

QUERY	1	10	20	30	40
UniRef90_E4Q7B2	M E Q R S A E T R I V E A L L E R R R I L K D T D L V R A R Q E S G M G L L A L L				
UniRef90_E3IFV5	M V A G K K R L G E L L V E A G L I T T Q E E Q L Q K A Q K S T G K K K L G E I L				
UniRef90_Q3AEE8	M K K K Q E R K R L G D L L V E A G L I T T E E Q L E E A L R E K G Q K K L G D V L				
UniRef90_F7YZ71	M K Q V R K R L G D L L V D A G L I T T A E E Q L E Q V L K E A G Q K K L G D A L				
UniRef90_W8YU27	M S M G K K R L G D L L V E S G V I T T E A E E L Q E A L R E Q G K S S L G D L L				
UniRef90_E6SH74	M A R W F R G Q L G D Y L V E R G W I T P D Q L Q A A Q R R T G R R R L G Q I L				
UniRef90_F4A396	M R T Q K K R L G D L L V E S G L I T T H D Q L L N T A Q R R T D D R L G D I L				
UniRef90_K6D9N2	M K S K R K R L G D L L V E N G L I T T H D Q L Q E A L K E E G Q K K L G N V L				
UniRef90_T0ITX4	S R K H L G D L L I E A N Y L R Q E E Q L E Q A Q K K T G E R R L E E K V L				
UniRef90_D5WWH2	R K R L G D L L I E A G L I T T V E E Q L E R A Q K I T G R R R L G E I L L				
UniRef90_J9HQ50	M P V A R K R M G E I L L V E E A G L I T P E E Q L Q K A Q R E S Q S R R L G D V L				
UniRef90_E4Q3R9	E K R K I G E I L L V E E A G L I T T R Q Q L L E E A Q K K T G K K K I G E I L L				
UniRef90_W4QS95	M A T Q K K R L G D I I L V E E S G M I T D E E Q L M N A Q K K T G A R R L G D Q L				
UniRef90_L0EKU4	R L G E L L I V Q A G L I T T E E Q L Q E A L R E G K E R R L G D V L				
UniRef90_R4K919	K K R I G D L L V D S G K I T T E E Q L Q K K K Q K A T G K R I G E L L				
UniRef90_R1ASI6	K M K L G D L L K S V G K I T T E D E Q L S D A Q K N S G K K K L G E I L L				
UniRef90_UP100047BB2C4	M K Q V R K R L G D L L I E E G L I T T D E Q L Q N T L K E S N Q K K L G E A L				
UniRef90_G7W5L7	M V P R Q D R K R L G E I I I I A G G V I S P T Q L L D E A L K T Q G L R L G E V L				
UniRef90_UP1000185117F	E R K R L G D L L V E S G L I T T E D E Q L Q D T L K D K G Q K K L G D A L				
UniRef90_F8IKZ5	M E T A L A R K R M G E I L L V E S G M I T A P E Q L L E M A Q R E T G A R R L G D I L				
UniRef90_D9TQ90	K K K L G D L L V E V G L I D E N Q L L N N A Q K M T G E K K L G K I L				
UniRef90_U2EFV2	M K R V K K R I G D I I I D A G L I R P D Q I I E T A L K E T D E K K L G D T L				
UniRef90_B8I5K8	R K R L G D L L I E V E M I T P N Q L L E S A Q K K T S E K K L G S I L				
UniRef90_UP1000366EFD5	M E D R T F R R R L G E I I I L A K Y R I T P E E Q L L E K A Q K K T G G K K L G E I L				
UniRef90_L0K8W5	I K K K R L G D I I L V E A G F I T T E E E L I N E A Q K N T E Q R R L G N I L				
UniRef90_L0F7T4	M A I R Q E R K R L G E I I I I A G G G A L T T E E Q L I E A Q K S L G S R R L G E V L				
UniRef90_UP100036C4D81	I K K K R L G D I I L V D A D F I T T E S D L L Q K A Q R G S D Q R R L G S I I L				
UniRef90_UP100042573B5	S K L G E M L V K A Q L I T T D A Q L L E R I Q R R E G G K K L G S I V				
UniRef90_I4D954	M S L R Q D R K R L G E I I I L V T G G A I S P T Q L L D E A Q K T L G L R L G E I L				
UniRef90_V7IA37	A S K M R L G E I I L V S E G L V S E N D I I E S A Q K N S G K R R L G D I L				
UniRef90_UP10003F8D907	M A V K R K R L G D L L I K E A D L I T T E S E I I T A L K K E G Q K K L G D V L				
UniRef90_W4Q5H0	M A K M R K R L G D L L V E S G L I T V E Q L L E Q A L K T D K Q K K L G D A L				
UniRef90_Q1K2V9	A T N R R L G E I I L V R S N N L L T E D Q L V S K A Q K M N K E R F V A T L				
UniRef90_C9R938	M A Q N R K K R L G E R R L V E E G L I T R E Q L L E E A Q A R T G E L L G Q V L				
UniRef90_A7H834	R L G E L L V R E E N L I S Q Q L Q R A Q R K T G G R R I G S L L				
UniRef90_W7YEC0	M N K P R K R M G D L L I E S G L I T T N E Q L Q T A L K E K K I P P I G E T L I				
UniRef90_U2CUF2	M E M K V K R R L G D L L V Q S G K I S M L Q L Q D A L R R Q G K K K L G E I L				
UniRef90_UP1000411DED2	K K R L G D L L V E L L G Y I S E N Q V Q E A Q K A T G K R R L G R I F				
UniRef90_UP10001E2E699	K K L L G D L L V E V G L L G P D D L K A A Q K R T G K K K L G D I L				
UniRef90_UP10003714D57	M A I P F K K Q K L G E I I L L K Q S K L I T T E E I I L Q A D K K E G Q K K L G D A L				
UniRef90_E6U2Z3	M A M K N L R I G E M L L I E N L I T T Q A Q L D A A L A R K K E E K L G D I L				
UniRef90_UP1000288C521	M Q Q R T H R R L G D L L I S A G L I N N E E Q L K T E Q K N P G Q K K L G E F L				
UniRef90_R6ERA0	M E L G R K K V R L G E L L V N S G V L S N E Q L Q Q A L A R Q G K K K L G Q F L				
UniRef90_J7IV59	M E K P Q K Q K I L G E L L M G A G M L T Q A Q L L E E V L A E Q G K R R M G Q I L				
UniRef90_KOAYE7	M L Q R K N R K I G E I I L L E I G L I T T N K Q L L K E A Q K V V G K K K L G E I I L				
UniRef90_UP10004726860	R K R L G E I I L I E K G I I T T Q E Q L L K D A Q K S T G K K K L G E I L				
UniRef90_K0IJX0	M A T R Q K R K L G D I I L K E A N L T T E A E I I L E A L K K D R Q K K L G D A L				
UniRef90_R5VAP3	K K R L G D L L V D A G V I S Q D Q L L V K A L Q K Q G E R R L G V V L				
UniRef90_W8U7S6	R R L G D D I I L L K F G K I T A E E I I L E N A Q K R L K K K K L G E V L				
UniRef90_R5YEV6	K K R L G D D I I L V E A G T I T T Q D Q L L T Q A L E E K K G Q R R L G D V L				
UniRef90_N9WCB6	K K R L G D D I I I Q N G K I T E S Q L L R T A L J A K S G R R R L G E I I L				
UniRef90_D1B5J6	M T T E T K H L R G D I I I I Q A G V L T T E S T L L E A A Q K M S S S M R R L G E I I L				
UniRef90_UP1000466F57C	A K R R I G E I I I I E R G L I T D N E E L I D F A F A Q K L T H E K K L G E V L				
UniRef90_E4TFI2	T K I G A I I I S E N L I T T E E Q L L A K A Q K K E G G R R L G S I I L				
UniRef90_D3PDA5	K I G A I I I I S E N L I T T E E Q L L E K A Q K K E G G R R L G S I I L				
UniRef90_B1YJT8	M A M K R K R L G E M L I E E S V V T E A Q I I E E A L K R T S E K K L G D T L				
UniRef90_B5E974	R L G E I I L L V D A G K I T P T Q L L E E T L K G Q G G R F G T N L				
UniRef90_W4V4A7	A G R K K L G E K L I E K G L I T T E E Q L L N Q A Q S R T G Q L L G Q I I				
UniRef90_K4LIU0	V Q Q R I G R S R I G E V L V E L G Y I V T P E E D I I E A Q L Q K Q G G R L G A Q I I				
UniRef90_X0WAQ1	K K I R I G D V L V A A G A I T T E E Q L L Q E E K Q K K E T G R K K L G N A I I				
UniRef90_F2NPRI	M G L K K K R L G D I I I D E K L T T E E D L L Q R L Q K G T K Q R R L G Q V L I				
UniRef90_UP10003B40D66	M Q L R I G E I I I I A A K M I T T E E D L L Q R L Q K G T K Q R R L G S V L I				
UniRef90_R5WN32	S K L R I G D I I I I R A A E A I N E S Q L L E A Q K K T G M Q L G K V L I				
UniRef90_UP100041AB977	R G I I D E I I I I E M G V I I T D T L L K K A Q R E S K R N I E D I I I				
UniRef90_UP100035C7486	R S K L I G E I I I I R R G Y I I T E E Q L L Q D A L R E T G E R R L G Q V L I				
UniRef90_UP10003B44EDA	K Q L I G E I I I I E E G L V N E A Q L M A A L D E Q G T S L G R V L I				
UniRef90_M1YXP7	A Y R R I G E I I I I A A K M I T T E E D L L Q R L Q K G T K Q R R L G S V L I				
UniRef90_G8M0J6	S K L R I G D I I I I R A A E A I N E S Q L L E A Q K K T G M Q L G K V L I				
UniRef90_E4U6Y6	R G I I D E I I I I E M G V I I T D T L L K K A Q R E S K R N I E D I I I				
UniRef90_D1BGY1	K Q L I G E I I I I E E G L V N E A Q L M A A L D E Q G T S L G R V L I				
UniRef90_UP10003B52F7C	M V D S P S P P L R I G D D L L V N A G A I T E K Q L L Q S A Q Q L T N R L G E I I I				
UniRef90_C9XSB6	M K P V A K K V R I G D K L V E K G Y I T E D Q L L K W A Q K N S G K R R L G E F L I				
UniRef90_F2JMC2	K K M Q R K R L G D D I I I F E T G M I T G E E Q L L E K E Q K R T G K R R L G E I I I				
UniRef90_D4LR24	R L G D D I I I R Q N V L T T E E K L L K Q A Q K G T G K K K L G E V L I				
UniRef90_H9ZTR7	A R P K L G E I I I I D L G Y I T T E D Q L L K A A Q E R T G D L L G Q I I L				
UniRef90_R9C858	M E A G L L T E D Q L L Q Q A L K D K H Q R R L G D S L L				
UniRef90_Q39ZG4	R L G E M L V K T G R I T P T Q L L D E A L R Q T S G G R R F G T N L				
UniRef90_B0K0R6	R L G E M L V K T G R I T P T Q L L D E A L R Q T S G G R R F G T N L				
UniRef90_S2XPP0	R K R L G D L L V E N G L I T T D D Q L L T N V L Q N K P E K L G D A L				
UniRef90_W7UCC2	E R I G D Y L V N Q G L I T T S E Q L L Q Q A Q K K A S N K K F G D V V				
UniRef90_UP100047CCE08	R K R L G D L L V E S S N L I T T E E Q L L V K T L Q E K S E K K L G D A L				
UniRef90_UP10003706716	L Q E Q V R R I R I G D L L I I D Y Y G H I T T E T E L L E E A L K R Q K R K L G Q V L				
UniRef90_10GL02	T G N L K L G E I I I I N E G K I S K E E Q L L E S A Q A K T G R K K L G E I I I				
UniRef90_E0QKB4	M Q K A K R L G D I I I I N E S K A I T Q E E Q L L M S A L Q K Q K K K L G E I I I				
UniRef90_Q3A7J6	M T A R K K I R I G E I I I I V Q H H I T S E E Q L L N T A Q K R T G S K K L G H T L				
UniRef90_UP10002D6BF2A	M A R K I K R L G E I I I I V Q H H I T S E E Q L L N T A Q K R T G S K K L G D K L L				
UniRef90_C4Z588	M N Y R K K I R L G D D V L V K K G I I D E N Q L L Q T A Q R E Q G K M G E M V				
UniRef90_UP10003B4EFC29	M D K T K E P K R L G E I I I I M E N G V L K D A D L L K K A Q K E E E G G L L G Q I I L				
UniRef90_R7BP08	M S G V R K K I R L G D V L I N E G K I T Q E E Q L L D T A L K E Q G K L L G D T L L				
UniRef90_E4TEJ3	M D V R K K I R I G E I I I I K E K N K L I T T E A Q L K V A Q Q T S G K K K L G E V L I				
UniRef90_A0LEG8	K K I G E I I I I L Q E G L I S K E E Q L L D R A Q H Q T G E R I G G V L				

QUERY UniRef90_E4Q7B2 UniRef90_E3IFV5 UniRef90_Q3AEE8 UniRef90_F7YZ71 UniRef90_W8YU27 UniRef90_E6SH74 UniRef90_F4A396 UniRef90_K6D9N2 UniRef90_T0ITX4 UniRef90_D5WWH2 UniRef90_J9HQ50 UniRef90_E4Q3R9 UniRef90_W4QS95 UniRef90_L0EKU4 UniRef90_R4K919 UniRef90_R1ASI6 UniRef90_UPI00047BB2C4 UniRef90_G7W5L7 UniRef90_UPI000185117F UniRef90_F8IKZ5 UniRef90_D9TQ90 UniRef90_U2EFV2 UniRef90_B8I5K8 UniRef90_UPI000366EFD5 UniRef90_L0K8W5 UniRef90_L0F7T4 UniRef90_UPI00036C4D81 UniRef90_UPI00042573B5 UniRef90_I4D954 UniRef90_V7IA37 UniRef90_UPI0003F8D907 UniRef90_W4Q5H0 UniRef90_Q1K2V9 UniRef90_C9R938 UniRef90_A7H834 UniRef90_W7YEC0 UniRef90_U2CUF2 UniRef90_UPI000411DED2 UniRef90_UPI0001E2E699 UniRef90_UPI003714D57 UniRef90_E6U2Z3 UniRef90_UPI000288C521 UniRef90_R6ERA0 UniRef90_J7IV59 UniRef90_KOAYE7 UniRef90_UPI0004726860 UniRef90_K0IXH0 UniRef90_R5VAP3 UniRef90_W8U7S6 UniRef90_R5YEV6 UniRef90_N9WCB6 UniRef90_D1B5J6 UniRef90_UPI000466F57C UniRef90_E4TFI2 UniRef90_D3PDA5 UniRef90_B1YJT8 UniRef90_B5E974 UniRef90_W4V4A7 UniRef90_K4LIU0 UniRef90_X0WAQ1 UniRef90_F2NPRI UniRef90_UPI0003B40D66 UniRef90_R5WN32 UniRef90_UPI00041AB977 UniRef90_UPI00035C7486 UniRef90_UPI0003B44EDA UniRef90_M1YXP7 UniRef90_G8M0J6 UniRef90_E4U6Y6 UniRef90_D1BGY1 UniRef90_UPI0003B52F7C UniRef90_C9XSB6 UniRef90_F2JMC2 UniRef90_D4LR24 UniRef90_H9ZTR7 UniRef90_R9C858 UniRef90_Q39ZG4 UniRef90_B0K0R6 UniRef90_S2XPP0 UniRef90_W7UCC2 UniRef90_UPI00047CCE08 UniRef90_UPI0003706716 UniRef90_I0GL02 UniRef90_E0QKB4 UniRef90_Q3A7J6 UniRef90_UPI0002D6BF2A UniRef90_C4Z588 UniRef90_UPI0003B4EFC99 UniRef90_R7BP08 UniRef90_E4TEJ3 UniRef90_A0LEG8

	50	60	70	80
G R L G L V S E R D H A E T C A E V L G L P L V D A R Q L G D T P P E M E V Q G				
V E Q G F V T E D E I V V E V L E F Q L G I P H I K L D Q Y N I D Q E A V S L				
L Q L G Y I T E Q Q L I E V L E F Q L G I P H V S L Y R Y P I D P K L T N L				
I K L G Y V S E Q D I M G V L F Q L G I P H I S L F R Y P F D Q S I M N L				
L Q R G L I T E Q Q L I E V L E F Q L G I P H V S L A L Y N Y S L D P A L I K S				
I A Q G Y I T E Q Q L I E V L E F Q L G I P H V S L F R Y P F D Q S I A Q I				
L R H G W I T R A Q L Q E A L A Q L A V R V W D L R R N P P D P A V V A R R				
V Q Q G F I T E R Q M F E V L E F Q L G I P Y V D L D R T F D I G V V R M				
I K K G Y I T E Q Q L I E V L E F Q L G I P H V S L F Q Y P I D I N L V N L				
I N L G Y I T E A N M I E V L E F Q L G I P Y V N M V A M D V P H E I A A T				
T Q S G V L S E D Q L I V M E F Q L G I P H V D L D R F R A D P A A V E L				
I N N G Y I S E S Q L I V E F Q L G I P H V V L D S N M R I D P A V L H				
V E K G Y V T E D E I I L E V L E F Q L G I P H V K L D Q Y V I D P D V I N L				
V D M E A V T E Q Q I I E V L E F Q L G I P H I N N L Y K Q K I D P K L I G I				
I A M G Y I T E Q Q R I E V L E F Q L G I P H V Q L Y R E N I D P R A I Q M				
I E E K F L S Q D D V I D I L E I Q N G I P R V Y M E M T N V D K E A I Q A				
V E K G Y V T E L D I I Q V F Q F G I P H I D L N T Q Y P F D T N I F S L				
V Q R G L I T E Q Q L I E V L E Y Q L G I P H I S L T Q Y P F D T N I F S L				
I H H G L V T E D D I I R T M Q S Q L G L P I D L N Q I V V A E Q I L Q K				
L Q R G Y I T E Q Q L I V E V L E F Q L G I P H V S L Y R Y P F D T T L F H				
I N N G Y I T E Q Q L I V E V L E F Q L G I P H V I L A N M K I D P E V L K L				
V K E G Y I T E E Q I I E A L E F Q L G I P H I D I K K V F I D P N V A K L				
I R V G Y V T E N Q V M D A L A L Q L G I K K V V S L S D Y M L N E T I L R L				
T K L G Y V T E D D I I Q V E F Q L G I P H V K L E K Y N D K S A Y L A				
Q K M G L V E S K E V Y E A L A E Q L G I P Y V D L D S Y V I D P R V V T L				
K R M G L V T D E S V M E A L E F Q L G I P R L D L K Q M I I D P E V I N M				
V R Q N F V P E E D I L R T I I Q K Q L G I P S V D L N R I V V T E N I L K M				
Q E L E L V T E Q D I I V E F Q L G I P Q V D L E Q W P P I D P T V I A L				
V R Q G Y C S D Q D I I V S F L G M Q Y G V P A A D L E Q W P P I D P T V I A L				
I K Q G L V M E E E I L R T M Q S Q L G L P S I D L N R I A V P E Q V L K A				
V G Q G L V T Y D E M I H A V K N Q L L N V P L V D L D E V H R Q E T L S L				
L E K G Y I T E Q Q L I V E V L E V Q L D I P R I S L Y R Y P D P T I I N I				
L Q Q G F I T E Q Q L I V E F Q L G I P H V S L L F R Y P D P N V I K M				
I R L K Y I S E D D I I A A F L S R Q Y G A P A I N L A E F E V D T D V V K L				
V R M G A I S E E D I I L N R V L G I S S A T K E L Q V S P E E L L K K L				
V R T G A I S E H D L T S F L S K Q Y G V P A I S S L K D F D D D E V L K K L				
M Q L G Y I S E Q Q R I I E V L E F Q L G I P Y V S L L F K Y P D T K L L N I V				
I H E G L V T A E D I I M E V L E E K Q T G I E R I N L D T I T D R K A I K V				
V E L G Y I T E E S I I I N I L L E L Q L G I P R I N L E L I D V D M N A V S T				
V Q E K F V T Q D D I I Q V E F Q L G I P H V K L E K Y N E P S A Y L Q				
L E Q G Y I S E K Q Q L I D V L E E Q L G I D S V S L L Y L Y P K E Q V L D L				
V E M G S V S E K E L L T R M L G T R L K V P V V D L V I E T G I D Q H V P D L				
I E R G Y I S E Q Q L I T D A L S S D Q L S I I P Q V H L A G I V I D Q S A A E L				
V D E G I V S E D D I I A K A L S S Q K Q L D L I D M I D L Q S I N V D K E V L N L				
I L E R N I L L T E E E I I M D T L A V Q Q L S L S I E R F D I G K A F I D P E V A R C				
N D E G M V S E Q Q I I E V L E L Q L G I P H M D I S K F F I S L E A T K L				
I S Q N L I S E A K M A E V L Q E Q L G I P F V D L N K V A L D P K L T E Y				
V E Q G Y I T E K Q Q I L I E V L E I Q L G I A T I S L Y R Y P I D E Q L V E L				
L D L G F T D D E K Q I I E V A L K A Q L K I Q S V D L S T R I P E E I I R L				
I E L L G Y V T D S D I I E V L E H Q L G I H H F E L D N C Y E P S S V P K L				
L R L G H T E Q Q L I E A E L H Q L K I P V I Q L Y N Y P V D V A V T K L				
V E M G Y L D E Q E I I A H F L S Q K T G I A H T S P E Q L M E I P P H V V G A				
L E L G L V S Q K D I I M H A N A V K M G I S F V D L S T Y Q I A D S S V P L				
V E M N L L D E E E I I L K K V L G V E E L D L K E E I D T A L L E E I L				
T K L G F L E I E S E L L S D F V A K Q Y G I P G I D D E F E V D P A V I Q L				
V Q S G K I N P E M L A K S I I A I Q Q G Y P Y I D P Q E T P P D P G V V M L				
V E K G F V D E K T L I N E F L S K Q Y G V D S I D L S S I E I P R E V I K K				
V D L G F I S N D M L I T V L T T Q L G I D Y I E L L K G A K I E D K V I H M				
I S N K I V S P E D M A K T L A V Q L E V D Y I D L A N A A I P Q E M T K Y				
K E L G L T T E D E I I A V A L H H Q L G V L L A E N D K Q N I K E E M F E				
I S N G I I T E E D I I N A L Q M Q L G I E Y V D L T K V D I P I E M A Q I				
V Q M K Y I T D K D L V S S L S E Q M D I P Q A D L E N I K I S N E A I D L				
V E L G L G A S P K D I M R A N A T K M G I E F I D L S T E G V K D T T I Q N L				
UniRef90_E4U6Y6	V L R G Y L K E E D L V R A L A T T Q Q A E V V H L G Q V E A D P E A V A V L			
V E L G V L S E G Q L V S A L A A Q V G M Q F V D L D T F P V D R A A V V S R				
UniRef90_D1BGY1	I K N G F L T E R Q L A E A L S N Q L K L P L V T L A R Y R P M I E A L R M			
UniRef90_UPI0003B52F7C	V Q E G L I D S N L I S V V K E L L D I E S I F L E G T E D T L A T K M			
UniRef90_C9XSB6	V E K G I V T E E N I L G A L E F Q L G I P H M N L E Q Y T I D Y N I A S R			
UniRef90_F2JMC2	V E N G F I T E E M I I A R A L Q T Q L G I K I I E L T G V T I P K E V R N L			
UniRef90_D4LR24	L R R G Y I R E E D L V R A L A D Q Q R A P L I H P A Q T P L D P Q A L R L			
UniRef90_H9ZTR7	L Q K G Y I T E Q Q L I E V L E F Q L G I P H V S L Y R Y P F D P K L F T I			
UniRef90_R9C858	V E M G C I D E E E I L A R V L S E E K L R V P C V D P D E L M N I S P A I I E A			
UniRef90_Q39ZG4	I K L G Y V T E S Q I I L E A L F Q L G I P Q V Q D L Y H Y P F E A K L F N L			
UniRef90_B0K0R6	L Q Q G I I T E Q Q L L E V L E I Q L G I P Q V Q D L Y H Y P F E A K L F N L			
UniRef90_S2XPP0	V E L L G F M S E V N F A K A L A G N L R V Q Y V D L D N V E I N T E A V Q M			
UniRef90_W7UCC2	L R E G Y I T E L Q L I E V L E Y Q L G I P H I K L Y S Y P F D P N V A K Q			
UniRef90_UPI00047CCE08	V E L L G F M S E V N F A K A L A G N L R V Q Y V D L D N V E I N T E A V Q M			
UniRef90_UPI0003706716	I D M G L V S Q A Q I L D V L A D Q Q P Q V D L R R Y Q F D P N V A K Q			
UniRef90_I0GL02	I E R G L I T P T E L S K L L E R Q S S I P S I S L E E I Q P D P N I S S V			
UniRef90_E0QKB4	V L E G G L K E E Q I L K V L E A Q L R I I P Y V S S N F S I D K N A A N M			
UniRef90_Q3A7J6	V E L G L S P T G F L K F L G Q Q L Q G I E H E R L R H Y Q Y K A E T V R L			
UniRef90_UPI0002D6BF2A	I E E G L I T E L Q L V I E V L E Q Q L G I D F V D M R E T D V S E D V L S M			
UniRef90_C4Z588	I A L G Y A T Q R D I N E A L C D S L G I D F V D M R E T D V S E D V L S M			
UniRef90_UPI0003B4EFC99	V G K G F V T E E D V V V A L A Q Q L N Y P Y L P V S N F V I N K H A A Q A			
UniRef90_R7BP08	V D L G Y V T Q D D M I D V L C R H P F I D L R H Y Q Y K A E T V R L			
UniRef90_E4TEJ3	E D L G Y V T E K Q K L L Q V I S E Q L G T K I L K A S D V E I N P D L K K L			
UniRef90_A0LEG8	L K L G F V S E E M L T E F I A K Q Y S A P Q V N I A K L T V P K D V L G L			

90 100 110 120

QUERY	UniRef90_E4Q7B2	UniRef90_E3IFV5	UniRef90_Q3AEE8	UniRef90_F7YZ71	UniRef90_W8YU27	UniRef90_E6SH74	UniRef90_F4A396	UniRef90_K6D9N2	UniRef90_T0ITX4	UniRef90_D5WWH2	UniRef90_J9HQ50	UniRef90_E4Q3R9	UniRef90_W4QS95	UniRef90_L0EKU4	UniRef90_R4K919	UniRef90_R1ASI6	UniRef90_UP100047BB2C4	UniRef90_G7W5L7	UniRef90_UP1000185117F	UniRef90_F8IKZ5	UniRef90_D9TQ90	UniRef90_U2EFV2	UniRef90_B8I5K8	UniRef90_UP1000366EFD5	UniRef90_L0K8W5	UniRef90_L0F7T4	UniRef90_UP100036C4D81	UniRef90_UP100042573B5	UniRef90_I4D954	UniRef90_V7IA37	UniRef90_UP10003F8D907	UniRef90_W4Q5H0	UniRef90_Q1K2V9	UniRef90_C9R938	UniRef90_A7H834	UniRef90_W7YEC0	UniRef90_U2CUF2	UniRef90_UP1000411DED2	UniRef90_UP10001E2E699	UniRef90_UP1003714D57	UniRef90_E6U2Z3	UniRef90_UP1000288C521	UniRef90_R6ERA0	UniRef90_J7IV59	UniRef90_KOAYE7	UniRef90_UP10004726860	UniRef90_N9WCB6	UniRef90_D1B5J6	UniRef90_UP1000466F57C	UniRef90_E4TFI2	UniRef90_D3PDA5	UniRef90_B1YJT8	UniRef90_B5E974	UniRef90_W4V4A7	UniRef90_K4LIU0	UniRef90_X0WAQ1	UniRef90_F2NPRI	UniRef90_UP10003B40D66	UniRef90_R5WN32	UniRef90_UP100041AB977	UniRef90_UP100035C7486	UniRef90_UP10003B44EDA	UniRef90_M1YXP7	UniRef90_G8M0J6	UniRef90_E4U6Y6	UniRef90_D1BGY1	UniRef90_UP10003B52F7C	UniRef90_C9XSB6	UniRef90_F2JMC2	UniRef90_D4LR24	UniRef90_H9ZTR7	UniRef90_R9C858	UniRef90_Q39ZG4	UniRef90_B0K0R6	UniRef90_S2XPP0	UniRef90_W7UCC2	UniRef90_UP100047CCE08	UniRef90_UP10003706716	UniRef90_10GL02	UniRef90_E0QKB4	UniRef90_Q3A7J6	UniRef90_UP10002D6BF2A	UniRef90_C4Z588	UniRef90_UP10003B4EFC29	UniRef90_R7BP08	UniRef90_E4TEJ3	UniRef90_A0LEG8					
L S L R F L K Q F H L C P V G E R D G R L D L W I A D P Y D Y A I D A V R L A	V S E N I A K R H T L I P I K V E G D K I Y V A M A D P L N I F A I E D D V A I Y	I P K E F A K R H M V M P L K V E G E R L L V A M A D P M D F F V I D D L R L S	I P P E S L I K R H K V I P L K R E G N R L T V A M A D P L N V V A I D D L R L A	V P K E M A K R N L L I P L K K D G D K L F V A M A D P M D F N A I D D L R l s	I P P E S L A R R Y Q V I P P L H K E G G K L M V A M A D P L D Y F A I E E E L R M s	V P D W V A R R Y Q V L P P V D D G R R L V V A M A D P T D L E A L D Q V R l v	V P I Q V A R T H N A I P V R M D G N M L W L A M S D P L D I I A M D D I H R I	V P K E F A R R K S L V P P L K K S G D R L F V A M A D P M D Y I S I D D L R l R	I P V S L A E R Y Q V I P P I K K E G R K L T L A M A D P T N F F A I D D D V R M A	V P E A L A R R Y K V I P P L K R S G N R L T L A M A M V D P L D Y F A I D D D I R M T	V P E R L V E S Y Q V I P P Y R K S G N R L Y V A M A D P L N I F A I E D D V A I F	V S E S I A R R H T L L I P I Q L K D D K L V V A M A D P L N I F A I E D D V A I F	I N E E L A R R Y Q V I L P V E R I G D K L T V A M A D P L D Y F A L D D D L R l S	V P R M L A E T H K V L P P Y R I E G N K L I V A M S D P L D Y Y A I E E E L R M A	V P E S L A N K Y V L I P I K I K D N T I H V A M V D P L N M F A L D D D V K l A	I T E N L A K R H L V I P P I K K D R G R K L L V A M A D P L N V V A I D D D I E M G	V A K E T A R R N L L I P P L K K D G N K L Y I A M V D P M D F I V M D D D L R l s	L P E K V A R K Y S V L P P V E I S D G Q L M V A M S D P T D Y F A I E E D L R l A	M P E K E S A K R N L M P P L K K E G D R L L S V A M S D P M D F Y S I E E D L R l s	M P E R L A E T Y V L I P P Y R K S G N R L Y V A M A D P L D Y Y A I D D D L R R s	I P E S L A K R H V A I P I K K E E N D G L L L V A M A D P L N I F A I D D D I K l i	I S E D Y A R Q N A V V P P L A F E E D G K L V V A A D P L N Y Y V V D D D L R l l	I P P E S L A R R Y G L I P I K K E E N G T L T V A M S D P L N V F A I D D D I N l Y	I P K F C R Q H Q V V P V G E K N T L L L A M A N P V D V V A I D D R V R l m	I P K S L A E R H K A I P V K Q K D N A L L T V A M A D P L D I I A I D D D I R l i k	I P P E A V A R K Y T V L P P V E F S S N G Q L L V A S S D P T D Y Y A I D D D I R l l a	I P P A L A H R H A I P I K K K G N I L T V A M E D P L D V L A I D D D I R l i k	I P K D L A Q R K H V K V L P P L Q R T G N V L T L A M S D P T D I F A M D D D V R f h	L P E N V V R K Y G V L P P V E L E N G Q L L V A M S D P T D Y F A L D D D L R l a	M P E R L A R K Y E A I L P P I R V D D N G Q L T V A M S D P S N Y F A I E E D D I R M A	V D K E F A Q R N M V I P P I N K E G D V L T V A M N D P M D Y F A I D D D L K l s	V S K E M A T R N F I P P I K K E G E K L L V A M A D P M D Y Y A I D D D I R l s	I S A D V V V Q K Y H L V P P I N R A G S T L L I V A M S D P P S N I F A I D D D I K F M	V P E E D L A R S R K V F P P L K K E G N R L L F L L M A N P L D I T T I D D D I R l w	V P K S T A E K H Q V V P V N R A G A S L I V A M S D P P S N I F A I D D D I K F l	V S K E T A E R N K L I P P L K K E E N D K L F V A M A D P M N F Y A I D D D I R l s	V P E S M C L K H D L L I P P F G F E N E N K I K V A M A W D P L N I F A I D D D I S l a	I S E E G L A K K Y N L I P P I S S K N G V L T V A M S D P P S N I F A I E E D D I V E l l s	I P E H L A R R H A S I P I S S K N G V L T V A M S D P P L N I F A I D D D I K l l f	V S K D F A R E H H L I P P I D Q E E N K L T V A M H D P I D Y F A I D D D I R l l a	I P E E L A K K Y M V I P P I A Q D G Q I L T V A T S D P M N F Y A I D D D L R l a	I D Q D F A R R N E L I P P Y K K K D G Q L Y V A M A M A N P L D L F A I D D D L Q M M	V P V N V L K K N K I F P F A Y K E N V L M V A M A D P L D D Y N A I D D D I N l i	V D E A V A L R K Y N L P P F K F N E K N L C V A M S D P P L D I R A M D D D V S l i	V P K E V A K K Y N L P P F G E K D G K L Q V A M S D P P L N I F A I D D D I S f l	I D E V L A R R Y T L L I P I S K T E T T T L V V A M T D P T N I F A I D D D I R M s	V P F I L L A K R H S L I P I K L E E D G K L Y I A M E D P L D F A A I D D D L K R v	V P K E V A R S N I L I P P I E L L Q D H T L T V A M N D P L D Y F A I D D D L E l l	V P K E A V R K Y N L P P F K F N E K N L C V A M S D P P L D I R A M D D D V S l i	L D E A V A L R K Y N L P P F K F N E K N L C V A M S D P P L D I R A M D D D V S l i	I S E G Y A I E N Q V I P P V K L Q G G E L T V A M S D P P F N I I A I S Q L E R M	V E E A V L R K H N L I P P F Q F H E N V I K V A M S D P P L D I R A M D D D I S l i	V P E T L C K K H H I P L Q A D E Y N I C V T S D P L D I R F A D D D I N l v	V P E N L A R R L D V V P P L S I E N K L I V A T A D P L N V M A L D E L K M A	V P R R N T A R Q N H L V P P L Q K Q G D T L F V A M E D P L N Y F A M D E E V R K A	I P K D L C R K Y M V V P P F D R A G N V L S V A I A D P S N A Y A L E D E L R F I	I P Q E E M M Q K F L V V P P F D R E G Q T L K V A A L A D P S N V Y A M E E L L R F l	I S K E E L A Q R H T L V P P V Y R E G N R L F I A M A D P M D L I A I D D D L R l Q	V P E E Y V R K Y R V M P P V A L L N N R K L T L A M L D P S D F Q A I D E I A F A	I T R N I A N R Y K V I P I E K D N G V L T V A M S D P T D I F C I D D I R l a	V P E E V I R K Y R V F P I R K E G E R L Y L A M A D P Q N V V V L D D D R l l	I P E E V A H K H T V L P P V N R A G S T L I L A T A D P S N I F A I D D D I K F l	V P E A T A R R Y T V F P H E L E G D A L V V L M K D P R N I F A I D D D I R M f	V P K N I A Q K Y T L I P V E V D K N K I K V A I A D P T N I F A L D E E V R F i	V P E S M V T K Y Q A I P I E D N P N I L K V A M A D P M D I M A M D D D I G l v	V Q R N I A K Q N H L V P P V Q K E G D S L Y V A M D D P L N I Y A L D E E V R K V	L D E E D I R E E K R V F P I R K E G E R L I L A M E N P Q N V V V I D E E D Q	L P K N I A R Q Y Q V V P V R V V K D E L Y L A M S D P M N F Y A I E E V R K A	V E E K F A R K Y M L I P P F K V E G K K L N L A I T N P F D L F A I D E E I A V K	T K N I A H R Y K V L P V K E K D N N V L T V A M K D P T D I F S I D D I R l a	I T K N I A H R Y K V L P V K E K D N N V L T V A M K D P T D I F S I D D I R l a	V D D R F A K R K H L V P P F Y R L D G H R L Y V A M A N P G D L K L I D E E L R Y M	L T G A V V C R R Y T V L P I A F E G D A L V L A M A D P G N V L A V D D E V R S S	V P E S V A R R L E L L P P L A V L D N R L F I A M A D P L N I L A I D E E I R M l	V P E N I C K R Y T V F P F K I D G N K I C L A M S D P Q D R E A V Q D D V R R M	V P E S I A R R Y T V I A V G I L D D N K L K V A M K D P L N M F A L D D D L K l s	V S V N L L K K Y Q C I P P F E Y N A N I L H L A M S D P P M D M A A I D D D I S l v	L D P R F A R E K R V L P P F K V E G N R L H V A M A M H P S D L A L D E E L R F r	V S K E T A K R Q L I I P P L K K E G E K L Y V A M A D P M D F Y T I D D L R l s	V P L E V V E Q Y Q V I P P V R L R E N R R L F L V M A M D P P S D L P A I D Q I A F R	V P E A V A K R H T I I P I K K D E D G I L V V A M A D P P L N I F A L D D D V R l i	V P K D V A K R S L M V P P L K V E G D K L Y V A M K D P M D F I T M D D D L R l i	V P E A L A R K H T V I A I N V Q G K R L L T V A T N D P V N F V L E D D I R M s	V P E T L A R R F R A I L P P L S E G R D G I L V V A M A D P P T D I F A Q D E I A R s	L P E L F V R V N K V L P P L R R I N D A L E V A V V P P I N P E V L E N V K l l	I S E Q V A K K Y N V I P P L K V N R G R L L L A M S D P P L D I F A I D D D V K l l	L P E I Y V R F R A V L P P K R E Q N K L F V A T A D P P L D Y F V L N N l R l Q	L D E N I M R K Y T L V P P L G D A P D N I R V A M A D P T N I L A M D D I N l v	I P S S L A L E Y V C I P P V D K V V G G R L A V V M S D P S N A T A V R K L L E R A	V P K Q F A I E N V I P P L K R E Q N K L F V A T A D P P L D Y F V L N N l R l Q	L P E D N A R R L K L V P P Y K N R A N V I W V A M A D P M D I M A I D D D V S l i	I P L D I A A K Y Q A V P P F G V M G T T V N V A M A D P P G N L F V I D D M R F l

QUERY

UniRef90_E4Q7B2
UniRef90_E3IFV5
UniRef90_Q3AEE8
UniRef90_F7YZ71
UniRef90_W8YU27
UniRef90_E6SH74
UniRef90_F4A396
UniRef90_K6D9N2
UniRef90_T0ITX4
UniRef90_D5WWH2
UniRef90_J9HQ50
UniRef90_E4Q3R9
UniRef90_W4QS95
UniRef90_L0EKU4
UniRef90_R4K919
UniRef90_R1ASI6
UniRef90_UPI00047BB2C4
UniRef90_G7W5L7
UniRef90_UPI000185117F
UniRef90_F8IKZ5
UniRef90_D9TQ90
UniRef90_U2EFV2
UniRef90_B8I5K8
UniRef90_UPI000366EFD5
UniRef90_L0K8W5
UniRef90_L0F7T4
UniRef90_UPI00036C4D81
UniRef90_UPI00042573B5
UniRef90_I4D954
UniRef90_V7IA37
UniRef90_UPI0003F8D907
UniRef90_W4Q5H0
UniRef90_Q1K2V9
UniRef90_C9R938
UniRef90_A7H834
UniRef90_W7YEC0
UniRef90_U2CUF2
UniRef90_UPI000411DED2
UniRef90_UPI0001E2E699
UniRef90_UPI0003714D57
UniRef90_E6U2Z3
UniRef90_UPI000288C521
UniRef90_R6ERA0
UniRef90_J7IV59
UniRef90_KOAYE7
UniRef90_UPI0004726860
UniRef90_K0IXH0
UniRef90_R5VAP3
UniRef90_W8U7S6
UniRef90_R5YEV6
UniRef90_N9WCB6
UniRef90_D1B5J6
UniRef90_UPI000466F57C
UniRef90_E4TFI2
UniRef90_D3PDA5
UniRef90_B1YJT8
UniRef90_B5E974
UniRef90_W4V4A7
UniRef90_K4LIU0
UniRef90_X0WAQ1
UniRef90_F2NPRI
UniRef90_UPI0003B40D66
UniRef90_R5WN32
UniRef90_UPI00041AB977
UniRef90_UPI00035C7486
UniRef90_UPI0003B44EDA
UniRef90_M1YXP7
UniRef90_G8M0J6
UniRef90_E4U6Y6
UniRef90_D1BGY1
UniRef90_UPI0003B52F7C
UniRef90_C9XSB6
UniRef90_F2JMC2
UniRef90_D4LR24
UniRef90_H9ZTR7
UniRef90_R9C858
UniRef90_Q39ZG4
UniRef90_B0K0R6
UniRef90_S2XPP0
UniRef90_W7UCC2
UniRef90_UPI00047CCE08
UniRef90_UPI0003706716
UniRef90_I0GL02
UniRef90_E0QKB4
UniRef90_Q3A7J6
UniRef90_UPI0002D6BF2A
UniRef90_C4Z588
UniRef90_UPI0003B4EFC99
UniRef90_R7BP08
UniRef90_E4TEJ3
UniRef90_A0LEG8

130 140

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

1 10 20 30 40

R L G E L L V R E N L I T V Q A L R K A Q Q K S G T R I | G T A |
 K K R L G D I L V M A E K I T P F Q L Q Q N A L K T Q G K K K L G E V L
 I G Q L L V E N G F L K E D Q L E E A L E K Q G K K K L G D V L
 K I R L G E M L V E Q G M L T K E D Q L D S A L K K Q G L K L G Q Y L
 M A K K R V K L L G E L L V E H E Y I T A K E E L K E A L N K T D K K I G E V L
 R P E K I R L G E D L L V Q Q K L L S E T Q L Q L A Q K K S G R K K L G R F L
 R P E K V R I G D D L L V S E Q L I S Q D Q L K A A A Q Q R T G R K K L G R V L
 T R L G D D L L V S V G L I T Q E E L E H A Q K K T K H R L G R E L
 R P E K I R L G E I L L I Q Q N L L S P E E Q L E L A Q K R T G R K K L G R V F
 A K I R L G D D L L V Q Q H I I N E E Q L M Q A Q K E S G R K K L G F M L
 R P E K I R L G D D L L V H E G Y I T E A Q L K L A Q K L T G R K K L G R I F
 R L R G D I L V H E G Y I T E A Q L K L A Q K L T G R K K L G E T L
 K D K H S K V R V G D D L L V E K K N I I S E E D Q L Q Q A Q K R S G R K K L G R A I
 R I I K K R L G D T L V D E K I I T E D E L V K A L E K Q N K K L G E T L
 K L G D D L L V K K G W L S P Q A L Q A A Q E K S G E L L G R V L
 K I G E L L V V K Q G L L K P D Q L S A A Q K K S G H K L T T A I
 R P E K V R L G E L L V Q Q K L L S E E Q L Q Q A E Q K R T G R K K L G R I F
 R K R L G E M L V E E G L L S T E D L H K A L K S Y G M K L G Q Y L
 R R F G D D L V E E E G L I E E D E L K K A Q R K S A Y K L G Q I L
 S Q K V R I G D D K L V E E K G Y I S R E E Q L E R A L K G T G K R I G E I L
 K L R I G D D K L V E E K G Y I T K E E Q L T W A Q K I T G E R L G E L L
 A Q R K L G Q I L V D L G Y I S E E D Q L L E E Q K R S P G E I I G Q V A
 M Q I K L R K R L G D D L L V E E E G I I S E E Q Q V E Q A Q K S T G R K K L G A T L
 M K V R L R K R L G D D L L V E E E G I I N E A Q Q L D Q A Q R S G G R K K L G D T L
 K M R L G E M L I Q E G L L T Q Q Q L E K C A N R G T G L K L G Q F L
 UniRef90_X1BMC1
 UniRef90_F0S1Z2
 UniRef90_B5YED2
 UniRef90_I3IMV6
 UniRef90_D3PQ1
 UniRef90_W0RN20
 UniRef90_C1CY06
 UniRef90_B5F9K6
 UniRef90_B8DPS6
 UniRef90_R7AM85
 UniRef90_L7VP83
 UniRef90_C9RLV9
 UniRef90_E9SAJ4
 UniRef90_G3IYQ0
 UniRef90_A9G5Y5
 UniRef90_R6L1A5
 UniRef90_I4CWA3
 UniRef90_UP10003B776B2
 UniRef90_Q1K1Z3
 UniRef90_Q1J1R8
 UniRef90_E8R134
 UniRef90_UP10003B503E3
 UniRef90_UP100037ECA3B
 UniRef90_Q6LM91
 UniRef90_Q1Q644
 UniRef90_UP10002F39286
 UniRef90_UP100023779A6
 UniRef90_X0XIV0
 UniRef90_UP100047C8ADD
 UniRef90_Q2BKX7
 UniRef90_UP100039555BE
 UniRef90_Q2S978
 UniRef90_D7CSM8
 UniRef90_E8WMT0
 UniRef90_B2TQN1
 UniRef90_W0BI57
 UniRef90_D2R473
 UniRef90_A1WTV8
 UniRef90_UP100037C30C7
 UniRef90_A8H939
 UniRef90_UP10003F4C7F1
 UniRef90_X1CBV7
 UniRef90_UP10003611D84
 UniRef90_A0A023X1F5
 UniRef90_UP100037CCC6E
 UniRef90_S0FWA4
 UniRef90_B3PKC6
 UniRef90_A4J3B6
 UniRef90_UP10003685551
 UniRef90_B8E071
 UniRef90_W6MA10
 UniRef90_D7DHY1
 UniRef90_D3PQS2
 UniRef90_Q3A3E8
 UniRef90_D5SPP6
 UniRef90_H7GIW2
 UniRef90_B113E7
 UniRef90_F6DH59
 UniRef90_UP10003825603
 UniRef90_R5TXB1
 UniRef90_C5BR26
 UniRef90_A8MGF8
 UniRef90_D7DKS2
 UniRef90_I3BX63
 UniRef90_Q5QWD0
 UniRef90_UP100036042A8
 UniRef90_A4J3A4

50 60 70 80

UniRef90_Q08YY5	I K T G A I E E S K L T D F L S Q K Y G V P A I N L K D F D V D P E I K L
UniRef90_V9HEH9	I E S G I V S E E D I I D A I S E T Q T G I K K I D L N N V N F D K K A I K I
UniRef90_D4JW09	I E L G Y V S E T Q L A Q A L S I R L K V P F I D T T K I D I E A V K K
UniRef90_C8X4Q7	V R F N I I R E D K V V V I E L E F Q R G I P H A D L D K Y F F D P S L A E L
UniRef90_E3DR87	V E E L G Y V K E E D L I E V L E F Q R G I P H A D L D K Y F F D P S L A E L
UniRef90_E6QQH2	V E N G L V T E E D Q I A D A I A R Q L G I V P F I H L K N Y H K P D T T R L
UniRef90_D9SIZ5	V D N G F V T E E K I S E S L A K Q L H P Y I N L K Y Y N I N G Q V R K
UniRef90_J0N374	I E E R V I T E E Q Q L I E A L R V Q L G V E F V D L S S T P V Q P Q L A E L
UniRef90_Y0KFD4	I I D S G F V T E E K Q I S E A L A R Q L G V P F I D L S F N V V K S H E V Q K
UniRef90_K6YPL7	I I E L G L V T E E N Q L L T F L S Q H L N V P L V D I S Q Y D V V S L A A V N M
UniRef90_G8QMA1	I V D G G Y V S E E Q I S Q A L A R Q L R I P F F D L K T F N V V K P D L T K L
UniRef90_B0VJ41	I I K L G Y L T E E N D L L M E L S S H F A M P F M D I S R F Q F D S E I T R R
UniRef90_Q1N2G2	I I D L G F V N E D D L L M E L S S H F A M P F M D I S R F Q F D S E I T R R
UniRef90_E3H6V3	V D M G Y V V S S E E I V R I L G E Q M G I P Y V S L E R L V I T K E A I L
UniRef90_D7BA4J	M Q K G L V S E Q L Y Q A L A E Q A G I E F L N K E G D L P E P Q P E V T A L
UniRef90_W5X515	I I Q L N F L K E A A I L R A M E K H Y A V P G V E V N T F E I D Q S V T A L
UniRef90_UP10002F8D32B	I I E N G F V T E E E I C G A L A K Q L N L P Y I N L K F F N V V N P D I V R L
UniRef90_T2GFM7	I I Q R N L L V D E R S I V R L L A K Q L R V E L F D P E L Y P P D V S L S Q V
UniRef90_I4BBU8	I I K K G L I S E E D A L K A L S K Q Y E M E F A E K L I E P K N E Q L T D K
UniRef90_T2RD26	I I E Q G I I T P E L L T S V L K E L L D I E N I S L T R S N I N P D V I K L
UniRef90_UP10004788ABB	I I D Q G L I T G E L L T S V L K E L L D I E N I S L T R S N I N P D V I K L
UniRef90_D5SPM8	I I R M G L V T E A Q V T E A L A E Q W G M P V V N L G E T T I P P R A I E M
UniRef90_F9S1H4	I I D L G F L S E K Q M L T F L S S Q Q L D P L I D L S R M N I D V D A V Q L
UniRef90_E8VT29	I I D L G F L S E Q Q M L A F L S S Q Q L D P L I D L N R A T V D I D A V Q L
UniRef90_D6SRQ2	V R N N I C R E D N I V D M L R S R Q L I D R Y D P S R Y P V D S S L A D L
UniRef90_X1BMC1	V E I I G A I S R E E E L Y E V L Q Y Y E T E Y V D L L N Y V I D P E V I S L
UniRef90_F0S1Z2	I I L R L G F I T T E E Q L M N A L S E Q K G I E R V E L S S Y L I D P E V I K L
UniRef90_B5YED2	I I E R G Y V K P E D I G K V L E K Q S E I P Y I S L A E V Q I D E R V A K S
UniRef90_I3IMV6	T S L H Y I T S E E Q I M Q A L S G Y L G L E I T L E N M D I S P E V I T M
UniRef90_D3PQ11	V N K F G L A E E R R L Y Q A L A E Q A G I E F R A E L D D L E L Q Q E V S A Y
UniRef90_W0RN20	V V K L G L L Q E T T T L K M L A R Q Y R R M P A V D L S R F E V D P R I L K L
UniRef90_C1CY06	V V Q S G K L S P E M L A R S L A A Q L G Y F L D P V Q N P P D A G V A S L
UniRef90_B5F9K6	I I Q L G F L S E K Q M L T F L S S Q Q L G V P L V D L N R A E I D A S A V Q L
UniRef90_B8DPS6	T K T N L C R E A D V V E V I S S R Q L K I E R Y T P Q Q H P L S L N M A E R
UniRef90_R7AM85	V E L G Y V T Q E K I N D L L C E M L N I E F I D L Q V E E P E E N V R D L
UniRef90_L7VP83	V V R E G F I T K E Q L Y Q A L E E Q L G V P Q Y T D L K D V E I Q E E I V K L
UniRef90_C9RLV9	V V D L L K F I D E K K L T D I L C C Q F E P V Y V K L D T I K L D D E K V Y E F
UniRef90_E9SAJ4	I I E M K L V S D V D F A K T L A E R M N V E F V D I D N T P L N A E I V K M
UniRef90_G3IYQ0	I I N L N F V N E T E L L N F L S S Q Q L K I P F L D I S Q Y P R K P E I I K R
UniRef90_A9G5Y5	V E Q G L I N E T Q L T Q I S H L S H L A V P W V S L L H I E F S R Q L L N L
UniRef90_R6L1A5	V V T M G F T A T Q S Q I N D V L C E H E H I N D F V D M R E E P D Q Q V L S L
UniRef90_I4CWA3	L L D L G F I D E G R L L R A L S E Q L Q I P F V E L K H Y K F D N Q L T Q S
UniRef90_UP10003B776B2	V V Q S G K L S P E M L A R S L A A Q L G Y D F L D P I Q N P P D A G V I K E
UniRef90_Q1K1Z3	I I D L D Y I T E D R L L E F L S R Q L Q V P L V D L R L F K D P E P H L V G L
UniRef90_Q1J1R8	I I E S G Q V G E K R I A R A L E E A L G V P Y V S L N E I T I P P S V I E L
UniRef90_E8R134	V V K L G Y A T P E E I T K A K A L Q Y G V P Y V S L N E I T I P P S V I E L
UniRef90_UP10003B503E3	V V R T G L V T D L E I A I V L A K Q S R L P F V D L S Q T N P S K E A L N S
UniRef90_UP10003TECA3B	V V D T G V V T E E R I A T A I A N Q L G I A Y F D L R E K D P E P H L V G L
UniRef90_Q6LM91	I I N M G F L T E Q Q M L S F L S Q Q L G I D P L V D L T R A N V D M E A V S L
UniRef90_Q1Q644	I I D L G F L T E Q K M L T F L S S Q Q L G I L P L I D L S R A P A Q I D V E A V Q V
UniRef90_UP10002F39286	V V R T G L V T D L E I A I V L A K Q S R L P F V D L S Q T N P S K E A L N S
UniRef90_UP100023779A6	V V T S L G F V R P E E I A L Q K Q L G Y W G I S Y I S L T D F K P N P D I M Q M
UniRef90_X0XIV0	V V T S L G F V R P E E I A L Q K Q L G Y W G I S Y I S L T D F K P N P D I M Q M
UniRef90_UP100047C8ADD	V V S R L G L V S E R D H A E A C A Q A L G L P L V S A K D L P A E P P P A E S Q P
UniRef90_Q2BKX7	V V T M G Y V Q E Q Q F L E F L S S Q Q L G L P L V E L T H Y S F N Q E D V L R
UniRef90_UP100039555BE	V V Q L G L V S E L D L M H T L A T Q L Q I P F T L G T D F P A E A I S V P G
UniRef90_Q2S978	I I D L G Y M D E D S L L R F L S S Q Q L G I P F V Q L R H Y Q F N Q E L I K R
UniRef90_D7CSM8	Q E Q G A L S D V Q L A E L A Q Q A D L P F T A D L R G A R I S E R L L A S H
UniRef90_E8WMT0	V V R L G V L T E T Q V V K A L Q A S L N I E Y V D L S C A E I T S Q A V R F
UniRef90_B2TQN1	V V D S N I I T E E E I I I E S I E Q Q T G I K K V D L N T I N F D N K S I A I
UniRef90_W0BI57	I I E E M G V V K E E E L L L K L A R Q R L Q D I P Y I D L N F Y E I N S S L A T L
UniRef90_D2R473	Q E M S L V N N E E Q L V Q A L E E Q M G M Q V V E L G D I T I P G D V L H K
UniRef90_A1WTV8	T T A M D F V T E D R I L A E L S Q Q L D V P P W V N P N D Y W V D P D V A S K
UniRef90_UP100037C30C7	L L Q S G A I S E S Q L F Q V L A E R A G I E F R E R V D D L E L Q M E V V A L
UniRef90_A8H939	I I D L S C I T E Q Q L L Q F L S H P Y I D S K R A I A T E V V S L
UniRef90_UP10003F4C7F1	I I D T G V I T E V Q P L L E F L A R R Q L I A F V D L N Q L I D A N V A T K
UniRef90_X1CBV7	I I K L G Y I K P T K Y L D F L A K L P G I A S I L S N Y T V Q K D V S E L
UniRef90_UP10003611D84	V V Q S G K I S P E M L A R S L A A Q L G Y E Y L D P A Q N P P D P Q V A L M
UniRef90_A0A023X1F5	V V S L G F V T T A E E I A K A R A R R L R L K Y V E I T D R N L D R A A A N L
UniRef90_UP100037CCC6E	I I D L G F I E E D A M I N L L S S Q Q L A V P F I Q L R N Y D F N F D L T A R
UniRef90_S0FWA4	L L A K G Y I D P D T I I N V L G R I Y N Y N M I R F S E I K P D P K A Q K I
UniRef90_B3PKC6	V V E L L G Y V D E N A L L N L L S A Q L N I P F V E E L K Q F R F D R E L V Q R
UniRef90_A4J3B6	V V Q L G F C S E D D I A R I I A K Q A G V P F V S L E N H T I D P A A I T A
UniRef90_UP10003685551	I I Q M G V I S E L L A S T L A K K Y H P L I D L D D D P I D P S A I H E
UniRef90_B8E071	L L E E G L I S K E K L T D L L S E I L G W K V L T G K E F K P D E E A V K S
UniRef90_W6MA10	V V K L G L V S E R D L A E A V A T R T L D L P L I K P A D Y P E I P V T N G A
UniRef90_D7DHY1	V V D K G Y V T E M Q I S E A L A R Q L K V P F I D L Q Q F S T K P E V I N K
UniRef90_D3PQS2	L L Q K G W I R E S E L Y Q V L D D Q Q R A P L I S L E A V E I Q P E A L N L
UniRef90_Q3A3E8	V V K L G F L S D D N L L D F L E H S L Q L E R V D L D D G F L P V P E V L A Y
UniRef90_D5SPP6	V V A Q G Y C S E D Q V L E C V A D D C G I P Y I R L D S R L F D P R A V E L
UniRef90_H7GIW2	V V I Q S Q G K L P C E A L A Q A V A T Q L G Y P Y V D P E E D P P D P G A S L L
UniRef90_B113E7	V V E E L G Y C T E E D I A R I V A Q V I A R Q N G V P Y V S L E T F A A D P Q A V G L
UniRef90_F6DH59	V V R K G L P C E E A L L Y R A L E E Q K G M F L E S A E G I V P D P S A A A L L
UniRef90_UP10003825603	I I E L G Y I E E E E L L K F L A Q Q L N I P Y M D I S Q K R I A P E V A Q L
UniRef90_R5TXB1	T T D L G Y I T E R E L L D V L G R G M G L E V I D S E F F H I D E R A V E K
UniRef90_C5BR26	V V E M G F V E E N S L L S S L S S R Q L D I P F I E L K H F R F D R E L V Q S
UniRef90_A8MGF8	V V S E K Y T T E D D I I E L V E F Q L G I P H V D L D K Y E V N P T V A T L
UniRef90_D7DKS2	V V L L G F V T E I M V R D V V A D T I G F E S I D L S T I V A D V D A L N L
UniRef90_I3BX63	V V R L G M L T E Q E V A F V V S R H L N V V R L A V T K D P S I P V E N P G I A
UniRef90_Q5QWD0	T T D L G Y I T E E D D L A K F I G K S F G R P V I D S E R K I P A E A F K L
UniRef90_UP100036042A8	V V K A G L F L T E E D D L A K F I G K S F G R P V I D S E R K I P A E A F K L
UniRef90_A4J3A4	V V D L G Y V T K K Q V S Q Y L D Y Q E Q M E E E V I H Q E I D K A L L K K

90 100 110 120

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

UniRef90_Q08YY5
UniRef90_V9HEH9
UniRef90_D4JW09
UniRef90_C8X4Q7
UniRef90_E3DR87
UniRef90_E6QQH2
UniRef90_D9SIZ5
UniRef90_J0N374
UniRef90_Y0KFD4
UniRef90_K6YPL7
UniRef90_G8QMA1
UniRef90_B0VJ41
UniRef90_Q1N2G2
UniRef90_E3H6V3
UniRef90_D7BA4J
UniRef90_W5X515
UniRef90_UP10002F8D32B
UniRef90_T2GFM7
UniRef90_I4BBU8
UniRef90_T2RD26
UniRef90_UP10004788ABB
UniRef90_D5SPM8
UniRef90_F9S1H4
UniRef90_E8VT29
UniRef90_D6SRQ2
UniRef90_X1BMC1
UniRef90_F0S1Z2
UniRef90_B5YED2
UniRef90_I3IMV6
UniRef90_D3PQ1
UniRef90_W0RN20
UniRef90_C1CY06
UniRef90_B5F9K6
UniRef90_B8DPS6
UniRef90_R7AM85
UniRef90_L7VP83
UniRef90_C9RLV9
UniRef90_E9SAJ4
UniRef90_G3IYQ0
UniRef90_A9G5Y5
UniRef90_R6L1A5
UniRef90_I4CWA3
UniRef90_UP10003B776B2
UniRef90_Q1K1Z3
UniRef90_Q1J1R8
UniRef90_E8R134
UniRef90_UP10003B503E3
UniRef90_UP100037ECA3B
UniRef90_Q6LM91
UniRef90_Q1Q644
UniRef90_UP10002F39286
UniRef90_UP100023779A6
UniRef90_X0XIV0
UniRef90_UP100047C8ADD
UniRef90_Q2BKX7
UniRef90_UP100039555BE
UniRef90_Q2S978
UniRef90_D7CSM8
UniRef90_E8WMT0
UniRef90_B2TQN1
UniRef90_W0BI57
UniRef90_D2R473
UniRef90_A1WTV8
UniRef90_UP100037C30C7
UniRef90_A8H939
UniRef90_UP10003F4C7F1
UniRef90_X1CBV7
UniRef90_UP10003611D84
UniRef90_A0A023X1F5
UniRef90_UP100037CCC6E
UniRef90_S0FWA4
UniRef90_B3PKC6
UniRef90_A4J3B6
UniRef90_UP10003685551
UniRef90_B8E071
UniRef90_W6MA10
UniRef90_D7DHY1
UniRef90_D3PQS2
UniRef90_Q3A3E8
UniRef90_D5SPP6
UniRef90_H7GIW2
UniRef90_B113E7
UniRef90_F6DH59
UniRef90_UP10003825603
UniRef90_R5TXB1
UniRef90_C5BR26
UniRef90_A8MGF8
UniRef90_D7DKS2
UniRef90_I3BX63
UniRef90_Q5QWD0
UniRef90_UP100036042A8
UniRef90_A4J3A4

130 140

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

1 10 20 30 40

UniRef90_Q1AWU6
 UniRef90_A6C1Z3
 UniRef90_K2BJQ1
 UniRef90_E6JE06
 UniRef90_UP100039D8CA9
 UniRef90_E3FH70
 UniRef90_H8MHY0
 UniRef90_F2G3R9
 UniRef90_UP100037A570B
 UniRef90_A5G9E8
 UniRef90_B9M2R7
 UniRef90_B5YD12
 UniRef90_UP1000378FA9B
 UniRef90_UP100036E1B45
 UniRef90_C9Y05
 UniRef90_D7AE13
 UniRef90_Q21L22
 UniRef90_K2EAJ9
 UniRef90_E3FJT6
 UniRef90_K6GGB0
 UniRef90_L7UME4
 UniRef90_K0CDQ6
 UniRef90_K2L6I5
 UniRef90_UP10003463990
 UniRef90_UP100036AED0C
 UniRef90_U2TM45
 UniRef90_A3CR73
 UniRef90_UP100041D0482
 UniRef90_M5U0L7
 UniRef90_L0A1E6
 UniRef90_R4KHJ1
 UniRef90_S0FSV2
 UniRef90_A9KZC7
 UniRef90_S9QE82
 UniRef90_T2G844
 UniRef90_K2CBV8
 UniRef90_C5ESB9
 UniRef90_S9PCZ7
 UniRef90_E8PJU9
 UniRef90_F1W3W6
 UniRef90_S0EUK1
 UniRef90_A0A017T0Z8
 UniRef90_N8X5B7
 UniRef90_I3IID8
 UniRef90_UP100037FD3A7
 UniRef90_W1Z16
 UniRef90_UP10003B42858
 UniRef90_A0A011P2N5
 UniRef90_B4CY16
 UniRef90_S6HP10
 UniRef90_UP10003814EDC
 UniRef90_Q0VRY6
 UniRef90_M5RL51
 UniRef90_Q7UE44
 UniRef90_V3BWR4
 UniRef90_E3FI9
 UniRef90_B5E8W5
 UniRef90_R7HYK1
 UniRef90_B9XRT3
 UniRef90_X1CPD3
 UniRef90_U2Z8S5
 UniRef90_B8WKW1
 UniRef90_A4BKF5
 UniRef90_F8CGX6
 UniRef90_B9M3F1
 UniRef90_UP10003B363B6
 UniRef90_A0YA38
 UniRef90_UP10003B7636C
 UniRef90_U2LSP9
 UniRef90_K2JXK5
 UniRef90_B5E8D1
 UniRef90_UP100036BF51C
 UniRef90_F5RF19
 UniRef90_E3H9S6
 UniRef90_M5RE97
 UniRef90_B5EFW5
 UniRef90_G7GBH4
 UniRef90_K1YLV1
 UniRef90_B3PBG3
 UniRef90_U1ZDS7
 UniRef90_Q0EZM9
 UniRef90_T0R702
 UniRef90_UP100036B0F5C
 UniRef90_W4LPV3
 UniRef90_T2GCR9
 UniRef90_L1M2C8
 UniRef90_UP10004756D1B
 UniRef90_I3YD22
 UniRef90_I1YKC1
 UniRef90_UP10003F58726
 UniRef90_G7QM82
 UniRef90_UP10003B745B4

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

UniRef90_Q1AWU6
 UniRef90_A6C1Z3
 UniRef90_K2BQJ1
 UniRef90_E6UE06
 UniRef90_UP100039D8CA9
 UniRef90_E3FH70
 UniRef90_H8MHY0
 UniRef90_F2G3R9
 UniRef90_UP100037A570B
 UniRef90_A5G9E8
 UniRef90_B9M2R7
 UniRef90_B5YD12
 UniRef90_UP1000378FA9B
 UniRef90_UP100036E1B45
 UniRef90_C9YCO5
 UniRef90_D7AE13
 UniRef90_Q21L22
 UniRef90_K2EAJ9
 UniRef90_E3FJT6
 UniRef90_K6GGB0
 UniRef90_L7UME4
 UniRef90_K0CDQ6
 UniRef90_K2L6I5
 UniRef90_UP10003463990
 UniRef90_UP100036AED0C
 UniRef90_U2TM45
 UniRef90_A3CR73
 UniRef90_UP100041D0482
 UniRef90_M5U0L7
 UniRef90_L0A1E6
 UniRef90_R4KHJ1
 UniRef90_S0FSV2
 UniRef90_A9KZC7
 UniRef90_S9QE82
 UniRef90_T2G844
 UniRef90_K2CBV8
 UniRef90_C5ESB9
 UniRef90_S9PCZ7
 UniRef90_E8PJU9
 UniRef90_F1W3W6
 UniRef90_S0EUK1
 UniRef90_A0A017T0Z8
 UniRef90_N8X5B7
 UniRef90_I3IID8
 UniRef90_UP100037FD3A7
 UniRef90_W1Z16
 UniRef90_UP10003B42858
 UniRef90_A0A011P2N5
 UniRef90_B4CY16
 UniRef90_S6HP10
 UniRef90_UP10003814EDC
 UniRef90_Q0VRY6
 UniRef90_M5RL51
 UniRef90_Q7UE44
 UniRef90_V3BWR4
 UniRef90_E3FI19
 UniRef90_B5E8W5
 UniRef90_R7HYK1
 UniRef90_B9XRT3
 UniRef90_X1CPD3
 UniRef90_U2Z8S5
 UniRef90_B8WKWY1
 UniRef90_A4BKF5
 UniRef90_F8CGX6
 UniRef90_B9M3F1
 UniRef90_UP10003B363B6
 UniRef90_A0YA38
 UniRef90_UP10003B7636C
 UniRef90_E3H9S6
 UniRef90_M5RE97
 UniRef90_B5EFW5
 UniRef90_G7GBH4
 UniRef90_K1YLV1
 UniRef90_B3PBG3
 UniRef90_U1ZDS7
 UniRef90_Q0EZM9
 UniRef90_T0R702
 UniRef90_UP100036B0F5C
 UniRef90_W4LPV3
 UniRef90_T2GCR9
 UniRef90_L1M2C8
 UniRef90_UP10004756D1B
 UniRef90_I3YD22
 UniRef90_I1YKC1
 UniRef90_UP10003F58726
 UniRef90_G7QM82
 UniRef90_UP10003B745B4

V S L G Y V S A E E L A R A R A R R L G L G Y L E P S E R D V D P A A L G L
 I R M G L V T D E Q V T Q A L A E Q W G M P V I E L E E T N I P S K V L E L
 I A L G M I T E K H L D F L S Q Q L H I P F Y D L T Q H S V N P Q F E Q Q
 V E M K L V S D V D F A K T L A E R M N I E F I D L D N T V L N A D V V R L
 I A Q Q I I T E D Q L Y E S L A E Q T G T V Y L Q N P R D F Q P T E D V L G S M
 V A E G L V T D E D V V A A I S E Q L G I P F I E H Q L R H L P V P T P L L S L
 V E L G L L S E Q D L A K A L G R L H N C A Y A S G E M V P D P K A V A L
 I D L G F I S E P Q L L R F L A A Q Q L N I P P Y V R L K I T Q R R I D P E Q A Q L
 I K L G Y I Q E A D L A T F L S K H Y G V P S I N L S E F D I E P A I I A T
 I K L G V V T Q E D I D W A L L S N Q L N I P P Y V R L K K E N I G R M A V E R
 I D L G Y V E E D N L L N L S R Q L D V P F V Q L R H F Q F N N D L V K K
 V R L L G F L S E N A S R E M V G D A V G Y T S M S L E G V V P D S E A L N L
 I D L G Y V E E D N L L N L S R Q L D V P F V Q L R H F Q F N N D L V K K
 I E T G V I T E E L L A N G L A R Q L R I I P F V N L K T F P F R A D V V K L
 V S L G I V T Q E D I D W A L L S N Q L N I P P Y V R L K P A M V D R D A V A L
 I D L G F V T E H V I R D T L A E T F G Q E S I D L S S A V P D S E A L A M
 V K L G F I H I D Q L L R E A L S I Q Q G G Y A H V E S K D L K V E P N V I R L
 V E L E F L D I E K L G E V L S E Q S R Y P Q A T I Q E F E A V T V A T L A T
 V R E G T V K E A D I V D L I S R Q M G L V K Y T P E R Y P V T S N L A E L
 I A Q G A I T E D T L A G A L S Q A L G M P Q V D L A A L T P E W A A V H M
 V G S G L L T A A T V A R A S A E E F G D P V I D L D A F S P D V L V K D L
 I E L G M I S E S Q L L N F L S Q Q L S I P L V S L Q D R R I I P A E A A K L
 V D L G V I A E P Q L L R F L A A Q Q L N V P F L D I S Q R R I A P E T A T L
 I H L G Y I S E D Q I L T F L S R Q R I N E I L V D L L K V K D H N A V Q L
 V E Q G L C T P T H I A R A L S A Q H A L P F V E L P E E F P S S V V G L
 I S K G Y V T T E E D M L K V M S Y Y Y R V P H V N L S Q F V I E K E A V E K
 V R L G M V S E R D M A E T A A E T L G L P L V S A K D C P D A P P P G V Q
 V K L E Y A T P E E V A Q A I A K F H K I P Y V D L R S V R I N E S V I E L
 I D T G L V G A K R I A R A V E E A L G I P L V N L V V V Q P T P E A L A V
 V R D G H C T E D D I A R V T A K R A G G S Y I T L D S I T I D P A A V A T
 A L K G I V S E N I I V D A V A S Q M N L R K F E A G E Y D I S P D L A Q I M D
 I D L Q S I T E H Q L L Q F L S Q Q L N V P L L D I S K M P I P A E V V H L
 V R M N F V S E D I L V R A L S S Q K L A I P A V N L D A L K E V P K H V L N R
 I Q N G I V E E A R L L A V L S R Q L K V K R L L D V E S F V P D P S L A S L
 V D L G Y V E E N K F E L L A R Q L E I P F V D L L K S Y T L Q P D L V K L
 M D L G Y V T E D A V M E C A A T R D N L Q V T D L L D S Y K I D L K A A D M
 V A E G L L S E E D V V R A L S E Q S G L P F I I D R V L R T M P V P R V L L P L
 V R K G L P E E V L Y R V L A E Q K G M E F L P S T R G L S P D P A A T N L L
 V E M H F V S L D T I K R V L A Q K I P F V N L R G F K F D P A L V K A
 I E M G I I N P V H V Y E A K A Q E M G V A F V N L T T Y K P D P S A I N V
 V Q N N V T D E Q S I A R A L A E E C G Y G L L P K I D T D A V P L E I A E R
 I E K L A I S P L L I A E M I S S E F G E P I F D L D S F N P E M L P K D I
 I D L G T I S E E D I L R L A H S K L L L P I W E K K K E D R Y P I V E N
 V E M D V I L E E D I L R A A L G R Q F G V R L V K G I S R F N Y P P A I L K L V
 I A L E F I S E P Q L L R F L A Q Q L Q I P F L D I S Q R K I S S D V V S K L
 V S L G Y I S E E E M A Q A L S R Q L G Y P Y I V N L D Q F E I V Y P D V I N I
 V S L G F V S E A T L R D A L S E S L A Q K Q S V D L L S N A L I D P S A L K Y
 I D Q G I V T Q E D V T R A L A A H A M A M D F V D L L S A L S V S D E V I G M
 V L L G Y L P E V Q F L D F J A Q Q L K I P M V D I L D S R Y N F N H N D V L K
 V A K G E L M D E S V T M A K A A Q A G A E V I E L D D A I Q L A D D V I S A
 V A S G K L T A R Q V V A S A V A E E F G D P I F D L N S F Q R D S L V K D L
 I E L G Y I A E R D A L G A L A E E V G L D Y V D L R E I D V D L K A L E G
 V R Q S L I S N A Q L G G A L S E Q F S V P F V D I D F S S V N P Q V A R L
 I L M Q G L I S A E Q L A Q A L A E Q N Q G V A W E S I D A W Q I P S S L I A E
 V D L G F C T A Q Q V L E L L A N Q A Q L P M V D L D A E M L D P Q L V E V
 D E M G V I T P E E L V E A L A Q S G M E M V K R I A V Q N V P G E L L E L
 I N S G V I T E D A I L K F L E A K L H I P Y V N L D D Y T L D P K C L K Y
 V E K A I V S E Q D M T V S M G R V L N T P P I N L S R I S I I P E V A D L
 L R L R M I S D E D V T R A L A E H L S M E Y V R F D D I S K I D M N I A R M
 V Q N K L V K A R E L A E L A A E Q F G V A F F D L G A L D K E G Q P R D L
 V K L G L V S E L D M A Q A L S E Q L E I P L L L A G D Y P E A P V E L A D
 V E N D L V N S T K I A M L A A D E F G S P I F D L D A Y D F E Q Y P R D L
 V D Q R F S T A Q Q V L E A L A F Q A G M Q T V D L D V Q P P D A R L T W
 UniRef90_B9M3F1
 UniRef90_UP10003B363B6
 UniRef90_A0YA38
 UniRef90_UP10003B7636C
 UniRef90_E3H9S6
 UniRef90_M5RE97
 UniRef90_B5EFW5
 UniRef90_G7GBH4
 UniRef90_K1YLV1
 UniRef90_B3PBG3
 UniRef90_U1ZDS7
 UniRef90_Q0EZM9
 UniRef90_T0R702
 UniRef90_UP100036B0F5C
 UniRef90_W4LPV3
 UniRef90_T2GCR9
 UniRef90_L1M2C8
 UniRef90_UP10004756D1B
 UniRef90_I3YD22
 UniRef90_I1YKC1
 UniRef90_UP10003F58726
 UniRef90_G7QM82
 UniRef90_UP10003B745B4

	90	100	110	120
UniRef90_Q1AWU6	V P E R V L R R H R A L P L	R L E E G R L V A A A L A D P T D L Q A L D D L R M L		
UniRef90_A6C1Z3	V P E T M A S I Y K I M P V	S L K D G V L T V A M A D P Q N V A A L D D D L R N F		
UniRef90_K2BJQ1	L S E A Y A R L Y R A I L L	T K Q N D G F L V G M A D P L D V I A I D T L R S V		
UniRef90_E6JE06	I P E A K S R A S G V I A V	R K I G R R L M V A T S D P M N Y I F E D L R M V		
UniRef90_UPI00039D8CA9	L R A D A L R L N A V P V	D E S E Q S V T V V T S D P R K R E D I E A L		
UniRef90_E3FH70	L P L E H A A R F E A V P P	L T L H G K E L V C A M R E P E N L D R L S E E L Q F L		
UniRef90_H8MHY0	V N P N E A D D K E Y L P M	R A D A T R L S V A V V N P H D F T T L D A I I A F K		
UniRef90_F2G3R9	I P E A Y A R R Y R A L V L	E A D D E E V L L G M S D P T D L G G L D Q L G L V		
UniRef90_UPI00037A570B	V P P E V A Q K Y Q M I P I	N R A G A T L I V A M A D P S N I F A I D D I K F M		
UniRef90_A5G9E8	V P P A S L A R R Y N L I P L	F L T G D D L S I A I A D P L N S E A V R A V E S A		
UniRef90_B9M2R7	I P E D M A L Q K L I F P L	K Q K E G L L A I A I A D P F D T D S Q D Y L A K K		
UniRef90_B5YD12	I S P Q K A R E N L I L P L	Y R D N G R I V V G I V D P S N I L A L D D L R M V		
UniRef90_UPI000378FA9B	L T E P F A R A N M V M P V	S L S G K R L Q V A M A N P D D I L L L D K I I K R H		
UniRef90_UPI00036E1B45	L P E E A L A R R F R S I V L	S E K R G E L L L V G M A D P L D I F A Y D E L V R V		
UniRef90_C9YC05	L P E A A A R R F K A L A L	E D K G D T L L V A L A D P L D I F A Y D E L T R L		
UniRef90_D7AE13	V P A V M A R Q H N L I P P	L I R A G E E L L S I A I A D P L N V A A V A V E K E		
UniRef90_Q21L22	V P K N V A T R N N V P I	S F N Q R E L R L A M A D V Y D V M V L D R I I R S I		
UniRef90_K2EAJ9	L P E D F I R E N R A V P P	I S T D G K T I I M V G M V N P N D K Q V L N D I I Y L		
UniRef90_E3FJT6	V P A A L A E K H A V F P L	H L E G R R L K V A M A S P S D M E H V D A L A F A		
UniRef90_K6GGB0	L P A E M A L R S K L V P P	S K V G N L I R V A M P D P L D I T T I V E D I E I Y		
UniRef90_L7UME4	L P R A R F C E H D L F P P	I Q L V P L S K V G N L I R V A M P D P L D I T T I V E D I E F T		
UniRef90_K0CDQ6	V D T K L I A R H T V L P P	Y K R G S R L F V A V S D P T N L P A L E E I R F N		
UniRef90_K2L6I5	L P E E V Q A R R H R A L V I	D V N D D S V L L G M S D P A D L L A A L D A L T L L		
UniRef90_UPI0003463990	L P E E V Y A R R Y R A L V I	E D N G D S V I L G M S D P A D L L S G L D Q L G P I		
UniRef90_UPI00036AED0C	L P E E V H A R R L R A L A L	H D N G K T V T L V V I S P A D L L H S L D V L A S L		
UniRef90_U2TM45	V S A D F Q S E H R I V P F R V R S E R I I H V A V D D P G D V T L V D E L R F Q			
UniRef90_A3CR73	V S E K V I A K R H G L I P I S F T D P K L V V A M A D P S N Y L A L D D D V K I V			
UniRef90_UPI00041D0482	V S L R F L K Q L A V C P Y	G I P E D A H G L D L V V A E P Q D P Y A A E A V A L A		
UniRef90_M5U0L7	V P E S V I A R E N M V L P	P Y K E E D G A L T I L I S N P F D L E T I E K L R F I		
UniRef90_L0A1E6	L P A K V A Q T L L A V P F A V V G G N L R V A F V D P L N S L T I E T V E D E			
UniRef90_R4KHJ1	M P V T A F K K Y K A L P V A F D G D K L V V A M K Y P D N I V A I D D L Q I M			
UniRef90_S0FSV2	V D N A T K F K A L P V K K S D G V I T I A M T D P L N I T V D Y I I E V M			
UniRef90_A9KZC7	I P E V Q A R R F R A I L P V E D R G D S V L V A M S D P A D L Q A L D H E M I			
UniRef90_S9QE82	V P V Q T A R D F A L L P P L R D D G K T L V V A I A D P L N V R Q L D E L R A I			
UniRef90_T2G844	I S S D L A E R C M V L P P L A R Q G G V L W V A M Q D P T D L T A L D S I I M H V			
UniRef90_K2CBV8	L P E F Y A R H F R A I V L K R E G D A Y L I G M A D P Q N L L A Y D E F E R I I			
UniRef90_C5ESB9	V S P A F A G H N R I I P I D F E E G R L V V A A S Y P I D M D V I D E T A T L			
UniRef90_S9PCZ7	L P L E K A E R L E V I P P V S Q Q A G V L V C A M R E P R D L A R L D E E L K L I			
UniRef90_E8PJU9	L L R S D A L R Y S A V P P V G F N N G E V E V V L A D P R H K E A V A E E L			
UniRef90_F1W3S6	V P A D F V R K Y K V M P L Y Q T S T R M V V A M E N P L A N Q P L Q E L L A F T			
UniRef90_S0EUK1	V D D H V A K A H N V P P V K K D G Q V L Y V A M G D V N N L E V Q D T L R M V			
UniRef90_A0A017T0Z8	V P I G Y A K L H R I L P P L G I H D G A V F C A L A D P L D I T T A I D D D V R A L			
UniRef90_N8X5B7	V D A G L I S K H G V I P P V Q R G N I L Y V A T S D P T N I E A L D A I A R F S S			
UniRef90_I3IID8	V P K V F L V S N R V L P P L N L H R N G I L D V A L A D P Q D S L L I E T I A L S R			
UniRef90_UPI00037FD3A7	S P E E A L A R F I F P P L K V E K K T L Y L A M A N P L D L D T A Q E V G F R			
UniRef90_W1Z16	L S E V Y A R R Y R A L V I E D N G D S V L V G M S D P A D L R A L D Q L A M L			
UniRef90_UPI0003B42858	I P V E I A K R S L V M P I H R I I R S F L T L A M V D P T D L D V I E D I R F R			
UniRef90_A0A011P2N5	V P R D L A K R H H L L P P D Y D N L R L T V V A I A D S N D I V A L D R I I R T L			
UniRef90_B4CY16	V P R E V A K R F K V I P P V E S E T G L M I A V G D P L N F D T F D S L H H M			
UniRef90_S6HP10	L S E T H A R R F R C L L K E A D F F L I G M T D P L D I A A Y D E V Q R L			
UniRef90_UPI0003814EDC	V P R N V V K R F N A V P I Y V S D D T V T M A L A D P T D L E A I D G L Q V A			
UniRef90_Q0VRY6	V D P K L I N K H N V L P P Y R R G S R L F V A V S D P T N L P A L E E I R F N			
UniRef90_M5RL51	F P Q K L I Y R Q S L F P I G F E D G S I V V A T S D P T N L P D Y P L D E A S A A			
UniRef90_Q7UE44	L P E D F A R S Q A S V I A D V S D R M L T L A M V A P D D I E T I A E E L L M			
UniRef90_V3BWR4	M P A S V A L H Y A V L P P R L E N D E L I V G S E D G I D P V S L A A L T R K			
UniRef90_E3FI9	L P V R V A E S C R V I P P R Q E G P R L V V A T A A P G D P V I A L D E V V A R L			
UniRef90_B5E8W5	V P G E V A I N K L V F P P L K R Q G G V L V A I A V S D P I D S E T L D L E R H			
UniRef90_R7HYK1	I I F F S D A K K Y R I I P P F K I E D T L T V A M A D P L D L F A I D K I I E T			
UniRef90_B9XRT3	L L P R E V A H H N Y K V I P P V S R L E N K L F L A M A D P L N V L A I D D V K R L			
UniRef90_X1CPD3	L L P E S V A K R F C L V T I G E K D D N K I I V A M A D P L N V L A I D D T I T L K			
UniRef90_U2Z8S5	V T E K L I R Q H R A L P P L W R R G N K I Y V G V S D P S N H Q A I T D I Q F S			
UniRef90_B8WKWY1	V S P D F L I S N Q V V P V S A A E H A L V F A A T A P Q D P F I K K A L A M A			
UniRef90_A4BKF5	I I A N N L I L A H H A I P P L I K R G T R L F V A V S D P T N L L I A I D E I K F H			
UniRef90_F8CGX6	I I P E R V A E A H R V V P P K L E G Q V L V V A I A A P A S L A S L D A V K S V			
UniRef90_B9M3F1	I I P K E L A L T Y G V I P P I H R D K K R L Y L V M S D P A D L K A I D E L S F T			
UniRef90_UPI0003B363B6	I I P Q D Y V K K N R I I P P S R L G R T L T V V A T A N P F G L V A W D D V S A L			
UniRef90_A0YA38	L L S E T Y A R R F R A L V I A E N N G T L V V G M A D P T D I Y G F D E L S S R I			
UniRef90_UPI0003B7636C	L L P F D Q A K K N H M V F P P K L K G D D L S L A M A E P T D T D L V E M L T K S			
UniRef90_U2LPSP9	V V P Q K L A E K Y N V I A L S E N D S R L Q L A M S D P L N F Y A Q E D I R Q I			
UniRef90_K2JKX5	I I L S P R F L K E N R L L P P A E D E H S S L T V V A M A N P L D Q F A V N A L A L S			
UniRef90_B5E8D1	V V P G Q L A R R Y S L C P I F L S G S E L S I A M A D P L N K E A V E E I T R V			
UniRef90_UPI00036BF51C	I I P V N I L R K N M A I P P L K R G G N K K L K L A V V D P Y D I N S L D E E I A F I			
UniRef90_F5RF19	I I D K K L M R T H K V V A L K K R G N R L A V A I A D P S N L R A I D E I R F Q			
UniRef90_E3H9S6	F F D R A Y L E G K N I V P I G I T S N K I I I A M A D P T D V N L I D E I N L K			
UniRef90_M5RE97	I I P E S V A R E N T I I P F S S D E E T L R I L I A D P F D F A T V E K L R F I			
UniRef90_B5EFW5	I I P M E M A V K H T I F P P K M D D G G R L G L A V A D P T T D E L F Q Q I A A M			
UniRef90_G7GBH4	I I D Q K L I Q R H I V P P L V Q R G Q I L Y V A T S N P T N I D A L D A I I R F N			
UniRef90_K1YLV1	I I P L G F A K E Y R M Y P P L A K Q N G S L Q V A V A D P L D T R P L N D S T L			
UniRef90_B3PBG3	V V D E K L I R K H Q T L P P L S R R G N R L F L L A V A D P T D L H A L D E I K F N			
UniRef90_U1ZDS7	L L S Y R F L K E C R A I P P E L S D G E L Q V A M A D P Q D R F A V E A L R L A			
UniRef90_Q0EZM9	I I L P V D L L R K N M L I P P I G R K G N V L K L A V A D P Y D I S G L L D E L L S F I I			
UniRef90_T0R702	I I P P I N Y A K N H E L I P P I E T E C T N I T V I M T D P F N F D A I I N D L R E I			
UniRef90_UPI00036B0F5C	V V D E K L I R K H H A L P P F K R G N R L F I I A V A D P T N L Q A L D E I K F N			
UniRef90_W4LPV3	V V P L A F A R Q H K L V P P I R L D E D A V L V A V H D P L Q P L D D D V S S L			
UniRef90_T2GCR9	V V P M E L A A K Y G L A P P L E R R G G I L W V A M R D P T D L H A L D D V V R A			
UniRef90_L1M2C8	I I L P R K I A M H Y G V H V P P I R Q G E D A L A L V V I S D P A D P Y P P L D A V R L A			
UniRef90_UPI0004756D1B	V V S P R F L K Q Q H V V P P I R Q G E D A L A L V V I S D P A D P Y P P L D A V R L A			
UniRef90_I3YD22	I I L R F L K D S R V L P P I A D D E Q R I E V A L A N P I D G F V L A A V R M A			
UniRef90_I1YKC1	F F Q E K K L I R Q H H A I P P L F Q R G K R L F V V A V A D P T N L Q A L D E F Q F N			
UniRef90_UPI0003F58726	I I L S P R F L K E R S R V L P P L A E A E D G V I F V A V A D P T N L Q A L D E F Q F N			
UniRef90_G7QM82	I I L P L K L I Q K S R I V P P F S L S K K T I R I A V A V S D P S D L H P M D D A R F L			
UniRef90_UPI0003B745B4	I I P K K I A E H Y E V V P P I S K M G K V L T V A M S D P L N I F A L D D V K Q I			

UniRef90_Q1AWU6 S G Y P V T P [V V] A T E E A I | R R L Q I K L F
UniRef90_A6C1Z3 [L] G Y D V R G A V S N L N D V E G A I A R H Y
UniRef90_K2BQJ1 L K K P L Y F V L I N D Q D L E Q A F K L I Y
UniRef90_E6JE06 T G C N I T P Q L A T K G A I N R A I G K M Y S
UniRef90_UPI00039D8CA9 130 V G R T V Q L I L A K P K D V E T L I E R F Y
UniRef90_E3FH70 T G Y A V R G V L A S D G A I R R A I N R F Y
UniRef90_H8MHY0 T G K R V V P V V I P E F R M N Q L L R R H
UniRef90_F2G3R9 A P R N I E L A I V Q E N Q M L E A F D S V Y
UniRef90_UPI00037A570B T G Y N V E V V V A A E A A I K E A I D K Y Y
UniRef90_A5G9E8 T G C Q I T V S V A L I R E I R E M Q D L F Y G
UniRef90_B9M2R7 T S C K V I P V L A T P E D I M A A V K K F Y
UniRef90_B5YD12 T R S E V F P V I V P R N E L I D A I N Q W G
UniRef90_UPI000378FA9B I R V Q L E P V L V V E N E I Q S A I D H F Y G
UniRef90_UPI00036E1B45 L K Q P V K Q A V V R E S E L L L N T L D L I Y
UniRef90_C9YC05 L K R N I S I A A V P E S Q L A L A F D R L Y
UniRef90_D7AE13 T G C A V S V S V A L I R E I R E M Q E R F Y G
UniRef90_Q21L22 L P L D V D L V L A T E T E R S A L D L F Y G
UniRef90_K2EAJ9 T G L K P F P L I L T H I E Y E R C I V N F F
UniRef90_E3FJT6 T G L R I V P C I V P E L R L Y I Y L E K R Y G
UniRef90_K6GGB0 K N C E I E P V I C T E R E L G Y L T S A V Y G
UniRef90_L7UME4 T G L K V S V S V R V A A L S A V R G A I L R Y Y
UniRef90_K0CDQ6 T G L N V E T V I V E D D K L T R W I D R L
UniRef90_K2L6I5 A P R T V E L A V V H E A E L L E A F D R I Y
UniRef90_UPI0003463990 L G K R I D L A V V Q E S Q M L E A F D T V Y
UniRef90_UPI00036AED0C L G R N F E L M I A R E D Q L I E S F D R V Y
UniRef90_U2TM45 L Q K Q M R V F V A A S D D L D A A L A R V R G
UniRef90_A3CR73 S K M A V E P Y V T F R D D I E K Y I D Q Y Y S
UniRef90_UPI00041D0482 T G R A V R V K V G L R A E I A D L I E R Y Y G
UniRef90_M5U0L7 L N R K I E T A L A P K E C A I N G A I N Q Y Y G
UniRef90_L0A1E6 C G M T V E P Y Q A L R E Q V Q W A I A H H Y
UniRef90_R4KHJ1 T G F D I K P V V V P D S E L E A A I E K Y
UniRef90_S0FSV2 T D M E V E T V I C T E Q N F N Y L M S A I Y G
UniRef90_A9KZC7 A P K R L K L A V A P E Q Q L L Q A F D N L Y
UniRef90_S9QE82 T K C R I V P N V A G R T A I A R A M A R F Y
UniRef90_T2G844 T R M E V E I A I C S K H E F D D I A H A I Y G
UniRef90_K2CBV8 L K A K I N T A I I R E D D L L T I L D A M Y
UniRef90_C5ESB9 T G M E V K V V V L G T S S A A V G R A I D R T Y
UniRef90_S9PCZ7 T G H A V R R G I Y A T Q S A L R R A I D R F Y
UniRef90_E8PJU9 L G R P A R F L L T L P K E W E A L F H Q A Y
UniRef90_F1W3W6 T K L K I D P V M A S V D D L T L V I N Q V Y G
UniRef90_S0EUK1 S R C Q I E P V L A V P D Q I E Q A L T T Y Y G
UniRef90_A0A017T0Z8 F G M P V E I A V A T S E A V V N A I N R
UniRef90_N8X5B7 C G L N I E P I I V E Q H K L E K I I A K H F
UniRef90_I3IID8 T N K Q V V N V F V G C E K D I L A S L E T L Y
UniRef90_UPI00037FD3A7 N G L Q V W P C V T T P E E I K S A I N R H
UniRef90_W1Z16 A P K R I E L A V V Q E S Q L M A A F D N V Y
UniRef90_UPI0003B42858 S G L S I Q P V I A S E T G I T N A I R K Y Y G
UniRef90_A0A011P2N5 A S D E I E I L L A G E T E I D R A I D Q Y Y G
UniRef90_B4CY16 L Q R D L E F V C A T P E A I T V A F R K Y Y G
UniRef90_S6HP10 L P K P I E L A V V A D S Q L P G V L E Q I Y
UniRef90_UPI0003814EDC L G K Q I E V R V A G E K E I Q N A I N R Y Y G
UniRef90_Q0VRY6 T G L N V E T V I V E E D K L S Q W I E A L
UniRef90_M5RL51 T G K N I I P V V A E R A E I A R L V K Q H L G
UniRef90_Q7UE44 T G Y K I R P V V A L E D D V R D L L N R I Y
UniRef90_V3BWR4 V G R K V V R Y V I V L R G Q I V T G L R H W Y
UniRef90_E3FI9 T G K R V V T L L A T D A A I S Q A I D R L Y
UniRef90_B5E8W5 S C N K I V Q V L A A R E E E L G A I K Q H Y
UniRef90_R7HYK1 A E C S I E P V I S S E T S I Q K K I D E Y Y
UniRef90_B9XRT3 T K L D V V P M I A S E K S I I D K L
UniRef90_X1CPD3 M K R Q L K A V I S S P Q E I R Q T I E V I Y
UniRef90_U2Z8S5 T G L N T E G V L V D D D K L G E A I E K F F
UniRef90_B8WKW1 T G K S I E V V F G L E T D I A K A L E
UniRef90_A4BKF5 T G L S I E S V L V D E S K L Q S A I E K
UniRef90_F8CGX6 S G K P V V A K L I A S D A S I R K A I G R L Y
UniRef90_B9M3F1 T G F I I P V A A P E L R M Q A L G K Y Y
UniRef90_UPI0003B363B6 T G L K I K P V L T S P S I L D E A I K K F Y S
UniRef90_A0YA38 L H H P L S L A V V R E S E L L D Q L D M L Y
UniRef90_UPI0003B7636C T Q K N L Q I F V A T E N D I I Q A Y R D F Y
UniRef90_U2LSP9 V D M P L E V V L L S E S P K I K K A I E Y Y Y
UniRef90_K2JKX5 S G K A V A R Q V A L A S E L D N A I E R L Y
UniRef90_B5E8D1 T G C Q I S I S V G L I R E I R E M H D A M Y G
UniRef90_UPI00036BF51C S G C K I D V V V V A E S Q L N Q K I A E L
UniRef90_F5RF19 T G L Q V D P V V V E T D K L S A L V D K M
UniRef90_E3H9S6 T K L I V S P Y L A L E D N I T D V I K E Y
UniRef90_M5RE97 L N R K I E T A L A P K S A I I G A I N Q Y Y G
UniRef90_B5EFW5 H K V K L I L Y V A T R M E I N R A I A K H Y
UniRef90_G7GBH4 T K L N I E P I I V E H N K L E K L I E Q Q F G
UniRef90_K1YLV1 T G A R V E P C V A T P E E I L R A I N R G Y
UniRef90_B3PBG3 T G I N T E A V L V E A D K L K S T I E K Y
UniRef90_U1ZDS7 S G C R I R P L V A L G S E I D A A I E R M H G
UniRef90_Q0EZM9 T G C Q L D L A V A A E S Q L A E A L D Q L
UniRef90_T0R702 F K K D I N V I V S S P L K V N D A I N R V Y
UniRef90_UPI00036B0F5C T G L S T D A V I V E D D K L S S A I D K Y
UniRef90_W4LPV3 I K A A V E P V L C F E R E I I G A L N R L Y
UniRef90_T2GCR9 T G L D V E P A I C T E R E L A A L A R L V Y G
UniRef90_L1M2C8 L K R P V S C R L A P Q G R V T L G L R Y H Y
UniRef90_UPI0004756D1B A G K P V A L C I G L R S E I D D L I E R Y Y G
UniRef90_I3YD22 A G K A V R A S V A P P T E I E A A I E R L Y
UniRef90_I1YKC1 T A L N T Y P V L V D E Q K L A L S I E K
UniRef90_UPI0003F58726 T R R P V R C V A A S D D L D E A F A R Y F
UniRef90_G7QM82 K G Y N V E F I L A P E P E I M R I H S H F
UniRef90_UPI0003B745B4 T G C M I L P I V T T S K E I Q H A L E I Y H S

1 10 20 30 40

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

50 60 70 80

UniRef90_N6YBP6	V D M G F V S E A A L R E T L A T R S G L P F V D L S V A □ A D P D A V A R	
UniRef90_X1HM91	L E K R L I S R E T L A T V L S F Q L N V P T I D L K Q A Q I Q P A A L A L	
UniRef90_W0TK70	H K L G L G L A S E R E D L A E A F S Q E L G L D F I A A D D F P D V A L F E D A	
UniRef90_E1WZ46	L K K N Y I H P H D I I K V I C H Q V N I P F I T D I N V D E I D P N L T L N	
UniRef90_W0Z429	V Q A K L V Q S R A L V E V A A E Q F G I A Y C D L N S L D R E S □ P K D V	
UniRef90_H2G0U2	L N L G M M S E R E L A R T L A E Q Y S L P □ T E N E S Y P □ A P P L E Q S	
UniRef90_C7R9N5	V A A G W L E G K Q A A K A Q A L N F G Y P Y F D L S S I A F E N I P K D V	
UniRef90_S3J9M7	V N S G M I T S V Q L A E A L A E Q A S V P M E I I D S R R I □ D E A L I K R	
UniRef90_B7IDH8	V E L G F C T W Q Q I V K A L A E Q Y E V G F F S E K P A I D P E L N L N	
UniRef90_R7M0M7	I N S G F I T E E K L I K F L E S K L H T P F V N L D D Y Q L D P N C L K Y	
UniRef90_U7G1F5	V E S G K L S A K V V A N A V A E E F G D P I L D L S A F F Q R D S L I R D L	
UniRef90_UP10003B3778F	V T N K I L D N L A I A A T A S H Q G V P F D L D A M D M E L L P T K R	
UniRef90_C8PUQ3	V D N K L A Q A D A V A W V I S R E F G D P L I D D A I N V N Y I P K E A	
UniRef90_R5H3M8	F K L G F I T L D Q L K E L L H I Q T G F D V V T A D Q L A A Q S K Y I N I	
UniRef90_F0RPC0	V Q S G K L S P E M L A Q S L A T Q L G Y E F I D P A K N P P D S G V S M L	
UniRef90_K2DWS2	I Q S N L I P E Q D L L G F I E A K L H I P Y V N L D D Y T I D K S C L S F	
UniRef90_H8N0S1	V G M K A V I S E E D V A R A L G H Q L D L P Y L Q R I F A E E V D A D L V K R	
UniRef90_S6AFQ2	V Q N K L L K S R D L A E M A A E Q F G V A F L D L G S V D K E S Q P R D L	
UniRef90_X1MIC0	E Q L G F I K E D K L I D F I A Q Q Q E L E V I N L E E M V L P I S L V K K	
UniRef90_Q7UU66	V T L G Y V S A R D A L S A I A D E V G L E F R D L R T S E I D L S A L E G	
UniRef90_Q1GX61	V R L L G F V T E E A V I Q C A A L R D H V P V V N L D I R I D L K A A D M	
UniRef90_G5HI25	M D L G Y V T E E A V I Q C A A L R D H V P V V N L D I R I D L K A A D M	
UniRef90_F4DR16	V Q N K L A S S R A V A E I A A E Q F G V P Y F D L S A V D K E H Q P R D L	
UniRef90_E1VPC6	V E E Q K L V D A K S L A I S T S E E F G V P V D V D A I A P D F F P K E I	
UniRef90_R5SD62	I I N S G L L A E D T L K F L E T K L H I P Y V N L E D Y E P D T R C F K E	
UniRef90_K0HWJ4	V E M G A L S R A Q L T E V V A Q Q F S I P M V A L D G F V V Q P E V L R L	
UniRef90_S9QBA7	V G L K A L S S E E D V A K A L G L Q L D L P Y L A R I F I E E D P E L V K R	
UniRef90_UP1000248C876	M S M R F I E P E K L Y R H I A T Q Y N L G R I G S E Y M F E E V N K	
UniRef90_B5EEE8	E D L E L V T G E E E L A A A L A V Q Y Q G C R V A S N F S G Y S F A P D L L A T	
UniRef90_UP1000412A010	C K E G S V S A R E E V A E A L S H M F S T P L L D L D A V D Q H Q L P Q G L	
UniRef90_UP10003790F48	V E H H K Y A D D S K T V A T L A S A E F G V P F F D L D A I D P S F L P I K L	
UniRef90_Q39XC1	C K L G F L T E S D L S Y I L E Q T G K R Q K L G D I L V R E R L I D Q E R L G	
UniRef90_UP100047483A4	A R L G L V S E Q Q D L L A Q A W S T T L L E P P L L T L A D A P E Q L E A P P E	
UniRef90_N6WX48	V Q N N L A D S R G L A F S A A M E F G V S V L D L S S F A P E M L P E K I	
UniRef90_UP10003729531	V T N N Y L L D S A T I I A E A A A D E F G A P L F D L S A F N K E V I P R E L	
UniRef90_A6W755	V E L G M V S E A E L L A Q C L E L L Q L E H V D L S R L T L A P D V V R L	
UniRef90_UP100047D3A7A	I I E D G V L T P Q Q L V A R V L A E R F G I E R I D L T I F R I D D N D L A R L	
UniRef90_F2K5N1	V Q N K L V Q S R Q V A E I A S E H F G V A L L D L N S L D K E T Q P T G L	
UniRef90_H2CHM7	Q K K G V A D E N D I L G V L I A R Q Y G L S F E K K L H F K N D A A F E R	
UniRef90_F8E5C7	T K M D I L V S E E Q L F T F L S K Q Y G V V M F N E Q E L T I P A D V Q K L	
UniRef90_C0QER1	L L T M G F I D P E T I I N V L G R I Y N Y P V V R L A D I K P D P K I L K L	
UniRef90_Q6FF45	I I D N F S I S P L T I A E I I S L E F G E P L L D L G V F D P A L F L K D K	
UniRef90_B5YIG2	I I K L G Y I T E D E L V I E S M S E L Y G Y P V F K I D S Y K I D P L V V K L	
UniRef90_M1PRA2	R Q F D Y I I D A T D V Y N F L S R Q H N F T P V L I S K E P P S K D A V T L	
UniRef90_F7YUA3	V E K G Y V T W D Q I T Q A L S E Q Y Q G I P V V K D L P R T V P V E V L K A	
UniRef90_H9NKV7	I I D L L G F I S E V Q Q L L Q F L A R Q L D V P F F D L N N L T I D A A A V P L	
UniRef90_S9P5C8	V T L L G F A S L P E V A R A L A R Q A N L P F V E L P E I P P E V R A L	
UniRef90_A0A021WCF2	A R L L G L V S E R D H A E T V A A A L D L P L V S I L K D A P E L P P E G V T	
UniRef90_K5UBA5	L S S G F F Q S H E L T E H L S I F G L S C T S L S Q Y E Y S S L C Q K L G L	
UniRef90_I4JP71	UniRef90_B7RSQ3	V Q N K L A K G R V V A E L L A S E Q F G V A L L D L S A V D K E T M P K E L
UniRef90_D9SD16	V E K K K N V D S M Q L A A V A A Q E F G V P Q L D T T C F D R S T M P A D L V E	
UniRef90_UP100046EEC67	I I N M G V V N T E V Q Q S M L A K K L G I P F V N V R K F F V E P S T F H L	
UniRef90_UP100035E2C1A	L L Q L G L V S E A L L M A A S Y A E L L T L P Q A S A H Y P S E P V L P E A	
UniRef90_D0SDF9	V S E G L I S S E E L I K L E A Y I L G I P F V N L E K E K I D S E V L K I	
UniRef90_N9FTD0	I I E N Y K I L S P Q M I A E T I S L E F G E P V F D L S V Y D S V Q I L R D L	
UniRef90_K7R7J1	I I N Q Q Q L S P T V I A E T I S V E F G E P L F D I S A Y D P A Q I L R D I	
UniRef90_UP100035D159C	V D M G L L S E R R I A Q A L E D H F G I P L V E L H T L E I P P K V R A L	
UniRef90_A4BQG9	L L G L G F V S D A V L R E A M A E R L G I Q A V A L P E L I A D A T A L A R	
UniRef90_W0E6V1	I I E Q G L L A A K N I I A A A S S E F G V P L F D L T V L E I N H S V V S L	
UniRef90_B8KD72	V G Q G L L S S R S I A V A A A H E F F G V P L I D L G S V I E V S E L P T S L	
UniRef90_I7ZJS1	L L T L N L I E H Q Q L T E Q L A H F G L P K V E I D Q F D Y A A M C Q K L G L	
UniRef90_UP10004776001	V E A K A V A P L R V A E I I A S G D F G A L V D L N A V D I D P N L I K D	
UniRef90_UP100039E8295	I I Q K G L I R S L D L A Q F C S E T F G C P W L D L A A F D D A F F A K D A	
UniRef90_B3E9S8	M S L L R F I E P E K L Y R A L I T Q T G I G R I G H V V Q L D S L P K	
UniRef90_UP10001D2D4A8	L L K L R F I D E E Q L A R S V A A Q F D L P Y V E I H S I S L D P D L S R Y	
UniRef90_UP1000381F73F	T K L G L V S E N D L S A H L G K F L A I P V I A P A D L P E E V A L A E Q	
UniRef90_V5RU60	L L R L G M I T D R D H A D A L A A L T E W P L L A E S D Y P E L I E I P Q G T S	
UniRef90_L8NBQ4	K D R G Y V K A E D F A E A L G V V Y N V P F I I T L T A E Q V D P S L M D L	
UniRef90_E0UUY3	V Q N K L V K S L T L A E M A S D Q F G I P F M D L S N L E K E S Q P K G L	
UniRef90_H8MUC9	I I A E G Y V T Q R D L L K T L S K Q L D I D F V D L Y G E N I N F N A I A T K Y	
UniRef90_D3PBY4	V E L G L L Q E A A L L R L L A N E F Q T R F V T A D K A K V R I D T K V L D K	
UniRef90_UP10003806A4E	I I E L L G K I S N D D I V E Y V L S K Q D I P F V I I L N E K D L D I N Y I K S S	
UniRef90_A0A031MGK2	V K L G L L C S E A D D V A D A F V E S G Q F E K I V P D Q Y P M E M Q L P D S	
UniRef90_UP100016C47D5	V Q N K L V K A K R D L L A M V C A E E F G Y P Y L D L T A L D R D S Q P E V S L	
UniRef90_U2RTL4	I I D K G F V R E D A L L P V L A E E F G L E Q V D L S H A K I E K D V L A A A	
UniRef90_UP10004771575	V R L L G V D E T P V L R L L A Q E F Q T R F V S T E K L A Q A Q I S P A L E K	
UniRef90_L7U122	I I R D N R I S E E Q V A F V C A Q S S S M E Y I D L A N T Q V A P E M Y A L	
UniRef90_W9TU41	A D L G L G L A S E D T V T E A I C H Q G L G M Q R V Q L G N I T R D A G A L A R	
UniRef90_UP10004762B66	V Q N K L V K G R V L G D I A A E Q F G V P F F D L A A L D R E T Q P K D L	
UniRef90_C4ZK86	L L E T K T L S A Q K I A E A A S I E F G A P L I D L T A I E I D P A V A R E	
UniRef90_H8MXE8	L L E R G L G M S C A A M A R F A A E T F G Y P L P L D L A A F D A A M F A R E A	
UniRef90_N8NVL5	V Q M G V V D E S S M V H A L S R Q L A I P T V N L D T H V P V P N A L Q A L R	
UniRef90_Q0EWN1	I I D Q L K I S S L D I A E K I A Q E F G E P L E F D L S T Y D S A Q L I R E G	
UniRef90_UP10004691D5C	R E L L G M I D D R Q L A Q A L S E Q Q L R I P L I H I D L D D D P P I N L T R R	
UniRef90_UP1000299FB00	I I A E G L G M I D D R Q L A Q A L S E Q Q L R I P L I H I D L D D D P P I N L T R R	
UniRef90_X1V962	V Q L K I V D Q E T A A R A F A S E L G R S Y V D L G D L V P E N D A M D M	
UniRef90_D4M776	V E N E V L T K E E L L S Y V L G E Q L G I P H V W L R K G L V D P R I V D I	
UniRef90_X0WXU4	V E E L G F L T D R Q L T E A L G L Q F M L P V V K V S D Y M A N I A A Q N E	
UniRef90_D3RVK5	V E E K I L D S R R I A I V A A Q E F G V P L L D L E S F D V S N L P P N L	
UniRef90_B9M6X5	I I E M G Y I E E E L L A Q F L S K K L G V P C A G N E Q L I N L H P G A L K L	
UniRef90_UP10002F44F5B	L S L K F V E P D R L Y R E I A T T Q Q Q I G R I G K E F S F E H E A R	

	90	100	110	120
UniRef90_N6YBP6	V P Q A L A R R R H R L L P L Q Y D A H R L I V A M A D A H D I V A L D R L R G E			
UniRef90_X1HM91	I P E D M A R K H N V L L P I S V D G D T L T V A M E E P D N S Q L I D T L A A S			
UniRef90_W0TK70	V S Q R F L K E S R V L L P L Y L E D D F R L F L A M A D P G D E F A I S A M E A A			
UniRef90_E1WZ46	I P I N Y A K S H E I L P L E T D F T V S V V L T F I G L S D P T N H Q A V T D I Q F S			
UniRef90_W0Z429	I S E R L V R Q H R V L P P W K R G N K L F I G L S D P T N H Q A V T D I Q F S			
UniRef90_H2G0U2	L P Y R F L K E H R L V P P H Q D Q T T L V L A M V D P G D D F A L Q A M A M			
UniRef90_C7R9N5	I D L K L M Q A H R A V P P Y K R G T R L F V A V S D A T N L K S L E E I R F F Q			
UniRef90_S3J9M7	V P A S V A L H Y A V L P P R E V Q G T L I F A S E S A I D P V S L A A L G R K			
UniRef90_B7IDH8	L K K E L I E E L R V I P P K E E N G K V I V V T D N V Y N L S L I R R L K F L			
UniRef90_R7M0M7	I N Y S D A R R Y K I I P P F K I E N T L T V A M A D P R D L F A I D K I M E T			
UniRef90_U7G1F5	V D P K L I T K H H V L P P F R R G S R L Y V A V A D P T N L P A L E E I R F N K F H			
UniRef90_UP10003B3778F	V S D K L I L Q K H H R A V P P Y Q R G S R L F V A V M S D P T R V D A L D A L R F G			
UniRef90_C8PUQ3	V D E K L I R E F N I I P P F Q R G S R L F V A V M S D P T R V D A L D A L R F G			
UniRef90_R5H3M8	L P E D F L K N N R I I P P S S D G K T L M L G V V T P V K P D V L K E E I I Y L			
UniRef90_F0RPC0	V P E A T A R R Y S V V P V R L E G E A L V V A M K D P R N V F A L D D D L R L I			
UniRef90_K2DWS2	I S R Q E A Q G Y R I I P P F K I E D V L T I A M A D P L D L F L M N N L I N C			
UniRef90_H8N0S1	I P I N F A R Q T Q Q L P P S L E G D E V V L A V A D P P D D T T A L D H H A R L L			
UniRef90_S6AFQ2	V S E K L I L I R Q H R A L P P W R R G N K L F V A I S D P T N H Q A V T D I Q F S			
UniRef90_X1MIC0	I S P E L M K K Y N F L P P G F R G G V L T I V T S D P T D Y E A I E E I L Q L T			
UniRef90_Q7UU66	F P Q K L I Y R H S M F P P G W D D G A L L V A T A D P P F D L Y P L D E A C A T			
UniRef90_Q1GXE1	V Q E S F A R R Y H T L P P V A F D A N T L T V A M S D P T N H M F N V V A L D Q L R A T			
UniRef90_G5HI25	V S P A F A E R N R I I P P I D F D G D R L V V A A A Y P M D Q D I L D E T A T I			
UniRef90_F4DR16	V S E K L I C R Q H R V L P P Y R R G N K L F I A L S D P T N H Q A L T D D V Q F S S			
UniRef90_E1VPC6	V S E K L I L I R K H R I L P P F K R G T R L F V G V S D P T H L Q A L D E I K F S S			
UniRef90_R5SD62	V T F A D A R R Y R I I P P F K I E D V L T V A M A D P L D L F I D K I E T S			
UniRef90_K0HWJ4	V P K E Y A V E H Q V L P P L V S D K S L V V A V E S P V D A D Y L D E L R F S			
UniRef90_S9QBA7	V P I N F A K Q A R I I L P P S V E D G A V A L A V A V D P L D T T V L D H H A R M L			
UniRef90_UP1000248C876	L P E A M R Q Y D A V I H Q D D D N R Y L V A V G H P T D E A V V A I E N M			
UniRef90_B5EEE8	I P V D V I A M Q N I F P P K L D D N R K L A L A M A D P P T E T R V V R N I S A N T			
UniRef90_UP1000412A010	L D P K I C T T Y R V L P P L S K R G N R L F V V A T A D P T N F Q A L D E I K F H			
UniRef90_UP10003790F48	V S E K L I I R Q H H A L P P F K R G N R L F V V A T A D P T N F Q A L D E I K F H			
UniRef90_Q39XC1	Q A R E V A K R D G R P P L A R A L R K L R V V E E P L A K A V A			
UniRef90_UP100047483A4	L P A P R F L K E H G L V P P S S T G S E L H V W I A N P N Q P D A L Q A I L E Y A			
UniRef90_N6WX48	V D E K L I V R K H H N A L P P L Y K R G K R L F I A V S D P T N H Q A I N D I Q F S S			
UniRef90_UP10003729531	I D I K L V Q K H H S L P P F R R G N R L F I A V S D P T N L R A L D E E I K F H			
UniRef90_A6W755	L P R A V A E R C Y R V L V L D K T P E Y L V V A A A D P T N V L A L D D D V K L Y			
UniRef90_UP100047D3A7A	V P D P G F V R Y R D A I P P V G Q D D E Q L L V A M A D P P A M N M L A I I D D V T M I			
UniRef90_F2K5N1	V S E K L I V R Q H H A L P P L W R R G N K L Y V G I S D P T N H Q A I N D I Q F S S			
UniRef90_H2CHM7	I P A N L I I E K Y R M V P P F E K K G K L I R I A L S D D P E Q V H Y Q D D D L R R H			
UniRef90_F8E5C7	V K Y D L I V Y N Y G I P P F K V T D D K G V H I G F S D F R V L N D I D E I I A F K			
UniRef90_C0QER1	L L P F D I I A K R Y M V F P P L G M K G E E L V V T M T E P D T T A V E E L Q Q E			
UniRef90_Q6FF45	I I D E K L I I Q K Y R I M P P L V H R G R H V L Y V V A T S N P T N I E A M D A I I R F N			
UniRef90_B5YIG2	L L P E D V I R K Y K V L P P F L R E G N I I R V L I T D P A N E I A L E Q L K F E			
UniRef90_M1PRA2	V V P Y K I I A K K Y M A F P P L R I A G N T L Q I S M A E P D T T E A V E K L Q D F			
UniRef90_F7YUA3	V V P R A L I D I E L R I I P P I G K Q D D S S L I V V T D T V Y N P R I L S E V K F V			
UniRef90_H9NKV7	L L P E V Q A R R Y R R A L A V N L T D D D K V T V A M S D P A D L S A L D A V A A L			
UniRef90_S9P5C8	V V P L D F Q I E H R L V P P F R L E R E R R L H V V A V D D P S D L R P V E E L S F Q			
UniRef90_A0A021WCF2	L L T L K F M K Q F A I C P V P V G E G E S H V E V L V A M A D P Q D A Y Q V D A L R L A			
UniRef90_K5UBA5	R D L I T R H N A I P P L N R T S S T L I L A V A D P T N L Q A E D D F R F A			
UniRef90_I4JP71	V V S E K L I A R Q H R L P P L A R R G N K L Y V V A V S D P A N H Q A V T D V Q F S S			
UniRef90_B7RSQ3	V V D L V L K H H A P P L Y R R G N R L F I A V S D P T N L A A L D E E I K F H			
UniRef90_D9SD16	V V P I N F V T V Y K S I L P P L Y H T D H S L I V A M E N P L L W E P L N E L R V I			
UniRef90_UP100046EEC67	I L S A R F L R D A H V V P P L S I E G G T L H L A M R D P L D S F T P E A L G A A			
UniRef90_UP100035E2C1A	V V P E P I A R S H N V I A F R K F K G N E L E V A V M A D P E D L R T I E F I K K T			
UniRef90_D0SDF9	V V E D K L I I T K H R V L P P I Y R R G N N I L Y I A T S N P T N M D A M D A I I R F N			
UniRef90_N9FTD0	I I D E K L I I T K H R I L P P I F K N S S S I L Y I A A L S N P T N I E A I D A V R F S			
UniRef90_K7R7J1	L L P A E K A K E Q A P P F A L D E E V V R V A F V N P D T L A L E E V E D L			
UniRef90_UP100035D159C	V V P R W L A Q R H T L P P L A W D A Q T L T V A M A N P A D L V I A L D A L R R Q Q			
UniRef90_A4BQG9	V V T E K L I I R H H R A L P P I K R G K R L Y V A V S D P T N L E A L D E F K F H			
UniRef90_W0E6V1	V V D E R L I I R K H H A L P P F R R G N R L F L A V S D P T N D Q A L E E I R F N			
UniRef90_B8KD72	V V R E L I I T H H Q A L P P I Y R R G N R L T I A I T D P T N L E L E D E F R F A			
UniRef90_I7ZJS1	L L S E K L I L R K T H T I P P L Y R R G K T F V A V S D P T N L A A L D E I K F A			
UniRef90_UP10004776001	I I D A K L I M S K H L V L A L G K K G N R I T V A V A D P T N L R A L D E I I R F Q			
UniRef90_UP100039E8295	L L P V D L I A R E M N A V I A E R S R N R Y L V A V G T P L S D A Q I R K K I E D C			
UniRef90_B3E9S8	L L P V D L I A R E M N A V I A E R S R N R Y L V A V G T P L S D A Q I R K K I E D C			
UniRef90_UP10001D2D4A8	I I S S V Y A Q K H M L V P P I S M I G N T L T L A M A Q P L R H H D I R Q L E D N S			
UniRef90_UP1000381F73F	I I P Q K F F L R A N G I L P P K A A N E S A N T L W L V M T D P R D R F V R D A L Q A			
UniRef90_V5RU60	I I P R F L N E A R A V M L E A E D D G L W L V M T D P R D R F V R D A L Q A			
UniRef90_L8NBQ4	V V P L N V I A K K Y R F V P P F E L K E N K L S L A M I D P L D L Q T I D F F I E R K S			
UniRef90_E0UUY3	V V S E K L I L Q A A Q A I P P L W R R G N R L F I G V S D P T N H Q A V T D I Q F S S			
UniRef90_H8MUC9	V V P L H I L Q A A Q A I P P K F E D D F V Y I A T S D P L N Y D A L E A L E R E R I			
UniRef90_D3PYB4	L L P V R L I A E A Q N V L P P L A V D P E R E L S V V A A E P Q N K S L L D E I I A L V			
UniRef90_UP10003806A4E	V V P S H H L L K K Y N F P P L Y E T E S E I V K I V T D D P F R E D L L I K D D L T K L			
UniRef90_A0A031MGK2	V V S E K L I I R Q H C V P P M P L Y K R G S R L Y L A S D P T N Q Q A L S D I Q F N			
UniRef90_UP100016C47D5	M P Q K L V H R K N L M P V A R H H N G T L I V A T S D P F D V Y A L D E I L Q T L			
UniRef90_U2RTL4	V V P V R L I A E G F D F M P L R P L A Q G V L Y V A I A E P Q R Q R A L E E I V R T			
UniRef90_UP10004771575	V V P E D V A R R F N V V P P M D D G Y A L T V A L A D P L D F E I L D T L P H V			
UniRef90_L7TU122	V V V D L T L A E Q K G V P P K D N G K T L V L A M A D P T D L G T L D Q V A Q R			
UniRef90_W9TU41	V V V S E K L I L Q V R Q H R A L P P Q R R G N K L Y V A V S D P T N H Q A I S D I Q F N			
UniRef90_UP10004762B66	V V V S D K V L V R K V H A L P P F K R G R K T F V A V S D P T N L Q A L D E I I R F Q			
UniRef90_C4ZK86	V V V D R K L L A K H Q V A P P L A K R Q S R I T L A T A D P S N L R A L D E I I R F Q			
UniRef90_H8MXE8	V V V D I A E R Y T T V P P I A Y E P K T L V A T S D P T N V E S L Q E L A F H			
UniRef90_N8NVL5	V V V D E K L I T K H R I L P P F K R G N L L Y V A T S N P T N L D A M D A I R F N			
UniRef90_Q0EWN1	F P V K F F M R M H L A V P P Y E A S A T R V S I A T A N P L D N P P A I E E V E R R			
UniRef90_UP10004691D5C	L L P S G L C L E Y R A V P P W M D M A G T L L V A T S R P P H Q F D D D L R R A			
UniRef90_UP1000299FBB0	V V P K N V V R R H N C I P P L F I D E A A V V V A C A D E P D A E L E D E I R R L R			
UniRef90_X1V962	L L P K D K A L S Y Q V I P P M F C V N N V V T L A T A D P H S I F V F D E V S K I			
UniRef90_D4M776	C P R E L L M E K F N V F P P L E F Q G S V L L I A I A D P L D V A T Q D M L R T K			
UniRef90_X0WXU4	L L P A S F A K R H R V V A V D V I A T S V V T I A G P L S P E T K Q Q E L A T L			
UniRef90_D3RVK5	V V D E R L I S K H R A L P P L R R G N R L F L A L S D P T S D Q A L E E I R F H			
UniRef90_B9M6X5	I I P K E I V R K Y R V V P P G L D K K K L Y V A M E D P S N L A S I D E E I S F M			
UniRef90_UP10002F44F5B	L L P E A T A R A Y D A I M I N K M S N R Y L I A V G A P L T E A Q V D I E G I			

130 140

UniRef90_N6YBP6	L G V H I E L R L A G D T E L G R A I D H H Y G
UniRef90_X1HM91	T K R K I K P V V P L H G G I R E A I D T H Y G
UniRef90_W0TK70	S G H E V Q P V V A L P A D I D N A I E K L Y G
UniRef90_E1WZ46	F K K E I K L I V A H P M K V S E A I N R V Y G
UniRef90_W0Z429	T G L T T E A L L V E D D K L G V A I E K L Y G
UniRef90_H2G0U2	C G Q P V R A Q V G V S S E I D A A I E R L Y G
UniRef90_C7R9N5	T G C S V E A V L V E P N K L E S V V G K
UniRef90_S3J9M7	V Q R P V S Y V I V P R G E V V V G L R Y W Y S
UniRef90_B7IDH8	L S K D I E V F L V A P S V F D E L L
UniRef90_R7M0M7	A E C E I D P V L S S E E S I L K K I D E F Y
UniRef90_U7G1F5	T G L N V E T I I V E E D K L T H W I D N L
UniRef90_UP10003B3778F	T G L A T E T I I L V E E S K L A K A I
UniRef90_C8PUQ3	T R F N V E T V V A E H H K K S L E K I F
UniRef90_R5H3M8	T G Q N P K Q L L M T H Y E F E N A I N T F F S
UniRef90_F0RPC0	T G R E V P A V M V E K E T R L E K Y F G
UniRef90_K2DWS2	I N C K I E P I C S E R S I L E A I D K H Y S
UniRef90_H8N0S1	L G Q G Q P R I A L A S T V D A I I N S V Y
UniRef90_S6AFQ2	T G L N T E A I I L V E D D K L G D A E K F F
UniRef90_X1MIC0	T D W R V E V V L L A P S S M I K
UniRef90_Q7UU66	T G K T V V P V V A E R G E I S R L V K K H L G
UniRef90_Q1GXE1	V G V Q V K P V L A A E A Q I E D Y I D Q F Y G
UniRef90_G5HI25	T G M E V K A M L V T S C A M E K A I E K T Y G
UniRef90_F4DR16	T G I S T E A L L V E D D K L G D A L D K F F
UniRef90_E1VPC6	T G L T V D P I I I P D D R L G A T I D R F
UniRef90_R5SD62	A E C S I E P V I A S E A S I V K K I D E Y Y
UniRef90_K0HWJ4	A Q K Q V V P V I A N P D E L A A R I T V E Y S
UniRef90_S9QBA7	L G Q D V L P R I A L A S T V D A I I N S V Y
UniRef90_UP1000248C876	L G M P V Q Q V L A T R E E M E Y F W K E A Y
UniRef90_B5EEE8	H G L S I T P F I A T R K E I Y S A I C R N Y
UniRef90_UP1000412A010	T Q L N V D W I V V E T D K L S H W I E Q
UniRef90_UP10003790F48	T R H N T E N I L V E E D K L I R M I D
UniRef90_Q39XC1	V Q Y D L S F V H I N T L E I E A E I A R Y
UniRef90_UP100047483A4	C Q C P V R L S I G Q R S D I E Q L I E R Y Y G
UniRef90_N6WX48	T G L S T D A V L V D D S R I R E L I D R Y
UniRef90_UP10003729531	T G I N T D A V L V N E E L L A K A L H D F
UniRef90_A6W755	T R T P L H V V V A M D S Q I R D Q A R A W S
UniRef90_UP100047D3A7A	T G M A V R P V V A A Y D D I H R L
UniRef90_F2K5N1	T G L T T E A I I L V E D D K L S D A I E K F F
UniRef90_H2CHM7	L G F R V I E F V V S T E T E I N K I F H G H F
UniRef90_F8E5C7	T G K N V I P V L F P D S M Y E K I L
UniRef90_C0QER1	V G K T L K I S V S T E N D V I Q A Y R D F Y
UniRef90_Q6FF45	S K L K V E P I I V E H D K L E R R L L S E H F
UniRef90_B5YIG2	S G F K I L F Y I G K D S D F K N L I N K F F G
UniRef90_M1PRA2	V G K N L A V C V S M E R D I V E A Y K T Y Y
UniRef90_F7YUA3	T G K N P I V Y L V T P Q
UniRef90_H9NKV7	L S P R I V L A V A R E G Q L L E Y F D R L Y
UniRef90_S9P5C8	L N K P I R V H V A A E D D I L D R V L E
UniRef90_A0A021WCF2	T Q R E V R P F V A L R S E I I G D L I E R W H G
UniRef90_K5UBA5	T G L Q V E L V L A D F K E L S A A I R R Y G
UniRef90_I4JP71	T G L H L E A I I L V E D D K L G Q A L E K F Y
UniRef90_B7RSQ3	T G I N T D A V L L E E R A L S K M I E A W
UniRef90_D9SD16	T H L T V V P V L A A R E D V F V I N E L
UniRef90_UP100046EEC67	T G L T I A P Q V A L P L E E A A I E R L Y
UniRef90_UP100035E2C1A	A N L K I L P R I T T P S S I K Y V L R Q Y
UniRef90_D0SDF9	S K M N I E A I I V E Y P Q L E K K L I E Q H F
UniRef90_N9FTD0	T K L N I E T I I V E H H N K L E K L I E Q N F
UniRef90_K7R7J1	T G L V V E P Y Q T T K S A F L Y T L A K A Y
UniRef90_UP100035D159C	V G G E L A T R L A S A A D I L D A I E R C Y G
UniRef90_A4BQG9	T G L S T D P V L V E D D Q L G R I D Q
UniRef90_W0E6V1	T G L A T D A V L V E E D K L Q A A I D
UniRef90_B8KD72	T G R Q E L V L A D K A L H S A I R K Y G
UniRef90_I7ZJS1	T G F N T E A V V V E E D K L T K A I E
UniRef90_UP10004776001	T G M A V D P V V V E D K L I A R
UniRef90_UP100039E8295	L S R P I E Q V L A T R Q E M E K F W K K A Y
UniRef90_B3E9S8	I R L K I I S V I A S E A S V Q R A L K M Y
UniRef90_UP10001D2D4A8	T G L S I D L R I V T P A L F E K A W A S Y G
UniRef90_UP1000381F73F	T G K T V R P A I G L P A D I G A A L E R
UniRef90_V5RU60	T G Y K V V P Y I T T E K T I E K V L E E Q K G
UniRef90_L8NBQ4	T G L N T E A I I L V E D D K L S N A I E K F F
UniRef90_E0UUY3	S I K P V K I Y L A Y S S D I H V I F H R
UniRef90_H8MUC9	T G M E V Y A Y I G L R S A I S A A I R K H Y
UniRef90_D3PB4Y	T G K K V S L S V T S G K K I E K F L N E I F
UniRef90_UP10003806A4E	T G K N I H V K V G L S E I D T A E V Y Q Y G
UniRef90_A0A031MGK2	T G L M T D A V I V E D D K L R T A D K Y
UniRef90_UP100016C47D5	T G L H V M P V L A P A R E I T R L I K Q H F G
UniRef90_U2RTL4	V G V Q V L P F V A V R R S I R A A I R K H Y
UniRef90_UP10004771575	L S R E V N P V C A T Y S S I H H A I N A G Y G
UniRef90_L7U122	S R A R V V P M V A G E R E I E H A I L R H Y
UniRef90_W9TU41	T G I L S V E A V L V E D D R L G E A I E K F F
UniRef90_UP10004762B66	T G N M T E A V L V E E D K L V K A L E
UniRef90_C4ZK86	T G I L Q I E L V I V E A D K L K R A V E A L
UniRef90_H8MXE8	S G Q K L Q V V V A T A S S I E R A I R H H Y
UniRef90_N8NVL5	S K M N I E A I I V E H P K L E K L E Q N F
UniRef90_Q0EWN1	L R K K A V V V I A A E S A L L S M G K L
UniRef90_UP10004691D5C	L G H H M I P V I A D E L Q I K Q Q I S R Y G
UniRef90_UP1000299FBB0	F G K P I R P V I A S G K A L N Q A I V A N Y
UniRef90_X1V962	T K M P V L P V L S R A D
UniRef90_D4M776	L P I P L R F A L A P A Q E I R E A L
UniRef90_X0WXU4	L G R K V N Y Y S V Q R E I E A R L A Q Y
UniRef90_D3RVK5	T G L A T D P I L V E D S K L G A A I Q K
UniRef90_B9M6X5	T G F I V M P L I A T E L S I L A L E K H Y G
UniRef90_UP10002F44F5B	V E A P I E Q V L A T R K E M E D F W K A V Y

1 10 20 30 40

UniRef90_G2DA83	D S G I G G Y L V Q T G R I L R R E E A E N A L R Q S E S S F A V L L		
UniRef90_E4TX37	L G D L L I I Q K G L I S E K Q L F H A Q K E S G K K L G E I L L		
UniRef90_D3DI49	E A K L L E L F V R L G Y I T K E Q A K Q A E K Q K D E D I I T T L		
UniRef90_UPI0003B312FE	R L G E A L L I A M G Y I S Q N Q L D A A L I E Q R V P L G E L L		
UniRef90_A8TAM8	M Q T K L P L L L R Q L D V L T E Q S L L E Q I K V S G I S M S E A L L		
UniRef90_B8JGM0	R T R L G E L L L R A G A C T P A A I R D A L E N Q G G R L G T N L		
UniRef90_I3CJL4	L T G L A R K L V T E N L L T E A V A E Q A F E E T R I S F A S Y I		
UniRef90_UPI00037AC5CB	R G L A Q T L V L T G A V R A A D M S A A I A Q A G G A L Q Q L L		
UniRef90_UPI0002F7C1AE	L I E R L R E N G Q L S D T D A K R A A Q D P N R P L H E L M		
UniRef90_UPI00037EC352	Q Q N R S Q L A L M L H K H N L L N K Q Q V Q Q I Q Q S R K Q P V V K L L		
UniRef90_B9XLV9	L L S L I K E Q N L I D D L Q Y E E V E G E S G K P V I Q I L L		
UniRef90_V5DYC2	Q Q A E P Y Q A L F N I L K Q W D K I S A S E L K K V V R V K K E S L P Q L L		
UniRef90_K0C1P2	G L A R R L V L D G L I T E D V A L K Y S E E A K R P F V S F L		
UniRef90_UPI00017446F2	M Y S N E D F L L E L L R E S G M V N E Q D L H H A R K K P S E T L M E G L		
UniRef90_A4G8R8	A M S G L A R A L L Q A G Q I T P Q Q A D S V A K Q A K P F I D I L		
UniRef90_N6YBK2	I Q G I L T A A R L I G D D Q L R I A Q Q R R Q R P L G R L L		
UniRef90_A0A024HD40	P K R M A L G Q K L I I A Q G L I D E T Q L E A A T N P R R R L G H E I L		
UniRef90_UPI0003B352D9	Q R K D Y K L G E A L I I K K G C V T L A E A L Q V Q E K T L G S L G K I L		
UniRef90_U5T875	M D A A E R R P A L A R W L V D R A A I L P P D R A D T I A R A G R P L V R Q L		
UniRef90_U7A4T5	K A Q R T P L G H R L V E K G L V S E A Q L E A V L T S P H R R L G R E L		
UniRef90_UPI000476433D	A G L S G M A R R R V S E G V P E A D V R K A S T Q A K A T L A T W L		
UniRef90_A0A009ZY19	E L L K S K Y P T Y L D R L V A T G F L T K E Q I H R E I N K N N K F I V Q Y L		
UniRef90_F2IR96	K R L M L T N L V A I I L R Q A E L I S A M Q E Q A V V T Q S G T S V P E A L		
UniRef90_B9MD27	L G Q I L V H Q G A L T E A Q L L D A L E H P G L R L G A A L		
UniRef90_Q0EY30	R Q L I L V Q S G I L T E A Q L L D A L E H P G L R L G A A L		
UniRef90_U7NG77	G Q K G L A R R L V D D G L M S S A A A Q R A A H E A Q I S L L Q H V		
UniRef90_UPI000467C871	M L A A T D N T R I G E W M L A K G M I T A D Q L E I A Q Q K H R L L L G Q Q L		
UniRef90_UPI000375269F	M D N A T T Q N R V A D D L L A K G I L T E E V K Q R Q K R L K V S C A K A I		
UniRef90_G2E531	A S T I K P S G L A W R L V R D D Q L I S E Q Q M L E E A A Q Q N K G F V R H L		
UniRef90_UPI00018170AB	R L G E T L I R W E A L T P A Q L D Q A Q Q Q T G K R L G Q I L		
UniRef90_H8Z3F9	A R I T H L G D V M V I E L G Y L K P R D L R R A A L E A Q G K R L G E I L		
UniRef90_A5KT43	M R I Q A D I T I E Q Q L L R N T G R A T D D Q L Q K E Q A T T H R P L Q E L A		
UniRef90_Q2BGF6	M Q P N Q P L T G L A K R L V N E G V C S A E V A A D A A R E K Q Q T F I S Y V		
UniRef90_B8GN18	T S A P A L T N L L A I I L R Q A D L L S P T Q E Q A V M H A S G T N V P E A L		
UniRef90_S7HVK9	U X1INN4	U UniRef90_X1INN4	U K T Q L G Q V L L S R G I L V T A E Q I K E K A L A E Q S E K L G E I L
UniRef90_UPI0004665012	U UniRef90_A1AV36	U UniRef90_A1AV36	U I I T N Q L E E A L E S Q G I K L G S A I L
UniRef90_UPI0003769980	U UniRef90_A5ZEP0	U UniRef90_A5ZEP0	U A S P L R G L A R Q L V D D G L L D E Q A L L K E S Q Q K E E S L L A M V
UniRef90_UPI0003699362	U UniRef90_UPI00047B2B8B	U UniRef90_UPI00047B2B8B	U D R A E L L R R F G E F L L A E N I L D R M S L D R A S Q T T G D R L D T V L
UniRef90_UPI00047B2B8B	U UniRef90_A0A024HLZ7	U UniRef90_A0A024HLZ7	U M D M E I A D K S F L R L L K S K G K L S D N D L D G K V R R M Q K D S L P Q L L
UniRef90_A0A024HLZ7	U UniRef90_UPI00047B2B8B	U UniRef90_UPI00047B2B8B	U T G I A R R R L V Q D G A I L D E R A A L A A A A S E K V P V A S Y L
UniRef90_UPI00047B2B8B	U UniRef90_X1SJR9	U UniRef90_X1SJR9	U M N D Q V V L S G L A R Q L V I A E L L D E K Q A Q Q Q A Q R N K L S L V T Y L
UniRef90_X1SJR9	U UniRef90_K2A1B2	U UniRef90_K2A1B2	U Q V N K K T I S D V L L V K N I I D Q P V Y D K I K L E T N K P I E Q I V
UniRef90_K2A1B2	U UniRef90_A0A023NN47	U UniRef90_A0A023NN47	U M D H K F S L P H L A N H L I R E G V L K E S V A H E A K R T D G I P L I S Y L
UniRef90_A0A023NN47	U UniRef90_UPI000376A803	U UniRef90_UPI000376A803	U M Q P S L A L S G L A R R L V S E D D V L P E A D V R K A V A D S K T S L T A W L
UniRef90_UPI000376A803	U UniRef90_A1KA4J	U UniRef90_A1KA4J	U N P Q A A L S G L A R A L I Q H G R I L S E A D V L S C S P K S T G S S N S F L
UniRef90_A1KA4J	U UniRef90_14VQB1	U UniRef90_14VQB1	U N P Q A A L S G L A R A L I Q H G R I L S E A D V L S C S P K S T G S S N S F L
UniRef90_14VQB1	U UniRef90_A7C1H4	U UniRef90_A7C1H4	U L P G L A R K L V G E G L L N E M K A E Q A F E Q S Q T P F I T Y L
UniRef90_A7C1H4	U UniRef90_H1G0T9	U UniRef90_H1G0T9	U Q T E K P K S R Y G L L A S G Q I L S E E Q L Q Q A T E E A N K R D G D V L
UniRef90_H1G0T9	U UniRef90_C8X3E6	U UniRef90_C8X3E6	U S T N L C S V L R Q A G L I D E D A V I E L V K A S G I S V P E A L
UniRef90_C8X3E6	U UniRef90_UPI0002376B41	U UniRef90_UPI0002376B41	U S S L S G L A K R L V A D D Q V L D E S T A L K A A R R E N Q T F A Q H A
UniRef90_UPI0002376B41	U UniRef90_UPI000361535F	U UniRef90_UPI000361535F	U M R I E N K Q L K E F L L D S N I L D S K E V E K I A G D T N Q K L G D L L
UniRef90_UPI000361535F	U UniRef90_X1PAQ8	U UniRef90_X1PAQ8	U R V G E A L L K D K N K L S D Q E D L D R A Q K I W G S P I G T I L L
UniRef90_X1PAQ8	U UniRef90_K2GQ67	U UniRef90_K2GQ67	U M E N A A P Y Q A F L I Q I L L D K N K L S A N E L L K K V E R M Q K E S L P H L L
UniRef90_K2GQ67	U UniRef90_E3CZC9	U UniRef90_E3CZC9	U M H D D I S L H G L A R Q M V L A G L I D E K T V L Q A Q R Q A Q R P L V T W L
UniRef90_E3CZC9	U UniRef90_H8GIG8	U UniRef90_H8GIG8	U T N R S Q L A I L L H K K G L L N A Q Q I Q Q L H K E M K T P V L R Q L
UniRef90_H8GIG8	U UniRef90_C1DPK2	U UniRef90_C1DPK2	U T Q R L P L G Q H L M A A G V I G D R D L I H A Q R H V D A P L G E V L
UniRef90_C1DPK2	U UniRef90_L8MNT2	U UniRef90_L8MNT2	U F G Q Y L Y A N G Y L D E A G L A M A S E K G E E P I G D V L
UniRef90_L8MNT2	U UniRef90_UPI000469F610	U UniRef90_UPI000469F610	U K T T K L S G L A G R L V E D G L V S E E Q A A S A V A E A A K S L V R H L
UniRef90_UPI000469F610	U UniRef90_J7IV84	U UniRef90_J7IV84	U N P Q T A L S G L A R A L V Q H G R I L S E A D A A T C T T S A P A G F I L E L
UniRef90_J7IV84	U UniRef90_B8KR37	U UniRef90_B8KR37	U K T T K L S G L A G R L V E D G L V S E E Q A A S A V A E A A K S L V R H L
UniRef90_B8KR37	U UniRef90_H0Q417	U UniRef90_H0Q417	U N P Q T A L S G L A R A L V Q H G R I L S E A D A A T C T T S A P A G F I L E L
UniRef90_H0Q417	U UniRef90_A4AFG6	U UniRef90_A4AFG6	U K T T K L S G L A G R L V E D G L V S E E Q A A S A V A E A A K S L V R H L
UniRef90_A4AFG6	U UniRef90_X1SGF2	U UniRef90_X1SGF2	U K T T K L S G L A G R L V E D G L V S E E Q A A S A V A E A A K S L V R H L
UniRef90_X1SGF2	U UniRef90_UPI0003743F71	U UniRef90_UPI0003743F71	U A A L S G L A K R L V M D G V L D E A D G L T Q A N K Q K L P F A L Y L
UniRef90_UPI0003743F71	U UniRef90_A0A023RXK5	U UniRef90_A0A023RXK5	U R R L V E E K H V S A A T M Q T A L K R A K Q D T V A Y Y L
UniRef90_A0A023RXK5	U UniRef90_A3QIK6	U UniRef90_A3QIK6	U G L S T L F I R K G L L S E E Q L Q Q A T E E A N K R D G D V L
UniRef90_A3QIK6	U UniRef90_G8RZ23	U UniRef90_G8RZ23	U M D Q T F R P L L D A L K Q I G I V G A V D S A A E E A Q R S G R P V R A V L
UniRef90_G8RZ23	U UniRef90_UPI0003B5E983	U UniRef90_UPI0003B5E983	U L K K H N K R K K I G E I L I K Q G M I T P E Q F R T A V K E S R E K I G A F L
UniRef90_UPI0003B5E983	U UniRef90_Q3SGC7	U UniRef90_Q3SGC7	U L T G L A R A M V N H G W L S E Q D A E R A H Q S G D S F V T E L
UniRef90_Q3SGC7	U UniRef90_W6LR29	U UniRef90_W6LR29	U U R L V E E K H V S A A T M Q T A L K R A K Q D T V A Y Y L
UniRef90_W6LR29	U UniRef90_S9ZPT3	U UniRef90_S9ZPT3	U N P Q P A L S G F A R A L V Q H G R I L S E A D A I L C T R H G T E G A N A F I
UniRef90_S9ZPT3	U UniRef90_D4M773	U UniRef90_D4M773	U R A K H P L L G E M L L R A G V I T Q Q Q L S M V Q E R A R K R L G E I L
UniRef90_D4M773	U UniRef90_UPI0003462898	U UniRef90_UPI0003462898	U R G G L R G I A E R L V N H G L L T E T E V T R A R E Q Q E I P L L R H V
UniRef90_UPI0003462898	U UniRef90_H8MP55	U UniRef90_H8MP55	U S R L A Q H V S R A L L T Q E Q L L L R Q H Q A Q G G H L D T A L
UniRef90_H8MP55	U UniRef90_K11918	U UniRef90_K11918	U K I L G E I L K E V C N L S E E L L D E A Q K E K G G R V I G E I L
UniRef90_K11918	U UniRef90_A1ASU1	U UniRef90_A1ASU1	U K K L G H I L L I E E Q I L T P A R L L A I A K R H N T R F G W T L I
UniRef90_A1ASU1	U UniRef90_A0A023X5J9	U UniRef90_A0A023X5J9	U R I L I H A L L R R G V L D A D G L R E A R G G L D I L S R L
UniRef90_A0A023X5J9	U UniRef90_D95JC9	U UniRef90_D95JC9	U M N T Q L A H Q R I G E V L I A R G H I L N D D Q L R I A L Q K Q K P L G E E L
UniRef90_D95JC9	U UniRef90_A7HJC2	U UniRef90_A7HJC2	U L E K E V K P K K L G D V L L E K G I I T P F E L E K A Q S Q K P L G E V L
UniRef90_A7HJC2	U UniRef90_G2DC95	U UniRef90_G2DC95	U K A N L S G L A R C I I Q D N L I S E E N A S A A F E S Q S I P F A T Y L
UniRef90_G2DC95	U UniRef90_Q0BR98	U UniRef90_Q0BR98	U R L T S L L L S L G H C D S A S V S R A A R E T G E R R D V V M
UniRef90_Q0BR98	U UniRef90_T0Z555	U UniRef90_T0Z555	U D A R A Q E S V V V Q K L I A A G R I L K E S D V A R A Q R E S G G T V S S L L
UniRef90_T0Z555	U UniRef90_D6SKP2	U UniRef90_D6SKP2	U P E D V K V G D L L S R G L I Q N K H M E Q V Q K V T R E K L G R I L
UniRef90_D6SKP2	U UniRef90_J3AQ81	U UniRef90_J3AQ81	U R S Q A R A R L V E D L I D R G L V E M A A I A R A A L L R T G Q P V E Q V L
UniRef90_J3AQ81	U UniRef90_UPI000479C45B	U UniRef90_UPI000479C45B	U L G E A L L Q A G I I S E Q T L Q K A E Q E G I R V V G Q I L
UniRef90_UPI000479C45B	U UniRef90_Q3A3Y0	U UniRef90_Q3A3Y0	U K M G E G Y L L V E F G A I A P G Q I E V I L Q R M G L R F G E T G
UniRef90_Q3A3Y0	U UniRef90_4ABC9	U UniRef90_4ABC9	U Q Q T S R E G G F G Q Y L I S Q K Q I D F G Q L L S S A Q E K T G A R L G E I L
UniRef90_4ABC9	U UniRef90_D8FE24	U UniRef90_D8FE24	U L G E I L S E N N W G L S E K D L Q K A L Q E K G G R L G E I L L
UniRef90_D8FE24	U UniRef90_UPI0004757C42	U UniRef90_UPI0004757C42	U S G L A R L L V Q H G R I V E S D A E A L Q Q S A K T T F I E Q I L

50 60 70 80

UniRef90_G2DA83	V R M G M L S D Q E L A Q A Q S A F H G I P L I D E S E F P E R P Y G S R
UniRef90_E4TX37	V E E G Y I S Q K E M A I V L S K Q N E F F I D L Y G Q K I D F R S L E R F S
UniRef90_D3DI49	I R L G F L D D A K L A D F Y S R N M P Q R F W K D S L E D V N I P E Q V L K E
UniRef90_UPI0003B312FE	V R A G Y I L K R D A L R S A L A R Q M G Y P V V Q V E T Y P V D P A A L R L
UniRef90_A8TAM8	F N S G F F Q P D E L L E H L S S F G L S Y T T V S Q Y E Y A S L C Q T L G L
UniRef90_B8JGM0	L E L G A V D E G A L A R A L G Q Q H G V P A L S G E V R E P E A V A V
UniRef90_I3CJL4	V E K K L L G S K E V A H A A S E E L G V P L V D I E N V E L N P E V I K L
UniRef90_UPI00037AC5CB	V N Q K L V T E A Q V A E A I A L H T G H R Y V V D L A N L P D P A V V A L
UniRef90_UPI0002F7C1AE	I E K G I G S E M Q I L T A L G E E F G L E F V D L S H T I S A E T L S V
UniRef90_UPI00037EC352	L E K Q W I Q E K K L L S L L K K E M F F E E V A L A E F Q V D P A V L S L
UniRef90_B9XLV9	Q D L G I M D I A T I L Q L E A D A L S T E V V S L R D R E L T K D I L A A
UniRef90_V5DYC2	V K L G L C S E L D V A D A F V E T G H F E K V K P E Q Y P L E T Q L P E S
UniRef90_K0C1P2	V E K K V L L D S Q I I A L S A S E E F G V P L F D I T A L S K D V I P K G I
UniRef90_UPI00017446F2	I K G G V L S S E E D V A Q T M A V N S G M E F I D L T G Y A V S P D L K N V
UniRef90_A4G8R8	L K S E I M N G A R L A A F C S Q T F G Y P L L D A A F N S S N S D N K I
UniRef90_N6YBK2	V E L G F V S D T A L R D A L A A H Y G H T S V D L G D T L A D P N A L A R
UniRef90_A0A024HD40	L L R G L I D S R Q L V I E A L A E Q L D E P W A P L N P F K L D A A L I H A
UniRef90_UPI0003B352D9	V H L G Y L E E E N L L E V L S D Q L G V P Y I N L K R D K I Q R D A A K K
UniRef90_U5T875	L D S D A L S P A L I A A D A A S R V F G I E R I P A D S L D P L P E L V A Q
UniRef90_U7A4T5	L V R G Y I D S I Q L V Q E L A A Q F E L E W A P L N P F K L D P Q L I A S
UniRef90_UPI000476433D	L D H Q L V D S T R F T Q V A S V E F G M P M M D V T A L A P A S M P L N L
UniRef90_A0A009ZY19	V E A F D I K P S I I A A E A I S I E Y E E P L F D L N T F N L S L I P H G I
UniRef90_F2IR96	L G L G F F H P R E L T E Q L S H F G L Q E T D L S R Y D Y A N C Q Q L G L
UniRef90_B9MD27	V H R D V I T P Q Q L L A A V A E Q A G V P W E T L G G Q A V D S D L A A L V P
UniRef90_Q0EY30	I E T E G V D V A L F F N A L S R L Y K T S Y I D I S K T V I D P Q L M E L
UniRef90_U7NG77	I E N G L V P V R Q A C V T A S W E Y G I P A L D D A L R Q D V L P P A E S
UniRef90_UPI000467C871	V R L H F V T D A M R D V L A H Y H A Q E S I D L Q Q V I V D P E A L A M
UniRef90_UPI000375269F	L D L K L A S E E E T L K A L A E S E H E L F D L D E H Y E P T S E L L H T
UniRef90_G2E531	V E Q R L L D S R R I A I A A S H E F G V P L L D L A A L D L S N P T T L
UniRef90_UPI00018170AB	L Q E G M V T P D T L A A D A L A E Q A D P R V S L T N V V L G A L V D C
UniRef90_H8Z3F9	L D M G L I S E Q R L I E E V L A D Q L D F L V E S P N F S Q V D Q E L L K L
UniRef90_A5KT43	V R H Q Y I T P K E L T Q L Y A K T V D P F I E I D P R D I P T D A L K L
UniRef90_Q2BGF6	I E Q R L L V S A Y R A A A A A S E E F G I P L L D L D A L D V T S L P Q G L
UniRef90_B8GN18	V D N K L V E S R R R V A Q A A A E E F G T P V F D L D S F D K E L L P K K L
UniRef90_S7HVK9	I D L A I F H N H D L T E H S Q F G L P N T D L T R F D F A P L C Q Q L G L
UniRef90_UPI0004665012	V T H Q I L D A S T V A R V A A D E F G T P V F D L D S L S T T A P T K L
UniRef90_X1INN4	V E M N Y C T Q N Q V A S A L A E A Y G V P Y A Q V S P K C D A R I L E T
UniRef90_A1AV36	F E L G Y V E E N A L G R A L S A K L G V P F V G R S E L S S P G D L I R D
UniRef90_UPI0003769980	V A R E L L V A P R D A A L A A S H A F G L V C V D L D A F P A T A L P P L E K
UniRef90_M4ZEPO	T K L G L V P E T G L V A A L A K F L A I D L V H A D E V P S G P V L P Q L
UniRef90_UPI0003699362	I K K L C S D S D I A G S F A E A S G I Q R V T P E Q Y P P Q S P L P D S
UniRef90_UPI00047B2B8B	L D Q R L V S P A A M A A A N S V E F G I P L F D P S S M D P D Q A A V R L
UniRef90_A0A024HLZ7	V Q N K L V K S R P L T E L A A D Q F G I A Y F D L G S D R D S I P K D L
UniRef90_X1SJR9	V D H N F A S G E E I A K A K A E V Y V K P Y T D L K E T S V S P E A L N L
UniRef90_K2A1B2	I K H K I S S E E M V N H F Q K M L K P R F D L A M Y D K N W L K H S P
UniRef90_A0A023NN47	L D H N L V D S S R L T R I A S D F G M P V M D V S A I A V G Q M P A N L
UniRef90_UPI000376A803	I D E G W L Q E E V I A E A V A F Q A G Y E M R A I A E D D V L N A R G R
UniRef90_A1KAJ4	V Q R G L M T A R D I A R F A A E T F G Y P L F D I A A I D R G A I P R D A
UniRef90_I4VQB1	A R L G L V S E R D L A E A W A E L L Q V P L L A A R D A P E L P P A E L D
UniRef90_A7C1H4	V K E K I V S G R D I A V A A E Q F G P L I D I E N L E L N P E I K I E G
UniRef90_H1G0T9	V T E K I V E A L S L A Q A A A E E F G T P L F D L D A L D D K E Y L P T K L
UniRef90_C8X3E6	L R D Y G I D R D V L G A S L S A F Y D V D F V A F D R D P P F G L F E K R S
UniRef90_UPI0002376B41	I H H N M Y F T S D E L A V H L S L F G L N Y C S L C E F D F E P L C K E L G L
UniRef90_UPI000361535F	V E A K L V K S R E L A N I A S Q A F G T P L F D L G G Y N F D L I P K D V
UniRef90_X1PAQ8	E E N K L V D E D Q L T R I A A T N K I K F I N L S P D M V Q P M A H M
UniRef90_K2GQ67	L E K K L I N E D E L R K L Y S Y L L G I P Y V N L E K E T I T A D I L Q I
UniRef90_E3CZC9	M A Q G I I N G Q Q L A R V L S E Q S G L P Y R N E E P P D P E A V S L G V R G
UniRef90_H8GIG8	V K L G L C S E H D V A D A F V E Q S G L P Y R N E E P P D P E A V S L G V R G
UniRef90_C1DPK2	V Q N K L V K S R G L A E L A A E Q F G I A L F D L G T L E R E N Q P R D L
UniRef90_L8MNT2	M Q H E W L D G E K V Y E Y L L R K D L M F D E I D L R E F Q V D A S L L A L
UniRef90_UPI000469F610	V A E G W L Q E E V I A E A V A F Q A G Y E M R A I A E D D V F L M A H H
UniRef90_J7IV84	L R T G I L E K A S L S E A L R S Y L G I Q A V K L T R V I L D P A V A G L
UniRef90_B8KR37	V E S M D V D S D R L A N I A S R E F G A P L F D L T A I A K E S L P Q E L
UniRef90_H0Q417	A Q R K L I T T K E V A W F A A E T F G Y P L L D I A A V D R S F F P K D A
UniRef90_A4AFG6	L D S G T I S P A Q L A S A R A A Q A G V P F V E L V D F A V D H Q A V A L
UniRef90_X1SFG2	I Q M G A I A E V D V D L L K A L G I Q F G L P L W S T I S G N V D I N F T Q N
UniRef90_UPI0003743F71	V Q N D I L D A R T V A Q I A A D E F G T P V F D I R A I S P S A L P Q K L
UniRef90_A0A023RXK5	I E E V H L S P S L L A E T I S A E F A E P Y F D L D V Y D T S Q I P K D L
UniRef90_A3QIK6	I A T K V L S A R E V A E L C Y E E Y G T P L P L D I N E F D I S S I P E A F
UniRef90_G8RZ23	I N D Q V V T T E E Q L T Q A A A A F G I N T L D L D V G F T P D P T A L K R
UniRef90_UPI00035B5E983	V N R G F I T N H Q L Y N A L S H Q Y N T P Y K D G F Y Y D E L N K I K L I K F
UniRef90_Q3SGC7	I K G R R F K A D Q V A E F A A A S F G F P Y L D L N A M D A E S L P Q G L
UniRef90_W6LR29	V E N K L A R D K D I A R I A S R F S N L P L F D L T A L E I D A V V V Q L
UniRef90_S9ZPT3	F E R G L I S L A S L A R F A D T F G Y P L L D I A A F D K S M L S A D A
UniRef90_D4M773	L S E G I I T S S R L A E A L S E Q L K L P L L S L A E E P E P A I R L
UniRef90_UPI0003462898	V E H R L V D P V E A T V A A A R E Y G L P V V V D L D A V R L G A L P P A E H Y
UniRef90_H8MP55	L E R G L S E A D V L A M M G E V S G F R P N L V D F E P N L E V A S F
UniRef90_K19198	V R M G A V S E D A V L R A L S E Q L G Y P C V E P A R M P A P L D I Y K C L P
UniRef90_A1ASU1	P E D L G L V T G D E L A K A A R Q F E L R R R V T N L V N G S Y S Q E I L N T
UniRef90_A0A023X5J9	V S E G V V G E R D L A A A R A E V S G G L A Y V E E P A P V A P E V L A G L
UniRef90_D9JS9C	L D L H F I S E Q A M R E A V S E A A G Y K S I D L A G N V A N A A A L A L
UniRef90_A7HJC2	V Q M G Y C T W D D I V R A L A E Q Y G I F A C I G E V K I D N E F V K K
UniRef90_G2DC95	V E N Q L T S L E I A V S A S R G F G V P I F E D L D V V D T D L M P R D L
UniRef90_Q0BR98	Q R L G L V T E R D L A E A Y A S L L N A P L L Q E A D F P D T P L F A G T
UniRef90_T0Z555	V R R G L G L V T G D E L A D W A E V L P A T R F D T S S A P P T P P E G I D L
UniRef90_D6SKP2	T R L G M V S E Y D M V R A V A H Q Q G V P C V D L T R W K P E M Q W L R R
UniRef90_J3AQ81	N Q L G V L S D D L T R A Y A Q Q A G C E L W E P R L R P V A A K A P D L G
UniRef90_UPI000479C45B	V D R G D V T Q D Q L K H V I D S W G E Y M V N P A H L T P D A I S L A L
UniRef90_Q3A3Y0	I E E L G F Y D E E I L A R V L A R Q F G L E Y V D M A S F H P D P E L L D Q
UniRef90_I4ABC9	V R H K A L A E E L L I E L R S Y L G V V K V D L T Q V D I D P E V A S L
UniRef90_D8FE24	V R L K R I T E A D L L G A L G V Q W G L P V S M T L S F E N L D T A F T Q Q T
UniRef90_UPI0004757C42	I S S R K I S A K E L A E L G A Q A F G Y P L F D L D Q I D T S Y I P S G V

90 100 110 120

UniRef90_G2DA83	I S L A F L N R N L C V P V Q E D E A G L M V A M A D P D N P Y L L E A L K M V		
UniRef90_E4TX37	F P L L L R A N A I P F K E D D D Y I Y I A T S D P L N Y D D L E L L E R V		
UniRef90_D3DI49	L P E K L L R K Y Y I A P V K Y E D G K L T V V T V N P F N Q S A I N E L L R F K		
UniRef90_UPI0003B312FE	V P F G L A Q R L N V L P L Q T L P G R M V V A M D D P S R K S L I D E L S F A		
UniRef90_A8TAM8	R D L I T R H N A L P L K R T S S T L V L A V A D P T N L Q A E D D F R F A		
UniRef90_B8JGM0	L R A E V A D R C D V V P F L L A G R R L A V L A V D P S D L R V L D E E V A F A		
UniRef90_I3CJL4	L I D E K L L K K H R T L P I Y K R G N R L F V A M S D P T N F P A L L D E I K F Q		
UniRef90_UPI00037AC5CB	V P G N L L C R K Y G L I P V D R R G D R L T V G V L D P T D I V A L D D V A S I		
UniRef90_UPI0002F7C1AE	M P T K I V H R K G L M P I S R N N G T L V V A T S N P Y D V N T L D E E L Q T L		
UniRef90_UPI00037EC352	I P P K S F C Q K Q L I I P L R V T G K R L L L A M A D P L N V E L I D E E L G F T		
UniRef90_B9XLV9	V P A S T A R M Y R C I P V G V F G N T V Q I A P M E P L D P R H I D E E L G F V		
UniRef90_V5DYC2	V S L R F L K Q Y H V V G L D Q D E N T I T V A M M D P E D E F V V D S E L K L V		
UniRef90_K0C1P2	V D E K L L V R K H H A L P I F K R G N K L F V A V S D P T N L Q A L D E E I K F Q		
UniRef90_UPI00017446F2	V P E D V A R R Y K V V P I G F E H G R L L Q I A I S D P N N F E T L D A I L P H V		
UniRef90_A4G8R8	I D L K L M Q S Q R V I A L A K R G N K V L I A L S D P T N S Q A L D Q I K F Q		
UniRef90_N6YBK2	V P R A L L A Q R H R T L P L H Y D Q T L T I A A A S A D D I V A Q D R L R A E		
UniRef90_A0A024HD40	F P R L L L A M R Y A V L P V A E E D Q T L V L A S E R Q V S Q V S L G A I S R Q		
UniRef90_UPI0003B352D9	V P A K L L A F H Y K V L P I G F K D N K L T L V L V S N P L D R R L F E E L H T L		
UniRef90_U5T875	I D P E L L I L R H H A L P L R W R D G V V Q I A V S D P A N T T A L D E E L R F H		
UniRef90_U7A4T5	V P R R I L A V Q Y G V L P P V M D E N G T L V L A S E D P V S Q V S L G A I S R Q		
UniRef90_UPI000476433D	I I S E A L I T K H R A L P P L F R R G K R L Y V G I A D P M Q S H A L D E I K F H		
UniRef90_A0A009ZY19	I D E K L I T K H K I L P P L S V K D H T L Y I A V V D P S L T Q D L D T I I R F N		
UniRef90_F2IR96	R E L L I T R Y D A L P P I A K Q G N L L L A V S D P T L L Q A E E E F R F A		
UniRef90_B9MD27	A A V A L V R Y S V V P P V G R N E T D I V I A T A T P L D V S M L D A L G F K		
UniRef90_Q0EY30	C P E K L L C Y M F V P P V G R N E T D I V I A T A T P L D V S M L D A L G F K		
UniRef90_U7NG77	F P E E L L R R L Q V L P P L K R Q G N R L L V A V P Y P A T L V G L D E L Q F A		
UniRef90_UPI000467C871	V P E A F A R Q H K L L P P L S P D K Q I M R V A L S G H N N M L V L L D A L R H M		
UniRef90_UPI000375269F	L P V K L F V H Y Q V L P P I K V E D D C L T L A F A E V P S P E L G N L R L I		
UniRef90_G2E531	V D E R L L I S K H R A L P P L M R G N R L L F V A V S D P T N D K A L E E I R F N		
UniRef90_UPI00018170AB	L P R D L A V R H H V V P P F S I E D G S L N I A V S E L P D G E V L E E L A R A		
UniRef90_H8Z3F9	V T P D W C R R L A A M P L R R E A E G V L V A F T D P L D S A A R H G A D A A		
UniRef90_A5KT43	L P E R V A R Q Y N A I V F K I E N G I K F L A M E D P D D I Q A V S F L E K Q		
UniRef90_Q2BGF6	I I N D S L I T K H H A L P P L Q K R D N R L L V F V A I S S D P T N I Q A L D E F K F Q		
UniRef90_B8GN18	V D E K L L V R Q H H A L P P L F K R G N R L F V G I A D P M N L T A L D E I K F N		
UniRef90_S7HVK9	R E L L I T R Y Q A L P P L N S N G Q I L T L A V S D P T H L Q V E D E F R F A		
UniRef90_UPI0004665012	V D Q K L I Q K H H T L P P L M K R G N R L F L L A V A D P T N L H A L D E I K F N		
UniRef90_X1INN4	L P R E F L E E H I V L V P P L F K V Y Q V L T V A V S E P T N V F L M D E I E R I		
UniRef90_A1AV36	F S R S M A V K Y N V M P F K L E R E N R L L G L A M S D P N D F R A L E D I A F M		
UniRef90_UPI0003769980	L S E A L I I R R T R A I P P L S R R H A H R L I V A I I D D P A R L S V L D E E L Q F V		
UniRef90_M4ZEPO	V E A E F V R H N R V L P P L L P G S H D G R L S V G V T D P F N H D P V R A L A F L		
UniRef90_UPI0003699362	V S Q R F L K Q Y H A V G L L A A D D E Q I Q V A V M D P E D D Y V T Q A L Q F A		
UniRef90_UPI00047B2B8B	V K E E L L R K H C V L P P L Y K R G N R L F V A T S E P T D T R A L D E I V K F Q		
UniRef90_A0A024HLZ7	V S E E K L L V R Q H R V I P P L W R R G N K L F V G L S D P T N H Q A V T T D V Q F S		
UniRef90_X1SJR9	L P E P V A R Y R I I C F P L S G E G Q K L L A M K N P M D L T A I E F F I E Q K		
UniRef90_K2A1B2	I I S E A L I F R Q Y R I I P P L N K I D F I F Y I G L S D P T D Q G A I D A V T T F H		
UniRef90_A0A023NN47	I I S E A L I N K H H A L P P L F K R G K R L F V G L A D P M Q S H A L D E I K F H		
UniRef90_UPI000376A803	I I S T D L L C Y R L R V L P P V Q D A G D R L L M L A A A V P L E P Q A L A E I V A A		
UniRef90_A1KAJ4	U N D R K L L M G K H Q V V A L G K R Q N R L T L A V A D P S N M R V L D E I R F Q		
UniRef90_I4VQB1	L S L R F L K Q Q H V V P V H D A S G L A L V V A D P A D P Y P R Q A V E L A		
UniRef90_A7C1H4	I I K Q K D I E K Y R A I P P I F K R G N V L F I A L S D P L N R T A L D Q F R F L		
UniRef90_H1G0T9	V D E K L L I R Q H Q A L P P L F R R G N R L F V G M S D P M N I S A L D E I K F N		
UniRef90_C8X3E6	L D P D F L L K R Y G W V P P F A E E G Q D I V V L M S N P F D L G R M D E I R F F		
UniRef90_UPI0002376B41	R E L L I T K Y N A L P P L K K D S N A L T L A I P D P T M W H A E D D F R F A		
UniRef90_UPI000361535F	V D E K L L I S K H F A L P P L Y K R G N R L F I A V A D P T N L A G L D E I N F N		
UniRef90_X1PAQ8	V S S E I I V N Q H N V I P P V K K E E G D N L L V A M S E P W N L V V R D Q I G K		
UniRef90_K2GQ67	I I P E P I I A K K Y G I V A F E K D G N D L K V A M K N P E D I Q T I D F F I R K K		
UniRef90_E3CZC9	V G E D F L L R R R Q O M P C E V E G G V G L V G V A L V N P E D R E G L E E L A R R		
UniRef90_H8GIG8	V S S L R F L K N F H V I P C E V E G G V G L V G V A L V N P E D R E G L E E L T L A		
UniRef90_C1DPK2	L S E K L L I R Q H R A L P P L W R R G N R L F V A I S D P T N H E A I R E I R F G		
UniRef90_L8MNT2	V P Q A I I C T R Q L V L P P L R V A D K R L R L A M A D P L D Q G L I D E L G F M		
UniRef90_UPI000469F610	L P A S I I C L Q F Q V V P P W S L N G I V L V A T S D P G D F D R L R L C M G D		
UniRef90_J7IV84	I I S E E I I A R R Y T L I P P F E R Y S G V G L V K V A M S D P T H E R A L R D V R M L		
UniRef90_B8KR37	V D T D L L S K H H A L P P L F K R G N R L F I A L S D P T N L N A L D E I K F A		
UniRef90_H0Q417	I I D R K L L I S K H Q I I P A L G K R Q N R L T V A A A D P S N M R A L D E I R F Q		
UniRef90_A4AF6G	A P A A I I C R E H E V L P P I A F S E G Y L V L A M V D P G N I F A L D D I R A A		
UniRef90_X1SGF2	I I P I L F L K K Y K M V P P V A T P D G V Y I A V N D P M L F Q P L D D I R A I		
UniRef90_UPI0003743F71	V D P K L L I E K H H A L P P L M R R G N R L F V G M V D P T N L H A L D E I K F N		
UniRef90_A0A023RXK5	V D Q K L L I L K H R I L P P L I Q R G Q I L Y Y V A T S N P S N I I E A I D A I R F N		
UniRef90_A3QIK6	L N N K K L I I E K H K C P P L F K R G N R L F I Y I G T S D P T N I A A L E D F Q F S		
UniRef90_G8RZ23	I I P L P V V L L R H R V L P P L A I N D G E R L V V G V T D P A D V V I A D D V R A A		
UniRef90_UPI00035B5E983	V S E K Y A R R N M I I P P I S L E G K Q L F L G I T Y P E G F E A I E E L L L I		
UniRef90_Q3SGC7	L D Q K L L V Q K R R R V L P P L A L Y Q R G N K L Y Y V A T S D P T H L Q A L D E E V K F Q		
UniRef90_W6LR29	V D E K L L I R Q H H T P P L Y K R A R R L F V G V I D P T N Q R A L E D I K F Q		
UniRef90_S9ZPT3	V D R K L L M Q K H Q V V A L A Q R Q N R I L T L A L D P S N M R V L D E I R F Q		
UniRef90_D4M773	V P R N I A A R L L N L L P P L R I E D G R L L I A M A D P L D I L A Q D E E V Q M M		
UniRef90_UPI0003462898	V P A R V L R N L L G V V P P L A R H E H R L T V A V P Y P A T L T Q L D E E L Q F A		
UniRef90_H8MP55	I I P P K L L A E R L S V V P P S L D G N T L H V A C A Y P V P K K E L D E V G F L		
UniRef90_K1918	V R L E W W L L D N D A L P L W E V V D G Q L P D L E T Q L Q D L A Y L		
UniRef90_A1ASU1	F T V E F V L L E Q V V F P P L K L E D K V L V V A V A D P T D L K T L H N F G A N		
UniRef90_A0A023X5J9	V S E R K L L R R H G A V P T A K D G A G A W V A V R D P S D L Y A L E D L R H I		
UniRef90_D9SJ9C	I I P K P V A I I K Y T L F P I S F D A G H L V I V A A N P D D I L A R D A I S L I		
UniRef90_A7HJC2	F P K E L I I Q E L K I V P P I S E R D G K L F V G I S N V Y D P N V K R R L K F R		
UniRef90_G2DC95	V D E K L L I R N H H A L P P L F K R G N R L F L V A V S D P T N H Q G L D E I R F N		
UniRef90_Q0BR98	L P R R F L L R T S R I I L P P V S I T D G T V T L A M A D P L D Q F A C D S V A A A		
UniRef90_T0Z555	L P P L R F Q K A H R V A I L S A D A D R I Q V L I T D P A D P Y P L Q A I A L A		
UniRef90_D6SKP2	F N R N F C L Q N R V L P P L G V H K D Q L V V A T S E V P K V Q V Q Q K I H R L		
UniRef90_J3AQ81	V T V D F L L R R A R R L V P P L G E A G P A V L C A A C D P L D D E A L A G L V F A		
UniRef90_UPI000479C45B	V P R A V A E R E S V L P P L A R G D A L V V L L M A D P C D R I L L D E L R F L		
UniRef90_Q3A3Y0	I P P E D T L L R F G V V P P L Q R T D K G V V V A T A D P T D I D R L D Q L K W A		
UniRef90_4ABC9	L S E Q A A L R Y G A I P V G L K D R I L Q V A M F D P G N H R Y V E N I R I L		
UniRef90_D8FE24	P I Q F L L K K F K L I P L I T R E K A A I A M N D P S E F Q A L L D D L R R M		
UniRef90_UPI0004757C42	L D P K L L M Q A N R L V P P L F K R G S K L F I G G S D I T N L Q G L E E V R F Q		

130 140

UniRef90_G2DA83	S G C E V V P R V G V V S E I E A A F R Q R Y
UniRef90_E4TX37	A T K P I K I F L A F S S D I K H I F Q R L
UniRef90_D3DI49	S K I N I I P Y A S T R K T V E N I L N K L Y
UniRef90_UPI0003B312FE	S R C K V I P V L A A T E D L T Q P I I A A Y
UniRef90_A8TAM8	T G L Q V E L V L A D F G E L A A A I R R L Y G
UniRef90_B8JGM0	A G R E V H A L V A P E A R V W A L L R R A Y G
UniRef90_I3CJL4	T K M N T E A I L V E E D K L I K L M E K
UniRef90_UPI00037AC5CB	T D L F V E P V V V A Q D A L A Q M F E R F
UniRef90_UPI0002F7C1AE	T G L E I T P V L G S Q R E I S R L I K H H F G
UniRef90_UPI00037EC352	T A L L Q I D P V I S T V S E V E G K L Q E L Y G
UniRef90_B9XLV9	V K R D I Q V V V A D P A D I E K A I E K S Y G
UniRef90_V5DYC2	T G K D I A V K V G L L S E I D A A L E V Q Y G
UniRef90_K0C1P2	T R M S T E A I L V E E D K L A R V I D
UniRef90_UPI00017446F2	L S T E I E F I C S T P G S I R T L T S S L Y G
UniRef90_A4G8R8	T Q L T V E P I I V D H A T L L K I E K L
UniRef90_N6YBK2	L G P Q V R I A L A A D A E L S R A I D R H Y G
UniRef90_A0A024HD40	L G R P V T W R L A P Q G R V T L G L R Y W Y G
UniRef90_UPI0003B352D9	L G C D I A I A I G H E E Q I M N A L E E Y Y G
UniRef90_U5T875	T G L P V T P V L A D D D D L R A Q I A L L T G
UniRef90_U7A4T5	L K R P V K Q R A P Q G R V T L G I R H W Y
UniRef90_UPI000476433D	S N C M V E P I L V E R G Q L L Q R A I D
UniRef90_A0A009ZY19	S K K K L E L V I V E H D K L E R A L E E V Y G
UniRef90_F2IR96	T G L Q V E L L A L A D H R A L Q A A I R R L Y G
UniRef90_B9MD27	L G R T V R Y V I V P K G E V T V E L R R L Y
UniRef90_Q0EY30	L G R R I V P R L A R P D Q I L H K I N E S Y
UniRef90_U7NG77	T G L T P E G I L A P L D Q I L Q A L L E Q Y
UniRef90_UPI000467C871	L G G T I Q L V L A T E A H L E Q A L D K C Y G
UniRef90_UPI000375269F	L G K R I Q V A L A A P S R I Q S V I K R S F G
UniRef90_G2E531	T G L A I I D A I L V E E D K L N A A I A
UniRef90_UPI00018170AB	A G R K V A C F M A C D H E M L A E L A
UniRef90_H8Z3F9	F G R V V P V I A T R R A I D E T I R S S Y
UniRef90_A5KT43	L G S D I L R L H I A T H E N I L R A I E S Y
UniRef90_Q2BGF6	S G I T T E A I I V E E D K L S R A I E S F
UniRef90_B8GN18	T G I A T E P V L V E Q D K L G K L I E E
UniRef90_S7HVK9	T G L Q I E L V L A D H K A L Q A A I R R L Y G
UniRef90_UPI0004665012	T G L N T D P I L V E A D K L A A A I E R Y
UniRef90_X1INN4	S G C K
UniRef90_A1AV36	T G C V V Q P Y I A P D V R I S D A Q A R Y Y
UniRef90_UPI0003769980	S G M S V E G V L V P A D Q L D S K L E H Y
UniRef90_M4ZEP0	T G L S V D M R L F T A A E F D K A C G A L Y
UniRef90_UPI0003699362	T G K P I K L Q I G Q L S E I D A A L E L Q Y G
UniRef90_UPI00047B2B8B	T N L R T D P V L V D T E T I R R L I E R W
UniRef90_A0A024HLZ7	T G L T T E A I L V E D D K L G D A I E K L F
UniRef90_X1SJR9	T G K R I A P A I A L E K N I I A A I E Q Y Y S
UniRef90_K2A1B2	T R L R I V I T I I A E N Q M A E F I Q N Y
UniRef90_A0A023NN47	S N C M V E P I L V E R G Q L L R T I E
UniRef90_UPI000376A803	C G E T P K V C V R D S Q I M A G L D
UniRef90_A1KAJ4	T G M Q V D L I I V E V D K L C K L A D S L
UniRef90_I4VQB1	A G R P V A L R I G L R S D I D G L I E R Y Y G
UniRef90_A7C1H4	T K M R T E T I I L V E E D K L A K I I I E H
UniRef90_H1G0T9	T G I P T E P V L V E H N K L S K L I E
UniRef90_C8X3E6	L G S R I V P K V A L Q A D I Q A Y I D H F F
UniRef90_UPI0002376B41	T G L Q V E L V L A D F K E L Q A S I R R L Y G
UniRef90_UPI000361535F	T G L S T D A V L V E A D K L A K A I I E N Y
UniRef90_X1PAQ8	T G C K I V P V A A T P T A I R Q A V R Y H F
UniRef90_K2GQ67	T G L K I I P C L T G D E S I K S L L K Q Y
UniRef90_E3CZC9	L G C P V E P F V T S D R D L Y F A L D R S F
UniRef90_H8GIG8	T G K R V S A K V G V L S E I D A A L E V Q Y G
UniRef90_C1DPK2	T G L N T E A I I L V E D D R L G E A M E K Y F
UniRef90_L8MNT2	T G L S I H P L L C R L G Q L Q D K L H E L F G
UniRef90_UPI000469F610	A G K R M F P A I A A P A Q I K Q H I N R L Y G
UniRef90_J7IV84	T G L E I E P L Y A A K E E I I E A A I R Q Y
UniRef90_B8KR37	T G L S T E A V L V P E S D L A K M L A
UniRef90_H0Q417	T G M Q V D L I V I V E A D R L A R L A E A L
UniRef90_A4AFG6	T G R Q V R T V V V A E R S D L Q G A L D R F H
UniRef90_X1SGF2	L G W D V E T V L A P H S S I L S A I I N F V Y
UniRef90_UPI0003743F71	T G I N T E A V L V E A D K L A P A L E A Y
UniRef90_A0A023RXK5	S K L L V I E P V I V E H H K L E K V L G Q H F
UniRef90_A3QJC6	A G L H A E A I L V E D D K L T V A L E K
UniRef90_G8RZ23	T G M T V R P V V V A R S E V R R I I E K L
UniRef90_UPI0003B5E983	Y N L A M T A V F I S E T K F A S L F T S L Y
UniRef90_Q3SGC7	T G Q A V I E P V V V E D D K L G K L I E K
UniRef90_W6LR29	T R L D I E P V I I S E L Q M V K A L E
UniRef90_S9ZPT3	T G L Q L D L V I A E A D K L K R L V E T L
UniRef90_D4M773	V S G G I R I G V A T Q Q E S I Y Q N L P R F Y
UniRef90_UPI0003462898	T G L S V D G V L A P V N Q L D T T L R S Y
UniRef90_H8MP55	L G K P L E L W V A V E L R V R E W I S I I Y
UniRef90_K11918	F G R P V Q Y W L A R T Q D I D T L V D Q
UniRef90_A1ASU1	H G V Q I M P C V A S R R E I H E A I C T F Y
UniRef90_A0A023X5J9	L G A S T E F V V A P E S R I L A A L D R L F
UniRef90_D9SJ9	A G R R I I P A I A P S A E V L A A L D K F Y
UniRef90_A7HJC2	M N K D V D F C L F S P S V F E S M Y N
UniRef90_G2DC95	T G L A S E A I L V E E N K L S K L
UniRef90_Q0BR98	L G R P V R I G I A V P I M V E T A L Q R L Y
UniRef90_T0Z955	T R R S V V P I L L A G N E I E D D L L E R W
UniRef90_D6SKP2	S G K A P K F A L T E E H Q L V N F V Y D H F
UniRef90_J3AQ81	A N R P V I S V L A A R P G D W R R A F E E R Y G
UniRef90_UPI000479C45B	T Q R R L I P L Q A A P G T L V P A I A K A Y S
UniRef90_Q3A3Y0	V S V P V L Y K V A A K S H I L R
UniRef90_I4ABC9	T G F E V E P L L A E E E A Q V V T A I K K Y
UniRef90_D8FE24	L H L N A S V V L A P A S A I L S G I N A A Y
UniRef90_UPI0004757C42	S G L Q V E P I V V E D N K L A A L M G K L F

1 10 20 30 40

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

50 60 70 80

UniRef90_UPI000467FA6C	I A E G L A D R R D V L E A L S R Q H N T Q I V D L R D D P A R P S L A A R
UniRef90_UPI0002D28239	N E K I F S S A E L S E H L S R I F S L P L D S I N H Y Q Y V E A N H Q I N C
UniRef90_D5EJ69	T R D H V V S Q M Q I A A E A L A E E F S M E V V D L T D V R T S G D A L E I
UniRef90_UPI0003D3A513	L L Q L G L L T E T D L A E T Y S A I L G R N V L D A S D L A S L E R P L R P E Q
UniRef90_Q0A6W6	V E A K V L P G H E V I Q Q A A I E F G I P A L D L A A V E P D I N A V K L
UniRef90_E3BM20	T A L E L L T S E C L A S H A K I Y G L P C V N I H N F N C S S V Y D V D N L
UniRef90_D5SUY1	V Q L K L A D G E T A A R A L A S E L G R P F V D L N E M L P D D S I L D L
UniRef90_T2G7B4	R H Q G K L K E D E L M E Y V A N Q L Q I D K Y S V E K Y P V D T S L S R I
UniRef90_C9QCK3	L E L D F I A H R E L T K Q L S R L F G L A E I S L C Q F N Y Q S L C H T L G L
UniRef90_Q8KZ85	L L Q L G L V S E R D M A L S Y A E F L D M P L A S A D L Y P R E P V L T Q Y
UniRef90_K2DV36	L D D H K F A S Q E D I A K A R A Q T L G I P F V S S Q Q M E N I A I E S E I N S
UniRef90_UPI00040AAFF5	V K L G L L S E A D L C G A Y A A Y C G L K I V R S S D L P L Q P L L A D R
UniRef90_Q87DF3	G R L G L V S E R D H A E V C A E V M G L L L I Q V R E L P D T P P E F E V H G
UniRef90_F7NYG1	I G E K L I Q S K L L A E A A A S F T L H S S L D L D F F D I N A I P E E L L R N
UniRef90_K8Z5I5	S D K K L V T A A Q L A A A A N A L E F G M P L L D V S V F D A S Q S A M K L
UniRef90_A0Z7B0	S Q A L D I D S Y E L L A E I A S A E F G V P P L L D V S V F D A S Q S A M K L
UniRef90_Q1Q110	V E L G Y T T H K E I I K C L S W H Y D L P V L D L A N L E I P D E I I N L
UniRef90_U1KD40	L S S G M S S R E L L A E E C L D L F K V P F F N L D H F N V S E I P P A L
UniRef90_UPI00035E7B93	L Q E K I I T S Q Q L L A H L A H L F G G C P L F D L S Q F D Q E K V D F S V
UniRef90_Q606C2	S D K K L V T A A Q L A A A A N A L E F G M P L L D V S V F D A S Q S A M K L
UniRef90_I11DW94	V A N K I L L D G L Q I A Q V A H Q E F G L P L L D L A A V V F D I P P T Q W
UniRef90_C0DAV7	T E L L K F L S E Q Q L L Q F L A Q V A L N V P F L D I A Q K P I E P K A V Q L
UniRef90_D7AJL4	L D F G Y V S S E A A L L A C L G E R D G L E V V D L S E Y K V D P E A S G L
UniRef90_UPI0003749179	V G D G L I T T E E N L L A R A L A E Q F G L D Y V D A R G V R L N E S L L A T
UniRef90_UPI0003B77ABE	V E K Q W L S S E E L L A R F C E R E F M L P L S N L H D F D I K Q I A P E Y
UniRef90_SKHGVPS	S K H G V P S D V L D L A T K S V E Y G A P L V Q L E G L T P D T D T L E K
UniRef90_UPI0002002869	L D E G L I D S R Q L L A A A L A Q Q H Q L G W R D C N P F Q P D A E L L E R
UniRef90_D0J005	V H K D L I S T A Q L L A A A V A Q Q A G V S W E F L G E R L I P D E I A A L
UniRef90_L0DXA4	A T R T K I P E G R L L A E A A G D E F G L P V F D L A A F D R D L L P K E H
UniRef90_K1ZA49	I N A G F L L D K Q K L L V E F L G K Y L D I P V V D P T Q M K I D P K K V I S F
UniRef90_UPI0003499FE1	V D Q G L V S E A Q Y I T A R A A S N N S K T V P L T D Y P V D G T A V S M
UniRef90_D3RS82	L E K R L I Q E Y Q L I E V L A D Q L L G F L H E E P S F A T I E R E E L L F Q
UniRef90_K1XC86	I I A K I I P E D Q I L R T L A H D L G L K F I Q L S S M S I D I K A I E T
UniRef90_A4XT08	L L D G L L D S R Q L V Q A L A E Q L D E P W A P L N P F R V D E H L I R A
UniRef90_F8IJH3	V A R G Y A K P V D V Y R L L A E Q L K H E R V V W P P R L Q T L R K
UniRef90_X1DFW5	I D L N I L K K D E M M L S L A D E I G E K Y V N L D D I T I D P T I V V L
UniRef90_A1WIC1	V E L L G A L T Q E Q L R A V I A S W L G E Y Q V H P G D L K P E A A A L A L
UniRef90_I2F4T5	V G M G V I S W E D I Y D S L S K Q Y G L K V L E D L P N M L S P E V L R M
UniRef90_G8UY28	V K N K I L S A E Q I A L T A A Q N F G V P M L D I N C I D V G T I P A N L
UniRef90_A0A011PNE4	V A A R K A S F I E L A R F A A D K F G Y P L L D L A A F D D A H I Q K N A
UniRef90_G4T3C5	L E R E W V A E K T I R S I L R K E L L I E E V S L P E F Q V N P E A V E L
UniRef90_UPI000466CE20	R E Q R K V T V G A Q L L A A A N S I E F G M P V F D P S A M D P A Q N A L A L
UniRef90_W0VCN1	L S S G A I D A A G L A L F C S E T F A Y P L L D L R T L S L D A L L P Q K S
UniRef90_K1YJW7	I I K Y N F I D E K V F N R V L S L Q L G F P L V D I N L S L V D K V L V G R
UniRef90_UPI0003B310B4	L H D G L L D E A Q L L R A L S E L H G I V A V D L G A I E P E A E A L E Q
UniRef90_K9DBD3	L A S G A I E P R A L A A F C A E T F G Y P L F D L S A F A P E F L P T S A
UniRef90_C8X268	F D K D I L R D Q D Y L E F L S Q R L S M P C A P E L F D I A Q D I F E L
UniRef90_A7H8U3	S R L A G V P E G A L L A S V L S E K H G V P G V D L S R T A I A V S V L D L
UniRef90_UPI000374EF6A	Y Q N A K L P T E K L L F D I L S R S S G F P K I D I N R L Y I D K E I V E L
UniRef90_L0DX91	L R L G V V G D R D L A D A L A L T G V A I V R A E D S P D L L E P P A D
UniRef90_X0WVQ9	I D K G Y A D E R D V L E I G E Q L S I P V V N L D E I E I D Q D L L G L
UniRef90_UPI00036D5C30	L M V E G V N G D K V M Q A L A G L Y K A P F L D I S H F Q P S E K L I A K C
UniRef90_X1AQ40	V E I G G A I S R E E L L Y E V L L Q Y V Y E S Y E V D L S N Y V I D P E V I S L
UniRef90_F8CGR1	L E Q G I J A S E A D V L A L L G E V S G F M P V N L M D F E P N P E V A S F
UniRef90_N9VNH0	I I E N I L L G S K E L A D F C E Q E Y G V P L L D L D A F D V T E I P Q K Y
UniRef90_UPI00037E5585	I E L G F L S E I E I A R T L S R K L Q L P Y I E P D L L M K I P A E V I A L
UniRef90_D8JKQ0	R K A S G M Q S Q A I V R A V A D A Y H K I A R V E E G D W G R F Q P P Q T E
UniRef90_UPI00047AED56	T E R D K A M A D L R H M S L P F V D L D E Y Q V D P S V V N M
UniRef90_UPI00047CF894	F D D K I I T P Q D L C A L L S R M F N Y P Q F N I N A F S R S K M M T D L
UniRef90_M5S1E0	L E L G L I D E G T L L R F L S Q Q R G V P Y A L L R D G M V D P A V V Q L
UniRef90_UPI000465B18A	M R K G W L D E E T L L A E A L A Y Q S A L P R T S L D E A R V R A G N V H
UniRef90_UPI000468CFA1	V A E G G L A S P Q E V M Q S V S R Q S N I P L A E H S A S L P D P S L G S A
UniRef90_UPI00046FC2CBF	I I A A G A V S P S D L L A H T L S S S D L L S V D P T R L P R N V
UniRef90_A0A024Q2F7	I E Q R W V A A R E A T Q S A A W E Y G L P F V D L E A L S T E R L P I G E G
UniRef90_A7HD86	A S F G F V D E D K A T Q A V A Q A V G V P Y R K I D P L K L D A Q L I T R T
UniRef90_Q0EZ04	L A K G W V S P Y V M G Q V L A E H F D K P H V D L M D R P D I S L L D R S K
UniRef90_A7IG36	V S R G W L D E E T L L A E A L A F Q S G L P R T H V T E Q M V R Q F H D L
UniRef90_UPI00037C0D81	V E N D F I S S E A L A A Q F C E A E Y G I P L L D S D T L N L D N I P E K F
UniRef90_S7W1E2	V E E G T I T T Y G Q I I A S A R A A Q A E L P F V E L Q D Y P I D R A A V A L V P
UniRef90_E8M1N6	L A L E L F D S Q Q L T R H L E R L F S L P R V Q L D T Y Q Y P E L C Q Q L G L
UniRef90_A1W474	T E S K I I T P S D L L A H T V S T V F G A P L L D V D A I D R Q R I P K D L
UniRef90_E4TIY4	V K L G K I S K A Q L D Y V I S K Q I D L P F V I V G K E Q V D F E L L N R
UniRef90_UPI00021A60DB	I R L L G F V S G A I L R D I L L G G A L G I E S V D L A R T P D S S A I A A
UniRef90_UPI00047E3FFD	R E H K L V T A A Q M A A A N S I E F G M P V F D A A A M D P S S N A L K L
UniRef90_UPI00037325A1	V R N G I L S S E A Q L Q A A A A W G D P V I D P R Q L S P D P S A L A L
UniRef90_G2LTG9	L A Q R G V P A Q R F Y A I V A A H F G L Q F I D L V Q Q P P D P A L L T P G D
UniRef90_X1CI31	I D L G R V T Q D E I N W V L G K Q L N L P Y V V R I N V D N I D I Q L S K N
UniRef90_UPI00047B61A0	L E R Q L V D P M D M A I A C S N Q F G M S L V D L D A I N I S I Q M K E L
UniRef90_E8WL35	V E K G F I E E R R L T E V L S F Q L G F P V A E L E F R K L D R K L F A K A
UniRef90_K2B1A5	L K K H L V N E E D L L K A R A S L N N I P Y V T L L S S V A F S P E F I N Y
UniRef90_L0GFR9	L A R G W I N S Q L Q A Q A A Q A D L E W T P L N P F T I D A Q L I E Q
UniRef90_UPI00035D50FE	V D S G L V S A E E A A V A A A W E Y G L P V V S L E A I R V A A L P A A S D Y
UniRef90_F3LUR2	V R L G A L D T E A L T A W L A G R A G L P Y L R I D P L R V D V G R V A E V
UniRef90_Q28T00	I A Q G A I S E P E L L I S T L A Q T Y G V G I A D L S G D L P D T S L A P
UniRef90_S7TP84	I K K K M L T E A Q W L E T L S G V Y D L P V I E R L P V G N S R S T V I Q N
UniRef90_F6AGH6	A Q N K L V K S R A L A E L T A D Q F G I A Y F D L S A L D K E S Q P K D L
UniRef90_UPI00047E3224	V R L G L V A E K D V A E T L A E V A N L D L A V A A D Y P V D P L P E A
UniRef90_UPI0003F8A6A3	V E N K M A D A Y E L L A N L L S K F S G D P L F D L N A L E A D I V P K D L
UniRef90_R6NYX9	I K E G V V T E E Q I Y D L M A K K M H L P L V D L T S Y Y I S D D V A Q L
UniRef90_C7M1V6	V R R G I V P R D L L A R V L A E R A R V P F V T L V D R E P R R E L L E G
UniRef90_S2KSJ9	V E S G L V T A R Q A A F A A A W E Y G L P L I D L D A L K L D G L P P A S E
UniRef90_UPI0003468C42	I I R S S N M S Q E N Q L L A Q C V E L F R T P Y I D L S S F D P R S I D K H L
UniRef90_D3G2C7	L L R G L I N S E Q L A K A L A H Q A S L K A V S F N I F Y L D S K L I A A

90 100 110 120

UniRef90_UPI000467FA6C	L P V G L C L Q F R A V L W M D M A G V L L V A T S R P H E F E T L R T A
UniRef90_UPI0002D28239	R E L T L S H G V L P L E I N A N L L T L A I S D P T N L E A Q D D F R F A
UniRef90_D5EJ69	I N Y D I A N R Y K V F P L E V D D T E V E L A I C D P L D M D A I D S I S H V
UniRef90_UPI0003D3A513	V G A H F I R A A R A L P F V E G E G I L S V L M A D P L D D F V A E A I E A A
UniRef90_Q0A6W6	V S E K L I R T H Q A L P L F R R G K R L F L G V V D P T N L D A L D E I K F H
UniRef90_E3BM20	T T L I I R H S A L P P I K T S K Q K I I C L A I L S D P S N S E I E K E F R F T
UniRef90_D5SUY1	L P R Q V V R R H T C L P F E D D G Q I L V A C A D D P P Q E L E D E I R L R
UniRef90_T2G7B4	L P M D V A R K H V A V L R Q K G S M I W L A T S D P L N V G M L D I L E K S
UniRef90_C9QCK3	R E L I T R F S A L P I N Q T P Q L L T I A V A D P T N L E I E D E F R F A
UniRef90_Q8KZ85	L G A R F L R D I H A V P L G V D D G T V T L A L R D P L D G F A A S S I A A A
UniRef90_K2DV36	V P E T V A R A R Y K L V P F R M D S D G L L A I I M T D P L D L Q V V Q F I E K K
UniRef90_UPI00040AFF5	L K L T F L K G S R T L P I S V S D G V L L L A T V D P F D E E A H K A I S Y M
UniRef90_Q87DF3	L S I R F L K Q F H V C P L A E H D G V L Q L C V A D P F D V Y A I E A L R L A
UniRef90_F7NYG1	E K L I R K H H I L P L S K R H K T L F L A V V D P T D M T S V E D F E F N
UniRef90_K8Z5I5	V S E E L L H K Y Q V L P L F K R G N R L F V G M S N P T Q T R A L D D I K F H
UniRef90_A0Z7B0	V S A A L L M S K H Q T P I F R G N R L F I A L A D P T N I A A L D E I K F A
UniRef90_Q1Q110	L P T H I I K K N G I L P I S K K S G V I T I A T S R P P D L G F M D N L R F I
UniRef90_U1KD40	V K E K L I R K H H I L P L V Q K G R K L Y V A A A S D P T D F S A F E N F E F S S
UniRef90_UPI00035E7B93	I T T E Q S A K F L T I P P L L Q R G R R R L T V A V A D P S V L Q A L Q K A T F S S
UniRef90_Q606C2	V G E K L I R R H H I L P P L R R G N H F V A V A S D P T N F L G L D E I T F Q
UniRef90_I11DW94	L P E V Q A R R F R F A L V L E D H G S K V V L L A M D P A D L A A M D Q L A A L
UniRef90_C0DAV7	I S H N F S D Q Y Q V L P I G I R R G N G K L V V A A R D P L M F D V F D E I E A A
UniRef90_D7AJL4	L P P D A I Y R Y Q F V P P L E E E D G T L V V L L A D P T D V L K L D E E L E L
UniRef90_UPI0003749179	L S M D L I E H H H A I P V V L L E D K V L Y L A M S D P T N I S A L E D F S F R
UniRef90_UPI0003B77ABE	I S P P G F A Y R N K L V P I E K L D D E L T I A M V E V L N V L I D E I E L I
UniRef90_UPI0002002869	I G E R L A F K Y S V L P P L C M E E N N L V L G R E S A A S A V A L G V I S R Q
UniRef90_D0J005	V P A H L A D H Y S V V P P L R E E G E A L I I L A S E S V I D P V S H A A L E R K
UniRef90_L0DXA4	L I E T L I R K H H A I P L L Q R G N R L F V A I S D P T N L S A T D E F K F A
UniRef90_K1Z4A9	I P A Y L L A R Q F K L I P F K Q T D Q R L M I V M A D P G N K I A L G E L Q S T
UniRef90_UPI0003499FE1	L P A A L C R R H G V L G V G F E G E V L V L A M V N P T N V L A I D D A R T A
UniRef90_D3RS82	V N P N W C Y P R R F Q A V P I R R D D E G T V A F L N P L D T A A R Q A A E G T
UniRef90_K1XCB6	I T H Q Q A K E Y H I M P V I R E M N T L I I A T H K P D L E Y I D N L R M I
UniRef90_A4XT08	F P R R L A L R Y A A V L P V D E E G D T L V L A C E R L L S Q V S V G A I S R Q
UniRef90_F8IJH3	L P P E D V A R R L G A V V I D E D A S Q I W V A V H D V L D E A R M R E L L T M Y
UniRef90_X1DFW5	I P P E E M A R R H Q L I A I D K D E K K L T V A M A N P L D V F A H D E E L K I R
UniRef90_A1WIC1	V P P R A M A E R E S V L P P L I R E D T L V L L M I D P G K R S L L D E E L R F L L
UniRef90_I2F4T5	I P P K P V A D R L N V I P P I E Y L P E N R V V T T D V L K V P Q I D E E L S F L L
UniRef90_G8UY28	V N E K L I K R H A M V P P L F S R G T N L Y L A T D D P S K Q A S L K E I I Q F H
UniRef90_A0A011PNE4	I I D R K K L I A T H R V V P P L H K R G N R L L A V A I A D P T N L R A L D E E I R F Q
UniRef90_G4T3C5	L P R S V C E Q H C V P P L K V D Q R Q L L L V M A D P L D M G L Q A E L R F M
UniRef90_UPI000466CE20	V S E E L L R K H H C V P P L F K R R G G K L F V G T S E P T A T R A L D E E L K F F Q
UniRef90_W0VCN1	I I D N R L M Q S Q R V I P P L T R R G N K M S V A I S D P T N T Q A L D Q I K F Q
UniRef90_K1YJW7	V V P M K T L V E H Q F I P P I K N G G T A T L V A F A D P L N K K S V E T A Q K Y
UniRef90_UPI0003B310B4	I P P E P L Q R E L R I V P P L L V R G S V L W I A T P D V L S P D A R A R I I Q A T
UniRef90_K9DBD3	I I D A R L M Q A Q R V I A L A K R G N K L S V A L S D P T N N Q A L D Q I K F Q
UniRef90_C8X268	V P S E L L C R K Y E A V P F F R H N N T L F I A T A D P E N I L L A L D D I R F V
UniRef90_A7H8U3	V P R G V A Q G D L I L P P L S L E G E R L L H L G M A R P L D E R I L S E V R F A
UniRef90_UPI000374EF6A	V P K K L L C E R F V F P V D K L L G R G N L T L A M A C P I D K E T V F L V E Q F
UniRef90_L0DX91	I L P E R F L E R V R A V P P L G E E D G R L V L A L A D P R D R F V L D S V A L A
UniRef90_X0WVQ9	L P S K L V H R C C L F E P I D R K N G S I R V A T S N P F D L Y A F D E E L R M L
UniRef90_UPI00036D5C30	P E V L L C N D F G F V P I D E K N G E L I I I A T G N P M D F Q A L D A L Q F K
UniRef90_X1AQ40	T S E K A A L R F K L I P I S K N N D E L I I I A M A N P L D V Y A I D F F V R D H
UniRef90_F8CGR1	I I P P K I A E R L C V V P P L S L D G N T L H V A S G Y P V P K K E L D E V V G F L
UniRef90_N9VN0	I I N Q K L L E K H H A L P I Y T Q G H T L Y I A M S D P T N V S A L E E F G F N
UniRef90_UPI00037E5585	V P P Q R L A S K H Q V I P C R L E K K R L F L A M S D P T N L T I I D A L A F R
UniRef90_D8JKQ0	I I P T A F L R E N K I Y P L G D V E D G I L L L A M E D P S D A Q A I N A V R I A
UniRef90_UPI00047AED56	V P D D L C R R R S K L P I S I N G N R G I L A L A M A K P N D F A A I D D I S A S S
UniRef90_UPI00047CF894	L D E N Q M M A H R C P P L F K R G R G K L F M A V I S D P T N I Q A L Q K L V F S
UniRef90_M5S1E0	L P P K A K A E A F E S L V L F K V R G R K L S V A M V D P H N L Q H V D E I E R I
UniRef90_UPI000465B18A	L L P I D T A I Q L R A L A L E T T S Q V L H L A V V A P L S E S A L E E T L R Q H
UniRef90_UPI000468CFA1	L P S G L C L K H R C P W C K I G D V L M V G T N H P D H F E A L K K C M G E
UniRef90_UPI00046FC2CBF	I I D G K L L S A Q Y Q V L V L G K R G N R N L F I G G A D P T D Q E A V V E R I K F A
UniRef90_A0A024Q2F7	L S D T L I R R L G V L P L A R G E R H I S V A I P Y P S T L A K L D E L Q F T
UniRef90_A7HD86	L S R R P F A R R H G V L P P L E R R N G A L V V A A A N P F D R E L F E N L R G L
UniRef90_Q0EZ04	I I S R S E N L F M P W Q R E D G L L K V A V V D V T P E L L K I V N E T
UniRef90_A7IG36	L P P L D L M V R R R R L L P V G R D E T R L V V A V P S P S L G D K A L E D D V R E A S
UniRef90_UPI00037C0D81	I I N E K L I E K H H A L P V Y V Q Q K T L Y I A M S D P T N V S A L E D F G F S
UniRef90_S7W1E2	A A L I C R R C E V L P P I S I S G D L L T V A V A N P G D V V T L D D L R A A
UniRef90_E8M1N6	REL I T R F N A L P I A K D N N Q L T V A V A D P S H L E V E D E F R F A
UniRef90_A1W474	L D V K L L C Q S Y K V I A L S K R N N R N L I V A T A D P T F Q E A A E K I K F T
UniRef90_E4TIY4	F S I E F M K R H R A L P I Y A D E H N I S V I T D D P F D T R V V E Y F E K V
UniRef90_UPI00021A60DB	L P V Q V I A R R F L A V P G L T L D N K R L R V A M A D P F D V I A L D H I R S L
UniRef90_UPI00047E3FFD	V S E E L L N K H H V P P L F K R G G K L F V G T S D P T N T H A L D E V V K F H
UniRef90_UPI00037325A1	V P R H V A E R E S V L P P L L E D E V L V L M A D P W D Q R L L D E L R F L
UniRef90_G2LTG9	L D S Y A Q R L V L P W R R E D G V L V L A V A D P D P A L F A W A R A H
UniRef90_X1CI31	I I S E N A L K K F K A I P I M E L N D E L V V A M A D P T D D E E A I E M I K E V
UniRef90_UPI00047B61A0	I I P E D M M R K L Q A I P L F T I G S A L I I A V A D P H Y S F E L G D I K V T
UniRef90_E8WL35	P P E V F V R D E L F P P Y A D K E G A V M V A F A N P L E K Y S R L A A E K L
UniRef90_K2B1A5	I I P E A V A R K Y T L L P P F E Y D E N T L S V A M T D P L D A Q I I D F L E K K
UniRef90_L0GFR9	L L P A R L A L R Y S V L P P I A E L D G T L V I A S E R E L S Q V S L G A M S R Q
UniRef90_UPI00035D50FE	P P V K L L E R L G I L P P L A R H G H R L T V V A V P Y P A T L T Q L D E L L Q F A
UniRef90_F3LUR2	M S V H Y A E S R R A L P V A V S P T E V T V V A T A E P F D V A W V P E I E A H
UniRef90_Q28T00	L L P A A S I T A E A V L W K R A G S A L V I A T S R P D R I Q D L R A L
UniRef90_S7TP84	I I P I Q F L K K Y V M P P L E N E G P E V I I I A V N D P T S F Q P I D D V I R I
UniRef90_F6AGH6	V V S E K L L V R Q H R A L P P L W R R G N K L F I G L S D P S N H Q V V T D I Q F S
UniRef90_UPI00047E3224	V V S C Y R F L R T R H A V G M G E E D D H F V I A A A D P L D E F L R E A L T L A
UniRef90_UPI0003F8A6A3	U V D E N I L L R K F N A L P P I F K R Q G Q L F V A L S D P T R I D A I D A I A F N Y
UniRef90_R6NYX9	I I P E Q M M E D L G V M P L T I E G N Y Q L L I A M T N P L D Y K A I Y T L N N Y
UniRef90_C7M1V6	I I P D L E A C V R E R E L V P P I R D D D G T L L V V A S S E V P T D T V R E S A E R L
UniRef90_S2KS9J	I I P P E K V L R K L S A M P L Y R D E H H T V A V P Y P S T L A M L D E L Q F A
UniRef90_UPI0003468C42	F F P R Y L A C R Y A V L P P F S Q K G K A L Q L I C E H A L S P I S L G V I S R H
UniRef90_D3G2C7	

UniRef90_UPI000467FA6C 130 140
 UniRef90_UPI0002D28239 L G D R I L P V I A D E Q Q I Q N E I T R L Y G
 UniRef90_D5EJ69 T G Y Q I K P V L V D H Q Q L T G A I R K L Y G
 UniRef90_UPI0003D3A513 V K R T I N T R I A P L D D I E R A I H Q Y Y
 UniRef90_Q0A6W6 T G M R V V Q R E V A R I S L I E A M I E R L Y
 UniRef90_E3BM20 T G L T T E A I L V E P D K L T Q V M E R
 UniRef90_D5SUY1 S G K D I E L V I A S H E Q I S T V I D E L Y
 UniRef90_T2G7B4 Y D K P M R H V I A S Q L G I N Q G I S K Y Y
 UniRef90_C9QCK3 T G L Q V E L V L A D V K Q L H G A I R Q V Y G
 UniRef90_Q8KZ85 T G L R V S C O R V A V P I E L E A A I D R L Y
 UniRef90_K2DV36 T G K V K V R Y M G L P A N I I N V I N D Q Y S
 UniRef90_UPI00040AAFF5 L G W R V D L A V I A P A D I E R A F R K L Y
 UniRef90_Q87DF3 T G A V L Q L C I G L R S E I D D L V E R W Y G
 UniRef90_F7NYG1 T G L N A E M I V V E F D K L H K A I D K L F
 UniRef90_K8Z5I5 T N L T V E P I L V D E D Q L R R T L E Q W
 UniRef90_A0Z7B0 T G I S T E A V V V D E R V L A R R L T E L
 UniRef90_Q1Q110 L G S D I K F I L A T A E Q I A Y A F R K
 UniRef90_U1KD40 T G L Q C E V L V A N Y K K L E A K I D Q L F
 UniRef90_UPI00035E7B93 A G V T I D M V V V P A D Q L L G L I E R L
 UniRef90_Q606C2 T R L V T D O V L V E E N K L S R C L E
 UniRef90_I1DW94 L P R Q I E L A V V R E S Q L I E A F D T L Y
 UniRef90_C0DAV7 A G M E L T V V L A A A E S I R N C A A A V Y
 UniRef90_D7AJL4 L D R P F I V K L A T E T A A T I L K K
 UniRef90_UPI0003749179 F N L V T D A L L V E E G K
 UniRef90_UPI0003B77ABE T N C R V I P V L A N T A D I E E A I V R L Y G
 UniRef90_UPI0002002869 L G C P C R Q V L V P Q G R V Q
 UniRef90_D0J005 L E R P V R Y L I A P K G E V T V E L R R L Y
 UniRef90_L0DXA4 T G L S I E T V L V E H N K L D R L I E
 UniRef90_K1ZA49 Y P E Q I E I C I G L D D K K I T E A I T K H Y
 UniRef90_UPI0003499FE1 S G R P V K P L Q V E E R D L A A A L D R Y
 UniRef90_D3RS82 F G T V V A A I S T R R A I E E A I K N Y
 UniRef90_K1XC86 L N L Q V D T V V A T R M D I E Q T I D K Y Y
 UniRef90_A4XT08 L G R P V R W Q L A P Q G R V T L L G L R Y W Y G
 UniRef90_F8IJH3 L D K P I R Q Q L A T R Y E L D Q L W N L I Y
 UniRef90_X1DFW5 L G Y D I D S V L S Y G E D I Y K A L D E V F G
 UniRef90_A1WIC1 T Q R R L I A L Q A A P D T L G P A I R K A Y
 UniRef90_I2F4T5 T G N K I S T L L V P P P M F D A L Y R
 UniRef90_G8UY28 T G L N T H A I V V E T D K L S A L I D N L
 UniRef90_A0A011PNE4 T S L A V D P V I V E E N K L A P L V T R L
 UniRef90_G4T3C5 T G L T I E T V M A D I A A I K K K I N A V Y G
 UniRef90_UPI000466CE20 T N L V V E P I L V D E D V L K R T L E L W
 UniRef90_W0VCN1 T E A S V E P V I V Q H D V L L Q V L A S L
 UniRef90_K1YJW7 L G G Q I S P A I S E K K A L N D T I K
 UniRef90_UPI0003B310B4 T T L E P R E L L A Q A S A I D L L Q Q R M
 UniRef90_K9DBD3 S E A T V E P V I V P H D
 UniRef90_C8X268 T G M E L A V H I A T P T S I A V S L E N Y
 UniRef90_A7H8U3 T G R E V S P Y V A V R A S L A R A V Q E A Y
 UniRef90_UPI000374EF6A T Q L R V K P T L A R I T E I E E T I N K Y H
 UniRef90_L0DX91 A G Q E V T P R I A L P A D I T T L D R L
 UniRef90_X0WVQ9 T G T K I E P
 UniRef90_UPI00036D5C30 L G E R V R A I F A R P D V I R K K I R D F Y
 UniRef90_X1AQ40 T K K E I K S L L A T E E D V L N A I T N Y Y
 UniRef90_F8CGR1 L G K P L E L W V A T E V R V R E W V S T I Y
 UniRef90_N9VNHO F G L H T E A L L V E E Q K L V H A I G K L
 UniRef90_UPI00037E5585 L G F I I V P V V V P E I R L M L A L Q K Y Y
 UniRef90_D8JQK0 L Q R E V I P R V I A S A E D I L A A I E R M
 UniRef90_UPI00047AED56 T G M Q V I P M V A T A S Q V Q A A I N R F
 UniRef90_UPI00047CF894 S G L S I D L L V L V R D D H L N S F L E W F G
 UniRef90_M5S1E0 T G L Q V N P V L T L R S V I E R M L P R C Y
 UniRef90_UPI000465B18A A G R K V V Q Q A I A C E S D I A Q G L R L L R G
 UniRef90_UPI000468CA1 H G R H M L P V L V S N K Q I R D Q I T V I F G
 UniRef90_UPI00046F2CBF T Q L S P E W V I V E H D K L A R I L E
 UniRef90_A0A024Q2F7 T G L T A E G V L V A T D Q L Q P A I E R Y
 UniRef90_A7HD86 T G A E I E P V L I S S P A D I H R A I A E V Y G
 UniRef90_Q0EZ04 V D E P F D I V T S K F D I I W L L Q E Y Y S
 UniRef90_A7IG36 V G D V P V Q R I A R E S E I N G G L R L L R G
 UniRef90_UPI00037C0D81 F S M H T E A L L V E E K Y L N K A I E E
 UniRef90_S7W1E2 T K M H I S P V V A E R Q D L R N A I N R
 UniRef90_E8M1N6 T S L R V E L V L A D Y N E L K G A I R R L Y G
 UniRef90_A1W474 T Q M G V D W I I A E Y D K L L R L I E
 UniRef90_E4TIY4 S N K K V L L S V A S E D N I L D I L N M V E G
 UniRef90_UPI00021A60DB I G E G V E I L V L A S R A D I E E F I D R Y
 UniRef90_UPI00047E3FFD T N L M V E P I L V D E D T I R R T L E L W
 UniRef90_UPI00037325A1 T Q H R L L P A L A A P G T I L Q P T I A R F Y
 UniRef90_G2LTG9 Y G E D V R F V G T A K F D I I W S L Q R Y
 UniRef90_X1CI31 T K R K L K I V L A S F K N I D E T I N R I F S
 UniRef90_UPI00047B61A0 T K L V P E P V L V E Y S K L Q K I Y G
 UniRef90_E8WL35 F G R S M K P A L A T R T A I L S A I A
 UniRef90_K2B1A5 T D K S I K S F M A M K E D I L S S I E N L Y
 UniRef90_L0GFR9 L G R K I I C K I A P Q G R V T V G L R Y W Y
 UniRef90_UPI00035D50FE T G L S V D G V L A P A D Q L R D T L V Q Y
 UniRef90_F3LUR2 T R R T L R L V V A N P E D V R R Y T T E F Y
 UniRef90_Q28T00 L G Q R I M T V L A S R N Q I T E A Q R K L Y G
 UniRef90_S7TP84 I G K Q V Q V V L S T R E A I F S A I N I S Y
 UniRef90_F6AGH6 T G L S T E A L L V E D D K L G D A I E K F F
 UniRef90_UPI00047E3224 C G K S I H L K V G V L A E I D N A L K R Q Y
 UniRef90_UPI0003F8A6A3 S R L S V A T V I V E E D K L K Q R I E T I Y
 UniRef90_R6NYX9 T K R K I K T A I C T P T Q L K I K L D E I F S
 UniRef90_C7M1V6 S G A P V R L V L T T E W D L L R Y I V R
 UniRef90_S2KSJ9 T G L L V E G V L A P T D Q L A P A L E N Y
 UniRef90_UPI0003468C42 T G L Q C E V V L A D Y R Q I D N L I E Q L F
 UniRef90_D3G2C7 I G L N V E C L I A P Q G R V T L L G L R Y W Y

UniRef90_F0EYS1
 UniRef90_UP1000419E451
 UniRef90_J9YX5C
 UniRef90_K2EUK9
 UniRef90_UP10001746BDE
 UniRef90_A9BP72
 UniRef90_K2DJC4
 UniRef90_F8XNJ0
 UniRef90_U5N618
 UniRef90_UP100026C77B8
 UniRef90_UP100045EA652
 UniRef90_W1NCK0
 UniRef90_F8AACM0
 UniRef90_S9P6F4
 UniRef90_B1T6C6
 UniRef90_Q21MF4
 UniRef90_K2JS49
 UniRef90_A0A017THA5
 UniRef90_E6W6Q8
 UniRef90_G4CTS0
 UniRef90_H5WS19
 UniRef90_L7U678
 UniRef90_Q48MM1
 UniRef90_K9U1C9
 UniRef90_I7DMQ3
 UniRef90_E8RVR5
 UniRef90_UP1000402CCE2
 UniRef90_K9QXH3
 UniRef90_UP100037B2EB7
 UniRef90_D4DM32
 UniRef90_UP1000365E9C5
 UniRef90_UP10003B3F371
 UniRef90_A0A058ZR42
 UniRef90_J2LWX7
 UniRef90_R9PSD7
 UniRef90_F0SN30
 UniRef90_UP10002F5146A
 UniRef90_X0T044
 UniRef90_H0E2Y8
 UniRef90_UP100036C48B8
 UniRef90_A0A024E5N1
 UniRef90_B5EA28
 UniRef90_A0L656
 UniRef90_H8L4F9
 UniRef90_Q82SM4
 UniRef90_E5Y4E6
 UniRef90_K7WYY7
 UniRef90_UP1000364B9B5
 UniRef90_UP100046475D5
 UniRef90_C1DRU4
 UniRef90_K1YQ24
 UniRef90_L8LZ17
 UniRef90_E6QI38
 UniRef90_B9XM22
 UniRef90_UP100047B2234
 UniRef90_UP100046EE236
 UniRef90_UP100036D613D
 UniRef90_K2BK53
 UniRef90_F5XXH0
 UniRef90_K2EDY9
 UniRef90_W7QDQ3
 UniRef90_UP10003661867
 UniRef90_Q47VS7
 UniRef90_UP10002558F60
 UniRef90_UP10003B66C2C
 UniRef90_UP100047503C4
 UniRef90_K1ZMX0
 UniRef90_B4D852
 UniRef90_UP100047A4796
 UniRef90_A71269
 UniRef90_B4VWI9
 UniRef90_A1WBA5
 UniRef90_Q4ZRN9
 UniRef90_UP10003FA079C
 UniRef90_F8CJ95
 UniRef90_U1M5X8
 UniRef90_K2DQ63
 UniRef90_UP10003711BA5
 UniRef90_UP10003825AC0
 UniRef90_B7S019
 UniRef90_I2BN94
 UniRef90_K2HRB7
 UniRef90_X1HNV4
 UniRef90_D5WR70
 UniRef90_R5TEV9
 UniRef90_UP10003B6205B
 UniRef90_UP100016B268C
 UniRef90_I9KQL8
 UniRef90_W0BDW7
 UniRef90_Q4FPL8
 UniRef90_A6T1B6
 UniRef90_B4SJA4

10 20 30 40

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

50 60 70 80

UniRef90_F0EYS1	F S D K I I T P D A L A Q L C S D V F N Y P M L D L N F F P R S R I V P D V
UniRef90_UPI000419E451	S D R R L L V S A A S M A A A N S V E F G V P L L D A N A F D P G Q S A I K L
UniRef90_J9YX5C	I N D N L V S E D D I V A A V S R N Y A L R K I V L T E Q T I K K D A V K K
UniRef90_K2EUK9	R K G K M V S E E S L V Q A K S Q L Y N I P F V K L D T S P V A P A A L A A L P
UniRef90_UPI0001746BDE	L E R G L V E E A M L Q P L A E E L G W P W E P M L Q P K L E E A S E L K R L
UniRef90_A9BP72	S N A G I L S A L E V A E T V S T T M F S A P L L D L D A I N A A R L P H E L
UniRef90_K2DJC4	R K Q N L V S N A D L V K A K A S L Y N I P Y I D L A T S P S S P E A M S V
UniRef90_F8XNJ0	V E K G A V P A A V L M A H L S A R Y N M P M L D L D A V D P T R I I R D A
UniRef90_U5N618	L G S G V L T P S E L A H F L C V A F S L P M V D L D A V D P T R I I R D A
UniRef90_UPI00026C77B8	V K N N I L S A T Q I A L T A S R R N F G V P M L D L D S I E I D S L P S N L
UniRef90_UPI00045EA652	L A M G L L S E D Q L V R G L A E Q Y Q L L Q T I H L L D G L A E E P L
UniRef90_W1NCK0	V E S R Q V S A L P L A R I A A E I H G V P L A D E G I E P A D L P S P S S
UniRef90_F8AAM0	I E N F G I S K F D I G R A L T D Y Y G Y P F I E F N E L N L G P K P S C L T G
UniRef90_S9P6F4	L E R R Q W L A E P Q V L H A L G E A S G L R P V N L A D F E P N A D V A S F
UniRef90_B1T6C6	L E C S E L S T E S L A D A L A E Q A E L P R V S L G N V A V G H F A D S
UniRef90_Q21MF4	S Q K S G I S A L T I A T A S E E F G T P L C D R A V R K D S I P V G L
UniRef90_K2JS49	L A H G M V E A T T L Y R A L A Q Q H H A I V A D F D K T A P D V R L I D I
UniRef90_A0A017THA5	V D R G A I T E Q A L L Q A L A T Q F H F P M V D L N R I A I D R S I L Q E G
UniRef90_E6W6Q8	C E L L G F I A E D Q L L Q A L A T Q F H F P M V D L N R I A I D R S I L Q E G
UniRef90_G4CTS0	F E A N I L I T P E A L A G L L A R V F S Y P L L D L S Y Y P R S N V L T D I
UniRef90_H5WS19	V R L L G I L D T E S L A T T E W L A G R F G I P Y L R I D P L K V D V G R V A E V
UniRef90_L7U678	K T Q G V L D E D R V T E V A A R A S G L A Y R K I D P L K L D M T L A T R T
UniRef90_Q48MM1	L S H G W L D D E T L A E A T F Q N D L P R V F D I A G K R A T N D V
UniRef90_K9U1C9	W S L N F L T Q A E F L H L I G T T D S H T D W L V V S G S V L D F S I A K T
UniRef90_I7DMQ3	V S E G W A S Q E Q V L D A L S S E H G M Q R V D L G G H R P Q A R L L A R K
UniRef90_E8RVR5	N Q L G Q L S D D D L A E A Y S A V T G Y R V W D A Q N E P S E I E P E T L G
UniRef90_UPI000402CCE2	V K L L G L I S E A D L C Q V Y A A Y C G L R V M G E A E I P A R P V L A D R
UniRef90_K9QXH3	L R Q Y K K Q Q L F E L K I L Y G V E F L D P E V N N L G N T M V G Q L I E T L
UniRef90_UPI00037B2EB7	L A N G W V Q E E A L T R A L S R Q W R S S V L V D L A A L P P D P R L I D A
UniRef90_D4DM32	F A D G I T N P K A L A E L L A G M F N Y P V L D L N Y Y P R S N I V Q D I
UniRef90_UPI000365E9C5	E K S K G M T D E Q V H R A L A N K L A I P F I Q L K Q F A I T P E A V A L
UniRef90_UPI0003B3F371	I E G G A A S R E L M A K L W G D S L D K A Y I E L G R T T M M Q E E L L D Y
UniRef90_A0A058ZR42	I A H G M I T P N Q L T R A L A Q Q F D Q A P I D L E T L T P D P R L I D E
UniRef90_J2LWX7	A E L G F V S E L E L R A L R A Q L H Q L P E V D L V I T R R P D P T V L P L
UniRef90_R9PSD7	V E N E L I S S R E L A D F C E A Q F G I P L L D L D A I V E L S E I P Q N F
UniRef90_F0SN30	V Q M K L V E P D K A A Q A L A E E L G R S F V D L D E V P P D D R V L D L
UniRef90_UPI0002F5146A	I S T G L V Q A R Q A T L T A A W E Y G L P I I D L D A L R L E S L P D A G D Y
UniRef90_X0T044	L E L G L V N E D T L T K A I A K Q F G L K Y V N P E K I S I P A E A V K L
UniRef90_H0E2Y8	V E L L R V A S A D Q V A R A L A D R H G L D H L D A H V Q P D P A V L T K
UniRef90_UPI00036C48B8	L D H G D V T E T A I A E V S A N V G T H V A D L A N G F I D P A F K S F
UniRef90_A0A024E5N1	L S N G W L D D E T L A E A I A F Q N D L P R V F D V A H K A Q A S T L T
UniRef90_B5EA28	M R D Y N I P R E E M I K C L S L N F G T E F V S F D P D L P R L D D V L K K T
UniRef90_A0L656	E R L L G F V S Q Y D V A T T I S E Q E D R P Y L D I N A V R P A E E S L R L
UniRef90_H8L4F9	Q D R Q A V D S L S L S E A S S R E F G I P L V D L A A L D M P E L P A E L
UniRef90_Q82SM4	I D E F G I S V T Q V G G A L A V F F G V R Y E R Y R P D R I K P M D L L K N
UniRef90_E5Y4E6	Y E A E R I N E N Q Y L E T A A A R H A M L C M D K E G S G W A T D A E R V C K
UniRef90_K7WYY7	I T E R K I L S P E F V T E I L Y G V E S L D P A I Y E I D P T N V G N L I Q T L
UniRef90_UPI000364B9B5	V K N Q L T A E Q I A F T A A Q S F G V P M I D I N C I E I E S I P A T L
UniRef90_UPI00046475D5	L A Q K K I S A K D I A Q T A S N A F G F P F L D L A L D Q D S L P D K T
UniRef90_C1DRU4	I R M G A L S E D A L L V V L H E Q L G L P V L D G A G M P V P Y A F M M S G L P
UniRef90_K1YQ24	L S I D L M N E D E V I P F I A K S L N I Q W I N L K E F K F N T S L P S E
UniRef90_L8LZ17	L R Q Y K K H H L F E L K V L Y G V A S I D L E E V N S N Q T G A L I D S L
UniRef90_E6Q138	G M V D E R A Q A E Q L A R R Y R A E F A D L K H F K I Q H D L L R T
UniRef90_B9XM22	C R E R G V A E D V F L Q Q L A T A L K W P F L D L P K V G V P P E A S Q K
UniRef90_UPI00047B2234	V E L L G V A T G D G V A R A L A D R Y G L D H L D L A H T Q P D A S V T G I
UniRef90_UPI00046EE236	L Q S R R K L S A L Q V S H A A S Q A F G F P L L D L N A I I S P D D L P S K S
UniRef90_UPI00036D613D	F Q D L G L I A D E N L G K V I A D T K I P F V N L S K E A I A D D L L I V
UniRef90_K2BK53	L K K D L I A D E N L G K V I A D T K I P F V N L S K E A I A D D L L I V
UniRef90_F5XXH0	V R L A A V D I E A L T Q Y L A G R A A L E Y Y L R I D P L R V D V G K V A D T
UniRef90_K2EDY9	H L S K Q E S A N K N K L G M L W G D S I G L A Y I D L N K A I F Q T E V V E K
UniRef90_W7QDQ3	R E Q G W Y T E N E L A A E V S Q R Y H T P Y F D L N Y F D V A S I K E D L
UniRef90_UPI0003661867	L A K G W V K P Y L L G Q V L A E H F D K P N V D L M K Q G I D E R L I K R D Q
UniRef90_Q47VS7	I E D K S I D G N S I A K V L S K S F G H P L I Q L S N F D T S L V P E G V R N
UniRef90_UPI0002558F60	I S H R L V S A Q R A A Q A A A D E F G L P L F D L D A I N P E Y I P K G L
UniRef90_UPI0003B66C2C	I E M G F V D A D I C Y A A L A E K L G V K S I N V F D Q N N R E I F E F T E N
UniRef90_UPI00047503C4	V S H Y Y L T T A Q E L S L A L S A Y F D E R V S S I S D F P S Q L T C D R L N L
UniRef90_K1ZMX0	I T S H Q L N H T I L A Q T I A N Y F K L P F I D L D K L Q Y D E I L P K S
UniRef90_B4D852	L N S G R V D E A R L A E Q L A R S F H N P F V Q I E A D G I D R K S L G L
UniRef90_UPI00047A4796	I L I E A G L D R R R I Y Y E V L A Q H W D A P L V D L V A E P V D D R L L M E M
UniRef90_A71269	I R Q Y K K Q Q L F E L K I L Y G V E S L D P E L G D I S G H Q V K E L I E R L
UniRef90_B4VWI9	V R L L G N V A D V D I L T E Y V A Q R C G L A F L R I D P L K V D V G R V A D A
UniRef90_A1WBA5	T R L L G L V S E F E L L A R A W A L L Q A P L L A D A V P P L L D P L P P
UniRef90_Q4ZRN9	V E S E T L T G E E L A Q F C E V Q F G L P L L D L G V I E L G A I P E K Y
UniRef90_UPI0003FA079C	V R E G L C S E A D V L R G L S E Q L G V D A V D L E R S P P D A T I L L G H
UniRef90_F8CJ95	C N A T Q L S A K E L A F K A A S L F S A P L L E L N N F D L D F V P D G K E R
UniRef90_U1M5X8	V E R D L L S D E H L G Q L V A E Y T G Y H F I N R K V N I A D E V L R F
UniRef90_K2DQ63	L K E G F I T E T E E L L E C L G E L L Q T G F E P D P Y T L R I E G N H S R F
UniRef90_UPI0003711BA5	I S S G R Q L T P E F E L L K I L Y G V E S L D P E V I S Q V G Q T T V G Q L I D T L
UniRef90_UPI0003825AC0	F R S G S L L D M D S L L A W L S E T T D Q L V Y S I D P L K L N V T A V A D V
UniRef90_B7S019	L L T R L G L V S E V E L L A R A W A D L L N A P L L A D A P P L L D P L P V
UniRef90_I2BN94	I A H G H L D E S A L V D A L A E Q F G A G R I V P G D L R A A P E A L D R
UniRef90_K2HRB7	K K L K L A D E T E I S M M A A S L Y G F E F R R R V K P K Q V D K E A F D K
UniRef90_X1HNV4	L S L G Y I T S R E L L Q I L A E H Y H L P F L E N S E H A N L V D I S L I E R
UniRef90_D5WR70	D I L L D M C D K D A L L D A L S D K V Q V N P V M L E H N L K I N P V K Y
UniRef90_R5TEV9	L K K F V S E Q D I V K V L A K Y N L K T I D L K I G S I K P D G L S A
UniRef90_UPI0003B6205B	S E E G L L D N E L L V H G V A Q V S G V P Y V N L S N S V I S Q D I L S L
UniRef90_UPI00016B268C	I S S G A M S A H D V A V F A A D K Y Q L P L L D L N Q Y N L Q N V P P V L A G
UniRef90_19KQL8	C R L N F I N H T Q L I M Q I L A T Q Y N L S L F P R D Q I P V A R N R C A V S L
UniRef90_W0BDW7	F E L K L T D E K K I D L L I K E Q N L E I D L K S V E I T E E V K T V
UniRef90_Q4FPL8	V S N G W L D D E T L A E A I A F Q A D V P R A H I D A G M I E K Y A G Y
UniRef90_A6T1B6	L T Q G W L D D E T L A E A I A F Q G Q D L P R A V I D V D Y L R A C Q F P
UniRef90_B4SJA4	

UniRef90_F0EYS1
UniRef90_UPI000419E451
UniRef90_J9YXC5
UniRef90_K2EUK9
UniRef90_UPI0001746BDE
UniRef90_A9BP72
UniRef90_K2DJC4
UniRef90_F8XNJ0
UniRef90_U5N618
UniRef90_UPI00026C77B8
UniRef90_UPI00045EA652
UniRef90_W1NCK0
UniRef90_F8AACM0
UniRef90_S9P6F4
UniRef90_B1T6C6
UniRef90_Q21MF4
UniRef90_K2JS49
UniRef90_A0A017THA5
UniRef90_E6W6Q8
UniRef90_G4CTS0
UniRef90_H5WS19
UniRef90_L7U678
UniRef90_Q48MM1
UniRef90_K9U1C9
UniRef90_I7DMQ3
UniRef90_E8RVR5
UniRef90_UPI000402CCE2
UniRef90_K9QXH3
UniRef90_UPI00037B2EB7
UniRef90_D4DM32
UniRef90_UPI000365E9C5
UniRef90_UPI0003B3F371
UniRef90_A0A058ZR42
UniRef90_J2LWX7
UniRef90_R9PSD7
UniRef90_F0SN30
UniRef90_UPI0002F5146A
UniRef90_X0T044
UniRef90_H0E2Y8
UniRef90_UPI00036C48B8
UniRef90_A0A024E5N1
UniRef90_B5EA28
UniRef90_A0L656
UniRef90_H8L4F9
UniRef90_Q82SM4
UniRef90_E5Y4E6
UniRef90_K7WYY7
UniRef90_UPI000364B9B5
UniRef90_UPI00046475D5
UniRef90_C1DRU4
UniRef90_K1YQ24
UniRef90_L8LZ17
UniRef90_E6Q138
UniRef90_B9XM22
UniRef90_UPI00047B2234
UniRef90_UPI00046EE236
UniRef90_UPI0003D6613D
UniRef90_K2BK53
UniRef90_F5XXH0
UniRef90_K2EDY9
UniRef90_W7QDQ3
UniRef90_UPI0003661867
UniRef90_Q47VS7
UniRef90_UPI0002558F60
UniRef90_UPI0003B66C2C
UniRef90_UPI00047503C4
UniRef90_K1ZMX0
UniRef90_B4D852
UniRef90_UPI00047A4796
UniRef90_A71269
UniRef90_B4VWI9
UniRef90_A1WBA5
UniRef90_Q4ZRN9
UniRef90_UPI0003FA079C
UniRef90_F8CJ95
UniRef90_U1M5X8
UniRef90_K2DQ63
UniRef90_UPI0003711BA5
UniRef90_UPI0003825AC0
UniRef90_B7S019
UniRef90_I2BN94
UniRef90_K2HRB7
UniRef90_X1HNV4
UniRef90_D5WR70
UniRef90_R5TEV9
UniRef90_UPI0003B6205B
UniRef90_UPI00016B268C
UniRef90_I9KQL8
UniRef90_W0BDW7
UniRef90_Q4FPL8
UniRef90_A6T1B6
UniRef90_B4SJA4

90 100 110 120

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

130 140

UniRef90_F0EYS1	T G L S A D [L] V V V R D D Q L S T V L E W F G
UniRef90_UPI000419E451	T N L A V E A I L V D A D T I A R C D R W
UniRef90_J9YX5C	T G C N V E L Y V A K P S N L D Q A L K
UniRef90_K2EUK9	T G Y H I K P Y A A L P K Q I E D F I Q T R Y
UniRef90_UPI0001746BDE	V S L P V R W C L A P R G E V L R S I Q A F Y G
UniRef90_A9BP72	T Q L G V D W I I V E A D K L E R L I A Q
UniRef90_K2DJC4	T G F R V K P M A A E E K I M D V I V N R Y
UniRef90_F8XNJ0	S G L Q V M P V L V E A N K L V K A V H
UniRef90_U5N618	T R Q N A D W V I A E C D K L H K F I A
UniRef90_UPI00026C77B8	T G L N T Y A I V V E A D K L G A L I D H L
UniRef90_UPI00045EA652	T K L Q I D L R L A T S K L I D E G L V K I Y G
UniRef90_W1NCK0	T G H G V A V Q L A P A D R L R A L L D A W
UniRef90_F8AAM0	L K K K L E I K I G I K E D I F K F I D Y F F G
UniRef90_S9P6F4	L G K S L E L W V A T E V R V R E W I S V I Y
UniRef90_B1T6C6	A R S N V A Y F I A C D A E I A T E L A R H
UniRef90_Q21MF4	T G L T T E A V L A E A D I L N T Y I E A Y
UniRef90_K2JS49	F G P V R M A V T S E T A M H E A L L R
UniRef90_A0A017THA5	L G T P V R L V R A P M A A E E A I R T L
UniRef90_E6W6Q8	F D T S V H K A L I S Q S L L E E H
UniRef90_G4CTS0	A G V T F D L V V V R S D Q L D S I L E
UniRef90_H5WS19	T R R R V R L V V A N P D D I A R Y T T E F F
UniRef90_L7U678	T G L P V E P V L S A K A D I L K A I S D I Y G
UniRef90_Q48MM1	L G A E P V Q L I A R E S D I V A Q L R Q L
UniRef90_K9U1C9	S Q V K I Y E V L A T E N Q I
UniRef90_I7DMQ3	F G D I R P V I A S E A Q T E L L T A H F
UniRef90_E8RVR5	T G R E L R F L I I A R V M D W R T A F D
UniRef90_UPI000402CCE2	L D L E V E L A L I V P A E E R A L R T L Y
UniRef90_K9QXH3	L G L A L Q R M V I T Q E D Y Q Q L I N Q Y
UniRef90_UPI00037B2EB7	A F G T V V R M L L C S E T A A R E A I
UniRef90_D4DM32	S G F Q I D L V I V R H D Q L M T L V E
UniRef90_UPI000365E9C5	T N R H E L V T A S K R D I L Q A I G E F Y G
UniRef90_UPI0003B3F371	Y G C K I S T V F A L P E D L E D T L E
UniRef90_A0A058ZR42	L G E P I L A L C D E R A L H R A L V R
UniRef90_J2LWX7	L R A R M R L A L A A P G E L V R E I D R V Y G
UniRef90_R9PSD7	F G L H V I E A L L V E E N K L A K A I Q A L
UniRef90_F0SN30	F D K P M R A V I A T P L Q I N Q G I A R H Y
UniRef90_UPI0002F5146A	T G L S L E G V L A P T D Q L G P V L E A Y
UniRef90_X0T044	T R G P V R L A V A A R E D V Q A R L A
UniRef90_E0E2Y8	V N R E C Q F Y A A P L K G I Q T A W E Q I F G
UniRef90_UPI00036C48B8	L G G E P V Q L I A R E S E I V A Q L R
UniRef90_A0A024E5N1	F Q K R I S F V G A F R E D I I G K F I D H Y Y
UniRef90_B5EA28	T G L K P F F Y Q G E K G K I R N A V Q Y Y Y
UniRef90_A0L656	T G L N T I Y A V C T R R E F Q A M L D L F Y G
UniRef90_H8L4F9	L G L S F Q R R V I T Q K D Y Q D I I N K F
UniRef90_Q82SM4	T G L N T N A I V V E T D K L F Q L I E H L
UniRef90_E5Y4E6	M G A T L F P I V V E D D K L G K W D K
UniRef90_K7WYY7	F G R E L V R Y L A R A Q D V D T L V D Q
UniRef90_UPI000364B9B5	I A R R V V K A K L A G R K D L R E A L K K F F G
UniRef90_UPI00046475D5	L G I E L Q R R V I T Q A D Y Q K L I D K Y
UniRef90_C1DRU4	L G S R I E P R V A T L S Q I T D L L K K
UniRef90_K1YQ24	L A A G P V E F A L A P K A E I E K A L K K Y Y G
UniRef90_L8LZ17	T R G A V R L A V A A R E D V Q
UniRef90_E6QI38	T G K A L V P I I V E D D K L S K W I D K L
UniRef90_B9XM22	S F K Q T E L V Y C K Y E V I E D D L S K V Y
UniRef90_UPI00047B2234	T G E N I T V Y F A T D R D L E N A M R F Y
UniRef90_UPI00046EE236	S R R T V R R V V A N P Q D I H R Y T A E F F
UniRef90_UPI00036D613D	M D C L V S P M F A F P D D I D E A I D L Q Y S
UniRef90_K2BK53	T G Y N V E Y L C V E A S K L Q Q A L E T A Y
UniRef90_F5XXH0	V G E P F D F V I T S K F D V I W Q L Q
UniRef90_K2EDY9	T G Y S T E L V L C D E K S L Q T C I E E K
UniRef90_W7QDQ3	T G T A T E A V L V E D D K L H Q L L
UniRef90_UPI0003661867	T G F R E V F F R T T D W D I N Q S I Q R S F
UniRef90_Q47VS7	F N K K V K I V V I A D P K Q I T K Y I S K
UniRef90_UPI0002558F60	C E V P V R L S I G P R N E V E T L I E R Y Y G
UniRef90_UPI0003B66C2C	F S L H V E A L L V E E H K L A K A I N H L
UniRef90_UPI00047503C4	S G M P V E A H I A A D A A L N G A L A R L Y G
UniRef90_K1ZMX0	T G L Q T E V V V V A Y D E L N T A I D S L L F
UniRef90_B4D852	T G K Q A Q V F F A T A R D I Q E A L G N Y
UniRef90_UPI00047A4796	L G R K V A V V V L A P S E A I S Q G L E
UniRef90_A71269	L G L A L Q R M V I T Q E D Y Q Q L I N Q Y
UniRef90_B4VWI9	L R K R I R R V L A D P R D I A R H T S E F Y
UniRef90_A1WBA5	C E V P V R L S I G P R N E V E T L I E R Y Y G
UniRef90_Q4ZRN9	Y Q E Q L S V R V I G E R D F F E L V R R F
UniRef90_UPI0003FA079C	L G Y S M E I Y I T L Y T S I M K Q I E
UniRef90_F8CJ95	A K K N V N F S V T T F T N L E K V L A
UniRef90_U1M5X8	T G Q R P I K V F M A S E E S V R H V L D Q Y
UniRef90_K2DQ63	F N L S V D L V V V E H D K L M R
UniRef90_UPI0003711BA5	T K K N E L H A A K G D S E Y I E R L
UniRef90_UPI0003825AC0	F G Q D P A Q R I A R D S E I A A G L R L L S G
UniRef90_B7S0I9	T R S E I E Q S I A R E S E I N A G L R
UniRef90_I2BN94	
UniRef90_K2HRB7	
UniRef90_X1HNV4	
UniRef90_D5WR70	
UniRef90_R5TEV9	
UniRef90_UPI0003B6205B	
UniRef90_UPI00016B268C	
UniRef90_I9KQL8	
UniRef90_W0BDW7	
UniRef90_Q4FPL8	
UniRef90_A6T1B6	
UniRef90_B4SJA4	

1 10 20 30 40

UniRef90_A0A024F123	M A T P F L S I K T	I L A K S T S L T	Q D Q I R S V L N N P S V T	V G E A L
UniRef90_UPI00036731C7	D Y L L T N G K I S	P E Q F E M W G K Q S D D S	L M T F F	
UniRef90_B3U4T7	E I L L I L H G H L	S Q Q D L D N A L A E A K K D I	E S L L	
UniRef90_UPI0003651E90	M D A K R R G P I G I	T P E Y L D R V A T E A D E A V	V V R E L	
UniRef90_L9UBL5	L R G I A Q R L V K H G L	L T N A Q A A T A E T T A S D S	L L Q H V	
UniRef90_R6ZAJ2	D Y L L N N S I I T	S Q D L D N A L A E A K K D I	E S L L	
UniRef90_B4CVB4	Q R I A D R L V L E G R I T	T P D D H R R A V E R T R G R I	I E D A I	
UniRef90_K2DK04	Q E N P T F I N F L I S K K I	V T E E D A N A L Y N K F E N D A F A I L		
UniRef90_X1M7F3	S S L A A V L S Q A G L	L N R Q D L N N A L H E T P H A A N A L		
UniRef90_B8F193	R Q R L G E L L S W Q A I D	P D R L E Q A L G E S H A R L G R V L		
UniRef90_9GRB7	L L P P L L R E A G E I V	Q E Q E A R V R R H A E D K H I D L L		
UniRef90_K1XLY2	L L D I I H E K T P L S R E K V R A A Y E R D P S N	L M E S I V		
UniRef90_U3BDG4	P Y L K L G E L L V K A G F I	T T N Q L E E V L T L Q K D R L G T L L		
UniRef90_E1TCE0	R D T R Q E L G D L L V S W Q A I D	P E R L E E A R R T D H A R I I G R V L		
UniRef90_C8X565	M Q E N P E K K R V L R R M V D L G V I P	L E N V R K K S F A E V L S T L		
UniRef90_UPI0003B57500	S R E S E Q N L I N V L I D H D I I S G K D L K K V S S E G N K S Q I D A V	P R L G D L L V E R G L V R P A D V A N A Q A Q N G G L L G L N L		
UniRef90_UPI0003619D4A	Q T N L P S F A Q K L V Q S G Y I T I P Q L Q K A I I Q K Q K S H L S L L	A N I P L A I P L		
UniRef90_B9NN10	S K E R L G D M L V R S G Y I L P E Q L E R A Q A K S G G L L G D I L			
UniRef90_G8MNY4	M N D S Q L S G L S R Q L V Q A N L L D E K T A V Q A Q A R N K L S L V T H L			
UniRef90_C4FM56	M H F S D E Q L E E I L V K T D M L A A K E L K S E A K K Q N K N I L G L I			
UniRef90_F2I3P5	L C R Q T L E E A V S R R G S L V E A L			
UniRef90_UPI0004731DF3	Y Y L L K K R S I T S Q L Q Q A L K V N K S V E F V L			
UniRef90_UPI0003B6525C	D R K L D I A Q I I A W L E A D G M I L S A A D L K K C R Q N K H K H P L K I L			
UniRef90_I4IV53	I L L S K A T S L S Q D Q I R S V L A N T S I S V G E A L			
UniRef90_H6CQE8	S R P L L G E M A V E A G L V Q P E A L A P A L E K Q G G P L L G R I L			
UniRef90_T2EEX7	S P F G N K L I Q A G Y V N A D Q M Q Q A M R K S G R P L T E V L			
UniRef90_K1ZPL6	S R E S E I L N L I N I L I D Q D V I S G K D L I D I K K K S S K S Q I D A V			
UniRef90_UPI0001745618	M D V R R R Q P M G V E L V K R G I V N E E A I E E A R E H P N Q K I G D I L			
UniRef90_D8F7P5	L P A V N			
UniRef90_F8L595	F A N K L I Q S G Y I N L P Q I Q Q A L K T G R S L L E I L			
UniRef90_G0A620	F L A H L G T S S R L T P E A L L Q R A W R A T G Q A I D V V M			
UniRef90_W5WXH2	R Q L V T W L L T D G V I T L A D G K V A Q R A G D S A Q H P L			
UniRef90_A7HQ64	M G D L L V E A G E L A P E D L V T A Q Q R Q D L R G D I L			
UniRef90_F4XXG1	R L L V E W L K Q D K V I S E D E A V R A R C C S Q A E S A Q H P L			
UniRef90_B6BQP4	R L F D L L V A R R R V L T P K Q R E F V T L E K G K Q R Q K L L			
UniRef90_R7GHQ8	S N L L K L L V R T G M I L P K N M A A V K V Q A H A R H A G I A I L			
UniRef90_UPI0003A70CFF	M N A Q E P R Q K L G E I L L A G Q K L S R N D L E R A Q R S M G G R L G R L L			
UniRef90_B7KJH1	R Q I V D W L R E D G V I S Q A V A E R E R C S R A E S S Q H P L			
UniRef90_UPI000378D250	R L E L D E L L A T L V V D G Y L L A D D A K Q V R M R A G R S T V E V L			
UniRef90_A2SKC2	R N E V S P F G K S L I A A G Y V D T D Q M Q N A L R K S G R P L T E I L L			
UniRef90_A0A037ZFB4	L L D R A T L D G L Q A K G S K S L A E F V			
UniRef90_C9YGV2	L G Q T L L Q A G L I T T D Q L D R A L Q R A G G L L G R H I			
UniRef90_K1ZDR4	L E R K L A A E L L G S R L T L E Q W Q Q A L E I R R R T G S S L G Q V L			
UniRef90_Q39ZZ5	R L G F D Q V A A A L V A D G L V A D S D L E R I R F S A Q G A R N A S E			
UniRef90_E8TY17	K S L E D L L V S E F D V S A L D L N K A Q N K A G G R L E Q I L			
UniRef90_UPI00040D8B0B	E P F I Q Q L L			
UniRef90_M4NLE4	F A N K L I Q S G Y I N L P Q I Q Q A L K T G R S L L E I L			
UniRef90_K9WB69	F L A H L G T S S R L T P E A L L Q R A W R A T G Q A I D V V M			
UniRef90_B5JET1	R Q L V T W L L T D G V I T L A D G K V A Q R A G D S A Q H P L			
UniRef90_B8HEE8	M G D L L V E A G E L A P E D L V T A Q Q R Q D L R G D I L			
UniRef90_Q2JN55	R L F D L L V A R R R V L T P K Q R E F V T L E K G K Q R Q K L L			
UniRef90_UPI000364AD4C	S N L L K L L V R T G M I L P K N M A A V K V Q A H A R H A G I A I L			
UniRef90_UPI0003464AAE	R Q I V D W L R E D G V I S Q A V A E R E R C S R A E S S Q H P L			
UniRef90_B9XRT4	R L E L D E L L A T L V V D G Y L L A D D A K Q V R M R A G R S T V E V L			
UniRef90_E8LVN5	R N E V S P F G K S L I A A G Y V D T D Q M Q N A L R K S G R P L T E I L L			
UniRef90_C7LW72	L L D R A T L D G L Q A K G S K S L A E F V			
UniRef90_UPI0003803CF0	L G Q T L L Q A G L I T T D Q L D R A L Q R A G G L L G R H I			
UniRef90_D5EQA9	L E R K L A A E L L G S R L T L E Q W Q Q A L E I R R R T G S S L G Q V L			
UniRef90_L9PFP0	E E L A A M K V I V P E E A L Q Y A E E G S L A L I E Y I L			
UniRef90_A0A022G8E5	A H G K L L S A L			
UniRef90_R7FKI6	M E I K R R R T L P E I L I A K G A I D I K R L E Q I Q A Q S G R S L D H I L			
UniRef90_X1JAK9	R M P I G V E L V K R G V V T E T D I E K A L E H P N T K L G D I L			
UniRef90_E1V3I4	L I R T L L I N R E L I T G S Q L N E A Q R E T K Q S L D K I F			
UniRef90_UPI0004675A60	I C D R L R E T G A L A A T D I E R A R R E E A S R G D G E V L			
UniRef90_C5TAC5	L L R M L V S D G H I D A E K L H Q D R K R D S S K I H P I V			
UniRef90_B1WNC9	S P F G N K L I I E A G Y V G P D Q M K Q A L R K S G R P L T E V L			
UniRef90_K9DDL5	L G E A L L Q A G I N E T Q A Q K A E Q G Q G I R V G Q I L			
UniRef90_K9S3W5	R K L D L Q S I F S W L I A D G I V T K E D F A Q A Q A V A Q C K L V S S L			
UniRef90_V4JDU3	S P F G N K L I I Q S G F V N A D Q M Q Q A L R K S G R P L T E V L			
UniRef90_UPI0004788427	L F D T L V R Q R V I T D K Q R Q L V E L E K G K D L V D I I			
UniRef90_R7LTT5	M I A D G V V T P V V I E Y A Q K I E G V P L G R L L			
UniRef90_UPI00036D426F	M E M R R R L P I G V E L V K R G V V T E T D I E K A L E H P N T K L G D I L			
UniRef90_V9R6S1	V D H R L E L H P L L P A L E E G L I T P D M A Q R L A A S D T Q H P L E H I			
UniRef90_K2FD92	E E S K I L K I L V D S A Y V S Q E D A Q K A F Q K N K T P I D E Y L L			
UniRef90_UPI000473432E	I G Q L L L S R G L I I Q T D L D K A Q K Q A K M R L G A A L			
UniRef90_M1Z1X4	Y L L Q Q G L L T D I E L N K A A R K E Q I D I E N I L			
UniRef90_A4A8Y9	K L T L K A L L E G L L R D G R I A A G D L R R R L Q G L S P G A I L L			
UniRef90_M5RPK4	E Y L V H E Q L I S Q K Q L S A C E E Q A K D D L I R R L			
UniRef90_W7QN33	M Q A V S P D L L G Q R L I R K G V V S D Q E V E R A Q A R I G G R L G G I L			
UniRef90_M4X177	Q R I A D R L L L D G R I A H D D Y R T A R T N R S R I E D A M			
UniRef90_C5T4G5	S Q T S V T P F G R K L V Q M G I A D N A Q I Q A A Y R E T G R D L V S V L			
UniRef90_A0A017T402	Q P A S T T L G G L M V E R G L L T P V Q L L Y A E Q K E P L P L S R L L			
UniRef90_UPI000348F367	R L V L R W L T E D S V I S E G E A R R A R I S S A H S A Q H P L			
UniRef90_A0A058XMM5	E H R L T V K E V L D E V A D G L V D R T E E K A R S E R G E L H P L V V			
UniRef90_E1YBH1	D R Q P E Y K R L G E I L I E R G D L A P E A L D E V L R K P L G E L L			
UniRef90_A0A024IG67	F I E H L T N K G I L R G G Q A R E T H V S S R S L D A G W			
UniRef90_W6LZH3	I L V N Q Y D V S P T D L A N A Q K F G G R I E N I L			
UniRef90_X1P074				
UniRef90_C8PFZ0				
UniRef90_E8RCQ9				
UniRef90_UPI0004788283				
UniRef90_U1KBM4				

UniRef90_A0A024F123
 UniRef90_UPI00036731C7
 UniRef90_B3U4T7
 UniRef90_UPI0003651E90
 UniRef90_L9UBL5
 UniRef90_R6ZAJ2
 UniRef90_B4CVB4
 UniRef90_K2DK04
 UniRef90_X1M7F3
 UniRef90_B8F193
 UniRef90_A9GRB7
 UniRef90_K1XLY2
 UniRef90_U3BDG4
 UniRef90_E1TE0
 UniRef90_C8X565
 UniRef90_UPI0003B57500
 UniRef90_UPI0003619D4A
 UniRef90_B9NN10
 UniRef90_G8MNY4
 UniRef90_C4FM56
 UniRef90_F2I3P5
 UniRef90_UPI0004731DF3
 UniRef90_UPI0003B6525C
 UniRef90_I4IV53
 UniRef90_H6CQE8
 UniRef90_T2EEX7
 UniRef90_K1ZPL6
 UniRef90_UPI0001745618
 UniRef90_D8F7P5
 UniRef90_F8L595
 UniRef90_G0A620
 UniRef90_W5WXH2
 UniRef90_A7HQ64
 UniRef90_F4XXG1
 UniRef90_B6BQP4
 UniRef90_R7GHQ8
 UniRef90_UPI0003A70CFF
 UniRef90_B7KJH1
 UniRef90_UPI000378D250
 UniRef90_A2SKC2
 UniRef90_A0A037ZFB4
 UniRef90_C9YGV2
 UniRef90_K1ZDR4
 UniRef90_Q39ZZ5
 UniRef90_E8TY17
 UniRef90_UPI00040D8B0B
 UniRef90_M4NLE4
 UniRef90_K9WB69
 UniRef90_B5JET1
 UniRef90_B8HEE8
 UniRef90_Q2JN5
 UniRef90_UPI000364AD4C
 UniRef90_UPI0003464AAE
 UniRef90_B9XRT4
 UniRef90_E8LVN5
 UniRef90_C7LW72
 UniRef90_UPI0003803CF0
 UniRef90_D5EQA9
 UniRef90_L9PFP0
 UniRef90_A0A022G8E5
 UniRef90_R7FKI6
 UniRef90_X1JAK9
 UniRef90_E1V3I4
 UniRef90_UPI0004675A60
 UniRef90_C5TAC5
 UniRef90_B1WNC9
 UniRef90_K9DDL5
 UniRef90_K9S3W5
 UniRef90_V4JDU3
 UniRef90_UPI0004788427
 UniRef90_R7LTT5
 UniRef90_UPI00036D426F
 UniRef90_V9R6S1
 UniRef90_K2FD92
 UniRef90_UPI000473432E
 UniRef90_M1Z1X4
 UniRef90_A4A8Y9
 UniRef90_M5RPK4
 UniRef90_W7QN33
 UniRef90_M4X177
 UniRef90_C5T4G5
 UniRef90_A0A017T402
 UniRef90_UPI000348F367
 UniRef90_A0A058XMM5
 UniRef90_E1YBH1
 UniRef90_A0A024IG67
 UniRef90_W6LZH3
 UniRef90_X1P074
 UniRef90_C8PFZ0
 UniRef90_E8RCQ9
 UniRef90_UPI0004788283
 UniRef90_U1KBM4

50 60 70 80

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

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

	90	100	110	120
UniRef90_A0A024F123	L P I N Y A K Q H N V L	P Y K E D A D	I V L T S N P V N L K A L	D D M K V L
UniRef90_UPI00036731C7	I S T K V A F Q Y N I I	P V S E E N G E L	R I A V S N P F E P G L I N S A Q Y E	
UniRef90_B3U4T7	L N V D Y L K K N H W M P L	K R D R A A I E I L T D D P G D L D R V Q D I K R T		
UniRef90_UPI0003651E90	I P G A I C R R H T V L	P I G T A D G M I	V V A M A D P G N V F A I D D V R A A	
UniRef90_L9UBL5	P V K V L Q S L N V L	P L A R H G H R L	T V A V P Y P A T L T R L D E L Q F A	
UniRef90_R6ZAJ2	I S I D V I K K N N K A I	P F E I A G N K I V K V C F A D T	D R K A V E I V R L I	
UniRef90_B4CVB4	L P E S L S I G R L I V	P F D I I S R T V	M I A M A N P F D S L G K E A V Q Q L	
UniRef90_K2DK04	V S Q A V V Q R F N L I	P F M Y D D R T L	S I A M A N P V D L D A I S F V R Q K	
UniRef90_X1M7F3	I P E D M A R R F N A I	P L A T M N S V L	Q V A I A N P A D I F A L E V L A L Q	
UniRef90_B8F193	L K V P F M K N N I W V	P L R E E D G Q I	I I A I D N P T D I Q R I D I V K L F	
UniRef90_A9GRB7	V S A I T A T L H G V F P L	P L D D R N T T L	S V A T A D P D N D V A L H E I R L A	
UniRef90_K1XLY2	I P E K T A R E H K I I	P V Y Q M G G T V	T V A M A D P T R Q D I I D E V K D I	
UniRef90_U3BDG4	R E L I C R Y Q A L	P L A Y D A Q C L I	L A V A D P S V K E A E N E F R F A	
UniRef90_E1TE0	L P L E T I V R H R V L	P T H G A H R R T	V L L S A S P L S D E V L A Q L S A L	
UniRef90_C8X565	I I S E S F A R S H Q I V P L R I	P E D G R L T L	A F N P F Q P D L W A D M Q R V I	
UniRef90_UPI0003B57500	I P R S F L K K Y C M A P L	A K D G E E P L I	V N D P S D L S G V D D I A A L	
UniRef90_UPI0003619D4A	Y P F C M K Y L L L P L R T C N T	T I L L S T T E P D N T D L L K E V E K V		
UniRef90_B9NN10	P V E F W L A H N V L	P W M R V G P I L L	V A T A R P D L F D P V A E A L G T	
UniRef90_G8MNY4	T P D T I V R L R A L	P V D A N G H A V	F I C A S L L I D D V S L A E L R E A S	
UniRef90_C4FM56	F P A S L I E K K Y V V P F E Y S Q G V L	K V A V L D P T D R E V L N Q I K F S		
UniRef90_F2I3P5	L P S N Y I N M N F V A P F K V D G K T L	H I A L P D S S K L G L M R N L K A I		
UniRef90_UPI0004731DF3	S P L A W W A E R E A V A W R E E A P R I	L C A A V Q P L D P A L A E R I A Q S		
UniRef90_UPI0003B6525C	V P V D M M F F R Y S F V P L	E Q M G S R L A I A V S D P S K L M V L D E I S G L		
UniRef90_I4IV53	L P F E I C R Y K I L P L Q K Q N V L H	L A M V D P A N Q E I L D D R R I		
UniRef90_H6CQE8	L P E Q V A M A Y G V V V I H Q Y M N R Y	V A V S D P L		
UniRef90_T2EEX7	X X X X X X X X X X X X	X X R G N K L F V G I S D P A N H Q A I N D V Q F S		
UniRef90_K1ZPL6	L T E A A A R E N Q V I A F D K N E E G I L	L V G M V D P E N L E T I E F L K K A		
UniRef90_UPI0001745618	F P A K L A L R H R V Y P A H L S G A D L	T L L T Y D P F N L L D A R Q A V G Q E		
UniRef90_D8F7P5	L K E S Y L M H S G W V P L S W S N K G L E I L M D D P R D L G K I D Q V T G L			
UniRef90_F8L595	L P Y S F V K Q R L A L P L K E H E G K L L	V A I S H P Y D L E V L E E I R C M		
UniRef90_G0A620	F S K A Y A G N Y N I L P I K I S D D E V	V V A T A E P F V Q S W Q Q D L A K M		
UniRef90_W5WXH2	I P I N Y A K Q H N I L P Y K E E S D V L	V A L T S N P V N L K A L D D L K V L		
UniRef90_A7HQ64	I D F Y L R E M C L P W R R A G E T I	I Y V A A D P D R S R A A I T T G Q		
UniRef90_F4XXG1	I P I D I C R R Y H L L P I S K H E P S V L	V A M V S P D D L E A Q D D L N R I		
UniRef90_B6BQP4	I L P S N Y I N M N F I A P F K I E G N V L H	I A I P D S S K L S L M R N L K T I		
UniRef90_R7GHQ8	I I S L D I A Q K N K A V F E V S S G K I K V C F A N T V N R A M E T I R M L			
UniRef90_UPI0003A70CFF	I P P E L I C R R Y K L L P L K K R N Q Q I	V V A L V N P K D P E T L D T L K Q I		
UniRef90_B7KJH1	M G T D F A A R N A L L P I T G E K G A L S	L I V A D P F S R P A I E E A I E F F L		
UniRef90_UPI000378D250	M S A T Y A E R R R A L P L Q V G P T E A L V A T C E P F D T D W L P Q I E A H			
UniRef90_A2SKC2	M G A A E A C L A A L A V P I R K L G G A T I	V A T A E P F I T D W V S E V E R Q		
UniRef90_A0A037ZFB4	M G A A Y A E R H K I L P V V V T P S E I T	V A T A E P F I T D W V S E V E R Q		
UniRef90_C9YGV2	I P R N F A I R Q L L P F K M E D G L L A M A V Y	H P D C H G V L E D I E Q A		
UniRef90_K1ZDR4	L S M E Q A L K F R A L P I R L Q G Q G L V V A M A D P S D R E N M Q A L A S L			
UniRef90_Q39ZZ5	I L N T S F L L S N H V L P L G P V D G Q A P L	V A A D P Q D P A M Q A A L R L V		
UniRef90_E8TY17	M S A S Y A E R H K V L P V L V S G D E V V V A T A E P F I A D W V G E I E R Q			
UniRef90_UPI00040D8B0B	V S H A Y A K R H R I L P I A A A P G E V T F A T C E P F E A G W A P D L A Q M			
UniRef90_M4NLE4	L P P I D I C R R Y R L V P L S K N E T Q L L V A M V D P D N L L D A Q D D L N R I			
UniRef90_K9WB69	I I D P A L A R M H G V V P I E G G D R Q V T I V T T D P F N T G V V D D V A F A			
UniRef90_B5JET1	F S E V S E P G G W L P W H L E D G V L T V A T A V K P S E E I R A A A M R A			
UniRef90_B8HEE8	F D P E V V M M R H F Y P L S W T D H T L T V M V N D P L D W V V D E L L S W R			
UniRef90_Q2JNJ5	V S H A Y A R R H R F L P L A V D T E R V L V A T S E P L A Q E W L R D L Q H L			
UniRef90_UPI000364AD4C	L L Q F L L H N G W F P L L I E G N K W Q F A S Y D P L S I S V N Q W V S S E			
UniRef90_UPI0003464AAE	F P A E I C R R W C I L P F D K M S K T I F V A T A N P F N R Q A A K D L A E A			
UniRef90_B9XRT4	I I S E S F A R M N T L V P I M Q T Q R V L T V A V T D L T D T N I E E E F R F A			
UniRef90_E8LVN5	I L S S T E V S E P G G W L P W H L E D G V L T V A T A E P F I T D W V S E V E R Q			
UniRef90_C7LW72	I I R E L I T R Y T A L P I M Q T Q R V L T V A V T D L T D T N I E E E F R F A			
UniRef90_UPI0003803CF0	I I S E S F A R M N T L V P I M Q T Q R V L T V A V T D L T D T N I E E E F R F A			
UniRef90_D5EQA9	I V P M E L I A R K G N V M P L W H L E D G V L T V A T A E P F I T D W V S E V E R Q			
UniRef90_L9PFP0	M S A S Y A A R F N I L P L E L N G D T L V V A T A D P Y A V E W E A E I A K I			
UniRef90_A0A022G8E5	F P E D V A L Q Y K V V P F S Y T G V G I C V A T Y A P P D Q A A V T A I G A A			
UniRef90_R7FKI6	L S F D M C K N N R C L P F E V T N G K I K V A F S D K T V N G K T D P V R M I			
UniRef90_X1JAK9	I P E T L A R R Y H L I P L S K D G K V I S V V M A D P S D I			
UniRef90_E1V3I4	S S M R F A R H H G V V A V D E A G Q A L R V V A G V P V S V P G L E A V A Y R			
UniRef90_UPI0004675A60	V S Q A Y A E R L R I M P I T V K D G I A T I A T A D P F H Q E W L H D L L E R L			
UniRef90_C5TAC5	V P R A V A E R E S V L P L L A R D D A L V L M A D P Y D R V L L D E L R			
UniRef90_B1WNC9	I I S F D I C R R H R I I P L S Q H G P S V L V A M V D P D N L L A A Q D D L N R I			
UniRef90_K9DDL5	M S A S Y A A R F N I L P V E M T A T T L V V A T A D P A L T E W E A E I I A K V			
UniRef90_K9S3W5	I I P L L D I C R R H H K L V P L S R S E E Q V L V A M V D P D N L L E A Q D D L N R I			
UniRef90_V4JDU3	F P K N F A I R H H L L V P F N V D E G V L V E V A S Y H P D C E Q V C K D I E Q A			
UniRef90_UPI0004788427	F N R N V C L P H T A F L P L R R D G D G V V E V V L G D A V P G A V A D V V D R R			
UniRef90_R7LTT5	L S S L D I C K K N K H C P F E V T N G K I K V C F T D K I V V N N K T D S V K M L			
UniRef90_UPI00036D426F	L L S A Y L L M R T Y R L I P L Q K E Q N K L L I A V V P P L E A N V S N Q L K S F			
UniRef90_V9R6S1	S S H A F A Q R H A I L A V A V D A Q S V T I A S A Q P H V T A W E A G L A Q V			
UniRef90_K2FD92	I I P S E A I A K K H R L V L F S E N E K D V L T T D N P E Q K N F P S E L R I F			
UniRef90_UPI000473432E	I I S P G W F S E H G L I I W E S A D G V I Q C A A R N P T S S F L Q E T M A M A			
UniRef90_M1Z1X4	L L N L N F L S K N Y W V P V E R E D D K V V I V I D N P N N L D K I Q N I K L I			
UniRef90_A4A8Y9	M S R A F A E R H R I L A V D V T D E E V V I A S A E P Y Q R A W Q G N L E Q V			
UniRef90_M5RPK4	L P S Q W C F N R Q V A P L S D D G K I V E V A V E P D G L L L A D E I R R L			
UniRef90_W7QN33	L L N T Q Y K R K N L V V I L A N P E M H P I I V M A Q P T N A T L L L E V E S A			
UniRef90_M4X177	I I S V E W F L L S E Q I V L W Q D E P N A L L V A A R D P L E P A L R D V L S F Y			
UniRef90_C5T4G5	F N R S L C L T Y G F L P L R E T P E G L I I V L G D A Q P E A V T D L V Q R K			
UniRef90_A0A017T402	V S S V T A T L H G V F P V V L L D D R T L T V A T A D P D N A A L H E I K L A			
UniRef90_UPI000348F367	L L P V D V C N R Y Q M C P I S Q E G D V V T V A M T N P E N L R A L D D L N R R			
UniRef90_A0A058XMM5	F N R E L C L T H N F L P L R R Q D G E L Q V L L G E A V P V A R V A A L V L Q R			
UniRef90_E1BYH1	L S Y G F L L I K N N C L P V K H D N K I I Q L V T V N N P F N Y P V F D Y I F N K			
UniRef90_A0A024IG67	M S A G Y A E R H K V L P V Q V G P A E V V V A T A E P F L T D W V G E V E R Q			
UniRef90_W6LZH3	V S Y E Y A A R Y Q I V L P V A A D E R R V V F A T A E P Y L T G W Q D V L R Q A			
UniRef90_X1P074	F P V D F L L H R S N F I P F E E K N N I V K I A V A D P S D I A T I D A I E S Y			
UniRef90_C8PFZ0	P T A Q L K R Y G V I P V K A D D L N I Y V A F S D P F N L E S Q D K A Q A M			
UniRef90_E8RCQ9	L D Q L V N L V G E M V T V Q A R L S Q V S N A L G D A T Y I A I A E E V E R L			
UniRef90_UPI0004788283	L L S P R F L R E G R L F L P Y S D A D G R L M V A V A T P V D T E T L N A I E V A			
UniRef90_U1KBM4	E I A E L I E L G H L P F R V T E H C I S I A S T D P L D V K L H D W A A R Q			

UniRef90_A0A024F123
 UniRef90_UPI00036731C7
 UniRef90_B3U4T7
 UniRef90_UPI0003651E90
 UniRef90_L9UBL5
 UniRef90_R6ZAJ2
 UniRef90_B4CVB4
 UniRef90_K2DK04
 UniRef90_X1M7F3
 UniRef90_B8F193
 UniRef90_A9GRB7
 UniRef90_K1XLY2
 UniRef90_U3BDG4
 UniRef90_E1TCE0
 UniRef90_C8X565
 UniRef90_UPI0003B57500
 UniRef90_UPI0003619D4A
 UniRef90_B9NN10
 UniRef90_G8MNY4
 UniRef90_C4FM56
 UniRef90_F2I3P5
 UniRef90_UPI0004731DF3
 UniRef90_UPI0003B6525C
 UniRef90_I4IV53
 UniRef90_H6CQE8
 UniRef90_T2EEX7
 UniRef90_K1ZPL6
 UniRef90_UPI0001745618
 UniRef90_D8F7P5
 UniRef90_F8L595
 UniRef90_G0A620
 UniRef90_W5WXH2
 UniRef90_A7HQ64
 UniRef90_F4XXG1
 UniRef90_B6BQP4
 UniRef90_R7GHQ8
 UniRef90_UPI0003A70CFF
 UniRef90_B7KJH1
 UniRef90_UPI000378D250
 UniRef90_A2SKC2
 UniRef90_A0A037ZFB4
 UniRef90_C9YGV2
 UniRef90_K1ZDR4
 UniRef90_Q39ZZ5
 UniRef90_E8TY17
 UniRef90_UPI00040D8B0B
 UniRef90_M4NLE4
 UniRef90_K9WB69
 UniRef90_B5JET1
 UniRef90_B8HEE8
 UniRef90_Q2JNJ5
 UniRef90_UPI000364AD4C
 UniRef90_UPI0003464AAE
 UniRef90_B9XRT4
 UniRef90_E8LVN5
 UniRef90_C7LW72
 UniRef90_UPI0003803CF0
 UniRef90_D5EQA9
 UniRef90_L9PFP0
 UniRef90_A0A022G8E5
 UniRef90_R7FKI6
 UniRef90_X1JAK9
 UniRef90_E1V3I4
 UniRef90_UPI0004675A60
 UniRef90_C5TAC5
 UniRef90_B1WN9C9
 UniRef90_K9DDL5
 UniRef90_K9S3W5
 UniRef90_V4JDU3
 UniRef90_UPI0004788427
 UniRef90_R7LTT5
 UniRef90_UPI00036D426F
 UniRef90_V9R6S1
 UniRef90_K2FD92
 UniRef90_UPI000473432E
 UniRef90_M1Z1X4
 UniRef90_A4A8Y9
 UniRef90_M5RPK4
 UniRef90_W7QN33
 UniRef90_M4X177
 UniRef90_C5T4G5
 UniRef90_A0A017T402
 UniRef90_UPI000348F367
 UniRef90_A0A058XMM5
 UniRef90_E1YBH1
 UniRef90_A0A024IG67
 UniRef90_W6LZH3
 UniRef90_X1P074
 UniRef90_C8PFZ0
 UniRef90_E8RCQ9
 UniRef90_UPI0004788283
 UniRef90_U1KBM4

130 140

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

1 10 20 30 40

UniRef90_UPI0004703D13	L G E V L I G D N Y L T E D E L S N V L R A N K I T L D E V
UniRef90_UPI0003740A41	Q T V L Q A L F E D G W I D E A A L R R A R Q H A L Q R V A A T
UniRef90_Q02D05	
UniRef90_UPI000348E08D	V T L Q S N F S P F G N K L I Q A G Y V D R N Q M Q Q A Q R K S G K P L T S L
UniRef90_Y0KIFO	E H R L T L P E T V D A L V A D G L V D A E E A A R F K Q E R R H P L I A A
UniRef90_W0SCT6	D K K L D A R E I L R M L A A D G L L T N R D L A T R S R K W Q D T H P L I L
UniRef90_UPI0003735F69	L V D S G H L S P A Q W Q A A Q E S A S R R V E R V L
UniRef90_F9ZTT7	D G L V S D A V I S A A E L D L A Q R S A G L D L E E V L
UniRef90_G8QN5K	E H K V T L Q E L V D G M V A D G L L G E A V A R D F L H E R G D H P L V V L
UniRef90_UPI00047E9C14	D R L V Q A G S V T P L Q R D E A I H T A R V S L P D V L
UniRef90_F5R982	A A V L L R R G I I D Q R K L D L A R R R S Q I P L H R S V
UniRef90_F7SA68	M E V S A G V S G L G R A L V Q H N S L D A E A I I Q R Q A Q S S S I S F V E Q L
UniRef90_W0J427	A T S T T P F G N K L I Q S G Y I S P E Q L Q Q A L K Q A G K P L T E V L
UniRef90_G21ZF6	V S H A P Q G R L G G H L V A K G L L A P E T L R V A Q T V T R Q R L G Q I L
UniRef90_A0YN51	Q P A R L R S R F D A L V A D G R I T A E E F A D A T R E S G T S V E T L L
UniRef90_H1KPR3	D R W L D L S E L L R E L L I A Q G R I S Q D T A E Q A M S V R H Q A A G N L L
UniRef90_M1ZJ8	A P G R L S L G D M L V N D G L L Q A E Q L F K D R R S S N L H P I I I M
UniRef90_N6YB43	E H K L K L A E V L G M L V A D G M V G K A E A D R L H R Q D S H P L V V I A
UniRef90_Q4K429	R L G E L L V I S W Q A I A P A Q L E E A L K A R Q V P L G R V L
UniRef90_Q1GZF2	E Q Q E A K L T L E Q V L L E D G V I S D A D L E K C R T S Q V K H P L N I L
UniRef90_Q988B0	K K L A S L L L H R K L I T K Q Q L E E I S H D A K Q D F L E Y L
UniRef90_D5CTY9	E H R L T L A E V L G W L V A D G L I I S K R K S E E I R K E K E K R V S E I L
UniRef90_T8YQ26	Q P I G I E L V K R G V V T E A D V N K A L E H S S K K L L G D L I I
UniRef90_A8FXR0	R I G Q L L I D Q G Y I T E E H V E Q A L E D G R T R L L G D M L
UniRef90_UPI00046384C2	V L D W L V Q D G W I A A V D V I H Q R L S A G V S S L H P L
UniRef90_D3NZB0	M A L G K I Q Q S Q I V A E L T A M S R L T D E Q R E K I G A M T G D A L E K M L
UniRef90_G3IS20	E H Q A E L D V A V L V L V R D G I I T R Q Q L D E A Q R R L G G A L L S R H L
UniRef90_UPI000477AF64	M D N R R T Q P I G I E L V K R G I V G E E D I N K A L E Y Q K K K I G D I L
UniRef90_K0E8A1	M D Q R R I G E L L V I E R G V I S A S D V D Q A Q R E T P V L F G Q A L
UniRef90_A0A011NPZ2	M A L G K I Q Q S Q I V A E L T A M S R L T D E Q R E K I G A M T G D A L E K M L
UniRef90_UPI0003B5D06A	E H R L T L A E V L G W L V A D G L I I S K R K S E E I R K E K E K R V S E I L
UniRef90_R5PLC6	Q P I G I E L V K R G V V T E A D V N K A L E H S S K K L L G D L I I
UniRef90_D1C8K0	R I G Q L L I D Q G Y I T E E H V E Q A L E D G R T R L L G D M L
UniRef90_I4Z576	V L D W L V Q D G W I A A V D V I H Q R L S A G V S S L H P L
UniRef90_A3UGZ5	M A L G K I Q Q S Q I V A E L T A M S R L T D E Q R E K I G A M T G D A L E K M L
UniRef90_B1ZZ35	E H Q A E L D V A V L V L V R D G I I T R Q Q L D E A Q R R L G G A L L S R H L
UniRef90_UPI00035E665D	M D N R R T Q P I G I E L V K R G I V G E E D I N K A L E Y Q K K K I G D I L
UniRef90_R6BE41	M D Q R R I G E L L V I E R G V I S A S D V D Q A Q R E T P V L F G Q A L
UniRef90_I1XJ98	M D Q R R I G E L L V I E R G V I S A S D V D Q A Q R E T P V L F G Q A L
UniRef90_Q2JJR8	F G R K L K E L G F A D D K Q I Q K A D R E G N S K A L A L V
UniRef90_A5P922	E K R R L G E L L R G W D V V V S S P M L E K A Q K R E G G M L G D L L
UniRef90_E7RV96	R R L M I D R I L L A L L A E Q G E I S E E T R Q T L S R D A R H P L V M I A
UniRef90_D8EXG7	D Y L L R R N N R V T S D Q L L R R A L K K T K Q S V E Y V L
UniRef90_F6D8T5	E Y L L D Q R V L N E Q A Q L E Q A Q Q L Q G G S S L L E N T
UniRef90_UPI0002886921	F V Q L L L D E G L A T P S Q I A E A R A R S G V H I D Q T L
UniRef90_H6NKE3	E Q M S R D K R F G E I A V E Q G Y I T E E Q V Q E S Q K S E H I L L G Q T L
UniRef90_S9ZL18	Q P A R L R S R F D A L V A D G R I T A E E L R Q A I R E A R L S T E S I L
UniRef90_C3MFK5	D G L V T E G V L S Q D E A A Q R A L A T S Y L P F D V V V
UniRef90_J2TVE2	A E R A L R M P L G L L L I S R G W I S H G E L Q E A Q R R S G G R I L G E W L
UniRef90_UPI00037C9ABF	R V P I N P L G R A L V R A G A I S R S D A A L A R R H C D T S L D R I L
UniRef90_A3W073	L A T A L E Q L G L L H P R E T E M L T D E D P Q L L S P E L
UniRef90_A1VS23	D Y L V H R N L I S E K E L K K L Q E T S N R Q L L V Q R L
UniRef90_K6YYC4	D Y L V H R N L I S E K E L K K L Q E T S N R Q L L V Q R L
UniRef90_K9RP93	A L V E S G Y A S S E Q V R E A M R K S G R S L V Q V L
UniRef90_K1Z6X0	F L S A L E A A G H L T S E A V Q V R A Q A A T S H P V D I V M
UniRef90_B9JMG1	M A M Q S S L R T L P D A P Q Q S G Q V R Q T L R E L R Q A S R S F Q Q H L
UniRef90_D6TEF2	N Q R Q Q P V R L L D Y L I S D A V I S A A E L D R S A R K K G C D L E D V L
UniRef90_F9ZFR1	L V Q Q L V K K G I L E K E K L E F E I K S S G K K D E E V I
UniRef90_X1Q9V2	R L G Q I L Y G K G M I S Q E Q L Q Q E A L R E T D K R V I G E V L
UniRef90_X1BFX7	Q Q F V D R L A T F V T L D R E Q I K A A C H C D P A R M W E M A
UniRef90_I5B431	D R R L D P G E L L R E L V I A C G R I D R D S A E R C L A I Q R Q R L D D R L
UniRef90_C1DJF3	L S P F A S K L V Q L G Y I D S E K M Q Q A A R K T G K P L T Q I L
UniRef90_K9W4C5	T R E L T V E N I A H L L K Q R G L L S A A Q V E K A Q Q R H P V A E L L
UniRef90_S0G6Z3	D A D K L V I A A Y E K D K S A L V D T I V
UniRef90_A1AMW5	H L A S K G I L R D A Q A F E S R L A T R H P D G D A W
UniRef90_UPI000368343C	M S T S L S S F Q L L D L L K K A N W I S E E Q F Q T S Q V N P K L H P I E Q V
UniRef90_K6ZG46	K R L L G E I L V E R H A V S A D A L D K A L D Q Q P R L G A M L
UniRef90_G8QZG8	D H R L T V D E V L D D L V A D G M V T R P V A Q R A E R H A L E L V A D A K
UniRef90_UPI00037446E1	E R L K D I L K K I N L S F D D L L K I S L E T N K S I I E A I I
UniRef90_U5N9S0	M L Y S Q G V I T Q D Q L R T A L D A Q K Q R I I G R W L
UniRef90_C7RAA9	D S L V N D G V L S A A E L Q Q C A R E Q A K S V E H V L
UniRef90_M3A9V6	G Y K K L G E I L L E R G D I D P T T L E K A L G D Q R K L G E I L
UniRef90_G0A9D0	Q H Q N D P K R A E A L L I A Q G T V S E E Q L T E A R
UniRef90_UPI0003666616	L G V M L L R E E G H L A P H R I M A A L S H G G R P L A D V L
UniRef90_F8C2Z8	I D A G L V T A D M A K R A P S H T Q H P L E S I
UniRef90_C1F9A0	R S R F D A L V A D G R I T A E E L R Q V I R E A R T N T E T I L
UniRef90_UPI00047CAFE0	L L I S Q Q G L L N Q D S A E R A L S N R R N A A N S Q I
UniRef90_S7VBM9	E R F G E R L C M L G C I S P E Q L A Q A M L E T G K R L G A C L
UniRef90_D7BJL9	R N I G D V L L E K Q Y I A P K T L K E M L H K E N K R L G D V L
UniRef90_A3PH22	K K Q R I T L N E I L D H V L
UniRef90_UPI00034BF41D	R V L R I L Q A G G Q L E Q D Q L R D I M N K Q N G K S P E V L
UniRef90_N6YAX9	K L V D V L V N Q F D V A Q S D V D K A Q E K Q G G R L E S I L
UniRef90_S6KYD5	I R Q G V I T L S H L E K I E G I D I T P I L L
UniRef90_G2LJ93	M D R H L E L F P L L D S L V A Q R R I S S E S R Q R F S H E T G E H P L E S I
UniRef90_F4A0E2	UniRef90_B9D470
UniRef90_UPI0004663956	UniRef90_J9A4L4
UniRef90_T0L452	UniRef90_L8D317
UniRef90_A6QAW3	UniRef90_L1M5V9

S E K F F I D K D T F L S N F A R K F G M V Y M N L N D V D I D Y R I A E R T S
 UniRef90_UPI0004703D13 L A D G K L L D D A L S A W L A E R A G L P L L R I D P L K V D I G R I G D L
 UniRef90_UPI0003740A41 E Q S Q A Q A I A A R Y R C E Y V D L R E A G I D H D L F R S
 UniRef90_Q02D05 E E Q S G L P A D S F V R A L G R L M Q Y P V L A A L D L H A L Q P Q F N L V
 UniRef90_Y0KIF0 E Q H R V L D L D G L T Q W L A K W S G L D Y F H I D P L K I N F S A V T E V
 UniRef90_W0SCT6 I G E R N I P D E T L T E W L A G A V R L P Y Y H I D P L K I D V S A V C T V
 UniRef90_UPI0003735F69 L R D F G L S R C A L L E V L S R H Y A C P F V Q Y D E R L P V P T S L F A G
 UniRef90_F9ZTT7 V K E F Q V K P A A I G Q A L A K Y F G D P Y E P Y R S E R V K P I D L L R N
 UniRef90_G8QNK5 I S E C G I A S E Y I T R A L S L Q W S C P V L S S R G F S A R E M A L V A
 UniRef90_UPI00047E9C14 A A Q K W L S L D V L T E W M A G W S G H D Y F H I D P L K V D F A A V T E V
 UniRef90_F5R982 S A M Y R V T S L R W A R E L S A A S G L P L V D L R A S P C D H T L L A E A E
 UniRef90_F7SA68 V D L G F A T E R D A Y D A A A E A H G L D F I D L T E V T A A R E L I A Q
 UniRef90_W0J427 I L S K K M S S L E V A T F A S Q V F G F P L L D L A A I E P E Q L P Q G L
 UniRef90_G21ZF6 L A R Q Y K K Q Q L F E Q K I I Y G V D A F D L E V E Q V S V E Q I E Q M L N T
 UniRef90_A0YN51 V A N D M V S R R A L I D A L I E L D P T S L A T E Y V N R C P
 UniRef90_H1KPR3 L D E Y K I N R S D F G K S L E E F Y N I P Y Y G Y S P D I V L V P Q S L F T G
 UniRef90_M1ZJ28 V E Q F G L S Y A E L G A A A A R F F G V P Y Q P F V A N H V K P M D L L R N
 UniRef90_N6YB43 H P L E V I A G Q Q L P D L Q H P G A H L D L D S L T A W L A R Q A G Q P Y L R
 UniRef90_Q4K429 S E Q K W L S L E M L T A W L A K R A N L E H F H V D P L K L D F S A V A Q V
 UniRef90_Q1GZF2 T E L L G L I G E Q E L L A S S L S R S Y R L E A P M P V E I P E Q V S P E M L A S
 UniRef90_D5CTY9 E K R R I L T L E P L T E W L A K H V G M E Y F H I D P L K I D F T D L T D L
 UniRef90_T8YQ26 M A N W R A L K Q V L Q H G D P R R V A W E S I D A W Q I P S S L I A E
 UniRef90_A8FXR0 V N M G A L S E E V L P R L Y S K L L Q P L V D I N A L Q D W Q A P V W E E K
 UniRef90_UPI00046384C2 M T R G W L D E E T L A E A I A F Q G D L E R V H F D L A K V E A S K D R
 UniRef90_D3NZB0 V R N G F L A R A D L D E A K I S H E T A L E T P E A M G G T P
 UniRef90_G3IS20 I E C D V T D Q T Q L G K P L T L E N L T Q W L A K K V D L P Y Y Y I D P L K I
 UniRef90_UPI000477AF64 I T Q R W L D R D A V G V I I G D S L G R S Y L N L S K T L F K Q E A L N T
 UniRef90_K0E8A1 I E N E I V D N K S F M I L E S A T T L L R L Q Y I D L T T I N V K F L P Q E Y F D
 UniRef90_A0A011NPZ2 G D Q K W L T L D D L G E W L A R R V G L E Y Y H I D P L K V D F T A V T E V
 UniRef90_UPI0003B5D06A I E L L G I F G E E S F C E W M E R R F G F R S I R S I E E V E I S L V K L
 UniRef90_R5PLC6 N E L L H L C D S Y R L K I G E I L G E K T I L L E L D V K V N I T D Y
 UniRef90_D1C8K0 V E L L G F V N H Q Q I W K A V A A Q F E A S L F R I L I Q P G G T F V T P E E
 UniRef90_I4Z576 V R L L G S L D T D V L L R W L A K R V G L P Y L R I D P L K V D V A R V T E V
 UniRef90_A3UGZ5 L R L L G A V A E D I L L D T L S R Q L D L P I L M A E A L P R E E A V Y G V A P
 UniRef90_B1ZZ35 Q D E Y R I T P F Q L L V A K G R A F R L S P V N V A R F K V L P D T F E R
 UniRef90_UPI00035E665D M I D A W V P R R T I Y R H L A E E W W Q A P Y L D L M A E P P D V T M V H R H H
 UniRef90_R6BE41 Y E L L H I G N P S K L I A A I A D I L G E K P M L L S A S D I R I N I P E Y
 UniRef90_I1XJ98 E D I S N L T P D L F V Q A L G Q L V H Y P V L T I S Q L Y D M Q P D F T V
 UniRef90_Q2JJR8 V D L E R A Y K R Q Q L F E L K I I Y G I P S L D V D L E P V E I S E M I D S I
 UniRef90_A5P922 V R D G V I D E D V L T E A I S T Q N Q L P R A E L N L D M V C E H L D L
 UniRef90_E7RV96 E R K G L N P P H A M L Q W L A G Q I G W R H V R I D P L K V D F S R I G E V
 UniRef90_D8EXG7 I Q Q F N I P K S Q V G K S L S L Y Y R C P F R S F D P K T E V P V E L I G N
 UniRef90_F6D8T5 V K L L G F L T R E A A N N Y G K Q L G L S Y L S T S L V A D P D A L A L
 UniRef90_UPI0002886921 A S R G H H L D D V T L V D V I S R L W N L I E R A A M T E V D G E F A R Q W S G Q
 UniRef90_H6NKE3 I D Q G L M T Y D S F S E V L G A F K E A Y S L S S D Q F S S I L Q G N V D A L
 UniRef90_S9ZL18 V D G L G L T A V E L G E A A A R Y F G V P Y Q P F R D N H I R P M D L L R N
 UniRef90_C3MFK5 T E L G I S R D E D L A G W L S E Y L V V P R V P M P E A D V L S R S F E G
 UniRef90_J2TVE2 M A N Y R L R P A Q I G Q S L A K F F G V G Y E P F N T G R I R S E M L H G P
 UniRef90_UPI00037C9ABF G R L H G V S E E T I A K A L G I Q W N C A V L P H G M P G L E F A P S L
 UniRef90_A3W073 Q A E G L A T E E D D L L J A A H A R R L S S Q R W T V Q D L A V A E P V D A G
 UniRef90_A1VS23 V E R R L L T P E D L L H H A L A R T A G I V E V D A A N F M L P G R G F D G Q L
 UniRef90_K6YYC4 T S E H R V P E D D L G N A L S V H Y Q V P Y I A Y L P D K Y H L F Q S D S K
 UniRef90_K9RP93 Q D V T G R A M L K V I Y G I D C L D P D L N R F P T D Q I G Q L I G T V
 UniRef90_K1Z6X0 D E E I I L Q N L S K K I N L P Y V D I I T Q Y V L D E N V S R R
 UniRef90_B9JMG1 R E L A F M P D A Q L A E A M A L F C Q C D C C A V I A G V D E E L L E R
 UniRef90_D6TEF2 U P H E V L S S P S G P D D L A R L A Q C M G V P Y I S S P G N L P V Q V R N L
 UniRef90_F9ZFR1 A D E F Q I A L P L I G K A L A L F F G V K Y E S F R T D R V K P M D L L K N
 UniRef90_X1Q9V2 L E R G I V S E S F L F S L K S E N L K I P L K E V V A S E I P L K I L E L
 UniRef90_X1BFX7 L D L G Y I E E D G L K E L I R Y Q I R E A V L D I S F W V E G D F E Y R D C L
 UniRef90_I5B431 C D T K L V S E S H S L K A L G G I Y G I E F L D D L A F F N P D L S V S E K
 UniRef90_C1DJF3 R P G R K L D E S L T Q W L A D H A G Q P Y L R I D P L K L D V A A I T P L M
 UniRef90_K9W4C5 E S L K A L S P E F E L K I I Y G V E S L D P E I K Q I E Q S Q V S E L I D T L
 UniRef90_S0G6Z3 L A F K H V S E Q D I L N I I L G R I Y Q I P A V S A L D V D H H D T T W T R E
 UniRef90_A1AMW5 I A S S W L T E D V I T E V V A D K L G I P Y L K I D P L K L N L D V V T A H
 UniRef90_UPI000368343C I S L T K L T P G A F A D E L L A T F Y S C R R V Q R A E L V G D R F A G G Q
 UniRef90_K6ZG46 K N K H K I S E K L I Y E A L S V Y F Q V P F I D Y L P R K Y K S T Q S N T K
 UniRef90_G8QZG8 A D Q N W K S L E T L T E W L A A K V G L D Y L H I D P L K I D F S A V T E V
 UniRef90_UPI00037446E1 I G S G N L P I E N Y V S E L L S E Y F G A P L A N L K R Q K I E H K T L Q L
 UniRef90_U5N9S0 V S V G V L V D V D M L L Q W L A G R S G L D Y V R I D P L R V D V G K V A E T
 UniRef90_C7RAA9 A D L S L I D E E L L T Q F V A K L Y K L P Y E K I D P L K I D V D G V T R V
 UniRef90_M3A9V6 V K E G L V S T D K V A A A L A E Q K H G E V E K V A K A D A A D I R V Q A S R
 UniRef90_G0A9D0 U H I T L E W L T E W L A R Q V Q M P F Y R I D P L K I D F A K V V A D V
 UniRef90_UPI0003666616 I H H R I T L E E L T F W L A K R T G P D Y L R I D P L K I D A P N V G D L
 UniRef90_F8C2Z8 M E N F K I H K K E I L D S I K N F Y K I P V F E I T D L K K F K K I P Q V L T
 UniRef90_C1F9A0 I Q Q R S L N E L Q L A R A L S A Q W N C P L Y S A E R L D V K Q A A Q L
 UniRef90_UPI00047CAFE0 M A D F K I R P S Q I G P S L A R F F G V P Y E A F N A G R I R S E Q L Q G P
 UniRef90_S7VBM9 A E H G L V S K D R L A S A L A E Q R E V R G L R A A R T K G G A E M Q A A S I
 UniRef90_D7BJL9 A Q V L G M P Y I D L I N Q P P D P A V R K R
 UniRef90_A3PH22 L A E G A L S E D E I L A M M A R R S G L P V L D P A A E R P D P R L I D R
 UniRef90_UPI00034BF41D A A I L G P S L E S L T Q W L A G H A G Q P Y W R I D P L K I D V A T I V P L M
 UniRef90_N6YAX9 I D V L G L S V A E L G E A A A R Y F G V P Y Q P F I P N H V K P M D L L R N
 UniRef90_S6KYD5 H P L E F F L A G Q Q L D D Q R R P G R S L D L E S L T L W L A H R A G Q P Y L R
 UniRef90_G2LJ93 V E L L G Y L T A A D L Q A M L T G H V T Y L V H S L F P W T T G E Y Q F Q P Q K
 UniRef90_F4A0E2 L I E N N V V T E E Q L M I A V A A S Q H R L F V K N I S L F K S D A A N D
 UniRef90_B9D470 I I E N F A L N L K D F L K S V A T K F R F E Y I D L D N I D I D Y K L C E K
 UniRef90_UPI0004663956 V K L L G L I A E A D L A A A Y A Y C D L P L L T G R D I P D Q P I M A D R L K
 UniRef90_J9A4L4 I H N G F D E E V I Q T I L S R A Y A L R R K T V T P E T I D K D I L K S
 UniRef90_T0L452 Y I S E K R V L Q K L S S E L E L S F L D L D S I D M D Y R I T T N N
 UniRef90_L8D317 V N M G C L T D E Q I P N V L A S A L G I P I W E G A L Q L Q K V L E H F S A S
 UniRef90_A6QAW3 A R E R L L D L D S L C Q W L A Q Q A G Q P F L R L D P L G I D L P G M T G L M
 UniRef90_L1M5V9

90 100 110 120

UniRef90_UPI0004703D13	L A Q L K K F G A L P I K E D D L N I Y V A L M E P F D I I N A Q D R I Q A L		
UniRef90_UPI0003740A41	L S R H Y A E R H R I L P V S A D A Q G A T I A T A E P F E T G W L P E V E R M		
UniRef90_Q02D05	I P V D L M F R Y N F V P L H A Q N G T L D I A L S D P R N L N L I D E L T L L		
UniRef90_UPI000348E08D	I S V V D I C R R H R L L A A Q L E P S V L V A M V E P D N L T A L D D L N R I		
UniRef90_Y0KIF0	L P F T E A S R L H C V L L S A Q D G V L T I V C A D P F D A L L P T Q L D A Y		
UniRef90_W0SCT6	M S N S Y A T R Y R I L P V E V K S H E V V I A T A E P F Q R A W E A E M L P I		
UniRef90_UPI0003735F69	V S H A Y A T R F R H I L P V A V N A D E V I A V I A T A E P F Q R E W I S V L E Q V		
UniRef90_F9ZTT7	L D P K M L R A E A W F P V R Q L G D T V V V A A A V P D S P T M R A Q V T T L		
UniRef90_G8QNK5	L K R D Y L E S Q Q W V P V E E T R E G V V V V A T D P E R V R V N S R V V N N I		
UniRef90_UPI00047E9C14	P R T F V D K L G L V P V R V A G S K L Y L G F E D R L D A S A A L A L E L M		
UniRef90_F5R982	V S S A Y A N R F R I L P V Q A S A R E V V I A T A E P F M T E W E K E L A P I		
UniRef90_F7SA68	H D L Y L R H L F I P W R Q P D G V V V I A T A E P F M T E W E K E L A P I		
UniRef90_W0J427	V P V R I V L T H R L A P V S L Q D G I L L V A A F A E P P T S T D L G K I L R L L		
UniRef90_G21ZF6	V D E D L I S S R R L L P L Y K R G S R L F I G T S D P T Q T S A F H A I T F K		
UniRef90_A0YN51	L T V E T C K R H R F I P L Q I L E T E I L M A M V N P D N L N A L D E L K N Q		
UniRef90_H1KPR3	I P P D L L R E H A I I V I A E T E E A V Y V S T G G P E D V A R F V V E D H Y		
UniRef90_M1ZJ8	L N T N F L L K N N W L P I A K D E N R V T I L T D N P A N Q D K I Q S I K L I		
UniRef90_N6YB43	I K R E Y V E Q M L W L P Y E E S S N E G V V V L C V D P E Q V R S S G V A Q V L		
UniRef90_Q4K429	I D P A F A Q R H K I L A V A V D G Q S V T V A S A Q P Y V S A W E A D L A H V		
UniRef90_Q1GZF2	V S K A Y A E R L K I M P V K V S G Q E A I A T A E P F F T D W I P D L E R I		
UniRef90_Q98B0	V P L A Y L R E N A I L P Q M D A E R L V V A V A D P F S S A T I D A L A F H		
UniRef90_D5CTY9	M S I E Y A N R F A I M P L R I D G G D L V V A T S E P F L R A W E E T L K H T		
UniRef90_T8YQ26	M P A S V A L H Y A V L P L R L D N D E L L V G S E D G I D P V S L A A L T R K		
UniRef90_A8FXR0	V D L S K L V E H G W Y P L Q Q T K G V W T I A V Q D P L N F D I M Q L E F F		
UniRef90_UPI00046384C2	L P L D V A T L H S V L I H G E D A G H T I I L S A S V L P D D V M L E L A T A		
UniRef90_D3NZB0	I P L P L E R H A I I V T G L S D E A V H V A T L H D E A V A G R V A A R Y Y		
UniRef90_G3IS20	Y S H A Y A A N Y N I L P I K V S K D E A V I A T A E P Y I R A W E A D L K K I		
UniRef90_UPI000477AF64	L T R E Q T E H H G V I P V Y M F E E I V T I A M S E P N D T K K L R H L E H L		
UniRef90_K0E8A1	I D F C R E N H C I A L F T R K R T I H V A L A N P I S Q Q I L K K L R S R		
UniRef90_A0A011NPZ2	M S S A Y A T R F G V L P V A V T T R E V L V A T T E P F L R D W E K E I R A I		
UniRef90_UPI0003B5D06A	F P K N M L T Q F M F I P A K H E G S K I I F V A S P E P F E L P T I S E I S G I		
UniRef90_R5PLC6	I S M D M A K K N R A I P F E V G A G K I K V C F S D G T N K K M I D A M K L L		
UniRef90_D1C8K0	I D E A F M E E I R I E P I V L N A M R M W L A T H A K Q D T V S L T D V P F V		
UniRef90_I4Z576	M S L A Y A E K R R V L P V Q V G P T E V T I A T C E P F E R D W V V E I S A H		
UniRef90_A3UGZ5	L P L R W L S E K A A V L W W C D A F R L V L F A R R N P L D P A L L E R R L Q E A M		
UniRef90_B1ZZ35	I P Q D F C Q Q N L V L P V Q V G V Q G F L L V A F A N P F E I T L P T K I H E M		
UniRef90_UPI00035E665D	D G V R W F A H H H W L P W R M G E E A L V F A T S V A P N E R L L A E V R E T		
UniRef90_R6BE41	L P I D I A R R N K A I P F E V G S G K I K V C F S N T A N Q R M L E N M R L L		
UniRef90_I1XJ98	L P F T Q A E K G C I A V R D Q Q H T L Y I V H A N P F E A N L P S K I D L L		
UniRef90_Q2JJR8	L P L D I C N R Y K F I P I R R R D N Q V T V A M V K P D N L Q A L D D I Q R R		
UniRef90_A5P922	L D R A T M T Q L Q I L P F G I S S K E A E L L A V A K P L A C E Q T R L I W S R		
UniRef90_E7RV96	M S K A Y A N R Y R I L P L E V T P D S V T I A T A E P L T A E W V A E L S H T		
UniRef90_D8EXG7	L K K S F L L H D S W V P M S W G K N G V E I L I D D P G D L R K T G Q I R G L		
UniRef90_F6D8T5	F E P S L L R K W Q A A P I R M Q Q Q T L T L G V V N P D L W V Q D Q I E H L		
UniRef90_UPI0002886921	L Y I A A E N W M P V R E P D G R A L V A T A R V P D D E R S Q R I S D A		
UniRef90_H6NKE3	V S A V L L K D G L P A G E W L S G Y V S L F A K N L I R F A		
UniRef90_S9ZL18	I K R D Y V E Q S K W L P Y E E T A E G V V V L C I D P E Q V R S A G T V Q N V		
UniRef90_C3MFK5	F D T S F G R T Q G V W M P I G R D G E D Q V V A L A N P L D E T V V A L L E Y F		
UniRef90_J2TVE2	L K R D F I E Q Q G W I P L E E T T E G L V I M C M D P E A V R G A R V V P Q V		
UniRef90_UPI00037C9ABF	I P A F L R R R Y G L L A L L R Q P D A A L Y L A G K D R A E H A A A R A I E H M		
UniRef90_A3W073	L D P R I L L K Y G V L P L T A A S G A T V L A T G G P E S L A A L R P S L P K		
UniRef90_A1VS23	L R K M R N H D L L F L G E A D E T L F I A S W H P T D E D M H H H L C T L		
UniRef90_K6YYC4	L N L S Y L K R N F V A V L A D V K D N P I V L M A E P N N A T L L M E I E S A		
UniRef90_K9RP93	L A L D I C R T Y Q A I P I S M N R E S L L V A M V D P D N L E A V D N L G K A		
UniRef90_K1Z6X0	L P E K Y A R R F S S I L L A E K N E H Y L I G M V D P L D I F A T D E L H A I		
UniRef90_B9JMG1	I G T V F A Q A H A I I P C Q R Q G D S L R L I V A D P F A F S T I G A V V S Y L		
UniRef90_D6TEF2	V S K Q L Q A L E Q C Y P L G C E D D I L T V A M A D P R N E A A L S R L Q Q E		
UniRef90_F9ZFR1	I I K B K D Y V E S N A L L P I D E T K E G V V V L T L D P E Q I K S Q R I A N T I		
UniRef90_X1Q9V2	I I P E E S A R Y Y K M V P L S K K D N L L E V G M V F P E D L K A Q E A L K F L		
UniRef90_X1BFX7	L I T R K F L K K N L I V P L K P E N N P P V I A L N D P S E L S Y V D D V A M H		
UniRef90_15B431	S R A F A Q R H G I L L A V A V A D G V T V A S A Q P F V G A W E A D L A Q A		
UniRef90_C1DJF3	I P I D S C R R S R F V P L S K E A P S V L V A M V N P D D L D A Q D D L N R I		
UniRef90_K9W4C5	I I S R S F L K K A C M V P L I R K N A P P L I A V V N D P S D L G P A D D I A V C		
UniRef90_S0G6Z3	I I P R P F A L K H L I V T V A E E P G A I T V A V A N P F N L H L V D E L A A A		
UniRef90_A1AMW5	I L S P R F L K D G R L F P Y A D S D G R L M L A I A A P V I E D E T V R A I E V A		
UniRef90_K6ZG46	L S S I S Y L K R N H V V L L K D T R D R L I V V M Y E P N N T D L V M E I E S A		
UniRef90_G8QZG8	V S N T Y A G R F K I L P I Q V T T R E V I I A T A E P F L R E W E K E L K P I		
UniRef90_UPI00037446E1	I I P E V Y A K A N R L A L F D I V S G R A K V A M E D P W N I Q M V K Y L E Q F		
UniRef90_U5N9S0	M G L A Y A Q H H K I L P I Q I G P A E V T V A T S E P F V T G W V T E V E R Q		
UniRef90_C7RAA9	M S M A Y A Q R H N I L V I H V D K Q T V K V A V M N P E D L A W R E S L E Q V		
UniRef90_M3A9V6	L D E L L M D Q V G E L V I A Q A R L R Q L A N A G N D P H L K S L V E E I E R L		
UniRef90_G0A9D0	M S A S Y A T R F N I L P V E L S L T D L V I A T A E P F R T E W Q A E I A K I		
UniRef90_UPI0003666616	V T A S Y A A W N R I L P V S I L T A E Q V V F A T S E P Y L T S W I E E L G G I		
UniRef90_F8C2Z8	I I K K D F F L N T F C I P F Q A G K T I Y L V C Y N P E D I D T I E K V K K I		
UniRef90_C1F9A0	L L P R L L V E S S G G L P L R R S S S R L L V A F E E R L D H C V S L A L E R M		
UniRef90_UPI00047CAFE0	L L K R E F V I V E Q G W I P L E M S P E G L V V M C M D P E S V R G S R I V P Q V		
UniRef90_S7VBM9	R V A A E K L D H L V V T V Q A R L S Q V A S G R E D P V L T A L T E E L E R L		
UniRef90_D7BJL9	I S D A H T L S M R A I P H H I N E G E L I V V V I S D P E D I Q R N D E L L K M L		
UniRef90_A3PH22	L L G V R D C L R E G L L P L R D T G S A V L L A A A A P E S F R R H R R L E E L		
UniRef90_UPI00034BF41D	S H A F A Q R H A I L A V A V D A H T V T I A S A Q P F V T G W E A G L A Q V		
UniRef90_N6YAX9	I K R D Y V Q Q S L W P Y E E N G D G V V I L C V D P E Q V R S S C V A Q Q N V		
UniRef90_S6KYD5	I I D P A F A Q R H Q I L L A V A I D P H G V T V A S A Q P Y V N A W E A D L A H V		
UniRef90_G2LJ93	V F D K Q L L A Q S S F Y P L L K V N D G Y V I A Q T N F T P P D A I D D		
UniRef90_F4A0E2	V V P L N Q L K T Y E A L P I K E D E I A V Y V A F K N P F D I S G Q D R L Q A I		
UniRef90_B9D470	L L S F L K K A N R L L P I S C A A D L L V L A S V D P F V D E L A R A V V S Y M		
UniRef90_UPI0004663956	L L P I K F I K K E G I L P L A K E G R F L R V G A V D P T K A T L G G Q I K A L		
UniRef90_J9A4L4	V V P L A Q L K K H T A L P V S Q D D M Y V T I A F Y D P L N I E A Q E A L L Q R V		
UniRef90_T0L452	E L L Q Y L I S H K W A P V S L S E N S I D F V S V Y P L D I E I H D W L		
UniRef90_L8D317	I I P Y Q K L L K Y N V I P I D E S E L N V L V V F D D P L D M A A Q D A V Q R L		
UniRef90_A6QAW3	S A A F A R R H G I L A V A Q S V D S V T V A S A E P W V C S W E A D L A R A		
UniRef90_L1M5V9	V F D K Q L L A Q S S F Y P L L K V N D G Y V I A Q T N F T P P D A I D D		

UniRef90_UPI0004703D13 F N R K L | K V V L A D P [] H I | E K Y [] G K
 UniRef90_UPI0003740A41 L | R R P V Q L V V A N P A D I A R Y T A E F F
 UniRef90_Q02D05 L N N K K L | R V K V A T L S Q I S D L L K K
 UniRef90_UPI000348E08D L | K L G L | Q K R V I A P E D Y E H | H L N Q Y
 UniRef90_Y0KIF0 I | K Q P V R W A L A H T D D I A A Y L Q H H
 UniRef90_W0SCT6 L | R K D I R R V I S S P D D I T R Y Q V E F Y
 UniRef90_UPI0003735F69 T | R K | T R V V A N P A D I L R F L A E F Y S
 UniRef90_F9ZTT7 S A A N Y E F R V A L R E D I H W Y I Q D Y
 UniRef90_G8QNK5 F P K K V V Y R V T T N R E F L Q V L D H F F G
 UniRef90_UPI00047E9C14 S G L K V E S G L M Q A E E F R
 UniRef90_F5R982 L | R R P I R R V I A N P D D I A R Y V V E F Y S
 UniRef90_F7SA68 P G C H V E F V I T T S K F D L I W A V V Q R [] F
 UniRef90_W0J427 L | G L R I R A V L C G P A A M R D Y V K R H Y G
 UniRef90_G21ZF6 T S L S V E V V V E D D K L G K L I G S Y
 UniRef90_A0YN51 L | G W H L K R Q V I T Q G D Y D K L I S A Y
 UniRef90_H1KPR3 P G M E I E F A A A N Q D A F V E Q I A R
 UniRef90_M1ZJ8 UniRef90_N6YB43
 UniRef90_Q4K429 L | K K R L S F R V T T T H D F E R T V E Q Y F G
 UniRef90_Q1GZF2 L | K R T V R R V V A S P L D I Q R L T L E F Y
 UniRef90_Q988B0 L | K L N I R L V V A N P R E I S R Y L P E V Y
 UniRef90_D5CTY9 S R K R I R R V I S S P T D I N R Y L V E F Y
 UniRef90_T8YQ26 V G R K V R Y V I V L R G Q V T G L R H W Y
 UniRef90_A8FXR0
 UniRef90_UPI00046384C2 M G Y E V V Q H V A S E S E [] N T G V R M L R G
 UniRef90_D3NZB0 P G R T V R F S S F V P D Q F D E F L D R
 UniRef90_G3IS20 Q P G Q I T R V L A N P D E [] K R Y L G E F Y
 UniRef90_UPI000477AF64 I | G K P I S P V F S L P D E I Q T A I M I N Y
 UniRef90_K0E8A1 Y D C A F I P V V A E
 UniRef90_A0A011NPZ2 S K K E I S R V L A S P V D V A R Y L V E F Y
 UniRef90_UPI0003B5D06A T N I E V R V C S P N L V K T A I D K A F
 UniRef90_R5PLC6 F G L V M D K Y I T F D S N L A R I L N S [] G G
 UniRef90_D1C8K0
 UniRef90_I4Z576 T R K S V R L V L A H P N D [] A R F T T E F Y S
 UniRef90_A3UGZ5 W S G P L T L A L G A N R L L D G A L A R []
 UniRef90_B1ZZ35 T G K K V I R L L A R E K D [] R
 UniRef90_UPI00035E665D T G H Q
 UniRef90_R6BE41 F G L I M E R Y I T F D S I I D E I L
 UniRef90_I1XJ98 I A E T V V W V L A H S D D [] E V Y L A H H
 UniRef90_Q2JJR8 F G L K L Q R R V F T Q R D F E T L I S R Y
 UniRef90_A5P922 M S K G Y R E H I V P Q S R I K E I L A A []
 UniRef90_E7RV96 L | R R R V M P V L A S P L E L Q R Y L A E F F
 UniRef90_D8EXG7 T K T K I N F S V G I R E D I E K Y V L H F F
 UniRef90_F6D8T5 P S F Q I S W V L I N A D E L P D F L A R S Y
 UniRef90_UPI0002886921 L | G R D V V F V V A A T S A Q L W H S I L D V F G
 UniRef90_H6NKE3 T G V R L E M A I A P R
 UniRef90_S9ZL18 L | K K R L L S Y R V T S A R E F E L T V E K F F
 UniRef90_C3MFK5 F D A K L Q I R V F S R R E [] A S A I D
 UniRef90_J2TVE2 F P R I T R F A V T T Q T E F D E T L N Q [] F G
 UniRef90_UPI00037C9ABF L | R E P V H A A F L E D S
 UniRef90_A3W073 S L A R A R A V M A P R H A [] Q D R I A Q
 UniRef90_A1VS23 T G R S V R V V W A D R D A I V A R L E R M
 UniRef90_K6YYC4 L | G I D Y E I S V S L P N T I L Q Y L
 UniRef90_K9RP93 L | G L T L R R M V I T L E D Y Q H L I
 UniRef90_K1Z6X0 L | K K P L Q L A L V S E T E L L Y K L D Q [] Y
 UniRef90_B9JMG1 A D L P A A I S V A P R L L I D E F F R E
 UniRef90_D6TEF2 T G L T I Y P I L T S K H E L Q
 UniRef90_F9ZFR1 F K H R I I Y A V T T K R E F T A T V E Q F Y G
 UniRef90_X1Q9V2
 UniRef90_X1BFX7
 UniRef90_I5B431 A G F D Y T [] A L A T K A Q [] L S A [] N M [] F
 UniRef90_C1DJF3 L | R R P I R R V V A N P V D [] R R F T Q E F Y
 UniRef90_K9W4C5 L | G I N W Q R M V I T A E D Y S S [] I N Q Y
 UniRef90_S0G6Z3 L | N S P Y D [] V L A P K H I I L S A V N L L Y
 UniRef90_A1AMW5 R R L A I R R V L S S K S D I L K I L R E F Y G
 UniRef90_UPI000368343C L | G Q K V M I A V A T G D D L E A A L A
 UniRef90_K6ZG46 L | G Q N Y Q L A F S L P H Q I L Q Y L E
 UniRef90_G8QZG8 L | R K D I R R V V A N P Q D I A R Y L V E F Y
 UniRef90_UPI00037446E1 L | E M P V D V Y Y A S S A D L R N A Y K L Y
 UniRef90_U5N9S0 S R R S V R R V L A N P Q D I H R Y T V E F Y
 UniRef90_C7RAA9 L | R M K I V P V M G N P A L I K R Y Q K E F Y
 UniRef90_M3A9V6 S
 UniRef90_G0A9D0 S R R N I R L V I A N P [] D I T Q Y I T Q F F
 UniRef90_UPI0003666616 I | K R E I V R V V A N P R D I E R Y R K E F F G
 UniRef90_F8C2Z8 L | Q I P V Q L A F A I K E D [] M E A I E M Y Y S
 UniRef90_C1F9A0 H G L P V E A G V M P S S E F R A A
 UniRef90_UPI00047CAFE0 F P R K F T Y R V T T Q S E F E E T L G Q L Y G
 UniRef90_S7VBM9 L | G I R M L P I G T T F S K F S R L V R D L S G
 UniRef90_D7BJL9 L | N I P L R L A L A S P S A [] Q R V I T R T Y G
 UniRef90_A3PH22 F G T V I P A L A T R S S I E A A L Q E
 UniRef90_UPI00034BF41D L | K R S I K R V V A N P Q D I Q R C I G E F Y
 UniRef90_N6YAX9 L | K K R L L S Y R V T S A R E F A Q T V E Q Y F G
 UniRef90_S6KYD5 L | K L P | K R V V A N P A D [] Q R F T Q E F Y
 UniRef90_G2LJ93
 UniRef90_F4A0E2 G Y N I Y T V Y T T K D R V L E A I E
 UniRef90_B9D470 F N R K L K T A I A D P S K I D K Y L S K
 UniRef90_UPI0004663956 L | D L R V E L A I L P P A A M E E A M R R L H G
 UniRef90_J9A4L4 T N F N V E F F V
 UniRef90_T0L452 F P R K I K I A T A T K K Q [] Q S Y L
 UniRef90_L8D317
 UniRef90_A6QAW3 F K K P I K I A M S K P S Q [] R Q Y L Q R L
 UniRef90_L1M5V9 L | K R R V V R V V A S P L R I R Q I S Q D F F

Sequence alignment showing UniRef90_00041133A4 (top) aligned with UniRef90_C8S0F1 (bottom). The alignment highlights a conserved motif at positions 10-13.

	1	10	20	30	40
UniRef90_00041133A4		F G V M L L R D G L V A P H D L V Q A L A Q R R G R L T E I L			
UniRef90_C8S0F1		S Q I E A I F R S H F D V S S E D L V K A Q S R N G G Q L E Q I L			
UniRef90_D0X4T8		D H L I F D G V V S A A E F E L A A R K K G C D L E D V L			
UniRef90_F8GKWW		R L G E M L I A N Q L A S A N D I Q R F Q K R F G G R L G A I L			
UniRef90_I3CBL8		D L L V H K S L L E E A T L K D I Q A T T P K A F I Q R L			
UniRef90_F2G6C9		L F S P Q G I A E A R Q R S G R S V V D V L			
UniRef90_M5DPU2		R K A R E R L G N M L V R A E L L T P D A L E H A Q K R T L R R L G D V L			
UniRef90_A7HDW9		S A E Q L Q H A R R R R E R S P L D V L			
UniRef90_UPI00045EC210					
UniRef90_E1YJQ1					
UniRef90_Q30QR7					
UniRef90_D5BQP3					
UniRef90_A7H7A6					
UniRef90_UPI00047AE7EF	M Q M	P R E H L G Q L L N F G H V T E E Q L A K A Q E E T R I R L G K V L I			
UniRef90_UPI00047B3C05		D K R F G E I A L Q G Y L T E S Q L L A A Q K E S H L V L G Q V L			
UniRef90_UPI00046303CC		D Y L V H K G R V K E K Q L K E L T D S S S R Q L I Q R L			
UniRef90_A0A0101KRP6		D H R L T L A E L L G W L V D D G L I K P Q A D D L L R D S R L N R L S			
UniRef90_T1B3D5		A G L T G L A R R R L V A D G A L S E A D A R G A V Q E A A G P L A R H			
UniRef90_E6VZ53		D E D L E A P R L G E I L I Q S G D V T E A D I R D A L S K Q K P L G Q I			
UniRef90_D4TEC7		L N N L V N K L V K S G H I H R E Q I K L A S L E S G K V L T D V L			
UniRef90_K9XBD8		S P F G N K V I E S G Y V S N E Q M Q Q A L R K R S K R P L I E V L			
UniRef90_A6GIV4		L G Q I L A R E G L I T Q S Q C D Q T L R R T G K K Q G E L V L			
UniRef90_K9VFL1		M I L S G Y V N G E Q V K Q A Q Q K S G K R L T E V L			
UniRef90_K9YU62		S P F G S K L I Q A G Y A D S K Q I Q E A R Q E T G K E L P P E L			
UniRef90_Q1IRC2					
UniRef90_R6TFP7		Q Q N I H Q Q I C L Q L V K M N V C S I E E I H Y I L E K I N K P F Y E V F			
UniRef90_S7U755		M K K N Q E Q Q L L G Q L L M E K N I I T E T Q L Q E A Q K N D G A T L G Q I L			
UniRef90_A0A024IFU4		D Y L V V D G V M S A Q E A S R A A R R K G V D L E D V L			
UniRef90_B9T9F3		R I G D H F L Q S G R L S E A D I Q R I Q E E S R L R F G D A A			
UniRef90_W8X598		R L A E F F V N K E L F N S S D A N Y I N Q A K T S L Y K Y L			
UniRef90_C6XCJ8		E H R L T L P E V L G W L V D D H V S A D D A D I L L K E S G H P L T T I A			
UniRef90_R6Y452		V A S R K D Y S P F E N K L I Q A E F V N D R Q L Q E A R Q E T G E P L T Q V L			
UniRef90_C7RR18		M D K N S T V K I G D L L I D K G I I T R E Q L D L A I R K Q K E Q L G E V L			
UniRef90_U5DLZ1		N P A L D L K R V L L Q G L L A D Q H L H A N D E H A A N H P T A H P L E Q I			
UniRef90_UPI00041133A4		M N O P I D I P S I G S G I A R I E I F K V Q Q A R A I A Q O Q K Q P O I D V L			
UniRef90_B3PBX6					
UniRef90_F8FY66					
UniRef90_Q1H1M8					

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
ipssm

	50	60	70	80
UniRef90_C8S0F1	L A R G M I	S E D R L F D A F S R H W Q A S R I	D P A R D P	A D P R L I D R
UniRef90_D0X4T8	V N I G A L	T E E N L P E F Y A T Y L K P L I T E F E L P P	P D L L F E N G E K	
UniRef90_F8GKW2	L D E F Q I	G L P L I G K A L S A F F E V R Y E P F R T	D R L R P M E L L K N	
UniRef90_I3CBL8	I R M G A I	S E D G L L N T L A E Q L N L T V L L T T Q L P	S D I N Q L E V T G	
UniRef90_F2G6C9	V S E Y R I	S E D E I G N S L S I H Y Q V P F I P Y L P D K Y H R F E N E S R		
UniRef90_M5DPU2	E T N S E L	D T A H F V A E L A R A A R L Q A M D M A	A L Y A L S P A F D I	
UniRef90_A7HDW9	V E E A L V	S K A A L R E M T A L Q T T E T V Y R L F H W K S G T Y A F E P G E		
UniRef90_UPI00045EC210	E E T V G L	A P E R F V Q V L A D T F H Y P	A L A M S D L D R L H P A F E V	
UniRef90_E1YJQ1	M V S K R S G S E F	C C W I M E R M E T L E H K D N E V N L N L S Q		
UniRef90_Q30QR7	Y I Q E K D V L T K L A Q N L T F L D L D S I D	M D Y R V V E K		
UniRef90_D5BQP3	I R S G G T	D D E L V H K V L S R A Y A L R	R C Q L E P R Q V D V R A L A L	
UniRef90_A7H7A6	T L V G L V S	P D T V R D V L A I K L R E T L L D V F L W D A G V F W F		
UniRef90_UPI00047AE7EF	V D E N I L T	L L E Q L S E T T L S S Y K R D H S L S D E Q F Q A I T K G D V E L L		
UniRef90_UPI00047B3C05	I S E L R I	P E K E I G N A L S V H Y Q V P F V N Y D P D K Y H L Y R S D S K		
UniRef90_UP100046303CC	E E L S G L T	P D V F V L A L Q G C M H Y P T	T A L D L H A M Q P M F D L	
UniRef90_A0A011QRP6	A H P L V V I	A D Q K W K A L H E P P R G L E Y H H I D P L K V D F T A V T E V I		
UniRef90_T1B3D5	V Q N A L V	D T Q R V M H A L S A E F G V P V L D L D A I D	L A Q V P I K L	
UniRef90_E6VZ53	A E E G K V	A P E K V E Q A V R R Q A E A K E Q D A S R K Q Q E S I R V A A D K		
UniRef90_D4TEC7	I A R G K L	D P Q Q H L F E L K I L Y G V E Y I D P E V S Q M N W N I I R E S L		
UniRef90_K9KBD8	E S L R Q L S	P D Q Q L F E L K I V Y G V E F I D P E I N Q I A T N Q V A N L I		
UniRef90_A6GIV4	V E M G I L S	E G N L R Y G L E A Q L R H K L Y D I F A W D D A R Y Q F K P D V		
UniRef90_K9VFL1	E A L R L Y K	K K Q Q M F E V Y G V E A F D P E M S E M S N E Q L G V M D A L K		
UniRef90_K9YU62	Y R Q Y K K H	H L F E L K I Y Y G V E S L D P E V T N L D Q Y P I K E L I D D V		
UniRef90_Q1IRC2	Y E E E R G R D L	A R R Y R C E F V D L K S F R M H Q D L F R K		
UniRef90_R6TFP7	S Q E K W I N	E E Q L S Q V L A S Y L G Y D Y Y N I D T I	R I D E N L V K T	
UniRef90_S7U755	V R L G Y A T	E K D V V S V V N E Q Q N H S I K S F S E N A Q S Q I E H H P R		
UniRef90_A0A024IFU4	E A Q G E H	A D S I S Q R L A R T A G L P F A D H Q R L N A M V P A F D A		
UniRef90_B9T9F3	A R D F Q V K	Q P A I G A S L L S K F F G V T Y E P F K P E R V K P F D L I K N		
UniRef90_W8X598	V A L G L L D	T G E V E Q A L A A Q Q Y H Y P T A A L D A V L A G Y P V A H A P H		
UniRef90_C6XCJ8	Q D Q S A M A P	E A F V I A E L S H A L H Y P V L D N R T M H A L S T D F E V M P		
UniRef90_R6Y452	T D S K T L D	E E K V Y R A V A E Y F G L N F Y S T S V F S I D E N L I K N		
UniRef90_C7RR18	E Q Q R P L T	L D D L G E W L A A R I G L D Y L H D P L K V D F T A V T D V		
UniRef90_U5DLZ1	A E M E L P P E	R H H L F E L K I L F G V E S L D P E I D Q V D H D K V V N D L		
UniRef90_UPI00041133A4	M R S E V L S K	T L L G Q A L G E Y Y K L P F V D L D A S P V G K E Q L E K		
UniRef90_B3PBX6	T G L G F I T R	L Q L K R S L N W Q		
UniRef90_F8FY66	A A C A L E D	R R H P G K P L D L D R L C Q W L A N K V G Q Q P Y L R I D P L Q L		
UniRef90_Q1H1M8	E E I S G L D	A D T F M H A L G R L M R Y P V L G I L Q L Y E W Q P D F Q L		

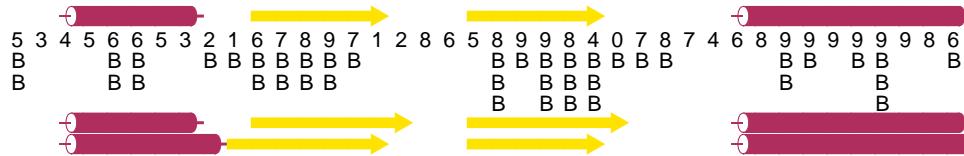
lupas_21
lupas_14
lupas_28



UniRef90_C8S0F1
 UniRef90_D0X4T8
 UniRef90_F8GKW2
 UniRef90_I3CBL8
 UniRef90_F2G6C9
 UniRef90_M5DPU2
 UniRef90_A7HDW9
 UniRef90_UPI00045EC210
 UniRef90_E1YJQ1
 UniRef90_Q30QR7
 UniRef90_D5BQP3
 UniRef90_A7H7A6
 UniRef90_UPI00047AE7EF
 UniRef90_UPI00047B3C05
 UniRef90_UPI00046303CC
 UniRef90_A0A011QRP6
 UniRef90_T1B3D5
 UniRef90_E6VZ53
 UniRef90_D4TEC7
 UniRef90_K9KBD8
 UniRef90_A6GIV4
 UniRef90_K9VFL1
 UniRef90_K9YU62
 UniRef90_Q1IRC2
 UniRef90_R6TFP7
 UniRef90_S7U755
 UniRef90_A0A024IFU4
 UniRef90_B9T9F3
 UniRef90_W8X598
 UniRef90_C6XCJ8
 UniRef90_R6Y452
 UniRef90_C7RR18
 UniRef90_U5DLZ1
 UniRef90_UPI00041133A4
 UniRef90_B3PBX6
 UniRef90_F8FY66
 UniRef90_Q1H1M8

	90	100	110	120
LGAATC	R D G L L	P W R R A G Q A T V I A T A F P E D F A		
YS A	L Q N M G W L	V A K T G E G E L V V F A Q N P L H P E A I E L L S S L		
L K K D Y V E S N S L L	P I D E I K E G L I V L T L D P E R I K S Q R I A N T I			
L D K E W C L D Q E L V V W A E D E N Q L C C L A R D P L A D T L H E V L D N R				
L N V S Y L K R N Y V A V I A D A H D K P I V L M A E P N N A A L L M E I E S A				
M N F T L A T R H E C L P L R A P G K R L R L V V A D P F H I E F F D W A M E C				
V				
I P Y A E A V R H E C L A C R D G E G E L L V L F A D P L N A G L Q A W A D H A				
V P Y F Y S K N N L V I P L R I E E K T L I A A V I S G N N G L L A A V E L A K R				
I S L T Q L K K Y Y A F P I S E D E L S I T V A F C D P L N I E A K E S V Q R L				
I P V S F I D K H Y A I P F Q V E N R F L R V G I I D P T T A T L A G Q L K S I				
L N Q M L				
L N L S Y L K R N F V A V I A D V K E N P I V L M A E P N N A A L L M E I E S A				
L R F N D A S T L H A V L M Q Y P D Q S L Y L V L A D P F D E P L Q L R L Q S M				
M S A Y A T R F G I L P V K V T T R E V L V A T T Q P F L R D W E K E I R S I				
V S E D L L R K H R V L P L F N A A T A S R W A P A				
I L D Y L V D L V G E L V I V Q A Q L T Q V V I S E R N D P T M T A L A E E L E R L				
I P I D I C R S Y G L P L G K E E N Q V L V A M V E P D N L A A C D Y L N R I				
I P V D I C R R F Q L L P L S Q D P P S V L V A M V D P D H L E A Q D N L L T R L				
E G E D Y G L R F P T S A Q G I I V N A L I E T T P E E R A L K A L E				
I S I D I C H Q G R F I P V A K T E T E V L V A M V D P D N L N A I E D L R R I				
I P V D I M C R R Y K L L P L D K K D T R L L V G M V N P D Q L D A Q D N L L M R I				
I P V E L M F R Y N F I P L E E P D G R L E I A I D D P S R L M M I D E V G L L				
L T Y E W I S K Y K I P L T F D E Q R Y I L A T S N P F D F N A I N I A Y A L				
I P Y A E A M Q H E C L L M R E S E G Q G V L V V A D P F D N D L L S W A Q E R				
L K R E Y L E E Q Q W V P V E E G A E G I V I A A L D P E K V K G S R V V N N I				
S P E A E A I R H				
F A E A Y R R E C I P L R G E D G Q L L I V I A D P F A S D I Q A W L L D T				
I P L I Y I K E N R K L I P V F K D E E T V L V V I D D P P Y R L V D L Q T I T Y F				
M S A Y A T R F G I L A I Q V T V R E V V V A T T Q P Y L R D W E K E I K P I				
V P I D I C R R H K V L P L A R Y E P T L V V A M V E P D N L A A Q D D L N L M				
I P E A D A R E Q R V V F L K Q S G D G I I L A T D S P E T V N P K K L Q A L F				
I S P A F A Q R H G I L I V A A D A S S V T V A S A Q P Y Q D D W L A D L T R S				
L P F A E A G R Q E C L A L R D E A G K L H M V H A N P F D A Q L Y S R M N Q L				

lupas_21
 lupas_14
 lupas_28
 jnet
 conf
 sol25
 sol5
 sol0
 jhmm
 jpssm



	130	140
UniRef90_C8S0F1	V P E N V Q F V V T S E S Q F D E L I Q S H	
UniRef90_D0X4T8	F K H K I I Y A V T T K R E F A A T V E Q F Y G	
UniRef90_F8GKW2	F P E R I T W F L A	
UniRef90_I3CBL8	M G I D Y E I A V S L P N L I L Q Y L G E H S G	
UniRef90_F2G6C9	V H E P F D L Y L A H R A D I L A Y L A R H	
UniRef90_M5DPU2		
UniRef90_A7HDW9		
UniRef90UPI00045EC210	V G R P A R W C L V H R A D L N A F L T R H	
UniRef90_E1YJQ1	L G V K V K P L R A E P G I V I E A I S K Y Y G	
UniRef90_Q30QR7	F K K P I K I T V A T K E Q I D S Y L	
UniRef90_D5BQP3	S N F N I E F Q L I S L S N F E A L	
UniRef90_A7H7A6		
UniRef90UPI00047AE7EF	M G I D Y D I F V G L P N Q I L Q Y L	
UniRef90UPI00047B3C05	V R V P V Q W C L A H R N D I A A C L Q	
UniRef90UPI00046303CC	V K K D I R R V L A N P V D V A R Y L I E F Y	
UniRef90_A0A011QRP6		
UniRef90_T1B3D5	L G I R M L P I G T S Y S K F R R I L V R D L S G	
UniRef90_E6VZ53	L N W Q F K R L V I A A E D Y E I L I N Q Y	
UniRef90_D4TEC7	L R P K S Q R I G I T Q E D F Q Q L L A K Y	
UniRef90_K9XBD8		
UniRef90_A6GIV4	L G L A L Q R R V I T P D D Y Q D I T S A Y	
UniRef90_K9VFL1	L Q L K L Q R I V M T L E D Y Q R I I G E Y	
UniRef90_K9YU62	L R R E I V T K V S T L S Q I T D I L K K	
UniRef90_Q1IRC2	F G T H S Q I V V C P D T K L V R I L Q S R I F	
UniRef90_R6TFP7		
UniRef90_S7U755	V R R P M A I V V A S R G D I E A Y L A R H	
UniRef90_A0A024IFU4	F P K K L L Y R V T T T R E F V Q T L D Q F Y G	
UniRef90_B9T9F3		
UniRef90_W8X598		
UniRef90_C6XJC8	V H E P F T L Y L A H Y A D V S A F L S R H	
UniRef90_R6Y452	I K D P I E V R L A T P T Y V T S S L N	
UniRef90_C7RR18	L K K E I R R V M A N P V D V A R Y L V E F Y	
UniRef90_U5DLZ1	L R	
UniRef90UPI00041133A4	P H K K I R F A Y T L P G Y I D E S F N F Y	
UniRef90_B3PBX6		
UniRef90_F8FY66	L G R P I R R V L A S P Q Q V R Q A	
UniRef90_Q1H1M8	L P E P A Q W S I A H R K D I A A F L S R F	