet  
conf  
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sol5  
sol0  
jhmm  
inssm

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UniRef90_H3FS96	K W D A E E S L P L D V L R K A G D L G F G A L Y C D E N G G S G S R T D A S		
UniRef90_W0PFY5	D Y E A R E E F P R A L I K K A G A A G L Y G A M F P E V G G G S D M G Y L A A A A		
UniRef90_I1AYM4	R A R S W V G F D A D F S A E L G K R G W L G M T L P A Y G G H G R D A V D R H		
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UniRef90_W2F4E2	A G E A A E R F P R D L F L L G A S G L G L P Y P E H G G A G Q P Y E V Y L		
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jhmm

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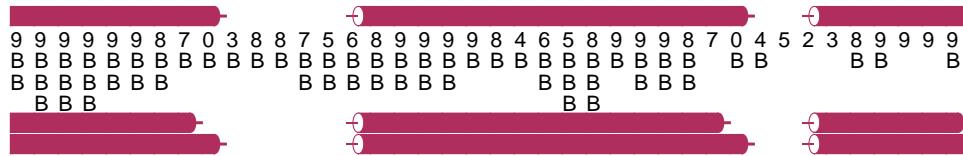
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