

QUERY 1 10 20 30 40  
UniRef90\_A8A8D3 D P E K V R E E E I L S E I V E E I K I D T D E A G V V V K A D T L G G S L E A V V K Q  
UniRef90\_G7WC54 L E E L K E Q V K R K E I V E E E V M I E T D D K E G N V I V K A D T V Q G S L E A L V K Q  
UniRef90\_G0ED57 D E E E A K E K V M E I E I K E A G E R I R T K D K E G V I V K A D T L L G G S L E A L V K Q  
UniRef90\_Q0AY18 D E F F Q Q M K D A E V V T K E L T N V V L K S D V Q G G S L E A L R K Q  
UniRef90\_D6TJS5 D T L Y T Q M Q E G T V V D T K E L N V V V K S A S T L G G S L E A L R K Q  
UniRef90\_A5DR16 D E E E M D E V M D D L T G L S V V D T S G K G V V V V K A S T L G G S L E A L R K Q  
UniRef90\_I9MDG7 D D L F F K Q I Q E G N I I S Q D L N I V I K A D V Q G G S L E A L R Q Q  
UniRef90\_K8E153 D D L F F K H I Q E G Q I I K E L L P I I L K A D V Q G G S L E A L R A Q  
UniRef90\_Q2RJM5 D D L F F K Q M E A G G E V K E L L N L V I K A D V Q G G S L E A L R A R G  
UniRef90\_W5AJD7 D I E D L K D A V M E E M S R V R I D K S G E G V Y V Q A S T L G G S L E A L T E  
UniRef90\_D1CFX1 E E L F F K N A S D S K E K E L N I V I K A D V Q G G S L E A L I Q  
UniRef90\_A0A024KEC9 E Q M M N Q L K A S G I A K F P L V I L K A D V Q G G S L E A I V A  
UniRef90\_G8QW24 D N L Y S K I K E G E I Q E F N V V I K A D V Q G G S V E A L V G  
UniRef90\_C9LTT0 D D L F F Q Q L Q D V G N I K D L N L I V I K A D V Q G G S V E A L A N  
UniRef90\_UPI00035F6A27 D I E K R R K R V S L E D L D K V L Q E T N Q L N L I K A D N S G T V E A L E  
UniRef90\_F0VKX3 D I E D L K E E V M S D M G S I S V I D R S G S G V Y V M A S T L G S L E A L L V  
UniRef90\_UPI00046E145F D L E E V K E T A M G D M K S V R I D K S G E G V G I Q A S T L G S L E A L L E  
UniRef90\_UPI0003715DDA D T L F E Q M K S Q G E M K E L N V I V K A D V Q G G S L E A L A S  
UniRef90\_M4DIV3 D V D E A K K T A M E D M K S V L V I D K S G E G V Y V Q A S T L G S L E A L L E  
UniRef90\_UPI000371F1D9 E M M N Q R Q S A G L K E F P L V I K A D V Q G G S L E A L A G  
UniRef90\_J2VGX2 E Q M M S Q L Q S V T G L K E F P L L I K A D V Q G G S I E A I A G  
UniRef90\_N0B8Q3 E Q M M Q Q L K D A E R K E F P L L V V K A D V Q G G S V E A I A G  
UniRef90\_C1D8X2 E N M F A Q M A E G G V R S K L L P L I V K A D V Q G G S Y E A L A G  
UniRef90\_B0THR4 D D L F F K Q I K E G Q V L K E R L N L V V K A D V Q G G S V E A L I Q  
UniRef90\_K4LEV1 E D L F F K Q I K E G K V L K E E R N L V V K A D V Q G G S V E A L I Q  
UniRef90\_S4NTC3 V D V L K E V A R E D Y K A S A S V E F K K A P E R G V Y V Q A S T L G S L E A L L E  
UniRef90\_C5K696 D P D E V K R R A M A D Y K A V I E F K K A E G V Y V K A S T L G S L E A L L E  
UniRef90\_S9U0H4 D D L F F K H I K D G E M K E L N V I V K A D V Q G G S V E A L R G  
UniRef90\_V6I2U5 D D L F F E K I K E G E M K E L N L V I K A D V Q G G S V E A L R S G  
UniRef90\_G2FGA5 D E M F S K M A E G E E T Q T L N V I V K A D V Q G G S V E A L K E  
UniRef90\_R5SW75 D N I F E K I K E G E E M K Q L D I I V K A D V Q G G S V E A L V Q  
UniRef90\_UPI000345879A E S M F D Q M A E Q E V E L K Q N L S I I K A D V Q G G S Q E A L M H  
UniRef90\_R5BE68 D D I F N Q Q Q G E V E L K D L N I I I K A D V Q G G S V E A L R Q  
UniRef90\_Q01W31 E Q L H Q Q M R E G E V K E L P V I I K A D V G G S A E V L K E  
UniRef90\_H7F6T8 D N L F F E H M K A G E E M K E V N V I V K A D V G G S V E A L A A  
UniRef90\_G4Q300 D D I F F S I Q E G E E M K D L N I V V K A D V Q G G T I Q A L A Q  
UniRef90\_E3J039 E T L L E R M K E G E K T Q L N L I L K A D V S G S V E A L E D  
UniRef90\_Q6CIX3 S V D S T S G R G V V V Q A S T L G S L E A L L D  
UniRef90\_G7XNW2 V M S D L E N L K V S D S R D Q R G V S V Q A S T L G S L E A L L E  
UniRef90\_UPI0003B504EC D D L F F K Q I Q Q G E V K D L N V I I K A D V Q G G S A E A L R G D  
UniRef90\_UPI0003675BE1 R R K R L S M L R D L D A A L K E T N E F L N L I K A D N S G T V E A L R G D  
UniRef90\_B9QZZ9 E Q M M N R L Q E T E R K E F P L V L K A D V Q G G S A E A I A H  
UniRef90\_H2JH35 E D L F T Q I K E G K V L K D L N I I I K A D V Q G G S V E A V K Q  
UniRef90\_H3KGD0 N L F F S D V G E G E V K T L L P L I I K A D V Q G G S Q E A L V H  
UniRef90\_Q47D94 E N M F S Q M E E G E V V T L L P L I V K A D V Q G G S Q E A L V Q  
UniRef90\_E1Z9W8 D V E D L K D A V M E D M Q D I S V I D K T G E G V C V Q A S T L G S L E A L L E  
UniRef90\_UPI00029A9617 I E K A R Q E E L M R S Q I Q S V V I N T G K V G V I V K A D T L G S L E A L S K  
UniRef90\_I0HGP7 D E M L L R D I K E G E R A T L T L V I K A D G S L G S L E A L S E D  
UniRef90\_M1USS0 I E Y L K E E V M A D L S T A A V I D T S G V G V Y V Q A S T L G S L E A L L E  
UniRef90\_G5GH10 I E E T K D D L L F S Q I K A G N V I K E L P I I V K A D V Q G G S V E A V K Q  
UniRef90\_J2H8X4 D D L F F Q H I K E G D I K E L L N L I V K A D V Q G G S V E A L R G  
UniRef90\_E4LA13 D N I F E K I K E G E M K D L N I I I K A D V Q G G S V E A L V Q  
UniRef90\_B8DW43 E E F F K K F A E S E I D M K E L N L V I K A D V S G S V E A L E G  
UniRef90\_D8IQH0 E N M F D Q M T E G E V K N L N M I K T D V Q G G S Q E A L V Q  
UniRef90\_F9ZRU7 E S L F E A A A E G E V Q Q L N L L I K A D V Q G G S A E A L S Q  
UniRef90\_UPI00037882AE E N M F A N M E A G E V K H L P I I I K A D V Q G G S Q E A L A A  
UniRef90\_UPI0003B6A957 E E F T Q A L E Q Q G E T E L K D L N I V I K A D V Q G G S A E A V K A  
UniRef90\_R5HAE8 D D L F S Q I Q Q G E L K D L N I I V K A D V Q G G S A E A V K A  
UniRef90\_W2EVZ0 E E L F F K D L E K G Q V D E L K E L N I I V K A D V S G S V E A L E Q  
UniRef90\_R7EUA9 D L F A Q I S E G R V I E K S G R G V S V Q A S T L G S L E A L L D  
UniRef90\_F0X8Y7 E N L F D S L E E G E L K S V N V I V K A D V Q G G S V E A L L A  
UniRef90\_A0A011QWD7 D L E E V K E S A M Q D M K S V R I D R S G E G V C V Q A S T L G S L E A L L D  
UniRef90\_U5FEV9 E Y C R D E V M K D F Q T I D V D K S G K G V Y V Q A S T L G S L E A L L E  
UniRef90\_R7QN18 E N M F D Q L G D A A Q T L P L I I K A D V Q G G S Q E A L A Q  
UniRef90\_I0HT26 E T L T L N L V V K A D V Q G G S V E A I T E  
UniRef90\_T5QRK8 D S L F D S L K E G E M K E L N L V I K A D V Q G G S V E A I A N  
UniRef90\_F4FUH6 E K I Q K G E V K D L N T I V K A D V Q G G S V E A V A S  
UniRef90\_E8WMY2 E N M F S N M G E N Q A Q S D L S V I I K A D V Q G G S Y E A L S G  
UniRef90\_L1NTR7 E N M F S N M T A G D V A E L N I V L K A D V Q G G S V E A I A D S  
UniRef90\_A5F926 D L F F G R I S E G Q L K T E A K E L N L I I K T D V Q G G S L E A L K S  
UniRef90\_R5WFN0 E Q M F A K I Q A G E A K E L P V V I K A D V Q G G S V E A L I G  
UniRef90\_UPI00036799DB D V E D I K E A A M E D M K S V R I D K S G E G V Y V Q A S T L G S L E A L L E  
UniRef90\_K4BGN7 E N M F A N M E E G K V S E L N I V L K T D V Q G G T C A I C  
UniRef90\_D3UYZ0 E D L N Q A L A A G K V E T L N L I L K A D V S G S V E A I E D  
UniRef90\_K6VMD4 D N L F S Q I E E G E M K E L S L I V K A D V Q G G S V E A V K Q  
UniRef90\_R7GV14 D M M R D L K S G A G R K E F A L V V K A D V Q G G S V E A I A G  
UniRef90\_B0UL50 I M S D L K S L S I D K S G K G V C V Q A S T L G S L E A L L E  
UniRef90\_A0A015ING5 D E M E L R E E V L S D M K G V R V D K S G E G V Y V Q A S T L G S L E A L L E  
UniRef90\_A4RV06 E E L Y S Q I E E G K V R E L N I V I K A D V Q G G S I E A L K Q  
UniRef90\_UPI0002884F8F K T L D Q L F E Q L E K G E T Q E L R L I L K A D V G A G S V E A L E D  
UniRef90\_F5XR98 D E E V L R D A V M T D L T T L S V I D K S E R G V C V Q A S T L G S L E A L L D  
UniRef90\_UPI000441532D E S M F D N M G E G Q A Q V L P L I V K A D V Q G G S Q E A L V A  
UniRef90\_UPI000344A0B1 E N L N L I I K A D V S G A V E A L E D  
UniRef90\_M2YE26 E Y Y R E E V A N V L K D E S I K V Q E R G V F V Q A S T L G S L E A L L E  
UniRef90\_UPI0003594097 N K E K M L E E T K A K M S L D D L S N L K E L N I V I K A D V Q G G S V E A V K Q  
UniRef90\_R7A1H0 L E E V K T E V Q S E F K F Q D L S E E N G V F V Q A S S L G S L E A L L K  
UniRef90\_B0E653 K R T R R V S L J E D L D K V A G E V Q Q L N L I I K G D A S G S V E A L L E S  
UniRef90\_Q8CJQ8 D N I F S Q I Q A G N L K E L L V I V K A D V Q G G S V E A V R E  
UniRef90\_F7V6C5 E N I L D Q L K E G A V Q E L L A L V V K A D V Q G G S V E A L V E  
UniRef90\_E1QFC5 E V Q Q L N L I I K A D V S G S V E A L E D  
UniRef90\_UPI0003B4A234 E V Q Q L N L I I K A D V S G S V E A L E D

QUERY  
UniRef90\_A8A8D3  
UniRef90\_G7WC54  
UniRef90\_G0ED57  
UniRef90\_Q0AY18  
UniRef90\_D6TJ55  
UniRef90\_A5DR16  
UniRef90\_I9MDG7  
UniRef90\_K8E153  
UniRef90\_Q2RJM5  
UniRef90\_W5AJD7  
UniRef90\_D1CFX1  
UniRef90\_A0A024KEC9  
UniRef90\_G8QW24  
UniRef90\_C9LTT0  
UniRef90\_UPI00035F6A27  
UniRef90\_F0VKX3  
UniRef90\_UPI00046E145F  
UniRef90\_UPI0003715DDA  
UniRef90\_M4DIV3  
UniRef90\_UPI000371F1D9  
UniRef90\_J2VGX2  
UniRef90\_N0B8Q3  
UniRef90\_C1D8X2  
UniRef90\_B0THR4  
UniRef90\_K4LEV1  
UniRef90\_S4NTC3  
UniRef90\_C5K696  
UniRef90\_S9U0H4  
UniRef90\_V6IZU5  
UniRef90\_G2FGA5  
UniRef90\_R5SW75  
UniRef90\_UPI000345879A  
UniRef90\_R5BE68  
UniRef90\_Q01W31  
UniRef90\_H7F6T8  
UniRef90\_G4Q300  
UniRef90\_E3J039  
UniRef90\_Q6CIX3  
UniRef90\_G7XNW2  
UniRef90\_UPI0003B504EC  
UniRef90\_UPI0003675BE1  
UniRef90\_B9QZZ9  
UniRef90\_H2JH35  
UniRef90\_H3KGD0  
UniRef90\_Q47D94  
UniRef90\_E1Z9W8  
UniRef90\_UPI00029A9617  
UniRef90\_I0HGP7  
UniRef90\_M1USS0  
UniRef90\_G5GH10  
UniRef90\_J2H8X4  
UniRef90\_E4LA13  
UniRef90\_B8DW43  
UniRef90\_D8IQH0  
UniRef90\_F9ZRU7  
UniRef90\_UPI00037882AE  
UniRef90\_UPI0003B6A957  
UniRef90\_R5HAE8  
UniRef90\_W2EVZ0  
UniRef90\_R7EUA9  
UniRef90\_F0X8Y7  
UniRef90\_A0A011QWD7  
UniRef90\_U5FEV9  
UniRef90\_R7QN18  
UniRef90\_I0HT26  
UniRef90\_T5QRK8  
UniRef90\_F4FUH6  
UniRef90\_E8WMY2  
UniRef90\_L1NTR7  
UniRef90\_A5F926  
UniRef90\_R5WFFN0  
UniRef90\_UPI00036799DB  
UniRef90\_K4BGN7  
UniRef90\_D3UYZ0  
UniRef90\_K6VMD4  
UniRef90\_R7GV14  
UniRef90\_B0UL50  
UniRef90\_A0A015ING5  
UniRef90\_A4RV06  
UniRef90\_UPI0002884F8F  
UniRef90\_F5XR98  
UniRef90\_UPI000441532D  
UniRef90\_UPI000344A0B1  
UniRef90\_M2YE26  
UniRef90\_UPI0003594097  
UniRef90\_R7A1H0  
UniRef90\_B0E653  
UniRef90\_Q8CJQ8  
UniRef90\_F7V6C5  
UniRef90\_E1QFC5  
UniRef90\_UPI0003B4A234

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

QUERY UniRef90\_A8A8D3 UniRef90\_G7WC54 UniRef90\_G0ED57 UniRef90\_Q0AY18 UniRef90\_D6TJS5 UniRef90\_A5DR16 UniRef90\_I9MDG7 UniRef90\_K8E153 UniRef90\_Q2RJM5 UniRef90\_W5AJD7 UniRef90\_D1CFX1 UniRef90\_A0A024KEC9 UniRef90\_G8QW24 UniRef90\_C9LTT0 UniRef90\_UPI00035F6A27 UniRef90\_F0VKX3 UniRef90\_UPI00046E145F UniRef90\_UPI0003715DDA UniRef90\_M4DIV3 UniRef90\_UPI000371F1D9 UniRef90\_J2VGX2 UniRef90\_N0B8Q3 UniRef90\_C1D8X2 UniRef90\_B0THR4 UniRef90\_K4LEV1 UniRef90\_S4NTC3 UniRef90\_C5K696 UniRef90\_S9U0H4 UniRef90\_V6IZU5 UniRef90\_G2FGA5 UniRef90\_R5SW75 UniRef90\_UPI000345879A UniRef90\_R5BE68 UniRef90\_Q01W31 UniRef90\_H7F6T8 UniRef90\_G4Q300 UniRef90\_E3J039 UniRef90\_Q6CIX3 UniRef90\_G7XNW2 UniRef90\_UPI0003B504EC UniRef90\_UPI0003675BE1 UniRef90\_B9QZZ9 UniRef90\_H2JH35 UniRef90\_H3KGD0 UniRef90\_Q47D94 UniRef90\_E1Z9W8 UniRef90\_UPI00029A9617 UniRef90\_I0HGP7 UniRef90\_M1USS0 UniRef90\_G5GH10 UniRef90\_J2H8X4 UniRef90\_E4LA13 UniRef90\_B8DW43 UniRef90\_D8IQH0 UniRef90\_F9ZRU7 UniRef90\_UPI00037882AE UniRef90\_UPI0003B6A957 UniRef90\_R5HAE8 UniRef90\_W2EVZ0 UniRef90\_R7EUA9 UniRef90\_F0X8Y7 UniRef90\_A0A011QWD7 UniRef90\_U5FEV9 UniRef90\_R7QN18 UniRef90\_I0HT26 UniRef90\_T5QRK8 UniRef90\_F4FUH6 UniRef90\_E8WMY2 UniRef90\_L1NTR7 UniRef90\_A5F926 UniRef90\_R5WFFN0 UniRef90\_UPI00036799DB UniRef90\_K4BGN7 UniRef90\_D3UYZ0 UniRef90\_K6VMD4 UniRef90\_R7GV14 UniRef90\_B0UL50 UniRef90\_A0A015ING5 UniRef90\_A4RV06 UniRef90\_UPI0002884F8F UniRef90\_F5XR98 UniRef90\_UPI000441532D UniRef90\_UPI000344A0B1 UniRef90\_M2YE26 UniRef90\_UPI0003594097 UniRef90\_R7A1H0 UniRef90\_B0E653 UniRef90\_Q8CJQ8 UniRef90\_F7V6C5 UniRef90\_E1QFC5 UniRef90\_UPI0003B4A234

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

QUERY E E E K K K K W M E A  
 UniRef90\_A8A8D3 R E E E K R K V L E T  
 UniRef90\_G7WC54 L D P S F K E V V  
 UniRef90\_G0ED57 I E A D R R R R E F E S  
 UniRef90\_Q0AY18 L D P E Y K E K F  
 UniRef90\_D6TJS5 L E P E Y R E V I  
 UniRef90\_A5DR16 M E I R R R D F L E  
 UniRef90\_I9MDG7 L A P E Y K E V L Q  
 UniRef90\_K8E153 L D P E Y K E V I  
 UniRef90\_Q2RJM5 L E P E E R E V I  
 UniRef90\_W5AJD7 R E E K K K D S A E  
 UniRef90\_D1CFX1 L E P E S K E V I D  
 UniRef90\_A0A024KEC9 L A P E R R E T F  
 UniRef90\_G8QW24 L A P D I K E V I  
 UniRef90\_C9LTT0 L A P K Y K E V V Q  
 UniRef90\_UPI00035F6A27 L K P E Y E E V  
 UniRef90\_F0VKX3 K E E K K K E V A Q  
 UniRef90\_UPI00046E145F K E E K K K E S A D  
 UniRef90\_UPI0003715DDA L D P E F E E K I  
 UniRef90\_M4DIV3 R D E E R K E T  
 UniRef90\_UPI000371F1D9 L T P E R R E T M  
 UniRef90\_J2VGX2 L S P E R R E T F  
 UniRef90\_NOB8Q3 L A P T K R E V F  
 UniRef90\_C1D8X2 L A P E K K E E I T  
 UniRef90\_B0THR4 L E P E E K E V V Q  
 UniRef90\_K4LEV1 L E P I Y K E V  
 UniRef90\_S4NTC3 K Q K K R E E F  
 UniRef90\_C5K696 K E E K R Q Q V Q E  
 UniRef90\_S9U0H4 L D P E Y K E V V  
 UniRef90\_V6IZU5 L D P E F K E K V  
 UniRef90\_G2FGA5 L S P E I R E E I  
 UniRef90\_R5SW75 L A P T V K E I L  
 UniRef90\_UPI000345879A L A P E K K E V I T  
 UniRef90\_R5BE68 L T P E F K E V I  
 UniRef90\_Q01W31 L A P V F K E V Y  
 UniRef90\_H7F6T8 L D P E Y E E K I  
 UniRef90\_G4Q300 L A P K F R E K I  
 UniRef90\_E3J039 L K P V Y E E A  
 UniRef90\_Q6CIX3 L E K R R A E F I  
 UniRef90\_G7XNW2 T E R R R K E E  
 UniRef90\_UPI0003B504EC L D P E F E E R V  
 UniRef90\_UPI0003675BE1 L K P I Y E E V  
 UniRef90\_B9QZZ9 L S P E R R E T F  
 UniRef90\_H2JH35 L E P T Y Q E V V  
 UniRef90\_H3KGD0 L S P E V R E T  
 UniRef90\_Q47D94 L S P E K R E Q I T  
 UniRef90\_E1Z9W8 K E E E Q E A A  
 UniRef90\_UPI00029A9617 E E R K K R E L L  
 UniRef90\_I0HGP7 L K P E Y E E V  
 UniRef90\_M1USS0 K E R K K R D A  
 UniRef90\_G5GHI0 L E P V Y E E R I  
 UniRef90\_J2H8X4 L D P V Y K E N I  
 UniRef90\_E4LAI3 L S P K L K E I  
 UniRef90\_B8DW43 L K P E Y E E V T T S  
 UniRef90\_D8IQH0 L S P E K R E Q  
 UniRef90\_F9ZRU7 L S P E I R E K I  
 UniRef90\_UPI00037882AE L T P D K K E E I  
 UniRef90\_UPI0003B6A957 L K P E F E E V  
 UniRef90\_R5HAE8 L A P K F R E V  
 UniRef90\_W2EVZ0 L K P E F E E V  
 UniRef90\_R7EUA9 L A P K Y K E A L  
 UniRef90\_F0X8Y7 S E K K K E E  
 UniRef90\_A0A011QWD7 L D P E F E E K V T  
 UniRef90\_U5FEV9 K E E R K R E A  
 UniRef90\_R7QN18 K K D R R E Q V S D  
 UniRef90\_I0HT26 L A P E Q R E E V  
 UniRef90\_T5QRK8 L A P V Q R E V Y  
 UniRef90\_F4FUH6 L A P T Y T E Q V T  
 UniRef90\_E8WMY2 L E P T F R E K Y  
 UniRef90\_L1NTR7 L A P E E K E Q I T  
 UniRef90\_A5F926 L S P E F K Q E I  
 UniRef90\_R5WFN0 L A P K F K E T V  
 UniRef90\_UPI00036799DB L E P T F K E K F  
 UniRef90\_K4BGN7 L A P E Y K Q Q I  
 UniRef90\_D3UYZ0 L K P E F E E H  
 UniRef90\_K6VMD4 L A P K T R E V V  
 UniRef90\_R7GVI4 L P P T L R E  
 UniRef90\_B0UL50 V E Q K R K D Q  
 UniRef90\_A0A015ING5 K A D K R E A A S Q  
 UniRef90\_UPI0002884F8F L E P E F K E V I  
 UniRef90\_F5XR98 L K P I Y E E V  
 UniRef90\_UPI000441532D T E A K R K D A  
 UniRef90\_UPI000344A0B1 L A P E Q K E E I  
 UniRef90\_M2YE26 L K P E Y E E V  
 UniRef90\_UPI0003594097 K R R R Q E E F  
 UniRef90\_R7A1H0 L D P V Y E E K V  
 UniRef90\_B0E653 E E Q K R  
 UniRef90\_Q8CJQ8 L K P E Y E E V  
 UniRef90\_F7V6C5 L E P I Y E E K V  
 UniRef90\_E1QFC5 L A P E F H E E V  
 UniRef90\_UPI0003B4A234 L K P E F E E A

UniRef90\_E11FZ5 UniRef90\_K6H676 UniRef90\_W5XCC8 UniRef90\_A3UIH1 UniRef90\_R7NC17 UniRef90\_UPI00037C809F UniRef90\_S9VSH8 UniRef90\_E8V7H8 UniRef90\_UPI000415DC85 UniRef90\_B8CW72 UniRef90\_I3TDY1 UniRef90\_R5TGM4 UniRef90\_J4C7Z4 UniRef90\_UPI0003741AF9 UniRef90\_X1NMD1 UniRef90\_D4MXM6 UniRef90\_V7HWG2 UniRef90\_U1FYR2 UniRef90\_X1TPW8 UniRef90\_C0EAK5 UniRef90\_F7RV46 UniRef90\_UPI00037875EE UniRef90\_K2D737 UniRef90\_UPI00047613B9 UniRef90\_Q6C182 UniRef90\_UPI0003FD32F7 UniRef90\_T0ZDD8 UniRef90\_M5J8I2 UniRef90\_C8P7Y0 UniRef90\_U2IG08 UniRef90\_I7LC64 UniRef90\_U1LP26 UniRef90\_I0X9V9 UniRef90\_B6AD18 UniRef90\_U7KF21 UniRef90\_A0A023X3S2 UniRef90\_C0QTL9 UniRef90\_K2LMM2 UniRef90\_F8C4R7 UniRef90\_I3CJY7 UniRef90\_Q0U4I7 UniRef90\_Q6G4W0 UniRef90\_C2KV10 UniRef90\_S3L0X8 UniRef90\_UPI0003B42602 UniRef90\_U5MS32 UniRef90\_R9SKG2 UniRef90\_C3Y385 UniRef90\_I0A0D0 UniRef90\_R6E0R1 UniRef90\_D6SK67 UniRef90\_B2J955 UniRef90\_G1XWR1 UniRef90\_R6U9X6 UniRef90\_X5MN78 UniRef90\_UPI0003B372E9 UniRef90\_Q2VZV0 UniRef90\_F5SC70 UniRef90\_E6VSQ7 UniRef90\_UPI0004187573 UniRef90\_I7LRW4 UniRef90\_UPI00035FA5BB UniRef90\_UPI000371EE18 UniRef90\_UPI0004657515 UniRef90\_L0GUP2 UniRef90\_B3P196 UniRef90\_UPI0004676F2C UniRef90\_Q1GXD6 UniRef90\_UPI00034AD84B UniRef90\_A0A024GC03 UniRef90\_D2RX40 UniRef90\_I0R2X5 UniRef90\_E8LM64 UniRef90\_UPI000479599E UniRef90\_R7FR39 UniRef90\_E0SQA7 UniRef90\_B8CKH3 UniRef90\_Q11PK5 UniRef90\_A5FJF9 UniRef90\_M7NTE9 UniRef90\_UPI00047240A3 UniRef90\_UPI000375CE9C UniRef90\_K2DF21 UniRef90\_R5B5W0 UniRef90\_UPI000459LPJ5 UniRef90\_B4RXT8 UniRef90\_K9Q338 UniRef90\_UPI00036E1910 UniRef90\_F2N9P8 UniRef90\_R7JP21 UniRef90\_A0A017T119

1 10 20 30 40

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

UniRef90\_E11FZ5 S Q T E V Q I K I 50 H R G T G A I I T E T S D D V N L A T A S S Q A I I I G G  
UniRef90\_K6H676 A L K E E V Q E K I I V L S A G A V G G G I V T T E S D D V L L A N A S S S D A I I I V G  
UniRef90\_W5XC8 M L E E E V Q E A K I I V L S A G A V G G G I V T T E S D D V L L A N A S S S D A I I I V G  
UniRef90\_A3UIH1 A L E E E V T V K V L F S A P G G G I V S N E S D D V V L L A S A S S G N A V I I F G G  
UniRef90\_R7NC17 S L E E E V T V K V L F S A P G G G I V S N E S D D V V L L A S A S S S D A V I I I G G  
UniRef90\_UPI00037C809F A L L N E Q V I R V L F S A P G G G I V S Y K K D V M K C A T M L E K A K E Y A V I I I G C  
UniRef90\_S9VSH8 S L E K Q M K I P V L A S V N I T G V G A I V T E T S D I L L A S A S S S N A V V I I G C  
UniRef90\_E8V7H8 S L R K I E V N I I I H T G V G A I V T E T S D I L L A S A S S S N A V V I I G G  
UniRef90\_UPI000415DC85 S L R K I E V N I I I H T G V G A I V T E T S D I L L A S A S S S N A V V I I G G  
UniRef90\_B8CW72 S L E E V T V R I I F G V N T G V G A I V T Q K K D V L E A S I V G K T A P E Y K V V L A G  
UniRef90\_I3TDY1 A L K E Q M N I P V R I A D V G G G I V T Q K K D V T L L A S V S S N A I I I L G A  
UniRef90\_R5TGM4 S L E E V T V R I I F G V N T G V G A I V K E S D D V T L L A S V S S N A I I I L G A  
UniRef90\_J4C7Z4 S L N D K K I K I F G V N T G V G A I V Q K K D V K K A S I M R E K H P E Y S T I L L A  
UniRef90\_UPI0003741AF9 S L E K V R V K I I H S G V G G A I V T E T S D I L L A T A S S N A I V I I G  
UniRef90\_X1NMD1 S L R R D N P I R L A N V G G A I V S K R D V M E A V V V K E H E P L H G V I I A  
UniRef90\_D4MXM6 S L D E V A V K V I I H A A V G G A I N E S D D V N L A A A S S S N A I I I V G G  
UniRef90\_V7HWG2 S F K K V A V K V I I H Q A V G G A I N E S D D V T L A E A S S S N A I I I V G G  
UniRef90\_U1FYR2 S L M K V N R V I I H S T A G V G A I N E S D D V T L A N A S S S N G I I I G G  
UniRef90\_X1TPW8 S L E E Q V N V R V I I H S T A G V G A I T K S D D M L A A S K N G L I I I G G  
UniRef90\_C0EAK5 S L E E Q V N V R V I I H S S A V G G A I S K S D D V M L A N A S S N A I I I G G  
UniRef90\_F7RV46 S L D D E V K V K I I V G S G V G G I T E T S D I S L L A G A S S N A I V I I G G  
UniRef90\_UPI00037875EE S L D D E V K I K V L A S G V G G I T E T S D I N L L A L A S S D G I I I V G G  
UniRef90\_K2D737 V L D E E V K I K V L A S G V G G I T E T S D I N L L A L A S S S A I I I V G G  
UniRef90\_UPI00047613B9 S L L K Q M K I P V L M S A L G L G P V Y K K D V M R A T T M L E K D K S L A I M L C  
UniRef90\_Q6C182 S L L K I D V R V I T H R G V G G A I V T Q N D V N L A T V D S N A I I I G G  
UniRef90\_UPI0003FD32F7 S L L E E V R V N I V I H A A V G G A I T E S D D V N L L A L A S K N A V I I I G G  
UniRef90\_T0ZDD8 S L L Q K I K V D I I H R A A V G G A I N E S D D I T L A E A S S G N A I I I V G G  
UniRef90\_M5J8I2 S L L Q K I K V D I I H R A A V G G A I S Q S D D T L A E A S S S N A V I I I G G  
UniRef90\_C8P7Y0 S L L E E I Q V N V I I H K G V G G A I S E S D D V V L A S A S S S N A I I I L G G  
UniRef90\_U2IG08 S L L E K V R V N I I H S G V G G A I N E S D D V T L A G A S S S N A F I I I G G  
UniRef90\_I7LC64 S L L M K I E L R I I I H R S G V G A I T E S D D V N L A T V D S A V I I I G G  
UniRef90\_U1LP26 S L E E I N L S V I I H S S A G T V H K L D V R R A S I M H E R H P E E M A V I I L A  
UniRef90\_I0X9V9 Y L K S C N P V S A L N I A G T V H K L D V R R A S I M H E R H P E E M A V I I L A  
UniRef90\_B6ADi8 A L D E E V E L N I I D R G V G G A I V T E T N I S L A A S S S D A V I I L A  
UniRef90\_U7KF21 S L D E E V R T I N V I H R S G V G G A I T D S D D V M L A S A S S S G I L L G G  
UniRef90\_A0A023X3S2 S I L E E V T I N V I H R S G V G G A I T E S D D V M L A A S S S N A L I I I G G  
UniRef90\_C0QTL9 T L E E E V S V R V L H S G V G G A I N E S D D V T L A R A S S N A L I I I G G  
UniRef90\_K2LMM2 S L L E E V K V N I I H R A G I G G A I S E S D D V M L A S A S S N A I V V G G  
UniRef90\_F8C4R7 S L D E V K V N I I H R A G I G G A I T E S D D V N L A L A S S N A I I I G G  
UniRef90\_I3CJY7 S L D E V K V N I I H R A G I G G A I T E S D D V N L A L A S S N A I I I G G  
UniRef90\_Q0U4I7 F L R V S K I P V S T I S L G P V F R K D V L R A G I M L E K A K E Y A V M L C  
UniRef90\_Q6G4W7 A L E E E V R A R I V I H S A A G G A I T E S D I S L A E A S S H S A V I I G G  
UniRef90\_C2KV10 S L L Q E V R K V I V I H A G V G G A I N E S D I N L A L A S S S N A I V I I G G  
UniRef90\_S3L0X8 S L L E K I R L V V I H A S S A G A I N E S D D V M L A A A D S N A I I I I G G  
UniRef90\_UPI0003B42602 L L S K K I E L R I I H A G V G G A I N E S D D V V L A A A S S D A I I I I G G  
UniRef90\_U5MS32 S L E K V K V R V I I H A G V G G A I T E T D V T L A N A S S N A I V I I G  
UniRef90\_R9SKG2 L T D L K V P L R S A D I G D V S K R D V I N G Q I A S E E N D E D G V I F A  
UniRef90\_C3Y385 F L K T S K I P F A G L N I G P V H K K R D V M K A S I M L E H D S Q Y A V I L A  
UniRef90\_I0A0D0 A L K R N N I P V R I A D N I G I T K K R D V V E A S I S K Q D D E T L G V I L G  
UniRef90\_R6E0R1 S L E K V R V R I I H T G V G T V T E T S D V M L A G T T G S I I I I G G  
UniRef90\_D6SK67 A L N K V Q I N L I H G G A G E I S E T D I M L A S A S S S N A V I I I G G  
UniRef90\_B2J955 A L K E V K I R M L L A T A G E I T E T D I D L A A S S S N A V I I I G G  
UniRef90\_G1XWR1 T L E E E V K V R V L H S G V G A I N E S D D V T L A N A S R N G I I I I G G  
UniRef90\_R6U9X6 S L E E N A G T D I H A G V G G A I N E S D D V M L A K A S S N A L I V V G G  
UniRef90\_X5MN78 A L E E V N V N I V S G G V G G I T E S D D V N L A A A S G A A I I L G G  
UniRef90\_UPI0003B372E9 S L E E V N V N I V S G G V G G I T E S D D V N L A M T S E S V M F G G  
UniRef90\_Q2VZV0 T L E K V K V R I L H A A G G A I N E S D D I T L A K A S S N G L L I V G G  
UniRef90\_F5SC70 S F E K V R I N I I H S A G A G A I T E S D V S L A S A S S N A L I I V G G  
UniRef90\_E6VSQ7 A L D E E V K I N V I H S G G A G A I T E S D I L L A S A S S E A I A I G G  
UniRef90\_UPI0004187573 A L E E V Q L R V I H R G V G G A I T E S D V N L A A A G D E E S A T I I A  
UniRef90\_I7LRW4 S L O K V K V D I V I H S G V G G A I N E S D D V S L A E A A S N A V I I I G G  
UniRef90\_UPI00035FA5BB A L E E V D L R I L H S R G V G A I T E N D V N L A T I D N A I I I I G G  
UniRef90\_UPI000371EE18 S L D E V K I K V I S S G V G G A I N E G D V N L A L A S S E A L L I I G G  
UniRef90\_UPI0004657515 Q L N K V E L S I V I H S A A P V T E S D D L L L A K A S S E G I V I I G G  
UniRef90\_L0GUP2 S L D E V K V T V V A N G V G G I T E S D A N L A V T S S N A I L I I G G  
UniRef90\_B3P196 S L D E E V Q V N I S S G V G G A I T E N D V N L A V T S S G A I I I V G G  
UniRef90\_UPI0004676F2C S L D E E V R V K V I I H S S V G G A I T E T D I S F A A S S E A V I I I G G  
UniRef90\_Q1GXD6 S L D E E V K V N I I I H T G V G A I S E S D V N L A A A S K A V L I I G G  
UniRef90\_UPI00034AD84B S L E N I A I Q V L K V N I G P V S E S D V L L A T A S S D A I I I I G G  
UniRef90\_A0A024GC03 F L R T C D I P V A C K V N I G P V H K K D V M R A S V Q L E H Q P E Y A T I L A  
UniRef90\_D2RX40 A L D E A E V P I V R A E V G D V A P R D I S V A S T A E D P K Q Q V I L G  
UniRef90\_I0R2X5 S L D S V Q L R I I H R G V G G A I T E S D V N L A T V D S A V I I I G G  
UniRef90\_E8LM64 A L D E V K V N I V I H S G V G G I T E T D S T L A A A S S N A I V I I G G  
UniRef90\_UPI000479599E S L E E V K V N P I H G G V G G A I R E T D T M L A S A S S N A I V I I G G  
UniRef90\_R7FR39 S L D E E V R V N V I H T G V G G I T E T D V M L A N A S S N A I V I I G G  
UniRef90\_E0SQA7 A L N R K S I P I R I A D V G P L T K R D V I E A S I V A K N N K Y N A I V I L  
UniRef90\_B8CKH3 S L D E E V K V N I I A R G V G G I T E T D A T L A A S S N A I M V G  
UniRef90\_Q11PK5 S L E E E I Q I R I L H K G V G G A I S E S D V L L A S A S S D A I I V A  
UniRef90\_A5FJF9 S F E E V Q I N I I H K G V G G A I T E T D V N L A S A S S D A I I I G  
UniRef90\_M7NTE9 F L K Q S K I P V S G I D L G P V H K K D V I R C S A M L E R A K E Y A V M L C  
UniRef90\_UPI00047240A3 A L D E E I K V N I V A A A G G G I S E T D V N L S V A S S N A T I I I G G  
UniRef90\_UPI000375CE9C A L E E E V K V A V V S S G V G G I T E T D T N L A V A S S E A I I I I G G  
UniRef90\_K2DF21 S L D E E V K V T I V H S G V G G A I T E S D I N L L A L A S K A I I V I I G G  
UniRef90\_R5B5W0 A L E E E V R V C I H G A V V G G A I T D S D V I F A S A S S N A I V I I G G  
UniRef90\_A0A059LPJ5 F L R E V G I P V S A I N I G P V H K R D V M R A N V M L E R V R K Y G V I L A  
UniRef90\_B4RXT8 S L S E V K V N I V I G S G V G G I T E T D A T L A A A S G A I V L G  
UniRef90\_K9Q338 S L D E E V K I R V L L S A P G G I S E T D V D L A A A S S G A V I I I G G  
UniRef90\_W2VBV7 S L E K V K V N I V I H S G V G G I T E S D I M L A E T S N A V I I I G G  
UniRef90\_UPI00036E1910 S L E E E V E V R V I S S G V G G I T E T D A N L A L A S S N A V I V G G  
UniRef90\_F2N9P8 A L D E E V R I N I I H S A V G A I S E T D V T L A A A S S N A I I I V G G  
UniRef90\_R7JP21 S L E T V Q V N V I I H S A V G Q I S E S D D V L L A A A S N A I I I V G G  
UniRef90\_A0A017T119 A V E K V K V T I V S A G V G A I T E G D V N L A V A S K A I I I V G

UniRef90\_E1FZ5 F N A R P D P A A R R A A E E Q Q G I D E I V R R F Y Y N I I Y Q L T D D I I K K A M V G M  
UniRef90\_K6H676 F N V R P E T K K V K E M A E E E Q E Q S N V V V E I R R F Y Y N I I Y Q L T D D I I K K A M V G M  
UniRef90\_W5XCC8 F N V R K A N P E G G A R K K E A E E K E R E Q E S N V V V E I R R F Y Y N I I Y Q L T D D I I K K A M V G M  
UniRef90\_A3UIH1 F N V R A N K P E G G A R K K E A E E K E R E Q E S N V V V E I R R F Y Y N I I Y Q L T D D I I K K A M V G M  
UniRef90\_R7NC17 F N V K P D N Q A R R I V A E E R E K G V D D L V R R L Y S S V I Y N A I E D D V V V K A A M V G M  
UniRef90\_UPI00037C809F F N T T L A P G A R Q A A D D Q A G L V V V F R D Y S N V I Y N L L F D D A F T Q A A M V G M  
UniRef90\_S9VSH8 F D V K V D H P D A E A L S E A E E N G V E I V R L H H R V I Y H L L F Q D E E I T K A M L G L  
UniRef90\_E8V7H8 F N V R P E R K A Q E L S E A E E N G V E I V R L H H R V I Y H L L F Q D E E I T K A M L G L  
UniRef90\_UPI000415DC85 F N V R P D S A N A R K K A A E E S E K K V D E I V K K T Y R V I Y K A I E E E V K A A M K G L  
UniRef90\_B8CW72 F N V R P D S A N A R K K A A E E S E K K V D E I V K K T Y R V I Y K A I E E E V K A A M K G L  
UniRef90\_I3TDY1 F N V K V L P E A K S L A E E R E K V N D L L Y H N V I Y Q L L E E E L D K W V K E V  
UniRef90\_R5TGM4 F N V R P E H E A Q K Q A D K E K M R L Y R V I Y D A I D D D V Q K A L N G L  
UniRef90\_J4C7Z4 F D I K V T P D A E K E A E L L G V K L L T A D I I Y H L L L D D S F L J A Y M E A M  
UniRef90\_UPI0003741AF9 F N V R P E P Q A K I A A D Q E K V D I R L H R I I Y N V I D D E I E Q A M K G M  
UniRef90\_X1NMD1 F N V R K L P D A E E A A S Q R R K P I F Q H N I Y H L L D D D Y T K A W V R S K  
UniRef90\_D4MXM6 F N V R P E P A A K E D A A S A E A E Q V D D L R R L Y R V I Y N A I E D E I E T A A M K G M  
UniRef90\_V7HWG2 F N V R P T P Q A K S Q A E A E A D Q V D D L R R L H N V I Y K A I E D E I E T A A M K G M  
UniRef90\_U1FYR2 F N V R P D T G A K R S A E A E E N G V D D M R L H N I Y T V I D D I E S A M K G M  
UniRef90\_X1TPW8 F N V D S E P G A R R L A E E V E G V G L R H Y N I Y N L V D D D V D K A M K G M  
UniRef90\_C0EAK5 F N V R P D P A K E E A E A N D V E L L R M Y R V I Y D A I E D D V E Q A M K G M  
UniRef90\_F7RV46 F N V R A D A T A R R T S E N E N G V I E L R R Y S V I Y D V I D E V R Q A M T G M  
UniRef90\_UPI00037875EE F N V R P E N K A K K V A D V E G V D I L R Y F Y K V I Y D A I D E V R K A A M G V  
UniRef90\_K2D737 F N V R A D A V A K R L A E R E Y G V D I L R Y Y S I I Y K L A D D I L K A A L T G M  
UniRef90\_UPI00047613B9 F N T T L A P G S R A A A D R E Y Q G V K L F R E A D I I Y N L L F D D I T K A M E G L  
UniRef90\_Q6C182 F D V K L D K D A E R A A A D R E Y Q G V K L F R E A D I I Y H L L F D D F V K H Q K K L  
UniRef90\_UPI0003FD32F7 F N V K P A E R V A E L A D R E G V D M R R F Y S V I Y G A I D D D I E L A L K G M  
UniRef90\_T0ZDD8 F N T R A D T T A R K L I A S E A G N V D D V I R R Y D I I Y N V V D E I V K A A L S G M  
UniRef90\_M5J8I2 F N V R P T P Q A K S Q A A D S E N V D I R R L H N V I Y N A I E D E I V E D A A M K G M  
UniRef90\_C8P7Y0 F N V R P T P V A K S L A D S S E N V D I R R L H N V I Y N A I E D E I V E D A A M K G M  
UniRef90\_U2IG08 F Q V R P S Q A A R R L A D S R E G V D I R R T Y S I I Y D T I E D I K S A M E G M  
UniRef90\_I7LC64 F N V R P S T V T A K S Q A A D S E N V D I R R L Y S I I Y K A I E D D I V T A A M K G M  
UniRef90\_U1LP26 F N V R P D T K A R E R A A E Q E G V D V R F Y N I I Y A A I E E D V E N S L K G M  
UniRef90\_I0X9V9 F N V R P T P K A K T L A E A E E Q V V K I M K A N I I Y K C V E D V Q A A M G M  
UniRef90\_B6AD18 F D I K V E A E A E L E A K K L G V K I M K A N I I Y H L C D D M F T K Y T D V  
UniRef90\_U7KF21 F N V R A E G K A T E T A T Q E E G V D I R Y Y T V I Y K A I E E E V E A A L K G M  
UniRef90\_A0A023X3S2 F N V R P D N T A R K V A E E E E D V D I R T Y D V I Y D K A L L E E E D A M R K G M  
UniRef90\_C0QTL9 F N V R P T D S A R K A A E E E D V D I K Y G I Y D L D D D I E K A L K G M  
UniRef90\_K2LMM2 F N V R A N Q Q A R E Q S R R E D N V D I R Y Y S I I Y D V A D D I K K A M L S G M  
UniRef90\_F8C4R7 F N V R K P T P N A K N V A K E E E E V D L H Y Y S V I Y Q L A D D I K K A M V G L  
UniRef90\_I3CJY7 F N V R A D N T A R R L I S E E E E V D L H Y Y S V I Y Q A I D D E V K K A L G G M  
UniRef90\_Q0U4I7 F D V K V D K E A K A V A D E T G I F E A D I I Y H L F D D K F T A H M K Q L  
UniRef90\_Q6G4W7 F N V R A N K P A R D C A K T Q G N I E V R R Y N I I Y D L V D D I K A A M S G M  
UniRef90\_C2KV10 F D V K P D P T A R D I A E E Q E K V D E V R L Y N I I Y K A I E E E I T L A M K G M  
UniRef90\_S3L0X8 F N V R P T P K A K I L A D Q E K V D E I R R K Y N I I Y K A V E E E I T L A M E G M  
UniRef90\_UPI0003B42602 F H V Q A E S K A E V M A K E K E G V E L R R Y N I I Y D A I E E V K K A M E G M  
UniRef90\_U5MS32 F N V R P E D N A V A Q A D K E E G V D I K T Y R I I Y D A I E D V K S A M I G M  
UniRef90\_R9SKG2 F N V S V H P Q V R E D L E E S D V K L F E G E V I Y Q L T E D Y S I W I K E K  
UniRef90\_C3Y385 F D V R V E R D A K E L A D S L G I R I F T A D I I Y H L F D D S Y F M K Y R D D M  
UniRef90\_I0A0D0 F N V K V M P D A K E E A E K L N V K I M L N N I I Y K L L E D D S F M N W K E E V  
UniRef90\_R6E0R1 F N V R P T T A V Q T F A D R E N I Q I R L Y R V I Y D I L N D D V E D A M K G M  
UniRef90\_D6SK67 F N V R P T P R V K Q E V A E E S V E I R R F Y D I I Y N L V N D I R D A M A G M  
UniRef90\_B2J955 F N T T F A S G A R R K A A D E A G V D V R R E Y N V I Y K L L E E E V Q D A L E G L  
UniRef90\_G1XWR1 F N V R A N Q A R E M A K R D N A E I R Y Y S V I Y D I L D D D V R A L L T G M  
UniRef90\_R6U9X6 F N V R P D A V A Q A T A E R D Q G V T E L H M Y R V I Y D C A I E E V K A M K G M  
UniRef90\_X5MN78 F N V R A N A V A R D A A R Q Q G V I R R Y Y A V I Y D L V D D D V K A A M A G V  
UniRef90\_UPI0003B372E9 F N V R A D G G A R K L A E N E G V I D L R Y Y S V I Y D L V D D D V K S A L S G M  
UniRef90\_Q2VZV0 F N V R A N P Q A R D M A R R Q E K V D D I R R Y S V I Y D V T D D L K K M L S G M  
UniRef90\_F5SC70 F N V R P E P Q A R V T A R E Q E K V D I R L Y R V I Y D A I E E E L E S A M K G M  
UniRef90\_E6VSQ7 F N V R P N L K V K E L A E R E N G V E I R R F Y D I I Y K L V E E E V K D A M S G M  
UniRef90\_UPI0004187573 F N V R A E P G R V K D M A E E V D I R R Y T V I Y Q V I E E E V E T A L K G M  
UniRef90\_I7LRW4 F N V R P T L A R V M A E T D E V E I R R L H S I I Y K A I E E E V E T A M K G M  
UniRef90\_UPI00035FA5BB F N V R P Q G S V E R L A E R E G V E I R R Y S V I Y Q A I E E E V E A A L K G M  
UniRef90\_UPI000371EE18 F N V R A D G K A R K A A Q E N D V E L H Y Y S V I Y D A I D D Q L R N A I S G M  
UniRef90\_UPI0004657515 F N V K T D S S A A A A K R E G V Q I K L F S I I Y E L V D D Q V R D A M A G L  
UniRef90\_L0GUP2 F N V R A D A A A R R V D D K G L D L R Y Y S I I Y E L I D E V K Q A I A G M  
UniRef90\_B3P196 F N V R A D G A T R R L A E T E G V D D I R R Y S I I Y D A L L N D I K S A L S G M  
UniRef90\_UPI0004676F2C F H V R P T A K A R F L A D Q E K V E I R R K Y N I I Y D A I N D I K S V L E G M  
UniRef90\_Q1GXD6 F N V R A D A G A R K L I E S T G V D V R R Y N I I Y E A V N D E V K A A L G G M  
UniRef90\_UPI00034AD84B F Q V R P S A Q A R R H A E E G V E I R R M Y S I I Y D A I D D M K A A M E G M  
UniRef90\_A0A024GC03 F D V K V H H D A T E L A Q E E G V I R I F T A D I I Y H L F D D Q F T A Y M D N F  
UniRef90\_D2RX40 F N V D V L S D A E H R A E T D D V T I F T D E V I Y Q L V E E Y D E Y V E G L  
UniRef90\_I0R2X5 F N V R P D N K A R R E R A D S E S E G V D I R H Y Y T V I Y N V L D D D I E N S L K G M  
UniRef90\_E8LM64 F N V R A D G P A R R E V I E S E G V D L R H Y Y S V I Y D L V D D D V K K A M S G M  
UniRef90\_UPI000479599E F N V R P T S T A L D L A N R E N V D V R T Y R V I Y N A I E D I E A A I K G M  
UniRef90\_R7FR39 F N V R P D K A A L D S A Q S Q G V D I R R Y R I I Y E L I E E I Q A A I K G M  
UniRef90\_E0SQA7 F N V K A L P A D E E L A R K S E N I K I F S N S I I Y K L I D D D Y I N W I E S E  
UniRef90\_B8CKH3 F N V R A D A Q A R K V V D S E S V I D L R Y Y S I I Y Q L I D E V R D A M G G M  
UniRef90\_Q11PK5 F Q V R P S T S A R K L A E Q E E I E I R R M Y S I I Y D A I N E V K D A M E G M  
UniRef90\_A5FJF9 F N V R P A G N A R Q L A D K E E I D I R R Y S I I Y A A I D D L K D A M E G M  
UniRef90\_M7NTE9 F D V K V D K D A E E L A E Q L G I K I F T A D I I Y H L F D D S F T K Y Q A E I  
UniRef90\_UPI00047240A3 F N V R A D A A A R R V I E D G T L D L K Y F S V I Y E V I D D Y M R Q A M T G M  
UniRef90\_UPI000375CE9C F N V R A D A T S R D I V E R E G L V E L L R Y Y S V I Y Q L I D D I R Q A M S G M  
UniRef90\_K2DF21 F N S R A D A V A R K L I Q S S G V D V H Y Y N I I Y E A V D E V K A A L S G M  
UniRef90\_R5B5W0 F N V R P N T S A R A L A E K E N V D I R L Y R V I Y N A I E D I L Q N A M K G L  
UniRef90\_A0A059LPJ5 F D V P V T R E A R E V A D D E N G V K V L T A D I I Y H L F D D F T A Y L A K L  
UniRef90\_B4RXT8 F N V R A D A T A R R V L E A E E I D L R Y Y S V I Y N L I D E E V K A A M S G M  
UniRef90\_K9Q338 F N T T L A P G A R Q A A E Q E V D L R E Y N V I Y R F I E E I Q G A M E G L  
UniRef90\_W2BVB7 F N V R P S T A A L S T M A D R H G V E M R L Y R V I Y D V I N D I R K A M G G M  
UniRef90\_UPI00036E1910 F N V R A D A T A R K V I E S E E L D L R Y Y S V I Y D I I D D V R K A L T G M  
UniRef90\_F2N9P8 F G V R P Q A K A R D L A E K E V I Q I K T Y S I I Y K A I E N I D A A R L G M  
UniRef90\_R7JP21 F Q V R P S A S A R K L A E K E E I E I R L Y N I I Y D A I N D I K D A L E G M  
UniRef90\_A0A017T119 F N V R S A G K A S Q L A E S E E I E I R L Y N I I Y N A V D D I K S A M E G L

UniRef90\_E11FZ5 L A P T F K E V V E  
UniRef90\_K6H676 L A P V I R E Q Y  
UniRef90\_W5XCC8 L E P K F E E Q Y  
UniRef90\_A3UIH1 L A P E K R E T F  
UniRef90\_R7NC17 L E P I Y E E K I  
UniRef90\_UPI00037C809F L E P E  
UniRef90\_S9VSH8 M E Q K R E E N S D  
UniRef90\_E8V7H8 L D P V I F K E  
UniRef90\_UPI000415DC85 L D P E F E E K V  
UniRef90\_B8CW72 L E P E L K E E V T  
UniRef90\_I3TDY1 R T R E K M K E L E  
UniRef90\_R5TGM4 K P K K Y K E I  
UniRef90\_J4C7Z4 Q E A K K Q E Q I Q  
UniRef90\_UPI0003741AF9 L D P I Y K E A V  
UniRef90\_X1NMD1 R E T R L Q E E F D  
UniRef90\_D4MXM6 L D P E F V I E K V T  
UniRef90\_V7HWG2 L E P V I Y E E K V T  
UniRef90\_U1FYR2 L D P E F E E Q V  
UniRef90\_X1TPW8 L E P S Y V I E V I D  
UniRef90\_C0EAK5 L A P K T R E V  
UniRef90\_F7RV46 L A P E F K Q Q I  
UniRef90\_UPI00037875EE L S P D E V I E K V T  
UniRef90\_K2D737 L A P K Y E E Q I  
UniRef90\_UPI00047613B9 L E P E E V I E  
UniRef90\_Q6CI82 Q E Q K R L D T I D  
UniRef90\_UPI0003FD32F7 L K P E Y E E V  
UniRef90\_T0ZDD8 L A P D R K E N I  
UniRef90\_M5J8I2 L D P E Y K E E I  
UniRef90\_C8P7Y0 L E P V I Y E E  
UniRef90\_U2IG08 L S P E I K E N V  
UniRef90\_I7LC64 L E P T F E E K V T  
UniRef90\_U1LP26 L K P E F E E V  
UniRef90\_I0X9V9 L Q P D T K E E V  
UniRef90\_B6ADI8 Q E E K R K E  
UniRef90\_U7KF21 L K P I Y E E R  
UniRef90\_A0A023X3S2 L A P E E R E  
UniRef90\_C0QTL9 L T P K E R E V L  
UniRef90\_K2LMM2 L S P E V R E K F  
UniRef90\_F8C4R7 L E P K L V I E H I T  
UniRef90\_I3CJY7 L A P E V K E V I  
UniRef90\_Q0U4I7 E E Q R K E E  
UniRef90\_Q6G4W7 R S P E Q R E T F  
UniRef90\_C2KV10 L A P V I Y E E K V  
UniRef90\_S3L0X8 L K P D V K E E V  
UniRef90\_UPI0003B42602 L E P T Q K E V V Q  
UniRef90\_U5MS32 L E P E Y K E V V  
UniRef90\_R9SKG2 K E A E R K A Y L D A  
UniRef90\_C3Y385 K K Q K Q E E  
UniRef90\_I0A0D0 K R L E K I K E M E  
UniRef90\_R6E0R1 L D P E F K E E V  
UniRef90\_D6SK67 L D P I I K E E Y  
UniRef90\_B2J955 L E P E  
UniRef90\_G1XWR1 L K P V L R E R F  
UniRef90\_R6U9X6 L A P K T R E V  
UniRef90\_X5MN78 L G P E L R E T F  
UniRef90\_UPI0003B372E9 L S P E M R E E I  
UniRef90\_Q2VZV0 L A P E L R E K F  
UniRef90\_F5SC70 L D P E F R D K M  
UniRef90\_E6VSQ7 L A P D I E E V Y  
UniRef90\_UPI0004187573 L K P E Y E E A  
UniRef90\_I7LRW4 L D P E F E E K V  
UniRef90\_UPI00035FA5BB L K P E Y E E V  
UniRef90\_UPI000371EE18 L E P E V R E E I  
UniRef90\_UPI0004657515 L E P E L R E T V  
UniRef90\_L0GUP2 L S P V V T E E I  
UniRef90\_B3PI96 L D P E R V I E T I  
UniRef90\_UPI0004676F2C L E P D I E Q Q F  
UniRef90\_Q1GXD6 L S P E Q K E N V  
UniRef90\_UPI00034AD84B L K P K I E E Q I  
UniRef90\_A0A024GC03 R S T R R E E V A D  
UniRef90\_D2RX40 E Q A Q Q D T I L E  
UniRef90\_I0R2X5 L K P E Y E E A  
UniRef90\_E8LM64 L K A E V R Q E I  
UniRef90\_UPI000479599E L E P E Y K E V I  
UniRef90\_R7FR39 L K P V I Y R E S I  
UniRef90\_E0SQA7 K M M E L R R E F E S  
UniRef90\_B8CKH3 L A P E F R Q E I  
UniRef90\_Q11PK5 L E P K M E E V V  
UniRef90\_A5FJF9 L A P E M K E E V  
UniRef90\_M7NTE9 M E K R R R E  
UniRef90\_UPI00047240A3 L A P K F K E T I  
UniRef90\_UPI000375CE9C L A P E W K E E I  
UniRef90\_K2DF21 L S P E R K E S V  
UniRef90\_R5B5W0 F K P V I F K E V  
UniRef90\_A0A059LPJ5 K E D E Q  
UniRef90\_B4RXT8 L A P E F K Q E I  
UniRef90\_K9Q338 L D P E E V I E  
UniRef90\_W2BVB7 L D P E F K E E V  
UniRef90\_UPI00036E1910 L G S D T R E Q I  
UniRef90\_F2N9P8 L K P T E E E V  
UniRef90\_R7JP21 L E P V M K E E I  
UniRef90\_A0A017T119 L P A T K V I E



UniRef90\_F3KCQ1  
UniRef90\_UPI0003B32B9B  
UniRef90\_UPI000371266E  
UniRef90\_R6UVF6  
UniRef90\_V7I7X1  
UniRef90\_V6GAN5  
UniRef90\_F8GLP2  
UniRef90\_W6KE90  
UniRef90\_B0TWR3  
UniRef90\_G3P8M4  
UniRef90\_Q82WD0  
UniRef90\_UPI0004560A7B  
UniRef90\_S6BTK1  
UniRef90\_R7GLW3  
UniRef90\_H2WX90  
UniRef90\_X0PGN0  
UniRef90\_A7SBA3  
UniRef90\_UPI00036C4408  
UniRef90\_I4YCK6  
UniRef90\_UPI0002559EED  
UniRef90\_J9ZY26  
UniRef90\_D5BU76  
UniRef90\_D7LJ09  
UniRef90\_R6J685  
UniRef90\_O83861  
UniRef90\_UPI00047C472D  
UniRef90\_UPI0003A93387  
UniRef90\_UPI0003B47C43  
UniRef90\_Q2SML3  
UniRef90\_UPI0003765EB6  
UniRef90\_R5AMU9  
UniRef90\_M1FLY5  
UniRef90\_V6AR70  
UniRef90\_H8L3B6  
UniRef90\_UPI0003C10E0B  
UniRef90\_M4V964  
UniRef90\_Q5KMN3  
UniRef90\_UPI0003687B19  
UniRef90\_D1C375  
UniRef90\_Q7UZZ9  
UniRef90\_V2YAP5  
UniRef90\_R6GZF6  
UniRef90\_W1Q2G2  
UniRef90\_A0A059MRZ5  
UniRef90\_D2RGZ0  
UniRef90\_D6GRX2  
UniRef90\_A6VU29  
UniRef90\_T0CUV1  
UniRef90\_A8UQR9  
UniRef90\_D3SFL0  
UniRef90\_A9QP58  
UniRef90\_A8GW31  
UniRef90\_S8FEM1  
UniRef90\_C6HXK1  
UniRef90\_W0RK90  
UniRef90\_V2TN62  
UniRef90\_F2IIZ6  
UniRef90\_F2U2B6  
UniRef90\_M4SF63  
UniRef90\_UPI00044092C5  
UniRef90\_C3JBY5  
UniRef90\_UPI000476523C  
UniRef90\_B1L5N7  
UniRef90\_R7LPH1  
UniRef90\_W0G6P1  
UniRef90\_K9YDS2  
UniRef90\_A0YK85  
UniRef90\_W9BX11  
UniRef90\_F4KKY7  
UniRef90\_T0GWT1  
UniRef90\_UPI00036F0977  
UniRef90\_V7PXG0  
UniRef90\_Q3SWP9  
UniRef90\_F9ZFA6  
UniRef90\_J9G585  
UniRef90\_L0ETR9  
UniRef90\_C8W719  
UniRef90\_M7WVW4  
UniRef90\_D7E9I6  
UniRef90\_F3LFN6  
UniRef90\_T2MHU6  
UniRef90\_G3ZYN1  
UniRef90\_I3D4E3  
UniRef90\_R5A0C5  
UniRef90\_F0QVP1  
UniRef90\_B6AT68  
UniRef90\_A8TZ01  
UniRef90\_C6XRX1  
UniRef90\_UPI0003B4DDAC  
UniRef90\_V4ZSG8  
UniRef90\_U1Q4W3  
UniRef90\_UPI000478359C

1 10 20 30 40

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

UniRef90\_F3KCQ1 S L E E V K V V I V S S R G G V G G A G I S E T Q N D A N L A V S T G A V I F 80  
UniRef90\_UPI0003B32B9B S L D E E V K Q L R V I V H S R G G V G G A G I M T T E S G D I D L L A A A S S K N A T I I I G G  
UniRef90\_UPI000371266E S E L E E V R R I V L L R S R S G G A G A I T T E S D I L L L A A S A S S H A V I I Y I G  
UniRef90\_R6UVF6 S L M E K V R N V I R S S Q A V G A I T T E S D I L L L A A S A S S N A V I I Y I G  
UniRef90\_V7I7X1 S L E E E I K L V R V I H S N S G A V G A I T T E S D I S L L A T A S S N A I V I I G G  
UniRef90\_V6GAN5 A L D E E V K V K L N N I I Q S S G A G A I V I D E M D V M L L A S A S S N A I V I I G G  
UniRef90\_F8GLP2 S L E D E E V K V N I I H S S G V G A I V T E S S D V N L S L A S S K A V I I G G  
UniRef90\_W6KE90 S L E E E V K V T L L H S S A V G G A I V T E S S D I T L L A Q A S S G A V V I I G G  
UniRef90\_B0TWR3 S L D E E V K V D L L A S G I V T T E S S D V T L L A V A S S T A V V I I G G  
UniRef90\_G3P8M4 F L R T S K V P Y A G I N I V G P V H K K D V M K A S T M L E H D L Q Y A V I L L A  
UniRef90\_Q82WD0 A L K E V K I N V V H S S G V G G A I V T E S D I N L L A L A S S K A V V I L G A  
UniRef90\_UPI0004560A7B F L K V S K I P V G G I N I V G G P V Y K K D V M R C S T M L E K A K E F A V I L L A  
UniRef90\_S6BTK1 S L E K I K V I V A A G V G G A I V N E S S D A N L A L T S G A A I I Y I G  
UniRef90\_R7GLW3 S L E K I K V I V I R S T V G G A I V S E S D I L L L A S A S S K A I I Y I G  
UniRef90\_H2WX90 F L K S Q K I P Y S N V N I V G P V H K K D V Q K A S A M K E H K A E Y A C I L L A  
UniRef90\_X0PGN0 S L Q K I K V I I H Q A V G G A I V N E S S D V T L A A A S Q A I I L L A  
UniRef90\_A7SBA3 F L K V S K I P Y A G I N I V G P V H K K D V M K C S I M L E H D V Q Y A V I L L A  
UniRef90\_UPI00036C4408 F L S E V E V R V I A S G I V G G L V T R E N D I E M A L T S K A I V I L A  
UniRef90\_I4YCK6 S L R A S E I P V S G I N I V G G P V Y R K D V L R A G V M L E K A K E F A T I L L A  
UniRef90\_UPI0002559EED S L E E E V K V N I V S S G V G G I A E T D A N L A L A S S A A I L V G G  
UniRef90\_J9ZY6 S L E E E V K I N V I H S N A I V G G A I S E S D I S L A N S A Q G V V I G G  
UniRef90\_D5BU76 A L E K V K V R M L S S G V G G A L S E S D I S L A A S S N A I V I G G  
UniRef90\_D7LJ09 F L K S V K L P V G G I G I V G P V Q K K D I M K A G V M L E R K K E F A T I L L A  
UniRef90\_R6J685 T L E D E V S V Q I L H S S A V G G A I V S D S D V T L L A K A S N A F I I G G  
UniRef90\_O83861 S L E E V Q L R V I H S S S G V G G A I T E S D V M L L A A A D S N A V T I I G G  
UniRef90\_UPI00047C472D S L E K V R K V I H S S S G V G G A I T E S D V L L L A T A S S N A I I I G G  
UniRef90\_UPI0003A93387 A L E D E V K V N V L S T A I V G G A I N E S D I D L L A M A S S K A I I I G G  
UniRef90\_UPI0003B47C43 S L D E E V V K V I H S G V G G A I N E S D I T L L A A A S S N A I I I G G  
UniRef90\_Q2SML3 A L E E E V Q V K I I A S G V G G I T E T E D A N L A L S T Q A I I V G G  
UniRef90\_UPI0003765EB6 S L E E E V R A N V I Y G A A V G G E I S E S D V L L A K S S G A P V F A  
UniRef90\_R5AMU9 S L E E E I Q V N V L H K A V G G E I S E S D V T L L A A S S D A I I I G G  
UniRef90\_M1FLY5 S L E E E V Q V K I V S S G A V G G I A E T D I S L A L A T S A V I F I G G  
UniRef90\_V6AR70 M L R R Q Q V P V A K A D I V G P V N R R D V L E A K V I K E N D R H L G V I L A  
UniRef90\_H8L3B6 S L E E V K V N V I A S G V G G I T E S D A T L A A A S K A L V I L G G  
UniRef90\_UPI0003C10E0B S L D E V R A R I I A S G A V G A I T E S D V L L A K G A G A P I L G G  
UniRef90\_M4V964 M L N E V K K I V H A A V G G V T E S T D V M L A H T S K G V V I L A  
UniRef90\_Q5KMN3 F L E Q M K I P V F N F A I V G G P V H K K S I V K A G T M L D K A P E Y A V I L L A  
UniRef90\_UPI0003687B19 A L D E E V K V E V I S N G T V G G I T E S D V H L A T A S S N A I I I G G  
UniRef90\_D1C375 T L E S V G V S V I H A G T V G E I S E S D V N D L A V A S S N A I I V G G  
UniRef90\_Q7UZZ9 S L E E E V Q V R V L L S A P G A I T E T E D I D L L A A A S S G N A S V I I G G  
UniRef90\_V2YAP5 S L E E E V A I R V I H G A V G A I N E S D I S L A S A S S N A I V I I G G  
UniRef90\_R6GZF6 S L E E V R V K V I A G V G A I N L S D V T L L A E I S K A V V I I G G  
UniRef90\_W1Q2G2 S L Q K V R D I I H Q A V G G A I N E S D I T L L A Q A S S G A I V V G G  
UniRef90\_A0A059MRZ5 A L D E E V R L R V I D R G V G G V V T E T N V N L A A A S S N A V I I G G  
UniRef90\_D2RGZ0 E L K R A G I P I K K A E S V G G A I D K R D V V E A S A N K D E V N K V V L L A  
UniRef90\_D6GRX2 S F E E E V K V I V H S S G V G G A I T E T E D V M L A S A S S N A I I I G G  
UniRef90\_A6VU29 S L D E E V K V N V I S S G V G G I T E T E D A T L A L A S S D A V I F G G  
UniRef90\_T0CUV1 S L E E E V A V R I I H G G V G G A I T E S D V M L A R A S S N A I I I G G  
UniRef90\_A8UQR9 S L E E E V S R V I I H G A V G G I T E T E D V M L A K A S S G N A I I I G G  
UniRef90\_D3SFL0 S L D E E V R V K V V S A G V G G I S E S D L N L A M A S S G E A I V I A  
UniRef90\_A9QP58 A M E E V R V S I L H S S G V G G A I T E S D V T L L A E A S S S A P I I G G  
UniRef90\_A8GW31 S L D E E V K L R I L H S S G V P I T E S D V S L L A H A S S S A I V G G  
UniRef90\_S8FEM1 S L E K I K V N V I H S Q A V G G Q I T E S D V T L L A A A S S N A I I I G G  
UniRef90\_C6HXK1 A I S K V R V R F I H R E G V G G A I R E T D V L L A Q A S S N A V I I G G  
UniRef90\_W0RK90 A L A E V A V E I V Q R G V G G A I T E T G D I L L A K A A G N A I I I G G  
UniRef90\_V2TN62 A L D E E V K V R V I G S G V G G A I T E S D V T L L A E S S D A V L L G G  
UniRef90\_F2IIZ6 S L E E E I K V I V H K G G V G G A I T E A D V N L L A S A S S D A I V I G G  
UniRef90\_F2U2B6 F L R T E Q I P V S A V N I V G P V H R R D V T R C T I Q L Q R D P K Y A C I L L A  
UniRef90\_M4SF63 S L N K I Q V R I L H S G V G G I T E S D V T L A A A S K A P I I L G  
UniRef90\_UPI00044092C5 F L K V S K I P V S G I N I V G P V H K R D V M R C A T V L E K A K E L A C I L C  
UniRef90\_C3JBY5 E L E E I G V N V I D R G V G G I N E S D V V L A E A S S Q A V I I G G  
UniRef90\_UPI000476523C A L D E E V N L R V I R A D I V G A V N T K A D V F E A S V I R G S D E R Y S A I I A  
UniRef90\_B1L5N7 Q L E R E G I P I R R A D I V G A V N T K A D V T L A K V S N A I I I L A  
UniRef90\_R7LPH1 S M E E V R V K V I H A A P G E V N E S D V T L A K V S N A I V L G G  
UniRef90\_W0G6P1 A L N E L S T D V V G S G V G G I T E T E D A S L A A A S S N A I V I G G  
UniRef90\_K9YDS2 S L N E V Q L R V L L Y A A P G E V T E T E D I D L L A A A S S G A V I I G G  
UniRef90\_A0YK85 A L K E V K L R L L L A A P G E V T E T E D I D L L A T A S S D A V L I G G  
UniRef90\_W9BX11 S L H K I K A R V L L H S G V G G A I T E S D V T L L A K A S N A P I I G G  
UniRef90\_F4KKY7 S L K E I Q V R I L H S Q G V G G A I T E S D I Q L L A T A S S E A I I I G G  
UniRef90\_T0GWT1 S L D E E V K V R V I H S S G V G G A I T E S D V T L L A A A S R A P I I G G  
UniRef90\_UPI00036F0977 A L D E E V A V D I V A S G V G G I T E S D V N L L A L T T G A I V L G G  
UniRef90\_V7PXG0 F L N D E S K A I P V F S V N I V G T V Q K K D V K K A S I M R E K R P E Y A V I L L A  
UniRef90\_Q3SWP9 S L E E E V A R I L H A G V G G I S E S D V T L A E G F N A A I I G G  
UniRef90\_F9ZFA6 A L D E E V K V N I I H S A V G G A I T E S D V N L S L A S S K A V I I G G  
UniRef90\_J9G585 S F E E N I V I K V I Y K G V G G A I S E S D V T L L A A A S E A I I V G G  
UniRef90\_L0ETR9 A L E E V K V R I V H F S A V G A I N E S D I S L A Q A S D A T V I G G  
UniRef90\_C8W719 S L D E E V R I S T I H S A V G G I T E T D V V L A D A S N A I I I G G  
UniRef90\_M7WVW4 F L K S V K I P V A G I N I V G P V H K K D V M R C A T M L E R A P E L A V I L C  
UniRef90\_D7E9I6 E L A E E K I P I A R K L E V N G D I S Q R D I I E V S A I E D Q Y S V I I G G  
UniRef90\_F3LFN6 A L D E E V Q V N V I S S G V G G I T T G N D I N L A L T T N A I V I G G  
UniRef90\_T2MHU6 F L K T S K I P Y C G V N I V G P V H K K D L M R C S V M L E H E P M Y A V I L A  
UniRef90\_G3ZYN1 S L D E E V K V K V V G S G V G G I T E T D A T L L A A A S N A I I I G G  
UniRef90\_I3D4E3 M L R R S Q V P V A K A D I G P V N R R D T M E A K A I K E K N R H L G I I L S  
UniRef90\_R5A0C5 A L E G V K I N V I R S G I V G G T I T E S D V V L A N A S N A I I V L A  
UniRef90\_F0QVP1 Y L R S Q G I P V R K A D V G G A I S R R D V V D A S I V R K K N P L Y G V I L A  
UniRef90\_B6AT68 A M D E E V R V R V L H S G V G G A I T E S D I G L A E A S S A P I M G  
UniRef90\_A8TZ01 T M E K V K P A R I L H G A V G P I S E S D I S L A K A S N E G L I I G A  
UniRef90\_C6XRX1 S L D E V K A R V V Y G A V G G I S E S D I L L A K A S A P I I A  
UniRef90\_UPI0003B4DDAC A L E E E V K V Q V R H G G T G A I T E S D I L L A S A S S D A I I I G G  
UniRef90\_V4ZSG8 A L A E A E V P V L R A E V G G A I A P R N D V A V A S T A N E P K H A A I L G  
UniRef90\_U1Q4W3 S L D E E V A L Q I I H R G V G G A I T A Q R D V N L A T V D N A I I I G G  
UniRef90\_UPI000478359C S L D E E V S I R V I G R G V G A I T Q N D I N L A T S A D A I I V G

UniRef90\_F3KCQ1 F N V R A D S S A R R V L E K N G V I D E M R R Y Y S V I Y D I V D D I V E K A L S G M  
UniRef90\_UPI0003B32B9B F N V R P A D S R V N E L A D E E N E G V I D E M R R Y Y S V I Y D I V D D I V E K A L S G M  
UniRef90\_UPI000371266E F N V R R A D A S A R K A A Q E E N E G V I D E M R R Y Y S V I Y D I V D D I V E K A L S G M  
UniRef90\_R6UVF6 F N V R P A N A L V R K K A E E E N G V I D E M R R Y Y S V I Y D I V D D I V E K A L S G M  
UniRef90\_V7I7X1 F N V R P D N N A A A L A E E E K V I D V V K T Y N R I I Y N A V D D D I R A N A M L G M  
UniRef90\_V6GAN5 F H V R R A N D P K T J A L A E E S S G V D Q D V K R Y Y N I I Y Q V V D D E I K K A M S E G M  
UniRef90\_F8GLP2 F N V R R A N D A S A R K A L L A E E S S G V D Q D V K R Y Y N I I Y E A V D D E I K K A M S E G M  
UniRef90\_W6KE90 F N V R A N P Q A R D M A R R D S S V D V I R R Y Y S I I Y D V T D D D L K K A L S T G M  
UniRef90\_B0TWR3 F N V R A D S A S K Q L A E E V D G V R I R R Y Y S I I Y D L T D D D L K K A M T R D Y  
UniRef90\_G3P8M4 F D V K V E R E S A S K E M A D S L G V R I R F S A E I I Y H L F D A F T K F R E D Y  
UniRef90\_Q82WD0 F N V R A D L G A R K L I T S T F G V I D V R Y Y N I I Y E A V D D E V K K A L S G M  
UniRef90\_UPI0004560A7B F D V P V D K E A E K L A E E F G I K D L R F T A K S I I Y H L E N D D V F V K A V N Q E G M  
UniRef90\_S6BTK1 F N V R A D A A A R R V L E E H G G I K D L R Y Y S I I Y E V I D D D V K K A V A G G L  
UniRef90\_R7GLW3 F N V R P D A N V R R K A D E E E G V I D V R L R H Q V I Y K M V E E I E A A M K E G M  
UniRef90\_H2WX90 F D V K I E R E A R Q I F A D H E E G V I D V R F Q A D N I I Y H L Q D A F L K Y A M K E G L  
UniRef90\_X0PGN0 F N V R P T A N S Q A D M D D V D I R R Y N A I E E V E S A M K E G M  
UniRef90\_A7SBA3 F D V K I E R E A Q S Q A D M D L G V T I R F S A D I I Y H L F D K F T N Y R E E Q M  
UniRef90\_UPI00036C4408 F N V R A N S A T R K S A Q D S L G I E I R Y Y S I I Y D V T N D V F K D A M S G M  
UniRef90\_UPI00014YCK6 F D V P V D K E A E K Y A D S V G V K I R F K A D I I Y H L F D F T A Y N K S G L  
UniRef90\_UPI0002559EED F N V R A D N Q A K A V V E R E E E L E L R Y Y S I I Y D I T D D V K Q A M T S G L  
UniRef90\_J9ZY6 F N I R A I P Q A R T I A K R D D G V D I R Y Y S I I Y E L I D D D M K K M L S G L  
UniRef90\_D5BU76 F N V R A I P Q A R D L A K R D K V E I R Y Y H S I I Y E L I D D E V K K A A M G G L  
UniRef90\_D7LJ09 L D V K V T T E A R E L A D E M G V K I L C A D I M Y H L F D D Q F  
UniRef90\_R6J685 F N V R A I P H A R D M A R R Q D D G V D I R Y Y S I I Y D V A D D I K K A L E E G M  
UniRef90\_O83861 F N V R P T P Q A A V L A E R E R V D I R K K Y T V I Y Q A V A D E M R L A M E G M  
UniRef90\_UPI00047C472D F N V R P E R K A A E L A Q Q D T E G V D I R L H S I I Y E L Q D E M R L A M E G L  
UniRef90\_UPI0003A93387 F N V R A D G A A R K R I Q D D V D I R Y Y S I I Y D I T D D E V S N A V S G L  
UniRef90\_UPI0003B47C43 F D V R P D A T A K S M A E H E G V I K L Y K V I Y Q A I E I Y E Y A M S G M  
UniRef90\_Q2SML3 F N V R A D A S A R K I V E K E E G I E L R Y Y S V I Y N I I D D V K K A L S T G M  
UniRef90\_UPI0003765EB6 F N V R A N K Q A R E L A E K E R E V E I R Y Y S V I Y N A L L E D D V K D T L S G M  
UniRef90\_R5AMU9 F Q V R P S L A A R R E A E R E D G V L R Y Y S V I Y N A I E E V K K A M E G M  
UniRef90\_M1FLY5 F N V R A D N A A K R L V E Q E S G L D L R Y Y S I I Y N L L D D V K A A L T G M  
UniRef90\_V6AR70 F N V K V L A D A D A K E E A E S H L K I R F S D K V I Y S L L D D N Y T L W V E D  
UniRef90\_H8L3B6 F N V R A D A S A R K V I E D T S G L D V R Y F S I I Y D V L D D Q V K Q A A S G L  
UniRef90\_UPI0003C10E0B F N V R A S K Q A R E L A E R E G V D I R Y Y A I I Y D L L D D D I K S V M S G M  
UniRef90\_M4V964 F N V R P D N N A Q E A K A Q K L G V D I R T S A M I I Y E M M D A F T K K A M T S E V  
UniRef90\_Q5KMN3 F D V Q I E K E A Q E L A Q K A K G M K I R F S A M I I Y H L F D A F T K Y M S E V  
UniRef90\_UPI0003687B19 F N V R A D A G A K R L A E Q E S V S L H Y Y S V I Y D I V D D Q I K G A L T G M  
UniRef90\_D1C375 F N V R P D A S A K R A A D A A N D D I R R E F Y D I Y K L V D D D I K S A M E G L  
UniRef90\_Q7UZZ9 F N T S L A S G K R A A D A A N D D V D I R R E Y E V I Y K L L E D D I K S A M E G L  
UniRef90\_V2YAP5 F N V R M D A V A K D T A D R E K V D V R L Y K V I Y S L I S D D V E S A M K G M  
UniRef90\_R6GZF6 F N V R P D A E S R N Y A E K N H I D V R L R L K V I Y E A I D D D V E T L V K G L  
UniRef90\_W1Q2G2 F N V R P T P Q A R S L A N D N E I D I R Y Y S I I Y N V I E E I E I A M K G M  
UniRef90\_A0A059MRZ5 F N V R A E G K A T E L A N R E G V D I R Y Y S I I Y Q A I D E V E K A L K G M  
UniRef90\_D2RGZ0 F N V R K L L P G V A S E A E K Y E K K L R Y Q D S I I Y S A V E D V E K W R E E T  
UniRef90\_D6GRX2 F N V R P A T G A V S I A E R E K V D M R T Y R I I Y E A I E D D V E K A M K G M  
UniRef90\_A6VU29 F N V R A D N S A K Q F I E R E S I D L R Y Y S V I Y N I I D D V K S A L S G M  
UniRef90\_T0CUV1 F N V R P V A T A E V L A K K E E V D A R T Y T I I Y K A I E D D V Q A A M T G M  
UniRef90\_A8UQR9 F N T R P D P K A R E L I E K E K V D A R M Y G I I Y Q V I D D D V K K A L Q G M  
UniRef90\_D3SFL0 F N V R A D A G A K R L A E E N E I D V R Y Y S V I Y E A I D D D V K Q A L S G L  
UniRef90\_A9QP58 F N V R A N A P A R A S A N K K G V E I L R Y Y S I I Y D L L V D D D V K A A A S G L  
UniRef90\_A8GW31 F N V R A G A N A K T A A E K E K V E I L R Y Y S I I Y D L L D D D V K A I M S G M  
UniRef90\_S8FEM1 F Q V R P S N T A S K L A E E E G V D L R K Y S I I Y D A I E E V K S A M E G M  
UniRef90\_C6HXK1 F N V R P E P K A L A L A E R E K V M K F Y S V I Y D A V E D V R K A M E G M  
UniRef90\_W0RK90 F H V R P D N K A R A S A E R E K V D D K L Y R I I Y E A V N D D V R A A L E G M  
UniRef90\_V2TN62 F N V R A D T T A R Q K A D E D E I D I R Y Y S V I Y Q L I D D D V K D A M S G K  
UniRef90\_F2IIZ6 F Q V R P S V A A R K L A E E Q I D I R L Y S V I Y K A L D E L K A A M E G M  
UniRef90\_F2U2B6 F D V P V D A D A R K Y A E R E G I R I L F E A D I I Y H L E E S F R K H E E V  
UniRef90\_M4SF63 F N V R A N A K A R E I A T R D G G V A L K Y Y D V I Y D L L D E I R A A M E G Q  
UniRef90\_UPI00044092C5 F D V P V D K D A D R L A E E Q I K L R F K A D I I Y H L F D A F T A Y N A E G L  
UniRef90\_C3JBY5 F Q V R P S A J A R K N A E E Q Q G V I E I R T Y S I I Y D A I J A D V K S A M E G M  
UniRef90\_UPI000476523C F N V R P A G K A G D L A E R E G V D I R F Y S V I Y A A I D D D I E A A L K G M  
UniRef90\_B1L5N7 F N V R K V S E E I K R E A L S R G V A I R F E D V I Y T Q A I E K F K S Y L E D L  
UniRef90\_R7LPH1 F N V R P I P A A K E M A E S E E V A Q I K Q Y S V I Y T A I E E V E A A M K G M  
UniRef90\_W0G6P1 F N V R A D A S A R R I E S E S I D L R Y Y S I I Y E L L N E I K A A M S G M  
UniRef90\_K9YDS2 F N T T L A S N T K A A A D Q E I D D I R E Y N I I Y K L L D D D I Q G A M E G L  
UniRef90\_A0YK85 F N T T L A N G A R Q A A D Q E G V D L R E Y N I I Y N L L D D D V K A M S G L  
UniRef90\_W9BX11 F N V R A N A Q A R A L A E R D G V R F K Y F D I I Y D L L D D D I K G E M A G V  
UniRef90\_F4KKY7 F Q V R P S A Q A R K L A E E G V I R R T Y S I I Y D A I E E D V H D A M E G M  
UniRef90\_T0GWT1 F N V R P N A K A R Q L A E R E K I E S L R Y Y D V I Y D L L E E V R G E M A G Q  
UniRef90\_UPI00036F0977 F N V R A A T V A R Q L A E E Q I E V R Y Y S V I Y N L L D D E V K Q A L S G M  
UniRef90\_V7PXG0 F D V K I D P E A E K E A Q I L G V E I M Q K D I I Y H L F D A F T A Y L K K I  
UniRef90\_Q3SWP9 F S V R A N K E E A A A A K R N G I Y D L V D D D V K K A M S G L  
UniRef90\_F9ZFA6 F N V R A D A G A R K L I A S N G V D V R Y Y N I I Y E A V D E E I K K A L S G L  
UniRef90\_J9G585 F Q V R P S M Q A R K L A E R D N I R Q Y S V I Y D A I E E D V T E A M S G M  
UniRef90\_L0ETR9 F N I R A N S Q A R V L A E R D N I K V L Y Y N I I Y D L V N E V K E V M S G  
UniRef90\_C8W719 F G V R P D A K A K L A A E R V G V E I R T Y S V I Y K A I E E I D A A R I G M  
UniRef90\_M7WVW4 F D V A V D K D A E R Q A E E L G I K I F K A D I I Y H L F D D Y F M V Y K R G V  
UniRef90\_D7E916 F N V K V L D A E R K A Q E S D I K L F V N D V I Y K L I D D D Y K E W V E E K  
UniRef90\_F3LFN6 F N V R A D G T A R K I A E A E S I E I R Y Y S I I Y Q L L D D D V K N A L E G M  
UniRef90\_T2MHU6 F D V K I E K D V Q E F A D R E S I R I R Y Y S I I Y H L F D N E F T A Y M E D Y  
UniRef90\_G3ZYN1 F N V R A D G S A R R I E S E N I D L R Y Y S I I Y E L L N E I K A A M S G M  
UniRef90\_I3D4E3 F N V K V L P D A R E E S E I S H I K V F E D K V I Y S L I D N Y N A W V E E  
UniRef90\_R5A0C5 F N V S P S S A T K D T A K S Y G V K I R L Y N I I Y K L V E E E I S A M K G M  
UniRef90\_F0QVP1 F N V K V P H D I E V E A M Q Y G V K I R N E I I Y R L V E E F T Q W Y K E Q  
UniRef90\_B6AT68 F N V R A N T S A R N T A N Q K G V E I R Y Y S I I Y D L V D D D V K A A A S G L  
UniRef90\_A8TZ01 F N V R A N P Q A R E M A R R E S L E I R Y Y S V I Y D L I D D D I K A L L T G M  
UniRef90\_C6XRX1 F N V R A N K Q A L A L A E K E G V E I R Y Y S V I Y Q L L D D D V K A T L S G M  
UniRef90\_UPI0003B4DDAC F N V R P E A R L K E I A E Q E K V E I R F Y D I I Y K L T G E V K D A M S G M  
UniRef90\_V4ZSG8 F N V D V L A N A E A D L E E S T V R L F A D D S V I Y K L V E E R Y E E F V A E R  
UniRef90\_U1Q4W3 F N V R P A E R V A E M A D R E G V I R F A D S V I Y K A I E D V E A A L K G M  
UniRef90\_UPI000478359C F N V R P E G K N S E L A D R M G V D I R Y Y S I I Y Q A I D E V E A A V K G L

UniRef90\_F3KCQ1 L S P E F K E S I  
 UniRef90\_UPI0003B32B9B L K P Y E E V V  
 UniRef90\_UPI000371266E L S P E T R E V F  
 UniRef90\_R6UVF6 L A P V Y E E V V  
 UniRef90\_V7I7X1 L M P D I K E V I Q  
 UniRef90\_V6GAN5 L E P E R I E E V  
 UniRef90\_F8GLP2 M S P D R K E S I Q  
 UniRef90\_W6KE90 M A P T L R E S F  
 UniRef90\_B0TWR3 L S P D M K E Q I  
 UniRef90\_G3P8M4 K K A K Q D E F  
 UniRef90\_Q82WD0 M M P D R K E K I  
 UniRef90\_UPI0004560A7B V E S K K R E A  
 UniRef90\_S6BTK1 L K P E I K E E I  
 UniRef90\_R7GLW3 L A P E M E E V V T  
 UniRef90\_H2WX90 K E K A R R E  
 UniRef90\_X0PGN0 L E P T Y Q E K V T  
 UniRef90\_A7SBA3 K R K K R E E F  
 UniRef90\_UPI00036C4408 L S P E T R E V F  
 UniRef90\_I4YCK6 V E E K R K E A A P A  
 UniRef90\_UPI0002559EED L S P E Y R E E I  
 UniRef90\_J9ZY6 L T P D T K E E I  
 UniRef90\_D5BU76 L S P D T Q E D F  
 UniRef90\_D7LJ09  
 UniRef90\_R6J685 L S P E L K E K I  
 UniRef90\_O83861 L K P S L K E V V  
 UniRef90\_UPI00047C472D L E P T F K E  
 UniRef90\_UPI0003A93387 L G T E T R E Q I  
 UniRef90\_UPI0003B47C43 L A P Y E E R V T  
 UniRef90\_Q2SML3 L A P E F R E D I  
 UniRef90\_UPI0003765EB6 L A P E K R E T F  
 UniRef90\_R5AMU9 L A P E L K E E V T  
 UniRef90\_M1FLY5 L A P E F R E D I  
 UniRef90\_V6AR70  
 UniRef90\_H8L3B6 L G V E I R E E I  
 UniRef90\_UPI0003C10E0B L S P L L R E T F  
 UniRef90\_M4V964 L A P Q V V E K V  
 UniRef90\_Q5KMN3 Q E A K R K E A  
 UniRef90\_UPI0003687B19 L A P Q F K E E I  
 UniRef90\_D1C375 L S P E V R Q V T D  
 UniRef90\_Q7UZZ9 L E P  
 UniRef90\_V2YAP5 L E P Y E E K V  
 UniRef90\_R6GZF6 E E P K F R E V V  
 UniRef90\_W1Q2G2 L D P E Y V E E I T  
 UniRef90\_A0A059MRZ5 L K P Y E E V  
 UniRef90\_D2RGZ0 K A L K E K Q R I E A  
 UniRef90\_D6GRX2 L S P E F V E  
 UniRef90\_A6VU29 L S P D L R E D I  
 UniRef90\_T0CUV1 L D P E Y M  
 UniRef90\_A8UQR9 L T P I E R E E V  
 UniRef90\_D3SFL0 L S A E I R E E V  
 UniRef90\_A9QP58 L S A E V R E T F  
 UniRef90\_A8GW31 L D P I I R E Q Y  
 UniRef90\_S8FEM1 L A P T V K E Q E T A  
 UniRef90\_C6HXK1 L S P I I R E K F  
 UniRef90\_W0RK90 L K P E E R E V V  
 UniRef90\_V2TN62 L P P E H R E T I  
 UniRef90\_F2IIZ6 L S P D I E E K V  
 UniRef90\_F2U2B6 K Q Q L R R E R Y  
 UniRef90\_M4SF63 L G P E Y F E T V  
 UniRef90\_UPI00044092C5 T E A K R R D A  
 UniRef90\_C3JBY5 L S P E I K E V V T A  
 UniRef90\_UPI000476523C L K P Y E E V  
 UniRef90\_B1L5N7 R R K E E E R V L  
 UniRef90\_R7LPH1 L A P K Y E E K V  
 UniRef90\_W0G6P1 L Q P E F K Q Q I  
 UniRef90\_K9YDS2 L D P E E V E  
 UniRef90\_A0YK85 L E P E  
 UniRef90\_W9BX11 L G P E R I E T V  
 UniRef90\_F4KKY7 L S P D I R E Q V T A  
 UniRef90\_T0GWT1 L A P E R I E T I  
 UniRef90\_UPI00036F0977 L A P E T K E E I  
 UniRef90\_V7PXG0 E D E K K Q S K M  
 UniRef90\_Q3SWP9 L A P T L R E T M  
 UniRef90\_F9ZFA6 M S P E R K E S I  
 UniRef90\_J9G585 L E P V I K E E V T A  
 UniRef90\_L0ETR9 L K P E V R E T F  
 UniRef90\_C8W719 L K P T E Q E V  
 UniRef90\_M7WVW4 E E K K E A E A  
 UniRef90\_D7E9I6 K A  
 UniRef90\_F3LFN6 L S P E L R E E I  
 UniRef90\_T2MHU6 K T K K R D E F  
 UniRef90\_G3ZYN1 L Q P E F K Q E I  
 UniRef90\_I3D4E3  
 UniRef90\_R5A0C5 L D P E Y E E V V  
 UniRef90\_F0QVP1 K T K L I E M E L D  
 UniRef90\_B6AT68 L S A E I R E N F  
 UniRef90\_A8TZ01 L A P E I R E E F  
 UniRef90\_C6XRX1 L A P E R R E T F  
 UniRef90\_UPI0003B4DDAC L T P  
 UniRef90\_V4ZSG8 E R A Q Q S T V L E  
 UniRef90\_U1Q4W3 L K P V F E E V  
 UniRef90\_UPI000478359C L K P I Y E E V

	1	10	20	30	40
UniRef90_R6VKW3			K E L N I I V K G D T D G G S I E A L S		
UniRef90_Q2S1N7		D Q V S R Q M A E G E F	H E L N I I V K A D V D G G S I E A L S		D D
UniRef90_UPI0004065AB6		E Q M M A K L E A N K T S	S E E M T L L V K A D V E Q G S A Q E A I V K T		K Q
UniRef90_R5KP03		D N L F S T L E E G M L	K E L N I I V K A D V E G G S V E A I V K L		S
UniRef90_G0UJC4	D K E A I A	K E V M K D A N S I S L S	P D G V G V T V Q S S T L G G S I E A L S		N D
UniRef90_I5AZT8		Q K M F E N L G T A E L	K E L K L I V L K A D V R G G S I E A L S		N G
UniRef90_A4BAM5			G D S E K K V L N I V L K S D V R G G S I E A I K K		E
UniRef90_B4U987		D D I F K K I K E G E V	K E L K L I V K A D A V G G S I E A I K K		L E
UniRef90_W2RLG7		V M A D L T Q L K L D K A	Q R G S V S H A S T L G G S I E A L L A		D
UniRef90_A5EWY9		K T K L E N L F N N A D G E	I S K V S L M I K A D V L G G S I E A L L A		D
UniRef90_UPI0003A5D975			K E L N I I V K G D V D G G S V E A L L A		D
UniRef90_I0YM15	D L E G L K L L A M K D M E D I S	V D R S G E G V C	Q A S T L G G S I E A L L A		L E
UniRef90_F7XVT0			K E L A I I I K A D V N G S A E A I L A N		
UniRef90_G0QPE8	D E E D A M D L V M N D L H Q V K V K L	S E Q G V G V A A S T L G G S I E A L L N			
UniRef90_W7Z8V8		M F N Q I Q Q G D I	K D I N V I I K A D V Q G G S V E A M K G		
UniRef90_Q5NQ27		E S M F S A L K D K Q A	V E Y P L L I K A D T Q G G S V E A I A G		
UniRef90_S6G3Z3		E A I K K H I D D G	D L K A I N L I V K A D T Q G G S V E A I K G		
UniRef90_UPI00047DDF09		L E S F M A E S K V E T	K T N L L K G D V S G S I E A L L E		D
UniRef90_U6KMJ0	D I A E L E	S E V M Q E V S L V K V E	E K T N G V Y V M A S T L G G A L E A L L A		L A
UniRef90_U7UCU1		E N L F D K I K E G	E M K E L D L I V K G D V K G G S I E A L L C		Q
UniRef90_M1AYW6	M K E A V M E D M K S V R I	D K T G E G V Y V Q A T T L G G S I E A L L E			
UniRef90_K1Z955		E D M F T K M K A G E I	S E L S L I L K T D V Q G G S I E A I R D		
UniRef90_UPI000372B185			E Q K E V A V V V K A D V Q G G S A E A L L G V		
UniRef90_U6M5Y7	I S D I E G E V M K D M G A V S V	D S T G S G V F V A A S T L G G S I E A L L V			
UniRef90_UPI000362CCFE			D F K E L N I I V K G D V D G G S I E A L L S D		
UniRef90_B6FZB7		D D L F N Q M N D G	L K E L N I V I K A D V Q G G S V Q A V I K Q		
UniRef90_M5ACH0			D F K E L K I I I K G D V D G G S V E A I A D		
UniRef90_D8LKY1		V M R D F T D L K M D L E P K G V M I	Q A S T L G G A L E A L L M Q		
UniRef90_Q9LPV0			I D K S G E G V Y V Q A S T L G G S I E A L L E		
UniRef90_F7YXQ3		E E L L K I M E E	S E K K E L N I V L K A D T V G G S I E A L L K S		
UniRef90_Q7NH85			E G E L K E L A L I I R A D V Q G G S V E A I R A		
UniRef90_U7DAI8			E M Q T L N I I V K G D V D G G T V Q A L S A		
UniRef90_E7C3G5			K E L P L V L K A D V Q G G T C E A V L R D		
UniRef90_B5JRR0		E E A F N R M A E G D V E T	V N V L L K A D V Q G G S V E A L R E		
UniRef90_H8I4Q9	N K E T V L K E I E G E M E K A R I V T	D E T G I M I K A D T L G G S I E A I V N			
UniRef90_C6REJ6		E E L S E K I A E G	E L K S L P V I V K A D V G G S I E A L K A		
UniRef90_A1RUX2	D I Q K V V Q L V R E E I S E I K I E T	D R E G V I A R A D T F G T L E S M V L			
UniRef90_G8T8W6			K Q L N L I L K G D V D G G S V E A L L S D		
UniRef90_UPI00046A7967		D E L S S K I A E G A I	K N L P V L L K A D V L G G S I E A I K G		
UniRef90_A0A044V4A5	L K	E D C E A Q L S K M A I K K K	P E G V Y V Q A S T L G G S I E A L L E		
UniRef90_A6LP48		E E I L K M M E Q	S D R K E L N I L K A D T N G S V L A L N G		
UniRef90_U4KRC1		D S M F S N L E D T E	K V L N I V L K G D V Q G G S I E A L K G		
UniRef90_A0RUB8	R L K K E M E A E M K S V F I E T	D G V T L K C	D T I G S I E A I L T S		
UniRef90_UPI0002887C24	L D N L F	E K I S E E	D V K E L N I V V K A D V K G G S V E A L N Q		
UniRef90_UPI0003814A4B		Q N I F A R I I K E E Q I N T	L N I I L K T D T D G G S A E A L A D		
UniRef90_X0ZLJ4		E R I I E E G K I	Q E L K L I L K G D V Q G G S I E A V L S G		
UniRef90_R5V9G0		E D L I Q E S K E G	E K Q V I Q V I I K A D V Q G G S A E A I K N		
UniRef90_Q976A1	I E E Y K K I I Q E E I A S V D K Y N A N I	G I V V K A D S L G S I E A I V E			
UniRef90_R7IGI6		S V D A G N K E I N V V L	K A D V R G G S E E A V K N		
UniRef90_B5YEH4	L E E R K Q K K E S N I E V W G L G E K V L	P I I V K A D T Q G G S I E A I L Q			
UniRef90_K1ZEK8		E N I L Q R M G D D K N E R	V L N I V L K A D V Q G G S A E A L S Q		
UniRef90_R6XDR8		K A A S L N D L F K D D E N E	K T L N L I I K C G D V Q G G S I E A I R G		
UniRef90_UPI000361BBDB			Q Q L N V I I K G D V D G G S V E A L S D		
UniRef90_N1W5Y9			L K E L K V I I K A D V R G G S T E A V K E		
UniRef90_H1XXM9	K Q V K M L T L Q Q I S E A Q G E	V H D L P V I I K A D V D G G S A E A L A D			
UniRef90_UPI000288A00D		E S M F S A L K E K Q A	I E Y P L V V K A D T Q G G S V E A I V G		
UniRef90_Q6MMS6		D E V F A K V K A G	D V K E L A I V L K A D V H G S I E A I N G		
UniRef90_Q3B1Z8		D S I A R Q I K E G L	E G N L K A L P V I L K A D V Q G G S I E A I K A		
UniRef90_B9KEV0			E S I F D N I T D S S V Q V S L I I K S D V Q G G S Q E A I S S		
UniRef90_L0B6W8			T D E E G I I I K A D T I G S I E A L A N		
UniRef90_D5VR05			D Q M L E R I Q A G	E Q K E V A V L I K A D V Q G G S A E A I Q T	
UniRef90_W7DKG6		E N L F N T L K E G A S K T	L K V V V K A D T Q G G S C E A I V D		
UniRef90_UPI000374105C	Q I R K E M I L Q T Q Q	E T K D L N I I I K A N T H G S A E A V S A			
UniRef90_K2E2E6	E E V T H G L K S A L T S I S V N P	V G V Y V V A S T L G S I E S L L T			
UniRef90_U6IM86		D N M F E N M G Q E E K K T L N I V I	K A D V R G G T L E A L R G		
UniRef90_UPI0003B4485C		D Q M L A R I Q A G	E Q K E L A V I K A D V Q G G S A E A I Q A		
UniRef90_A5FV21	D V E D I K	E E V M K D V S G L T L A T	E A K G V T V Q A S T L G A L E A L L E		
UniRef90_F0YFE3			K V L K L I I K A D T Q G G S V E A I V D		
UniRef90_E0XPX4			K E L K C I R A D S K G S V E A I K E		
UniRef90_D0GIS8		E S L S Q E L E E Q Q L	D T K Q L N I I V K A D V Q G G S V G A V V T		
UniRef90_C7H127		E E F F G K L Q A G	H Q E G V H V S T L G S I E A L V S		
UniRef90_I6UQK7	E E E V K	N A L E A D L E S V S M E L R	H Q E G V H V S T L G S I E A L V S		
UniRef90_X1GIN6		E D V H R R V E T G K L R	E L A L V L K C D V H G S A E A R Q		
UniRef90_G9ZJ01		E N L F A N T S S G E A Q T	V N L M I K A D V Q G G S V E A L S D		
UniRef90_D3S3F5			V T I K T D E E G V V L K T D T L G S I E A L V N		
UniRef90_W6EAI7			L K T L P V I I K A D V Q G G S I E A I K G		
UniRef90_K4IWA5			E G T L K E L K I I L K A D V Q G G S V E A L K N		
UniRef90_R4X6X2		A A T E G A E P E A E K D T L D L I E V P L I V	K G D V S G S V E A V V D		
UniRef90_UPI0003B78140		D Q V F A R M G D G S A E Q K S L N L M I	K A D V Q G G S A E A L S E		
UniRef90_UPI0003B75BA9			E Y P V V I K A D V Q G G T A Q A I V Q		
UniRef90_G3MKY6		K K R K R L T N R E K E F T V D D T	P C L P I I V K G D V D G G S V E A V L D		
UniRef90_W9E2W8			T E E L N L I I K S D V H G S E A I K N		
UniRef90_Q2Y4K6	L E N V V K L V K S E I D E M R M E T S	P E G L I I K A D T M G S I E A L A S			
UniRef90_X0TGD4		V M E E F E D L V E G V L G S R E E V G V Y V	Q A S T L G S I E A L L A		
UniRef90_J9IR74	I E T Y K A Q I Q D D L V D I M V D K T	A S G V C	Q A S T L G S I E A L L E		
UniRef90_R7M4W4		D E L F D R I L S A G E	K E I A V V K A D V R G S E A I R N		
UniRef90_G0S2J5			Q E S K E A E P M L K H L N F I I K G D V H G S V E A C T A		
UniRef90_C4V7G1	N E E E V K L K L D K D Y Q S V S I K L D E S G V H V	V A S T L G S I E A L S D			
UniRef90_D8RNT4			K D S G V E S H Q L N I V L K V D V Q G G T V E A I R E		
UniRef90_R5Y713			S K N K D G T K K I N V V L K T D V K G S E E A I K A		
UniRef90_C0S180	D L E K R R Q E L Q S E K D N A N S G P K G I P F L I	K A D V S G S V E A L V N			
UniRef90_F5TAM7		D D L F D K I Q D G	N L K E I K I I V K T D V R G T V D A V K N		

UniRef90\_R6VKW3  
UniRef90\_Q2S1N7  
UniRef90\_UPI0004065AB6  
UniRef90\_R5KP03  
UniRef90\_G0UJC4  
UniRef90\_I5AZT8  
UniRef90\_A4BAM5  
UniRef90\_B4U987  
UniRef90\_W2RLG7  
UniRef90\_A5EWY9  
UniRef90\_UPI0003A5D975  
UniRef90\_I0YM15  
UniRef90\_F7XVT0  
UniRef90\_G0QPE8  
UniRef90\_W7Z8V8  
UniRef90\_Q5NQ27  
UniRef90\_S6G3Z3  
UniRef90\_UPI00047DDF09  
UniRef90\_U6KMJ0  
UniRef90\_U7UCU1  
UniRef90\_M1AYW6  
UniRef90\_K1Z955  
UniRef90\_UPI000372B185  
UniRef90\_U6M5Y7  
UniRef90\_UPI000362CCFE  
UniRef90\_B6FZB7  
UniRef90\_M5ACH0  
UniRef90\_D8LKY1  
UniRef90\_Q9LPV0  
UniRef90\_F7YXQ3  
UniRef90\_Q7NH85  
UniRef90\_U7DAI8  
UniRef90\_E7C3G5  
UniRef90\_B5JRR0  
UniRef90\_H8I4Q9  
UniRef90\_C6REJ6  
UniRef90\_A1RUX2  
UniRef90\_G8T8W6  
UniRef90\_UPI00046A7967  
UniRef90\_A0A044V4A5  
UniRef90\_A6LP48  
UniRef90\_U4KRC1  
UniRef90\_A0RUB8  
UniRef90\_UPI0002887C24  
UniRef90\_UPI0003814A4B  
UniRef90\_X0ZLJ4  
UniRef90\_R5V9G0  
UniRef90\_Q976A1  
UniRef90\_R7IGI6  
UniRef90\_B5YEH4  
UniRef90\_K1ZEK8  
UniRef90\_R6XDR8  
UniRef90\_UPI000361BBDB  
UniRef90\_N1W5Y9  
UniRef90\_H1XXM9  
UniRef90\_UPI000288A00D  
UniRef90\_Q6MMS6  
UniRef90\_Q3B1Z8  
UniRef90\_B9KEV0  
UniRef90\_L0B6W8  
UniRef90\_D5VR05  
UniRef90\_W7DKG6  
UniRef90\_UPI000374105C  
UniRef90\_K2E2E6  
UniRef90\_U6IM86  
UniRef90\_UPI0003B4485C  
UniRef90\_A5FV21  
UniRef90\_F0YFE3  
UniRef90\_E0XPX4  
UniRef90\_D0GIS8  
UniRef90\_C7H127  
UniRef90\_I6UQK7  
UniRef90\_X1GIN6  
UniRef90\_G9ZJ01  
UniRef90\_D3S3F5  
UniRef90\_W6EAI7  
UniRef90\_K4IWA5  
UniRef90\_R4X6X2  
UniRef90\_UPI0003B78140  
UniRef90\_UPI0003B75BA9  
UniRef90\_G3MKY6  
UniRef90\_W9E2W8  
UniRef90\_Q2Y4K6  
UniRef90\_X0TGD4  
UniRef90\_J9IR74  
UniRef90\_R7M4W4  
UniRef90\_G0S2J5  
UniRef90\_C4V7G1  
UniRef90\_D8RNT4  
UniRef90\_R5Y713  
UniRef90\_C0S180  
UniRef90\_F5TAM7

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

UniRef90\_R6VKW3 F Q V V R P S A A A R K L A D Q E G V E I I 100 N T Y S S V I Y D A I I D D V T S A M E G M  
UniRef90\_Q2S1N7 F Q V R R A N R P S T S G A R K E A S Q R E E E E G V D E I I R T Y S S V I Y A A I I D D V T R D G A L E E G G L  
UniRef90\_UPI0004065AB6 F N V R A N R P S T S G A R K E A S Q R E E E E G V D E I I R T Y S S V I Y A G L I I D D V T R D G A L E E G G M  
UniRef90\_R5KP03 F A T G V E P D A A Q D L A A K K R D D D M R R Y Y N I I Y D D L I I E D D I L E K S A M R E G G M  
UniRef90\_G0UJC4 F D V E V S A D A Q D L A A K K R D D D I D V F E A K I I I Y H L F D D K F T R Y I I N E Y  
UniRef90\_I5AZT8 F N V R R A T P Q I R K L V K E R D D D M R R Y Y N I I Y D D L I I D D I I K A A L L D S G M  
UniRef90\_A4BAM5 F N V R P D A K A K E A A E E E K G V D D I R V Y N G I I Y E L L D D D V K K A A L L S G M  
UniRef90\_B4U987 F D V S V D K D A K K Y A E E E E G G V D I R F T A S I I Y H L F D D D F J A H S K K L  
UniRef90\_W2RLG7 F N V R A E A N A K K L I E E E E G G V D I R F T A S I I Y Q A I I E E D V K A A M Q G L  
UniRef90\_A5EWY9 F Q V R P S G S A R K L A E E E E G G V I I K T Y S S V I Y K A I I E E R D A I E G M  
UniRef90\_UPI0003A5D975 F D V P V T K N E A R E L A E E E E G G V R I I K T Y S S V I Y H L F D  
UniRef90\_I0YM15 F N V R A N N Q A R D M A G E S Q L G V V I I K Y Y S I I Y N L I D D I K A A V S G L  
UniRef90\_F7XVT0 F D V K V L P D A Q K Y A E E D N G V V K V I F T A N I I Y H L F D D Y Y T K Y Q K E C  
UniRef90\_G0QPE8 F N V R P D V N A K R V A A E A R D G V D I L R K H Y N A I I D E I I E K A M K G G A  
UniRef90\_W7Z8V8 F N V R P D V N A K R V A A E A R D G V D I L R K H Y N A I I D E I I E K A M K G G A  
UniRef90\_Q5NQ27 F H V R A E A N A K K L I E E E E G G V I I R F S A E S I I Y Q A I I E E D D V K A A M Q G L  
UniRef90\_S6G3Z3 F N V R P D A T V R K K A E E E D G G V I I R F S A E S I I Y K L I E E E L E A A K G G I  
UniRef90\_UPI00047DDF09 F N V R P Q S R V E E D L A E E E E G G V I I R F S A E S I I Y S A I I E E E A A L S K G M  
UniRef90\_U6KMJ0 F D V K V D A E A K E A K T L G V V I I R F S A E S I I Y H L F D Q F T N Y F E A M Q G V  
UniRef90\_U7UCU1 F N V R P N I N A I E L A K A T E E V D V V R T Y S S I I Y D I I N D I E A A A K G M  
UniRef90\_U7UJW6 F D V K V T Q G A R E L S K D E H H V I I R F M A N I I Y H L F D Q F K A Y I S D T I  
UniRef90\_K1Z955 F N V R P E I K A L H L A K E H H V I I R F M A N I I Y D L V N E V F K A M Q G L  
UniRef90\_UPI000372B185 F N V R A T T Q A R E L A K R E G V I I R F Y S I I Y E V A D D I E K L V K G K  
UniRef90\_U6M5Y7 F N V R K I D A E A K E A K V L G V I I R F S A E S I I Y H L F D A F T E Y F N A Y  
UniRef90\_UPI000362CCFE F N V R A G V N A E K D L A E K E E I I R T Y S S I I Y D A I I D D V K E A M E G M  
UniRef90\_B6FZB7 F N V R P V S G A E S L A E K E N I I D M R T Y S I I Y K A I I D D I Q E A M C G M  
UniRef90\_M5ACH0 F N V R P N I G A K N L A K K E N I I R T Y S I I Y D V T N D I Q E A M D G M  
UniRef90\_D8LKY1 F D V K I I D S D A R R Y A D K E N G V I R I F T A D L I Y H L F D D Q F T A H M D R L  
UniRef90\_Q9LPV0 F D V K I I S A E A R E L A D K M G V V K E I I C D D D T I Y C L F D D K F K S Y  
UniRef90\_F7YXQ3 F R V K V D S Q A R K Q A E E S E G V V I I R T Y S I I Y D L T D N I K R A L E G M  
UniRef90\_Q7NH85 F S T T L A S G A R Q A A E E S G V D V I R T Y S I I Y K L L E D I Q L A M E G L  
UniRef90\_U7DAI8 F H I S P N K I K E H A K Q A G V V I I R T Y P V I Y E A I D D V K K A M I G M  
UniRef90\_E7C3G5 F H V R P D T A S R R A A E E E Q E I I R Y R V I M N L V D V R S A M A G G M  
UniRef90\_B5JRR0 F N V R A D S A G R R A A E E E Q E I I R Y R V I M N L V D D V R A M S G M  
UniRef90\_H8I4Q9 F N V Q I L A E T K E Y L Q A S S D I K E V I F T N D V I Y R L I E D D Y E K W Q K A Q  
UniRef90\_C6REJ6 F N I R P T G E V E K E K A K S S G I I K T Y N V I Y R L I D D V K A L S Q E L  
UniRef90\_A1RUX2 F N V K I P P E V E R E A M S S G I I K I R G E I Y N R I L F D E Y I K W S Q E V  
UniRef90\_G8T8W6 F N V R P S T Q A N R L A E S S E G V V I I K L Y S I I Y N A I I E E V K S A M E G M  
UniRef90\_UPI00046A7967 F H V R P T G S V E K E K A K S S G V I I K T Y N I I Y D L I D D V T G L V S G L  
UniRef90\_A0A044V4A5 F D V R V D R E V E K F A A S E G V V I I R F S A D I I Y H L E D S F L K Y  
UniRef90\_A6LP48 F R V K A D S K A R K M A E A E E G V I I K T Y S I I Y K L I E D D L K A A L E G M  
UniRef90\_U4KRC1 F N V R P N A A V R S L E A E E E L R F S D K I I V Y S L V D G Y S K A L K E E  
UniRef90\_A0RUB8 F N V R V L P D A R E T S A E D D Y H V I I R F S D K I I V Y S L V D G Y S K A L K E E  
UniRef90\_UPI0002887C24 F N V R P N M N A I E L A K E E E E V I I R T Y R V I Y E I I N D I I E Q A A K G M  
UniRef90\_UPI0003814A4B F H V R P S P H Q A R K L A E E E E K V Q D V I K L Y Q E I I Y D V I D D V Q A A L E G M  
UniRef90\_X0ZLJ4 F N V K L S P G A K E M A E E E K V Q D V I K L Y Q E I I Y K V I D D V Q A A L E G M  
UniRef90\_R5V9G0 F N V R P D A A I R K K A A E S N N V I R L H N I I Y A L T E E L E A M K G L  
UniRef90\_Q976A1 F R V K P L Q G I E V P K N N I K L I T Y S E I I Y Q L T D D I E E K Y I T E G V  
UniRef90\_R7IGI6 F N V V J A S N N A K D I A K D N N I D I R L Y T I I Y K L V E D I E A A I N G G M  
UniRef90\_B5YEH4 F N V R P D S K A Q Q A I S K E K V I A K T Y R I I Y E I I E D L Q N Y I S G G L  
UniRef90\_K1ZEK8 F N V R A N N E A R K L I E G E Q V D L R H Y H I I Y D V I N E D L Q N R A I S G G L  
UniRef90\_R6XDR8 F N V R P T A Q I T D M A K D E D E G V I I R L Y N I I Y K L Q E D I E K A V S G G L  
UniRef90\_UPI000361BBDB F Q V R P T P N T R R L A E R E D V E I R L Y S I I Y H A T I E E V K A A M E G G L  
UniRef90\_N1W5Y9 F H T R A N P K T V S L A E K E K N V D I K Y Y S I I Y D V I N E D L K A S M E G M  
UniRef90\_H1XXM9 F N V R A N L K A K E L A E K E N V D L K T Y R V I Y D A I N D D L K A S M E G M  
UniRef90\_UPI000288A00D F N V R P N A K A R E L A E R Q K V A F K Y Y D V I Y D L T D D E I R A G M A G E L  
UniRef90\_Q6MMS6 F N V R P D L G A Q A K A K Q M G D D V R T Y S I I Y H L E D D V M K A A M G G L  
UniRef90\_Q3B1Z8 F R V R P N V N A K K L A E K E D L V R F Y S I I Y H V L T D D V M K A A M G G L  
UniRef90\_B9KEV0 F N I R P T G E I K E R A K D K G V E I K T Y N V I Y N L L D D V K A L L G G M  
UniRef90\_L0B6W8 F N V R A D S L A K K N A E E L N N I R Y Y S I I Y D A I N D I K Q A V S G M  
UniRef90\_D5VR05 F N V K V L P E A E K E N E K Y N K I F L D N I I Y K L V E D F T E W V  
UniRef90\_W7DKG6 F N V R A T V Q A R E L A Q E N V G I H Y Y S I I Y Q V I D D I E K I I K G R  
UniRef90\_UPI000374105C F H T K L E D T G V T D A A K R E G V Q I K L Y S I I Y E L I D E M R E A M A G L  
UniRef90\_K2E2E6 F A V K E D A N L R J A T N V G V D I R K Y D I I Y Q V L D D I E K T M L G L  
UniRef90\_U6IM86 F D V R V D K D A E K M A A E V G V K L F T A N I I Y H L E A S M N E Y M E N I  
UniRef90\_UPI0003B4485C F N V R A D A G A R K I V E Q E G L D M R Y Y S I I Y D I I D D I L E K A L S G M  
UniRef90\_A5FV21 F N V R A N A G A R T I A S R D G V I R Y Y S I I Y Q V S D D I L E T M V K G K  
UniRef90\_F0YFE3 F D V P V D P D A Q T Y A D K N G V V I I F T A E I I Y H L E T H F T T H L D A I  
UniRef90\_E0XPX4 F H A K I D T G V G E V A K R E T G V E V K L Y A I I Y E L T D E I V K E A M A G L  
UniRef90\_D0GIS8 F N V R P T T P A R I E A E K T G V E V R N Y N V I Y H V T E E I E K A M K G M  
UniRef90\_C7H127 F N V R P S Q S V L K T A D S K G I V I R T Y R V I Y D I I D D I E N A M K G M  
UniRef90\_I6UQK7 F D V V L D R E I L K D M A S S M G V F E A K I I Y H L L D D S Y Q D F I S E E  
UniRef90\_X1GIN6 F N V R T D P R A E R M A S S E S V Q I R Y S I I Y E L T Q D V Q D A M L G L  
UniRef90\_G9ZJ01 F N V R A D A N A K R L V E S E G V D L R Y Y S I I Y E A I D Q V K A A M Q G L  
UniRef90\_D3S3F5 F N V K V L P G V E E A A R Y A G V R I F L D N I I Y S L L D N V T S W R E E Q  
UniRef90\_W6EAI7 F H V R P T G V V K E K A K S A G V E I K T Y N I I Y D L I D D V T N I V T G L  
UniRef90\_K4IWA5 F H V R P T V K A Q I L A D Q E K V E I R K Y N I I Y D A I S D V K S V L E G M  
UniRef90\_R4X6X2 F N V A V D N K A K A T A A R E G I Q I S H N I I Y R M I D D V S D A L A S F L  
UniRef90\_UPI0003B78140 F N V R A D S V A R R T I Q D T G L V R Y Y S I I Y D V L D D V S R D A I G G L  
UniRef90\_UPI0003B75BA9 F H V R P N A K A R Q I A E E E K V R F K Y F D V I Y D L T D D I R K E M A G G E L  
UniRef90\_G3MKY6 F H V P V S S A A K E A A E E G N V I I R T Y N I I Y H L T D D I I K K E L G K R L  
UniRef90\_W9E2W8 F N V K P S K E A K K L A E N E K I K I R S Y N I I Y E V L D Y L K Q R M S G L  
UniRef90\_Q2Y4K6 F N V D L L P D A K E M A M T N G L P V F T S D V I Y R L I E E Y E D W V K G  
UniRef90\_X0TGD4 F D V K I I A D D A K K E A K R T G T Q I F T A D I I Y H L F D D K F S K Y M A E V  
UniRef90\_J9IR74 F D V K I L T P E A Q Q F A E E N E I R F T A N I I Y H L F D Q F T E Y V K K C  
UniRef90\_R7M4W4 F N I R P T N S I I M E Y A K E K G V D I R L Y N I I Y K L I E E M E A A M K G K  
UniRef90\_G0S2J5 F N N E I P S K I I K R M A Y D A G V K I L D H N I I Y H L V E D V K D R L A N D A  
UniRef90\_C4V7G1 F D V I V D K I I K D L A H N L H I K I F E A K I I Y H L F D Q Y T N Y I L N N M  
UniRef90\_D8RNT4 F N V R T Q P T V R D K A D S E G V E I R L Y K V I Y E L V D D M R Q A M E G L  
UniRef90\_R5Y713 F N V R P N N K I L M D V A K A Y E G V R I R L H N I I Y K M L I E E L Q A I K G M  
UniRef90\_C0S180 F N L P V E P A M A R M A E A G V R I L N H N I I Y K L I E D V K S E L S E Y  
UniRef90\_F5TAM7 F N V R P S Q G A I D L S R H E N V D V R T Y R V I Y D A I E D I K L A V K G M

UniRef90\_R6VKW3 L D K V K K E L T T  
UniRef90\_Q2S1N7 L S P E R R E  
UniRef90\_UPI0004065AB6 L E P E R K E T F  
UniRef90\_R5KP03 R S V K Y R D V  
UniRef90\_G0UJC4 E K R E K E R A  
UniRef90\_I5AZT8 M P S T F Q E N I  
UniRef90\_A4BAM5 L S P D L R E E I  
UniRef90\_B4U987 L S P V K K E I  
UniRef90\_W2RLG7 L E E K K E Q  
UniRef90\_A5EWY9 L S P E I R E E I  
UniRef90\_UPI0003A5D975 L E P T K E E R  
UniRef90\_I0YM15  
UniRef90\_F7XVT0 L S P I I K E K L  
UniRef90\_G0QPE8 I E E R K Q E I  
UniRef90\_W7Z8V8 L D P E F E E K V  
UniRef90\_Q5NQ27 L G P E Y F E T V  
UniRef90\_S6G3Z3 L D P E F K E V V  
UniRef90\_UPI00047DDF09 L K P E F E E V  
UniRef90\_U6KMJ0 K Q S K K  
UniRef90\_U7UCU1 L E P E F V E E V Q  
UniRef90\_M1AYW6 K E E K R K E V  
UniRef90\_K1Z955 L A P D I K E T Y  
UniRef90\_UPI000372B185 L A P I Q R E K F  
UniRef90\_U6M5Y7 K Q N K K K E V E Q T  
UniRef90\_UPI000362CCFE L S P E I R E Q V  
UniRef90\_B6FZB7 L D P  
UniRef90\_M5ACH0 L S P E I R E K I  
UniRef90\_D8LKY1 M E Q R R Q D A  
UniRef90\_Q9LPV0  
UniRef90\_F7YXQ3 L Q P E Y V E E L  
UniRef90\_Q7NH85 L D P E  
UniRef90\_U7DAI8 L A P R I E E  
UniRef90\_E7C3G5 L P P T L K E Q V  
UniRef90\_B5JRR0 L S P E L K E N I  
UniRef90\_H8I4Q9 K D M A D K K R F E  
UniRef90\_C6REJ6 M S P V I H E  
UniRef90\_A1RUX2 K T K T I E Q L L  
UniRef90\_G8T8W6 L E P K I T E K I  
UniRef90\_UPI00046A7967 L S P V I R E  
UniRef90\_A0A044V4A5  
UniRef90\_A6LP48 L E P E E I E E I  
UniRef90\_U4KRC1 L E P T F E E V V T  
UniRef90\_A0RUB8  
UniRef90\_UPI0002887C24 L D P D I V E E I  
UniRef90\_UPI0003814A4B L K P K Y E E Q V  
UniRef90\_X0ZLJ4 L A P K K V E V  
UniRef90\_R5V9G0 L K P I Y E E V V T  
UniRef90\_Q976A1 R E S E K R R T L D S  
UniRef90\_R7IGI6 L D P E Y E E K V  
UniRef90\_B5YEH4 K E P Q I K E V V  
UniRef90\_K1ZEK8 I A P E I Q E K I  
UniRef90\_R6XDR8 L D P V F E E K I T  
UniRef90\_UPI000361BBDB L S A D I E E E I  
UniRef90\_N1W5Y9 L E P E K V E N V  
UniRef90\_H1XXM9 L K P S L E E N V  
UniRef90\_UPI000288A00D L G P E A F E T V  
UniRef90\_Q6MMS6 L S P D I V E E V  
UniRef90\_Q3B1Z8 L S P E L H E  
UniRef90\_B9KEV0 M S P I I S E  
UniRef90\_L0B6W8 L I P E K K E E V  
UniRef90\_D5VR05  
UniRef90\_W7DKG6 I A P K Q R E K F  
UniRef90\_UPI000374105C L D P I T K E E I T  
UniRef90\_K2E2E6 L Q P E F K E V  
UniRef90\_U6IM86 L Q E N R K K H A D  
UniRef90\_UPI0003B4485C L G S D V R E N I  
UniRef90\_A5FV21 L A P I E R E K F  
UniRef90\_F0YFE3 M E Q R R D D A  
UniRef90\_E0XPX4 L D P L L K D V V T  
UniRef90\_D0GIS8 L D P E F K E L Y  
UniRef90\_C7H127 L E P  
UniRef90\_I6UQK7 R E K N K K M H M E  
UniRef90\_X1GIN6 L E P V Y E E V V  
UniRef90\_G9ZJ01 L S P E V R E D I  
UniRef90\_D3S3F5 K R L R E K Q K I E S  
UniRef90\_W6EAI7 M A P V I R E  
UniRef90\_K4IWA5 L E P D V E Q Q F  
UniRef90\_R4X6X2 L T P L K Q Q R V  
UniRef90\_UPI0003B78140 L G T E T R E Q I  
UniRef90\_UPI0003B75BA9 L G P E I I E T V  
UniRef90\_G3MKY6 L P L L D E E E I  
UniRef90\_W9E2W8 L A P D V Q E K I T  
UniRef90\_Q2Y4K6  
UniRef90\_X0TGD4 E E Q K K K  
UniRef90\_J9IR74 R D E R K  
UniRef90\_R7M4W4 L D P T Y E E  
UniRef90\_G0S2J5 L P P L K K V V A E A  
UniRef90\_C4V7G1 K S K A K E I H F  
UniRef90\_D8RNT4 L K P I Q E E V  
UniRef90\_R5Y713 L D P E Y E E K V T  
UniRef90\_C0SI80 L P P A I T Q H V T  
UniRef90\_F5TAM7 L A P T F V E E V



UniRef90\_V4IKC6  
UniRef90\_C3WCG3  
UniRef90\_S7XJ48  
UniRef90\_Q7URR0  
UniRef90\_D3BFQ1  
UniRef90\_F7WZG5  
UniRef90\_A6GK83  
UniRef90\_I2F981  
UniRef90\_A6URS1  
UniRef90\_UPI00035CECA8  
UniRef90\_Q93FR1  
UniRef90\_T1CQ79  
UniRef90\_UPI00035C4717  
UniRef90\_UPI00047A6952  
UniRef90\_C1DXS6  
UniRef90\_A1AV99  
UniRef90\_UPI000388C2F5  
UniRef90\_G8FUH0  
UniRef90\_D8IC94  
UniRef90\_I2F5J2  
UniRef90\_XOWJA5  
UniRef90\_UPI0003F0803B  
UniRef90\_Q6KID8  
UniRef90\_C1LEQ4  
UniRef90\_A0A037UQ47  
UniRef90\_U1N0N3  
UniRef90\_E8U9G1  
UniRef90\_D9PKF8  
UniRef90\_H1Z3V3  
UniRef90\_D7BF12  
UniRef90\_E4TZN9  
UniRef90\_D0WDY6  
UniRef90\_E0UQE8  
UniRef90\_B1VAG9  
UniRef90\_UPI00032A70ED  
UniRef90\_UPI0002F651E3  
UniRef90\_A4RU91  
UniRef90\_S5ME80  
UniRef90\_C5BPV9  
UniRef90\_UPI00046C3CE5  
UniRef90\_A9BJ54  
UniRef90\_R6YZZ3  
UniRef90\_L0A6W5  
UniRef90\_M8BJF1  
UniRef90\_B8AX87  
UniRef90\_G4NDZ9  
UniRef90\_UPI0000E4979C  
UniRef90\_UPI00036BD35B  
UniRef90\_F5SVK3  
UniRef90\_V5RVV7  
UniRef90\_G3J115  
UniRef90\_I1CHS2  
UniRef90\_J2P8Z8  
UniRef90\_L0PG75  
UniRef90\_R5YV07  
UniRef90\_W0JIM8  
UniRef90\_T2STN7  
UniRef90\_D4GTJ2  
UniRef90\_B8BPT5  
UniRef90\_I7IAG9  
UniRef90\_K2AP48  
UniRef90\_C5FV79  
UniRef90\_B9EXR3  
UniRef90\_E2R3A4  
UniRef90\_UPI000262CDEA  
UniRef90\_D1J8W4  
UniRef90\_D5EK65  
UniRef90\_L9VTQ1  
UniRef90\_D5SQ08  
UniRef90\_Q823F2  
UniRef90\_B5Y928  
UniRef90\_U5XJ15  
UniRef90\_E8QYY5  
UniRef90\_F8KS62  
UniRef90\_UPI0003A90B2E  
UniRef90\_A7SA88  
UniRef90\_F4W750  
UniRef90\_L8WVW99  
UniRef90\_R7MCH9  
UniRef90\_K2G6V3  
UniRef90\_L7VJB7  
UniRef90\_G9MMZ5  
UniRef90\_UPI00016B22D2  
UniRef90\_R5ZCK4  
UniRef90\_A8BUL3  
UniRef90\_UPI000383512C  
UniRef90\_I3JJT2  
UniRef90\_G7DSF5  
UniRef90\_R8BRP2  
UniRef90\_G3SZT5  
UniRef90\_A8ITP1  
UniRef90\_M9PQN9

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

UniRef90\_V4IKC6  
UniRef90\_C3WCG3  
UniRef90\_S7XJ48  
UniRef90\_Q7URR0  
UniRef90\_D3BFQ1  
UniRef90\_F7WZG5  
UniRef90\_A6GK83  
UniRef90\_I2F981  
UniRef90\_A6URS1  
UniRef90\_UPI00035CECA8  
UniRef90\_Q93FR1  
UniRef90\_T1CQ79  
UniRef90\_UPI00035C4717  
UniRef90\_UPI00047A6952  
UniRef90\_C1DXS6  
UniRef90\_A1AV99  
UniRef90\_UPI000388C2F5  
UniRef90\_G8FUH0  
UniRef90\_D8IC94  
UniRef90\_I2F5J2  
UniRef90\_X0WJA5  
UniRef90\_UPI0003F0803B  
UniRef90\_Q6KID8  
UniRef90\_C1LEQ4  
UniRef90\_A0A037UQ47  
UniRef90\_U1N0N3  
UniRef90\_E8U9G1  
UniRef90\_D9PKF8  
UniRef90\_H1Z3V3  
UniRef90\_D7BF12  
UniRef90\_E4TZN9  
UniRef90\_D0WDY6  
UniRef90\_E0UQE8  
UniRef90\_B1VAG9  
UniRef90\_UPI00032A70ED  
UniRef90\_UPI0002F651E3  
UniRef90\_A4RU91  
UniRef90\_S5ME80  
UniRef90\_C5BPV9  
UniRef90\_UPI00046C3CE5  
UniRef90\_A9BJ54  
UniRef90\_R6YZZ3  
UniRef90\_L0A6W5  
UniRef90\_M8BJF1  
UniRef90\_B8AX87  
UniRef90\_G4NDZ9  
UniRef90\_UPI0000E4979C  
UniRef90\_UPI00036BD35B  
UniRef90\_F5SVK3  
UniRef90\_V5RVV7  
UniRef90\_G3J115  
UniRef90\_I1CHS2  
UniRef90\_J2P8Z8  
UniRef90\_L0PG75  
UniRef90\_R5YV07  
UniRef90\_W0JIM8  
UniRef90\_T2STN7  
UniRef90\_D4GTJ2  
UniRef90\_B8BPT5  
UniRef90\_I7IAG9  
UniRef90\_K2AP48  
UniRef90\_C5FV79  
UniRef90\_B9EXR3  
UniRef90\_E2R3A4  
UniRef90\_UPI000262CDEA  
UniRef90\_D1J8W4  
UniRef90\_D5EK65  
UniRef90\_L9VTQ1  
UniRef90\_D5SQ08  
UniRef90\_Q823F2  
UniRef90\_B5Y928  
UniRef90\_U5XJ15  
UniRef90\_E8QYY5  
UniRef90\_F8KS62  
UniRef90\_UPI0003A90B2E  
UniRef90\_A7SA88  
UniRef90\_F4W750  
UniRef90\_L8WV99  
UniRef90\_R7MCH9  
UniRef90\_K2G6V3  
UniRef90\_L7VJB7  
UniRef90\_G9MMZ5  
UniRef90\_UPI00016B22D2  
UniRef90\_R5ZCK4  
UniRef90\_A8BUL3  
UniRef90\_UPI000383512C  
UniRef90\_I3JJT2  
UniRef90\_G7DSF5  
UniRef90\_R8BRP2  
UniRef90\_G3SZT5  
UniRef90\_A8ITP1  
UniRef90\_M9PQN9

50 60 70 80  
S T D E V K V R V L H E G T G A I I T D S S D I L L A S A S D A I V I G G  
S L T S E S V A V N I V L I Q A A G S G A K I L T N K K D L V R A S I L M A E K S I E Y S P L L G C  
F F L T S S E S V E I R V L Q T V R S V G V G G I S L A D A D A T L A S A S A D A V I L L G  
F L K E G E K I P V A F K A V I G V G P V H K K H V M N A A I M A N K D P K Y A I I I L G A  
S L E K V L N E V I S A S G V G G A I T E T S D A T L C L A S L A E N P L I I I G G  
S L E E K V R V N I I G F A G V G G V I S E S D I D L L A S A T S S S S D P L N G L I I L G S  
E L I T K A K A N I K K F A K G V G G A I S E K K D I I E A S S S Y S S S D P L N G F I I L G  
S I K D E I R V N I L Y K G V G G A I T S E S D V L L A A E T S S N S I I I L G A  
S V L E E I N I N I S F G I S E S D V S L A A A S P N C L I I L G  
L L E D V K I N V L L S G G I S P T E S G D V L L A S T A A N A A A T A K A T I I I G  
A L D Q I R I N V I V S S G V G G I T E S D V M L L A A A S N A I I I G G  
S I E E L S E K I H A S G G I T E S D V I T L A A T S N A L V L G  
A L E E A K K V V S A S G V G G I N N T D I L A A T S G V I Y G  
I L D E E C E L D V V H F G V G G D V S E N D I N L A A E T F K E K D P K Y A I I L L A  
F L K K I R I P V A N V A S G P V A K K H V M S A A I M L E K D P K Y A I I L L A  
A L D K I R F V S I Y K G V G G A I V T E S D V N L A H A S N A I I I L A  
A M A K V K I E V V H S A G I G G A V T N S S D V M L A S A S D A V I M G  
Y L E E V K I N L L H A A P G V T E G D V V L A E A S N A I I I L G A  
F L K T S E V P Y A G I N I G P V H K K D V M K A S V M L E H D P Q Y A V I L A  
K L E E V K I N V R S S V I G A I T T K S D I L L A Q A S N A I I I F G  
Y L L K S V D I P Y S G I N I G T V I H K K D V M K A S V M C E R E P K W A V I L A  
S L L K V K I N V L R A T V G G I S E S D V T L G L A S A Q A F I L G A  
T L A D D E I P V T R A E V G N V A S P R D V R M A Q A A T E P R H R A I L L A  
I L D D V K I N V M L A G I G G A P T E G D V L L A S T A G A T I I L G C  
S L E E V K I N V I V H E G S I T E S D V A L A G A G E K I V I L L G  
E L E K H E I P V F R A E V G G P V S R H D I I E V A T I R D P L R S V L L A  
I L E E V K I N V M F S S G V G G A P A E S D V L L A T T A N N S E N C M L V G  
A F S E E V K I S I I H S A V G G I T E T D V T L A A A S N S E N C M L V G  
S L D E E K I D V I S S G V G G I T E S D V E L L V S N S E N C M L V G  
M L D E K I K V N L L R T S V G T V T E K D V I L A E S S Q S L L I G  
A L D N V T L K F L L E T T G D V S T S D V D L A A A S R A I I I F G  
E L E E V R L R V L H A G I G A I T E S D V Q L L A S A S P Q D T L V L L G  
E L D R V Q L R F L M A S A G A E V S S D V L L A S A S E G I I L L A  
S I E G V K I N V I R A T V G A I S A S D I T L G L A S S D A L I I Y G  
A L D E V Q V N F V G G V G G A I S E N D V N L A L T S G A V I Y A  
U P I 0 0 0 4 6 C 3 C E 5 A I Q E E I D I E I I H A G I G P V L S T S D I M L A S A S D A I V L G  
A L E K I E V N I V R A A G A P T E S D V L L A Q A S S A L V L G  
I L K S V N L N V M L A G I G A P T E G D V L L A S T A N A T I L C  
H L K S V D I P V Y D W N L G P V Y K Q D V M K A S A M L K R K E E Y A V I L A  
A I E N V R L R F L Q A P G V T E S D V D L A V A S E G I I F G  
A V E N V R P R F L R S A P G Q V T E S D V E H A A T T G S H E G I I I S  
T L H Q C K L N V L S F G V G G V I S D N D V E L A H T F E G A V V G  
E V K S T K I H G G V G A I N E S D I M L A S A S N A I I I G  
U P I 0 0 0 3 6 B D 3 5 B G L Q K L S D M V K V R V V G S G V G I N E T D A Q L A A A S D A I I G  
U P I 0 0 0 3 6 B D 3 5 B S L R Q V D L H I V G S G V G N I S E N D V H L A A D E N T V I Y G  
U P I 0 0 0 3 6 B D 3 5 B S L K Q I E V K V V F G G V G G I N E G D A N L A L A S G A I L M G  
U P I 0 0 0 3 6 B D 3 5 B A L D E I K V R I L S S G V G A I T E S D V T L A A A S G E G Q V I G  
U P I 0 0 0 3 6 B D 3 5 B A L D E I K T K V I Y E D V G T V V E S D I T R A A A V Q G Y I V S  
U P I 0 0 0 3 6 B D 3 5 B S L E E V K V I H S V A G A V S E S D V Q L A K A A E A I I I A  
U P I 0 0 0 3 6 B D 3 5 B A L G E A E I P I V S A E V G G D V A P R D V S V A S T A E D P K Q Q A I L G  
U P I 0 0 0 3 6 B D 3 5 B S L E E A E I Q V I H S S G V G G I T E N D L S L V S S S A E H A V I L G  
U P I 0 0 0 3 6 B D 3 5 B A L Q E A E V P I L R A E V G D V A P R D V A V A S T A R E P E H K V I L G  
U P I 0 0 0 3 6 B D 3 5 B H L N S P G V N V P V S G C G P I E K K D V M K A S A M L K R K E E Y A A I L A  
U P I 0 0 0 3 6 B D 3 5 B S I N K V K L N I H S K A V G G I T D S D V L L A E A S N A I I L L A  
U P I 0 0 0 3 6 B D 3 5 B A L A G I K L V V H S G V G G I T E S D V M M A A A G G N A I I V G  
U P I 0 0 0 3 6 B D 3 5 B A V N E V F A K I L R F N V G K I G E S D I R L A S A A N A A V I S  
U P I 0 0 0 3 6 B D 3 5 B F L K S M N I P V C H D F R L G P V V L R K D V M K A R F M V R K K T Q Y A T I L A  
U P I 0 0 0 3 6 B D 3 5 B I M H C E L Q L V L I Q G V G G I S E N D V N L A E T F H G V I Y G  
U P I 0 0 0 3 6 B D 3 5 B A L D E V R V N L I A Q G V G G I T E S D A T L A S S A G A I V L G  
U P I 0 0 0 3 6 B D 3 5 B T L Q S E I R V N I R A T S G G I T T K A D I L L A A E T S N A R I Y L  
U P I 0 0 0 3 6 B D 3 5 B A L S E L E L D V I S V G V G N I T K N D V T L L S S A G G N A C I I L G  
U P I 0 0 0 3 6 B D 3 5 B A L A E A E I P V M R A E V G G I A P R D V S I A S T A D D P I H R T V G  
U P I 0 0 0 3 6 B D 3 5 B E I P E V R V R I L H E G V G G I N E S D V Y L L A S A S S A I I I A  
U P I 0 0 0 3 6 B D 3 5 B S I D K V S A E I L A N S V G E I S E S D I R L A A A S K A V I I G  
U P I 0 0 0 3 6 B D 3 5 B A L G E V D M N I I H A G V G G A I S D G D V I L A E A S K A L I V G  
U P I 0 0 0 3 6 B D 3 5 B S L D E V P K I V I V S G V G G A I T E T D A T L A A A S N A I I L G  
U P I 0 0 0 3 6 B D 3 5 B E L T E I P I R I L H R G V G G A I T E S D V S L A V A S K N A M I V A  
U P I 0 0 0 3 6 B D 3 5 B S L D E V G V Q I L L G A G V G A I S E N D L S L V A N N P H A L V L G  
U P I 0 0 0 3 6 B D 3 5 B S L E E V G V D I V I V G V G N V S D S D V L L A Q A S K A V I I G  
U P I 0 0 0 3 6 B D 3 5 B A L K K I L M S I L N A G V P V T E S D V K M A D S F R A V I F G  
U P I 0 0 0 3 6 B D 3 5 B V F D K C E L N V I H Y G V G P V T E T D L Q M A D M F N A I I Y P  
U P I 0 0 0 3 6 B D 3 5 B A L C G I G N K I A R V K I V S Q T V G D V S E S D I A R A K A I E G T V V A  
U P I 0 0 0 3 6 B D 3 5 B A I K E I T T K I H V G V G D I S E A D V M L A A A S N A L I L G  
U P I 0 0 0 3 6 B D 3 5 B I S T E I K I N I V E S E V G G I T E S D I K V G A A S Q A M I L G  
U P I 0 0 0 3 6 B D 3 5 B A I E E I S I N I I R K G I S E S D V I L A N A S N A I I I G  
U P I 0 0 0 3 6 B D 3 5 B S I H E V Q P K I I L R S S A G Q I T E Y D I D H A A T S N S I I V N  
U P I 0 0 0 3 6 B D 3 5 B S L R A V N L H I I G S S G V G D I S E N D I R L A A D E K T V I Y G  
U P I 0 0 0 3 6 B D 3 5 B A L N K V N L K L L G C A S G E V S E G D V V L A E A S H A S I T  
U P I 0 0 0 3 6 B D 3 5 B Y L E K T K V P L A G C A I G P I S K N T I Q E A A L Q L E R N P E Y A C I L A  
U P I 0 0 0 3 6 B D 3 5 B I L D E E C K L D I V H F G M G D I S E T D I S L A E S F N G V I Y G  
U P I 0 0 0 3 6 B D 3 5 B I L L D Q C E L E V V L F G T G D I S E N D V N M A E M F G G S I Y G  
U P I 0 0 0 3 6 B D 3 5 B A V K E A K V I V L T G V G D V S N S D I D M A R T A E A V I L G  
U P I 0 0 0 3 6 B D 3 5 B A L N E V R P R V L R S A G Q V T E S D V D H A A T S K G M I I S  
U P I 0 0 0 3 6 B D 3 5 B A S H E C K L E L V H F G V G D I S E N D V N L A E M F G G I V Y G  
U P I 0 0 0 3 6 B D 3 5 B A L Q S V V L R F L L S G A G D I N V S D V D L A A A S G G M V L G  
U P I 0 0 0 3 6 B D 3 5 B S L S K V Q I N V V S I M P G E I T A T D V E L A S T T N A N L I G

UniRef90\_V4IKC6  
UniRef90\_C3WCG3  
UniRef90\_S7XJ48  
UniRef90\_Q7URR0  
UniRef90\_D3BFQ1  
UniRef90\_F7WZG5  
UniRef90\_A6GK83  
UniRef90\_I2F981  
UniRef90\_A6URS1  
UniRef90\_UPI00035CECA8  
UniRef90\_Q93FR1  
UniRef90\_T1CQ79  
UniRef90\_UPI00035C4717  
UniRef90\_UPI00047A6952  
UniRef90\_C1DXS6  
UniRef90\_A1AV99  
UniRef90\_UPI000388C2F5  
UniRef90\_G8FUH0  
UniRef90\_D8IC94  
UniRef90\_I2F5J2  
UniRef90\_XOWJA5  
UniRef90\_UPI0003F0803B  
UniRef90\_Q6KID8  
UniRef90\_C1LEQ4  
UniRef90\_A0A037UQ47  
UniRef90\_U1N0N3  
UniRef90\_E8U9G1  
UniRef90\_D9PKF8  
UniRef90\_H1Z3V3  
UniRef90\_D7BF12  
UniRef90\_E4TZN9  
UniRef90\_DOWDY6  
UniRef90\_E0UQE8  
UniRef90\_B1VAG9  
UniRef90\_UPI00032A70ED  
UniRef90\_UPI0002F651E3  
UniRef90\_A4RU91  
UniRef90\_S5ME80  
UniRef90\_C5BPV9  
UniRef90\_UPI00046C3CE5  
UniRef90\_A9BJ54  
UniRef90\_R6YZZ3  
UniRef90\_L0A6W5  
UniRef90\_M8BJF1  
UniRef90\_B8AX87  
UniRef90\_G4NDZ9  
UniRef90\_UPI0000E4979C  
UniRef90\_UPI00036BD35B  
UniRef90\_F5SVK3  
UniRef90\_V5RVV7  
UniRef90\_G3J115  
UniRef90\_I1CHS2  
UniRef90\_J2P8Z8  
UniRef90\_L0PG75  
UniRef90\_R5YV07  
UniRef90\_W0JIM8  
UniRef90\_T2STN7  
UniRef90\_D4GTJ2  
UniRef90\_B8BPT5  
UniRef90\_I7IAG9  
UniRef90\_K2AP48  
UniRef90\_C5FV79  
UniRef90\_B9EXR3  
UniRef90\_E2R3A4  
UniRef90\_UPI000262CDEA  
UniRef90\_D1J8W4  
UniRef90\_D5EK65  
UniRef90\_L9VTQ1  
UniRef90\_D5SQ08  
UniRef90\_Q823F2  
UniRef90\_B5Y928  
UniRef90\_U5XJ15  
UniRef90\_E8QYY5  
UniRef90\_F8KS62  
UniRef90\_UPI0003A90B2E  
UniRef90\_A7SA88  
UniRef90\_F4W750  
UniRef90\_L8VWV99  
UniRef90\_R7MCH9  
UniRef90\_K2G6V3  
UniRef90\_L7VJB7  
UniRef90\_G9MMZ5  
UniRef90\_UPI00016B22D2  
UniRef90\_R5ZCK4  
UniRef90\_A8BUL3  
UniRef90\_UPI000383512C  
UniRef90\_I3JJT2  
UniRef90\_G7DSF5  
UniRef90\_R8BRP2  
UniRef90\_G3SZT5  
UniRef90\_A8ITP1  
UniRef90\_M9PQN9

F N V R P T G K I K D L A E K E S V D I 100  
F N V R P T T K A I K E A E V N G V E I R F S T S D N I V I Y H A M D I I R K N A M L G M  
F N D I K I D D K E A I S E T A E E K Y R N V E I R F S T S D N I V I Y H I T E D D I K E A L T G M  
F N V I P D D K K A R S E T A E E K Y R N V E I R F S T S D N I V I Y N K L L D D K Y K E A L T G M  
F G V K V E E S A M Q T A N E T L K L I T D V V I M S E E S T I Y L F V I D D R I L K T Y F G A T I  
F N V R A D S L A K R I T E E R K L D V V I R Y Y S S V I Y D V I S D R V R K K S I S G L  
F N V K A V G K A S K R L A E H E K V P V I Y E A S D R V R R E R M I S D L  
F N I R P T G N V K A K A K E L G V V E I K E T Y S I I Y S L L D D V K A L L G G L  
F N T K T L P D A K L E L E K T D G V K L E G S I I Y K L V E D D Y G A W L K E M L  
F N V R A L I P Q A R D M A K R D D G V I E I K Y Y S I I Y E L I D D D M K G L L G G L  
F N V K T D T Q V K E L A K Q K N I E I K H Y F S V I Y D I I D D D I K K A L L T G M  
F G L R P T G T V K S K A K E L G V V E I K T Y S I I Y D L V D D D I K A L I S G L  
F S V T A S G G V K K V A D T K G I E I K T Y S I I Y E L I D D D V D R L I K G N  
F N V R A D A A A R K V I E T H N L D L R R Y S I I Y D V I D D Q V K Q V A S G L  
F N V R A D A A A R K A A E Q E N G V D R I R E Y S I I Y Q A I E D D L E K T A M K G L  
F N V R A D A V A R K T A D N E N V I K I K F H N I I Y H L I D D D L K D E L S S K  
F N V N A N K S I Q Q L A A K K G V I K I K F H N I I Y H L I D D D L K D E L S S K  
F D V K I E D S A K R E A A N D M K V I L S E E T I Y L F E K K L Q N D H F D E I  
Y R V R P S G K A R E L A E K L G I P I E R Y D I I Y E A I E S I K A A M K G S  
F K V K P D A M A R K Q A E V E G V I K V Y E I I F N L I D D L K K A L E G L  
F N V V I P E E H A S K T A E A K G V E I R L Y N I I Y R I T E D L E K S M V G L  
F D V R I E R D A S E M A D S L G V I R I F S A E I I Y H I T E D D I K K A L E G L  
F N I R A T G G I K T F A E E S R V I V K T S H T I I Y E L L D D E V N E L L N G L  
F D V R V D K D A Q K L A T Q L N V K I F T S E I I Y R L L Q T Q M E K Y M E D L  
F N V R P T A H V R K K A E D E G E I I Y K L T E I I Y K L I T E E Y D E Y V T E I  
F N V E V L S D A R S L A T Q E A V E L L F E H D V I Y R L I T E E Y D E Y V T E I  
F S V T P S G S V T K L A D Q K G I D D L K S Y S I I Y E L I D D D V R L I K G N  
F N V K P N S S V K Q K A K E L G V I D D I L R T Y S I I Y A L L D D D V R L M L G G M  
F N T P L L P D A I D S A E K E N V V Q L F E S K V I Y H L I D D D Y V I E W E K T  
F G V N R P A G S V K M A E K Q M G I P L Q S F S I I Y E L I D D D V R K M V T R G Q  
F N V R P T G N V N A M A E Q M G I K I V N T Y S I I Y Q L I D D D V T A M L T G M  
F N V R P T A G A R A A A E R E K V D V R L Y S I I Y Q A I E D D I N A A R V G M  
F N V R P T S G S I K A L A K Q R N V D I R T Y S I I Y L L L D D D M T G M L T G M  
F N V K P S S I L K L A K Q K I V Q I V V H N I I Y R I L E D D I T E K R L K Q M  
F N V K A P G S V K S Y A D N K A V E I R L Y R V I Y E L L D D D V R K A M E G L  
F N V V I P C D N E A I K L A D S R E I P I R E Y Q V I Y K L T E D I K A A M E G K  
F N T P C S D R I G E L A K R K V I E V R R Y Q V I Y K L V D E V R A A M E G M  
F N V R P T S Q V R Q K A E E D G V E I R R L H N I I Y K L I D D D V R A A A T G M  
F N V R A D N S A R K L A E S S A E I R R Y S I I Y K L V D D D V K E E I A G S M  
F N T T C P K N I Q E L A E N S G V N I K F H N I I Y K L V D D D V K E E I A G S M  
F R V K A D S K A L K M A E A E G L E V R R Y N I I F D L I D D D I K K A L E G M  
F N V K A N A L A M S K A K E A N T E L R L Y I I Y E L I D D D V K L A M Q G L  
F S V V P S P G V Q K V A T Q K G I E L K T Y R L I Y E L I D D D V R L I K G T  
F D V K V M P E A S A L A E S G L K E I I T A D T V Y R L V N T Y T E H I K G L  
F N V K A P G S V K S Y A D N K A V E I R M D H S I I Y D L I D D D L R N A M  
F N N P I Q G H I E R M A D Q K G V R I R L H S I I Y H L V D D D V K A V L S E K  
F N V S A T Q E A E E A A K A K G V P L K M H S I I Y R L V D D D L K D D L S N R  
F N V R P D V N A R R A A E T E K I D D I R R L Y S I I Y D A I E D V K A A M S G L  
F N V R A D N A A R K V I A E E K G L D V R Q Y F S I I Y D L L D D V T K A M T G M  
F N V D L P A V K R Q A A R D K V Q D V R L Y K V I Y E L L D D D A K R S M E E L  
F N V R A D A A A R R L I E E K G I D L H Y S S I I Y E A I D E D V K K A I S G M  
F N V K A D K K I Q R E A E A R E G V P V L R S Y S I I Y K L I D D D V K D K L G D M  
F N V R P N A K A R E Q L K T K T P M M Y D V I Y E L L T A E V A K Q M A G T I  
F N L K L N K K I A Q F A H R E K V K I T S H S I I Y K L L D Y I K E E L S E L  
F N V R P V G S A K E V A E K E G V E I K Q Y S I I Y K A L E D V E A A M K G L  
F N V D V L A D A K T R A E K D D V K L F T D E V I Y K L V D D D I K D A L E R K  
F N I R P T G N V K N A K E Y N S I K T Y T V I Y A L I E E M R S L L L G L  
F N V D V L S N A E A E L D K N D V K L F E D D V I Y K L V D D D I K D A L E R K  
F N V R V M P E A D V L A S E S G V K I V T A D T L Y K L V D S F N E H I K R S  
F N V K T D S K P I R D M A K Q K G V E I H T Y N I I Y E L I D D D M K M Y L T K L  
F H V Q S G P N V R L A E R E H V E I L V Y K I I Y E L L D H V K K I L T G M  
F N Q S V E P D I M K L A I A E G V N I L N H N I I Y E L I D D D V K M R L S E H  
F N V K V S P D A Q K L A S Q D G V K I L A D V I D H L F E Q F R K Y I S  
F N V N A G N V I Q K S A A K G V K I K L H K I R L I E D V F Q E E L S  
F N V R A D A G A R Q V I E R D G I E L R Y Y S I I Y D I V D D V K A A M S G L  
F N N T I N N E I K K A A E L K N I K I E K H N I I Y K M V E E L E T L I T T L I  
F N V R L D N G V Q S I A K H H D N I R I I Q H D I I Y E L L D Q V E E M V G L  
F N V E V L G D A K R H A D E N E V R I F R N E V I Y Q L V E G Y D E F V E D S  
F H V I P E D R A A S L A L Q E N G V I R R Y N I I Y E A V I D E I K Q T L E G M  
F H T G L E S H A E S L I K N L G V K V L T Y R I I Y H A V I D A V K E M M T A L  
F N V R P V G K T N K L I E E K G I K V L T Y R I I Y D L V D D M A N L L K G L  
F N V R A D A S A R R V I D A E S L D A I R Y Y S  
F R V D E D R A V S L A E S K G I D L A I Q R Y D V I Y K V T D D I K D A L E R K  
F N I R P T G N V R S K A K E L R V E I K T Y S I I Y A L L D D D M K A L M G G L  
F G V Q I P S N T R L L A N Q M G V K I R A Y N I I Y Q V V D D V K L A V E G L  
F N V R A P K D V Q L L A H Q M S G V K I K T H R V I Y K L L T D D V K D E L S S R  
F N V G V M K N L Q Q E V N E K K I S I R P Y N V I Y K L L D D D V K N E I N S K  
F N V S A P S K I Q Q L A S E Q G V P L L N E N I I Y K L M D E I I K K R V I A L  
F N V K E D G N A L J A S A E R E G V T L K K Y D I I Y Q L L D D D I E K R T L S L  
F N V E I T P V A K R L A E S N D V K M K T F K I I Y E L V E E V K M V I E M  
F N V S T A L N A R T F S E H K N I D T R L Y S V I Y D A I N D D M K N H V M  
F N V C T I P 9 H I K Q R A E E A K V K L D H K V I H V V D D D V K A A L S D I  
F N V D L P P A V K R L A V R D G V N V R L Y K I I Y E L L D D D A K R S M E D M  
F N V H A S T L A S A L A K E K N I E I R H Y D I I Y H L T E D D I T K A M K G L  
F D I E V D K A T E D Y A K I N K V E I F R A D I I Y H L Y D D D M F V E H L K Q Y  
F S V K A N E S I K Q L A A K K G I K I K L H N I I Y K L V D D D L K E E L N  
F N V A A S R G I E Q L A A A R K G I P L R L H S V I Y K L V D D D Q L K E E L S S K  
F N I K A P K P I Q S A A Q A G V A I H L D T V I Y R L I D D D V K Q R V I G L  
F N N P I A G F I K Q R A K D A G V K I L D Y N V I Y H L T D D D V K D R L S D L  
F N V N A G N V I Q S S A A K K G V K I K L H K I I Y E L I G D D L K E E L S S R  
F N L E P D E A V S H A K K L G V N V K S Y K I I Y E L I D D D V K A M E G K  
F N T N F A P G A K Q A A K F N I L V E N Y Q I I Y A L I E D I K G R M K D L

UniRef90\_V4IKC6 L A P T F A E E V  
 UniRef90\_C3WCG3 L D P E Y K E I Y  
 UniRef90\_S7XJ48 R N K M K D A A  
 UniRef90\_Q7URR0 L K P E E R  
 UniRef90\_D3BFQ1 K E K L R E Q T  
 UniRef90\_F7WZG5 L K P V Y K Q N I  
 UniRef90\_A6GK83 L E P E Y R E V  
 UniRef90\_I2F981 M S P V I E E  
 UniRef90\_A6URS1 E E L L K S D E L  
 UniRef90\_UPI00035CECA8 L K P I I K E E I T  
 UniRef90\_Q93FR1 L R P L K Q E V  
 UniRef90\_T1CQ79 M S P L L E E  
 UniRef90\_UPI00035C4717 L D P V F E E R Y  
 UniRef90\_UPI00047A6952 L G V E I R E E I  
 UniRef90\_C1DXS6 L K P T F R E V L  
 UniRef90\_A1AV99 L S P E L S E N I  
 UniRef90\_UPI000388C2F5 L P S V V I E H I  
 UniRef90\_G8FUH0 R Q K L R E E T  
 UniRef90\_D8IC94 L E R L K K E V  
 UniRef90\_I2F5J2 L E P E E  
 UniRef90\_XOWJA5 L E P E E M E  
 UniRef90\_UPI0003F0803B  
 UniRef90\_Q6KID8 K A P K F K E V V T  
 UniRef90\_C1LEQ4 K T G N Q R K H R D  
 UniRef90\_A0A037UQ47 L D P E M V I E E V  
 UniRef90\_U1N0N3 E A A Q Q E Q I L E  
 UniRef90\_E8U9G1 V E P V I F E E Q Y  
 UniRef90\_D9PKF8 M S P I I S E E V  
 UniRef90\_H1Z3V3 R R E L E K Q S F E  
 UniRef90\_D7BF12 R E P V F K E E V  
 UniRef90\_E4TZN9 M A P Q F R E  
 UniRef90\_DOWDY6 L S P D I V I E  
 UniRef90\_E0UQE8 M A P K F T E  
 UniRef90\_B1VAG9 V K P V F E E V F T  
 UniRef90\_UPI00032A70ED L D S V E E Q V  
 UniRef90\_UPI0002F651E3 L K P E E R  
 UniRef90\_A4RU91 L S S I K E E I  
 UniRef90\_S5ME80 L D P V F E E  
 UniRef90\_C5BPV9 L D P E R V I E E I  
 UniRef90\_UPI00046C3CE5 L P Q K E Q E E V  
 UniRef90\_A9BJ54 L E P I Q K E E L T  
 UniRef90\_R6YZZ3 Q V P D L V I E V V  
 UniRef90\_L0A6W5 Q E P V F E E R Y  
 UniRef90\_M8BJF1 K E A K K M Q F  
 UniRef90\_B8AX87  
 UniRef90\_G4NDZ9 L P P  
 UniRef90\_UPI0000E4979C L P L L E Q E S I  
 UniRef90\_UPI00036BD35B L E P E Y R E V  
 UniRef90\_F5SVK3 L E P V Y R D E I  
 UniRef90\_V5RVV7 L A P K V V I E T  
 UniRef90\_G3J1I5 L A P E I R E Q I  
 UniRef90\_I1CHS2 L P P  
 UniRef90\_J2P8Z8 W G P E R I E T V  
 UniRef90\_L0PG75 L P L K V K  
 UniRef90\_R5YV07 L D P I Y E E K V  
 UniRef90\_W0JJM8  
 UniRef90\_T2STN7 M S P I I E E  
 UniRef90\_D4GTJ2  
 UniRef90\_B8BPT5 K E L K K M Q  
 UniRef90\_I7IAG9 L K P I T R E V  
 UniRef90\_K2AP48 L E P E I  
 UniRef90\_C5FV79 L P P  
 UniRef90\_B9EXR3  
 UniRef90\_E2R3A4  
 UniRef90\_UPI000262CDEA L A P E L R E E I  
 UniRef90\_D1J8W4 K E P V Y E E K L  
 UniRef90\_D5EK65 L D A E L T E  
 UniRef90\_L9VTQ1 R K A Q Q E T I L E  
 UniRef90\_D5SQ08 L K P A K K E V  
 UniRef90\_Q823F2 L D P I A E E  
 UniRef90\_B5Y928 V K P K E V I E V V  
 UniRef90\_U5XJ15  
 UniRef90\_E8QYY5 F K A D I K E V  
 UniRef90\_F8KS62 M S P I V E E  
 UniRef90\_UPI0003A90B2E L R P D L V I E E V  
 UniRef90\_A7SA88 L P P A Q E D V V  
 UniRef90\_F4W750 L P P V D T E E M  
 UniRef90\_L8VWV99 L P V T Y E Q R V  
 UniRef90\_R7MCH9 L E P E I K E V  
 UniRef90\_K2G6V3 L P P E I  
 UniRef90\_L7VJB7 I S P L E N E Q V  
 UniRef90\_G9MMZ5 L  
 UniRef90\_UPI00016B22D2 L A P E  
 UniRef90\_R5ZCK4 L K P V F V I E K V  
 UniRef90\_A8BUL3 K L E R R E A L K S  
 UniRef90\_UPI000383512C  
 UniRef90\_I3JJT2 L P P L V S E N I T  
 UniRef90\_G7DSF5 M P K V Y D S K V T  
 UniRef90\_R8BRP2 L P P  
 UniRef90\_G3SZT5 L P Y R M E E H  
 UniRef90\_A8ITP1 L K L V I E E R V  
 UniRef90\_M9PQN9 L D P E Y S E V

UniRef90\_I0YKM9  
 UniRef90\_J4KQJ4  
 UniRef90\_UPI00022CA4D3  
 UniRef90\_UPI000180BA36  
 UniRef90\_S8CA65  
 UniRef90\_A1D3X4  
 UniRef90\_X1ANC1  
 UniRef90\_L2GXU9  
 UniRef90\_F7FRE0  
 UniRef90\_Q91YJ5  
 UniRef90\_G2YG19  
 UniRef90\_K3Z3Q3  
 UniRef90\_A0A015K8K6  
 UniRef90\_M0UFW9  
 UniRef90\_S3CNG5  
 UniRef90\_D7CWV9  
 UniRef90\_X8J459  
 UniRef90\_K2FS92  
 UniRef90\_H9J514  
 UniRef90\_G6CV33  
 UniRef90\_I1JR04  
 UniRef90\_I7MK40  
 UniRef90\_E3QLP6  
 UniRef90\_R6PDF1  
 UniRef90\_V9KIJ7  
 UniRef90\_K2E8Q3  
 UniRef90\_N9VDP9  
 UniRef90\_E0TJN7  
 UniRef90\_UPI0003B707FB  
 UniRef90\_W0IVE9  
 UniRef90\_UPI0002654438  
 UniRef90\_R7V375  
 UniRef90\_W7T2T0  
 UniRef90\_K8EJM2  
 UniRef90\_T0LPA7  
 UniRef90\_UPI000443C284  
 UniRef90\_UPI000258ED7D  
 UniRef90\_I3EFV2  
 UniRef90\_W8BPE8  
 UniRef90\_UPI00044087FD  
 UniRef90\_K1R4P4  
 UniRef90\_M3IMR0  
 UniRef90\_UPI0004414426  
 UniRef90\_UPI0004655C26  
 UniRef90\_Q7S514  
 UniRef90\_E3L7R8  
 UniRef90\_E0TKS9  
 UniRef90\_Q2UN94  
 UniRef90\_W5USG2  
 UniRef90\_C7LKE5  
 UniRef90\_D6PAY6  
 UniRef90\_R6U7V5  
 UniRef90\_X0XQD6  
 UniRef90\_UPI000441645F  
 UniRef90\_UPI0003C398FF  
 UniRef90\_UPI0003F4A317  
 UniRef90\_C6PQX0  
 UniRef90\_UPI0002E24168  
 UniRef90\_Q8MS23  
 UniRef90\_G2XH47  
 UniRef90\_E0VMT5  
 UniRef90\_T0LT86  
 UniRef90\_Q2GDP0  
 UniRef90\_K2AMJ3  
 UniRef90\_T0XXS1  
 UniRef90\_B3QZV5  
 UniRef90\_M3CXE2  
 UniRef90\_UPI00032B08AE  
 UniRef90\_W4VT20  
 UniRef90\_D8RP50  
 UniRef90\_T1EF30  
 UniRef90\_F4WF48  
 UniRef90\_X1HEE7  
 UniRef90\_X5HLY1  
 UniRef90\_G8BN33  
 UniRef90\_Q8EJU0  
 UniRef90\_M5DDG6  
 UniRef90\_X1DGF8  
 UniRef90\_K2AT22  
 UniRef90\_V4B509  
 UniRef90\_A0A044UNP0  
 UniRef90\_UPI00042B39CC  
 UniRef90\_UPI0003B37B9D  
 UniRef90\_K1YTH6  
 UniRef90\_H2YR98  
 UniRef90\_H3EW12  
 UniRef90\_R9T8A9  
 UniRef90\_K2EXS3  
 UniRef90\_A6MVX8  
 UniRef90\_F9QD65  
 UniRef90\_Q5ZZV6  
 UniRef90\_C5E1S7

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

UniRef90\_I0YKM9 A V D R V S P R F L A A A S G D I V S A S D V D L L A F A S S G A L I L G 80  
UniRef90\_J4KQJ4 S I H E V R S K V L R S S A A V Q Q I V T E S Y D D D L L A A A S S G S L I I V N  
UniRef90\_UPI00022CA4D3 L F D S C E K L N Q V V H Y E G V G G E I T T S S D D I E L A A G T F K A V I I Y G  
UniRef90\_UPI000180BA36 I L D V C E L Q V V V T T S S S D I E L A N T L N A V I V T T  
UniRef90\_S8CA65 Q V E E V R T K I I R S E G V V G P L S E S S D I A M A E T T G A Y C L V T S  
UniRef90\_A1D3X4 S V I E V Y A N I V L R S E G P I S E F F D I E H A A T A S R G N A I I S  
UniRef90\_X1ANC1 A I N K K L K T E I H A G V G G N I S E T E T D V M L A S A S R I A I I G  
UniRef90\_L2GXU9 L V K N E N I P V A S V G I G V G N I S R K D I L K M K A I K E K D V N V G I M L C  
UniRef90\_F7FRE0 A A D D E C E L E L V H F F G L G G D I S E N D V N L A E T F Q G G V V I Y G  
UniRef90\_Q91YJ5 L L D E C E L E L V H F F G L G G D I S E N D V T F A E T F D G V V I Y G  
UniRef90\_G2YG19 Q L K E I E P I V L R S S G V G G K L S E S S D I E H A A T A K G Y V I N  
UniRef90\_K3Z3Q3 H L K T S S L D I P V S G I N I H K K D I M K A T A M L K R K E E Y A A I L A  
UniRef90\_A0A015K8K6 F L R T S K I P V S G I N I H K K D I M R A G I M L E K A K E F A V I L C  
UniRef90\_M0UFW9 A L R Q V F V N I V H V G V G P V V S E H D I D L A Q A C R G A C V G  
UniRef90\_S3CNG5 S I K E V H P V L R S S G V G G A P T E S F D I E H A S A A K G H I I N  
UniRef90\_D7CWW9 V I L A R E A E Q V E E V A G V G A P T E S S D L L A S T A G A T V M S  
UniRef90\_X8J459 A L C G I R V K I V S Q T V G G D V S E S S D I A R A K A V D G M V V G  
UniRef90\_K2FS92 I L E E V L L E Y V N T G V G G Q V I T T S S D V K L A E E S T G A I I F G  
UniRef90\_H9J514 I L E T V R L D L V H F F G L G G Q V T P N D L E I A E A F G N A I I Y A  
UniRef90\_G6CV33 I L E T V K M E L V H F F G L G G Q V T P G D I E I A E A F G A V I Y A  
UniRef90\_I1JR04 A L K T V F V N V V V G A G P I S K Q S D L D L A Q A C G A C L V G  
UniRef90\_I7MK40 F L E K K K I P V S Y V S V G P V S S K D S I T L A D D P C K R K Q E Y A C M L V  
UniRef90\_E3QLP6 T I K E V K P R I L R S S A G Q V S E S S D V E Y A E A S N S V T A N  
UniRef90\_R6PDF1 A I N E I T K L I H V G V G D I S E A D V M L A A A S N A I I L G  
UniRef90\_V9KIJ7 I L E Q C E L N L V H F F G L G G D I S E N D V K L A E T F S G L V I Y G  
UniRef90\_K2E8Q3 S F E E V G V K I I G K G L G N I T E D D V K K A T T S G A T V I G  
UniRef90\_N9VDP9 T L D E L S I K N V I R A T A G E I T T K A D L L L A E T S N S R V I L  
UniRef90\_E0TJN7 S I E K L S I K I I Y Y N I G H I T E S S D V L L A K A S D A I I V G  
UniRef90\_UPI0003B707FB E V R S V H V I H S G V G A I N E S S D V M L A S T S N A I I V G  
UniRef90\_W01VE9 V L E K V S K I E L V A D E V G L I S K T D V L M A S A A G A V I I G  
UniRef90\_UPI0002654438 F L R T S K I P H P V V V A Y A V I L A  
UniRef90\_R7V375 V L D Q C R L Q V I A S S G V G G D V S E S D V E K A A A F N G L V F A  
UniRef90\_W7T2T0 A V S E V G V K V L S S F T G A G G D V T T Q E N D V A L A G V S Q A T I L A  
UniRef90\_K8EJM2 S V G K V G K V V T G A G G I S E N D V Q L A G A I I N A P I L G  
UniRef90\_T0LPA7 E L G T R G I K I R S T Q T G E I S K R D L I D V S T L P D Q M D R I L A G G  
UniRef90\_UPI000443C284 I F D T C E L E L V H F F G L G G D I S E N D L S L A E T F H G L I Y G  
UniRef90\_UPI000258ED7D I F D T C E L N V I H Y G V G P V I S E N D T D L S Q L A E T F N A I I Y G  
UniRef90\_I3EFV2 I L K K A N I P I R T V G V G N I S K K D V I K V S T I S E R H P E Y S V M L C  
UniRef90\_W8BPE8 V F E R C Q L D V V H Y G V G N V T E G D I E L A K T F N A I I Y G  
UniRef90\_UPI00044087FD A V E G I G T K V V S S G V G E V T E S D V M L A K A V E G M I A  
UniRef90\_K1R4P4 M F S T C E L R V V H H E A G P V T E A D V N L A E S L N A E I F S  
UniRef90\_M3IMR0 S T I E E V T S V V L S H E A G P S G D S D I E M A K T F N A T I F S  
UniRef90\_UPI0004414426 A L E V I G N D V A R T K I A T G V G D V T E S D I M R A K A A E G M V I A  
UniRef90\_UPI0004655C26 S V S K I K I N V I R A N A G E I N K A D V I L A E A S N A R I Y A  
UniRef90\_Q7S514 S I N E V R P R V L S S P G G I T E S D V E H A A V S S G S T I N  
UniRef90\_E3L7R8 A I E Q V K V K I V L S S G V G N I S E S D A R M A I A S S G A Q L V G  
UniRef90\_E0TKS9 V V E E I H I N V L H S A V G G L I S K S D I L L A Q T S N A K I F A  
UniRef90\_Q2UN94 S V N E V F A N V L R S E G P I S E F D I E H A A S A N G H I V S  
UniRef90\_W5USG2 A V S K V Q V N I L H S S G V G A I T T A D I L L A Q T S E S I I Y V  
UniRef90\_C7LKE5 S L E K I V V Q I I Y K N I G L I S E S D I L L A V A S N A I I I G  
UniRef90\_D6PAY6 E L D K L E I P I R M A T A G P V N K R D I I T A Q C A E S E L N Q I I L G  
UniRef90\_R6U7V5 S T E E V R V R V L H A S T G G A I K E S D I T L A S V S N A I I I G  
UniRef90\_X0XQD6 S T E E V K R K V I H G A T G A V T E T D V M L A S A S K A I I I C  
UniRef90\_UPI000441645F A V I Q G I G V K L V S T G V G P V T D S D V M M A K A A E G L V V A  
UniRef90\_UPI0003C398FF C K L K Y S A T R I G V V V K R D V M K A S T M L E H E P Q F A T I L A  
UniRef90\_UPI0003F4A317 S L E E A G V K V V H T G V G G D I T E S D I D F A S A S D A T I I G  
UniRef90\_C6PQX0 E E I K V R V I H G A V G G A I T E T D V T L A S A S N A V I I G  
UniRef90\_UPI0002E24168 A L E E V K I N F I K T S A V G M V T I N D I N L A K T F E A L L I N  
UniRef90\_Q8MS23 V L E T C R L D I V H Y G V G N V T E G D L E L A K A F H A I I Y A  
UniRef90\_G2XH47 T I H E C E L P R I L R S S A V G G Q V S E S D V E H A A T S G S V I Y N  
UniRef90\_E0VMT5 I F D E C E L S I V L S S S V G K I T L K D V I E L A E T F N A I I Y A  
UniRef90\_T0LT86 E L S E K G I R I R N A Q I G L I S R R D V I D V A T L Q E P L D R I I L G  
UniRef90\_Q2GDP0 S I S E V D I A V V H T G I G G D I S D S D V L L A Q V S G A Y I V G  
UniRef90\_K2AMJ3 N L P S G V H V V S K G V G G D V N E G D I F L A K T S K A N I F T  
UniRef90\_T0XXS1 E C Q E A Q L P V K G A E V G S V G K R E V L L A G A V K D R K L R A I L A  
UniRef90\_B3QZV5 I L L E K V L K F I K M G V G G D I S E S D I N L G Q L N S S L I G  
UniRef90\_M3CXE2 Y I L S V S N P K F I K S Q V P I H E S D I E L A D A G A H I I A  
UniRef90\_UPI00032B08AE A S H E C E L L L H F G V G D I S E N D V N L A E T F N G I V Y G  
UniRef90\_W4VT20 A L E Q V S V S I V H S G I G P V V S E A D F L L A E A C L E H D S Q Y A T I L A  
UniRef90\_D8RP50 V V E T C K L N V I N Y G V G A V T E N D V Q M A Q M F D G I I Y T  
UniRef90\_T1EF30 F L K S S K I P L I M Y A T I L A  
UniRef90\_F4WF48 M L K Q E K I L V V I G T G N I N K N D I T N A K A N K I N E L D A I V G  
UniRef90\_X1HEE7 S I K D I E I S I I H T S V G D I N D S D L L L A E V S D S Y I I G  
UniRef90\_X5HLY1 A I D E V K C N I I S S S A V G L P N D S D L K M A E V T N S K S L V I  
UniRef90\_G8BN33 L L S S I E V N L V R A A I G S I N S S D I D L A R T S K S L V I  
UniRef90\_Q8EJU0 S L D K V Q L N I L S A T S G C I C H K D I D L A T T S K S A I I G  
UniRef90\_M5DDG6 S L D E V N I N V V H S A S T I A S S D I S L A T V S N A I I L G  
UniRef90\_X1DGF8 A L P K E I N V V S Q K T G D I A S S D I F F A K S T K N A I I L G  
UniRef90\_K2AT22 L L Q K C R L N I L H E G V G G D V T E L D V E R A H A F N G I V Y G  
UniRef90\_V4B509 V L E E V E L D L V K F D V G P P S E S D V K L A K D L G V V L Y C  
UniRef90\_A0A044UNP0 A L K T L N S P V V H V G V G P I S Q S D V D L A Q A C G A C I I G  
UniRef90\_UPI00042B39CC M G A V T E S D V N L A T V D N A I I I G  
UniRef90\_UPI0003B37B9D L F E K V K L K M I H A A T G A V S D T D I M F A N A Y N A I I I A  
UniRef90\_K1YTH6 L L D E C Q L Q L V I S E Q V S S D I E L A S T L N G I V C  
UniRef90\_H2YR98 V L S T C N L Q L V D F G V G P P T E K E I E M A E T A G A M L Y T  
UniRef90\_H3EW12 E C N K A G I P I R K Y D T G L I S R K D L I D A S A Y G E S V H R V I M G  
UniRef90\_R9T8A9 S L K D T N I V L L A V G E I N K S D I F L A S A K A T K S I I I G  
UniRef90\_K2EXS3 S I D K V Q V R V L Y A S A G E I T E T D I D F A D T S G A I V L A  
UniRef90\_A6MVX8 K I D E A V I K V V S W A A G T I N N S D L L A Q A S N A T I F T  
UniRef90\_F9QD65 T I E K V H I H I H S G V G I V N K A D I L L A Q T S N S I I Y A  
UniRef90\_Q5ZZV6 S I E E V V C N V V S S V G P P A E S D L K M A Q I T D S K S I I L C  
UniRef90\_C5E1S7

UniRef90\_I0YKM9 F N L E P S E S V 90 Q A A A K D Q Y G V D V 100 R S Y R V I Y D M V D D L V R A L M E G K  
UniRef90\_J4KQJ4 F N T A V P P H I V K Q R E A T D A G G V R V I M D H T N V I Y H V V D D V L V R A A L G D S L  
UniRef90\_UPI00022CA4D3 F N V S K A L P S K E I V K E E E A T A K D A G G V R V I M D H T N V I Y H V V D D V L V R A A L G D S L  
UniRef90\_UPI000180BA36 F N V S K A L P S K E I V K E E E A T A K D A G G V R V I M D H T N V I Y H V V D D V L V R A A L G D S L  
UniRef90\_S8CA65 F N V N N D S E I L L A M A E R Y S N I N I R V I N I L E H N N V I Y A I L D D A I V K T L M A E E K Q Y  
UniRef90\_A1D3X4 F N M P I D D P A M S R T A E K L R E K V V D I M N H N I I Y K L M D E V K A S A L S K E G Y  
UniRef90\_X1ANC1 F N I R P I D P A M S R T A E K L R E K V V D I M N H N I I Y K L M D E V K A S A L S K E G Y  
UniRef90\_L2GXU9 F D T K I D K E M M D L A E S Q K G H I K I F E A Q I I Y N L I D E K Y K E Y T E K L  
UniRef90\_F7FRE0 F S V E A G S D I I Q Q S L A V K Q K G V K I K L H H I I Y R L L I E D L Q E E L S S R R F  
UniRef90\_Q91YJ5 F N V E A G S D I I Q Q S L A V K Q K G V K I K L H H I I Y R L L I E D L Q E E L S S R R F  
UniRef90\_G2YG19 F N T E V E P E N I A Q F A A Q N K V K I L D H H I I Y R L L M D D V R A E M S K F  
UniRef90\_K3Z3Q3 F D V K V M P E A F D L A A E S G V K L F M A D T V Y K L V G R F T D H I  
UniRef90\_A0A015K8K6 F D V K V D K E A Q D L A D  
UniRef90\_M0UFW9 F N V R D P P S A I T G A T Q A N V I K I L L H K V I Y H L L E D M  
UniRef90\_S3CNG5 F N T E I D P S H I L R S A A E R D A A K G V K T I L D Q Q I I Y R L L V D E D V K A K L S E H  
UniRef90\_D7CWW9 F G V T A P G S V I K K A S A E R D A A K G V K T I L D Q Q I I Y R L L V D E D V K A K L S E H  
UniRef90\_X8J459 F N V S A S A K I I Q Q A S Q Q G V I L L S E N I I Y K L M D E I K K R R V V A L  
UniRef90\_K2FS92 F S V T A T T V A K R M A E K A N V I S I K S F N V I Y R L V D E V I K K R N D M A D L  
UniRef90\_H9J514 F N V E C P P A V A A D A K D L N I S V I R K H N N V I Y R L V D D I K K D E I T  
UniRef90\_G6CV33 F N V E P P P S V A A V E A K N N N I S I Q I K R H N N V I Y K L V D D I K K D E I T  
UniRef90\_I1JR04 F N V K S P P T A S Q E A A R A G I K I V L H N I I Y H L L L E D I G N L I I E  
UniRef90\_I7MK40 F D V K I L P D A Q K Y A E E N G V K I L T A N I I Y H L L Q D Q Y V K Y I Q  
UniRef90\_E3QLP6 F N S A I P A H V K H L A E D K G V K T I L D H T V I Y H L S D E V K Q V M S E N  
UniRef90\_R6PDF1 F T V K E D N S L E I Q A A A R E G V T I K K F D I I Y Q I L D D L E K E T M L S S L  
UniRef90\_V9KIJ7 F N V Q A N K S L E I Q M A V K K G I K I L K L H K K V I Y K L I L D D L K K E D E L S S K  
UniRef90\_K2E8Q3 F N V N A T P L A G S M M R E E N V Q F L Q Y D I I Y D L I D E W L K E E L G R L  
UniRef90\_N9VDP9 F N I E N A S S E I K K L F A E N K K I K I A S H N I I Y N I V E E L E A T M N T L  
UniRef90\_E0TJN7 F N V E C S L K S K L F A E K H K I R L Y I I Y N I I N D F K A N T L N L  
UniRef90\_UPI0003B707FB F S V R P D N V A R N M I E R D K V I D V R L Y R V I Y D L E E I E A A M K G M  
UniRef90\_W01VE9 F N T K L E N G V T P L A K H H G V L R I E T Y G I I Y E L A D K V R D M M A D L  
UniRef90\_UPI0002654438 F D V K V E R D A Q E M A D R E G L K V I F Q A D I I Y H L F D R F M A Y R E E L  
UniRef90\_R7V375 F N V K A P G A V V D M A R Q K S T P I R H H N I I Y K M V D D L K K Q L T A R  
UniRef90\_W7T2T0 F N V A A D M N A Q E E A R K T G V E I E Y H N V I Y D I L D E K V A K V Q E S L  
UniRef90\_K8EJM2 F N V R P N K S L Q E A K S K G V Q I V R Q N V I Y R L L D E V G A M L S L  
UniRef90\_T0LPA7 F N V D L S T D A K N N L M N Y D V A V V A S K V I Y S L I E E I E K W L K N K  
UniRef90\_UPI000443C284 F N V N I T G K V I Q E S A T K R G V K I K L H K I I Y R L V E D L Q E E I S S K M  
UniRef90\_UPI000258ED7D F N V N I T P I Q R L E E A V K K G V S I R F Y N V V Y K L F D N I K E T I S K M  
UniRef90\_I3EFV2 F D V A P S Q E M Q A L G K E M K V K F L T A E I I Y H L T E K Y K K H M E E  
UniRef90\_W8BPE8 F S V P A P T N A P K S V A L R C Y D V I Y R L T D D L K K E L S S S K  
UniRef90\_UPI00044087FD F S V N V P R A A D Q A A S R N E V S M Y S N I I Y R V L D E V K K E R L V R L  
UniRef90\_K1R4P4 F N V V S E D L R R K A E Q A N V V I T K E N N I I Y T L I D E L N E S A N S M  
UniRef90\_M3IMR0 F N M K V P K Q I S M R A D K E G V R I K E H N I I Y R L L D E V T E E L S S H  
UniRef90\_UPI0004414426 F S V K V P R K V E N E A S Q H V P I V S S I I Y K L M D T V T Q K V I E L  
UniRef90\_UPI0004655C26 F N N S I S G D I A K L A E L R N V K I K K H N I I Y K I T E E L E A L A K T L  
UniRef90\_Q7S514 F N N P I P P H I L K R M A V E N K V L M D H N I I Y N L T E E V T Q V L S E S L  
UniRef90\_E3L7R8 F N V K I D P M A F S P L E S H K K Y T I E S V I Y R L V D S V T Q Q D L V K L  
UniRef90\_E0TKS9 F N I Q V P N Q I K Q E A K Q A G I Q I S E H T I I Y K I I E E L K A Q I K G L  
UniRef90\_Q2UN94 F N M P I D D P A M S R T A E K L R E K V V D I M N H N I I Y K L I D D E I K A L S E Q  
UniRef90\_W5USG2 F N L P V N N Q I K T Q A K Q A K I Q I Q I R E H T I I Y K L I D D E I K E M V K Q L  
UniRef90\_C7LKE5 F N V K I T S K A K I L L A N Q K K I E L R L Y S V I Y N A I N A I K K A L D V M  
UniRef90\_D6PAY6 F S V K G N S E V Q P R L Q K D A D I K F I G A D I I Y R L L E E L E T W R E  
UniRef90\_R6U7V5 F N V R P D S M I E Q L A Q K D E D V L R L Y R V I Y D A I L D D V E T A M K G M  
UniRef90\_X0XQD6 F N V R A N P A V R A I A E K E N V D V R F Y D V I Y K V I E D I Q S A M A G L  
UniRef90\_UPI000441645F F G V N T P R S V E Q T A H Q G V A I Y T S D I I Y R V M E E V K S R V T D L  
UniRef90\_UPI0003C398FF F D V K V E K E A Q E M A D S L G V K I F Q A D I I Y H L F D K F M A Y R E E L  
UniRef90\_UPI0003F4A317 F S V E A S R S I Q N L A K Q S S V T I H V D Q V I Y R L I D L V R S R V S S L  
UniRef90\_C6PQX0 F N V R P D N N A T A T A E K A V D I K T Y R V I Y N A L M D D I R A A M I G M  
UniRef90\_UPI0002E24168 F N N P L N N D L L K T A F A Q D S K E V E I K T Y Q I L Y K M M E I E L K K L  
UniRef90\_Q8MS23 F A V E T P N Q L K A A K E V N I R S Y N I I Y R L T D D I K E Q L S S K  
UniRef90\_G2XH47 F N A P V A P D H I L K R L A D A A G V R L I A H N V I Y H L A D E V R Q T L S D Q  
UniRef90\_E0VMT5 F N V D L N D I L K N I V K T K V D I R K H N V I Y K M I D D L K K D E I S S R  
UniRef90\_T0LT86 F N V E I L L P E A K E V L N Q D V G V I N G G I I Y A L V Q Q C E E W I N E I  
UniRef90\_Q2GDP0 F R V K T E K T V K D Y P E K I F F Q S I I Y D V L K K V E K E M V E L L  
UniRef90\_K2AMJ3 F E A K A N S V R K L G E T E G V K I F E F K I I Y E L F E A L K E L I E E G  
UniRef90\_T0XXS1 F N V A V L P E A Q E A V R S A D V K I L Q G E V M Y R I L I E D Y Q A W  
UniRef90\_B3QZV5 F N V N S N V P Q S L A K N K G I K I N L Y N I I Y R I Y E D V E K T M K S L  
UniRef90\_M3CXE2 F N L P P D P Q M G Q A E A R G I K I L E N N I I Y R V L D D V K A V L E E K  
UniRef90\_UPI00032B08AE F N V T A S N V I Q K A A A K K G V K V K V H K I I Y R L I E D L Q E E L S S R  
UniRef90\_W4VT20 F D V K I E R D A Q E L A D S L G V K I F Q A D I I Y H L F D K F T N Y R E E L  
UniRef90\_D8RP50 F T V K C L P S V E A M A R R A K I P L V H H R V I Y H L L E E V G K L I E  
UniRef90\_T1EF30 F N I E T P D S I L S L A K E Q G V K I L N Y N I I Y R L F A D L T K Q L N N K  
UniRef90\_F4WF48 F D V K I E R D A Q E L A D S L G V K I F Q A D I I Y H L F D K F T N Y R E E L  
UniRef90\_X1HEE7 F N V G V D E A K E L K G N I K I L T D D V I Y K L I E D I K E F R Q E K  
UniRef90\_X5HLY1 F R V K A E R T V K E H S A I L F H S I I Y D V I K H V Q D L M T E L  
UniRef90\_G8BN33 F N V G N L P S N E I L N N S K K I D I R E Y N I I Y K L I E D I T E I T D G E  
UniRef90\_Q8EJU0 F N T K V S S K V S D Y A I S M G I T I R K N Y N I I Y Q I K D E I E R L K G I  
UniRef90\_M5DDG6 F N T N I E T T I S K L A K K L D L N L Q K F E V I Y D L L E Y L Q D Y M L N L  
UniRef90\_X1DGF8 F N V R P N P K V Q S S L A  
UniRef90\_K2AT22 F N I K I N P E V S R L A S A E K V L V K N Y S L I Y E L I D E I T D V L K G  
UniRef90\_V4B509 F N V T V P A A I Q Y I A N Q L S V P L S V H S Q V I Y K L F D D L L I E R L N E R  
UniRef90\_A0A044UNP0 F N V Q V P S G L K R L A E Q V E I N C H N I I Y R L V L E D L I E R L S N C  
UniRef90\_UPI00042B39CC F N V K S P S S L S M A T Q G I L M H N V I Y H L L E A I G N M I  
UniRef90\_UPI0003B37B9D F N V R P D T K A R E R A A R E G V D I R F Y S V I Y N A L D D A I E S S L K G M  
UniRef90\_K1YTH6 Y R V R I A S T A L S L A K Q H N V K I K D Y D V I Y H I Y D F V Q K S M E G L  
UniRef90\_H2YR98 F N V S P S K E I K A L A E S D S V S L T F D V I Y H L F N A V V D V I I E K  
UniRef90\_H3EW12 F N V D T P S S I R R C A S E S G V E I R P F N V V Y R L V D A L K D D L S K A  
UniRef90\_R9T8A9 F N V G L L P D A A K D A Q P S Y E N L K V I F T S D V I Y R L I  
UniRef90\_K2EXS3 F T V K T S A E A S L A K Q E K V I K S Y Q I I Y E  
UniRef90\_A6MVX8 F N T S L A T G A S K A A R H L N V K V K E Y D V I Y D L L D Y I E L T I E E I  
UniRef90\_F9QD65 F N N K P T A A Q K Q S A A N L G V T I S R E H T I I Y K I I E S I E K M L E G E  
UniRef90\_Q5ZZV6 F N L Q I P A A I K A Q A Q A Q V E H T I I Y K I I D E I E K K V R G M  
UniRef90\_C5E1S7 F N L G S L P T E V I N N R K G V D L R Q Y N V I Y K L I E D V T Q V L T D N

UniRef90\_I0YKM9 L A P T E E R  
 UniRef90\_J4KQJ4 L P P L V T Q R V H A  
 UniRef90\_UPI00022CA4D3 L P E V N I E E I T  
 UniRef90\_UPI000180BA36 L P P V L K N E L Q  
 UniRef90\_S8CA65 L K P T I I R T V  
 UniRef90\_A1D3X4 L A P  
 UniRef90\_X1ANC1 L K P K I E E Y I  
 UniRef90\_L2GXU9 I S M N K K K N M  
 UniRef90\_F7FRE0 L A P S V E E N V  
 UniRef90\_Q91YJ5 L P H T L E E Y  
 UniRef90\_G2YG19 L P P  
 UniRef90\_K3Z3Q3

UniRef90\_A0A015K8K6  
 UniRef90\_M0UFW9  
 UniRef90\_S3CNG5 L P P  
 UniRef90\_D7CWV9 I E P E F E E Q V  
 UniRef90\_X8J459 L P V T Y E Q R V  
 UniRef90\_K2FS92 L P P E I  
 UniRef90\_H9J514

UniRef90\_G6CV33  
 UniRef90\_I1JR04  
 UniRef90\_I7MK40  
 UniRef90\_E3QLP6 L A D K  
 UniRef90\_R6PDF1 L Q P E I K E V  
 UniRef90\_V9KIJ7 L P P A L E E  
 UniRef90\_K2E8Q3 L S D E K  
 UniRef90\_N9VDP9 K E P V Y E E R  
 UniRef90\_E0TJN7 K L N K N K K I I  
 UniRef90\_UPI0003B707FB L S P K F K E V  
 UniRef90\_W0IVE9 L E P D L K E V  
 UniRef90\_UPI0002654438 K K R N K E  
 UniRef90\_R7V375 L  
 UniRef90\_W7T2T0 L S P  
 UniRef90\_K8EJM2 K A P E Y E E I V  
 UniRef90\_T0LPA7 K E E M D E E  
 UniRef90\_UPI000443C284 L  
 UniRef90\_UPI000258ED7D P E V E I E D I I  
 UniRef90\_I3EFV2

UniRef90\_W8BPPE8 L P P  
 UniRef90\_UPI00044087FD L P C I I E K R I  
 UniRef90\_K1R4P4 E E D K K G E A  
 UniRef90\_M3IMR0 L K P R V E  
 UniRef90\_UPI0004414426 L P P I V E K R V T  
 UniRef90\_UPI0004655C26 K E P V Y E E  
 UniRef90\_Q7S514 L A P  
 UniRef90\_E3L7R8 L P K R Y K E R V  
 UniRef90\_E0TKS9 R T I E Y E E V  
 UniRef90\_Q2UN94 L P P  
 UniRef90\_W5USG2 R T I K Y E E V L  
 UniRef90\_C7LKE5 T A Q K I  
 UniRef90\_D6PAY6

UniRef90\_R6U7V5 L T P K Y R E E V  
 UniRef90\_X0XQD6 L E P V Y N E N I  
 UniRef90\_UPI000441645F L P K V V E Q R V T  
 UniRef90\_UPI0003C398FF K Q K K R E E F  
 UniRef90\_UPI0003F4A317 L P P K I E K R V  
 UniRef90\_C6PQX0 L E P D Y K E V V  
 UniRef90\_UPI0002E24168 I K P V F E E K M  
 UniRef90\_Q8MS23 L P P E V E E V L  
 UniRef90\_G2XH47 L A  
 UniRef90\_E0VMT5 L P M K N C E R V  
 UniRef90\_T0LT86 E E E R K K  
 UniRef90\_Q2GDP0 V S P K T R E V I  
 UniRef90\_K2AMJ3 L E K  
 UniRef90\_T0XXS1

UniRef90\_B3QZW5 L K T S L E E K V  
 UniRef90\_M3CXE2 L P P  
 UniRef90\_UPI00032B08AE L P C S V E E H  
 UniRef90\_W4VT20 K Q R K R D E  
 UniRef90\_D8RP50  
 UniRef90\_T1EF30 L P E I E D E E V  
 UniRef90\_F4WF48 K Q R K R D E  
 UniRef90\_X1HEE7 R K E I E K K R L  
 UniRef90\_X5HLY1 V S P K T R E V V  
 UniRef90\_G8BN33 L E P I Y E  
 UniRef90\_Q8EWM0 L D P V F V E  
 UniRef90\_M5DDG6 M D I E Y D K V  
 UniRef90\_X1DGF8

UniRef90\_K2AT22 K E L E L E E K I  
 UniRef90\_V4B509 L P V I K E E  
 UniRef90\_A0A044UNP0 L P E E  
 UniRef90\_UPI00042B39CC  
 UniRef90\_UPI0003B37B9D L K P E F E E V  
 UniRef90\_K1YTH6 L D H E Y I E T  
 UniRef90\_H2YR98 L P E  
 UniRef90\_H3EW12 L P E E T E R V L  
 UniRef90\_R9T8A9  
 UniRef90\_K2EXS3

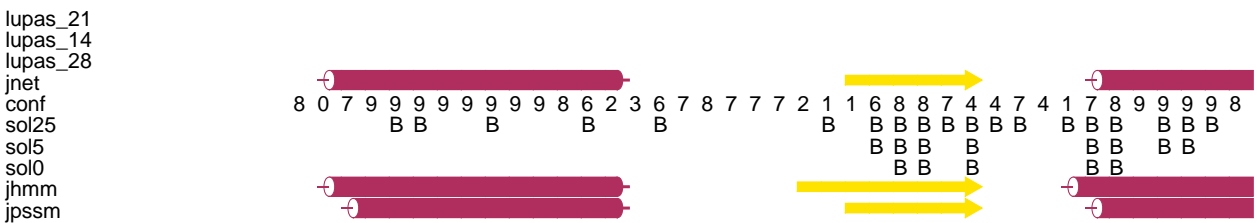
UniRef90\_A6MVX8 T G P E Y D K  
 UniRef90\_F9QD65 K A P V Y E E  
 UniRef90\_Q5ZZV6 R E I R Y E  
 UniRef90\_C5E1S7 L K P I Y E



```

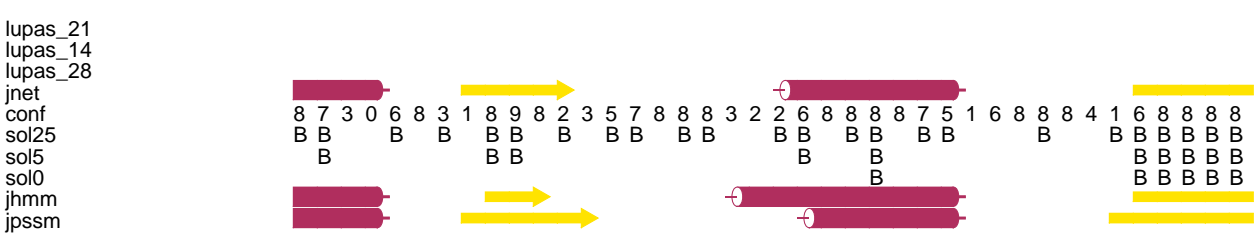
UniRef90_X1J049      1 N K E E [ ] K K A F K Q Q L T E [ ] S [ ] K T E K Q G [ ] I V K A D S [ ] G S [ ] E A [ ] L T [ ] 40
UniRef90_E6RZQ9
UniRef90_K3Y5U4      E [ ] K E E T P E R [ ] V E M P [ ] I I V K A D [ ] V Q G S [ ] V Q A V [ ] T D
UniRef90_L1JU72      E E H Q G E L M E V P [ ] V I V K A D [ ] C E G T L E A V M A
UniRef90_D3AY97      D P E K M A E E E [ ] V K A N [ ] L G A K [ ] P [ ] V K E K [ ] I A N [ ] L Y [ ] L K G D [ ] V G G S [ ] S V E A L Q F
UniRef90_UPI0003CFF692 P E S A [ ] Q Q F [ ] T G L K S G G G V A A E L R L T L K S D G S S S I E A L K Q
UniRef90_B9RCM3      [ ] D E R A E T M E P S N D T P [ ] V P E R A E M A F I V K A D V Q G T V Q A V T D
UniRef90_M1VHW9      E A T R S G T A H T T G L E L I I R G T Y R G T V E A V A Q
UniRef90_Q20447      N [ ] V [ ] H K K Q R [ ] E K D [ ] V A D G S P K [ ] F R L I I R T D V E G T L E A I L E
UniRef90_K1XTM5      E L R L I L K A D V S G S L E A I V K
UniRef90_J7REP1      D A E Q [ ] V K E D D D N D E E N [ ] V E K G P K Q I N F I V K S D V S G S A E A I Q E
UniRef90_T1BL26      E E E R [ ] L Q [ ] V H G E L A R E A Q P [ ] V A E L G [ ] V A [ ] Y A D A L G G L E A L A F
UniRef90_G8JNA7      E [ ] L A E K N N Y D D K E R G E [ ] V D S P E V N F I L K A D V S G S V E A I R E
UniRef90_K2E0L5      [ ] L K Q L K [ ] V V L K [ ] C E S N G S L E A L K N
UniRef90_F0WC79      E E E K R [ ] A S [ ] L K F G D K D Y [ ] V A Q S I [ ] P I L V K T D S V G T F S A I D E
UniRef90_F2U0L8      V V V K T D V Q G T T E A V L E
UniRef90_UPI0003F0EE39 K K [ ] L M E E Q K D [ ] R N D P [ ] V L N [ ] V I L K G D V D G S M E A L L N
UniRef90_X1BJ95
UniRef90_R1DLY2      [ ] P A L L K A E S F G S L E A A R E
UniRef90_A0A024TRB1 E R A K E E [ ] E R [ ] L E S [ ] T P D P K [ ] V I [ ] P V V L K A N A L G T I D A I D H
UniRef90_H3GK30      [ ] V E [ ] V R R R E A A E E A K R V A A L K P G V [ ] P I I V K T D S V G V I S A I D E
UniRef90_L0RV48      S D V H G T N E A I K G E
UniRef90_D2VCN7      [ ] L P I I L K T D V V I G T I D A F S E
UniRef90_D4G865      [ ] L N I I L K T D T Q G L D T I Q N
UniRef90_V5BH73      E R [ ] L R A [ ] L A D Q R R S [ ] V E [ ] L T E E E E A V [ ] D Q S G [ ] E A L Q E
UniRef90_W8GS70      T R E N [ ] L F Q K [ ] L S E Q [ ] N K K I F N I I L K V D S V N S L S A I E N
UniRef90_C5KC80      N R E H R E K [ ] L D [ ] L T E Y E D [ ] L P E A K [ ] L V L [ ] P V I L K T Q S I N V F D G I M D
UniRef90_L1LGK7      E R Q S Q I [ ] Y E D T F T E D [ ] I G R P V I [ ] P I I L R A N F V G T F D S L D
UniRef90_W7AS22      V K [ ] C D K Q G T I D V L K D
UniRef90_K3WZG4      E Q E K A D [ ] I N Q V K D A I G S T G D E G V V V C A D S L G S I D A I R K
UniRef90_D6GUZ3      E E R A D F E A D I Q L Q D D D A V R I P V V I K A D S H G A L E A V R D
UniRef90_B8C973      N A I I K A D S R N S I N S V I R
UniRef90_W8Q4J4      [ ] V E K [ ] R E [ ] L F S S Q M I N [ ] L A P D T Q V L K L V I K G Q D F G T L E T L V N
UniRef90_A0BPT3      K D D P T H F S F I I K S K V S G S S E A I Q T
UniRef90_U5NG91      E [ ] I G R P V V P V I L R A N F V G S F D A L L D
UniRef90_S6BK88      F I I K S K V L G S S E A I K S
UniRef90_I6ZEE3
UniRef90_X1DZA9      [ ] L A D [ ] Q V V T E E E G I V V K A D T L G S L E A I L A A
UniRef90_Q3IMS5      E E G I K L D P K K N I P V I P I I I R T N Y V G M F D I L A D
UniRef90_W7AQQ4      [ ] V K A H T S V V S F D K K V V S V I M R T S F V G S L D M L L D
UniRef90_I7JBM6      K Q Y M A N [ ] L V G D V K V G N S I N L I I K A N D F G T K E T L V S
UniRef90_UPI00006CDC6C G Q K E L R E I C V V V K A D V Q G S A E A L A R
UniRef90_B5YNY2      P I V I K T D T A G S L T S I L D
UniRef90_W4GY18      I I V K A D G A G S L V S I Q D
UniRef90_D0N6S1      E R K E Q K [ ] L R P K E K [ ] V E R D S N M L P I I I K G D V D G S V E T I L D
UniRef90_G1Q5G8      V Y A I A S S F G Y L F E L V L
UniRef90_M4EQN9      I L L K T D S A G S L A T I K D
UniRef90_A0A024GR90
UniRef90_U6M1X5      [ ] N Y F I K [ ] C D K Q G T I D I L L K N
UniRef90_Q7RJF0      K [ ] L P Q V Q L I I K A G D E G S V E A I L E
UniRef90_A5K511      [ ] N I I I K [ ] C V D Q G S L D A I L D
UniRef90_I7I904
UniRef90_F4PRI8
UniRef90_K2BUF2      N [ ] L K Q L K I V L K A D S N W S L E A M K E
UniRef90_C5K598      E K E [ ] Y M D [ ] K E Q E D E D Q [ ] Q R R Q V G V I L K A A S E G Q L K V L H A

```



UniRef90\_X1J049  
UniRef90\_E6RZQ9  
UniRef90\_K3Y5U4  
UniRef90\_L1JU72  
UniRef90\_D3AY97  
UniRef90\_UPI0003CF692  
UniRef90\_B9RCM3  
UniRef90\_M1VHW9  
UniRef90\_Q20447  
UniRef90\_K1XTM5  
UniRef90\_J7REP1  
UniRef90\_T1BL26  
UniRef90\_G8JNA7  
UniRef90\_K2E0L5  
UniRef90\_F0WC79  
UniRef90\_F2U0L8  
UniRef90\_UPI0003F0EE39  
UniRef90\_X1BJ95  
UniRef90\_R1DLY2  
UniRef90\_A0A024TRB1  
UniRef90\_H3GK30  
UniRef90\_L0RV48  
UniRef90\_D2VCN7  
UniRef90\_D4G865  
UniRef90\_V5BH73  
UniRef90\_W8GS70  
UniRef90\_C5KC80  
UniRef90\_L1LGK7  
UniRef90\_W7AS22  
UniRef90\_K3WZG4  
UniRef90\_D6GUZ3  
UniRef90\_B8C973  
UniRef90\_W8Q4J4  
UniRef90\_A0BPT3  
UniRef90\_U5NG91  
UniRef90\_S6BK88  
UniRef90\_I6ZEE3  
UniRef90\_X1DZA9  
UniRef90\_Q3IMS5  
UniRef90\_W7AQQ4  
UniRef90\_I7JBM6  
UniRef90\_UPI00006CDC6C  
UniRef90\_B5YNY2  
UniRef90\_W4GY18  
UniRef90\_D0N6S1  
UniRef90\_G1Q5G8  
UniRef90\_M4EQN9  
UniRef90\_A0A024GR90  
UniRef90\_U6M1X5  
UniRef90\_Q7RJF0  
UniRef90\_A5K511  
UniRef90\_I71904  
UniRef90\_F4PRI8  
UniRef90\_K2BUF2  
UniRef90\_C5K598

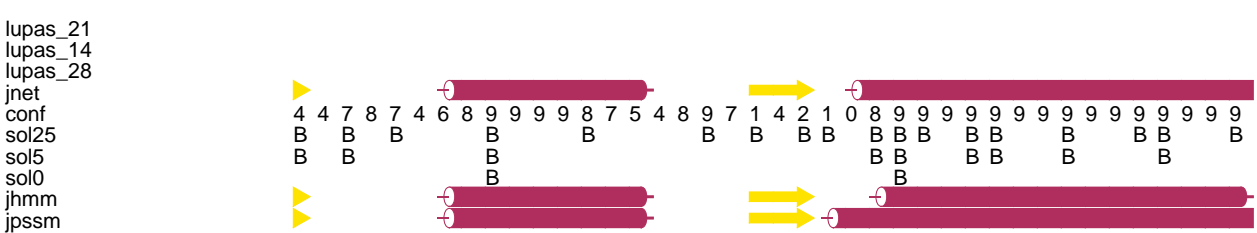
M L K Q E K I L V V K A G I G N I N K N D I T N A K A N L K I N E L D A I V S  
A L R S L N V N V V H S G V G G I T S Q S D I E L A S A S E N S I V L G  
S L H E I V L K I I E S G T P V T E S D V D Q S A S A S G A Y I V G  
A L E E I T Y N V V K T A Y G E V T D V D L K E V A L L K A P L I Y  
A V K N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



```

UniRef90_X1J049      F N I G I D E E A K E M K G K Y K
UniRef90_E6RZQ9     F N I R S P T G E V K E R A K D K G V E I K T Y N V I Y N L L D D V K A L L G G M
UniRef90_K3Y5U4     F N I R S P P L A I Q A A A R A N I K V S D F R I I Y D L I D N V T S L L V S K
UniRef90_L1JU72     F N C R P S A Q L K K T I Q N L E V K V S D F R I I Y D L I D N V T S L L V S K
UniRef90_D3AY97     F G P K L D H R I C E N A K K Q G V P L I E G D V I Y H V V D N L K V Y L E S T
UniRef90_UPI0003CF692 F N I S L N A L L K K K A E N L K I E M K S F D I I Y E L T D Y L D K L L Q G M
UniRef90_B9RCM3     F N V K T P P S A I N L A A T Q R I K I M Q H R V I Y H L L E E V G N L I
UniRef90_M1VHW9     F Q T K V P R A I A E L A A R H H V V K C F T V I Y E L L D D I Q Q
UniRef90_Q20447     F N V E T S A K L K Q R A D A A G I Q I D S F N V I Y R M L E S L K G E L S
UniRef90_K1XTM5     F N A K I S K S A E Q M A Q I K K I R I I T G N I I Y K L M
UniRef90_J7REP1     F N L G N L P N D I T I N N K Y H I P I K Q F N V L Y K L I E E V I K T L T D N
UniRef90_T1BL26     F N V P V L P D A V G P G E E G Q V E R V F T S D V M Y R L L E E Y S E W
UniRef90_G8JNA7     F S L G N L P N D V L N N K E K V E V R Q F D V I Y K L L I E S V T E L I E N M
UniRef90_K2E0L5     Y N V G V G V R A K N T L A N S K I E F I D K K V I Y H V L D R V E S L I T G M
UniRef90_F0WC79     F D L K Q P T S I E K E A L Q K N V S L R S H N I I Y H L L E D I K G L
UniRef90_F2U0L8     F G I G E S K A E A R M V E S A G L H Y M A H S V I Y K L L D D L Q E R M A S L
UniRef90_UPI0003F0EE39 F N V T V H P E A Q I L A R K E G V T I K L H K V I Y K L L
UniRef90_X1BJ95     F N T P T S P G A T Q L A N V E A V G I Q H Y D I I Y K L L E D M D R T L K G M
UniRef90_R1DLY2     F N V P L E S K A A G L A A T L Q V P V I Q H S H I I Y A L V D A A K A A I E P V
UniRef90_A0A024TRB1 F N T R Q P S L I E K D A L R K Q V A I K S H N I I Y S L M D D I E T L M T
UniRef90_H3GK30     F N I K H P A S I D Q E A L Q K K V S L R Q H S V I Y S L L D D I L K E L L Q D N
UniRef90_L0RV48     F N L K T P S T I K Q N A T N L G I S I L E H S V I Y K I V E D C N N F L E G E
UniRef90_D2VCN7     M N A K V A P N I S I D A K S N N I N I A Q F K V I Y H L I D Y L K L E L T K L
UniRef90_D4G865     F N V Q I D H S S K N L L K K F V P D I R N H S I I Y E L L K E I D M E M N K L
UniRef90_V5BH73     F G V S V L D N I D Q V I H E K G V P V I R N Q N I I Y R L F E D I E A L Y E
UniRef90_W8GS70     F N L K V P T K L L P L I K S R S V L I L N F D V L Y K L F D D I K E K T I E N
UniRef90_C5KC80     V Q V G I H P T A R Q H A D D C H P V K N F D V F T D L L E D I R S R C K L V
UniRef90_L1LGK7     F Q V P L I N D A A K H A V I N K I T I K S F N L V S D L L D D V K S R C Q H T
UniRef90_W7AS22     F N V K L S K S C P K N T K Q S S C R I I Y V N V L Y D L I D Q V E D L M K E K
UniRef90_K3WZG4     F N V K L H P K E K K L A A S R G V R V I L R S T I H G L I E E I T E F
UniRef90_D6GUZ3     F N V P V S K Q T E S I S N D S V K I L S S N S I Y T L F E N F Q E L K N M
UniRef90_B8C973     F G G I A D K E T K S L A E S E D V S I R G H D I I Y R L L E D A K E Y F G K Y
UniRef90_W8Q4J4     F N V K V N A Q Q D K L A Q Q L G V S V I K S A L I Y E L A D A I D A L L A
UniRef90_A0BPT3     L N S N V P N D I I R Q A Q Q D K I D I V Q H Q L I Y H L I D D L K T L V T A P
UniRef90_U5NG91     F E Q K I P K R V E E Q L N F L N V V F W N I N S I Y E L E E K I L D H K E K H
UniRef90_S6BK88     F Q V P V L I D A A K H A V I N H V V K Q F N V Y S D V L S D V E K R C E
UniRef90_I6ZEE3     F E Q K I P K K L E P Q I E F L N I P I W S I R S V Y E L E E R I E E H L E K
UniRef90_X1DZA9     F N V A I L P D A K E Q A I T D N I R I F T N N V I Y R L L E D Y I E Y A E I R
UniRef90_Q3IMS5     F N V D V L D D A E R E A E E K D V K L F A D D V
UniRef90_W7AQQ4     F H V K V L P D S V K Q A V L S N I V I K Q F D V F T D V I D D I V K R K N I
UniRef90_I7JBM6     F Q V P I L A D A V K H A I L N K V T I I K F D L F S D L L D H L R D R
UniRef90_UPI00006CDC6C M D I Q L S K D V E Q D L V K Q K I V V K S H K I Y T L I D D I K L L M
UniRef90_B5YNY2     F N A G A N V A A M D A R M L G V P I E Y Y S V V D A I E S V E C R M Q E V
UniRef90_W4GY18     F N V R V G A R E R K L A K D Q H V K I V I R P T I H E L L E E I
UniRef90_D0N6S1     F N V K L R S R E A K L A T E R G V R I I L R S T V H E L L I E E I T A F
UniRef90_G1Q5G8
UniRef90_M4EQN9
UniRef90_A0A024GR90 F R V N V T P K A S H L A Q T L G V K I I C G D T I E H L C Q Q F Q E C N K E L
UniRef90_U6M1X5     F N I R I R K R E R D L A H Q R R V N V I T K S T V I H D L I A D I
UniRef90_Q7RJF0     F A T K V A K D T K R A E A A G V Q L I C C D V I Y D A L H A V Q Q R L
UniRef90_A5K511     F N V K L A K N I K N I K N L K N N Q F I F S N V L Y E L I E Q I E N E M D K R
UniRef90_I71904     F N V D V T E R S V Q L S V E E N G A L L R T H T I I Y K L F E D L E
UniRef90_F4PRI8     F S V N T P K H I E L P D N I T V K Q H N I I Y N I F K D I E N
UniRef90_K2BUF2     F G P K L P G K I E D M V K R H K V S L I Q S D I I Y H V V D G I K A H L E S R
UniRef90_C5K598     W Y V W Q A K N L L S N S K I E V I N K K V I Y H I L E K I E L I M T W M
F Q E P P K Q A V I D R M R S A D L V L R H S E I I Y R L F Q D V E D

```



UniRef90\_X1J049  
 UniRef90\_E6RZQ9      M S P [ ] [ ] S E  
 UniRef90\_K3Y5U4  
 UniRef90\_L1JU72      [ ] P P R E E  
 UniRef90\_D3AY97      [ ] D P  
 UniRef90\_UPI0003CFF692 [ ] E Y E K H E [ ] [ ]  
 UniRef90\_B9RCM3  
 UniRef90\_M1VHW9  
 UniRef90\_Q20447  
 UniRef90\_K1XTM5  
 UniRef90\_J7REP1      [ ] K P [ ] F E K K F  
 UniRef90\_T1BL26  
 UniRef90\_G8JNA7      M  
 UniRef90\_K2E0L5      [ ] D T R Y E D [ ] [ ]  
 UniRef90\_F0WC79      [ ] Q Q N [ ] A Q [ ] [ ]  
 UniRef90\_F2U0L8      [ ] P Q  
 UniRef90\_UPI0003F0EE39  
 UniRef90\_X1BJ95      [ ] E P T Y A E [ ] [ ]  
 UniRef90\_R1DLY2      [ ] E A      R E T G E A  
 UniRef90\_A0A024TRB1  
 UniRef90\_H3GK30      [ ] D  
 UniRef90\_L0RV48      K T P [ ] Y E E R  
 UniRef90\_D2VCN7      [ ] P P [ ] Y E D [ ] [ ]  
 UniRef90\_D4G865      E R K S F N D K [ ] Q  
 UniRef90\_V5BH73  
 UniRef90\_W8GS70      K E K E [ ] [ ] K Q [ ]  
 UniRef90\_C5KC80      [ ] E R K R K  
 UniRef90\_L1LGK7      [ ] E K A K R R Y [ ] E  
 UniRef90\_W7AS22      [ ] S S K  
 UniRef90\_K3WZG4  
 UniRef90\_D6GUZ3      G [ ] E N R K K T [ ]  
 UniRef90\_B8C973      [ ] P [ ] E Y  
 UniRef90\_W8Q4J4  
 UniRef90\_A0BPT3      R N A K  
 UniRef90\_U5NG91      R R [ ] E K [ ] E K [ ]  
 UniRef90\_S6BK88  
 UniRef90\_I6ZEE3  
 UniRef90\_X1DZA9      K A E E  
 UniRef90\_Q3IMS5  
 UniRef90\_W7AQQ4      K A  
 UniRef90\_I7JBM6  
 UniRef90\_UPI00006CDC6C  
 UniRef90\_B5YNY2      [ ] S P  
 UniRef90\_W4GY18  
 UniRef90\_DON6S1  
 UniRef90\_G1Q5G8  
 UniRef90\_M4EQN9      G D D K S E  
 UniRef90\_A0A024GR90  
 UniRef90\_U6M1X5  
 UniRef90\_Q7RJF0      [ ] S K K  
 UniRef90\_A5K511  
 UniRef90\_I7I904  
 UniRef90\_F4PRI8      [ ] E P  
 UniRef90\_K2BUF2      [ ] D  
 UniRef90\_C5K598

lupas\_21  
 lupas\_14  
 lupas\_28  
 jnet  
 conf  
 sol25      3 1 2 9 9 9 8 7 1 4 9  
 sol5      B      B      B  
 sol0  
 jhmm  
 jpssm