

QUERY UniRef90\_F6XQG8 UniRef90\_UPI0003B39B04 UniRef90\_UPI0003F09BC1 UniRef90\_L9KMT3 UniRef90\_UPI00032B28A5 UniRef90\_Q8CJ16 UniRef90\_H3BGS8 UniRef90\_I3MC99 UniRef90\_F6U6G0 UniRef90\_UPI00042BBB9C UniRef90\_UPI0003AD7C78 UniRef90\_UPI000328FFB9 UniRef90\_UPI00032B18F0 UniRef90\_W5UF14 UniRef90\_UPI000443E043 UniRef90\_UPI00038C287D UniRef90\_HOXUM3 UniRef90\_UPI00046B5B2C UniRef90\_UPI00044194F4 UniRef90\_G3VR62 UniRef90\_UPI0003C88104 UniRef90\_W5M6U1 UniRef90\_UPI000333F943 UniRef90\_UPI0002C687B7 UniRef90\_UPI000392D958 UniRef90\_UPI0003F115E0 UniRef90\_HOX0R3 UniRef90\_F6TRE7 UniRef90\_UPI0002C42C07 UniRef90\_G5BK31 UniRef90\_UPI000395A629 UniRef90\_H3BH42 UniRef90\_A7VK02 UniRef90\_UPI000462AA8E UniRef90\_G1KE28 UniRef90\_UPI0003C841F9 UniRef90\_HOV981 UniRef90\_I3MJY8 UniRef90\_UPI0003C27E25 UniRef90\_G3N0B7 UniRef90\_F6VNA0 UniRef90\_Q311V2 UniRef90\_W5M875 UniRef90\_G3UD10 UniRef90\_UPI00033186B7 UniRef90\_UPI00034F9F45 UniRef90\_G3WJU7 UniRef90\_UPI0003315F7C UniRef90\_H3B0M0 UniRef90\_I3JJX2 UniRef90\_U3J988 UniRef90\_UPI0003C2ACF6 UniRef90\_G1TMY8 UniRef90\_G1TSM6 UniRef90\_UPI0003C15CA3 UniRef90\_UPI00046B3B5A UniRef90\_UPI00034FE9A0 UniRef90\_UPI0003C124AF UniRef90\_UPI000328A62F UniRef90\_V9KK00 UniRef90\_UPI000333B9F1 UniRef90\_K7GHR8 UniRef90\_M3YBM7 UniRef90\_Q8VCA5 UniRef90\_UPI0002C4465B UniRef90\_S7Q953 UniRef90\_UPI000441E334 UniRef90\_UPI00033156B6 UniRef90\_UPI00034F8533 UniRef90\_F1MYZ1 UniRef90\_F6TN33 UniRef90\_HOVFK0 UniRef90\_W5LZM8 UniRef90\_A6QXP2 UniRef90\_UPI0004574251 UniRef90\_I3JFI9 UniRef90\_UPI00042BB068 UniRef90\_W5KN48 UniRef90\_UPI00035015F2 UniRef90\_UPI0002A4BF76 UniRef90\_UPI0004440A27 UniRef90\_R0KF50 UniRef90\_L9KX10 UniRef90\_W5MIF5 UniRef90\_UPI000359C2D0 UniRef90\_UPI0004443929 UniRef90\_UPI0003F12F23 UniRef90\_K7FE41 UniRef90\_UPI000440D5E5 UniRef90\_F6RCG6 UniRef90\_Q6NUF5

QUERY UniRef90\_F6XQG8 UniRef90\_UPI0003B39B04 UniRef90\_UPI0003F09BC1 UniRef90\_L9KMT3 UniRef90\_UPI00032B28A5 UniRef90\_Q8CJ16 UniRef90\_H3BGS8 UniRef90\_I3MC99 UniRef90\_F6UG0 UniRef90\_UPI00042BBB9C UniRef90\_UPI0003AD7C78 UniRef90\_UPI000328FF9B UniRef90\_UPI00032B18F0 UniRef90\_W5UF14 UniRef90\_UPI000443E043 UniRef90\_UPI00038C287D UniRef90\_HOXUM3 UniRef90\_UPI00046B5B2C UniRef90\_UPI00044194F4 UniRef90\_G3VR62 UniRef90\_UPI0003C88104 UniRef90\_W5M6U1 UniRef90\_UPI000333F943 UniRef90\_UPI0002C687B7 UniRef90\_UPI000392D958 UniRef90\_UPI0003F115E0 UniRef90\_HOX0R3 UniRef90\_F6TRE7 UniRef90\_UPI0002C42C07 UniRef90\_G5BK31 UniRef90\_UPI000395A629 UniRef90\_H3BH42 UniRef90\_A7VK02 UniRef90\_UPI000462AA8E UniRef90\_G1KE28 UniRef90\_UPI0003C841F9 UniRef90\_H0V981 UniRef90\_I3MJY8 UniRef90\_UPI0003C27E25 UniRef90\_G3N0B7 UniRef90\_F6VNA0 UniRef90\_Q311V2 UniRef90\_W5M875 UniRef90\_G3UD10 UniRef90\_UPI00033186B7 UniRef90\_UPI00034F9F45 UniRef90\_G3WJU7 UniRef90\_UPI0003315F7C UniRef90\_H3B0M0 UniRef90\_I3JJX2 UniRef90\_U3J988 UniRef90\_UPI0003C2ACF6 UniRef90\_G1TMY8 UniRef90\_G1TSM6 UniRef90\_UPI0003C15CA3 UniRef90\_UPI00046B3B5A UniRef90\_UPI00034FE9A0 UniRef90\_UPI0003C124AF UniRef90\_UPI000328A62F UniRef90\_V9KK00 UniRef90\_UPI000333B9F1 UniRef90\_K7GHR8 UniRef90\_M3YBM7 UniRef90\_Q8VCA5 UniRef90\_UPI0002C4465B UniRef90\_S7Q953 UniRef90\_UPI000441E334 UniRef90\_UPI00033156B6 UniRef90\_UPI00034F8533 UniRef90\_F1MYZ1 UniRef90\_F6TN33 UniRef90\_H0VFK0 UniRef90\_W5LZM8 UniRef90\_A6QPX2 UniRef90\_UPI0004574251 UniRef90\_I3JF19 UniRef90\_UPI00042BB068 UniRef90\_W5KN48 UniRef90\_UPI00035015F2 UniRef90\_UPI0002A4BF76 UniRef90\_UPI0004440A27 UniRef90\_R0KF50 UniRef90\_L9KX10 UniRef90\_W5MIF5 UniRef90\_UPI000359C2D0 UniRef90\_UPI0004443929 UniRef90\_UPI0003F12F23 UniRef90\_K7FE41 UniRef90\_UPI000440D5E5 UniRef90\_F6RCG6 UniRef90\_Q6NUF5

QUERY	90	100	110
UniRef90_F6XQG8	R L L E V I S V C D D P	R G R F L A A T L C C	Q D D C G G R R K L P
UniRef90_UPI0003B39B04	N M W H F R E R	T S G K V I A L Q C C C	F D C G G A R R K L P
UniRef90_UPI0003F09BC1	E A W Q P R D N C	T S G Q V I V S L K C C C	S D C G G A R R K L P
UniRef90_L9KMT3	E V W Q P R N S	A S G Q V I V S L K C C C	S A C G G A R R P L L
UniRef90_UPI00032B28A5	E A W H L R D N C	T S G R V I V S L K C C C	S E C G G A R R P L L
UniRef90_Q8CJ16	E A W Q P S T N C	P S G R I V V S L K C C C	S E C G G A R R P L L
UniRef90_H3BGS8	N M W H F R E T	T S S K V V V S L K C C C	Y E C G G I R S S
UniRef90_I3MC99	E V W Q L R D N C	T S G Q V I V S L K C C C	S E C G G T R R K L L
UniRef90_F6U6G0	R L L D I L T V C E	P S G G R F L S V Q C C C	S E D C G G R K S
UniRef90_UPI00042BBB9C	D M W Q V R S S	A S G R I V A L K C C C	S E C G G M R S S
UniRef90_UPI0003AD7C78	E V W Q P R D S	A S G L I V A L R C C C	S E C G G A R R P L L
UniRef90_UPI000328FF9B	E V W Q R R D N C	T S G R I V S L K C C C	S E C G G A R R P L L
UniRef90_UPI00032B18F0	K L Y H S E T S S	K V V V S L R C C C	I R C G G V K S S P
UniRef90_W5UF14	K I G T A L Y P C H	E K Q I V Q V L C C C	Q D C G G R R R M L L P
UniRef90_UPI000443E043	E V W Q S R E D N C	T S G R V I V S L K C C C	S E C G G A R R P L L
UniRef90_UPI00038C287D	K L Y Y S D S C	S S R M V V S L Q C C C	I Q C G G V R S S
UniRef90_HOXUM3	E V R Q P R N N C	T S G Q V I V S L K C C C	S E C G G A R R P L L
UniRef90_UPI00046B5B2C	E V W Q P R N N C	T S G Q V I V F L K C C C	S E C G G A R R P L L
UniRef90_UPI00044194F4	R L R E A I F V C E	L T G R F L A T L C C C	Q D C G G R R K L
UniRef90_G3VR62	K L Y T S N V	F S K T V V S L R C C C	I E C C G T
UniRef90_UPI0003C88104	K L Y H S D V	S S K R V V S L R C C C	I E C C G
UniRef90_W5M6U1	K I K E V L S A C D	E N G R I L S V N C C C	Q D C G G R R K L
UniRef90_UPI000333F943	R L Y L S D S	S S Q S V V S L R C C C	I E C C G V Q S S
UniRef90_UPI0002C687B7	K L Y H S D V	S S K T V V S L R C C C	I E C C G V S S S
UniRef90_UPI000392D958	D M W Q V R S S	Q S S G R I A A L K C C C	S E C G G L R R R
UniRef90_UPI0003F115E0	K L F H S D V	S S K T V V S L R C C C	I D C C G
UniRef90_HOX0R3	K L Y H S N T	S S K K V V S L R C C C	I A C C G
UniRef90_F6TRE7	E M W K P R S S	A L G Q V I A L K C C C	S E C C G
UniRef90_UPI0002C42C07	R L F H S D S	L K R V V S L R C C C	I E C C G
UniRef90_G5BK31	K L Y S S D A	F S H T V V S L R C C C	I E C C G V R S
UniRef90_UPI000395A629	K L Y S S G S	A S E S V V S L R C C C	I E C C G L
UniRef90_H3BH42	K I Q S V L E D G S	V I S G A T V S L T C C C	S D C C G H
UniRef90_A7VK02	K L Y H S D V	T S N T V V S L R C C C	I E C C G
UniRef90_UPI000462AA8E	E R W Q I R S R	S S G R I V A L K C C C	S E C G G M R
UniRef90_G1KE28	K L Y N S K S	S S R S L V S L Q C C C	I D C C G T
UniRef90_UPI0003C841F9	E V W Q P R D S	T S G Q I V S L K C C C	S S C G G S R K V
UniRef90_HOV981	F Y K K L T L S	D T S S R S M V S L R C C C	V E C C G V R S
UniRef90_I3MJY8	K L Y H S D S	S S N T V V S L R C C C	I E C C G
UniRef90_UPI0003C27E25	R L Y N S D S	A L G T V V S L R C C C	I K C C G
UniRef90_G3N0B7	D S W G P G L R S D	P S Q Q Y V A L Q C C C	S H C G G L R A M
UniRef90_F6VNA0	K L Y N S D V	S S K M V V S L R C C C	I E C C G T A S
UniRef90_Q311V2	K L Y H S D A	S S K A V V S L R C C C	I A C C G
UniRef90_W5M875	N A T H V S R T Q	C I S G K V T S L K C C C	L E C C G S R P
UniRef90_G3UD10	E L Y K R L F H S	T T S K T V V S L R C C C	I E C C G
UniRef90_UPI00033186B7	E L W Q P P S H N	T S G R I V S V Q C C C	S A C G G A R S L
UniRef90_UPI00034F9F45	F Y T S I Q Y S S Y	S S G Y V V S L R C C C	I S C C G
UniRef90_G3WJU7	I W Q H R N S	T L G Q V V S L K C C C	S E C C G I Q P L L
UniRef90_UPI0003315F7C	T I Q E S L S R S L C	P S Q R Y V S L Q C C C	S H C G G L R S L V P
UniRef90_H3B0M0	S L T L M S D V I E	P S G R V L A V Q C C C	Q D C G G R R K V P
UniRef90_I3JJX2	K I K D S L Y P C D	E S R E V L T L C C C	Q D C G G R R S F
UniRef90_U3J988	R L Y T S N V	T S G K V V S L R C C C	I Q C C G
UniRef90_UPI0003C2ACF6	G L A E V V T A C W	S S G A R A E A E L C C C	T E C G G R R K L P
UniRef90_G1TMY8	K L Y H S D T C	S S K A V V S L R C C C	I E C C G
UniRef90_G1TSM6	E V W L P R D N C	T S G R V V S L K C C C	S E C C G
UniRef90_UPI0003C15CA3	T I Q E S T Y T S D C	P S Q Q Y V A L Q C C C	S H C G G L R A M
UniRef90_UPI00046B3B5A	E L Q V I Q N S S G T	L S G S L V S L H C C C	F A C C G
UniRef90_UPI00034FE9A0	L Y I S T E Y S S C	P S G Q V V S L R C C C	I S C C G
UniRef90_UPI0003C124AF	E V W Q P R X G T	A S G Q I I S L E C C C	S K C C G A R P
UniRef90_UPI000328A62F	A L H Q S L V Y V R E	C A S G R V I S L Q C C C	I A C C G Q R M
UniRef90_V9KK00	S I Q S L L R D G S S	S D K K V V S L V C C C	E Q C C G V R
UniRef90_UPI000333B9F1	T I Q E S L R S D C C	P S Q H Y V S L Q C C C	A H C G G L R
UniRef90_K7GHR8	K L Y K S A S	V I S G A V V S L R C C C	V K C C G L S S
UniRef90_M3YBM7	F S K M F I S N D I C	A S K T V V S L R C C C	I E C C G
UniRef90_Q8VCA5	E L Q V I Q N G S R S C	L S G S L V S L R C C C	L D C C G K
UniRef90_UPI0002C4465B	A L H H S V Y V R E	C A S G H V T L K C C C	T A C C G L R S
UniRef90_S7Q953	T H Q S V Y V R E G	C A S G R V V T L K C C C	T A C C G L R M
UniRef90_UPI000441E334	K L Y N S N W	P S E H A V S L R C C C	I R C C G T
UniRef90_UPI00033156B6	L Y K K L Y P S D A	V L K M V V S L R C C C	I E C C G
UniRef90_UPI00034F8533	L Y N N L Q Y S A T C	A S G N I V S L R C C C	I E C C G L
UniRef90_F1MYZ1	T H H S V Y T R E G	C T S G H V V T L K C C C	S A C C G L R
UniRef90_F6TN33	G L Q V P D L R G P C	P S S V V S L R C C C	T A C C G
UniRef90_HOVFK0	E L W Q P R D N C	T S G R I V S L K C C C	S E C G G A R P L
UniRef90_W5LZM8	L Q R Q L S S S N S C	A S D A V V T L R C C C	T A C C G A R R G P
UniRef90_A6QPX2	E L Q V I Q N S S G P	L S G S L V S L Q C C C	L A C C G Q
UniRef90_UPI0004574251	R I Q M V L L S T R	H S G K V A S L K C C C	L D C C G S P
UniRef90_I3JF19	Q Q A T A D R S V C	N S G S V V S L S C C C	S D C C G K
UniRef90_UPI00042BB068	R L S E V V S I C D	P T G Q F L A T L C C C	Q
UniRef90_W5KN48	A I S T N L S R T E	C S S G K V I T L K C C C	L E C C G S R P
UniRef90_UPI00035015F2	L Y K N L Q Y S A T C	T T G T M V S L R C C C	I N C C G L
UniRef90_UPI0002A4BF76	L Q S A A F S E S Q C	S S G M V T T L K C C C	L E C C G S P
UniRef90_UPI0004440A27	V H Q A T T D R S V R	G S V V S L K C C C	S D C C G Q
UniRef90_R0KF50	I Q Q S L N S S Q C	L T G K Y V S L R C C C	T T C C G Q R L L
UniRef90_L9KX10	E L Q V I Q N S S G P	L S G S L V S L Y C C C	H A C C G
UniRef90_W5MIF5	L I Q D V T D R T V	S S G M V I S L T C C C	S D C C G E R S
UniRef90_UPI000359C2D0	Q V T S L H N R E E	C T S G N V I T L K C C C	L A C C G T R
UniRef90_UPI0004443929	E L R Q L V L S K S C	S N N R V A T L Q C C C	T D C C G S R
UniRef90_UPI0003F12F23	E L Q V I Q N P S G P	L S G S L V S L H C C C	L A C C G
UniRef90_K7FE41	N A S H L R E E	T S G N I T L K C C C	L E C C G T R S
UniRef90_UPI000440D5E5	S L Q Q F R Y		
UniRef90_F6RCG6	T Q Q L I N P S E Y C	S S G N V I T L K C C C	V V C G L R P
UniRef90_Q6NUF5	F Y T S V Q Y S S Y C	Y S G N V V S L H C C C	L S C C G



UniRef90\_UPI0004545E97  
UniRef90\_UPI0004444007  
UniRef90\_G1TCR7  
UniRef90\_UPI000443C8C3  
UniRef90\_W5K2S5  
UniRef90\_UPI0003345184  
UniRef90\_I3LQG6  
UniRef90\_UPI00032ADA91  
UniRef90\_G5BHK7  
UniRef90\_UPI0003EAFD11  
UniRef90\_UPI0003C12EFA  
UniRef90\_UPI0003315020  
UniRef90\_UPI0003C28E9D  
UniRef90\_H2UB72  
UniRef90\_UPI00022F6D9D  
UniRef90\_UPI00042BC878  
UniRef90\_UPI000388EB4F  
UniRef90\_G3N9A0  
UniRef90\_F6VM88  
UniRef90\_H2S216  
UniRef90\_UPI0003D0E19B  
UniRef90\_F7C9D1  
UniRef90\_F6Y7X7  
UniRef90\_F6YP97  
UniRef90\_I3JDG1  
UniRef90\_UPI0003C80591  
UniRef90\_UPI0002BCF1A4  
UniRef90\_F1NC10  
UniRef90\_M3YCS8  
UniRef90\_F1QHB3  
UniRef90\_UPI00034F2A4A  
UniRef90\_UPI0003292CB2  
UniRef90\_UPI00034FBD72  
UniRef90\_W5KYS8  
UniRef90\_UPI0002990AA8  
UniRef90\_UPI00034FCBDE  
UniRef90\_G3WVK5  
UniRef90\_UPI0002038E2C  
UniRef90\_G3VQ30  
UniRef90\_F6QZA7  
UniRef90\_G5B7G2  
UniRef90\_G3TA31  
UniRef90\_L5KKR9  
UniRef90\_Q4T860  
UniRef90\_UPI0004422BDE  
UniRef90\_B0UXG9  
UniRef90\_UPI000395C1B9  
UniRef90\_U3JU13  
UniRef90\_UPI0002C31C44  
UniRef90\_W5K9Q4  
UniRef90\_F7CJN2  
UniRef90\_F1N9M8  
UniRef90\_L5M0R9  
UniRef90\_UPI0002741B33  
UniRef90\_H9GCR0  
UniRef90\_UPI00038C4913  
UniRef90\_UPI0003500DAC  
UniRef90\_M4AHP4  
UniRef90\_H3CQQ4  
UniRef90\_W5PKW5  
UniRef90\_B5X327  
UniRef90\_H2LSJ2  
UniRef90\_F7CJL1  
UniRef90\_UPI000333447F  
UniRef90\_U3IVM0  
UniRef90\_UPI00038724BA  
UniRef90\_W5LR38  
UniRef90\_UPI0003D091D7  
UniRef90\_F1Q9E1  
UniRef90\_G3Q9U9  
UniRef90\_V9KZK1  
UniRef90\_UPI0003C855F7  
UniRef90\_F7G3H0  
UniRef90\_F6TMW2  
UniRef90\_UPI000443F383  
UniRef90\_S9Y1X1  
UniRef90\_W5K2S9  
UniRef90\_K7FEA6  
UniRef90\_Q28DA4  
UniRef90\_A5PF55  
UniRef90\_UPI00027F8966  
UniRef90\_UPI0003EC3B64  
UniRef90\_H2UA74  
UniRef90\_UPI0003C11B05  
UniRef90\_UPI00034407B4  
UniRef90\_W5MI98  
UniRef90\_I3KFY0  
UniRef90\_UPI000299050E  
UniRef90\_HOYBM5  
UniRef90\_H3CCZ6  
UniRef90\_H3CQQ3  
UniRef90\_A2BGB9

1 10 20 30 40

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

UniRef90\_UPI0004545E97 Q Q Q L G F D S A Y R T T E V I T H R D I 60 A N S F L S E Y N S 80  
UniRef90\_UPI0004444007 K Q Q L G Y S R R H V E I S S T Y I S L T S I E Q D L Q T N L I V I S I N Y S Q A E V I K  
UniRef90\_G1TCR7 G K Q M G Y S S T S N S A P T F R A V K L I G E P D F Q Q L D V V E I T N Q L L E K V I A A  
UniRef90\_UPI000443C8C3 A Q Q L G Y S S Y T T G S A P L F R L V D L L L P R L G S L P E S E V G T A F T A V I T T E A Q E P S A  
UniRef90\_W5K2S5 A Q Q L G Y S H S P R T S V Q V P V L G S L P E S E V G T A F T A V I T T E A Q E P S A  
UniRef90\_UPI0003345184 R Q Q L G F D S S K P T F F R A V L E I L G E P A H D L D V V S I N H L L E K V I A A  
UniRef90\_I3LQG6 A Q Q L G F P S Y V I S S D R T L R V D L L L P R L G S L P E S E V G T A F T A V I T T E A Q E P S A  
UniRef90\_UPI00032ADA91 R K M G Y S S K P T F F R D V K I S G P G Q R L D V V E V T E T E N S Q  
UniRef90\_G5BHK7 G Q M G Y D S S Q P T F K A V K I S G W D Q D L D V I V V T E T E N S Q  
UniRef90\_UPI0003EAFD11 W S L G H L R L T H H K G V N L T D I K L N S S Q E F A Q L S P R L G G F L E  
UniRef90\_UPI0003C12EFA S Q L G Y E S T T Y Y K A S G T Q P Q S S S S S G Y L K L D P S L I N T E K  
UniRef90\_UPI0003315020 K Q M G Y D S S K P T F F R A V L Q I G E P D Q D L D V V S V T G D H G  
UniRef90\_UPI0003C28E9D K H L G F S S Y V I S S S G N L P V D A V I Q S L K M G P F T A I R N E L T S T P I  
UniRef90\_H2UB72 K K L G Y T Y K P R S S T A V P V G D I G Q S L K M G P F T A I R N E L T S T P I  
UniRef90\_UPI00022F6D9D R Q M G Y D S S K P T F F R A V L Q I G E P D Q N F T V V V S V T E T E N S Q  
UniRef90\_UPI00042BC878 K R L G F S S Y I S S S G Y L S V A A I E E F Q R H F V S V S H W S S A D Q V  
UniRef90\_UPI000388EB4F K Q M G Y S S V P T F F S A V D L A D T Q G L P L R E V M V N N G V L  
UniRef90\_G3N9A0 K Q L G F H S R Y M E S S F V I R M G A I E E Q D L Q R Y S L V S I N L S Q S Q I Q  
UniRef90\_F6VM88 S Q L L G F S S Y I S S S F I R M G A I E E E F F R A E F V S I N H W L P D N Q V  
UniRef90\_H2S216 L E M G Y S R G T F F Q S G Q Q R V I N S E G G F F Q L K S D F Y P E A S  
UniRef90\_UPI0003D0E19B K Q L G Y Q N V F L T E F I P L R S F S G K S L S V T A R P H  
UniRef90\_F7C9D1 K S L G H L R L T Q H K A V N L S D I K L N R S Q E F A Q L S A R P G G L V E  
UniRef90\_F6Y7X7 Q D L G Y S T S V A Q V T L L L S C E C D F S N H F S S L P A S S S T L T T  
UniRef90\_F6YP97 R Q M G Y S R G T L R S H G V S V S R L G N S L F S C K S K T H A F S A  
UniRef90\_I3JDG1 Q S I G Y S R G T Y F K S G G Q R A D C N D G F L L V K S K F N P Q A S  
UniRef90\_UPI0003C80591 R S L G H L R L T H D K A V N L S D I R L N S S R E F A Q L S P R L E G L L E  
UniRef90\_UPI0002BCF1A4 Q Q L G F K S A F W A N V T N R N F D S S F S I S S K Y S S  
UniRef90\_F1NC10 R H L G A L R A F V H Q K G V K L T D V S M E D G Q E F A Q V I N H L L P D D K V  
UniRef90\_M3YCS8 A Q L G F P S Y V S S D T L S V L G S L E E R L R E D F A S I N H L L P D D K V  
UniRef90\_F1QHB3 R Q L G Y S S Y V S S A A L P I S S L E E V F Q H N L V A V N K I N Q T H L H D  
UniRef90\_UPI00034F2A4A Q D L G Y S S S Y I K S A N A V T A P A S D G I V Y R L N Y A G T I G N  
UniRef90\_UPI0003292CB2 E E M G F L R A L A H S E L D V R A A G A N G T S G F F C V D E G R L P L A R  
UniRef90\_UPI00034FBD72 A Q L G F P S Y V S S G D L R V D L L E P Q F Q G D F V S I N H L L P D D R V  
UniRef90\_W5KY58 K Q L G Y S S Y V S S S I P I S S V E S A F Q K K L V A L G P G F L P N Y K  
UniRef90\_UPI0002990AA8 E E V G F V S V V N H S V A S V P E A S R D G G E F F C V K Q E E L S Y G K  
UniRef90\_UPI00034FCBDE Q D M G Y S T Y V R S P S V G A S D S A E G Y Q L R L N T S V A E G K  
UniRef90\_G3WVK5 N Q M G Y N R L S M A P T F Q A V K I G E Q Q L P V S K I T A K D Q  
UniRef90\_UPI0002038E2C K Y L G F S S F V N W A D F P V A A V E D E F Q K Y F V T L S A E Q L T S P Q  
UniRef90\_G3VQ30 Q Q L G F F S A H H T D E V V L E S G I T S S Y S V I F D Y N T  
UniRef90\_F6QZA7 E Q L G F S S Y I S S R T M R L E Q V E E L Q E E F V S M N H L P E N K V T  
UniRef90\_G5B7G2 W S L G H L R L V H H K G V N L S D L N L S S S Q A F S Q L S T G P G G L G  
UniRef90\_G3TA31 K S M G F L R A L A H S E L D G D G T L G F C I D K G R L S H V  
UniRef90\_L5KKR9 N S L G H L S L I H H K G V N L S D I K L N S S H K F A Q L P P K L G V L E  
UniRef90\_Q4T860 L E L G Y S R G T Y F G W G R Q Q T A P G G G F L A P K P D F H P E A S  
UniRef90\_UPI0004422BDE Q Q L G F L N A S D T E Y V P L S F S G K S L V A G G M R K  
UniRef90\_B0UXG9 K Q L G Y S N A S F V E S K A L P L S F S G K S L V A G Q D Y Q N N L I S I G L N Q T S F Q E  
UniRef90\_UPI000395C1B9 E Q M G Y S S T P T F Q G V E V S V G Q P L P P R E V V L S N G S L H V L E  
UniRef90\_U3JU13 Q Q L G Y S L S V A Q Q S A V L A G L V S A G S Q R F L Q A R P R N Q A G S P E  
UniRef90\_UPI0002C31C44 Q D M G Y P L S F S S Q G I V D D S G A T S F M K L N V S A N N I D L Y K  
UniRef90\_W5K9Q4 E Q L G Y T V N P S H R T I V M N D L P S D L K A S Y F A V E S G S V Q V  
UniRef90\_F7CJN2 Q Q L G F S S A F H T D E V I R K G L G E S F S V S E F R G S  
UniRef90\_F1N9M8 E E M G Y S S T F H A V D A G A G Q P L P P R E L V L S N G R L Q L P E  
UniRef90\_L5M0R9 Q Q L G F E S A Y R T G E V A Y R G V T S S V S I S K Y N S Q  
UniRef90\_UPI0002741B33 R Q M G Y S S K P V F K D V R M D P D Q E L D V V L V T E K T  
UniRef90\_H9GCR0 Q Q L G Y F G N V S E T D S V T L S H S G K S L L P A A L K D T I  
UniRef90\_UPI00038C4913 K D M G Y K N S F Y S T R G I A D D S G A A S F M K L N A S  
UniRef90\_UPI0003500DAC R E L G F N S H T M S S P V L L S A M S P I V L E A F A L V N K T D G T P N N  
UniRef90\_M4AHP4 V Q M G Y D S K F Y S S T Q V S F H T S A P E G Y L K L K S G S S Y K S  
UniRef90\_H3CQQ4 Q T L G Y T Y K P Q S S K V P V E D I Q S L K T G P F T A I R E G S A S T P I  
UniRef90\_W5PKW5 Q D M G Y R N S F Y S S Q G L A D D S G A T S F M K L N I S A N N I D L Y K  
UniRef90\_B5X327 K K M G Y S S G S Y V R S S Q R N P G S L A S E G Y L K L S S F D P Q S  
UniRef90\_H2LSJ2 E Q L G Y T R S S L T L C K L C S N R N P T S T Y I Q V T S L T S S L K I  
UniRef90\_F7CJL1 Q Q L G F Q R A M K H A D L N V M R S G K H Q Q Q K D R I V T D P Q S V I S L  
UniRef90\_UPI000333447F A Q L G F P S Y V S S D Q L L V D A L E P F Q Q G N F V S I N H L L P D D K  
UniRef90\_U3IVM0 E Q M G Y S S T P S F R A V D A G A G Q P L P P R E P C C C S E P S P F  
UniRef90\_UPI00038724BA E Q M G Y F R S T P T F G A V Q A G A G Q P L P P R E V V L S N G S L  
UniRef90\_W5LR38 S G Q V G F A R A I N F S V T C A S E S S H E F F C V K E S E L T Y G K  
UniRef90\_UPI0003D091D7 K Q L G Y N S V P T F Q A V D T V D V R G L P F R E V T L S N G S L  
UniRef90\_F1Q9E1 Q L L G Y S V S P V F S S I A V G P L P S D L K I S F C M V G T T K P Q T  
UniRef90\_G3Q9U9 E M M G H K R Q D Y K S S T Q T S A G S M A S K G Y M K L K T R S N H G A  
UniRef90\_V9KZK1 Q Q L G F T G Y F Q S S K I S S N Q I S T L T V N S T A K P G S N  
UniRef90\_UPI0003C855F7 G Q M G Y D S K P T F R A V E I G P D Q D L D V V K V I T E N L Q  
UniRef90\_F7G3H0 R Q M G Y S S K P T F R A V E I G P D Q D L D V V E I T E N S Q  
UniRef90\_F6TMW2 N S Q R G H L M F S P H S R L P Q H T S I N K F K R L F F F L A Q G L L D S  
UniRef90\_UPI000443F383 Q D L G Y R N S F F S S R G V A D D S G A T S F M K L N V S S G G R  
UniRef90\_S9Y1X1 E E M G F L  
UniRef90\_W5K2S9 R Q L G F R E S F H Y G S L P S T S P S F L S V S T Q S A N N I Q  
UniRef90\_K7FEA6 K Q M G Y S S T P T F S A V S I A D T R G L P Q A H A L R P T G R D A L R  
UniRef90\_Q28DA4 A Q V G F Y S E P V S G T V S I S D L S T S S A L L Y S T V Q T V L S D K S  
UniRef90\_A5PF55 A Q L G F R Q S Y S Y G V V K S N S P M F Q S V N S Q L V N N I Q  
UniRef90\_UPI00027F8966 A Q L G F P S Y V S S D N L R V S S L E E Q F R G E F V S I N H L L P D D V T  
UniRef90\_UPI0003EC3B64 G L M G F H S R P S F Q S L A R G S P Q I L D V V V L T A A S  
UniRef90\_H2UA74 V A L G F R K S E A S V S L T I D S K S S Q F L Q G R V T V R Y A I N L Y L I  
UniRef90\_UPI0003C11B05 Q A M G F  
UniRef90\_UPI00034407B4 Q Q L G F V S A Y R T T E V A H R N L A S S F S I S K Y N S  
UniRef90\_W5MI98 R Q L G F K G S S S T G E L N G W T S N G L S S V T S L P S N Y T  
UniRef90\_I3KFY0 R Q I G Y S R D D Y F A Y S Q T S A G V L A S N G Y M R L K S G S S S G S L  
UniRef90\_UPI000299050E V A L G F R N F Y T A N P I L Q S E A S V S L T I T I D S K S S Q F  
UniRef90\_HOYBM5 R Q M G Y S S K P T F R A V E I G P D Q D L D V V E I T E N S  
UniRef90\_H3CCZ6 L E L G Y S R S F H A A A V C A V T D R A A A T S V W L R L Q S P L R L S S N S  
UniRef90\_H3CQQ3 T K L G F R N F A A T N P S T S Q P A K S P T L T I N S R S P Y L Q  
UniRef90\_A2BGB9 Q Q L G Y T V S P R S T R I P V R S L F F N P Q N E F A T V S N D S A Q S

UniRef90\_UPI0004545E97 T L Q E S L Y R S K C P S Q R Y V S L Q C S H C G L R A L 110  
UniRef90\_UPI0004444007 L Q S A T F S K K Q C S S G M V T S L K C C T E C G S R P  
UniRef90\_G1TCR7 E L Q V I G N S S G P C L S G S L V S L T C C L A C C G Q S P  
UniRef90\_UPI000443C8C3 L H H S V Y A R E G C P S G R V V T L K C C T V C C G L R R  
UniRef90\_W5K2S5 D L Q N V L T R D Q C S S G S V I S L A C C S D C C G  
UniRef90\_UPI0003345184 R G S S G P C L S G S L V S L H C C L A C C G  
UniRef90\_I3LQ6 T A L H V Y V R E G C A S G H V V T L T C C S A C C G R R M  
UniRef90\_UPI00032ADA91 K L Q V Q N S S R P C L S G S L V S L S C C T N C C G Q S S  
UniRef90\_G5BHK7 E L R V R N S S G P C V S G S L V S L H C C L A C C G  
UniRef90\_UPI0003EAFD11 E A W Q P R V W S E A P G  
UniRef90\_UPI0003C12EFA Q F Y K M L S S K S C S M G S I L T L R C I D C G T R T P P  
UniRef90\_UPI0003315020 E L Q V I G N S S G P C L S G S L V S L Q C C L A C C G  
UniRef90\_UPI0003C28E9D T F L H T H I R E E C T S G K V I L K C C L V C C G T R S  
UniRef90\_H2UB72 H Q A T I D R R S Q C S S G S V V S L S C C S D C C G Q  
UniRef90\_UPI00022F6D9D E L Q M Q N R S S G T C L S L V S L S C C L E C C G R  
UniRef90\_UPI00042BC878 T A L Q S Y L R E E C T A G K V I L K C C L E C C G T R S  
UniRef90\_UPI000388EB4F R G Q D S G R Q C L S G S V V S L A C C G T C C G  
UniRef90\_G3N9A0 L Q N T T L S K T Q C S S G R V T T V K C C L E C C G S R P  
UniRef90\_F6VM88 T S L H M Y L R E E C A S A Q A I L K C C V A C C G L R  
UniRef90\_H2S216 I L Q Q F V L T N S C P D D S V V T L Q C C T D C C G R  
UniRef90\_UPI0003D0E19B T L Q Q S L N S S S C S T G K Y V S L R C C T S C G Q R  
UniRef90\_F7C9D1 E S W K P R  
UniRef90\_F6Y7X7 I F H T H C L S A T C A S G N M V S L R C I S C G L  
UniRef90\_F6YP97 D L Y R V L Y H S S C L S G S L V S L H C C L G C C G  
UniRef90\_I3JDG1 I L Q Q L A L Q N T C P N N M V V T L H C C T D C G S R  
UniRef90\_UPI0003C80591 E V W Q P S F R  
UniRef90\_UPI0002BCF1A4 T F Q E S L Y R S E C P S Q Q Y V T L Q C P S C G L R A L  
UniRef90\_F1NC10 D A W Q I R S S C E S G R V V A L Q C S A C C G Q Q T A P  
UniRef90\_M3YCS8 T H H S V Y A R E G C A S G R A V T L Q C C T V C C G L R  
UniRef90\_F1QHB3 T F R L Q N Y S Y H C N S G L V T A V K C I A C C G Y R S  
UniRef90\_UPI00034F2A4A I F A S L N Y S S T C S S G L V V S L K C I D C G L  
UniRef90\_UPI0003292CB2 R L L E V I S V  
UniRef90\_UPI00034FBD72 T H H S V Y M R E G C A S G H V V T V K C T V C G L R  
UniRef90\_W5KYS8 V H S S F L K K V Q C R S G L I T A L K C I E C C G T R P  
UniRef90\_UPI0002990AA8 K I K D A L F P C D E S R E V L T L L C C Q D C C G R R S F  
UniRef90\_UPI00034FCBDE L Q S R V Y K S F V C T S G S V V T L R C C I E C C G  
UniRef90\_G3WNK5 E L Q V Q T F S G P C L S M S L V S L H C C A V C C G  
UniRef90\_UPI0002038E2C N A T S L R E E C A S G N V V V I K C C L V C C G T R S  
UniRef90\_G3VQ30 T I Q E S I K R S D C P S H Q F I S L Q C C T R C C G M R V M  
UniRef90\_F6QZA7 S L H H A V Y V R E E C A S G R V V I L K C C T T C G L R  
UniRef90\_G5B7G2 E L W Q P R V W G K A P G  
UniRef90\_G3TA31 S L L E V T L C D C P R G Y F L A T I C Q D C G C R K L P  
UniRef90\_L5KKR9 E V W Q P  
UniRef90\_Q4T860 M L Q Q F V L S D A C P G D S V V T L Q C T D C G R  
UniRef90\_UPI0004422BDE T I Q Q S L N S S Q C S S R K Y V S L R C C T N C C G Q R  
UniRef90\_B0UXG9 P V K I H N S K T C S S L G M V T A L K C I A C C G S R P  
UniRef90\_UPI000395C1B9 E V W Q P  
UniRef90\_U3JU13 D M W Q V R S S C Q S G R I V A L Q C S E C G L Q  
UniRef90\_UPI0002C31C44 K L Y H  
UniRef90\_W5K9Q4 M Q S S F S D K K T C S L G S V V A L S C S D C G  
UniRef90\_F7CJN2 I Q A S I N R S D C P S Q R F V S L R C C T  
UniRef90\_F1N9M8 P G R K C L S G S V V S L L C S S C G  
UniRef90\_L5M0R9 T L Q E S L Y R S E C P S Q R Y V S L Q C C S  
UniRef90\_UPI0002741B33 Q L R V L N T S R P C L S G S L V S L N C C L A C G  
UniRef90\_H9GCR0 Q Q S L N R T S E C P S R R Y V T L R C C S S C G Q R  
UniRef90\_UPI00038C4913 L E T F M S P V D L C P T Q E G V S L Q C T D C G Q A S V  
UniRef90\_M4AHP4 P I Q T Q L M H S P E C S V R V V K L M H C I E C C G K  
UniRef90\_H3CQQ4 H Q A T I D R S Q C T S G S V V S L S C C S D C C G Q  
UniRef90\_W5PKW5 K L Y H R S D V C S S K T V V S L R C C I E C C G  
UniRef90\_B5X327 L L Q R Q L T R S P Y C A A Q A V S L Q C C I D C C G  
UniRef90\_H2LSJ2 S Y C F P T C S S V C R S G S V V S L T C C S D C G M S K  
UniRef90\_F7CJL1 T L S P P S D G C P S G R F V S L R C C T  
UniRef90\_UPI000333447F L H H S V Y L R E G C A S G H V V T L K C C T  
UniRef90\_U3IVM0 Q V P E P G R K C L S G S V V S L V C C S S C G  
UniRef90\_UPI00038724BA K I S T A L Y P C K O E K G Q V V E V L Q C E C C G R R M P  
UniRef90\_UPI0003D091D7 H V I Q D T S R Q C L S G S R V S L T C C S G C C G  
UniRef90\_F1Q9E1 F Q S A V S D R K V C S T G T V I S L S C S D C C G L S R  
UniRef90\_G3Q9U9 A L Q S L S Y S Q Q C S G P V V R L Q C L A C C G V S S A P  
UniRef90\_V9KZK1 I Q T T L S S G D Q C A S R E V V G L K C I D C G K R V N P  
UniRef90\_UPI0003C855F7 E L Q V R N S S G P C L P G S L L S  
UniRef90\_F7G3H0 E L H V R N S S G S O L S G S L V S L H C C L  
UniRef90\_F6TMW2 N L A V V N A V C V C L K G P F L T T I C Q D C G R R K L P  
UniRef90\_UPI000443F383 D L Y Q R L Y P R Y  
UniRef90\_S9Y1X1 S D C P R G R F L A A N C L D C G H R K L P  
UniRef90\_W5K2S9 G R L R V T S S C P G Q E A T S L Q C S D C C G H  
UniRef90\_K7FEA6 E A Q H F T L S G A V V S L V C A A C C G Q  
UniRef90\_Q28DA4 I Q V N P T V W G S C T S G Q V V S L R C A A C C G T  
UniRef90\_A5PF55 G R V N T S S S C P D Q Q S V S L Q C C D C C G R  
UniRef90\_UPI00027F8966 E L Q H S V Y V R E C A S G H V V T L Q C C T A C G R R R  
UniRef90\_UPI0003EC3B64 A L Q V I Q Q P R G P C L S G S L V S L R C C L  
UniRef90\_H2UA74 V A I H S S S C P D Q Q T V S L Q C C L D C G L Q R  
UniRef90\_UPI0003C11B05 V I S E C P S G R V L A V Q C C Q D C C G R R K V P  
UniRef90\_UPI00034407B4 T L Q E S L Y R S E C P S Q R Y V S L Q C S H C C G L R A M  
UniRef90\_W5MI98 Q G Q V D S S S A S C P G K K I V S L K C I D C C G N R  
UniRef90\_I3KFY0 I Q S Q L T H S L L C F S N A V T L Q C C I E C C G K S S  
UniRef90\_UPI000299050E L Q G R V T V S S C P D Q Q T V S L Q C C L D C G L Q R  
UniRef90\_HOYBM5  
UniRef90\_H3CCZ6 D A C P G D S V V T L Q C T D C G R  
UniRef90\_H3CQQ3 Y L H L C L H S S S C P G Q Q T V A L Q C C L D C G Q R R  
UniRef90\_A2BGB9 D I Q S F L S A S



UniRef90\_UPI000443544E 1 P L V G V R L S K D R S T L Q V T H R E T Q L W F S V C F D N F L E A W A E L A 40  
UniRef90\_H2S214 C V R L H G S G F V L Q V V Y G S G G W R N V C S R G W S A Q H G R A S  
UniRef90\_M3ZP96 C V Q F G T S N S V L E V K T A Q D G R F L P V C Y S G W N K E Y S D R V  
UniRef90\_W5K9T7 V L Q V R T A Q D G R F L P V C S Q D W D Q S Y A D Q T  
UniRef90\_F6XEJ3  
UniRef90\_F7EDF3 C V R L Y G A D S Q L Q V V Y S T L K S A W L P V C A D N W T D A Y G R L A S  
UniRef90\_H2S213 C V R L H G S G F V L Q V V Y G S G G W R N V C S R G W S A Q H G R A S  
UniRef90\_UPI0002C2E212 C V R V S G Q N A A L Q V F T A A T W R T M C S E D W K S H H A T V A  
UniRef90\_UPI0003AF51E9 A Y C V R F G E G N S L Q V R T T T D G R F L P V C N Q G W D D N E A K Q I  
UniRef90\_F6TCQ7 P L Y P G E Y L A G A Q Q M H L L D K C T N A C R N A N H N S A F V S S A  
UniRef90\_UPI00034F7FA0 C V R L Y G P N F Q L Q A Y S P A K A T W L P V C Y D E W S D N S G K I A  
UniRef90\_I3JFH9 A Y C V R F G E G N S L Q V R T A T D G R F L P V C N Q G W D N N E A M Q I  
UniRef90\_UPI000462E3F0 L P T V R L A Q E R S G L Q V R S Q E S G A W A C R R G F D A T M A Q A  
UniRef90\_Q4SPF8 F P V R L M S A H H V L Q V Y S P G S G W R S V C S D G W T Q Q H T E T A  
UniRef90\_W5K6G7 C V R L Y G S N F Q L L S F S A K D K T W K P V C S D R W D D N Y G R R A  
UniRef90\_UPI00022CD975 C V R F D W D R S L L K V Y S G S S H K W L P V C S D R W D S Y S E K T  
UniRef90\_UPI0004542E50 C V R F D W D Q S L L K V Y S G T Q Q W L P V C S D G W N S T Y S T K T  
UniRef90\_HOYPM9 R S I L Q V L S S R T Q T G S C V C H D F F P A P A R A A  
UniRef90\_F1R196 C V R L Y G P N F L L Q K Y S N V S A N W K N V C H D F F N D N L A K Q A  
UniRef90\_UPI00044404D4 C V R F G E S N S L E V R T A Q D G R F L P V C Y S G W N K E Y A D R V  
UniRef90\_UPI0004432B1F R I N T R N F L L E V Q V G A Q P G W L L A C Q E G W S P A L G T Q I  
UniRef90\_V9LID2  
UniRef90\_W5U8J8 C V R F G E G N E L Q V M T S N S S G F L P I C Y A D W N H S L A T Q T  
UniRef90\_UPI00034F900F R F L W D N S M V E V M S R K E N L W L P V C Y N E Y S D F P S F V  
UniRef90\_H2LS11 G A D N R L L V Q T A Q N S A F L P V C Y S G W S T D D A D V K V  
UniRef90\_UPI0003AF2D36 P P V P R L S G R S S V L Q V Q I Q G K W R T V C S E D W N N R L G R A A  
UniRef90\_G1Q2A1 F P V R L S S D R S T L Q L L D P T T G T W S A C F D G F T G A L A Q T A  
UniRef90\_UPI0002A48A77 F P V R L A S S Q N I L Q V Y S E S T G W S V C S N E W T Q H T E T A  
UniRef90\_E7F9A6 C V R F G A G G E L Q L K T A H N G Q F L P V C Y E G W N S Y A D Q I  
UniRef90\_M7BZ64 P P M E V R I S K D R S T L Q V L N K E T G T W F W A C H D N F H M T L A K A A  
UniRef90\_F6VAW7 C A R F L W D N S M V E V M S R K E N L W L P V C Y N E Y S S D F P S F V  
UniRef90\_UPI00045737DB  
UniRef90\_UPI00046B86BB P L V G V R I N T E D F L L E V Q V D R A Q P G X L L V C C Q G L I P A L G V W I  
UniRef90\_G3WVK6 P P V G V R L S K D R S T L Q V I D R E T G A W F W A C H D N F D R T L A K A A  
UniRef90\_UPI0003C4A5F9 P V G V R T A Q D R A A L Q V I D R E T G A W F W A C H D N F D R T L A K A A  
UniRef90\_E0VZ18 C V K I N S N S L L E I R T A S G E Y E P V C A D D W S T T R S D Q V  
UniRef90\_UPI0003C28C40 R I T T G T F L L E V Q V P G V P G W R L A C H D Y W S L A Q G T R V  
UniRef90\_UPI0003EC1E3D C V R L S G R S S V L Q V Q M Q G K W R T V C S E D W N N R L G R A A  
UniRef90\_UPI0003B50FBD Q V N G S S R R L R V Q I G S T P H T V C S D G W T S H L S D L T  
UniRef90\_UPI0003K1P7U9 S S R G V V R V Y N A E S D D W E V C S D D W N D T L S G L V  
UniRef90\_UPI000443AE71 Q V N G S R R L R V Q I G S T P H T V C S N G W T S H L S D F T  
UniRef90\_U31RK9 R I N A D S S L L E A R V R G R P G W L L A C H X G W D G S W D  
UniRef90\_Q7ZZ80 C V R V S G S H S V L Q V F G R G L W R T V C S E G W D S Q L S T L A  
UniRef90\_UPI00046C0406  
UniRef90\_UPI0003504E70 C V R F D W D S S L L K V Y S G S S H Q W L P V C A D D W N E K I S D S V  
UniRef90\_G1TL24 V Q V R I G K T W H L A C C A D D W N E Q I S D S V  
UniRef90\_U31J08 E D F L P K V Q V G A R P G W L L V C C Q G W S P A L G  
UniRef90\_UPI0003EBF9AE V Q V R I Q N A W H T A C A E N W N D Q L S D E V  
UniRef90\_UPI000443606D R I N K S N F L L E V Q I K G T A G W L L A C H A G W S A L L G T R I  
UniRef90\_F7B1X2 L I C C G N G W T D Q H S H A A  
UniRef90\_T1FUUV V Y Q N Q S G Y L I C S D G W L N E H S D A A  
UniRef90\_UPI0003838291 Y T V C A Q D W T P Q F S D F F  
UniRef90\_D6VMMQ5 T W S P V C S D N W N Q T H S D L V  
UniRef90\_UPI0003832D58 V Q A R I G K M W H L T C A D D W N E I S D S A  
UniRef90\_S4RZX2 R S S G D Q A Y L Q V W N T A A G V F S M V C V E N F T S A Y A E Q A  
UniRef90\_T1FDX3 I C A D G W S D E W G D A V  
UniRef90\_F6QQY8 C V R L F N S S M S G L V Q F K V Q S E W H T A C I D H W N E D S N D I  
UniRef90\_UPI00033166A0 C V R L G T R N S G L V Q F R I Q N I W H L T C A D N W T Q I S N N V  
UniRef90\_UPI0003506645  
UniRef90\_UPI0003DF5D2E S D T S L L K V R Q Y N G E Y R L V C S D G W S E E F S T S Y  
UniRef90\_J9KVA0 C V R L S G E E G M L E L Y S P N T T S W R P A C I Q S W D S D L A T I I  
UniRef90\_UPI00022C8A23 G V Q E F G G S S L L K I R Q Y N D E Y R L V C S D G W S E E F S N S Y  
UniRef90\_UPI000441C18A C V S L S K N S S F L T V Y R S A T N Y Y I C A D E W E E N L S H L A  
UniRef90\_H9GBV5 C V T L S K N T S F L T V Q R S A T N Y H V C A D G W E E S L S H L A  
UniRef90\_K7IUP3 S S G D D R F V C S D G W T D E F S D Q Y  
UniRef90\_F1KPJ5 R L E V F V D G Q W G T I C N R S W S E Q L A R L A  
UniRef90\_UPI00021A3F3C R L Y G G S S T M E L H V C A N G A W V T V C S Y W D R D N T V A  
UniRef90\_N6TUG6 R I G D V D N I L Q V Q F E N N T F S P I C L D D W N G T Y A T M A  
UniRef90\_B3SC98 W L P L C V S N W N D V Y S G V A  
UniRef90\_G3TCF2 V C A D G W Q E A L S Q L A  
UniRef90\_F6PY06 C V R L S L S N S G L L V Q F R V E R E W R T A C A E N W S P G V S D E V  
UniRef90\_UPI0004574879 C V S L S G N S S S L L V V H R S S A N Y H V C A D D W Q E E L S D L V  
UniRef90\_K1R3V1 R E E W I P V C S D N W T E N N S K V V  
UniRef90\_V4AW49 I S R S R G R L Q L Y H Q G K W R P V C S R G W K E S E V R T A  
UniRef90\_G3HFD1  
UniRef90\_A4UWM6 T V C A D T W D S E L S D F T  
UniRef90\_UPI00038C6102 C V T L S S S S S F L A V H R S A T E H H V C A D G W Q E A L S Q L A  
UniRef90\_Q9Z319 C V T L S K S S S L L A V H K S A K E H H V C A D G W R E T L S Q L A  
UniRef90\_W4ZFZ1 Y T I R L T G A N F R V E V F Y L G S W R P V C A D N W D L S D G H V A  
UniRef90\_UPI0003944089 V Q A R V I G E S W H L A C A E D W S G E T L S D S V  
UniRef90\_UPI00042BB6E6 V Q F R I E N N W S T V C A D Y W S E Q I L N K V  
UniRef90\_UPI0003C27E60 V Q F R I E N K W H L V C A D Y W T E Q I S N N V  
UniRef90\_UPI00032AFACF S S S F L T V H R S A T E Q H V C A D G W E K T L S Q L A  
UniRef90\_G1NNS9 V Q V R I G K V W H L A C A D D W N E I S D S V  
UniRef90\_E0VUT5 G R G L L Q V F S P E T D E W V P A C V S N W D N K Y A Q A I  
UniRef90\_UPI000359F14B S N K W Y R V C S D G F T D L S A R L V  
UniRef90\_T1FJ14 M C S D G W T E E H S T G V  
UniRef90\_W5KA79 C V S L S G S S P A V L V V S K T A A E Y Q V C A D E W N P H L S T V A  
UniRef90\_W5MTN6 W Y T V C A E N W S G E V S Q S V  
UniRef90\_UPI000395C4DC  
UniRef90\_UPI000334066E C V T L S K S S A L L S V H R S A T E H Y V C V D G W Q E T L S Q L A

UniRef90\_UPI000443544E C S E M G Y N S S 50 M K P I F Q P V K I I D P E Q Q L P V S H I L T V I D Q 80  
UniRef90\_H2S214 C L E M G Y S S Y S S F H P A A V C S D V G R E L T F T D Y P Q H Y S L M K Q  
UniRef90\_M3ZP96 C S Q L G L R Q S Y L S E S E I D S S P S K A P L K L T Q S N S A S L V Q  
UniRef90\_W5K9T7 C S Q L G F R R S F A L S E S V D E N K I S P V L N L Q A R T S N L I Q  
UniRef90\_F6XEJ3 C Q D L G Y N G S S Y N S D T M N S T Y A P N G Y F Q L K N G S Q T S  
UniRef90\_F7EDF3 C L E M G Y S R G T F F Q S Q Q R V N S E D S N S  
UniRef90\_H2S213 C A Q L G F P S Y V S S D T I R V D S L E E Q F R E E F V S I N H  
UniRef90\_UPI0002C2E212 C K Q Q G F R N V Y M T A T I Q S D S T G L T L N N S T R S A P L Q A  
UniRef90\_UPI0003AF51E9 C Y V P G T I L S T P H T E Q R D H T S N P N T S Q A A R L L G W G P L P H L T  
UniRef90\_UPI00034F7FA0 C Q D L G Y N G S S Y N S D T M N S T Y A P N G Y F Q L K N G S Q T S  
UniRef90\_I3JFH9 C K Q Q G F R N A Y M T G A V I Q S D S L G L T L N N S T R S A P  
UniRef90\_UPI000462E3F0 C A Q M G Y S S I P F T F G A V A V R D D R E V P L R D M A L Q D S G E  
UniRef90\_Q4SPF8 C Q T L G Y T Y K P Q S S K V P V E D I Q S L K T G P F T A I R E G S A S T P  
UniRef90\_W5K6G7 C Q Q M G Y S R T D Y V S S G E M K P G S G S S G G Y M V L N S G I S S A E S  
UniRef90\_UPI00022CD975 C Q Q L G F E S A Y R T T K V A D R D F A S S F S  
UniRef90\_UPI0004542E50 C Q Q L G F Q S A F H T D E V I R K G L G E S F S V S E F  
UniRef90\_HOYPM9 C E Q M G Y S S T P A F Q G V E V S A G Q P L P P R E V V L S N G S L  
UniRef90\_F1R196 C A E I G Y K D T Y S G Y Q G I L S P S L D F  
UniRef90\_UPI00044404D4 C S Q L G L R Q S Y L T I E K I D S N P S M A L K L T G N S A A L  
UniRef90\_UPI0004432B1F C R H L G H L R S  
UniRef90\_V9LID2 C A Q I G F V S S G T N W A D A T A P V S E A D A T V R Y Y C V D D T Q L P T A K  
UniRef90\_W5U8J8 C Q Q L G F R G S Y K Y G G L T S T S K S F L F V T S E S S D T  
UniRef90\_UPI00034F900F C Q R Y G F E G T P A T A P V Y F A S N E A L H S T Q N  
UniRef90\_H2LS1 C R Q L G F Y G D S V S G E L S S Q N S E V L E V T S N S A S R  
UniRef90\_UPI0003AF2D36 C K Q L G Y S S Y L E S F F L S L T Y I E K D L Q T D L M S F H W N K S Q I I K  
UniRef90\_G1Q2A1 C G M M G F H S K P T F Q A E K I G P D Q E L D V V V I T A  
UniRef90\_UPI0002A48A77 C E Q L G Y T S S V  
UniRef90\_E7F9A6 C E Q L G F R R S Y E S S A L N S K S S E A L I L E P T S G L L I Q  
UniRef90\_M7BZ64 C K Q M G Y S S V P A F R A V D I A D  
UniRef90\_F6VAW7 C Q R Y G F E G S Q F Y S V L S A P L S L G Q F S F N R I L S S D S  
UniRef90\_UPI00045737DB C R H M G Y V R C V N Y S V S V R D I G S N Y T H G F I E I E N K W D H N L E  
UniRef90\_UPI00046B86BB C Q S L G H L R F T H H K G V H X S D I K L S R W Q E F A Q L S P G L G G F P G  
UniRef90\_G3WVK6 C N Q M G Y N R  
UniRef90\_UPI0003C4A5F9 C K Q M G Y S S T P T F S A V S I A D  
UniRef90\_E0VZ18 C A F L G Y S S S A N Y N S M P L S N V E S F Y K L K N V T T E D I N N N F  
UniRef90\_UPI0003C28C40 C R Q L G H L  
UniRef90\_UPI0003EC1E3D C T Q L G Y S S Y L E S F F I S L T H I E K D L Q T D L M S F Q W  
UniRef90\_UPI0003B50FBD C R Y L G H R S G D S S L L P A L P Q D S P F V S V S L T R T R T G N  
UniRef90\_K1P7U9 C R Q L G Y R G V K N T S F I S K S S T S A S K I D L G G V N A S A N T  
UniRef90\_UPI000443AE71 C R Y L G H R S G D A S L L P A L P Q D S P F V Y I S L T R T R T G N G S  
UniRef90\_U3IRK9 C G S C R M T Q Q K G V N L T D V K L K D Q E F I Q V R P G H E G S L E  
UniRef90\_Q7ZZ80 C R Q L G Y S S R S A I S S R I V G G N V S K S G Q  
UniRef90\_UPI00046C0406 C Q Q L G L G N S N M S T V S Q T G E G P F A S I A E V A N H S L I F T K  
UniRef90\_UPI0003504E70 C R Q L G F K R T P A L T S L A Q D T L S P V S L G Q A G P  
UniRef90\_G1TL24 C Q Q L G L G D A N M S T V L F T G D G P F A A I T K T A N  
UniRef90\_U3IJ08 C G S L G H L R I H H K G V H L S D V K L S H W Q E F A Q L S P G L G G L P G  
UniRef90\_UPI0003EBF9AE C R S L G L G N V N T S S Q V F S S G G G P F V K L S M S N G S V I  
UniRef90\_UPI000443606D C R A L G H I S L D H P E L L V V G D Q L I R P P R R I P N L G D F P G L Y I P  
UniRef90\_F7B1X2 C R N M G Y S N S T R T N L V G F S T A K A L T L V S E A L S T G Y Q  
UniRef90\_T1FUV4 C R N M G Y S R S R F N A V Y Q N S A K S L R N E G K F A D G T D F L A N  
UniRef90\_UPI0003838291 C R Y L G Y R S G V A L F S I T V E G D G P F T T V N V N T N G S L E  
UniRef90\_D6VMMQ5 C R Q M G Y G G A S S T E T L E A P E A M F K E Y Y K L P Q A V V R S P  
UniRef90\_UPI0003832D58 C Q L L G L G D A N A S S T V L F T A D G P F V N I A K A T N N S L I  
UniRef90\_S4RZX2 C V L M G Y D S R G S V T W S S I A P S A G A V V A V S N G A A D S A  
UniRef90\_T1FDX3 C D Y L G L G N P S E Q S Q Y Q A I P S S I P S F V S L K D G A V R D A N  
UniRef90\_F6QY8 C H R L G L G N V N L T S A V L S E G N G P F V T L I Q V E D G S L R  
UniRef90\_UPI00033166A0 C Q S L G L G N E N S S M P V N S T G D G P F V T L S T A P N G N L I  
UniRef90\_UPI0003506645 C M G Y N V D T Y Y S Q G V A A E V S F K S F M K L N T S A G N T D L Y K  
UniRef90\_UPI0003DF5D2E C Q S L G F A G S E Y E S F Q T R D K T Q K I F R L K A N P N H A P  
UniRef90\_J9KVA0 C N I L G Y K L S S K S M L G E L A S V K Y N Q S E E Y Y D E N K M T V Y R  
UniRef90\_UPI00022C8A23 C R S L G F A G S E S T E L Q T W D K I Q K I L R L K L N P N H R A P L  
UniRef90\_UPI000441C18A C K Q M G F G G P V V I T D L V P A Y E I P Q H K K W L N L P P D W E S K N M S T  
UniRef90\_H9GBV5 C K Q M G L G G P S V T E I V S E Y E Q P H H E K W L N L H S D W E S K N I  
UniRef90\_K7IUP3 C R T L G F A S S E V T Q F V E Q G S N Q N L L Q L T P N A S P N S S  
UniRef90\_F1KJP5 C N Q L G L I M D S E H F E N W R I F P S A G S L P M V M D N I R C E E R E Y  
UniRef90\_UPI00021A3F3C C R Q L G F S S Y K Y E T D V T S T D Y P V I F N Y F N C R G S E S T L I G E  
UniRef90\_N6TUG6 C Q S L G F S D S T I Q L K T V E K P V D L Q F A A F Y T L D V K G H V A P L L S  
UniRef90\_B3SC98 C H Q L G Y T T F I H V I S Q L M T T P P G N S Y W N G K I S C K G S E Q S L A E  
UniRef90\_G3TCF2 C K Q M G L G Q P S V T E S I Q E Q E Q E Q D G Q W L T L R S N W E N L N G T T  
UniRef90\_F6PY06 C R L L S L G S G N A S R S V L S T G N G S F V T L S P A P N G S L  
UniRef90\_UPI0004574879 C K Q L G L G G T L T V T Q L L S E Y D Q S Q Q G K L L R L S P D W R N N V S  
UniRef90\_K1R3V1 C Q Q L G Y N G G M A T P T E E V M T Y H P D T S V F Y S N I T T G S E K R L T  
UniRef90\_V4AW49 C R Q L G Y S N G R L F N G G E V R G A E N L F V T N L L C E K E S D I L H D N  
UniRef90\_G3HFD1 C R Q L G Y S N G R L F N G G E V R G A E N L F V T N L L C E K E S D I L H D N  
UniRef90\_A4UWM6 C Q Y L G Y R S G E E S L Q S V L P Q D A A F A V V T V S S N G T L E  
UniRef90\_UPI00038C6102 C R Q M G L G E H A V T E L T Q G Q E S Q P W L R L H S N W E N L N G T T  
UniRef90\_Q9Z319 C K Q M G L G E P S V T K L I P G Q E G Q W L R L Y P N W E N L N G S T L Q  
UniRef90\_W4ZFZ1 C R E L G L G T V L G V D H G F I S S E E M G D Y I L N D V R C N G S E S  
UniRef90\_UPI0003944089 C Q L L G H A N M S S A V L F T G D G P F V T I T K G N H S L I  
UniRef90\_UPI00042BB6E6 C Q L L G L G N M T S S A M L S T G N G P F V K I T K A A N  
UniRef90\_UPI0003C27E60 C Q L L G L G N V N T S S T K S S I G G D S F V K I T E A E  
UniRef90\_UPI00032AFACF C K Q M G L G E P S V T Q W L E E Q D K D Q Q W L M L R S N W E S F N R  
UniRef90\_G1NNS9 C Q Q L G L G I A N S E Y S S L N T G R S T A F V Y I S D A P N S I C N I E  
UniRef90\_E0VUT5 C S L M G Y T S A N Y T R L I I K D N T N V E V Q P P Q T V N L T D Y R K  
UniRef90\_UPI000359F14B C R E M G F Y D C S A Y S G E T V S G R K L P N I T F E C V G D E T  
UniRef90\_T1FJ14 C R H M G Y S G S N N T K I I S K F G V E Y A L T D E V K S G A S L  
UniRef90\_W5KA79 C T Q L G L G A P M T A D A V D D V S G A G R R R W L H V H P D W S L R N T  
UniRef90\_W5MTN6 C Q Y L G F R G G D Y K T V S I T N R N D S F I T L S K T V N G S L E  
UniRef90\_UPI000395C4DC C S R Q K G V K L A D V R V G A G Q Q F L Q V T P G Q E G S L E  
UniRef90\_UPI000334066E C R Q M G L G K P S V T E S V P E E E E H Q R W L G L R S D W R N I S G T T



UniRef90\_UPI000443544E  
UniRef90\_H2S214  
UniRef90\_M3ZP96  
UniRef90\_W5K9T7  
UniRef90\_F6XEJ3  
UniRef90\_F7EDF3  
UniRef90\_H2S213  
UniRef90\_UPI0002C2E212  
UniRef90\_UPI0003AF51E9  
UniRef90\_F6TCQ7  
UniRef90\_UPI00034F7FA0  
UniRef90\_I3JFH9  
UniRef90\_UPI000462E3F0  
UniRef90\_Q4SPF8  
UniRef90\_W5KG67  
UniRef90\_UPI00022CD975  
UniRef90\_UPI0004542E50  
UniRef90\_HOYPM9  
UniRef90\_F1R196  
UniRef90\_UPI00044404D4  
UniRef90\_UPI0004432B1F  
UniRef90\_V9LID2  
UniRef90\_W5U8J8  
UniRef90\_UPI00034F900F  
UniRef90\_H2LS11  
UniRef90\_UPI0003AF2D36  
UniRef90\_G1Q2A1  
UniRef90\_UPI0002A48A77  
UniRef90\_E7F9A6  
UniRef90\_M7BZ64  
UniRef90\_F6VAW7  
UniRef90\_UPI00045737DB  
UniRef90\_UPI00046B86BB  
UniRef90\_G3WVK6  
UniRef90\_UPI0003C4A5F9  
UniRef90\_E0VZ18  
UniRef90\_UPI0003C28C40  
UniRef90\_UPI0003EC1E3D  
UniRef90\_UPI0003B50FBD  
UniRef90\_K1P7U9  
UniRef90\_UPI000443AE71  
UniRef90\_U3IRK9  
UniRef90\_Q7ZZ80  
UniRef90\_UPI00046C0406  
UniRef90\_UPI0003504E70  
UniRef90\_G1TL24  
UniRef90\_U3IJ08  
UniRef90\_UPI0003EBF9AE  
UniRef90\_UPI000443606D  
UniRef90\_F7B1X2  
UniRef90\_T1FUV4  
UniRef90\_T1FV33  
UniRef90\_UPI0003838291  
UniRef90\_D6VMMQ5  
UniRef90\_UPI0003832D58  
UniRef90\_S4RZX2  
UniRef90\_T1FDX3  
UniRef90\_F6QQY8  
UniRef90\_UPI00033166A0  
UniRef90\_UPI0003506645  
UniRef90\_UPI0003DF5D2E  
UniRef90\_J9KVA0  
UniRef90\_UPI00022C8A23  
UniRef90\_UPI000441C18A  
UniRef90\_H9GBV5  
UniRef90\_K7IUP3  
UniRef90\_F1KPJ5  
UniRef90\_UPI00021A3F3C  
UniRef90\_N6TUG6  
UniRef90\_B3SC98  
UniRef90\_G3TCF2  
UniRef90\_F6PY06  
UniRef90\_UPI0004574879  
UniRef90\_K1R3V1  
UniRef90\_V4AW49  
UniRef90\_G3HFD1  
UniRef90\_A4UWM6  
UniRef90\_UPI00038C6102  
UniRef90\_Q9Z319  
UniRef90\_W4ZFF1  
UniRef90\_UPI0003944089  
UniRef90\_UPI00042BB6E6  
UniRef90\_UPI0003C27E60  
UniRef90\_UPI00032AFACF  
UniRef90\_G1NNS9  
UniRef90\_E0VUT5  
UniRef90\_UPI000359F14B  
UniRef90\_T1FJ14  
UniRef90\_W5KA79  
UniRef90\_W5MTN6  
UniRef90\_UPI000395C4DC  
UniRef90\_UPI000334066E

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

1

10 20 30 40

UniRef90\_UPI0003F0BAB2 P S S L L T V H R S A T E H H V C A D G W Q G A L S Q L V A

UniRef90\_H2YM17 L E V Q S A T D S Y W Y S V C F D G W S D A N S F V A

UniRef90\_HOV903 C V T L S K T N S S A L L Y V H R S A T E H H V C A D G W Q E T L S Q L A

UniRef90\_UPI0003C172CE C V R L S D G S Q G T L V Q F K I Q H D W F T A A D S W N E Q L S Q S L

UniRef90\_UPI0004421C09 C V R L S L S S S G L V Q F N I Q N K W H L A C A D E W T E E S S S S I

UniRef90\_E4WZR4 G S W A Q V C A D N F K R H I A N R L A

UniRef90\_UPI00033338D8 V C A D G W Q D T L S R L A

UniRef90\_UPI000388FB1A C V R L F N G N G L L Q F R I E N N W Y I A C A D Y W S E Q I S N E V

UniRef90\_H2RVQ9 G S S R L Q F Q V G S T L L T A C A D T W N S L L S A F T

UniRef90\_F6ZAT4 C V T L S K D S T F L T V H R S A T D Y Q V C A D N W Q E T L S Q L A

UniRef90\_UPI000258D4AE G E H R L V C S D G W S E E F S D S Y

UniRef90\_UPI0003B7992C C V S L S D R S S V L T V F K T A A E Y Q V C A D E W N P D L S R L T

UniRef90\_UPI0003C48F34

UniRef90\_I1GE46 T N G V W G S V C D N S W D N R E A S A V

UniRef90\_I1GE46 T N G V W G S V C D N S W D N R E A S A V

UniRef90\_H2ZG11 I L N R Y D P I T S R W L P I C A D S W N F L L S H Q V

UniRef90\_UPI000333EDBC A S S F L T V H R S A T A H H V C A D G W Q E A L S Q R A

UniRef90\_W4XL81 G V W W S L C A S D W D S E D A T V A

UniRef90\_L9LD13 S L L T V H R S A T E Q H V C A D G W Q E T L S Q L A

UniRef90\_AOA044U113 R L E V Y A N N Q W G T I C N R S W T K E L A L L A

UniRef90\_I1FDV3 N E W G T V C D D G W T H T N V E V V

UniRef90\_V4ABZ9 E W K P V C A D G A G F T D L M A K M A

UniRef90\_F7B252 C V T L S K S S S F L T V H K S A R E H H V C A D G W Q E T L S Q L A

UniRef90\_W4WE00 G D Y Q L V C S D G W S E E F S D S Y

UniRef90\_H3AH32 V R L Q G G R S K L E V Y W N G V W G T I C S E N W D S E D D A V I

UniRef90\_UPI0004546788 V C A D G W Q E T L S Q L A

UniRef90\_UPI00026517B4 P V R L S G A N S R V L Q V Y F E G D W G K V C Q D D F T D V E A T I V

UniRef90\_UPI0002038B12 C V R L N G S N G L Q V L K A E N K W Y T A C G D N W T E Q L S S S I

UniRef90\_HOWUQ7 C V T L S K S S S F L T V H R G A T E Y H V C A D G W Q E T L S Q L A

UniRef90\_HOXAY4 V Q F R I Q S I W H T A C A E N W T A Q L S N D V

UniRef90\_E9GLP3 L E L Y N R T T Q Q W V P V C D R R F T E Q N A R V V

UniRef90\_UPI00022B28D5 Q V N G S S R L Q V Q I V S S L F T V C T D T W N S Q L S N F T

UniRef90\_I1FE71 N D D S G R L E V F H E E K W D S V C S H N F G R K E A N V A

UniRef90\_M9NDE3 P R V P V R L V G G A G R L Q V Y L K G R W G T V C D Y G W N V L N A L V

UniRef90\_K7IQW1 G R G R L E V Y H A R K G K F I P A C I A H W T P S R A K S M

UniRef90\_W2TYE3 R L E V F V D G S W G T V C N R T W S A K L A Q M A

UniRef90\_Q1PS60 T G K W R T I C S D G W M E D A R V L

UniRef90\_G3QCN8 L T I C A D T W N P H L S V F T

UniRef90\_W4Y2R7 L E V R L R N G S A W G A C D D S W D E Q D A E M A

UniRef90\_W5Q3X8 Y S N E G R V E V Y C N G Q W G T I C S D G F D S N N A N T I

UniRef90\_I1EVE5 Y S N E G R V E V Y C N G Q W G T I C S D G F D S N N A N T I

UniRef90\_UPI00026526A3 G S W R P V C S D N W D L S D G H V A

UniRef90\_UPI00026526A3 G S W R P V C S D N W D L S D G H V A

UniRef90\_J9JJY3 R L Q V F S E E L S T W G T V C N Y G W T L D N A A L V

UniRef90\_UPI0003506991 V C A D G W Q E N L S Q L A

UniRef90\_L5KDD0 K D G E D E R C G T T R

UniRef90\_E2C1W1 F L E Y F N K T T L Q W I P I C D D R F T E R N A Q V A

UniRef90\_E2C1W1 F L E Y F N K T T L Q W I P I C D D R F T E R N A Q V A

UniRef90\_AOA023F359 L E V F Q P E L Q S W R P A C I T N W D P D N S K A I

UniRef90\_UPI00042A9B23 P K V P V R L V G G E G R L Q V Y T E G R W G T V C D Y G W T M L N A L V

UniRef90\_B0XJU0 S L L Q V K P V N Q K D S S F V C A S D W T M N E A N V A

UniRef90\_U3JVB4 V S S S S F L M A H R S A V E H H V C A D G W Q E T L S Q L A

UniRef90\_D2H5N8 V C A D G W Q E T L S Q L A

UniRef90\_T1FDW8 V C A D G W Q E T L S Q L A

UniRef90\_T1IIA7 V R L A G S N A R V E A F V A G N W V G V C A D K F D T A N A H V V

UniRef90\_W5JL77 P K V P V R L V G G E N R L Q V Y T E G V W G T V C D Y G W T T N A A L V

UniRef90\_H2M4Q6 V R L V G G D S R V E V F H N G D W G T V C D H W S Q Q H A E V V

UniRef90\_G1T2J5 V Q F R I Q N V W H L A C A D N W T T Q I S N D V

UniRef90\_UPI0003F12D18 V Q F R I Q N V W Y K A C A E N W T T Q L S N D V

UniRef90\_UPI000265440C D V R L V D G S S T L E G R V I V D N V W G T I C N R G W D S T D S G V V

UniRef90\_W5M6H5 V R L Q G G R S K L E V Y L N G V W G T I C S N N W R D E N A V V

UniRef90\_UPI0002652497 S S H D G I L Q I M G N S S S T W G S A C G D T W T A A G E V A

UniRef90\_UPI0001CBBA5 R N R W R P V C A D G W M A D S R V V

UniRef90\_UPI0003D0E622 V C A D E W Q E N L S Q L A

UniRef90\_B4MS10 V R L R G G R S R D E G R V E V R N R W G S I C A D G W S L L E A N V V

UniRef90\_F6YGB4 R L S G G A G L V E V Y Y N G D W G S V C D D G W T E L N A Q V V

UniRef90\_UPI00038379E8 C V S L S D E G S L L V Y K A G L E Y H V C A D G W S P N H S S V T

UniRef90\_UPI0003943118 C V S L S D R S S V L T V F K T A A E Y Q V C A D E W N D E L S E L T

UniRef90\_UPI0004439A65 H Q V C V D G W Q E T L S Q L A

UniRef90\_W4XYI6 E V Q I A I N K T W T P L C S D N W A I R D A E V V

UniRef90\_E4WYY4 F L E H F S K D E D K W F R V C A D D W S N E N S K V A

UniRef90\_K1QUE4 G R W G A V C K N G W I Q E N A M V V

UniRef90\_E9J648 V R K N G V W R K L C Y D T W S E D L A K A A

UniRef90\_HOZLBO R L S G G R S R V E V A V G D Q P R W G L V C S E G W T T A E M V A

UniRef90\_W4YGBE4 D G V L Q I M G D S S S W G S V C G D T W T A A G E V A

UniRef90\_Q17JT6 P K I P V R L V G G I S R L Q V Y T E G Q W G T V C D Y G W T I N A A L V

UniRef90\_AOA026W477 P L L K I R Q Y N D D Y Q L V C S D G W S E E F S D S Y

UniRef90\_W5N5D2 V R L V G A D S R L E V Y H E G D W G S V C D D N W T E L N A Q V V

UniRef90\_UPI0003F18D31

UniRef90\_W4ZH42 D V R L A G A G S R V E V Y D N G Q W G T V C N D L W D I R N A L V V

UniRef90\_W4WZA5 F L E Y F N R T T L Q W I P L C D D R F T E R N A Q V A

UniRef90\_H3CQ93 G S S R L Q F Q V G S A L L T A C T D T W S S G F S V S T

UniRef90\_F6ZTM3 Y P V L L S S G A L D V Q I N E L S S Y S W F Y V C Y D W S D A N S F V A

UniRef90\_V5G659 P T V P I R L L G G N T R L Q V K I N N E W G T V C N Y G W T K N A A L V

UniRef90\_G3VB73 C V T L S K S S T F L T V H R S A T D H Q V C A D N W Q E T L S Q L A

UniRef90\_UPI000395894F C V T L S K N N S L M L L T V H R S A A A N H V C A D E W Q E N L S Q L A

UniRef90\_H2ZTG8 Y L V C A D D W Q E E L S Q Q A

UniRef90\_I1EJ04 N E W G T V C D D G W T H T N A E V I

UniRef90\_UPI0000E45EAD V R L S G G H Y I L E V F Y H G S W R S V C D D R W D N S G H V V

UniRef90\_K1QGP8 S I L Q L S S R P L C Y Q S W S D S L G P E V

UniRef90\_UPI000387056B R V E V K R G S K W G T V C S D G W T T K E A M V A

UniRef90\_UPI0003F0BAB2 C K Q M G L L G E 50 P S M T E A V H E Q E Q D K Q W L T L R P N W E T L N G T T 80  
UniRef90\_H2YM17 G E L G F P S V N S H Y S V P G F T A V V I T C H G T E S S L D  
UniRef90\_HOV903 C K Q M G L L G E P S L T E S I P E E E E N Q Q W L R L R S D W K N V S G T A  
UniRef90\_UPI0003C172CE C K H L G F G S L K N T S I Y Y K V S L A D N G T F V  
UniRef90\_UPI0004421C09 C N L L G L G S E N K S S P V L F T G A G P F V E V T K T A N S S  
UniRef90\_E4WZR4 Y Q M G F W A A S S F N Y G N I V I S A P Y Y N D F V V A L P D E Q E T K G D  
UniRef90\_UPI00033338D8 C R Q M G L G Q P S V M E S I Q A Q K G Q Q L L R L H P D W K N L N E  
UniRef90\_UPI000388FB1A C Q L L G L G N M N T S S A M L S T G N G P F V K V T K A A N  
UniRef90\_H2RVQ9 C Q Y L G Y R L G N A T Q L P A L P Q D S P F T N I T V T G N G S V K  
UniRef90\_F6ZAT4 C K Q M G L L G E L S V T E M I Q V Q R H P W K W L T L R L D W Q H I N T S T  
UniRef90\_UPI000258D4AE C Q A L G F S G S E T T D L Q T W D K S Q K L R L K A N P N H R M P  
UniRef90\_UPI0003B7992C C N Q L L G L G A P S S V S M V P D Q P G V P G R R R W L H V H P E W N L R N G  
UniRef90\_UPI0003C48F34 C R Q L G Y K G S S Y N S Y F G V G T N P L L I Y Y T Y C S S S A T N L R D C S  
UniRef90\_I1GE46 C R Q L G Y K G S S Y N S Y F G V G T N P L L I Y Y T Y C S S S A T N L R D C S  
UniRef90\_I1GE46 C S Q M G L G S K A K S F E T V I Y V P T R H R R S C H H L R N G D N Q R I R  
UniRef90\_H2ZG1 R Q M G L G G A S V T A S I Q E Q L R D W P W L T L H S N W E D L H G I T  
UniRef90\_UPI000333EDBC C R Q L G F S H F Q G H G A S N H G S G G G Q M I S T Y F D C E G D E T S L T  
UniRef90\_W4XL81 C R Q M G L G E P S V T A S V Q S Q E R D Q Q W L T L H S D W K S L N G S T  
UniRef90\_L9LD13 C N Q L L G L I M D P E Y F E N W Q I F S S S G E V P I V M D N I R C E E N E Y  
UniRef90\_A0A044U113 C R Q L G Y I L G A Q Y F S E K Y Y D T G N T S F L N D F V C L G S E D N I L Q C  
UniRef90\_I1FDV3 C K D M G Y E M G S Y V C C S S L G E G D S R S M V S L S R C R D I P G S  
UniRef90\_V4ABZ9 C K Q M G L G E P S V T G M I Q E Q E Q D Q Q W L T L H S N W E S L S G T T  
UniRef90\_F7B252 C Q A L G F V G S D E T L E S F A W D R S Q K L R L K T N P N Y R L P  
UniRef90\_W4WE00 C R Q L G Y S G K G T A R R V P F L R H G L A P V H G N I H C R G E E G S L L Q  
UniRef90\_H3AH32 C R Q M G L G E P S V T E R T Q G Q A G Q H W L S L H S S W E N L N G  
UniRef90\_UPI0004546788 C R Q L G F A G G N H T D A T Q Y D A V D G L F H L D N V  
UniRef90\_UPI00026517B4 C H W L G L N S V N R R S D I L F N G Y G P F V E V S K A I N N S L I  
UniRef90\_UPI0002038B12 C K Q M G L G E P S E T K L L Q L Q E N E Q R W L T L H P L W Q S L P G  
UniRef90\_H0WUQ7 C Q L M G L G S G N S S M P I S S T Q S G P F V K L S T A A D G S L  
UniRef90\_HOXAY4 C R Q L G L D T F H E Y K S V R H W P E P I Q C I G T E S R L D D C D R L N G  
UniRef90\_E9GLP3 C Q Y L G Y R S G E A S F L Q A R P Q D S P F A L I T I S D G T L K  
UniRef90\_UPI00022B28D5 C R M M G Y S A V Y T D R Y N D A A H S E S R S Q F T C K G D E N H L S  
UniRef90\_I1FE71 C H Q L G Y S L N P Q W R L L R S Q L P N A G T S E D I L M A N V R C T L Q D R  
UniRef90\_M9NDE3 C A L L G Y K L V N S S T L V M S E N V S I A E P V L E T S Q R G N L L Q  
UniRef90\_K7IQW1 C N Q L L G L I S D P E F F E N W R I F R H K G D L P M I M D N I R C E E N E V  
UniRef90\_W2TYE3 C G S L G F K E A T S S G E S R L L P A R P E D S P F A T I R I S N G S L E  
UniRef90\_Q1PS60 C Q Y L G Y S S G E S R L L P A R P E D S P F A T I R I S N G S L E  
UniRef90\_G3QCN8 C R T L G F Q G S M G S T T L S F G D T S E D Y N L D E V R C K G R E Q D F F Q  
UniRef90\_W4Y2R7 C K Q M G L G E P S V T K L I E E Q E Q D Q Q W L T L R S N W E S L N A  
UniRef90\_W5Q3X8 C K Q L G Y D V S F S F N N F S L H E N S S N S T  
UniRef90\_I1EVE5 C K Q L G Y D V S F S F N N F S L H E N S S N S T  
UniRef90\_I1EVE5 C R E L G L G T V L G V D H G F I S S E E M G D Y I L N D V R C N G S E S  
UniRef90\_UPI00026526A3 C R E L G L G T V L G V D H G F I S S E E M G D Y I L N D V R C N G S E S  
UniRef90\_UPI00026526A3 C R Q M G L V L N P A D W K V D V P L A D P L E P V L L T N V T  
UniRef90\_J9JJY3 C N Q M G L G G P S K T M V L E D G E M Q Q K W L H L H S D W K S K N A  
UniRef90\_UPI0003506991 C S S Q P G R R G Y V G S D A L G V D S L E E Q F R E A F V S V N H L L P D D V T  
UniRef90\_L5KDD0 C R H L G H T L N V Y V S Y D R R Y E L H P G S L T R V W S W P E P L Q C T G K  
UniRef90\_E2C1W1 C R H L G H T L N V Y V S Y D R R Y E L H P G S L T R V W S W P E P L Q C T G K  
UniRef90\_E2C1W1 C N F L G Y A E S N T S H L A L K G S N N V P L S K F R D V M P R R S H K K K  
UniRef90\_A0A023F359 C R Q M G L G E P S M T E P I Q G P E G Q H W L R L H S S W E D L N V  
UniRef90\_UPI00042A9B23 C H Q L G L A L N P R D W R L L R S E V P G A G T S E D V L L S H  
UniRef90\_BOXJU0 C R H L G F L G A E Y Y Q A T S N V I E S A I N S F N C L Q V S C R G L E S S L  
UniRef90\_U3JVB4 C S Y M G L G E P S V T E L V Q E Q E Q D Q L W L T L H S S W E S L N G T T  
UniRef90\_D2H5N8 C K Y L G L G H L E T W S L Q Q N H P R P Q R Y V M L K Y S A D S S K P  
UniRef90\_T1FDW8 C K E L G F A D S S S F S V G A G N L K I G I S N V H C N G L E L S L L D  
UniRef90\_T1IIA7 C H Q L G L A L N P M D W R L Q R S E V P G A G T T E D V L L S N V R T E H D I  
UniRef90\_W5JL77 C R Q L G Y R Y Q E K P V T H H H K S S A G L I L L D D V H C E G S E T S L L D  
UniRef90\_H2M4Q6 C Q L L G L G N E S S S T P I F S T E T G P F V K L N T A P N G S L I  
UniRef90\_G1T2J5 C Q L L G L G S E N S S P I V S T D G G P F V T L N R A P N G S  
UniRef90\_UPI0003F12D18 C R Q L G F G Q V S L S S P S F G L A D V Q C E S S D R R L C V T D R G O W Q  
UniRef90\_UPI000265440C C R Q L G H G Y K G R A R Q S P L S R Q T L L P V H H T V H C H G E E D L L Q  
UniRef90\_W5M6H5 C R Q L G F S G Y L N S P S N S A T A G H D D N D T Q A F L S G F R C Y G N E  
UniRef90\_UPI0002652497 C G Q M G F S E A I P I K L E F K D K M R T R M Q N A W L T N V T C R G V E S  
UniRef90\_UPI0001CBBA5 C N Q M G L G G L P T T E I V Q E H E E L Q H Q K W L K L H S D W R N R N A S T  
UniRef90\_UPI0003D0E622 C R Q L G L G Y A R F E D G A N V S R P I L S G S E C Y G N E T L A A D C L H H  
UniRef90\_B4MS10 C R Q L G F R Y V H F E D S A N R P W S G E G F I F L D D V T C T G E E S L L E  
UniRef90\_F6YGB4 C T Q M G L G S P L S T D A M L D V S P V V R R K R W L H V D P D W S P L P L  
UniRef90\_UPI00038379E8 C N Q L G L G E V P S S V S R V P D Q P G V Q G R R R W L H V H P E W H Q R N G  
UniRef90\_UPI0003943118 C K Q M G L G E P S V T E S V Q E Q E Q Y L Q W L V L H S N W E S L N G T T  
UniRef90\_UPI0004439A65 C Q T L G Y G N S L G A T S V V V E E E G F T F S Y G N V N C T G G E S K L N S  
UniRef90\_W4XYI6 C G Q L G F S S F N G F S F G L K D V K C D G S E N N I Q W C S K T E L G  
UniRef90\_E4WYY4 C Q Q L G L T Y H P D F G L V H Q Q V R S S V I E L S S V T C T N L D T D I  
UniRef90\_K1QUE4 C K A I T Y R P S F Y E T V I E K V L D Q N P P P N Q F Y Y T L S N G R S D L P E  
UniRef90\_E9J648 C R Q L G L G F A N H G L Q E T W Y W D A S N V T E M V M S G V K  
UniRef90\_HOZLB0 C R Q L G F S G Y L N S S F S D H D D D P W T F F H G F R C Y G S E R R L E V C  
UniRef90\_W4YLG6 C H Q L G L A L N P K D W R L Q R S E V P G A G T S E N V L L S N V R C T E A E  
UniRef90\_Q17JT6 C R A L G F A G A E T T E R S A W N K E Q Y G Q E L R L K T N P N H R R P  
UniRef90\_A0A026W477 C R Q L G F R R A K V S A D G A Y G E T G L L L D E V Q C S G S E R S L L D  
UniRef90\_W5N5D2 C R Q L G F R R A K V S A D A L G V D S L E E Q F R E A F V S V N H L L P D D V T  
UniRef90\_UPI0003F18D31 C R Q L G F R G A T S S R D Q  
UniRef90\_W4ZH42 C R Q L G Y L T R V W S W P E P L Q C S G K E Q S L E D C Q I R L  
UniRef90\_W4WZA5 C Q Y L G Y R F G N A T Q L P A L P Q D S P F T N I T V A S  
UniRef90\_H3CQ93 C G N L G Y P G Y T S H S P I A P L S P T A L L I S C T G T E S S L D  
UniRef90\_F6ZTM3 C Q Q L G Y V L N P D D W N L E R S E V P A A G T T E K V  
UniRef90\_V5G659 C K Q M G L G E P S V T E I V R E Q R N H R K W L T L R S D W Q H K N T S T  
UniRef90\_G3VB73 C N Q M G L G G P S K T E L V T D N D Q M Q D Q K W L N L H S D W K N K N A  
UniRef90\_UPI000395894F C K Q I G L G G P V T Q I M E D N D Q S H H R K W L R L N S D W R N K N T S A  
UniRef90\_H2ZTG8 C R Q L G Y S Q Y F N E K Y F G A V N R S I F L D E V V C L G S E D N I L Q C  
UniRef90\_I1EJ04 C R Y L G L G T A L T D Q H A T A S K G A P E Y F L N G I S C D G N E S S L E  
UniRef90\_UPI0000E45EAD C R S L G L G T A F S N A L S M Q Y F S S Q Y V H L D M N G Q V P S H  
UniRef90\_K1QG8 C R Q L G L G Y S L H A V I T E T W Y W D A S N V T E M V L S G V K  
UniRef90\_UPI000387056B C R Q L G L G Y S L H A V I T E T W Y W D A S N V T E M V L S G V K



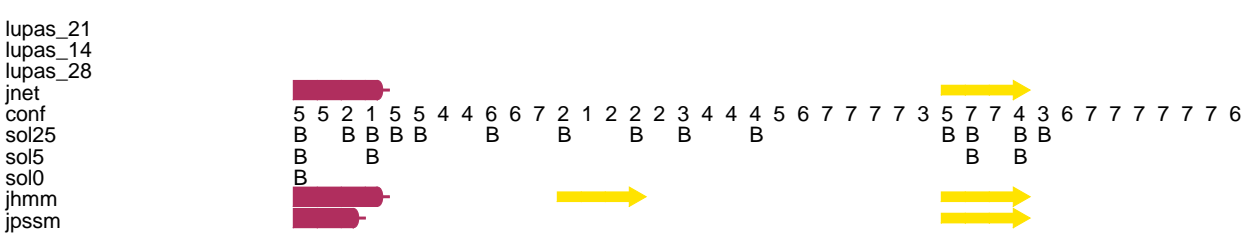
UniRef90\_UPI0003F0BAB2 L H E L L V K G Q S S C R S R S M I S L L C Q D C G H R P  
UniRef90\_H2YM17 G C T H V V T S S C Q S S G R V A L S C S  
UniRef90\_HOV903 L H R L L V P G Q A C P S S R N K I S L L C T D C G R R P  
UniRef90\_UPI0003C172CE L V I Q S N Q C L S D M I I H L E C F H C G K R  
UniRef90\_UPI0004421C09 F I L T P R V Q C F N N L V I H L R C S S C G K R M  
UniRef90\_E4WZR4 S V Q G M L V K G T P S R R V W S V D C Y A C C G K R  
UniRef90\_UPI00033338D8 T T L Q E L L V R S C Q S R S K I S L L C T D C C G R P  
UniRef90\_UPI000388FB1A Q S L L L T P S K Q C L S N L V I H L Q C C N N C C G K R  
UniRef90\_H2RVQ9 I S A S E T S S E E V I S L T C Q P C G V R  
UniRef90\_F6ZAT4 L H Q L L V K G H P C V S D K V V Q V S C Q E C C G  
UniRef90\_UPI000258D4AE L V A N L E R V E F C V S D K V V Q V S C Q E C C G  
UniRef90\_UPI0003B7992C S A L Q A R R S H A C H S R R R V S V G C S E C C G L R P A P  
UniRef90\_UPI0003C48F34 K L Y H S D V C S S K T V V S L R C L E C G V N S  
UniRef90\_I1GE46 F R W L P S Y S S S C  
UniRef90\_I1GE46 F R W L P S Y S S S C  
UniRef90\_H2ZG11 R I Q G A L E C G S C R S E R H V Q I T C K S C G K R  
UniRef90\_UPI000333EDBC V Q G L L V E G Q S C Q S S S A V S L L C Q D C G R R P  
UniRef90\_W4XL81 Q C E V V H D H S V C D T G Q A T L S C  
UniRef90\_L9LD13 L H R L L V N G Q S C R S R R K I A L L C A D C G R R P  
UniRef90\_AOA044U113 D I T L C R H D D S C A S T N V V G L R C M E  
UniRef90\_I1FDV3 N H S T I G S S H N C S R S N G V S V Q C S  
UniRef90\_V4ABZ9 L S D T C Y V N T G C S S G K Y V T V Y C S  
UniRef90\_F7B252 L H E L L V E G Q S C H S R S K I S L L C Q D C G H R P  
UniRef90\_W4WE00 L V T N L E E V G F C V S D K V M Q V S C Q E C G L  
UniRef90\_H3AH32 C Q K D V K L G G T C H Q K E V A A V T C T S  
UniRef90\_UPI0004546788 T T L Q K L L V H S C P S R S K I S L L C Q D C G H R P  
UniRef90\_UPI00026517B4  
UniRef90\_UPI0002038B12 L T P R E R C F N N L V I Y L Q C K Q C G E R  
UniRef90\_HOWUQ7 T T L H R L L V N S C E S G S K I S L L C Q D C G R R P  
UniRef90\_HOXAY4 T L T P S Q C P L Q N S L I L L Q C K S C G K K M L  
UniRef90\_E9GLP3 Q V W D H I Y S C P W D S E E F V F V D C G N R  
UniRef90\_UPI00022B28D5 T N I S E T C H R E E V M S L A C Q P C G V R  
UniRef90\_I1FE71 D C E Y T H D C P G G S V F L K C T  
UniRef90\_M9NDE3 D V T K C R A E Y E C S H E N D V G L R O Y E  
UniRef90\_K7IQW1 E L Q Q C S D Q K D Y S S I D L V C S E C G R R P  
UniRef90\_W2TYE3 D L T Q C R H P A G C R A T E V V A L R C T E  
UniRef90\_Q1PS60 E R T L L K S H K D C L S K R A A E A K  
UniRef90\_G3QCN8 T S T S E T C L S G E V I S L T C  
UniRef90\_W4Y2R7 C S H L P F G L H N C E K G E L A G V R C L  
UniRef90\_W5Q3X8 T T L H E L L V K S C Y S R S K I S L L C Q D C G R R P  
UniRef90\_I1EVE5  
UniRef90\_I1EVE5  
UniRef90\_UPI00026526A3 R I L D C L S I G K C N S T R S A R V R C S D  
UniRef90\_UPI00026526A3 R I L D C L S I G K C N S T R S A R V R C S D  
UniRef90\_J9JJY3  
UniRef90\_UPI0003506991 S T L H A L L V N M C Q S R S K V A L L C T D C G H R P  
UniRef90\_L5KDD0 A L H H S V Y V R E C A S G H V V T L K C T A C G L R  
UniRef90\_E2C1W1 E Q Q L F G H R H E C P D G Q F V F L H C G E R N L  
UniRef90\_E2C1W1 E Q Q L F G H R H E C P D G Q F V F L H C G E R N L  
UniRef90\_AOA023F359 R S N L L S E L R S C P S P R T V D L S C I V C G Q R R  
UniRef90\_UPI00042A9B23 T T L Q E L L E H S C P S R S K I S L L C Q D C G R R P  
UniRef90\_BOXJU0  
UniRef90\_U3JVB4 A E C H I E M K S R Y N N E E L V S L Q C H E  
UniRef90\_D2H5N8 L H E L L V K G Q A C H S R S K I S L L C Q D C G R R P  
UniRef90\_T1FDW8 F A G G F D S S Y S O C P S N V T V S I S C S D  
UniRef90\_T1IIA7 C E A T V D S S I N C S N Q Q I A T V V C  
UniRef90\_W5JL77 D I S K M M S V C G A T K G  
UniRef90\_H2M4Q6 C R H G I W G R T D C S H S E D V G V R C  
UniRef90\_G1T2J5 L T P S S Q C L Q D S L I M L Q C C N H C G T K  
UniRef90\_UPI0003F12D18 L I L T P S I Y C S Q D S L I Q L Q C C N H C G I K L V P  
UniRef90\_UPI000265440C T S T O P H N N D V G V R O S E T G  
UniRef90\_W5M6H5 C Q R T V W N G G E C A N R Q V A A V T C T  
UniRef90\_UPI0002652497 R R L E V D T V D S C Y E K Q E V L R C  
UniRef90\_UPI0001CBBA5 T L Q E C S Y H T Q C I S G M P A T A R O  
UniRef90\_UPI0003D0E622 L H A L L V K G Q S C Q T R S K V S L L C T D C G R R P  
UniRef90\_B4MS10 D H L K G L V S C H G N R Q H V A A V I C  
UniRef90\_F6YGB4 C P H S S W G Q H D C S H S E D V G V R C S N C  
UniRef90\_UPI00038379E8 Q G L L E K R G Q S C Q S S Y K K I S L Q C C T E C G R R P  
UniRef90\_UPI0003943118 S A L Q A R R S H A C H S R R R V S V L C T D C C G L R  
UniRef90\_UPI0004439A65 L H E L L V K G Q S C P S R S K I S L L C S D C G R R P  
UniRef90\_W4XYI6 T I A D G V G A Y A D S G R A S T S C S  
UniRef90\_E4WYY4 E S Q H R E C K S R E P V V L Q C C  
UniRef90\_K1QUE4 R E C H S I K R G D O C F D N V V Y L R O Q  
UniRef90\_E9J648 R T A L I S F R S S Q C P S G E V L K V R F E C G I R  
UniRef90\_HOZLB0 C A G H E M S L S H C Q H H G A S L S C R N T G T R  
UniRef90\_W4YGE4 P D A E W D T V D A C H E K R N V I L Q C  
UniRef90\_Q17JT6 K S S Q G D F E H S C S H E N D V G V R C Y E  
UniRef90\_AOA026W477 L V T N L E E Q V G F C V S E K V V R V S C Q E C G L  
UniRef90\_W5N5D2 C Q H G G W G R H D C S H G E D V G V I C  
UniRef90\_UPI0003F18D31 A L H H S V Y V R E C A S G H V V T L K C T A C G L R  
UniRef90\_W4ZH42  
UniRef90\_W4WZA5 N G Q L F G H R H E C S N G N F V F L H C G K R N  
UniRef90\_H3CQ93 N G R V T I S A S E C S S E E V V S L T C Q P C G V R  
UniRef90\_F6ZTM3 E C Q H V T T S T C R S G H  
UniRef90\_V5G659  
UniRef90\_G3VB73 L H E L L V A G L P C Q S R S R I S L L C Q D C G R R P  
UniRef90\_UPI000395894F S T L H A L L V N T C Q S R S K V A L F C T D C G R R P  
UniRef90\_H2ZTG8 L Q S L L V K G K F O Q S R S K I S L L C T D C G R R P  
UniRef90\_I1EJ04 N H S T I G S S H N C S R S N G V S V Q C S  
UniRef90\_UPI0000E45EAD C S W S S L R N R Q C N S T R I A M V R C S  
UniRef90\_K1QGP8 L G K T S V R A E Q C Q G A M V V A L K O C E G C G Q R  
UniRef90\_UPI000387056B C A G H E M S L S H C Q H H G T S L N C R N T G T R



```

UniRef90_I1FSI1      C R Q L G Y L N A V Y Y S R A Y F G A G T G K I F L D D V R C A G N E S S L L E
UniRef90_I1FI03     C R Q L G Y D P K S Y Q V V V S T N E Y P V I F S H F S C F G S E A N L T Q C S
UniRef90_UPI00021A57C0 C Y Q L G R S Q S F T N N Y F N I S D N P S F V I G A L S C S G S E E S L L S
UniRef90_UPI000258D67A C S M L G Y T V A V S A R V I A Q E N S N I T Q G E P K N L L K
UniRef90_UPI0002652623 C R Q L G Y S G D V G V A W R D A P T Y G Q G F G S M Y L S
UniRef90_K1PPJ5     C R E L G F S K A Y T H Y K S E V D S T G P Y W S S Q F N C T G N E T R L D K C
UniRef90_K1PPJ5     C R E L G F S K A Y T H Y K S E V D S T G P Y W S S Q F N C T G N E T R L D K C
UniRef90_D2A214    C R Q L G F Q G G S F F N W F D
UniRef90_UPI00021A7464 C S M L G Y T A P L S S R L M A Q G M N L T Q R E S K A H R T N L L K
UniRef90_UPI000252BD65 C K A I T Y Q D Y E S V E K V L D E N P T S G R S Y Y T L S Y S E K P V D K
UniRef90_C3ZQ40    C R Q L G Y R G G V A T A G G D
UniRef90_I1F415    C K Q L G Y D S F A M F N G S N A N N S Q P I W T T S L Y S A S S D V C F T Q S
UniRef90_UPI000443C015 C M G Y D S K P M F R A V K I G P E Q E L E V A E I T E N N Q
UniRef90_T1K324    C S S L G Y S R N V H L R R G P R I D M S P T Y T S
UniRef90_UPI000440B9FF C R Q L G L G F S M Y W D G S N V T D M V M S G V K C T G D E L S L S Q
UniRef90_D8TQB2    C R Q L G Y R Y G I A Q K G L L A N G A S P P G S A L M R I W M Q Q V N C S G S
UniRef90_UPI0003340113 C Q L L G L G S E N T S T P I F S A R D G P F V K L N R T S N G S
UniRef90_F1NH25    C R Q L G Y F K Y G K S V P E S S E G N S G L D D V S C S G K E T N L L Q
UniRef90_UPI0002651FAD C R M L G Y P G M S R R S S I G V S D S T P I T I G G L T C V G N E A S I E E
UniRef90_I1FA13    C R Q L G Y S T V Q S F E G S G N H L Y G P S S Q P V W L N S S H K C L S Y C Q
UniRef90_I1G7D8    C H Q L G Y S N Y N T Y K T L A G S S S Q P I W L D R V S C S S S S N C L S S C
UniRef90_C3XXL8    C Q T L G Y P G A V S S F P G T S I F G K G G G L V A R V S C V R S D G A S
UniRef90_U4U677    C Q Q L G Y V L N P H D W Y I E R N E I P D A G K S E S V T L S N
UniRef90_Q9NR16-3 C K Q L G C G T A L H F A G L P H L Q S G S D V V W L D G V S C S G N E S F L W
UniRef90_I1FXP0    C K T L G Y S H L S S S T T F R G S E I N T D T A V Y S V S C G G S E R D L D S

```





UniRef90\_I1FSI1 C M H N P G S H N C D H S K D V G V S C I N C 90 100

UniRef90\_I1FI03 S G L T S T L V C S N R Q V I K I A C Q E

UniRef90\_UPI00021A57C0 R H T T S G A S I N C Q S H E V A G V H C I E

UniRef90\_UPI000258D67A G F Q D C I T D L E V Y P T V E L T C S E C G R R R

UniRef90\_UPI0002652623 Q H V G F G N V T Q C K S K H Y A G V L C V E S G

UniRef90\_K1PPJ5 Q H V G F G N V T Q C K S K H Y A G V L C V E S G

UniRef90\_D2A2I4 E F Q E C I T D Q E A Y P T A E L T C S E C G R R

UniRef90\_UPI00021A7464 R I L T F K P S K C P S G E V L R V K C L E C G I R

UniRef90\_UPI000252BD65

UniRef90\_C3ZQ40 N S C P S S E V L D C S N S S I V S V E C

UniRef90\_I1F415 E F Q V Q N L S G S C Y S G S L V S L H C L D C G

UniRef90\_UPI000443C015

UniRef90\_T1K324 C Q H H K T V S C Q K S G A R F S A V L C S E

UniRef90\_UPI000440B9FF E A Q L Q D C G T L V P L G A T D C S H R

UniRef90\_D8TQB2 L I L T P S K T C L Q D S L I Q L Q C N H C G R K

UniRef90\_UPI0003340113 C S R R E W G K H D C S H Q E D V R L I C

UniRef90\_F1NH25 C M Y D A G H N I A C G I D K V A L L R C Q

UniRef90\_UPI0002651FAD I C P R S S R N H Y C N Y N E V V I L G C C

UniRef90\_I1FA13 E S C P S S Q Y H N C S H S Q D V A L G C C

UniRef90\_I1G7D8 T R A V V T D G V T C G N S S V V G I Y C

UniRef90\_C3XXL8

UniRef90\_U4U677 D C R H S G T V N D C L H Q N D V S V I C S D

UniRef90\_Q9NR16-3 C F V A L S G S T A C S S N R P A Y V V C T

UniRef90\_I1FXP0

