

QUERY	1	10	20	30	40
UniRef90_UP100033330F4	A N L E R T F I A I K P D G V Q R G L V G E I I K R F E Q K G F R L V A M K F L				
UniRef90_A9QQ80	A N L E R T F I A I K P D G V Q R G L V G E I I K R F E Q K G F R L V A M K F L				
UniRef90_N0BIQ4	A N R E R T F V M I K P D G V E R G V I G E I I S R F E R K G L K I V A M K M M				
UniRef90_F6CP12	M E R T F V M I K P D G V E R G V I G E I I S R F E R K G L K I V A M K M M				
UniRef90_B6RB47	M E R T F V M I K P D G V Q R N L V G N I I A C F E K K G L K I V A C K M M				
UniRef90_A9YVA7	S N E R T F I A I K P D G V Q R R L V G D I M K R F E N R G Y K L V A G M K F I				
UniRef90_L1JM45	E R T F I A I K P D G V Q R G L V A K I I E R F E Q K G F K L V G L K F M				
UniRef90_G0SG41	I E R T F I A V K P D G V Q R G L V G N I I A R F E A R G F R L V A L K L V				
UniRef90_G6CSE8	E R T F I M V K P D G V Q R G L V G Q I M E R F E K K G F K L V G L K F V				
UniRef90_F6DMU0	M E R T Y L M V K P D G V Q R G L V G K I I S R F E E Q K G F K L V A M K F L				
UniRef90_Q20X17	N A E R T F I M I K P D G V Q R G L V G T I I G R F E E Q K G F K L V A M K F L				
UniRef90_P50590	M E R T F I A I K P D G V Q R G L V G S I I Q R L E S R G Y Q L V G L K L V				
UniRef90_Q2JV1	T T E R T Y I M I K P D G V Q R G L V M G D I I K R F E E D R G F K L V G L K L V				
UniRef90_Q5DIW9	E Q T F I A I K P D G V Q R G L V G P I I S R F E E Q R G Y K L V A M K F M				
UniRef90_S8BER2	E R T F I A I K P D G V Q R G I I G E E I K R F E E T K G F K L V G L K L V				
UniRef90_G3PR82	N K E R T F I M V K P D G V Q R G L V G E E I K R F E E A K G F K L V A M K F M				
UniRef90_T1K1L0	C E R T F I A I K P D G V Q R G L V G E E I K R F E E Q K G F K L V A M K F M				
UniRef90_M7BLZ6	S N N E R T F I A I K P D G V Q R G L I S K I I G R F E E D R G F K L V G L K L V				
UniRef90_G8ZQD4	M E R T F V M I K P D G V Q R G L I G E E I S R F E E R K G F K L V A M K L M				
UniRef90_UP100034F2333	A E I E R T F I A I K P D G V Q R G L I S E E I S R F E E R K G Y K L V A M K I L				
UniRef90_D8QXS8	M E R T F L M I K P D G V Q R N L I V G E E I Q R L E T K G F T L V G L K L M				
UniRef90_B4VQN4	A T M E Q S F I M I K P D G V Q R G L V G E E I A R F E K K G F T L K G L R L M				
UniRef90_D8RHN0	M E R T F I A V K P D G V Q R G L V M E E I M S R F E E K R G F K L V G I K I L				
UniRef90_I2GUT2	S Q T E R T F I A I K P D G V Q R G L V A K I L A R F E D R G F K L V A V K L L				
UniRef90_C5DC13	M E R T F L M I K P D G V Q R N L I V G E E I S R F E E R K G L K I V G K F I				
UniRef90_Y5PGP7	M E R T F L M I K P D G V Q R R L V G E E I R R F E Q K G F K L I G M K L M				
UniRef90_V9LHK9	E R T F I A I K P D G V Q R R L V G E E I K R F K Q K G F R L V A M K L V				
UniRef90_D3ZGV9	A N L E R T F I A I K P D G V Q R G L V G E E I K R F E E K K G F Y L K A L K L V				
UniRef90_P93554	M E S T F I M I K P D G V Q R G L I V G E E I S R F E E K K G F Y L K A L K L V				
UniRef90_C4R300	S Q N E R T F I A V K P D G V Q R G L V P E E I L S R F W N K G Y K L V A I K L T				
UniRef90_K9Y128	M E R T F L M I K P D G V Q R N L I V G E E I K R L E N K G F K L V G L K L M				
UniRef90_T1FBN2	E R T F I M V K P D G V Q R R L V G E E I T R F E Q K G F K L V A L K F V				
UniRef90_A0CVZ9	N Q E R T F I M V K P D G V Q R R L V G K I I Q R F E D R G F K L V A L K F V				
UniRef90_UP10002F8C8F5	M E K T F I M V K P D G V Q R N L I V G E E I V S R F E A K G F T L V G A K L M				
UniRef90_D2VTC4	E R T F I A L K P D G V Q R G L I V G P I I T R F E Q K G F K L V A V K M L				
UniRef90_Q86EJ4	M E R T F I M V K P D G V Q R G L V G E E I Q R F E R R G Y K L I A V K M L				
UniRef90_J9I6G3	E R T F I M V K P D G V Q R G L V G E E I S R F E R K G F K L V S L K M E				
UniRef90_D1YXD8	R T F F V M I K P D G V Q R G L V G D I V A R F E H R G L K I A A M K M L				
UniRef90_R7YM22	T T E Q T F I A V K P D G V Q R G L I V G P I V S R F E N R G F K L V A K L V				
UniRef90_K6DGY0	M E R S F I M V K P D G V Q R N L I V G E E I V S R F E K K G G L K L V G A K E M T				
UniRef90_K2FP17	M E R T F I M V K P D G V Q R N L I V G E E I V E R F E K K G G Y Q L K A A K L M				
UniRef90_UP10003FEDD26	M E K T F F V M V K P D G V Q R N L I V G A I I V G R F E A K G F K L V G L K M L				
UniRef90_D7CJ40	Q T Q R T F I A V K P D G V Q R G L I S Q I I A R F E E R G Y K L V G M K M V				
UniRef90_G0U9C8	M E R T F V M V K P D G V Q R G L V G E E I I A R L E R K G L K L V G L K M L				
UniRef90_G8JQ34	Q R T Y I M L K P D G V Q R G L L G E E V L R F E Q R G F K L V A L K L V				
UniRef90_E6SK71	M E K T F F V M V K P D G V Q R A F I G E E V A R F E K K G F Q L V G A K L M				
UniRef90_U6K1W7	E R T F I A V K P D G V Q R G L L G D I I S R F E K R G Y K L V A L K L Q				
UniRef90_Q81FQ4	M E R T F I M L K P D A V V Q R G L V G K K I A K L E D K G F K L V G L K L I				
UniRef90_V4AAV4	Q T Q R T F I A V K P D G V Q R G L I S Q I I A R F E E R G Y K L V G M K M V				
UniRef90_I4D069	M E R T F I M L K P D A V V Q R G L V G K K I V A R F E E R G Y K L V G M K M V				
UniRef90_F1LG83	U N K E R T F I A I K P D A V V Q R G L I G K K V I A R F E E R G Y K L V G M K M V				
UniRef90_B8DBZ7	S K N E R T F I A I K P D A V V Q R G L I G K K V I A R F E E R G Y K L V G M K M V				
UniRef90_P49740	M E Q T Y I V M V K P D G V E R G L I G E E I V T R L E K K G L K I V A G K L M				
UniRef90_M1XB88	S T E Q T F I A V K P D A V V Q R G L I G Y I I S K F E L K G Y K L R A L K F L				
UniRef90_I2G1H5	M E K T F I M V K P D G V Q R Q L I V G E E I L S R F E R K G L Q L A G A K L M				
UniRef90_M1WVS3	E Q T Y I M I K P D G V Q R N L I V G T I I A R F E A R G Y K I V A L K M V				
UniRef90_UP100047A29B	M E L T F F V M V K P D G V Q R G L V G K K I H R F E T K G F T L V G L K F M				
UniRef90_H3BEM9	M E R T F V M V K P D G V Q R G L V G E E I V S R F E K K G L K L V G A K L L				
UniRef90_UP1000363F5FB	S L E R T L V L V K P D G V Q R G L I S G T I I S S R L E S R G L K I V G M K L F				
UniRef90_D8LW21	N K E R T F I A I K P D G V Q R G L V G K K I Q R F E Q K G K F K L V G M K M M				
UniRef90_W4WGH2	S T K E R T F I A V K P D G V H R N L I V G N I I S R F F E E R G Y K L I A M K F Q				
UniRef90_M1VWS3	E R T F I A V K P D G V Q R G L V G N I I S R F F E E R G Y K L I A M K F Q				
UniRef90_UP100047A29B	A E T L F I A V K S D G V Q R G L I V G E E I K R G L K I V G L K M V				
UniRef90_H3BEM9	A S L E R T Y I M V K P D G V V Q R G L I V G E E I S R F E K K G F K L T G L K L F				
UniRef90_Q8Y135	M E K T F V M V K P D G V Q R G L I G Q I I S R F E Q K G G L R I K A A K L M				
UniRef90_Q8TV10	M E R T F I A V K P D G V Q R G L I G Q I I S R F E Q K G G L R I K A A K L M				
UniRef90_E5GBW3	A E V Q R E F F V M I K P D G V V Q R G L I V G E E I K R G L K I V G L K M V				
UniRef90_H7F3T7	A S L E R T Y I M V K P D G V V Q R G L I V G E E I S R F E K K G F K L T G L K L F				
UniRef90_K0T5M1	M E K T F V M V K P D G V Q R G L I G Q I I S R F E Q K G G L R I K A A K L M				
UniRef90_E9BWH2	S T E R T F I A V K P D G V Q R G L V G E E I A R F E T K G Y K L V G M K M T				
UniRef90_D5WQ44	L E Q T F V M I K P D G V Q R G L I G D I I V S R L E R R G L R L V A A K L M				
UniRef90_B7G2S9	M E R T Y I M I K P D G V Q R G L I G E E I I K R F E A K G F K L V A M K L T				
UniRef90_V9W2E7	N M E K T F F V M V K P D G V Q R G L I G E E I V K R L E R Q K G F Q M I G C L F				
UniRef90_UP10003C25B50	E R T F F V M V K P D A L Q R R L I G D I I V R R F E R R G F R L V A M K L V				
UniRef90_E8N633	M E Q T F V L V K P D G V Q R G L I G E E I V A R L E R R G L K L V G A K F L				
UniRef90_F0Y250	T L E R T Y I M I K P D G V Q R G L I G D I T K R F E Q K G F K L L V G M K M L				
UniRef90_UP100035D5AD1	Q R T F F V M V K P D G V Q R G L V G E E I I S R L E R K G L K L V G M K M L				
UniRef90_UP10004411C2D	S K T E R T Y I M V K P D G V Q R G L V G A I I S R F E Q K G F K L L V A L K L V				
UniRef90_X0U7D8	Q V Q R T L V M L K P D A V H R G L I A G R I I S R F E Q K G F K L L V A L K M A				
UniRef90_F8KKJ9	T V E R T F F L M L K P D A V Q R N L I G N I I S R F E N K G G L K L V G A K L M				
UniRef90_D8S2E3	T L E Q T Y I V M V K P D G V Q R G L V G E E I L S R F E K K G F R L A G L K M F				
UniRef90_U1P6G3	E R T F F V M V K P D G V Q R R R L V G E E I T A R F E H R G L K L V A A K A K L				
UniRef90_UP1000344278A	E H S F I A V K P D G V H R R R L V G E E I I R R F E E K K G F R L V G M K L V				
UniRef90_B5XE35	L E R T Y I V M I K P D G V V Q R N L I G Q I V S S R F E E Q K G F K L L V A G K L V				
UniRef90_W7ZLX8	UniRef90_X8JTI3	N Q E R S Y I M I K P D G V Q R A L V G E E I L Q R I E K G F K I V A M K L A			
UniRef90_F4BUT2	M E K T F F L M V K P D G V Q R G L V A E I M G R F E E R R G F Q L V A A K L L				
UniRef90_F8FAU4	M E R T F F L M V K P D G V Q R G L I G R I V S R F E E D K G G L K L I A G K L I				
UniRef90_UP100035D44DC	M E R T F F L M V K P D G V Q R G L I A G E I I N R F E E K K G G I K I V A M K L V				
UniRef90_M7T8P2	E R T F F V M I K P D A V Q R G L V G E E I T A R F E H R G L K L V G A K F M				
UniRef90_C7NTU9	M E R T F F I V A L K P D T L Q R R G L V G D I I N R F E E K K G F Q L L G L K L V				
UniRef90_E4YWL7	M E R T F F I V A L K P D T L Q R R G L V G D I I N R F E E K K G F Q L L G L K L V				

QUERY	50	60	70	80
UniRef90_UPI00033330F4	R A S E E H L K Q H Y I D L K D R P F F P G L V K Y M N S G P V V A M V W E G L			
UniRef90_A9QQ80	R A S K D H L K Q H Y S D L K D H P F F P G L V K Y M N S G P V V A M V W E G L			
UniRef90_N0BIQ4	Q A S Q E E L L E K H Y A D L A G R P F F P G L V S Y M Q L G P V V P M V W E G L			
UniRef90_F6CP12	R I P R D L A E K H Y G E H K D K P F F P G P L V E Y I T S G P V V A M V V E G K			
UniRef90_B6RB47	T A S K E H L E K K H Y S D L S T K P F F P A G L V K Y M G S G P V V A M V W E G K			
UniRef90_A9YVA7	Q A P E S L L K K H Y A D L K D R P F F P G L V S Y M A S G P V V P M V W E G L			
UniRef90_L1JM45	Q A S E D D L L K E H Y A D L S S K P F F P A G L V E Y M K S G P V V P M V W E G D			
UniRef90_G0SG41	R P G K E H L E Q H Y A E L K D K P F F P G L I E Y M N S G P I V A M V W E G L			
UniRef90_G6CSE8	W P S E E L L Q K H Y S D L A S R P F F P G L V K Y M S S G P V V P M V W E G L			
UniRef90_F6DMU0	Q I P R E V A E K H Y G E H A G K P F F P Q G L V D F I T S G P V V A M V I E G K			
UniRef90_Q201X7	W P S E E L L K N H Y A D L S G K A F P G L I K Y M A S G P V V P M V W E G L			
UniRef90_P50590	K P S R E L L A E Q H Y A V H R E R P F F P N G L V E F I T S G P I V A I V L E G E			
UniRef90_Q2JVI1	Q V S Q E L L A E A H Y A E H R E R P F F P G L V K F I L T S G P V V A M V W Q G K			
UniRef90_Q5DIW9	Q P S E K L L S E H Y A D L S K K P F F P G L V K F M A T S P V C C M V W E G Q			
UniRef90_S8BER2	T P G K E H L E Q H Y S D L S S D K P F F P K G L V E Y M N S G P I C V A M V W E G R			
UniRef90_G3PR82	H A S E D D L L M Q H Y I D L K D R P F F P T L M K Y M T S G P V V A M V W E G K			
UniRef90_T1K1L0	Q A S E E L L K K H Y E E L L A G K P F F P G G L I K Y M L S G P V V P M V W E G L			
UniRef90_M7BLZ6	Q A S E D D L L K E H Y I D L K D R P F Y A G L V K Y M H S G P V V A M V W E G L			
UniRef90_G8ZQD4	T P T E N L L K Q H Y A E H V D K P F F P K M L S Y M M S S G P V V L A T V W E G K			
UniRef90_UPI00034F2333	R I S Q E L L A E K H Y A E H R E R P F F P S G L V D F I T S G P V V V A M V L E G K			
UniRef90_D8QXS8	T P T K E F A M H Y D D L K E R P F F P N G L C D F L L S S G P V V V A M V W E G Q			
UniRef90_B4VQN4	S V S R E L L A E Q H Y A V H K D K G F F A G L I E F I T S G P V V V A M V W E G E			
UniRef90_D8RHN0	Q I E K S F A E K H Y A D L S A K P F F P G G L V E Y V T S G P V V V A M V W E G K			
UniRef90_I2GUT2	N A S E E L L T K H Y E E H V G K P F F P K M V S F M R S G P V V A T V W E G K			
UniRef90_C5DCL3	R P S Q E L L R Q H Y A E H V D K P F F P K M S A F M S S G P V V L A T V W E G K			
UniRef90_Y5PPG7	I P T K D T V N V H Y A E H T E K P F F H K V S F L T S G P V V F A M V V E G E			
UniRef90_V9LHK9	Q A S E D D L L R D H Y F D L K D R P F Y N R L V K D M A S S P V V A M V W Q G L			
UniRef90_D3ZGV9	Q A S E D D H L K Q H Y I D L K D R P F Y F M S S G P V V V A M V W E G L			
UniRef90_P93554	N V E R S F A E K H Y A D L S S K P F F P Q G L V D Y I I S G P V V V A M V W E G K			
UniRef90_C4R300	L A N E D D L L R E H Y A D L T S K P F F P S L L S Y M L S S G P V V L A T V W E G K			
UniRef90_K9YI28	S V S Q E L L A E K H Y D V H K E R P F F P G S L V D F I I S S P V V V A M V W E G E			
UniRef90_T1FBN2	H A S E D D H L K K H Y E E A L S S K P F F P G G L V K Y M S S G P L V P M V W E G K			
UniRef90_A0CVZ9	A P D Q G L L T Q H Y A D L K E R P F F P S L L K Y V S S G P V V A A M V W E G K			
UniRef90_UP10002F8C8F5	Q V S R E L L A E K H Y A E H K E R P F F P G E L V D F I T S G P V V F A M V V W Q G N			
UniRef90_D2VTC4	T P T A E L L A S K H Y A E H D G K P F F P A G L V E F I L T S G P V C V A M V W E G Q			
UniRef90_Q86EJ4	H A S E Q L L Q T H Y E A L K S L P F F T N L V A Y M S S G P V V V P M V F E G R			
UniRef90_J9I6G3	Q P G K A K F E Q H Y S D L S T K P F F P G G L V N Y A A S G P V V V A M V W E G N			
UniRef90_D1YXD8	L V I S E D D L A K K H Y E E H A A K P F F P N L V S F I R S G P V V V A M V V E G K			
UniRef90_R7YM22	T P S K E H L E K H Y E E D L S D K P F F P K G L I T Y M G S S G P V C A M V W Q G R			
UniRef90_K6DGY0	T V S K E L L A E E H Y G E H K E R P F F P G E L V D F I T S S P V F A M V V W E G E			
UniRef90_K2FP17	Q V T E Q L L A S E H Y A E H K D K P F F Y D E L L V S F I T T S S P V F A M V V W E G D			
UniRef90_UP10003FEDD26	Q I S E E L L A G E H Y G E H K G K P F F Y D E L L V D F I T T S S P V F A M V V W E G N			
UniRef90_D7CJ40	K L S Q A M A E R H Y A E H R G K P F F Q E L L V D F I T T S S P V V V A M V W E G N			
UniRef90_G0U9C8	L P S S E Q A K Q H Y G D L A S K P F F Q E L L V D F I T T S S P V I V G M V W E G L			
UniRef90_G8JQ34	V P T E A L L R E H Y A E H V D R P F F P K L L A H M T S G P V V A A M V W E G S			
UniRef90_E6SK71	Q V S E E L L A R R H Y A V H E G K P F F P G L I R F I T S A P V V V A M V W E G R			
UniRef90_U6KIW7	N P S S Q T L E Q H Y R D L S D K P F F P F R V L M N Y M S S G P V V V A M V W E G T			
UniRef90_Q81FQ4	Q V T P E I L A Q G H Y A E H K E K P F F G E L V D F I T S G P V F A M V W Q G E			
UniRef90_V4AAV4	Q V S E D D H L R K H Y A D L K D K P F F E G L V K F M A S S G P V V V A M V W E G L			
UniRef90_I4D069	Q V D R S L A E A H Y A E H K G K G F F E P T V A Y I M S S S P V V V A M V W Q G K			
UniRef90_F1LG83	H A T R P H L E V H Y Q E L K D P F F P K T L I D Y M S S G P V V V A M V W E G L			
UniRef90_B8DBZ7	Q I D R E L A E K H Y A E H L G K S F E D L I G F I T S G P V F A M V L E G D			
UniRef90_P49740	V P S R D L V E E H Y A E H K G K P F F Y E K L V G F M A S G P V C A M I V W E G K			
UniRef90_M1XB88	Q V S E Q M A E N H Y A E H K G K P F F S E L V E F I T S G P V F A M V W E G E			
UniRef90_I2G1H5	H A S E E H L E K H Y A D L K D K K F F P G L I I K Y M A S G P V V C I V F E G K			
UniRef90_M1WVS3	D V S K K L A E S H Y D I H R E R P F F A S L V E F I T S S P V F A M V W K G D			
UniRef90_UP1000478A29B	S V S Q S L A E Q H Y A E H K E R P F F P Q E L V S F I T T S S P V F A M V L E G E			
UniRef90_H3BEM9	Q A S E E L L A K H Y H D L K T K S F Y S S L I D Y M S S G P V V V A M V W E G S			
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UniRef90_D8LW21	V P P M E L L E Q H Y A E H E K G K P F Y P S L T G F M S S S A V V A M V W E G N			
UniRef90_W4WGH2	Q P S E D D L L K K H Y A D L A S K P F F P G L V K Y M S S G P V M P M V W E G L			
UniRef90_U6P6F5	T A S K Q H L E V H Y Q E L K D P F F P H L I K Y M G S S G P V V V A M V W Q G L			
UniRef90_I7MKD9	L A T K Q I L E K H Y E E H I S K P F F P S L L K F M L S G P V V P M V W Q G K			
UniRef90_Q9YI35	K P T E D L A K H Y I D L K D P F F Y A G L C K F T S A G P V V A M C I V E G Q			
UniRef90_Q8T810	Q L D R E T A K L C Y E E H R D K P F F E D L I E Y V T S G P V V V M I V E G R			
UniRef90_E5GBW3	Q C T K E L L A E E H Y K D L K G K S F F P G L I I E Y I T S G P V V C M A W E G V			
UniRef90_H7F3T7	Q I S D S L L A K T H Y A E H D G K P F F P D L I H F I T S G P V V F A M V L E G D			
UniRef90_K0T5M1	Q A T K E L L D T H Y G D L V D K P F F P A L R D Y M M S S G P V V C M V W E G K			
UniRef90_E9BWH2	T A S E E L L K Q H Y A D A L D A G K G F F F N G L I A Y M A S G P V V A A M V W E G K			
UniRef90_D5WQ44	Q V S R Q L A E K H Y E E H R D K P F F F G E L L V S F I T S G P V V F A M V W E G Q			
UniRef90_B7G2S9	A P G K E H L E K H Y E E D L K D K K F F P G L I I A Y M T S G P V C A M V W E G K			
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UniRef90_I2GUT2	D V V N Q G R A M I G K T N P T D S A P G T I R G D F G I D L G R N V C H G S D			
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UniRef90_J9I6G3	N V V K T G R K M L G A T R P D D S E P G T I R G D F A V D V G R N N V I I H G S D			
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UniRef90_R7YM22	D V V K T G R A I L G A T N P L A S A P G T I R G D F A I V D V G R N N V C H G S D			
UniRef90_K6DGY0	N V I A T A R Q M M G K T N P A D A L P G T I R G D F G V T M G K N N V I I H G S D			
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UniRef90_G8JQ34	N V V R G G R V L L G A T N P A D S Q P G T I R G D F A I D V G R N N V C H G S D			
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UniRef90_P49740	Q A V K T G R L M L G A S N P L D S A P G T I R G D Y G I D L G R N N V C H G S D			
UniRef90_M1XB88	N V V E I T R Q L I G K T N P K D A L P G T I R G D Y G M F V G K N N I I H G S D			
UniRef90_I2G1H5	D A V R T G R V L L G A T N P L D S A P G T I R G D F A I I D V G R N N V C H G S D			
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UniRef90_H3BEM9	N V V K T S R A M V G E T N P L D A R P G T I R G D F S V D I C R N N V I I H A S D			
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UniRef90_D8LW21	N V V S I A R K M I L G A T N P K D A P G T I R G D L C V D M G H N N V I I H G S D			
UniRef90_W4WGH2	D V V K T G R V M L G E T N P K D S A P G T I R G D F C I Q V G R N N I I H G S D			
UniRef90_U6P6F5	D V V K Q G R A M L G A T N P L A S A P G T I R G D F C I Q T G R N N I I C H G S D			
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UniRef90_E5GBW3	G V V A S A R K L I I G V T N P L E A E P G T I R G D L A I Q K G R N N V I I H G S D			
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UniRef90_K0T5M1	E A V A T G R K M L G A T N P L A S E P G T I R G D F C I E V G R N N I I C H G S D			
UniRef90_E9BWH2	G V V K T G R K M L G A T N P L D S E P G T I R G D Y A I E V G R N N I I C H G S D			
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QUERY

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UniRef90\_E4YWL7

		130		140		150																										
S	V	K	S	A	E	K	E		S	L	W	F	K	P	E	E		L	V	D	Y	K	S	C	A	H	D	W	V	Y	E	
S	V	K	S	A	E	K	E		S	L	W	F	K	P	E	E		L	V	D	Y	K	S	C	A	H	D	W	V	Y	E	
S	C	P	S	A	E	K	E		A	L	W	F	K	E	E		C	N	Y	K	L	A	L	D	S	W	V	Y	E			
S	P	E	S	A	K	R	E		N	L	F	F	S	P	E	E		I	L	D	Y	E	R	A	I	D	K	W	I	Y	E	
S	P	A	S	A	E	R	E		N	L	F	F	S	P	E	E		L	V	D	Y	R	R	D	V	D	R	W	I	Y	E	
A	V	E	S	A	Q	K	E		A	L	W	F	T	P	E	E		C	N	Y	N	S	C	Q	S	S	S	W	V	Y	E	
S	V	E	S	A	N	T	E		A	L	W	F	K	P	E	E		C	S	Y	T	S	C	S	S	S	W	V	Y	E		
A	V	E	S	A	N	K	E		A	L	W	F	K	P	E	E		L	V	D	W	K	S	H	S	E	S	W	V	Y	E	
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A	V	E	S	A	N	K	E		A	L	W	F	S	E	K	E		V	P	W	T	K	D	I	D	S	W	V	Y	E		
A	I	E	T	A	Q	Q	E		A	L	W	F	S	P	A	E		S	D	W	T	P	T	I	Q	P	W	L	Y	E		
G	P	E	T	A	Q	R	E		A	L	W	F	Q	E	S	E		L	V	N	W	T	P	A	T	Q	S	W	V	Y	E	
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S	V	E	S	A	E	R	E		V	N	L	W	F	S	P	E	E		L	V	D	Y	Q	S	T	I	N	P	W	I	Y	E
S	V	E	S	A	E	R	E		V	N	L	W	F	S	P	E	E		L	V	D	Y	Q	S	T</							

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

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UniRef90_K8EM49	M V T K E H A E K H Y A D L S S K P F F A G L V T Y M C S G P V V C M V W E G K			
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UniRef90_I7KBS7	S L P E E R V V I E Q Y R E H L E K P F F P G L K A Y I M S S G P C F L M V W E G K			
UniRef90_UP100031703AA	K I S P E L A A R H Y H E H I G R P Y Y E D L I G F M T S G P V F A M V W E G E P			
UniRef90_W4QAI0	V I T E A M A E R H Y E H T G K P F F E K L V R F I T S G P V F A M V W E G E P			
UniRef90_D2K926	Q A T E D F I K K H Y E D L S D K P F F Y G K L C T F I A S S G P V F A M V W E G L			
UniRef90_I1CBB4	H P T K E L L E E H Y C D L K G K G F F P S L V E Y M L S G P V V G M V W T G K			
UniRef90_K2AMA9	Q I S E K L A G E H Y K E H V G K P F F P A L M R F T T M G P V V A M V I E G P			
UniRef90_A8BMG9	V P S K N L V E E H Y K E H A A R P F F A G L C K F L S S G P V C A M V W E G A			
UniRef90_E1Z406	Q C T K E V A E H Y K D L S S K P F F P A L V E Y E L S G P V V C M V W E G E			
UniRef90_B8GKL6	R L A E A T V N E H Y R E H E R S F Y P S L K Q Y I M S S G P C F L M V W E G K			
UniRef90_W7Z3K3	Q V T D E Q A Q R H Y A E H E G K V F Y D N L V R F I T S S S P V F A M V W E G D			
UniRef90_FORPA2	Q I P R E T A E S H Y G E H S A K P F F G E L V D F I T S G P V V A I A L E G E			
UniRef90_Q72GQ0	R I S Q E L A E R H Y A E H R E K P F F G E L V D F I T S G P V V A M V L E G E			
UniRef90_A6Q200	Q L S K N D A A K F Y E V H K E K P F F G E L V D Y M T S G P V V V M V L E G E			
UniRef90_H3SLF0	M I T R E Q A E R H Y A E H A E K P F F G E L V D F I T S G P V F A M I W E G D			
UniRef90_A9S8I9	K T P K E L A E E H Y G E L K E K P F F Y G K L V A Y I I S S G P V V C I A L E G P			
UniRef90_B9L159	K V D R E V A E R H Y A E H R G K P F F Y E D L L A F I T S G P V V V G V V E G P			
UniRef90_L0HJM6	K L P E Q R V T E H Y K E H L S P F F P S M K E Y I M S S G P V F L M V W E G R			
UniRef90_H5S9Y5	R I D K K L A E T H Y G E H R E K P F F K D L V D F V T S G P V V A M I V E G P			
UniRef90_D8U8X8	Q T P R E V A E E H Y K D L S A K P F F Y G K L D L V N Y I L S S G P V V C M V W E G K			
UniRef90_C6CAM0	H L T R D Q A E G F Y A E H Q G K P F F D G L V L S F S M T S G P V V V Q V L E G E			
UniRef90_UP1000292A743	R V T R P R L P F P R C S R C F P S S F R C R E I P L P S A P A H G G V W E G L			
UniRef90_A0LBZ0	R L T P E I A G K F Y E V H K A R P F F Y N D L C S Y M M S S G P V V V Q V L E G D			
UniRef90_Q5JGR7	W I D R K I L A E K H Y A E H K G K P F F E P L I D Y I T K A P S V V M V V V E G R			
UniRef90_UP10002DE7748	Q V T P E L A G K H Y A E H R D K P F F Y G E L I S F I T S G P S V P M V W E G R			
UniRef90_Q5PQ84	Q A S E G I L A E H Y H D L R R K P F F Y P A L L R Y M A A G G P V V A M V W E G H			
UniRef90_UP10002DD549E	H L S E E K A K G F Y A E H E G K P F F Y N D L V E F M T S G P V M V Q T L E G D			
UniRef90_T0RSG8	T A T E A R A S D H Y A D L A G R P F F F G G L V K Y F A S G P I V C M V W E G T			
UniRef90_UP10004105E7A	H L S K E Q A E G F Y A E H S E R P F F F G A L V E F M T S G P V V V S V L E G D			
UniRef90_UP1000320089E	Q A S R S L A E S H Y A A V H K G K P F F Y E S L I Q F L T S G P T V A M V W E G R			
UniRef90_E0IC82	Q I S R E T A E H Y A E H H G K P F F Y E R L I T F I T S G P V F A M V W Q G D			
UniRef90_Q9UZ13	W I S K E L A E K H Y A E H R E E K P F F F K S L L V E Y I T R T P V V V M V V E G R			
UniRef90_X0RN82	V I T K E M A E K H Y A E H K E R P F F F G D L V Q F I T S G P V F A M V W Q G E			
UniRef90_UP10002D3777A	I P S I L E L A Q K H Y G V H K D P F F S N L L V D F I S S G P V V A M V W E G E			
UniRef90_Q8ID43	N P T E E I L K E H Y K E L S D Q P F F K N L L V A Y I S K G P V V A M V W E G V			
UniRef90_D6PAY7	I P S E E I L A K T H Y A V H S E R P F F P G L I K F V T S G P V V C M A W L G K			
UniRef90_N9TZ21	H M T R E Q A M G F Y G E H E G K P F F E G L V N F M T S G P V M V Q V L E G E			
UniRef90_R7MDD8	Q A T D A Q A K A H Y E E H K D K P F F P R L I Q Y L Q S G P I V A M V V Q G F			
UniRef90_K0C4P5	Q L S R E Q A E G F Y A V H K E R P F F Y N D L V S F M I S G P V M V Q V L E G E			
UniRef90_B0FFJ9	Q A S E E L L S Q H Y Q E L R R K P F F P S L L Y Y M T S G P V V V M V W E G H			
UniRef90_A2BK98	W L T R E E A E K L Y E V H R G K P F F F D G L V N F V T S G P V V A M I L E G D			
UniRef90_E6R552	T P S D A L A K E H Y A D L S A R P F F Y P S L V K Y I L T S T P V V A M V W E G K			
UniRef90_UP100034D8074	H L S E E N A G G F Y A E H K E R P F F Y G A L V G F M T S G P V I V Q V L E G E			
UniRef90_A4A469	R L S D V V A G G F Y A E H K E R P F F F P A L I E F M T S G P V V V Q V L E G E			
UniRef90_U3TY38	H L T K E Q A E G F Y A E H Q G K P F F F D G L V E F M T S G P V V V S V L E G E			
UniRef90_UP10004640764	Q L S R A Q A E G F Y A E H Q G K P F F F E G L V D F M T S G P V C V Q V L S G D			
UniRef90_W4DLQ0	T V S E D Q A K R H Y A E H A G K D F F S E L V S F I T S G P V F A M V W E G D			
UniRef90_Q9PTF4	Q A S E D D L A K Q H Y I D L K D Q P F F Y A G L V K Y T S S G P L L A M V W E G L			
UniRef90_P87355	Q A D Q G L L D K H Y Q Q L R Q K P F F Y P A L L A Y M T S G P L V A M V W E G Y			
UniRef90_A0Z845	Q L S D T T A G G F Y A V H A E R P F F F G E L V E F M T S G P V V V Q V L E G E			
UniRef90_D5V6X6	Q L S R A D A E A F Y A V H A E R P F F F G E L V E F M T S G P V V V S V L E G V			
UniRef90_E1IHK5	Q V T E A L A R I H Y G E H E G K P F F F Q G L V E Y I T S A P V V V A V V V G K			
UniRef90_W7KVD6	Q I S R R A E E L Y A E H K G K S F F P E L I I S Y I T S G Q V V C M V V E G D			
UniRef90_B0KAQ8	T P T I E L L E K H Y E E H K G K P Y K P L I V Y M S S G P V F A M V L E G E			
UniRef90_I7ZF38	H L T E K E A G G F Y A V H S A R P F F K D L V S F M T S G P V V I Q V L E G E			
UniRef90_A6CAK3	Q V T K E L A A E H Y A E H V E K P F Y P L L E E F I T A G P V V A I V A E G P			
UniRef90_UP10003AF86AF	Q A P E R I L L A E H Y H D L Q R K P F F Y P A L I S Y M T S S S I S L L Q V W E G P			
UniRef90_UP100029DB717	W A S E E H L K Q L Y P D L K D C P F L P G L V K Y V N S W P V E G L			
UniRef90_UP100035E14D7	Q L D N E M A S G F Y A E H E G R P F F N D L K K F M T S G P V F V Q V L E G E			
UniRef90_Q6FEM7	H L S Q A E A E G F Y A E H K E R G F F A D L V A F M T S G P V V V S A L E G E			
UniRef90_D9RYG2	T V S R Q L A E E H Y R E H S S K P F F F R E L V D Y I T S G P V V A M V L E G E			
UniRef90_H3FC51	T A P K E L L E M H Y H E L R E R P F F P K L I Q Y M G S G P V V A M G M D			
UniRef90_UP1000378C0FD	R L T L Q E V E G F Y A E H E K G R E F Y P E L I Q Y M I S A P V I V Q V L E G D			
UniRef90_W4VF22	T I T E H L A K T H Y A E H D G K P F F N D L V S F I T S G P V F A M V W E G E			
UniRef90_A0A034TIM7	H L T E D Q Q A A F M Q S M K V K S F S P P L K E F M T S G P I V V Q V L E G Q			
UniRef90_C4L7J5	U i f e d l l a k k h y a e h e t k p f f g k l v q y m t s g p v v v a m v w e g k			
UniRef90_H2SJ0	Q V I S E D L L A Q K H Y Q Q L R S P F F Y P D L V Q Y M T S G P V V V A M V W E G K			
UniRef90_A0A059LES4	Q L T D E I L N Q H Y A H L S A K P F F Q R V K D S M M V T P V I V C Y E G V			
UniRef90_R7D0Z5	I P S R P F A Q K H Y A D L K D P F Y V G L V A Y W S S G P V V A M V W E G E			
UniRef90_P81766	Q L T K E Q A Q G F Y A E H Q G K P F F E S L V Q F M I S G P V V L M V L E G E			
UniRef90_F9Q716	Q L S Q E Q A G G F Y A E H K G K P F F K D L V Q F M I S G P V V L M V L E G E			
UniRef90_U25FX6	Q L D R R Q A E G F Y Y V H R S R P F F H S L I E Y M T S G P V V L M V L K G P			
UniRef90_H1XVK6	Q L T P A Q A E G F Y A E H K G K R S F Y D E L V V A F M T S G P V V V Q V L Y G E			
UniRef90_B3PDL7	Q V T E E I A A Q H Y E E H L N K P F Y P N L V K Y I T S G P I V A M V F Q G Y			
UniRef90_R5K710	Q M T K D Q A E N H Y S V H R S R P F F K D L V T Y I T S G P I V A M V L E G P			
UniRef90_Q9HJ59	V A D R E T A E K H Y E E H K D K P F F K D L I E F I T S G P V V A G V V V E G P			
UniRef90_C4LJU8	H L D E N M A G G F Y A V H K D R P F F K D L I A F M T S G P V V V Q V L E G K			
UniRef90_UP100037A8C5C	Q L S Q E Q A E G F Y A E H K E R P F F F A D L V K F M I S G P V V I Q V L E G E			
UniRef90_C6XEJ0	K L S K E Q A G Q F Y A V H K E R P F F Y T D L V E F M S S G P V V I L V L K G E			
UniRef90_F8KY99	Q L T R E Q A E G F Y A E H K E R P F F P S L V E F M M S S G P V C V Q V L Q G E			
UniRef90_UP100037AA305	L M S K A T A E A F Y A V H R E R P F F Q E L T E F M S S G P V V V Q V L E G E			
UniRef90_UP1000374EAC4	H L S R E Q A E R F Y A I H K E R P F F N D L V S F M I S G P V M V Q V L E G K			
UniRef90_W0BF85	H L T E E Q A G A F Y A V H K E R P F F K D L V A F M T S G P V M V Q V L E G E			
UniRef90_S6CFR3	H L T E E Q A G A F Y A V H K E R P F F K D L V A F M T S G P V M V Q V L E G E			
UniRef90_R9P8G7	I P S E E L A K E H Y I D L A K P F Y G G L V K Y I T S T P V V A M V W Q G K			

	90	100	110	120																																																																																																												
UniRef90_UPI000203AF56	E V V K A S R A M V G E T N P A E A R P G T L R G D F S V H V S R N V V H A S D	D A T R Q V R Q M M G A T D P A E A A P G T I R G D F G L D L G R N V V H G S D	K A V E V T R N T V G A T N P V D A A P G S I R G T Y G L T I G Q N L I H A S D	D V V A I S R L M M G K T K P W D A A P G T I R G D F A I E V G R N V I H G S D	G V V A T G R K M G A T N P L A S E P G T I R G D F A I E V G R N V I H G S D	N A V A L H R D I M G A T N P K D A A P G T I R A D F A E S I D E N A V H G S D	D V V K T G R K I G A T N P L A S E P G S I R G D F C I E V G R N V I H G S D	N V V L E G R K M L G A T K P S E S A L G T I R G D F C V D V G R N V C H G S D	G A A A V V R T M I G A T N P A E A A P G S I R G D F G L D I G R N V I H A S D	D V V K L S R W M M G S T D P E K A L P G T I R G D Y A T R M N R N V I H G S D	E V I E T A R L M I G K T N P Q E A L P G T I R G D L A A Q M P N N I I H G S D	K A V S T G R K M L G E T D P L K S A P G T I R G D L C I E V G R N V C H G S D	D A V K T G R K M L G E T N P L A S A P G T I R G D F C I E V G R N V I H G S D	N V I E V M R K L A G A T N P M E A A P G T I R K E F A M Y V T Y N I V H C G S D	N V V S I S R T M M G V T K P A E S A P G T I R G D F G I D V G R N I I H G S D	G V V K S A R K L I G A T N P L E A E P G T I R G D F A V G R N V V H G S D	N A A A V V R T L T G A T N P S E A A P G T I R G D Y G L D I G R N V I H A S D	D V I A L S R L L M G K T E V K D A Q P G T I R G D Y A S H T P H N L I H G S D	N A I A G W R S M M G A T N P A N A A P G T I R G D F A T S V G E N V T H G S D	G V V A E V R K M M G A T H P K D A L P G T I R G D F A T T I D E N V I H G S D	N A V A K N R E L M G A T D P K D A E P G T I R A D F A E S I E A N A V H G S D	E I I S L S R L M I G K T K V G E A Q P G T I R G D Y A S H T P L N L V H G S D	G I V A S A R K L I G A T N P L N A E P G T I R G D L G I D V G R N V V H G S D	R A I E I T R T M G K T D P A Q A E P G T I R G D L A L T I G Q N V I H G S D	N V A A I V R K V V G S T N P Q E A A P G T I R G D F G I D I G R N V I H A A D	N A I S V M R T M M G A T N P F N A A P G T I R G D F G L D L T Q N L I H G S D	G V V A T A R K M I G A T N P L A S E P G T I R G D F A I E V G R N V I H G S D	N A V Q R H R D I M G A T N P A N A A P G T I R A D Y A D S F T E N A V H G S D	N V V K T G R V M L G E T N P A D S K P G T I R G D F C I Q V G R N V I H G S D	G A V L K N R D I M G A T N P K D A A P G T I R A D F A E S I D A N A V H G S D	Y A I S V V R K M A G A T D P K D A E P G S I R G D Y G L D D V G Y N V I H A S D	Y A I S V V R K M A G A T D P K D A E P G S I R G D F A L I T E N I V H G S D	E A V Q V A R T L M G T T D P V K A Q P G T I R G D F A L I T E N I V H G S D	N V V Q T S T R A M V G D T D S S Q A K P G T I R G D L S V H I S R N V I H A S D	N A I S R Y R E L M G K T N P E E A A C G T I R A D F A V S M R L N S V H G S D	D V I L T G R K I L G A T N P N Q A A P G T I R G D N C I S T G R N L V H G S D	D A V K R H E I M G A T N P T E A L A G T I R A D Y A E T I D E N A V H G S D	E A V A V C R L M M G A T D G A K S P P G T I R G D F S L S V Q N N L I H G S D	N V I A L T R A L I G K T D A L E A L P G T I R S D Y A I H T N F N L I H G S D	C A I E V V R K M A G A T D P K N A E P G T I R G D F A L E V I C N V V H A S D	N V I K T A R L M M G A T N P I D A A P G T I R G D Y A T V M A Q N I I H G S D	Y A I S S A R K M I G A T D P K L E A E P G T I R G D L A V N I G R N I I H G S D	D V I R T S R I M V G D T N P S E A Q A G T I R G D F C I L E V S K N V I H G S D	D A I S V A R N L I G P T N G R E A A P G T I R G D F G M D I G Y N M I H G S D	D A I R R R E I M G A T N P K E A L A G T I R A C F A D S I D R N A V H G S D	N A V A G V R H L M G S T N P D E A E V G T I R A D Y A Q V K E Y N I V H G S D	D V I L K N R E V M G A T N P Q E A E A G T I R K D F A D S I D E N A V H G S D	N A I L K N R E L M G A T N P Q E A A A G T I R N D F A T T I D E N A V H G S D	N V V R T S R I M V G D T N P S E A Q A G T I R G D F S I H I S R N V V H A S D	S A I E V V R L M I G P T D G R K A P P G T I R G D Y A L I D G A N V I H A S D	D V I R Q G R R I V G A T N P L E A D A G S V I R G Q Y A V S V G R N L I H G S D	D A I A K N R D L M G A T N P K D A E A G T I R A D F A E T I D A N A V H G S D	N A V A T N R E L M G A T N P Q E A E A G T I R A D F A S S I D A N A V H G S D	N A I A Q R H R D L M G A T N P D N A L A G T I R A D Y A D S F T E N A V H G S D	N A I A R N R E L M G A T N P E E A E P G T I R A D Y A E S V S I N A A H G S D	D V V T L S R T L I G K T K V G E A L P G T I R G D F A S H T P L N L I H G S D	N V I K T G R V W M L G E T D P F A S K P G T I R G D F C I E V G R N L T H G S D	N V V R S T R A M V G D T D S A V A A A G T I R G D F S M H V S R N V V H A S D	G A I A K N R D L M G A T N P K D A E A G T I R A D Y A Q V K E Y N I V H G S D	N A V A G V R H L M G S T N P D E A E V G T I R K D F A D S I D E N A V H G S D	D V I L K N R E V M G A T N P Q E A E A G T I R A D F A E T I D E N A V H G S D	N A I A Q R H R D L M G A T N P D N A L A G T I R A D Y A D S F T E N A V H G S D	N A I A R N R E L M G A T N P E E A E P G T I R A D Y A E S V S I N A A H G S D	D V I R R R E I M G A T N P K E A L A G T I R A C F A D S I D R N A V H G S D	N A V A G V R H L M G S T N P D E A E V G T I R K D F A I S T T F N I I H G S D	D A I A K H R D L M G A T N P K D A E A G T I R A D F A D S I D E N A V H G S D	E A I T V V R S M M G S T N G R E S A P G T I R G D Y G I S R Q M N L V H G S D	N V V C T S R A M I G H T N S A K A A P G T I R G D F S T H V S R N V I H A S D	S V V E T G R V W M L G X T N P T D S K P G T S G G D F C I Q V G R D I H G S D	G A I A L K N R E L M G N T N P Q E A A P G T I R A D F A A N S I D A N A V H G S D	N A V A L A H R E I L M G A T N P K E A A P G T I R A D F A T S I D E N A V H G S D	N A I A K L V R L L M G A T K V E E A L P G T I R G D F A T S T T H N L V H A S D	I V A Q G R A M L G A T D P L K S A P G T I R G D F C Q A T G R N V C H G S D	N A I A L K N R E I M G A T D P T K A A K G T I R A D F A I S V R E N S A H G S D	N V I D M S R K M M G G K N P Q E A E I G T I R G 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 M E R T L A I I I K P P D G V V R G L I M G E I I G R L E R E E G L N V L A L K M I  
 E Q T L S I I K P P D A V A K N V I G K I Y T R F E E R G L K I V Q A K M A  
 I E R T F L M V K P P D G V K R Q V V G D I I D R F E R R R G F V M R G A K L M  
 M E K T L V I L K P P C Y T V Q R G L I G E I V T R F E E K K G L R L A G M K M V  
 V E Q T L M I K P P D G I Q R Q I V G K I I S R F E E R G Y R L A A M K L T  
 M E K T L L I I K P P D G V Q R G L I V G E I L G R I E E K K G F K I S A M K L E  
 M E F T F L M V K P P D G V N R K L I V G E I V S R F E E Q K G F T L T S A K M M  
 E Q T Y I M I K P P D G V Q R G L I V G E I I S R F E E K R G F K L V A L K L V  
 V E Q T L S I I K P P D G V A R G L V G E I V I G R F E R R G L K A M K M L  
 E R T F V L L K P P D A V R R K L I I G R I I Q R F E E D K G F E I V E M K M I  
 L E R T L A I I I K P P D I I E R H I I G A I I S R L E Q A Q F S I V A M K M V  
 I E I Q K S L V I I K P P D A F Q R D L I I G E I V I G R F E R R K G K I V A M K M G  
 E R I F L V A K P P D G A Q R R L V G E I V R R F E R R K G F K L V A L K M V  
 M E R T L L V K P P D G V N R G L I S G E I L G R M E K L G L K I G L R M L  
 I E R T F S I I L K P P D A T R R N L T G A I N A L I E K S G L R I I A Q R R V  
 M E K T F A I I K P P D A V S K G Y T G E I I S R I E K K G F K I S A M K K I  
 M Q Q T L I I L V K P P D G V K R R L I A G E V I S R I E R K G Y D I R E M K L M  
 M E R S L I I L V K P P D C Y V Q R R L I I G R I I S R F E E D K G L N I V G M K L M  
 V E R T F S I I K P P D A T R R N L T G K I I N A V I E G A G L R I V V A Q K R V  
 I E R T L S I I K P P D A V A K N V I G K I Y S R F E E T N G L K V I A A K L A  
 M E R T F F M I K P P D G V K R G L I G E V I H R I E R R G F T I E K L D M L  
 E K T L I I I Y K P P D A V R R N L I G E I T A L F Q D R G M K M V A A K L G  
 M E R T F A I I K P P D A V E R R N I I G K I I L E K V E T A G F R I V G M K K I  
 M Q Q T L V I L K P P S A I Q R S L I V G E V I S R F E E R K G L C L V G I K M I  
 I E R T L I L F K P P D A V Q R R L L G R I L S R I E D K G F Q I V G L K M L  
 E Q T F I M V K P P D G V L R G K I I M R E E N K G Y R I V A M K M L  
 L L Q R T L S M I K P P D A V S K M L I G T I I A R F E E K A Q L T P V A I K M L  
 V E R T L S M I K P P D A T R R N L T G A I T K M L E D G G L R V I V A S K R V  
 L L Q R T L S I I K P P D A V S R N L I A G D L A M I Q A A G L T V K A T K M I  
 M N R T F S I I K P P D A V K R N L I G H I N Q I I N Q I I E N G G L K I V S S K K M  
 M V K P P D G V Q R G L I G E V V S R L E Q R G L K M V G G K L I  
 L E R T F S I V K P P D A T K R N L L V G Q I V A K F E E G G L R V I A Q K R I  
 M Q K T V V L V K P P D G L Q R G L I V G Q I I S R F E E T K G L K I V A I K M V  
 I E Q T F S I I K P P D A V E R G L I A E I L K M I T D S G L K I K G M K M M  
 A N K E H T L V L V K P P D G F K R G L I T G E V I R R I E A K G Y Q L K G L K I K  
 E Q T L V L I K P P D G V Q R G L V G E V I A R I E E R K G L T L A A L E L R  
 E R T L V L I K P P D G V A R G L I G D V I A R V E R K G L K V V A L L E L R  
 M E R T L V L A K P P D A V R K N V I G K I I S R F E E E G F K L V A L L K K L  
 M E Q T F V M I K P P D E G V K R R L I G E I I K R F E E Q K G L Y I V N I K V I  
 I Q R T F S I I K P P D A T K R N L T G A I N A K L E A A G L R I V V A Q K R I  
 K M E R S F V L I K P P D A L Q R G L I G D I I S R F E E K K G F K L V A L K M I  
 I E R T F S I I K P P D A T A R N L T G A I N A V I E E A G L R I V V A Q R R I  
 V Q R T F S I I K P P D A V A K N V I G E I T T R F E E E K A G L R V V V A S K L K  
 M E R T L S I V K P P D G V E R G L I G E V V V R R L E K E G L K I I A M K M I  
 M E R T L V L I K P P D G V R R N L I G E I I R R Y E E M K G G L R V I V A I K S L  
 I E R T F S M I K P P D A T K R N L T G A I T A K L E E A G L R V V V A S K R V  
 V Q R T F S I I K P P D A T E R N L T G A I N A V I E E A G L R I V V G Q R R I  
 M E K T L L L V K P P D A V V K G V C G Q I I D R F E E K R G F E I A A I K M V  
 T L E Q T L S I I K P P D A V G Q N M I G N I I E Y F E E R E G L S V I V A A K M M  
 E R T L V L V K P P D G M K R R L V G E I I R R F E I K G L K I I G L K M L  
 S T E R T L V L V K P P D G V E R G L I T G Q I L A R V E Q K G Y T L A E L K K V  
 E Q T F V L I K P P D G V Q R R I I G R I I Q R F E E D K G F S M V A A M K M L  
 E R T L V L V K P P D G V S R G L I V G E V I S R L E R K G L T L V V A A E L R  
 T H V E E T L V L V K P P D A V K K N A V G D I I R I L Q E N D L K L I V A L K M I  
 T L E R T L V L V K P P D G V A R N L I T G E I I L R R I E A K G Y Q L V D V K L L  
 E R T L A V K P P D A V K K N A I G D I I N R Y E E K A G L R P V A M R L M  
 M E R T L I I I K P P D G V A R G L V G Q I I S R I E A K G Y T I D A L S L R  
 M E K T L V L I K P P S A M Q R G L I G E V T S R F E R K G L I L A G T K M I  
 S V Q L T L S I I K P P D A V R N H T G A I L A R I E Q Q G L A I I A A K M L  
 M E K T L S I I K P P D A V K A G Y S G K I I T M L E E E N G F E I K A M K K I  
 M I K P P D G V Q R G L V G E I I K R F E E Q K G F K S V A L K F V  
 T T E R T S L V L I K P P D G F Q R G L I T G E V L R R I E A K G Y T L G A L A I V  
 V E R T F S I I K P P D A V E R N L Q G E V L A M I Q G A G L K V V A A M K M I

	50	60	70	80
UniRef90_B2I7V6	Q  S R E A E G F Y A V   H R D R P F F N A L   L V E F M   S G P   V M I Q   V L E S E			
UniRef90_UP10004673AC0	H  L T R E Q A A G F Y A E H E G K P F F Y E T L   L M T N M T A G G P   I V V V Q   V L Q G E			
UniRef90_UP1000345F683	T  L D G D T A K S H Y E E H S S R P F F G S L   V E F I T G G P   L V A M V V E G E			
UniRef90_R6ZU28	Q  L T D E I L N E H Y A H L S T I P A F Q R I   K N S M M A A P   V I A C   C Y E G V			
UniRef90_T1BLW2	R  V T P E L A Q R H Y A E H E G K P F F Y P G L   I Q H I T S G P   P I V A L A   L E G R			
UniRef90_D6T132	R  L S D E L L N E H Y S H L V G R S F F P E V   K S F M Q L T P   P V V A L C   L E G V			
UniRef90_UPI0003B51215	K  L S K D Q A E G F Y A V H K E R P F F N D L   V S F M T S G S   V V Q   V L E G D			
UniRef90_Q9Y9B0	R  L T R E K A E E F Y S V H R D K P F F G E L   V E F I T S G P   P V V A M V V E G D			
UniRef90_F5YKN0	Q  M D T A M V E A H Y A E H K G K D F Y E K L   L A Y T L S G P   P V V A M I L E G E			
UniRef90_F9ZP19	Q  L S A A D A G G F Y A V H K D R P F F Y G E L   C A F M S S G P   P V L V S V L E G E			
UniRef90_W6I8A5	Q  L S Q A Q A E A F Y G V H R E R P F F N D L   V S F M I S G P   P V V V Q V L E G E			
UniRef90_Q3108	F  L T V Q E A K G F Y A E H D G K P F F D T L   V S F I T S G P   P I V V Q V L E G D			
UniRef90_F0ZDU0	T  P T K E L A E A H Y A E H K E R P F F G G L   V S F I T S G P   P V V A I C   L E G K			
UniRef90_A0A031GR04	Q  L S R E Q A E G F Y A A H K E R R G F F K D L   V D F M V S G P   P V M I Q A L E G E			
UniRef90_A0A022LLM2	H  V P Q E T A A E H Y A E H A E R P F F Y G D L   L E F T S G P   P V V A G V V E G P			
UniRef90_V9HLH5	H  L T R D E A E G F Y A I H K E R P F F G E L   V E F M M S G P   P V M I Q V L E G E			
UniRef90_E7A8X6	K  L T P E Q A H D F Y A V H K E R P F F K D L   M A F M T S G E   V V V M V L E G E			
UniRef90_R618V1	K  I T E E Q A K Y H Y A E H E G K P F F G E L   V E F I T S G P   P V A A M V I S G E			
UniRef90_Q5L6Z2	H  L S V K E A E G F Y A V H K S R P F F Q E L   L V D F M I S G P   P V V V M V L E G N			
UniRef90_H7EH89	Q  I T P E L A A Q H Y A E H E G K P F F Y D E L   V S Y I T S A P   P V V A M V W Q G D			
UniRef90_Q5CLG3	V  A T A Q Q I E A H Y S D H A G K P F F F E S   L V S R T T N Q P   P I V A M V L E G L			
UniRef90_W4YYY1	T  T T E D L F R V H Y V S H Q T T P F F D D L   L K L F S S V P   P V F A M V W E G K			
UniRef90_UP100047D709A	T  I D Q S K A E Y H Y E E H K E K P F F F G E L   V D F I T S S P   P V F A M V W E G E			
UniRef90_M1LS25	L  L S R S E A S F Y S I H K S R P F F N D L   V N F M I S G P   P V F I Q V L E G E			
UniRef90_W0AAN6	Q  L T K D Q A E G F Y G V H R P F F N D L   V A F M T S G P   P V V V Q V L E G E			
UniRef90_C4L6N1	T  P S V E V A E A H Y A E H K E K P F F F G E L   L V E F L T S G P   P V V A M E W E G E			
UniRef90_Q6MGU4	V  L T T T A K A E E F Y A E H K A K R P F F F G E L   V S F M T S G P   P V M L M C   L Q G E			
UniRef90_X0V0P4	R  M T K E Q A K G F Y V H A G K P F F Y E G V T D F M C S G P   P V M I Q A L E G D			
UniRef90_B6BTM4	H  L S K C E E A E G F Y A V H K E R P F F F N D L   V T F M T S G P   P V M I Q A L E G D			
UniRef90_UP10002D5AC83	N  V P R E L A E K H Y E E H K D K P F F F G E L   V D F I T S G P   P V F A M V W E G E			
UniRef90_A6LCB6	W  L T D E I L S E H Y A H L K E K P F F F Q R I   K D A M S V I C   P V V I V C   C W E G V			
UniRef90_B6ACQ5	V  A T P Q I L E Q H Y A E H L G P F L P G L   L I K K M T G   P V I C M   V F E G V			
UniRef90_E3H6U7	K  I S K E K A G I H Y A E H A G K G F Y S E L   L E F T S S P   P S V L A V I E G K			
UniRef90_D6XV97	T  I T E E L A R E H Y E E H K D K P F F F P E L   V S F I T S G P   P V F A M I W E G E			
UniRef90_G7DUA8	Q  A T K E H L E K H Y E D L K E K K F F P G L   V N Y M A S G P   P V I C M V W E G K			
UniRef90_F2NEZ9	H  L T K Q Q A Q K F Y E V H Q E K K F F P G L   S L T D F M S S G P   P V I A M I L E G Q			
UniRef90_F6BAH7	T  L S K E M A E E F Y K V H M K G D F Y E R L   T I F M T S G R   P V V A M I I E G E			
UniRef90_F4HCP4	H  L N Q Q A Q A G F Y A E H E G K P F F F A N L   I A F M T S T P   P V V V L V L E K E			
UniRef90_K1YJW4	V  L D D D T T L D V H Y E H H K D K P F F F K D L   L K Q Y M M S T P   P V V F M V L E G I			
UniRef90_G5BY68	Q  V S E E L Q G E H L A D L R R C   P F Y G C   L L K Y M G S G P   P V V			
UniRef90_Q3ZZF6	Q  M D A V L A D K H Y A P H R A R P F F F K D L   V T Y I T S G P   P I T A A V F E G E			
UniRef90_UP100047C5507	R  F T R E Q A E T F Y A V V H K A R P F F F G E L   V D T M I S G P   P V V V Q V L E G E			
UniRef90_F8E6Z0	K  M D K K T A E S F Y A V V H K E K P F F F E A L   T T F M S S G P   P A V V M V L E K E			
UniRef90_A0A023X437	Q  V S R E L A E E H Y G E H R E K S F F G E L   V D F I T S G P   P V V A M R I V E G E			
UniRef90_A3ZXF1	Q  V T P D L A K Q H Y A E H V A K P F Y P G L   E A F I T A S P   P V V A L V L E G L			
UniRef90_D8JUM1	R  W T R A Q A E K F Y E E H K A R P F Y G E L   V D F M T S G P   P I V L Q V L E G E			
UniRef90_C7RN36	W  L S P Q E A G A F Y A V H K E R P F F F K D L   V S F M I S G P   P V M I Q V L E G E			
UniRef90_G5KX4	E  A T P P E Q L K K H Y S A L V I K K S F F P E R L   V N Y M S S G P   P V V I G I I K G N D			
UniRef90_UP100037D3412	W  Y P S E F W E E F Y A E H E G K P D F F E R L   V N Y M S S G P   P I F I T V W S G D			
UniRef90_Q74E54	L  L S K C E A E G F Y V H K E R P F F F N D L   C S F M S R S   P V V V M V L E R E			
UniRef90_UP100046A5A49	Q  L D D K I L N E H Y A H L S K P F F F K R I   K D S M M A T P   P V V I V C   C W E G V			
UniRef90_F0SRU4	Q  V I T P E L A K Q H Y A E H V I E K P F F Y P H   L E A F I T A A P   P V V A V V V E G V			
UniRef90_B1N022	T  P T A E L L A Q H Y A E H V N K P F F Y P A L   V D Y M T S G P   P V V A I I A E G E			
UniRef90_M4U533	H  L T K A Q A E G F Y A E H Q G K G F F E N L   V E F M S S G P   P L V L V L E G E			
UniRef90_E6YHB4	W  M S Q Q Q A E G F Y A I H K G R P F F F E E L   V T F M S S G P   P T V V Q V L E G D			
UniRef90_T2GCZ8	Q  L T R A Q A E A F Y A V V H K E R P F F Y G S L   C D F M T S G P   P V V V S A L E G E			
UniRef90_J9Z1B4	Y  L T K Q Q A E I F Y S V H K E R P F F F N D L   V E Y M T S G P   P V Q V Q V L E G S			
UniRef90_U1QA90	H  I D E E L A Q E H Y A E H Q D K P F F D D L   V G F I T A G P A F A M V W Q G A			
UniRef90_Q0FGC0	Q  L T L A Q A Q E F Y G V H S E R P F F F G E L   C E F M I S E P   P I V V Q V L E G E			
UniRef90_K1ZDV6	Q  M T D E M I D N W Y A H H K E K S F F K D L   K T F M S W T P   P I V A M V W E G L			
UniRef90_F0JFP2	R  M D R A K A E G F Y A V H K E R P F F G E L   V D Y M I S G P   P V V V S C   L E G D			
UniRef90_S2W9Q9	H  A S E E L L Q D H Y F E H E K H P F F K D L   L E Y M Q S D   P V V A M V V E G D			
UniRef90_L7LBV3	Q  V S T E L A S E H Y A E H A E R P F F F G E L   L E F I T S G P   P V V A M V V A G D			
UniRef90_D2BCE1	T  L D V D T A K A H Y A E H S E R P F F F G E L   V E F I T S G P   P L V A L V L E G P			
UniRef90_C1DWI5	K  L T K E Q A G K F Y I V H K E R P F F Y D Q   L C E F M S S G P   P I V A M V W E G E			
UniRef90_B7XJT0	K  P S L E L L K E H Y S E L Q T K P F F F Q G L   I E W M S S G E   P I V P M I L E G K			
UniRef90_P95653	H  L S K A Q A A V F Y A V H K E R P F F Y D E L   C E F M A S E P   I V V Q V L E G E			
UniRef90_K2A8K1	Q  M D D E I L K K W Y H Q Y A E A P F F P K I   K A K F M K W T P   I V A M I W E G Y			
UniRef90_B8IH88	R  M S E A Q A K T F Y E V H A E R P F F Y G E L   V S F M T S G P   P V V V Q V L E G E			
UniRef90_Q48LZ8	Q  L S K A Q A E G F Y A E H S A R P F F G D L   V A F M I S G P   P V V V Q V L E G E			
UniRef90_A8ZWU7	H  M T R A Q A E G F Y A V H R E R P F F F E S   L T T F M S S G P   P V V V M V L E G E			
UniRef90_I7KAL7	Y  P S E E L L V M E H Y K E H E G K D F Y E R L   I N F L T S G M   P V I A I V L E G K			
UniRef90_UP10003B32F85	W  M S K R E A E G F Y A V H A A R P F F F G E L   V E T M T S G P   P T I V Q V L E G E			
UniRef90_Q0BZX9	Q  M T R A Q A E R F Y S V H S A R P F F F G E L   V D F M I S G P   P V V V Q V L E A E			
UniRef90_I9MEF6	Q  L T R K Q A E I H Y Y E H T D K P F F F Q E L   V D F I T S S P   P L I A M V I A G E			
UniRef90_K2EDT3	C  L S E S Q A Q L F Y T T M H K D K P F F F S E L   V E F M T S G P   P I L V M V L E G E			
UniRef90_TOLHF0	Q  L S R D E A E R H Y S V H K G K P F F A D L   V N Y I T S S P   P I V A I I F E G N			
UniRef90_UP100047877FB	N  A T R E M L A A H Y A E H E G K P F F Y E P   L V E F M M S S G P   P V V A A I F E G E			
UniRef90_AOBID7	T  P N Q E L L Q K H Y Y E E L L M F K P F F P C   L I C Y M L S G P   P V I A M I W Q G K			
UniRef90_E3ITV9	T  L E K A T A E T H Y G E H A S R P F F F G E L   V E F I T S G P   P L V A L V V E G P			
UniRef90_UP10003B2FB66	H  M S K E E A K G F Y I V H K D R P F F Y D E L   T D F M S S G P   P C V P M I F E G E			
UniRef90_UP10003B3D55F	Q  P D R E L L A Q H Y E E H Q G K P F F Y E P   L V E F M E S S G P   P V V A L R I A G N			
UniRef90_UP10003B5F56F	L  A D A D L L S Q H Y A E H V G P F F Y E P   L V E F M S S S G P   P V V A L V I A E G H			
UniRef90_D8PGP9	H  M S K A T A Q G F Y A V H K A R P F F D S L   C T F M S S S G P   P C V V L V L Q G D			
UniRef90_K9B710	T  A T A E E L A A H Y A E H E G K P F F Y Q P   L V D F M S E G P   P I V S I I A S G Q			
UniRef90_UP100047E41B3	UniRef90_G9ZE66	Q  L D D A I L N E H Y A H L K P F F Q R V K N S M M A S P   P V I V Q C   C W E G I		
UniRef90_W0JJH8	R  L S H D D A A R F Y D V H R E R P F F A E L   V A F M T S G P   P V L V Q V L R G D			
UniRef90_E9HVP8	Q  P T E E M L Q K H Y A D L S G R P F F A G L   V K Y M A S G P   P V V A M V W E G L			
UniRef90_A0A021VL1	T  A D R D L L G A H Y T E H A G K P F F E P   L V D F M A S G P   P V V A A V V E G H			
UniRef90_W9GK25	T  P T R E L L A K H Y A E H E G K P F F Y E P   L E F M S S S G P   P V T A A V V I E G Q			
UniRef90_Q729L7	H  L T K A Q A E G F Y A V H R E R P F F D S L   T T Y M C S G P   P V V C S V L E G E			

		90	100	110	120
UniRef90_B2I7V6	N A   V   A R H R E   L L   G A T N P K D A A P G T   I   R A D F A E S   I   E A N A A H G S D				
UniRef90_UP10004673AC0	G A   I   A K N R E   V M G A T D P E K A E E G T   I   R K D F A V S M Q Q N S   V   H G S D				
UniRef90_UP1000345F683	R A   I   E A F R S   L A G A T D P V T A A P G T   V   R G D F A L E V Q Q N L   V   H G S D				
UniRef90_R6ZU28	D A   V   Q V V R   R A M T G   V T N P Q T A A P G T   I   R G D F A M S   P Q E N I   V   H T S D				
UniRef90_T1BLW2	S A   I   S V V R   L I T G A T N P Q T A A P G T   I   R G D W A L G   I   T P N L I   H A S D				
UniRef90_D6T132	E A   V   D T V R A   L C G   I   T K A R E A A P G T   I   R G E F A M S   V Q A N L I   H C S D				
UniRef90_UPI0003B51215	D A   I   A K N R E   V M G A T D P V T A A P G T   V   R G D F A E N I   E A N S   V   H G S D				
UniRef90_Q9Y9B0	E A   V   S V V R   L M I G S T D G R K A A P G T   I   R G D F S   L D   I M K N I   V   H A S D				
UniRef90_F5YKN0	D G   I   A A V R   R L V G P   T D T R E S   L P G T   I   R G D Y A Y R   T R   L N I   V   H A S D				
UniRef90_F9ZP19	G A   I   A K N R E   L M G A T N P K D A A P G T   I   R A D F A E S   I   E A N S   V   H G S D				
UniRef90_W6I8A5	N A   V   A R N R E   L M G A T D P K K A D A G T   I   R A Q F A E S   I   E A N S   V   H G S D				
UniRef90_Q31108	D A   I   A K N R E   I M G P   T D P E N A P A G S   I   R K E Y A   I   S M Q Q N S   V   H G S D				
UniRef90_F0ZDU0	G   V   V   A A A R   L M I G V   T N P   L A S A P G T   I   R G D Y A   I   D   V A K N   I   H G S D				
UniRef90_A0A031GR04	N A   V   L A   H R   D L M G A T D P K K A E K G T   I   R A D F A D S   I   D   A N A   V   H G S D				
UniRef90_A0A022LLM2	R A   I   A A W R   Q L A G G T   D P D K A A P G S   I   R G D F G   L   E   T Q F N   L   V   H G S D				
UniRef90_V9HLH5	N A   V   A K N R E   I M G V   T N P   I   N A D   V G T   I   R K D F A D S   M   S E N A   V   H G S D				
UniRef90_E7A8X6	N A   V   E K N R E   L M G A T D P K V A K P G T   I   R A D F A D N   I   D   A N A   V   H G S D				
UniRef90_R618V1	N A   I   K A   V R   G Q M G A T N P   L   D S V   P   G S   I   R G D Y A   L   T   I   G E N I   V   H G S D				
UniRef90_Q5L6Z2	N A   V   A R N R E   I M G A T N P   Q   P E A A P G T   I   R A Q F G E S   I   G   I   N A   V   H G S D				
UniRef90_H7EH89	D   C   V   S   L   V   R   K   V   V   G   A   T   K   P   S   E   A   Q   P   G   T   I   R G D F G   C   S   H   T   S   H   N   I   V   H A S D				
UniRef90_Q5CLG3	N   V   I   T   E   F   R   R   F   M   G   S   T   D   P   K   K   S   E   M   G   T   I   R A Q F G   M   Q   T   E   R   N   L   I   H A S D				
UniRef90_W4YYY1	D   I   V   K   H   G   R   A   M   L   F   G   D   D   D   L   N   P   M   P   G   T   I   R G D Y   S   V   D   I   H   R   K   V   C   H   G   S   D				
UniRef90_UP100047D709A	N   I   I   D   V   S   R   T   M   I   G   K   T   S   P   T   E   A   Q   P   G   T   I   R G D F A F   K   K   E   E   N   V   I   H G   S   D				
UniRef90_M1LS25	N   A   I   Q   M   N   R   S   I   M   G   D   T   D   P   K   K   A   Q   K   G   T   I   R A D F A D   N   I   D   A N A   V   H G   S   D				
UniRef90_W0AAN6	N   A   V   Q   R   N   R   D   I   M   G   A   T   N   P   A   N   A   E   P   G   T   I   R K E   L   A   E   S   I   E   A N S   V   H G   S   D				
UniRef90_C4L6N1	D   I   V   A   V   S   R   L   M   I   G   K   T   K   P   V   D   A   Q   P   G   T   I   R G D F A S   T   M   S   Q   N   V   I   H G   S   D				
UniRef90_Q6MGU4	G   A   V   L   K   N   R   E   I   M   G   A   T   D   P   K   K   A   N   P   G   T   V   I   R A K F   G   D   N   V   G   E   N   A   V   H G   S   D				
UniRef90_X0V0P4	G   A   I   N   A   Y   R   K   L   M   G   A   T   D   Y   K   Q   A   A   G   T   I   R   H   D   Y   A   T   D   I   E   K   N   V   H G   S   D				
UniRef90_B6BTM4	N   A   V   L   K   N   R   E   L   M   G   A   T   N   P   Q   E   A   A   P   G   T   I   R A D F F   A   S   I   D   A N A   V   H G   S   D				
UniRef90_UP10002D5AC83	N   I   I   K   L   A   R   V   V   M   M   G   A   T   K   P   E   E   A   Q   P   G   T   I   R G D Y   A   V   T   I   S   E   N   V   I   H G   S   D				
UniRef90_A6LCB6	D   A   I   H   V   V   R   T   L   A   G   T   T   N   G   R   N   A   P   G   T   I   R G D Y   S   M   S   V   Q   E   N   I   V   H A S D				
UniRef90_B6ACQ5	D   V   I   T   Q   A   R   K   I   M   G   A   T   R   P   S   E   A   A   P   G   T   I   R G D Y   C   Q   E   A   G   R   N   I   V   H G   S   D				
UniRef90_E3H6U7	N   V   V   I   D   G   V   R   K   M   A   G   K   T   N   P   L   E   S   D   L   G   T   I   R G D F   A   V   A   V   S   H   N   V   V   H T   S   D				
UniRef90_D6XV97	N   V   V   K   E   A   R   K   M   M   G   A   T   N   P   A   D   A   Q   P   G   T   I   R G D   L   A   M   E   M   S   R   N   I   I   H G   S   D				
UniRef90_G7DUA8	D   V   V   K   T   G   R   V   V   M   L   G   A   T   N   P   L   A   S   N   P   G   T   I   R G D Y   A   I   D   V   G   R   N   V   C   H   G   S   D				
UniRef90_F2NEZ9	G   A   I   L   K   N   R   E   L   M   G   D   T   D   Y   Q   K   A   A   P   G   T   I   R A D F   A   R   D   I   E   A   N   I   V   H G   S   D				
UniRef90_F6BAH7	N   A   I   S   V   V   R   K   M   I   G   K   T   N   P   A   E   A   E   P   G   T   I   R G D F   A   L   S   T   P   D   N   L   I   H A S D				
UniRef90_F4HCP4	N   A   I   A   D   Y   R   A   L   M   G   K   T   N   P   A   E   A   N   M   G   T   I   R R   D   F   A   L   D   G   S   R   N   S   V   H G   S   D				
UniRef90_K1YJW4	D   V   V   G   S   V   R   Q   I   V   V   G   A   T   N   P   R   N   A   D   A   G   S   I   R   G   D   L   A   M   N   I   P   S   N   L   V   H A S D				
UniRef90_G5BY68	A   M   V   T   S   K   A   L   V   G   A   T   D   P   L   D   A   E   P   G   T   I   C   G   D   F   C   I   E   V   G   K   N   L   I   H S   S   D				
UniRef90_Q3ZZF6	N   A   V   E   K   M   R   K   A   M   G   A   T   D   P   K   S   E   K   G   T   V   I   R   G   D   F   G   L   I   V   E   Q   N   T   V   H G   S   D				
UniRef90_UP100047C5507	D   A   I   K   K   Y   R   D   V   L   G   A   T   D   P   K   K   A   E   P   G   T   I   R   K   E   F   A   V   S   I   L   G   E   N   S   A   H   G   S   D				
UniRef90_F8E6Z0	N   A   I   A   E   W   R   E   L   M   G   A   T   N   P   E   D   A   E   E   E   N   T   I   R   K   D   F   G   K   N   I   D   N   N   A   V   H G   S   D				
UniRef90_A0A023X437	N   V   V   P   V   M   R   N   L   M   G   A   T   N   P   A   E   A   A   P   G   T   I   R   G   D   L   A   L   T   I   S   E   N   I   V   H G   S   D				
UniRef90_A3ZXF1	E   A   I   R   V   I   R   D   I   L   G   A   T   S   G   L   K   A   A   A   G   T   I   R   G   D   F   S   S   S   R   Q   M   N   L   V   H A S D				
UniRef90_D8JUM1	N   A   I   A   K   Y   R   E   V   V   M   G   A   T   D   P   K   E   A   A   E   G   T   I   V   R   K   L   F   A   E   S   K   G   S   N   S   T   H   G   S   D				
UniRef90_C7RN36	G   A   I   A   K   N   R   E   L   M   G   A   T   D   P   K   K   A   E   P   G   T   I   R   A   D   F   A   E   S   I   D   A N A   V   H   G   S   D				
UniRef90_G5KGX4	R   V   V   D   S   W   R   T   T   M   M   G   V   T   N   P   K   D   A   L   P   G   T   I   R   G   D   F   G   Q   A   P   G   F   N   I   V   H G   S   D				
UniRef90_UP100037D3412	N   A   I   A   T   A   R   Q   M   A   G   A   T   D   P   L   D   E   A   P   G   T   I   R   G   R   Y   G   L   C   M   P   M   N   T   V   H   C   S   D				
UniRef90_Q74E54	N   A   I   A   N   T   W   R   E   V   V   M   G   A   T   N   P   A   N   A   E   A   G   T   I   R   K   D   F   G   L   I   E   E   N   S   V   H   G   S   D				
UniRef90_UP100046A5A49	D   A   I   Q   V   V   R   T   L   T   G   C   T   N   G   R   L   A   A   P   G   T   I   R   G   D   F   S   I   S   Q   Q   E   N   I   I   H   A   S   D				
UniRef90_F0SRU4	E   A   I   A   S   V   M   R   T   L   M   G   S   T   N   G   R   E   A   A   P   G   T   I   R   G   D   F   G   T   S   R   Q   M   N   L   I   H   G   S   D				
UniRef90_B1N022	Q   V   V   A   G   W   R   H   M   M   G   E   T   N   P   T   L   A   N   P   G   T   I   R   G   D   F   G   R   E   W   M   M   N   L   V   H   G   S   D				
UniRef90_M4U533	N   G   I   A   H   Y   R   E   L   I   Q   G   T   D   P   K   A   K   L   A   G   T   I   R   A   D   F   A   E   S   L   I   S   C   N   A   V   H   G   S   D				
UniRef90_E6YHB4	N   A   I   V   K   N   R   G   I   M   G   A   T   N   P   I   D   A   Q   E   G   T   I   R   K   V   H   A   L   S   I   S   E   N   S   V   H   G   S   D				
UniRef90_T2GCZ8	N   A   I   Q   A   Y   R   D   L   M   G   A   T   N   P   A   N   A   A   E   G   T   I   R   K   R   F   A   L   D   V   E   K   N   A   V   H   G   S   D				
UniRef90_J9Z1B4	D   A   V   V   S   T   Y   R   K   I   M   G   A   T   N   P   A   D   A   E   E   G   T   I   R   K   L   Y   A   E   S   I   E   A   N   S   V   H   G   S   D				
UniRef90_U1QA90	D   A   T   R   Q   V   R   G   M   V   G   E   T   D   P   D   E   S   P   A   G   T   I   R   G   D   F   G   L   D   I   E   R   N   V   I   H   A   S   D				
UniRef90_Q0FGC0	N   A   I   L   R   N   R   E   I   M   G   A   T   N   P   S   E   A   D   A   G   T   I   R   K   E   F   A   L   S   I   G   E   N   S   V   H   G   S   D				
UniRef90_K1ZDV6	E   I   I   P   A   V   R   K   V   V   G   S   T   K   G   R   E   A   E   A   G   S   I   R   G   D   F   G   M   S   G   S   Q   N   L   V   H   A   S   D				
UniRef90_F0JFP2	N   A   I   E   R   Y   R   A   L   M   G   A   T   N   P   A   D   A   E   G   T   I   R   A   A   Y   G   I   N   I   Q   N   N   A   C   H   G   S   D				
UniRef90_S2W9Q9	R   V   V   E   G   M   R   N   L   M   G   N   T   N   P   T   L   A   A   P   G   T   I   R   G   D   L   G   R   D   W   G   E   N   I   V   H   G   S   D				
UniRef90_L7LBV3	R   A   I   P   A   F   R   Q   L   A   G   G   T   D   P   E   K   A   T   P   G   T   I   R   G   D   F   G   L   Q   T   Q   F   N   I   V   H   G   S   D				
UniRef90_D2BCE1	R   A   I   E   A   F   R   A   L   A   G   L   T   D   P   V   K   S   A   P   G   T   I   R   G   D   H   A   L   E   I   G   E   N   V   V   H   G   S   D				
UniRef90_C1DWI5	N   V   V   S   R   V   R   E   I   M   G   A   T   D   P   K   A   K   E   E   G   T   I   R   K   L   Y   G   T   N   V   G   E   N   A   V   H   G   S   D				
UniRef90_B7XJT0	N   A   V   K   I   V   K   M   V   G   A   T   N   P   M   E   A   E   V   G   T   I   R   S   D   F   A   C   E   T   G   K   N   I   V   H   A   S   D				
UniRef90_P95653	D   A   I   A   K   N   R   E   V   V   M   G   A   T   N   P   A   E   A   A   E   G   T   I   R   K   E   F   A   L   S   I   G   E   N   S   V   H   G   S   D				
UniRef90_K2A8K1	N   A   V   D   L   I   R   R   I   I   G   T   R   K   G   Y   E   A   E   A   G   S   V   I   R   G   D   W   G   M   S   G   G   N   N   L   V   H   A   S   D				
UniRef90_B8IH88	N   A   V   A   K   Y   R   E   V   V   M   G   A   T   N   P   A   Q   A   A   E   G   T   I   R   K   K   F   A   L   S   I   V   G   E   N   S   V   H   G   S   D				
UniRef90_Q48LZ8	N   A   I   A   L   N   R   E   L   M   G   A   T   N   P   K   E   A   A   E   G   T   I   R   A   D   F   A   D   S   I   D   A N A   V   H   G   S   D				
UniRef90_A8ZWU7	D   A   I   L   R   Y   R   T   L   M   G   A   T   N   Y   K   D   A   A   E   G   T   I   R   R   D   F   A   T   E   I   E   R   N   V   V   H   G   S   D				
UniRef90_I7KAL7	N   A   I   K   C   A   R   I   I   N   G   A   T   K   Y   Q   D   A   L   P   G   T   I   R   G   D   F   A   F   D   E   T   E   N   L   V   H   A   S   D				
UniRef90_UP10003B32F85	N   A   I   L   K   N   R   E   V   V   M   G   A   T   N   P   A   D   A   A   E   G   T   I   R   K   T   F   A   L   S   I   G   E   N   S   V   H   G   S   D				
UniRef90_Q0BZX9	D   A   I   P   T   K   Y   R   E   V   V   M   G   A   T   N   P   A   D   A   A   D   G   T   I   R   K   L   F   A   K   S   I   G   E   N   S   V   H   G   S   D				
UniRef90_I9MEF6	N   A   I   K   V   S   R   I   I   M   M   G   S   T   N   P   I   D   A   A   A   G   T   I   R   G   D   F   A   L   N   I   R   K   N   I   I   H   G   S   D				
UniRef90_K2EDT3	N   A   I   S   R   N   R   Q   I   I   M   G   A   T   D   P   S   K   A   E   A   G   T   I   R   A   D   F   A   T   S   I   E   R   N   A   I   H   G   S   D				
UniRef90_TOLHF0	N   A   I   S   V   V   R   S   I   C   G   T   T   D   G   S   K   A   T   P   G   T   I   R   G   D   Y   S   I   S   E   K   N   I   I   H   A   S   D				
UniRef90_UP100047877FB	R   V   V   E   G   F   R   T   L   A   G   A   T   D   P   T   T   A   A   P   G   S   I   R   G   D   F   G   R   D   W   G   E   N   L   V   H   G   S   D				
UniRef90_A0BID7	D   V   V   R   Q   I   R   S   M   L   G   E   R   N   P   I   E   Q   K   P   G   T   I   R   A   D   Y   A   L   E   I   Q   R   N   L   I   H   G   S   D				
UniRef90_E3ITV9	R   A   I   E   G   T   R   G   L   M   G   V   T   D   P   V   K   A   V   P   G   S   I   R   G   D   Y   A   L   E   I   Q   G   N   L   V   H   G   S   D				
UniRef90_UP10003B2FB66	N   A   I   A   K   V   R   E   I   I   G   A   T   D   P   A   K   A   E   A   G   T   I   R   S   K   Y   G   T   D   V   G   R   N   A   V   H   A   S   D				
UniRef90_UP10003B3D55F	R   V   V   E   G   F   R   S   L   A   G   T   T   D   P   T   T   A   A   P   G   T   I   R   G   D   L   A   R   D   W   G   Q   N   L   V   H   G   S   D				
UniRef90_UP10003B5F56F	R   V   V   E   G   F   R   A   L   M   G   A   T   D   P   T   A   A   L   P   G   T   I   R   G   D   L   G   R   D   W   G   Q   N   L   V   H   G   S   D				
UniRef90_D8PGP9	N   A   I   K   K   N   R   E   L   M   G   A   T   D   P   A   K   A   E   Q   G   T   I   R   R   A   A   H   G   A   N   I   E   F   N   A   V   H   G   S   D				
UniRef90_K9B710	G   V   V   P   G   F   R   S   L   A   G   A   T   D   P   T   A   A   A   P   G   T   I   R   G   D   L   G   R   D   W   G   E   N   L   V   H   G   S   D				
UniRef90_UP100047E41B3	N   A   I   K   V   S   V   R   A   L   V   G   K   T   N   G   R   E   A   A   A   G   T   I   R   R   G   D   Y   S   I   S   F   Q   E   N   I   V   H   G   S   D				
UniRef90_G9ZE66	N   A   V   A   R   Y   R   E   L   M   G   A   T   D   P   A   E   A   A   P   G   T   I   R   R   A   E   F   A   G   S   K   S   E   N   A   V   H   G   S   D				
UniRef90_W0JJH8	N   A   I   A   D   Y   R   N   L   M   G   A   T   D   P   A   K   A   Q   P   G   T   I   R   R   A   L   Y   G   K   N   I   E   E   N   A   V   H   G   S   D				
UniRef90_E9HVP8	N   I   V   V   K   T   G   R   Q   M   L   G   E   T   N   P   A   D   S   K   P   G   T   I   R   R   G   D   F   C   I   Q   V   G   R   N   I   M   H   G   S   D				
UniRef90_A0A021VL1	R   V   V   E   G   F   R   S   L   A   G   A   T   D   P   T   A   A   P   G   T   I   R   R   G   D   L   G   R   D   W   G   Q   N   L   V   H   G   S   D				
UniRef90_W9GK25	D   C   I   K   G   F   R   S   L   A   G   A   T   D   P   T   A   D   A   P   G   T   I   R   R   G   D   F   G   R   D   W   G   Q   N   L   V   H   G   S   D				
UniRef90_Q729L7	N   A   I   S   R   Y   R   E   I   M   G   A   T   N   P   A   N   A   A   E   G   T   I   R   R   K   K   Y   A   V   S   L   E   A   N   S   V   H   G   S   D				

130                    140                    150

UniRef90_B2I7V6	V E N A A [ ] E	V A Y F F A A T E I [ ]	I [ ]
UniRef90_UP10004673AC0	S P E S A A R E I	A F F F N E E D I [ ]	C
UniRef90_UP1000345F683	S T Y S A E R E I	K [ ] F F P D	
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UniRef90_F9ZP19	S A E T A A W E I	A Y F F S K R E I [ ]	C
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UniRef90_A0A022LLM2	S E E S A A R E I	G [ ] W F P D	
UniRef90_V9HLH5	S [ ] E N A Q [ ] E I	N Y F F Q P E E I	F
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UniRef90_R618V1	S E E S A A R E I	K N F F K A E E I	
UniRef90_Q5L6Z2	S [ ] E N A A [ ] E I	N Y F F S K V E I V N	
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UniRef90_W9GK25	S P D S A S R E I	I G L W F P E	
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UniRef90_D6ZIF2	R T L V L V K P D G Y R R G L I G E V I I S R F E R R G F K I V G L Q T K					
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UniRef90_C4F7L1	S A V S K M R T L I M G A T N P L D A A P G T I	I V R G D F A N D V N A N I I H G S D			
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130                    140                    150

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 420 S T L E K T I A M I K P D A V S K K V G H M D M I F S D G F H H M S K A I M A  
 430 E R T L G I I K P D G L S G N Y T D R I R K V I L E S G F H I N K E M I I  
 440 Q K T F I M L K P D V L K R G L M G A I I I S R I E D Q N Y F I E R A Q V M  
 450 E R T L G L I K P D A F L K V G K I V D A I Y K D G F R V A Q L R T L  
 460 T L E L T L A I L K P D L M S N I F A A Q V R Q R I L K N G F Y F V K T R N L  
 470 Q T L I V V K P D A V K R N L I V E I I L S R F K K K G F S I S K L K T F  
 480 C C V I K P H A I S E A L T G K I I L H S I S A A G F E I S A L Q M F  
 490 E R T L V V I C K P D A V A R G L I G R V V Q R I E D A G L K I V G A K M A  
 500 E R T L I I L V K P D G V A N G H I G D V I D R L E R K Q Y Q I S A L K V V  
 510 V E R T L A L I K P D A I D K A E E I E D I I L R S G F T I L Q K R K V  
 520 C T C C I K P H A I N E G L L G K I L M A V R D A G F A V S A M Q M F  
 530 R T F T M I K P D A I A A G N A G I I Q K I T K S G F K I V A L K M T  
 540 E H V F I I L K P D A L E R G L V G V L L S R L E N K G Y L I E R L E M T  
 550 E P T L R A V K P D Q V Q R K L V G D V I P H F D R R C F K L V G M K M V  
 560 E R T F L I I K P D G V Q R S L I M G E I I S R I E R V G L K I T A V K F L  
 570 L Q L T L A L L K P D A V A H P L V L E V H E T I L S N R L L I V R A K E L  
 580 E R T L G I V K P D A M D K V V E I E D I I L R N G F T I L Q K R K V  
 590 S R K E R T L A L I K P D A T P K I G E L V D I I I N A G F T I T K A K M M  
 600 S R K E K T L A L I K P D A V S K A G E I I I E I N K A G F T I T K L K M M  
 610 C T C C I K P H A V N E G L A G K I K A I I N E G F Q S A L Q M F  
 620 M E Q T L V I K P D A F E R N F V A K I M R R L E K K N I K I A N I K Y Y  
 630 S K K E R T L A I I K P D A L I K M G D I Q M I Y D A G L M I K A K M S  
 640 V Q K T L A L I K P E A V A K G Y E D A I M E R I I D E G F T I V R W D K M  
 650 T L C L V K P H V V A D G G A G L V D M I Q D V F D I T A A Q L F  
 660 E R T L A L I K P D I L K D K K D E I L Q S I R D A G F S I A M Q K E V  
 670 E Q T F A L I K P D A A K T H K D E I M K K V K E A G F S I S K V K E Q  
 680 S K K E R T L V I I K P D D G V Q R T L I G E I I K R Y E Q I G L K L V G V K M V  
 690 E L T F L A I K P D G V Q R H I L G E I I R R F E K K G F K L V G M K L M  
 700 E R I L I I L V K P D G V A S G H I G E V V S R L E K K G Y H I D D L K I V  
 710 V E R T L A L I K P D A I D K A D E I E D I I L R S G F T I L Q Q R K L  
 720 C T C C I K P H A K E H R D D I I N S I K E A G F C S Q V K E T  
 730 H I E R T L L I I K P D I I N Y A D K I E E L I L Q K G F L I I Q K R R V  
 740 H I E Q T L A L I K P D A L D H A E E I E D I I L S N G F L V L Q K R R V  
 750 H I E E T L A L I K P D A M S P G V L D Q I I D I I R L N R F E I V N R K K V  
 760 S S K T C T L A V I K P H L V A D G A A G L V I D I Q E S F E V T A G G L Y  
 770 E R T F I A I K P D A V V R G F A G K I I S R F E D A A L K I V G V K M K  
 780 M E T L A L I K P H V L R N T Y A L R Q L K A L I A S N F D V L Q A K E V  
 790 E R S T L I I L K P D C L E G N H A G E V I G R F E K E G F E I R A A K L I  
 800 E W T L V A V K P D D G V Q R X L L A D G F L S F E R R G L K L T G R M M L  
 810 L Q L T L A L I K P D A V A H P L I L E I L S N K F L I V R V R E L  
 820 V E R T L A V I K P D A V D K E E E I E D I I L R S G F T I I Q R R K L  
 830 M K F M

	50	60	70	80
UniRef90_K0YXQ3	T A D E A K [RE] H Y A E H [V] H K H F F S D L V E Y M S S G P M T A [I] V V R G E			
UniRef90_H2BR86	Q M T K S D A Q T F Y E V [H] K E R P F Y G E L V D Y M T Q G G P I V A A V L E K K D			
UniRef90_Q1WQV8	S A T E D Q L K Q H Y N D K V D K P Y F P D M L S Y M Q S G G P I V G I V A A G T			
UniRef90_K0P239	Q [L] T P I V A E H F Y A E H [S] D R P F Y K S L C A F I A S S P V V V M V L Q K E			
UniRef90_UPI00047DEF4A	Q M P M E K A E K F Y A E H Q G K P F F K E L T E F M S S G P V V A A I L E K K D			
UniRef90_C6X5W9	Q [L] T V A D A Q K F Y A V [H] S E R P F Y G E L V D F M S S G P I V A A V L E G E			
UniRef90_Q11NY2	Y [L] S A E R A G E F Y A V [H] T G K P F Y D S L K S I M S E S P I I A L I L E K E			
UniRef90_I9L4X7	K A T A E Q L [Q] H Y S E K V G K P Y F K E I E T Y M M E G P M V A I I V S G S			
UniRef90_G4L3Q8	T L S K A Q L H E H Y H H L V D Q P F F P R L L D Y M M E G P V L L M V V K G E			
UniRef90_H2T4L2	V W R R Q D S E R F Y A E H S G R F F Y Q R L L V E F M S S G P M R A Y V L A R E			
UniRef90_Q1JS7	H L T K N Q A E G F Y A V [H] A N K P F F H S L T D F M A S G P I V V M C L E K E			
UniRef90_T1ZTJ0	T N V S E L I D Q H Y E A L L A K D F Y P S I R D Y M T S G S V I I G V L S G S			
UniRef90_G8LQP4	E I S K K L A K K F Y Y E H K K N L F F E S L V K F M M S S G P I V L I I L E K E			
UniRef90_UPI00047B5133	P L Q T S V V E E H Y A H L D D K P F F G E L V S F M T Q S P V V A A I L E E G P			
UniRef90_XOTF82	S V P R K L A E K H Y A I H K G K S F F E T V N Y I M S A P V V V A M V L E G N			
UniRef90_UPI0004659CAB	W V D R E L A E K H Y A A R H G E I V W R A L I D F L M V F A C V I E G V			
UniRef90_E4MZQ1	W M D A E F T R R H Y A D L E E R E V Y N L T A T F M Q Q G G P V I A L V L E G Y			
UniRef90_W7YI04	K L D K H E A E A F Y Q E H K G K P F F D D L T D F M S S G G P I T A A I L E K E			
UniRef90_M1MUA2	R A T R E I A E K H Y S Q H K G K D F Y E L I T F I L T R S P L C A V I L K G E			
UniRef90_UPI0003B3E663	L L S S E V V K E H Y E H L K D Q P F F P K L C A F M T E S P V I L M I L E G E			
UniRef90_W5M216	Q A N T S T H S Y W G L L S S R G V H S R L L N Y R G S V P A I L D T L K K N			
UniRef90_V6AQX5	T F T R P Q A E E F Y S V H N T K P F F G E L L V E F I T S G P V V V A A V I E G N			
UniRef90_U2NPC7	K V D K S L A E K H Y E E H K E K V F Y D N L I K Y I T R S P L C A V I L E G E			
UniRef90_A0A018YAV3	H L T V E Q A R G F Y A E H D G K P F F D G L V E F M T S G P V V V S V L E S E			
UniRef90_UPI0003667440	T A T P E L L K K H Y V D K V D K P Y F S E I E S Y M L E G P I V A L I V S G S			
UniRef90_UPI0003870788	Q A D Q G L L D K H Y Q Q L R Q K P F Y P A L L A Y M T S G P L V A M			
UniRef90_A4CQ16	Q [L] S R R D A E E F Y A I H K E R P F F G E L V D F M T R G P I V S A I L E K D			
UniRef90_Q5FGN1	L L T R Y Q A E K F Y E I H K S Q V F F V P L I N F M I S G P V V V Q V L E G E			
UniRef90_R7HNE6	T L S D E I L R E H Y A H L A D K P F F P L I V K S M Q A S P V V V M C L K G L			
UniRef90_U5SAD3	K A S I E V A E K H Y A E H K E K P F F S R L V S Y L T R S P L V V V L I L E G E			
UniRef90_A5C4V4	R L D E D T A G K F Y A E H S S R S F F P A L L V K Y M T S G P V L V M V L E K I			
UniRef90_A0A026VWZ3	T I S S E E A L F Y K E H R D K F F Y N R L L T F M C S G P S D V H I L T A N			
UniRef90_J9ATJ7	[L] Q I H Y Q E L Q G Q K P F F N D L V S Y M S S G P V I A M V W E G L			
UniRef90_UPI00035C754B	L M D A E F T R R H Y F D L E E R F V Y D T T A A F M Q K G P V F A L V L E G V			
UniRef90_UPI00028A3678	Q [L] T L D D A K K F Y D V H A N K P F Y E D L C G F M T S G P I V A A I L E K E			
UniRef90_R1G8Z1	K L T R E Q A E Q F Y Y A D E K W L I R G W L I D F I T S S P V V V A I V L E G V			
UniRef90_Q86M18	Q A S T A H L E E H Y K D L K E P F Y S G L C T Y M A S G P V V A M V W E G S			
UniRef90_M7NKJ9	S L S E E R A G Q F Y E V H K E R P F Y N D L K R Y M S S G R I M A A V L E K E			
UniRef90_UPI00036DE9E0	Y L D E S K L R E H Y A H L V E K P F Y P G L E T F M K S S P V A V I C A A G K			
UniRef90_M3YVL0	S M D R V N V E E F Y E V Y K V V S E Y N E M V T E V C S G P C V A M E I Q Q S			
UniRef90_UPI00041D6FF0	K V T K E L A V K H Y E D H L G K N F F D K L I K Y L T R G K V C A M I L G G E			
UniRef90_UPI0002B4A715	E L D E D R A S R F Y A E H S S R S F F P N L L V K Y M T S G P V C I M V L E K Q			
UniRef90_A7RFA5	R L L N R K E A S D F Y Q E H A S Q P F Y D R L L V E F I S S G P V V A F E L K G P			
UniRef90_J3LDY8	R L L D A E R A S L F Y A E H S G R S F F D S L L V K Y M T S G P V L V M V L E R P			
UniRef90_UPI0001CCB20B	Q L S R T D A Q R F Y A V H Q Q K P F F N E L L V D F I T S G K V V A M E L I G N E			
UniRef90_UPI00042B7B92	Q L D E V I N A A D F Y A E H S S K S F F T S L I K Y M T S G P V L V M I L E K E			
UniRef90_D4YEL0	E L D K Q M V A H H Y A H L L N E D F Y P E L E S Y M L S G P V F A M V V T G D D			
UniRef90_L1JUJ4	Q L T R R D A M E F Y A E H E G K P F F P A L T E F M S S G P I V A M E I V A D D			
UniRef90_R7UC11	H L T T S E A A Q F Y G E H E G K F F N R L V T Y M T S G P I R T H I L A R D			
UniRef90_B3T458	N F T V E M A E Q F Y S V H G S K P F F G E L V S F I T S S G A V V A A I I E G D D			
UniRef90_C1BEX6	N M D R A N A E E F L E V Y K V V T E Y P N M V A E L C S G P C M A L E I R G T			
UniRef90_UPI000369F68D	L M D A A F T R Q H Y A D L E Q R H V Y A A N A E A M R R G P V L A L V V E G V			
UniRef90_UPI0003044BF9	Q K A T D Q R A H Y S D K V D K P F Y S E I T D Y M Q S G P I V A I V A T G T			
UniRef90_C3Z4Q2	H L T P E Q A S D F Y A E H Y G K M F F P S L V G Y M S S G P V A M V L A R D			
UniRef90_UPI00033380D4	N M D R I N V E E F Y E V Y K V V S E Y N E M V T E M Y S G P C V A M E I Q Q H			
UniRef90_UPI000255A29D	R L T P E K A S E F Y A V H Q G K S F Y D K L V K F M S R G P I I A A V L E K N F			
UniRef90_K9FEF7	R L D P F R L R K L Y A H I A D K P F Y S D V E S Y M T S G P V V T G A L S S G F			
UniRef90_UPI00045DB0D0	Q A S E N I L T E Y Y F D L Q R K P S Y P X L I S Y M S F G P V V A L V W E S H			
UniRef90_UPI000273A2E5	R D L L R E H Y A A L R D R P F Y S R L L V Q Y M S S G P V V A M V W Q G L			
UniRef90_K2GAN3	V P K E E Q C W T H Y N K D D A W F Q S K G L V K Y M T A G P V L A M V I E G N			
UniRef90_E1C720	R C G R E Q S R R F Y V R E H A G Q F Y Q R L V E F M A S G P M W A Y I L A H E			
UniRef90_C4B8X2	H L S P E Q A S D F Y V E H Y G K M F F P S L V A Y M S S A P I T V F V L A K N			
UniRef90_UPI0002034D10	V L S R K E A V D F Y V D H Q S K P F Y N E L L Q F I T S G P I V A M E I L R D			
UniRef90_G1PF25	M L S R K E A A D F Y H I D H H S K P F F N E L I Q F I T S G P V I A M E I L K D			
UniRef90_E1C3P8	N M E R A N V E E F Y E I Y K V V A E Y M E M V T E L C S G P C I A M E I I Q P			
UniRef90_H2EE17	Q D V P R I L L E H Y D Q D R E K D Y F S A N C D F M I S G P I M V I I Y E G P			
UniRef90_W5MPS5	K V S W K E A M D F Y A E H Q S K S F F N N L M Q F M T S G P V V A M E I M G D			
UniRef90_D2V0V3	H L S Q E K V Q L F Y R E H E G K S F F P T L I E Y I T S G P L I V L V L A K H			
UniRef90_D8TIX5	T L L D R N A A E F Y E V Y K V G L V N F A N M V D H T S G P V L A L E V A D R			
UniRef90_F6RR34	M L T E Q V Q F Y I E H I D K D Y Y P A L L K Q M T S G P V L A A L A L V K D			
UniRef90_U3JJ15	A L T R E M A E Q F Y K D H K G K P F F E Q L V N C M T Q G P S V I M V L S K E			
UniRef90_K2FLD6	V P T E E H I E K H Y T L D P T W R T V T G L K K Y M T S G P V V A M V W Q G A			
UniRef90_UPI0003C45527	Q A S E D L L K E H Y I A L H D R P F Y S H L M K Y M R R S G P I V A M V W Q G L			
UniRef90_UPI0002490896	L A T K D Q L R A H Y K Q L V D K P F Y P E I E S Y M Q E G P I V A M I A S G T			
UniRef90_E3TC92	Q L S P E Q C S D F Y A E H Y G Q P F F P S L T A F M S S G G P V M A L A L A R H			
UniRef90_UPI0003EAA22C	K L T K E M A A E F Y K D H Q G K V F Y D Q L V D Y M S Q G G P S V M M I L S K E			
UniRef90_G4VQR7	H L T P E Q A S E F Y A E H Y G K I F Y A T L I A Y I S S G P I E V L V I A R E			
UniRef90_UPI0003AB8003	Q A P E S V L A E H Y Q D L R R K P F Y P A L I R Y M S S G P M V A M V W E G Y			
UniRef90_UPI0002B44A09	Q L T P E Q S S D F Y A E H S G K I F F P S L V A F M S S G E S I A Y L L A R N			
UniRef90_F4P4A3	W M T E A N V R E F Y A S H V E K S F F P S L V S Y L S S A P T L A L I L K K E			
UniRef90_A8JGW5	N L D R N A A E F L E V Y K V G L V P F N S M V E Q L T S G A C L A L E V A D R			
UniRef90_H0VBL3	T L T E A E V R H F Y Q H R A G Q E G F G K L V H H M C S G P S H L L I L D T E			
UniRef90_I3K7K3	Q A S E D L L M K H Y V D L K D R P F F P T L I N Y M S S G P V V A M V W E G K			
UniRef90_UPI0003E9C85	Q M D A E F T R R H Y F D L E E P Q V Y G M T S T F M Q Q T P V I A L V L E G A			
UniRef90_B4JL42	R I T K E I S E C F Y A E H K G K F F Y Q R L T S F M Q S G P C Y A L I L Q S E			
UniRef90_UPI0003770E6B	A L T D E L L N E H Y A H I A D R P F F P E I V E F M S S R G P V L A L V M E G E			
UniRef90_UPI0001DE9B98	Q A X E N I L L A E H H H D R Q R K P F Y P X L I S Y V S S G P V V V A V V V W K D P			
UniRef90_L8Y1F3	L W R K E D C R R F Y Q E H E G R F F Y Q R L V E F M A S G P I R A Y I L A H Q			
UniRef90_F7FRU9	Q L S P E Q C S N F Y A K L Y G K M F F P N L T A Y M S S G P L V A M I L A R D			
UniRef90_F6XY72	M V W E G L			
UniRef90_M0YS79	N V E R S F A Q Q H Y A D L S A Q P F F A K L V E Y I I S G P V V A M V W E G K			
UniRef90_E1BXX8	T L S E E Q A R E F Y K E H N E D Y F P A L L E Q M T S G P T L V L A L T R Q			

	90	100	110	120
UniRef90_K0YXQ3	R C I E G M R V M A G S T D P T A P A G T	L R G D F G R D W G E N V V H C S D		
UniRef90_H2BR86	N A V E D F R T L I G A T N P E D A A E G T I	R K K Y A A S I A E N A I H G S D D		
UniRef90_Q1WQV8	N I T K A M H R M A G N T N P G E A E F G T I	R G D Y G R E W Q N V V H T S D D		
UniRef90_K0P239	N A V A D L R L M G A T N P V E A A E G T I	R K I F A T S I D Y N A I H G S D D		
UniRef90_UPI00047DEF4A	N A V L D F R T L I G S T D P S K A A E G T I	R R M F A K D M T R N A I H G S D D		
UniRef90_C6X5W9	N A V E S F R T L I G A T N P A E A A E G T I	R K M F A R S I G E N A V H G S D D		
UniRef90_Q11NY2	N A V E D F R K L I G A T N P A N A D A G T I	R K I F A K S L E R N A V H G S D D		
UniRef90_I9L4X7	G V V K A V H R L A G S T R P A E A Q P G T I	R G D Y A H E I L R N I H T S D D		
UniRef90_G4L3Q8	Q A I S Q T R K I V G A T D P L E A E M G T I	R G D F G V I N K T R N L I H A S D D		
UniRef90_H2T4L2	D A I R H W R D L M G P T K V F R A R P A S I	R A Q F G L T D T R N T T H G S D D		
UniRef90_Q1JS7	N A I A D Y R K L I M G A T N P A N A E E G T I	R K K W A A S I E K N A V H G S D D		
UniRef90_T1ZTJ0	Q V I S G W R H M M G A T R P E E A L P G T I	R G D F A Q E T I L R N V V H G S D D		
UniRef90_G8LQP4	N A V K N F R N L I G N K N P I K A K V G T I	R K I L Y A S S L E K N A I H G S D D		
UniRef90_UPI00047B5133	S A V E V A R Q L I G A T N P L E A A T G S I	R G D L A I E A G E N V V H G S D D		
UniRef90_XOTF82	D I I K M V R T M I G K T D P M E A E M G T I	R G D Y C Q F I G R N I V H G S D D		
UniRef90_UPI0004659CAB	E S V E V V R V R K F C G S T E P K I S A P G T I	R G D F A C H S V Y N I I H S S A G		
UniRef90_E4MZQ1	D A I A T V R K I V G S T Y P D Q A P A G T I	R G D F S H M S R A N L I H A S G		
UniRef90_W7YI04	N A V A D F R F L I G A T D P N N A K E G T I	R K M F A T S K T Q N A I H G S D D		
UniRef90_M1MUA2	D A V A R I R K I N G A T S P T D A E E G S I	R H R Y A R S K T E N C V H A S D D		
UniRef90_UPI0003B3E663	D A V S R V R K I V G A T N P L K A D S G S I	R G Q F A T D T T R N L V H A S D D		
UniRef90_W5M216	K I S D L S Y A L L I S S N P I A P L L W V	R V G G C C F Y L H R N V V H G S D D		
UniRef90_V6AQX5	N A V A T T R I M I G A T K S F E A A P G S I	R G D F G L G F S D N V I H A S D D		
UniRef90_U2NPC7	N A V E E V R R I N G A T D P E K A E E G T I	R K R F A V N K T E N S V H S S D D		
UniRef90_A0A018YAV3	N A V Q R H R D L L G A T N P A N A L A G T I	R A D Y A D S L T E N G T H G S D D		
UniRef90_UPI0003667440	R V I K G L H T L A G E T S P N Q A A P G T I	R G D F G R M I L R N V I H S S D D		
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UniRef90_UPI000273A2E5	D V V R S S R A L I G A T N P A E S S P G T I	R G D F C V E V G K N V I H G S D D		
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UniRef90_A8JGW5	D A V E E P F R Q L S G P L D P R V L R P A S I	R A R F G L D A V R N G V H C T D		
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UniRef90_I3K7K3	G A V K T G R V M L G E T N P A D S K P G T I	R G D F C I D V S K		
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130                    140                    150

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UniRef90_K0P239	S D E T A A L E T S F F F P G C D L L
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UniRef90_C6X5W9	S D E N A L I E A Q F H F S G R E I F
UniRef90_Q11NY2	S D E N A Q I E G S F F F S A L E
UniRef90_I9L4X7	S R E N A H H E I A I W F P E
UniRef90_G4L3Q8	S V D T A Q E E I A R F F G
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UniRef90\_H3A143

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

50            60            70            80

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UniRef90_S4R4Z0	R L L K R S D S E R F Y A A H K G K G F F F Q R L V E F M A S G P P R V Y V L A H H		
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90                    100                    110                    120

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UniRef90_I1EYB3	N A I K E W K E L L G P S N S I L K A H P E H S L R A I Y G T D E L L R N A L H G S D
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UniRef90_UP10003C49E34	G A V P Q W K E L D K S D E P Q P E K P V S L Q E V L E S E N M L N L C D V E D
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UniRef90_UP100042C3F52	D A I Q L W R T V M G P T R V F R A R P D S I R G S F G L T D T R N T T H G S D
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140

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130 140 150

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1                    10                    20                    30                    40  
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 I I K P D D V L E G R V K E I K K K I K R A G F T I E V A E E K  
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 L E R T F I I L K P D V V E M N K M N A I V N D I L N F D L L I V A I K R G  
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UniRef90_UP10003C2B306	V L T E E Q A E F Y K E H E N D Y F P T L E Q M T S G P T M V M I L S K E
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UniRef90_V4RY76	R L D E D G A K T F Y A E H S S R S F F S S L I K Y M T S G P V L A M V L E K E
UniRef90_X1RKD6	E I D E G L A K S H Y R D H V E K D F G P P L L K Y I T S G P V V V M V I S G E
UniRef90_D3BE07	V L S I S E A E F Y Q Y N D H R G K F F Y E R L V G F M S R G P I P M V L S E K
UniRef90_Q2Z056	R F N E E Q A E H Y V V H K G K P F F E D L V A Y M A S S E S I P L F I L T Q
UniRef90_W9S9H2	Q L D E D G V R T F Y V E H S L K S F F H S L I T Y M T S G P V L V M V L E K E
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UniRef90_F4NWU0	H L D R S N A E D F L E V Y K V P E Y H L M L N Q L T S G P I I A M E I T G D
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UniRef90_D6GUZ1	K P D K D F A E K H Y G E H K G K F C Y D N L I N F M S Y T E L A V I A A G D
UniRef90_V6THT5	R F S E N D V N A F Y E E H G K F Y F E H P N M V V S M S L G P C V I E L I G P
UniRef90_M8C6F4	H L D A E R A S L F Y A E H A D R S F F N S L V K Y M T S G P V C A M V L E S P
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UniRef90_T1FZG7	T F D K V N A E E F Y E V Y K V P E Y P K M V D E L S R G L C L A M E V Q N C
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UniRef90_R7Q1Q5	T P S L E H A Q K H Y Y D L A E R P F F P T L C S F L L S S G P V C A M V F E G E
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UniRef90_Q99MH5-2	H L S P E H C S N F Y V E Q Y G K M F F P N L T A Y M S S G P L V A M I L A R H
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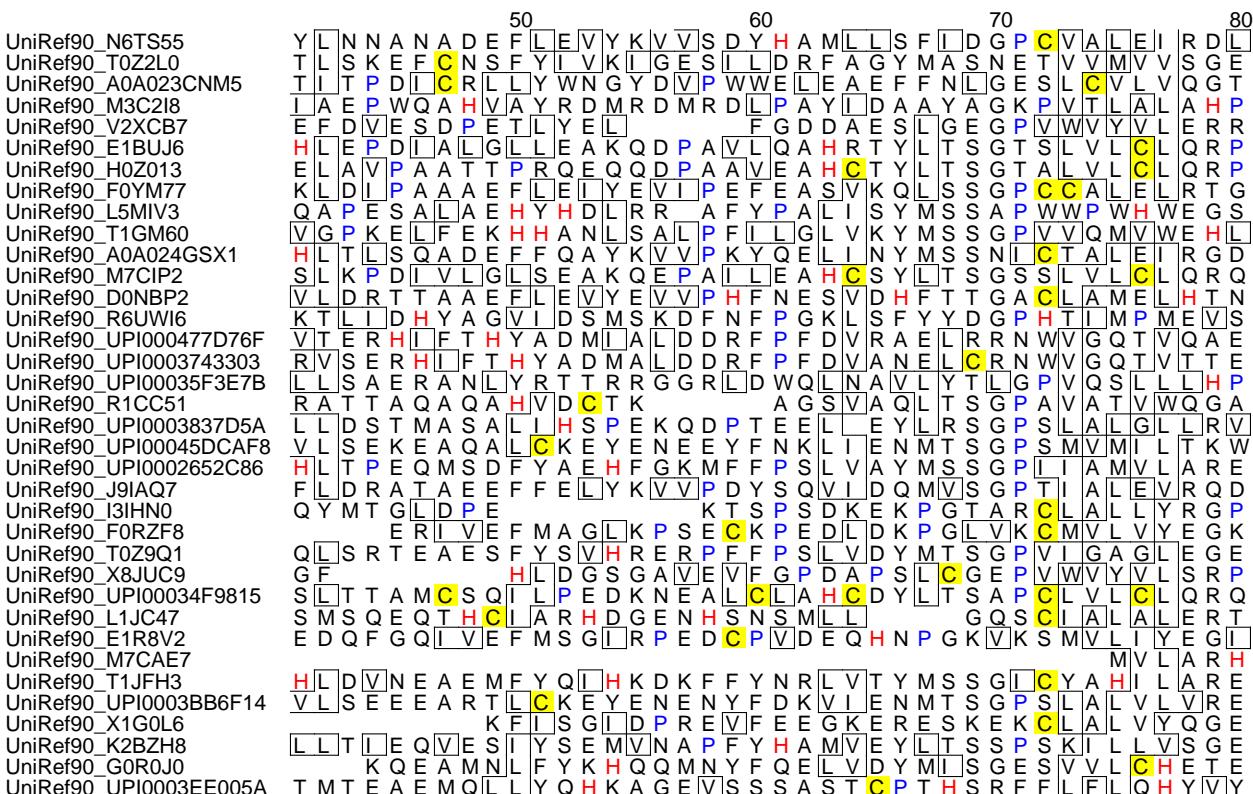
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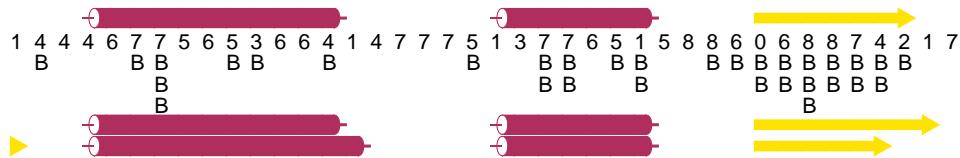
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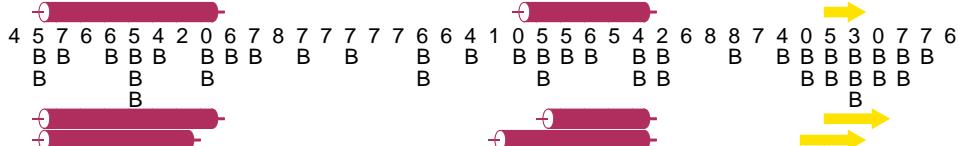


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H A S D</td> <td></td> <td></td> </tr> <tr> <td>T</td> <td>S P P I D K K L K G H Y R P E Y A K I G T I R</td> <td>R S R F G I N R I F N L F H S S D</td> <td></td> <td></td> </tr> <tr> <td>G</td> <td>I H A R L R Q L I G H T D P T R A V A G T I R</td>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