

QUERY	1	10	20	30	40
UniRef90_UPI00046FA263	H	G	R	M	T
UniRef90_UPI00037FACF6	M	P	R	V	D
UniRef90_C2W3J4	M	N	R	I	S
UniRef90_C5D2M8	M	A	R	L	A
UniRef90_UPI00036ACFB7	S	P	E	Q	M
UniRef90_UPI00035E75EC	M	T	R	I	D
UniRef90_R9C1V8	M	N	M	T	T
UniRef90_M8CYN9	M	T	S	Y	T
UniRef90_E1L3V6	M	S	E	N	R
UniRef90_UPI00047909B2	R	V	A	P	E
UniRef90_UPI00047A54BC	N	S	E	A	I
UniRef90_U5S6Y3	M	N	C	N	D
UniRef90_UPI00031FCA9C	H	P	I	K	D
UniRef90_UPI0003B68253	P	I	K	A	E
UniRef90_R5G7J6	M	S	C	V	N
UniRef90_UPI000380D8BA	M	K	R	N	D
UniRef90_W7CI19	M	N	R	N	V
UniRef90_F5LAE5	K	D	F	S	L
UniRef90_UPI0002DE726B	M	T	K	V	D
UniRef90_W8QSP2	L	I	K	Q	Q
UniRef90_Q3K1L6	M	K	D	T	L
UniRef90_R5D147	K	K	D	L	L
UniRef90_T0T7R3	M	N	K	E	E
UniRef90_UPI00037DE93A	K	F	A	K	E
UniRef90_R5ZZD4	F	K	R	E	Q
UniRef90_K9CZ72	M	K	N	F	D
UniRef90_UPI000381BD6E	R	Q	Q	I	L
UniRef90_UPI00035D19C0	L	S	Q	K	K
UniRef90_F0LJU7	M	T	Q	D	F
UniRef90_Q3IP34	R	L	Q	N	R
UniRef90_K2ED01	I	N	D	L	K
UniRef90_D6Y0H0	D	F	N	L	Y
UniRef90_A5G7P5	R	T	Y	L	V
UniRef90_U9VU58	K	M	L	T	L
UniRef90_R8W1N2	K	K	N	M	L
UniRef90_R5MRZ7	Y	D	L	Y	V
UniRef90_D1YXN6	K	H	T	M	L
UniRef90_W3AGJ2	K	E	L	L	K
UniRef90_D4K0Y4	D	L	T	L	Y
UniRef90_Q97RS5	M	K	D	I	D
UniRef90_Q3AE34	L	S	K	Q	L
UniRef90_A4J232	Q	H	Q	R	L
UniRef90_E8RE08	M	K	E	F	K
UniRef90_I0JSY7	R	Y	Q	R	L
UniRef90_L8LTG2	F	N	S	Q	L
UniRef90_C7NNW4	K	N	R	L	R
UniRef90_W4QQ67	M	P	A	L	T
UniRef90_B4VZU3	R	H	Q	R	L
UniRef90_G7ZQA0	K	S	K	L	Y
UniRef90_D4JBB6	M	P	F	D	L
UniRef90_UPI0003B5728E	M	L	S	L	Y
UniRef90_UPI00047DD273	K	K	T	M	L
UniRef90_D9V3D6	K	F	D	K	S
UniRef90_K9XA31	R	Y	S	K	Q
UniRef90_I7IJ11	K	F	D	R	D
UniRef90_H0J2N1	M	E	D	R	F
UniRef90_F5ZJJ1	R	D	K	L	K
UniRef90_UPI00036F8E9A	R	D	S	K	L
UniRef90_R5R058	M	E	D	R	F
UniRef90_R5J2F7	R	D	K	L	K
UniRef90_R6RD52	M	E	D	R	F
UniRef90_R5TIG8	R	D	K	L	K
UniRef90_R7DZK8	M	E	D	R	F
UniRef90_Q1ATF5	R	D	K	L	K
UniRef90_L0HJ99	M	E	D	R	F
UniRef90_R97TA1	R	D	K	L	K
UniRef90_K9FGB3	M	E	D	R	F
UniRef90_V6M115	R	D	K	L	K
UniRef90_E4RMU9	M	E	D	R	F
UniRef90_U7PC59	R	D	K	L	K
UniRef90_Q9HIQ4	M	E	D	R	F
UniRef90_L9WH85	R	D	K	L	K
UniRef90_W1RZK2	M	E	D	R	F
UniRef90_UPI000476DA47	R	F	L	A	Y
UniRef90_M0IBH2	M	A	P	S	N
UniRef90_L9ZPH2	I	T	P	K	Q
UniRef90_D4JUJ8	R	L	K	M	N
UniRef90_C0FNC9	K	E	K	G	L
UniRef90_C1DUZ3	P	D	Y	S	I
UniRef90_F6B7A2	R	E	A	L	A
UniRef90_U2T943	L	R	Q	K	L
UniRef90_UPI0003B49596	P	D	Y	S	I
UniRef90_E8LB15	M	N	E	T	D
UniRef90_F9RHV4	K	M	E	L	N
UniRef90_C4ZG54	F	K	S	T	D
UniRef90_UPI00030EF6AF	M	E	D	R	F
UniRef90_Q9RGS5	R	D	K	L	K
UniRef90_UPI0004662D4C	F	K	S	T	D
UniRef90_D3QIK6	F	K	S	T	D



QUERY	90	100	110	120
UniRef90_UPI00046FA263	L V N D D D V E L A L A N L V K A D D G V I H L V G Q Q D D D A E P A D R S V R A R R M G D D K I I V G G V V			
UniRef90_UPI00037FACF6	I V N D D D I E L L A L A I E L L D D A D D G V H H V G G Q Q D D D A E P A D R S V R A R R M G D D K I I V G G V V			
UniRef90_C2W3J4	I V N D D D V E L L A L A I E L L D D A D D G V H H V G G Q Q D D D E E D A R T S V R R E K M G D D K I I V G G V V			
UniRef90_C5D2M8	I V N D D D V E L L A L A I E L L D D A D D G V H H V G G Q Q D D D E E D A R T S V R R E K M G D D K I I V G G V V			
UniRef90_UPI00036ACFB7	I V N D D D V E L L A A A R I L D G A D D G V I H H V G G Q Q D D D E E P A R S I R A R R M G D D K I I L L G G V V			
UniRef90_W4D6B3	I V N D D D L E L A A A A L D A D D G V I H H V G G Q Q D D D E P A R L I R A R R Q L G D G H K I I L L G G V V			
UniRef90_UPI00035E75EC	I V N D D D V D L A L I L L G A D D G V I H H V G G Q Q D D D E P V E A V R S K I L G D K I I V G G V V			
UniRef90_R9C1V8	I V N D D D I E L A L A L L Q A D D G V I H H V G G Q Q D D D E A A I K V R R Q L F A N D K I I V L G G V V			
UniRef90_M8CYN9	I V N D D D V E L L A V A V I N A D D G V I H H V G G Q Q D D D E A A A R V R R D R I G H K I I V L G G V V			
UniRef90_E1L3V6	I I N D D D V E L L A V A V I N A D D G V I H H V G G Q Q D D D E M R L E D V R R H L V G H K I I V L G G V V			
UniRef90_UPI00047909B2	I V N D D D V E L L A V A V I D A D D G V I H H V G G Q Q D D D E S A A K M S V R R E K I I G A N R K I I G G V V			
UniRef90_G4HJ99	I V N D D D V E L L A L K L L D A D D G V I H H V G G Q Q D D D E S A A K M S V R R E K I I G A N R K I I G G V V			
UniRef90_UPI00047A54BC	I V N D D D V E L L A L E I L D A D D G V I H H V G G Q Q D D D E S A D T V R R Q K I I G S K I I L L G G V V			
UniRef90_U5S6Y3	I V N D D D V F L A F K L L N A D D G V F H H I G G Q Q E D D L A S I P L F R E K A G N K I I V G G V V			
UniRef90_UPI00031FCA9C	I V N D D D V D L A L I E L L D A D D G V I H H V G G Q Q E D D L S I E D V R R K I I G A K N K I I V G G V V			
UniRef90_UPI0003B68253	L V N D R V D L A L I L L D A D D G V I H H V G G Q Q D D L P V P E A K R I L P P C V I I V G G V V			
UniRef90_R5G7J6	V I N D D N V K I A K E M D A D D G V I H H V G G Q Q S D D M E A D D D V R K I I L G E D K I I V G G V V			
UniRef90_UPI000380D8BA	I V N D D D V E L A L K I L K A D D G V I H H V G G Q Q D D D T A I T E F R S L A K D K I I V G G V V			
UniRef90_W7CI19	I V N D D D V E L A L K I L K A D D G V I H H V G G Q Q D D D T A I T E F R S L A K D K I I V G G V V			
UniRef90_F5LAE5	I V N D D D H V L A L A V D D A D D G V I H H V G G Q Q D D D L P L E E A R K L L K P S H Q F G G V V			
UniRef90_UPI0002DE726B	I V N D D D L G L A I E L L D A D D G V I H H V G G Q Q E D D G D M K K I I R Q S L K G S H Q F G G V V			
UniRef90_W8QSP2	I V N D D D V Q L A I D L D A D D G V I H H V G G Q Q E D T L A Q D V R R R I L K N K I I L G G V V			
UniRef90_Q3K1L6	I I D D D D I E L V E L L D A D D G V I H H V G G Q Q S D D L P V D E A R R R L G D K I I I G G V V			
UniRef90_R5D147	V I N D D N V E I A A E I I E A D D G V I H H V G G Q Q S D D M E A G D V R A K L G D K I I I G G V V			
UniRef90_T0T7R3	I I N D D D V D L A A E V D A D D G V I H H V G G Q Q S D D M P V T E A R K L F P D K I I I G G V V			
UniRef90_UPI00037DE93A	I V N D D D H I L A L E A D A D D G V I H H V G G Q Q S D D M P L P E A R K L V G D K I I I G G V V			
UniRef90_R5ZZD4	I V I N D N V D I A L A D A D A D G V I H H V G G Q S D D M E A L D V R K R L P N K I I I G G V V			
UniRef90_K9CZ72	I M N D D M D L A E E L E V D G V I H H V G G Q Q D D D P I E E V R R C R F P N K I I I G G V V			
UniRef90_UPI000381BD6E	I I N D R L D L A L A C A E A D G L V H H I G G Q Q Y D D M P P Y E V A R K I I L G K N I I I G G R A			
UniRef90_UPI00035D19C0	L I N D R V D L A L A T E A D A D G V I H H V G G Q Q D D L P V A I A R K I I L G H R I I I G G R A			
UniRef90_F0LJU7	F V D D R L D L V A L A V D A D D G V I H H V G G P E D M P V Y I A R E L L A P N L I I I G G A R			
UniRef90_Q3IP34	I V N D R V L D L A A A I I G A D D G V I H H V G G D D D L D I E I A R E Q L G S D I I V G G R L			
UniRef90_K2ED01	I V N D R V D V A H L I G A D D G V I H H V G G Q D D L D I D S A R H L L G K D I I I G G V V			
UniRef90_D6Y0H0	V V N D D V A L A V A L E A D D G V I H H V G G Q E D M N A S D V K S R I P D G G C F G G V V			
UniRef90_A5G7P5	F I V N D R V D I A A A V G A D D G V I H H V G G Y N S D L P I Y M A A R K I I L G E K K I I V G G V V			
UniRef90_U9VU58	I V N D R V D I A A A V G A D D G V I H H V G G Q Q D L P M A A A R T I L P L P I V G G R			
UniRef90_R8W1N2	I M N D S I E L A R A A G A D G V I H H V G G Q Q S D V P G D N V R E L A G D D L I I L G G L			
UniRef90_R5MRZ7	I V N D N V D I A V K C H A E G V I H H V G G Q Q D D M K A S C V R R V G D D F M I G G V V			
UniRef90_D1YXN6	I V N D R L V E I A I J A S K A E G V I H H V G Q E D L P V K L A R P L A P P D K I I L G G V V			
UniRef90_W3AGJ2	I V N D D V E L A R T L D A D D G V I H H V G Q E D M E A N A A R R L V P D K I I L G G V V			
UniRef90_D4K0Y4	I I N D N D I L A I K C H A D D G V I H H V G G Q E D M A A A D V R A K V P D M I I I G G V V			
UniRef90_Q9R7S5	L V N D D D I E L A M E I L D A D D G V I H H V G G Q D D L G V D E I R K L M P D K I I I G G V V			
UniRef90_Q3AE34	F V N D R L D L G L A L N A D D G V I H H V G G Q E D L L L E V A R K H F P G K I I I G G V V			
UniRef90_A4J232	I I N D R L D I A L A V T G A D D G V I H H V G G Q R D M D I T R D A R K L A G S I I I G G V I			
UniRef90_E8RE08	I V N D R V D V A L A V T G A D D G V I H H V G G Q R D M D I T R D A R K L A G S I I I G G V I			
UniRef90_I0JSY7	I V N D D L D M V E P L D A D D G V I H H V G G Q E D T G V E V I R S Q F P D K I I I G G L			
UniRef90_L8LTG2	I I N D R L D L A Q A V L Q A D D G V I H H V G G Q K D L P I A V A R K I I L G N G I I I G G R			
UniRef90_C7NNW4	I V N D R V D L A L A V L E A D D G V I H H V G G D E D L P V A V A R K I I L G D K I I I G G R			
UniRef90_W4QQ67	I V N D D H I D V A L A V L E A D D G V I H H V G Q Q D D L P L E A R K I I L G D K I I I G G L			
UniRef90_B4VZU3	I M N D R V D L A L A I D A D D G V I H H V G G Q Q D L P I A V A R K L L P H R I I I G G R L			
UniRef90_G7ZQA0	I I N D D V E L A K E I N A D D G V I H H V G G Q D D A K V N E I A Q F F T N K I I I G G V V			
UniRef90_D4JBB6	I I N D N V D I A V A M N A D G V I H H V G G Q S D M E A G D V R A K L P D K I I I G G V V			
UniRef90_UPI0003B5728E	I V N D R A D I A R V L D A D G V I H H V G G Q D D M P S V F E L A R K I I L K R D K I I I G G K			
UniRef90_UPI00047DD273	L V N D D D I D L V E P L E A D G V I H H V G G Q D D L P S V H E I L R R L M P D K I I I G G L			
UniRef90_D9V3D6	S V N D R A D V A L A V G A D V L H H V G G Q D D L P V S L A R R V L G D D V I I G G R S			
UniRef90_K9XA31	L V N D D V D S L A L A V D A D G V I H H V G G Q Q D M P V I N A A R Q L L P H K I I I G G S			
UniRef90_I7J11	I V N D D V S L A K D I D A D G V I H H V G G Q N D L E V N E A F A Q Q F E N K I I I G G L			
UniRef90_H0J2N1	I I N D R L N V A L E S E A D G L H H V G Q Q S D T A V Q E A R Q A L P N A I I I G G L			
UniRef90_F5ZJ1	I I D D D I D L V K K L D A D G L H H V G Q Q K D S A V Q A A R S Q I G N K I I I G G L			
UniRef90_UPI00036F8E9A	F I N D N V D V A I K C K A D G V I H H V G Q E D M A A G A V R S L V G D M M I G G V V			
UniRef90_R5R058	I I N D N V A V A I K V D S D G I H H V G Q Q D D Q P V K R V R K I I V P H K I I I G G V V			
UniRef90_R5J2F7	L I D D N I K L A K A C K A D G V I H H V G G Q N D M D A G L A R Q L L P D K I I I G G L			
UniRef90_R6RD52	V V N D N V E I A M K C H A D G V I H H V G G Q S D K A G R D I R A M I P G S D K I I G G V V			
UniRef90_R5TIG8	I I N D N V D I A L A M D A D G V I H H V G Q Q S D M E A G D V R A K L P D K I I I G G V V			
UniRef90_R7DZK8	I V N N R I D L A L A L D A D D G V I H H V G A Q R D L P V P A V A R A M I P G D R I I L G G V V			
UniRef90_Q1ATF5	L V N D R V D V A L A L G A D D G V I H H V G A R S L P P A V A R S L I P G D M I I L G G V V			
UniRef90_L0HJ99	I V N D R V D V A L A T G A D D G V I H H V G R E D M P V E V A R E I V G D M I I I G G V V			
UniRef90_R9T7A1	I V N D R V D I A L A A K A D D G V I H H V G Q Q G D L P A A A L R K F V P D F I I G G V V			
UniRef90_K9FGB3	L V N D R V D I A A A V G A D D G V I H H V G Q Q G D L P M A A A R R I L P L P I V G G R			
UniRef90_V6M115	F V N D D V D L A I R L Q A D G V I H H V G Q Q D D M A L N E V R A A V G N I Y I G G I			
UniRef90_E4RMU9	I I N D D L A Q A L D A D D G V I H H V G G Q D D L P L K E A R A L L P D K I I I G G L			
UniRef90_U7PC59	L V N D D V E L A E L I D A D D G V I H H V G Q Q D D A K V N T F K T H F K N K I I I G G L			
UniRef90_Q9HIQ4	F I D D D V Q L A I E V Q A D G V I H H V G K D D M P L P D A R R I F D G L I G Y S			
UniRef90_L9WH85	I V N D R V D I A Q A I D A D G V I H H V G Q S D L P V A V A R E L L P E A V I I G G C			
UniRef90_W1RZK2	I I N D R I D V A L A V D A D D G V I H H V G Q S D M S A E T A R R L I G K N K I I I G G L			
UniRef90_UPI000476DA47	L M N D R V D L A L A V D A D G V I H H V G Q Q K D V P V A L A R Q L L G H R I I V G G R R			
UniRef90_M0IBH2	V V N D R V D I A R A I D A D D G V I H H V G D D D L P V V A V A R Q L L P D A I I V G G L			
UniRef90_L9ZPH2	I V N D R V D L A Q A I D A D D G V I H H V G Q S D D L P V A V A R D L P P D A I V G G C			
UniRef90_D4JUJ8	I I N D N V K L A K E I D A D G V I H H V G Q Q D D L D I K A A R E Y L G D K I I I G G V V			
UniRef90_C0FNC9	I I N D N V E L A K K I H A D D G V I H H V G Q Q S D M E I K N A R E L L G D K I I I G G V V			
UniRef90_C1DUZ3	I V N D R V D L A K V V D A D D G V I H H V G E E D P D V V E R E K T G K I I M G G V V			
UniRef90_F6B7A2	I V N D R V D V A F A V D A D G V I H H V G Q Q D D L P L E V A R Q I L P D K I I V G I			
UniRef90_U2T943	V V D D D V L A L E C A D D G V I H H V G Q D D D L S A E E A R R I L A G A D G I V G A			
UniRef90_UPI0003B49596	F V D D R L D I A L A T D A D G V I H H V G P D D M P I S M A R E L A P N L I I V G A			
UniRef90_E8LB15	I I N D R L D I A M A V G A A G V I H H V G Q Q D D L P C A A A R K I I L G E D Y I I G V V			
UniRef90_F9RHV4	I I N D R I D V A L A V D A D D G V I H H V G Q S D M P V E L A R Q L I G K N K I I I G G L			
UniRef90_C4ZG54	I I N D N V Q F A L D I A D D G V I H H V G Q Q S D M M N P A E A R K L I G D K I I I G G V V			
UniRef90_UPI00030EF6AF	L I N D R V D L A L A V I E A D G V I H H V G Q Q T D L P I A A A R Q L L G Q R I I I G G R			
UniRef90_Q9RGS5	I V N D D V A L A E E I G A D D G V I H H V G Q Q D D E A V D D F N N R F E G K I I I G L			
UniRef90_UPI0004662D4C	I I N D R V D V A L A V I G A D G V I H H V G Q D D L P L E A A V K T F V P D F I I V			
UniRef90_D3QIK6	I V N D N V A L A L K V Q A D G I H H V G Q Q D D A K V E D F F E Q F H D K I I I G L			

QUERY UniRef90\_UPI00046FA263 UniRef90\_UPI00037FACF6 UniRef90\_C2W3J4 UniRef90\_C5D2M8 UniRef90\_UPI00036ACFB7 UniRef90\_W4D6B3 UniRef90\_UPI00035E75EC UniRef90\_R9C1V8 UniRef90\_M8CYN9 UniRef90\_E1L3V6 UniRef90\_UPI00047909B2 UniRef90\_G4HJ99 UniRef90\_UPI00047A54BC UniRef90\_U5S6Y3 UniRef90\_UPI00031FCA9C UniRef90\_UPI0003B68253 UniRef90\_R5G7J6 UniRef90\_UPI000380D8BA UniRef90\_W7CII9 UniRef90\_F5LAE5 UniRef90\_UPI0002DE726B UniRef90\_W8QSP2 UniRef90\_Q3K1L6 UniRef90\_R5D147 UniRef90\_T0T7R3 UniRef90\_UPI00037DE93A UniRef90\_R5ZZD4 UniRef90\_K9CZ72 UniRef90\_UPI000381BD6E UniRef90\_UPI00035D19C0 UniRef90\_F0LJU7 UniRef90\_Q3IP34 UniRef90\_K2ED01 UniRef90\_D6Y0H0 UniRef90\_A5G7P5 UniRef90\_U9VU58 UniRef90\_R8W1N2 UniRef90\_R5MRZ7 UniRef90\_D1YXN6 UniRef90\_W3AGJ2 UniRef90\_D4K0Y4 UniRef90\_Q97RS5 UniRef90\_Q3AE34 UniRef90\_A4J232 UniRef90\_E8RE08 UniRef90\_I0JSY7 UniRef90\_L8LTG2 UniRef90\_C7NNW4 UniRef90\_W4QQ67 UniRef90\_B4VZU3 UniRef90\_G7ZQA0 UniRef90\_D4JBB6 UniRef90\_UPI0003B5728E UniRef90\_UPI00047DD273 UniRef90\_D9V3D6 UniRef90\_K9XA31 UniRef90\_I7IJ11 UniRef90\_H0J2N1 UniRef90\_F5ZJJ1 UniRef90\_UPI00036F8E9A UniRef90\_R5R058 UniRef90\_R5J2F7 UniRef90\_R6RD52 UniRef90\_R5TIG8 UniRef90\_R7DZK8 UniRef90\_Q1ATF5 UniRef90\_L0HJ99 UniRef90\_R97TA1 UniRef90\_K9FGB3 UniRef90\_V6M115 UniRef90\_E4RMU9 UniRef90\_U7PC59 UniRef90\_Q9HIQ4 UniRef90\_L9WH85 UniRef90\_W1RZK2 UniRef90\_UPI000476DA47 UniRef90\_M0IBH2 UniRef90\_L9ZPH2 UniRef90\_D4JUJ8 UniRef90\_C0FNC9 UniRef90\_C1DUZ3 UniRef90\_F6B7A2 UniRef90\_U2T943 UniRef90\_UPI0003B49596 UniRef90\_E8LB15 UniRef90\_F9RHV4 UniRef90\_C4ZG54 UniRef90\_UPI00030EF6AF UniRef90\_Q9RGS5 UniRef90\_UPI0004662D4C UniRef90\_D3QIK6

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



QUERY	170	180	190	200
UniRef90_UPI00046FA263	L I E A V R R Q G G A S L P I V G I	G G G I T I D N A A S P V I Q A G A D D G V I S M I S S	Q A G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_UPI00037FACF6	V I E L R R Q Q G G I T T V P L V G I	G G G I T T A A N T A P P V I R A G A D D G V I S M I S S	A A P P V I R A G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_C2W3J4	G L E E F R E A G G I T T V P L V G I	G G G I T T V E N A A S S V I E N A G A D D G V I S M I S S	A A S S V I E N A G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_C5D2M8	I I R F L R Q Q G G V D I P P L V G I	G G G I T T A E N A A S E V V I M E N A G A D D G V I S M I S S	A A S E V V I M E N A G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_UPI00036ACFB7	M I E E K M R R K Q G G I S L P I V G I	G G G I T T A E N A A S E V V I R A G A D D G V I S M I S S	A A S E V V I R A G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_W4D6B3	V I E E L R R R S G G L S I P P L V G I	G G G I T T L E E N A A P P V I R A G A D D G V I S M I S S	A A P P V I R A G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_UPI00035E75EC	M I K K M R N N G I L T I P I V G I	G G G I N L E E N A A G V V I A A G A D D G V I S M I S S	A A G V V I A A G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_R9C1V8	L I E K I V K E A N L T I P I V G I	G G G I T T A E Q T A R F Q V I E A G A D D G V I S M I S S	A A R F Q V I E A G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_M8CYN9	M I E H I R T Y E K T H V P L V A I	G G G I T T E Q T A R F Q V I E A G A D D G V I S M I S S	A A R F Q V I E A G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_E1L3V6	R I S K L K A E G L T L V C I V G I	G G G I T T L D N A R R E V I L Y A G A C G V V A V I S S	A A R R E V I L Y A G A C G V V A V I S S	S S S S S S S S S S
UniRef90_UPI00047909B2	L I E K L R K D G C E I P P I V G I	G G G I T T I E N A R R E V I D A G A D D G V I S M I S S	A A R R E V I D A G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_G4HJ99	L I R E L R E A G I R L P I V G I	G G G I T T I E R V R E E V I G A G A D D G V I S M I S S	A A R R E V I G A G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_UPI00047A54BC	F L K E L R A L D I Q L P I V G I	G G G I T T A E N A A N A P I I G A G A D D G V I S M I S S	A A N A P I I G A G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_U5S6Y3	F L K A I R K Q A S I N F P I V G I	G G G I T T E E N A N A V R S S G A D D G V I S M I S S	A A N A V R S S G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_UPI00031FCA9C	L I R K M R E A S I T I P I V G I	G G G I T T Q S T V T E V I N N G A D D G V I S M I S S	A A S T V T E V I N N G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_UPI0003B68253	A L T E I R Q A L G D F P I V G I	G G G I T T V D N M A A V R Q S G A D D G V I S M I S S	A A V R Q S G A D D G V I S M I S S	S S S S S S S S S S
UniRef90_R5G7J6	V K A I C E A V H I P V I A I	G G G I T T A D N I L L T L K G S G I C G I A V I S S	A A D N I L L T L K G S G I C G I A V I S S	S S S S S S S S S S
UniRef90_UPI000380D8BA	F L R I A R S L Y R D F P L V A I	G G G I T T T K N T H E T L E A G A D D G V I S M I S S	A A R S L Y R D F P L V A I	S S S S S S S S S S
UniRef90_W7CI19	F L I R A R R Q Y S D F P L V A I	G G G I D E S N A R H V R L S G A D D G V I S M I S S	A A R R Q Y S D F P L V A I	S S S S S S S S S S
UniRef90_F5LAE5	Y V I R Q V V E H I P F V A I	G G G I K L H N V D Q V I K A G A K R I C I V S S	A A V V E H I P F V A I	S S S S S S S S S S
UniRef90_UPI0002DE726B	Y I K E I R E Q L P G I P L V G I	G G G I K H N N A L K V I E A G A D D G V I S M I S S	A A R E Q L P G I P L V G I	S S S S S S S S S S
UniRef90_W8QSP2	L I N E V R Q H G L H I P I V G I	G G G I T Y E N A A P V I Q A G A D D G V I S M I S S	A A V R Q H G L H I P I V G I	S S S S S S S S S S
UniRef90_Q3K1L6	T T K A V R E I N Q D I P I V A I	G G G I T T S D F V H D I L E S G A D D G V I S M I S S	A A V R E I N Q D I P I V A I	S S S S S S S S S S
UniRef90_R5D147	L K A I C E A V D I P V I A I	G G G I T T K D N V K D L A G S G I C G I A V I S S	A A C E A V D I P V I A I	S S S S S S S S S S
UniRef90_T0T7R3	G L R E I R E L D K V I P I V A I	G G G I T T I G D V P S I C E S G A N G V I A V I S S	A A R E I R E L D K V I P I V A I	S S S S S S S S S S
UniRef90_UPI00037DE93A	Y V R E V A Q R I R I P F V A I	G G G I K L H N V D E I L R A G A T R I C A V S	A A V R E V A Q R I R I P F V A I	S S S S S S S S S S
UniRef90_R5ZZD4	L K A I C Q A V D I P V I A I	G G G I T T K E N V S E L K G S G I C G I A V I S S	A A C Q A V D I P V I A I	S S S S S S S S S S
UniRef90_K9CZ72	G I A T L R K T A G S M P I V A I	G G G I T T V D N A V A I V Q H G A D D G V I S M I S S	A A T L R K T A G S M P I V A I	S S S S S S S S S S
UniRef90_UPI000381BD6E	T G V R E I S L S K H P S V G I	G G G I N N S N A R D I I Q A G A D D G V I S M I S S	A A R E I S L S K H P S V G I	S S S S S S S S S S
UniRef90_UPI00035D19C0	E Y V S Y A A K N C P V W F A I	G G G I D A N N I N N V A I D A G A K R I A V V R R	A A Y A A K N C P V W F A I	S S S S S S S S S S
UniRef90_F0LJU7	E G L K K V V E S V K I P V V A I	G G G I N H E N V R K V L E I G V D G V I A V I S S	A A K K V V E S V K I P V V A I	S S S S S S S S S S
UniRef90_Q3IP34	L D R I R A V R D T S L P F V G I	G G G V T P D N A A P V I E A G A D D G V I S M I S S	A A R A V R D T S L P F V G I	S S S S S S S S S S
UniRef90_K2ED01	E Y V K W A S E N S D I P V W F A I	G G G I N L D N V D A V L N V G A S R I A V V R R	A A K W A S E N S D I P V W F A I	S S S S S S S S S S
UniRef90_D6Y0H0	G I R I Y R D A G I K M P V V A I	G G G I T P E N T P G I M K A G A D D G V I S M I S S	A A R I Y R D A G I K M P V V A I	S S S S S S S S S S
UniRef90_A5G7P5	K L A E I T H L L T I P L F A I	G G G I K P Y N V P E V I A A G A H G I A L V R R	A A E I T H L L T I P L F A I	S S S S S S S S S S
UniRef90_U9VU58	I R Y A V D H A P M P W F A I	G G G I D L R S N V A T V R E A G A P G I L A I V R R	A A Y A V D H A P M P W F A I	S S S S S S S S S S
UniRef90_R8W1N2	L R E I T S A V D V P V V A I	G G G I S A D N I L Q L L T G C G M Q G A A V V S S	A A R E I T S A V D V P V V A I	S S S S S S S S S S
UniRef90_R5MRZ7	E T L R S I C E A V D I P V V A I	G G G I N G K N I L K E L S H T G I D G V I A L V S S	A A L R S I C E A V D I P V V A I	S S S S S S S S S S
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UniRef90\_C4LDA5 S[T]H[D]P[V]I[E]L[A]E[A]L[T]I[R]P[S]Y[V]L[40]G[I]G[P]V[H]P[T]V[S]K[Q]D[A]A[E]V[N]G[T]M
UniRef90\_UPI0003FAE009 S[A]S[T]L[E]E[A]L[K]A[E]K[D]G[A]D[Y]V[L]G[I]G[P]V[H]P[T]V[S]K[Q]D[A]A[E]V[N]G[T]M
UniRef90\_D4CSK2 T[A]R[N]V[E]E[A]K[K]A[E]L[L]G[A]D[Y]V[L]G[I]G[P]V[H]P[T]V[S]K[Q]D[A]A[E]V[N]G[T]M
UniRef90\_S3J6U9 S[T]H[D]N[M]E[M]D[R]A[L]S[A]S[P]S[Y]V[L]G[I]G[P]V[H]P[T]V[S]K[Q]D[A]A[E]V[N]G[T]M
UniRef90\_Q6A9C4 S[A]Q[T]P[A]H[V]A[A]A[L]S[Q]G[R]D[Y]V[L]G[I]G[P]V[H]P[T]V[S]K[Q]D[A]A[E]V[N]G[T]M
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UniRef90\_R7AJZ1 T[A]K[T]L[E]E[Q]A[R]K[A]E[A]E[G]A[D]Y[V]L[40]G[I]G[P]V[H]P[T]V[S]K[Q]D[A]A[E]V[N]G[T]M

	170	180	190	200
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UniRef90_Q18GX9	KTIVTATIKTDANQSDIP V I V A I	GGGI T E P S N D T T Q P V L I R A G A G A D D G V V A V I S S		
UniRef90_AOA033UP97	QIIEENMRKLNQSDIP V I V A I	GGGI T E V E N D T V Q P L I R A G A G A N D G V V A V I S S		
UniRef90_R6PBC3	E R L R S I C Q A V A I P V V A I	GGGI K E E N D I T K E L L R D C G I I S G V V A V I S S		
UniRef90_UPI000367DF66	G V Q K A R N M T S L P I V G F	GGGI T T A N A A E V V I M R A S G A D D G V V A V I S S		
UniRef90_M1YWS6	ALVK E V I A G G M K L P V L A I	GGGI N L E R I P E V I M R A S G A H G V V A V I S S		
UniRef90_UPI0003460400	L V R R A A E L A E G R P W F A I	GGGI D A E N I G E E V I M R A S G A R R V V V R S S		
UniRef90_UPI000419CBD6	GLTNA L I K T N F P V V A I	GGGI N Q N E N I D D D I L R K T G V D D G V V A V I S S		
UniRef90_H6LID8	IAA I I C K S V T I P V V A I	GGGL N N E N I P E L L R A G T G A D D G V A V V I S S		
UniRef90_C8WIIY4	DGLAAITCAAVDIP V V A I	GGGL N N E N I P E L L R A G T G A D D G V A V V I S S		
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UniRef90_R7I0J2	EKLCTIRQSVDIP I V A I	GGGI T A E R L K E V I K R C G V D D G V V A V I S S		
UniRef90_U1N023	LTRQVRA L Y R E L P I V V A I	GGGI S P E H V P M I R Q N D G A D D G V V A V I S S		
UniRef90_B3GX82	FVKKAREAGIRKPKPI V V S I	GGGI S K A E H V A E L R R Q N D G A D D G V V A V I S S		
UniRef90_P57930	FVSTIRAHG I D K P L V A I	GGGI T T Q T N A E E L R R R G A N D G V V A V I S S		
UniRef90_U5UJA4	M I K Q L R Q K L G D F P M V A I	GGGI T E K N V A L I L A N A G A D D G V S V I S S		
UniRef90_W9AU74	L V R H T A A L A P A K P W F A I	GGGI D A D R L P E V I A A G A R R I V V V R S		
UniRef90_C6PN80	GLKE V C N S V K I P S V A I	GGGI N E T N F K E V V L S T G V N G I S V I S S		
UniRef90_H8Z602	GLKRAI C R E A P E L P K V A I	GGGI H A E H A G D D I L S T R A G A Q G G I A V V T S		
UniRef90_W6N5U3	GLKKVYGSVNI P V A V A I	GGGI N A E N F G D I L S T G V D G V I A V V T S		
UniRef90_B1XMV2	YVSYARET C P V P W F A I	GGSI D T E N L G E V V L A G A E R V I A V V R S		
UniRef90_B5ET97	GLLAFAVKESQ L P L V A I	GGGI N D S N I R E V V G D T G V D G I A V V R S		
UniRef90_UPI000347CFBE	LEAYVKAKCP P W F A I	GGGI D L K N L N G V I A K G A Q R V I A V V R S		
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UniRef90_F4A5C5	KGLNEITKRNIP S V A I	GGGI N K E N A K S V L E T G V N G S I S V I S S		
UniRef90_UPI0004709339	D L K R Q V A R I P D Y S T V A I	GGGI S I D R V P A V L E C G V G S I A V V S S		
UniRef90_K9UH06	YVQYAAKNATVP W F A I	GGGI D N T N L D D V L K A G A P G G V A M V R S		
UniRef90_U7UE36	LSE I C G C V N I P A V A I	GGGI T V I G N V D S I K G C G H C G I S V I S S		
UniRef90_K2FHK9	GLR T I Q N R A N I P V V A I	GGGI H E G N V D S K V R E T G A G I S V I S S		
UniRef90_G7WF00	KQLEVIKHSVSI P V V A I	GGGI G T T N L P L V R A G A G V D G V I S V V S S		
UniRef90_W0DAW8	L R Q A V K M T S K P L V A I	GGGI T H Y R V L K E V L S A G A K G I A V V S S		
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UniRef90_UPI0003B70863	G V G A L C E A T S K P V V A I	GGGI Q V A D R V P A L V R A G A G V S V I A V V R S		
UniRef90_M3V3P6	L V N S T A A T S P K P W F A I	GGGI D A A R V P E V V A R G A Q R I V V V R S		
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UniRef90_K0F8D2	L V R S T S D A H P T R P W F A I	GGGI D A H N L P E V I L G A G A T R V I V V R S		
UniRef90_UPI00037CTZ9	LKEIKKRVIH P V V A I	GGGI N G R T I P D F K G T G I D G F A I A S S		
UniRef90_UPI00047D7157	KGLKMI R P L F S K P L V C	GGGI H Q K N A A D I I K N G A N G V A I S S		
UniRef90_UPI0003152BAA	GLAALAAAS P L P T V A I	GGGI K V E H I E A Q L R A G A D G G L A V V S S		
UniRef90_S1P3R3	LTAI C Q A V Q I P V V A I	GGGI E Q T N I E A Q L R A G A D G G L A V V S S		
UniRef90_Q2JKL8	EYVRLAAEKAL P W F A I	GGGI D P H N L P E V L R R A G A T R V V A V V R S		
UniRef90_UPI0002002082	V R Q A A A E S A I P F F A I	GGGI E K E N L P S V L A T G A T Q V V A V V R S		
UniRef90_E3ZCR6	L L E I R R A G S I P I V G I	GGGI E K E N L P S V L A T G A T Q V V A V V R S		
UniRef90_R6KC24	T L L E L A G M M E D I P V V A I	GGGI S Y D N C C A E V L A T G A D G V I A V V S S		
UniRef90_K7W2Y5	EYVKYV S Q N C Q P W F A I	GGGI D M S N L N D V L M K A G A Q R V A V V R S		
UniRef90_B0CEK8	L R Y A N Q H A P M P Y Y A I	GGGI N E S N L G E V L A A G A G A Q R V A V V R S		
UniRef90_D7CJE1	T V R Q V A S F S P V P V I A I	GGGI T P E N A R E V L N A G A A G V A V I S S		
UniRef90_UPI0003651CBF	GSAALINQLS V H P S V G I	GGGI N K E N V A S V L S E S G C A G V S L V S S		
UniRef90_UPI0001E2F55F	LKA I C N C S V N I P V V A I	GGGI G A H N I S E V L S G T G I D G V A V I S S		
UniRef90_R5JXF1	D T L K A I C E A V S I P V V A I	GGGI T K D N I I S L K D S G I C G I S V I S S		
UniRef90_UPI00031EADCC	GLLAQAV S K S V L P L V A I	GGGI N S D N L D A V I A T K V A G I A V V R S		
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UniRef90_A3XJN1	GVRKVR S I T Q K P L V A I	GNM N A S N A R Q V V E A G A D C I A V V S S		
UniRef90_UPI0003B48F77	GLLQRIRRRKLSL P L V A I	GGGL D S S N A E Q V I R A G A D S L A V V S S		
UniRef90_C5UXN9	LKEMTQRK V S I P V V V I	GGGI N K E R I K D F K E T D I D G S L A I V S S		
UniRef90_UPI00046397A9	QFRDWRKQV E Q P V V A I	GGGI G L P E T A D I I R A G A D G I A V V S S		
UniRef90_R6P414	SNK I T S Y A N S I P V V G I	GGGI N S E N I M S V L E G Y G I D G V A V V S S		
UniRef90_UPI00036BC063	L R D V V E A V S I P V V A I	GGGI T A D N V D E V L A T G C A G I A V I G		
UniRef90_J9W8T1	E T L G K I K R L V D I P V V A I	GGGL K A D N V E A I D G A H V D G V A V V S S		
UniRef90_UPI0004724900	E L K Y V V K N I D I P F V A I	GGGI K E H N L V L E V L K K G A K C I A M V S S		
UniRef90_C0EZ08	E T L K A I C E A V N I P V I A I	GGGI G A D N L S L V L Q K G S G I C G I A V V S S		
UniRef90_I1KUN6	LKEV C L A S T L P V V A I	GGGI G L S N A R E V M K L G A N G V A V V S S		
UniRef90_E7B6U6	V L K Q M V E N T P D Y P T V A I	GGGI S I E R V P A V L A T G V G S V A V V S S		
UniRef90_UPI000368C7EE	L K N I V Q T V K I P V V A I	GGGI N V A N L D S V L A S E I S G I A V V S S		
UniRef90_R7PP04	L N A I C D S V D I P V V A I	GGGI C L D N I G R L A G S H A A G A A I V S S		
UniRef90_Q1MYG4	Q L S F W K N I Q H L P M V A I	GGGI K L E R I L S Q V A L T G V D S I A M I S S		
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UniRef90_M2QKG6	GLGEMLE D G T D V K A V A I	AGGI K S T N A L Q C L H G A D G L A V I S S		
UniRef90_S8B4F5	GTQAL L K A I L S D S P V V A I	GGGI N H S N T Q R V L A K G L D G V A I V S S		
UniRef90_R5P8D1	LKEIRPKNV D I P L V V I	GGGI N M N T L G N F K N I G I D G L A V V S S		
UniRef90_UPI0003777706	L V R A C A A T A P T R P W F A I	GGGI D D T R L P E V R T A G A D R I V V V R S		
UniRef90_UPI0004064131	L K D I C A A V P I P A N A I	GGGI N R S D N M Q L L K G A P I A G I C A V V S S		
UniRef90_Q2Y5Q6	L R Q G N L E I R I P I V A I	GGGI N S D N A Q E L I S A G A D A V I A V S N		
UniRef90_UPI00029B0E80	G T V E I A A L S K H S S V A I	GGGI N K T N A A D I L S T G T N G I A V V S S		
UniRef90_K9VHQ5	D Y V R Y A A T K S P W F A I	GGGI D N N L D E V L N A G A Q R V I A V V R S		
UniRef90_UPI00024905B6	K L H E L V E Q S V I P I V A I	GGGI T P A N A D V I K T G V A G I S G I S S		
UniRef90_M4YKP0	A I M D V R N A I E D V P I V A I	GGGL N R G N I L D V L A A G A D C P A V V S S		
UniRef90_C2FVP7	GLQK Y R R S R D K P L I A I	GGI H M N L Q N I A S V L Q A G A D A I A V V S S		
UniRef90_UPI00034C58BA	Y V K Y A A A H S P V P W F A I	GGGI D M D M V N D V L A A G A Q R V A V V R S		
UniRef90_C4LDA5	R L R E C V L Q S G D C P T V A I	GGGI S E E R V P Q V L A T G V G S V A V V S S		
UniRef90_UPI0003FAE009	LKEIKRKVSI P V V A I	GGGI N R E N V T L K E T N I D G V A V I S S		
UniRef90_D4CSK2	L K K I V A S V K I P V V A I	GGGI N I N N V G S L K N I G L Q G I C A V I S S		
UniRef90_S3J6U9	K L J A E H I Q T L G E Y S T V A I	GGGI S I D R V P A V L A T G V G S V A V V S S		
UniRef90_Q6A9C4	M R D V V N A S V W P V V C V I	GGGI S A S D A Q E D V A R V G C D G L S V V S S		
UniRef90_R5WS07	LKEI C S A V S V P V A V A I	GGGI T R Q N L Q E V L A G G K M A G A V V S S		
UniRef90_UPI0002EC1176	K V K Q W K K H I G A L P L V G I	GGGL T P E R A I G V L Q A G A N S V A V V T S		
UniRef90_B3EJ13	R I A E V T K T S I P V I A I	GGGI T E N S V C A V L R A G A S G I A V I S S		
UniRef90_UPI00037AE5B9	L V R Y A A S L A P A R P W F A I	GGGI D A D N L D Q V L D A G A R R I V V V R S		
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		210	220
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UniRef90_Q18GX9	A	I T T A D D P A A A T R K L Q G S V D T A	
UniRef90_A0A033UP97	A	I A K S Q N I E Q T V K G F H K Q Y K N	
UniRef90_R6PBC3	G	I Y A Q K D I E S A C Q R F L K L	
UniRef90_UPI000367DF66	A	I C G A L S P K D A A E E L R K A	
UniRef90_M1YWS6	G	I W N S T H I E D A S L Q Y M Q A I K	
UniRef90_UPI0003460400	A	I T E A E D P R A A A A D L K R R L E E Y	
UniRef90_UPI000419CBD6	A	I C H T D D P K S A A A L L K Q I H A A	
UniRef90_H6LID8	A	I F S K T D I V K A T Q V L R R L	
UniRef90_C8WYI4	A	I F A A E D I E E E T R R L R A A V Q A A	
UniRef90_UPI0002D9E602	A	I L D Q P N I T Q A A A E L K Q C L	
UniRef90_UPI0003693072	A	I C S A S C P Q T A A R T L R A I L E	
UniRef90_R7I0J2	A	I L D T Q D I R K A A E N L K N I W E K	
UniRef90_U1N023	A	I A S A P D V A M A T R R F	
UniRef90_B3GX82	A	I S L A S D V S Q A V K R L L	
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UniRef90_H8Z602	A	I E T A G D P Q A A A R A I R T Q V D L A R A	
UniRef90_W6N5U3	A	I L R S K N I T S A A K Q L K	
UniRef90_B1XMV2	A	I L M Q S A E P T L T A Q F F A A Q L H R Q Q T	
UniRef90_B5ET97	A	I C H A S S P K Q A S Q A L L G L M N	
UniRef90_UPI000347CFBE	A	I M Q A E Q P T L I T R Q F L S Q L	
UniRef90_W3V611	A	I T K A K D W R Q T T A Q L L H L V E	
UniRef90_F4A5C5	A	I L N K D N I K Q A A E E L L N I	
UniRef90_UPI0004709339	A	I T Q A P D W L A A T D T L L Q L I E N R R A N	
UniRef90_K9UH06	A	I M N A E N P T H A V I Q F C L G M L N R	
UniRef90_W7UE36	A	V F G A D D I K K A A E E L R K A V	
UniRef90_K2FHK9	A	I A S N E D P F S G V Q R L L	
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UniRef90_W0DAW8	A	I L G F E D V K K A T E E L V S A C R S Y	
UniRef90_A6C401	V	I C S H E H P G Q I T R E L L E Q L S N	
UniRef90_UPI000377B8E9	A	V C G Q A D P A A A T R R L W R E V Q R A K	
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UniRef90_UPI0003705BEB	G	I C S A P D P A K A A E N F R N Q I E K A	
UniRef90_K0F8D2	A	I T A A D D P Q S A A R A L K T A L	
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UniRef90_UPI00047D7157	A	I S K A K Y P E K E T K N L K E I I	
UniRef90_UPI0003152BAA	A	I C G T P D P E A A A R R F S A A	
UniRef90_S1P3R3	S	I F A Q E D I T Q S C I Q L K K E I W R H	
UniRef90_Q2JKL8	A	L M E A A D P T Q T A R T M L A E L Q	
UniRef90_UPI0002002082	A	I T E A A D P A Q A A R E L L E V L	
UniRef90_E3ZCR6	A	I T R S D N C Q A T I Q N L K N L	
UniRef90_R6KC24	A	I F A S D D C A L A T R K L	
UniRef90_K7W2Y5	S	L I E S D Q P T L A T Q Y F L S Q L H R I K	
UniRef90_B0CEK8	A	I M H A P S P T Q A V I Q Q M L K Q F	
UniRef90_D7CJE1	A	V W D S P D P W D Q M R R F I E M M R	
UniRef90_UPI0003651CBF	A	I M S A V N P A S A A S E L K E I I L K S K R	
UniRef90_UPI0001E2F55F	A	V F A Q P D	
UniRef90_R5JXF1	A	I F A E K D I T A A T K V L K E R	
UniRef90_UPI00031EADCC	A	I C H A D S P K Q S A Q E L L A Q I	
UniRef90_B4WH59	A	L M E A S D P S A V A R S L V E Q T Q Q	
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UniRef90_X6FZN0	I I N D F W R L A I E E D C D F I H V H I L	G Q E D L Q A A D T R I R A A G L R L L G L	V V V V C	V V V V C
UniRef90_F8IC76	I V N D R T D V A K A T Q A A D G V H V H I L	G Q E D M D V R D R R M A P G L T I V I I I G G A	V V V V C	V V V V C
UniRef90_B4SI22	I V N D D P A L A K A V G A A G V H V H I L	G G T D G D I P S A R A L L G A D I V I I I G R	V V V V C	V V V V C
UniRef90_L7KNB2	A V N D R A D I A T L A G A D I L H I L	G Q D D L P P A A A R R I V G A D I V I I I G R	V V V V C	V V V V C
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UniRef90_UPI00046ECA51	I I N D R L D I A L A K A D G L H I L	G Q E D L P L T V A R K I V G D M I I I I G V	V V V V C	V V V V C
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UniRef90_UPI00037604D8	F I N D Y W Q L A I K H Q A Y G V H I L	G Q E D M D V A D L P V I A D A G R L L G L	V V V V C	V V V V C
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UniRef90_D4Z0L7	I V N D S M A L A K R L K A D G V H I L	G Q G D G D P K E A R R R L L P S N V Q I I I G G	V V V V C	V V V V C
UniRef90_R5Y6X5	I L L D D K V H L V K R C K A D G V H I L	G K T D M P P A E A R R L L G N S I I I I G G	V V V V C	V V V V C
UniRef90_H2B178	M I N D R V D V A M A T D A D G V H V H I L	G Q D D M P I P M V R K L L P D K I I I I G W	V V V V C	V V V V C
UniRef90_A6L645	V I D D H V E L V K K I H A D G V H V H I L	G K K D M P P V A E A R G I L G N K F I I I G G	V V V V C	V V V V C
UniRef90_A9WDL8	I V N D R V D V A L A V D A D G V H V H I L	G Q D D M P P V A L A R R L I G N K L L L G V	V V V V C	V V V V C
UniRef90_S9Q5H8	L I N D R V D I A L A I G A E G V H I L	G Q D D M D C K T A R K I L G D D I I I I G V	V V V V C	V V V V C
UniRef90_K2GEV9	I I N D D P Q L A A D E C G A D G V H I L	G Q D D G G I A R A R A L L G A D I I I V G V	V V V V C	V V V V C
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UniRef90_W6M3D6	I I N D D V E L A V Q T I G A G V H I L	G R D D P A F S T V R A R L G E N A I I I G V	V V V V C	V V V V C
UniRef90_R7EJD4	I I D D H V E L A K K L H A D G V H I L	G K K D M P I A D A R R I L L G E Y I I I G G	V V V V C	V V V V C
UniRef90_C4R5Q8	L I N D R V D V A L A V D A E G V H V H I L	G Q T D M P P V L V R K L V G D M C I I I G V	V V V V C	V V V V C
UniRef90_H5USN5	A A N D R A D V A L A A G V D V L H V H I L	G Q D D L T P A Q V R R F C P D A V V I I I G L	V V V V C	V V V V C
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T C N T M E D I R L R T I Q K V D Y I V G L G P F R Y T T T K Q K L S P V L G V E  
U N I R E F 9 0 \_ R 5 V D M 2  
T C H H T F A E L G R A I A L R S Y I V S L G P I F S T T T S K K V R F G P Q G L A  
U N I R E F 9 0 \_ U P I 0 0 0 4 7 4 C 5 4 F  
S A S T L E E A M I A Q E Q G A D Y I V G I G S V Y S T S T K L D A K Y L A P D E  
U N I R E F 9 0 \_ U P I 0 0 0 3 7 8 F E A B  
S C H Y N K M E L A Q A L S N D E V D Y I V L A F G A L F S S M V K P D A V S A P L A L  
U N I R E F 9 0 \_ U P I 0 0 0 3 7 8 F E A B  
S S H D E A E L D R A L S V K P D Y I V L A L G P I Y P T L L K M K W H A E Q G L P  
U N I R E F 9 0 \_ A 6 W V K 8  
S T H S L P Q A Q A A I H D P D D Y F C V G P C W S T P T K P G R E A V I G L E  
U N I R E F 9 0 \_ D 6 Z F 1 0  
S A S S V E E A V K A V J E E G A D Y I V L G I G T L F A T Q T K T N K N I G T A  
U N I R E F 9 0 \_ B 8 M 2 M 4  
S T H G Y Y E M L R A K O L R S Y I V A L G H I F A T Q T K D M P S D P O G L R  
U N I R E F 9 0 \_ U P I 0 0 0 3 7 6 0 4 D 8  
S T H A D E E S A A A V I P G V D Y F C C G P I W P T P T K P G R H A P G P G  
U N I R E F 9 0 \_ D 2 B 6 1 0  
S S H D F A E L D T L A A K P D Y I V A L G P V F P T T L L K M K W A P Q G L E  
U N I R E F 9 0 \_ E 2 C B Z 6  
T A N T F E D V L H Y R A G A D Y I V G V G P F R F T T T K K N L S P V L G L E  
U N I R E F 9 0 \_ J 9 G I 1 9  
S T H D D A Q L A A A D A D R A D Y I V F C T G P C W S T P T K P G R T A T G L D  
U N I R E F 9 0 \_ L 7 L B S 3  
C H D S R H A M E A G E A G A D Y I V A F G A F Y P T T T K E T H Y R P D P S  
U N I R E F 9 0 \_ D 4 Z 0 L 7  
T A N T I E D I D L A G S C G V D Y I V G L G P F R F T T T K K L S P I L G M D  
U N I R E F 9 0 \_ R 5 Y 6 X 5  
S V G K V E E V E T L A Y W G P D Y I V G V G T V F P T E T K K N T K I P M G P R  
U N I R E F 9 0 \_ H 2 B 1 7 8  
T A N T F D D V K M H Y K A G A D Y I V G C G P F R F T T T K K D L S P V L G L E  
U N I R E F 9 0 \_ A 6 L 6 4 5  
S A H N L S E A L Q A V R D G A D Y I V G V G P I F A T T T K P D A A A P I G L D  
U N I R E F 9 0 \_ A 9 W D L 8  
S T N N I H E V D C A A A D G A D Y I V G I G S I Y D T N T K N V K E R I I G I T  
U N I R E F 9 0 \_ S 9 Q 5 H 8  
C H A S L D M A R A Q A D G A D Y V A F G R F F P S R T K P Q A P A D L A V  
U N I R E F 9 0 \_ K 2 G E V 9  
S T H D S A E L A V A Q A A D P D Y I V A L G P V W Q T K K V M K W A P Q T P E  
U N I R E F 9 0 \_ Q 1 Y F H 7  
T A N T Y E D V K K H W L D G V N Y I V G C G P F R Y T T T K Q K L S P I G Y K E  
U N I R E F 9 0 \_ R 6 A K 2 5  
T A N T L A D M A G L A A A G V S Y I V G L G P F R F T T T K A N L S P A G Y Q Q  
U N I R E F 9 0 \_ W 8 F 6 B 3  
S T H S P D Q V D A A L D S A D Y F C V G P L W A T P T K P G R P A T G L P L  
U N I R E F 9 0 \_ U P I 0 0 0 3 5 F F 3 6 3  
S C Y D R L D L A K A E R A G A D Y V A F G A V F P S P T K P T E I R A P L S L  
U N I R E F 9 0 \_ W 6 M 3 D 6  
T A N T F E D V L Q H Y K A G A D Y I V G C G P F R Y T T T K K N L S P I G Y T A  
U N I R E F 9 0 \_ R 7 E J D 4  
S T G K V E E A R Q A I K D G A D Y V G L G I V Y T T T K T H K K L P F G T L  
U N I R E F 9 0 \_ C 4 R 5 Q 8  
S T H S P E E Q L A A A L A E P D D Y F C T G P I W A T P T K P G R P G V G L D  
U N I R E F 9 0 \_ H 5 U S N 5  
S V H S F R E E A E A A F K K G A D Y I L A G H I F E T E C K H G L R P R G V E  
U N I R E F 9 0 \_ W 8 T 0 Y 5  
S V G F R E E V E T L A K W G P D Y I V G V G T L F P T L T K K N P K K A P M G P  
U N I R E F 9 0 \_ G 8 Z V Y 9  
S I E Y L E Q L K N E Q T E V A N H L G I S P V Y S T A T K T D T V T E W G I E  
U N I R E F 9 0 \_ D 5 B A 0 2  
T T K T V D Q A L L A Y N E G A D Y I V G V G A I Y P T T T K K V K T I L T S V E T  
U N I R E F 9 0 \_ U P I 0 0 0 4 7 B 8 D 6 5  
S T H S P E Q A K A A V A V G A D Y I V G V G P I F A T K T K E D V V A P V G F D  
U N I R E F 9 0 \_ B 6 W X X 7  
T C H N S R H A M E A G E A G A D Y V A F G A F F P T T T K E P P E M A E I  
U N I R E F 9 0 \_ K 5 X U 7 4  
S A G N I D Q A I A A K G G A D Y I V G I G A I Y G T Q T K D V S N K I M G P A  
U N I R E F 9 0 \_ R 9 A H Y 3  
S T H G Y F E I L R A K D L N P S Y I V A L G H I F P T T T K E M P S Q P Q G V T  
U N I R E F 9 0 \_ U P I 0 0 0 2 E D D 9 F 7  
S T H D D A E L D T A L A A E P D Y I V A L G P I F F T T L K S M R F A P Q G I P  
U N I R E F 9 0 \_ Q 1 Q J D 5  
S V I Q T L E E Q L A R I D A E R L D Y I V G L G P V F A T P S K H D H A E P I G F A  
U N I R E F 9 0 \_ U 7 P 6 8 1  
S T H C L E D I K N A E G E C G D Y I V G I G P I F P S E T K K Q L N P I G I D N  
U N I R E F 9 0 \_ A 2 C 4 4 0  
T A N T L E D V I S H A K A G A D Y I V G C G P F R Y T T T K Q R L S P I L G L E  
U N I R E F 9 0 \_ R 6 X K 2 3  
T V R G V E G A I A A R E A G A D Y I V G V G P V F G T T T K Q V P A P V L G V E  
U N I R E F 9 0 \_ L 7 U G 2 8  
S T H C H F E A I A K A H A R P S Y I V A Y G P V F P T T K S K D M P W P O G V K  
U N I R E F 9 0 \_ K 6 Z Y Q 7  
S T H D D T E L E T A L K H A P D Y I V A L G P I F P T T L K V M R F G P Q G I P  
U N I R E F 9 0 \_ W 3 R R L 0  
C Y G Q L E R A A A V Q A G A D Y I V A F G T P F P S P T K G T G K T P L T I  
U N I R E F 9 0 \_ W 4 M O D 2  
S A A T V A E A V A A Q A G A D Y I V G V G A V F G T S T K K N A R N L S V E K  
U N I R E F 9 0 \_ C O C H 7 8  
S V G S I K E L N T I G P D V D Y I V G I G P V F S T K T K V D A G A A V G L G  
U N I R E F 9 0 \_ R 5 E C Q 3  
S V H S I Q G A V A A E R H G A D F V V L G P I Y D T P S K R E Y S G P I G L Q R  
U N I R E F 9 0 \_ D 8 P H L 8  
S C N T K E H V Q K A I S D G A D Y I V G I G A V W G T S T K Q L T S P V I G V R  
U N I R E F 9 0 \_ F 8 N U 3 9  
T A N T F E D I Q N H I Q N G C D Y I V G L G P F R F T T T K E N L S P I L G L E  
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S T H K A E L A R A L E L K P D Y I V A L G P I Y P T T L K K M K W H Q Q G V T  
U N I R E F 9 0 \_ F 7 Z D T 2  
S C S T S A E V A A N Q L G D Y I V G S G P I Y P T V S K D D A D P V I G T A  
U N I R E F 9 0 \_ U P I 0 0 0 4 6 3 D 8 F 7  
S C K T P E Q A H Q A W L D G A N Y I V G C G G V F P T N T K K N N P T I G L  
U N I R E F 9 0 \_ U 5 D C J 2  
S T H D D A E L A R A V A L A P S Y I V A L G H I F P T Q T K A M P S A P Q G V E  
U N I R E F 9 0 \_ C 6 C N 7 8  
S C Y N W L D L A Q A E A G A S Y V A F G A C F A S E T K P N A V H A P L S L  
U N I R E F 9 0 \_ Y 0 K L 0 0  
S C H S E S D A E A E K L G C S Y I V A A G H I F A T D C K K G V M P R G L  
U N I R E F 9 0 \_ R 7 M J B 1  
S V S T V E Q A V A A E Q D G A D Y I V G V G S L F P T A T K Q D A T F M S R  
U N I R E F 9 0 \_ B 1 Y J 3  
S L K S L K Q L E G L E G A D Y I V G C G A I K P T A T K E S S V I L S L  
U N I R E F 9 0 \_ E 6 L 8 R 5  
S T H D D A E L E R A L A H A P D Y I V A L G P V W P S R L K P M H W A A Q G V E  
U N I R E F 9 0 \_ H 8 L 6 9 1

	170	180	190	200
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UniRef90_S6BEM7	L H R A R R E L P C P V V V A I	G G G I T A Q N N G Q P L I E A G A D L L A V I A		
UniRef90_E4Q309	M V K W A A E N S P L P F V V A I	G G G I K E H N L K D P V L E A N G A R G C A V I T S		
UniRef90_L9XR8B	P E R I A A I V E A V S L P V V V A I	G G G I T D N A K P V V V E A A G A R G C A V I T S		
UniRef90_UPI0003B55938	G L R R L T D G I A P P P V V A I	G G G I T A A N A R D C L D A G A D G I V I A V M G		
UniRef90_UPI00035E712A	L R E A R A T L D L P L C A I	G G G I T P A N A K P T V V V A T A G A D L L A V I Q		
UniRef90_Q1GTJ3	I L T W W Q G L F E L P C A I	G G G I T I D N A K T V L A D A G A D G I V I A V I S G		
UniRef90_E1SAT1	Q L N Q H L T R L S H L P T V A I	G G G I S I A R R A P E V L A T A G V G S L A V V V S T		
UniRef90_UPI0003633846	R I A I W K Q L V G A T P V I A I	G G G I N V E R I A G D V F K A Q G A D G S A A V V M T		
UniRef90_P25053	L S D I K Q R I S L P V I A I	G G G M T P D R L R D V F K A Q G A D G S A A V V S S		
UniRef90_A9AZD9	G L R A I V E A V D C P V V A I	G G G I T A Q H N V A E V V R A C G V A G I V V V S S		
UniRef90_F2G2T2	R L R K Y V A L C E G I P T V A I	G G G I N L A R N A A D V V A K T G V A G S I A V V S S		
UniRef90_H5SLW3	G L R R I V A Q A V R I P V V G I	G G G I T L D N A A E V I R A G A A N G V I A V I S S		
UniRef90_T0NCU7	R V L E E A K K I L N I P I F A I	G G G I N E H N V G R S I M Q Y G I S G V V A V I S S		
UniRef90_R7E1S6	I A G V R Q R L P E E F P V F C I	G G G I N G N T V L E S V V V E A G A S R N L A V I S A		
UniRef90_A8USJ4	L R E R A V R I S E K P L V C I	G G G I M P Y R V F E S V V K A G C R N L A V I S A		
UniRef90_M2NIQ9	G V I Q Q I L T A H D E V K T V A I	G G G I N A R N V Q R I M Y Q C A D G S L A V V S S		
UniRef90_V7IGC0	K L R R Y V Y Q Q A G N T P T V A I	G G G I T L E D N A P A V L I A T A R G V S L A V V S S		
UniRef90_M4WR86	L E Q A K A R I S N V P R V A I	G G G V T L D N A P E V L I A R G A G A D M I A V I H		
UniRef90_UPI00036F7624	R A E E T T G G A V E V P W F A I	G G G I D L G N A V E Q V L I A R A G A S R I V V V R		
UniRef90_UPI000368AAFF	L S E A R S T L P V V V A I	G G G I N M D N A A G Q V L I S A G A D M I A V I H		
UniRef90_A3WCR8	D T I E W W V K L F E I P V V A I	G G G I T P E N C A P L V R A G A G D F L A V I S G		
UniRef90_R7R228	L K R I R A A V A I P I V A I	G G G I K A D N V E E L K G T G I D G V I A V V S S		
UniRef90_A5VKA1	R L E R L N M I S E R P V V A I	G G G I D E E N M K V L H D T G V A G L A V I S S		
UniRef90_Q830K5	Q T L S E I A A A V T I P V V A I	G G G I K E E N I E Q L M G T G V A G V S L V S S		
UniRef90_X6FZN0	R L G E W K R R I A P T P V V A I	G G G L N P D R I E G V F G A G A D S A A V V T S		
UniRef90_F8IC76	G L R S L W Q E C R R I P V V A I	G G G I T P A N V G P L W Q L P V A G V I A V I S S		
UniRef90_B4S122	L R Q S A A L G V P R V A I	G G G L T P D N V G P I I D A G A D L V A V V S S		
UniRef90_L7KNB2	V R E V A A S E R R R K P W F A I	G G G I D E A R V P E V T A A G A R R I V V V R		
UniRef90_E8U9W2	V R W A A A H A P E D H P W Y A I	G G G I D H A T A P D V L I R A G A T R L A V V R		
UniRef90_UPI000412275C	V R H T A R R W G T D R P W F A I	G G G I G P E R L S E V L D A G A E R I V V V R		
UniRef90_Q82UQ7	L T A A K K K L G I P V V A I	G G G I D L D N A G M L I A S G C D A V A V S Q		
UniRef90_UPI0001E2D8C2	Y L K F V I Q N V I S I P Y V A I	G G G I K E H N D E V I G R G A K C A M V S		
UniRef90_R2Q8J6	E A I I Q G V I H V P V V A I	G G G V K E A N V M D F Q R V P I H G L C M V S		
UniRef90_R5VDM2	G Y Q K M S R E G I S I P V F A I	G G G I Q D A D F I P L M Q T G I Q G I A L S G		
UniRef90_UPI000474C54F	I L S W W S A L F E I P C V A I	G G G I T P A A A P L V A A G A D F V A V S G		
UniRef90_W7TKQ7	R L R Q W R H L V D V P L V A I	G G G I G L E A A A Q G V R D A G A D G I C V I S S		
UniRef90_UPI00046ECA51	L R R I R E A V K I P I G I	G G G I N E K N V S E L M E T D I D G V I A V S S		
UniRef90_UPI000378FEAB	F A E T D M A A N K A P A L V G I	G G G I D D Q N A A S V I H A G A D S I A V I S		
UniRef90_A6WVK8	R L G Q W K A R I G D I P L V G I	G G G M S V E R A P G V F E A G A D I V S V V T		
UniRef90_D6ZF10	L V A Q V A A L G A E K P W F A I	G G G I T D L E R V P Q V R S A G A S R A V V V R		
UniRef90_B8M2M4	G V K T I L R L N R T V G T V A I	G G G I N L S N V Q R V L Y Q S A D G S I A V I S		
UniRef90_UPI00037604D8	R L A K Y A Q L L A G T P T V A I	G G G I N L E R A P A V W K T G A D G I A V V T		
UniRef90_D2B610	L L R H A A S L G T D R P W F G I	G G G I D L A N L D E V I S Y G V R R V V V V R		
UniRef90_E2CBZ6	K L R I W K E R I G D I P L V A I	G G G I T P E R A S A A L D T H G A D I A S V V T		
UniRef90_J9GI19	G Y A R M K E A G I E L P V V A I	G G G I T Y E D I P A I L Q T G V R R I A L S G		
UniRef90_L7LBS3	L V R A A A R P A G K P W F A I	G G G I D A A R V G A V T A Q G A D R I V V V R		
UniRef90_D4Z0L7	I L L G W W T A L F E L P C V A I	G G G I T A D N A P L V K A G A D F L A V I S G		
UniRef90_R5Y6X5	G Y K H C R E K K Y S L P V A I	G G G I T L D D I P E L M A T G I T G I A L S G		
UniRef90_H2B178	G V A R I L I T A L E D N K A V A I	G G G L H P T N I E R V L M K R S L D G I A V S		
UniRef90_A6L645	G Y R Q M K E A N I H L P T V A I	G G G I T L E D I P S I M E T G I T G I A L S G		
UniRef90_A9WDL8	G L R A I R Q H V S I P L V A I	G G G I N Q A N A A D V M R A G A D G I A V V S		
UniRef90_S9Q5H8	G L R N I L Q H M S K M P R V A I	A G L N E T N A Q R V I Y L S I D G I A L V S		
UniRef90_K2GEV9	L R A A R A A L T L P R V A I	G G G V N A D N A P A L I D A G A D I L A V I H		
UniRef90_Q1YFH7	R L G V W R Q R I G D L P L V A I	G G G I T V E R P Q V F A Q G A D S A A V I T		
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UniRef90_W8F6B3	L L A Q F R A A G H G V P V I G I	G G G I T L A Q N V A E V C A T G L H G V A V A G		
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UniRef90_W6M3D6	L R E A R A A L Q V P T V A I	G G G I T P E N A P V L L E A G V D A L A V I S		
UniRef90_R7EJD4	I T H R M Q E K D I H L P T V A I	G G G I T L A D I P A V M Q T G V S G I A L S G		
UniRef90_C4R5Q8	G I R E I L T V L L N I K T C A I	G G G V N Q T N V Q K V L Y Q G L D G V A I V S		
UniRef90_H5USN5	L V R A A A E S G T E T P W F A I	G G G V S H E T I G E V V D A G A T R V V V V R		
UniRef90_W8T0Y5	F L K Q I R R A V P G V K L V A I	G G G I M P G N A R E A I S A G A D G I A V M S		
UniRef90_G8ZVY9	Q G A I K V L D A N V C R T V G I	G G G L H P V N I G R V L K R A L D G I C V V S		
UniRef90_D5BA02	G I K K I R T L I T K P L I A I	G R M D A G N A G E I I K A G A D C I A V V S		
UniRef90_UPI00047B8D65	L N D I C S A V I P V V A I	G G G I N K D N L H V L K G S P I A G I C A V V S		
UniRef90_B6WXX7	Y L D W V A A N I T I P V V A I	G G G I K E H N I A D V A R H G A R C C C A V V S		
UniRef90_K5XU74	E T L K L W A E T M E I P C V A I	G G G I T A E N C A P L V E V R A E F V A V S G		
UniRef90_R9AHY3	G A R A V L J A H S P L K T V V I	G G G I K S D N V L R V L H G V D S G L A V V S		
UniRef90_UPI0002EDD9F7	K L R L Y Q K L I G D Y P T V A I	G G G I D L S T A Q A V W S A G V S L A V V V R		
UniRef90_Q1QJD5	K I A E W K K R V G N I P T V A I	G G G I K L E Q A A A E L F D A G A D S I A V V S		
UniRef90_U7P681	G L A T L A A S P L P G V A I	G G G I K A E H V A A T R Q A G A Q G L A V I S		
UniRef90_A2C440	L K K G L S E A S L P A F A I	G G G I N K S N I T K L N Q I N N L R I A V S N		
UniRef90_R6XK23	G Y R H I I D G M K E A P T V A I	G G G I T I P D I P D I M K T G V T G L A L S G		
UniRef90_L7UG28	G L A R V V K G S P L P V V G I	G G G V G L D N M P W V A A T G V H G A V V S		
UniRef90_K6ZYQ7	G L A Y W K L L D Y P L V A I	G G G I D L E S A K D H A L G V S G I A G M I S S		
UniRef90_W3RRL0	R I T E W K R R V G E I P L V A I	G G G I K L E Q A K E I F E A G A D S I A V V S		
UniRef90_W4MOD2	Y R E V K Q H V S V P V F A I	G G G I N A G N A Q Q I R D A G A D A I S V V S		
UniRef90_C0CH78	L R E I C A A V T I P V V A I	G G G I H A L N A R K L S S Q V D G V A V I S		
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UniRef90_E3DVL0	I V N D R V D I A L F A N I H R V Q L	P D H S F S A K R V R A R F P H S H I I G R	I L F A N I H R V Q L	
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UniRef90_I4A399	I V N D D L E I A H F T H A N G V H H L	G K E D E S P E I A R E L L G A D K I I G G G	I L H F T H A N G V H H L	
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UniRef90_I0IKN7	I V N T R L D M A L S I H A I G L H H L	P E D H I P M D V I R K K K P D R N F I G G V	I L S I H A I G L H H L	
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