

1 10 20 30 40

QUERY	P I E L L P E T P S Q T A G P Y V H G L A L E A A G N P T R D Q E I W N R □ A	
UniRef90_C1DSM4	E L L P E T P S Q T A G P Y V H G L A G A A A G N P T R E Q E I W N E M A	
UniRef90_T2L635	L M L R E T A S Q T A G P Y V H G L A L A A A G N P V R E E E I W N E M A	
UniRef90_E2CL99	L Y Y L K E T P S Q T A G P F V H G L A P G A A G F D I Y K N E L G R D I □ A	
UniRef90_G0EA31	D Y L A E T A S Q T A G P Y V H G L A P D A A G F H I F E K N F G P N □ V	
UniRef90_Q4K5M0	P V Q L L P E T P S Q T A G P Y V H G L A □ A A A G N P P R P E E I W N Q M A	
UniRef90_K6C8P7	P V Q L L Q E T P S Q T A G P Y V H G L A P Q V A G N P P R E L E I W N E M A	
UniRef90_H0JIT8	D L L P E T P S Q T A G P Y V H G L A □ A A A G N P T R E V E I W N Q □ A	
UniRef90_A3XE62	L N Y L K E S A S Q T A G P Y V H G L A P G A A G F D I Y K Q E L G W D I A	
UniRef90_N8NZ30	L H E T P S Q T G G P Y V H G L L P K Q A G I E V F E N N F N N D L V	
UniRef90UPI000410AA0D	P L N Y L K E T A S Q T A G P Y V H G L I P G M A G F D I F E K N F T N V L V	
UniRef90UPI000371E410	L D Y L R E T A S Q T A G P Y V H G L A P L A T G I E I F D H D L G L D I A	
UniRef90_Q0FH37	L D Y L K E T P S Q T A G P Y V H G L A P G A A G F D I Y R Q E L G W D I A	
UniRef90UPI0002EAD9D5	P A S F L Q E T P S Q T A G P Y V H G L I P H Q A G F D I F E K D F S N T L V	
UniRef90B7QSI2	L T P L K E T P S Q T A G P Y V H G L A P G D A G F Q I Y D T E L G Q D □ A	
UniRef90UPI00035EE7B4	G Y R K E S P S Q T A G P Y V H G C T P N F A G I A V Y E T D L G S S M V	
UniRef90S9QUB7	P L N Y L K E S P S Q T A G P Y V H G L A P G A A G F A I F R Q E L G R E □ A	
UniRef90UPI0004729F0B	L L S L D N T □ S E M T G P V F G H S L I G E L D N D L L Q N F S Q N	
UniRef90UPI00046A9659	L E Y L K E S P S Q T A G P Y V H G C T P N F T G I E A Y G G D L G A T M K	
UniRef90J3C6K0	L G I L K E S A S Q T A G P Y V H G L P N F V D L G V Y E S D L G S A M V	
UniRef90A0A022H2S1	P E T A S Q T G G P Y V H G L A P K Q A G F E I F D N N F G S V L V	
UniRef90V9XBJ7	V T R F P E T P S Q T G G P Y V H G L A P Q Q A G F D I F D N N F G N V L V	
UniRef90H0HJJ2	L D R L K E S P S Q T A G P Y A H G L T P N F S G □ G V Y E S D L G V A M V	
UniRef90G8PK99	L E Y L K E S P S Q T A G P Y V H G C T P N F I G N G I L F K E D L G A R M V	
UniRef90UPI0004779B7	M L R E T A S Q T A G P Y V H G L A L E V A G F A S R D D E I W E N L A	
UniRef90UPI00036FDAB1	L R Y L K E T P S Q T A G P Y V H G L T P N F C D I G V Y E R D L G V A M V	
UniRef90B9K2N2	P L G Y L K E S P S Q T A G P Y V H G C T P N F S G I E F K E D L G S G P □ Y	
UniRef90D8NTX3	P F V H Y G E T A S Q T G G P Y V H G L A P R Q A G F D I Y E K A F G N V L T	
UniRef90UPI00037A7DE0	L D Y L K E S P S Q T A G P Y V H G T N P N W V E I G V W K D D L G L V L V	
UniRef90G4RCS4	L I S F A S T □ S E K T G P A F G H N M L G E Y D N D L I I N Y A R P G	
UniRef90V9VSL0	P L I S L E N T A S E I T G P V F G H N H D I A A T D N D L L T N F A Q P	
UniRef90A3JVX0	K R L N E T P S Q T A G P Y V H G C T P S F T G I D V Y N N D L G D S M V	
UniRef90X6GMP7	L G R L K E S A S Q T A G P Y V H G L P N F A G I G V Y E R D L G T A M V	
UniRef90U1IGT1	P L I P M R H T □ S E I T G P V Y G H E T V R A N D N D L T I Q A	
UniRef90V4RAL5	R L K E T P S Q T A G P Y V H G L G T V P S A A G L E I R T Q E N P H □ L	
UniRef90J3HM52	L L S L D G T K S E I T G P V F N P S I L G E L D N D L I H N Y A A P G	
UniRef90A6X5C9	L L S L E E G T K S E I T G P V F G H S M L H E L D N D L I L N Y A R P G E M	
UniRef90F7IWM1	L I S L E N T V S E I T G P V F G H G D I G A G D N D L I H N Y A A P G	
UniRef90A0A059IJ54	L P Y L P E T P S Q T A G P Y V H G L G T P N A L G A G I Y P Q D L G A A P I	
UniRef90Q1GJ76	P L T H L K E S P S Q T A G P Y V H G C T P N F A D I G V Y P E D L G Q K M I	
UniRef90A0A058ZJC2	L I S L Q N S V S E I T G P V F G H N D I D P I D N D L I L N Y A K P	
UniRef90Q11GN1	L P R L K E T A S Q T A G P Y V H G I G L T P N Y C D I G V F P E D L G A R M V	
UniRef90W8S6E7	P L I S I E Q T V S E I T G P R F G H G D I G A L D H D L L K N Y A T	
UniRef90B7RK18	P L N H L K E S P S Q T A G P Y V H G C T P N F C D I G V Y P H D L G D T M V	
UniRef90H1SF14	P L V A L N Q T L S E I T G P L F G A E F V R H G D S D L T A G H	
UniRef90UPI0003720A0E	L K L L P H M L T E I T G P V L G E D R I C E L D H D L T R Q H D	
UniRef90UPI0003FE5164	P L D T L I E T P S Q T A G P Y V H G C I P S F A G E G V Y P Q D L G T S P □	
UniRef90K9NEB2	P L V F L P H S L S E I T G P T V G A E R V N E K D N D L T A Q H E	
UniRef90P00437	L V S I P Q S I S E I T G P T T G P N F S H □ G F G A H D H D L L L N F N	
UniRef90KOP3P8	L H R L K E T P S Q T A G P Y V H G L G L T P N F C D R G V Y G D D L G T A M V	
UniRef90A4EGL3	P L L Q M P Q T Q T E I T G P T F G H G D I G L R D D D L I T N Y A	
UniRef90R4TDX6	P L I V L P H L L T E V T G P A L G P G R G E F D N D L T K G H	
UniRef90J2ESS4	P L V V V I K Q S L S E I T G P V F G D F N L G P L D H D L T K N S I K	
UniRef90W7SDZ6	P P Q L I P Q H L S E I T G P L L G A D R V G E L D H D L T R Q H	
UniRef90W4HGC1	P L L S V E N S L S E I T G P T F G H G A L G A L D H D L I K N H A I	
UniRef90B7RK17	L I S M N T T L S E Q T G P V F G H H D I L G A L D H D L I K N H A I	
UniRef90Q52134	L V S I P Q S I S E T S G P D F T H L K M G Q H D N D L L N F N T G	
UniRef90UPI000373582B	L L S L E Q G M G E I T G P A F N H N D L G P L D N D M I L N Y A K	
UniRef90D1C1C4	P V T P T Q T V G P F F H P C L □ L R P D A V I T T L V	
UniRef90UPI00034BFCEA	P L T L L P H T L T E I T A P V L G Q D R I G A L D H D L T R Q H D	
UniRef90A8LPE4	L S Y L K E T P S Q T A G P Y V H G C T P N H A G T G F Y D T D P G A V L K	
UniRef90UPI000469DAE4	L L S F P T T L S E E T S P V F G H N L I G E L D N D L I L N H A Q P	
UniRef90A9MBT1	L I S L E G T R S E I T G P V F G H N M L N E L D N D L I L N Y A R P G E M	
UniRef90UPI00035F59FC	L L S L E N S V S E I T G P V F G H H N D L I G P L D N D L I R N Y A K	
UniRef90UPI000468779A	P L L S M E S T T L S E E T G P R F G H H S T I G P H D N N L I S N Y T Q G	
UniRef90I5C4J4	V S F P H T L S E V T G P V F G H S I I G A L D H D L T V N F A T P G	
UniRef90UPI0004675122	L L S L E G T I I S E N T G P R F G H S I I G E L D N D L I H N Y A R P G	
UniRef90H0A7P5	P V E Y L K E T P S Q T G G P Y V H G I G L L P A A A G L A T R T Q E N P H	
UniRef90UPI00037017FE	P L L S L E S G P S E E T G P M F G H G M F G A L D N N L I L N W T K G	
UniRef90X5XP41	L L A F D N T A S E I T G P V F G H M A L G E L D N D L I H N F A K P	
UniRef90UPI000361E604	L V D I D P E L S E I T G P A Y G L E A L G P L D H D L T K N G Q I	
UniRef90U1IK13	T P S Q T V G P Y F K Y G L T P N G E Y E W N D A F S N N L L	
UniRef90UPI00046967FC	D P T V T E M T G P T F G H G M L G P D D D D L I V N Y A Q A	
UniRef90D4GN18	P L I S L Q N S L S E I T A P V F P T Q E L G P R D S D L I L N Y A K	
UniRef90C0ZS02	P L K L L P Q R L T L E T L G P V F G E D R V G A G E N D L T I A N G	
UniRef90P20372	L I S I A E T L L S E V T A P H F S A D K F G P K D N D L I L N Y A K	
UniRef90K2IZ10	L D T L I E T A S Q T A G P Y V H G I G L M P T Y A G N G G Y Y D E E I A T T P	
UniRef90X7FDJ7	M L K E S P S Q T A G P Y V H G C L P N L C G D G V Y P E D L G A R M Y	
UniRef90W4RYS0	I D I P A T L S E V T G P Q L N R L T L G A H A D L T A G F A	
UniRef90Q9L5B0	P L I P I P H G I M E A T A P V F G Q D A I G P L D H D L T R N G R V	
UniRef90I3TND4	U S G L T E G T G P R F A P S V R K L D F D L T K N G I T N	
UniRef90K2MMC7	M E Q L R Q T P S Q T V G P F F A Y A L T A E Q Y G Y P Y D S L M N H T L V	
UniRef90UPI00036E2C95	M D D F P E T A S Q T A G P Y V H G C T P N F A G I G V Y P Q D L G R H M I	
UniRef90UPI0004683C8F	P L V T I P Q T L T E V T G P M F G D R L F R P P V H D M T R Q G	
UniRef90UPI0004722871	E T A S Q T A G P Y V H G I P R M A G L A L H P V E L G R S L V	
UniRef90Q161V0	L I T P K P T L S E I T G P V F G E T D V T E L D S D L T R Q H P	
UniRef90D6YGP3	M L Y A T A S Q T V G P Y L H G L T G L N C A D L T A Q H T	
UniRef90V9X7F5	E L T P K P T L S E I T G P V F G E T D V T E L D S D L T R Q H P	
UniRef90Q46R62	UniRef90UPI000380EF50	P L L S M E Q S I G D R T G P V F G H D R L D P L D N D L I H N F A T
UniRef90V4QWTW8	M T A L K Q T P S Q T V G P Y F A Y G L C P Q Q Y N F D L K S L F S G V L A	
UniRef90B2JNR8		

QUERY UniRef90_C1DSM4 UniRef90_T2L635 UniRef90_E2CL99 UniRef90_G0EA31 UniRef90_Q4K5M0 UniRef90_K6C8P7 UniRef90_H0JIT8 UniRef90_A3XE62 UniRef90_N8NZ30 UniRef90UPI000410AA0D UniRef90UPI000371E410 UniRef90_Q0FH37 UniRef90UPI0002EAD9D5 UniRef90_B7QSI2 UniRef90UPI00035EE7B4 UniRef90_S9QUB7 UniRef90UPI0004729F0B UniRef90UPI00046A9659 UniRef90_J3C6K0 UniRef90_A0A022H2S1 UniRef90_V9XBJ7 UniRef90_H0HJJ2 UniRef90_G8PKK9 UniRef90UPI0004779B27 UniRef90UPI00036FDAB1 UniRef90_B9K2N2 UniRef90_D8NTX3 UniRef90UPI00037A7DE0 UniRef90_G4RCS4 UniRef90_V9VSL0 UniRef90_A3JVX0 UniRef90_X6GMP7 UniRef90_U1IGT1 UniRef90_V4RAL5 UniRef90_J3HM52 UniRef90_A6X5C9 UniRef90_F7IWM1 UniRef90_A0A059IJ54 UniRef90_Q1GJ76 UniRef90_A0A058ZJC2 UniRef90_Q11GN1 UniRef90_W8S6E7 UniRef90_B7RK18 UniRef90_H1SF14 UniRef90UPI0003720A0E UniRef90UPI0003FE5164 UniRef90_K9NEB2 UniRef90_P00437 UniRef90_K0P3P8 UniRef90_A4EGL3 UniRef90_R4TDX6 UniRef90_I2ESS4 UniRef90_W7SDZ6 UniRef90_W4HGC1 UniRef90_B7RK17 UniRef90_Q52134 UniRef90UPI000373582B UniRef90_D1C1C4 UniRef90UPI00034BFCEA UniRef90_A8LPE4 UniRef90UPI000469DAE4 UniRef90_A9MBT1 UniRef90UPI00035F59FC UniRef90UPI000468779A UniRef90_I5C4J4 UniRef90UPI0004675122 UniRef90_H0A7P5 UniRef90UPI00037017FE UniRef90_X5XP41 UniRef90UPI000361E604 UniRef90_U1IK13 UniRef90UPI00046967FC UniRef90_D4GN18 UniRef90_C0ZS02 UniRef90_P20372 UniRef90_K2IZ10 UniRef90_X7FDJ7 UniRef90_W4RYS0 UniRef90_Q9L5B0 UniRef90_I3TND4 UniRef90_K2MMC7 UniRef90UPI00036E2C95 UniRef90UPI0004683C8F UniRef90UPI0004722871 UniRef90_Q161V0 UniRef90_D6Y6P3 UniRef90_V9X7F5 UniRef90_Q46R62 UniRef90UPI000380EF50 UniRef90_V4QWTW8 UniRef90_B2JNR8

	50	60	70	80
K P D A P G E H	L L L G Q V Y D G N G H	L V R D S F L E	V W Q A D A N G E Y Q	
K D D A P G E H	I L I G K V V D G N G H	L I R D S Y L E	L W Q A N H E G V Y D	
K P N A E G E H	E V V G T V I D G N G D	L V R D T F V E	A W Q A D A N G H Y Q	
G P N A R G E R	R V E G T V I D G M G S A	V K D V L L E	A W Q A N A D G I Y A	
S A E T K G Q R	T I E G R V F D G S G T	P V R D V L L E	L W Q A N A D G R Y N	
K A D A P G E R	L L I G H V Y D G N G H	L V R D S F L E	F W Q A D H A G V Y D	
R P G A P G E H	V L L G N V F D G N G H	H I R D A Y L E	F W Q A D H E G A Y H	
K P G A P G E H	L L T Q G V F D G N G N	L V R D S F L E	F W Q A D H Q G Q Y D	
G P N A K G E R	R V E G R V I D G M G A P	I K D V L L E	V W Q A N A E G H H A	
K N N P Q G Q R	R L E G Q V F D G I G V	P L R D V L V E	I W Q A D A N G V Y P	
G P N T K G E R	T I E G R V L D G T G T	P L R D V L L E	I W Q A N A A G R Y N	
G P N A K G E R	R V E G R V I D G M D T P	L R D A L I E	V W Q A N A A G I Y A	
G P N A K G E R	R V E G G I V I D G T G N P	V K D V L L E	T W Q A N A D G V Y A	
T P E T Q G E R	T I E G R V I D G T G S	L C K D I L L E	I W Q A N A A G K Y D	
G P N A A G D R	R V E G R V F D G T G A P	V R D V L L E	V W Q A N A A G L Y P	
N D K T L G E R	T V R G R V I D G G G T P	L K D A L V E	I W Q A D A S G L Y N	
A P D V P G E R	R V E G G I V F D G T G S	P V T D V L L E	V W Q A D A A G I Y P	
G D L P I G E R	V V H G R V L D E K G H P	V P N V L L E	L W Q A N A G G R Y R	
T G P V K G T E	T V K G T V Y D G M G M P	L R D A M I E	I W Q A D S N G L F A	
N E Q T K G E R	T I C G K V F D G A G A P	L R D A L I E	I W Q A D S Q G F Y N	
T P D T R G E R	Q V E G R V F D G S G S	L V R D V L V E	I W Q A N A E G K Y A	
T D E T E G E R	V L L E G R V I D G T G T	P V R D A L L E	S W Q A N A H G R Y A	
NE K T K G E R	A V K I R V I D G S G T P	L K D A V V E	I W Q A D A A G L Y N	
N E Q T N G Q R	T I K G R V F D G A G T P	P L K D A M L E	I W Q A D S E G L F N	
K E G A E G Q H	T E L I G A V Y D G N G D	L V R D A L I E	I W Q A D S Q G E Y I	
N D K T T G E R	T T V T G R I F D G G G A	L V R D A V I E	I W Q A D S A G L Y N	
N D K T R G E R	T I T R G F V Y D G G G N A	L K D A L I E	I W Q A D S D G L Y N	
T P A T R G E R	R L E G R V Y D G S G T	L V R D V L I E	I W Q A N A D G K Y A	
G P E T K G E R	V I I E G T V T D G A G N	L V R D A L I E	I W Q A D A E G L H	
E E A I G Q R	V V V H G R V I D Q N A K P	V P N V L V E	F W Q A N A G G R Y R	
G E S P I G E R	I V H G R V L D E N A R P	V P N T L V E	I W Q A N A S G R Y R	
N A N T L G E R	S I T G T V V D G A G M	V L R D T M V E	I W Q A D A A G V H N	
N D K T R G E R	R V N I R V I D G D G S P	L P N D A L V E	I W Q A D A A G I Y N	
K G E P L G E R	I V H G H V L D E D G R G V	P V P N T L V E	L W Q A N A C G R Y Q	
Q G D A D G T R	R I E G G L L I D G A G Q P	V T D A M M E I	I W Q A D S K G R Y	
E S A I G E R	I V H G R V V D E R G K G V	S G A L L E	F W Q A N A G G R Y R	
P I G P R	L V H G R V L D E S S R P	P V P G A L L E	F W Q A N A G G R Y R	
G H S A L G E R	L L H G R I F D E N S R P	P L P H T L V E	I W Q A N A G G R Y R	
R D G A K G E R	T I R G T V T D G A G M	I L R D A L I E	T W Q A D A Q G I Y P	
L G D V K G Q R	R I T G H V I D G T G T P	L P R D A L V E	I W Q P D A A G L F N	
G E S P I G E R	I V H G R V L D E N G R P	P V P N T L V E	A W Q A N A G G R Y R	
D E K T K G E R	V T Y K M R V I D G T G S	I V R D A L I E	I W Q A D A A G L Y N	
T G D P V G E R	I V H G R V L D Q E G R P	P V P E T L V E	V W Q A N A G G R Y R	
N A D T R G D R	T V K G T V F D G T G T A L	K D A M V E	I W Q A D A D G I Y P	
A G E A I G E R	L V S S G R V L D E N G R P	P V P N A L I E	V W Q A N A A G R Y Q	
G E P Q G Q R	I V H G Q V R D S D G R P	P V P H S L I E	I W Q A N A G G R Y R	
A E G A Q Q G Q I	T I T G S I Y D G T G W A L	R D A M I E	A W Q A D A A G R F P	
G Q P Q G E R	I I H G R V L D E N G L P	V P G I L V E	I W Q A N A A G R Y A	
N G G L P G E R	I V A G R V V D Q Y G K P	V P V P N T L V E	M W Q A N A G G R Y R	
N D Q T L G E R	I I R G R I F D G A D T	L V R D A I A E	I W Q A D G A G L Y N	
A E G A Q Q G P R	I V R G T L R D E N G R P	V P P G K L I E	V W Q A N A G G R Y R	
A G E P Q G Q R	I V T G R L L D G D G R P	I P R D S L V E	I W Q A N A G G R Y R	
N G E P L G E R	I V H G R V V D Q F G K P	I P P H T L V E	I W Q A N S C G R Y Q	
T G E P L G E R	V V H G R V L D E N G R G L	P V P E V L V E	E A W Q A N A G G R Y R	
K P E T E G T R	R I E G R V L D G D G L P	V P V D D A M V E	I W Q A N H Y G R Y R	
G E P Q G Q R	I V H G Q V R D S D G V	P V P H T L V E	V W Q A N A G G R Y R	
T G S V K G Q E	T L R G T I F D G A G A P	V P R D A M V E	I W Q A D A A G R F A	
G E S A I G P R	I V H G R V L D E M G R G V	P V P G A L L E	V W Q A N A G G R Y R	
P V G G P R	L V H G R V L D E G N R P	V P P G A L L E	F W Q A N A G G L Y N	
D G D P V G E R	I V H G R V L D E T G R G V	P V P N T L V E	F W Q A N A G G R Y R	
K A L A V G E R	R V H G R V L D E N A R P	V A G A L I E	V W Q A N A G G R Y R	
E S A I G P R	I V Y Y G R V L D E N A R P	V P P N V L V E	F W Q A N A G G R Y R	
E S A I G P R	I V Y Y G R V L D E N G R P	V P P G A L V E	Y W Q A N A G G R Y R	
I L S G A G E R	R L T G I V Y D G S G H	A V R D A L L E	I W Q A D A E G R H N	
A A P A I G E R	L V F G H V L D E R G K P	V P P E T L V E	I W Q A N A A G G R Y R	
G E S A I G E R	I V Y Y G R V L D E R G Q G	V S G A L L E	F W Q A N S G G R Y R	
N G E P L G E R	V V T G R V L D E N G N P	V V A N T L V E	V W Q A N A A G R Y Q	
T P D T S G E R	R V E G K V Y D G D G A	V I P D C M L E	I W Q A D S Q G R F S	
G E A A I G P R	I V H G K L L D E D G R P	V V S G K L I E	V W Q A N A G G R Y R	
E G L P I G E R	I V H G Y V R D A F G Q P	V V P V R N A L V E	V W Q A N A G G R Y R	
G E A A Q Q G R	V V H G R V L D G D G K P	V P P H T L L E	V W Q A N A G G R Y R	
D G L P I G E R	V I V H G Y V R D Q F G R P	V V K N A L V E	V W Q A N A S G R Y R	
F L D A Q G E V I	E I V G S V F D G T G W A M	R D A L I E	S W Q C D A A G V F P	
A D G V R Q G K	T V G R I L D G T G S V	V V R D A L V E	W Q A D A E G R M P	
G E P L G E R	I V V S G R V L D E N G K P	V V R N S V L E	W Q C N A A G R Y Q	
N G E P L G E R	V V T G R V L D D D A G R P	V P P G T L I E	W Q A N A A G R Y T	
G E P L G E R	V V H G K V M D T D G R P	V Q P D I L V E	W Q A N A A G R Y Q	
S L D T P G Q R	V V T G Q V W D G A G A T	L S D A V L E	W Q A D A Q G H Y R	
G E A A K G K R	I L T G I Y D G D G T P	M R D A M I E	A W Q P D A A G L F A	
K G E P L G E R	I V V S G R V L D D D R G R P	V P P S T V V E	I W Q C N A A G R Y Q	
G P E T K D A R	T V T G C H D G A G D	V R D A I I V E	W Q A D G T G S L A	
Q161V0	G E P I G E R I V T G R V L D V R N G R P	V V R Q G L V E	W Q A N A A G R Y A	
D6Y6P3	G E P I G E R I V T G R V L D G E G R P	V V R R Q L V E	W Q A N A S G R Y Q	
V9X7F5	D G L P I G E R I V H G F V K D E F G N P	V V V E G A L V E	W Q A N A G G R Y R	
Q46R62	A P E L A G G Q R I V E G R V V D G T G A P	V V P D G M V E	W Q A N P A G R Y R	
UPI000380EF50	G S P I G E R T V V T G R V L D G E G R P	V V P V R R Q L V E	W Q A N A S G R Y Q	
V4QWTW8	D G E A L G E R I V V Y G K V L D E N A R P	V V P R N T L I E	W Q A N A G G R Y R	
B2JNR8	D R E A A G E H I T V G Q V F D G D G A V I	G D A M I E	V Q V D S E G R Y P	

QUERY	90	100	110	120
UniRef90_C1DSM4	D A Y N [L] E N A F N S F G R T A T T F D A G E W T [H] T [V] K P G V V N N A A G [V]			
UniRef90_T2L635	T [V] Y D L E K S F N G F A R T A T T F D A G E W T [V] K P G V V K N A A G G K			
UniRef90_E2CL99	A D Y D L S K P F N S F G R T A T T F D H G E W S [L] T T I K P G A V E H P S G Q			
UniRef90_G0EA31	H P G D V E D G F R G W G R [V] I T C S D F A S G [V] W R F Q T I K P G S V R D A N G K			
UniRef90_Q4K5M0	H P D D L D P N F R G W G R T C S D F A S G [V] W R F Q T I K P G A V V G R D G R			
UniRef90_K6C8P7	P [V] F D T E K P F N C F G R T A T T F D A G E W T [L] N T I K P G V V S N A A G [V]			
UniRef90_H0JIT8	S E Y S P A N P F N G F G R T A T T F D D G Q W V L K T I K P G S M R N A A G [V]			
UniRef90_A3XE62	P [V] Y D V E K A F N G F G R T A T T F D A G D W T [L] H T [V] K P G Q V Q D Q R G Q			
UniRef90_N8NZ30	H P G P V E D G F R G W G R [V] I T D F E T G E W G F D T I K P G K T R G R N [V] G			
UniRef90UPI000410AA0D	S Q A D A D [V] N F H G W G R A G A D F K T G V W H F D T I K P G T V P G R K A S			
UniRef90UPI000371E410	H P A D L D A D F R G W G R A G S D F E S G [L] I T F E T I K P G V T T D K A G R			
UniRef90_Q0FH37	H P G E V E E G F R G W G R S V T D F Q S G E W R F D T I K P G A V M G R H G R			
UniRef90UPI0002EAD9D5	H P G E V E E G F R G W G R [V] I T D F E T G E W G F D T I K P G P V G D E G H E			
UniRef90B7QSI2	H E A D Q D P A F R G W G R T G T A F D T G V Y T F E T I K P G K V A G R A G R			
UniRef90UPI00035EE7B4	H P E T P E N G F R G W G R V I S N S F E S G S W S F D T I K P G G V A G R N G R			
UniRef90S9QUB7	S P S E L D P N F T G W G R C P T S A D E G V F T F E T I K P P G R V P Y K D G R			
UniRef90UPI0004729F0B	H P E D P R H G F R G W G R [V] P D F E T G L W A F F E T I K P P G A V P P G R S G R			
UniRef90UPI00046A9659	H Q A P L D P N F G G C G R T I L T D D D G N Y T F R T I K P P G P Y P W P N G D			
UniRef90J3C6K0	S A G D A D P N F T G W G R S A G D M N T G E F T F E T I K P P G S V P F P D G R			
UniRef90AOA022H2S1	S H S E L D P N F T G W G R Q P T H M E S G E F R F E T I K P P G R V P Y K D G R			
UniRef90V9XBJ7	H P G D L D P S F R G W G R T G T D F G V Y T F E T I K P P G S V A G R G G A			
UniRef90H0JJ2	H P D D L D P N F R G W G R T G G D F E T G V F T I L E T I K P P G A V T N P D G S			
UniRef90G8PK9	S P S E A D P N F T G W G R Q A T D M A T G E C L F E T I K P P G R M P F P D G R			
UniRef90UPI0004779B7	S P G D A D P N F T G W G R Q P V N L E T G E C F E T I K P P G S V P F P D G R			
UniRef90UPI00036FDAB1	A E F D N K K P F S G F G R S A C A T D G H Y Y H F Y T I K P P G R V D F D H Q			
UniRef90B9K2N2	S P S E A D P N F T G W G R C P S R A E D G V Y S F D T I K P P G K V P F K D G R			
UniRef90D8NTX3	S P S E T D P N F L G W A R C P G D M A T G E F V F H T I K P P G K V P F A G G R			
UniRef90UPI00037A7DE0	H P G D R D P A F R G W G R T G A D F D T G T Y R F E T I K P P G A V A W R G D T			
UniRef90G4RCS4	S P Q E T D P A F G A W A R Q P V S E K D G T F R F E T I K P P G R V P W P D G R			
UniRef90V9VSL0	H K A P L D P N F G G F G R T I L T D E D G Y Y Y W F R T I K P P G P Y P W P N G D			
UniRef90A3JVX0	H K K D L D P N F G G C G R T I L T D E H G C Y H F R T I K P P G A Y P W R N N D			
UniRef90X6GMP7	S P Q E T D P N F T G W G R C P S R A E D G V Y S F D T I K P P G R V A S R D G R			
UniRef90U1IGT1	H P A P L D P N F T G A G R T Q S D D K G Y Y Y K F I T I K P P G A Y P W G N H H			
UniRef90V4RAL5	H Q D G F F G W G R T V T D W T T G R W W F E T I K P P G P V P Y R D G R			
UniRef90J3HM52	H K A A I D P N F G G C G R T I L T D E D G Y Y Y R F R T I K P P G A Y P W P N G D			
UniRef90A6X5C9	H K A A I D P N F G G V G R T I L T D E N G Y Y Y W F R T I K P P G P Y P W P N G D			
UniRef90F7IWM1	H K A P L D P N F G G C G R T I L T D E N G Y Y Y F R T I K P P G A Y P W R N N S			
UniRef90A0A059IJ54	A P N D P D P N V T G W G R A I L A D F D S G V W T L E T I K P P G T V P H P S G D			
UniRef90Q1GJ76	H P A S E T D P N F T G F G R C P S D M T T G A F A F D T I K P P G A V P F V D G R			
UniRef90A0A058ZJC2	H K A P L D P N F G G C G R T I L T D E N G Y Y Y F R T I K P P G A Y P W R N N N			
UniRef90Q11GN1	S P S E P D P H F T G W G R Q A S D K E T G V F T F E S I K P P G R V P F T N G R			
UniRef90W8S6E7	H F A P I D P N F G G C G R T I L T D E N G S Y Y F F R T I K P P G A Y P W R N N D			
UniRef90B7RK18	N N D P R D P N F S G W G R K A G D Y D T G E W V F D T I K P P G A V P F P D G R			
UniRef90H1SF14	H D A P L D P N F T G E G R A V T D A Q G R Y Y Q F K T I K P P G A Y P W H H N A			
UniRef90UPI0003720A0E	H V I M P L D P N F T G V G R T L T D A E G R Y R F E V T I K P P G A Y P W H D N A			
UniRef90UPI0003FE5164	G Q D G A D P A V S G F C R F A A D K D S G L F T L R T I K P P G A T P A R G G A			
UniRef90K9NEB2	H A A P L D P N F T G T G R T I V T D D A D G W Y Q F Q T I K P P G A Y P W G N H H			
UniRef90P00437	H K A P L D P N F G G V G R C L T D S D D G Y Y S F S R T I K P P G P Y P W G P N D			
UniRef90KOP3P8	S P S E A D P N F T G W G R C P T S G E D G Y F Q F E T I K P P G K V P F K D G R			
UniRef90A4EGL3	H V A P L D A N F G G C G R C L T D E E Q G H Y S F R T I K P P G P Y P W P N G D			
UniRef90R4TDX6	H P S P L D P N F D G A G R T I L T D S E G R Y T F E T I K P P G A Y P W H D N A			
UniRef90J2ESS4	H D A P L D P N F L G A G R C M T D K D G N Y Y K F Y T I K P P G A Y P W G N H Y			
UniRef90W7SDZ6	H D A P L D P N F S G V G R T I V T D A Q G N Y Y R F V S I K P P G A Y P W H D N A			
UniRef90W4HGC1	H V A P V D P N F G G C G R C L S D A D G Y Y Y N F R T I K P P G A Y P F R N N S			
UniRef90B7RK17	H K A P L D P N F G G C G R T I V T D A Q G G G Y S F R T I K P P G P Y P W P N G D			
UniRef90Q52134	H K A P L D P N F G G V G R A L T D S E E G R Y H F R T I K P P G P Y P W R N N S			
UniRef90UPI000373582B	H K A P I D P N F G G C G R T I L T D D S G Y Y Y F R T I K P P G P Y P W R N N S			
UniRef90D1C1C4	H P A P L D P T F I G F G R T G T D E E G R Y W F E T I K P P G V V P F D D Q Q			
UniRef90UPI00034BFCEA	H P A P L D P N F S G V G R A L T D A D E G R Y R F V T I K P P G A Y P W H R N A			
UniRef90A8LPE4	S G D P R D P H F T G W G R C A C D A D T G E F G F E T I K P P G R V P F I D G R			
UniRef90UPI000469DAE4	H Q A A A D P N F G G C G R T I L T D A E D G S Y E F R T I K P P G P Y P W P N G M			
UniRef90A9MBT1	S P S E S D P H F R G W G R C P S N M E T G E F F E T I K P P G R V P F R D G R			
UniRef90UPI00035F59FC	H K A P I D P N F G G C G R A L T D D S G Y Y Y F R T I K P P G P Y P W R N N S			
UniRef90UPI000468779A	H F A P L D P N F G G C C G R T I L T D D S G Y Y Y F R T I K P P G A Y P W P N N D			
UniRef90I5C4J4	H R A P L D P N F G G C G R T I S D S E E G H Y F F R T I K P P G A Y P W P N N D			
UniRef90UPI0004675122	H Q A A A D P N F G G C G R S I L T D E E G R Y W F R T I K P P G P Y P W P N G P			
UniRef90H0A7P5	A G D F L G W G R A A A D A E T G E W M F E T I K P P G V V R W R D G R			
UniRef90UPI00037017FE	H K A P L D P N F G G C C G R A L T D D E N G Y Y E F L T I K P P G A Y P W P N N D			
UniRef90X5XP41	H K A P L D P N F G G C G R T I L T D D A D G G Y A F R T I K P P G P Y P W P N G P			
UniRef90UPI000361E604	H D A P L D P N F L G S G R C L T D A N G G G Y R F Y T I K P P G A Y P W G N H P			
UniRef90U1IK13	D P Q D T R S S F K G F G R V G T D K G G G G F A F D T I K P P G V V P D A D G K			
UniRef90UPI00046967FC	H A A P L D P N F G G C G R C I S G E D G S Y Y S F R T I K P P G P Y P W P N G D			
UniRef90D4GN18	H K A P I D P N F G G C G R M L T D D N G Y Y Y C F R T I K P P G P Y P W R N Q D			
UniRef90C0ZS02	H P A P L D P F F N G G L G R C V T D A N G H Y S F T T I K P P G A Y P W H D N A			
UniRef90P20372	H P N D Q D P N F G G C G R M L T D D N G Y Y Y V F R T I K P P G P Y P W R N N E			
UniRef90K2IZ10	G T E G A D P A F T G H C R F A A D A E T G E F T L R T I K P P G V Y T G R G G V			
UniRef90X7FDJ7	H K A P L D P N F G G C G R C I T D D H G R Y A F K T I K P P G A Y P W R N H Y			
UniRef90W4RYS0	G G D P R D P A F A G F V R A A D P E T G D W T F D T I K P P G R V P W P D G R			
UniRef90Q9L5B0	H A A P L D P N F R G T G Q V L T D D H G R Y A F K T I K P P G P Y P W P N G P			
UniRef90I3TND4	H D A P L D P N F T G A G R V V T D D E G R Y S F I T T I K P P G A Y P W H P N A			
UniRef90K2MMC7	H D A P L D P N F R G S G R C M T D A N G N Y Y V F Y T I K P P G A Y P W G N H F			
UniRef90UPI00036E2C95	T A P H T D R G F L G F G R V G T G T L P G R Y Q F T T I K P P G A T G E G S			
UniRef90UPI0004683C8F	G Q K G A D P A V S G F G R C P C D A I D G R F R F E T I K P P G S V A F P D G R			
UniRef90UPI0004722871	H D A P L D P N F T G Q G R I T T D E E G R Y R F I T I K P P G A Y P W H H N A			
UniRef90Q161V0	G N D G F T G W G R V A T D F D T G V F S F E T I K P P G C V L D A G G G K			
UniRef90D6Y6P3	H A E D A R E G F T G F G R V P T A E D G S F R F V T I K P P G P Y P W H D N A			
UniRef90V9X7F5	UniRef90Q46R62	H P A P L D P N F T G Y G R C L T D D D G C Y R F T T I K P P G P Y P W H H N A		
UniRef90UPI000380EF50	H A E D A R E G F T G F G R V P T A E D G S F R F V T I K P P G P Y P W H H N A			
UniRef90V4QWT8	H V A P L D P N F G G C G R C M T D E D G N Y Y V F R T I K P P G P Y P W R N H D			
UniRef90B2JNR8	A S R E A K T G F R G F A R F G T G T D Q K R F I F E T I K P G R A S P			

QUERY

UniRef90_C1DSM4
UniRef90_T2L635
UniRef90_E2CL99
UniRef90_G0EA31
UniRef90_Q4K5M0
UniRef90_K6C8P7
UniRef90_H0JIT8
UniRef90_A3XE62
UniRef90_N8NZ30
UniRef90UPI000410AA0D
UniRef90UPI000371E410
UniRef90_Q0FH37
UniRef90UPI0002EAD9D5
UniRef90_B7QSI2
UniRef90UPI00035EE7B4
UniRef90_S9QUB7
UniRef90UPI0004729F0B
UniRef90UPI00046A9659
UniRef90_J3C6K0
UniRef90_A0A022H2S1
UniRef90_V9XBJ7
UniRef90_H0HJJ2
UniRef90_G8PKK9
UniRef90UPI0004779B27
UniRef90UPI00036FDAB1
UniRef90_B9K2N2
UniRef90_D8NTX3
UniRef90UPI00037A7DE0
UniRef90_G4RCS4
UniRef90_V9VSL0
UniRef90_A3JVX0
UniRef90_X6GMP7
UniRef90_U1IGT1
UniRef90_V4RAL5
UniRef90_J3HM52
UniRef90_A6X5C9
UniRef90_F7IWM1
UniRef90_A0A059IJ54
UniRef90_Q1GJ76
UniRef90_A0A058ZJC2
UniRef90_Q11GN1
UniRef90_W8S6E7
UniRef90_B7RK18
UniRef90_H1SF14
UniRef90UPI0003720A0E
UniRef90UPI0003FE5164
UniRef90_K9NEB2
UniRef90_P00437
UniRef90_K0P3P8
UniRef90_A4EGL3
UniRef90_R4TDX6
UniRef90_I2ESS4
UniRef90_W7SDZ6
UniRef90_W4HGC1
UniRef90_B7RK17
UniRef90_Q52134
UniRef90UPI000373582B
UniRef90_D1C1C4
UniRef90UPI00034BFCEA
UniRef90_A8LPE4
UniRef90UPI000469DAE4
UniRef90_A9MBT1
UniRef90UPI00035F59FC
UniRef90UPI000468779A
UniRef90_I5C4J4
UniRef90UPI0004675122
UniRef90_H0A7P5
UniRef90UPI00037017FE
UniRef90_X5XP41
UniRef90UPI000361E604
UniRef90_U1IK13
UniRef90UPI00046967FC
UniRef90_D4GN18
UniRef90_C0ZS02
UniRef90_P20372
UniRef90_K2IZ10
UniRef90_X7FDJ7
UniRef90_W4RYS0
UniRef90_Q9L5B0
UniRef90_I3TND4
UniRef90_K2MMC7
UniRef90UPI00036E2C95
UniRef90UPI0004683C8F
UniRef90UPI0004722871
UniRef90_Q161V0
UniRef90_D6Y6P3
UniRef90_V9X7F5
UniRef90_Q46R62
UniRef90UPI000380EF50
UniRef90_V4QWTW8
UniRef90_B2JNR8

130 140 150 160

170 180 190 200

QUERY	UniRef90_C1DSM4	UniRef90_T2L635	UniRef90_E2CL99	UniRef90_G0EA31	UniRef90_Q4K5M0	UniRef90_K6C8P7	UniRef90_H0JIT8	UniRef90_A3XE62	UniRef90_N8NZ30	UniRef90UPI000410AA0D	UniRef90UPI000371E410	UniRef90_Q0FH37	UniRef90UPI0002EAD9D5	UniRef90_B7QSI2	UniRef90UPI00035EE7B4	UniRef90_S9QUB7	UniRef90UPI0004729F0B	UniRef90UPI00046A9659	UniRef90_J3C6K0	UniRef90_A0A022H2S1	UniRef90_V9XBJ7	UniRef90_H0HJJ2	UniRef90_G8PK99	UniRef90UPI0004779B27	UniRef90UPI00036FDAB1	UniRef90_B9K2N2	UniRef90_D8NTX3	UniRef90UPI00037A7DE0	UniRef90_G4RCS4	UniRef90_V9VSL0	UniRef90_A3JVX0	UniRef90_X6GMP7	UniRef90_U1IGT1	UniRef90_V4RAL5	UniRef90_J3HM52	UniRef90_A6X5C9	UniRef90_F7IWM1	UniRef90_A0A059J54	UniRef90_Q1GJ76	UniRef90_A0A058ZJC2	UniRef90_Q11GN1	UniRef90_W8S6E7	UniRef90_B7RK18	UniRef90_H1SF14	UniRef90UPI0003720A0E	UniRef90UPI0003FE5164	UniRef90_K9NEB2	UniRef90_P00437	UniRef90_K0P3P8	UniRef90_A4EGL3	UniRef90_R4TDX6	UniRef90_I2ESS4	UniRef90_W7SDZ6	UniRef90_W4HGC1	UniRef90_B7RK17	UniRef90_Q52134	UniRef90UPI000373582B	UniRef90_D1C1C4	UniRef90UPI00034BFCEA	UniRef90_A8LPE4	UniRef90UPI000469DAE4	UniRef90_A9MBT1	UniRef90UPI00035F59FC	UniRef90UPI000468779A	UniRef90_I5C4J4	UniRef90UPI0004675122	UniRef90_H0A7P5	UniRef90UPI00037017FE	UniRef90_X5XP41	UniRef90UPI000361E604	UniRef90_U1IK13	UniRef90UPI00046967FC	UniRef90_D4GN18	UniRef90_C0ZS02	UniRef90_P20372	UniRef90_K2IZ10	UniRef90_X7FDJ7	UniRef90_W4RYS0	UniRef90_Q9L5B0	UniRef90_I3TND4	UniRef90_K2MMC7	UniRef90UPI00036E2C95	UniRef90UPI0004683C8F	UniRef90UPI0004722871	UniRef90_Q161V0	UniRef90_D6Y6P3	UniRef90_V9X7F5	UniRef90_Q46R62	UniRef90UPI000380EF50	UniRef90_V4QWTW8	UniRef90_B2JNR8	
	E Q P Q R R E T L I A K R C E V D G K T A Y R F D I R I Q G E G E T V F F D F	E Q P E R R K T L I A K R C E V D G K T A Y R F D I R I Q G E G E T V F F D F	E S P A R R Q T L I A K R E E A D G K V R Y R L D I R I Q G E G E T V F F D F	E W E V R R Q T L I A Q R E V R G D E V V Y R F D I R I Q G E G E T V F F D F	E W E V R R Q T L I A H P C E V N G Q R A Y R F D I R I Q G E G E T V F F D F	E Q P Q R R E T L I A R R C E V D G K T A Y R F D I R I Q G E G E T V F F D F	L P E P E R R A T L I A R R C E I L D G R L A Y R F D I H L Q G P Q E T V F F D I	E W E H R R A T L I V A K R S E R D G V L V Y R F D I T L Q G E D E T V F F D I	E W E P R R Q T L I A K R E E R D G E V V Y R F D I Y I Q G D K E T V F F D I	E W E P R R Q T L I A K R E E R D G E V V Y R F D I Y I Q G P E E T V F F D I	D Q P A R R S T L I A T R N E R G G K T V Y S F T N L Q G P E E T V F F D I	E W E G R R K T L V A P R E V R D G M P V Y R F D I R L Q G E G E T V F F D I	E W H N R R P T L I A K R S E R D G K V V Y R F D I R L Q G E G E T V F F D I	V E Q A E R R K T L I A Q R S E R D G K V V Y T F D I R L Q G A D E T V F F D I	E Q T D R R A T L L A Q P V S G T G S R V Y Q F D I H L Q G P G E T V F F D I	E H R H R V V A T L V A P R K G S I Y T F D I H L Q G E K E T V F F D I	E Q P P R R E T L I A R R T G P G R Y R F D I R L Q G E D E T V F F D I	P D Q A A I E Q L V A P L D M P M D S L A Y K F D D V L R G R R S T Y F E	E H Q N R I P T L L A K P E G E G V Y R F D I H L Q G P L E T V F F D I	E H R V V V S T L I A S R E G N N Y G F D I V L Q G D R E T V F F D I	E W E V R R K S L V A Q R S E R R N G K V I Y N F D V R L Q G T E E T V F F D I	E W E V R R N T L I A S R S E R D G R T V Y T D I R L Q G G G A E T V F F D I	E H R V R V V A T L I A P R D G D T Y T F D I H L Q G E R E T V F F D I	E H R V R V P T L I A K Q S G D T Y T F D I Y I Q G E N E T V F F D I	I S P E R Q N T L I A V K E D T E E K P R Y R F D I Y I Q G N N E T V F F D I	E H R D R V A T L I A A R D G S T Y T F D I R L Q G E N E T V F F D I	E H K V R V V P T L I A A K K Q G N D Y V F D I H L Q G G E N E T V F F D I	E W E V R R Q T L I A R R G E R N G E V V Y T F D V R L Q G G G A E T V F F D I	P E P A R R A T L V A P R S M R D G L P V F T F D I R L Q G E N E T V F F D I	S D P D A I D R L V A R L D M P M D L R A Y R F D D V L R G R R S T F F E	P D P A A V E M L I A R L D M P L D T M A Y R F D I V L R G R R S T L F F E	I E H Q N R V P T L L A Q N D G K G S Y R F D I I L Q G D N E T I F F D I	E H Q K V R V P T L L A Q N D G K G S Y R F D I I L Q G I N E T V F F D I	V T D E K A R A R M I S S F T K P E W A L C Y R F D I V L R G R N A T P M E	A G A P W L Q E T M I A G R F D A D G M P G Y R L D I H L Q G E K E T V F F D I	P D K K A A I E Q L I A A L D M P M D A R A Y K F D I V L R G R R S T L F F E	P D K S A V E R L V A P L D M P M D M L A Y K F D I V L R G R R A T L F F E	P D P A A I D R L I A P L D M P F D C L A Y R F D D V V L R G R R S T L F F E	E H K D R V V S T L L A K K T G K G E Y W F E V K L Q G E D E T I F F D I	E H Q T R V K T L I A E A Q G D G Q Y H F D I R L Q G H H N E T V F F D I	P C Q Q G R D S L V A A L T I P L D T I A Y K F D I V L R G R R S T V F F E	E H Q N R V P T L I I A P R T G D T Y N F D I H L Q G E K E T V F F D I	I A D P V A I D M L T A K L D M P L D S L A Y R F D D V L R G R R S T L F F E	E H Q N R V Q T L I I A V Q E T A G V Y R F D D I Y L Q G E K E T V F F D I	V P D A K A R D R L V A A F T V P E Y A L G Y R F D D I V L R G R D A T P M E	I P D E K A R E R L V A R F T V P E W A L A Y E W D I V L R G R E A T V F E	E Q R P R A E T L I A K P D G E G Q Y R F D D I R L Q G D G E T V F F D I	V P D T R A K E R L I A S F T I P S Y A L G Y R W D I V L R G R D A T P M E	I A N P E A V Q Q L I A K L D M P M D C L A Y R F D D I V L R G Q R K T H F E	E H R Q R V V E T M V A Q R D G N F Y T L D I H L Q G P K E T V F F D I	I P S D E A I D R L V A R R T V P M D I R A Y R F D D I V L R G R R A T I F F E	I P D E K A R Q R M I A R R T E A E W A L A F Q F D I V V R G R E A S V F E D	V P K G R D L L I S K F T E E S F A L A Y R F D D I F V L R G N N A T P F E N L	V P D E Q A R Q R L I A R F T Q P E W A L S Y Q F D I V L R G S D A S V F E D	I P D A A A L D R L I M A P L D V P L D C L A Y R F D D I V L R G R R Q T L F F E	V N D P Q A V Q T M I A R L D N P M D C L A Y R F D D I V L R G Q R K T W F E	I P D A G A I E R L I A P L T V P M D A R A Y K F D M V L R G R R S T L F F E	V P E E R R G T L I A R R E E V D G N V V Y R F D D I R L Q G E G E T V F F D	V P D P K A R E R M L I A A Y T E P E W A L A Y R W D I V L R G R E Q T P F E	I E H R H R I P T L L V L P E A S G V Y R F D D I H L Q G D R E T I F F D F	L K S Q E A V K M L T A R L T T P M D S R A Y K F D I V L R G Q R Q T Y F E	I E H R M R V P T L I I G Q R E G D V Y H F D I H L Q G E K E T V F F D I	I P D K D A L E R L I A P L D T P F D S L A Y R F D D I V L R G Q R S T Y F E	V K D R G D L D R L V A P L D M P L D F L A Y R F D D I V L R G R R Q T M F E	I P D R Q A V E G L I I A L D M P M D A R A Y R F D D I V L R G R R S T L F F E	L N D P E A V K M L T A R L T T P M D S R A Y K F D I V L R G R R S T F F E	I E Q V G R R A T L I A E R T D A V D M P T Y R F D V V Q L Q G D A E T V F F D M	V K D R G D L D R L V A P L D M P L D F L A Y R F D D I V L R G R R Q T M F E	I P D R R A A I E T L V A Q A T I P F D A R A Y K F D I V L R G R R A S L F E	V P E E G A R E R M I A D F T E E G F A L G Y I F D I V L R G V N A T P M E D	V P A D R R A T L I A K K T G G N V Y T F D D V H L Q G D N E T V F F D	I P S D T A I D R L V A R L T V P M D I R A Y R F D D I V L R G R G A T I F F E	V G S E A A V R T L I A P L D V P L D C L A Y R F D D I V L R G H R A T W F E	V P E A A R H R M V S V F T V P N W A L G F R F D D I V L R G R N A S V F E	I P S Q Q R R A L I A L E D K S N D S R C Y R F D D I T L R G R R A T Y F E	I E Q R P R V D T L I A K K T A E G T Y R F D D I R L Q G A G E T V F F D I	V D D A Q A R E R M V S S F D V S E Y A L A Y R F D D I V L R G R K Q T V W E	UniRef90_X5XP41	I P S R E A I E T L V A R L D R P M D A L C Y Q F D D I T L R G R R Q T M F E	T A D A G A R D R L V A R F T Q P E F A L G Y M F D I V L R G A M A T P M E D	T E D A A A R E R L I A K F T E E G F A L G Y Q F D D I V L R G R N A T P M E	V P A E R R A T L L A H R K E V N G E I R Y I F D D I H M Q G S D E T V F F E L	I E H K S R V R T L L A Q P K G D G V F E I N I H L Q G P E E T I F F D	V P P E A R Q R M V S R F T E S G W A L G Y V Y D I V L R G R N E T P M E	UniRef90_Q161V0	I V P P E R R R D T L I A R R E G D T Y H F D D I H L Q G A R E T V F F D	I P D E D A R R R L I A T Y D R P E W A L G F R W D I V L D G P D A T Y M E E	I P T V D Q L R S L I A Q E D P P F D A R A Y R W D I V L R G R R A T F F E	V P A E R R G T L I A T A Q G G N G T L R W D D V V L L Q G A G E T V F F D I	I P D P K A R E R L V A V Y D H E W A T G Y R W D I V L T G S A A T P F E E	L P D P T L A D R L T A T L D M G E D C L A Y R F D D I V L R G R R S T F F E	V P A E R R A T L V A R R E T N A G N A V Y R F D D I H M Q G P N E T V F F D I

QUERY
UniRef90_C1DSM4
UniRef90_T2L635
UniRef90_E2CL99
UniRef90_G0EA31
UniRef90_Q4K5M0
UniRef90_K6C8P7
UniRef90_H0JIT8
UniRef90_A3XE62
UniRef90_N8NZ30
UniRef90_UPI000410AA0D
UniRef90_UPI000371E410
UniRef90_Q0FH37
UniRef90_UPI0002EAD9D5
UniRef90_B7QS12
UniRef90_UPI00035EE7B4
UniRef90_S9QUB7
UniRef90_UPI0004729F0B
UniRef90_UPI00046A9659
UniRef90_J3C6K0
UniRef90_A0A022H2S1
UniRef90_V9XBJ7
UniRef90_H0HJJ2
UniRef90_G8PKK9
UniRef90_UPI00047792B7
UniRef90_UPI00036FDAB1
UniRef90_B9K2N2
UniRef90_D8NTX3
UniRef90_UPI00037A7DE0
UniRef90_G4RCS4
UniRef90_V9VSL0
UniRef90_A3JVX0
UniRef90_X6GMP7
UniRef90_U1IGT1
UniRef90_V4RAL5
UniRef90_J3HM52
UniRef90_A6X5C9
UniRef90_F7IWM1
UniRef90_A0A059IJ54
UniRef90_Q1GJ76
UniRef90_A0A058ZJC2
UniRef90_Q11GN1
UniRef90_W8S6E7
UniRef90_B7RK18
UniRef90_H1SF14
UniRef90_UPI0003720A0E
UniRef90_UPI0003FE5164
UniRef90_K9NEB2
UniRef90_P00437
UniRef90_K0P3P8
UniRef90_A4EGL3
UniRef90_R4TDX6
UniRef90_I2ESS4
UniRef90_W7SDZ6
UniRef90_W4HGC1
UniRef90_B7RK17
UniRef90_Q52134
UniRef90_UPI000373582B
UniRef90_D1C1C4
UniRef90_UPI00034BFCEA
UniRef90_A8LPE4
UniRef90_UPI000469DAE4
UniRef90_A9MBT1
UniRef90_UPI00035F59FC
UniRef90_UPI000468779A
UniRef90_I5C4J4
UniRef90_UPI0004675122
UniRef90_H0A7P5
UniRef90_UPI00037017FE
UniRef90_X5XP41
UniRef90_UPI000361E604
UniRef90_U1IK13
UniRef90_UPI00046967FC
UniRef90_D4GN18
UniRef90_C0ZS02
UniRef90_P20372
UniRef90_K2IZ10
UniRef90_X7FDJ7
UniRef90_W4RYS0
UniRef90_Q9L5B0
UniRef90_I3TND4
UniRef90_K2MMC7
UniRef90_UPI00036E2C95
UniRef90_UPI0004683C8F
UniRef90_UPI0004722871
UniRef90_Q161V0
UniRef90_D6Y6P3
UniRef90_V9X7F5
UniRef90_Q46R62
UniRef90_UPI000380EF50
UniRef90_V4QTW8
UniRef90_B2JNR8

This figure displays a multiple sequence alignment of protein UniRef90_000042490D2 across 40 different species. The alignment is organized into three columns representing positions 10, 20, and 30. The sequences are color-coded based on conservation: black for highly conserved, blue for moderately conserved, and yellow for less conserved positions. The UniProt ID for each species is listed on the far left.

N G E P [] G E R | I I V | T G R | V [] D E D A R P | V A G T | [] V | E L W Q A N A A G R Y Q
UniRef90_Q28JN2 H D G A P G E R | I I V | H G R | V R D E D E R P | V R N T L | V E V W Q A N A S G R Y R
UniRef90_A3JX1 G E L A I P G R | I I V | Y G R | V T D Q D G R G I | A G A L | V E V W Q A N A G G R Y R
UniRef90_V5PUY0 N G E P L G E R M I | V T G R | V L D E G G P R | V P N T L | V E V W Q A N A C G R Y Q
UniRef90_K0EXW5 A G E P I G G Q R | I I V | H G R | L L D G D G K P | I P H S L I | E I W Q A N A A G G R Y R
UniRef90_Q93PS2 G E P I G E R | F V | H G Q | V M D E D G R A I | P N T L | V E I W Q A N A A G R Y S
UniRef90_W1NB34 P G L P V G E R | I I L | F G R | V V D Q F G K P | V P H T | L V E M W Q A N A G G R Y R
UniRef90_UPI00040D1A18 T P D V S G D R | R | E G R | V F D G D G V A | V P D C M L | E V W Q A D A Q G R F A
UniRef90_Q09B99 A G A P Q G E R | L I V | S S G R | V L D E N G R P | V R H A L | V E V W Q A N A A G R Y Q
UniRef90_E6V573 N G E P L G E R M I | L T G Q | V L D E R R R P | V A N T L | V E L W Q A N A S G R Y Q
UniRef90_M7MV75 G E P I G E R | I I V | A G R | V L D G D G R P | V A G Q L | I E V W Q A N A A G R Y Q
UniRef90_UPI00047D96B9 D E T V S G T R | R | I V V | G C | V F D G E D A P | V P D A M V | E V W Q A D S E G R Y A
UniRef90_UPI0002DBA87D K G Q P L G E R | I V V | S G R | V L D E N G R P | V R N R V | V E V W Q C | A G R Y Q
UniRef90_D3P5E3 T S A T P G E H | R | E G V | V T D G E G A P | I R D C | V V E I I W Q A G A D G T H A
UniRef90_Q12FV5 Q P H A Q G E H | R | T G Q | V F D G A G Q S | V L D A L | V E I I S Q P D A S G Q P S
UniRef90_J9SBY1 D G E P I G E R | R M V | V T G R | V V D G E G R P | V R R Q L | V E I I W Q A N S A G R Y Q
UniRef90_UPI000289A3E8 D A A P L G E K | I V V | T G R | V L D E D G K P | V R N S L | L E V V W Q C | A G R Y R
UniRef90_M1P0B5 G G E A I G Q R | F V | H G R | V L G W D G K P | V P N T L | V E A W Q A N A A G R Y R
UniRef90_S4AE93 R G D P | G E R | T V | T G R | V T D R Q G R P | I R G Q L | V E L W Q A N A A G R Y R
UniRef90_UPI00036E303B T P N T Q G E R | T L | E G K | V F D G S G T P | L R D V L | L E I I W Q A N A A G R Y N
UniRef90_UPI00038102CC Q P H A E G E H | T V | I G R | V L D G A G Q P | V S D A M I | E I I A Q L D A R G R E V
UniRef90_Q82MF7 R G E P I G E R | R M T | V S G R | L L D R D G R P | V R G Q L | V E E V W Q A N A A G R Y A
UniRef90_UPI000466363E A G E P L G E R | I T V | T G R | V L D R A G R P | V R G Q L | V E E V W Q A N A A G R Y A
UniRef90_U5VYU3 G E A Q G Q R | I V V | H G Q | V R D A D G R P | V R N T L | L I E V W Q A N A A G R Y R
UniRef90_UPI000345E6D4 UniRef90_M2XY80 T P N T Q G E R | T L | E G K | V F D G S G T P | L R D V L | L E I I W Q A N A A G R Y D
UniRef90_UPI0000F2F72C K G E P [] G E R | I T I S G R | V L D G E G R P | V R R Q L | V E I I W Q A N A A G R Y Q
UniRef90_B8H804 G E P Q G E R | I I V | A G R | V L D G D G R P | V A G Q L | V E I I W Q A N A S G R Y Q
UniRef90_I4XW57 Q A E T [] G E R | V A I | S G Q | V V D G D G R P | V N D A M L | E I I W Q A N A A G K Y D
UniRef90_U5WVK4 C G E P [] G E R | L V I | T G R | L L D G [] G R P | V R R Q L | I E I I W Q A N A S G R Y A
UniRef90_Q1AVN6 T E D A E G E R | T I | E G T | L Y D G A G E P | V T D G L | V E I I W Q A A P S G R Y D
UniRef90_Q2TPV5 R P G P V G P R | L V H | G R | V L D E G N R P | V P G A L | L E I I W Q P D G Q G R F A
UniRef90_N7BT46 T G E P L G E R | V V T | T G R | V L D R D G R P | V R H Q L | V E E V W Q A N A S G R Y R
UniRef90_UPI000364680B H A G T P G E R | V V T | T G R | V L D G D G R P | V V A H Q L | V E E V W Q A N A A G R Y R
UniRef90_G8SLL2 UniRef90_K2L5W2 H G G E P G E R | I I V | A G R | V L D G D G R P | V V A H Q L | V E E V W Q A N A A G R Y R
UniRef90_UPI00034CCA95 S P D I P G E R | R V G G R | I L D G D G A P M T D A L L | E I I W Q A D A S G T Y S
UniRef90_F2LN12 E P H A A G E Q | V L I | Q G | V F D G D G K T | L D A M L | E F T Q V D A S G R F P
UniRef90_D9WT40 Q G E P L G E R | T V S G R | L L D S G G R P | V R G Q L | I E I L W Q A N A A G R Y A
UniRef90_UPI00016A488B A P H A A G E H M L L | V G Q | V F D G D G N | V V S D A V L | E F T Q A D S A G R Y Q
UniRef90_W9GLZ1 G E P I G E R | R I | T G R | V L D G D G R P | V R G Q L | V E E I W Q A N A A G R Y Q
UniRef90_A0A052JJQ0 D P S A P G Q H | I V M G N | V Y D G S G A P | V V D A M I | E F L Q P D A D G V Y A
UniRef90_H2FTZ4 R G E V Q G E R | R L | T G K | V Y D G E G V A | I D D A M I | E I I W Q A N A A G R F H
UniRef90_UPI0001CBFDC3 S A Q A T G A P | V Q I | S G | C | I F D G A G T | P V A D A V L | E V W Q A D A A G I Y A
UniRef90_UPI00047E223B G E A V G G Q R | L V Y G R | V L D S G G R P | V P D T L | V E I I W Q A N A S G R Y R
UniRef90_UPI000237AA0A N P G A F V L | H R | L T D G N G D P | V P D G L | V E I I W Q A D E Q G R F D
UniRef90_UPI0002627A9D UniRef90_Q93PS1 T K D V D G K H | I T L | R G T | V L D G D G L | P V P D A L I | E I I W Q P D G G R F S
UniRef90_J2PSY5 L A R P L G Q R | I V V | A G R | V L D E Q G R P | V R G T V | M E I I W Q A N A A G R Y I
UniRef90_Q73WC9 R G E P I G E R | V V V | A G R | V V D E A G R P | V A G Q L | V E I I W Q A N A A G R Y R
UniRef90_A0A010PGQ0 N G E P I G E R | I V T | T G R | V L D G E G R A V | A G Q L | V E M W Q A N A A G R Y M
UniRef90_UPI000255DEB5 Q G E P L G E R | V V R G K | I L D G D G R P | V R N Q L | V E I I W Q A N A S G R Y Q
UniRef90_R4TC5 UniRef90_UPI00020006F2 T A E P [] G E R | T V S G R | V L D R D G R P | V P D A M I | E T W Q A D A D G R F D
UniRef90_D3DAK3 H A G E P G E R | I V A G R | I T D S A G R P | V R G Q L | V E I I W Q A N A A G R Y Q
UniRef90_C1D2D6 D D L P G E H | T V T G R | V L D A D G L | P V P D A L | V E I I W Q A G P Q G Q T G
UniRef90_UPI00047E7CF2 D E G A V W I R G | V T D G A G A P | V P D G L | V E T W Q A D R N G R F D
UniRef90_UPI00045EC709 G E P [] G E R | R I S G R | V L D G E G R P | V R R Q L | V E I I W Q A N A G G R Y Q
UniRef90_C6WS86 UniRef90_N9PS1 T G T V R D G A G E P | V A D A V | V E T W Q A D P D G R F D
UniRef90_UPI00047DD51B N G S P L G E R | I V V | T G R | V L D E Y G K P | V R N T L | V E I I W Q A N A A G R Y Q
UniRef90_UPI000369F212 G E P L G Q R | T V S G R | L L D R S G R P | V R G Q L | V E I I W Q A N A A G R Y A
UniRef90_I0RX86 A G E P I G E R | I V T | T G R | V L D G V G R P | V A G Q L | V E I I W Q A N A G G R Y H
UniRef90_W7GBR3 P A T A Q G E R | V E V Q G Q G | V F D G N G V P | V S D A V L | E I I W Q A D A Q G I Y A
UniRef90_A0A024JX30 H P G E P G E R | I I V S G R | L L D Q S G R P | L A G Q L | I E I I W Q A N A G G R Y R
UniRef90_M3AX20 G E P I G E R | T V A G R | V T D R R G R P | V R G Q L | V E I I L W Q A N A A G R Y A
UniRef90_A0A031GMN4 Q N G E P G E R | K V R G R | V L L D D G D G P | V R H Q L | V E I I W Q A N A A G R Y Q
UniRef90_UPI00047E0CED UniRef90_GTPG A | W I R G T | V F D G A G N P | V P D A M V | E S W Q A D P S G R F P
UniRef90_UPI00038225C1 R P D A V R L T G T | V Y D G N G D P | V P D A M L | E I I W Q A D A E G Q I P
UniRef90_UPI000255DEB6 UniRef90_D3PNP8 T L G E R | T L K G R | V L D G D N Q P | V P D A L V | E I I W Q A D A Q G R F R
UniRef90_I5CQ05 A N K N T Q D L | I I R G K | V Y D L H G E A V | D D A M I | E I I W Q V D Q K G E F
UniRef90_UPI0003B718EE V N K S Y D N L | T I T G S | V F D G D G Q A L | D D I M L | E T W Q S D E N G L Y S
UniRef90_UPI000469036E T G D P N G S R | T L T C H | V I D G D G V P | L K D A M V | E I I W Q A G P D G G T Y
UniRef90_D8NVG6 P G Q A A G Q V | N V I G R | V L N V H G E P | V R G A R L | E I I W Q A N T Y G R Y T
UniRef90_UPI0003B488FB UniRef90_F8EGN3 N P I D R K N A I | T I V G K | V F D G E G A V | V P D A M L | E I I W Q A D E D G N V V
UniRef90_C4RH13 UniRef90_GEDLPGER | R L I R G R | I V D G T G A P | V V D A I | V E S W Q A D P D G R F D
UniRef90_Q02CF8 P G S P G S | I R L Q G T | V Y D G D G V A L | H D C M L | E I I W Q A D S A G R Y A
UniRef90_UPI0002E4CB5C UniRef90_B7KA34 A K G E M I M I K G R | V L I D G C Q P | V K G A K V | I E I W Q A C T S G R Y N
UniRef90_M7AWN9 P S G H P D R | R L H G T | I F D G A G N P | V P D A L V | E I I W Q P D G D G I V P
UniRef90_W9GFR6 C P G A | I G Q R | I V H G F | V T D G N G T G I | Q D S M L | E I I W Q A D E S G Q Q P
UniRef90_G7GT11 G G E A I G Q R | I V H G F | V T D G N G T G I | Q D S M L | E I I W Q A N A A G R Y R
UniRef90_L8EVJ5 R G T P I G E R | T V T G R | L L N D R G R P | I P H Q L | I E I W Q A N A A G R Y A
UniRef90_UPI00037B3223 K N K N V S E | L T I E G S | V F D G N G I A L | D D V M L | E T W Q C | D E K G E F
UniRef90_B5HSP9 A P V G H P D T | T L Q G G H | I T D G E G S P | V P D A F L | E I I W S A D P S G N V P
UniRef90_E8QYB0 A V G E I T Y L S S G M | V R D A K G N P | I R N A T V | E I I W Q V D H H G A Y L
UniRef90_V4HXH3 K G K A K G I V I E I I S G Q V | F D Q N G Q N | E D A T I | D D L W Q A N S F G K Y H
UniRef90_UPI0003710D38 A P L G H P D T | A L Q G H | V Y D G E G N P | V P D A F L | E I I W G A D P E G N I P

90 100 110 120

UniRef90_UPI00042490D2	H D A P [] D P N F [] G A G R C V T D A E G R Y R F [] T I K P G A Y P W H P N A
UniRef90_Q28JN2	H K K D T D P N F G G C G R T V T D D Q G Y Y R F N T I K P G A Y P W P N G N
UniRef90_A3JVX1	H K A P [] D P N F G G C G R V I T D A D G N Y E F R T V Q P G P Y P W P N N D
UniRef90_V5PUY0	H D A P [] D P N F G G A G R A L T D A Q G R Y R F [] T I K P G A Y P W H H N A
UniRef90_K0EXW5	H D R D L D P N F D G A G R T Y T D S A G R Y E F T T V K P G A Y P W H H N A
UniRef90_Q93PS2	H P A P [] D P N F Y G A G R T V T A D D G T Y T F T T I K P G P Y P [] M N N Y
UniRef90_W1NB34	H K A P [] D P N F G G V G R C L T D E D G W Y R F R T I K P G P Y P W P N G []
UniRef90_UPI00040D1A18	D P Q D P N A A F K G F G R C G T D Q N G V Y S F D T I K P G V V P D P D G K
UniRef90_Q09B99	H D A P [] D P H F T G E G R V F T D E H G R Y R F T T I R P G A Y P W R N H Y
UniRef90_E6V573	H D A P [] D P N F L G A G R C L T D S E G R Y R F [] T I K P G A Y P W G N H P
UniRef90_M7MV75	H P A P [] D P N F T G V G R A I T G K N G E Y S F T T I K P A P Y P W H H N A
UniRef90_UPI00047D96B9	H P A D G R G G F R G Q R G T G D S N R F [] F D T I K P G P V G G
UniRef90_UPI0002DBA87D	H D A P [] D P N F T G T G Q V L T D D H G R Y R F T T I K P G A Y P W R N H F
UniRef90_D3P5E3	P G A A G F G R C G T T D E G [] Y F F E T V K P G A L G D
UniRef90_Q12FV5	V A D A Q A K G F T G F G R C G T G T A D H H F A F D T V K P G V A A P G
UniRef90_J9SBY1	H Q A P [] D P N F T G V G R C L T D D D G T Y R F T T I K P G P Y P W H R N A
UniRef90_UPI000289A3E8	H D A P [] D P N F G W G K M M T D D A G R Y R F [] S I K P G P Y P W G N H E
UniRef90_M1P0B5	H P A P [] D P H F N G V A R T L L T D E N G H Y S F Y T I Q P G C Y P W G N H H
UniRef90_S4AE93	H P A P [] D P N F T G C G R C L T D D D G T Y T F T T I R P G A Y A W H D N A
UniRef90_UPI00036E303B	H P A D [] D E F R G W G R A G S D F E S G [] L V T F E T I K P G A I T D K A G R
UniRef90_UPI00038102CC	T S A E Q A Q G F T G F G R C G T G T D Q C R F V F T T I K P G A A A D
UniRef90_Q82MF7	H P A P [] D P N F T G V G R T L L T D D Q G R Y T F T T I K P G P Y P W G N H T
UniRef90_UPI000466363E	H P A P [] D P N F T G F G R C L T D D R G A Y A F T T I K P G A Y P W H D N A
UniRef90_U5VYU3	H D A P [] D P H F T G L G R T L T D A D G H Y R F V T V K P G A Y P W G N H P
UniRef90_UPI000345E6D4	H P D D P R G G F R G F G R C P T D G E G R W G V Y T L K P G P V P G P Q G V
UniRef90_M2XY80	H P A P [] D P N F T G V G R C L T G D D G S Y S F T T I K P G P Y P W K N H Y
UniRef90_UPI0000F2F72C	S Q A D T D P A F Q G W G R T G A D F E T G [] W S F N T I K P G A T A G R K G S
UniRef90_B8H804	H P A P [] D P N F T G I G R C I T G P D G S Y R F T T I K P G A Y P W K N H A
UniRef90_I4WX57	H P E D L D P N F Q G F G R V P V D G E G R F R F T T I K P G S V P G L Q G S S
UniRef90_U5WVK4	H K A P [] D P N F T G T G R C L T D D D G G Y R F [] T I R P G A Y P W R N H Q
UniRef90_Q1AVN6	H P A P [] E E G F H G F G R S G T E D G G R F S F V T L K P G P V P G P D G A
UniRef90_Q2TPV5	G A H P R N S A F K G F G R R H C D K S G N F S F Q T I K P G R V P T A D G V
UniRef90_N7BT46	H K K A A I D P N F G G V V G R T I T D E N G Y Y W F K T I I Q P G A Y P L P N G D
UniRef90_UPI000364680B	H P A P [] D P H F T G G G R C L T D D E G R Y R F [] V T I K P G A Y P W H H N A
UniRef90_G8SLL2	H P A P [] H D P N F T G V G R C L T D A D G N Y R F Q T I K P G P Y P W H R N A
UniRef90_UPI00034CCA95	H P D D P R P G F R F G R C P T D A S G A Y G [] R T I K P G P V P G P H G D
UniRef90_K2L5W2	E N D V A L S S G R G L G R C G T G T D Q N R F Y F D T I K P G V V A D G T
UniRef90_D5USW6	H P A P [] D P N F T G V G R C L T G P D G S Y R F T T I K P G A Y P W H H N A
UniRef90_Q28JN1	D S A E G F G G R I V P D F E T G A Y G F D T I K P G A T N G
UniRef90_UPI0004769092	H D A P [] D P N F [] G G G R V L T D A D G N Y A F H T I K P G A Y P W G N H Y
UniRef90_F2LN12	A S R A A T S G F T G F A R V G T G T D Q H R F V V R T V K P A A T A A G
UniRef90_D9WT40	H P A P [] D P N F T G V G R T L L T G D D G S Y S F T T I K P G A Y P W R N H E
UniRef90_UPI00016A488B	A S R A D Q T G F T G F A R V V G T G T D Q H R F V V E T V K P G R T A D A D A D
UniRef90_W9GLZ1	H P A P [] D P H F T G V G R T L T G D D G S Y S F L T I K P G P Y P W G N H R
UniRef90_A0A052JJQ0	T E A G G A F R G F A R V V G T G T D P A R F V L R T V K P G P A G P
UniRef90_H2FTZ4	H P [] D L D P G F [] G F G R C G T T Q D D L S F V F D T I K P G A A Q D G H
UniRef90_UPI0001CBFDC3	H P A D A D P S F D G W G R V P T D A H G R F S F S T I K P G R V A G P G G K
UniRef90_UPI00047E223B	H P A P [] D P H F D G L G R V V T D S L G R Y E F M T I K P G A Y P W G N H H
UniRef90_UPI000237AA0A	H P S D P R P E W Q G F G R C P T D T A D G E F W F R T I K P G P L P T P T A E
UniRef90_UPI0002627A9D	H P D D P R P G F R G F G R C P T K P D G S Y E I L L T I L P G A I P G E N G A
UniRef90_Q93PS1	G H H P [] T A E F K G F G R A M C D A L G [] F S F E T I V K P G G A P M R D G V
UniRef90_J2PSY5	H D A P [] H D P N F T G A G R V I T D D E G R Y R F V T I V R P G A Y P W G N H H
UniRef90_Q73WC9	H Q A P [] D P N F T G A G R C L T G P D G W Y R F [] T I K P G P Y P W H H N A
UniRef90_A0A010PGQ0	H P A P [] D P N F T G V G R T I T G P N G E Y S F T T I I K P A P Y P W H H N A
UniRef90_UPI000255DEB5	H P A P [] D P N F T G V G R T I T G D D G S Y E F T T I I K P A P Y P W H H N A
UniRef90_R4TC5T	H P D D P R G G F R G F G R C P T D T N G D Y E I R T I M P G S L P G P A G G
UniRef90_UPI00020006F2	H P A P [] D P N F S G V G R T L T D A E G R Y H F T T I V K P G P Y P W R N H A
UniRef90_D3DAK3	H P A P [] D P N F T G A G R C L T D G D G Q Y R F Q T I I K P G P Y P W H R N A
UniRef90_C1D2D6	G H H A F S G F G R S D T R R D G G Y W [] F R T I V K P G L V S T P H G T
UniRef90_UPI00047E7CF2	H P D D P Q P G F R G F G R C P T D D D G A Y A I R T I V V P G A V P
UniRef90_UPI00045EC709	H P A P [] D P H F T G V G R T L L T D D D G G Y S F V S I I K P G P Y P W H R N A
UniRef90_C6WS86	H P D D P R N G F R G F S R S G T A P S G E F R L L T I V K P G P L P F G D G R
UniRef90_UPI00047DD51B	H D A P [] D P N F [] G A G R C L T D N E G R Y R F [] T I I K P G A Y P W G N H N
UniRef90_UPI000369F212	H P A P [] D P N F T G V G R T L L T G D D G G Y T F T T I I K P G A Y P W H T G A
UniRef90_I0RX86	H P A P [] D P N F T G V G R C L T K S D G S Y R F [] T I I K P G P Y P W H H N A
UniRef90_W7GBR3	H G E D P D P A F D G W G R V P T D D Q G R F A F T T I V K P G R V P G L R G E
UniRef90_A0A024JX30	H P A P [] D P N F T G A G R C L T G P D G T Y R F [] V T I V K P G P Y P W H H N A
UniRef90_M3AX20	H P D P L D P N F T G A G R C L T D G E G R Y R F V T I I R P G A Y P G R S A V
UniRef90_A0A031GMN4	H P A P [] D P N F T G I G R T L T G A D G T Y E F T T I I K P A P Y P W H R N A
UniRef90_UPI00047E0CED	H P D A P [] D P Q P G F R G F G R S H T V E P A G E Y G I L L T I I K P G R V D D G K G G
UniRef90_UPI00038225C1	E S G E P G G D F R G F G R C P T D D N G E Y G I C T L I L P G A L P
UniRef90_UPI000255DEB6	H Q E T G D G W T F T G W G R A T V D N V G T Y T F S T I V N P G P T E E G K
UniRef90_D3PNP8	H P A D P D P H F K G F G R S G T T G E F C F Q T I I K P G P V P P S P V P
UniRef90_I5C0Q0	H P A P [] D P N F T G Q G F F S I G R M G T G T I E G W F E T L C I P A A E K P G
UniRef90_UPI0003B718EE	S E S G F A R F V P D N L T K K F Y [] H T I V K P G F V Y N F D G K
UniRef90_UPI000469036E	G P T E G F S H W G R Q P T D A H S G E L V F E T L I L K P G A T A
UniRef90_D8NVG6	H P A D R D P N F D G F A V I H A D E E G R Y K F K T I I K P G A Y P T G P N T
UniRef90_UPI0003B488FB	S R E G D G Y T F T G W G R T A V D N V G H Y T F T T I V N P G A T E P G K
UniRef90_F8EGN3	G E N P [] F G R F G T G T D P E N R F V F H T I I K P V A I V N
UniRef90_C4RH13	H P D D P R G G F R G F G R S E T D G Q G C Y R L L T I V K P G S L P D P D G G
UniRef90_Q02CF8	Q S P A A D F R G F G R L A T D D H G G C I F Q T I I V K P G R V P G P E G R
UniRef90_UPI0002E4CB5C	Q R T G D G Y T F T G W G R G S V G N S G V Y T F T T I V N P G P T A P G A
UniRef90_B7KA34	H P A P [] D P N F Q Y W G Y G T T D D D G Q Y S F L T I V K P G S Y P V T R D W
UniRef90_M7AWN9	G S L R R D G T F T G F G R V Q T D R V G H Y S F S T I V V P G P M S D G A
UniRef90_W9GFR6	G S I L T S D P G F T G F G R T S T W R D G G Y S F T T I V V P G P T S Q G A
UniRef90_G7GT11	H P A P [] D P H F N G V A R T L T D A Q G N Y E F T T I I K P G A Y P W G N H H
UniRef90_L8EVJ5	H D A P [] D P N F T G T G R A L T D A A G R Y A F T T I I K P G P Y P T P D D A
UniRef90_UPI000371B3223	K E D T G F A R F I P N N L T K K F I L K T I V K P G P Y K G F D G K
UniRef90_B5HSP9	G S I R R D P E F T G W G R Q T D A N G H W T A R T I I L R P G A R G R S
UniRef90_E8QYB0	H S G S R D V N F Q G F G R F L T G S T G E Y L F R T I I K P V P Y P
UniRef90_V4HXH3	H P A P [] D E H F Q A W A I Q T K A G G H F R F K T I V F P G A Y P L N A S Q
UniRef90_UPI0003710D38	Q V D G S M R E F T G W G R L Q T D A N G H W S A R T I I L R P G A R G H S

130 140 150 160

UniRef90_UPI00042490D2	WR P Q H H F S L F G P A F A T R L V T Q M Y F P G D P L H G L D P M F N S
UniRef90_Q28JN2	WR P A H H F S V F G A A F C Q R L I T T Q L Y F E G D P L P L C D V Q T
UniRef90_A3JYX1	WR P A H H F S V F G H A F A Q R L I T T Q M Y F E G D P M I W Q C P V D T
UniRef90_V5PUY0	WR P Q H H F S L F G Q A F T Q R L V T T Q M Y F P G D P L F F Q D P V Y H S
UniRef90_K0EXW5	WR P A H H F S L F G Q A F T Q R L V T T Q M Y F P G D P L I Q H D M I Y S T
UniRef90_Q93PS2	WR P A H H L S L F G P S F L T R L V T Q L Y F E G D P L I P I C P V Q T
UniRef90_W1NB34	WR P A H H V S V M G P S I S T R L I T T Q M Y F P G D P L I P I C P V Q T
UniRef90_UPI00040D1A18	P Q A P H V L L A V F G R G M L R H Y T R I Y F A D E A A N G A D P V L A L
UniRef90_Q09B99	WR P A H H F S L F G A G L G T R L V T Q M Y F P G D A L L P Y D P F N S
UniRef90_E6V573	WR P Q H H L S L F G Q S F A S R L V T T Q M Y F P G D P L M Q Y D P M I T G T
UniRef90_M7MV75	WR P A H H F S L F G T D F T Q R M I T Q M Y F P G D P L F S S L D P I Y Q S S
UniRef90_UPI00047D96B9	E A A P H N V I L F M R G L L S H A Y T R I Y F A D E S A R N A A D P V L A S
UniRef90_UPI0002DBA87D	WR P A H H F S L H G E G G Q R L V T Q M Y F P G D P L L A F D P I Y N C
UniRef90_D3P5E3	G Q A P H A V T V F A R G M L S H A F T R L H F S D E T A A N D A D P V L A T
UniRef90_Q12FV5	Q A P F N V C V T M R G L L V H T F S R I Y F D D E A A A N S K D A V L N S
UniRef90_J9SBY1	WR P A H H F S L F G Q A F T Q R M I T Q M Y F P G D P L F A L D P I Y Q A S
UniRef90_UPI000289A3E8	WR P A H H F S L F G N V Y A Q R L V T T Q M Y F P S D P L F D Y D P I F Q S S
UniRef90_M1P0B5	WR P A H H F S L F G R Q F T E R L L V T Q M Y F P G D P M F F Q D P I Y N S S
UniRef90_S4AE93	WR P A H H F S F F G R A F T Q R L V T Q M Y F P G D P L L A L D P V L H S
UniRef90_UPI00036E303B	K C A P H V N I W I V A R G N I G L N T R L Y F S D E E T A N A A D P V L S S
UniRef90_UPI00038102CC	G Q A P H D V I V F M R G M L S H A F T R L Y F S D E E T A N A A D P V L Q S S
UniRef90_Q82MF7	WR P A H H F S L F G Q A F T Q R M I T Q M Y F P S D P L F A Y D P I L R S S
UniRef90_UPI000466363E	WR P A H H F S L F G T A F T Q R L V T T Q M Y F P G D P L F A Y D P I L Q S S
UniRef90_U5VYU3	WR P A H H F S V F G Q A F T Q R L V T Q M Y F P D D P L F R Y D P I Y H S S
UniRef90_UPI000345E6D4	Q A P H D V S V F A R G M L H R T V T R V Y F A D E A E A N A V D P V L A S
UniRef90_M2XY80	WR P A H V H F S L F G T E F T Q R M V T Q M Y F P G D P L F A L D P I Y Q A S
UniRef90_UPI0000F2F72C	T Q A P H A L V I F A R G N L G H T R V Y F E D E A E A N A D P V L N S
UniRef90_B8H804	WR P A H H F S L F G T E F T Q R I I T Q M Y F P G D P Q L F P L D P I Y Q T
UniRef90_I4XW57	T Q A P H V V L V F A R G L V K H L T R I Y F D G E P A N A A D P L L A C
UniRef90_U5WVK4	WR P A H H F S V F G T A F T Q R M I T Q M Y F P S D P L L A L D P I Y Q S S
UniRef90_Q1AVN6	T Q A P H M V A V F A R G L L K Q L I T R I Y F E D E P E A N A E D P V L R S M
UniRef90_Q2TPV5	M Q A P H A L S I F G K G N R R L Y T R I Y F A D E A S N A E D P V L S M
UniRef90_N7BT46	WR P A H H F S V F G H G F A Q R L I T Q M Y F E G D P L I W R C P I V K T
UniRef90_UPI000364680B	WR P A H H F S L F G T A F T Q R L V T T Q M Y F P G D Q L F H L D P I F S S
UniRef90_G8SLL2	WR P A H H F S L F G T E F T Q R V V T T Q M Y F P G D P L C A L D P I Y Q S S
UniRef90_UPI00034CCA95	Q A P H D V S V F A R G M L N R V V T R L Y F P E E E A A N A A D P V L N G S S
UniRef90_K2L5W2	A A P F V N I V F M R G M L V H A F T R R F Y F D D E A A A N A K D D I L Q S S
UniRef90_D5USW6	WR P A H H F S L F G T D F T Q R L I T Q M Y F P G D P L I A L D P I C Q S S
UniRef90_Q28JN1	WR P A H H L W L V A R G N L G H T R M Y F E D E G E A N A A D P V L Q G S S
UniRef90_UPI0004769092	WR P N H H F S V I G H Q F E H R L V T Q M Y F P G D P L F D Y D P I F Q S S
UniRef90_F2LN12	A P H V D V T V M M R G V L T H A F T R L Y F D D E S A A N A A D P V L E T
UniRef90_D9WT40	WR P A H H F S L F G T A F T Q R L I T Q M Y F P G D P L F V Y D P I L Q S S
UniRef90_UPI00016A488B	N D E P H V N V T V M M R G L T H A F T R V Y F D D E A A A N A S D P V L N A S
UniRef90_W9GLZ1	WR P A H H F S L F G R E F T Q R M I T Q M Y F P G D P L F A L D P I Y Q S S
UniRef90_A0A052JJQ0	G R A P A D V I V H M R G M L H A Y T R I Y F D D E A A A N E G D A I L S A
UniRef90_H2FTZ4	A P F T V V V L L R G L L S H A Y T R V Y F E D E G R A N D A D P V L N K
UniRef90_UPI0001CBFDC3	L Q A A H T V L V F M R G G L L R G A S T R L Y F A D D P Q L G S D P I L A L
UniRef90_UPI00047E223B	WR P A H H F S L F G R A F T Q R L V T T Q M Y F P D D P L F G Q D P I F N S
UniRef90_UPI000237AA0A	T E A P H D V T V L A R G M L N R V V T R V Y F P D E E Q A N A A D P V L S S
UniRef90_UPI0002627A9D	T Q A P H D V S V F A R G L L H V T R I Y F P E N T E A A N A A D A V L N S S
UniRef90_Q93PS1	I Q A P H V A V S I F G K G L N R H L Y T R V Y F D D E E A N K S D P V L N S
UniRef90_J2PSY5	WR P S H H L S L L G P A F A T R L V T Q M Y F P D D P L I E I D P I A N A
UniRef90_Q73WC9	WR P A H H F S V F G T A F T Q R L I T Q M Y F P G D P M F E L D P I F Q S S
UniRef90_A0A010PGQ0	W R S A H H F S V F G T D F T Q R L V T T Q M Y F P G D P I F A L D P I Y Q S S
UniRef90_UPI000255DEB5	W R P A H H F S L F G T D F T Q R M I T Q M Y F P G D P L F S L D P I Y Q S S
UniRef90_R4TC5	T Q A P H D V S V F A R G L L H R V V T R I Y F E D N D N S G D P V L A S S
UniRef90_UPI00020006F2	W R P A H H F S L F G T A F A Q R L V T T Q M Y F P G D P L F P H D P I L R S S
UniRef90_D3DAK3	W R P A H H F S L F G T E F S Q R L V T T Q M Y F P G D P L F R L D P I F Q S S
UniRef90_C1D2D6	L A P H Q I W L G M R G L L T H S T R I Y F S D E D N T T D P V L A L
UniRef90_UPI00047E7CF2	G E A P H D V S V F A R G M L H R L V T R I Y F P E Q I E A N A G D P V L S S
UniRef90_UPI00045EC709	W R P A H V H F S V F G D A F T Q R L V T T Q M Y F P G D P L F A L D P I Y Q S S
UniRef90_C6WS86	A Q A P H D V S V F C R G L L V R L V T R I Y F P D E P A N A E D P V L A S
UniRef90_UPI00047DD51B	W R P G H H F S L F G D Y F G S R L V T T Q M Y F P G D P L L A L D P I F Q G S S
UniRef90_UPI000369F212	W R P A H H F S L F G T A F T Q R L I T T Q M Y F P G D P L F R H D P I L Q S S
UniRef90_I0RX86	W R P A H H F S V F G T A F T Q R L V T T Q M Y F P G D P L F G L D P V Q S S
UniRef90_W7GBR3	P Q A P H V V L V F M R G G L L Q A T R A R I Y F S D E A S N A E D G L A L
UniRef90_A0A024JX30	W R P A H H F S L F G I A F T Q R L V T T Q M Y F P G D P L L D L D P I F G S S
UniRef90_M3AX20	W R P A H H F S L F G T A F A Q R L V T T Q M Y F P G D P L L A H D S I A R A
UniRef90_A0A031GMN4	W R P A H H F S L F G T D F T Q R M I T Q M Y F P G D P L F P L D P I Y Q G S S
UniRef90_UPI00047E0CED	L Q A P H V D V S V F A R G L L D R V V T R I Y F G D E A A A N A E D D V L A S S
UniRef90_UPI00038225C1	G Q A P H D V S V F A R G L L S R V V T R I Y F A D D P E D P V L A S S
UniRef90_UPI000255DEB6	G A P F H L V V V F A R G L L N K L H T R I Y L P E D T A A L E K D A L L L S S G
UniRef90_D3PNP8	C A V R V F A R G M L I H A V T R V Y F S D H D N T Q D P V F A G
UniRef90_15C0Q0	Q A P T H M I V F M R G L L S H V Y T R V Y F E F E K I L N Q E D P Y L K L
UniRef90_UPI0003B718EE	I Q S P H S I S V S S R G L N M T L N T R I Y F E G D D L T N D P L L S V
UniRef90_UPI000469036E	G Q A P H L A W I T A R G I N L G L T T R I Y F A D E D N S S D P V L A V
UniRef90_D8NVG6	M R P P H H F R M T G H E D E L V T Q L Y F D G E P L N D K D P L L L Q S S
UniRef90_UPI0003B488FB	A P F M L T V F A R G G L L N R F T R I Y L P E D T A A L A N D P L L L A S S
UniRef90_F8EGN3	G Q A P H S V I V F M R G Q I H S Y T R L Y F S D E V T L N E R D D V L N S G
UniRef90_C4RH13	T E A P H T L S V F G R G L L H R L V T R I Y F P D E Q E A N A V D P V L A L
UniRef90_Q02CF8	T Q A P H N V T V F A R G L L H R L V T R I Y F P A G D R A N S E D P V L A L
UniRef90_UPI0002E4CB5C	A A F S V A V F A R G M N R L F T R V Y L P E N E E A L A N D P L L L S S G
UniRef90_B7KA34	Q R P P H H F K V T A P T L S P L T Q L Y F S E E T E L N Q K D R I L G R
UniRef90_M7AWN9	A P F F S V C V F A R G L L D R L F T R A Y L P D G V R A L A S D T V L G S S
UniRef90_W9GFR6	A P F T A M V V F A R G L L N R F T R V Y L P D D A E A L A N D P F L S S
UniRef90_G7GT1	W R P A H H F S L F G R A Y T E R L V T Q M Y F P D D P F F
UniRef90_L8EVJ5	W R A A H S L S I S S R G L N M T L N T R I Y F E S D E L K N D P V L L S
UniRef90_UPI00037B3223	I H S P H S L S I S S R G L N M T L N T R I Y F E S D E L K N D P V L L S
UniRef90_B5HSP9	Q R T P H H V A V K I P G Q P K F T T Q C Y K G H P N N E R D G I L G S S
UniRef90_E8QYB0	G R T P H H V A V K I P G Q P K F T T Q C Y K G H P N N E R D G I L G S S
UniRef90_V4HXH3	Q R T P H H L K I S K R G Y H S L L T Q M Y F P D H P L N D K D G L F R S S
UniRef90_UPI0003710D38	A P Y S V C V F A R G L L V H F T R I Y L P D D E A A L T S D P L L T R

170 180 190 200

UniRef90_UPI00042490D2	V P D P A A R E R L I A R F T E P E V A L G Y E F D I V L R G R L A T P M E
UniRef90_Q28JN2	V P D P R D I D M L M A K L D M P F D S I A Y R F D I V L R G A R S T P F E
UniRef90_A3JVX1	I P S K K A I K T L I A D R T V P M D A R A Y K F D I V L R G N R Q T V F E
UniRef90_V5PUY0	T P A H A R D R L I A R F T E P E Y A L G Y E F D I V L R G A D Q T P M E
UniRef90_K0EXW5	V P A H A R E L L V S R R T E P E R A L A F E F D I V L R G R N A T P F E D
UniRef90_Q93PS2	A P E S S R E A M I A K F T K S E W A L A Y R F D I V L R S Q K N T H I E A
UniRef90_W1NB34	L N D P E A V Q T M I G R R S R P M D A L A W R F D I V V R G E L Q T W F E
UniRef90_UPI00040D1A18	V P A D R R A T L I A S R K S D G V Y T L D I R L Q G D G E T A F F D
UniRef90_Q09B99	T A D E K A R N R L I V S Q L D I S E I A L A Y R F D I V L R G R L Q T P W E
UniRef90_E6V573	P E R Y R N R L I A D F T E E G Y A L G Y Q F D I V L R G A D E T P F E
UniRef90_M7MV75	I T D A E A R N R L I V A T Y D H E W A T G Y N W D I V L T G S N R T W M E D
UniRef90_UPI00047D96B9	V P A E R R A T L L A Q P D P S M P G L Y R W D I R M Q G E R E T V F F D L
UniRef90_UPI0002DBA87D	V D D D K A R A R M V S S F T E N E F A L G Y R F D I V L R G R K M T V W E
UniRef90_D3P5E3	V P A D R R D T L I A R R L E T P G G G V V Y R F D I Q L Q G E R E T V F F D
UniRef90_Q12FV5	V P A E R R N T L I A R R T M T G A G P V Y R F D I H M Q G D K E T V F F D L
UniRef90_J9SBY1	I T D Q K A R D R L V A A Y T T H E W A T G Y R W D I V L A G P H R T L F E E
UniRef90_UPI000289A3E8	I P D L A A R Q R L I S R F T V D V D M L G Y E F D I V L R G R D A T P F
UniRef90_M1P0B5	V P A G A R E R M I A V F T R P N F A L G Y K F D I I L R G A H A T P F E
UniRef90_S4AE93	V T D E A A R A R L V A A Y D H P E W S L G Y R W D I V L D G P S A T L F E E
UniRef90_UPI00036E303B	I E Q P V R R S T L I A K R S E R G A K I V Y A F T N L Q G P E E T M F F D
UniRef90_UPI00038102CC	V P A E R R G T L L A R R Q V Q P A G V V Y Q F D I H M Q G D Q E T V F F D L
UniRef90_Q82MF7	V T D A A A R N R L I A T Y Q H P G F S L G Y A W D V L D G P S A T W I E E
UniRef90_UPI000466363E	V T D D A A R E R L V A T Y D H P E R S L G Y R W D I V L D G P A A T W I E E
UniRef90_U5VYU3	V P E F F A R D R L V A A F T V E L W A L G F R F D I V L S G A S A T P M E
UniRef90_UPI000345E6D4	L D S P E E R A T L I A Q A T E D G Y R F D I R L Q G E G E T V F F D L
UniRef90_M2XY80	I V D P K A R E R L V A N Y D H H E W S L G Y K W D I V L T G T H R T L M E E
UniRef90_UPI0000F2F72C	I E W A P R R Q T L I A K R F E E N G E V V Y R F D I R I Q G D D E T V F F D L
UniRef90_B8H804	I V D Q D A R D R L V A S Y T E P E W A L G Y R W D I V L T G A K R T W T E
UniRef90_I4XW57	V P E E R R A T L L A K Y A D A A G H Y Q W D I V I L Q G D A E T V F F D Y
UniRef90_U5WVK4	V T D P K A R E R L V A R Y D H P E S A L G Y R W D I V L S G D Y R T P M E
UniRef90_Q1AVN6	I G D E R L R K T L I A G R E G E S R Y R F D I R L Q G E G Q T A F F
UniRef90_Q2TPV5	L S E D E R V T L L I A T S E S P A A Y R L D I R L Q G D G E T V F F E
UniRef90_N7BT46	I P D K S A I L E R L I A P L D M P M D M R A F K F D I V L R G R R S T F F E
UniRef90_UPI000364680B	V T D E K A Q Q R L I A T Y T V A E W A L G Y Q W D I V L D G P G A T P
UniRef90_G8SLL2	I T D P K S R E L L I A R Y T T P E W S L G Y R W D I V L T G S H R T P
UniRef90_UPI00034CCA95	I G D P E A R A T L V A R R E E D G Y R F D I R L Q G E G E T V F F D
UniRef90_K2L5W2	V P A D R R D T L I A K R V I E T R T G V E Y R L D I H M Q G D A E T V F F D
UniRef90_D5USW6	I V D P A A R D R L I A D Y D H P E W S L G Y R W D I V L G G A G R T W T E
UniRef90_Q28JN1	I L D L E R R A T L I A A R D G T T Y R L D I R V Q G D N E M V F F D
UniRef90_UPI0004769092	V P Q H A R E L L I A K F T E A E F A L A Y Q F D I V L N G R H K T P F E
UniRef90_F2LN12	V P A A R Q R Q T L I A R R E T A N G V S V Y R F D I R M Q G E R E T V F F D L
UniRef90_D9WT40	V T D E S A R Q R L I V A T Y D Q P E W S L G Y R W D I V L D G P S A T W I E E
UniRef90_UPI00016A488B	V P A E R R A T L V A K R T Q P G G P T I Y R F D I R M Q G P D E T V F F D
UniRef90_W9GLZ1	V T D P K A R E R L V A S Y D E H E F L L G Y R W D I V L T G E H A T R M E
UniRef90_A0A052JJQ0	V E P Q R R Q T L I A R R Q A G N A A V Y V F D I H L Q G P A E T V F F D L
UniRef90_H2FTZ4	V P A E R R P T L L A K R V E T G T G V E Y R F D I H M Q G D R E T V F F E
UniRef90_UPI0001CBFDC3	V P A E R R A T L L A Q P G A G G A Y A W D I R M Q G E A E T V F F R Y
UniRef90_UPI00047E223B	I P A V A R H N R F S L D R S Q D N W A L A F E W D I V L R G E Q T P F E
UniRef90_UPI000237AA0A	V E P A R R G T L V V A A D D R G Y R F D I R V Q G D D E T V F F A I
UniRef90_UPI0002627A9D	V P E D R R G T L I A A K T D D G Y R F D I V R L Q G E A E T V F F D
UniRef90_Q93PS1	I P E D L R S K L I A K E E P D C Y E I S I R L Q G E G E S V F F D
UniRef90_J2PSY5	V P S P Y R Q R L V S R F T Q P D W A L G Y L F D V V L R G R G A T P
UniRef90_Q73WC9	I L D P A A R R R L I A H Y T Q P E Y A T G Y R W D I V L A G G G R T P
UniRef90_A0A010PGQ0	I T D Q A A R D R L I V A T Y D Q H E W N T G Y R W D I V L S G S N R T W A E
UniRef90_UPI000255DEB5	I T D Q K A R D R L I V A T Y D H H E W N T G Y Y W D I V L S G S N R T W M E
UniRef90_R4TC5	V P E A R Q G T L I A T K T G D G Y R F D I R L Q G E G E T V F F D
UniRef90_UPI00020006F2	V T D E A A R Q R L I V A T Y S R P E H S L G Y A W D I V L D G P A A T W T E
UniRef90_D3DAK3	I T D A K A R E R L V V A A Y D H H E W A T G Y R W D I V L G G G R R T P
UniRef90_C1D2D6	V P P D R R P T L I A Q R E V T P A G P V Y R L D F Q L Q G P Q E T V F F D
UniRef90_UPI00047E7CF2	V P A D R R R T L I A E P T E D G Y R F D V R L Q G E G E T V F F D
UniRef90_UPI00045EC709	I T D Q S A R D R L V A R Y D E H E W I L L G Y T W D I V L T G S H A T W T E
UniRef90_C6WS86	I P D P A A R A T L V A V A Q P G G Y R F D I H L Q G E R E T V F F D L
UniRef90_UPI00047DD51B	T P A H C R D L L V S H F T Q E G H A L G Y A F D I V L R G A L Q T P T E
UniRef90_UPI000369F212	V T D D A A R Q R L I V A R Y D H P E W S L G Y H D D I V L D G P T A T W I E
UniRef90_I0RX86	V I D P A A R Q R L I A T Y T V P E Y A T G Y R W D I V L
UniRef90_W7GBR3	V P A E R R Q T L I V A Q A Q G K G L Y H W D I V R M Q G P D E T V F F A Y
UniRef90_A0A024JX30	V T D P A A R Q R L I A G Y T E P E F A T G Y R W D I V L
UniRef90_M3AX20	V P E P A A L D R L I I G A Y D P P G H A L G Y R W D I V L D G P A A T W T E
UniRef90_A0A031GMN4	I T D Q A A R D R L I V A T Y D H H E W N T G Y W W D I V L T G S H R T W M E D
UniRef90_UPI00047E0CED	I P D D A S R R T L I A Q P T E D G Y S L D I H L Q G D D E T V F F A
UniRef90_UPI00038225C1	V P E E R R G T L I A T P A D D G Y R F D I V R L Q G D G E T V F F D
UniRef90_UPI000255DEB6	L D A D R R S T L I A E R R A D G S L L F D D V H L Q G E K E T V F F Q F
UniRef90_D3PNP8	L D P V R R Q T L V A A Q R C E L P P G G V V Y R W D I R L Q G E G E T I F F D L
UniRef90_I5CQ0	V A E E R R N T L I T K K V Q D S P V K I Y E F N I H M Q G E K E T V F F D Y
UniRef90_UPI0003B718EE	V K S R N D I S S L V A K K I L E E D G Y L F D I F L Q G D K E T I F L D I
UniRef90_UPI000469036E	A G D R Q A T L I A Q G G D G S Y R H D I Y L Q G A Q E T V F F D
UniRef90_D8NVG6	V A P S R R M L L V A K M L A P P D S K L V V V F D I V L R G
UniRef90_UPI0003B488FB	L T E A E R K T L I A T R E A D G S L R L D I R L Q G E E E T V F F S Y
UniRef90_F8EGN3	I P A E R R N T L I A S Q N G S V Y E F N I R M Q G E G E T V F F E I
UniRef90_C4RH13	V N A D R R D T L L A S P A P D G L H F D I R L Q G D R E T V F F A
UniRef90_Q02CF8	I P E E R R G T L M A Q P V D G Q T G N W H F L R L Q G A G E T V F F D
UniRef90_UPI0002E4CB5C	L E P E R R K T L I A R R D P D G G L T W D R L Q G G D E T V F F L D F
UniRef90_B7KA34	V P P Q K K E L V I T Q F D N S L K K R V G Q F N I L L
UniRef90_M7AWN9	V P D D R R A T L I A T K D R D G Y R F D I H L Q G E A E T V F F L D
UniRef90_W9GFR6	L A E D R R S T L I A T R E A D G V Y R F D V R L Q G D G E T V F F L Q F
UniRef90_G7GT1	
UniRef90_L8EVJ5	A P T A A A R H R L I A T Y A P R P S S L T Y H W D I V L G G P A P T
UniRef90_UPI00037B3223	I I K N R N V N S L I A K K K N R S Y L F N I F L Q G E E E T I F L D I
UniRef90_B5HSP9	V P A Q R R D T L I A R K Q D D G T Y R F D I R L Q G E G E T V F F L E F
UniRef90_E8QYB0	I R D P K A R E S V L V A F E P R A G E L A A R F D I V L
UniRef90_V4HXH3	K T R Q E Q A L M T A K A T S K A N Q Y R Y D V L
UniRef90_UPI0003710D38	V I D P A R R D T L I A T R G E L G T Y R F D I R L Q G E G E T V F F L E F

UniRef90_UPI00042490D2
UniRef90_Q28JN2
UniRef90_A3JVX1
UniRef90_V5PUY0
UniRef90_K0EXW5
UniRef90_Q93PS2
UniRef90_W1NB34
UniRef90_UPI00040D1A18
UniRef90_Q09B99
UniRef90_E6V573
UniRef90_M7MV75
UniRef90_UPI00047D96B9
UniRef90_UPI0002DBA87D
UniRef90_D3P5E3
UniRef90_Q12FV5
UniRef90_J9SBY1
UniRef90_UPI000289A3E8
UniRef90_M1P0B5
UniRef90_S4AE93
UniRef90_UPI00036E303B
UniRef90_UPI00038102CC
UniRef90_Q82MF7
UniRef90_UPI000466363E
UniRef90_U5VYU3
UniRef90_UPI000345E6D4
UniRef90_M2XY80
UniRef90_UPI0000F2F72C
UniRef90_B8H804
UniRef90_I4XW57
UniRef90_U5WVK4
UniRef90_Q1AVN6
UniRef90_Q2TPV5
UniRef90_N7BT46
UniRef90_UPI000364680B
UniRef90_G8SLL2
UniRef90_UPI00034CCA95
UniRef90_K2L5W2
UniRef90_D5USW6
UniRef90_Q28JN1
UniRef90_UPI0004769092
UniRef90_F2LN12
UniRef90_D9WT40
UniRef90_UPI00016A488B
UniRef90_W9GLZ1
UniRef90_A0A052JJQ0
UniRef90_H2FTZ4
UniRef90_UPI0001CBFDC3
UniRef90_UPI00047E223B
UniRef90_UPI000237AA0A
UniRef90_UPI0002627A9D
UniRef90_Q93PS1
UniRef90_J2PSY5
UniRef90_Q73WC9
UniRef90_A0A010PGQ0
UniRef90_UPI000255DEB5
UniRef90_R4TCT5
UniRef90_UPI00020006F2
UniRef90_D3DAK3
UniRef90_C1D2D6
UniRef90_UPI00047E7CF2
UniRef90_UPI00045EC709
UniRef90_C6WS86
UniRef90_UPI00047DD51B
UniRef90_UPI000369F212
UniRef90_I0RX86
UniRef90_W7GBR3
UniRef90_A0A024JX30
UniRef90_M3AX20
UniRef90_A0A031GMN4
UniRef90_UPI00047E0CED
UniRef90_UPI00038225C1
UniRef90_UPI000255DEB6
UniRef90_D3PNP8
UniRef90_I5C0Q0
UniRef90_UPI0003B718EE
UniRef90_UPI000469036E
UniRef90_D8NVG6
UniRef90_UPI0003B488FB
UniRef90_F8EGN3
UniRef90_C4RH13
UniRef90_Q02CF8
UniRef90_UPI0002E4CB5C
UniRef90_B7KA34
UniRef90_M7AWN9
UniRef90_W9GFR6
UniRef90_G7GT11
UniRef90_L8EVJ5
UniRef90_UPI00037B3223
UniRef90_B5HSP9
UniRef90_E8QYB0
UniRef90_V4HXH3
UniRef90_UPI0003710D38

Sequence logo showing the conservation of amino acids at each position of the protein sequence. The x-axis represents positions 1 to 40. The y-axis lists UniProt IDs. Colored bars indicate the frequency of each amino acid at each position: blue for A, red for C, green for D, yellow for E, purple for F, brown for G, black for H, pink for I, grey for K, orange for L, light blue for M, dark blue for N, cyan for P, magenta for Q, white for R, light green for S, and light pink for T.

UniRef90_UPI0002D9269C
 UniRef90_UPI0003ACF75E
 UniRef90_G0S5Q3
 UniRef90_H6RMN3
 UniRef90_UPI000050F816
 UniRef90_UPI0004065BAD
 UniRef90_F4DZC8
 UniRef90_JOLFK7
 UniRef90_C7RVK3
 UniRef90_K6Y4X1
 UniRef90_U3HGC3
 UniRef90_L7LSA5
 UniRef90_W6QR36
 UniRef90_W9GBU8
 UniRef90_B2T4P2
 UniRef90_UPI0003776F9B
 UniRef90_J2N7A6
 UniRef90_H5TM25
 UniRef90_UPI00046826AA
 UniRef90_H0BVP0
 UniRef90_UPI0003624D4D
 UniRef90_B1Y648
 UniRef90_U5WZL0
 UniRef90_B2AX64
 UniRef90_UPI0002F754C2
 UniRef90_A0A024HF40
 UniRef90_C7Q1M0
 UniRef90_Q1LMG6
 UniRef90_UPI00036C0394
 UniRef90_L8MED5
 UniRef90_UPI0004221E62
 UniRef90_UPI0003B5314E
 UniRef90_J2MPN9
 UniRef90_Q2MKF3
 UniRef90_F2LMR9
 UniRef90_14Y1V3
 UniRef90_UPI0003753EF1
 UniRef90_D5USW7
 UniRef90_B7LQV7
 UniRef90_Q2MKC1
 UniRef90_Q2MKD4
 UniRef90_J2KKE5
 UniRef90_UPI0004692E0D
 UniRef90_G8RNP9
 UniRef90_UPI000365E79A
 UniRef90_A0A024IL62
 UniRef90_H5TQF7
 UniRef90_UPI00037CA4BA
 UniRef90_10RX87
 UniRef90_UPI0003A0B55E
 UniRef90_D8NTT5
 UniRef90_A0A010RZ11
 UniRef90_U3B9G8
 UniRef90_Q4P2S7
 UniRef90_UPI0002FB3E96
 UniRef90_Z5X601
 UniRef90_D3P0N3
 UniRef90_Q0VH42
 UniRef90_UPI000373C801
 UniRef90_X7YR36
 UniRef90_K9VU63
 UniRef90_W1NAB3
 UniRef90_X5EDU5
 UniRef90_H4F7V9
 UniRef90_G2S8F0
 UniRef90_W6W7F8
 UniRef90_D0MCE0
 UniRef90_JOUAA6
 UniRef90_UPI00036EF2F9
 UniRef90_U7NGB4
 UniRef90_Q2MKG1
 UniRef90_J2URC7
 UniRef90_A7IED9
 UniRef90_A1B187
 UniRef90_UPI00037849AA
 UniRef90_L0DC79
 UniRef90_Q2MKG3
 UniRef90_Q1QBA4
 UniRef90_UPI0002F38665
 UniRef90_L7FG98
 UniRef90_Q2MKE8
 UniRef90_G8GMD8
 UniRef90_UPI00037BFE83
 UniRef90_F1VV65
 UniRef90_D8IP03
 UniRef90_UPI00037F1585
 UniRef90_N9MJS3
 UniRef90_M4S898
 UniRef90_K9ATQ2
 UniRef90_COZS03
 UniRef90_UPI000255DEE6
 UniRef90_J2JP02

50 60 70 80

Detailed description: This figure displays a sequence alignment of UniRef90 proteins across 80 positions. The alignment is presented in a grid where each row represents a different protein sequence. The columns represent the 80 positions of the sequence. A color scale at the top indicates conservation: blue for highly conserved positions, green for moderately conserved, and red for divergent positions. Yellow highlights are placed on specific residues that appear to be functionally important or characteristic of the group. The alignment shows significant conservation in certain regions, particularly around positions 50, 70, and 80, while other regions show more variation.

	90	100	110	120
UniRef90_UPI0002D9269C	H T S D S D K N F Q G F G T F T T A S A G E Y R F R T I	I K P V P Y P G R P		
UniRef90_UPI0003ACF75E	G L M P L D P N F T G A G R T I T D S T G R Y G F R T I	I K P A P Y P A R R R G M		
UniRef90_G0S5Q3	Q Q D E A Q P D M N F R G R F M T D A E G R Y S F Y A L	R P V S Y P I P D D G		
UniRef90_H6RMN3	S P E D P R P G F R G Y A R S Q T L S G E F G V F T L	L K P G R L P D G E G G		
UniRef90_UPI000050F816	G S L R R D G T F T G F G R N A V D P E G R F V F S T L	L N P G P T E A G K		
UniRef90_UPI0004065BAD	R A S S L R R H H F G G W G R T S T D T S G H F S F T T	V R P G A L P P S S		
UniRef90_F4DZC8	Y F D S S S Q S E F F N L R R R I V T D A D G R Y R A R S I	V P S G Y G C P P D G		
UniRef90_JOLFK7	V F D S S S Q P P F N L R R R A I I T D A D G R Y K F K S I	L P V G Y S C P P G G		
UniRef90_C7RVK3	H P D P L D P D F Q G Y G R F T T G V D G G	I K P V P Y P		
UniRef90_K6Y4X1	H S S P L D E N F Q Y W A K I K S G A D G S Y S V K T I	K P N K Y S A M G D W		
UniRef90_U3HGC3	Y F D S T Q S E F F N L R R R I I T D S E G R Y R A R S I	V P S G Y G C P P D G		
UniRef90_L7LSA5	G S L R R D G T F T G W G R R S S T D N A G H Y S F S T I	A P G G V D G G		
UniRef90_W6QR36	H S R G L D P G F Q G Y G R F T T A A D G R Y R F R T I	R P V P Y P		
UniRef90_W9GBU8	S M H R D G H T F T G F G R V S T R R D G H Y S F T T L	E P G P S A P G		
UniRef90_B2T4P2	Y F D K S Q P A F N L R R R S I R T D A E G K Y S F R S I	V V P V G Y S V P P H G		
UniRef90_UPI0003776F9B	Q V E G S L H T F T G W G R C S T D A T G H Y S F S T I	V L P G A T E D G K		
UniRef90_J2N7A6	H F D K S Q S P F N L R R R I V T D A Q G R Y R V K S I	V P S G Y G C G R H G		
UniRef90_H5TM25	G S L R R D G T F T G W G R A K T D R V G H Y S F S T I	V T P G A T R D G		
UniRef90_UPI00046826AA	F F D K S Q G E F N L R R R V K T D A N G R Y A A R S I	V P S G Y G C P P D G		
UniRef90_H0BVP0	H P G D G G P D F Q G F G R V T L G R D G R Y R F R T I	V R P A P Y T		
UniRef90_UPI0003624D4D	H P A R R D P H F Q G Y G R F E T S S S G D Y Y F R T I	L R P A P Y S		
UniRef90_B1Y648	H P G D G D P A F Q G F G R V T V G A D G R Y R F R T I	V A P G S V D		
UniRef90_U5WZL0	R Q A G S L A E F T G F G R A A T D A D G H Y R F T T	V R P V P Y P		
UniRef90_B2AX64	Q Q D S D Q P E M N F R G R F T D Q Q G R Y A L Y A L	R P V P Y P W P N G D		
UniRef90_UPI0002F754C2	H K A P L D P N F G G C G R T I T D E E G R Y W F R T V	V R P G A Y P W P N G D		
UniRef90_A0A024HF40	Y F D Q S Q S Q A Y N L R R R I V T D A Q G R Y R A R S I	V P S G Y G C P A D G		
UniRef90_C7Q1M0	G A P G S L R T F T G F G R V S T G P D G R Y V L R T I	L P P G G V		
UniRef90_Q1LMG6	Y F D P T Q S A F N L R R R S I V T D G Q G R Y R F R S I	M P V G Y S V P P H G		
UniRef90_UPI00036C0394	Y F D P K S Q S E Y N L R R R I I T D A E G R Y R A R S I	V P S G Y G C G R H G		
UniRef90_L8MED5	Y F D T T Q S D Y N L R R R I V T D S E G R Y R A R S I	V P S G Y G C P P H G		
UniRef90_UPI0004221E62	R Q E G S L H T F T G F G R A A T D A A G H Y Q F S T V	V V P G Y K D G S		
UniRef90_UPI0003B5314E	G A R D G M T W S G W G R C A T T R A G T Y S F T T V	E P G A V D		
UniRef90_J2MPN9	F F D P S Q S E Y N L R R R I I T D A E G R Y R A R S I	I M P S G Y G C G R H G		
UniRef90_Q2MKF3	H A R D R D P N F D G V G R A L T D A K G R Y T F T T I	K P G A Y P W H D N A		
UniRef90_F2LMR9	Y F D P S Q Q P F N L R R R S I R T D A E G R Y A F R S I	V V P V G Y S V P P G G		
UniRef90_I4Y1V3	Y F D T T Q S E F N L R R R I V T D A E G R Y R F R S I	V P S G Y G C P P D G G		
UniRef90_UPI0003753EF1	F F D P S Q S P Y N L R R R S I R T D A D G R Y R F R S I	K V P V G Y S V P P G G		
UniRef90_D5USW7	R P A A L I P D F A G W G R A A T G H T G R F G F T T V	V E P G P A Q P G A		
UniRef90_B7LQV7	F F D Q S Q S E Y N L R R R I I R T G A D G R Y S V R S I	V P S G Y G C P P D G		
UniRef90_Q2MKC1	H P A P L D P N F T G A G R T I T D K Q G Y Y K F I T V	K P G A Y P W G N H H		
UniRef90_Q2MKD4	H Q K D L D P N F G G C G R T I T D E D G A Y A F R T I	I R P G P Y P W P N G P		
UniRef90_J2KKE5	F F D P S Q T P F N L R R R S I I R T D A E G R Y R F R S I	V P V G Y S V P P G G		
UniRef90_UPI0004692E0D	H I E D L D E N H L G M G R V V T D E N G N Y R F W A I	I S P G A Y L A R P G R		
UniRef90_G8RNP9	T A R R D G W T F T G W G R A A T D D A G H Y S F S T V	S P G P T R S G A		
UniRef90_UPI000365E79A	R A H G D D H T F T G F G R A A T T D V G R Y F R E W T R	N P G P V		
UniRef90_A0A024IL62	H P G D A D P A F Q G F G R V A V D R E G R Y R F R T I	I R P V P Y S		
UniRef90_H5TQF7	Q F A P G L P E W N L R G T W V A D D E G R F E I H S I	L Q P A P Y Q I P W H A		
UniRef90_UPI00037CA4BA	Y F D K T Q T D Y N L R R R I E T D A E G R Y R F R S V L	P S G Y A V P R H G		
UniRef90_10RX87	G S L R R D G T F T G W G R S A T D S A G R Y S F T T V	V A P G S P S A G		
UniRef90_UPI0003A0B55E	F F D Q T Q S P F N L R R R T I I T D A A G R Y Q F Q T I	I M P K G Y G C P P G G		
UniRef90_D8NTT5	F F D K T Q S A F N L R R R T I V T D A Q Q G R Y Q F R S I	V P V G Y T C P P D G		
UniRef90_A0A010RZ11	Y F D S R Q S E Y N L R R R I V T D S E G R Y R A R S I	V P C G Y G C A P D G		
UniRef90_U3B9G8	Y F D K S Q S Q A Y N L R R R I V T D A E G R Y R A R S I	V P T A Y P I P Y D P		
UniRef90_Q4P2S7	Q Q D P A Q P D F N Y R G K F T T D A N G E Y A L R C I	V P V G Y G C P P D G		
UniRef90_UPI0002FB3E96	F F D R T Q S A F N L R R R T I V T D A H H G R Y Q F R S I	V P V G Y G C P P D G		
UniRef90_Z5X601	N A A G S L R T F S G W G R A S T D D S G R Y S F S T V	V I P G A T E P H A		
UniRef90_D3P0N3	I F D S S S Q T P F N F N R G T I H T G A D G R Y S F Q S I	M P S G Y A C P P G S		
UniRef90_Q0VH42	Y F D E S Q S Q A Y N L R R R I V T D A E G R Y T A R S I	I P S G Y G V G R H G		
UniRef90_UPI000373C801	S P L D P D K G F R G L G R G F A D R D G A V T F T T I	V P A E V		
UniRef90_X7YR36	H P A P L D P N F A G V G R C L T G P D G S Y R F V T I	I K P G P Y P W H H N A		
UniRef90_K9VU63	I Q D P S Q P L G N F R G R F K T N K S G K Y M F E T V	V V P L G Y K V P R H S		
UniRef90_W1NAB3	F F D P S Q S D Y N L R R R T I L T D D E G R Y R A R S I	I P S G Y G C P P D S		
UniRef90_X5EDU5	S P L D E R S D G A G I G R G M V D D S G E V T F R T R	R R P G A T P A S T G D		
UniRef90_H4F7V9	Q Q Q G I Q P D F N L R R G V F R T D A D G R Y W F R A V	V K P K F Y P I P D D G		
UniRef90_G2S8F0	F F D P S Q S E Y N L R R R V K T G A D G C Y A V R S I	V K P C G Y G C P P D G		
UniRef90_W6W7F8	Q Q Q G L Q P E F N L R R R G M F R T G E D G R Y R F L A V	V K P K Y Y P I P D H P		
UniRef90_D0MCE0	H P N Q P D P H F A G F G A V L T G E D G N Y L F Q T I	L F P V P Y S S		
UniRef90_JOUAA6	H P G D A D A A F Q G F G R V A V A Q D G S Y R F R T I	I R P V P Y A		
UniRef90_UPI00036EF2F9	H V E D L D E N H F F G M G R V V T D E D G N Y R F W T I	S P G A Y L A R P G R		
UniRef90_U7NGB4	F F D Q T Q S E Y N L R R R I I Y T D S E G R Y T A R S I	I P S G Y G V P E G A		
UniRef90_Q2MKG1	H V R D L D P N F G G C G R C L T D A E G M Y S F R T I	I K P G P Y P W R N N D		
UniRef90_J2URC7	F F D P S Q S P F N L R R R S I I R T D A D G R Y R F R S I	R V P V G Y S V P P G G		
UniRef90_A7IED9	H F D P T Q P A F N L R R R I E T L A D G T Y S F R T I	I M P A G Y G C P P G S		
UniRef90_A1B187	H F D P T Q A P F N M R R R T I I A D E D G R Y R F Q S I	L P S G Y G V P P G S		
UniRef90_UPI00037849AA	T E T V E G F R G L G R G M V D E T G S V T F T T I	L I P G G F E D		
UniRef90_L0DC79	H T G D S D G N F Q G F G R F T T G S T G E Y Y Y F R T I	I K P V P Y P G R P		
UniRef90_Q2MKG3	H K A P L D P N F G G C G R A L S G E D G S Y A F R T I	I K P G A Y P W P N G D		
UniRef90_Q1QBA4	F F D E S Q S H F N L R R R S I I L T D E N G N Y A F R S I	V P L G Y S V P P H G		
UniRef90_UPI0002F38665	T I P R D R I L T F T G W G R A P T D T E G R Y S F T T V	I K P G A P Q H S		
UniRef90_L7FG98	G S L R R D P D F T G F G R V A T D A D G H Y A L Y T L	L P P G N V G L		
UniRef90_Q2MKE8	H P A P T D P N F P G E G R I F T D A Q Q G H Y R F V T I	I K P G A Y P W H H N A		
UniRef90_G8GMD8	H K A P L D P N F A G F G R M V L T D R D G Y Y S F E R T I	Q P G R Y P W R N R I		
UniRef90_UPI00037BFE83	F F D A S Q S A F N L R R T I T T D D Q G R Y Q L R S I	I K P G P Y P W G P N D		
UniRef90_F1VV65	F F D A S Q S A F N L R R T I T T D D Q G R Y Q L R S I	L P K G Y G C P P P N G		
UniRef90_D8IP03	H F D P T Q K P F N M R R T I I T D A Q Q G R Y K F R S I	M P T A Y G C P P H G		
UniRef90_UPI00037F1585	F F D S S Q T D Y N L R R R I I K T G P D G R Y A V R S I	I P S G Y G C P P D G G		
UniRef90_N9MJS3	F F D K S Q S H F N L R R R S I I L A D D Q G N Y V A R S I	T M P V G Y G I A R H		
UniRef90_M4S898	Y F D K S Q S D Y N L R R R T V I T D A E G R Y A V R S I	I V P V G Y A C P R H		
UniRef90_K9ATQ2	Q F A P G L P E W N L R G T F V A D D E G R Y E H T I	I R P A P Y Q I P W H A		
UniRef90_COZS03	H P D D P R G G F R G F A R S A A D S T G T A L V H T	V K P G A Q P T E T D A		
UniRef90_UPI000255DEE6	Q F A P G L P D W N L R G R F S T D A E G R F H F R S I	N Q D P S Q E N M N L R G R F S T D A E V R S I	V R P A G Y P V P T D G	
UniRef90_J2JP02	N Q D P S Q E N M N L R G R F S T D A E G R F H F R S I	V R P A G Y P V P T D G		

130 140 150 160

UniRef90_UPI0002D9269C	A P H H V K V K K G G R D L T T Q F M V A G H A G N A R D H V F N E
UniRef90_UPI0003ACF75E	Y R P A H H F S V C G P D L S S R L V T Q C Y F E G D P L L R N D P V V R A
UniRef90_G0S5Q3	P R P G H H F I V S A P G F R T L T T Q L Y D D R D H Y V T N D A V
UniRef90_H6RMN3	L Q A P H D V S V F A R G V L D R A V M R I Y F A D E A E A N A E D V V L R A
UniRef90_UPI000050F816	A P F I S V V V F A R G L L N R L F T R I Y L P E D T A A L T A D P L L S S
UniRef90_UPI0004065BAD	P F A V A V F A R G L L N R L F T R A Y L P G D H L H A D R L L N S
UniRef90_F4DZC8	T R P A H H F F I S A P G Y R H L T T Q I N L A G D E Y L W D D F A Y
UniRef90_J0LFK7	S R P A H H F F V T A P G Y R K L T T Q L I N E G D P L I W D D F A F A S R
UniRef90_C7RVK3	G R A P H V H F A I T V A G Q A P L V T Q M Y V A G A A E N A G D G L L Q G
UniRef90_K6Y4X1	V R P P H H F R V A K K G M R E L T T Q M Y F A N E A L N E L D K L Y E
UniRef90_U3HGC3	P R P A H H F F I S A P G H R H L T T Q I N L S G D Q Y L W D D F A Y
UniRef90_L7LSA5	A P F F A L T V F F A R G L L D R L F T R A Y L P G H E A A L A A D P L L S S
UniRef90_W6QR36	G R T P H I H L A V T L P G I P R F A T Q C Y V H G E L L N Q R D G L L N A
UniRef90_W9GBU8	R A P F V A V T V F A R G L L N R L F T R I Y L P D D T D A A A D P F L R S
UniRef90_B2T4P2	H R P A H H F F V S A P G F R K L T T Q I N L D G D P Y L W D D F A F A T R
UniRef90_UPI0003776F9B	A P F F A V T V F A R G L L D R L T T Q I N L D G D P Y L W D D F A F A T R
UniRef90_J2N7A6	Q R P A H I H F F V S A P G Y E H L T T Q I Y L W D D F A Y A T R D G L I G E
UniRef90_H5TM25	E A P F F A V C V F A R G L L D R L T T R A Y L P E S S A L D D D A V L S G
UniRef90_UPI00046826AA	P R P A H I H F F V S A P G H K H L T T Q I N L N G D R Y L W D D F
UniRef90_H0BVP0	G R T P H I H F K V R L G Q R D L T T Q M Y V E G E P G N A R D F L W S R
UniRef90_UPI0003624D4D	G R T P H I H L A V T P P G Q R Q R W T T Q C Y V H G E G N A R D A V L N S
UniRef90_B1Y648	G R T P H I H F K V R H Q G H E L L T T Q L Y V Q G D P G N E R D G L W R R
UniRef90_U5WZL0	G R A P F F V I A V F A R G L L H R L F T R A Y L P S P D D A D R L L A R V
UniRef90_B2AX64	P R P G H I H F I V S A E G H R A L T T Q L Y D S R D R W V D D D A V
UniRef90_UPI0002F754C2	W R P A H I H F S V F G H G F A Q R I T Q M Y F E G D P M I W K C P V G T
UniRef90_A0A024HF40	P R P A H I H F F I S A P G Y R H L T T Q I N L S G D Q Y L W D D F A Y
UniRef90_C7Q1M0	P Y S V C V F A R G L L H H L F T R V Y L P D A D L D S D A L L A A
UniRef90_Q1LMG6	T R P A H H F F V S A P G H R K L T T Q I N L D G D P Y L W D D F
UniRef90_UPI00036C0394	Q R P A H H F F I S A P G Y R H L T T Q I Y L W D D F A Y A T R D G L V G D
UniRef90_L8MED5	N R P A H H F F I S A P G Y R H L T T Q I N L S G D E Y L W D D F A L L V G D
UniRef90_UPI0004221E62	G K A P F I A A A V F S R G L M N K H T R I Y L P D H A S R H A A D P F L S S
UniRef90_UPI0003B5314E	G R A A F F A V T V F A R G L L N R L F T R A Y V P G D D A L A A D P F L S G
UniRef90_J2MPN9	Q R P A H V H F F I S A P G H R H L T T Q I N L S G D Q Y L W D D F A Y
UniRef90_Q2MKF3	W R P A H I H F S V F G R S F T Q R V T Q M Y F P D D P L F S Q D P I F N S
UniRef90_F2LMR9	U R P A H I H F F V T A D G M R R L T T Q I N I D G D P Y L W D D F
UniRef90_I4Y1V3	P R P A H I H F F I S A D D H R H L T T Q I N L D G D E Y L H D D F A Y
UniRef90_UPI0003753EF1	T R P A H I H F F V T A P G H R K L T T Q I N L E N D P Y L W D D F A F A T R
UniRef90_D5USW7	A P F S V A V F A R G L L T G L F T R V Y P P E A T A A L A A D P L L S T
UniRef90_B7LQV7	P R P A H I H F F V S A P G H K H L T S Q I N L N G D Q Y L W D D F A F A T R
UniRef90_Q2MKC1	W R P N H I H F S V F G H S F L S R V T Q M Y F P G D Y L F P F D P I F N S
UniRef90_Q2MKD4	W R P A H I H F S V F G H G F A Q R I T Q M Y F E G D P L W F C P V R T
UniRef90_J2KKE5	T R P A H I H F F V S A P G Y R K L T T Q I N I A G D P Y L W D D F
UniRef90_UPI0004692E0D	W R P K H I H L S V S G G S S R I T Q M Y F P D D E P N N A S D P M A I L
UniRef90_G8RNP9	A P F F L I T V F A R G L L N R L F T R A Y V P C E Q L A D D P L L N S
UniRef90_UPI000365E79A	G R A P F Y S V I V F A R G L P D K V T R I Y L P E H E E L L A A D P P L L R S
UniRef90_A0A024IL62	G R T P H I H V K V K L D R M E L T T Q L Y V Q G D P G N E R D G L W R R
UniRef90_H5TQF7	W R P A H I H L H F K V S A P G Y E L I T T Q L Y F P G D P H N D D D I
UniRef90_UPI00037CA4BA	U R P A H V H F F I S A H G Y R H L T T Q I N I E G D P F V H D D F A Y A T R
UniRef90_I0RX87	R A P A F F A L T V F A R G L L N R L F T R A Y L P G G D F G A D P L L A G
UniRef90_UPI0003A0B55E	Q R P A H I H F F V S A E G Q R K L T T Q I N I D G D E Y L W D D F A F A S R
UniRef90_D8NTT5	T R P A H I H F F V C A P G H R K L T T Q I N I D G D E Y L W D D F A F A S R
UniRef90_A0A010RZ11	Q R P A H I H Y F I S A P G H R H L T T Q I N L S G D K Y L W D D F A Y
UniRef90_U3B9G8	U R P A H I H F F I S A P G H R H L T T Q I N L A G E K Y L W D D F A Y
UniRef90_Q4P2S7	M R P A H I H L L I E A N G Y K Q V T Q I F D S K C D Y I G A
UniRef90_UPI0002FB3E96	T R P A H I H F F V S A P G H R K L T T Q I N I D G D A Y L W D D F A F A S R
UniRef90_Z5X601	U R P A H I H F F V F A R G L L N R L F T R A Y V P G E Q L A R D T L L S G
UniRef90_D3P0N3	S R P A H I H F F V S A P G Y R K L T T Q I N I Q G D P L I D D D F P D V R R
UniRef90_Q0VH42	Q R P A H I H V F V S A P E H R H L T S Q I N I A G D K Y L W D D F A Y A T R
UniRef90_UPI000373C801	D E A P H I K V G I F A R G M L E R L Y T R M Y F P E N A D A N E A D P V Y Q L
UniRef90_X7YR36	W R P A H I H F S V F G T A F T Q R L V T Q M Y F P G D P F L G L D P I F Q S
UniRef90_K9VU63	W R A A H I H V K V S A P E Y T P L T T Q I F M A G D P H L D S D F A V R S A
UniRef90_W1NAB3	U R P A H I H F F I S A P G H R H L T T Q I N I A G D P Y T Y D D F
UniRef90_X5EDU5	V E A P H I L K V G V F A R G L E R L Y T R A Y F P G D E L G D D P V L A V
UniRef90_H4F7V9	P R P A H I H Y I I K A D G F E T L V T H I F D P D D P Y I N S D A V
UniRef90_G2S8F0	P R P A H I H F F V S A P G F K H L T T Q I N L N G D Q Y L W D D F
UniRef90_W6W7F8	Y R P A H I H F I I K A D G F Q S L T T Q I F D P D D P Y I D A V F G V K E S
UniRef90_D0MCE0	R P P H I V K L W R G E K E L T T Q L Y L K G R T G N E W W G G
UniRef90_JOUAA6	G R T S H I H F K V R L G Q R E L T T Q L Y V A G D A G N A R D P V W R G
UniRef90_UPI00036E7F29	W R P K H I H L S V S G G S A R I T Q M Y F P G E P N A S D P M A I L M
UniRef90_U7NGB4	P R P A H I H Y F V S A P G H Q H L T T Q I N I A G D P Y T Y D D F
UniRef90_Q2MKG1	W R P A H V H L S L F G H A F V Q R V T Q L Y F E G D P L V A R C A V N T
UniRef90_J2URC7	T R P A H I H F F I S A P G M R K L T T Q I N I E G D P F L W D D F A F A T R
UniRef90_A7IED9	E R P A H I H F F V T A P G Y R K L T T Q I N I E G D Q Y L H T D F A F G T R S
UniRef90_A1B187	P R P A H I H F F V S A D G H R K L T T Q I N I E G D P L I N D D F A L V P S
UniRef90_UPI00037849AA	E A P H I N V G V F A R G M L E R L N T R L Y F P E N A D A N A N D P V L Q A
UniRef90_L0DC79	A P H I H I K V K K G G R E L T T Q L N I A G H P G N D V D G V V L E G
UniRef90_Q2MKG3	W R P A H I H F S I F G S G F A Q R I T Q M Y F E G D P L T K L D P M T G G
UniRef90_Q1QBA4	H R P A H I H F F A S A D G H R K L T T Q I N I D G D E Y L W D D F A F A S
UniRef90_UPI0002F38665	T P F V A V T V F A R G L L N R L F T R A Y L P G D Q L H A D R L L S S
UniRef90_L7FG98	P Y S V C V F A R G L L T H L Y T R A Y L P G D Q L H A D R L L D S S
UniRef90_Q2MKE8	W R P V H I H F S L F G S G F A Q R I T Q M Y F P G D P L L A L D P I Y H G
UniRef90_G8GMD8	Y R P S H I H Y S L S G V G M A Q R I T Q M Y F E G D P L P L C P I V K S
UniRef90_UPI00037BFE83	W R P A H I H F S I S G P S I A T R L T T Q L Y F E G D P L P L C P I V K S
UniRef90_F1VV65	T R P A H I H F F I S A D G H R K L T T Q I N I D G D E Y L W D D F A F A S R
UniRef90_D8IP03	N R P A H I H F F V T A E G H R K L T T Q I N I E G D P F L Y D D F A Y
UniRef90_UPI00037F1585	P R P A H I H F F V S G P G F K H L T T Q F N I E G D K Y L W D D F
UniRef90_N9MJS3	Q R P A H I H Y F I S A P G H R K L T T Q F N I E G D K Y L W D D F A F L V A
UniRef90_M4S898	N R P A H I H F F V S A D H H R H T T Q L N I D G D P Y L H D D F A Y A T R
UniRef90_K9ATQ2	W R P A H I H M F K V H A P E H Q L T S Q L Y F P G D P H N E D D
UniRef90_COZS03	D E A P H I V N V S V F A R G M L D R L V T R L Y F P E D T A D H A T D P V L S S
UniRef90_UPI000255DEE6	W R P A H I H L L K V S A P G H E L T A Q L Y F P G D P H N E D D
UniRef90_J2JP02	P R P A H I H F M V S K P G H K V L T Q V F A D D D E N L E S

170 180 190 200

UniRef90_UPI0002D9269C	L R D P [N R E L V L V D F K P L K G E L T A K F D I V I		R G R M M T P W E
UniRef90_UPI0003ACF75E	P D P R G I D R L T A K L T E P G G A L A Y D W D I V L		
UniRef90_G0S5Q3	F A V K D E L I V K F V P K E G D W L L E Y D F V L		
UniRef90_H6RMN3	L P E D R R S T L L A T P A D D G Y R L D I H L	Q G D R E T V F F A	
UniRef90_UPI000050F816	L D E A D R N R L I A T R E A D G S L R F D I R L	Q G E D E T P F L R F	
UniRef90_UPI0004065BAD	V A A D R R H T L I A V P D E Q G L R F D I R L	Q G A D E T V F L R Y	
UniRef90_F4DZC8	A T R E G L I G D V T F I E S E A A A R D H G F Q G Q R A E V N F D F		
UniRef90_JOLF7	V P H T R Y T A A E A K F N I D E P F A S I D F D F E H K E R E G V F		
UniRef90_C7RVK3	V R D P Q A R A A L L A T F V R P G G D L L A R F D I V L		
UniRef90_K6Y4X1	V P K K A R A S I T V E V N D G K S N F D I V L		
UniRef90_U3HGC3	A T R E G L V A E V R F I E D A A A A A D F D F Q L Q		
UniRef90_L7LSA5	L E P D R R A T L V A E A D A Q G H A F D I R L	Q G Q G E T V F L T F	
UniRef90_W6QR36	I R D P R L R E L L L V V P F V P V S G E Q I A R F D V V L		
UniRef90_W9GBU8	V P E D R R P T L V A A R E P D G S L R F D I R L	Q G D D E T V F L R F	
UniRef90_B2T4P2	V P A V K Q A E G A E G K P Y G V D G N F A L L D F D F T L		
UniRef90_UPI0003776F9B	L P D D E R A T L V A A S D A Q G L R F D I H L	Q G E R E T V F L	
UniRef90_J2N7A6	V H F V D D E N Q S I A H E V S G R F A Q M T F D F Q L R		
UniRef90_H5TM25	V E S N R R A T L V A H V P D S T G Y R F D I H L	Q G E S E T V F L	
UniRef90_UPI00046826AA	A F A T R D E L I A D P V K V D S A L A A Q R D L P G P H T E V S F D F		
UniRef90_H0BVP0	L S P A G R A A L T V P F T P S S D G P R A E F A L V V Q		
UniRef90_UPI0003624D4D	I R D R Q L R E R L V D F R P R P D G E L D A R F D I I L		
UniRef90_B1Y648	L R D P R D R A A L T V P F E P G V D G L R A R F P I V V		
UniRef90_U5WZL0	D P P R R A T L L C A G D D A S G R L G Y R F D I H L	Q G P S E T V F L T Y	
UniRef90_B2AX64	F A V K D E L V V R F E P R E G D P G A R W D F I L		
UniRef90_UPI0002F754C2	V P D R R A I E Q L I A A L T V P M D A R A Y R F D I V L	R G R R S T F F E	
UniRef90_A0A024HF40	A T R D G L V G E V N F V E D A S G L E F S F Q L Q		
UniRef90_C7Q1M0	L E S D R R S T L I A E P T A E H V Y R F D I H L	Q G E K E T V F L D F	
UniRef90_Q1LMG6	A F A T R E G L V P P I T R V S D A A A I R F D F T L H A D Q A		
UniRef90_UPI00036C0394	I R F I E D A E A A A K R G V K G R F A E I E F N F Q L Q		
UniRef90_L8MED5	I R F I E D A V A A K A R G L D G E R F A E I D F D F Q L Q S A A A		
UniRef90_UPI0004221E62	L E P E E L S T V V A A R A E D G S L Q H D I H L	Q G V R E T V F L A F	
UniRef90_UPI0003B5314E	L D E V A R R S L V A V R E D D G S L R F D I R L	Q G E D E T V F L T Y	
UniRef90_J2MPN9	A T R E G L V G E V M F R E D A V S G R F D F Q L Q		
UniRef90_Q2MKF3	V P D P A A R A R M I S S R T V S N W A L A Y S F D I V L H G		
UniRef90_F2LMLR9	A F A T R D G L V P E L K K A E G A E G I D F D F R M T R E R A		
UniRef90_I4Y1V3	A T R E L I A K I T F S D D Q Q R A D F D F T L Q P S A Q		
UniRef90_UPI0003753EF1	V P E M K K V E D P A A L R A R E V D A P Y Y T T F D F G L H A E K E		
UniRef90_D5USW7	L P T D R R S T V I A Q R G D D G S L R W D I R L	Q G E R E T V F L D F	
UniRef90_B7LQV7	I A D P V K V V N A K I A E R G L D G E H T E V R F D F T L Q N P D E		
UniRef90_Q2MKC1	V T D P K A R E R M V S K F T V P D W A L A F R F D I V L H G		
UniRef90_Q2MKD4	L P D R A A L E M L I A S L D M P P M D A L A Y R F D I V L H G		
UniRef90_J2KKE5	A F A T R E G L V P E M T H V T D A A A I R F D F M L H V E Q A		
UniRef90_UPI0004692E0D	M G D S F E R N I G R P R D V G A A E A Y D F D I V I	G G R N A T Y F E	
UniRef90_G8RNP9	L A R R R Q T L I A T R E A A G L R F D I R L	Q G D D E T V F L T Y	
UniRef90_UPI000365E79A	L L D E S E R A T L I A T R P D G S L H H D I H L	Q G E K E T V F L A F	
UniRef90_A0A024IL62	L L D E A G R M A L T R P F A P D G D G V K A T F P V I Q		
UniRef90_H5TQF7	A S A V K P E L M D P Q P V E G G V A V E Y D F V L D P E A		
UniRef90_UPI00037CA4BA	D E L L P P V I R H S V A S D I H A A G L N A I A F D F V L N P A E E T		
UniRef90_I0RX87	L D A A R R Q T L I C I G E A D A T Y R F D I H L	Q G V D E T V F L A Y	
UniRef90_UPI0003A0B55E	V P A I V R V A A L D A K G L A K P F A S I D F D F H L L H		
UniRef90_D8NTT5	V P T I Q R I A K A L A E K G L A K P Y A S I D F D F R L Y A E R		
UniRef90_A0A010RZ11	A T R D G L V G Q V N F V E G H A E L E F D F Q L Q		
UniRef90_U3B9G8	A T R D G L V G Q V N F V E G H A E L E F D F Q L Q		
UniRef90_Q4P2S7	D A V F Q A D K S A L T V D F A Q P T S E Q A V T Y D I R L V A D N		
UniRef90_UPI0002FB3E96	E G L V P A I E R V S A P A V L D G H G V N R F D F R L H G E H		
UniRef90_Z5X601	L P P E R R D T L V A T R D Q T G L R F D I Q L Q D S K E T V F L R Y		
UniRef90_D3P0N3	I D D P A A I E A R G V N R P F A E I T F D F R L Q		
UniRef90_Q0VH42	E G L V G E A R L L D A D A S K A H G L D G L E F D F V L Q		
UniRef90_UPI000373C801	V D E P R R H L L V A E A T D G G Y R F D V Q V Q S E D E T P F F		
UniRef90_X7YR36	I L E P V A R Q R L L A T Y T E P E Y A T G Y R W D I V V S G S C R T C T E D		
UniRef90_K9VU63	I V Q L Q K H A P D E F K A H N Q S K P F Y T F D F V L		
UniRef90_W1NAB3	A F A T R E E L V V I E A T R I E D A A T A R		
UniRef90_X5EDU5	V P E D R R G R L V L T E D G E N S Y R M D I V L Q H D D E T P F F		
UniRef90_H4F7V9	F G V K E S L L A E F R A P D R A L S Y D F D F V L		
UniRef90_G2S8F0	A F A T R E E L I A D P V K I D G T L A R E R D I		
UniRef90_W6W7F8	L L A N K F R P A Q A A Q L G F K S W F W D V E F D F V L		
UniRef90_D0MCE0	K A R D Y L Q F E P V N I D G R V V G E F N F V L		
UniRef90_JOUAA6	L S E A E R S A V T V P F A P G A D G L L A R F P I V V		
UniRef90_UPI00036E2F9	G D G F E N N I G K P Y E T I D L D V D E G Y R F D I V V G G R N A T F F E		
UniRef90_U7NGB4	A F A T R E E L V A K R I E E Q D E I A K R E M D G P F S E V V F D		
UniRef90_Q2MKG1	V G D P R A V D Q L I A R L D M P F D S L V Y R F D I V L H G		
UniRef90_J2URC7	V P A L K Q V T D A A A I R S N E L D A P F Y D F D F T M H R E Q A		
UniRef90_A7IED9	I P A V R R V Y A A E I H A R G L N K P F A V I D F D F S I A P E A Q G V		
UniRef90_A1B187	V V I E R T D E S I H A N N L N G P F A E I A F D I H L		
UniRef90_UPI00037849AA	V D E P R R E L L V A D K T E N G Y H L N I Y V Q H E D E T P F F K I		
UniRef90_L0DC79	I G V F D R E L L M A E F K P I K G E L T A H F E M I L R T P D E S T F		
UniRef90_Q2MKG3	L S D P R A V E Q L I A P R T P M D A T A Y K F D I V L D G		
UniRef90_Q1QBA4	R E G L V P E V T M I E D A D K K F D H L		
UniRef90_UPI0002F38665	V P A D R R H T L I A V P D E H G F R F D I R L Q G A D E T I F L R Y		
UniRef90_L7FG98	L P A E R R A T L V A A E G E R R T Y R F D I R L Q G E G E T V F L E F		
UniRef90_Q2MKE8	I A D A G A R D R L V S K F T E P E W A L G Y R F D I V L H G		
UniRef90_G8GMD8			
UniRef90_UPI00037BFE83	I A N P E A V Q S L I A R L D M P M D C L A Y R F D I V L R G Q R K T H F E		
UniRef90_F1VV65	V P A I T R I S A P L A K K G V D Q A F A S I I D F D F T L E G P F A E I V F D I		
UniRef90_D8IP03	A T R E G L V P P L V E R T D A A S I K A F E G L E G P F A E I V F D I		
UniRef90_UPI00037F1585	A F A T R E E L I A Q R D I P V S H T E V K F D F K L Q K D K E		
UniRef90_N9MJS3	V A E D V T D E A E I L A R R G L K G P F K Y I R F D V V L		
UniRef90_M4S898	D E P P V H R T T L G A K Y G V E G P F A E I E F D F E L H		
UniRef90_K9ATQ2	I A S A V K P E L M L D P Q P N P D E E G E T Y D F F V L D P A R		
UniRef90_COZS03	L S E T E R A K L V A T K V D G G Y S W T V Y V Q D E D E T P F F E L		
UniRef90_UPI000255DEE6	I A T A V K P E L M L D P K P A A D G D G V V D Y D F F V L D P S D E T P		
UniRef90_J2JP02	D P T F G V T R R L I G R F A L A P D S A S L H H D F E L		

UniRef90_UPI0002D9269C
UniRef90_UPI0003ACF75E
UniRef90_G0S5Q3
UniRef90_H6RMN3
UniRef90_UPI000050F816
UniRef90_UPI0004065BAD
UniRef90_F4DZC8
UniRef90_J0LFK7
UniRef90_C7RVK3
UniRef90_K6Y4X1
UniRef90_U3HGC3
UniRef90_L7LSA5
UniRef90_W6QR36
UniRef90_W9GBU8
UniRef90_B2T4P2
UniRef90_UPI0003776F9B
UniRef90_J2N7A6
UniRef90_H5TM25
UniRef90_UPI00046826AA
UniRef90_H0BVP0
UniRef90_UPI0003624D4D
UniRef90_B1Y648
UniRef90_U5WZL0
UniRef90_B2AX64
UniRef90_UPI0002F754C2
UniRef90_A0A024HF40
UniRef90_C7Q1M0
UniRef90_Q1LMG6
UniRef90_UPI00036C0394
UniRef90_L8MED5
UniRef90_UPI0004221E62
UniRef90_UPI0003B5314E
UniRef90_J2MPN9
UniRef90_Q2MKF3
UniRef90_F2LMR9
UniRef90_I4Y1V3
UniRef90_UPI0003753EF1
UniRef90_D5USW7
UniRef90_B7LQV7
UniRef90_Q2MKC1
UniRef90_Q2MKD4
UniRef90_J2KKE5
UniRef90_UPI0004692E0D
UniRef90_G8RNP9
UniRef90_UPI000365E79A
UniRef90_A0A024IL62
UniRef90_H5TQF7
UniRef90_UPI00037CA4BA
UniRef90_I0RX87
UniRef90_UPI0003A0B55E
UniRef90_D8NTT5
UniRef90_A0A010RZ11
UniRef90_U3B9G8
UniRef90_Q4P2S7
UniRef90_UPI0002FB3E96
UniRef90_Z5X601
UniRef90_D3P0N3
UniRef90_Q0VH42
UniRef90_UPI000373C801
UniRef90_X7YR36
UniRef90_K9VU63
UniRef90_W1NAB3
UniRef90_X5EDU5
UniRef90_H4F7V9
UniRef90_G2S8F0
UniRef90_W6W7F8
UniRef90_D0MCE0
UniRef90_JOUAA6
UniRef90_UPI00036EF2F9
UniRef90_U7NGB4
UniRef90_Q2MKG1
UniRef90_J2URC7
UniRef90_A7IED9
UniRef90_A1B187
UniRef90_UPI00037849AA
UniRef90_L0DC79
UniRef90_Q2MKG3
UniRef90_Q1QBA4
UniRef90_UPI0002F38665
UniRef90_L7FG98
UniRef90_Q2MKE8
UniRef90_G8GMD8
UniRef90_UPI00037BFE83
UniRef90_F1VV65
UniRef90_D8IP03
UniRef90_UPI00037F1585
UniRef90_N9MJS3
UniRef90_M4S898
UniRef90_K9ATQ2
UniRef90_COZS03
UniRef90_UPI000255DEE6
UniRef90_J2JP02

Sequence logo showing the conservation of amino acids at each position of the protein sequence. The x-axis represents positions 1 to 40. The y-axis lists UniProt IDs. Each position has four bars representing A, T, C, and G. The height of each bar indicates the frequency of that amino acid at that position.

50 60 70 80

UniRef90_L8MER5	M A F T P G Q Q P A L V Q G R V D P A G E P V A G A V L D V W Q T A D N G M Y S
UniRef90_L7L1G6	R E D E K G D P L L W N G Q V R S C D G T P L A G A K V E L W H A D D D G F Y S
UniRef90_W1JF60	R I I V H G H V R D E D G R G V A N T L V E I W Q A N A C G R Y Q
UniRef90_H5X6M6	R P D E K G T P L T L S G Q V R D L E G N P V P G A E L D I W H A D D D G Y Y S
UniRef90_UPI00029A8554	A V G E I T H L T G R L L S P N G S P L K D V T M E I W Q C D A N A V Y L
UniRef90_E4WK94	Q R I T L R I T V I D G D R V P V A D A M V E T W Q A D A V G R F A
UniRef90_Q8FN48	E P G T E G A I E L E I T V V D G N G D P I A D A M F E I W Q A G P D G V H N
UniRef90_L0I3G4	G E A I T L Q G K V L D V F G R P I S G V K I E I W Q C D G Q G I Y D
UniRef90_UPI00047BDAA3	E T V R V R G V V R D T A G R P I P G V T V D V W E D A P N G L Y E
UniRef90_Q2MKD9	F P H S P G A I V L A G T I F D G A G L P I P D A M I E I F G A D I D G S V P
UniRef90_UPI000262A928	G A K G E P C E V S C T I R D L A G E P V P G A T I D V W Q A D A D G R Y D
UniRef90_U3QRM6	E V W Q A N A S G R Y A
UniRef90_Q2MKB5	E V W Q A N A G G R Y R
UniRef90_Q2MKD1	E V W Q A N A G G R Y R
UniRef90_UPI0003813A18	R D D E P G T P L T W T G R V T S T D G S A L A G A T V E V W H A D A D G Y Y S
UniRef90_A1W2C2	E E P P R G E V V V M E G R V L D T D G Q P V A G A L V D V W H A N E C G R Y S
UniRef90_A0A031GHD8	R E D E G G T P M V F H G Q V R S T D G T P L K D A K V E L W H A D S D G F Y S
UniRef90_G7ZC67	D G K G E P C L F R G R V L D T D G N P V A G A S V D V W S D N A D G F Y D
UniRef90_A0A010S520	S G D P E G E P L L V V C K I K D R Q G N P I S G V K I D I W E T D S S G H Y D
UniRef90_F4CK68	R P D E K G A P L V F A Q G V R D L D G R P I A G A E L D I W H A D A Q G Y Y S
UniRef90_A0A014NHX8	S D K D G H T L I M H G T V R G A N G Q P L P G A Q V E V W H A N T K G F Y S
UniRef90_E3QC14	E A F T H L H G R V L D Q H G Q P V K D A T V D I W H T A P N G M Y E
UniRef90_B2TEH3	G A R G E P C F V S G T V K G A D G E A V A N A R I E V W Q A D A D G F Y D
UniRef90_Q2MKD7	E V W Q A N A G G R Y N
UniRef90_H0TAT3	E V W H A N S K G G Y S
UniRef90_UPI000463D849	P G E V L I I S G T V R G E D G N A I P G A I V D V W H C D T R G F Y S
UniRef90_B2UB14	P D P A A G P L I I H G T V T Q D G K P V A G A L V E C W H A N S N G F Y S
UniRef90_H0C251	P K G E V F V M E G R V L D L D G N P V A H A S V D V W H A N E Q G G Y S
UniRef90_G9A4D4	D A N G H T L I M H G T V H G A D G K P L P G A T V E V W H C D T R G F Y S
UniRef90_N8S1M8	I P L L V K G K I L N Q Q G E A I V G A K I E V W Q T A E N G M Y S
UniRef90_J1ZP40	T P A I R G V R L D L S G V V Y D T A C K P L P E T L I E F W Q C D Q N G D Y D
UniRef90_UPI00036CFF4F	D G K G E T C L F E G R V L D L D G N P V E G A L I D V W S D N E D G F Y D
UniRef90_Q0K2L5	G A Q G E P C F V R G Q V R D W E G T A I P D A T I E V W Q A D Q H G H Y D
UniRef90_UPI0003648089	R D D E S G T P L L F Q G Q V T G V S G E P L S G A L L E M W Q A D D D G L Y A
UniRef90_E3HWU1	P G T V L V M E G Q V R D V D G Q P V A G A L V D V W H A N E C G R Y S
UniRef90_W6WRJ1	G A V G E P C L V R G T V K D R N G V P I A G A E L E I W Q A D A E G N Y D
UniRef90_X4ZBZ4	D P D A A A G P L V I R G V V T D T N G A P L A N A V V E C W H A N S E G F Y S
UniRef90_I2DYF6	A D A G A G P L V I H G T V K D L D G K P V A G A L V E C W H A N S H G F Y S
UniRef90_G7D690	K S E P I G E R I I V H G H V L D E D S R G V P D A L V E L W Q A N A C G R Y Q
UniRef90_UPI000467408C	R D D E P G T P L L F Q G Q V T S V D G A P L D G A R I E L W Q A D D L G F Y S
UniRef90_D1AAH1	E D G E V L V I V E G Q V T G R G G V P L A G A V V D V W H A N T L G N Y S
UniRef90_B8IBD2	E E D E K I T P L V F S G Q V T D L D G N G L A G A K V E L W H A D N D G Y Y S
UniRef90_P95607	S D E N A E T M I L T G Q V T D E N G N P L V N A V V D V W H A N T M G N Y S
UniRef90_H8WCE1	A T A E D G D A R E I S F T V L D G D G A P V A D A M V E I W Q T R P D G T F N R
UniRef90_S5T4I7	S H D P Q G E P C L I L C S V K D V N G A P I P D V K I D I W E T D S T G H Y D
UniRef90_Q2MKC5	E G K G E Y M F V E G T V K G T D G K P I P P N V T I D I W E T D D H G F Y D
UniRef90_A7EJD1	D T D A E A I I L I K G R I T D E N G E P L A N A V V D I W H A D T K G A Y S
UniRef90_UPI000455FE3A	G E P V F F H G T V G D V N G P V A D A L I E V W Q T A P N G M Y E
UniRef90_A6EXT5	E V W Q A N A G G R Y R
UniRef90_Q58S83	E V W Q A N A G G R Y R
UniRef90_Q2MKD2	E V W Q A N A G G R Y R
UniRef90_V9WGL6	V R E A G G E I I T L K G Q T G R N G I P I A G A R I E I W Q C D V N G K Y L
UniRef90_UPI00045619A4	Q D G N K G L T C Y L Y G T V T S A T G R P I D N A R I D V W H T G P N G F Y E
UniRef90_R4LLL6	I T R L H G R V L D G D G V P V P D A M L V E I W Q A G P D G Q Q P
UniRef90_W0Z738	F P H S P G A I V L L G G T V Y D G S G A P I P D A I V E I W G A D S D D G F Y D
UniRef90_UPI0003612582	R E D E P G T P L T W N Q V T S T D G S A L G G A T V E I W Q A N E D G F Y D
UniRef90_UPI0003B4EDB0	T P K D G Q V A Y M H G Q V T A E T G K P L A N A S V D V W Q A S T N G L Y E
UniRef90_G0RKX5	R S T T S G D P L V L K G R V L D V N G E P I A G A T L D V W Q A S P D G L Y E
UniRef90_U7FJE9	R D D E K G T P L L F Q G Q V R S T D G S P L S N A K V E L W H A D E E G F Y S
UniRef90_M7MXZ0	G A P G I P C L V R G T V R G I G G E P V A N A R M D V W Q S D E D G L Y D
UniRef90_UPI00035F2BA	P G E P A Y Y H G Q V T D T E G Q P I A N C C L D V W S G D G E G I Y D
UniRef90_A0A024ICW8	G R E M W L Y G G E V K D T N G K P L A N A V V D I W H A N T L G N Y S
UniRef90_UPI00037EBB3F	D T L F I E G K V T D T D G N P I P N A K V E V W H A N S L G N Y S
UniRef90_N8ZLW5	L V F G G Q V T D L D G K G I D G A I I E L W H A D A D G Y Y S
UniRef90_UPI00036EBB08	C L D G K G E P M V V E G R V T D L D G K P I P N A K L E V W Q T N D D G F Y D
UniRef90_M1VYD4	D G Q V V Y M H G K V I N V T G K P L A N A T V D V W Q G S T N G L Y E
UniRef90_A0A038H4V6	W Q T A D N G M Y S
UniRef90_J7JB10	W Q T A D N G M Y S
UniRef90_Q2MK9	W Q T A D N G M Y S
UniRef90_N1V372	R E N E Q G T P L L L Q G S I T N L A G E P L P G A T V E I W H A D D E E G F Y S
UniRef90_E6V443	G A A G V P C D V Y A T V R G L D G E R V A G A V V D V W Q A D E G G H Y D
UniRef90_UPI00046591EC	G H T L I M H G V V R G S D G E P V V A G A R V E I W Q C D V N G K Y L
UniRef90_UPI00036E3386	V E Q A G G E I I R I T L K L M S K Q G K P I L A G H R I E I W Q P A P D G S R P
UniRef90_S3ZN47	P A G H P D T L T H G Y V H D G A G A P V P D A I V E I W Q P G P D G D R P
UniRef90_UPI000464CDA6	M A L T S G E P I L V R G K V F D T L G R P L V G A C L D V W Q C A A N G M Y S
UniRef90_UPI0004650B9D	G E R A V I V H G R I T D C D G R P L V A G A V L D V W Q A D D T G L Y D
UniRef90_UPI0003782B51	C L D A K G E P M V V Q G R V T D V E G N P I V N A K L E D V W Q T N D D G Y Y D
UniRef90_K8RGS0	R D D E A G T P L V W V R G R I T D T N G A P L S G K V E L W H A D A E G F Y S
UniRef90_G8RL89	C L D G K G E S C L F E G T I T D T R G N S L E G A E L D V W S D N A D G Y Y D
UniRef90_K2HGT8	E V W Q A N A G G R Y R
UniRef90_Q2MKF8	E V W Q A N A G G R Y R
UniRef90_UPI000367D9B8	R D D E P G T P M I L A G Q V T D T D G T P L A G A T V E I W H T D D E G W Y S
UniRef90_D2STN4	M A F T P G E T A L V R G R V V D T Q G K P L A D A V L D V W Q T A E N G M Y S
UniRef90_S7RD10	E G K G Q Y M Y V E G R V I D T H G K P V P N A L I E I W E T D E Y G F Y D
UniRef90_UPI0003B53BAB	P D E G G Q M L H M N G T V K G P D G E P V V G N A I V H V W H A N S K G W Y S
UniRef90_W3WXN7	S T D P E G E P M V C D V C T V K D T E G R P I R G V K I D V W Q A D E G F Y D
UniRef90_J2LDW6	C L D H K G E D M V I G G R I L D T D G K P I A N A V L D V W Q A D E G F Y D
UniRef90_H0IZT5	G V E G E P L F I E G Y V H D A H G K P L A N V V I D V W Q S D S E G F Y D
UniRef90_A3HV65	V A G K G K P I H L T G I I M N D D C T P Y A N A K V E I W H C D E E G V Y D
UniRef90_H0PXC2	A E G K R L R V S G V V R D T G G P I V G A T V E I W Q A D A H G R Y R
UniRef90_UPI000440DD4B	E G K G E Y M F V E G S V L S T S G K P I P D A V I E T W E T D D D N G F Y D
UniRef90_UPI00047BE3BF	C L D G K G E P L V V R G R V V D T E G K P V A G A L I D V W Q T N D D G F Y D

	90	100	110	120
UniRef90_L8MER5	G Q D P E Q P [■] A N L R G R Y R T D G E	G R F A [■] R T I [■] P V S Y P I P R H P		
UniRef90_L7L1G6	Q F A P G I [■] P E W N L R A T F T T D	D E G R F E I T T I R P A P Y M I P W H P		
UniRef90_W1JF60	H P A P L D P N F T G A G R T V S D A A G Y Y R F V S I	K P G A Y P W G N H H		
UniRef90_H5X6M6	G F A P H V P E G N L R G V V V A D G D	G R F E V S T V K P A P Y Q I P W H P		
UniRef90_UPI00029A8554	H K K Q Q D Q N F Q G F G R F T T G S S G E Y R F R T I	I K P V P Y P G R P		
UniRef90_E4WK94	H P D D P R G G F R G F G R A G A D E T G T A V I H T	V K P G A L P A E N D T		
UniRef90_Q8FN48	S D L D P N D G F R G L G R A M A D	A N G A A T F T T L T P G A V G D		
UniRef90_L0I3G4	H P N Q [■] D P S F S G F G A T V T E E D G R Y L F Q T L	F P V P Y S S		
UniRef90_UPI00047BDAA3	Q Q D P D Q P D Y N L R G R F L T D	E K G E Y E F V G I R P V P Y P M G H H P		
UniRef90_Q2MKD9	H D A P T D P N F T G C G R T L S D	D Q G R Y R F V T I K P G E Y P W R N H Y		
UniRef90_UPI000262A928	R A R G A D H A F T G F G R A F T D D E G R Y E F W T R	N P G S V A		
UniRef90_U3QRM6	V Q Y A G L D Q A Q G R G V L H S D	A N G R F R F R T V L A Q A Y P I P D H P		
UniRef90_Q2MKB5	H D A P L D A N F T G T G R T I T D	E E G R Y R F V T I K P G H Y P W G N H Y		
UniRef90_Q2MKD1	H K A P L D P N F G G C G R N I L T D A D G G G	Y A F R T V K P P G H P W P N G P		
UniRef90_UPI0003813A18	Q F A P D I P E W N L R A G F T T D T E	G R F R I R T V R P A P Y R I P W H A		
UniRef90_A0A1W2C2	H F D P G Q A P Y H R L R K R T G A D	G S Y S R F R S F I P P G Y A I P P G S		
UniRef90_A0A031GHD8	Q F A P N L P E W N L R G S F P V D	E Q G G F S I T T V Q P A P Y Q I P W H A		
UniRef90_G7ZC67	Q Q P D [■] Q P P F F N N R G V F V T G E D G R Y A F R G	V K P V S Y P I P R H H C		
UniRef90_A0A010S520	V Q H E G R T E A S E R C V M I S D K E	G R F F F Q G I K P V S Y P I P H H C		
UniRef90_F4CK68	G F A P G I P E G N L R G V V V A D	D Q G R F E I S T V Q P A P Y Q I P T D P		
UniRef90_A0A014NHX8	H F D P T Q Q P F N M R R T I L A D G	Q G R Y K F Q S I V P V G Y G C P P D G		
UniRef90_E3QC14	Q Q V T G Q P D M D L R G R F R T D G E	G R Y S S L Y C K P V P Y P V P D D G		
UniRef90_B2TEH3	V Q H A G D D T H R A R G V L H S A D	G R Y R F R T I V A E P Y P I P W H H P		
UniRef90_Q2MKD7	H D A P I P D P N F T G A G R F L T D K D G H Y R F M T I	R P G E Y P W H H N A		
UniRef90_H0TAT3	F [■] D G E Q A P Y N L R R R I A T D S K	G R Y L A R S I V P N G Y G C P P H A		
UniRef90_UPI000463D849	H F D P T Q A P F N M R R T I I A D E	E N G R Y R F Q S I L P S G Y G V P P G S		
UniRef90_B2UB14	H F D P T Q S P F N L R G A V R T G A D	G K Y E F R T L L M P V G Y G C P P H G		
UniRef90_H0C251	H F F P G M K P Y E L R R R I E T D	A Q G Q Y R F R S F I P P G Y A I P P N S		
UniRef90_G9A4D4	H F D P T Q A P F N M R R T I V T D	E N G G C V P H G Y G V P P G S		
UniRef90_N8S1M8	G Q D P [■] Q A [■] S N L R G A F I S Q M	Q G E Y A F K S I L P V S Y Q I P R H F		
UniRef90_J1ZP40	T S G F S L R G H Q Y T D S R	G A Y L L K T I I P R D Y W G R W G		
UniRef90_UPI00036CFF4F	V Q Q P G Q P P F N N R G I F R T G A D	G R Y A F R G I R P V S Y P I P H H P		
UniRef90_Q0K2L5	V Q P D G A H T H R A R G R L R T G	E D G R F S F R S I I L A E P Y P I P H H P		
UniRef90_UPI0003648089	Q F A P G [■] P E W N L R G A V E T D	D E G R F A V L T V Q P A P Y Q I P W H P		
UniRef90_E3HWU1	H F D P D Q A D Y H L R R K I K T D	A Q G R Y R F R S F I P P G Y A I P P N S		
UniRef90_W6WRJ1	V Q Y P D L K T H Q A R G V L R S R Q D	G S F E F R T V V A V A Y P I P R H P		
UniRef90_X4ZBZ4	H F D P T Q D F N L R G A V Q T G P D	G K Y E F R T L L M P V G Y G C P P H G		
UniRef90_I2DYF6	H F D P T Q R D F N L R G A V R T G A D	G T Y A F R T L L M P V G Y G C P P H G		
UniRef90_G7D690	H P A P L D P N F T G A G R A Q T D P K G H Y S F V T I	R P G A Y P W G N H H		
UniRef90_UPI000467408C	Q F A P S L P E W N L R G T V I A D G E	G N F Q V N T I Q P A P Y Q I P W H A		
UniRef90_D1AAH1	G A P G S L R A F T G F G R V A V D A D	G H Y A L E R T L L P P G G L		
UniRef90_B8IBD2	V F D K S Q S P W N L R R R I E T D	A Q G R Y R F R S I I L P K G Y G C P P H G		
UniRef90_P95607	Q F A P H [■] P E W N L R G T I I A D	E E G R Y E I T T I Q P A P Y Q I P T H P		
UniRef90_H8WCE1	Y F D Q S Q S E Y N L R R R I R T D	E N G R Y T A Q S I I P A G Y G C P P H G		
UniRef90_S5T4I7	A P N D P R D G F R G L G R A M A D	E T G T A T F T T L L L P G A F D		
UniRef90_Q2MCK5	H A A P L D P N F T G A G R C V T N D R G E Y R Y R L T I	I K P G A Y P W H P N A		
UniRef90_A7EJD1	V Q R E N R T E P D G R C I M Q S D A Q G E F W F R A I	V P V P Y P I P H H P		
UniRef90_UPI000455FE3A	T Q Y T S R E A P D C C R G R L R T D S E	G R Y S Y R A V V V P V P Y P I P R H N		
UniRef90_A6EXT5	Y F D Q S Q S E Y N L R R R I R T D	G R Y A A Q S I M P S G Y G C P P H G		
UniRef90_Q58S83	G Q D P D Q P E G N L R G R F R T N A D	G A Y A F H S I K P T S Y P I P R H P		
UniRef90_Q2MKD2	H V N D D D P N F G G C G R T L T D A D	G R Y R F R T I K P G A Y P F R N N S		
UniRef90_V9WGL6	H P G D D R P G F Q G F G H D I T D	D D T G N Y A F R T I R P T K Y P		
UniRef90_UPI00045619A4	Q Q D P D Q P D Y N Y R G R F N T A A D	G R Y S R F C L V P T A Y P I P Y D P		
UniRef90_R4LLL6	G S L R R D G T F T G F G R T A T T V D	G H Y S F T T V E P G P T G P		
UniRef90_W0Z738	R E R G D D H S F T G F G R A A T T D D G H Y E F W T R	R N P G V V D G K		
UniRef90_UPI0003612582	V Q Q P G I Q P E L N L R G F T A D D D G R F W F R S	V V P K Y Y P I P D D G		
UniRef90_UPI0003B4EDB0	Q Y A P G L P E W N L R G T F V T D	E Q G R F A I R T V Q P A P Y Q I P W H A		
UniRef90_G0RKX5	Q Q D P D Q I D C N L R G K F I T D A E	G R Y S F Y G C L R P T P Y P I P R H E		
UniRef90_U7FJE9	N Q D K D Q A D F N L R G K F I V S D	E N G N Y L I R T V K P A G Y P V P V H P		
UniRef90_M7MXZ0	Q F A P G I P E W N L R G T F I A D E	E D G N F R I D T M Q P A P Y Q I P W H A		
UniRef90_UPI00035FF2BA	V Q H P D I D H A Q A R G I V H A D S E	G R Y H F R S I I L A V P Y A I P H H P		
UniRef90_A0A024ICW8	M Q M G E D A G M R L R A R F R T D	A Q G N Y R F W S I K P S F Y P V P D D G		
UniRef90_UPI00037EBB3F	F F D K S Q S E Y N L R R R I R T G S D	G R Y S V R S I V P S G Y G C P P H G		
UniRef90_N8ZLW5	F F D K S Q S D F N L R R R I L S D	E N G Q Y V A Q T T M P V G Y G C P P H G		
UniRef90_UPI00036EBB08	Q F A D H L P E W N L R G K I T D S E	G R Y E I T T I I Q P A P Y Q I P T H P		
UniRef90_M1VYD4	Q Q D P D Q R E Y N L R G I F H T D	A E E D G R Y A F Y C L K P T P Y P V P T D G		
UniRef90_A0A038H4V6	V Q Q K G V Q P D S N M R G V F T S D A E	G R Y W F K S V K P R H Y P I P S D G		
UniRef90_J7JB10	G Q D Q E Q P H G N L R G R Y R T D A E	G R Y A I T T I L P V S Y P I P R H P		
UniRef90_Q2MKE9	H N A P L D P N F L R G A G R C M T D G D	G R Y T F M T I K P G A Y P W G N H P		
UniRef90_N1V372	Q F A P G L P E W N L R A T V A A D E	G R Y M I N T M Q P A P Y Q I P W H A		
UniRef90_E6V443	V Q H D G L D H A E N R G R L R T G P D	G A L H F R S I V L A Q A Y P I P R H P		
UniRef90_UPI00046591EC	H F D P T E Q A P F N M R R T I I A D D	R G R Y G F R S I V P K G Y G V P P G S		
UniRef90_UPI00036E3386	H P N D N D N G F Q G F G H D I A D G N	G N Y S F K T I K P T I Y P		
UniRef90_S3ZN47	G S L R R D P T F T G F G R V P T D A D	G H W A I R T L L P P G G V		
UniRef90_UPI000464CDA6	G S L R R D P T F T G F G R I A T D A D	G H W A A R T L L P P G G V		
UniRef90_UPI0004650B9D	G Q D I G Q A E G N L R G R Y H T D	E Q G C Y A I R S T L L P V S Y P I P R H P		
UniRef90_UPI0003782B51	S Q D A E Q P D G N L R G L F T T G P D	G A Y W F R T V K P A S Y P V P R H P		
UniRef90_K8RGS0	V Q Q G I Q P D H N L R G V H F S D S D	G R Y W F K S V K P R H Y P I P S D G		
UniRef90_G8RL89	Q F A P G I P Q W N L R G S F T S G P D	G V F E I T T I R P A P Y M I P W H A		
UniRef90_K2HGT8	Q Q P D I Q P K W N N R G R F I T G A D	G R Y R F R G I K P V S Y P I P D D G		
UniRef90_Q2MKF8	H K A P L D P N F G G C G R T L T D	E N G Y Q F L T I R P G A Y P W P N N D		
UniRef90_UPI000367D9B8	G F A A K P P A G N L R G V V T C D	G A L D Q D Q G R Y E I H T R K P A P Y T P L D P P		
UniRef90_D2STN4	G Q D T E Q P F Q R G R Y R T D	A N G Y F A L R T I V P V C Y P I P R H P		
UniRef90_S7RD10	T Q Y A D R S K P D C R G R L R T D K D	G R Y G Y R A V V V P V A Y P I P R H N		
UniRef90_UPI0003B53BAB	H F D P T Q T P F N N R R R I K L G P D	G R Y A F H S N Q P S G Y S V P P H G		
UniRef90_W3WXN7	V Q H E R D E T G P S E R C V M E S D E Q G V F W F K A I	I K P V S Y P I P H H C		
UniRef90_J2LDW6	Q Q Q G I Q P D F N L R G V F V R T G K D	G H Y W F R A V V K P K Y Y P I P D D G		
UniRef90_H0IZT5	V Q K P E L E S S T L R A R F H T D	S Q G R Y A F W T V T P S P Y P I P R H P		
UniRef90_A3HV65	N S T P A P Y N Y R G T V M T D S K	G Q Y S F D T I L P V P Y D A G G G M		
UniRef90_H0PXC2	H P G S R D P A F Q G Y G R V L T D	A Q G R Y A F L T I L P G N Y G		
UniRef90_UPI000440D4DB	T Q Y K N R E K P D C R G R L R S G P D	G K F G Y R A V V V P V A Y P I P R H N		
UniRef90_UPI00047BE3BF	V Q Q G I Q P D W N L R G V F T S G E N G D Y W Y R A V	V K P R Y Y P I P D D G		

130 140 150 160

UniRef90_L8MER5	WR P A H L F M V T A E G H R T L V T H L F N H D D P Y L E S D V V F L K V
UniRef90_L7L1G6	WR P A H L H L K V S A P G H E Q L T A Q L Y F P G D P H N D D D
UniRef90_W1JF60	WR P A H I H L S V F G H S F V T R L V T Q M Y F P N D P L F P F D P I F N S
UniRef90_H5X6M6	WR P A H P H L I V R A S G H R Q I T T Q L Y F E G G E W L E D D
UniRef90_UPI00029A8554	V E A P H I H V K L K R G D Q E L L T T Q I F V R G D E G N K R D G V F Y Q
UniRef90_E4WK94	E A P H I H V N L G I F A R G M L E R L Y T T R L Y F P E D T Q A H T G D P V L L A
UniRef90_Q8FN48	E A P H F K H V G V F A R G M L E R L Y T T R A Y L P D A D L S A D P V L S A
UniRef90_L0I3G4	R P P H I H V K L W R G D H E L L T T Q L Y L K G Q T G N E W W G G
UniRef90_UPI00047BDAA3	W R P G H I H F M L K K D G Y S S L V S Q I Y D A D T E Y L D N D A V F A V
UniRef90_Q2MKD9	W R P A H I H F S L F G P A F A T R L V T Q M Y F P G D P L L P F D P M F N C
UniRef90_UPI000262A928	G E A P F F S A I V F A R G L P D K H T R I Y L P E D G T R L D A D P L L S V
UniRef90_U3QRM6	W R P A H I H F M I Q A P G Y E T L V T H V F R K G D Q Y L D S D A V
UniRef90_Q2MKB5	W R P A H I H F S V L G P G F L T R L I T Q M Y F P G D P L F P L D P I F N S
UniRef90_Q2MKD1	W R P S H I H F L V F G H G F A Q R I T Q M Y F E G D P L I W R C P I V R G
UniRef90_UPI0003813A18	W R P A H I H V K V S A P G H E L L T A Q L Y F P G D E H N D D D
UniRef90_A1W2C2	P R P A H I H F L V V A D G L R T L T T Q V N P G D S F L D D D F
UniRef90_A0A031GHD8	W R P A H I H L K V S A P G H E L L T A Q L Y F P G D E H N D D D
UniRef90_G7ZC67	W R P A H M H F L I G A P G F E R L I T H I F V A G D S Y L D S D A V
UniRef90_A0A010S520	W R P A H I H F M F Q K E G W D H L I T A L Y L R G D P Y E K S D A V F K S L
UniRef90_F4CK68	W R P A H I H L I V R A P G Y R P V T T Q L Y F E G G E W L D S D
UniRef90_A0A014NHX8	P R P A H I H F F V S A P G H R K L T T Q V N P G D P L V F D D F A Y A T R
UniRef90_E3QC14	P R P A H I H F I V S A D G Y R P V T T Q L F D K E G E Y L E D D S V F A V
UniRef90_B2TEH3	W R P A H I H F M I T A P G Y E R L V T H V F R E G D Q Y L D S D A V
UniRef90_Q2MKD7	W R P A H I H F S L F G Q G L M Q R L I T Q M Y F P G D P L E Y D P M F M C
UniRef90_H0TAT3	E R P A H I H Y F I S A P G Y R Q L T T Q F N F T G D K Y L Y T D F A F G T R
UniRef90_UPI000463D849	P R P A H I H F F I S A P D H R K L T T Q I N E G D P L I N D D F A Y
UniRef90_B2UB14	N R P A H V H F F V T S D G H R K L T T Q F N I E G D P L I W D D F A Y A T R
UniRef90_H0C251	P R P A H I H F L V V A P G M R T L T T Q I N V P G D S F I D D D F
UniRef90_G9A4D4	P R P A H I H F F I G A D G H R K L T T Q I N I D Q I N I D G D P L V N D D F A Y A T R
UniRef90_N8S1M8	W R P A H I H F M I T A E G Y Q P V T H L F L Q D D E Y L N A D A V
UniRef90_J1ZP40	Q R A P H I H T Q V Q V S G G P L V T T Q L Y F P D D T Q A Y G R F A A L N A
UniRef90_UPI00036CFF4F	W R P A H M H F M V T A P G Y R R V I T H L F V S G D P Y L D A V F G V K A S
UniRef90_Q0K2L5	W R P A H I H F M I S A P G C E T T L I T H V F R D G D R Y L D S D A V
UniRef90_UPI0003648089	W R P A H I H L K V S A P G H E T L T A Q L Y F R G G E H V E D D
UniRef90_E3HWU1	P R P A H I H F L V V A A E G Q R T L T T Q V N L P G D T F L D D D F
UniRef90_W6WRJ1	W R P A H I H F M I K A K Q H Q T L V T H V F R N G D Q Y L D S D A V
UniRef90_X4ZBZ4	N R P A H V H F F V V S A D Q R H R K L T T Q F N I E G D P L I W D D F A Y
UniRef90_I2DYF6	N R P A H V H F F V V T S D G H R K L T T Q F N I E G D P L I W D D F A Y
UniRef90_G7D690	W R P A H I H F S V F G H S F A P R
UniRef90_UPI000467408C	W R P A H I H L K V S A P G H Q L I T T Q L Y F P G D P H N A D D
UniRef90_D1AAH1	P Y I S V C H F V F A R G L L H Y T T R V Y L S D P G D D P L L A S
UniRef90_B8IBD2	Q R P A H I H F F V S G P E H R Q L T T Q I N L A D D P Y V Y D D F A F G T R
UniRef90_P95607	W R P A H I H L I V S A P G K E S V T T Q L Y F K G G E W I D S D
UniRef90_H8WCE1	N R P A H I H F F I S K S G F K H L T T Q I N L A G D E Y T Y D D F
UniRef90_S5T4I7	G Q A P H I H N V G V F A R G M L E R F T R L Y F P E N S D A N A A D P V L A E
UniRef90_Q2MCK5	W R P A H I H L S L F G P S F V T R L V T Q F F F P G D P L I P L D P I L N S
UniRef90_A7EJD1	W R P A H M H F M F Q K T G W D H L I T A L Y L R G D P Y E S S D A V F E S L
UniRef90_UPI000455FE3A	M R P A H I H M M F E A P G Y A K L V T A F Y P A G D E F I Q S D A V F L E Q
UniRef90_A6EXT5	Q R P A H I H Y F V V S K P G Y K H L T T Q I N L A G D E Y T Y D D F A F A T R
UniRef90_Q58S83	M R P A H I H F R I D A P G Y E P L T A L Y L S S D D P Y V N S
UniRef90_Q2MKD2	W R P A H I H F S L F G A G G W A Q R I M Q M Y F E G D P L L R H D A I A H T
UniRef90_V9WGL6	G R T P H I H V K V L D G S R E L T T Q F Y E G D P D N A K D G L H R R
UniRef90_UPI00045619A4	M R P A H I H F L I D A P G H K Q V T Q I F D R Q C K Y L G A D A V F A D L
UniRef90_R4LLL6	G R P A F F A F T V F A R G L P N K H T R I Y L P G D A E A G T D P L L A A
UniRef90_W0Z738	A P F F A V V V F A R G L P N K H T R I Y L P G D A E A G T D P L L A D
UniRef90_UPI0003612582	P R P A H I H F I V S A P G Y R P V T T H V F V I A D S P Y L D S D A V L I R E
UniRef90_UPI0003B4EDB0	W R P A H I H V K V S A P G H E E L T A Q L Y F P G D P H N E D D
UniRef90_G0RKG5	Y R P A H I H L I V E A A E G Y G S L T T Q I F D K D D S K Y L E D D S V F A V
UniRef90_U7FJE9	M R P A H V H F I V S A P E H K T L I T Q I F A D T D E A M V N D V V F G A
UniRef90_M7MXZ0	W R P A H I H L K V S A P G H E L L T A Q L Y F P G D E H N D D D
UniRef90_UPI00035FF2BA	W R P A H I H F L I E A D G Y E K L I T H V F R S D D D Q Y L D S D A V
UniRef90_A0A024ICW8	W R P G H I H M K V Y A A P G H Q T V T T H V F V I A D S P Y L D S D A V
UniRef90_UPI00037EBB3F	P R P A H I H F F V A A P G H K H L T S Q I N L N G D K Y L W D D F
UniRef90_N8ZLW5	N R P S H V H Y F V S A P G Y R K L T T Q F N I E G D K Y L W D D F A F A T R
UniRef90_UPI00036EBB08	W R P A H L H L I V S A P G K E S V T T Q L Y F E G G E W L D S D
UniRef90_M1VYD4	W R P A H I H L M V Q A E G H K P L T T Q I F D K D D C K Y L A N D S V F A V
UniRef90_A0A038H4V6	P R A A H I H F I V T A P G F D P V I T H I F T P D C P Y L P E D A V F F N K
UniRef90_J7JB10	W R P A H L H F M I D A P G Y R K L V T H F D E E G A Y L K S D A V F G V
UniRef90_Q2MK9	W R P Q H I H F S L F G D Y F A S R V T Q M Y F P G D P L F A Y D P M Y Q G
UniRef90_N1V372	W R P A H L H L K I S A P G Y Q L T S Q L Y F K G D E H V G D D I
UniRef90_E6V443	W R P A H L H F K I E A P G Y E N I T H V F R E G D Q W L D S D A V
UniRef90_UPI00046591EC	P R P A H I H F F V S A A E G H R K L T T Q I N I A G D P L V N D D F
UniRef90_UPI00036E3386	G R A P H I H V K V L D G D R E L T T T Q F Y I A G N K L N S T D G L Y R R
UniRef90_S3ZN47	P Y L S I A L F A R G L L D H Y T T R A Y V R D A P D D T L L T
UniRef90_UPI000464CDA6	P Y L S V C H F V F A R G L L H Y T T R I Y L P G P A A E A A P L L A
UniRef90_UPI0004650B9D	W R P A H I H F M I D A P G H R R R L V T H L F N E G D P Y L D S D D A L R V A
UniRef90_UPI0003782B51	M R P A H V H L R V E A A G H R P L T T H V F A A D D P Y L G S
UniRef90_K8RGS0	P R A A H I H F I V T A P D Y D A V I T H I F T P D C P Y L G E D A V F F Q R
UniRef90_G8RL89	W R P A H I H V K V S A P G H E Q L T A Q L Y F P G D E H N D D D
UniRef90_K2HGT8	P R P G H I H M L L V K A D G Y H T I V S H S F V E G D E Y L D D D T V
UniRef90_Q2MKF8	W R P M H I H A S V F G H S F G Q R L I T Q M Y F E G D P L I P L C P I A A T
UniRef90_UPI000367D9B8	W R P A H I H L L V S A P G H R T L T T Q L F F T G D P Y L G N D
UniRef90_D2STN4	W R P A H I H F M I D A P G Y R K L V T H V F H D D P Y L D S
UniRef90_S7RD10	M R P N H L H M M I E A P G Y Q K T T A F Y P E G D E W L A S D A V L K D V
UniRef90_UPI0003B53BAB	N R P A H V H F F I E A P G Y R T L T T Q I N F G D D P F A A D D F
UniRef90_W3WXN7	W R P A H I H F M F D K P G L D K I T A L Y L R G D P Y E T S D A V F G S L
UniRef90_J2LDW6	P R P A H I H Y L I K A E G F E T L V T H I F D P D D P Y I H S D A V F F K L
UniRef90_H0IZT5	Y R P A H V H F M L M A P G Y E T L V T Q I F A E D D P Y L D S
UniRef90_A3HV65	I R P A H Y H M I T A E G Y Q T V T T Q L Y F S G D E N I K K D P W A S N
UniRef90_H0PXC2	T R P P H I H F R V A R P G H P E F V T Q M Y F R G N N R E G N G Y T P
UniRef90_UPI000440D4DB	M R P N H L H V M I E A P G Y V K L T T A L Y P D G D P Y M T S D A V
UniRef90_UPI00047BE3BF	P R A A H I H F I V S A P G Y D P V I T H I F T P D C Q Y L A E D A V F G V

170 180 190 200

UniRef90_L8MER5	V Y Q P C R A N H P L A T R Y G F E G D F H L T Y D F V L E H P		
UniRef90_L7L1G6	V A S A V K P E L V L D P K E D G K G G F T V A Y D F V L D P E K		
UniRef90_W1JF60	V P D E K A R A R		
UniRef90_H5X6M6	V A Q A T K P E V L D P R P D G E G K L R A E Y D F V L E P Q G		
UniRef90_UPI00029A8554	T R D L I D R E L L Q T D F T P R T G E L S A V F D I V I R T P D E N A F		
UniRef90_E4WK94	L P E S Q R P K L I A S R T D D G Y S L T V Y V Q D S D P D G V E T P F F E L		
UniRef90_Q8FN48	V P D D R R D L V A T A T D N G Y R F D I T V Q S E G E T P F F A L		
UniRef90_L0I3G4	K A R D H L Q F E P V N I D R R I V G T F D F V I		
UniRef90_UPI00047BDAA3	K E S L I G K G A G A D T D L V M E F D F K L K P A K G T I		
UniRef90_Q2MKD9	V P D E R A R N R L I S E T T I P E T A L G F R F D I V L H G		
UniRef90_UPI000262A928	L S A A Q R S T L V A T R T P D G H L A H D I H L Q G A K E T V F L A Y		
UniRef90_U3QRM6	F G V R E S L V G E W V Q G D G S W R L D F D F V L		
UniRef90_Q2MKB5	V R D P A V R A R T I S S F T V P D W A L G F R W D I V L H G		
UniRef90_Q2MKD1	I R D K A A I E T L I A Q A T I P F D A R A R Y K F D I V L H G		
UniRef90_UPI0003813A18	I A S A V K P E L M L D P K S G P D D E T V R Y D F V L D		
UniRef90_A1W2C2	A F A T R D G L V V T L E P G T P A A G Y R F D F V L Q		
UniRef90_A0A031GHD8	A S A V K P E L I L D P Q P A G D G V D V A Y D F V L D		
UniRef90_G7ZC67	F G V K D R L I V D F K P A D D G W L A E Y D F V L		
UniRef90_A0A010S520	V V D L D K V D K A T A E Y S V K E G S W L K Q D F V L V S E K E T		
UniRef90_F4CK68	V A N A T K P E L V L S P K A Q P D G R L R S E Y D F V L D		
UniRef90_A0A014NHX8	E G V P A V V E R T D A A S Q A E G L S A I V F D I Q L		
UniRef90_E3QC14	K E D L I V E Y K P S E A R W T L E Y D F V L C G A		
UniRef90_B2TEH3	F G V R S S L V A Q W K H H E A G T A L E F D F V L		
UniRef90_Q2MKD7	V P D P K A R Q R L V V S S F D V P E Y A L G Y R W D I V L H G		
UniRef90_H0TAT3	E E L I V T L E R I K S P D E I R K A G L R A T F D I V L T K E T		
UniRef90_UPI000463D849	I P H V V D K T G G A A F D L K T D A Y K D L E F N V V L		
UniRef90_B2UB14	A F A T R D G L V I A L E K N V P A A G Y K F N F V L Q		
UniRef90_H0C251	D G L V P A L I E R T D E A G P F A E E F D I H L		
UniRef90_G9A4D4	F G V K D R L I V G F Q Q V E D Q T Q F T F D F V L Q G E		
UniRef90_N8S1M8	A D R L R N R A C T I A L T G P E G G R Y T G T F D F V L		
UniRef90_J1ZP40	L I T P F E R V D R D S E T W H A A Y D F V L Q A E		
UniRef90_UPI00036CFF4F	F G V R S T L V A D W V Q P D G S L T L D F D F V L S R A H E		
UniRef90_Q0K2L5	V A S A V K P E L V I D P R P V G D G G N Q V T Y D L V L D		
UniRef90_UPI0003648089	A F A T R D G L V V I E L Q P G T P P A G Y E F D F V L Q		
UniRef90_E3HWU1	F G V R Q T L V A D W R Q P D G G Y T L N Y D F V L		
UniRef90_W6WRJ1	A T R E G L I P P V V E K T G G A A L		
UniRef90_X4ZBZ4	A T R E E L I P P V T T K T G G A A L A F D F V L T P R		
UniRef90_I2DYF6			
UniRef90_G7D690			
UniRef90_UPI000467408C	I A S A V K P E L M L D V Q E R G N G A R V T T Y N F R L D P E		
UniRef90_D1AAH1	L E P K R R A T T L L A V P E R E G V Y R F D I R L Q G D G E T V F L D F		
UniRef90_B8IBD2	D G I L V V I E V E R V I A A A G L N E P F S K I R F D F A L N P E		
UniRef90_P95607	V A S A T K P E L I L D P K T G D D G K N Y V T Y N F V L D		
UniRef90_H8WCE1	V G E Q R R G A L V A E Q T E R G Y H L T I H V Q H H D D E T P F F		
UniRef90_S5T4I7	V P T K S G R K R L M S S Y A E P E F A L G Y R F D I V L H G		
UniRef90_Q2MCK5	I V N F E P A T A E I A E Y S V P V G S K V L K H D F V L V S E R E T		
UniRef90_A7EJD1	V N D P E R A K A L G F K R A E G F K Y L R K D I V M R T E A E		
UniRef90_UPI000455FE3A	E E L V V A A N R		
UniRef90_A6EXT5			
UniRef90_Q58S83			
UniRef90_Q2MKD2	I P D A A A V Q R L T A D A A T P L D C L A Y R F D I V L H G		
UniRef90_V9WGL6	M S K A E A R A V S M A F T E G P K G		
UniRef90_UPI00045619A4	T V D F V E P R T Q E A K D F G V D R Q L C F D I R L V P D E		
UniRef90_R4LLL6	I P P E R R T T L L T R D A T G L A F D V H L Q G P H E T V F L S F		
UniRef90_W0Z738	L S A D E R A T L V A T R T P D G Y L R H D I R L Q G E K E T V F L A F		
UniRef90_UPI0003612582	V P E V D D P E R A A A A G P N P F R T L T F D I V L Q		
UniRef90_UPI0003B4EDB0	I A S A V K P E L V L D P Q D A G D G S V T V D O Y G F V L D		
UniRef90_G0RKX5	K D G L T V E F K P R E G D A K A Q W D		
UniRef90_U7FJE9	K E D L E L R E T P S A E Y P D V A A P F T C T Y D F I L		
UniRef90_M7MXZ0	I A T A V K P E L L I Q Q A T E G N G V Q T T Y D F V L D		
UniRef90_UPI00035FF2BA	F G V R Q S L I A D K Q R P D G S Y L V E Y D F V L K P A Q Q		
UniRef90_A0A024ICW8	F G V R N S L I V P F Q Q H P A G T A A T Y D F R L V P A R		
UniRef90_UPI00037EBB3F	A F A T R D G L V A D P V E I T D P A V A R F R D F A L		
UniRef90_N8ZLW5	D G L V A A D E A E I A R R G V D K A F K H I T F N V E L V K D K		
UniRef90_UPI00036EBB08	V A S A T K P E L I L S P T A G D D G K N H V D Y N F A L D P A G E		
UniRef90_M1VYD4	K E E L T V E F V P R K G D A Q A A L E E Y D V R L		
UniRef90_A0A038H4V6	I D D A D A A K R A G F S S P F W S V S W D F T L A T S G		
UniRef90_J7JB10	K P S P R A A D D E L A R R V G L S G P R E A T Y D F V L D		
UniRef90_Q2MKE9	V P A D S R E L M V A K F T Q P D F A L G Y V F D I V L G G		
UniRef90_N1V372	A S A V K P E L I L D P T P R T D N R G R E Y D F V L D P E		
UniRef90_E6V443	F A V R Q S L V A P K Q Q A D G R W R L D F D F V L		
UniRef90_UPI00046591EC	A H A T R D G L V P Q I V E R D D E A G M R A Y G L D G P F A E A F D F		
UniRef90_UPI00036E3386	M S V E Q A Q Q		
UniRef90_S3ZN47	A L D A G R R A T L L A Q A Q G P H R A Y R F D I R L Q G E G E T V F L E F		
UniRef90_UPI000464CDA6	G L A P E R R A T L L A T E E R P G V H R F D I R L Q G D G E T V F L D F		
UniRef90_UPI0004650B9D	Y R S C A A D D P L A A R F G F D T A F R M A D Y D F V L		
UniRef90_UPI0003782B51	D A A F A V K D A L I A P F A P G D Q D T A R R F		
UniRef90_K8RGS0	I E D E A A A M R L		
UniRef90_G8RL89	I A S A V K P E L I L D P V P Q P D G S Q E V R Y D F T L D P E R		
UniRef90_K2HGT8	F G V K E S L I A T Y E R V D G D T V W R F D I V M A R P G E T		
UniRef90_Q2MKF8	I R N R S Q L D W L V A P L D M P L D Y L A Y K F D I V L H G		
UniRef90_UPI000367D9B8	V A S A D K P E L D P Q P T G N G A E V R S D R D F V L		
UniRef90_D2STN4	D N E Q E A R K R G F P K G S H F K L L E H D L V L V P E A E		
UniRef90_S7RD10	A F G T R E G G L L P V P L R Q G D T A S I Q F D F Q L Q		
UniRef90_UPI0003B53BAB	I V D L D K V D K E T A K Y D A E E G H W L R H E F V L V T E K E T		
UniRef90_W3WXN7	T E D P A R A N E L G F E G K F W Q V E Y D F V L A P A K		
UniRef90_J2LDW6	D A A K N R V L Q V T P D G N N G S V		
UniRef90_H0IZT5	P E R E A L T D L V Q G Q E D A G Q I T L A A R F D L T L A G A		
UniRef90_A3HV65	F G V K K S L V V H K D V D D E A E A R F D F V L V T N E E		
UniRef90_H0PXC2	K D S L V A D F K A I S G P T A V N W D F V L		
UniRef90_UPI000440DD4B			
UniRef90_UPI00047BE3BF			

UniRef90_L8MER5
UniRef90_L7L1G6
UniRef90_W1JF60
UniRef90_H5X6M6
UniRef90_UPI00029A8554
UniRef90_E4WK94
UniRef90_Q8FN48
UniRef90_L0I3G4
UniRef90_UPI00047BDAA3
UniRef90_Q2MKD9
UniRef90_UPI000262A928
UniRef90_U3QRM6
UniRef90_Q2MKB5
UniRef90_Q2MKD1
UniRef90_UPI0003813A18
UniRef90_A1W2C2
UniRef90_A0A031GHD8
UniRef90_G7ZC67
UniRef90_A0A010S520
UniRef90_F4CK68
UniRef90_A0A014NHN8
UniRef90_E3QC14
UniRef90_B2TEH3
UniRef90_Q2MKD7
UniRef90_H0TAT3
UniRef90_UPI000463D849
UniRef90_B2UB14
UniRef90_H0C251
UniRef90_G9A4D4
UniRef90_N8S1M8
UniRef90_J1ZP40
UniRef90_UPI00036CFF4F
UniRef90_Q0K2L5
UniRef90_UPI0003648089
UniRef90_E3HWU1
UniRef90_W6WRJ1
UniRef90_X4ZBZ4
UniRef90_I2DYF6
UniRef90_G7D690
UniRef90_UPI000467408C
UniRef90_D1AAH1
UniRef90_B8IBD2
UniRef90_P95607
UniRef90_H8WCE1
UniRef90_S5T4I7
UniRef90_Q2MKC5
UniRef90_A7EJD1
UniRef90_UPI000455FE3A
UniRef90_A6EXT5
UniRef90_Q58S83
UniRef90_Q2MKD2
UniRef90_V9WGL6
UniRef90_UPI00045619A4
UniRef90_R4LLL6
UniRef90_W0Z738
UniRef90_UPI0003612582
UniRef90_UPI0003B4EDB0
UniRef90_G0RKX5
UniRef90_U7FJE9
UniRef90_M7MZX0
UniRef90_UPI00035FF2BA
UniRef90_A0A024ICW8
UniRef90_UPI00037EBB3F
UniRef90_N8ZLW5
UniRef90_UPI00036EBB08
UniRef90_M1VYD4
UniRef90_A0A038H4V6
UniRef90_J7JB10
UniRef90_Q2MKE9
UniRef90_N1V372
UniRef90_E6V443
UniRef90_UPI00046591EC
UniRef90_UPI00036E3386
UniRef90_S3ZN47
UniRef90_UPI000464CDA6
UniRef90_UPI0004650B9D
UniRef90_UPI0003782B51
UniRef90_K8RGS0
UniRef90_G8RL89
UniRef90_K2HGT8
UniRef90_Q2MKF8
UniRef90_UPI000367D9B8
UniRef90_D2STN4
UniRef90_S7RD10
UniRef90_UPI0003B53BAB
UniRef90_W3WXN7
UniRef90_J2LDW6
UniRef90_H0IZT5
UniRef90_A3HV65
UniRef90_H0PXC2
UniRef90_UPI000440DD4B
UniRef90_UPI00047BE3BF

50 60 70 80

UniRef90_M7R4E1	E G L V G E P I V L Q G R V L D T S G N P A S G I K V	E I W Q C D G Q G I Y D
UniRef90_Q46TP3	G E P C Y V S G Q V R S L T G E A V P G A K I	E V W Q A D A D G F Y D
UniRef90_UPI00045EC3E1	P D A D A G P L R I H G I V T G P D G A P V A D A L V	E V W H S D S K G F Y S
UniRef90_M4GDC8	S S D P E G E P M L A V C T V R D K A G N P L A G V K I	E V W E T D S T G H Y D
UniRef90_U1HI73	S S D P D G E P L L V L C T L K D S A G R P I E G C K I	D I I W E T D S T G R Y D
UniRef90_UPI000408D151	R P D E P G E T L H F S G R V Q D L Q G K P L A N T K V	E I I W H N D N S R K Y S
UniRef90_X5EAZ3	A G A V G E P A W V E G T V T D T D G R P V P G A R I	E V W E C D E D G M Y D
UniRef90_Q9AEQ0	P G V V M F L Q Q G Q V F D A D G K P L A G A T V	D L W H A N T Q G T Y S
UniRef90_R1GS82	K E A E Q G D T A W M H G R V L D T T G K P I V N A E L	D V W H T A P N G L Y E
UniRef90_E0WFN0	A P A G H P E T I T L H G Y V Y D G A G Q P V P D A L I	E T W Q P G P D G S R S
UniRef90_UPI00037FB909	E P G M H G T K I V L T G R V L S T Q C T P V V S A L L	D F W H A D D S G E Y D
UniRef90_UPI0003739880	G E P T L V T G R V L S T D G S P I Q N A K L	D V W Q A S A E G Y Y D
UniRef90_G8MQC5	T E G E P T L F H G R L I D E S G E P V V N A L I	E V W E T A N N G M Y E
UniRef90_G6FYF7	N L D G K G E S C L Y E G R V L D L D G N P V A G A H V	D V W S D N A E E G F Y D
UniRef90_UPI00047A9D61	R E D E Q G E R I V M T G R V V D A S G T P L P G A V L	D A W Q A D A E G L Y S
UniRef90_H0JTW3	A G G A S Q G P C W I E G T V T D T D G N P V P N A R I	E V W E C D E D G F Y D
UniRef90_A9YE78	S E D G V A T P M F L E G Q V L D L D G K P I A G A T V	D L W H A N T K G N Y S
UniRef90_U1G7Z2	V Y M H G R V L N A N K Q P L S R A S I	D V W Q A S T N G L Y E
UniRef90_UPI00047887A8	R Q E E P G E V L F F S G S V K D T A G N P L V D T K I	D L W Q A D A N G E Y S
UniRef90_B6BG71	Q T V R V S S G R V L D T G G N P I E G V Q I	D V W E D A P N G L Y E
UniRef90_G9ZX73	G G R P G E P L I V E G T V R R P D G T P A V G A W V	D T W H S D A E G F Y D
UniRef90_D8IR74	G A K G E P C F V S S G S V R G R N G R P L A H A R M E	E V W Q A D E N G F Y D
UniRef90_M7NIP0	R D D E P G E K L L R F K G N V S D V N G K K L A N T K V	E V W W Q D D A S G Y Y S
UniRef90_F0J076	R F G A A G A R I V I E G R I T D G A G A V A D A A V E	L F Q A
UniRef90_UPI00036B65A8	E T V F V E G G Y V R D V E G A P I A G A L I	D L W E D A P N G L Y E
UniRef90_S9TG62	S D A T P G P R F E V R G R V L S L D G K P L A G A R I	E T W Q A S P E G L Y E
UniRef90_UPI00037E1866	G G L P P G T P M W A D I R V T G P D G E P V P D A V V	D V W Q S N E D G Y Y D
UniRef90_B3RAT3	A P G L P L F V S G T V R A T D G T P L P G A L V	E V W Q A S P V G L Y D
UniRef90_R1HYR8	A G L P P G T P L P D I R V V D T D D E P V A A A V V	D V W Q S N E D G F Y D
UniRef90_UPI000441359D	G K G D P M F V Q Q G V L D T S G R P I A G A T I	E T W E T D D T G H Y D
UniRef90_UPI000382BCD1	P G T P L F V T G K V T D L E G K P V P G A V L	D V W Q A D A D G A Y E
UniRef90_F6EZ83	C L D G K G E P L L V R G R V T D T D G N P V P G A V V	D V W A T N D D G F Y D
UniRef90_Q12C15	G P D E P G D R L V L T G T V F S S D C R P L P G A L I	E V W Q A N H A G L Y D
UniRef90_F8GYX6	D T Q G E R L R V R G R V L S L D G T P I V G A R V	E T W Q A A P S G L Y E
UniRef90_M3K0Z5	V K A F T R R G R V T D T E G N P L A G A K I	E V W Q C N S A G F Y S
UniRef90_A0A023X3D7	E S G D V L F V R G R V A S T D G T P L S S A V L	D V W Q T G P T G G Y D
UniRef90_A4YKQ2	T P G P A L F V Q Q H V V D P N G A P V A G A E V	D V W H A S P V G Y Y E
UniRef90_C7ZKK8	D P D G E P M L V A C T V K D T N G N P I P N V K V	D V W E T D S K G F Y D
UniRef90_R0K5T5	P H P D G Q V T L M H G K V V D L N K K G I P G A V I	D V W Q A S A N G K Y D
UniRef90_UPI000373A52F	C L D G K G E P L V V Q A E V A D L E G N P V E G A V V	D V W Q T N D D G F Y D
UniRef90_B5WSJ6	G A H G A P C Y V Q K Q V R G A D G E V V P N A W L	D V W Q S D E D G F Y D
UniRef90_J0K7S3	T T D T P G A P L H V R G R V C S L D G A P L A N A R V	E T W Q A S P Q G L Y E
UniRef90_UPI00020006F1	G A R G E P C F V S S G S V R G L D Q G P L A H A T L	E V W Q A D E D G F Y D
UniRef90_R0G935	D T L I I E G T V T D T E G N L I E N A K V E	E V W H A N S G N Y S
UniRef90_N9HEE5	E P L V L E E G R V T D L A G K P I K G A E M F V	W H S D N H G H Y S
UniRef90_M1KK18	G G A H G Q P C W V E G T V T G T D G N P V P N A R I	E V W E A D E D G F Y D
UniRef90_Q9S1B4	R S E T P G P A L L F K G R V I G L D G A P V A G A K L	D I W Q A S P V G L Y E
UniRef90_W6RJF4	S S D A A G E P M L A L C T V R D S S N R P I Q G V K V	D I W E T D S S G H Y D
UniRef90_G9P3I4	S A E G K G D P L L V T L R V L D T Q G R P V P G A R V	E T W E T D A E G F Y D
UniRef90_R0K318	T P T T R G T R L T V T G Y V F G L S C L P I A R V L L	D F W Q A D D V N G A Y
UniRef90_F8TW87	D G E Q P E T P L L V K G Q I R N T K G E P I T N A Y I	D V W Q T A D N G M Y S
UniRef90_S9Q5K1	L P G A P G T R L L M V S G Y V F T R S C R P V A Q A L L	D F W Q A D N A G A Y D
UniRef90_C5CZA4	G G G H P G A L L R L Y G T V Y D G A G D G P D A L V	E L W Q T D Q H G S L R
UniRef90_S5S7Z3	E T V Y F E G G Q V R D A D G T P L A G V T I	D V W E D A P N G L Y E
UniRef90_X0MWP4	G A S G E P C F V A G T I R G I G G E P I G D A S I	D V W Q S D D E G W Y D
UniRef90_UPI00036FBE6D	A P E G H P D A V T L H G T V R D G A G A P V A D A L L	E F W Q A G P D G G G P P
UniRef90_M5FX03	A P A G H P D T V T V H G R V Y D G A G E P V P D A L L	E C W Q A D P G G S L A
UniRef90_UPI0003671381	A S E G K G D P L L V T L R V L D T Q G R P V P G A R V	E T W E T D A E G F Y D
UniRef90_UPI0004774EBE	T P T T R G T R L T V T G Y V F G L S C L P I A R V L L	D F W Q A D D V N G A Y
UniRef90_K0EJB0	D G E Q P E T P L L V K G Q I R N T K G E P I T N A Y I	D V W Q T A D N G M Y S
UniRef90_D5PA3	L P G A P G T R L L M V S G Y V F T R S C R P V A Q A L L	D F W Q A D N A G A Y D
UniRef90_V9D1W1	G G G H P G A L L R L Y G T V Y D G A G D G P D A L V	E L W Q T D Q H G S L R
UniRef90_UPI0003669270	G D P L L V L C T V K D D V Q G P R I E G V K I	D I W E T D S S G K Y D
UniRef90_Q700W9	G A G G E P C F V S G R I M G L E G E A V P N A R I	E V W Q A D S A G F Y D
UniRef90_C5M7A0	E P L L L R G R V L D L L A G A P V A D A L I	D V W H S T P D G H Y G
UniRef90_W6YW63	E G K G E P L L I E G K L T D T N G D P I A N A T I	D L W H C D K D G F Y D
UniRef90_S3D670	D P D G E P L L V L C T L K D D V N G N P I S G A Q I	D V W E T D S K G F Y D
UniRef90_UPI00031EF71E	P A P L G K P A L M H G K V I D M T G K G I P N A I F	D I W Q A S A N G K Y D
UniRef90_C9Y2Z2	A I L G K I I E V S G R V M G R N G Q P V P G A R I	E M W Q A N S V G R Y A
UniRef90_K2N265	G E P C V I S G R V V S V S D V G T P L P G A T L	D V W Q A D D Q G F Y D
UniRef90_K2RQ89	E S I L V E E G Y I T D T D G K P I E G V T L	D I W E D A P N G L Y E
UniRef90_A1WRQ4	G E V A L M H G K V I D E T K K P I P N V V F	D I W Q A S S N G K Y D
UniRef90_A3K7B3	G A E G E P C F V R G S I I R G L A G E P V A G A V I	E V W Q A D A K G L Y D
UniRef90_Q0D0A5	D G V G E P C L F Q G R V V D L D G H P I A G A T V	D V W S D N A D G F Y D
UniRef90_K7WQQ8	D P K G E P L L V V C T L R D T H G N P I E G V K I	D I W E T D S T G H Y D
UniRef90_I3THZ4	E K D K V A P P L I F K G K V T D L E G N G I P A G A T V	E L W H A D E D G Y Y S
UniRef90_C9Z6K7	A D A S D G E V M Q V S G R V L D T D C R P V A G A L L	D I W H A D P T G A Y D
UniRef90_D9V8L2	G E P C V I S G R V L S R D G A P L P G A V L	D V W Q A D A E G Y Y D
UniRef90_UPI000363A1DE	D Q N T P G Q R L T V S G Y V F G L S C Q P I G R A L L	D F W Q A D V N G A Y D
UniRef90_D9WJE3	E P G R P G T A L T V S G F V F S R S C K P I G R V L L	D F W Q A D N G G N Y D
UniRef90_G2YLE1	A A G A P G E P C W V E G T V T D T D G N P V P G A R L	E V W E A D E D G L Y D
UniRef90_W7HV75	D G E I V Y M H G T V T D T T K K P I V G A T V	D A W Q A S T N G L Y E
UniRef90_UPI000371B36A	C S P G K G E P M L V L C T V K D T A G N A V E G V T V	D V W E T D D T G H Y D
UniRef90_U4L9K4	G G M S G Q P C W V E G T V K D T E G N P V P A G A R I	D V W E A D D D G F Y D
UniRef90_K4R4U3	C T D G K G E M C L V R C T L K D T S G K P I A G A S V	D I W E T D E T G H Y D
UniRef90_F2RIL1	G P G V P G T R L L M V T G Y V F G L A C R P I A G A I L L	D F W Q A D H N G A Y
UniRef90_UPI000405043B	E P G T A G A R L T V S G Y V F G L A C R P I A G V L L	D F W Q A D T N G A Y D
UniRef90_W2EZ19	R P G M P G T P L T V T G Y V Y S L S C R P V A R A V L	D F W Q A D H Y G R Y D
UniRef90_Q6F4M7	H P G A V T I T G R V L D G A G D P V P D A L L	E L W T G D P G D R G
UniRef90_Q0BAD5	G G A T G Q P C W I E G T V T D T A G N P V P E A R I	E V W Q N D E D G F Y D
UniRef90_UPI000365912B	G A K G A P C Y V S Q G V R G A G G E V I P D A Q I	D V W Q S D E D G F Y D
UniRef90_S1SLV5	T P G T P G T P L T V S G Y V F G R N C V P L S G V L L	D F W Q A D D N G D Y D

	90	100	110	120
UniRef90_M7R4E1	H P K Q S D A H F A G F G A V E T	R S D G R Y L F Q T	L Y P V P Y A S	
UniRef90_Q46TP3	V Q N P D R S H A Q Q R G G	T L T A D D T G H F R F R S I	V A E C Y P I P H H P	
UniRef90_UPI00045EC3E1	H F D P T Q S E F N L R G A I R T G A D	G R Y E V L T R M P A S Y G C	C P P H H G	
UniRef90_M4GDC8	V Q H A D R N G Q P S E R C V M R S D E E	G K F W F K G I	K P V S Y P I P N H C	
UniRef90_U1HI73	V Q H A D R K G P D G R C V M Y S D K D	G I F W F K A I	K P I S Y P I P H D G	
UniRef90_UPI000408D151	S F D S E A P P Y N L R G H F Y T D	E N G A F D V K T I	V P I P Y S I P D H P	
UniRef90_X5EAZ3	V Q Y G D G R T A G R A C L Y S D	E D G A F R F W G L	T P V P Y P I P Y D G	
UniRef90_Q9AEQ0	Y F D S T Q S E Y N L R R I L T D	A V G R Y R A R S I	V P S G Y G C G R H G	
UniRef90_R1GS82	Q Q D P D Q P D F N L R G R F T T G P D	G E Y N F Y C	R P V S Y P I P R H P	
UniRef90_E0WFN0	G A P G S L R H F T G F G R V P T D A D	G H W A V R T I	L P P G G V S	
UniRef90_UPI00037FB909	V D G F R L R G H Q F T D S	Q G R Y R L E T I	V P G L Y P	
UniRef90_UPI0003739880	V Q Q P E K P D M N L R G I F Q T D	D D G R F G F C T	E K P A S Y P I P R H A	
UniRef90_G8MQC5	G Q D P N Q P E S N L R G R F R S G A D	G E F A F R A I	I K P T A Y P I P R H P	
UniRef90_G6FYF7	V Q Q P G Q P R W N N R G I F V T Q G Q D	G A Y R F V G I	K P V S Y P I P N D G	
UniRef90_UPI00047A9D61	G F D A R L P E G I L R G K V I A D	D E G R F E I R T I	L P A P Y T I P W S P	
UniRef90_H0JTW3	V Q Y T D G R V A G R A H L F T D	D Q G A Y R F W A L	T P V P Y P I P H D G	
UniRef90_A9YE78	Y F D Q S Q S E Y N L R R I L V T D S D	G R Y R A R S I	V P S G Y G C G R H G	
UniRef90_U1G7Z2	Q Q D P N Q Q D C N L R G K F Q T D	E D G E Y A F Y C	V R P T P Y P V P D D G	
UniRef90_UPI00047887A8	H F A E G I P A D N L R A V L Y T D	E K G N F E I Q T	V V P G N Y S L P H H S	
UniRef90_B6BG71	Q Q D P D Q P D Y N L R G R F L T G A D	G S Y D F V G L	R P E P Y P M G H H P	
UniRef90_G9ZX73	V Q L G D E P E L N L R A R F R T D	E Q G R F W F R S I	V P A F Y P I P H D G	
UniRef90_D8IR74	V Q Y A D L D Q Y R A R G T L F T D A E	G R Y H F R S I	I L A N P Y P I P H H P	
UniRef90_M7NIP0	N F D S D A P D F N L R S H F Y T D E N	G D F F E V E S I	L P I P Y S I P T D G	
UniRef90_F0J076	S P A R A D V F P G Y G R V A A D A E	G R F R F A T	V M P G P L P G P R G A S	
UniRef90_UPI00036B65A8	N H D H D Q P D Y N L R G R F E T D A E	A N G H Y A L R A I	R P V P Y P M G H H S	
UniRef90_S9TG62	N Q D E A Q E H M N L R G R L E T D A Q	G R F W F T S	V R P A G Y P I V P T D V	
UniRef90_UPI00037E1866	V Q L P D L D G P V L R A R F R S D A D	G R V R F W S I	L P K E Y P I P R H P	
UniRef90_B3RAT3	N Q D P N Q P D R N L R G C H A D E G G	H Y F R S I	V R P A G Y P V P R H P	
UniRef90_R1HYR8	V Q L P E V D G P V L R A R F R T D A D	G R L R F R T I	I V P S A Y P I P R H P	
UniRef90_UPI000441359D	T Q Y A D R S T P D C R G R L K S A E	D G S Y S F R A V	V V P V A Y P I P R H N	
UniRef90_UPI000382BCD1	A Q L P E I D E A R L R A K Y Q A R E	D G T Y C	V C R T I A P R G Y A I P M D H	
UniRef90_F6EZ83	V Q Q G I Q P D H N L R G V F I A D S N	G E Y W F R T	V K P R F Y P I P D D G	
UniRef90_Q12C15	T N K P G N G T F H L R G M L Y T N E	K G Q Y E I E T I	V P G R Y P I P P N L	
UniRef90_F8GYX6	N Q D P E Q E D M N L R A R F E T D S D	G S F W F D S	V K P S G Y G V P R H H	
UniRef90_M3K0Z5	Q Q K E H D P E F N L R G T F I A D K D	G Y Y S F E C	L R P T S Y P I P Y D G	
UniRef90_A0A023X3D7	V W D E K Q P D Y N F R G R F G V E E	D G G Y E F Q T	M V P K P Y T V P T H P	
UniRef90_A4YKQ2	N Q D P D Q A D M N L R G K F T T D E D	G R F W F R S	V M M V G Y P I P R H P	
UniRef90_C7ZKK8	V Q Y P D H D G P D G R A V V R S D E D	G A F F F K A I	V V P V P Y P I P R H P	
UniRef90_R0K5T5	F Q D P E N Q E P N N L R G K F T T N E	N G E Y W F Y C	Y K P T A Y S L P R H P	
UniRef90_UPI000373A52F	V Q Q G L Q P D G N L R G K F Q S D A Q	G R F W F R T	V K P R D Y P P D D G	
UniRef90_B5WSJ6	H S G D G P T E H R A R G R L Q T D A E	G N F H F R S I	I L A E A Y P I P H H P	
UniRef90_J0K7S3	N Q D P E Q E D M N L R G V F L T D A Q	G R F D F H S	V R P A G Y P V P V D I	
UniRef90_UPI00020006F1	G A G R D G T R F T G F G R V P T D A D	G H Y A L R T I	L P P P	
UniRef90_R0G935	V Q Y P D L D Q L Q A R G T L Q T D A Q	G R F H F R S I	L A N S Y P I P H H P	
UniRef90_N9HEE5	F F D K A Q S D F N L R T I F A D D K G	K Y V A L T T M P V G Y G C	P K E Y P I P P H G	
UniRef90_M1KK18	G F D P E L P Q D S Y R G K K I I G A D	G E Y R I R T R V P A P Y P I P H H P		
UniRef90_Q9S1B4	V Q Y A D G R V A G R A H L F T D A N G	K Y A F W G L T P T P Y P I P H D G		
UniRef90_W6RF4F	N Q D A D Q D D F N L R G V F H T D E A	G S F W F T S	V K P A G Y P Q H R H P	
UniRef90_G9P3I4	V Q Y S T R E A P S E R C I M T S D V	G D S F W F K A I	I R P V S Y P I P D H P	
UniRef90_R0K318	V Q Y E D R G S K A D G R A L T S D D K	G V F W F K A I	V P V P Y P I P H H C	
UniRef90_F8TW87	V Q D Q G Q P E G H L R A S F R S T P D	G S Y S F Q T	V L P V S Y P I P A D G	
UniRef90_S9Q5K1	N H D P D Q P E F N L R G R F E T D E N	G H Y A F R A L	R P V D Y P M G H H P	
UniRef90_C5CZA4	V Q R P G L D H A Q G R G Q L K S E D	E D G R Y H F R S I	V A V P Y A I P H H P	
UniRef90_S5S7Z3	V Q Y D D D R T M A R A H L Y T D E H	G E Y R F W G L T P V P Y P I P H D G		
UniRef90_X0MWP4	G S L R R D P A F T G F G R V P T D A G	G H Y A V R T L	P P A A R P	
UniRef90_UPI00036FBE6D	G R P G S G A D F T G F A R V A T D A D	G H W S V S R T L	P P P A A R	
UniRef90_M5FX03	T Q Y E G R T T G P D C R G R L K T Q E D	G V C F E W A V V P V A Y P I P S D G		
UniRef90_UPI0003671381	D N V G Y T F R G H Q F T N A Q G A F T	L S T I V P G L Y P		
UniRef90_UPI0004774EBE	G Q D P N Q K I D N L R G L F I S D E S	G N Y A F K S S L	P V S Y Q I P S D F	
UniRef90_K0EJB0	N S G Y N W R G H Q F T D A N G R F S	S L I V P G L Y P		
UniRef90_D5PAI3	R G H R D D A A F T G W G R C A T D P A	G R Y G F T T V A P G A A A G		
UniRef90_V9D1W1	V Q H P N R D G P D G R C I L K S D A E	G V F W F K A I	V P V P Y P I P H H P	
UniRef90_UPI0003669270	V Q Y E G D T H R A R A V L H S L P D G	S Y H F R S I	V A E P Y P I P H H P	
UniRef90_Q700W9	G F H H N N I P R D F Y R G K L R T D A	A G G Y E V R T T V P V A Y A M G R H S		
UniRef90_C5M7A0	T Q Y E N R D H A D L R G I V R T A E D	G S F V I K A S K P V P Y P I P R H P		
UniRef90_W6YW63	V Q H A D R T G P D G R A V L T S D E D	G N F W F K A I	V P V P Y P I P H D G	
UniRef90_S3D670	F Q D P E Q S D N N L R G K F R T D A N	G E Y H F Y M L K P T A Y S L P R H P		
UniRef90_UPI00031EF71E	H A P P L D P N F D G F A R L V A D K D	G A Y R F L T V E P G A Y K A G S T		
UniRef90_C9Y2Z2	V Q Q P E Q P G P G N G R G L F T A D E	G R F W F R S C V P S P Y P I P R H P		
UniRef90_K2N265	N H D P D Q P E Y N L R G R F E T D E S	G H F A L R A V R P V P Y P I M G H H P		
UniRef90_K2RQ89	F Q D P E G Q T P P N N L R G K F R T N	E N G E Y H F Y M L R P T A Y A L P T D P		
UniRef90_A1WRQ4	V Q Y E A F D E H R A R A T L R S A P	D G G G Y H F L G I V A T P Y P I P H H P		
UniRef90_A3K7B3	Q Q P D T Q P Q H N N R G V F R T G D D	G R Y W F T G I K P V S Y P I P D D G		
UniRef90_Q0D0A5	V Q Y A G R D G P D G R C I I R S D N	S G V F W F K A I T P V P Y P I P H D G		
UniRef90_K7WQQ8	Q F A P D I P E W N L R G T L E A D E D	G N Y E I T T L K P A P Y Q I P N H P		
UniRef90_I3THZ4	N Q G F R M R G H H F A D D A G R Y R	L T L K P G L Y P		
UniRef90_C9Z6K7	Q Q P D V Q P P G N G R G L F T A D E G	R F W T C V P S P Y P I P R H P		
UniRef90_D9V8L2	N N D G F N F R G H Q Y T D N D L G E	F K T T I V P G L Y P		
UniRef90_UPI000363A1DE	N N T T Y R Y R G H Q Y T D A S G K F T	L T T I V P G L Y P		
UniRef90_D9WJE3	V Q H D D G H L A A R A H L Y T D D Q	G A Y F W G L T P T P Y P I P H D G		
UniRef90_G2YLE1	Q Q D D E Q A E H N L R G K F K T D E N	G H Y G F Y C L K P T P Y P I V P R H P		
UniRef90_W7HV75	T Q Y P G R T T P D C R G V L T S G A	D G I S F K C I K P V P Y P I P R H C		
UniRef90_UPI000371B36A	V Q Y E G Q E A A G R A W L L S D D E	G R Y G F W G L T P T P Y P I P H D G		
UniRef90_U4L9K4	T Q Y K D R Q Y P D C R G I L K T D E N	G D F W F K A V K P V P Y P I P H D G		
UniRef90_K4R4U3	D N T G Y R F R G H Q F T A S N G S F	A L T T I V P G L Y P		
UniRef90_F2RIL1	N N T G Y R F R G H Q F T D A Q G A F	W G L T P T P Y P I P H D G		
UniRef90_UPI000405043B	N Y G Y T L R G R H Q Y T D A S G R F	T L T I V P G L Y P		
UniRef90_W2EZ19	A L G R A G A G V S G F G R C G T A P	D G F R F R T A P P A R		
UniRef90_Q6F4M7	V Q Y S D G R V S G R A H L F S D A H	G R Y R F W G M T P V P Y P I P S D P		
UniRef90_Q0BAD5	V Q N L D E A G H R A R G R L K G D A	E F F N F R S I L A E A Y P I P H H P		
UniRef90_UPI000365912B	Q Q P D I Q P K W N N R G T F V T G S D	G R Y S F V G I K P V S Y P I P R H P		
UniRef90_S1SLV5	M A G Y T F R G H Q F T G A T G A F A	L K T I V P G L Y P		

130 140 150 160

UniRef90_M7R4E1	R P P H I H V K L W R D N Q E L	L T T Q L Y L K G N T G D E W W G G	
UniRef90_Q46TP3	W R P A H L H F M I S A P G Y E T	L V T H V F R N D S D Y L D A V F G V R S S	
UniRef90_UPI00045EC3E1	N R P A H V H F F V T T D S F R K	L T T Q F N I E G D P L I W D D F A F A T R	
UniRef90_M4GDC8	W R P A H V H F M F E K A G M E K	L I T A L Y L R G D P Y E D A V F G V K K S	
UniRef90_U1HI73	P R P S H M H F M F E K P G Y D N	L I T A L Y L A R G D P Y E T S D A V F G S L	
UniRef90_UPI000408D151	M R P A H L H L M F E A P G Y E T	L I T Q V F F E G D P W L D N	
UniRef90_X5EAZ3	P R P A H L H F M V T A P G L R T	L V T H I F V E G D P Q L D S V F G V K D S	
UniRef90_Q9AEQ0	Q R P A H V H F F I S A P G F R H	L T T Q I N L E G D K Y L W D D F A Y	
UniRef90_R1GS82	M R P A H I H F I V S A P G Y K P I	V T Q V F D R R D K H I E D D S V	
UniRef90_E0WFN0	Y I S L A V F A R G L L H H	Y T R A Y L V D E P G D A L L S	
UniRef90_UPI00037FB909	G R T R H F H V K V Q A P N R Q V	L T T Q L Y F P G E Q R N S R D F L F D R	
UniRef90_UPI0003739880	W R P A H I H F I V S A E E H E S T	L T T H L F V A G D P Y L N S D V V	
UniRef90_G8MQC5	M R P G H V H F L I E A E G Y T T	L T T A L Y L Y S A D D P Y V G S	
UniRef90_G6YFY7	P R P A H M H F L V T A H S Y H R	L V T H T F V G D D P Y L D S D T V	
UniRef90_UPI00047A9D61	W R P A H I H V I V T A E G H E E L	L V T Q L F F D Q G E H L D D D V A G A	
UniRef90_H0JTW3	P R P A A H L H F M V S A D E L R T	L V T H I F V D G D P Q L E I G D S V F G V	
UniRef90_A9YE78	Q R P A H I H F F I S A P G Y R H	L T T Q I N L S G Q D Y L W D	
UniRef90_U1G7Z2	P R P A H I H L V V M L D G F K P I	T T Q I F D A E S Q Y L E N D S V F A V	
UniRef90_UPI00047887A8	Y R P A H L H L L F K P E N G D K L	V T Q I Y F E G D P Y L E S D V	
UniRef90_B6BG71	M R P G H V H F M I T K T P G Y K P I	L I S Q I Y D S E T E Y L D N D A V F A V	
UniRef90_G9ZX73	P R P A H V H F M I M G A A G C E T	L V T H V F L A G D P Y L E S D V V L V R A	
UniRef90_D8IR74	W R P A H L H F R I Q A E G G Y E T	L I T H V F R R D D V Y L D S D A V	
UniRef90_M7NIP0	P R P A H I H M K F E Q E G G Y E T	L I T Q V F F E G D E W L E T	
UniRef90_F0J076	Q Q A P H C G A L H A R G G L R P	F T R I Y F A G D A L N A T D P V L S L	
UniRef90_UPI00036B65A8	M R P G H L H M M V T R D G Y R S	L I S Q I Y D S S S P H L D D D S V	
UniRef90_S9TG62	M R P A H L H F I V A A E G Y K V L	A T Q I F D I E D P N A F E D V V F G A	
UniRef90_UPI00037E1866	W R P A P H V H F M I K A P G H Q Q	L I T Q L F V R G G P Y L D T S S G R G	
UniRef90_B3RAT3	Y R P A H I H F I V A A P G Y R T	L V T Q V F A D E P A Q L E S D V T F Q L	
UniRef90_R1HYR8	Y R P A H P H F M I A K P G Y R T	L I T Q V F V A G G E Y L D S D T V	
UniRef90_UPI000441359D	M R P A H L H L M V I A D G Y E T	L V S S F Y P S G D K Y I T S D A V F L Q T	
UniRef90_UPI000382BCD1	W R P A H V H F L I H E P G Y E K	L I T H L F Q E G S E Y L D S D V V	
UniRef90_F6EZ83	T R A A H L H F I V K A P G Y D T	V T H I F T P D C Q Y L G E	
UniRef90_Q12C15	P R P A H I H F R V M E S L H V P	V T Q L Y F K G D P F I A K	
UniRef90_F8GYX6	M R P A H L H F I V I A P G H K V L	A T Q I F D E L D P Y A Y S	
UniRef90_M3K0Z5	P R P S H I H W R V S H P G F H T	L V T Q I Y D S E C P	
UniRef90_A0A023X3D7	W R P A H I H V V A E A E G H E T	L T T Q V F F P D D P Y L D T I G A V K P E	
UniRef90_A4YKQ2	Y R P A H L H F A L I V K P G Y R V	H T Q I Y D S S S P H L D D D S V	
UniRef90_C7ZKK8	Y R P S H F H F L F D K P G Y D R L	I T A L Y L R G D P Y E R S D A V L I I A	
UniRef90_R0K5T5	W R P A H I H L M V S A E N F K P I	L I T Q L Y P R D D Q W V T	
UniRef90_UPI000373A52F	P R A A H I H F I Q A P G Y E T	V I T H V F A P D C P Y L A E D A V F G V	
UniRef90_B5WSJ6	W R P A H P H F M L Q A P G Y E T	L I T H V F R D G D Q Y L D S D V V F S S L	
UniRef90_J0K7S3	M R P A H L H F I V V A A G H K V L	A T Q Y F D I D D P N A H E D V V F G A	
UniRef90_UPI00020006F1	E A P Y L G V L V L A R G G L H H	H T R A Y L P G H P H D T L L A G	
UniRef90_R0G935	W R P A H L H F R I R A E G Y E T	L I T H V F R R G D H Y L D S D A V F G V R	
UniRef90_N9HEE5	N R P S H V H Y F V S A P G F R K	N R P S H V H Y F V S A P G F R K T	
UniRef90_M1KK18	W R P A H V H F K I R A P G F L E H	L T T Q S Y F T G G K W V D S D C V	
UniRef90_Q9S1B4	P R A S H H L H F M V T A P G K R T	L V T H I F V E G D P Q I E I G D S V F S L	
UniRef90_W6RJF4	M R P A H L H F I V S A P G H K T L	M R P A H L H F I V S A P G H K T L I T Q I F S D T P Q A L A T D V V F G A	
UniRef90_G9P3I4	W R P A H M H F M F E K P G D H	L I T T L F I R G D Q Y E T S D V V F T S L	
UniRef90_R0K318	W R P S H S H M H F M F E K E G F	W R P S H S H M H F M F E K E G F D N L V T A L Y V R G S L Y E T S D A V F G V	
UniRef90_F8TW87	P R P A H I H F M I S A P G Y R R	P R P A H I H F M I S A P G Y R R L V T H I F V A G D D Y L K S D A V F G V	
UniRef90_S9Q5K1	M R P G H M H F L L S K E G F R P	M R P G H M H F L L S K E G F R P L I S Q I Y D S R S E Y L E N	
UniRef90_C5CZA4	W R P A H L H F M I K A P G Y E T	W R P A H L H F M I K A P G Y E T L I T H V F R S G G N Y L D A V F G V R S S	
UniRef90_S5S7Z3	P R A A H L H F M V T A P E H R T	P R A A H L H F M V T A P E H R T V T H I F V E G D P Q L E I G D S V F G V	
UniRef90_X0MWP4	D A A P H L A V C V H A R G G L L E H	D A A P H L A V C V H A R G G L L E H F T R V Y F A E R T A T R A A D P L L A Q	
UniRef90_UPI00036FBE6D	P Y L L A V C V F A R G L T H H	P Y L L A V C V F A R G L T H H Y T R A Y L G A P P A G D P V A R L P R	
UniRef90_M5FX03	P R P A H L H I M V D A D R F E T	P R P A H L H I M V D A D R F E T T A T A L Y L E G D E Y I D A V F G V K R S	
UniRef90_UPI0003671381	G R T R H I H V K V Q A P N Q R I	G R T R H I H V K V Q A P N Q R I T T Q L Y F P G E P R N N T D S I F	
UniRef90_K0EJB0	R P P F A H L T V F A R G G L L D R	R P P F A H L T V F A R G G L L D R F T R A Y L P G D P G A D P L L A G	
UniRef90_D5PAI3	U N I F O R M A T I O N	U N I F O R M A T I O N	
UniRef90_V9D1W1	U N I F O R M A T I O N	U N I F O R M A T I O N	
UniRef90_UPI0003669270	W R P A H L H F M I T A P G Y E R	W R P A H L H F M I T A P G Y E R L V T H I F V R D G D R Y L D S D A V F S S L	
UniRef90_Q700W9	W R P A H V H Y K V R A P G F H T	W R P A H V H Y K V R A P G F H T L T T Q A Y F E G G E Y V D S D C V H S E	
UniRef90_C5M7A0	Y R P A H I H F I E K P G Y D R L	Y R P A H I H F I E K P G Y D R L I T A L Y E K G D P F E D A V F G V K S K	
UniRef90_W6YW63	P R P S H I H F M F K K D G Y D P I	P R P S H I H F M F K K D G Y D P I L A T A L Y L K N D P Y E D A V F G V K D S	
UniRef90_S3D670	M R P A H L H L M I T H D D Y K P I	M R P A H L H L M I T H D D Y K P I V T T Q I F P K D D P Y L A T	
UniRef90_UPI00031EF71E	W R A K H L H Y L V D G D I N R	W R A K H L H Y L V D G D I N R L I T Q M Y F A G D P L L G Q D R T L A Q D	
UniRef90_C9Y2Z2	Y R P A H V H F I V G A E G Y S P	Y R P A H V H F I V G A E G Y S P V T T H I F V A G S D Y L D S D A V F A S L	
UniRef90_K2N265	N R P G H L H F I L A K P G Y R T	N R P G H L H F I L A K P G Y R T V T T Q L Y F K G G D W V E N D	
UniRef90_K2RQ89	W R P A H I H L M V S H P D Y K P I	W R P A H I H L M V S H P D Y K P I V T T Q L Y P D T D P H L I D D S V	
UniRef90_A1WRQ4	W R P A H L H F R I S A P G Y E T	W R P A H L H F R I S A P G Y E T L V T H I F V R D G D P Y L D S D A V	
UniRef90_A3K7B3	P R P A H M H F I L I S A P G F A R	P R P A H M H F I L I S A P G F A R L I T H T F V A G D S Y L E S D A V F G	
UniRef90_Q0D0A5	P R P S H M H F M F Q K E G F D H	P R P S H M H F M F Q K E G F D H L I T A L Y L R N D P Y E D A V F G V K N S	
UniRef90_K7WQQ8	W R P A H L H L L V S A P G K R A	W R P A H L H L L V S A P G K R A V T T Q L Y F K G G D W V E N D	
UniRef90_I3THZ4	G R T R H I H I R V Q A P G G P V	G R T R H I H I R V Q A P G G P V T T Q I Y F A D E P G N D R D R I F	
UniRef90_C9Z6K7	Y R P A H I H F I A S A E G H T P V	Y R P A H I H F I A S A E G H T P V T T H I F V A G S D H L D S D A V F L V Q	
UniRef90_D9V8L2	G R T R H I H V K V Q A P G E P I	G R T R H I H V K V Q A P G E P I T T Q L Y F P G E P R N N T D T I F D S R	
UniRef90_UPI000363A1DE	G R T R H I H V K V Q N P G G R I	G R T R H I H V K V Q N P G G R I T T Q L Y F P G E P R N N T D T I Y	
UniRef90_D9WJE3	P R A S H H L H F M A A S P G L R T	P R A S H H L H F M A A S P G L R T V T H I F V E G D S L L G S D A V F G V K	
UniRef90_G2YLE1	U N I F O R M A T I O N	U N I F O R M A T I O N	
UniRef90_W7HV75	Y R P A H I H F K F K K D G Y D P I	Y R P A H I H F K F K K D G Y D P I I T A L Y L R G D P Y E T S D A V F V F L D S	
UniRef90_UPI000371B36A	P R A A H I H F M V D A P G L R R	P R A A H I H F M V D A P G L R R V T H I F V D G D P Q L E I G D S V F S L	
UniRef90_U4L9K4	P R P S H M H F M I I A E G Y D T L	P R P S H M H F M I I A E G Y D T L V T S L Y L R G D P Y E D A V F G V K S S	
UniRef90_K4R4U3	G R T R H I H V K V Q A P G R P V	G R T R H I H V K V Q A P G R P V T T Q L Y F P N E P R N S T D S L F D	
UniRef90_F2RIL1	G R T R H I H V K V Q A P G R P V	G R T R H I H V K V Q A P G R P V T T Q L Y F P G E P R N N T D S I F	
UniRef90_UPI000405043B	G R T R H I H V K V Q A P Y Q P L	G R T R H I H V K V Q A P Y Q P L T T Q L Y F P G E P R N R T D M L F D	
UniRef90_W2EZ19	P Y L L A L L V F A R G G L L K P	P Y L L A L L V F A R G G L L K P V R T R V Y L S G V P G P P L D A	
UniRef90_Q6F4M7	M R V A H L H F M V T A D G L R T	M R V A H L H F M V T A D G L R T L V T H I F V A G D P Q L E R G D S V F G V	
UniRef90_Q0BAD5	W R P A H L H F M I E A P G Y E T	W R P A H L H F M I E A P G Y E T L I T H V F R D G D K Y L D S D D V V	
UniRef90_UPI000365912B	Y R P A H I H M Y I V T A A G F Q K L	Y R P A H I H M Y I V T A A G F Q K L V T H F V G G D D N Y L S S	
UniRef90_S1SLV5	G R T R H I H V K V Q A P G E P V	G R T R H I H V K V Q A P G E P V T T Q L Y F P G E P R N S T D M I F D	

170 180 190 200

UniRef90_M7R4E1	K A R D Y L Q F E T □ R I D G R L T G E F N F V I		
UniRef90_Q46TP3	L V A D W V R H K P G S T P D G G E S A V T L D Y D F V L		
UniRef90_UP100045EC3E1	I P H V V E R T G G A A V G F E E D G Y R D I E F N I E L		
UniRef90_M4GDC8	I D L D K A D A A T A A K Y G V A E G V W L L R H D F V L V T E E E T		
UniRef90_U1HI73	V V D Y T Q T D R E I A K Y D V E E G T L L M T Y D F V L V S D E E		
UniRef90_UP1000408D151	D V A E G V R E E L I T T L H D K G G H K E A A L T F E M R		
UniRef90_X5EAZ3	L I K P F R K Q T P D G R R L D G Q E W S R A R F D I V L A P E E I T		
UniRef90_Q9AEQ0	A T R D G L I G E L R F V A F D F H L Q		
UniRef90_R1GS82	F A V K E S L I I D F N P R Q G D P K A D F D F R L A S Y D E		
UniRef90_E0WFN0	A □ D G Q R R A T L L I A G A G P D R T Y R F D I R L Q G G P G E T V F L E F		
UniRef90_UP100037FB909	R R L L M T □ D D R S D R K A A Q F D F V L S T P Y F		
UniRef90_UP10003739880	Q A V K E G L I V D F K E S N D S T E A D F D L		
UniRef90_G8MQC5	D A V F G V K S S L V V Q Y V R N D D R E A K R W D		
UniRef90_G6YFY7	F G V K E T L V A P F E R V E G G P T L Q F D F V L V D R Q Q		
UniRef90_UP100047A9D61	V K D E L V V K P E V G P Y A P E R S F S Y D F T L		
UniRef90_H0JTW3	K D S L V K E F A Q Q A P G T P T P D G R K A R F D I V L A P E G		
UniRef90_A9YE78			
UniRef90_U1G7Z2	K D S L I V K F D D P Q A E M E L K Y D I L M V P S D E		
UniRef90_UP100047887A8	A Q G V R G T L I T K L E K Q E D P I V L		
UniRef90_B6BG71	K E S L I G D M K P A P D D L V M D F D F R L K P E		
UniRef90_G9ZX73	□ E R Q E R G T T P G G H P A D I P C A L L R Y D F A L A P E R E T		
UniRef90_D8IR74	F G V R S T L I A D W P C H P A G T A L D Y D F V L		
UniRef90_M7NIP0	D V A K G V R Q S L M T K L V D K G D Y K E A E L G F V L R		
UniRef90_F0J076	V P A A R R D T L V A D E T S P G V W R R D I V L Q G E G E T V F L D F		
UniRef90_UP100036B65A8	F A V K E A L I G E F E G A D T D L T L R F D F I L		
UniRef90_S9TG62	V G S L L R K F E P D G D G G Y V L D I E L R E P G E T		
UniRef90_UP100037E1866	D T V F G V K D S L V V D F V P R H G		
UniRef90_B3RAT3	V G Q L Q R H D G H S P W G N V P P F F T L G F D F T L E P G E Q T		
UniRef90_R1HYR8	F G V K D G L I V D F T G G L D F T F R I S G		
UniRef90_UP1000441359D	V K D A S K A R E K G F P A D A G D T F A L L E R D I I L A S H A E		
UniRef90_UP1000382BCD1	F G T K E A L L V V R F D E R P A G P A A E F D F V L Q		
UniRef90_F6EZ83	D A V F G V K D S L I A D F R Q V D		
UniRef90_Q12C15	D P W A G R K P S L A I D L K Q D G K L R R S V F D V V L		
UniRef90_F8GYX6	D A A F G A V G S L L R K F E P D G N G G Y R L D L E L R		
UniRef90_M3K0Z5			
UniRef90_A0A023X3D7	L V R P L E R E A E I S R R G L D A P F Y T C E F D I T L		
UniRef90_A4YKQ2	L K N V S D V E G L V E K H G V D P S T K L M K Y D F V L V T D K E		
UniRef90_C7ZKK8			
UniRef90_R0K5T5			
UniRef90_UP1000373A52F	K E S L I G R F D K V E D		
UniRef90_B5WSJ6	I A D W V R H E P G I A P D G K V F E V P W Y T Y D F I L		
UniRef90_J0K7S3	V G S L L R R F E P D G Q G G F S L D I E L R		
UniRef90_UP100020006F1	L P P E R R A T L L A H E E R A K L Y R F D I R L Q G D D E T V F L D F		
UniRef90_R0G935	I A D W P R H E A G I A P D G S H C E Q P F Y H Y D F I L N P Q R		
UniRef90_N9HEE5	A F A T R D G L V A T A V E V T D		
UniRef90_M1KK18	E G V R P A L I H N L E D A N G A K V L R K D F K L D		
UniRef90_Q9S1B4	I K A F D R Q E P G T P T P D G R D G D R A W R F D I V L A P E G		
UniRef90_W6RJF4			
UniRef90_G9P3I4	V V D L D K V D K E T A K Y K V P E G A W L L R H N F V L A S T R E T		
UniRef90_R0K318	V P L E T V T P E Q A K Q Y G V S E D C Q L L K Y D F V L V T D E E T		
UniRef90_F8TW87	K P D L V V H P R P D G D R L A I D Y D F R L A G A		
UniRef90_S9Q5K1	D S V F A V K D S L V G E F R K A D T D L H V S F D F V L		
UniRef90_C5CZA4	I A D W K R H E L G I A P D G T H M P F H T L D Y D F V L		
UniRef90_S5S7Z3	D E Q P A D T P T P D G R D L G D E T W A K A R F D I V L A P A D A		
UniRef90_X0MWP4	L P A E R A R T V L A R P D G P G R L R F D I R L R G D E E T V F L A F		
UniRef90_UP100036FBE6D	E L R A T T L L A H A E G D R T Y R F D V H L Q G V K E T V F L D I		
UniRef90_M5FX03	L I C K I D R V A D E A E A K K H A K S T Q L K W D F V L A S K E E		
UniRef90_UP10003671381	I F D P R L L M T V R D V P P T A K E A A F D F V L		
UniRef90_UP10004774EBE			
UniRef90_K0EJB0	D R R L L M T V R T V P T G K E G T F D F I L		
UniRef90_D5PIA3	L D A E R R A T L L C V A E T D C P G Y R F D V H L Q G P R E T V F L A Y		
UniRef90_V9D1W1	V S A D Q A A K Y G V K E G S A L M T Y D F V L V T E Q E		
UniRef90_UP10003669270	I A D W I H H E E G V A P D G T R M Q S P T L A F D F V L		
UniRef90_Q700W9	L I H A D V R E S G I K V I E T D F E L A		
UniRef90_C5M7A0	L L Y T L D K E E K A S K Y N M D K D W Y L H W D F T I I T E Q E S V		
UniRef90_W6YW63	L V V P L L Q R K S Q A K T Y E V E L G S A L I S Y D F V L V T D E A A V		
UniRef90_S3D670	D T V Y A V K D D L V I D F T P R E G D P N A K L D		
UniRef90_UP100031EF71E	L N Q P V G G Q F P P A I F G Q A D G V E R L G F D I I L		
UniRef90_C9Y2Z2	V E E F V V E V D S P A A K L G L A N P F R R A R F D I V L Q		
UniRef90_K2N265	K N S L V A K R A E D D T D L Y V R F D F T L		
UniRef90_K2RQ89	F A V K D D L I I H F N P R E G D P K A K L D		
UniRef90_A1WRQ4	F G V R S S L V A D W V H E G G P A L D F D F V L N P A R		
UniRef90_A3K7B3	V K A P L I V N F V A T E D A E S A V R W R A D Y D F V L		
UniRef90_Q0D0A5	V V D I L G R A P E Y A K Y N V P E D H A L L T Y D F V L V S D S E T		
UniRef90_K7WQQ8	V A T A T K P E L I L D P K A N A D G I A E V T Y N F A L D P E A		
UniRef90_I3THZ4	R P D L V M A Q G A D G G Y G F D V V V		
UniRef90_C9Z6K7	D F T E T D D P A L L A R R F G I P N P F R H A R F D L V L G T R E T P		
UniRef90_D9V8L2	L D R R L L M N V R T V G N G K E A S F D F V L		
UniRef90_UP1000363A1DE	E S L V K R F E R Q P A G T P A P D G R D R V R F D I V L A P Q R		
UniRef90_D9WJE3	D S V F A V K D S L I V D F V P		
UniRef90_G2YLE1	I T D P E M A D K H G M K A G D H L L R W D F V L I T D R E		
UniRef90_W7HV75	I K K F E Q Q D T P D G R Q L D R D W A R T T F D I V L A P Q N		
UniRef90_UP1000371B36A	I D V K K V G D E A V A K Y D V K T D D W E I N Y D F V L V S A E E A V		
UniRef90_U4L9K4	I P R I L L M A V V R D G G G R Q A S F D F V L		
UniRef90_K4R4U3	UniRef90_F2RIL1 D A R L L M S V R D A G P A K E A A F D F V L Q G P G		
UniRef90_UP1000405043B	L D P A R R A T L L A R R E G Q D L Y R F D V R L Q G E E E T V F L E F		
UniRef90_W2EZ19	V E Q P P G T P T P D G R H G D R N W A R C E F D I V L A P E Q		
UniRef90_Q6F4M7	F G V R S T L I A E W K R H E P G V A L E Y D F V L		
UniRef90_Q0BAD5	D A V F G V K A S L I A P Y E R V S G E T V W R F D F V L		
UniRef90_UP1000365912B	P A L L M N V R G A G G G K E G T F D F V L N V D G D T		
UniRef90_S1SLV5			

UniRef90_M7R4E1
UniRef90_Q46TP3
UniRef90_UPI00045EC3E1
UniRef90_M4GDC8
UniRef90_U1HI73
UniRef90_UPI000408D151
UniRef90_X5EAZ3
UniRef90_Q9AEQ0
UniRef90_R1GS82
UniRef90_E0WFN0
UniRef90_UPI00037FB909
UniRef90_UPI0003739880
UniRef90_G8MQC5
UniRef90_G6YFY7
UniRef90_UPI00047A9D61
UniRef90_H0JTW3
UniRef90_A9YE78
UniRef90_U1G7Z2
UniRef90_UPI00047887A8
UniRef90_B6BG71
UniRef90_G9ZX73
UniRef90_D8IR74
UniRef90_M7NIP0
UniRef90_F0J076
UniRef90_UPI00036B65A8
UniRef90_S9TG62
UniRef90_UPI00037E1866
UniRef90_B3RAT3
UniRef90_R1HYR8
UniRef90_UPI000441359D
UniRef90_UPI000382BCD1
UniRef90_F6EZ83
UniRef90_Q12C15
UniRef90_F8GYX6
UniRef90_M3K0Z5
UniRef90_A0A023X3D7
UniRef90_A4YKQ2
UniRef90_C7ZKK8
UniRef90_R0K5T5
UniRef90_UPI000373A52F
UniRef90_B5WSJ6
UniRef90_J0K7S3
UniRef90_UPI00020006F1
UniRef90_R0G935
UniRef90_N9HEE5
UniRef90_M1KK18
UniRef90_Q9S1B4
UniRef90_W6RJF4
UniRef90_G9P3I4
UniRef90_R0K318
UniRef90_F8TW87
UniRef90_S9Q5K1
UniRef90_C5CZA4
UniRef90_S5SZ73
UniRef90_X0MWP4
UniRef90_UPI00036FBE6D
UniRef90_M5FX03
UniRef90_UPI0003671381
UniRef90_UPI0004774EBE
UniRef90_K0EJB0
UniRef90_D5PIA3
UniRef90_V9D1W1
UniRef90_UPI0003669270
UniRef90_Q700W9
UniRef90_C5M7A0
UniRef90_W6YW63
UniRef90_S3D670
UniRef90_UPI00031EF71E
UniRef90_C9YZ22
UniRef90_K2NZ65
UniRef90_K2RQ89
UniRef90_A1WRQ4
UniRef90_A3K7B3
UniRef90_Q0D0A5
UniRef90_K7WQQ8
UniRef90_I3THZ4
UniRef90_C9Z6K7
UniRef90_D9V8L2
UniRef90_UPI000363A1DE
UniRef90_D9WJE3
UniRef90_G2YLE1
UniRef90_W7HV75
UniRef90_UPI000371B36A
UniRef90_U4L9K4
UniRef90_K4R4U3
UniRef90_F2RIL1
UniRef90_UPI000405043B
UniRef90_W2EZ19
UniRef90_Q6F4M7
UniRef90_Q0BAD5
UniRef90_UPI000365912B
UniRef90_S1SLV5

1 10 20 30 40

UniRef90_G7GLS1
UniRef90_H1S8S8
UniRef90_A3W8R9
UniRef90_UP100040281EA
UniRef90_H6BPU2
UniRef90_W9H0E9
UniRef90_UP1000455F2EE
UniRef90_K1VPF5
UniRef90_N0CT13
UniRef90_A3YEX2
UniRef90_L1KQ9
UniRef90_Q0RYT1
UniRef90_W8IAN8
UniRef90_F4CR57
UniRef90_M2MP97
UniRef90_A5DM4
UniRef90_W01MW8
UniRef90_Q2MKC2
UniRef90_D4Z2W7
UniRef90_U4Q7P2
UniRef90_W8H738
UniRef90_R7YL17
UniRef90_A0A016Q4Y3
UniRef90_A5VHB0
UniRef90_R9PK60
UniRef90_J7FJH4
UniRef90_G2QHA5
UniRef90_W8HLD4
UniRef90_UP1000366AE13
UniRef90_V7EPT3
UniRef90_I2GCL0
UniRef90_Q84F03
UniRef90_J2J7J1
UniRef90_W7SUI1
UniRef90_E9EUN3
UniRef90_A8P985
UniRef90_F0Q574
UniRef90_M7A9N7
UniRef90_UP10004623B2C
UniRef90_E4N129
UniRef90_C6YXG7
UniRef90_UP100031513C6
UniRef90_Q0SFL8
UniRef90_H8JIZ8
UniRef90_UP10001FFEC1E
UniRef90_A9YE54
UniRef90_A9YE74
UniRef90_V5FTZ9
UniRef90_L2FRT5
UniRef90_UP10003B636E9
UniRef90_B9QUK8
UniRef90_I2B6T8
UniRef90_M5F4G8
UniRef90_M2ZDY6
UniRef90_F4RUX1
UniRef90_J2NRJ5
UniRef90_M4Z402
UniRef90_G4R9G5
UniRef90_T0J8Y3
UniRef90_G8MGD1
UniRef90_S8AFQ1
UniRef90_L8MU62
UniRef90_N4U8N2
UniRef90_N1QJ66
UniRef90_UP1000410711F
UniRef90_K2M4Z5
UniRef90_F2LB88
UniRef90_W9ATW3
UniRef90_UP10002F12364
UniRef90_W9XL59
UniRef90_M3BY09
UniRef90_C7E3Y8
UniRef90_E6V7C9
UniRef90_Q6IYE7
UniRef90_G7D5E3
UniRef90_B6HA25
UniRef90_A9YE72
UniRef90_Q2MKH3
UniRef90_G3JND9
UniRef90_D5ZRR8
UniRef90_A4L384
UniRef90_UP100031AD579
UniRef90_B8HJC2
UniRef90_A4L370
UniRef90_UP100036CC13D
UniRef90_E0XVG0
UniRef90_P0A396
UniRef90_G2NEL6
UniRef90_H0HN65
UniRef90_H8X398
UniRef90_E4V214
UniRef90_UP100037BD3A8

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

UniRef90_G7GLS1
 UniRef90_H1S8S8
 UniRef90_A3W8R9
 UniRef90_UP100040281EA
 UniRef90_H6BPU2
 UniRef90_W9H0E9
 UniRef90_UP1000455F2EE
 UniRef90_K1VPF5
 UniRef90_N0CT13
 UniRef90_A3YEX2
 UniRef90_L1KQ9
 UniRef90_Q0RYT1
 UniRef90_W8IAN8
 UniRef90_F4CR57
 UniRef90_M2MP97
 UniRef90_A5DYM4
 UniRef90_W01MW8
 UniRef90_Q2MKC2
 UniRef90_D4Z2W7
 UniRef90_U4Q7P2
 UniRef90_W8H738
 UniRef90_R7YL17
 UniRef90_A0A016Q4Y3
 UniRef90_A5VHB0
 UniRef90_R9PK60
 UniRef90_J7FJH4
 UniRef90_G2QHA5
 UniRef90_W8HLD4
 UniRef90_UP1000366AE13
 UniRef90_V7EPT3
 UniRef90_I2GCL0
 UniRef90_Q84F03
 UniRef90_J2J7J1
 UniRef90_W7SUI1
 UniRef90_E9EUN3
 UniRef90_A8P985
 UniRef90_F0Q574
 UniRef90_M7A9N7
 UniRef90_UP10004623B2C
 UniRef90_E4N129
 UniRef90_C6YXG7
 UniRef90_UP100031513C6
 UniRef90_Q0SFL8
 UniRef90_H8JZ8
 UniRef90_UP10001FFEC1E
 UniRef90_A9YE54
 UniRef90_A9YE74
 UniRef90_V5FTZ9
 UniRef90_L2FRT5
 UniRef90_UP10003B636E9
 UniRef90_B9QUK8
 UniRef90_I2B6T8
 UniRef90_M5F4G8
 UniRef90_M2ZDY6
 UniRef90_F4RUX1
 UniRef90_J2NRJ5
 UniRef90_M4Z402
 UniRef90_G4R9G5
 UniRef90_T0J8Y3
 UniRef90_G8MGD1
 UniRef90_S8AFQ1
 UniRef90_L8MU62
 UniRef90_N4U8N2
 UniRef90_N1QJ66
 UniRef90_UP1000410711F
 UniRef90_K2M4Z5
 UniRef90_F2LB88
 UniRef90_W9ATW3
 UniRef90_UP10002F12364
 UniRef90_W9XL59
 UniRef90_M3BY09
 UniRef90_C7E3Y8
 UniRef90_E6V7C9
 UniRef90_Q6IYE7
 UniRef90_G7D5E3
 UniRef90_B6HA25
 UniRef90_A9YE72
 UniRef90_Q2MKH3
 UniRef90_G3JND9
 UniRef90_D5ZRR8
 UniRef90_A4L384
 UniRef90_UP100031AD579
 UniRef90_B8HJC2
 UniRef90_A4L370
 UniRef90_UP100036CC13D
 UniRef90_E0XVG0
 UniRef90_P0A396
 UniRef90_G2NEL6
 UniRef90_H0HN65
 UniRef90_H8X398
 UniRef90_E4V214
 UniRef90_UP100037BD3A8

	50	60	70	80
G A P G E P C W V E G S V T D T D G K P L P G S V I E V W E A D E D G L Y D	G E P C Y V S G K V K S V T G E A V P N A R L E V W Q A D S E E G L Y D	E T A Y Y E G Y I R D A A G N G I A G V T L D V W E D A P N G I Y E	L Y M R G R V T G P D G E P A K D A I L H V W H A N S Q G W Y S	
P P D D A E P V Y M Y G Q V F D A S K K P L A N A A I D V W E C S T N G L Y E	G T E G P A L I V T G R I I D P E G Q P L E G V E V D V W Q A S P V G L Y E	E G K G E Y M Y V D G R V V D T E G K P I A N A V V D A W E A D D T G H Y D	T Y M R G R V T G P D G E P A K D A I L H V W H A D A P D G L Y D	
E P D A P Y T H Y G T I Y D G D G K P L P N A V V D I W H D A P D G L Y D	T P G T P G V P L T V S G Y V F G R A C R P I S G A L L D F W Q A D T N G S Y	K G D L E G E I I L V E G V V K D T Q G K L I A G A K V D I W Q T A P N G M Y S	G G A S G E P A W V A G R V T D T D G A P V A G A R V E V W E A D D E G M Y D	
G G A S G E P A W V A G R V T D T D G A P V A G A R V E V W E A D D E G M Y D	G E P C L V T Q G Q V R S A D G T P L A G A S V D V W Q A N A D G F Y D	Q T P G P A L F A E C R I T D P D G K P I E G V E I D V W Q A S P A G L Y E	A G L P G T P L S V H L T V V D T D G V P V P G A A V D V W H A D G D G H Y D	
C S D G K G E P L L I E G L L T D T E G N P L A N G S I D I W H C D S N G L Y D	D G D N T L M H G K V L D H T S K P I E N A E L D V W H T A P N G L Y E	D G K G E S C L F I G R V L D L D G N P L E G A R I D V W S D N S D G F Y D	D G K G E S C L F I G R V L D L D G N P L E G A R I D V W S D N S D G F Y D	
P L V V R G Q V R D I D G S V L P G A E V D I W H S T P T G K Y S	T L D G K G E S C V F E G T V V N L E G R A V E G A I I D V W S D N A E G F Y D	A L V L R G R V T D L D G A G L G G A T I E L W H A D D E G G Y Y S	G Q V T L M H G R V V D I T K E G I P N A V V D I W Q A S S N G K Y D	
T P S D G K V A Y L Y G T V T S T T G K P I P N A S V D V W Q A S T N G L Y E	G I P L V V R Q G V R D G E G R P I V G A K I D V W Q T N E D G F Y D	E G K G E Y M Y V E G T V K G L D G Q P I E G A L I E T W E T D A E G F Y D	P N P D G R V C K M H G T I T D L T G K P I P G A V F D I W Q A S A N G K Y D	
P N P D G R V C K M H G T I T D L T G K P I P G A V F D I W Q A S A N G K Y D	P G G R V V K M H G V I R D V T G K P I P N A V F D I W Q A S A N G K Y D	G G A P Q G P C W V E G T V T G L H G S P I P G A R I E V W E A D E D G F Y D	P A G H P D V T V T H G W V Y D G A G Q P V P D A L L E V W Q P A P D G S R H	
P A G H P D V T V T H G W V Y D G A G Q P V P D A L L E V W Q P A P D G S R H	D G K G E S C L F E G K V L D L H G N P I D G A C V D V W S D N A D G F Y D	E Q G M G G T R L V L T G R V L T T D C R P V A H A L L D W W H A D N E G D Y D	E Q G M G G T R L V L T G R V L T T D C R P V A H A L L D W W H A D N E G D Y D	
K M V M R G K V T G L N Q P V A G A V I D V W H A T P D G K Y S	K M V M R G K V T G L N Q P V A G A V I D V W H A T P D G K Y S	K M V M R G K V T G L N Q P V A G A V I D V W H A T P D G K Y S	K M V M R G K V T G L N Q P V A G A V I D V W H A T P D G K Y S	
L L V T G T V R N T D G S P L P H A T V D V W Q C N E E G F Y D	G G L A G D P L W V S T Q I V D V D G K A V P G A V V D V W Q A N K D G F Y D	D P N G E P L V L V L C T V S D T A G N P V S D V K V D I W E T D S S G Q Y D	D P N G E P L V L V L C T V S D T A G N P V S D V K V D I W E T D S S G Q Y D	
E G K G H Y M Y V E G R V L D T K G N P V P G A V I E T W E T D G F G H Y D	E G K G H Y M Y V E G R V L D T K G N P V P G A V I E T W E T D G F G H Y D	G A H G Q P C F V S S G T V R G I G G E P V A G A T I D V W Q S D E D G T Y D	G A H G Q P C F V S S G T V R G I G G E P V A G A T I D V W Q S D E D G T Y D	
S P S S V G Q T C V V H G T V R A E D G T P V P G A L V D V W Q A D A D G F Y D	T S G T Q G V P L T V S G F V F G R N C L P I A G A L L E T W E T D G H G F Y D	K G D Y M Y V E G R V L S T D G T P V P N A T I E T W E T D G H G F Y D	T S G T Q G V P L T V S G F V F G R N C L P I A G A L L E T W E T D G H G F Y D	
R P D E P G D I L F E F K G H V S D A Q Q G N A V A E M E I D L W H A D A E G L Y S	R P D E P G D I L F E F K G H V S D A Q Q G N A V A E M E I D L W H A D A E G L Y S	D G K G E S C L F A G Q V R D L D G H P I I E G A C V D V W S D N A D G Y Y D	D G K G E S C L F A G Q V R D L D G H P I I E G A C V D V W S D N A D G Y Y D	
D D G H P Q A I R L H G T V Y D G G D A A V P D A L V E L W Q P D T A G R I A	D D G H P Q A I R L H G T V Y D G G D A A V P D A L V E L W Q P D T A G R I A	A G K K G T P L W V D V A T G T D D R P V P G A V V D V W Q S D E D G F Y D	A G K K G T P L W V D V A T G T D D R P V P G A V V D V W Q S D E D G F Y D	
T D K G E I L F M D G Q V A D T Q G Q P V A G A L V E V W H A D T L G N Y S	T D K G E I L F M D G Q V A D T Q G Q P V A G A L V E V W H A D T L G N Y S	T A D N K G E V L F M Q Q T V Y D T D G K P L A G A K V E V W H A N L G N Y S	T A D N K G E V L F M Q Q T V Y D T D G K P L A G A K V E V W H A N L G N Y S	
A D G E L T F F H G V V M S D E T G K P I P D A V F D M W Q A S T N G K Y D	A D G E L T F F H G V V M S D E T G K P I P D A V F D M W Q A S T N G K Y D	E D G Q V A W M Y Q V T C S N G K P L A N A S V D V W Q A S T N G L Y E	E D G Q V A W M Y Q V T C S N G K P L A N A S V D V W Q A S T N G L Y E	
S D A P G G E R M T L A G Y V L T E N C Q P V A K A L I E L W H A N E I G A Y D	C L D E K G D D M L A W G K V T D V E G E N P L E G V K I D V W Q A N D E G F Y D	D G K G E S C L F R G R V L D L D Q G P I A G A M L D V W S D N E D G Y Y D	D G K G E S C L F R G R V L D L D Q G P I A G A M L D V W S D N E D G Y Y D	
G S P D G E R I T V A G F V F D R R C H P L P G S L I E I W H A D E N G E Y Y D	G S P D G E R I T V A G F V F D R R C H P L P G S L I E I W H A D E N G E Y Y D	D P D G E P C L V V I C T I K T D T A G K P I E G V K I D I W E T D S K G F Y D	D P D G E P C L V V I C T I K T D T A G K P I E G V K I D I W E T D S K G F Y D	
G G L P V G E R I L I V S G R V C Q Y G K P I P H T L V E M W Q A N A G G R Y R	G G L P V G E R I L I V S G R V C Q Y G K P I P H T L V E M W Q A N A G G R Y R	R L L I N G K V T D M K G N A I K G A K I D V W E T D E N G F Y D	R L L I N G K V T D M K G N A I K G A K I D V W E T D E N G F Y D	
E G D P M L V T G S V S T I D T D G G P L A G A V V D V W H S D N D G Y Y D	E G D P M L V T G S V S T I D T D G G P L A G A V V D V W H S D N D G Y Y D	D G K G E S C L F R G R V L D L D Q G P I A G A M L D V W S D N A D G F Y D	D G K G E S C L F R G R V L D L D Q G P I A G A M L D V W S D N A D G F Y D	
S D G P P M I V E G S V F D T R G E P V V A N A L I E T W H S D D H G F Y D	C S P G K G E P M L V L C S L K D T K G N A I E G A T I D I W E T D D T G N Y D	G P E E P G E R L L M I T G T L F S S D C R P V P G A L M E I D I W E T D S K G F Y D	G P E E P G E R L L M I T G T L F S S D C R P V P G A L M E I D I W E T D S K G F Y D	
D P D G E P L L V V C T V R D S Q G N P L E D V E V D I W E T D S K G F Y D	D P D G E P L L V V C T V R D S Q G N P L E D V E V D I W E T D S K G F Y D	D G V V T Y M H G I I R D M T K K P M P G V T F D M W Q A S S N G K Y D	D G V V T Y M H G I I R D M T K K P M P G V T F D M W Q A S S N G K Y D	
G D R I I V A G F V L D T F C R P I P P E A M V Q I W H A D D T G R Y D	R T D T G G T P V T L L G Y V L N S A C T P I A N A I V D I W H A D S D G R Y D	R T D T G G T P V T L L G Y V L N S A C T P I A N A I V D I W H A D S D G R Y D	R T D T G G T P V T L L G Y V L N S A C T P I A N A I V D I W H A D S D G R Y D	
A E G S S G T P L Y I T G V I R D L H D Q P V V G G A V L D V W Q A D A H G I Y E	A E G S S G T P L Y I T G V I R D L H D Q P V V G G A V L D V W Q A D A H G I Y E	E D V P G G E P I T L A G F V L D E Q C R P Q V Q A G A L V E L W H A D D E G R Y D	E D V P G G E P I T L A G F V L D E Q C R P Q V Q A G A L V E L W H A D D E G R Y D	
K E D T F G E A T L V L R G Q V C S V N G V P V K K A L L D A W A T D G H G V Y D	K E D T F G E A T L V L R G Q V C S V N G V P V K K A L L D A W A T D G H G V Y D	T D P D A E R L F V L C T V K D T A G T P I P N V Q C D V W E G D S H G F Y D	T D P D A E R L F V L C T V K D T A G T P I P N V Q C D V W E G D S H G F Y D	
T D P G V V M F L Q Q G R V S D P T G K P L A G A T V D L W H A N T K G T Y S	T D P G V V M F L Q Q G R V S D P T G K P L A G A T V D L W H A N T K G T Y S	P G V R G E P A F Y S G R V T D T R Q G P L A N A L L D I W S G D G E E G V Y D	P G V R G E P A F Y S G R V T D T R Q G P L A N A L L D I W S G D G E E G V Y D	
G S K L V F E G Q V R D L D G K G L G G A T V E L W H A D D E G Y Y S	G S K L V F E G Q V R D L D G K G L G G A T V E L W H A D D E G Y Y S	Q T G E R M F V Q S R V T D L K G K P L A G V P V D V W H A D D D G F Y D	Q T G E R M F V Q S R V T D L K G K P L A G V P V D V W H A D D D G F Y D	
S N D T K G E P L L V V C T L K D M N G K P I Q D V K I D I W E T D S S G H Y D	N E D E I G D P L I M E G Q V F A E D G T P L S N A L V E V W H A N H L G N Y S	N E D E I G D P L I M E G Q V F A E D G T P L S N A L V E V W H A N H L G N Y S	N E D E I G D P L I M E G Q V F A E D G T P L S N A L V E V W H A N H L G N Y S	
T P S D G Q V T F M H G Q I T C A D G R P L A K A K V D V W Q A S T N G L Y E	T P S D G Q V T F M H G Q I T C A D G R P L A K A K V D V W Q A S T N G L Y E	V V I E G M V L D G R G D H V D Y G F L E L W S R E Q A	V V I E G M V L D G R G D H V D Y G F L E L W S R E Q A	
Q P C W V E G T V R D T S G R P V P G A R I D V W E A D E D G F Y D	G G A N G Q P C W V E G I V T D T S G K P L P G A R I E V W E A D E D G F Y D	G G A N G Q P C W V E G I V T D T S G K P L P G A R I E V W E A D E D G F Y D		
M L D G A G T R L T L T G W V F G L G C R A I S N V L L D F W M A D N G G N Y	E A G G K L I L N L M G S L V N R D S K P I K G M T A E I W Q T D M N G V Y L	E A G G K L I L N L M G S L V N R D S K P I K G M T A E I W Q T D M N G V Y L		
T S S T P G V P L T V S G Y V F G R A C K P L T G V L L D F W Q A D T G G A Y	T E G R E G V E L L M L R L Q V V D E S C R P L S K A R V D V W H C D A T G H Y S	T S S T P G V P L T V S G Y V F G R A C K P L T G V L L D F W Q A D T G G A Y		
T E G R E G V E L L M L R L Q V V D E S C R P L S K A R V D V W H C D A T G H Y S	C S D G R G E P L L I E G L L T E P D G T P V V A D A A I D L W H C D A N G L Y D	T E G R E G V E L L M L R L Q V V D E S C R P L S K A R V D V W H C D A T G H Y S		
D T A G K K L F V L C T A R D T N G K P V V A D A R V D V W E A D S S G G L Y D	D T A G K K L F V L C T A R D T N G K P V V A D A R V D V W E A D S S G G L Y D	D T A G K K L F V L C T A R D T N G K P V V A D A R V D V W E A D S S G G L Y D		
P E G E R I T V A G F V F D N R C R P L A G G L V E I W H A D E N G D Y D	P E G E R I T V A G F V F D N R C R P L A G G L V E I W H A D E N G D Y D	P E G E R I T V A G F V F D N R C R P L A G G L V E I W H A D E N G D Y D		

	90	100	110	120
UniRef90_G7GLS1	V Q R D A Q S R T A R G R L I A D S N G E F R F W G L	T P T P Y P P I P P D D P		
UniRef90_H1S8S8	V Q Q A G L D G R Q G R G T L T A D E S G G F H F K S I V A E C Y P P I P P H H P			
UniRef90_A3W8R9	N L D P D Q P E Y N L R G R F E T D A N G H Y A F V A V R P V P Y P M G H H P			
UniRef90_UPI00040281EA	H F D P T Q T P F N N R A R I K L G P D G K Y S F H S K M P N G Y S V P R H G			
UniRef90_H6BPU2	Q Q D P N Q V D R N L R G R F I T D E E G R Y A F Y C I R P T P Y P P V P R H P			
UniRef90_W9H0E9	N Q D A T Q A D M N L L R G K F T T D R Q G C F H F R S I I R P A G Y P P V P T D G			
UniRef90_UPI000455F2EE	L Q Y D N G V P D C R G R R L T D A E G K F N F R A I V P A Y P M N R H N			
UniRef90_K1VPF5	A Q T P E K P E Y H C R G R F R T D E N G R Y D T V C L R P T P Y P P I P P Y D H			
UniRef90_N0CT13	D M A Q Y A F R G H Q F T G A D G S F S L T T I V P G L Y P			
UniRef90_A3YEX2	S Q D P A Q D I D S F H G F T T D E A G R Y A F T T V R P V S Y T V P R H H P			
UniRef90_L1KQU9	V Q Y D D G A G A L A G R G H L F T D A E G R Y R F W G L T P T P Y P I P P D D P			
UniRef90_Q0RYT1	V Q Q P G Q P E L N L R G L F T T D D E G K F W F R S I V P R Y Y P I P P D D G			
UniRef90_W8IAN8	N Q D P D Q A N M N L R G K F L T D A E G R I S F R S I V K P A G Y P V P R H P			
UniRef90_F4CR57	S D I P G L E G A A M R G L F H T S A E G R A S F S T I S P A P Y P I P P D D V			
UniRef90_M2MP97	Q Q D P N Q V D M N L R G R F T T G A D G T Y S F Y C I R P T S Y P V P N H P			
UniRef90_A5DM4	T Q Y E N R E N P D M R M G I T K T N E D G T F V I K C T R P V P Y P I P H D G			
UniRef90_W01MW8	Q Q P D I Q P K W N N L R G L F I T G A D G A Y S F V G I K P V S Y P I P P D D G			
UniRef90_Q2MKC2	H P A P L D P N F L G A G R C I T D Q A G H H R F L T V K L G P Y P W G N H H P			
UniRef90_D4Z2W7	G F H D N I P P V D Y Y R G K L T S D S E G A Y R V A T T A P V P Y A M G R H S			
UniRef90_U4Q7P2	Q Q P D I Q P R W N N R G R F T E T G A D G R Y S F I G I K P V S Y P I P P D D G			
UniRef90_W8H738	Q F A P H L P E W N L R G R T V I T D P E G R Y E I T T I E P A P Y Q I P W H H P			
UniRef90_R7YL17	F Q D P G Q T D N N L R G K F R T D D K G Y Y H F Y C L K P T S Y S L P R H P			
UniRef90_A0A016Q4Y3	Q Q D D K Q V E H N L R G K F I T D D Q G R Y S F Y C L R P T P Y P V P Q D G			
UniRef90_A5VHB0	V Q Q P D Q Q P R W N L R G L F T S D A E G R Y G F I T A R P R F Y P I P P D D G			
UniRef90_R9PK60	V Q Y D G R T K A D C R G R I R S G P G G V Y N F R A V R P V P Y P I P S D G			
UniRef90_J7FJH4	F Q D P E N Q T P N N L R G K F R A D E N G K Y W L Y C Y H P T A Y S L P R H P			
UniRef90_G2QHA5	F Q D P E N Q T P N N L R G K F R A N D E G K Y W F Y C L H P T A Y S L P R H P			
UniRef90_W8HLD4	V Q Y T D N N R V T G R A H L F T D E W G R Y R S F W G L T P T P Y P I P H D P			
UniRef90_UPI000366AE13	G A P G S L R R F T G F G R I A T D A D G H Y A I H T L P P G G V			
UniRef90_V7EPT3	Q Q P D I Q P K W N N R G R F I T G R D G L Y A F R G I K P T S Y P I P P D D G			
UniRef90_I2GCL0	N R G F R L R G H Q Y T D K N G N F Q L E T I V P G L Y P			
UniRef90_Q84F03	G I H D N I P P Q Y Y R G K I T T A A D G S Y E C R S I L P V P Y Q I P W H S			
UniRef90_J2J7J1	Q Q P D V Q P A G N G R G L F T T D E Q G R F W F T R T V T P S H Y P I P P R H P			
UniRef90_W7SUI1	V Q L P E V D G P V L R A R F V A D D E G R L T F W T T L P R E Y P V P R H P			
UniRef90_E9EUN3	V Q H D H R E G P R E R C I I V S D A K G K F W F K A V R P V S Y A I P D H C			
UniRef90_A8P985	V Q Y E N R E E P D C O R G R F R S K D D G S F S Y S R A V V P V P Y S I P P D D G			
UniRef90_F0Q574	V Q R P G L D H A E G R A R L I A S G A D G R Y H F R S I L A V P Y P I P H H P			
UniRef90_M7A9N7	Q Q P D L Q P L G N G R G L F T T D D Q G R F A F E S I V P A H Y P I P T D G			
UniRef90_UPI0004623B2C	T Q Y A V R D K P D C R G R V H A D K D G H F G Y R A V V P V A Y P I P R H N			
UniRef90_E4N129	D N S G Y T F R G H Q F S G A N G S Y S L T T I V P G L Y P			
UniRef90_C6YXG7	Q I H P G I P H F N L R G R F H T N D Q G D F E V K T I L P P P Y E I P R H Y			
UniRef90_UPI00031513C6	Q F A P A I P P W N L R G T I P T D R D G T F S I T T I R P A P Y Q I P W H A			
UniRef90_Q0SFL8	Q Q P D I Q P Q W N N R G R F L T G A D G R Y L F R G I K P T A Y P I P P D D G			
UniRef90_H8JIZ8	R Q A G R D P S F T G W G R C A T D D A G R Y A F T T L P G S V I D G			
UniRef90_UPI0001FFEC1E	L Q L P E E D G P V L R G R F R T G D D G R L R F R S I L P A A Y P I I P A D G			
UniRef90_A9YE54	Y F D K S Q S D F N L R R S I V T D A E G R Y R F R S I M P S G Y G C P P D G			
UniRef90_A9YE74	F F D K S Q S R F N L R R T I V T D A N G R Y Q F R S I V P M G Y G C P P H G			
UniRef90_V5FTZ9	V F D P E Q T R H N L R G K F R T D K D G K F W F Y C L K P T E Y A M G R H P			
UniRef90_L2FRT5	Q Q D A D Q P E H N L R G V F K T D S E G R Y G F Y C L R P T P Y P V P D D G			
UniRef90_UPI0003B636E9	N S G Y K L R G H H F T D A E G K W W F E T I V P G V Y P			
UniRef90_B9QUK8	V Q Q G I Q P E F N L R G V F R T G P D G K Y W F K A V K P K H Y S I P A D G			
UniRef90_I2B6T8	V Q Q P S Q P R W N N R G R F I T G A D G R Y T F R G V R P V S Y P I P D H P			
UniRef90_M5F4G8	R E G F R L R G H Q F T D V Q G R W W F N T V P A L Y P			
UniRef90_M2ZDY6	V Q Y P G R E G P D Q R A V M H S D K D G V F W F N A I T P V P Y P I I S H H C			
UniRef90_F4RUX1	V Q H P N R E A P D C R G I M T T D E D G A F S F K A V L P V P Y P I P R H C			
UniRef90_J2NRJ5	H K A P L D P N F G G V G R A L T D R D G Y Y S F R T I K P G P Y P W R R			
UniRef90_M4Z402	V Q R D E I G D L A M A R F H A D A N G H F W F S I K P A A Y P I P H H P			
UniRef90_G4R9G5	V V Q P G Q P K W N N R G R V F V T G A D G T Y D F I G I K P V S Y P I P D D G			
UniRef90_T0J8Y3	G I H D G I P P H Y Y R G K I V T D A D G R Y N V R S I M P I P Y A M G R H S			
UniRef90_G8MGD1	V Q R T G K G A L D M R A R F H A D E T G H F W Y R S I V P V A Y P I V P N D G			
UniRef90_S8AFQ1	T Q Y P G R T T P D C R G I L K S G E D G F W F K C I K P V P Y P I P R H S			
UniRef90_L8MU62	T Q K P G N G D F H L R G M L Y T D A Q G R Y R I E T V M P G R Y P I V P P G L			
UniRef90_N4U8N2	V Q Y A D R E G F D N R A T L H S D S E G N L D F K A I V P V P Y P I P R H P			
UniRef90_N1QJ66	F Q D P D Q S D N N L R G K F K T D E N G E Y R L Y C L R P T A Y S L P R H P			
UniRef90_UPI000410711F	T A G Y R L R G H Q F T D R S G R W W F T T I V P A L Y S			
UniRef90_K2M4Z5	N Q G F N M R G Y Q R T D G Q G R Y Y F D T I K P A E Y Y A			
UniRef90_F2LB88	M Q L E S E E M R A R G R L T T G A D G K Y W F R S I K P F Y Y P I V P T D G			
UniRef90_W9ATW3	G Q L P D G D A R L R A K Y T S Q P G G G Y C I V R T I A P R G Y S I P M D G			
UniRef90_UPI0002F12364	N A G Y R L R G H Q F T D R E G G R W W F S I V P A L Y T			
UniRef90_W9XLS9	L E Y A E K E G P D C R G K L Y T D D K G R Y A F T C V R P I P Y P I I S N H W			
UniRef90_M3BY09	V Q N P Q R Q H P D G R A V L H S D A N G V F Y F T A V V P V P Y P I P D D G			
UniRef90_C7E3Y8	Y F D K S Q S E Y N L R R R I V T D A N G Y Y R A R S I V P S G Y G C S P D G			
UniRef90_E6V7C9	M Q V E G A G M A A R A R I R T D A E G R Y W F W S I K P S Y Y P I M G R H P			
UniRef90_Q6IYE7	H F A P H I P D G N L R G T I V A D D E G R F E I T T I Q P A P Y Q I P W H H P			
UniRef90_G7D5E3	S Q K P D E V G A S A R A R F I T D S D D G R F F F R T I L P C S Y P I I P R H P			
UniRef90_B6HA25	V Q H P D R D G P D G R C I M R S D S N G V F W F K A I T P V P Y P I P H D G			
UniRef90_A9YE72	Y F D P S Q E A F N L R R S I R T D E N G R Y C F Q S V V P V G Y S I V P P N G			
UniRef90_Q2MKH3	H Q A A L D P N F G G C G R A I T D D G Y Y H F R T V K P G A Y P I W P N N D			
UniRef90_G3JND9	Q Q D E K Q V D H N L R G V F V T D A E G R Y S F Y C L R P T P Y P I V P R H E			
UniRef90_D5ZRR8	C R V R T L E G R F R A V V R K P E P V T L P D G N			
UniRef90_A4L384	H P A P L D P N F L G A G R V V T D A G G N Y R F T T I K P G A Y P W H H N A			
UniRef90_UPI00031AD579	V Q Y S D T R T A G R G H M F S D Q D G N Y R F W A I T P T P Y P I P H D P			
UniRef90_B8HJC2	V Q Y T N H R V A G R A H L F A D Q D G H Y A F W G L T P T P Y P I P H D P			
UniRef90_A4L370	H E A P L D P N F S G A G R T L T D S E G R Y A F T T I R P G A Y P W H D N A			
UniRef90_UPI00036CC13D	D N T T Y R F R G H Q F T N A Q G A F S L T T I V P G L Y P			
UniRef90_E0XVG0	H T G S R D D Q F Q G F G R S I T D R N G H F F F R T I I P V E Y P			
UniRef90_P0A396	G F H D D I P T D F Y R G K L R V G T D G S F R V R T T M P V P Y Q I P D H S			
UniRef90_G2NEL6	D M T G F A F R G H Q F T G A D G S F T L R T I V P G L Y P			
UniRef90_H0HN65	G Y D G R D V D T T G L R G V Q H T D E Q G L V A F K T I Y P G W Y R			
UniRef90_H8X398	T Q Y P N R D H P D M R G I V K T N N N G S F I I K C T R P V A Y P I P H D G			
UniRef90_E4V214	V Q Y T K R E R P D N R G V L H T N S Q G Q F W F T A I Q P V P Y P I P D H Q			
UniRef90_UPI00037BD3A8	S V G F H L R G H Q F T D T E G R W W F T T I V P A L Y P			

130 140 150 160

UniRef90_G7GLS1	M R A S H L H F M V S H P G A R T L V T H I F P T G D P I G D T T V F G V K D S
UniRef90_H1S8S8	W R P A H L H F M I S A P G Y E T L I T H V F R E G G E Y L E S D T T V F S S L
UniRef90_A3W8R9	Y R P G H M H F I S K D G Y R Q L I S Q I Y D G D S K W L D D D S V F A V
UniRef90_UPI00040281EA	H R P A H V H F F I E A P G Y R K L T T Q I N F G D D P H A A D D F
UniRef90_H6BPU2	Y R P A H I H L I V L V E G Y K P I T T Q I F D K K S K Y L D N D S V F A V
UniRef90_W9H0E9	P R P A H L H F L A F K P G H K T L I T Q I F V D D D Q H L D T D V V F G V
UniRef90_UPI000455F2EE	M R P S H L H I L V D A P G Y E K L V T Q F Y P S E D K W I D S D S V L L E Q
UniRef90_K1VPF5	Y R P A H I H Y W I E A D G H R T L V S Q I F D R E S D Y L T D D A V F A V
UniRef90_N0CT13	G R T R H I H V K A Q A P G G R I L T T Q L Y F P G E P R N N T
UniRef90_A3YEX2	W R P S H L H Y M V S A P G C R T L V T E V F P S D D P Y L D Q D T V F
UniRef90_L1KQ9	M R P A H L H F K V T A P G F H P L I T H I F V A G D P W L D R D S V F E S L
UniRef90_Q0RYT1	P R P A H V H F I V T A P G H E P V T H F V D D G T P Y I D S D V V F F P V
UniRef90_W8IAN8	Y R P A H L H F L C F K P G H K T L I T Q I F V D D D A H L E S D V V F G V
UniRef90_F4CR57	M R P G H L H V R I G A P G F A P L T T M L F R E D D P Y L D S
UniRef90_M2MP97	M R P A H I H F I T A P G Y K P L V T Q I F D R R D K H I S D D S V
UniRef90_A5DM4	P R P A H L H F M I G K P G Y D E L I T A L Y E K G D K Y E K S D T P L L Y T
UniRef90_W01MW8	P R P A H T H Y L I T A S G Y Q K L V T H F V D G D P Y L E S D T V
UniRef90_Q2MKC2	W R P A H T H L S L Y G T T W A S R L V T Q F Y F E G D P L L P L D P I Y N A
UniRef90_D4Z2W7	W R P A H V H F K V R K P G F K T V T T Q V Y F E G G Q W V D S D C C
UniRef90_U4Q7P2	P R P A H M Y I V T A N G Y Q K L V T H T F V G D D D Y L S S D A V F G V
UniRef90_W8H738	W R P A H L L R V T S P G K Q P I T Q L Y F P G G D W I D D D
UniRef90_R7YL17	M R P A H I H L M I S A D D Y K P C T T Q I F P K D D P W L E T D T V M
UniRef90_A0A016Q4Y3	P R P A H L H F M V I I A K G Y N S V V T Q I F D S D S G Y L D N D S V F A V
UniRef90_A5VHB0	P R P A H I H F I V T A P G Y D Q V T H I F A S D C P Y L E Q D A V V V D I
UniRef90_R9PK60	P R P A H I H L Q I V T A P G F A P L T T A L Y Y F E G D D F L Y S D A V F L K Q
UniRef90_J7FJH4	M R P A H I H I M V T H P E Y K G C T T Q L Y P K D D P W L E T
UniRef90_G2QHA5	M R P A H I H I M V T H P E Y Q G C T T Q L Y P S D D P W V K S
UniRef90_W8HLD4	M R A S H L H F M V T A A R H R T L V T H I F V R G D A L L H S D S V F E S L
UniRef90_UPI000366AE13	P Y L S V I V F A R G G L L H H L H T R V Y L G D A E G D P L L G S
UniRef90_V7EPT3	P R P A H M H F L V T A P G F H K L V T H T F V G D D P Y L D S D A V
UniRef90_I2GCL0	G R T R H F H V K V Q A P N K P V L T T Q L Y F P D E P
UniRef90_Q84F03	W R P A H I H Y W I H A D G M R D L I S Q A Y F E G D Q Y I D D D C C
UniRef90_J2J7J1	Y R P A H I H F I A R Q C H R P L T T H I F V P D S P Y L D S D A V
UniRef90_W7SUI1	Y R P A H V H F M I V A P N Y H K L V T Q L F V K G G A Y M D S D T V F
UniRef90_E9EUN3	W R P A H M H F M F E K E G W D H L I T A L Y M R G D P Y E M S D A V F R S L
UniRef90_A8P985	P R P A H L H V R I D A P G F E N L T T A L Y F E G D P Y V T S D V V F
UniRef90_F0Q574	W R P A H L H F M I Q A P G Y E T L T T H I F V D G S E Y I D S
UniRef90_M7A9N7	P R P A H I H F I V T A P G F R E L T T H I F V D G S E Y I D S
UniRef90_UPI0004623B2C	M R P N H L H M M V E A P G F R K L T S A W Y P E G D E W L D A V F G V K K S
UniRef90_E4N129	G R T R H I H V K V Q A P N Q P L T T Q L Y F P P N E P R N A T D T
UniRef90_C6YXG7	F R P A H L H M K L R H P K H H E M T S Q L Y F S G G E Y L N A V R E G L I G
UniRef90_UPI00031513C6	W R P A H L H V K V S A P G Y Q T L T A Q L Y F P G D P H N N D D
UniRef90_Q0SFL8	P R P A H M H F L V T A E G G C E R L V T H T F V E G D S Y L E S D A V
UniRef90_H8JZ8	R P P F F A L T V F A R G G L L N R L F T R A Y L P G D P D A D P L L A A
UniRef90_UPI0001FFEC1E	P R P A H I H F L I T A D G Y R E L I T Q L F V A G G A H L D S D A V F E D L
UniRef90_A9YE54	P R P A H I H F F V S A P G F R T L T T Q I N I Q G D K Y I
UniRef90_A9YE74	R R P A H I H F F V S A A G G H R K L L T T Q I N I L D G D E Y
UniRef90_V5FTZ9	W R P A H I H M M V T H P D Y I G V T A Q L Y P R D D D Q Y L
UniRef90_L2FRT5	W R P A H I H L I V R S E S F Q S V T T Q I F D E D D S K Y L E D D S V F A V
UniRef90_UPI0003B636E9	G R T R H I H L K V Q R P G G N V L T T Q L Y F P G E P D N E R D R I F N A
UniRef90_B9QUK8	P R P A H L H Y I V S K D G Y D E L T T H I F P D D D P Y I D S D S V F F K E
UniRef90_I2B6T8	W R P A H T H F M L T A P G Y Q R I V T H T F V A G D N Y L T S D A V
UniRef90_M5F4G8	G R T R H F H F K V Q R P G G S V L T T Q L Y F P G E P G N A G D R I F
UniRef90_M2ZDY6	Y R P S H S M H F M F E K E G Y D H L I T A L Y L R G D P Y E T S D A V F G V
UniRef90_F4RUX1	F R P A H V H F K I D A E G F E T L V T A I Y L K G D P F I H S D V V
UniRef90_J2NRJ5	
UniRef90_M4Z402	W R P A H V H F M I S A P G F E Q L V T H V F V A G D T Y L D S D V V F G
UniRef90_G4R9G5	P R P A H M H Y L V T A P G Y Q K L V T H T F V G G D P Y L E S D T V
UniRef90_T0J8Y3	W R P A H V H Y K I S A P G M H T H I S Q A Y F E G G A Y V E D D C C
UniRef90_G8MGD1	P R P A H V H F K V S A P G F E T I L V T H V F L E G D A Y L D S D V V
UniRef90_S8AFQ1	Y R P A H I H F K F Q K D G Y D E L I T A L Y A R G D P Y E D S V F G V K S S
UniRef90_L8MU62	M R P A H L H F R V I D S L H V P V T L Q L Y F K G D P H I A G
UniRef90_N4U8N2	Y R P S H M H F K F K K A G Y D P L I T A L Y F R G D P Y E T S D A V L I V D
UniRef90_N1QJ66	M R P A H I H L M I T K E G Y K P C I T T Q I Y P K D D P W L E T D T V F A D L
UniRef90_UPI000410711F	G R T R H Y H L K A R K P S G P I L T T Q L Y F P G E P R N A R D R L F D
UniRef90_K2M4Z5	G R T P H Y H V K I T P P N G R T L I T Q L Y F P D E P E L N E L D H F D S
UniRef90_F2LB88	P R P G H I H F I V S A P G Y K T V I T H L F P S D T P Y L D S D A V F K S L
UniRef90_W9ATW3	P R P A H V H F L I T A P G Y E P L I T H L F E A G A P Y L D T D A V Y A E L
UniRef90_UPI0002F12364	G R T R H Y H V K V Q R R G G D V L T T Q L Y F P G E A R N A R D R L F D
UniRef90_W9XL59	Y R P A H M H F M I S H P D Y N T L I T A L Y Y S R D S K Y I E S D T V F F T E
UniRef90_M3BY09	P R P G H V H F M L E G K G F D K L V T A L Y P R G D P Y E T S D P V F G S L
UniRef90_C7E3Y8	P R P A H I H F F I S A P G H R H L T T Q I N I F A G D K Y I
UniRef90_E6V7C9	N R P G H I H M K V V A E G H A P V T T H L F V A G S P Y I D S D A V
UniRef90_Q6IYE7	W R P A H I H L M V K A P G K R A I T T Q L Y F K D G E W I E N D
UniRef90_G7D5E3	M R P A H V H F L V N A K G Y E P L I T H V F M D G D K Y L D S D V V F G V
UniRef90_B6HA25	P R P A H M H F M F E K L G Y D H L I T S A L Y I R N D P Y E T S D A V F G S L
UniRef90_A9YE72	T R P A H I H F F V T A D G H R K L T T Q I N I L D G D P Y L W D
UniRef90_Q2MKH3	W R P A H I H F S I F G H A F A Q R L I T Q M Y F E G D P V I W Q D P I A L S I
UniRef90_G3JND9	Y R P A H I H L I V T A D G Y K S L T T Q I F D S K S D Y L T D D S V
UniRef90_D5ZRR8	R L A P H I H L S I F L F T R G L A G P L V T K V Y F P D E E Q A N R S D A I L R Q
UniRef90_A4L384	W R P A H I H F S I L F G S G L L S R L V T Q M Y F P N D P L I V H D P I I H G
UniRef90_UPI00031AD579	M R A S H L H F M V S A P N L R T L V T H I F V R G D E L L D R D S V F E S L
UniRef90_B8HJC2	M R A S H L H F M V T A D E H R T L V T H I F V Q Q D P Y I E A G D S V F G V
UniRef90_A4L370	W R P A H I H F S I L F G T S F L S R I L T Q M Y F P G D P L M P F D P I F N S
UniRef90_UPI00036CC13D	G R T R H I H V K V Q A P N R P I L T T Q L Y F P G E P R N N T D S
UniRef90_E0XVG0	G R T P H I H L K L W N E R E N V L T T Q L Y I Q G H S L N K E D F L F K R M
UniRef90_P0A396	W R P A H V H F K V V A P G Y E T L T T Q Y Y F E G G D W I T D D C C
UniRef90_G2NEL6	G R T R H I H V K A Q A P G R P V L T T Q L Y F P G E P R N T T D A L F D
UniRef90_H0HN65	G R T T H I H F K V F P D E S S V M T G Q I F F P P D D L S E H L F T N V A P Y
UniRef90_H8X398	P R P A H I H F I I E K E G Y D R L I T A L Y A K G D P Y E T S D A V F T S L
UniRef90_E4V214	W R P A H V H F K V V A P G Y E T L T T Q Y Y F E G G D W I T D D C C
UniRef90_UPI00037BD3A8	G R T R H F H L K V Q R P G G R V L T T Q L Y F P G E P R N A G D R L F H

170 180 190 200

UniRef90_G7GLS1 L P Q P A G T P T P D G R V [] D G P W S R T R F D [] V L
 UniRef90_H1S8S8 I A D W V [] Q H E A G T A P D G T P S A T P F Y T L [] D F
 UniRef90_A3W8R9 K D S L I G T F K P A P K E L G F E F D F F V L
 UniRef90_UP100040281EA A F A T R D G L L P L P Q R Q G D T A Y N F D F Q L Q
 UniRef90_H6BPU2 K D S L I V D F V P R K G D L E L H Y D I
 UniRef90_W9H0E9 T R H L V G D F Q R H D D G S A Y T L D F V M R G D
 UniRef90_UP1000455F2EE V N D V E S A K A L G F Q H P E R G F K L F K R D I V M R
 UniRef90_K1VPF5 I V D F K P I P K D Y V P P K G L E G K M K Y E L D F R L
 UniRef90_N0CT13 D A L F D P E L L L M N V R S V G N G R Q G T F D F V L D
 UniRef90_A3YEX2 I R P F E R H E T P D G R R [] D G T W T S A A F D I V L R K E
 UniRef90_Q0RTY1 V D D P E R A R Q [] G F D N P F R T V H F D V T L
 UniRef90_W8IAN8 T R H L I G D F T Q G S G E P
 UniRef90_F4CR57 D P V F G V K A S L L T R Y E S D G D G E T L R H T F V L D R E
 UniRef90_M2MP97 F A V K E S L I V D F A P K E G D P Q A Q F D
 UniRef90_A5DM4 L T K L G E E K A K Y D M K P D D W Y L Q W H F K I V
 UniRef90_W01MW8 F G V K N S L V A P F E R V D H P T V W R F D F V L
 UniRef90_Q2MKC2 V P A H S R E R L I A L Y T E E N Y A L G Y R F D I V L H G
 UniRef90_D4Z2W7 S G V R D D L V R R T T Q E D G V D T L T V D F V L D
 UniRef90_U4Q7P2 K A T L I A P F E R V R G V A E W R F D F V L
 UniRef90_W8H738 V A T A T K P E L L L D P Q L D D A G R K V V S Y D F A L D
 UniRef90_R7YL17 A V K D D L V V D F K P L E G D K E A T L D
 UniRef90_A0A016Q4Y3 K D N [] T V T F V P R K G D P Q A E W E L E Y N M T L A T E
 UniRef90_A5VHB0 I P R D D A S A A A A F G V T N P F T A I E W N F D L V P A P G S D T V
 UniRef90_R9PK60 I H D P S R A K E L G F R N E E P F W L C H Y D L V L P T V Q E
 UniRef90_J7FJH4 D T V F A V K D D L V V D F K P Y K Y D K A L E Y N V V L
 UniRef90_G2QHA5 D T V F A V K D D L V V T F K P L E G D
 UniRef90_W8HLD4 I K D F T E Q P A G T P P D D R P W A R T R F D I V L A A P A A
 UniRef90_UP1000366AE13 L A P E R R A T L V A T P E G G R V H R F D V R L Q Y D G E T V F L A F
 UniRef90_V7EPT3 F G V K Q T L I A P F E R L E D A D T L W F D F M L T P E

 F A V K R S [] I G E F G T G D A E Q A A Q F

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

 F G V R S S L V A D W K P H D P G T A L D Y D F V L

 UniRef90_M7A9N7 V G L S E V R D E A E A R F P K G G S F K [] L L H R D I I L V P E E Q
 UniRef90_UP10004623B2C I Y D P A [] L M T V R Q V G N G R E A S F D F V L
 UniRef90_E4N129 E L V H V T D T A E I A R R G L C K P F Y I Y R Y D F
 UniRef90_C6YXG7 V A T A V K P E L M L E P V A G P N G I S V T Y D F A L D P Q
 UniRef90_UP100031513C6 F G V K E A L I A T Y D D P A T A W S S Q Y D F V L
 UniRef90_Q0SFL8 V P A E R L E T L L C V A E N D G A A Y R F D I H L Q G L A E T V F L A Y
 UniRef90_H8JIZ8 I V D F V P R T G A M P D G T V P D G G W R L T F T F R I

 UniRef90_A9YE54 K D G L T V R F L E R K G D A K A P W E L E Y N I K L
 UniRef90_A9YE74 A L L L D V R A T S D G K F G R Y D F
 UniRef90_V5FTZ9 T S D P E K V A A A G F D G P T Y W D V E F D F V L A P K K A
 UniRef90_L2FRT5 F G V K A S L I Q H F E P P N P R G W T A D F D F V M
 UniRef90_B9QUK8 H E S L L L D M K E T G D G L F G Q F D F V V
 UniRef90_I2B6T8 I D L K T V S E E H V K E Y G V K A G T S L I T Y D F V L V T D E E
 UniRef90_M5F4G8 F G V R N S L I V D P V E H P A D R T L E Q N F V L

 UniRef90_M2ZDY6 V K D S L I R E F I H Q P A G R A P D G R H L K Y D F V L
 UniRef90_F4RUX1 F G V K K S L V A P F V R T P D S D I A T F D F V L V R E G
 UniRef90_J2NRJ5 E D V C E E H V V A E K V E D G V R I V E V D F V I P K A T
 UniRef90_M4Z402 F G V K D A L I A K L E T I E G A T S L
 UniRef90_G4R9G5 L V A D I G K I T D S A K Y G M K L G D H L L K W D F V L T T E T E
 UniRef90_T0J8Y3 D P W A R D R S T N T I E L Q R D G E L R R G V F D I V L
 UniRef90_G8MGD1 L G T V S E V S G L S E K Y G V P G T T K L L R Y D F S L V S E A E
 UniRef90_S8AFQ1 V V D F V P L K E L P A N M P P N A G K G G L E L D I V L
 UniRef90_L8MU62 E R L L L R I G E T A D G R F G R F D I V L
 UniRef90_N4U8N2 A L L M M M H P A S D G E I G R F D F V L
 UniRef90_N1QJ66 I V D F K R H E A G L A P T G E K V D F W T C E Y D F H L V P S D K T
 UniRef90_UP1000410711F V V I E F E R R P T P D G R T S D E P W L L A T Y D F V L Q P Q R W T M
 UniRef90_K2M4Z5 E R L L L M R V E E T A D G K F A R Y D F V V
 UniRef90_F2LB88 D P D L A R Q Y R L K T F K K E R E G F W L L E F D F V L T E K E
 UniRef90_W9ATW3 I V D L G T V D E V V A K Y G V K K G M K L L T Y D F V L

 UniRef90_UP10002F12364 F G V R P S L V V D F E S H P P G K A A H Y D F H L Q P E A A
 UniRef90_W9WL59 V A T A T K P E L I L D P K P S A D G T N R V T Y
 UniRef90_M3BY09 K D D L V I A K V E P R N D P A M P D G S K A
 UniRef90_C7E3Y8 V V D V G K A S A E V S R Y G V P E G H A I L T Y D F V L M T D E T

 UniRef90_E6V7C9 P E P H R G R A V D R A T R P H A D G R A R L S L D I V L H G
 UniRef90_Q6IYE7 F A V K D G L T V D F V P L K D N P K A E Y D
 UniRef90_G7D5E3 V P E A R R P L L I A R P T G V E R H L R Y D I R L Q G E R E S V F F S I
 UniRef90_B6HA25 I P D A A A R E R I L V I S A F T P E W A L G Y R F
 UniRef90_A9YE72 I L K D F I E Q Q P G T P T P D G R D W S R T R F D I V L A P A A E
 UniRef90_Q2MKH3 K S S L L K R E Q Q P A G A P T P D G R E L H R F D I V L
 UniRef90_G3JND9 I P D E K A R Q R L I A D F T R P E W A L G F T F
 UniRef90_D5ZRR8 L F D P R I L L M N V R N V G G G R E A T F D F V L
 UniRef90_A4L384 T L A E Q K I N S M K L L P A Q T N D S T E Y V T S V R L
 UniRef90_UP100031AD579 N G V Q S S L I T P D I V E E G V R L M N L N F V I E P A R A
 UniRef90_B8HJC2 P A L L M N V R S A G P G R E G T F D F V L D
 UniRef90_A4L370 N D R S E K R D T W I A R R A G P L S Q A A L R
 UniRef90_UP100036CC13D L Y T L D K L G T E K A K K D P E D W Y L K W H F K I
 UniRef90_E0XVG0 UniRef90_P0A396 V I D Y G S V D E E M A K K Y G V P A G T A L S H D F V L A T E Q E
 UniRef90_G2NEL6 UniRef90_H0HN65 K A L L L D I K Q T R D G K F G R F D F V V
 UniRef90_H8X398 UniRef90_E4V214
 UniRef90_UP100037BD3A8

UniRef90_G7GLS1
UniRef90_H1S8S8
UniRef90_A3W8R9
UniRef90_UPI00040281EA
UniRef90_H6BPU2
UniRef90_W9H0E9
UniRef90_UPI000455F2EE
UniRef90_K1VPF5
UniRef90_N0CT13
UniRef90_A3YEX2
UniRef90_L1KQU9
UniRef90_Q0RYT1
UniRef90_W8IAN8
UniRef90_F4CR57
UniRef90_M2MP97
UniRef90_A5DYM4
UniRef90_W0IMW8
UniRef90_Q2MKC2
UniRef90_D4Z2W7
UniRef90_U4Q7P2
UniRef90_W8H738
UniRef90_R7YLI7
UniRef90_A0A016Q4Y3
UniRef90_A5VHB0
UniRef90_R9PK60
UniRef90_J7FJH4
UniRef90_G2QHA5
UniRef90_W8HLD4
UniRef90_UPI000366AE13
UniRef90_V7EPT3
UniRef90_I2GCL0
UniRef90_Q84F03
UniRef90_J2J7J1
UniRef90_W7SUI1
UniRef90_E9EUN3
UniRef90_A8P985
UniRef90_F0Q574
UniRef90_M7A9N7
UniRef90_UPI0004623B2C
UniRef90_E4N129
UniRef90_C6YXG7
UniRef90_UPI00031513C6
UniRef90_Q0SFL8
UniRef90_H8JIZ8
UniRef90_UPI0001FFEC1E
UniRef90_A9YE54
UniRef90_A9YE74
UniRef90_V5FTZ9
UniRef90_L2FRT5
UniRef90_UPI0003B636E9
UniRef90_B9QUK8
UniRef90_I2B6T8
UniRef90_M5F4G8
UniRef90_M2ZDY6
UniRef90_F4RUX1
UniRef90_J2NRJ5
UniRef90_M4Z402
UniRef90_G4R9G5
UniRef90_T0J8Y3
UniRef90_G8MGD1
UniRef90_S8AFQ1
UniRef90_L8MU62
UniRef90_N4U8N2
UniRef90_N1QJ66
UniRef90_UPI000410711F
UniRef90_K2M4Z5
UniRef90_F2LB88
UniRef90_W9ATW3
UniRef90_UPI0002F12364
UniRef90_W9XL59
UniRef90_M3BY09
UniRef90_C7E3Y8
UniRef90_E6V7C9
UniRef90_Q61YE7
UniRef90_G7D5E3
UniRef90_B6HA25
UniRef90_A9YE72
UniRef90_Q2MKH3
UniRef90_G3JND9
UniRef90_D5ZRR8
UniRef90_A4L384
UniRef90_UPI00031AD579
UniRef90_B8HJC2
UniRef90_A4L370
UniRef90_UPI00036CC13D
UniRef90_E0XVG0
UniRef90_P0A396
UniRef90_G2NEL6
UniRef90_H0HN65
UniRef90_H8X398
UniRef90_E4V214
UniRef90_UPI00037BD3A8

UniRef90_G7GN02
 UniRef90_M2NCM6
 UniRef90_U2ZXT1
 UniRef90_E5AAI8
 UniRef90_A5VGV3
 UniRef90_UP100036C21BF
 UniRef90_S3BQH7
 UniRef90_H0TDW7
 UniRef90_N9UX48
 UniRef90_A7IPL2
 UniRef90_Q2MKB7
 UniRef90_S9PDJ1
 UniRef90_P11451
 UniRef90_UP100035EBAFD
 UniRef90_R8BTM0
 UniRef90_J3Q4B2
 UniRef90_K2Q707
 UniRef90_F4ASR9
 UniRef90_C5D1D2
 UniRef90_L9MVY5
 UniRef90_F2J2I0
 UniRef90_UP1000345FA2F
 UniRef90_A0A031K408
 UniRef90_A3LYE3
 UniRef90_C7ZEB3
 UniRef90_G8BJM5
 UniRef90_UP10002F2FD30
 UniRef90_Q212E8
 UniRef90_G0RG14
 UniRef90_UP100035D4BC2
 UniRef90_A4L368
 UniRef90_U1GRV7
 UniRef90_A0A014NS16
 UniRef90_H0RXA5
 UniRef90_UP1000440CF3E
 UniRef90_N0B6D5
 UniRef90_G0ABV2
 UniRef90_A4L364
 UniRef90_UP10003AD6B97
 UniRef90_W9ZCA8
 UniRef90_S4Y1G6
 UniRef90_G7XJ4
 UniRef90_I3RYK6
 UniRef90_C5PGT7
 UniRef90_S9QCW7
 UniRef90_UP100036C4ADC
 UniRef90_K0PLX6
 UniRef90_A4L378
 UniRef90_UP10002895412
 UniRef90_H0T059
 UniRef90_C3Y6B7
 UniRef90_C5GK74
 UniRef90_Q0FNE5
 UniRef90_UP100041A3536
 UniRef90_F3NC11
 UniRef90_Q8KQ85
 UniRef90_UP10003679FC6
 UniRef90_UP1000377FB4
 UniRef90_I3CRU9
 UniRef90_UP100036AD34B
 UniRef90_Q2MKF1
 UniRef90_N7PAY7
 UniRef90_F4CS31
 UniRef90_B8H8W8
 UniRef90_G6YA85
 UniRef90_UP100036921D0
 UniRef90_I7IHZ0
 UniRef90_A0A017SXH4
 UniRef90_Q46QJ7
 UniRef90_N6TW04
 UniRef90_W0PGD9
 UniRef90_Q0K337
 UniRef90_W4M1Y7
 UniRef90_J3D1H2
 UniRef90_Q3YRH8
 UniRef90_I0K1P3
 UniRef90_J4G1P3
 UniRef90_G2Q150
 UniRef90_L1L739
 UniRef90_UP10003716509
 UniRef90_L7EYD0
 UniRef90_I3Z025
 UniRef90_H1VY83
 UniRef90_UP10002899B9F
 UniRef90_A7NJL0
 UniRef90_S7PYF5
 UniRef90_S4MZB7
 UniRef90_UP100035F4A6A
 UniRef90_V5GEN5
 UniRef90_B7KRL9
 UniRef90_E8PP53
 UniRef90_G2R5W0

1 10 20 30 40 M

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

50 60 70 80

UniRef90_G7GN02	S F G A S G Q P C W V E G T V T D T D G T P L P G A R I E V W E A D D D G L Y D	
UniRef90_M2NCM6	E G T V T Y M H G V I R D L T Q K P I P N V T F D M W Q A S S N G K Y D	
UniRef90_U2ZXT1	L Y M T G Q I T G P D Q E P V K D A I L H V W H A N S K G F Y S	
UniRef90_E5AAI8	R G Y L E G V P L Y L S G T V R N E A G E P I V G A K V D I W H S N D E G Y Y D	
UniRef90_A5VGV3	G R P C V V S G R V L A T D G T P L P G A E L D V W Q C D E E G F Y D	
UniRef90_UP100036C21BF	T D A V V A Y M Y G E V T S A D G L P L A N A V V D V W Q C S T N G L Y E	
UniRef90_S3BQH7	G E K M F V Q A R V T D V S G A P L A G A A V D V W H A D D E G L Y D	
UniRef90_H0TDW7	S P E D N G E P L M I R G R V T A P N G A P I E G A T V H I W H S T P D G A Y T	
UniRef90_N9UX48	T P G P A L F A D C R V T D P K G L P L A G V E V D V W Q A S P V G L Y E	
UniRef90_A71PL2	U P G P A L F A D C R V T D P K G L P L A G V E V D V W Q A S P V G L Y E	
UniRef90_Q2MKB7	E V W Q A N T H G R Y T	
UniRef90_S9PDJ1	S E G Q K G P V R L A L R V L D E S C K P I P G A T V D I W H A G P A G V Y S	
UniRef90_P11451	P L I I R G T V R S D T G E L L A G A V I D V W H S T P D G L Y S	
UniRef90_UP100035EBAFD	R E D R T G I P L K M R I Q V V G A D C K P L E K A R V D I W H C D A Q G N Y S	
UniRef90_R8BTM0	A D G Q F T F F H G V I K D V D G K G I P G A V F D M W Q A S T N G K Y D	
UniRef90_J3Q4B2	K M V V E G M V K N Q N G E G I A G A R L D V W E T D E N G F Y D	
UniRef90_K2Q707	D G I G E P L L V E G R V E D L D G L P I P T A E I I T W Q A N A E G Y Y N S	
UniRef90_F4ASR9	R A G E P G I P L V F K G T V T N E H G V K I E N A L L D I W H N A D S G L Y S	
UniRef90_C5D1D2	G G A V G E P L F V Q A T V R G P G G E P V A D A V V D V W E A D A E G F Y D	
UniRef90_L9MVY5	F V N G T I G D G E I P P H A E I E V W Q A D D E G F Y D	
UniRef90_F2J2I0	D R D G A T V L V H G I V R D T L G N A L P G A I V D T W Q A D A S G T Y P	
UniRef90_UP1000345FA2F	I P G D P G V P L A V S G Y V F T R D C R P V A G A L L D F W Q A D D A G V Y D	
UniRef90_A0A031K408	A E G N R L E I R L Q V L D V G G K P L K G A L V E V W H A D A L G K Y D	
UniRef90_A3LYE3	K G E P L L I E G K L T D I R G N P I E G A T I D L W H C D K D G F Y D	
UniRef90_C7ZEB3	T P E D G I V A Y L Y G T V T S A T G A P I P N A S V E V W Q A S T N G L Y E	
UniRef90_G8BJM5	E G R G E P L L I E G L L T E P D G T P I P D A S I D L W H C D N K G M Y D	
UniRef90_UP10002F2FD30	G V K G E P T Y Y S G R V L D E H S T P I A N A C L D V W S G D G E G N Y D	
UniRef90_Q212E8	V E G D R M F V Q C R V T D L A G K P L A G V T V D V W H A D D E G F Y D	
UniRef90_G0RG14	T T D A A G E P M L A L C T V C D S S G R P L S G V K V D I W E A D S S G H Y D	
UniRef90_UP100035D4BC2	A F G A S G E P C W V T G S V R D T E G N P V P G A R I E V W E A D D D G R Y D	
UniRef90_A4L368	G R Y R	
UniRef90_U1GRV7	G Q V T F M H G K L T N T T K K G I S D A V L D I W Q A S S N G K Y D	
UniRef90_A0A014NS16	G G L P G T P L F F E G R V V N R A G A P V A D A A V D V W H S D G D G H Y D	
UniRef90_H0RXA5	A D L K G E K M F V Q T R V T N L S G A P L A G A S V D V W H A D D E G F Y D	
UniRef90_UP1000440CF3E	K P S T E G E P L F F S A T V K N T K G E P I E G V I A E V W Q A D G E G A Y D	
UniRef90_N0B6D5	A E G R P G I R L R L E L R I I S G T C A P I P N A R V D V W H A D A Q G I Y S	
UniRef90_G0ABV2	A T I S G V L R D G D G A P I N D G W V E A W M P D A	
UniRef90_A4L364	UniRef90_UP10003AD6B97	G Q V T F M H G K L T N T T K K G I S D A V L D I W Q A S S N G K Y D
UniRef90_W9ZCA8	T P E D A E I V Y M Y Q G V V D A T K K P L T N A A I D V W E A S T N G L Y E	
UniRef90_S4Y1G6	L W F T G T V A D T R C C S I P H V E I E V W H A D S K G L Y D	
UniRef90_G7XJ4	P N P N G K V T F M H G V L K D E T G A P I V G A V L D I W Q A S A N G Q Y D	
UniRef90_I3RYK6	P L L L H G S V K D E T G R V V T D A I I D I W H S T P D G R Y S	
UniRef90_C5PGT7	P A E G G E V T Y M H G R V V D V T G E P I E G V V I D V W E A S T N G L Y E	
UniRef90_S9QCW7	S E G H G G P V R L A F R V L D E N C K P V P G A S V D I W H A G P E G V Y S	
UniRef90_UP100036C4ADC	L T I H G I L R D G D G A P I T D G M I E A W T P S A	
UniRef90_K0PLX6	A E D L E G T P M L V T G T V S S T S G A P L T E A D I D V W H S D D E G Y Y D	
UniRef90_A4L378	UniRef90_UP10002895412	D G K G E A C R Y Q G R V L D L E G N P I E G V R I D V W S D N S D G F Y D
UniRef90_H0T059	D G V G E P L A V A G R V V D L D G H P I I A G A L V E T W Q A N G Q G F F E	
UniRef90_C3Y6B7	L G T S D D D Y M F V K G T V Y D V H C H P V H G A N V E L W Q A D K T G L Y Y	
UniRef90_C5GK74	F S D G A G E P L L V V I C T V R D R A G K P L E G V K V D I W E T D S S G R Y D	
UniRef90_Q0FNE5	T E G R E G V P L R L Q M Q V V T A D C R P V P E A R V D I W H C D A Q G N Y S	
UniRef90_UP100041A3536	P E D A D A E D M I I R G C V T D L A G Q P V S G A E I D I W H S T P D G L Y S	
UniRef90_F3NC11	R P E E P G E P F V V S G T V R S T S G A P L P G A V L D V W Q I D A D N L Y S	
UniRef90_Q8KQ85	R D R E A A G E H I T I V G Q V F D G D G Q V I G D A M L E I I S Q V D A Q G H Y P	
UniRef90_UP10003679FC6	A E G R P G V P L K L L L Q V T D G A C Q P I S G A R V D V W H C D A T G Q Y S	
UniRef90_UP1000377FB4	D G K G E P L R V S V R V Q D L D G L P I G G A E V V T W Q A N A E G F Y N	
UniRef90_I3CRU9	I S G A I L D D G D G V P I N D A W A E A W L P G S	
UniRef90_UP100036AD34B	S T K A A G V P L T V T L L D N A C S P L A G A A V Y V W H C D Q D G K Y S	
UniRef90_Q2MKF1	UniRef90_N7PAY7	P V G P R I L V H G R V L D E G N R P V P G A L L E F W Q A N A A G R Y A
UniRef90_F4CS31	V V S G T V R S T S G R P L A G A T V D V W Q C D E N G L Y D	
UniRef90_B8H8W8	S A T A E G V P L T F T L T L L D N A C T P M A G A A V Y V W H C D R D G K Y S	
UniRef90_G6YA85	T E G K K G V G D V R L Q V V D T A C R P L A G A R V D I W H C D A Q G A Y D	
UniRef90_UP100036921D0	G S I Q D G T L L T L V V N F S R A C K P I K D A I V D I W H C N A D G I Y S	
UniRef90_I7IHZ0	P V S A T G E L I N I V G R I T D N C L P I Q N A V V S I W H A N S Y G M S H	
UniRef90_A0A017SXH4	K A S G R L F V L K G Q V T D A Q G S P V R G A E V Q I W Q T D D H G R Y P	
UniRef90_Q46QJ7	R D G R P Q G P L R L R L M V V D A D C T P V Q G A L V S I W H C D A E G S Y S	
UniRef90_N6TW04	D G V G E P L L V S V Q V Q D L D G L P I V G A E E V T W Q A N A E G F Y N	
UniRef90_W0PGD9	T E G R K G I P L R M Q I Q V V S A D C R P L K D A R V D I W Q C D A E G N Y S	
UniRef90_Q0K337	R D D R P G Q P L R L C I R V V D A G C A P V P G A L V S I W H C D A D G S Y S	
UniRef90_W4M1Y7	A G T K G I P I V V T G L V L N T R C E P L A G V L L D F W Q T D A E G V Y D	
UniRef90_J3D1H2	K I V V K G A I F D G D G V A I N D A W V E T W M P D S	
UniRef90_Q3YRH8	A D G E L I Y I V G R V T D E N C I P I A N A N V L I W H T N A H G I Y Q	
UniRef90_I0K1P3	R D D R T G V A L A I N I T I K N G N C A I L S G A L V D I W H C D K D G Y Y S	
UniRef90_J4G1P3	K A G T H G E A M F F S G T V K N T K G Q G I K G A K I D V W Q A D G D G I Y D	
UniRef90_G2Q150	T S D P A G E P M L A V C T V K D T Q G R P I P G V T I D I W E T D S S G H Y D	
UniRef90_L1L739	D G V A E G V P L T V T L T I V D Q A S T P K A G A V Y L W H C D R E G R Y S	
UniRef90_UP10003716509	T G T A E G V P M T L E L T V T D L A G A P F A G V A V Y V W H C D R E G R Y S	
UniRef90_L7EYD0	T E G K S G V P L T L R L T V Q D T T C A P V A G A A V E I W H C D A D W G Y Y S	
UniRef90_I3Z025	W T E K G Q K I L L T G T V Y N L G G R P A P N V V V Y Y W Q T D N N G Y Y S	
UniRef90_H1VY83	I E E Q E G V D I V L V D Y Q V L D E T C E P V P N V Y L E M W H C N S T G V Y S	
UniRef90_UP10002899B9F	T I V I H G S I F D G D G V P I N D A Q I E A W Q P A G A A A E S S	
UniRef90_A7NJL0	K E G L P L L L T F V V I S Q V G S A G C A P L S G A L V D I W H C D A Q G V Y S	
UniRef90_S7PYF5	T P D T T G E N L F F A A T I K N T K G E G I K G A T I D V W Q A D G D G V Y D	
UniRef90_S4MZB7	S A G A E G V P L T I T L T V V D G C G T P K P G A A V Y V W H C D R E G A Y S S	
UniRef90_UP100035F4A6A	T A V A A G V P L T V A L K I L D L T C S A Y S G A A V Y L W H C D R D G N Y S	
UniRef90_V5GEN5	S S T G A G E S M L I R G T V K D L H G N P V H G A L L D I W E T N G N G H Y D	
UniRef90_B7KRL9	A E E R D G V P L R L R L R V I E G P C T P V A G A R V D V W H C D A R G L Y S S	
UniRef90_E8PP53	R E G L P G I P L R L T L R V Q D R T C Q P L G S V R V D L W H T D A L G R Y S S	
UniRef90_G2R5W0	T E D Q Q G V P L T V D I Q V D M D C K P I P G A Y L E I W H S N A T G V Y G	

UniRef90_G7GN02
UniRef90_M2NCM6
UniRef90_U2ZXT1
UniRef90_E5AAI8
UniRef90_A5VGV3
UniRef90_UPI00036C21BF
UniRef90_S3BQH7
UniRef90_H0TDW7
UniRef90_N9UX48
UniRef90_A7IPL2
UniRef90_Q2MKB7
UniRef90_S9PDJ1
UniRef90_P11451
UniRef90_UPI00035EBAFD
UniRef90_R8BTM0
UniRef90_J3Q4B2
UniRef90_K2Q707
UniRef90_F4ASR9
UniRef90_C5D1D2
UniRef90_L9MVY5
UniRef90_F2J2I0
UniRef90_UPI000345FA2F
UniRef90_A0A031K408
UniRef90_A3LYE3
UniRef90_C7ZEB3
UniRef90_G8BJM5
UniRef90_UPI0002F2FD30
UniRef90_Q212E8
UniRef90_G0RG14
UniRef90_UPI00035D4BC2
UniRef90_A4L368
UniRef90_U1GRV7
UniRef90_A0A014NS16
UniRef90_H0RXA5
UniRef90_UPI000440CF3E
UniRef90_N0B6D5
UniRef90_G0ABV2
UniRef90_A4L364
UniRef90_UPI0003AD6B97
UniRef90_W9ZCA8
UniRef90_S4Y1G6
UniRef90_G7XJ4
UniRef90_I3RYK6
UniRef90_C5PGT7
UniRef90_S9QCW7
UniRef90_UPI00036C4ADC
UniRef90_K0PLX6
UniRef90_A4L378
UniRef90_UPI0002895412
UniRef90_H0T059
UniRef90_C3Y6B7
UniRef90_C5GK74
UniRef90_Q0FNE5
UniRef90_UPI00041A3536
UniRef90_F3NC11
UniRef90_Q8KQ85
UniRef90_UPI0003679FC6
UniRef90_UPI000377F8B4
UniRef90_I3CRU9
UniRef90_UPI00036AD34B
UniRef90_Q2MKF1
UniRef90_N7PAY7
UniRef90_F4CS31
UniRef90_B8H8W8
UniRef90_G6YA85
UniRef90_UPI00036921D0
UniRef90_I7IHZ0
UniRef90_A0A017SXH4
UniRef90_Q46QJ7
UniRef90_N6TW04
UniRef90_W0PGD9
UniRef90_Q0K337
UniRef90_W4M1Y7
UniRef90_J3D1H2
UniRef90_Q3YRH8
UniRef90_I0K1P3
UniRef90_J4G1P3
UniRef90_G2Q150
UniRef90_L1L739
UniRef90_UPI0003716509
UniRef90_L7EYD0
UniRef90_I3Z025
UniRef90_H1VY83
UniRef90_UPI0002899B9F
UniRef90_A7NJL0
UniRef90_S7PYF5
UniRef90_S4MZB7
UniRef90_UPI00035F4A6A
UniRef90_V5GEN5
UniRef90_B7KRL9
UniRef90_E8PP53
UniRef90_G2R5W0

90 100 110 120

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

130 140 150 160

UniRef90_G7GN02	P R A S H [L] H F M V T A P G C R R	L V T H I F V R G D E L L D R D S V I K D F	
UniRef90_M2NCM6	M R P A H I H [L] M V T H P D Y K P V I T Q I Y P K D D P W		L A T
UniRef90_U2ZXT1	N R P A H I H F F V E A P G Y R Q L T T Q I N F G D D P F A G D D F		
UniRef90_E5AAI8	M R P A H I H F [L] V K A P G Y K P I I T Q I F D R K S K Y I E D D A V F A V		
UniRef90_A5VGV3	P R P E H V H Y M I T A P G Y R R L V T H L F A Q G D K Y L T S D V V F S S L		
UniRef90_UPI00036C21BF	P R P A H V H F [I] A R A E G H R P V T T H T F V A D G P Y L D S D A V		
UniRef90_S3BQH7	P R P A H V H F L V D A K G H E P L V T H V F I S L G D D Y L D S D V V F G V K		
UniRef90_H0TDW7	M R P A H V H F L V D A K G H E P L V T H V F I S L G D D Y L D S D V V F G V K		
UniRef90_N9UX48	W R P A H V H F K L R A D G Y R D L T T Q S Y F A G G K W V D D D C		
UniRef90_A7IPL2	P R P A H L H F [L] G F K E G Y K T L V T Q V F V D D D E R L E S D V V F		
UniRef90_Q2MKB7	M R P A H I H F D V L G R H N R L V T Q M Y F A G E P L N D T D R I I Q		
UniRef90_S9PDJ1	G R A [L] H H F I I R I G D T A S V T S Q L Y F E D N D D I L N T Q A I Y N T		
UniRef90_P11451	W R P A H V H F K V R K D G F E P L T T Q Y Y F E G G K W V D D D C H G V		
UniRef90_UPI00035EBAFD	G R T V H H F K V F L D Q T Q V L T G Q A F F P D A L S Q Y I F D N		
UniRef90_R8BTM0	F R P A H I H M M V T H P D Y V G V T A Q L Y P R D D P Y L E T D T A C A		
UniRef90_J3Q4B2	F R P A H I H F M I K A D G Y E S L T T S L Y K G D P F I D A V F G V K N S		
UniRef90_K2Q707	P R P A H L H F M V R A P G F E T T V I T H I F D A S D P R L G E D A L F G V		
UniRef90_F4ASR9	W R S A H L H V V V S A Q G Y E S V I T E L F F S D C E Y I D		
UniRef90_C5D1D2	W R P A H V H F M I Q A P G Y E T T L I T H V F R E G D P Y L D S D A V		
UniRef90_L9MVY5	W R P A H L H F M I S A P G Y E R L V T H V F K A E G D Y L D S D A V F T S L		
UniRef90_F2J2I0	W R P A A H H Y I V R A P G M R A I L T T E L F F D N T E Y D N D A V F G V		
UniRef90_UPI000345FA2F	G R T R H L H V K V Q A P S R P V L T T Q L Y F P G E P R N E T D L I F D		
UniRef90_A0A031K408	M R P A H I H F R V A L P G F D T L V T H V F D G T D A F L D D D A V F G V		
UniRef90_A3LYE3	P R P A H I H F I I E K E G Y D S L V T A L Y H R G D P Y E T S D A V F G V K		
UniRef90_C7ZEB3	P R P A H L H F M V A E G Y V S V T Q I F D S D S G Y L D N D S V F A V		
UniRef90_G8BJM5	P R P S H I H F I I E K P G Y D R L I T A L Y A K G D P Y E T S D V V F		
UniRef90_UPI0002F2FD30	N R P G H H M H F M L S A A G F E S V T T H L F V I A D S P Y L D S D A V		
UniRef90_Q212E8	M R P A H V H F F L L D A K G Y E P L V T H V F I E G D K Y L E S D V V L I S T		
UniRef90_G0RG14	P R P A H M H F I I E K Q G L D R L V T T L F I R G D Q Y E T S D V V F S N L		
UniRef90_UPI00035D4BC2	M R A S H L H F M V T A P A F R R L V T H I F V D G D E I G W K D A V F G V		
UniRef90_A4L368	W R P A H I H Y S I S G T A W A Q R L I T Q M Y F E G D P L I A Q C P I V K T		
UniRef90_U1GRV7	M R P A H I H L M I T H P T H K S V T T Q I F P A D D P Y L L S T		
UniRef90_A0A014NS16	P R P A H V H F L L I E A E G F Q R V T T M L F P S D D P Y L D T		
UniRef90_H0RXA5	M R P A H V H F L V D A K G H E P L V T H V F I G G D A Y L D S D V V F G V		
UniRef90_UPI000440CF3E	H R A S H L H F T I T A P G Y D S L T T A L Y P S H S P F L G T		
UniRef90_N0B6D5	G R T P H V H V K V F I G E T R V A T A Q V Y F P D E F Y T T Y E P Y N L R S		
UniRef90_G0ABV2	P V L F A T V F A R G L L V H Q F S A V F L E D D S G L A Q S E I L S Q		
UniRef90_A4L364	W R P A H I H F S L F G Q A F V Q R L V T Q M Y F P G D P L L D A D P M Y N C		
UniRef90_UPI0003AD6B97	M R A S H L H F M V I I A D G H R T L V T H I F V R G D E T L L D S D A V F G V K		
UniRef90_W9ZCA8	F R P A H I H L I V L I E G Y K P I T T Q I F D K Q S K Y L E D D S V F A		
UniRef90_S4Y1G6	W R V K H H F K L F A P G H R S L T T Q I F L P D D H T S S D R L Y N P R L		
UniRef90_G7XJ4	M R P A H I H L M I T H P D Y A T V I N Q I Y P S D D P H L D I D S V F A V		
UniRef90_I3RYK6	W R P A H V H F K V V R K D G F E A L T T Q Y Y F E G G E W V D S D C C		
UniRef90_C5PGT7	M R P A H I H L I A Q H K D Y K P I T T Q I F D S E D K Y L A N D S V F A V		
UniRef90_S9QCW7	R T V H H F T I T K V A G T E S V T S Q I Y F E D N D D I L S T Q P L Y N T		
UniRef90_UPI00036C4ADC	G E P A A L V T V F A R G L L V H Q F T A V F L E D D N L D R S E L L R Q		
UniRef90_K0PLX6	P R P E H V H F M V A A A G H E T L V T H V F A E G D P Y L D S D V V		
UniRef90_A4L378	W R P A H I H F S L F G Q A F L T R M V T Q M Y F P G D P L L J A Y D P M F T C		
UniRef90_UPI0002895412	W R P A H I H M H F M L E H P D Y E R I V T H T F V S G D A Y L T S D A V		
UniRef90_H0T059	P R P A S I H F I V S A E G F E P I T T Q L F D R A D A T E D A L H C V K P S		
UniRef90_C3Y6B7	Y R P A H I H Y R V T A P G Y R E I I T Q L Y F S H H D D S L G A N D P		
UniRef90_C5GK74	Y R P A H M H F M L W K E G W D C L I T A L Y L R G D P Y E S S D A V F L I V		
UniRef90_Q0FNE5	G R T T H I H Y K V F L D E S T V L T S Q I F F P D A L S Q Y L Y L A V		
UniRef90_UPI00041A3536	W R P A H I H F W V R C V G K R D L I N Q A Y F E G G D Y V G N D C E T D H		
UniRef90_F3NC11	L R P L H I H A I V T A E G C L P L T T Q I Y F D G D P L A E G T L E G P		
UniRef90_Q8KQ85	D E A P H L N V V V T M R G Q		
UniRef90_UPI0003679FC6	G R T T H I H F K V F L L D E K A M L T G Q M Y F P D A L S E Y I F T A I		
UniRef90_UPI000377F8B4	P R P A H L Q F V V V R A K G F E T I T T H I Y D S N D P R L A E D A L F G V		
UniRef90_I3CRU9	P V A Y V T V F A R G L V K H Q F T A V F L E D D P A L A Q S A L L E Q		
UniRef90_UPI00036AD34B	G R W P H I H F E V F G R W D R L I T		
UniRef90_Q2MKF1	I R P A H I H F E L S G T H G R L V T Q M Y F A G D P Y N E K D R F L Q S		
UniRef90_N7PAY7			
UniRef90_F4CS31	Y R P A H V H F I A S A P A H E E V T T H A F V A G S P Y I D S D A V F L L V		
UniRef90_B8H8W8	G R W P H I H F E V F E S M N N A T A A G Q V		
UniRef90_G6YA85	G R T T H I H F K V F P N E R S V M T G Q L F F P D G D Q I F A T V S P Y N		
UniRef90_UPI00036921D0	G R A V H I H F K I I R A T G K S H E F T S Q L Y F D D K L N D E I F A Q		
UniRef90_I7IHZ0	D R A P H V N F L V Q H P D F P E F T T Q M F F A D Y Y C N N Y V D S V L S G		
UniRef90_A0A017SXH4	R R A P H I H V K V F V G G L C K L T T Q G Y F D D E R A M L G R D F V R A L		
UniRef90_Q4QJ7	P R A V H I H F K V L L A N A E V L T S Q L Y F S D		
UniRef90_N6TW04	P R P A N H I H F V I I R A K G F E T I T T H I Y I Y N A N D P H L G E		
UniRef90_W0PGD9	G R T A H V H Y K V F L N E K T V L T S Q I F F P D A L S E Y I Y L Q S		
UniRef90_Q0K337	P R A I H I H F K V L L G R S E A L T S Q L Y F S D N R E V L G S H P A Y R A		
UniRef90_W4M1Y7	G R T R H I H V K V Q A P H G R V L T T Q L Y F P P D N E V Q N K R D S		
UniRef90_J3D1H2	P V A Y V T V F A R G L T K H Q F T A V F L E D D A G L A Q S E I L G Q		
UniRef90_Q3YRH8	N K I P R V H F I L Q H S E F P E F N T T M F F P P E Y N N S T D N Q F K N		
UniRef90_I0K1P3	G R A P H I H V H I Y N S A G K S L L V T Q I A F P P Y D V T N T V Y T T A T A Q		
UniRef90_J4G1P3	H R A S H I H F V L V A P G Y D D L T T A L Y P S H S P F L G T		
UniRef90_G2Q150	W R P A H V H F M F A K E G W D R L I T		
UniRef90_L1L739	G R W P H I H F E V Y G S A Q N I V A T S Q L A F P K D		
UniRef90_UPI0003716509	G R W P H I H F E V Y A D S T R A V A T S Q V A L P Q D D Q V Y A Q A G Y E A S		
UniRef90_L7EYD0	P R T C H I H L K V H T E G G T V N H T G Q L F F P P D D A A		
UniRef90_I3Z025	G M P A H I H L S I K E P N I E N E Y Y A E L Y F D D D P L Y L K H		
UniRef90_H1VY83	R A T H I H L M V H A N A T L Y S H V G Q T F F D D Q D		
UniRef90_UPI0002899B9F	P L A Y I T V F A R G L V K H Q F T A V F L D S D T H L A Q S A I L E Q		
UniRef90_A7NJL0	G R T V H I H F K I I R A T G Q V Y D F T S Q L Y F D D A I S D A V F A Q A P		
UniRef90_S7PYF5	H R S S H I H F L K A P G Y D E L T T A L Y P A H S P F L G T D P V F A T		
UniRef90_S4MZB7	G R W P H I H F E V Y G S A T S I T N T S Q L A F P K D		
UniRef90_UPI00035F4A6A	G R W P H I H F E V Y T S A S N K I S T S Q L A F P E D		
UniRef90_V5GEN5	P R P A H V H F I I N H P S F E K L N T A L Y N R E D P V F G A K S S L T K D		
UniRef90_B7KRL9	G R A T H I H F K T F L Q R N V L M G Q M Y F P D		
UniRef90_E8PP53	R T P H I H L R V E A G G R S F A T Q L F F P P E E P Y A E G M P R I G N R		
UniRef90_G2R5W0	G R T I H V A V H I H V A Q P Q P H V G Q M Y F D Q D		

170 180 190 200

UniRef90_G7GN02	A E Q P A G T A T P D G R A [] D G P W T R A R F D I V L]		
UniRef90_M2NCM6	D T V F A V K D D L V V D F T P [] K G		
UniRef90_U2ZXT1	A F A T R E G L L P [] P V N R Q G E S A Y [] A F D F E L Q R A K A		
UniRef90_E5AAI8	K D S L L V D F I [] P F E G D P K A E F		
UniRef90_A5VGV3	I R N Y E P R E G G T A P D G K A M D G [] E L H H D F V L		
UniRef90_UP100036C21BF	F A V K Q G L I T D F A E S H D E R A A E F D I V L A P E A G T		
UniRef90_S3BQH7	K E A L K V N F V P R Q G D P E A K F		
UniRef90_H0TDW7	D E L I A Q V E R R T D P V M P D G K L A M T Y D F R M		
UniRef90_N9UX48	A G G I V D D L I F A P V L E D G K K V L Q I D F V L D		
UniRef90_A7IPL2			
UniRef90_Q2MKB7	T A A A A N R H R [] I V P F E R P Q D G L V G S W D I V L D G		
UniRef90_S9PDJ1	R G E R D T R N T A D N I V D Q Q G Q L G D F T L Q T R K M T		
UniRef90_P11451	T P D [] I T P E T I E D G V R V M T L D F V I E R E Q A		
UniRef90_UP100035EBAFD	A P D Y G G R K T		
UniRef90_R8BTM0	V K K D D L L D F K P V Q N E P N G A T [] D V E Y D V R L		
UniRef90_J3Q4B2	L I V D V S E N S P D A T H P T K W W G L K Y D F I L P T R Q E		
UniRef90_K2Q707	R P E L V Q S F E Q T A V D G Q A R Y S L K V R F V M V		
UniRef90_F4ASR9			
UniRef90_C5D1D2	F G V R S S [] I G D F A Q H A A G R A		
UniRef90_L9MVY5	I A N W L K H E N G I A P N G I E Q H E P F Y T F D F I L		
UniRef90_F2J2I0	L I E P V K K A D D L G F P V E K R P D A R C C R F D F V L A P E G		
UniRef90_UP1000345FA2F	P R L L M N V R D D A S G K A A E F D F V L D		
UniRef90_A0A031K408	L D S T I G E F V P V T E P G A G A E H Y R L D L V L Q P S G		
UniRef90_A3LYE3	T P L L F E L D R I G K D R A E D D W L L Q W H F K I		
UniRef90_C7ZEB3	K D G L T V D F V P R K G D P Q A N W		
UniRef90_G8BJM5			
UniRef90_UP10002F2FD30	F G V R D S [] I V P F T K H P A G V A		
UniRef90_Q212E8	I E L R T D A T M P D G L P A P G P W H L M T Y D F R L		
UniRef90_G0RG14	V V D L L E R V D E T A A E Y G V L E G T L L L R H K F I L A S A R E T		
UniRef90_UP100035D4BC2	K E S L I K S F T R H S S G P A P E G R S V V T F D I V L		
UniRef90_A4L368	I P S E A A V R Q L I A P L D V P F D S L A Y R F		
UniRef90_U1GRV7	D S V F A V K S D L V V D F K P R K G D D K A T L D		
UniRef90_A0A014NS16	D P V F G V K E S L I T S Y D T Y E A G A G		
UniRef90_H0RXA5	K D E L I A Q V E Q R T D P V M P D G K L A A		
UniRef90_UP1000440CF3E	D P V F A T K K S L I C D L S E E R D A		
UniRef90_N0B6D5	I S D T T N D E D S I F R D G E R D G G G T		
UniRef90_G0ABV2	V P A D R R P T L I A R K Q G D A R Y H W D I W M Q G D K E T V F F D Y		
UniRef90_A4L364	V P D E R A R R R L V I S E T T I P E I A L G Y R F		
UniRef90_UP10003AD6B97	E S L V K V D F E R L P A G T P T P D G R A V V R F D I V L		
UniRef90_W9ZCA8	V K D S L V V E F V P R K D D D K A K L E L R Y D V L M		
UniRef90_S4Y1G6	A V Q L E R G S S Q A G R E G A F S A R F D F V L		
UniRef90_G7XJ4	K D D L V V D F K P K T D D P K A Q L D		
UniRef90_I3RYK6	N G V K P E L V M P A A M E Q G M Q A M A L D F V I		
UniRef90_C5PGT7	K H S L V V I E F K P L Q G D R E V Q Y D L K L		
UniRef90_S9QCW7	R G A R D T R N S A D K V A A P D K Q G D F L L Q T R K		
UniRef90_UP100036C4ADC	V P A E R R S T L I A R K T G T N A Y Q W E I C M Q G A A E T V F F D Y		
UniRef90_K0PLX6	F G V K N S L V T R F V E H E A G T A L H Y D F V L		
UniRef90_A4L378	I E N E A A R N R L I S V F T I P E Q A L G Y R F		
UniRef90_UP10002895412	F G V K D S L I V D Y C E S M D E S T A N F D F I M		
UniRef90_H0T059	L L A D F K P T R R K D V P W S L A F T F		
UniRef90_C3Y6B7			
UniRef90_C5GK74	D L H P L T D P E M A K K Y D V P L G T P M Q Y E F V L V S E E E		
UniRef90_Q0FNE5	P P Y N D R R D T M N G N D G I A Q Q A G E G A F		
UniRef90_UP100041A3536	L D L V V P K I Y E N G K R V M Q V N F V L		
UniRef90_F3NC11	V P A A T V R T T V V H D T P E D Y R A R A L T H D I V L R		
UniRef90_Q8KQ85			
UniRef90_UP10003679FC6	A P Y N D R R D T L		
UniRef90_UP1000377F8B4	R P D L V A R		
UniRef90_I3CRU9	V P A D R R D T L I A R K Q P D G S Y L W N I H M Q G A R E T V F F D Y		
UniRef90_UP100036AD34B			
UniRef90_Q2MKF1	V L R P E A L I V K L Q P V T G A V S A V F D I V L H G		
UniRef90_N7PAY7			
UniRef90_F4CS31	D F C E T T D S E L G V R Y G V E P P F I H A T F D I E L		
UniRef90_B8H8W8	D R P G K R D T G I A R R A G P L S Q A A L R		
UniRef90_G6YA85	S P Y A G R G E R		
UniRef90_UP100036921D0	F I D S G L A N L L I A S F V Y N D Q A K T Y T F N I T L G G		
UniRef90_I7IHZ0	L R T E Q D R E A T V M K V E R		
UniRef90_A0A017SXH4	D A L F G V R P E L V A C F E P I E		
UniRef90_N6TW04	P E Y K R E G E R		
UniRef90_W0PGD9	H G V P S R A T T		
UniRef90_Q0K337	I Y D E R L E V A M P P S S S A A Q P V A R F D F V L		
UniRef90_W4M1Y7	V P Q Q R R D T L I A K K Q A D G S Y L W N I N M Q G A E E T V F F D Y		
UniRef90_J3D1H2	I D P N L N D R L V A Q Y T K A L G I K T Y H F N I T I A G		
UniRef90_Q3YRH8	G Y T K G A Q D T L		
UniRef90_I0K1P3	D P V F A T K K S L V		
UniRef90_J4G1P3			
UniRef90_G2Q150			
UniRef90_L1L739			
UniRef90_UP10003716509	V T N L A R V S L		
UniRef90_L7EYD0			
UniRef90_I3Z025			
UniRef90_H1VY83			
UniRef90_UP10002899B9F	V P A A R R A T L L A T Q A G D G Q Y N W S I H M Q G P Q E T V F F D Y		
UniRef90_A7NJL0	Y A D R G R R A T L		
UniRef90_S7PYF5	E T D P K R W A E M G Y K R D E V G R V W V W K Y D F V L A S Q D E		
UniRef90_S4MZB7			
UniRef90_UP100035F4A6A	I V W C E D L E R P I V R K V D R E G F W L L E H D F I L A D K Q E		
UniRef90_V5GEN5	Q D M I F R A D L L A L K P E G E G Y G G		
UniRef90_B7KRL9			
UniRef90_E8PP53			
UniRef90_G2R5W0			

UniRef90_G7GN02
UniRef90_M2NCM6
UniRef90_U2ZXT1
UniRef90_E5AAI8
UniRef90_A5VGV3
UniRef90_UP100036C21BF
UniRef90_S3BQH7
UniRef90_H0TDW7
UniRef90_N9UX48
UniRef90_A7IPL2
UniRef90_Q2MKB7
UniRef90_S9PDJ1
UniRef90_P11451
UniRef90_UP100035EBAFD
UniRef90_R8BTM0
UniRef90_J3Q4B2
UniRef90_K2Q707
UniRef90_F4ASR9
UniRef90_C5D1D2
UniRef90_L9MVY5
UniRef90_F2J2I0
UniRef90_UP1000345FA2F
UniRef90_A0A031K408
UniRef90_A3LYE3
UniRef90_C7ZEB3
UniRef90_G8BJM5
UniRef90_UP10002F2FD30
UniRef90_Q212E8
UniRef90_G0RG14
UniRef90_UP100035D4BC2
UniRef90_A4L368
UniRef90_U1GRV7
UniRef90_A0A014NS16
UniRef90_H0RXA5
UniRef90_UP1000440CF3E
UniRef90_N0B6D5
UniRef90_G0ABV2
UniRef90_A4L364
UniRef90_UP10003AD6B97
UniRef90_W9ZCA8
UniRef90_S4Y1G6
UniRef90_G7XIJ4
UniRef90_I3RYK6
UniRef90_C5PGT7
UniRef90_S9QCW7
UniRef90_UP100036C4ADC
UniRef90_K0PLX6
UniRef90_A4L378
UniRef90_UP10002895412
UniRef90_H0T059
UniRef90_C3Y6B7
UniRef90_C5GK74
UniRef90_Q0FNE5
UniRef90_UP100041A3536
UniRef90_F3NC11
UniRef90_Q8KQ85
UniRef90_UP10003679FC6
UniRef90_UP1000377F8B4
UniRef90_I3CRU9
UniRef90_UP100036AD34B
UniRef90_Q2MKF1
UniRef90_N7PAY7
UniRef90_F4CS31
UniRef90_B8H8W8
UniRef90_G6YA85
UniRef90_UP100036921D0
UniRef90_I7IHZ0
UniRef90_A0A017SXH4
UniRef90_Q46QJ7
UniRef90_N6TW04
UniRef90_W0PGD9
UniRef90_Q0K337
UniRef90_W4M1Y7
UniRef90_J3D1H2
UniRef90_Q3YRH8
UniRef90_I0K1P3
UniRef90_J4G1P3
UniRef90_G2Q150
UniRef90_L1L739
UniRef90_UP10003716509
UniRef90_L7EYD0
UniRef90_I3Z025
UniRef90_H1VY83
UniRef90_UP10002899B9F
UniRef90_A7NJL0
UniRef90_S7PYF5
UniRef90_S4MZB7
UniRef90_UP100035F4A6A
UniRef90_V5GEN5
UniRef90_B7KRL9
UniRef90_E8PP53
UniRef90_G2R5W0

UniRef90_A4L365
 UniRef90_Q7SD19
 UniRef90_A8LAI2
 UniRef90_UP10002F7AA27
 UniRef90_UP1000378B56D
 UniRef90_UP100036B1BF1
 UniRef90_M7XFV1
 UniRef90_C5BZL3
 UniRef90_J7QLH3
 UniRef90_CONJB0
 UniRef90_Q7NI94
 UniRef90_UP10003700103
 UniRef90_UP1000441125A
 UniRef90_UP10002FF039F
 UniRef90_J2JLT1
 UniRef90_I0HDF1
 UniRef90_UP100035FC902
 UniRef90_D6K792
 UniRef90_T0IXC5
 UniRef90_W6QTT3
 UniRef90_Q3JC14
 UniRef90_S9T4U8
 UniRef90_G0RXM6
 UniRef90_K6WQ58
 UniRef90_D1BGK4
 UniRef90_E9EHL0
 UniRef90_A0A031JTE1
 UniRef90_C7Z1U0
 UniRef90_UP10002630AF9
 UniRef90_Q2H2W8
 UniRef90_Q2Y783
 UniRef90_W3XRF2
 UniRef90_U5W763
 UniRef90_UP10004699675
 UniRef90_W3XPN5
 UniRef90_M2Y137
 UniRef90_UP100037ADD54
 UniRef90_U7DL30
 UniRef90_G2QKY8
 UniRef90_UP10003820938
 UniRef90_H8N0M9
 UniRef90_J6EY16
 UniRef90_H8IU93
 UniRef90_K7YY97
 UniRef90_D8JRA1
 UniRef90_UP10003B2F7C8
 UniRef90_UP1000419060B
 UniRef90_UP10003776A25
 UniRef90_A0A023BVX8
 UniRef90_K1WUD5
 UniRef90_Q82BN3
 UniRef90_A0A029EE18
 UniRef90_A9YE80
 UniRef90_B5RU70
 UniRef90_C9SEY1
 UniRef90_G0S8J7
 UniRef90_UP10003177B39
 UniRef90_J5JF9
 UniRef90_E2LRS7
 UniRef90_A7EUU2
 UniRef90_UP10003821EC2
 UniRef90_B8NG21
 UniRef90_UP10003B780BC
 UniRef90_R8BX0
 UniRef90_G1XF94
 UniRef90_L0G1Q2
 UniRef90_K0WND1
 UniRef90_M7T1S8
 UniRef90_C0S1W7
 UniRef90_B5HTQ8
 UniRef90_D2V248
 UniRef90_H0TK57
 UniRef90_F8EN50
 UniRef90_J2SCS3
 UniRef90_I9CTH2
 UniRef90_W3XJY0
 UniRef90_V4YNP0
 UniRef90_C6XDB4
 UniRef90_G2YWG5
 UniRef90_UP10003B70D58
 UniRef90_T1XH86
 UniRef90_UP100036B5CB4
 UniRef90_J3AN00
 UniRef90_B3PC34
 UniRef90_UP1000377BF8E
 UniRef90_UP100036F3422
 UniRef90_C6WLB1
 UniRef90_B8N505
 UniRef90_I2GIL8
 UniRef90_B5AS51
 UniRef90_J3ECI6
 UniRef90_UP100038269AF

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

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

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

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

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

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

	50	60	70	80
UniRef90_A4L365	T E D Q A G V D L A L D L Q V Y D E T C E P V P N V Y L E I W H C N S T G V Y S S			H W R E V D
UniRef90_Q7SD19	T G T A E G V P M T L A L T V R D L A G T P F A G V A V Y V W H C D R E G R Y S			
UniRef90_A8LAI2	G G T A E G V P L T L T L T V V D A D G T P R K G A A V Y V W H C D R E G G Y S			
UniRef90_UPI0002F7AA27	A E G R P G V P L A L H T T V V D A A C E P L P D A S V D V W H C D A D T G V Y S S			
UniRef90_UPI000378B56D	V T D R K G V A L L I N L K I Q D E D C K P I A G A Q V D V W H C D A D G N Y S S			
UniRef90_UPI00036B1BF1	S G T A E G V P M D L Q L L T V V D L A G G G V P F V A V Y V W H C T R E G G Y S			
UniRef90_C5BZL3	R E N K T G V P I M L R L Q I V D E A C R P I A G A R V D V W H C D A V G N Y P			
UniRef90_J7QLH3	L S G V A G R E L V L D L T V R G Q D C K P V F P V L I D L W H A D P R G N Y D			
UniRef90_CONJB0	R E D R P G I P L K L A M Q I V D A S C R P M P G A R V D V W H C D A G G D Y S			
UniRef90_Q7NI94	H P D T K G E K M Y F S A T I K N T K G E G I P G A K V E V W Q A N G E G V Y D S			
UniRef90_UPI0003700103	G A T A E G V P L T F E L R I V D L A G V P F A G A A V Y A W H C T A Q G E Y S			
UniRef90_UPI000441125A	E G T Q T G I P L T L T F T V I N D C L A V S G L R V D I W H C N K R G Y Y			
UniRef90_UPI0002FF039F	T T V A P G V P L Q F S L T V L N A A C T P T A G A A I Y A W H C D R A G R Y S			
UniRef90_10HDF1	R E G L P G V P L R L R L A V Q N R A C C Q P L R G A R V D L W H T D A Q G R Y S			
UniRef90_UPI00035FC902	H P D T L T V H G H V Y D G E G R P L P D A L V E V W G P G P D G V L P			
UniRef90_D6K792	L I L E G T V T D T A G Q P I A G A L L D F W Q A D H E G H Y			
UniRef90_T0IXC5	U N I T F F H S R I L D A D T S P V A G A S L N V W Q C A V N G L Y D			
UniRef90_W6QTT3	H S M K K G V P L R L V F R V L E G N C T P L K G A I V D V W Q C D A L G V Y S S			
UniRef90_Q3JC14	R E D Q Y G V D L L L R L R V V D V K C R P I C G L A V D I W N S N A C G V Y S S			
UniRef90_S9T4U8	T D S Q P G V D I T L L D Y Q V I D V D C E P V P D V Y V E I I W H C N S T G V Y S S			
UniRef90_G0RXM6	S G T A P G V P A T L T M T L Q D L G C S P G E G M A V Y V D G E G N Y S S			
UniRef90_K6WQ58	G A T A A G V P L T L L T S I L D M A G G D V P F R A V Y V D C A E E G G Y S S			
UniRef90_D1BGK4	T E G Q A G V D I A L D Y Q V I D V D C D P V P N V Y V E I I W H C N S T G V Y S S			
UniRef90_E9EHL0	T N T A D G V V Q L T I E L Q L V D V S C T P I E G A A I Y V W H C D A A G L Y S S			
UniRef90_A0A031JTE1	V E D Q E G L G I V L D Y Q V I D E T C D P V P N V Y L E M W H C N S T G V Y S S			
UniRef90_C7Z1U0	A T V A A G V Q L T L T V V D V N C A P L A G Y A I Y I I W H C D R D G K Y S S			
UniRef90_UPI0002630AF9	V E D Q A G V P L L L D Y Q V I D I D C E P I P E V Y L E I I W H C D A N A T G V Y D S			
UniRef90_Q2H2W8	L P L A L E L R I F T V G N E G M E G C L P L A N A I V D I I W H C D A Q G I Y S S			
UniRef90_Q2Y783	S E D L E G V P I V M D F Q V V D I N C E P M P N T Y L E I I W H A N A T G V Y A			
UniRef90_W3XRF2	S G T A E G V P L E F S L V V T D L D G A A V T G A A V Y A W H C D R E G N Y S S			
UniRef90_U5W763	G A T A D G V P L S F E L Q I L D L A G V P F A G V A V Y A W H C C N A Q G E Y S S			
UniRef90_UPI0004699675	I D G Q D G V P T I L D Y Q V V D A D C E V V P N V Y L E I I W H C N S T G V Y S S			
UniRef90_W3XPN5	T G T A E G V P T T V T L H Q D A D C A A G A G M A V Y L W H C D R D G N Y S S			
UniRef90_M2Y137	S A T A D G V P L T F S L Q I V D M D A N G V P M I A V Y A W H C C N A R G A Y S S			
UniRef90_UPI00037ADD54	S E G M D G V P L V L K L T I V D M T C Q P V T G A I V D I I W H C C N A T G V Y G			
UniRef90_U7DL30	V E D Q P G L P L L L E Y Q V V D V A C E P V P V E V Y V E I I W H C C D K D G N Y S S			
UniRef90_G2QKY8	T S D R T G I P L A I T I A V K N T N C N A L A N T I V D I I W H C C D K D G N Y S S			
UniRef90_UPI0003820938	T S E G H D G L V P V R L A F L V V D E S C K P I P G A T V D I I W H C C D R E G N Y S S			
UniRef90_H8N0M9	R D D E P G V P L Y V D I Q L I D T N C S P L S G A A L D F W H C N S T G V Y S S			
UniRef90_J6EY16				
UniRef90_H8IU93				
UniRef90_K7YY97	S S T A T G V P L T L T L N L L D V N C A P L A G Y A I Y L W H C D N G K Y S S			
UniRef90_D8JRA1	S D G R P G M P L R L L E L R I I E T A C A A I P N A R V D V W H A D A E G L Y S S			
UniRef90_UPI0003B2F7C8	R E G L P G V P L R L L L R V Q D R A C R P V A G A R V D L W H A D A L G R Y S S			
UniRef90_UPI000419060B	I G D R K G I A L V I N L K I Q S Q S C E G L A G V Q V D V W H C D A E G F Y S S			
UniRef90_UPI0003776A25	T G T A A G V P L T K L Q I V N G S C A T L E G F A V Y L W H C D R D G N Y S S			
UniRef90_A0A023BVX8	E E P G D K L I I I S G M V Y F P D G K T R A D I I V Y V H H T N N K G V Y P			
UniRef90_K1WUD5	T E D Q E G I D L L L D T Q V I D V D T C D P V P D A M I E I I W H C C N A T G V Y S S			
UniRef90_Q82BN3	T D G K K G V P L T V R L Q L T V R D G S C A P L G D A A V E I I W H C C D A A G H Y S S			
UniRef90_A0A029EE18	D T L I I E G T V T D T D G N P I E N A K V E V W H A N S L G N Y S S			
UniRef90_A9Y8E0	A D E D A G V P L I I R G T V T G P D G K P V A D A V V E C W H A N S K G F Y S S			
UniRef90_B5RU70	T E D Q D G V P D L L L D V Q L I D V N C E P V P Q S Y I D V W H C C N S T G V Y S S			
UniRef90_C9SEY1	Q D G E Q G Q V L M Y L D F Q I I D T T C K P V E G Q Y V E I I W H T N A T G V Y P			
UniRef90_G0S8J7	V E Q Q P G V P L L L D Y Q V I D V N C E P V P N V F L E M W H C C N S T G V Y G			
UniRef90_UPI0003177B39	S S T A A G V Q L T L T L T V V D V N C G P L A G Y A I Y L W H C C D R N G K Y S S			
UniRef90_J5JF9	T E D Q T G V P I H D I S F I D V N C K P L P H V L V D I I W Q A N A T G H Y A			
UniRef90_E2LRS7	E Y Q Q G L L T L L D I L G V I D I N C K P L P H V L V D I I W Q A N A T G H Y A			
UniRef90_A7EUU2	V E D Q Q G I D L I I D T Q V I D M T C D P V T N A V V E I I W H C C N S T G V Y S S			
UniRef90_UPI0003821EC2	T E G L P G I P L D L A L A V R D E Q G Q P L L A G A R V D V W H C C D A S G L Y S S			
UniRef90_B8NG21	K E D Q E G V P L Y Y D I L Q I D T N C E P V P Q V Y L D F W H C C D R E G N Y S S			
UniRef90_UPI0003B780BC	T T V A Q G V P L T I E D L T V R N A A G A A L V G A G V Y L W H C C D R E G N Y S S			
UniRef90_R8BX0	V E S Q A G V A M A I D D V Q V L D E T C E P V V S G A Y L E V W H C C N S T G V Y S S			
UniRef90_G1XF94	T D G Q V G V P L Y Y D I I Q V I D T N C E P V V S S A Y F D A H T N A T G V Y S S			
UniRef90_L0G1Q2	R G D R T G I D L D I E I T I L N G N C A P M E G V M V D I I W H C C D K D G N Y S S			
UniRef90_K0WND1	S E G A E G L P L L L R L I S I V D M T G E P V V S G A L V D I I W H C C N A R G A Y S S			
UniRef90_M7T1S8	I I E Q A G V D I V L L D Y Q V I D V D C E P V P N V Y L E I I W H C C N A T G V Y S S			
UniRef90_C0S1W7	V I D Q L G V P L Y Y D I L Q I D T N C E P I P E M Y T D I I W H T N S T G V Y S S			
UniRef90_B5HTQ8	G G T A E G V P L T F T L T V V D G C G T P K R G A A V Y V W H C C D R E G G Y S S			
UniRef90_D2V248	T E S K S G F P I H L Y I T I L D L A C L P T Q N V T V E I I W H C C D Y L G I Y S S			
UniRef90_H0TK57	T E G R P G V P L S F R L R V I E G A C T P I A G A R V D I I W H C C D A R G L Y S S			
UniRef90_F8EN50	D A G E P G E R M E I S G I I Y Q K D G K P A A G V I L Y Y H T D V K G E Y T			
UniRef90_J2SCS3	V G F T I N I T I K N T N A S C A A L K G A L V D I I W H C C D K D G Y Y S S			
UniRef90_I9CTH2	T E G H P G V P L V I R V T V L E G P C T P L A G A R V D I I W S A G A D G E Y S S			
UniRef90_W3XJY0	T E D E P G V P L Y L D L Q L I S T D C E P I E G V V A L D I I W H A N A T G E Y S S			
UniRef90_V4YNP0	G A P G K P C T V S G R I V G T Q G Q S V G H A Q I E V W Q A D E E G F Y D			
UniRef90_C6XDB4	H F F S P G V P L I I S I L D N L A C E P L A G A T V D I I W H C C D A Q G V Y Y S S			
UniRef90_G2YWG5	V I E Q E G V D L L L D T Q V I D S T C D P V T N A F V E I I W H C C N S T G V Y S S			
UniRef90_UPI0003B70D58	S E G R P G L P L K L A V E V V K V D D C S A L E G V T V E I I W H C C D A R G Y Y S S			
UniRef90_T1XH86	T E G L P A G V P L L E V R F T V L D T A G K P L R G L R V D I I W H C C D A Q G R Y S S			
UniRef90_UPI00036B5CB4	R E G R P G V P L L E R L A L I E Q G C A P I A D A R V D I I W H C C D A S G E Y Y S S			
UniRef90_J3AN00	T T T A T G V A L E L L T L Q L V D V N C V A I S G A A V Y Y V W H C C D K D G N Y S S			
UniRef90_B3PC34	A E D K T G V P L Q V K L K L V N V N C T P V S A Y V Y I W H C C D R D G N Y S S			
UniRef90_UPI000377BF8E	S T V A E G V P L T I A L T V R D A A G A L A G R G V Y L W H C C D R D G N Y S S			
UniRef90_UPI00036F3422	G S T A D G V P L S L T F T V T D T A G V P F D G V V A V Y A W Q C D A Q G R Y S S			
UniRef90_C6WLB1	S A V A E G V P M T L E L S I V D V A G G D V P F V A V Y V W H C C D R A G G Y Y S S			
UniRef90_B8N505	A E D Q Q G V P L F M D I Q L I D T N C E P L P E I Y T D I I W H C C D A N A T G V Y S S			
UniRef90_I2GIL8	R D D E P G D P L V W T Q R N A N A S C A A L A G A I V D V W H C C D K D G Y Y S S			
UniRef90_B5AS51	U N I T I R N A N A S C A A L A G A I V D V W H C C D A D D D G Y Y S S			
UniRef90_J3ECI6	S E G A D G V P L V L R L A I V D M T A Q P V V G G A L V D I I W H C C D N A R G A Y S S			
UniRef90_UPI00038269AF	G V R G E P T F Y A G R V T D T E G M P I A G A L L D V C S G D G T G D T P			

90 100 110 120

F P A P [D P N F [L G V G Q C R T N D E G E Y R F [L T V K P G P Y P W E N H Y
G G D A A N [N A N T F L R G L Q Q T D A D G [I A Q F E T L F P G H Y T
[L Y S D G V T D Q N Y L R G V Q I T D T A G T V R F T S I F P A C Y S
D N D G Y R W R A Y Q L T D D A G R W G F D T I L T Q H Y S F
[L Y T D G L T R E N Y L R G V Q E T D E E K G Q V T F T S V F P G C Y P
G R S A G T E G E R F L R G R Q T D Q D E E G T A E F A T L Y P G W Y D R
Q E A D Y R N V S F L R G R Q T D Q D E E G T A E F A T L Y P G W Y P
M Y T D G I T G E N Y L R G V Q I A D D D G V V R F T S I F P A C Y S
G Q G D D R A H P S F L R G S Q F A D A A G V A T F K S I Y P G W Y P
F Q D P D N Q E P N N L R G K F R T G P D G S Y H L Y I L H P T P Y S [P T D G
[L E G F R F R T R H A S D R P G V R L V T F V P G R Y P
G Y A T D T S G Q T F R G T Q I A D E R G V A N F V T I Y P G W Y R
V Q Y D V R E F P D D R A R I V A E P D G S F N Y R A V L P T A Y P [P N H A
M Y S S G L E D V T Y L R G V Q V A D D D G R V S F T S I F P G C Y S
S A Y D G Q P G I D G L R G I Q Y T D S N G Q V T F T T I Y P G W Y T
L Y S T G V T R E N Y L R G I Q V T N A A G T V T F T S I Y P G C Y A
G V I D A P G T F C R G Y Q L T D E K G E V S F L T L F P G W Y P S
G S M R R D P E F T G F G R S Q T D A N G H H W Y A R T L R P G A R G R N
D R H G H H L S G V V V S D A E G R Y R V R T A V P K D Y S D H D D D
UniRef90_Q6WQTT3
UniRef90_Q3JC14
UniRef90_S9T4U8
UniRef90_G0RXM6
UniRef90_K6WQ58
UniRef90_D1BGK4
UniRef90_E9EHL0
UniRef90_A0A031JTE1
UniRef90_C7Z1U0
UniRef90_UPI0002630AF9
UniRef90_Q2H2W8
UniRef90_Q2Y783
UniRef90_W3XRF2
UniRef90_U5W763
UniRef90_UPI0004699675
UniRef90_W3XP5N
UniRef90_M2Y137
UniRef90_UPI00037ADD54
UniRef90_U7DL30
UniRef90_G2QKY8
UniRef90_UPI0003820938
UniRef90_H8N0M9
UniRef90_J6EY16
UniRef90_H8IU93
UniRef90_K7YY97
UniRef90_D8JRA1
UniRef90_UPI0003B2F7C8
UniRef90_UPI000419060B
UniRef90_UPI0003776A25
UniRef90_A0A023BVX8
UniRef90_K1WUD5
UniRef90_Q82BN3
UniRef90_A0A029EE18
UniRef90_A9YE80
UniRef90_B5RU70
UniRef90_C9SEY1
UniRef90_G0S8J7
UniRef90_UPI0003177B39
UniRef90_J5JF9
UniRef90_E2LRS7
UniRef90_A7EEU2
UniRef90_UPI0003821EC2
UniRef90_B8NG21
UniRef90_UPI0003B780BC
UniRef90_R8BX0
UniRef90_G1XF94
UniRef90_L0G1Q2
UniRef90_K0WND1
UniRef90_M7T1S8
UniRef90_C0S1W7
UniRef90_B5HTQ8
UniRef90_D2V248
UniRef90_H0TK57
UniRef90_F8EN50
UniRef90_J2SCS3
UniRef90_I9CTH2
UniRef90_W3XY0
UniRef90_V4YNP0
UniRef90_C6XDB4
UniRef90_G2YWG5
UniRef90_UPI0003B70D58
UniRef90_T1XH86
UniRef90_UPI00036B5CB4
UniRef90_J3AN00
UniRef90_B3PC34
UniRef90_UPI000377BF8E
UniRef90_UPI00036F3422
UniRef90_C6WLB1
UniRef90_B8N505
UniRef90_J2GIL8
UniRef90_B5AS51
UniRef90_J3ECI6
UniRef90_UPI00038269AF

UniRef90_A4L365
UniRef90_Q7SD19
UniRef90_A8LAI2
UniRef90_UPI0002F7AA27
UniRef90_UPI000378B56D
UniRef90_UPI00036B1BF1
UniRef90_M7XFV1
UniRef90_C5BZL3
UniRef90_J7QLH3
UniRef90_CONJB0
UniRef90_Q7NI94
UniRef90_UPI0003700103
UniRef90_UPI000441125A
UniRef90_UPI0002FF039F
UniRef90_J2JLT1
UniRef90_10HDF1
UniRef90_UPI00035FC902
UniRef90_D6K792
UniRef90_T0IXC5
UniRef90_W6QTT3
UniRef90_Q3JC14
UniRef90_S9T4U8
UniRef90_G0RXM6
UniRef90_K6WQ58
UniRef90_D1BGK4
UniRef90_E9EHL0
UniRef90_A0A031JTE1
UniRef90_C7Z1U0
UniRef90_UPI0002630AF9
UniRef90_Q2H2W8
UniRef90_Q2Y783
UniRef90_W3XRF2
UniRef90_U5W763
UniRef90_UPI0004699675
UniRef90_W3XPN5
UniRef90_M2Y137
UniRef90_UPI00037ADD54
UniRef90_U7DL30
UniRef90_G2QKY8
UniRef90_UPI0003820938
UniRef90_H8N0M9
UniRef90_J6EY16
UniRef90_H8IU93
UniRef90_K7YY97
UniRef90_D8JRA1
UniRef90_UPI0003B2F7C8
UniRef90_UPI000419060B
UniRef90_UPI0003776A25
UniRef90_A0A023BVX8
UniRef90_K1WUD5
UniRef90_Q82BN3
UniRef90_A0A029EE18
UniRef90_A9YE80
UniRef90_B5RU70
UniRef90_C9SEY1
UniRef90_G0S8J7
UniRef90_UPI0003177B39
UniRef90_J5JF9
UniRef90_E2LRS7
UniRef90_A7EUU2
UniRef90_UPI0003821EC2
UniRef90_B8NG21
UniRef90_UPI0003B780BC
UniRef90_R8BX0
UniRef90_G1XF94
UniRef90_L0G1Q2
UniRef90_K0WND1
UniRef90_M7T1S8
UniRef90_C0S1W7
UniRef90_B5HTQ8
UniRef90_D2V248
UniRef90_H0TK57
UniRef90_F8EN50
UniRef90_J2SCS3
UniRef90_I9CTH2
UniRef90_W3XJY0
UniRef90_V4YNP0
UniRef90_C6XDB4
UniRef90_G2YWG5
UniRef90_UPI0003B70D58
UniRef90_T1XH86
UniRef90_UPI00036B5CB4
UniRef90_J3AN00
UniRef90_B3PC34
UniRef90_UPI000377BF8E
UniRef90_UPI00036F3422
UniRef90_C6WLB1
UniRef90_B8N505
UniRef90_J2GIL8
UniRef90_B5AS51
UniRef90_J3ECI6
UniRef90_UPI00038269AF

130 140 150 160

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

UniRef90_A4L365 V P E H A R A R [L] V S T Y T [V] P S W A [L] G Y R W
UniRef90_Q7SD19
UniRef90_A8LAI2
UniRef90_UPI0002F7AA27 L F D P R [L] V M A L D D D R S T G R F D F [V] V
UniRef90_UPI000378B56D
UniRef90_UPI00036B1BF1 A D D [I] G P E N T [L] Q [V] T G S P E E G Y Q A D [I] V L
UniRef90_M7XFV1
UniRef90_C5BZL3 S E R T A K R D T [L]
UniRef90_J7QLH3 D T V F A V K N D [L] V D F K P [L] E G D P [L] A E
UniRef90_C0NJB0
UniRef90_Q7NI94
UniRef90_UPI0003700103
UniRef90_UPI000441125A
UniRef90_UPI0002FF039F
UniRef90_J2JLT1
UniRef90_I0HDF1
UniRef90_UPI00035FC902 P P Y A E R G [P] R [I] G N R Q D G [F] R A D [L] L S [L] Q A E G E G Y T A F F
UniRef90_D6K792 S E D [L] I [L] D M H P [V] P G A N A [L] R F D I
UniRef90_T0IXC5
UniRef90_W6QTT3 E D D Q R G G S E [L] I [L] P [L] A R E T A G Y [V] G T F D [I] G [L] Q
UniRef90_Q3JC14
UniRef90_S9T4U8
UniRef90_G0RXM6
UniRef90_K6WQ58
UniRef90_D1BGK4
UniRef90_E9EHL0
UniRef90_A0A031JTE1
UniRef90_C7Z1U0
UniRef90_UPI0002630AF9
UniRef90_Q2H2W8
UniRef90_Q2Y783
UniRef90_W3XRF2
UniRef90_U5W763
UniRef90_UPI0004699675 S A D N [L] A R [I] S [L] T S D N [V] F G D D G G [V]
UniRef90_W3XPN5
UniRef90_M2Y137
UniRef90_UPI00037ADD54
UniRef90_U7DL30
UniRef90_G2QKY8
UniRef90_UPI0003820938
UniRef90_H8N0M9
UniRef90_J6EY16
UniRef90_H8IU93
UniRef90_K7YY97
UniRef90_D8JRA1
UniRef90_UPI0003B2F7C8
UniRef90_UPI000419060B
UniRef90_UPI0003776A25
UniRef90_A0A023BVX8
UniRef90_K1WUD5
UniRef90_Q82BN3
UniRef90_A0A029EE18
UniRef90_A9YE80
UniRef90_B5RU70
UniRef90_C9SEY1
UniRef90_G0S8J7
UniRef90_UPI0003177B39
UniRef90_J5JIF9
UniRef90_E2LRS7
UniRef90_A7EUU2
UniRef90_UPI0003821EC2
UniRef90_B8NG21
UniRef90_UPI0003B780BC
UniRef90_R8BI0X
UniRef90_G1XF94
UniRef90_L0G1Q2
UniRef90_K0WND1
UniRef90_M7T1S8
UniRef90_C0S1W7
UniRef90_B5HTQ8
UniRef90_D2V248
UniRef90_H0TK57
UniRef90_F8EN50
UniRef90_J2SCS3
UniRef90_I9CTH2
UniRef90_W3XJY0
UniRef90_V4YNP0
UniRef90_C6XDB4
UniRef90_G2YWG5
UniRef90_UPI0003B70D58
UniRef90_T1XH86
UniRef90_UPI00036B5CB4
UniRef90_J3AN00
UniRef90_B3PC34
UniRef90_UPI000377BF8E
UniRef90_UPI00036F3422
UniRef90_C6WLB1
UniRef90_B8N505
UniRef90_I2GIL8
UniRef90_B5AS51
UniRef90_J3ECI6
UniRef90_UPI00038269AF R E Y S G R K A [L] A [L] T N D E D [V] H G G E A S T [L] N [I] H T [L] G R D E D G F F G F
I V | D F D R H E Q G E A P R R M R K P Y W S A H Y D F R [L]

UniRef90_A4L365
UniRef90_Q7SD19
UniRef90_A8LAI2
UniRef90_UPI0002F7AA27
UniRef90_UPI000378B56D
UniRef90_UPI00036B1BF1
UniRef90_M7XFV1
UniRef90_C5BZL3
UniRef90_J7QLH3
UniRef90_C0NJB0
UniRef90_Q7NI94
UniRef90_UPI0003700103
UniRef90_UPI000441125A
UniRef90_UPI0002FF039F
UniRef90_J2JLT1
UniRef90_I0HDF1
UniRef90_UPI00035FC902
UniRef90_D6K792
UniRef90_T0IXC5
UniRef90_W6QTT3
UniRef90_Q3JC14
UniRef90_S9T4U8
UniRef90_G0RXM6
UniRef90_K6WQ58
UniRef90_D1BGK4
UniRef90_E9EHL0
UniRef90_A0A031JTE1
UniRef90_C7Z1U0
UniRef90_UPI0002630AF9
UniRef90_Q2H2W8
UniRef90_Q2Y783
UniRef90_W3XRF2
UniRef90_U5W763
UniRef90_UPI0004699675
UniRef90_W3XPIN5
UniRef90_M2Y137
UniRef90_UPI00037ADD54
UniRef90_U7DL30
UniRef90_G2QKY8
UniRef90_UPI0003820938
UniRef90_H8N0M9
UniRef90_J6EY16
UniRef90_H8IU93
UniRef90_K7YY97
UniRef90_D8JRA1
UniRef90_UPI0003B2F7C8
UniRef90_UPI000419060B
UniRef90_UPI0003776A25
UniRef90_A0A023BVX8
UniRef90_K1WUD5
UniRef90_Q82BN3
UniRef90_A0A029EE18
UniRef90_A9YE80
UniRef90_B5RU70
UniRef90_C9SEY1
UniRef90_G0S8J7
UniRef90_UPI0003177B39
UniRef90_J5JIF9
UniRef90_E2LRS7
UniRef90_A7EUU2
UniRef90_UPI0003821EC2
UniRef90_B8NG21
UniRef90_UPI0003B780BC
UniRef90_R8BIX0
UniRef90_G1XF94
UniRef90_L0G1Q2
UniRef90_K0WND1
UniRef90_M7T1S8
UniRef90_C0S1W7
UniRef90_B5HTQ8
UniRef90_D2V248
UniRef90_H0TK57
UniRef90_F8EN50
UniRef90_J2SCS3
UniRef90_I9CTH2
UniRef90_W3XJY0
UniRef90_V4YNP0
UniRef90_C6XDB4
UniRef90_G2YWG5
UniRef90_UPI0003B70D58
UniRef90_T1XH86
UniRef90_UPI00036B5CB4
UniRef90_J3AN00
UniRef90_B3PC34
UniRef90_UPI000377BF8E
UniRef90_UPI00036F3422
UniRef90_C6WLB1
UniRef90_B8N505
UniRef90_I2GIL8
UniRef90_B5AS51
UniRef90_J3ECI6
UniRef90_UPI00038269AF

1 P V C L L E 10 P E S T E G P Y Y V A G 20 E L I R S D I
UniRef90_H3GU58 UniRef90_M7TIX4 UniRef90_UPI00037B1CAC
UniRef90_UPI000380AD64 UniRef90_Q5YRP5 UniRef90_UPI0003737E7C
UniRef90_B3VZQ4 UniRef90_E8RLZ4 UniRef90_M1W5U7
UniRef90_UPI0003B38BBA UniRef90_NOE104 UniRef90_L8MBD6
UniRef90_B5AS52 UniRef90_Q2MKF2 UniRef90_W0RHA0
UniRef90_K6WLL2 UniRef90_C5C926 UniRef90_U2YVS5
UniRef90_B5AS42 UniRef90_W3WJH6 UniRef90_V6UKE1
UniRef90_A0A03110B7 UniRef90_W0ACF5 UniRef90_W9YRT9
UniRef90_A7LCR1 UniRef90_L2G774 UniRef90_A0A024EGD0
UniRef90_Q2HCB4 UniRef90_C7PNX7 UniRef90_S9P309
UniRef90_K4R6N8 UniRef90_D4GUP6 UniRef90_I0WFY7
UniRef90_I6UE69 UniRef90_V4P7W1 UniRef90_F0XCU2
UniRef90_UPI000469A7D0 UniRef90_V2Y225 UniRef90_D0N0H2
UniRef90_D2SDN8 UniRef90_B5TZG8 UniRef90_W3WJI3
UniRef90_UPI0003789733 UniRef90_K3XB81 UniRef90_H3GVM6
UniRef90_W2PKR1 UniRef90_W3WVT4 UniRef90_A6GAK7
UniRef90_G7XLP6 UniRef90_D8PSP6 UniRef90_A0A010RTQ6
UniRef90_E9ENS5 UniRef90_I0HB28 UniRef90_E3QWH6
UniRef90_F0XE25 UniRef90_G2R2S3 UniRef90_W3WU70
UniRef90_UPI0003692F86 UniRef90_T1KKQ0 UniRef90_K9CWL8
UniRef90_W2QN77 UniRef90_E9DQZ8 UniRef90_Q82BE4
UniRef90_H6R876 UniRef90_V9R7Z4 UniRef90_I3I806
UniRef90_G2X460 UniRef90_W2ULB5 UniRef90_I3BQ10
UniRef90_K3XB83 UniRef90_L7L7L0 UniRef90_E2CLQ1
UniRef90_S4MZD2 UniRef90_S7RY17 UniRef90_N1QHX5
UniRef90_D8QEWF4 UniRef90_K3XB80 UniRef90_C4RBM3
UniRef90_UPI00034BEE94 UniRef90_X8J736 UniRef90_J3CHE2
UniRef90_A3YB93 UniRef90_G2XSI5 UniRef90_UPI000362E194
UniRef90_W2ZYL8 UniRef90_UPI00037236C4 UniRef90_A9GY96
UniRef90_X8J439 UniRef90_W3X529 UniRef90_D8QLX3
UniRef90_M5FQT2 UniRef90_UPI00036536D2

10 P E S T E G P Y Y V A G 20 E L I R S D I
P E T I I G P Y W V T G E A I R S D I
E P E E T N G P Y P A D G T N G P N A G V V R S D I T S F G D S
P Q E T E G P Y P G D G T N G P Q S G V V R S D I T R S F G G A
S E T A G P Y P A D G S N G P D D G I V R K D I R P T F G G A
P T E T Q G P Y P G D G S A L A L S G I N R S D I R T S V G S A
P E T I I G P Y Y V A G E Y L R E E I
T Q S T T R G P C Y F S D D K G E D I S L G L R
P D E T A G P Y P G D G S N G K N V L D D V R S D I T T S I G S
S P E Q T A G P F Y L D D A L L R Q D
T K G S I E G P Y Y L P D S P L L P A R C T L P M R

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

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

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

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

50 60 70 80

UniRef90_H3GU58	R E D Q P G I D L Y V D L Q F V D V N C S P V N E L Y V D I W H A N A A G V Y S
UniRef90_M7TIX4	T E D E A G I P V H D L L Q F I D S D C S P V P D M L I D L W H A N A I G N Y S
UniRef90_UPI00037B1CAC	S G T A D G V P L T F S L T V V D V S G E P V A G A A V Y A W H C D R D G K Y S
UniRef90_UPI000380AD64	H E D K P G I P L A L K F N L V D I N C E A F P Y A S I Y V W H C D K D G L Y S
UniRef90_Q5YRP5	T G V A E G V P M T L S L S L R D L A G A A G T G M A V Y V W H C D R E G E Y S
UniRef90_UPI0003737E7C	A S G A D G V P L E F S L V V N D R S G R P I S G A A V Y A W H C D R G G N Y S
UniRef90_B3VZQ4	P D D T G T L Y M S G V I R G P G G E P V E G A I L H V W H C D R G G N Y S
UniRef90_E8RLZ4	S G T A P G L P L K L T I T L V N S A C A A L S G Y V I Y L W H C T R D G L Y S
UniRef90_M1W5U7	S D N E P G V P I Y L D F Q F V D V T C E A V P N L I V D M W H A N A L G V Y S
UniRef90_UPI0003B38BBA	G L P M Q L C L Q L I D R Q C R P L R G Y Q I E V W H C D T R G V Y S
UniRef90_NOE104	S E K V A G V P M T I N L T V T D S A S A A M A G A A V Y V W H C D A A G N Y S
UniRef90_L8MBD6	T D G K P G L P R L Q F E V L R L D C R P L D G A A L E I W H C D A Q G A Y S
UniRef90_B5AS52	S V D A R E T P F V M H G Q V T D L D G S P M A G A T E I W H A D A E G Y Y S
UniRef90_Q2MKF2	E V W Q A N A A G R Y M
UniRef90_W0RHA0	S G T A A G I P T I I E L T L V S A T C E V L A N R A V Y L W H C D R A G L Y S
UniRef90_K6WLL2	S G T A A G I P M T I I T L S I T D Q S Q A P Y A G V A V Y L W H C D R A G N Y S
UniRef90_C5C926	G T V A E G V P L T V T M N V I D M T N A A M T G A A V Y L W H A D A Q G R Y S
UniRef90_U2YVS5	G T T A D G V P M T L R L T I L D T A D V P F A G A A V Y V W H C D A A G G Y S
UniRef90_B5AS42	R D E P G D P L V F S G Q V R A V D G T P L A G A K V E L W H A D D L G F Y S
UniRef90_W3WJH6	T D G E S G V P L H D L Q F V D T S C T A V E D L L I D I W H C N A T G V Y S
UniRef90_V6UKE1	G A T A Q G V I P F T F E L T V L D E G G E P M A G A A V Y A W Q C D R D G K Y S
UniRef90_A0A0310B7	T T V A T G V Q L T I T L T L V N V N C A P L V G Y A I Y L W H C D R R D G N Y S
UniRef90_W0ACF5	T A T A A G V P V T L T I T V V D A N C T P L L G G Y A L Y L W H C D R D G N Y S
UniRef90_W9YRT9	T E D Q I G I P L T L D L Q V I D T T C E P V A L Y M D L W H C N A T G V Y S
UniRef90_A7LCR1	G S K L V F E G Q V R D L D G K G L G G A T V E L W H A D D E G Y Y S
UniRef90_L2G774	T E G E V G V P L T L D V G I L D M A C E P L P D A L V S F W H C N A T G S Y S
UniRef90_A0A024EGD0	S E S A D G I V P L V L R L S I I V D M T M G E P V T G A L V D I W H C N A R G A Y S
UniRef90_Q2HCB4	V D G Q Q G V P L H D I Q L I D V D C E P I E G S F I E M W N A N S T G V Y S
UniRef90_C7PNX7	T D G K T G L P L S I T I T V R N V S C N V V S N A R V D I W H C D K D G Y Y S
UniRef90_S9P309	T E G E E G L P V R L A F L I V D E T C K P I P G A T L D I W H C G P D G L Y S
UniRef90_K4R6N8	T E D K E G I V P L V L N L K V I D E T C R P V A N A A V D I W H C D A L G I Y S
UniRef90_D4GUP6	G E Q E D G V R L D L G F K V F E L T C T P L D N A I V D V W H A N A S G V Y S
UniRef90_I0WFY7	W N D K G Q K L L V T G T V Y K F G G K P A P N V I L Y Y Q T D S N G Y Y T
UniRef90_I6UE69	D V W Q A N T G G T Y S
UniRef90_V4P7W1	S G T A S G T Q L T L K I R L V N T N C T P L T G Y A I Y L W H C T D D G R Y S
UniRef90_F0XCU2	T P K D G K T A Y M F M G K I T S A D G K G I P N A A V D V W Q A S T N G L Y S
UniRef90_UPI000469A7D0	I D G R T G Y K L T A K I T I L N N S C A G L A G A I V D I W H C D A E G N Y S
UniRef90_V2Y225	I E D Q A G V P L T L D I G V V D I N C E C P L S D V F V E L W A C N A T G V Y S
UniRef90_D0NH2	R E Q Q T G V T M Y V D D V Q V I D I N C D P V K D M Y I D L W H T N A T G V Y S
UniRef90_D2SDN8	S G T A E G V P M T L E L T I A D L A G V P F E G V A V Y V W H C T R E G G Y S
UniRef90_B5TZG8	S G T A S G T Q L T L K I R L V N T N C T P L T G Y A I Y L W H C T D D G R Y S
UniRef90_W3WJI3	T E G Q E G V P L H D I Q F V D A D C S A V P E L V V D I W H C D A L G E Y S
UniRef90_UPI0003789733	R E D K E G F E V R Y T F T V V D A D C A P L A D A L V E I I W H C D A L G E Y S
UniRef90_K3XB81	R E D Q A G V P D L Y A E L Q I V D F N C T P V E D L Y I D F W H C N S T G V Y S
UniRef90_H3GVM6	T E N N E Q G I S L F A E L Q F V D V N C E P V D D N L Y V D F W H C N A T G V Y S
UniRef90_W2PKR1	R E D Q P G V D M Y I D V Q V V I D V T C E P V T D M Y V D F W H A N A T G V Y S
UniRef90_W3WVT4	E D Q A G I V D L Y L D L Q V I D V N C E P H P D L W L E I I W H C N S T G V Y S
UniRef90_A6GAK7	G H E G V P F T L D Q G Q V F D E Q C C Q P I I A D A V V L L W H A S P P G V R P
UniRef90_G7XLP6	S D G E P G V P L Y I D G Q F I D I N C E C P I Q D L Y W D V W N C N S T G I Y S
UniRef90_D8PSP6	R E D Q A G I V P L V I D I G I L D I N C E C P V P N S F V E I W A A N A T G V Y A
UniRef90_A0A010RTQ6	T D G Q S G I P M Y I D L Q I I D T T C C Q P V P D I W V E V W H T N S T G I Y S
UniRef90_E9ENS5	T D G E P G V A S H L D F Q F I D I N C E A V P N L I I D L W H A N S T G V Y S
UniRef90_I0HB28	T T T A E G V P M T L T L S L K D G A A F V A G V A V Y V W H C N R A G E Y S
UniRef90_E3QWH6	T D D Q P G V P V H L D I Q F I D V V A C T A V P E Q L I D L W A C N A T G V Y D
UniRef90_F0XE25	I E D R E G V D I A L D Y Q V I D V D C E P V P N V Y V E I I W H C N A T G V Y D
UniRef90_G2R2S3	D P E G E P M L A I C T V K D T Q G N P I A G V T I D I W E T D S S G H Y D
UniRef90_W3WU70	T E G T Q G V P L H D I Q F V D I A T N P I P R L A V D V W H C N A T G V Y S
UniRef90_UPI0003692F86	G T T V S G V P L S L T F S V T D L A N P Y D G V V Y W M W Q C D A A G L Y H
UniRef90_T1KKQ0	T D G Q T G V N L D L N L K L T N A D C S P L S N Y F V H V W Q A N A L G H Y
UniRef90_K9CWL8	S G T A E G I Y M Q L T I T V V N G S C A P L E G Y A V Y I W H C T R D G L Y S
UniRef90_W2QN77	R E D Q E G V D L Y A E V Q I I D V N C E P V Q G Q L Y D F W H C N A T G V Y S
UniRef90_E9DQZ8	V E T Q R G V P M E I D V Q F E I D T S C R P V V G K Y D V W Q A N A T G V Y N
UniRef90_Q82BE4	T E G K A G I V P L K L A L T V V D S T C A P I S N A L V E L W H S D A L G E Y S
UniRef90_H6R876	T G V A D G V P L T I D L T I H D L A G T L G A G M A L Y L W H C D R E G R Y S
UniRef90_V9R7Z4	P L S A D G E I L Y I V G K I T D T N C I P I A N V N V F I W H T N A H G I Y Q S
UniRef90_I3I806	A E D K T G V P L Q V K L K L V N V N C S P V S A Y M V I I W H C D K D G L Y Y S
UniRef90_G2X460	I E E Q E G V N I V L D Y Q V I D V D C E P V P N V Y L E M W H C N S T G V Y S
UniRef90_W2ULB5	N D G P R L R V S G T V Y L P D G K P A K D V I L Y V Y H T D Q D G V Y P
UniRef90_I3BQ10	G L S G L P M Q L C L K L V W D S D C Q P L E N H W I E V W H C D N R G V Y S
UniRef90_K3XB83	R E E Q A G I D L Y A E L Q I I D V N C T A V E N M Y V D F W H C C N T T G V Y S
UniRef90_L7L7L0	G N R A D G V P L T F T F K V T D M A N K P F T G A V V Y L W Q C D A Q G R Y S
UniRef90_E2CLQ1	T E G P G M P L T V A I R L I D G N C Q P I P G G V V D I W A C N A S G Y Y S
UniRef90_S4MZD2	T E D Q E G I P L T L R L L K V I D E T C K P L A N A A V D I W H C N A T G V Y S
UniRef90_S7RY17	T E G Q A G I V P F V M D I G V L D I N C E P L S N A F V E I W G A N A T G V Y S
UniRef90_N1QHX5	S E D Q A G V P L F V D I Q L I D T T C A P A P I Y V D A W H C N S T G V Y S
UniRef90_D8QEWF4	R E T Q E G V N V L L D D V G I I L D T T C E P V S D A F V E I I W H A N S T G V Y S
UniRef90_K3XB80	K E T Q N G I D L T A E I Q I D V N C L P V D N Y Y V D F W H C N A S G V Y S
UniRef90_C4RBM3	T E D R K G V P L T L R L Y T V V D A T Q A P V K G A R V D T W H C D A F G Y Y S
UniRef90_UPI00034BEE94	H A V V G V P L T L K L Q L V N V N C A P L A G H V F Y L W S C T P A G E Y S
UniRef90_X8J736	R E S Q S G V K L V L D I G V M D T T C T P L P A A L V E L W H C N A T G S Y Y
UniRef90_I3CHE2	S T V L Q G L P L T L S V I N A A C S V A R N V Q I D V W H A D A A G E Y N S
UniRef90_A3YB93	S T G L S G L P M M Y C F Q I I D Q D C N P V S D Y V E V E I I W H C D N R G I Y S
UniRef90_G2X515	T E G Q V G V P L H L E V Q Y I D T T C E P V P E V Y V D I W N C A N A T G V Y Y G
UniRef90_UPI000362E194	T E D K E G I V P L T L A L K V I D E T C K P L A N A A V D I W H C D A L G I Y Y S
UniRef90_W2ZYL8	R E N Q E G V D L Y A E V Q I I D V N C E P V Q G L Y L D F W H C N A T G V Y S
UniRef90_UPI00037236C4	R E N Q E G V D L Y A E V Q I I D V N C E P V Q G L Y L D F W H C N A T G D Y S
UniRef90_A9GY96	D D H P G C E L R L Y V R L L D A N N E P I P D A E V Y I I W H C D A D G R T S
UniRef90_X8J439	S E G Q D G V P L V L D I G V I D T T C Q P L D Q A L V E I I W H C N A T G V Y S
UniRef90_W3X529	R E D Q H G I D T V V E Y Q I I D V D C E P V P Q V F L E E L W H C N A T G V Y S
UniRef90_D8QLX3	U R E D Q H G I D T V V E Y Q I I D V D C E P V P Q V F L E E L W H C N A T G H Y A
UniRef90_M5FQT2	V E N Q T G V P F Y I E F S V I D N C E P L V G A A V D I W S C N A T G D Y S
UniRef90_UPI00036536D2	L P T R I G L R I V E A E T C K P I E G A D V E I I W H A D A R G V Y S

90 100 110 120

UniRef90_H3GU58	G A A N [D T T F H R G L S P T D S D G F V S F T T K F P G [L Y A		
UniRef90_M7TIX4	G S M G S G [L N T T F L R G V Q V T D E Q G V V E F D T L F P G H Y T G R V N		
UniRef90_UPI00037B1CAC	M Y D I A D Q N Y L R G V Q E A D A D G K V T F T S I F P A C Y A		
UniRef90_UPI000380AD64	G Y S Q P G A N T I G F C R G I Q D V N N G E V T F H T I F P G W Y A		
UniRef90_Q5YRP5	L Y G A N V T G E N Y L R G V Q V A D D S G T V T F T S I F P A C Y S		
UniRef90_UPI0003737E7C	L Y S T G V T E Q N Y L R G I Q P T D A T G T A T F T S I F P A C Y S		
UniRef90_B3VZQ4	H F D P T Q T P F N N R R R I R I G G D G R Y S F H S K M P N G Y S V P P G G		
UniRef90_E8RLZ4	L Y S S G V T G E N Y L R G I Q V T D T N G Q V T F T T I F P G C Y S		
UniRef90_M1W5U7	G Q G G L K T N F G R G V Q I T D D D G V V Q Y R S I F P G H Y I		
UniRef90_UPI0003B38BBA	A G D A A A Q N S A W F R G V L T T D A D G R V V N F K T I F P G W Y P		
UniRef90_NOE104	M Y S Q G A T D Q T W L R G V T E T N A N G T A T F T S V F P G C Y A		
UniRef90_L8MBD6	G V G A D A A S R Y L R G V Q I T D G E G R A E F R S I L P G Y Y P		
UniRef90_B5AS52	G F A P H L P A W N L R G T V V T D G Q G R Y E I T T I Q P A P Y Q I P T D G		
UniRef90_Q2MKF2	H E A P L D P D F Q G Y A R L R T G A D G A Y R I V T I K A P P V T T A P I		
UniRef90_W0RHA0	L Y S A G A T N Q N Y L R G V Q V A A D A S G K L T F Q S I F P G C Y A		
UniRef90_K6WLL2	L Y S D G I T D Q N Y L R G V Q I A G A D G S V T F T S V W P G C Y D		
UniRef90_C5C926	M Y S D G I T E E T Y L R G V Q V V G G D G T V T F T T V I P A C Y T		
UniRef90_U2YVS5	M Y S N G V E N E T Y L R G V Q V A D A S G V V T F T S V I P A C Y T		
UniRef90_B5AS42	Q F A P G L P E W N L R G T W I A N E D G N F E I H T L R P A P Y M I P T D		
UniRef90_W3WJH6	G V S A S Q G G G T T F R G V Q A T D D G V A Q F D T I V P G H Y T		
UniRef90_V6UKE1	L Y S E G V E D E N Y L R G V Q V A D S Q G R V V K F V S V F P A C Y P		
UniRef90_A0A0310B7	L Y S G A T A E S Y L R G V Q V T D A N G Q V T F T T I F P A C Y S		
UniRef90_W0ACF5	L Y D L P A E S W L R G I Q V T D A N G Q V T F T T I F P G C Y A		
UniRef90_W9YRT9	G N D T A N L N K T A L R G I Q Q T N R N G I L Q F E T I F P G H Y T S		
UniRef90_A7LCR1	H F A P H I P D G N L R G T V T D G A G R F E I T T I Q P A P Y Q I P T D G		
UniRef90_L2G774	S F T H L S P N T R L R G M W P T N S E G I M E M Q T I F P G F Y		
UniRef90_A0A024EGD0	G W P R T D D D T Y L R G G Q F T D K K G I V R F T T I Y P G F Y A		
UniRef90_Q2HCB4	G A L A T V N N R S F L R G S Q K T D E D G V A Q F Q T I F P G H Y E		
UniRef90_C7PNX7	G Y S Q D N S A L V F C R G L Q Y S D S N G R V V K F M S V Y P G W Y T		
UniRef90_S9P309	G E D A S D F C T T G Y R G V Q T A D A N G R V V N F N T C F P G W Y S S		
UniRef90_K4R6N8	H E E P T D D E R Y L R G T W K T D K Q G R V T F R T I F P G W Y R		
UniRef90_D4GUP6	D V E M Q N T G Q D F L R G I Q L T D D A G A A S F T T I Y P G W Y T		
UniRef90_I0WFY7	P E E G M D Q H G R I R G W V K T D A N G K Y S I Y T I R P A A Y P N R D T		
UniRef90_I6UE69	W F D T A Q S E F N L R R R I E T D A Q G N F R F R S I V P S G Y G C P P H G		
UniRef90_V4P7W1	L Y T V T N Q N Y L R G V Q V T D A D G Y V T F V T V I P G C Y S		
UniRef90_F0XCU2	Q Q D D D Q C E H N L R G K F I T D A E G R Y S F Y C L R P T P Y P K G H N H		
UniRef90_UPI000469A7D0	E Y Y G G S Q V I H F L R G R Q T T D A N G L V T F T S I F P G W Y S		
UniRef90_V2Y225	G Y P P L Q R N E T F L R G G G L P T D S N G I V E I T T L Y P G F Y E		
UniRef90_D0N0H2	G V V A S T N G N N L R G V T P T D K D G V A Q M T S I F P G H Y A		
UniRef90_D2SDN8	L Y S S G I E D Q N Y L R G V Q V A D A D G L V R F T S V F P A C Y D		
UniRef90_B5TZG8	T Q Y A Q R D K P D C R G R L H A D K D G R F G Y R A V V P V A Y P I P R H N		
UniRef90_W3WJI3	G S S E G Q G G G L N A R G A Q I T D D D G V T E F D T V F P G H Y T		
UniRef90_UPI0003789733	G F Q E E D N G T F L R G G Q L T D A N G Q C S I T S I W P G H Y V		
UniRef90_K3XB81	G D T S N R D N T F G R G L A P T D A N G V V S F V T K F P G H Y T		
UniRef90_H3GVM6	G S D A S N I N N T A F R G L A P T D D D N G I V T F T S V F P G H Y T		
UniRef90_W2PKR1	G S D T T N L N N T F L R G V T P T D D E D G V A Q M I S I F P G H Y V		
UniRef90_W3WVT4	G I I A D G N G D T L R G I T Q T D A D G V A E F S T I F P G H Y T		
UniRef90_A6GAK7	A S T A P D P E Y M Y Y G W V R T D A A G R Y A F S S I L R P G W Y L N G A S		
UniRef90_G7XLP6	G V Q S S M N G N T F L R G I Q K T D A D G V A G F K T I V P G H Y S		
UniRef90_D8PSP6	S Y P A T R N E T F L R G G G F P T D D N G I L V E F T T I Y T G F Y E		
UniRef90_A0A010RTQ6	G A D P S N A D K T F H R G L R K T N A N G A V W F F G T N L P G H Y S		
UniRef90_E9ENS5	G Q G G L K T N F G R G I Q Q T D K D G V V Q F S T I F P G H Y		
UniRef90_I0HB28	L Y S E G I T D E N Y L R G V Q V A D T A G E V T F T S I F P A C Y S		
UniRef90_E3QWH6	G A A A G Q Q G G L N G R A V Q Q T D A D G V V Q F D T I F P G H Y V		
UniRef90_F0XE25	S S D D S N I N K T W L R G I H L S D D N G V A E F E S I F P G H Y T S		
UniRef90_G2R2S3	V Q H A D R T A P S E R C V M V M S D E Q G R F W F K G I K P V S Y P I P H H C		
UniRef90_W3WU70	G G Q G G L N T T F L R G V S I T D D D G V V Q F D T I F P G H Y S		
UniRef90_UPI0003692F86	M Y S E G V E D E T Y L R G I Q V A D S N G Q Q A T F Q T I V P G C Y S		
UniRef90_T1KKQ0	G V N E L F P G E R F L R G Y Q K T N E D G E V N F K T I I P G W Y		
UniRef90_K9CWL8	L Y T V P G E N Y L R G V G V T D A N G Q V T F T S I F P G C Y D		
UniRef90_W2QN77	G S G N G D S S D T L R G L T P T D E D G V A S Y T S I F P G H Y T S		
UniRef90_E9DQZ8	G N G P A D P N N T F L R G I Q K T D N D G V V V K F S T I F P G H Y A		
UniRef90_Q82BE4	G F S E P D N G K F L R G G V L T N S S G V A N I T S I Y P G W Y R		
UniRef90_H6R876	L Y S E G V T E Q N Y L R G V Q V A G T D G K I S F T S I F P A C Y D		
UniRef90_V9R7Z4	D S Q D Y D H R F I G S G K S V T D N L G N Y N H I T I I P G T N N E		
UniRef90_I3I806	G Y S T G Q A G Q T Y C R G I Q Y T D T S G V A H F T I Y P G W Y A		
UniRef90_G2X460	G S D E S N I D N T W L R G I Q E T D S D G V A Q F E S I F P G H Y T		
UniRef90_W2ULB5	A K G T E T G W G K W I K T N N K G Q Y T F Y T L K P G V Y P N R S A		
UniRef90_I3BQ10	G D S A A Q A S T W Y R G I L Q T D S K G R V N F K T I C F P G W Y R		
UniRef90_K3XB83	G A D T T N I I G K T F N R G L A P T D S N G V V S F T T F P G H Y T		
UniRef90_L7L7L0	M Y S E G V E N E T F L R G I Q K V G R D G N A R F T T I V P G C Y T		
UniRef90_E2CLQ1	G Y G E P D R A Q R F C R G A L R T D A D G I A E F D T V Y P G F Y Y Q		
UniRef90_S4MZD2	H Q E P T D D E R Y L R G T W R T D K R G L V E F R T V F P G W Y Q		
UniRef90_S7RY17	G P A P Y E R N E T F L R G G Y T T S D T G V V E L V S I Y P G F Y A		
UniRef90_N1QHX5	G T S N L D N T F N R A L Q Q T D V N G V V Q F E T T F P G H Y T		
UniRef90_D8QEW4	G Y S G A E N A I N L R G G Y F T N D E G I V E L T T F N A D H A I G Y Y Q		
UniRef90_K3XB80	G A D L T N I L N A R F L R G L A A T D A D G V V T F K T I F P G H Y T S		
UniRef90_C4RBM3	G Y L S H D P D T R F L R G S Q Y T D E S G G V E F G T V Y P G W Y H		
UniRef90_UPI00034BEE94	L Y S R S I V G E D Y L R G A Q V T D A Q G R V T F Q T I V F P G C Y A		
UniRef90_X8J736	G S G G S L S D K F T W L R G G S E T N T N G V V E L T T I Y P G F Y T		
UniRef90_J3CHE2	G Q T S T V G Q T F L R G Y Q L T D S T G T V T F K T I Y P G W Y R		
UniRef90_A3YB93	N G D E A A M K S T W Y R G V L K T D V M G R V N F K S T F P G W Y P		
UniRef90_G2XSI5	G V A D G G Y D S T F L R G L Q A T D S D G V A T F D T I F P G H Y D		
UniRef90_UPI000362E194	H E E P T D D E R Y L R G T W K T D R Q G R V T F K T I F P G W Y R		
UniRef90_W2ZYL8	G S G G N G D S S D T L R G L T P T D E D G V A S Y T S I F P G H Y T S		
UniRef90_UPI00037236C4	G W E K R H G S L R G W M R T N E K G E Y K F V T L R P A P Y P G H S D		
UniRef90_A9GY96	G F E H Q S P S T R F C R G V Q L S D R N G L V G F K S I Y P G S D A		
UniRef90_X8J439	T F I S R I T I T F L R G G W A T N S E G M V E F K S V Y P G Y Y T		
UniRef90_W3X529	G Q D Q G N I N K T F L R G L Q Q T D A D G V A Q F E T I F A G H Y S		
UniRef90_D8QLX3	G H P L P R P G L T W L R G A W V T D A N G V A K F T T I F P G Y Y T		
UniRef90_M5FQT2	G F S E L D S E T F L R G M Q I T D G D G N A Y F T T I V P G W Y S		
UniRef90_UPI00036536D2	G E A A D D A A A R G R G R Q I S D A N G V V S F L T V Y P G W Y P		

UniRef90_H3GU58
 UniRef90_M7TIX4
 UniRef90_UPI00037B1CAC
 UniRef90_UPI000380AD64
 UniRef90_Q5YRP5
 UniRef90_UPI0003737E7C
 UniRef90_B3VZQ4
 UniRef90_E8RLZ4
 UniRef90_M1W5U7
 UniRef90_UPI0003B38BBA
 UniRef90_NOE104
 UniRef90_L8MBD6
 UniRef90_B5AS52
 UniRef90_Q2MKF2
 UniRef90_W0RHA0
 UniRef90_K6WLL2
 UniRef90_C5C926
 UniRef90_U2YVS5
 UniRef90_B5AS42
 UniRef90_W3WJH6
 UniRef90_V6UKE1
 UniRef90_A0A0310B7
 UniRef90_W0ACF5
 UniRef90_W9YRT9
 UniRef90_A7LCR1
 UniRef90_L2G774
 UniRef90_A0A024EGD0
 UniRef90_Q2HCB4
 UniRef90_C7PNX7
 UniRef90_S9P309
 UniRef90_K4R6N8
 UniRef90_D4GUP6
 UniRef90_I0WFY7
 UniRef90_I6UE69
 UniRef90_V4P7W1
 UniRef90_F0XCU2
 UniRef90_UPI000469A7D0
 UniRef90_V2Y225
 UniRef90_D0NOH2
 UniRef90_D2SDN8
 UniRef90_B5TZG8
 UniRef90_W3WJI3
 UniRef90_UPI0003789733
 UniRef90_K3XB81
 UniRef90_H3GVM6
 UniRef90_W2PKR1
 UniRef90_W3WVT4
 UniRef90_A6GAK7
 UniRef90_G7XLP6
 UniRef90_D8PSP6
 UniRef90_A0A010RTQ6
 UniRef90_E9ENS5
 UniRef90_I0HB28
 UniRef90_E3QWH6
 UniRef90_F0XE25
 UniRef90_G2R2S3
 UniRef90_W3WU70
 UniRef90_UPI0003692F86
 UniRef90_T1KKQ0
 UniRef90_K9CWL8
 UniRef90_W2QN77
 UniRef90_E9DQZ8
 UniRef90_Q82BE4
 UniRef90_H6R876
 UniRef90_V9R7Z4
 UniRef90_I3I806
 UniRef90_G2X460
 UniRef90_W2ULB5
 UniRef90_I3BQ10
 UniRef90_K3XB83
 UniRef90_L7L7L0
 UniRef90_E2CLQ1
 UniRef90_C4MZD2
 UniRef90_S7RY17
 UniRef90_N1QHX5
 UniRef90_D8QEW4
 UniRef90_K3XB80
 UniRef90_C4RBM3
 UniRef90_UPI00034BEE94
 UniRef90_X8J736
 UniRef90_J3CHE2
 UniRef90_A3YB93
 UniRef90_G2XSI5
 UniRef90_UPI000362E194
 UniRef90_W2ZYL8
 UniRef90_UPI00037236C4
 UniRef90_A9GY96
 UniRef90_X8J439
 UniRef90_W3X529
 UniRef90_D8QLX3
 UniRef90_M5FQT2
 UniRef90_UPI00036536D2

130 140 150 160

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

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

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

	170	180	190	200
UniRef90_H3GU58 UniRef90_M7TIX4 UniRef90_UPI00037B1CAC UniRef90_UPI000380AD64 UniRef90_Q5YRP5 UniRef90_UPI0003737E7C UniRef90_B3VZQ4 UniRef90_E8RLZ4 UniRef90_M1W5U7 UniRef90_UPI0003B38BBA UniRef90_NOE104 UniRef90_L8MBD6 UniRef90_B5AS52 UniRef90_Q2MKF2 UniRef90_W0RHA0 UniRef90_K6WLL2 UniRef90_C5C926 UniRef90_U2YVS5 UniRef90_B5AS42 UniRef90_W3WJH6 UniRef90_V6UKE1 UniRef90_A0A0310B7 UniRef90_W0ACF5 UniRef90_W9YRT9 UniRef90_A7LCR1 UniRef90_L2G774 UniRef90_A0A024EGD0 UniRef90_Q2HCB4 UniRef90_C7PNX7 UniRef90_S9P309 UniRef90_K4R6N8 UniRef90_D4GUP6 UniRef90_I0WFY7 UniRef90_I6UE69 UniRef90_V4P7W1 UniRef90_F0XCU2 UniRef90_UPI000469A7D0 UniRef90_V2Y225 UniRef90_D0N0H2 UniRef90_D2SDN8 UniRef90_B5TZG8 UniRef90_W3WJI3 UniRef90_UPI0003789733 UniRef90_K3XB81 UniRef90_H3GVM6 UniRef90_W2PKR1 UniRef90_W3WVT4 UniRef90_A6GAK7 UniRef90_G7XLP6 UniRef90_D8PSP6 UniRef90_A0A010RTQ6 UniRef90_E9ENS5 UniRef90_I0HB28 UniRef90_E3QWH6 UniRef90_F0XE25 UniRef90_G2R2S3 UniRef90_W3WU70 UniRef90_UPI0003692F86 UniRef90_T1KKQ0 UniRef90_K9CWL8 UniRef90_W2QN77 UniRef90_E9DQZ8 UniRef90_Q82BE4 UniRef90_H6R876 UniRef90_V9R7Z4 UniRef90_I3I806 UniRef90_G2X460 UniRef90_W2ULB5 UniRef90_I3BQI0 UniRef90_K3XB83 UniRef90_L7L7L0 UniRef90_E2CLQ1 UniRef90_S4MZD2 UniRef90_S7RYI7 UniRef90_N1QHX5 UniRef90_D8QEWF4 UniRef90_K3XB80 UniRef90_C4RBM3 UniRef90_UPI00034BEE94 UniRef90_X8J736 UniRef90_I3CHE2 UniRef90_A3YB93 UniRef90_G2XS15 UniRef90_UPI000362E194 UniRef90_W2ZYL8 UniRef90_UPI00037236C4 UniRef90_A9GY96 UniRef90_X8J439 UniRef90_W3X529 UniRef90_D8QLX3 UniRef90_M5FQT2 UniRef90_UPI00036536D2	<p style="text-align: center;">Y I D N E M K I T I N M Q D F I A A Q Q A G Q E Y D</p> <p style="text-align: center;">Y R Q R G E Q D T P H E N G G D G V Y R</p> <p style="text-align: center;">I G E G A G T S I A I R D A A D P G K Y R W D I V L D G</p> <p style="text-align: center;">A P Y S T N R Q N I M Q N A A D N I I L L Q E A A T P F F H Y</p> <p style="text-align: center;">R G S R D T T N A T V V S A E S A P E Y S F</p> <p style="text-align: center;">Y A D R G D R D T I</p> <p style="text-align: center;">V A D I S R V S I S S D N V F G D D G G A G</p> <p style="text-align: center;">Y T T N S Q S F T D I I L D D S I I A A G E A T S D Y D I</p> <p style="text-align: center;">R Q D E</p> <p style="text-align: center;">L E D G I A A D E A T A E Y D P</p> <p style="text-align: center;">V E D I A P D A A T A T Y D P</p> <p style="text-align: center;">Y S T N T Q E I T T N A E D Q I L S E E A A E D F D P F F E Y</p> <p style="text-align: center;">I D P S I Q D I L V G R Y T K N T G I K T Y Y F N I T I</p> <p style="text-align: center;">N T N K N T R E D S I D Q E N A D G N N A F F N I L E I L L G E D</p> <p style="text-align: center;">Y T D D T N R R T I</p> <p style="text-align: center;">L P P Y D G H I T L E R I A N D E D I L Y Q S D</p> <p style="text-align: center;">I T L A T D R D G V A A Q T P R I T G S A A A</p> <p style="text-align: center;">Y T S T N Q R R T I N A Q</p> <p style="text-align: center;">E P A Y A A R S A N I A A P D P P P G S V V</p> <p style="text-align: center;">P I A Q T R R D S I N I F E D S H G P E G Q Y N F D I H F I G</p> <p style="text-align: center;">T E D H A V R T T</p> <p style="text-align: center;">Y S A R P M R A T M N G G D T V F S A S D A A H F</p>			

UniRef90_H3GU58
UniRef90_M7TIX4
UniRef90_UPI00037B1CAC
UniRef90_UPI000380AD64
UniRef90_Q5YRP5
UniRef90_UPI0003737E7C
UniRef90_B3VZQ4
UniRef90_E8RLZ4
UniRef90_M1W5U7
UniRef90_UPI0003B38BBA
UniRef90_N0E104
UniRef90_L8MBD6
UniRef90_B5AS52
UniRef90_Q2MKF2
UniRef90_W0RHA0
UniRef90_K6WLL2
UniRef90_C5C926
UniRef90_U2YVS5
UniRef90_B5AS42
UniRef90_W3WJH6
UniRef90_V6UKE1
UniRef90_A0A031I0B7
UniRef90_W0ACF5
UniRef90_W9YRT9
UniRef90_A7LCR1
UniRef90_L2G774
UniRef90_A0A024EGD0
UniRef90_Q2HCB4
UniRef90_C7PNX7
UniRef90_S9P309
UniRef90_K4R6N8
UniRef90_D4GUP6
UniRef90_I0WFY7
UniRef90_I6UE69
UniRef90_V4P7W1
UniRef90_F0XCU2
UniRef90_UPI000469A7D0
UniRef90_V2Y225
UniRef90_D0N0H2
UniRef90_D2SDN8
UniRef90_B5TZG8
UniRef90_W3WJI3
UniRef90_UPI0003789733
UniRef90_K3XB81
UniRef90_H3GVM6
UniRef90_W2PKR1
UniRef90_W3WVT4
UniRef90_A6GAK7
UniRef90_G7XLP6
UniRef90_D8PSP6
UniRef90_A0A010RTQ6
UniRef90_E9ENS5
UniRef90_I0HB28
UniRef90_E3QWH6
UniRef90_F0XE25
UniRef90_G2R2S3
UniRef90_W3WU70
UniRef90_UPI0003692F86
UniRef90_T1KKQ0
UniRef90_K9CWL8
UniRef90_W2QN77
UniRef90_E9DQZ8
UniRef90_Q82BE4
UniRef90_H6R876
UniRef90_V9R7Z4
UniRef90_I3I806
UniRef90_G2X460
UniRef90_W2ULB5
UniRef90_I3BQI0
UniRef90_K3XB83
UniRef90_L7L7L0
UniRef90_E2CLQ1
UniRef90_S4MZD2
UniRef90_S7RYI7
UniRef90_N1QHX5
UniRef90_D8QEWA
UniRef90_K3XB80
UniRef90_C4RBM3
UniRef90_UPI00034BEE94
UniRef90_X8J736
UniRef90_I3CHE2
UniRef90_A3YB93
UniRef90_G2XS15
UniRef90_UPI000362E194
UniRef90_W2ZYL8
UniRef90_UPI00037236C4
UniRef90_A9GY96
UniRef90_X8J439
UniRef90_W3X529
UniRef90_D8QLX3
UniRef90_M5FQT2
UniRef90_UPI00036536D2

UniRef90_UPI000363DE3B
UniRef90_W6ZVFV4
UniRef90_F9G5Z7
UniRef90_W7E9C4
UniRef90_G7XPU1
UniRef90_R1GNM8
UniRef90_C1B0Y6
UniRef90_G2P734
UniRef90_A0A017SDR1
UniRef90_U5HBL7
UniRef90_UPI0003489DA8
UniRef90_W2PT37
UniRef90_S3D2B8
UniRef90_Q0CGP7
UniRef90_W3XQ24
UniRef90_UPI00037C8831
UniRef90_Q72II5
UniRef90_E3UR72
UniRef90_G8R1E4
UniRef90_W3XPQ5
UniRef90_UPI00046233E5
UniRef90_A0A017SG95
UniRef90_W3WJU0
UniRef90_W3XJZ0
UniRef90_G2X7F3
UniRef90_B0D6C3
UniRef90_W3WVL5
UniRef90_J1FHC3
UniRef90_G3XQN9
UniRef90_A4FB52
UniRef90_A8NAF1
UniRef90_Q0CJQ3
UniRef90_K5XET1
UniRef90_D9VKA7
UniRef90_G7XK96
UniRef90_D6KEU7
UniRef90_UPI00036BAFD0
UniRef90_U7PZP9
UniRef90_E3W847
UniRef90_UPI00037F6D5E
UniRef90_K5WGH4
UniRef90_FOXDS0
UniRef90_M7UMP7
UniRef90_M3E995
UniRef90_G2XXK8
UniRef90_UPI0001F2A85D
UniRef90_UPI000413F12E
UniRef90_H5U7C9
UniRef90_T1K3G7
UniRef90_N4V5K5
UniRef90_R1H067
UniRef90_U7PLM1
UniRef90_W6KLH2
UniRef90_Q2U606
UniRef90_T1KZD7
UniRef90_I8IKB6
UniRef90_UPI0003AB2E0A
UniRef90_C7YLF1
UniRef90_V5RQY9
UniRef90_UPI0003466F04
UniRef90_L2FD84
UniRef90_B7VD11
UniRef90_UPI00044074BA
UniRef90_A8JED1
UniRef90_Q5AR12
UniRef90_W9CLV4
UniRef90_W3XQ97
UniRef90_W3XJE2
UniRef90_T1K9R8
UniRef90_K2RQ85
UniRef90_A5CCT3
UniRef90_F4RAH9
UniRef90_UPI00036AA317
UniRef90_L8WEZ4
UniRef90_F4RK71
UniRef90_UPI00044168A1
UniRef90_W3XJ34
UniRef90_C1GQ41
UniRef90_L2GF50
UniRef90_A3XLG6
UniRef90_V9FRX1
UniRef90_E8X295
UniRef90_Q5B2A2
UniRef90_H1VVA6
UniRef90_M7MJG3
UniRef90_M3D0L3
UniRef90_C7CZ5
UniRef90_G4TMX2
UniRef90_G5A988
UniRef90_G7XMK7
UniRef90_T0KK12
UniRef90_L7II87

1 10 20 30 40
V V I G G P F E N S E Y G M I D Q P A T I M S V
E Q T E G P F Y Y V S G E L V R K N I
S P E I T A G P Y Y I V G E Y L R S N V I E
P A F T E G T V L G P F H A H V S E T V S S G A A I
T P E V T R G P Y V W P R S Q T L R Q D M
P E V T D G P Y Y V T G E L I R K N V K E
T K E L T E G P Y Y L D H A L V R A N V
L L G P S P E G E T G P Y W I P G E R I R S K L
T Q G P Y Y H I A G H P I R Q N M A
S P E V T E G P Y Y L D G Q L V R E D I
P E L T E G P Y Y V R G E L I R T D M
P E V T E G P Y W V A G E L I R Q D V
E T I G P Y Y V E G G E L I R T N I
T S E L V E G P Y Y I D A D K I R R D V
P T P A L T Q G P Y Y L R D V P Q R E D
E G P Y Y L K S P F R T D I R E S R R
P E G E I G P F W V K G E L N R E D I
G P Y Y L P G A P Y K Q I E D G K A V M A S T
T P T I T D G P Y Y A W G E T I R Q N V K E
P E G E T G P Y W V K G E L V R N N L
L K Y T K D T P S E L F G S N T S C I L T P D N A N G P Y F Y Q E Q I R S N V
P E V T E G P Y Y H T E G H P I R Q N I A
G P Y F V Y Q E L I R Q D V
Q P A R Q V G G P C E G C E A L H E Y G D K Q L T P T D T L P G F
T P E V T A G P F W W A D S Q T L R Q D M
T A D T T Q G P Y Y F D A D K I R S D I
P E T I E G P Y Y I R N E F V R S D V
T P T I T D G P Y Y I W G E V I R Q N V K E
M E G P V Y V P G A P D R M L E P G K A V L A T V
P E G E T G P Y Y V P G R T R S D V
T T E Q I E G P Y Y I D Y E L F R K N V
T S E T V E G P Y Y I I D A D K I R R D V
T P D N I E G P Y F V W G E D V R S D L
P E Q M E G P Y Y L D Y R I L R E D I
M E G P L Y V P G A P A R M L E P G K A V L A T V
P E V T D G P Y Y V V G E W F R S N V K E
S P E G A E G P Y Y V E G E Y I R S N I
T S E T T E G P Y Y I D A D K I L R Q D
T T E A P Y Y V L N P E V T Q G P Y I W P R S E T L R Q D M
S P E V T R G P Y V W P R S Q T L R Q D M
P R L V G G P C E G C E A V L E Y E D K D L N A I D T L P E F S
P M V T A G P Y F I P E P L R R I N I
T P E Q T E G P L C E E I R R E L
P E T T E G P Y Y V V G E L F R S N V
P S V D Q G P L Y V K G E Q V R K D I
E G P Y F F C A N P P G R A Y P P S Q T L R R D M
T P E V T E G P Y Y V P F A T E G P Y F L A D D L E R S D I
T T E A P Y Y V L N P E V T Q G P Y I W P R S Q T L R Q D M
E V P Q E T A G P Y P A D G S V L A L S G I V R S D I R Y S I G S S
T P E T S R G P Y F L P R S Q T L R Q D I
T P E V T K G P Y V W P Q S Q T L R Q D M
P F W L R S W N E A Q N S R P T I A S H G R I A
V G P F F V K G E Y V R S D L
T K P D E S F C A L K N P Q G
P E V T Q G P F Y V S G E Y I R A D V R E T A I Q T
S P V V T E G P Y V W P R S Q T L R Q D M
P D T I W G P Y G I D G E I V R H D L R E L S T
T P F T T E G P Y F L P D D Y E R S D I T D G Y T G V N L N L T L
L A P E S W S Y V V G E L I R K N V K E
E P E V F S I T T N N L L R Q V G Q
S P V V T S G P Y Y H L S G H P I R Q N L A E W
A G P E A T T L A R S G I V R G D I R R G F G T A
T P E V T E G P Y Y V G D D Y L K N I Y I R S N I
E H I G P L Y I V G A P N R N I D D G K A V L A S
S P I V T E G P Y I W P R S Q T L R Q D M
A S T V L G P Y Y V D G E L V R N N V
P E T T I G P Y Y V E G E L I R T D I
P L K S V A E T P E Q E Q G P F Y L A D E L I R S R I
P T V T D G P Y Y L W G E L M R Q D V R E E L Y S
T P E V T R G P Y Y T W P Q S Q M L R Q D M
P E T T Q G P Y W Y P P S Q L L T Q D M
P E V T E G P Y Y A P D T V W G P Y G V D G E M V R H D L
P E V I R G P Y Y S I R G N L V R D D M
T P E T S S G P Y V Y P R S Q T L R Q D I
S P E I T G G P Y Y V V G E Y M R S N V I E
M P A V D Q G P L Y V K G E E V R K D I

UniRef90_UPI000363DE3B D T S P P G Q K | L L I | T G T M Y Q N D G K | P A A G V V L | Y Y H T N V A G R Y Q
 UniRef90_W6ZVF4 V S G Q | G P K A H | D I N L I D V N C K P | I K G A Y I E | L W G A N V T G V Y N
 UniRef90_F9G5Z7 K E F C D G V P L F L | E V Q Y V D V T C N | G V P N L A T D V | W N C N A T G V Y S
 UniRef90_W7E9C4 P H D P N G E P L L V | P G E P G S P L R V | T G V V R S R T G E | P V V A V D I | D V W E T D S K G F Y D
 UniRef90_G7XPU1 A E D Q P G V P L W L | D I G V L D M A C D | P L P N A L L D L | W H C N A T G S Y S S
 UniRef90_R1GNM8 E L Y S D G V D L L Y L E | V Q Y I D E T C E | P V P D V Y V D I | W N A N A T G V Y S S
 UniRef90_C1B0Y6 P G E P G S P L R V | T G V V R S R T G E | P L S G A E I E I | W H A D A D G C Y S S
 UniRef90_G2P734 T E D K K G V P L Q L A | L T V V D T A C A | P L N K A L A E I | W Y C D A G E Y S S
 UniRef90_A0A017SDR1 R E G E P G V P V I M E Q Q Y I | D I N C E | P I P D L Y T E I | W G C N A T G V Y S S
 UniRef90_U5HBL7 E D D Q L G L P F Y I | D I G I L | D V N C C E | P V S N V L V D I | W H A N T T G H Y A
 UniRef90_UP10003489DA8 T E G K Q G F P L E L A I | T V V D Y A C A | P L A N V A V E I | W H C D A W G Y Y S S
 UniRef90_W2PT37 R E K Q T G V T M Y I | D I Q V I N V D C C T | P V K D M Y V D | D W H A N A T G V F S T
 UniRef90_S3D2B8 T T G S K G I I T H | D I N V I | D V T C K P I | P D I F V E L | W G C N S T G V Y T
 UniRef90_Q0CGP7 V E D Q E G V P L Y L D I Q M I | D T N C C D | P V S D V Y L D L | W H C N A T G V Y S S
 UniRef90_W3XQ24 T E D Q V G G I P M H L E L | Q F V D V N C K P | P V P A L F I D I | W G A N A T G G Y A
 UniRef90_UP100037C8831 T E D Q E G E I P L T L A L K V I | D A D C R P | L R D A A V D I | W H C N A T G V Y S S
 UniRef90_Q72II5 R E G L P G V P L R L L R V R D R A C R P | L Q G A R V D L | W H T D A L G R Y S S
 UniRef90_E3UR72 UniRef90_G8R1E4 UniRef90_W3XPQ5 UniRef90_UP100046233E5
 UniRef90_A0A017SG95 UniRef90_W3WJU0 UniRef90_W3XJZ0 UniRef90_G2X7F3
 UniRef90_B0D6C3 UniRef90_W3WVL5 UniRef90_J1FHC3 UniRef90_G3XQN9
 UniRef90_A4FB52 UniRef90_A8NAF1 UniRef90_Q0CQJ3 UniRef90_K5XET1
 UniRef90_D9VKA7 UniRef90_G7XK96 UniRef90_D6KEU7 UniRef90_UP100036BAFD0
 UniRef90_U7PZP9 UniRef90_E3W847 UniRef90_UP100037F6D5E UniRef90_K5WGH4
 UniRef90_FOXDS0 UniRef90_M7UMP7 UniRef90_M3E995 UniRef90_G2XXK8
 UniRef90_UP10001F2A85D UniRef90_UP1000413F12E UniRef90_H5U7C9
 UniRef90_T1K3G7 UniRef90_N4V5K5 UniRef90_R1H067 UniRef90_U7PLM1
 UniRef90_W6KLH2 UniRef90_Q2U606 UniRef90_T1KZD7 UniRef90_I8IKB6
 UniRef90_UP10003AB2E0A UniRef90_C7YLF1 UniRef90_V5RQY9
 UniRef90_UP10003466F04 UniRef90_L2FD84 UniRef90_B7VD11
 UniRef90_UP100044074BA UniRef90_A8JED1 UniRef90_Q5AR12
 UniRef90_W9CLV4 UniRef90_W3XQ97 UniRef90_W3XJE2
 UniRef90_T1K9R8 UniRef90_K2RQ85 UniRef90_A5CCT3
 UniRef90_F4RAH9 UniRef90_UP100036AA317 UniRef90_L8WEZ4
 UniRef90_F4RK71 UniRef90_UP100044168A1 UniRef90_F9FRX1
 UniRef90_W3XJ34 UniRef90_C1GQ41 UniRef90_L2GF50
 UniRef90_A3XLG6 UniRef90_E8X295 UniRef90_Q5B2A2
 UniRef90_H1VVA6 UniRef90_M7MJG3 UniRef90_M3D0L3
 UniRef90_C7ZC5 UniRef90_G4TMX2 UniRef90_G5A988
 UniRef90_G7XMK7 UniRef90_T0KK12 UniRef90_L7II87

90 100 110 120

UniRef90_UPI000363DE3B	A S P S [L] N P H G Y I R G W V K S D E Q G K Y A [I] Y T V R P G A Y P		G T
UniRef90_W6ZVF4	G D G S S D [L] S S N A L R G L Q P T D D D G G T A S F I T L L P G H Y G		
UniRef90_F9G5Z7	G Q A G L N T T F [L] R G I Q I T D H D G V V Q F E T I F P G H Y E		
UniRef90_W7E9C4	V Q Y A G R E G F D G R A V L S S D E H G D F H F K V I V P V P Y P [I] P D H Q		
UniRef90_G7XPU1	S F T G L S P N T T W L R G M W P T N E D G V M E M K T I I F P G F G Y P [V]		
UniRef90_R1GNM8	G Y A A D G Y N S T Y L R G I Q A T D Q D G V A A F E T I I F P G H Y D G R A T H		
UniRef90_C1B0Y6	G Y S V E I L R N N L R G I V V T C A G G R F D I A T V Q P A P C E F S S A R		
UniRef90_G2P734	G F Q E P D N G K F L R G A V L T G T D G V A N L T G I Y P G W Y R		
UniRef90_A0A017SDR1	G A A D L A N H Q R T F L R V Q K T N A D G V V T F D T L F P G H Y D S		
UniRef90_U5HBL7	G H P D P D P D F P R W N Q H E T W N K F G V S Q F T S I F P G Y Y T		
UniRef90_UPI0003489DA8	G Y T E A S P G G S F L R G V Q P A D E E G T A V F R T I V P G W Y S		
UniRef90_W2PT37	G Q S N [L] Q N T F L R G V T P T D D D G V A E M I S I F P G H Y A		
UniRef90_S3D2B8	G A A P E E I K N N A L R G V Q P T G A N G T A S F I T I A P G H Y V		
UniRef90_Q0CGP7	G N D E T N L D A T F L R G L Q K T D A D G I V Q F Q S I F P G H Y T S		
UniRef90_W3XQ24	G A E S P A G N T T F L R G I Q I T D E H G V V S F D Q I I P G H Y Y Q		
UniRef90_UPI00037C8831	H Q E P T D D D D R F L R G T W H T D R H G Q V T F K T L F P G W Y P S		
UniRef90_Q72II5	G V I N A P G T F C R G W W Q A T D E R G E V A F L T L F P G W Y D		
UniRef90_E3UR72	F F D K S Q S D F N L R R R T [L] T D T D G K Y V A L T T T M P V G Y G C P P H G		
UniRef90_G8R1E4	H I E P S N E S T Y L R G Y Q K T D I N G N A E F T T I V P G W Y D		
UniRef90_W3XPQ5	G V Q D D S N G N G R G I Q P T D E D G V A V S F R S V F P G H Y S		
UniRef90_UPI00046233E5	F R S W T L R G K V T T D A H G R A E V L S V N P G E Y G V P F M G		
UniRef90_A0A017SG95	G Y A E G G Y N S T Y L R G I Q R T D H D G L V N F D T I F P G H Y S		
UniRef90_W3WJU0	G A D A A N [L] N A T F L R G V A K S D A D G V V V Q F E S I F P G H Y D		
UniRef90_W3XJZ0	G A G E G G L G T Y L R G V Q P T D K D G V V V N F D T L F P G H Y S		
UniRef90_G2X7F3	Q Q D P A Q P E M H L R A R L P T D P D G R F A L Y C L R P P P Y P V P D D G		
UniRef90_B0D6C3	G H P S P H P H L W L R G A W P T D K N G V A Q F T T I F P G Y Y M		
UniRef90_W3WVL5	G S A E G Q G G G L S Y L R G V Q P T D D E G V V V N F D T L T P G T Y P S R S		
UniRef90_J1FHC3	T K G D A R R H G Y L R G W I K T G A D G R Y T F Y T I F P G H Y E A		
UniRef90_G3XQN9	S F T A L T G N E T W L R G M W P T D S N G M M E M R T I F P G Y Y Y R		
UniRef90_A4FB52	G A E A P T D D K R Y L R G A Q V T N A D G I V E F T T I W P G W Y R		
UniRef90_A8NAF1	G Y T G P W G E D T W L R G G L F T N K N G M V E L V T I F P G H Y D		
UniRef90_Q0CQJ3	G A A D G W D S T Y L R G I Q Y T D E D G V V T F D T I F P G H Y D		
UniRef90_K5XET1	Y R S Y A L R G R L T T G A D G S V E V L T I S P G D Y G A G A A		
UniRef90_D9VKA7	S E G R Q T W L R G V Q V T D A A G R C V F E T I V P G W Y A G L		
UniRef90_G7XK96	G D D T S N [L] N A T F L R G I Q K T D S D G V V V T F E S L F P G H Y S G R T H H		
UniRef90_D6KEU7	H Q T P T D D [L] T W L R G I Q M T D H Q G F V T F R T I F P G W Y T		
UniRef90_UPI00036BAFD0	H Q E P T D D D S R Y L R G T W R T D R H G Q V T F R T I F P G W Y R		
UniRef90_U7PZP9	G A G Q G G [L] N T T F L R G V Q M S N A D G V V V A F D T I N F P G H Y G R A T H Q		
UniRef90_E3W847	H F D P T Q T P F N M R R T I M T D A Q G H Y R V Q T I L P A G Y G C P P D Q		
UniRef90_UPI00037F6D5E	H A P P T D D D T T W L R G V R L T D S E G V A S F R S I V P G W Y Q		
UniRef90_K5WGH4	Y R S Y A L R G Q L T T G A D G S V E V L T I V A P G D Y G G G L G V		
UniRef90_F0XDS0	G I S T S G N N S T Y L R G V Q L T D S D G V V V E F E T I F P G H Y Q D R A T H		
UniRef90_M7UMP7	G N D A S N [L] N K T F L R G L Q T T D S D G V V V Q Y S S I F P G H Y S A		
UniRef90_M3E995	S G T P T D S D T R Y L R G T W K T D K R G L V T F E T I F P G W Y R		
UniRef90_G2XXK8	S F T G Q D P N [T] W L R G M W P S N D E G M L E M K T I F P G F Y V		
UniRef90_UPI0001F2A85D	S F T H L S P N F R L R G M W P T D E N G V M E I K T I F P G F Y V		
UniRef90_UPI000413F12E	T K G D A D R H G Y I R G W [K] T G K D G R Y T F Y T Q V P G S Y P D S A N		
UniRef90_H5U7C9	P E P W N L R G T W I A D D E G H F E I H S L Q P A P Y Q I P W H A		
UniRef90_T1K3G7	G F N D P Q L T S R W L R G V Q R T G L T Q V R F V S I V P G W Y R		
UniRef90_N4V5K5	S D L S L S L I N T T T L R G V Q F T D N E G M A A F D S V V P G H Y A G R T N H		
UniRef90_R1H067	G S D T D T A N [L] N G R G I Q A T D I E G A L Q F Q S I F P G H Y M S R K S H		
UniRef90_U7PLM1	G P G M G D P G T A L R G I Q L T D D H G V V S F D S V V P G H Y A		
UniRef90_W6KLH2	G A D P D Q P A A T G R G A L R T D G D G I A E F D T I W P G H Y T		
UniRef90_Q2U606	S F T H L S P N T F L R G M W P T D K H G M M E M K T I F P G F Y V Y		
UniRef90_T1KZD7	G V Q E P I Y D T R W L R G Y Q V T N E D G E V N F K T I V P G W Y		
UniRef90_I8IKB6	S F T H L S P N T F L R G M W P T D E N G V M E I K T I F P G F Y V		
UniRef90_UPI0003AB2E0A	V Y T E G T I A A N Y L R G V Q A T D A S G T A T F T T V V P G C Y A		
UniRef90_C7YLF1	S F T G L S P N T Q L R G M W P T D K H G V T S F T T I V P G F Y V		
UniRef90_V5RQY9	F F D K S Q H E Y N L R R R I V T D E K G Y Y R A R S I A P S G Y G C G R H R		
UniRef90_UPI0003466F04	G W A K R Q G Y I R A W M K T D Q N G A Y T F Y T F M P P G S Y G N G		
UniRef90_L2FD84	S F T G R D P N T P L R G M W P T D S N G I M E M K T I V F P G F Y V		
UniRef90_B7VD11	D F G P N D A A L R T W R G [C] V K T D A E G R F E F Q T I R P A P D N L		
UniRef90_UPI00044074BA	G S D P S N I N T T F L R G I Q Q T S G E G F I Q F H T L F P G H Y T		
UniRef90_A8JED1	D N S N [L] A N A D C R T R V P I A A D G S Y K Y T T I I P A A Y G S R N C		
UniRef90_Q5AR12	G A D D S I L L Q E T F L R R V S K T G E E G V V T F N T L F P G H Y A		
UniRef90_W9CLV4	G S N P S N I N A T F A R G L Q P T G A E G A T Q F T A F Y P G H Y Q		
UniRef90_W3XQ97	S F T G L S P N T G L R G Q W P T D S E G V M E M K T I F P G F Y V		
UniRef90_W3XJE2	G F T G I D P D T T F L R G I Q V T D S E G M I E F L T L F P G H Y Y		
UniRef90_T1K9R8	G R P K P I N N L R F L R G Y Q I T N E D G L V N F N T I I P G W Y		
UniRef90_K2RQ85	G I Y T S G N N S T Y L R G I Q P T D Q D G V V V A F E T I F P G H Y D G R A T H		
UniRef90_A5CCT3	S N N N L E S T F T G S G V T T T N N N G N F Y F I T I Y P A A V H N P H F N		
UniRef90_F4RAH9	G H P V R S R P D [L] T F L R A A W P T N S N G V S R F T S I F P G Y Y T		
UniRef90_UPI00036AA317	L Y S P G L E R E N Y L R G V Q T A D T A G W A R F T S I F P G A H D		
UniRef90_L8WEZ4	G F G G N G T A P S G N M T V P S G N A T A P T G T E S I P S C I G P D E I T D T		
UniRef90_F4RK71	E A D P Q D R N S S S R R G A I E T N P E G V A S F V T I F P G S Q G		
UniRef90_UPI00044168A1	S I R H Y G L R G T F V T D A S G T V E V L S I T P R E Y G P K G L		
UniRef90_W3XJ34	S F T G L S P N T F L R G Q W P T D S E G M M E M K T T F P G F Y V		
UniRef90_C1GQ41	S F T G L S P N T F L R G Q W P T D S E G M M E M K T T F P G F Y V		
UniRef90_L2GF50	G V A S A E N G N G A I V D N L N T T F G R V T F R S G F D T I S P G H Y T		
UniRef90_A3XLG6	G W E K T H G Q Y R G W L K T E K D G K F T F Y T F R P A P Y P K V		
UniRef90_V9FRX1	G I V A S G N G D S L R G L T P T D E D G V A S Y T S I F P G H Y T S		
UniRef90_E8X295	H G P P P D R D G A G L R G I Q F T G D D D G A V S F E T I F P G F Y D		
UniRef90_Q5B2A2	R S G D G G W D T T F L R G I Q E S D K D G V V T F Q T I F P G H Y E		
UniRef90_H1VVA6	S F I I H H N P N T F L R G I W P T D A N G I M E M K T V F P G F Y		
UniRef90_M7MJG3	L Q F E N N K R F V T H R A W V K T N E Q G Q Y F T Y T F I P G S Y R H S		
UniRef90_M3D0L3	S Y T G R D P N F Q F L A T D T T T W L R G M W S F K T I V P G F Y		
UniRef90_C7ZCZ5	S F T G I D P N E T F L R G I Q V T D E N G M V E F L T K F P G Y Y		
UniRef90_G4TMX2	G F S T L D Q S M T A S G G V Q S S S M T D S Y N F N T I Y P G F Y T		
UniRef90_G5A988	D M S N L D A T F L R G A T P T D A D G V A R M L S I F P G H E F		
UniRef90_G7XMK7	S F T G L N P D I T L R G M W P T D E K G V T S F T S I F P G F Y T N		
UniRef90_T0KK12	G V D S R P S F P G H Y E G R A V V H T H L L S H T N A T		
UniRef90_L7II87	G P G M G D P G T T L R G V Q P T D K A G V A S F D T L M P A I V Y L G A T K		

UniRef90_UPI000363DE3B D E P A H I H P S I Y E P G L E Q P Y Y D E F V F D D D P L L T S A K R
 UniRef90_W6ZVF4 T R A N H L H T L V H H D G G T I S H V G Q F Y F D Q D F L F D
 UniRef90_F9G5Z7 G R A T H T L L T H A N A S P V Q H I G Q L F W P E D
 UniRef90_W7E9C4 Y R P S H M H F M A L Y L R R D P Y E T S D V V F L L I
 UniRef90_G7XPU1 E R A I H I H A Q V H T D A S N T V S T G Q L Y F E E E
 UniRef90_R1GNM8 T H L A H M N V T V Y A D G N N I T H I G Q L F W N E E L R S A
 UniRef90_C1B0Y6 G D A A H L N V V V H A R G H L P R E T R L V P T P
 UniRef90_G2P734 G R C L H V H L K V H T D G G N E I H T G Q L F F D E
 UniRef90_A0A017SDR1 R T T H Y H N I A H L T G G T I P H I A Q I F W D Q E T V E S T Y P Y N T N D
 UniRef90_U5HBL7 G R A T H I H I K V H A N G S R L I H T G Q L F V E D
 UniRef90_UP10003489DA8 P R V T H I H L K V H T E G G T V H T G Q L F F S D D
 UniRef90_W2PT37 G R T T H L H F I G T Y A G G S S V A H V G Q F F F E Q D L I D A V E A V T
 UniRef90_S3D2B8 G R T N H L H T I I H H Q G G T I S H V G Q F Y I E Q
 UniRef90_Q0CGP7 R A T H I H V L A H A S G L H S A H V G Q L F F D Q D
 UniRef90_W3XQ24 P R A T H T H I V A W G N A
 UniRef90_UP100037C8831 G R C V H I H V K V H V D G G H T C H T G Q L F F D E K S V L A T A V L E P Y
 UniRef90_Q72II5 R T P H L H L R V E A G G R V F A T Q L F F P E E V I Q R Q V Y A L
 UniRef90_E3UR72 N R P S H V H Y F V S A P G Y R K L T T Q F N I E G D E Y L W D D F A F
 UniRef90_G8R1E4 P R V P H I H Y K V I L N N K E H L T S E L Y F E E N F Y
 UniRef90_W3XPQ5 G R A T H V V V A H V T G G N V S H I G Q L F F D Q D T Q V E A T Y P Y N T S
 UniRef90_UP100046233E5 K R S G H V H L N V S G T G K H R F M T T Q V Y
 UniRef90_A0A017SG95 G R A I H T H L L T H L N A T L L P N N T Q L F W P E D
 UniRef90_W3WJU0 G R A T H H H M V H L N G G T Y G H V G Q L F F W D Q D
 UniRef90_W3XJZ0 G R A T H E H I A H V T G G Q V A H L S Q L F F D Q
 UniRef90_G2X7F3 P R P A H I H F V S C P G R R T L T T Q F D A E D P H L D D T V F A V
 UniRef90_B0D6C3 G R A T H I H T K V F P E A G R L S H V G Q F F F E D E
 UniRef90_W3WVL5 R A S H Q H I I V H V T G G V V A H L S Q L F F D Q
 UniRef90_J1FHC3 E P A H I H I T K E P D K N E Y Y L D D F L F E G D P L L T
 UniRef90_G3XQN9 G R A I H I H V Q V H T D S G K T V S T G Q F F F D E
 UniRef90_A4FB52 G R T V H I H A M V H V S N S R V L T T Q V M F D E A L N A R V F A G Q P
 UniRef90_A8NAF1 G R T T H I H T M V H H G G N W Q T N H I G Q F F F D E D Q V F R T H P Y T T N T
 UniRef90_Q0CJQ3 G R A T H T H L L T H L R T G M M L Q A E G R R E Q L T T Q L Y
 UniRef90_K5XET1 L R T G H F H M M L Q A E G R R E Q L T T Q L Y V Y G R
 UniRef90_D9VKA7 A P H I H F K V R P D E R S E T T S Q F F L P D A F L K D
 UniRef90_G7XK96 H M V A H L D V T V T I T G G T V A H I G Q L F F W D Q D
 UniRef90_D6KEU7 G R A V H V H T K V H T T G G R T C H T G Q F F Y F A E
 UniRef90_UP100036BAFD0 G R C V H I H V K V H V D G G H T C H T G Q F F F D E E S V L A S A V V E P Y A
 UniRef90_U7PZP9 H V V A H I G A A L A A T G G T V A H I S Q L F F D Q
 UniRef90_E3W847 P R P A H I H F F V S A D G H R K L T T Q I N V A G D P Y T Y D D F A Y
 UniRef90_UP100037F6D5E G R T V H I H V K T I T E G G H H T S H T G Q L Y F P E
 UniRef90_K5WGH4 R A G H F H M K L H D G A R R Y R L T T Q L Y
 UniRef90_FOXDS0 T H L A H M N A S L S S N G T V S V W I G Q L F Y P E
 UniRef90_M7UMP7 R A T H V V Q T H L N G G S V V S H I G Q F F F D Q D
 UniRef90_M3E995 G R C V H I H T K V H V D G G T C H T G Q F F F L G E E A V L D S A E V E P Y S
 UniRef90_G2XXK8 K R A I H I H V Q V F T D Y V L H V V T G N L N S I G Q F Y F N E D V I E T I L
 UniRef90_UP10001F2A85D Q R T I H I H W R V R E N G S N T I S T G Q L Y F D E
 UniRef90_UP1000413F12E P A H I H P F I L E P D G K Y Y Y L S A Y H F E K D P L L T N D H M
 UniRef90_H5U7C9 W R P A H I H F K V V S A P G Y E L I T T Q L Y F P G D P H N D D D I
 UniRef90_T1K3G7 G R S L H I H I E I R M G N N L V Y V G Q L F F T E E G E L L E Q V S P Y N T
 UniRef90_N4V5K5 V H A A H I N N T V T G K V A H I G Q M Y F D Q
 UniRef90_R1H067 S W P
 UniRef90_U7PLM1 G R A T H I H T V Y L T G G K A A H V G Q L Y F D Q P L L T Q V N K V
 UniRef90_W6KLH2 G R A I H I H F K V H F G N R S W T T N Q T L L P E D
 UniRef90_Q2U606 E R T I H I H V Q V H T D T G N V V S T G Q L Y F D E
 UniRef90_T1KZD7 G R C L H I H V E V Y S K N N A I T Y I G Q L Y F K R E
 UniRef90_I8IKB6 E R A I H I H W S V V R G N G G N T V S T G Q L Y F D E
 UniRef90_UP10003AB2E0A G R M P H M H L E I Y P S A S N A L K T T Q L A F P T D A I Y N A N A G Y S N S
 UniRef90_C7YLF1 Q R A I H I H V Q I H
 UniRef90_V5RQY9 Q R P A H I H F F I S A P G H R Q L S T Q I N V A G D K Y L W D E F A Y V G D
 UniRef90_UP10003466F04 P A H I H A T V L E P D G K Y Y F I D D F T F E G D P N M D S S
 UniRef90_L2FD84 E R T I H I H A Q V H T D G S N I A N T G Q I F F D E E
 UniRef90_B7VD11 G R E S H I H F T V E S P D F G R Q W A P T L F F A D D P L V T E R Q
 UniRef90_UP100044074BA G R T H H V H L V V H Q S G G S Y T H H G Q V F F D Q E V N E L S P Y N T N N G
 UniRef90_A8JED1 L R P P H I H L R L A L S S G Y A L L V T Q
 UniRef90_Q5AR12 G R A T H Y H V L A H L D G G S V P H I G Q L F F D Q D
 UniRef90_W9CLV4 G R S Q H I H V A T V H V D G S T I S H I G Q I F F D D
 UniRef90_W3XQ97 E R A I H I H W S L H E N G G H I A S T G Q I Y F
 UniRef90_W3XJE2 T R T T H I H V T V V Q G T G F A I Q H I G Q L F F E E D L L N E V Y Q L
 UniRef90_T1K9R8 G R C I H I H V E I I Y T D G H A V V S Y I G Q L Y F
 UniRef90_K2RQ85 T H L A H M N V T V Y A D G N N V T H I G Q L F Y N E E
 UniRef90_A5CCT3 F R A E H
 UniRef90_F4RAH9 G R A T H V H A K V H L N S S E S Q Y I G Q F F F P D E I N L D G M S P Y F N P
 UniRef90_UP100036AA317 G R W P L L H V E V Y P S M V A C P G T R M
 UniRef90_L8WEZ4 G R T V H I H T M I H S H A G N V R H I G Q L F F D D D
 UniRef90_F4RK71 G R P P H V N A L I R T D W F E H N L V G Q I F F P D
 UniRef90_UP100044168A1 T R A G H F H M M I D P P K T L D S M T T Q L Y
 UniRef90_W3XJ34 E R A V H I H W T L A G N G G H I A S T G Q I Y F G E D
 UniRef90_C1GQ41 T R T S H I H G Q I Y F D Q A L I I D A V G V T E P
 UniRef90_L2GF50 G R A T H I H I M S T D E G G T A R N I G Q I F F D Q S I I I S E V E L L E
 UniRef90_A3XLG6 Q E P E H I H I Y V K E P N T I P Y Y I D S Y F F E S D T K L T
 UniRef90_V9FRX1 R A T H I H I L L G T Y N G G Y A S H V G Q L F F D Q D
 UniRef90_E8X295 G R T N H I H F K V R L E G G H T A H I G Q L F F P E
 UniRef90_Q5B2A2 G R A I H I H L L T H
 UniRef90_H1VVA6 D R T I H I H A L V H T D A S N I V S S G Q L F F D E D
 UniRef90_M7MJG3 K E L R H I H P V V K E A G K P E Y K L N S L M F E D D P F L T K A C R K K L K
 UniRef90_M3D0L3 D R S L H I H A Q V H
 UniRef90_C7ZCZ5 T R T T H I H V T V S A S S S S V Q H I G Q L F F E E
 UniRef90_G4TMX2 G R T I H I H T M V H S R S G S L V H V G Q M F F D D
 UniRef90_G5A988 G R A T H I H F I V L A N G G S F S H V A Q L F F D Q E
 UniRef90_G7XMK7 R A I H I H V Q V H T N A G R T V N T A Q L F V N E D
 UniRef90_T0KK12 L M P N G T I S V W D A P V A H I G Q L F F W P E
 UniRef90_L7II87 L Q N N T L S G G R A A H V G Q L Y F D Q

UniRef90_UPI000363DE3B R R M **L** N R G G S G **V** L R T **V** R Q G D **L** E **V** A R **H** D **V** I **L** 170 180 190 200
UniRef90_W6ZFV4 **V** D **L** Q A A A D **I** S **V** A K Y G M P E T M K **V** L K Y D F F **L** V A D A E
UniRef90_F9G5Z7 **V** E A **V** S **P** Y D T N T A I **T** T N A D D M W D I **V** Q A G T T Y D **P** F **P** E Y
UniRef90_W7E9C4 D A S R E **V** G E S A V E T F **V** D **V** D A G G A **V** S C D F **V** L D
UniRef90_G7XPU1 **I** P T A N A K D R **V** V G Q E T E G N D A
UniRef90_R1GNM8 **P** Y S T N K Q T **L** T A T A T
UniRef90_C1B0Y6
UniRef90_G2P734
UniRef90_A0A017SDR1
UniRef90_U5HBL7
UniRef90_UPI0003489DA8
UniRef90_W2PT37
UniRef90_S3D2B8
UniRef90_Q0CGP7
UniRef90_W3XQ24
UniRef90_UPI00037C8831 **V** S N T A T R T T **L** I Y P Q N G H E G G **L** Y R Y D
UniRef90_Q72II5 **P** P Y R E R G M P R **V** N N R Q D G **L** F R A D **L** L L R L E R E
UniRef90_E3UR72
UniRef90_G8R1E4
UniRef90_W3XPQ5 T **V** D **I** T **L** A D R **V** F S **L** E S E N D N D P **V** F D Y **V** F **L** G D D **V** T
UniRef90_UPI00046233E5
UniRef90_A0A017SG95
UniRef90_W3WJU0
UniRef90_W3XJZ0
UniRef90_G2X7F3
UniRef90_B0D6C3
UniRef90_W3WVL5
UniRef90_J1FHC3
UniRef90_G3XQN9
UniRef90_A4FB52
UniRef90_A8NAF1
UniRef90_Q0CJQ3
UniRef90_K5XET1
UniRef90_D9VKA7
UniRef90_G7XK96
UniRef90_D6KEU7
UniRef90_UPI00036BAFD0 S N A A E R E D T **I** Y D Q S G T Q G G **L** L K **L** R Y D
UniRef90_U7PZP9
UniRef90_E3W847
UniRef90_UPI00037F6D5E
UniRef90_K5WGH4
UniRef90_FOXDS0
UniRef90_M7UMP7
UniRef90_M3E995 T S T T E R T T **L** D D D T **I** Y D G G G **V**
UniRef90_G2XXK8 A E E P Y A S H T Q I N R T T N A E D N Y Y Y
UniRef90_UPI0001F2A85D
UniRef90_UPI000413F12E E D P **P** R G G N G V V K **L** Q K N G E M K **L** I E R D F **I** L
UniRef90_H5U7C9 A S A **V** K P E **L** M L D P Q P V E G G V A V T Y D F **V** L D P E A
UniRef90_T1K3G7 V T T P R T I N P D D I R F Q Q A R G A G I L T T D F V
UniRef90_N4V5K5
UniRef90_R1H067
UniRef90_U7PLM1
UniRef90_W6KLH2
UniRef90_Q2U606
UniRef90_T1KZD7
UniRef90_I8IKB6
UniRef90_UPI0003AB2E0A V R N **L** A
UniRef90_C7YLF1
UniRef90_V5RQY9 I R F **I** D D A E S A Q A R G **L** Q G P Y T E **V** D F D F Q M Q
UniRef90_UPI0003466F04 L G S K N R G G S G **L** V K **L** Q K E G V L L S A E R D I V L
UniRef90_L2FD84
UniRef90_B7VD11
UniRef90_UPI00044074BA T **L** T T N D E D R **V** L S D E Q D **V** D P **V** L E Y V L L G D
UniRef90_A8JED1
UniRef90_Q5AR12
UniRef90_W9CLV4
UniRef90_W3XQ97 E P Y S A H **L** E T **L** N R T T N A E D S **L**
UniRef90_W3XJE2
UniRef90_T1K9R8
UniRef90_K2RQ85
UniRef90_A5CCT3
UniRef90_F4RAH9 **V** K D R T R R D S **L**
UniRef90_UPI00036AA317
UniRef90_L8WEZ4
UniRef90_F4RK71
UniRef90_UPI00044168A1
UniRef90_W3XJ34
UniRef90_C1GQ41 Y A S N Q **V** K E T **L** N A D
UniRef90_L2GF50 P Y A S N R Q T **L** T T N **L** Q D A A G E A T A E F D
UniRef90_A3XLG6
UniRef90_V9FRX1
UniRef90_E8X295
UniRef90_Q5B2A2
UniRef90_H1VVA6
UniRef90_M7MJG3
UniRef90_M3D0L3
UniRef90_C7ZCZ5
UniRef90_G4TMX2
UniRef90_G5A988
UniRef90_G7XMK7
UniRef90_T0KK12
UniRef90_L7II87 K K G **I** D S I L T T **L** K K E D M Y **V** A N Y N I V L

UniRef90_UPI000363DE3B
UniRef90_W6ZFV4
UniRef90_F9G5Z7
UniRef90_W7E9C4
UniRef90_G7XPU1
UniRef90_R1GNM8
UniRef90_C1B0Y6
UniRef90_G2P734
UniRef90_A0A017SDR1
UniRef90_U5HBL7
UniRef90_UPI0003489DA8
UniRef90_W2PT37
UniRef90_S3D2B8
UniRef90_Q0CGP7
UniRef90_W3XQ24
UniRef90_UPI00037C8831
UniRef90_Q72II5
UniRef90_E3UR72
UniRef90_G8R1E4
UniRef90_W3XPQ5
UniRef90_UPI00046233E5
UniRef90_A0A017SG95
UniRef90_W3WJU0
UniRef90_W3XJZ0
UniRef90_G2X7F3
UniRef90_B0D6C3
UniRef90_W3WVL5
UniRef90_J1FHC3
UniRef90_G3XQN9
UniRef90_A4FB52
UniRef90_A8NAF1
UniRef90_Q0CJQ3
UniRef90_K5XET1
UniRef90_D9VKA7
UniRef90_G7XK96
UniRef90_D6KEU7
UniRef90_UPI00036BAFD0
UniRef90_U7PZP9
UniRef90_E3W847
UniRef90_UPI00037F6D5E
UniRef90_K5WGH4
UniRef90_F0XDS0
UniRef90_M7UMP7
UniRef90_M3E995
UniRef90_G2XXX8
UniRef90_UPI0001F2A85D
UniRef90_UPI000413F12E
UniRef90_H5U7C9
UniRef90_T1K3G7
UniRef90_N4V5K5
UniRef90_R1H067
UniRef90_U7PLM1
UniRef90_W6KLH2
UniRef90_Q2U606
UniRef90_T1KZD7
UniRef90_I8IKB6
UniRef90_UPI0003AB2E0A
UniRef90_C7YLF1
UniRef90_V5RQY9
UniRef90_UPI0003466F04
UniRef90_L2FD84
UniRef90_B7VD11
UniRef90_UPI00044074BA
UniRef90_A8JED1
UniRef90_Q5AR12
UniRef90_W9CLV4
UniRef90_W3XQ97
UniRef90_W3XJE2
UniRef90_T1K9R8
UniRef90_K2RQ85
UniRef90_A5CCT3
UniRef90_F4RAH9
UniRef90_UPI00036AA317
UniRef90_L8WEZ4
UniRef90_F4RK71
UniRef90_UPI00044168A1
UniRef90_W3XJ34
UniRef90_C1GQ41
UniRef90_L2GF50
UniRef90_A3XLG6
UniRef90_V9FRX1
UniRef90_E8X295
UniRef90_Q5B2A2
UniRef90_H1VVA6
UniRef90_M7MJG3
UniRef90_M3D0L3
UniRef90_C7ZCZ5
UniRef90_G4TMX2
UniRef90_G5A988
UniRef90_G7XMK7
UniRef90_T0KK12
UniRef90_L7II87

UniRef90_UPI0004449F92
 UniRef90_W4JUA0
 UniRef90_K5XRG4
 UniRef90_UP10004750A49
 UniRef90_K5WXB8
 UniRef90_K2RY67
 UniRef90_W7EUA3

1 10	20 30 40 A P E V A K D S T W L P N A P V T D D V P N A P V T A Q I L A P E S P K D N Y V S G S P M K T D I N N L R K V G E L A P E S P K E N Y V A G M P A R S D I L H R N I
-------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

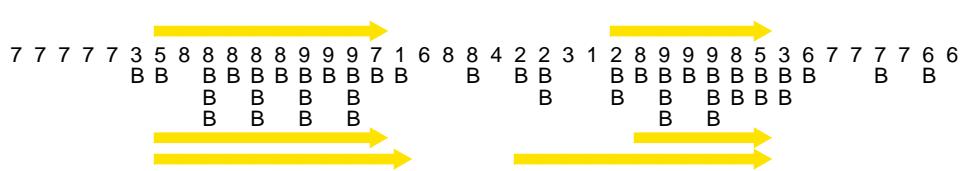
lupas_21
 lupas_14
 lupas_28
 jnet
 conf
 sol25
 sol5
 solo
 jhmm
 jpssm

8 9 8 8 7 7 7 7 6 0 1 0 4 6 2 2 2 7 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 6 6 6 B	 
---------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

UniRef90_UP10004449F92 50 60 70 80
 UniRef90_W4JUA0
 UniRef90_K5XRG4
 UniRef90_UP10004750A49
 UniRef90_K5WXB8
 UniRef90_K2RY67
 UniRef90_W7EUA3

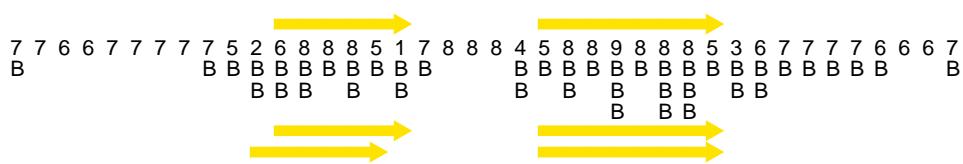
V G S N G G V P M F V D V G I M D T T C Q A M T D V L V E I W S P N A V G D Y E T G G Q A G V S L I L D I G L M D T T C E A L P N T L V E V W A P N A V G T Y T S G Q S G L P F T L D V A V M D V N C E P V A T M V E V W S S N A R G K P S L K G E I V V I K G K L L D K K C V P V S D A K I Y L W Q V G D N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

lupas_21
 lupas_14
 lupas_28
 jnet
 conf
 sol25
 sol5
 sol0
 jhmm
 jpssm



UniRef90_UP10004449F92	S	N S L R G A Q T D Q N G I A E Q T I F P G F T S D G A N
UniRef90_W4JUA0		G A G F L R G A T L T G S N G I A E F E M I F P G F T S A G A N
UniRef90_K5XRG4	D H G N F L R G A T S S S Q N G I A E F Q T I F P G W S D G D G	
UniRef90_UP10004750A49	Y T P R N S S F V G S G T T T D N N G N F Y F T I S P K K S N G	
UniRef90_K5WXB8	N F L R G G T T T S S G G A E F R T I F P G M S K G A G	
UniRef90_K2RY67	S F T G Q S P N T P L R G M W P T D K H G M M E M R T V F P G F Y	
UniRef90_W7EUA3	S S D E S N L N A S S F R G N I S D D N G V G T R G T I F L G H C T G R M N H	

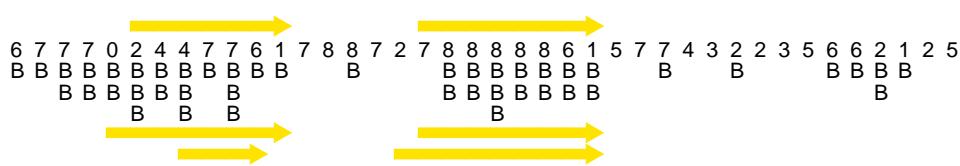
lupas_21
 lupas_14
 lupas_28
 jnet
 conf
 sol25
 sol5
 sol0
 jhmm
 jpssm



UniRef90_UP10004449F92
 UniRef90_W4JUA0
 UniRef90_K5XRG4
 UniRef90_UP10004750A49
 UniRef90_K5WXB8
 UniRef90_K2RY67
 UniRef90_W7EUA3

130	H V N V I V H R P G V T S P H V Q L F F T D	140
	H I N V I V H R P G V T S P H V G Q V F F T D	
	A N H V N I A V H S T S S P T H V G K L Y F T D	
	P Y F N F R I E H R E L G N F Q T M H V	
	A N H V N I A V H S M S S S T T H V G K L F F V D	
	E R T I H I H T Q A S V D G L L	
	M R V A V L N A K N T L K C G N S A S I S R V Y F D Q	

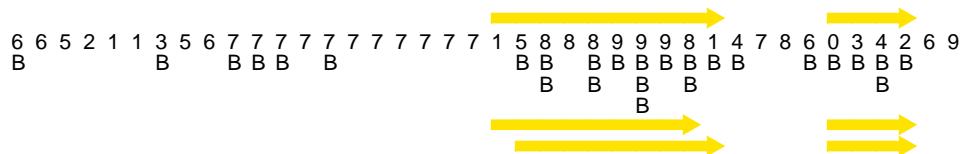
lupas_21
 lupas_14
 lupas_28
 jnet
 conf
 sol25
 sol5
 sol0
 jhmm
 jpssm



UniRef90_UPI0004449F92
UniRef90_W4JUA0
UniRef90_K5XRG4
UniRef90_UPI0004750A49
UniRef90_K5WXB8
UniRef90_K2RY67
UniRef90_W7EUA3

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm

170 180 190 200



UniRef90_UPI0004449F92
UniRef90_W4JUA0
UniRef90_K5XRG4
UniRef90_UPI0004750A49
UniRef90_K5WXB8
UniRef90_K2RY67
UniRef90_W7EUA3

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
solo
jhmm
jpssm