

QUERY UniRef90_C1C484 UniRef90_F7HRK6 UniRef90_UPI0001D53FB0 UniRef90_G1LKM5 UniRef90_Q1HTZ8 UniRef90_G1MBW6 UniRef90_E2RM89 UniRef90_M3ZIE2 UniRef90_G7MY55 UniRef90_UPI00039555C3 UniRef90_UPI00033173C2 UniRef90_H9H3M1 UniRef90_G3W1L5 UniRef90_F7GE61 UniRef90_H2PN87 UniRef90_UPI00046B3964 UniRef90_Q28HA2 UniRef90_F6Y538 UniRef90_F7A147 UniRef90_K7FKB9 UniRef90_UPI0003C1799A UniRef90_J3SCT7 UniRef90_UPI0003C8F2CD UniRef90_G1T0N4 UniRef90_F1RD77 UniRef90_W5N4R0 UniRef90_K4GBZ8 UniRef90_H2ZX68 UniRef90_UPI0002C4574C UniRef90_UPI00044348FE UniRef90_F6TNV3 UniRef90_H0XVG1 UniRef90_UPI0003334602 UniRef90_UPI000386F931 UniRef90_UPI0003C28618 UniRef90_UPI0004422581 UniRef90_H3B918 UniRef90_H9GI92 UniRef90_H9G3B7 UniRef90_G1QC82 UniRef90_C1BKT4 UniRef90_M3XFB4 UniRef90_UPI00039428EF UniRef90_J9NZL0 UniRef90_UPI00033446C4 UniRef90_UPI0004419DE4 UniRef90_G1TZL7 UniRef90_Q7M6Z1 UniRef90_F7IL74 UniRef90_S9YKK1 UniRef90_UPI0003C2903F UniRef90_UPI00045486F6 UniRef90_F7IGZ0 UniRef90_V9LG15 UniRef90_I3J0D0 UniRef90_F6STJ0 UniRef90_UPI00033412B7 UniRef90_F6WG40 UniRef90_UPI0003EA8ACA UniRef90_UPI00035058F8 UniRef90_UPI00042C1DFD UniRef90_UPI00042AC790 UniRef90_UPI00033166BB UniRef90_UPI00005A4755 UniRef90_G3SEN9 UniRef90_UPI000392DADA UniRef90_F7D6J9 UniRef90_G3NWE3 UniRef90_Q0IG01 UniRef90_W5NCG2 UniRef90_J3JZK5 UniRef90_G3W5U7 UniRef90_UPI00046B23DC UniRef90_A0A034V1S4 UniRef90_T1IQI8 UniRef90_D2DSG3 UniRef90_G5B9P2 UniRef90_F7B505 UniRef90_F7IEM2 UniRef90_A2I421 UniRef90_G3S334 UniRef90_G7NPK9 UniRef90_UPI0002A49CAC UniRef90_UPI0003F0944E UniRef90_UPI0003290C5F UniRef90_V5GMX3 UniRef90_UPI00022F380B UniRef90_F1RZM2 UniRef90_UPI00044403B8 UniRef90_UPI0003C91892 UniRef90_F6U4U0

1 10 20 30 40

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

QUERY	A	K	E	N	E	F	N	V	V	50	V	N	T	P	K	D	S	V	Q	I	V	L	A	V	L	K	A	G	E	T	R	A	V	N	P	D	V	E	F	Y				
UniRef90_C1C484	A	K	E	N	E	F	N	V	V	E	A	E	G	M	N	K	P	I	K	I	V	L	A	S	L	K	P	G	S	V	Q	P	P	T	V	S	L	G	G	F	F	I		
UniRef90_F7HRK6	A	K	N	E	L	H	V	V	E	A	E	A	M	N	Y	E	P	G	S	V	T	L	A	T	L	K	K	M	S	V	Q	P	P	T	V	S	L	G	G	F	F	I		
UniRef90_UPI0001D53FB0	A	K	E	D	E	L	H	V	V	E	A	E	A	M	N	Y	E	P	G	S	V	T	L	A	T	L	K	K	M	S	V	Q	P	P	T	V	S	L	G	G	F	F	I	
UniRef90_G1LKM5	A	K	E	D	E	L	H	V	V	E	A	E	A	M	N	Y	E	P	G	S	V	T	L	A	T	L	K	K	M	S	V	Q	P	P	T	V	S	L	G	G	F	F	I	
UniRef90_Q1HTZ8	A	K	E	D	E	F	H	V	V	E	I	V	P	Q	V	E	G	Q	P	V	T	L	A	T	L	K	K	P	S	V	I	L	P	M	A	T	M	V	G	S	F	A	E	L
UniRef90_G1MBW6	A	K	E	D	E	L	H	V	V	E	A	E	T	M	N	Y	K	G	S	P	I	K	V	T	L	A	T	L	K	V	S	L	Q	P	T	V	S	L	G	S	F	A	E	L
UniRef90_E2RM89	A	K	E	D	E	L	H	V	V	E	A	E	E	G	S	E	P	I	K	V	T	L	A	T	L	K	M	S	V	A	T	V	S	L	F	G	G	F	F	A	E	L		
UniRef90_M3ZIE2	A	K	E	D	K	F	H	M	V	E	V	E	Y	D	A	K	T	S	K	V	T	L	A	V	L	K	K	P	S	V	L	P	S	M	N	L	G	G	F	F	A	E	L	
UniRef90_G7MY55	A	K	E	D	E	L	H	V	V	E	A	E	T	M	N	Y	E	K	V	T	L	A	T	L	K	K	M	S	V	Q	P	P	T	V	S	L	G	G	F	F	A	E	L	
UniRef90_UPI00039555C3	A	R	D	E	F	H	V	V	E	V	I	T	E	G	G	R	P	P	V	P	L	A	T	L	K	K	P	S	V	L	P	T	A	T	L	A	G	V	E	L	L	L		
UniRef90_UPI00033173C2	A	K	D	E	L	H	V	V	E	A	E	Y	E	G	Q	R	E	K	A	T	L	A	T	L	K	K	R	S	V	Q	P	T	V	S	L	G	A	F	F	E	L	L		
UniRef90_H9H3M1	A	K	D	E	L	Q	I	V	E	A	E	A	M	N	Y	E	S	P	K	T	L	A	T	L	K	K	M	S	V	Q	P	T	V	S	L	G	A	F	F	E	L	L		
UniRef90_G3W1L5	A	K	D	E	L	H	V	V	E	A	E	A	E	G	S	E	P	T	T	V	T	L	A	S	L	K	L	S	V	Q	P	T	V	S	L	G	G	F	F	A	E	L		
UniRef90_F7GE61	A	K	E	Y	E	C	N	V	V	E	R	N	Y	H	G	E	P	I	A	I	P	V	A	N	L	K	L	S	V	C	P	P	T	M	V	S	L	G	G	F	F	A	E	L
UniRef90_H2PN87	A	K	E	Y	E	L	H	V	V	E	A	E	A	M	N	Y	E	P	I	K	V	T	L	A	T	L	K	Q	M	S	V	Q	A	T	V	S	L	G	G	F	F	A	E	L
UniRef90_UPI00046B3964	A	K	E	E	V	N	R	V	E	I	L	P	P	R	K	R	Q	T	V	T	I	A	S	L	Q	A	S	V	L	P	M	V	S	L	L	M	G	F	F	Q	L	L	L	
UniRef90_Q28HA2	A	K	D	E	H	N	V	V	E	V	E	Y	Q	D	K	E	V	T	V	P	L	A	N	L	K	L	S	V	C	P	M	V	S	L	N	V	E	Y	G	F	F	E	L	
UniRef90_F6Y538	A	K	G	E	S	H	I	V	E	V	E	A	M	N	Y	E	G	K	A	T	L	A	A	L	K	V	S	I	E	P	T	V	S	L	G	G	F	F	A	E	L	L		
UniRef90_F7A147	A	K	E	E	L	H	V	V	E	A	E	A	M	N	Y	E	P	I	K	V	T	L	A	T	L	K	M	S	V	Q	P	T	V	S	L	G	G	F	F	A	E	L	L	
UniRef90_K7FKB9	A	K	D	E	F	N	V	V	E	I	V	P	S	K	G	T	T	P	V	P	L	A	T	L	K	K	P	S	V	L	P	M	A	S	M	V	G	V	E	L	L	L		
UniRef90_UPI0003C1799A	A	K	D	E	L	H	V	V	E	A	E	Y	E	G	K	P	T	K	I	V	L	A	S	L	K	I	S	V	Q	P	M	V	S	L	G	G	F	F	A	E	L	L		
UniRef90_J3SCT7	A	K	D	E	C	N	V	V	E	R	D	Y	Q	N	K	E	V	T	V	P	V	A	N	L	K	L	S	V	C	Q	P	W	L	C	N	N	F	A	F	F	F	L		
UniRef90_UPI0003C8F2CD	A	K	D	E	L	H	V	V	E	A	E	A	M	N	Y	E	I	K	V	T	L	A	T	L	K	M	A	V	Q	P	T	V	S	L	G	G	F	F	A	E	L	L		
UniRef90_G1T0N4	A	K	D	E	L	H	V	V	E	A	E	A	M	N	Y	E	I	K	V	T	L	A	T	L	K	M	S	V	Q	P	T	V	S	L	G	G	F	F	A	E	L	L		
UniRef90_F1RD77	A	E	D	K	F	H	V	V	E	M	E	Y	D	G	K	T	T	K	I	T	L	A	V	L	K	P	S	V	L	P	S	L	S	L	G	G	F	F	A	E	L	L		
UniRef90_W5N4R0	A	K	E	S	N	H	V	V	E	V	N	H	G	E	P	T	V	S	V	P	V	A	N	L	H	L	S	V	C	P	M	V	S	L	G	G	F	F	A	E	L	L		
UniRef90_K4GBZ8	A	S	D	G	L	H	V	V	E	A	E	Y	E	G	T	P	T	K	V	V	L	A	A	L	K	M	S	V	Q	P	T	V	S	L	G	G	F	F	A	E	L	L		
UniRef90_H2ZX68	A	K	D	E	M	H	V	V	E	M	E	Y	E	G	E	P	T	R	V	Q	L	V	S	L	R	P	S	V	L	T	T	V	N	L	S	G	G	F	F	A	E	L	L	
UniRef90_UPI0002C4574C	A	K	E	E	M	N	L	V	E	I	L	P	D	K	K	T	Q	P	V	T	I	A	S	L	Q	A	S	V	L	P	M	V	S	L	I	M	G	L	E	L	L	L		
UniRef90_UPI00044348FE	T	K	D	E	P	N	I	V	E	V	I	P	P	K	K	R	P	P	V	P	L	A	M	L	K	P	S	V	L	P	M	A	N	I	S	G	M	L	E	L	L	L		
UniRef90_F6TNV3	A	K	Y	E	L	H	V	V	E	M	N	Y	E	G	S	P	I	K	G	T	L	A	A	L	K	M	S	V	Q	P	A	V	S	L	G	G	F	F	A	E	L	L		
UniRef90_H0XVG1	A	K	D	Y	E	R	T	M	N	Y	D	D	G	S	P	I	K	A	T	L	A	T	L	K	M	S	V	Q	L	T	F	S	L	G	G	F	F	A	E	L	L			
UniRef90_UPI0003334602	A	K	E	E	V	N	R	V	E	I	L	P	D	R	K	A	H	P	V	T	I	A	S	L	K	A	S	V	L	P	M	I	T	M	T	G	V	E	L	L	L	L		
UniRef90_UPI000386F931	A	K	D	E	F	H	V	V	E	I	V	P	A	E	E	G	D	P	V	V	L	C	A	N	L	K	P	S	V	L	P	M	A	T	M	V	G	V	E	L	L	L		
UniRef90_UPI0003C28618	T	N	D	E	L	N	I	V	E	I	L	P	P	Q	D	P	S	P	V	V	L	A	A	L	K	P	S	V	L	P	M	A	P	M	V	G	V	E	L	L	L			
UniRef90_UPI0004422581	A	K	E	E	M	N	L	V	E	I	L	P	P	R	K	R	K	P	I	T	L	A	A	L	K	R	A	S	V	L	P	M	V	L	A	G	L	E	L	L	L	L		
UniRef90_H3B918	A	K	D	E	F	N	V	V	E	L	V	P	R	E	E	K	P	L	P	I	A	T	L	K	A	S	V	M	P	M	A	N	M	F	A	G	L	E	L	L	L			
UniRef90_H9GI92	A	K	D	E	C	N	V	V	E	R	D	Y	Q	N	K	E	I	V	P	V	A	N	L	K	S	V	C	L	P	M	V	S	L	H	N	G	F	F	E	L	L	L		
UniRef90_H9G3B7	A	K	D	E	F	N	V	V	E	I	V	P	P	K	D	T	T	P	H	L	A	T	L	K	L	S	V	L	P	M	V	S	L	A	L	T	G	G	F	F	A	E	L	L
UniRef90_G1QC82	A	K	D	E	L	H	V	V	E	A	E	A	M	N	Y	E	P	I	K	V	T	L	A	T	L	K	M	S	V	Q	P	M	L	S	L	G	G	F	F	A	E	L	L	
UniRef90_C1BKT4	T	T	S	D	E	L	N	V	V	E	V	E	T	E	G	K	V	K	A	V	L	A	S	L	K	P	S	T	L	P	C	V	C	L	G	G	F	F	A	E	L	L		
UniRef90_M3XF84	T	K	E	D	E	L	N	V	V	E	S	E	A	M	G	N	P	I	K	I	T	L	A	S	L	K	M	S	V	Q	P	T	V	S	L	G	G	F	F	A	E	L	L	
UniRef90_UPI00039428EF	A	K	D	E	C	N	V	V	E	R	N	H	E	N	Q	E	I	A	V	T	V	A	N	L	K	L	S	V	C	P	L	L	S	L	D	N	F	K	E	L	L	L		
UniRef90_J9NZL0	A	K	E	R	L	H	V	V	E	M	N	Y	K	G	S	P	I	K	V	T	L	A	T	L	K	M	S	V	Q	P	T	V	S	L	G	G	F	F	A	E	L	L		
UniRef90_UPI00033446C4	A	K	E	E	V	N	R	V	E	I	L	P	P	K	K	T	R	P	I	V	I	A	S	L	R	A	S	V	L	P	M	V	I	T	S	G	L	E	L	L	L	L		
UniRef90_UPI0004419DE4	A	R	D	E	F	N	V	V	E	I	L	P	P	K	N	S	T	P	V	R	I	A	T	L	K	L	S	V	L	P	M	A	T	L	A	G	L	D	L	L	L	L		
UniRef90_G1TZL7	A	K	E	E	V	N	R	V	E	I	L	P	P	D	R	K	A	S	P	V	T	I	A	S	L	Q	A	S	V	L	P	M	V	A	M	A	D	L	E	L	L	L	L	
UniRef90_Q7M6Z1	A	K	E	E	V	N	R	V	E	I	L	P	P	E	D	R	K	P	I	T	V	A	T	L	K	A	S	V	L	P	M	V	T	V	T	G	D	L	E	L	L	L		
UniRef90_F7IL74	A	K	D	E	L	Q	T	V	K	A	E	A	M	N	Y	E	K	V	T	L	A	T	L	K	M	S	V	Q	P	T	V	S	L	G	G	F	F	A	E	L	L	L		
UniRef90_S9YKK1	A	K	E	E	M	N	L	V	E	I	L	P	P	G	K	R	K	P	I	L	A	S	L	R	A	S	V	L	P	M	V	V	L	T	G	L	L	L	L	L	L			
UniRef90_UPI0003C2903F	A	K	D	E	L	N	V	V	A	V	N	T	Y	G	D	N	T	P	M	P	I	A	S	L	K	L	S	V	L	P	M	A	T	L	D	G	F	F	E	L	L	L		
UniRef90_UPI00045486F6	A	K	D	E	V	N	L	V	E	I	V	G	E	E	S	E	K	R	P	I	A																							

QUERY	E	S	K	V	T	F	K	L	I	K	G	S	G	P	V	Y	I	H	G	H	N	I	K	D	D	
UniRef90_C1C484	T	P	P	V	T	L	R	L	K	A	G	S	G	P	V	Y	V	S	G	H	N	H	L	K	D	D
UniRef90_F7HRK6	P	P	P	V	V	L	R	L	K	C	G	S	G	L	V	H	I	S	G	Q	H	L	V			
UniRef90_UPI0001D53FB0	P	P	P	V	V	L	R	L	K	C	G	S	G	P	V	H	I	S	G	Q	H	L	V			
UniRef90_G1LKM5	T	P	P	V	V	L	Q	L	R	H	G	S	G	P	V	H	I	S	G	Q	H	L	V			
UniRef90_Q1HTZ8	T	P	P	V	T	F	R	L	K	A	G	S	G	P	V	Y	I	S	G	Q	H	L	V			
UniRef90_G1MBW6	T	P	S	V	V	F	Q	L	R	A	G	S	G	P	V	Y	I	S	G	Q	H	S	V			
UniRef90_E2RM89	T	P	S	V	V	F	R	L	K	C	G	S	G	P	V	H	I	S	G	Q	H	L	V			
UniRef90_M3ZIE2	T	P	S	V	V	T	F	R	L	V	S	G	S	G	P	V	H	I	S	G	Q	H	F	V		
UniRef90_G7MY55	T	L	P	V	V	L	W	L	K	L	G	S	G	P	V	H	I	S	G	Q	H	L	V			
UniRef90_UPI00039555C3	T	P	P	V	T	F	R	L	R	S	G	S	G	P	V	Y	V	S	G	Q	H	L	V			
UniRef90_UPI00033173C2	R	P	P	L	V	L	R	L	K	C	G	S	G	P	V	H	I	S	G	Q	H	L	V			
UniRef90_H9H3M1	T	H	P	V	V	L	R	L	K	C	G	S	G	P	V	Y	I	S	G	Q	H	L	V			
UniRef90_G3W1L5	T	P	P	V	V	L	R	L	K	C	G	S	G	P	V	Y	V	S	G	Q	H	L	V			
UniRef90_F7GE61	Q	P	P	V	T	F	R	L	K	S	G	S	G	P	V	H	I	T	G	R	H	L	V			
UniRef90_H2PN87	P	L	P	V	V	L	Q	L	K	C	G	L	G	P	V	H	I	S	G	Q	H	L	V			
UniRef90_UPI00046B3964	C	P	P	V	T	F	Q	L	R	A	G	S	G	P	V	F	L	S	G	Q	E	C	Y	D		
UniRef90_Q28HA2	E	P	P	V	T	F	R	L	L	T	S	G	S	G	P	V	F	I	S	G	R	H	L	V		
UniRef90_F6Y538	T	P	P	V	L	L	Q	L	K	C	D	S	G	P	V	H	I	S	G	Q	H	L	V			
UniRef90_F7A147	T	P	P	Y					L	K	C	G	S	G	P	I	H	I	S	G	Q	H	L	V		
UniRef90_K7FKB9	T	P	P	V	T	F	R	L	R	A	G	S	G	P	V	Y	I	T	G	R	H	L	V			
UniRef90_UPI0003C1799A	T	P	P	L	V	L	R	L	K	S	G	S	G	P	V	H	V	S	G	Q	H	L	T	S	E	
UniRef90_J3SCT7	Q	P	P	V	T	F	R	L	R	S	G	S	G	P	V	H	L	A	G	Q	H	L	V			
UniRef90_UPI0003C8F2CD	T	P	P	V	V	L	R	L	K	C	G	S	G	P	V	H	L	S	G			L	V			
UniRef90_G1T0N4	T	P	P	V	V	F	L	V	S	S	S	E	N	P	M	I	M	S								
UniRef90_F1RD77	T	P	P	V	S	F	R	L	Q	S	G	S	G	P	V	Y	I	S	G	Q	H	F	V			
UniRef90_W5N4R0	R	T	P	V	T	F	R	L	K	S	G	S	G	P	V	C	I	S	G	Q	H	L	V			
UniRef90_K4GBZ8	T	P	P	V	T	F	R	L	K	S	G	T	G	P	V	Y	I	S	G	Q	H	L	V			
UniRef90_H2ZX68	T	P	P	V	S	F	R	L	K	S	G	S	G	P	V	Y	I	S	G	Q	H	L	V			
UniRef90_UPI0002C4574C	S	L	P	V	T	F	Q	L	R	A	G	S	G	P	V	F	L	S	G	Q	E	C	Y	E		
UniRef90_UPI00044348FE	T	S	P	V	T	F	H	L	R	S	G	S	G	P	V	H	I	S	G	R	N	L	V			
UniRef90_F6TNV3	T	L	P	V	V	L	P	S	K	R	G	S	G	P	E	H	I	S	G	Q	Y	L	L	V	D	
UniRef90_H0XVG1	P	P	P	M	V	L	R	L	K	C	G	L	G	T	V	H	I	S	G	Q	H	L	V			
UniRef90_UPI0003334602	S	P	P	V	T	F	Q	L	R	A	G	S	G	P	V	F	L	S	G	Q	E	C	Y	E		
UniRef90_UPI000386F931	T	P	P	V	T	F	H	L	R	A	G	S	G	P	V	Y	I	S	G	Q	H	L	V			
UniRef90_UPI0003C28618	T	P	P	V	T	F	R	L	R	A	G	S	G	P	V	Y	I	T	G	R	H	L	V			
UniRef90_UPI0004422581	S	P	P	V	T	F	Q	L	R	A	G	S	G	P	V	F	L	C	G	Q	E	C	Y	D		
UniRef90_H3B918	H	P	P	V	T	F	Q	L	R	T	G	S	G	P	V	Y	M	S	G	Q	H	L	V			
UniRef90_H9GI92	E	P	P	V	T	F	R	L	R	S	G	S	G	P	V	H	L	S	G	R	H	L	V			
UniRef90_H9G3B7	N	P	P	V	T	F	R	L	K	S	G	S	G	P	V	Y	L	A	G	Q	H	L	A	A	D	
UniRef90_G1QC82	T	P	P	V	V	L	K	L	L	S	M	S	G													
UniRef90_C1BKT4	T	P	P	A	V	F	R	L	K	S	G	S	G	P	I	H	L	S	G	Q	H	L	V			
UniRef90_M3XFB4	I	P	P	V	V	L	Q	L	K	C	D	S	R	P	V	H	T	S	G	Q	N	F				
UniRef90_UPI00039428EF	Q	P	P	V	T	F	R	L	A	A	G	S	G	P	V	H	L	A	G	W	H	L	V			
UniRef90_J9NZL0	T	P	P	V	V	L	Q	L	K	C	G	S	G	P	V	H	I	S	G			L	V			
UniRef90_UPI00033446C4	S	P	P	V	T	F	Q	L	R	A	G	S	G	P	V	F	L	S	G	L	E	S	Y	D		
UniRef90_UPI0004419DE4	T	P	P	I	T	F	R	L	K	S	G	S	G	P	V	Y	L	A	G	Q	H	L	V			
UniRef90_G1TZL7	S	P	S	I	T	F	Q	L	R	A	G	S	G	P	V	F	L	S	G	K	E	C	Y			
UniRef90_Q7M6Z1	S	P	P	V	T	F	R	L	R	A	G	S	G	P	V	F	L	S	G	Q	E	C	Y	E		
UniRef90_F7IL74	T	P	P	V	V	L	Q	L	K	C	G	S	R	L	A	H	I	S	G	Q	H	L	V			
UniRef90_S9YKK1	S	P	P	V	T	F	H	L	R	A	G	S	G	P	V	F	L	S	G	Q	E	C	Y	D		
UniRef90_UPI0003C2903F	T	P	P	V	D	F	V	L	K	S	G	T	G	P	V	Y	L	H	G	Q	H	V				
UniRef90_UPI00045486F6	T	P	P	V	T	F	R	L	R	A	G	S	G	P	V	Y	I	S	G	Q	D	I				
UniRef90_F7IGZ0	P	P	P	V	I	L	W	L	K	C	G	S	G	P	V	Y	I	N	G	Q	H	L	V			
UniRef90_V9LG15	S	P	P	V	S	F	H	L	K	S	G	S	G	P	V	Y	I	S	G	E	H	I	V			
UniRef90_I3J0D0	T	P	P	A	V	F	R	L	K	A	G	S	G	P	I	H	I	S	G	Q	H	L	V			
UniRef90_F6STJ0	P	P	P	V	V	L	Q	L	K	R	G	S	G	P	M	H	I	S	G	Q	R	L	V			
UniRef90_UPI00033412B7	T	P	P	V	T	F	Q	L	R	A	G	S	G	P	V	L	L	S	G	Q	E	Y	Y	D		
UniRef90_F6WG40	S	P	P	I	T	F	Q	L	R	A	G	S	G	P	V	F	L	S	G	H	E					
UniRef90_UPI0003EA8ACA	M	P	P	V	T	F	N	L	R	S	G	Q	G	P	V	Y	I	S	G	Q	H	F	M	L	D	
UniRef90_UPI00035058F8	V	P	P	V	T	F	M	L	Q	C	G	T	G	P	V	Y	L	N	G	Q	H	L	L	E		
UniRef90_UPI00042C1DFD	I	P	P	V	A	F	E	L	K	S	G	T	G	P	V	Y	L	N	G	Q	H	L	L	E		
UniRef90_UPI00042AC790	C	P	P	V	T	F	R	L	R	A	G	S	G	P	V	F	L	S	G	H	E	C	Y	E		
UniRef90_UPI00033166BB	S	P	P	V	T	F	Q	L	R	A	G	S	G	P	V	F	L	S	G	M	E	C	Y	D	N	
UniRef90_UPI00005A4755	S	L	P	V	T	F	Q	L	R	A	G	S	G	P	V	F	L	S	G	Q	E	C	Y			
UniRef90_G3SEN9	T	P	P	V	V	V	K	L	L	S	I	S	G													
UniRef90_UPI000392DADA	V	P	P	V	T	F	L	L	K	C	G	A	G	P	V	Y	L	S	G	Q	H	I	T	L	E	
UniRef90_F7D6J9	T	P	P	M	V	L	P	L	K	Y	V	S	G	P	V	H	M	S	G	Q	H	L	V			
UniRef90_G3NWE3	K	A	P	V	T	L	R	L	K	A	G	T	G	P	V	T	V	S	G	L	H	L				
UniRef90_Q0IG01	D	S	P	V	T	F	T	L	V	E	G	K	G	P	V	H	I	H	G	Q	H	L				
UniRef90_W5NCG2	I	P	P	V	T	F	R	L	K	T	G	S	G	P	V	Y	V	S	G	E	H	V	A	L	E	
UniRef90_J3JZK5	D	P	P	V	T	F	T	L	L	I	Q	S	G	P	V	H	I	V	I	G	H	L				
UniRef90_G3W5U7	T	P	P	V	G	L	R	L	L	C	Y	S														
UniRef90_UPI00046B23DC	Q	L	P	V	T	F	R	L	E	S	G	S	G	P	V	R	I	T	G	R	H					
UniRef90_A0A034V1S4	E	T	S	L	T	F	K	L	I	K	G	S	G	P	V	Y	I	M	G	Q	N	I	K	D	D	
UniRef90_T1IQI8	K	C	G	I			L	R	L	I	S	G	S	G	P	V	H	I	S	G	Q	H	L	E		
UniRef90_D2DSG3	S	P	P	V	T	F	Q	L	R	A	G	S	G	P	V	F	L	C	G	Q	E					
UniRef90_G5B9P2	S	P	P	V	M	F	H	L	R	A	G	S	G	P	V	F	L	S	G	Q	E	C	Y	E		
UniRef90_F7B505	S	T	P	V	T	F	T	L	L	K	S	G	S	G	P	V	Y	I	S	G						
UniRef90_F7IEM2	T	P	P	V	V	L	P	W	T	C	A	S	G	P	V	H	I	S	R	E	H	L	V			
UniRef90_A2I421	D	P	P	V	T	F	K	L	I	K	G	S	G	P	I	H	L	L	G	N	H	S	V			
UniRef90_G3S334	T	S	P	V	V	L	R	I	S	G	S															
UniRef90_G7NPK9	M	P	P	V	I	L	Q	L	K	C	G	S	G	P	V	H	A	R	G	Q	H	F	V			
UniRef90_UPI0002A49CAC	K	A	P	V	T	L	R	L	K	A	G	S	G	P	V	V	I	S	G	L	H	L				
UniRef90_UPI0003F0944E	S	P	P	V	I	F	Q	L	R	A	G	S	G	P	V	F	I	S	G	Q	E	S	Y	E		
UniRef90_UPI0003290C5F	H	S	P	V	T	F	H	L																		

UniRef90_Q2F5N9 1 D E F F Y G V T L S S S S H Q S E T W D P E A E Y P R S N K L V I R Q A L L G P D 40
UniRef90_P91753 K E Y F W G A T L S K D K K I F K W D P E A S D F L D S H F L F L K Q A V L G V N
UniRef90_G3SKC2 Q N Y L F G C E L K A D K D Y H F K V D N D E N E H Q L S L R M V S L G A G
UniRef90_H2PQY9 Q N Y L F G C E L L E A N K D Y H F K V D N D E N E H K L S L R M V S L G A G
UniRef90_B4MGY6 D N E F F G F T L T A K N N I F T W D S D S R E S W G H K L L I K Q I L L D D K
UniRef90_R4WCCQ4 E D Y F W G L T L D S N K R K E V W D P D Q Q D F R G D H T L L V K H A T L G A E
UniRef90_R7TU00 R E F F W G C E L S K D E P E Y T W T L D E D N D M D H T L F L K H A T L G A A
UniRef90_C1C4F7 U I W G G E L S A S R K T C R F E S E E D N M I H L L S L W T I C L G G T
UniRef90_K1R4R9 R E Y V W A C C E L S K E K P T F V F S F K E E D E D H T L F L K S T N A V L G A S
UniRef90_UPI00032AF883 W G C E L S Q E K R T C T W K P R T E G K N C R L W L L K N A V L G A S
UniRef90_UPI00038EC8CA W G A E L T L E K R L C T F R P P V E E N C R L V L S A I C L G E K
UniRef90_E0V9N0 E D Y F W G V T L S N T N K E V K W E P D E N G K G E H T L I I K Q A L L S P S
UniRef90_UPI00038BF371 L D Q E S R V R A G G V E E E D D A E H V L A L L T M L C L T E G
UniRef90_UPI0003AF6E91 K E F F W G D S L L T G T K K E V K W N P L D S D F G L Q H F L F L K Q A V L G A N
UniRef90_Q9NLA3 E T F Y G V T L S E K D P L A Q F D V E S E F E N N Q K L I I K Q I V L G A Y
UniRef90_T1GJ60 F W G C E L N D T T P R C V V K E E D D L L E H L V Y L R T V T L G E D
UniRef90_UPI000441BC6F Y F W G C E L S S T K K T Y H W K P F T G P C K S H L L I L K Q A L I G A T
UniRef90_T1IRC6 Q K Y L F G C C L K A D K D H F K V D N D E N E H Q L S F R K Q A V L G A G
UniRef90_H2PVG4 L W G C E L N D T Q R N A V F E I A E D L L E H Q F F I R T M C L S A G
UniRef90_B9ENT2 E S F Y G V E L S E K D P L A Q F E V A E T D K Q D Q K L I I K Q I S L G A E
UniRef90_T1PBW8 E D Y F W G V T L D K T K T E V W D P D V K G D A E H T L L V K Q A V L G P E
UniRef90_C4WRW5 Q N Y L F G C E L K A D K D Y N F K V D N D E N E H Q L S L R M V S V G A G
UniRef90_D3ZP59 R E E F Y G V T L S E K E P L A Q Y E M E E P T T E D Q K L V I K Q I C L G A E
UniRef90_UPI0003D09A6E S T L W G C E L N E S N K E E S F K T D D T N H Q H Q L A L L R T M C L G H T
UniRef90_Q0P4A5 W G C E L S A A Q T T A V F E V E D D L L E N Q Q F F L K T I C L S A E
UniRef90_W5K0J6 Y L F G C C E L M A N K D Y H F K V D H A K N G H H L I G T V S
UniRef90_H0XHM4 Q E E F W G C C V L T K D K K E F T W D P D S E A D V E H K L Q L S T A C L G F K
UniRef90_UPI0002B43D6C Q N Y L F S C C E L K A D K D Y H F K V D N D E N E H Q L S L R T V S L G A G
UniRef90_S7MHH0 R E F F W G V E L N K D K S E H Q W N F E E D E D Q H T L F L R H A L S G K D
UniRef90_D9IG59 K L G L K I V S L G A E
UniRef90_H3B070 Q N Y L F W G C E L N K A D K D D H F F Q V D N D E N E H E L S L R T F S L R A G
UniRef90_G1PYL5 L W T C E L N T K Q T T Q T F V P S D G S A D H Q L S L K M V C L G V G
UniRef90_V9L7E8 K E D F W G C C V L S K S E D T V T W N P E S D G E D E H K L V L S Q A C L G S K
UniRef90_A7RZK8 Q D H L F G C E P K A D K G H F K L D N D E N E H L L S L R M V S L E A G
UniRef90_H0XP07 E L K A D N D D H F K V D N D E N E H Q L S V R T V S L G A V
UniRef90_UPI0003336E92 E F F W G C E L S K E N P S V T F S I K E E D E D S H T L F V K H A V L G G Q
UniRef90_V4AWG8 G C E L T A T K K E F A F E E E E D P N V E H H L L L H T V C L G A G
UniRef90_S4RJQ2 E S F Y G V T L S E K E P L A Q F D P E E Y I V H S H K L I I K Q I S L G H E
UniRef90_B4NK16 G C E L K S D K K E Y K V K I E E D A E H Q L S L K A V S S A E K
UniRef90_W5M1J5 R E Y F W G A E L S K L Q T V S K W S P E R D D G L E H I L E L K Q A V L G A K
UniRef90_UPI0003F0E5C4 E E Y F W G V Q L D A K T K E I E W N P E K N F P K E H S L M I K Q A I L S H E
UniRef90_E9FX34 Q N Y L F G G E L K A D K D D F K V D N D E N E Q Q Q F S V R T V S V G A G
UniRef90_UPI000258E7A2 G I T L E G A N S S E V W D P E Q H F G A D Q K L I I K M A L L G P E
UniRef90_H0XK37 Q N Y F F N C E L R A D K D Y P S K V D N D E N G R Q L S L R T V R V G A A
UniRef90_G1Q6Q2 Q S Y L F S C C E L K A D K D Y H F K V D N D E N Q H Q L S L R T V S L G A G
UniRef90_G1MAE5 Q N Y L F S C C E L K A E R D Y H F Q V D I S E N E H Q L S L R K V S S L A G T
UniRef90_M3WW29 L S L S L R S V S L G E K
UniRef90_UPI000328CC40 Q N Y L W G C E L S Q E Q R S C T F Q P Q V E G Q L D C K L L R T I C L G E K
UniRef90_G1TG60 Q N Y L F G C C E L K A D K D H H F K V F N D E N E N Q L S L R M V S L G T V
UniRef90_G1TG60 K E Y F W G C A K L D K K T K V N Q W E G R D D G M M E Q L V L K R A C I A P G
UniRef90_H2XTN5 Q N Y F S G C E L K A D K D Y Y F K V D N D E N E H Q I S L R T V S L G T G
UniRef90_G1TEZ9 Q T F L F G C E L K G D K P Y H F K V N D E E N E H Q L A L S L R T V S L G V G
UniRef90_V8NHH1 L A L S L R T V S L G T G
UniRef90_G3HXU8 M V I K Q I L L G A E
UniRef90_Q27415-2 Q N Y L W G C C E L S Q E R R T W T F R P Q L E G K Q S C R L L L N T
UniRef90_H2PPQ6 V D D D E N E H E L S L R T V S L A A G
UniRef90_G3UK29 V K L S K E K P S I V W K L D E E D D S E T T L L I K Q A C L G A S
UniRef90_B3S3B2 Q N Y L F G C C E L K A D K D Y H F K V D N D E N E H Q L S L R T V S L G A G
UniRef90_UPI0003EDE9C0 F V F G C E L N S S A R S Y T F K V S E E D D S D H F L A L N M A C L S E G
UniRef90_V8P479 N F V F G C E L T G S T R S Y T F K V D E A D D S E H I L A L S M V C L T D G
UniRef90_UPI00046B2391 D S F S F G C E L S S H T H S F A F K G E E K D D A E L L L A L T R L C L A E G
UniRef90_UPI00046C3ADD Q I Y L V S C E L K A D K D D H L K M D N D E N E H Q L S L I T V S L W I G
UniRef90_Q9GLJ3 E Y F W T V E L N A D N R S H I W T A K D D E L E N H T L F L K L A V L G D G
UniRef90_D2HX69 M A L L G P E
UniRef90_E2RAD1 G C E L K S D K K E Y K V K I E E D A E H Q L S L K A S C S G S A
UniRef90_W5MTX0 Q Q A V W G D K A D K D Y H F K V D N D E N E H Q L S L R T V S L G A G
UniRef90_UPI000359C47A Q N A F W F E V K T D R N Y H F E M D N N E N E H Q L S L R M V S L G A G
UniRef90_K7JAR2 I C L G E M
UniRef90_UPI0003EABDE7 W G C E L N K N Q R T V K W G P I D R C P K N N H L L L E Y A M L G D T
UniRef90_UPI0003BBCC68 C E L K A D K D Y H F K V D N D E N E H K L S L K T V I L G V G
UniRef90_G1Q4L3 E S Y V F S C E L S S E V P F Y T F Q G D E E D L E H F L E L R T I C L G G K
UniRef90_UPI000392E53C E E F V W S A T L D K K N P E H N W S P P D S D S E D H K L R I R K N A F L S S K
UniRef90_UPI0001555C86 I W G C Q L N R E N P V Y T F D T P E E W S C E Q Q L A L R T I C L G E N
UniRef90_T1IKG4 S T K I Y F K V D K E E N E H R L S L R I T I L K T G L
UniRef90_M3Y5G3 L W G C E L N W S N R S Y T F D P L E N G N G D H K L M L H L I C L G E K
UniRef90_UPI000440B8C6 Q S R L L G C E L K T N K D D H F K V Y G D E N Q Y Q L S L T T V S L G A I
UniRef90_W5NCQ9 L W G C E L N G T Q R K F N F E V E D D L L E N Q L F I K T I C L S E D
UniRef90_M3WQV2 F F F S D E H S S H P N S F T S K V K E K D N V E H A W T L T M L C L T E G
UniRef90_G1L332 L W G C E T W T F T P Q R G G K Q N C E L L N M I C L G E K
UniRef90_H0W9E5 Q N C L F S C K L K A N K D H H F K L D N D E N E Y P D V L S Q A T L G A G
UniRef90_D8T268 F W G A K L K P K K P F L V E R D E L E G R R L H I S Q A T L G Q N
UniRef90_F6QPA1 K L I L N M V C H G E K
UniRef90_S7MQX8 S C E L N Q E K R T W T F K P Q K E G K Q D C K V L L N T V
UniRef90_C1BV33 D E Y I W T V T L D K D N K E Y V W N P D K E A E E Q K L L V K N A F L S L E
UniRef90_UPI0003C186E6

UniRef90_Q2F5N9 A K P D E L N V I Q V E E A M Q E A V K L P V A V L K V G E S R H V R L D I E F P
UniRef90_P91753 A K D D D R N V I E V E E T D G E E T V I Q P L L S L R L G L N E S T N L D I G L P
UniRef90_G3SKC2 A K D D E L Y L V E A E A Y E N S P I K V I L L A T L K M S V Q S R F P L G G F E I
UniRef90_H2PQY9 R K D G F Y T V V E E M N Y E G S P I K V I L L A T L K M S H V Q S M V Y L G G F E I
UniRef90_B4MGY6 A K D D E Y N V V N V D S L V E E V R L P I A V L R A G G E L R V I H P N L E F Y
UniRef90_R4WCCQ4 A K D G D V N V V E I E T A M G E K V F P I A V M R G G S Q S T A V L D L L F Q
UniRef90_R7TU00 A V E I K E R N L V A I E E T D G E D V K I P L V S L T C G A T E S T Q L D L L Q H
UniRef90_C1C4F7 M K D E M H V I A V E A E Q Q G K E V V I A S L Q P S L Q P M V N L H D I E I
UniRef90_K1R4R9 A V E S E R N L I Q M E T K D K D L K A P I V S L T L G K K D M C A L D L S F G
UniRef90_UPI00032AF883 A K D E L H R V E I V P D K K P P H V T I A T L K S S V L P M V A M A G V T L
UniRef90_UPI00038EC8CA A R D E V N R V E I V P D K K P P H V T I A T L K S S V L P M V A M A G V T L
UniRef90_E0V9N0 A K D S E V N V I E V E T T G Y K I R Q P I A L V I G G K Q Q H L R L D L N F P
UniRef90_UPI00038BF371 A K D E L H V I E A E A M N Y E I K V T L A T L K M S V Q Q P T V S L G G F E I
UniRef90_UPI0003AF6E91 A K D E C N V V E R N H D H Q E I A V P V A N L K L S C Q P M L S L D D F Q L
UniRef90_Q9NLA3 A K E G E R N V I E I E T E D G N V K Q P I F S L K L G L N E S S P L D I G F P
UniRef90_T1GJ60 A A N G E F N V V Q A E T E D K D L K I P I A V L K A G E T R T L T P N L E F P
UniRef90_UPI000441BC6F A N D E T H V L A V E S R N M P E P V L I V S L K H S V L A M V C L D G F E L
UniRef90_T1IRC6 A V Q E E L N V V K L E T S G Y K I K Q P I F Q L K R G T E D R V A L D V N I Y
UniRef90_H2PVG4 A K G E S H V A E A E A M D M K L V T L A T L K M S V Q Q P T V S L G G F E I
UniRef90_B9ENT2 A S K E M H V V E V Q D R V G E K P V P I A T L H P M C Q P M V S F S G F E L
UniRef90_T1PBW8 A K D E F N V V Q A E E V E K E T L K I P I A V L K A G E T R V L K P N L E F P
UniRef90_C4WRW5 V P D D E F N V I E V E A M G Y K I K F P V V V L K G G T H Q C V L D L L F P
UniRef90_D3ZP59 A K D G L H I V E A E A M N Y E I K V T L A T L K M S V Q Q T V S L G G L Q
UniRef90_A0A034VV26 A K N G E F N V V Q V E T Q K E T L K L P I A V L K A G E T R A L R P N V E F L
UniRef90_UPI0003D09A6E A K D E L H V I E A E Y E G N P L K A T L A S L K M S V Q P T V S L G G F E I
UniRef90_Q0P4A5 A K D E F N I V E L V T G E G N K A V P I A T L H A K S M P T V N L S G L D L L
UniRef90_W5K0J6 A S D E M H V V A V D G Y G G S K P V P I A T L R H C M P M V S F P G L E L
UniRef90_H0XHM4 UniRef90_UPI0002B43D6C A K E N E R N L V E V T T E G K D I T C P I V V L R V G G K E C V H I D L G F T
UniRef90_S7MHH0 A K E E L H I V E M L Y E G S P I K A T L A T V K M A V Q P T V S L G G F
UniRef90_D9IG59 M K E G E R N V I E V E T K G E P I K L P L V V L T G G K T D M V S L D I N F H
UniRef90_H3B070 A K D E L H V V E A E Y E G K P T K I V L A S L K I S V Q P M V S L G G F A I
UniRef90_G1PYL5 A K D E L H I A K A E A M N D S I P I K G T L A T L K M S V Q P P V S L S G F E I
UniRef90_V9L7E8 A K D E L N V V E I V P E M D S G V S I P I A A L Q A S S M P M T L L C D L D L
UniRef90_A7RZK8 A T K S M V E V T S M D F K G D D S T H T I V S L R E G A T E M C A L N L A F
UniRef90_H0XP07 I E Y E L H T V E A E T V N Y E I K V T L A A L K M S V P L A V S P G G P L K
UniRef90_UPI0003336E92 P K D E L H V V E E M N H E G S P I K V T R T T L K L S L Q P W L V S L G L W D N
UniRef90_V4AWG8 A V K D E L N L V T V E T Q N E T I K Q P F I S L T R G E S S M C Y M D I S F T
UniRef90_S4RJJ2 A P D E F H S V S L D H S G K M T V P V A T L K P S V Q A S L S L A G L E L
UniRef90_B4NK16 A K T G E F N V V Q A E T E K K T V K I P I A V L K V G E T R C L K P N V E F P
UniRef90_W5M1J5 R T A A C I G V T S G E V V N E T S S V P H A S L S R S L V S L G G F E I
UniRef90_UPI0003F0E5C4 A T A G G R N I V E V T T E G N S V K Q P I L S L E L G K N D A C S M N L T F
UniRef90_E9FX34 A A G E M A V I E A E A Y G N I K T L I S V L V Q G K D H Q R S S L D L V F H
UniRef90_F71787 A Q D E L Q V V E A E Y K G S P I K G T L A T L K M S V P T M V S L G A L K C
UniRef90_UPI000258E7A2 A K P G E L N V L Q V E A R G G L K I P I A L L E M G K T A Q I L D L S F P
UniRef90_H0XK37 A K A E L H V V E A E A E G G L G K V T L E T L N M S G Q P T V S L P G G F E I
UniRef90_G1Q6Q2 A K E E L H I V E A E A M N Y E I K A T L A T V K M S V Q Q P T V S L G G F E I
UniRef90_G1MAE5 A K D E L H I V E M N Y K G S P I K V T L A T L G M S V Q P T A S L G D F E I
UniRef90_M3WW29 A K D E L H I V E M T E Y E G S P I K I T L A T L K M C E E P M V S L G D F E I
UniRef90_UPI000328CC40 A R E E R N L V E I L P A K K R P V T L A S L Q A A V L P M V A V A G L E L
UniRef90_G1TG60 A K D E L H I V E A E T M N S E I Q V A L T T L E M S V Q P R I L G G L E I
UniRef90_H2XTN5 A K E G E R N L V E V N H K Q E K V E A C I C S L R S G S Q E D V A L A D L T I
UniRef90_G1TEZ9 A K D E H I V E A A A M S Q E I K V T L A M L K M S V Q P M I S L G S N V P
UniRef90_V8NHH1 A K D E L H V V E A E Y E G N Q I K V T L A S L K M S V Q P T
UniRef90_G3HXU8 A K E E C N V V E R D H H N Q E I A V P V A N L R L S C Q P M L S L D D F Q L
UniRef90_Q27415-2 A K E N E F N V V E V N T P K D S V Q I P I A V L K A G E T R A V N P D V E F Y
UniRef90_H2PPQ6 UniRef90_G3UK29 A K D E S H I A E A E A M N Y E I T V T L A S L Q A S V L P M V S T V G V Q L
UniRef90_B3S3B2 A K K D E V N V V E V C T V G E E V Q C P I V N L T C K G S S A C S T V N A T L
UniRef90_UPI0003EDE9C0 A K D E L H I V E E A E A M N Y E
UniRef90_V8P479 A K D E C N I V E E R D Y Q N K E V A V P V A N L K L S C Q P W T
UniRef90_UPI00046B2391 UniRef90_UPI00046C3ADD A K D E C N V V E R D R A X N Q E I A V P V A N L K L S C Q P P M V S L G G F E I
UniRef90_Q9GLJ3 A K D E C N V V E V V A Q N Q E I A V P V A N L K L S C Q P P M L S L D D F Q L
UniRef90_D2HX69 T K E D V L E I M A R N H D H Q Q T A V P V A N L K L S C Q L M L S L D D F Q F
UniRef90_E2RAD1 A K D E L H I V E A K A M K Y P M E V T L E T L K M S A Q P T S L G G F E I
UniRef90_W5MTX0 T K D E L H V V E V E S E G Q T V R T V L A S L R P S S L P S V C L G G F E I
UniRef90_UPI000359C47A A V P G E P N I V T L E S M D A S S V Q I V N L T C G N N N M G H M D L A L
UniRef90_K7JAR2 A K A G E L N V L Q V E A M G G P I K I P I A L L E M G K T S Q I L D L S F P
UniRef90_UPI0003EABDE7 A R Q A R L L S R L R L R A A G G L D A V P S A R L R P R S F S H T S L G G F E I
UniRef90_UPI0003BBCC68 A K D E L H I V E A E A M N Y E I K V T L A T L K M S V Q P T
UniRef90_G1Q4L3 A K Y E L H I V E A E A M N H E S S P I H S N T G N H T A G F P G G F E I
UniRef90_UPI000392E53C A E D E F H V V E I V P A E E G D P V P V C T L K P S V C T M A T M V G V E I
UniRef90_UPI0001555C86 A T D E C N V V E R N H N K E T A V P V A N L K L S C Q P M L S L D D F Q L
UniRef90_T1IKG4 A V V D E L N V V E C E T V N R F V N W D I F Q L K R G T N Y I N L D F D I E I
UniRef90_M3Y5G3 A K D E L H I V E A K A M K Y V M Q V T L E N L K M S V A K I S L V G L E I
UniRef90_UPI000440B8C6 A K E E N N V V E M N H Q G K K I S V P V A N L H I S C L P M V K S F L I L
UniRef90_A7TZ48 A K E D E F N T J I E L E T T G E E L K C P L V M M K S S S T S Q C T V D L S F N
UniRef90_V8NYN2 A K D E F H V V E I V P K S S T P V R L A T L K L S I L P M W N G D D
UniRef90_F7DSN3 F T Y S Q I C V V E A E A M N D E G W A T L K M S S E P M V S F K G
UniRef90_G3X0B0 S N D D V T I V E I T S P K Q R P P V P I A T L K P S V L P M V S
UniRef90_V8P0A8 A D D E T H V V A V E S R N M P P V P V A L K H P V L P M V S C L D G F E L
UniRef90_UPI000337A16 A K D E L H L V A M N Y K G S P V K R T P A T L K M S L L S M V S L G G L E I
UniRef90_W5NCQ9 A S D D L H V I E V E A M Q D V R P I P I A T L R A S V Q P M W
UniRef90_M3WQV2 A K D K C N V V K M N H D Q E T A V L V T N L K L S C Q L L A D I R L
UniRef90_G1L332 A K E E M N V M E I L P P K K M K P I T M A P L Q V S V L P M V I M E C E R
UniRef90_H0W9E5 T K D E L Y I V E M N Y K G G E P K V T L A A L N M S I Q P M V S L G G F E I
UniRef90_D8T268 A K D G E R S I L K C K G G E P P V F V C S L K P G L H E T C Y L D L N F
UniRef90_F6QPA1 T K D E L N L V E G T P T K K R L P V P I A M L K P S V L P M G N I F P
UniRef90_S7MQX8 UniRef90_C1BV33 A K D G Q V N V V N I E T L G Y E I K C P L V A M K A G T D Y Q R L V D Q E F
UniRef90_UPI0003C186E6 L N Y E G R S I K I V L A S L K I S V Q A T E S L G G F A I

UniRef90_Q2F5N9 D A P V T F T L V Q G S G P V H L T G H H L
UniRef90_P91753 Q P P V T F K L A L G S G P V Y L S G Q H A L D
UniRef90_G3SKC2 P P V L D M K L L S I S G
UniRef90_H2PQY9 T L P V A L H Q C V S G P G H M S T Q H L
UniRef90_B4MGY6 E S R V T F T L S T G S G P V H I Y G Q N L K D N
UniRef90_R4WCC4 D P P V T F H L A K G S G P V H L L G N H
UniRef90_R7TU00 E V P F T L R L V M G T G P V H F S G N Q L V E
UniRef90_C1C4F7 A P P V T F I L M C G S G P V Y I S G Q D I V D D
UniRef90_K1R4R9 E E V T F R L V E G S G P V F L S A Q E L V E
UniRef90_UPI00032AF883 A P P V T F Q L R A G S G P M F L S G K E C Y E
UniRef90_UPI00038EC8CA S P P V T F H L R A G S G P V F I S G Q E C Y
UniRef90_E0V9N0 D P P V M L R L I E G H G P V H I S G N H V L
UniRef90_UPI00038BF371 T P P V V L R L K C G S G P V H I S G Q H L V
UniRef90_UPI0003AF6E91 Q P P V T F R L K S G S G P V R I T G R H
UniRef90_Q9NLA3 H P P V T F L L T A G S G P V H I S G Q H M I E
UniRef90_T1GJ60 H S S V T F K L I T G K G P V H I S G Q H I I S E
UniRef90_UPI000441BC6F L P P V S F I L K S G M G P I Y L N G Q H L I L E
UniRef90_T1IRC6 N Y C V L R L M S G T G P V Y I S G E H V V E
UniRef90_H2PVG4 T L A I V L Q L K C G L G P M H I S H L A A V E E
UniRef90_B9ENT2 M P P V I F N L R S G Q G P L F I S G Q H L
UniRef90_T1PBW8 S D S V T F K L T Q G T G P V Y I C G Q H L V H D
UniRef90_C4WRW5 D P P V T F K L V K G N G P I H L L G N H S V
UniRef90_D3ZP59
UniRef90_A0A034VV26 N T S V T F K L I Q G T G P V H M Y G Q N L Y
UniRef90_UPI0003D09A6E T P P V V L R L K C G S G P V Y Y V S G Q H L V
UniRef90_Q0P4A5 H P P V T F R L K H G S G P V F V G A E H V
UniRef90_W5K0J6 L P P V T F Q L C S G K G P V F L S G Q H I
UniRef90_H0XHM4 T P P M V L T V V C G S G P V R T S G Q H L V
UniRef90_UPI0002B43D6C N K T K F I L L K E G S G P L A L S G V H L
UniRef90_S7MHH0
UniRef90_D9IG59 E I A A T F R L V E G S G P V V L N G Q Q L V E
UniRef90_H3B070 T P P L V L R L K S G S G P V H V S G Q H L V E
UniRef90_G1PYL5 T P P A V L R W Q
UniRef90_V9L7E8 T P P V T F R L S S G S G P I H V T G Q D V T L E
UniRef90_A7RZK8 S P P V T F K L A S G N G P V H L T G N H V
UniRef90_H0XP07 R H H L L K C G S G L V H I S G K H L V
UniRef90_UPI0003336E92 T T M V L Q L K C G L R P I H I S E Q H L
UniRef90_V4AWG8 D S P V T F S L S E G T G P I Y I S A V Q L V E
UniRef90_S4RJQ2 A P P V L R L T A G A G P V H I C G Q H V
UniRef90_B4NK16 N G S V T F K L I Q G S G P V Y V C G
UniRef90_W5M1J5 T P P A T F R L K T G S G P V F I S G Q H F V
UniRef90_UPI0003F0E5C4 R A P A T F K L I K G S G P V Y L A G T H V L E
UniRef90_E9FX34 D A P V K L R L I K G S G P V H L V G A H
UniRef90_F71787 G P M V E V W F R A S D I S G Q H L V
UniRef90_UPI000258E7A2 D P P V T F T L V K G S G P V H I I G H N L
UniRef90_H0XK37 T P P V L P E R V S G Q H L V
UniRef90_G1Q6Q2 T P L V V L K L L S M S G
UniRef90_G1MAE5 T P S V V L Q
UniRef90_M3WW29 T L P V V L Q L K C G S G P V H I S G Q H
UniRef90_UPI000328CC40 S P P V T F H L R S G S G P V F L C G Q E C Y D
UniRef90_G1TG60 A P P V V
UniRef90_H2XTN5 F P P A I F K L I Q G N G P I H I V G N H M M M D
UniRef90_G1TEZ9 Q Q K V K L A V K K G S
UniRef90_V8NHH1
UniRef90_G3HXU8 Q P P V T F R L K S G S G P V R I T G R H
UniRef90_Q27415-2 E S K V T F K L I K G S G P V Y I H G H N L K D D
UniRef90_H2PPQ6 S P P V T F Q L R A G S G P V F L S G Q E R Y E
UniRef90_G3UK29 K S P A
UniRef90_B3S3B2 H S P V E L K L T A G S G P V H L S G
UniRef90_UPI0003EDE9C0
UniRef90_V8P479
UniRef90_UPI00046B2391 T P L V V L R L K C G S G P V H I S G Q H L V
UniRef90_UPI00046C3ADD
UniRef90_Q9GLJ3 Q P P V T F R L K S
UniRef90_D2HX69 Q P P V T F C L K S G S G P V Q I R G E
UniRef90_E2RAD1 T P F V T C C S G P V H N G G Y
UniRef90_W5MTX0 T P P V L F R L K A G S G P V H I S G Q H L M
UniRef90_UPI000359C47A S G K V T F N L V S G S G P V H L S G N Y L M E
UniRef90_K7JAR2 D P P V T F T L I K G S G P V H I V G H N L
UniRef90_UPI0003EABDE7 T P P A T F R L K T G S G P V F I S G Q H F V
UniRef90_UPI0003BBCC68
UniRef90_G1Q4L3 T H I V L Q L Q C D S G T V Q I N G K H S V D
UniRef90_UPI000392E53C T P P V T F H L R A G S G P V Y I S G Q H V
UniRef90_UPI0001555C86 Q P P V T F R L K S G S G P V H V T G R H
UniRef90_T1IKG4 N Y C V L Q L V C G S G P V F M T G V H V Y D
UniRef90_M3Y5G3 T P P V V L R
UniRef90_UPI000440B8C6 H
UniRef90_A7TZ48 R S V K F T L T E G N G P I H L V G S H I L E
UniRef90_V8NYN2
UniRef90_F7DSN3 T P P V V F W L K Y S S G P V P I S G Q H L V
UniRef90_G3X0B0
UniRef90_V8P0A8 L P P V S F I L K S G M G P V Y L H G Q H L I L E
UniRef90_UPI0003337A16 S A T Y R V K
UniRef90_W5NCQ9
UniRef90_M3WQV2 Q L P V T F C L K S G S G P V R I T
UniRef90_G1L332 S P P P V F L S G Q
UniRef90_H0W9E5 T P P V V L
UniRef90_D8T268 E D D V V F S V T G S T A I H L S G Y Y M
UniRef90_F6QPA1 H S L I T F Y L R S G S E P V H V S G R D L
UniRef90_S7MQX8 S P P V T F Q L R A G L G P V F L S G Q E C Y E
UniRef90_C1BV33 S S K V E L T L V H G Q G P V I G T H S F D
UniRef90_UPI0003C186E6 T P P L V L R L K S G S G P A Y A S G Q H L V

1 10 20 30 40

UniRef90_H0W5F4 G A E L N S E R R I C T F R P Q A E E D S C R L V L S A I C L G E K

UniRef90_A9VD53 F W G G K I S K G T E V T W E P D T P F N S L S I T Q L A L D P A

UniRef90_UPI00032970B8 Q T F L Y G C V L E A G K E V V F N P D D D D L E H Q L D L R M V C V D S S K

UniRef90_C1BMD8 E E F V W S I T L D E K T P E F S W S P S D G E E E E H R L K V Q N A F L S S K

UniRef90_UPI0003EC1B03

UniRef90_UPI0003D09B1D G C E L N A S T R K Y I V K E X D D F L E H L V S L K T I C L G A E

UniRef90_UPI00034FC4CA L A G C E L S S H A R S F T F K V E E E D D A E H V L A L T M V C L T E G

UniRef90_T1GRJ7

UniRef90_M2XKD8 E A Y F W A L E L A Q K K E T F I V N P D H V L H L T M A S F G T K

UniRef90_T1MRA2 S S F W G A E V K P E K P Y T H A H S P R R G R L R L T Q A T L G A E

UniRef90_I1EL46 E T F W G K T L S S K N K V F E F E E E E E G L E T T I Q L R G A C L G D N

UniRef90_M7CKU9 G C E L N T S T R R C V V M E E D D F L E H L V L K T I S L

UniRef90_I1Y26 S F W G A E V K P E K P T H T H S P R R G R L R V T Q A T I G G E

UniRef90_F2UJR3 F F G R T L H A K E E E L A E G R M G E T L V I K Q F T V D S S

UniRef90_UPI000350F721

UniRef90_U5EYC7 F W G L I L K A N K K Y T Q T V T K S F H L S Q A T L D L T

UniRef90_G1PZJ7 S S L T G C E L K A D K D Y H F Q V E N D E N E H Q L S L Q T V R L G A G

UniRef90_D3ZP35 Q D Y L L C C E L K T D K D L T S V T I R L G A G

UniRef90_M1D260 F W G V E L K S G K P F T H N F E K E R G R L H I S Q A T L G A G

UniRef90_F4QB12 F W G L E I K K E A V K F T P P Y D T H V T G A C L A A A

UniRef90_E4WQN4 K E Y L W A T N L E G S A P F K F E G G D N E D E Q V I F K S C A L G A G

UniRef90_A0A022QAP9 F W G I E V K P G K P Y I H R S D D E R G R L H V T Q A T I G T G

UniRef90_Q54NB6 F W G I E V K P G K K V N P F H E D N L Q G R L H V T T A C L S A V

UniRef90_A0A059D1U8 F W G I E V K P G K P Y V H V N P F H E D N L Q G R L H V T Q A T L G L G

UniRef90_S8D2E9 F W G V E L K P G K P Y V H R Y D H R L H I S Q A T L G A G

UniRef90_V8NSE3 G C E L N H T T R R C V V K E D D D L L E H L V Y L R T V S L G E D

UniRef90_UPI0002B45AD9 F W G I E V K P G K P T Y H S D N V T G K L R I T Q A T L G P G

UniRef90_T1GIM4 E E S F Y A V T L T K G D A Q V E W D V D D D Y P R G Q K L I K Q I L L G H D

UniRef90_R7QNJ7 F W G I A L K P G E P A D L D L Q D G E T L H V T M A S L G V D

UniRef90_B9R9N7 F W G I E V K P G K P H P F H S D N V E G R L R L V T Q A T L G L G

UniRef90_UPI000350F0EF S T F W G V E V K P G K P Y T L T H S D C G R L R L T Q A T L G D E

UniRef90_UPI0003C38EB4 D E S F Y G V T L S G E G S K V E W E V D I D F P R G Q K L I V R Q I L L G A E

UniRef90_E9C0N0 F W G V E I S P N K A I S F A P P Y D A E P G K M Y S Q L V I K L A S L G A E

UniRef90_D3BBG4 F W G I E V S P N K A I S F A P P Y D A H L T S A C L S V D

UniRef90_UPI0002C33890 F W G I E V K P G K P F T H K P G D S N G R L H L T S M A T L G L G

UniRef90_B8AUD1 F W G V E V K P G K P Y T H H R L R L R L R L T Q A T L G G E

UniRef90_M0XSH6 F W G I E V K P D E P Y G Y Q S D E F K G R L H I T Q A T L G L G

UniRef90_M5XHC6 F W G T E V K P G K P F T H N P D S A R E R L R L S Q A T L G A S

UniRef90_B9RL64 F W G I E V K A G K P V T H S S N N E R G R L R I S Q A T L G I G

UniRef90_M1AYV7 F W G I E V K P G N P V P Y S T H D V E G K L H V T Q A T L G V G

UniRef90_G7K7Y8 F W A C T L K K G Q D Y K Y E E Q D D N I L L H I S N A A L G L N

UniRef90_G0QMS8 F W G C E V T E T K A A V D V P E G F V L N V C N A T S G V A

UniRef90_G4Z0L3 F W G L E V K P G K P Q A F H P K N E Q G K L H L T Q A T L G S G

UniRef90_M4DBM7 F W G I E V K P G K P Q A Y N P E N E Q G T L R L T Q A T L G A G

UniRef90_M4DRM9 F W G V E V K P G K P T H T H Q A D H G R L R L R L C Q A T L G N

UniRef90_C5X894 F W G V E V K P G K P T F T L K N N E A T G I R R L R L T Q A T L G H G

UniRef90_F4J9Q6 S S F W G V E V K P G K P H T L T H G D F I G R L R L T Q A T L G A E

UniRef90_C5Y997 S S F W G I E V K P G K P Y P Y H S D D V Q G N L R V T Q A T L G L G

UniRef90_B9ICW3 S F W G L E V K P G K P Y Q P Y H P K N E Q G K I H V T Q A T L G A G

UniRef90_R0F4E1 F W G L K V E P G K W T F V P P P D E A L R L H I S Q A T L G G G

UniRef90_C1E8Q2 F W G V E I K P G K P T H T Y D S S K G R L H I S M A T L G H G

UniRef90_G7JN90 F W G C T V K K G N D H K F E S E D H A I L H L S N V A L G L N

UniRef90_Q231H1 F W G V E I K P G K P S H Q F D A S K G R L H I S M A T L G L G

UniRef90_UPI00032A9594 N I F W G V C L E S G K K Y T Q T P D K N F H I S M A I D P S

UniRef90_V4U6V4 F W G I E V K P G K A H P Y H S D N V P G K L H V T Q A T L G L G

UniRef90_UPI00042B93CA F W G I E V K P G K P H P Y H S D N V R G K L H V T Q A T L G L G

UniRef90_V4TSP7 F W G V E V K P G K P F T H T A D D A R G R L H I S Q A T L G I G

UniRef90_J9IHB7 F W G C V V K E G K P Y K T Q S A L E E N D Y P V L H L S N V A L P K N

UniRef90_A0A059C487 F W G V E V K P G K P F V H P S S G A R Q R L H I T Q A T L G I G

UniRef90_UPI0002658616 F W G L Q L E A N L R Y S Q Q V P E G F R I T K A T L S A K

UniRef90_S8D1Z0 F W G V E V K S G R S V T H S S R E S G G R L R I S Q A T L G L G

UniRef90_M4DUL6 F W G V E V K A G K P L K V K P D E D C L I H L S Q A S L D I K

UniRef90_D7TQZ5 F W G I E V K P G K P T H S F D G Q R G R L H I S Q A T L G I G

UniRef90_I1JAK5 F W G I E V K P G K P C P Y H A D N V R G K L H V T Q A T L G I G

UniRef90_K3ZTX8 F W G V E V K P G K P T H T Y Q A D H G R L R V C Q A T L S N

UniRef90_R7TFI7 N M F W G V T I D E G K R Y T Q V V E R S F H V S M A A L E P S

UniRef90_K8E9U2 F W G T I I E A G K S V R V D I D E D D E E H V S L S L V A L G S S

UniRef90_UPI00042B7D27 F W G I E V K P G R P F T H S P L S S R L H L S Q A T L G M G

UniRef90_M0YLR1 F W G L E V K P N Q S I K V S P E D D H F L H L S Q A L G E V

UniRef90_UPI0002C33CDB F W G V E V K A G E P M K V K P D L G N V V H L S Q A C L G E A

UniRef90_L1JUJ1 F W S A C I K P S K P F P V I E P D N H T L R L T Q C S L G E N

UniRef90_V4LA88 F W G V E V K P G K P F T L K A T E T R R L R L S Q A T L G L G

UniRef90_I0YYQ4 E S T F W G V V V Q P G K A Q P F V P P V D A K L H L S Q A T L S M D

UniRef90_P0C1J6 F W G L Q L V P G K T Y S Q V V S A C P F R I T M A S L A A D

UniRef90_A9P2L8 F W G V E V K P G E V L C C D P G D D K Y L H L S Q A A L G E N

UniRef90_M4E9J1 F W G V E V K P G K P F T L K A A T N D A K R L H L S Q A T L G L S

UniRef90_S2J7J7 F W G I E V K P G K P V T H S C E K A R G R L R L T S M A S L G S S

UniRef90_A0A022RL14 F W G A E V K A G K P L K V K P D E D C V I H L S Q V C I D N G

UniRef90_M4DUL3 F W G I E V K P G K P F T H K F D D S K G R L H V S M A S L G L G

UniRef90_W9QZW6 G I E V K P N K P C P Y H S D N A R G K L H V T Q A T L G I G

UniRef90_V7CFR7 Q K M F W G V T L D G G K R Y T Q T V E R S F H I S M A A L E P P

UniRef90_K1R2S2 E S F Y G L E V A A G K Q V K P K I P E D H V L R L T Q V A L P V N

UniRef90_G0U018 N M F W G V T I D A G K R Y S Q T V T Q G F C L S M A A L E N

UniRef90_UPI0003599B00



UniRef90_H0W5F4 A K E K V Y R V E I V P D K R P Q T I T I A T L K L S V L P M W P R R R F L A F
UniRef90_A9VD53 A K S K T V V V Q V S P D S E Q P A S F V L S T L R P G H I D Q H T L D L V F
UniRef90_UPI00032970B8 T K D E L H M V N I S E A T T E G E E I V K A V L V S L K P S T L P S A Y D E E E
UniRef90_C1BMD8 A K D G I H S V N I S E A T T E G E E I V K A V L V S L K P S T L P S A Y D E E E
UniRef90_UPI0003EC1B03 E E S N V V E V T A M N H Q G K T T I E S V P L A N L H I K C L P M V S L G E F E L
UniRef90_UPI0003D09B1D A K D E L N V V A V N T Y G D N T P M P X A S L K L S V L P M V T
UniRef90_UPI00034FC4CA A K D E C N V V E R N H D H Q E I A V P V A N L K L S C Q P M F
UniRef90_T1GRJ7 I T L V H T V K D S L K I P I A V L K A G E T R A V N P D V E F Y
UniRef90_M2XKD8 L V E K D R A P I S M Q P E G D A K K V T L C A L L P G V M E S I P L N V I L S
UniRef90_T1MRA2 V E K G K T D L V Q Q C T V K N K E P V Y L C A L L P G V S V T C H L D L E F E
UniRef90_I1EL46 M N P K E R N I A V T V E N E E E R F V I A S L R L D G V E Q V S L S L S I
UniRef90_M7CKU9 D G F E F E
UniRef90_I11Y26 A S K A E R K V R L Q C T V K N R D P L L L C T L L P G Q S E T L N L D L E F E
UniRef90_F2UJR3 C K D D V V T V Q V E L P E Q E V K F Q V C H L R P G T V D Q F N T E L V F D
UniRef90_UPI000350F721 M N V L K G S P L K V T M A T L K K M P V Q P M V P L G S F E
UniRef90_U5EYC7 T C S G E G E D V Q V L T S E D N T Y L L C T L L K K S S I P Q W S L D L N F M
UniRef90_G1PZJ7 A K D A K W T A L S R Y V I F I I F Y A A T L S Q L D Y C S R F K W E L
UniRef90_D3ZP35 A K N E L H I I E A E A M N C E V T L T T L K M S A Q P T V S L G G F E I
UniRef90_M1D260 S S N K K S I V Q C K V G D K E P I Y V C S L L P E K L E T C P L N L E F E
UniRef90_F4QB12 A K G T E R N T L V V K Y D G Q E Y S L C S L L V L G K N E H S L N D L T F E
UniRef90_E4WQN4 A K G K H V I E L S A V D A N S E K C C S V L L P E K V L E S D A N P Y L R L P
UniRef90_A0A022QAP9 S S T K R S I V Q C E V G D K K P I Y M C C S L L P E K L E T C A L N L F E E
UniRef90_Q54NB6 A K D T G R N V L Q V K Y D G K T Y S L C S L L K L N A T E H S V L N D T N F E
UniRef90_A0A059D1U8 S S A E K S V L Q C F R E H K P P I F L C C S L L P N K I E S C S L D L E F E
UniRef90_S8D2E9 S S T K K S V V E C R V G K R K P I F L C C S L L P E R L E T C A L N L F E E
UniRef90_V8NSE3 D N D E T H V V V E S R N M P K P V P I V V
UniRef90_UPI0002B45AD9 S S K E R S I V Q C S V G N K S P I F L C S L I P N K I E S C P L D L E F E
UniRef90_T1GIM4 A K D D E R S V E
UniRef90_R7QNJ7 A D E K G R S V V S A T V R D G N Q K H G L V V L K A G N T E S R V M D V S F I
UniRef90_B9R9N7 P S T E R T V L Q C S V G H K N P V F L C S L L P D R I E S C S L N L E F K
UniRef90_UPI000350F0EF A G K G E K G G V L Q C S V E S K D P V Y L C A L V P E Q S E T C H L E L E F D
UniRef90_UPI0003C38EB4 A K E G E F N V V E V
UniRef90_E9C0N0 V E D D A R A T V Y L T A E R K T F P I S T L L G G R I M Q Q N L D L Y I E
UniRef90_D3BBG4 A T G T D R N V L V Q K Y D G K E Y S L C S L L K L G G I M Q S T S L D L V F E
UniRef90_UPI0002C33890 A A T K R S I L L Q C N V G N K S P V Y L C C S L L P E K N E C L Q L H L E F E
UniRef90_B8AUD1 A G K V E K G G G Q C C T V K N K D P P V F L C C S L L V P G Q S E T C H L E L E F E
UniRef90_M0XSH6 C D A A T R T V V Q C I V G N K K D P I I L L C C S L L N P K L A E M C C H L E I E F E
UniRef90_M5XHC6 E S K E R S I V Q C C S M G Y K S P I F L C C S L L P N K N E S C C Q L D L E F E
UniRef90_B9RL64 A K K K S V V Q C N V G N K S P V F L C C S L L F P E Q S E S C C Q L N L E F D
UniRef90_M1AYV7 N A E T K S L V Q C N V G N K S P V F L C C S L L P N K T E S C C H L D L E F E
UniRef90_G7K7Y8 V G P S T E K S I L L Q C S S G R K N P V F L C C S L L P N K V E T C P L N L F D E
UniRef90_G0QMS8 A T S N N S T T V Y A K V E G K Q V L A H L Q K G K V E H T V L D L V F A
UniRef90_G4Z0L3 S A D A Q V A L G L E T P D G K A W K G A V A H L G G K Q P L Q V K L D L V F
UniRef90_M4DBM7 S G K E K S V I Q C S T A G N T P T Y L C C S L L P N K T E C C C P L N L E F E
UniRef90_M4DRM9 L G K E K S V I Q C C S I G N A P V I K L C C S L L N P N K S E C C C P L N L E F N
UniRef90_C5X894 C D A A A R T V L Q C C N V G N K K P V I K L C C S L L N P K L A E T C C H L E I E F E
UniRef90_F4J9Q6 T A T N R S I L L Q C C N V G N K S P L L L C C S L L V T P D K V D S C C Q L N L E F E
UniRef90_C5Y997 V G K G E K G A V L Q C C S V G N K D P I F L C C S L L M P E Q S E T C H L E L E F F S
UniRef90_B9CWF3 S S E E R C I L Q C C S V G H K S P I F L C C S L L P G K A E S C C S L N L E F S
UniRef90_R0F4E1 L S K E K S V I Q C S I G D K T P I L L C C S L L P N K I E C C C Q L N L E F D
UniRef90_C1E8Q2 I P E D E R I V E A E D E E G A Q E F N I C C S T I L G G V V E S C H L D L I E
UniRef90_G7JN90 T A I T K S V L V Q C N V G N R S P V Y L C C S L L Y P G N T E S L Q L N L E F E
UniRef90_Q231H1 T K A G A Q A S V F A K V D G K E F V I T H L T Q G K V E H T T L D L Y F R
UniRef90_UPI00032A9594 S A I T K S T L Q C N V G N K S P I Y L C C S L Y P G K T E S L Q L N L E F E
UniRef90_T1FSD3 N K A S T D P V S V L I E R N N A Q F V L C C S L L V P G I L Y Q Q A L D L N E F S
UniRef90_V4U6V4 S S T E K S I L L Q C S V G D R S P I F L C C S L L P N K N E S C C P L K L E F D
UniRef90_UPI00042B93CA S S T E R A V L Q C S V G H K S P I T L C C S L L P N Q N E T C C S L D L K F D
UniRef90_V4TSP7 T A P K K S V V Q C N V G D K S P V F L C C S L L P E K A E S C C Q L N L E F E
UniRef90_J9IHB7 A Q G G K Y H L L A S M G K D L K L T L A T L Q K D K V E T V A L D I Y I N
UniRef90_A0A059C487 S A T N K S I V Q C N V G N K S P V F L C C S L L F P D G A E S S Q L N L E F E
UniRef90_UPI0002658616 A Q D P A S K L V Q V F V E Q E S D Y A I A T L K H G E I Y D C S M D L E F F A
UniRef90_S8D1Z0 Q D A I K K S V V Q C N V G N R T P V L L C C V L I P N Q T E S C H L D L E F E
UniRef90_M4DUL6 G K K G E A A L L Y V T V D G K L L V I G T L V Q D T P Q I S F D L V F E
UniRef90_D7TQZ5 A A S K K S L V Q C N V G N K S P V L L C C C C L L P D K T E S C C T L S L E F E
UniRef90_I1JAK5 S S S E K S I L L Q C S S G H K S P V F L C C S L L P D K V E S C C P L N L E F D
UniRef90_K3ZTX8 C D A A A G R T V L Q C C N V G N K P I K L C C S L L N P K L A E M C C R L E I E F E
UniRef90_R7TF17 S A K P E A V S V M V Q H K D A E F L I C C T L Q K G S L F Q Q P L D L E I F T
UniRef90_K8E9U2 T S E E E L S V V E D V G V N G A K E I F L A T L R R G K T E Q F S L D V V L S
UniRef90_UPI00042B7D27 S S M Q K S I L V Q C N V G N K S P V Y V C C T L F P D K A E C C Q L N L E F E
UniRef90_M0YLR1 K K D D K T T L F V R V D G G Q K L A I G C T L S M D K F P Q I Q F D L V F
UniRef90_UPI0002C33CDB K K A A D S V V I Y G K A K E Q K L V L G H L I P S Q I P Q I S F D L V F D
UniRef90_L1JUJ1 V K Q G K T V L K V K V A G K E C V I A S L I T E K M E H C V M E L M F E
UniRef90_V4LA88 N A T T R S I L Q C N V G N K S P L F L C C S L L V L S P E K V D S C C Q L N I E F E
UniRef90_I0YYQ4 A D N G S K V G L T C T M G E D G E V L L C C T L R E G A T E S Q S L D L V F
UniRef90_P0C1J6 A E A G K R T S V S V L V D E K E F V L C C T L V P N K I E D Q Q P L D I M F V
UniRef90_A9P2L8 A K E N E R V L L N V H D D N K K I V L G A L T Y G K C D Q F S L D I M F
UniRef90_M4E9J1 S S G T N R S I L L Q C N V G N K S P L F L C C V L S P E K V D S C C Q L N I E F Q
UniRef90_S2J7J7 I K D N K R T S V T V Q C N V G N K E F V L C C S T L I P N K I E Q Q A L D I S F V
UniRef90_A0A022RL14 G A K K T I V V Q C N V G N T T P I L L C C S L L P N K I E T L N V G L E F D
UniRef90_M4DUL3 K K G E T A L L Y V T V D G K R L V I G K L S Q G S L P Q I N V L D L J F
UniRef90_W9QZV6 S K A T T K S V L Q C A S V G H K S P V F L C C S L L P E K A E S L Q L N L E F E
UniRef90_V7CFR7 S S K E K S I L L Q C A S V G H K S P V F L C C S L L P N R I E S C C P L N L E F D
UniRef90_K1R2S2 V S E V G V M V C V D K A E F L L C C S L L G Y G N V I Q Q P L D L M F T
UniRef90_G0U018 A N A A I S L V V S L E G K Q F T I A T L D P K R N T F Q T S T D F V L
UniRef90_UPI0003599B00 K S G S N N E F V Q V L L Q H E S S E Y L L C T L Q H G K L L Q Q P L N L N F A



UniRef90_H0W5F4 S P G H L P A V G L L G A V F L S G Q E C

UniRef90_A9VD53 D D A V T F S I K Q G D G P V H L I G N E L T D

UniRef90_UPI00032970B8 E D V I T S K K R P A T S P

UniRef90_C1BMD8 N H E V K F T L S E G T G P I Y L L G S H I

UniRef90_UPI0003EC1B03 K A P V T I R L K A G T G P V S V S G L H L V E D

UniRef90_UPI0003D09B1D

UniRef90_UPI00034FC4CA

UniRef90_T1GRJ7 D T S V T F K L I K G N G P V Y I H G Q N L K D E

UniRef90_M2XKD8 D S D V T F T N N S K S N T V Y L T G Y M T V E D

UniRef90_T1MRA2 E K F V T F S V L G S R S V H L A G Y Y V G D

UniRef90_I1EL46 Q P P A K F E L I K G S G P V H L T G

UniRef90_M7CKU9 I P P V A F E L K S G T G P V Y L N G Q H L I L E

UniRef90_I1Y26 E K Y V T F S V L G P V H L T G Y Y I G N E

UniRef90_F2UJR3 E P V S F S L V R G K G P V H M I G N

UniRef90_UPI000350F721 T Q P F V L S L R Y S P E L V H I S G Q H L V

UniRef90_U5EYC7 E G D N V S F S T R G N G V V H L S G Y L I P D E

UniRef90_G1PZJ7 E T P V I L H I K

UniRef90_D3ZP35 T P P V V

UniRef90_M1D260 E D E V T F S V I G S H N V H L S G

UniRef90_F4QB12 E G K V S F Q V L G S G P I H V T G

UniRef90_E4WQN4 E P P L L K L T E G S G P V N V A A N H F V

UniRef90_A0A022QAP9 D D E V T F S I I G S H S V H L S G

UniRef90_Q54NB6 E G K E V E F S V S G N N T I C L T G Y F V D

UniRef90_A0A059D1U8 E D S A S F S V M G P K S I H L S G Y L L A D D

UniRef90_S8D2E9 E D E V I F S V V G T L S V H L S G

UniRef90_V8NSE3

UniRef90_UPI0002B45AD9 E D S I A F S V S G P I H L S G Q H V I R D

UniRef90_T1GIM4

UniRef90_R7QNJ7 D E S I T F E V S G K N V V H L V I G N

UniRef90_B9R9N7 D E L V A F S V I G P R S I H L S G Y F V S D E

UniRef90_UPI000350F0EF E V E V T F S V I G Q R S V H L V I G Y Y I A D

UniRef90_UPI0003C38EB4

UniRef90_E9C0N0 E T K I T F R V S G Q V P V H L V I G H

UniRef90_D3BBG4 E G K I T L Q V K G A G Q T I H L T G

UniRef90_UPI0002C33890 E A D E V M F S V L G P R S V H L A G Y Y L

UniRef90_B8AUD1 E K H V T F S V L G P R S V H L A G Y Y I G D

UniRef90_M0XSH6 E V D E V L F S V L G Q S S V H L S G Y Y L

UniRef90_M5XHC6 D G L I D F S V I G K R S V H L S G Y

UniRef90_B9RL64 E S D V V F S V I G P R S V H L T G Y Y L

UniRef90_M1AYV7 E A E V V F S V L G P R T V Y L T G Y Y V

UniRef90_G7K7Y8 D D L V K F S V I G S R S I H L S G Y F V P D E

UniRef90_G0QMS8 D Q K V S F G V Q G D S E V H L S G Y

UniRef90_G4Z0L3 G H K V K F Y L A K G S G A V N L T G Y

UniRef90_M4DBM7 D D D E T V E F V A G D R S I H L S G

UniRef90_M4DRM9 D E A V E F S V T G D R S I H L S G

UniRef90_C5X894 E D D V V F S V I G Q S S I H L S G Y Y V

UniRef90_F4J9Q6 E T D E V I F S V I G P R S V H L T G Y F L

UniRef90_C5Y997 E E E V T F S V I G Q R S I H L A G Y Y M T D

UniRef90_B9ICW3 D E L V A F S V I G P R S I H L C G Y H L R D E

UniRef90_R0F4E1 D D P V E F S V T G D R S I H L S G

UniRef90_C1E8Q2 D G Y A E F Y V E G S Y P V H L T G Y

UniRef90_G7JN90 E D G N V I L S V L G P R S I H L C G Y Y L

UniRef90_Q231H1 N D E V T F G V K G E A E V H L S G Y

UniRef90_UPI00032A9594 D G K V L S V I G P R S I H L C G Y Y L

UniRef90_T1FSD3 E G E L V L Y T K G K V A V H L T G Y V L Q D D

UniRef90_V4U6V4 E D D V V V F S V K G P Q S I H L S G D H L R D E

UniRef90_UPI00042B93CA E D D V A F S V I G P R S I H L S G Y H L R D E

UniRef90_V4TSP7 E D E V V F S V I G P V H L T G Y F L

UniRef90_J9IHB7 S Q N V T L S I S G A G E L H L S G

UniRef90_A0A059C487 E A E V T F S V V G P R S V H L S G F Y L

UniRef90_UPI0002658616 E G E I C F Y L K G D G V V F L T G H N L Y P D

UniRef90_S8D1Z0 E D D V V F S V L G P R S V Y L T G Y Y V

UniRef90_M4DUL6 K E F E L S H S G S V H F T G Y

UniRef90_D7TQZ5 E V E V I F S V I G P R S V H L T G Y Y L

UniRef90_I1JAK5 A D D L V A F S V V G S R S I H L S G Y

UniRef90_K3ZTX8 E D D V V F S V I G Q S S I H L S G Y Y V

UniRef90_R7TFI7 E G E L T F F L N G K G V V H L T G Y L I E D D

UniRef90_K8E9U2 D T F I M K N S G N V H V T G

UniRef90_UPI00042B7D27 E H E V V F S V I G P R S V H L T G Y Y L

UniRef90_M0YLR1 E K E F E L S H N S K T T S V F F S G Y N V

UniRef90_UPI0002C33CDB E E F E L S H K N G S V H F A G Y Q S V

UniRef90_L1JUJ1 E G Q I E F I T S G Q N E I H L A G N M M

UniRef90_V4LA88 E D E V V F S V I G P R S V H L T G Y F L

UniRef90_I0YYQ4 D H Y T E F K V Q G S A A V H L T G Y Y M P E

UniRef90_P0C1J6 E G E V T F S A K G Q N N I H L T G N Y V I F Q D

UniRef90_A9P2L8 S K P F K L S H S C T T G S V F F I G Y T T V V E

UniRef90_M4E9J1 E A E V I F S V I G P R S V H L T G Y F L

UniRef90_S2J7J7 E G E V T F A I K G D N V V H L T G N Y V F S D

UniRef90_A0A022RL14 E D D V V F S V I G P R S V Y L S G Y Y V

UniRef90_M4DUL3 D Q E F E L S H S L E T G S V H F T G Y

UniRef90_W9QZW6 E V D E V I F S V L G P R S I H L S

UniRef90_V7CFR7 D D L V A F S V I G S R S I H I S G F F A A D D

UniRef90_K1R2S2 E G E V T F F L L G N G V V H L T G Y L V E D

UniRef90_G0U018 E Q A I T F S A V G A G A V H L T G Y

UniRef90_UPI0003599B00 A G E V S F S L N G S G I V H L T G



