

1 10 20 30 40
H M Y Y V I F A Q D D V P N S T L E K R L L S V R E Q H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_C9P5B7 M W Y V I F A Q D D V P N S T L E K R L L S V R E Q H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_S6HZJ2 M L Y A F I C H H P N S T L E K R L L S V R E Q H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI000369AFA0 M F Y V I F S Q H D V P D S S L E K R R K V A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_Q2Y766 M L Y A I F S G E D D V P D S S L E K R R M E I V R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI00047775BD M F Y A I I G E D D V P D S S L E K R R L A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_G7LK15 M L Y V I Y A E D D I A D S S L E K R R L A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_A3Y9H9 M L Y A I V C Q D D V A D S S L A G R R K S A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_G3IS32 M L Y A I I S E D D I T D S S L E K R R L S V R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_B3PFS9 M F Y A I I S E D D I T D S S L E K R R K Q A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI000376DE38 M L Y M I H G Q D A P D S S L D A R R L A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_W1RNX8 M L Y S I V G E D D V P D S S L S A R R Q A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_R7U410 M L Y A I I S E D D V D N S S L P L R M N A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_A1STS7 M L Y V I F S Q D D V E N S S L S L R Q Q A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI00036223CC M W Y S I V C E D D V P N S S L E K R R L A A S R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_W0SGE3 M L Y A I V G E D D V P N S S L E K R R L A A S R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_F2K1J2 M L Y S I V C Y D H K N S S L E G R R K S A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_W8K182 M L Y A I I S T Q D D V E N S S L E K R R R S A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_U1KM45 M L Y M I Y S T Q D D V E N S S L E K R R L S A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_E9CPU6 M L Y L I Y T Q D D V P Q S S L E T R R K T P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_A7BYJ4 M L Y A I I C E D D V P N S S L E T R R K T P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_A0A023WQY6 M L Y A V I A T D A P N S S L Q D R R L A T R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_R4YL13 M W Y A I I S Q D D V D N S S L E K R R L S V R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_I2JJJ5 M L Y A V I A T D D V A N S S L A K R R L E A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_C1DRN9 M L Y A I I A T D V A N S S L D K R L G A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI00047B33CC M L Y A I I C E D A A G S S L P L R L L E T R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_G2DFH9 M Y Y A I I A E D D R E S S L E Q R R L A T R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_L0WE33 M L Y A I I S E D D V P D S S L P L R G A A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI00037AF2AF M L Y S I F A Y D V P N S S L S L R D K V R E A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_A4BCE3 M W Y A I I S E D H P N S S L E S R K A V R E A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_V4HMI7 M L Y M I Y S T D V E N S S L E K R R M N A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_Q1H041 M W Y T I I A E D V P G S S L E K R R L A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_F2KCB3 M L Y A I I A T D V A N S S L E K R R Q A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_A0A014M6U7 M L Y V I Y A E D D N S S L E K R T A V R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_M4U2V2 M L Y V I F S E D D V K N S S L A L R V A T R E A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI0003703789 M F Y A I I S E D K P N S S L A Q R R L A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_G4QL79 M W Y V I Y A E D D V E N S S L A L R M E A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_G8QGA5 M L Y I I G E D R P G S S L E A R R L A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_D0ZH86 M L Y L I Y A Q D A P D S S L Q Q R L L A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_I1DX36 M F Y M I Y S E D V A N S S L E K R R L A T R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI000304B66C M L Y M I Y S T D V E N S S L E H R K A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_A1K667 M L Y V L L G E D A P G S S L E K R R L A V R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_F2G5U5 M L Y M I C A T D V A D S S L E K R L N A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_R9PHQ6 M W Y V I Y A E D V A N S S L D K R K Q A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_M5DTF7 M W Y A I I S Q D D V E N S S L D K R L A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_A1WUL0 M Y Y A I I S Q D D V E N S S L P L R Q S A A R A D H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_N6W0F6 M Y Y A I I S Q D D V D N S S L P L R K E A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_V5HN33 M W Y V I F S Q D D V K D S S L Q K R G S V R D K H A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_I3CGU9 M L Y A I I C E D A P D S S L E M R L K V R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_D5BV51 M L Y A I I G Q D I E H S S L E R R R Q V R S A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI0003B7347B M W Y A I I S E D A P D S S L P L R L A H R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_E1VIF4 M W Y A I I G E D K P N S S L D A R Q A S R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_F4AM85 M W Y V V Y S Q D D V E N S S L P L R K Q T R A A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI00036C5AFC M L Y M I Y A Q D T P N S S L S L R L E H R P P H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI000472F975 M L Y A I V S Q D H P N S L D K R M A A R P P D H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_Q31G95 M L Y S I F A Y D V K N S S L P L R A K A R P P G H H I A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI000378E512 M L Y T L I A Q D I E N S S L K R R M E A R P P S H H I A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_U4THB9 M L Y S F F Y Q D H P N S S L K S R I K A R P P A H H I A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_H5TAG9 M Y Y M I Y A Q D V P N S S L G N R I K A R P P D H H V A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI0003624DA1 M W Y L I Y S Q D D V E N S S L P L R R K K A R P P A D H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_Q1QZP2 M L Y S I V S D D V Q D S S L E R R K K A A R P P D H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_G4E3M0 M R Y V I Y A Q D V P D S S L P L R A T A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_W1YZ15 M L Y M I Y S T D V E N S S L P L R K E A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_R11T13 M W Y V I F S Q D D V E N S S L P L R M Q V R E Q H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI000381743E M F Y A I V G Q D T A D S L E R R L A A R P P A H H M E R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_Q65UL8 M Y Y V I F A Q D K P N S L E K R L E V R P P H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_I1XLH3 M L Y A I I S E D K P D S S L Q R R K N T R P P F H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_R9NJ95 M L Y V I Y A E D S H D S S L S K R T A A R P P A H H L A R R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_I0QW96 M L Y M I Y S E D V H D S S L E K R R I A R S A H H L E R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_M1FE86 M Y Y A I I S E D I N D S S L A L R Q S A R S A H H L E R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_UPI00036A71AB M L Y A I V T E D T P N S S L E K R I A H R P A H H F A R I T E L L H N Q G R L V L L T
UniRef90_I4WIK8 M W Y A I I G T D N A N S S L E A R K S A R P P A H H L E R L L K Q L L R K Q L L Q D Q Q E N G R R L L L T
UniRef90_Q5QX90 M W F V I F A E D H E N S S L E G R K Q A R P P A H H L E R L L K A L L Q D Q Q E N G R R L L L T
UniRef90_Q47BZ7 M L Y A I I A E D K A G T L D K R L A A R P P A H H L E R L L J A L L Q D Q Q E N G R R L L L T
UniRef90_R8AUX3 M L Y V I F A E D H N P D S S L A A R L L H A R P P A H H L A R R L L Q A L L A A D Q Q G R L I L T
UniRef90_C6DGY6 M L Y V I F A E D N V D S S L A K R L S V R P P D H H L A R R L L Q A L L A A D Q Q G R L I L T
UniRef90_UPI0003481745 M W F A V H A K D H P D S S L A K R M A A R P P E H H L A R R L L H A L L Q D Q Q E N G R R L L L T
UniRef90_D7DPF2 M W Y A I M A E D T P N S S L D K R L A R P P E H H L A R R L L H T L L Q D Q Q E N G R R L L L T
UniRef90_T0ZEZ9 M W Y A I T A T D H P D S S L A A R K A A R P P A H H L A R R L L Q A L L H E A Q G R M L L L T
UniRef90_B8KIW1 M Y Y A I F G Y D V P H S S L P Q R K A V R E Q H H L A R R V Q E L L A N E G R V L L T
UniRef90_UPI0003FB775C M W Y M I V A E D V E N S S L P L R K Q T R A A H H L A R R L L Q V L L K E Q Q G R L L L T
UniRef90_I4WXS9 M W F A I L G T D V A D S S L E K R K G V R P P A H H I A R R L L Q A L L D E G R L F V L T
UniRef90_UPI0003740E7F L Y V I Y A E D T A D S L E K R L A A R P P A H H L A R R L L E L L H D E G R L I T L T
UniRef90_B4SPW8 M W Y V I E G Y D G Q D S L A Q R R L Q A R P P E H H L A R R L L H A L L R Q D E G R R L L L T
UniRef90_A0L6D5 M Y Y A I V A Q D I E N S S L S L R Q S A R P P A H H L E R L L K A L L R Q A Q D G R L L L T
UniRef90_W0E0S6 M L Y A I I A V D I P D S S L E R R L L E A R P P A H H L E R L L R E L L H D A G R L L L T
UniRef90_F9UBQ4 M L Y A I I A V D K A D S S L G A R L L G A R P P A H H L E R L L E A L L Q D Q Q G R L L L T
UniRef90_B7RV98 M W Y A I I T Q D V A D S S L A G R K A N R S A H H L E R L L Q A L L A D Q Q G R L L L T
UniRef90_W9V6A3 M Y Y A I I A E D V D N S S L D A R M K A R P P A H H L E R L L K V L L S S E G R L L L T
UniRef90_UPI000368A88C M L Y A I I G E D V D D S S L E A R H R A R P P D H H L A R R L L E A L L R D E G R L L L T
UniRef90_I3Y814 M L Y A I I A V D R P N S S L E A D R Q R V R P P A H H L A R R L R A L L D E G R L L L T
UniRef90_B7J5W2 M Y Y C I L G T D N A D S L G K R Q A A R G D H H L A R R L H Q L L Q S E G R L L T

QUERY	A	G	P	N	P	A	I	D	D	E	N	P	S	E	A	G	F	T	G	S	T	V	I	A	Q	F	E	N	L	70	A	A	K	D	W	A	A	Q	D	80					
UniRef90_C9P5B7	A	G	P	M	P	A	I	D	D	E	N	P	S	E	A	G	F	T	G	S	T	V	I	A	Q	F	E	N	L	Q	A	A	Q	Q	W	A	D	N	D	P					
UniRef90_S6HZJ2	A	G	P	H	P	A	I	D	S	E	E	D	P	G	E	A	G	F	S	G	S	L	V	I	A	E	F	F	D	N	L	A	T	E	A	K	Q	S	W	A	D	E	D	P	
UniRef90_UPI000369AFA0	A	G	P	T	P	A	I	D	S	E	E	D	P	G	G	P	A	G	F	S	G	S	L	V	I	A	E	E	F	F	D	N	L	E	E	A	K	Q	S	W	A	D	A	D	P
UniRef90_Q2Y766	A	G	P	Y	P	A	I	D	S	P	D	P	P	G	S	P	A	G	F	S	G	S	L	V	I	A	E	E	F	F	D	N	L	E	E	A	Q	A	W	A	E	A	D	P	
UniRef90_UPI00047775BD	A	G	P	L	P	A	V	D	S	E	P	D	P	G	S	P	A	G	F	T	G	S	L	V	I	A	E	E	F	F	D	N	L	E	E	A	Q	D	W	A	E	A	D	P	
UniRef90_G7LK15	A	G	P	L	P	A	V	D	S	E	E	D	P	G	K	A	G	F	T	G	S	L	V	I	A	E	E	F	F	P	S	L	Q	E	A	K	S	W	A	N	E	D	P		
UniRef90_A3Y9H9	A	G	P	N	P	A	I	D	S	S	D	P	P	G	D	A	G	F	T	G	S	L	V	I	A	E	F	F	A	C	L	Q	D	A	Q	A	W	A	D	Q	D	P			
UniRef90_G3IS32	A	G	P	H	P	A	I	D	S	D	N	P	P	G	A	A	G	F	T	G	S	L	V	I	A	E	E	F	D	S	L	E	T	D	A	Q	Q	W	A	N	V	D	P		
UniRef90_B3PFS9	A	G	P	H	P	A	I	D	T	E	D	P	G	E	A	G	F	T	G	S	L	V	I	A	E	E	F	D	S	L	E	E	A	Q	Q	W	A	N	A	D	P				
UniRef90_UPI000376DE38	A	G	P	C	P	A	I	D	S	P	D	P	P	G	P	A	G	F	S	G	S	L	V	I	A	E	E	F	P	S	L	E	E	A	A	R	E	W	A	D	A	D	P		
UniRef90_W1RNX8	A	G	P	N	P	A	I	D	S	D	N	P	P	G	D	A	G	F	T	G	S	L	V	I	A	E	E	F	F	S	L	E	E	E	A	Q	A	W	A	K	A	D	P		
UniRef90_R7U410	A	G	P	C	P	A	I	D	S	N	D	P	P	G	E	A	G	F	T	G	S	L	V	I	A	E	E	F	F	A	S	L	E	T	E	A	K	A	W	A	D	A	D	P	
UniRef90_A1STS7	A	G	P	M	P	A	I	D	S	E	E	D	P	G	A	D	A	G	F	T	G	S	L	V	I	A	E	E	F	D	S	L	E	A	A	Q	N	W	A	N	A	D	P		
UniRef90_UPI00036223CC	A	G	P	N	P	A	I	D	S	E	E	D	P	G	T	A	G	F	S	G	S	L	V	I	A	E	S	F	D	S	L	E	A	D	A	Q	A	W	A	N	A	D	P		
UniRef90_W0SGE3	G	P	C	P	A	I	D	S	P	D	P	P	G	P	A	G	F	S	G	S	L	V	I	A	E	A	E	F	D	S	L	E	A	A	Q	A	W	A	D	A	D	P			
UniRef90_F2K1J2	A	G	P	N	P	A	I	D	T	N	D	P	P	G	E	A	G	F	T	G	S	L	V	I	A	E	E	F	N	S	L	E	E	A	K	K	W	A	S	E	D	P			
UniRef90_W8K182	A	G	P	Y	P	A	I	D	S	A	D	P	P	G	E	A	G	F	T	G	S	L	V	I	A	E	E	F	D	S	L	E	D	A	A	Q	A	W	A	D	T	D	P		
UniRef90_U1KM45	A	G	P	L	P	A	V	D	S	N	E	P	P	G	E	A	G	F	T	G	S	L	L	I	A	E	E	F	F	A	S	L	E	D	A	K	V	W	A	N	D	D	P		
UniRef90_E9CPU6	A	G	P	N	P	A	I	D	S	N	D	P	P	G	N	A	G	F	T	G	S	L	V	I	A	E	E	F	T	T	L	E	A	D	A	K	T	W	A	E	Q	D	P		
UniRef90_A7BYJ4	A	G	P	H	P	A	I	D	A	P	D	P	P	G	T	A	G	F	T	G	S	L	V	I	A	E	E	F	F	S	L	E	E	D	A	R	A	W	A	Q	A	D	P		
UniRef90_A0A023WQY6	A	G	P	H	P	A	I	D	S	N	D	P	P	G	E	A	G	F	S	G	S	L	V	I	A	E	E	F	D	S	L	E	E	A	A	Q	Q	W	A	D	A	D	P		
UniRef90_R4YL13	A	G	P	H	P	A	I	D	S	E	E	D	P	G	E	A	G	F	T	G	S	L	V	I	A	E	E	F	N	A	L	T	D	A	Q	A	W	A	D	A	D	P			
UniRef90_I2JJJ5	A	G	P	H	P	A	I	D	S	E	E	D	P	G	E	A	G	F	T	G	S	L	L	I	A	E	E	F	P	S	L	E	A	D	A	Q	H	W	A	D	T	D	P		
UniRef90_C1DRN9	A	G	P	H	P	A	V	D	S	S	D	P	P	G	E	A	G	F	S	G	S	L	V	I	A	E	E	F	F	S	L	E	E	A	A	R	A	W	A	D	A	D	P		
UniRef90_UPI00047B33CC	A	G	P	H	P	A	V	D	C	E	D	P	P	G	D	A	G	F	T	G	S	L	V	I	A	E	E	F	P	D	L	E	A	A	Q	A	W	A	E	E	D	P			
UniRef90_G2DFH9	A	G	P	H	P	A	I	D	N	E	D	P	P	G	A	G	F	T	G	S	L	V	I	A	E	E	F	F	D	S	L	E	E	A	A	R	E	W	A	D	Q	D	P		
UniRef90_L0WE33	A	G	P	H	P	A	I	D	S	N	D	P	P	G	D	A	G	F	S	G	S	L	V	I	A	E	E	F	D	S	L	E	E	A	A	Q	Q	W	A	D	Q	D	P		
UniRef90_UPI00037AF2AF	A	G	P	N	P	A	I	D	S	T	A	P	P	G	D	A	G	F	S	G	S	L	V	I	A	E	E	F	K	S	L	E	C	A	Q	Q	W	A	A	D	P				
UniRef90_A4BCE3	A	G	P	H	P	A	I	D	S	E	E	D	P	G	Q	S	G	F	S	G	S	L	V	I	A	E	D	F	F	A	S	L	E	A	E	A	Q	A	W	A	D	A	D	P	
UniRef90_V4HMI7	A	G	P	L	P	A	V	D	D	E	N	P	P	G	E	A	G	F	T	G	S	L	V	I	A	E	E	F	P	S	L	E	E	E	A	Q	A	W	A	K	A	D	P		
UniRef90_Q1H041	A	G	P	F	P	A	I	D	S	N	D	P	P	G	P	A	G	F	T	G	S	L	V	I	A	E	E	F	D	S	L	E	S	A	Q	A	W	A	N	E	D	P			
UniRef90_F2KCB3	A	G	P	H	P	A	V	D	S	N	D	P	P	G	A	A	G	F	S	G	S	L	M	V	I	A	E	E	F	D	S	L	E	S	A	A	Q	S	W	A	E	A	D	P	
UniRef90_A0A014M6U7	A	G	P	M	P	A	V	D	S	N	D	P	P	G	A	A	G	F	S	G	S	T	I	I	A	E	E	F	N	S	L	E	S	E	A	Q	A	W	A	D	A	D	P		
UniRef90_UPI0003703789	A	G	P	H	P	A	I	D	S	E	E	D	P	P	G	A	G	F	T	G	S	L	V	I	A	E	E	F	F	A	S	L	E	N	E	A	Q	S	W	A	D	E	D	P	
UniRef90_G4QL79	A	G	P	T	P	A	I	D	S	E	E	D	P	P	G	E	A	G	F	T	G	S	L	I	A	A	Q	F	E	S	L	Q	D	A	K	E	W	A	D	A	D	P			
UniRef90_G8QGA5	A	G	P	C	P	A	I	D	S	P	D	P	P	G	P	A	G	F	S	G	S	L	V	I	A	E	E	F	A	S	L	E	E	A	A	R	A	W	A	D	A	D	P		
UniRef90_D0ZH86	A	G	P	L	P	A	I	D	S	S	D	P	P	G	A	A	G	F	T	G	S	L	V	I	A	E	E	F	F	E	S	L	S	Q	A	Q	A	W	A	G	N	D	P		
UniRef90_I1DX36	A	G	P	L	P	A	I	D	S	L	D	P	P	G	T	A	G	F	T	G	S	L	V	I	A	E	E	F	F	A	S	L	E	A	D	A	Q	S	W	A	D	A	D	P	
UniRef90_UPI000304B66C	A	G	P	L	P	A	I	D	S	A	D	P	P	A	E	A	G	F	T	G	S	L	V	I	A	E	E	F	D	S	L	E	E	A	A	R	E	W	A	A	D	P			
UniRef90_A1K667	G	P	M	P	A	I	D	S	P	D	P	P	G	P	A	G	F	A	G	S	L	V	I	A	E	E	F	F	A	S	L	E	T	E	A	E	W	L	A	A	D	P			
UniRef90_F2G5U5	A	G	P	F	P	A	V	D	S	P	D	P	P	G	P	A	G	F	T	G	S	L	V	I	A	E	E	F	D	S	L	E	E	D	A	Q	A	W	A	D	A	D	P		
UniRef90_R9PHQ6	A	G	P	M	P	A	I	D	A	D	D	P	P	A	E	A	G	F	S	G	S	T	V	I	A	E	E	F	S	L	E	E	D	A	K	A	W	A	D	A	D	P			
UniRef90_M5DTF7	A	G	P	H	P	A	I	D	S	E	N	P	P	G	D	A	G	F	T	G	S	L	V	I	A	E	E	F	F	A	S	L	E	N	D	A	Q	E	W	A	D	A	D	P	
UniRef90_A1WUL0	A	G	P	Y	P	A	V	D	T	E	T	P	P	G	D	A	G	F	T	G	S	L	V	I	A	E	E	F	D	S	L	E	E	A	A	Q	A	W	A	D	A	D	P		
UniRef90_N6W0F6	A	G	P	Y	P	A	I	D	S	P	D	P	P	G	P	A	G	F	T	G	S	L	V	I	A	E	E	F	F	S	L	E	E	A	A	Q	R	W	A	D	D	P			
UniRef90_V5HN33	A	G	P	M	P	A	I	D	S	D	N	P	P	G	E	A	G	F	T	G	S	L	V	I	A	E	E	F	E	T	L	Q	D	A	K	A	W	A	D	A	D	P			
UniRef90_I3CGU9	A	G	P	H	P	A	I	D	A	N	D	P	P	G	A	A	G	F	T	G	S	L	V	I	A	E	E	F	F	A	S	L	E	A	D	A	Y	A	W	A	Q	D	P		
UniRef90_D5BV51	A	G	P	F	P	A	M	D	T	E	D	P	P	G	E	A	S	F	T	G	S	L	L	I	A	E	E	F	P	S	L	E	E	A	A	E	Q	W	A	E	A	D	P		
UniRef90_UPI0003B7347B	A	G	P	H	P	A	I	D	S	E	E	D	P	P	G	A	G	F	T	G	S	L	V	I	A	E	E	F	D	S	L	E	D	A	A	R	A	F	A	D	S	D	P		
UniRef90_E1VIF4	A	G	P	F	P	A	I	D	S	D	N	P	P	G	P	A	G	F	S	G	S	L	V	I	A	E	E	F	E	S	L	E	E	Q	A	N	A	W	A	I	A	D	P		
UniRef90_F4AM85	A	G	P	C	P	A	I	D	S	K	D	P	P	G	E	A	G	F	T	G	S	L	V	I	A	E	D	F	P	S	L	E	E	D	A	Q	A	W	A	D	A	D	P		
UniRef90_UPI00036C5AFC	A	G	P	L	P	A	I	D	S	V	D	P	P	G	E	A																													

QUERY	Y	V	E	A	G	V	Y	A	D	V	I	V	K	P	F	K	K	V	F	
UniRef90_C9P5B7	Y	V	T	A	G	V	Y	A	Q	V	I	V	K	P	F	K	K	V	F	
UniRef90_S6HZJ2	Y	Q	K	A	G	V	Y	K	K	S	V	I	K	P	F	K	K	V	L	
UniRef90_UPI000369AFA0	Y	V	A	A	G	V	Y	Q	D	V	I	I	K	P	F	K	K	V	L	
UniRef90_Q2Y766	Y	A	T	S	G	V	Y	A	K	V	T	V	K	P	F	K	K	V	L	
UniRef90_UPI00047775BD	Y	A	T	G	G	V	F	A	R	I	T	V	K	P	F	R	K	V	F	
UniRef90_G7LK15	Y	A	A	N	V	Y	R	Q	V	T	I	K	P	F	K	K	V	F	F	
UniRef90_A3Y9H9	Y	T	P	A	G	V	Y	E	S	V	T	I	K	P	F	K	Q	V	F	
UniRef90_G3IS32	Y	I	D	A	G	V	Y	A	K	V	T	V	K	P	F	K	K	V	F	
UniRef90_B3PFS9	Y	I	E	A	G	V	Y	A	Q	V	N	V	K	P	F	K	K	V	L	
UniRef90_UPI000376DE38	Y	V	H	A	G	V	Y	T	S	V	D	V	R	P	F	K	Q	V	F	
UniRef90_W1RNX8	Y	M	D	A	G	V	Y	K	N	V	T	V	K	P	F	K	Q	V	F	
UniRef90_R7U410	Y	I	D	A	G	V	Y	R	Q	V	T	I	K	P	F	K	K	V	L	
UniRef90_A1STS7	Y	M	D	A	G	V	Y	K	K	V	I	V	K	P	F	K	K	V	L	
UniRef90_UPI00036223CC	Y	V	I	A	G	V	Y	Q	Q	V	M	I	K	P	F	K	K	V	L	
UniRef90_W0SGE3	Y	V	A	A	G	V	Y	G	R	V	T	V	R	P	F	R	Q	V	F	
UniRef90_F2K1J2	Y	L	E	A	N	V	Y	E	K	V	E	V	K	P	F	K	Q	V	F	
UniRef90_W8K182	Y	V	A	A	G	V	Y	A	Q	V	T	V	K	P	F	K	K	V	F	
UniRef90_U1KM45	Y	I	I	A	G	V	Y	S	G	S	T	V	K	P	F	K	K	V	F	
UniRef90_E9CPU6	Y	V	V	A	G	V	Y	A	Q	V	T	I	K	P	F	K	Q	V	F	
UniRef90_A7BYJ4	Y	K	E	A	G	V	Y	T	N	V	T	V	K	P	F	K	K	V	L	
UniRef90_A0A023WQY6	Y	K	A	A	G	V	Y	V	N	V	V	V	K	P	F	K	K	V	L	
UniRef90_R4YL13	Y	I	S	A	G	V	Y	Q	S	V	T	V	K	P	F	K	K	V	L	
UniRef90_I2JJJ5	Y	L	A	A	G	V	Y	A	K	V	T	V	K	P	F	Y	K	K	V	L
UniRef90_C1DRN9	Y	C	A	A	G	V	Y	A	E	V	R	V	K	P	F	N	K	V	L	
UniRef90_UPI00047B33CC	Y	R	R	A	G	V	Y	E	R	V	T	I	K	P	F	K	K	V	F	
UniRef90_G2DFH9	Y	V	L	A	G	V	Y	Q	R	V	T	I	K	P	F	K	K	V	F	
UniRef90_L0WE33	Y	V	D	A	G	V	Y	Q	R	V	T	V	K	P	F	K	K	V	L	
UniRef90_UPI00037AF2AF	Y	V	K	A	G	V	Y	E	R	V	E	V	K	P	F	K	Q	V	L	
UniRef90_A4BCE3	Y	V	D	G	G	V	Y	A	R	V	Q	V	K	P	F	K	K	V	L	
UniRef90_V4HMI7	Y	I	E	A	G	V	Y	A	S	S	V	V	K	P	F	Y	K	K	V	L
UniRef90_Q1H041	F	V	N	A	G	V	Y	S	A	V	T	V	K	P	F	R	K	T	L	
UniRef90_F2KCB3	F	V	A	A	G	V	Y	A	N	V	V	V	K	P	F	K	K	V	M	
UniRef90_A0A014M6U7	Y	L	A	A	G	V	Y	K	Q	V	T	V	R	P	F	R	R	V	F	
UniRef90_M4U2V2	Y	Q	K	A	G	V	Y	A	C	V	T	V	K	P	F	K	Q	V	F	
UniRef90_UPI0003703789	Y	T	N	A	G	V	Y	Q	Q	V	V	V	K	P	F	Y	K	K	V	L
UniRef90_G4QL79	Y	V	S	A	G	V	F	K	S	V	I	V	K	P	F	Y	K	K	V	L
UniRef90_G8QGA5	Y	V	A	A	G	V	Y	A	Q	V	T	V	K	P	F	K	K	V	L	
UniRef90_DOZH86	Y	V	A	A	G	V	Y	R	Q	V	S	V	T	P	F	K	Q	V	F	
UniRef90_I1DX36	Y	L	A	A	G	V	Y	A	R	A	T	V	K	P	F	K	K	V	L	
UniRef90_UPI000304B66C	Y	V	S	G	G	V	Y	D	N	S	V	V	K	P	F	K	Q	V	F	
UniRef90_A1K667	Y	V	T	E	G	V	F	A	R	T	S	V	K	P	F	K	K	V	L	
UniRef90_F2G5U5	Y	I	E	A	G	V	Y	E	S	V	I	V	K	P	F	Y	K	R	V	L
UniRef90_R9PHQ6	Y	V	A	A	G	V	Y	E	K	V	S	V	K	P	F	K	K	V	L	
UniRef90_M5DTF7	Y	V	S	A	G	V	Y	E	R	V	V	V	K	P	F	K	R	V	L	
UniRef90_A1WUL0	Y	V	A	A	G	V	Y	E	Q	V	E	V	R	P	F	K	P	V	L	
UniRef90_N6W0F6	Y	V	A	A	G	V	Y	A	S	V	M	V	K	P	F	K	P	V	L	
UniRef90_V5HN33	Y	L	D	A	G	V	Y	Q	D	V	I	V	K	P	F	Y	K	K	V	F
UniRef90_I3CGU9	Y	K	E	A	G	V	Y	A	K	I	N	I	K	P	F	K	K	V	F	
UniRef90_D5BV51	Y	V	A	A	G	V	Y	A	Q	V	T	V	K	P	F	K	Q	V	L	
UniRef90_UPI0003B7347B	F	V	T	H	G	V	Y	A	R	V	V	V	K	P	F	R	K	T	L	
UniRef90_E1VIF4	Y	L	A	A	G	V	Y	A	S	V	S	V	K	P	F	R	K	A	L	
UniRef90_F4AM85	Y	M	D	A	G	V	Y	K	E	V	T	V	K	P	F	I	K	V	L	
UniRef90_UPI00036C5AFC	F	V	H	A	G	V	Y	G	Q	V	L	V	K	P	F	R	K	T	L	
UniRef90_UPI000472F975	Y	N	A	A	G	V	Y	A	S	T	S	V	K	P	F	L	K	V	F	
UniRef90_Q31G95	Y	L	A	A	G	V	Y	E	K	V	D	V	K	P	F	K	K	V	L	
UniRef90_UPI000378E512	Y	V	T	A	G	V	Y	S	S	V	V	I	K	P	F	N	K	V	L	
UniRef90_U4THB9	Y	L	K	A	G	V	Y	S	H	V	D	V	K	P	F	K	K	V	L	
UniRef90_H5TAG9	Y	I	S	A	G	V	Y	E	K	V	T	V	K	P	F	K	K	V	L	
UniRef90_UPI0003624DA1	Y	I	A	A	G	V	Y	Q	K	V	E	V	K	P	F	K	I	A	L	
UniRef90_Q1QZP2	F	V	I	A	G	V	Y	A	K	V	T	V	K	P	F	K	K	V	L	
UniRef90_G4E3M0	Y	V	A	A	G	V	Y	A	Q	V	T	V	S	P	F	K	Q	V	F	
UniRef90_W1YZI5	Y	V	A	A	G	V	Y	A	N	T	V	V	K	P	F	Y	K	K	V	L
UniRef90_R1TI3	Y	I	E	A	G	V	Y	K	D	V	I	V	K	P	F	K	K	V	L	
UniRef90_UPI000381743E	Y	V	T	A	G	V	Y	A	G	V	S	V	K	P	F	K	K	T	L	
UniRef90_Q65UL8	Y	V	D	A	G	V	Y	G	E	V	I	I	K	P	F	N	K	V	F	
UniRef90_I1XLH3	Y	I	E	A	D	V	Y	A	N	V	T	V	K	P	F	R	K	V	L	
UniRef90_R9NJ95	Y	V	A	A	G	V	Y	K	N	V	A	I	K	P	F	K	R	V	F	
UniRef90_I0QW96	Y	M	L	A	G	V	Y	Q	K	V	T	V	K	P	F	K	K	T	L	
UniRef90_M1FE86	Y	V	S	A	G	V	Y	Q	Q	V	K	V	K	P	F	K	R	V	L	
UniRef90_UPI00036A71AB	F	V	H	A	G	V	Y	A	N	V	I	V	K	P	F	R	Q	S	L	
UniRef90_I4WIK8	Y	L	A	A	G	V	Y	R	D	T	M	V	K	P	F	R	Q	V	L	
UniRef90_Q5QX90	Y	W	Q	A	G	V	Y	K	K	A	T	V	K	P	F	N	A	V	L	
UniRef90_Q47BZ7	Y	T	A	A	G	V	Y	E	K	V	T	I	K	P	F	K	K	A	L	
UniRef90_R8AUX3	Y	V	A	A	G	V	Y	R	Q	V	T	V	K	P	F	R	K	V	L	
UniRef90_C6DGY6	Y	I	A	A	D	V	Y	K	H	V	S	V	K	P	F	Y	K	V	F	
UniRef90_UPI0003481745	Y	V	A	A	G	V	Y	A	E	V	E	V	K	P	F	R	K	T	L	
UniRef90_D7DPF2	F	V	I	S	K	V	Y	K	N	V	I	V	K	P	F	R	K	T	L	
UniRef90_T0ZEZ9	Y	R	T	A	G	V	Y	R	S	V	E	V	K	P	F	R	K	V	L	
UniRef90_B8KIW1	Y	T	T	T	G	V	F	S	H	V	E	V	K	P	F	K	I	V	I	
UniRef90_UPI0003FB775C	Y	L	E	A	G	V	Y	A	R	V	T	V	K	P	F	K	K	V	L	
UniRef90_I4WXS9	Y	V	A	A	G	V	Y	A	E	V	Q	I	K	P	F	R	K	A	L	
UniRef90_UPI0003740E7F	Y	I	A	A	G	V	Y	A	S	V	S	V	K	P	F	Y	R	R	T	F
UniRef90_B4SPW8	Y	V	A	A	G	V	Y	T	H	V	Q	V	K	P	F	R	K	V	L	
UniRef90_A0L6D5	Y	V	A	A	G	V	Y	A	Q	V	S	V	K	P	F	K	K	V	L	
UniRef90_W0E0S6	Y	R	A	A	G	V	Y	A	E	V	S	V	R	P	F	K	Q	V	F	
UniRef90_F9UBQ4	Y	L	D	A	G	V	Y	R	E	V	Q	V	K	P	F	K	R	V	F	
UniRef90_B7RV98	Y	T	V	G	G	V	T	E	K	I	K	V	K	P	F	K	Q	V	L	
UniRef90_W9V6A3	Y	F	A	A	G	V	Y	K	R	V	L	V	K	P	F	K	K	V	L	
UniRef90_UPI000368A88C	Y	M	G	A	G	V	Y	S	Q	V	S	V	K	P	F	K	K	V	L	
UniRef90_I3Y8I4	Y	R	E	A	G	V	Y	R	E	V	L	I	K	P	F	K	Q	V	F	
UniRef90_B7J5W2	Y	L	S	A	G	V	Y	A	D	V	S	V	R	P	F	Y	K	G	V	F

UniRef90_UPI00036926D5
UniRef90_U1L0R9
UniRef90_LOGWVW2
UniRef90_UPI00039E6B91
UniRef90_W6M3Z1
UniRef90_UPI00037FB16F
UniRef90_Q7VKZ3
UniRef90_U0ZKH9
UniRef90_UPI00035F33F1
UniRef90_UPI00035FE518
UniRef90_UPI00035D7B21
UniRef90_UPI000418BD72
UniRef90_H8Z6G4
UniRef90_UPI000479DE26
UniRef90_A0A021X389
UniRef90_UPI0002FDD67F
UniRef90_W0DWB8
UniRef90_V2UCR3
UniRef90_K6ZIF0
UniRef90_N9CTD1
UniRef90_S3MR95
UniRef90_I3TGP3
UniRef90_G4CK79
UniRef90_UPI00036AA25E
UniRef90_UPI00036F53CA
UniRef90_UPI0003822958
UniRef90_Q11DE8
UniRef90_W8I678
UniRef90_A0A023RXR4
UniRef90_K2Q847
UniRef90_UPI000378DDAD
UniRef90_N9GXZ4
UniRef90_F3L000
UniRef90_F0EXW9
UniRef90_A0P7N3
UniRef90_N9E4E3
UniRef90_K1YQ05
UniRef90_UPI00037F5854
UniRef90_D5ASY9
UniRef90_UPI00037AFFAA
UniRef90_X1XP25
UniRef90_UPI00040D115E
UniRef90_UPI00046387D8
UniRef90_J1TEX6
UniRef90_K2LY55
UniRef90_UPI000478AF0E
UniRef90_K2NWC1
UniRef90_K9H818
UniRef90_G6EYE9
UniRef90_C6M6U7
UniRef90_W9X306
UniRef90_Q5H0V3
UniRef90_UPI00041BA769
UniRef90_C8S123
UniRef90_A9H3Z8
UniRef90_F0MI20
UniRef90_Q28JW7
UniRef90_V7EI05
UniRef90_UPI00035F45A6
UniRef90_U2WA88
UniRef90_D5VBT7
UniRef90_T1B4M3
UniRef90_D2QJE9
UniRef90_W6KDJ7
UniRef90_W1CNI3
UniRef90_Q1Q9A1
UniRef90_UPI00035D9F07
UniRef90_V5FU20
UniRef90_UPI000464353D
UniRef90_W7DM95
UniRef90_U2Z035
UniRef90_C7DF01
UniRef90_UPI000380FBA0
UniRef90_UPI0003B382A4
UniRef90_I2GK91
UniRef90_UPI000463D015
UniRef90_A8LP81
UniRef90_W2S382
UniRef90_UPI0003B7984F
UniRef90_UPI00037CAC8C
UniRef90_G2WRP9
UniRef90_W9Y5M4
UniRef90_UPI000366D6F1
UniRef90_H1VF42
UniRef90_UPI000368553B
UniRef90_UPI0001F2A023
UniRef90_S2EUP4
UniRef90_B7RJP8
UniRef90_F7VA66
UniRef90_S6AK24
UniRef90_D5QHL7
UniRef90_S5XKC2

UniRef90_UPI00036926D5 A G P F P A V D S E A P G D A G F T G S S L I V A Q F D S L E A A R E W A E A D P
UniRef90_U1L0R9 A G P L P A I D S D D P G E A G F F T G S S L I V A K F D S L E D A R S W A N T D P
UniRef90_LOGWVW2 A G P H P A I D S D P D P G A G A G F F T G S S L I V V A E F F S D L A S A Q E W A N T D P
UniRef90_UPI00039E6B91 A G P P P A I D S A D P P G A A G F T G S S L I V V A E F F A S L A D A Q E W A D A D P
UniRef90_W6M3Z1 A G P L P A I D S D P D P G P A G F F T G S S L I V V G E F F A S L E A A K N W A D A D P
UniRef90_UPI00037FB16F A G P M P A I E E S N D P G P A G F F T G S S V I A E E F D S L Q A A Q K W L A A D P
UniRef90_Q7VKZ3 A G P N P S E E G D N I T G S T V I A E F D S L A A A Q A W A E Q D P
UniRef90_U0ZKH9 S G P L P A I D S A D P G P A G Y C G S L V V A E F A S L E E A R A W A A A D P
UniRef90_UPI00035F33F1 A G P H P A V D A A E P G E A G F S G S L I V A E F D S L E A Q A Q R W A D A D P
UniRef90_UPI00035FE518 A G P R P R I D A A D P P G E A G F S G S V V I A E F D S L E A A Q A W A A D D P
UniRef90_UPI00035D7B21 A G P N P A V D S E D P P G E Y G F T G S S A I I A S F E S L E A A R E W A S Q D P
UniRef90_UPI000418BD72 A G P C P A I D A L D P G E A G F S G S I V I A E F F G S L E Q A A R A W A D A D P
UniRef90_H8Z6G4 A G P H P A V D A T D P P G E A G F T G S S L V V A E F F A D L A A A R T W A D Q D P
UniRef90_UPI000479DE26 A G P C P A I D A E D P G P A G F S G S L V V A E F F G S L E E A R A W A E A D P
UniRef90_A0A021X389 A G P F L G D D G K P T G S L V V V I K A E T L E E A R Q I A E N D P
UniRef90_UPI0002FDD67F A G P F L D D D D G N P C G S L V V I E A E R D R Q A A D L A A S D P
UniRef90_W0DWB8 A G P H P L L D G Q E G F S G S L I V A E F A S F E Q A T A W A E E D P
UniRef90_V2UCR3 A G P M P K Q P G N P Q A G F Y G S T L I V D F D S R E E L D W L K E E P
UniRef90_UPI00035F518 A G P C P A I D S E D P G E A G F T G S S L V I A E F F S L E A A Q K W A D T D P
UniRef90_N9CTD1 A G A M P K D P S N P Q A G F Y G S T L I V D F D S R E A L D V W L Q E E P
UniRef90_S3MR95 A G A M P K Q H D N P Q A G F Y G S T M I V D F D S R A E L D E W L K E E P
UniRef90_I3TGP3 A G P F L S D D D G A T M I G S L I Y D A E T L E E A K E F A A G D P
UniRef90_G4CK79 A G P C P L P D N D S A F S G S L I V A E F D S L D A A E E W A G Q D P
UniRef90_UPI00036AA25E A G P F P A V D A V D P G A A G F S G S L V V A E F E S L D A A R A W A D A D P
UniRef90_UPI00036F53CA T G P M L G A D E A T P I G S L M V V I E A E S R A I E W A A G D P
UniRef90_UPI0003822958 A G P F L D A E G K P C G S L V I V E A E T I E A A T E I A N A D P
UniRef90_Q11DE8 A G P F L D G E N K P C G S M V G I E A A S L D A D A E L A R S D P
UniRef90_W8I678 A G P F L G D D G K P T G S L V I V K T E T I L D D A R A I A E A D P
UniRef90_A0A023RXR4 A G A M P K D P N D P Q A G F Y G S T M I V E F D T R E A L D E W L K E E P
UniRef90_K2Q847 A G P F L D A D G K P C G S M L L I V A A D D I E A A K A L A A Q D P
UniRef90_UPI000378DDAD A G P T P Y P E Q E G V S G S L I V A E F E T L D A A E W A S Q D P
UniRef90_N9GXZ4 A G A H P I D P N N P Q A G F L G S T I I V I E F D S R E A L D V W I E E E P
UniRef90_F3L000 A G P L P S E A S P D P S V P V E G S L I I A E F E T H A D A D A E W A A N D P
UniRef90_F0EXW9 A G P N P L P D N P D A V S G S L I V A E F F D S L D E A E A W A G Q D P
UniRef90_A0P7N3 A G A Y P A I D N I D P G G N G Y T G S L I I A D F D S L S E A K S W A D K E P
UniRef90_N9E4E3 A G A M P V D R E N P Q A G F Y G S T M I L D F E S R E A L D E W L K D E P
UniRef90_K1YQ05 A G P L M N Q D G D N P L L A G I C G S L I I A Q F Q N L A R A K E W I A A D P
UniRef90_UPI00037F5854 A G P M P A I D S E D P G P A G F A G S V V I A E F D S L D D A R R W A D D P
UniRef90_D5ASY9 A G P F L D E A G M C G S L V I L D C E S L D A A Q A W A A G D P
UniRef90_UPI00037AFFAA A G P F L D D A G N M T G S L V I I E A E N R D E A L A V S Q E D P
UniRef90_X1XP25 A G P T P S I D S E D P G A A G M T G S S V L I V I E F E T L E D A R V W A D A D P
UniRef90_UPI00040D115E A G P T P L P D N N A G E V S G S L I I A D F A N L D E A E A W I J A S D P
UniRef90_UPI00046387D8 A G P F L G D D G K P T G S L V A L E V A S R E E A E S I L Q A A D P
UniRef90_J1TEX6 A G P F L D A E G K P N G S L V M V H A E T A D D A K A L G A A D P
UniRef90_K2LY55 A G P T L D P D M E G M N G S V F I I E F D A I E D A R E F A A N D P
UniRef90_UPI000478AF0E A G P C P K N A E D T A Q G F Y G S L L V L D F P D R A S L D A W L A E E P
UniRef90_K2NWC1 A G P F L D D A G K P C G S L V A V E A T D K A G A E L I A A G D P
UniRef90_K9H818 G P L L S D D G A T M I G S M L V V E A A D R A E L G A W L E Q D P
UniRef90_G6EYE9 G P L L G G N E K S C G S L I I V E V I E D R A A A G F A E S D P
UniRef90_C6M6U7 A G P N P L P D N P E R V S G S L I V A Q F E S L D A A Q E W A E K D P
UniRef90_W9X306 G G A T L S K Q P S E G E T P D M T G S A M L I K A N T E Q E V R D F L E N D P
UniRef90_Q5H0V3 A G P C P A I D A E D P G P S G F S G S V V I A E F D A L E D A R A W A N A D P
UniRef90_UPI00041BA769 A G P F L G P D D K P C G S L V V T I E A D S L E A A K A T A A K D P
UniRef90_C8S123 A G P F L D A D G Q M T G S L L V L N V I E T L D Q A K A W A A A D P
UniRef90_A9H3Z8 A G P L L G P D G R P S G S M L L V D V E D R A A A E G F A A S D P
UniRef90_F0MI20 A G P N P L P E D S N R V S G S L I V A Q F E S L D A A Q A W A E D D P
UniRef90_Q28JW7 A G P F I D E N G G M S G T L L V I E V D T M Q D A Y D F A D N D P
UniRef90_V7E105 A G P F L T E G G E M A G S L V I L D V E T L E Q A R G W A A S D P
UniRef90_UPI00035F45A6 A G P T L G A D G E S M T G S L L I L E F D D A T A A Q E F A E N D P
UniRef90_U2WA88 A G P F M S E D D K S D A S P T P I G S M L V I E A E D R Q A A E N W A A A D P
UniRef90_U5VBT7 A G P T P I A H G K S E A M S G S V V V A E F E D I H A K A W A E A D P
UniRef90_T1B4M3 A G P L L A W T T P E P H P D A V V I G S L V I A D F E S L E D A Q H W I K E D P
UniRef90_D2QJE9 G G A L L S P E E T M I G S M L L L D F D T E E Q L Q E Y L K T D P
UniRef90_W6KDJ7 G P L L A D D D G T T M I G S M L V L D V I E D K A E Q K F V D G D P
UniRef90_W1CNI3 A G P M P A V D S N E P G A A G F S G S T V I A E F E S L E A A R
UniRef90_Q1Q9A1 A G P T P I E H G K S E M S G S L I I A D F D S L E A A Q N W A S A E P
UniRef90_UPI00035D9F07 A G P F L G A D E K P N G S L L V V I E A E S L E A A R A L A D A D P
UniRef90_V5FU20 G G A M F E E H P A E G Q T P N F K G S M I I A L A D S A A E V K Q I I S N D V
UniRef90_UPI000464353D G G P F L K D D D Q M C G S L L I L E V I E S M A Q A E F F A A N D P
UniRef90_U7DM95 C G P L N N Q K G Q S C G S L I V D L M E D R P A A E G F A I S D P
UniRef90_U2Z035 A G P F L S E G G E M D G S L V I L D V A D M A A R D W A E N D P
UniRef90_C7DF01 A G P L M D S N G L M F G S L V I V D V D S M N D A E Q W A A N D P
UniRef90_UPI000380FBA0 A G P V F G D D G E T F A G S T F V V E F D S L D A K A W A A E D P
UniRef90_UPI0003B382A4 A G P L I E E G E M R G S L V I L E A P D L A T A Q D W A D N D P
UniRef90_I2GK91 G G A L L D P D G K M I G S M L V V E F E T L E A L Q W L Q R E P
UniRef90_UPI000463D015 A G P F L D A D G K P N G S M V V I E A T D E A G A E A L A A A D P
UniRef90_A8LP81 A G P F L S N E G E M C G S L I L L D V A D M E A A Q A F A A G D P
UniRef90_W2S382 G G A T L A Q Q Q P A D G G A P E M T G S V M L I K A N S E Q E V R E L T E G D E P
UniRef90_UPI0003B7984F A G P L M G E D G Q T P A G S L I V L D V I P D R N A A E S F A A G D P
UniRef90_UPI00037CAC8C A G P I L S A G D E P K P I G S M I I D A S E G A V I Q L F C E N D P
UniRef90_G2WRP9 G G A L L D P A D D E P S S L K F N G S T L V C L A E S R E E V M G W L E K D V
UniRef90_W9Y5M4 G G A I L S K Q P G P G E T P D M T G S F I L I K A E N E K V R E A L E N D P
UniRef90_UPI000366D6F1 G G S L L D P D G K M M G S M L M L D M E T E D Q L N E Y L R N S D P
UniRef90_H1VF42 G G A M F E E H P V I E G T T P S F K G S V M M Y T V I Q N A E A W E L I R N D I
UniRef90_UPI000368553B G P V L D G E G K P R G S L Y V V D M P D R A A V E A F A S G D P
UniRef90_UPI0001F2A023 G G G T L D S H P A P G E T P P F N G S A L I V V A E N E A E V K A L T S N D I
UniRef90_S2EUP4 R L G G P T L D D D A G L A M N G T L L V I E A G S L S E V E S F L Q D D P
UniRef90_B7RJP8 A G P F L D A D G Q M C G S L I L I D V A D M A A Q T W A A N D P
UniRef90_F7VA66 A G P Q L D I N G K C G S L I L I D V K D R A E A E G F A A A D P
UniRef90_S6AK24 R L G G P T L D S D D G R M N G T L L V V E A M S L G D V I Q A F L G D D P
UniRef90_D5QHL7 G G P I L D A D N R P C G S F L L I E V A D R A A A E G F A A G D P
UniRef90_S5XKC2 A G P L L E D G N P I G S L V V I E A A D I E A A R A W A G N D P

UniRef90_UPI00036926D5	Y N A A G V Y Q T V T V K P F K P V L
UniRef90_U1L0R9	Y I E A G I Y K E S I V V K P F K R V L
UniRef90_L0GWWV2	Y R A A G V Y D E V V V V K P F L K V L
UniRef90_UPI00039E6B91	Y V A A G V Y A D V A I K P F K R V F
UniRef90_W6M3Z1	Y V A A G V Y V A V E I Y P F R K V L
UniRef90_UPI00037FB16F	Y Q A A G V Y K T V T I K P F K K V L
UniRef90_Q7VKZ3	Y V S A G V Y Q N I I I K P F N N V F
UniRef90_U0ZKH9	Y Q G G G V Y A S V D V V Q P F V Q V F
UniRef90_UPI00035F33F1	Y I A A G V Y Q K V T V V K P F K K V L
UniRef90_UPI00035FE518	F V H A G V Y E R V E V Y P F V K T L
UniRef90_UPI00035D7B21	Y W L E G V Y K E G T V V K P F K
UniRef90_UPI000418BD72	Y V A A G V Y A R V D V V K P F N A V L
UniRef90_H8Z6G4	Y M A A G V Y Q Q V E V V K P F V K V L
UniRef90_UPI000479DE26	Y V E S G V Y E R V E V V R P F R R V L
UniRef90_A0A021X389	Y A K A G L F A S V E V K A W N W V F
UniRef90_UPI0002FDD67F	Y A R A G L F E S V E I R P F W N W V F
UniRef90_W0DWB8	Y V A A G V Y D S V V V V K P F K Q V F
UniRef90_V2UCR3	Y L K A G V Y S Q V D V V K P F I Q V F
UniRef90_K6ZIF0	Y A I A G V Y Q
UniRef90_N9CTD1	F L K A G V Y R Q I D V V K P F N K A F
UniRef90_S3MR95	F L I E G V Y A S V E V V K P F N K A L
UniRef90_I3TGP3	Y A K A G L F E S V T I R P F W R K V F
UniRef90_G4CK79	Y V E A G V Y A E I L I R P F K K V L
UniRef90_UPI00036AA25E	Y C A A G V Y E S V S V V K P F K Q V L
UniRef90_UPI00036F53CA	Y A K A G L F E S V E I R P F R K V I
UniRef90_UPI0003822958	Y A K A G L F E S V E V K P F N W V F
UniRef90_Q11DE8	Y A L A G L F E S V E I R P F N W V F
UniRef90_W8I678	Y A K A G L F S N V E I K A F N W V F
UniRef90_A0A023RXR4	F L K E G I Y S H V D V V K P F N K A F
UniRef90_K2Q847	Y A K A G L F E T V E I K P Y N W V F
UniRef90_UPI000378DDAD	F A L N G I Y T E V L I K P F R V T L
UniRef90_N9GXZ4	F L K E G I Y A S I D V V K P F N K A F
UniRef90_F3L000	Y A L A G L F A E V S I R P F Y R K A L
UniRef90_F0EXW9	Y V D A G V Y A E V L I K P F R K V F
UniRef90_A0P7N3	F L L H G I Y S S I D I K P F K K S L
UniRef90_N9E4E3	F L K E G I Y R H I D V V K P F N K A L
UniRef90_K1YQ05	Y V T A E V Y Q K I T V V K P Y K V V L
UniRef90_UPI00037F5854	Y V A A G V Y S G V T V V Q P F K R V L
UniRef90_D5ASY9	Y A A A G L F E S V S V T E W K K V I
UniRef90_UPI00037AFFAA	Y A R A G L F A S V E I R P W N W V I
UniRef90_X1XP25	Y V K A G V Y K
UniRef90_UPI00040D115E	Y V D A G V Y A E V M I R P F V K A L
UniRef90_UPI00046387D8	Y A K A G L F E S T E L R A W N W L F
UniRef90_J1TEX6	Y A L A G L F E S V E V K P F N W V F
UniRef90_K2LY55	Y A K A G L F E S V V I R P F K K V F
UniRef90_UPI000478AF0E	Y L I E G V Y S Q I D V V K P F I K A L
UniRef90_K2NWC1	Y A L A G L F E S V E I Q P W N W V F
UniRef90_K9H818	Y A K A G L F E S V T V R P F K W L L
UniRef90_G6EYE9	Y A K A G L F E S V V I R P F K M V
UniRef90_C6M6U7	Y V D A G V Y E E V L I K P F K A V F
UniRef90_W9X306	Y T K G G A W D K A Q I R P F K C A
UniRef90_Q5H0V3	Y V E A G V Y A R T E V R P F R R V L
UniRef90_UPI00041BA769	Y A L A G L F A K V D V R P W N W A I
UniRef90_C8S123	Y A L A G L F Q S V S I R E W K K V
UniRef90_A9H3Z8	Y A K A D V F E S V V I R A F R P V F
UniRef90_F0MIZ0	Y V H A G V Y S E V L I K P F K A V F
UniRef90_Q28JW7	Y A K A G L F E K V R I E W K K V I
UniRef90_V7EI05	Y A K A G L F Q S V E I R E W K K V I
UniRef90_UPI00035F45A6	Y K L A G L F A Q V T I T P W K Q V L
UniRef90_U2WA88	Y A I A G L F D S V E I H P W N H S F
UniRef90_D5VBT7	Y I I A G V Y H H V D V R P F I Q V L
UniRef90_T1B4M3	Y Q R A G I Y Q S V H V H P F
UniRef90_D2QJIE9	Y I V Q G V W E K V D T K P F R Q A
UniRef90_W6KDJ7	Y G Q A G L F S S V E I H G Y K K V F
UniRef90_W1CNI3	
UniRef90_Q1Q9A1	Y L R D G V Y S H V D I K P F I Q A L
UniRef90_UPI00035D9F07	Y A K A G L F A S V T V R R W N W T
UniRef90_V5FU20	Y A K E G V W E N A Q I I P F K S A
UniRef90_UPI000464353D	Y A K A G L F E A V E L I P W K Q V I
UniRef90_W7DM95	Y A K A G L F E S V I R P Y K L V
UniRef90_U2Z035	Y A R A G L F D S V E I R A W K K V I
UniRef90_C7DF01	Y S K A G L F E Q N R I H E W N K V I
UniRef90_UPI000380FBA0	Y A K A G L F E T V E I R P F N W L L
UniRef90_UPI0003B382A4	Y G K A G L F A S V E V I E W K K V I
UniRef90_I2GK91	Y L I G N V W D N V D I K P F R K A
UniRef90_UPI000463D015	Y A K A G L F E K V E I K P W T W V F
UniRef90_A8LP81	Y G K A G L F Q S V E L R A W N R V I
UniRef90_W2S382	Y A K A G A W D K A T I T A F R C A
UniRef90_UPI0003B7984F	Y A R A G L F E N V D I R A T K R V F
UniRef90_UPI00037CAC8C	Y A T A G L F E S V E I R H W L K V
UniRef90_G2WRP9	Y A E A G V W E K V Q L W P F K C A F
UniRef90_W9Y5M4	Y T K G G A W D N A K I Y P F K C A
UniRef90_UPI000366D6F1	Y I V Q G V W D K I D V K P F R Q A
UniRef90_H1VF42	Y A Q K G V W E K A Q V I P F K S A L
UniRef90_UPI000368553B	Y A Q A G L F E S M V I R P M R V V F
UniRef90_UPI0001F2A023	Y T R S G V W E K A Q I I P F M C A
UniRef90_S2EUP4	Y V I Q A G L F S S I Q I R P W H W S L
UniRef90_B7RJP8	Y A K A G L F A D V Q L I A W N K V I
UniRef90_F7VA66	Y A K I N L F E S V I V R P L R T V F
UniRef90_S6AK24	Y V R A G L F A H V E I R P W H W
UniRef90_D5QHL7	Y A K A D L F E S V V I R P F R S V F
UniRef90_S5XKC2	Y V A A G L F S S V E V V E W K K V I

UniRef90_M9RD55 A G P F L D L N G Q 50 M C G S M I I M N V D S I A A A Q A W A D N D P P
UniRef90_A4EH48 A G P V L D D D G Q M C G S L I V L E V D D L A A A Q A W A D N D P P
UniRef90_U4UZK1 A G P L L D S D G N M C G S L V L V L E V D D T M A Q A E E W A K N D D P P
UniRef90_C6F145 A G P T L N D A G A A M N G T L L V I E A A S L P E V I E A F N R A D P P
UniRef90_F7SB32 S G P L L A E E D E Q T M V G S C F V V I E S N S L A E V I E A F N R A D P P
UniRef90_A1CXU2 G G A M L E S H S T E G T P S F K G S A M L L M A E S E E Q A R E N L L S K D P
UniRef90_UPI0004680A5A A G P L V D A E G G M C G S M I V L D V P D M A A A E N W A E N D P P
UniRef90_A3SUE9 A Q A G P L L D D A G D M I G S L V I L D V A D K A A A Q D W A D N D P P
UniRef90_N1JIT2 G G A Y L E D V P K G S E D L K I Q G S A V I A Y A E S R D E V I E K L K K D V
UniRef90_UPI00046AAAE4 A Q A G P L L D D A D G V I G S L I I L D V A D M T E A Q N W A N D P P
UniRef90_C1GBX2 G G A L L E Y H P E E G Q T P P M K G S V L I V V S E S P E A V R E Q L S K D P
UniRef90_UPI00037F4927 G G P L L D Q D G H A I G S L L L V E A A N S E A L R T Y L E Q D P
UniRef90_S8B8U9 G G A M L E S H P A E G E V P N F K G S M M L A V A E S E A E V R A L L E K D P
UniRef90_G4N026 G G A L L D P K D D D P A S L K M S G S T L V A V A S S R E E I M E V L K A D P
UniRef90_UPI0003FC513A G G P Y L D E G G N M I G S L L I A E A V D L K T L Q T V L A E D P
UniRef90_UPI0004449BEA G G A M F S P D S V T P G A K K M V G S V M F F Q A D S L I E D V K K S V E S D P
UniRef90_B9NUA4 A Q A G P L L D D G E A M I G S L I V L D V I E D M T Q A Q E W A R N D P
UniRef90_N1PQS1 G G A S L D E P V K E G S P I K I N G S V L M A E A D T E E E V I R K I V E S D P
UniRef90_Q1K6L1 G G A V L S P T S D D P K T F K F A G S T I V L V A E S R E E V I K I L K D V
UniRef90_UPI0004145092 A G G L L D E E F G K M K G S A L I M E F D S R Q E L D E Y I K N E P
UniRef90_UPI000466585B G G P T L D S E G Q R M N G T L L V V I Q A A S R T E V E A F L Q D D P
UniRef90_W9H6U1 G G A I L D D D G R M I G S S C I V E M P D R A A V D A W L A S D P
UniRef90_K5XCG0 A G I V A D P D K P T T T I D G Q T G S L L I V E A D T L E E V K K L I M N D V
UniRef90_Q471T0 G G P L L A P D G A T M I G S L L V I E A P D L V T A E R F S A G D P
UniRef90_UPI00036BF86D S G P L L A D D E E T M I G S C F L V E A D S M D A V M K F H E N D P P
UniRef90_UPI00037F7E9B G G A L L S P E G Q M I G S M M L L D F E T E A Q L Q D W L S W E P P
UniRef90_UPI00036BE89A A G P F L D G D D K P C G S M L L I E A D S Q E A D A E A I L A A E D P
UniRef90_R4X6T8 A G A M L A A H V E S G Q V P S F K G S V L V V I R A S S E E C R S I L Q Q D V
UniRef90_L6SIZ1 A G P M P A V D S N D P G V A G F T G S T V I A E F E S L E A A Q S W A D A D P
UniRef90_G8Q9R0 G G P T L N E A G L A M N G T L L V V I E A G S L P E V I A F V Q D D P
UniRef90_M7STJ6 G G A L L N E D E N D P T K F D F Y G S T I T I V A A S R E E V I S I L S N D P
UniRef90_A4ETK9 A G P L L D Q D G N M A G S L I I L D V A D M A G E A W A N D P
UniRef90_A6V875 R L G G P T L D D C D G R M N G T L L V I E A A S L D E V I E A F L A D D P
UniRef90_UPI00035DBC27 G G P F T S E D G A T S I G S M L I V E A D T L E G A R V F L A N D P
UniRef90_G0SEG7 G G A V L V P T S D D P K D F S F A G S T L V V I Q A T S R E E I K E I L R K D V
UniRef90_G1XKN9 G G V M L H E H I K E G E T P K F K G S I M L Y S V E T K E E I W E M I K S D K
UniRef90_K9Z2P1 L G P T K D N T K V F G I Y E A D S Q E T V E N L V K S D P
UniRef90_UPI0003FF5BBA A G P L F N H D G R A C G S L L I V D V I E D R A A A E G F A A S D P P
UniRef90_A0A058ZMW8 A Q A G P F L D A H G D M C G S L L I L D V H D M A A A E D W A N D P P
UniRef90_A9AT5 G G P T L D P Q G D A M N G T L L V I E A D D I D A D V M R F V G N D P
UniRef90_H0JC12 C G A K L S D D G E T A S G S V Y I V D V I E T R A E A E A F I A R D P P
UniRef90_L8LP34 L G P T A D N T Q V F G I Y E A N S P E E V R T L V E N D P P
UniRef90_UPI0003B2E7C1 G G P L L R P D G R A M G S L L I M E F D D R D A V I A F A N A D P
UniRef90_UPI0002002EE5 L G P T E G S T H V F G I Y E A E N Q E Q V E T L L H N D V
UniRef90_UPI0004792EBC C G A K L H D D G Q D A G G G L Y V V D V D T R D A A E A F I A A D P
UniRef90_S3DGN1 G G A I L D E V P K E G E A M G I V G S A L V C V A A S K E E I F E V L K N D P
UniRef90_K2CFE4 A G P L I Q E N N I V F G S L I I A K F E N L D Q A K E W I A A D P
UniRef90_G3JUX5 G G A V L V P K G A D P S T F D F H G S S F V A L A E S K E A V I R E Q L K D D V
UniRef90_J0HIA6 G G A V L S H H P K N G E A P P M K G S A L I V Q A D S E E E I R D I L A K D V
UniRef90_S3CH78 G G A I L S D D P A D P N T F D F K G S S L I L E A A S K A E V I E F L K T D V
UniRef90_UPI000349228E G G A L L D G A G K M S G G V L I V D F P D R D H L D Q W L D N E P
UniRef90_UPI000349228E C G A K L K D D G S D A G G G V V V V D V I E T R E A A E A F I A A D P
UniRef90_A6WXI9 A G P F L G E D G K P N G S L V V V E A D K A A A E K I A A N D P P
UniRef90_UPI000345AF5D C G A K L A D D D G S D L G G G L Y V V D L D S R E D A Q H F I E A D P P
UniRef90_UPI0004668C5B A G A L I E D D K M V G S T L F V D F E N E E L D A W L E N E P
UniRef90_D4YM52 S G P L E S E D Q P G G L L I F R A D D Q A N V E D L L A Q D P
UniRef90_A6R7L4 G G A M L E F H P K E G Q T P P M K G S V L L V V A E S S E A V R E Q L S K D P
UniRef90_L8NWZ5 L G P T A D L S Q V F A I Y Q A A S E S E V R E L I E A D P
UniRef90_B4RC24 A G P F L D D A G E M A G S L L I L D V P D R A A A E A F N A Q D P P
UniRef90_H1Y793 G G A L L D D H G R M I G S T M V L Q F D S D G Q L E A W K Q E P P
UniRef90_Q31QU3 L G P T Q D L H V F G I Y E A D T I E T V K Q A I E A D P
UniRef90_J6UD46 A C G A K L F D G G S D A G G I Y I V D V I E T R E E A Q A F I E T D P
UniRef90_K5WRA8 G G A L I S P E T Y Q S A E R K M I G S M G V Y Q A E N I E A V Q K V I E E D P
UniRef90_U2Q8N0 G G A V L V P T S S D S K E D F S F A G S T I V V L A S S R E E I K E I L R Q D V
UniRef90_U9U3C2 G G A I P E P N V V S S G E G K M V G S L F I F E A E N E E Q I R K E I R D P
UniRef90_T0GY53 A G P L L A D D A V T I I G S V I V V A A D S R S Q V E A F S A A D P P
UniRef90_E9E3V1 A G P M L S A H P Q K A G D P N I V G S L L V L N L D T L E D V W K L R A E D P
UniRef90_M2R2Q8 G G A M L S P E S I Q P G E K K M V G S T M I Y E A E S L E A V K K I V E E D P
UniRef90_UPI00036687C5 S G P L V S D D G G T M I G S L F L V I E A P S R A E V E A F N R A D P
UniRef90_UPI000425E1B8 A G P F E D G A L I V Y E A E D R N A A E A L A A N D P
UniRef90_C7N195 A G G L T N A E G K L T G S V L L M D F E S R E Q L D E Y L A S E P P
UniRef90_UPI0004012676 G G A I L N S E G K M V G S S V I V Q F D Q K E E L Q Q W L R E D P
UniRef90_U4L476 G G A L L N P K D G N P Q N F D S G S V V V A T G E T K E E I E K L R Q D P
UniRef90_B8MT34 G G P L Y S S Q P K D L E D G K I T G S L H L F K A A S E E E V W E M I R S D P
UniRef90_A9BEJ8 L G P T K C T R Y V F G I F Q A K T L E E I V K K L L E S D P
UniRef90_UPI0003B2EEDA S G P L T N E T G E I M K G S F F M V I E A D N I E E I K E F Q S N D P
UniRef90_K8GDS0 I G P T K D L T K C F G I Y E A E T E A V V R D I T E S D P
UniRef90_UPI0004407862 G R A F V S P E S S P N A E Q K M V G S L I Y E A S S L E E A K K L V Q S D P
UniRef90_UPI0003B5C3FC A G A T V G D D G A M T G S M M I C A S N R D E L D R W L E I E P
UniRef90_UPI000366383A C G A K L S D D A S T A S G G L Y L V D L I E T R E E A Q D F I H Q D P
UniRef90_UPI0003B39986 A G A M L N D E G N M I G S T M M L Q F E T D E A L E A W K Q N D P
UniRef90_Q1LTG1 A G L T P R I D C Y D P G K I G F N G Y T V I A E F D S L E S A Q A W L K N P
UniRef90_B6ATF3 A G P L L N D G G K M C G S L V I L D V I E D M A A A E N W A N D P P
UniRef90_D5V6J2 A G A L I E E D Q M V G S T L F V D F E S E D E L N D W I D N E P
UniRef90_B8LTT1 G G P M F H A H N D G D P K F K G S V M V F R A E T E A E V R E I L N D V
UniRef90_X6DYQ6 S G P L V A E D G V T M I G S L F V F S A N S I D D V T A F N A A D P
UniRef90_K9RGP8 L G P T K D A T K V F G I Y E A E D E E T V R K L V E N D P P
UniRef90_UPI00047220BA C G A K L H D D G S D A G G G L Y I I R A D T R A Q A Q A F I D A D P
UniRef90_F6F292 A G P M M S D D D S H N I G S F M V V I E A D D L Q T V K K F H D E D P P
UniRef90_J8V2U8 A G P H P A I D S N D P G E A G F S G S L L V A E F D S L A A A Q A W A D R R P
UniRef90_UPI0003649BFD A G P L L G D D G Q T M V G S L L V I D F P S Q A E A R A W L A A E P
UniRef90_UPI00037DA499 V G P L L N D E A Q M I G S F L L C E F A S R A A L I E E C L N N D P

UniRef90_M9RD55	Y	Q	K	A	G	L	F	K	D	V	R	I	E	E	W	K	K	V	I	
UniRef90_A4EH48	Y	A	K	A	G	L	F	S	D	V	T	L	R	A	W	K	K	V	I	
UniRef90_U4UZK1	Y	N	L	A	G	L	F	Q	S	A	E	L	I	Q	W	N	K	V	I	
UniRef90_C6F145	Y	V	Q	A	G	L	F	S	R	I	E	I	R	P	W	N	W	S	L	
UniRef90_F7SB32	F	A	K	A	G	L	W	A	T	V	S	I	R	A	F	N	K			
UniRef90_A1CXU2	Y	V	R	S	G	V	W	E	K	A	Q	I	I	P	F	K	S	A		
UniRef90_UPI0004680A5A	Y	A	K	A	G	L	F	Q	S	V	E	L	T	E	W	K	K	V	I	
UniRef90_A3SUE9	Y	A	K	A	G	L	F	A	D	V	Q	L	I	P	W	N	R	V	I	
UniRef90_N1JIT2	Y	A	E	A	G	V	W	D	K	V	Q	I	Y	P	F	K	C	A		
UniRef90_UPI00046AAAE4	Y	A	K	A	G	L	F	Q	S	V	T	L	T	H	W	N	R	V	I	
UniRef90_C1GBX2	Y	A	T	S	G	V	W	D	N	M	Q	I	T	P	F	K	S	A	I	
UniRef90_UPI00037F4927	Y	A	Q	A	G	V	F	E	Q	V	T	F	V	P	F	R	W	T	L	
UniRef90_S8B8U9	Y	S	R	S	G	V	W	D	N	A	Q	I	I	P	F	K	S	A		
UniRef90_G4N026	Y	A	K	E	G	V	W	D	K	V	Q	M	W	P	F	K	C	A	F	
UniRef90_UPI0003FC513A	Y	A	R	A	G	L	F	E	S	V	D	T	K	P	W	K	W	V	I	
UniRef90_UPI0004449BEA	Y	Y	T	S	G	V	W	E	K	L	V	I	L	P	F	N	S	A	F	
UniRef90_B9NUA4	Y	A	R	A	G	L	F	D	S	V	E	L	I	Q	W	K	R	V	I	
UniRef90_N1PQS1	Y	Y	K	S	G	V	W	D	K	L	Q	L	F	P	F	K	S	A		
UniRef90_Q1K6L1	Y	A	Q	K	G	V	W	D	N	A	Q	M	W	P	F	K	C	A	F	
UniRef90_UPI0004145092	Y	V	L	E	G	V	W	E	K	I	D	T	D	T	M	N	V	V	I	
UniRef90_UPI000466585B	Y	I	R	N	D	L	F	A	H	L	E	V	R	P	W	L	W			
UniRef90_W9H6U1	Y	V	T	A	G	V	W	R	E	I	E	V	R	P	F	R	C	A		
UniRef90_K5XCG0	Y	W	K	N	G	V	W	E	K	V	V	I	Q	P	F	L	P	A		
UniRef90_Q471T0	Y	R	K	A	D	L	F	A	E	V	S	V	R	P	F	W	D	W		
UniRef90_UPI00036BF86D	F	H	A	A	G	L	W	E	K	V	S	I	R	P	F	N	K			
UniRef90_UPI00037F7E9B	Y	V	Q	G	K	V	W	E	K	I	D	I	K	P	F	R	Q	A		
UniRef90_UPI00036BE89A	Y	G	K	A	G	L	F	E	K	V	E	V	K	P	Y	K	W	L	Y	
UniRef90_R4X6T8	Y	V	S	A	Q	V	W	D	S	A	Q	I	I	P	F	K	T	A	L	
UniRef90_L6SIZ1	Y	V	A	A	G	V	Y	A	Q	V	S	V	K	P	Y	K	K	I	F	
UniRef90_G8Q9R0	Y	V	R	A	G	L	F	A	T	L	Q	I	R	P	W	H	W	S	L	
UniRef90_M7STJ6	Y	T	T	S	G	V	W	E	K	A	Q	I	W	A	K	I	A	F		
UniRef90_A4ETK9	Y	N	K	A	G	L	F	E	A	V	E	L	I	T	W	N	K	V	I	
UniRef90_A6V875	Y	V	R	A	G	L	F	E	R	V	E	V	I	R	P	W	S	W	S	L
UniRef90_UPI00035DBC27	Y	A	G	A	G	L	F	D	S	V	E	V	L	P	W	R				
UniRef90_G0SEG7	Y	A	Q	V	I	G	V	W	E	N	A	Q	I	W	P	L	L	C	A	F
UniRef90_G1XKN9	Y	V	E	N	D	V	W	E	K	V	E	I	I	P	F	K	T	A	L	
UniRef90_K9Z2P1	Y	W	Q	N	G	I	W	T	E	Y	E	V	V	K	E	W	I	Q	A	F
UniRef90_UPI0003FF5BBA	Y	A	K	V	D	L	F	E	S	V	V	I	R	P	T	R	A	V	F	
UniRef90_A0A058ZMW8	Y	A	K	A	D	L	F	E	S	V	T	I	K	A	W	N	R	V	I	
UniRef90_A9AT55	Y	V	K	E	G	L	F	S	R	V	D	V	R	P	W	D	W	S	L	
UniRef90_H0JC12	F	T	S	A	G	L	P	G	E	V	R	I	T	R	W	R	K	A	I	
UniRef90_L8LP34	Y	W	Q	N	G	I	W	T	E	Y	Q	V	K	E	W	I	Q	A	F	
UniRef90_UPI0003B2E7C1	Y	H	L	A	G	L	F	E	S	R	S	V	T	N	W	H	K	V	L	
UniRef90_UPI0002002EE5	Y	W	R	N	G	I	W	T	E	L	K	V	Y	P	W	I	Q	A	F	
UniRef90_UPI0004792EBC	F	S	K	A	G	L	F	E	R	V	T	I	T	R	W	R	K	A	Y	
UniRef90_S3DGN1	Y	A	K	N	E	V	W	D	K	V	Q	V	Y	P	F	K	C	A	F	
UniRef90_K2CFE4	F	V	A	V	A	V	Y	Q	N	L	T	V	K	L	F	R	Q	A		
UniRef90_G3JUX5	Y	V	T	N	G	V	W	E	K	A	Q	V	F	P	F	L	C	A	F	
UniRef90_J0HIA6	Y	A	T	S	G	V	W	D	N	V	K	V	Y	P	F	R	C	A	F	
UniRef90_S3CH78	Y	Y	K	E	G	V	W	E	N	A	Q	V	Y	Y	L	K	T	A	L	
UniRef90_UPI000349228E	Y	I	T	N	H	V	W	Q	R	V	E	V	H	P	F					
UniRef90_D5RSK5	F	T	K	A	G	L	F	E	R	M	Q	I	T	R	W	R	K	A	Y	
UniRef90_A6WXI9	Y	A	L	A	G	L	F	Q	N	V	T	V	R	P	W	N	W	A	I	
UniRef90_UPI000345AF5D	F	H	Q	A	G	L	F	E	R	V	L	I	T	R	W	R	K	A	Y	
UniRef90_UPI0004668C5B	Y	V	K	E	K	V	W	E	E	L	Q	I	V	P	V	K				
UniRef90_D4YM52	Y	A	E	I	G	V	I	A	S	T	Q	V	R	P	W	N	P	V	F	
UniRef90_A6R7L4	Y	A	T	S	G	V	W	D												
UniRef90_L8NWZ5	Y	W	Q	N	G	I	W	T	E	Y	Q	V	K	E	W	I	Q	A	I	
UniRef90_B4RC24	Y	T	L	A	G	L	W	G	S	V	T	I	K	A	F	K				
UniRef90_H1Y793	Y	I	T	Q	H	I	W	E	K	L	E	I	R	P	F	K	V	A		
UniRef90_Q31QU3	Y	W	Q	N	G	V	W	T	E	Y	E	V	R	E	W	I	Q	A	F	
UniRef90_J6UD46	F	F	R	A	G	L	F	A	S	V	K	I	T	R	W	R	K	A	W	
UniRef90_K5WRA8	Y	Y	T	G	N	V	W	E	K	L	I	I	L	P	W	V	P	A	F	
UniRef90_G2Q8N0	Y	A	K	E	G	V	W	D	V	E	N	V	S	R	F					
UniRef90_U9U3C2	Y	V	I	N	K	V	W	E	K	Y	E	I	S	P	F	K	M	A	I	
UniRef90_T0GY53	Y	R	H	A	G	L	V	G	S	V	R	I	E	L	W	N	W	T		
UniRef90_E9E3V1	F	N	K	T	G	V	W	D	K	T	T	I	T	P	F	K				
UniRef90_M2R2Q8	Y	Y	V	G	N	V	W	E	K	L	V	I	L	P	Y					
UniRef90_UPI00036687C5	F	A	A	A	G	I	W	E	K	V	T	I	S	G	F					
UniRef90_UPI000425E1B8	Y	A	K	G	G	V	W	I	K	Y	E	I	H	P	W	T				
UniRef90_C7N195	Y	V	T	G	G	A	W	E	D	I	K	V	E	T	C	N	V	L	F	
UniRef90_UPI0004012676	Y	A	T	Q	Q	V	W	E	K	L	E	V	K	P	F	K	V	A		
UniRef90_U4L476	Y	T	T	E	N	V	W	E	K	A	Q	I	I	P	F	L	C	A		
UniRef90_B8MT34	Y	A	K	L	G	V	W	D	E	V	V	I	T	P	M	K	V			
UniRef90_A9BEJ8	Y	W	K	E	G	I	W	T	S	I	D	V	Y	P	W	T	Q	A	F	
UniRef90_UPI0003B2EEDA	I	Y	K	A	G	V	W	D	E	L	T	I	S	P	F	N	K			
UniRef90_K8GDS0	Y	W	Q	N	G	I	W	T	D	Y	E	V	K	E	W	I	Q	A	I	
UniRef90_UPI0004407862	Y	Y	T	A	G	V	W	E	R	I	M	I	H	P						
UniRef90_UPI0003B5C3FC	Y	N	V	H	K	V	W	E	H	I	E	V	S	N	F	N				
UniRef90_UPI000366383A	F	Y	I	A	G	L	F	E	D	I	K	I	V	R	W	R	K	A	Y	
UniRef90_UPI0003B39986	Y	T	T	Q	H	V	W	E	S	I	D	V	K	P	F	K	V	A		
UniRef90_Q1LTG1	Y	I	A	T	N	N	Y	T	K	V	I	V	R	P	Y	I	L	L	L	
UniRef90_B6ATF3	Y	A	K	A	G	L	F	A	S	C	E	L	V	Q	W	N	K	V	I	
UniRef90_D5V6J2	Y	V	V	N	K	V	W	D	E	F	Q	I	V	P	V	K				
UniRef90_B8LTT1	Y	N	K	G	D	V	W	E	K	V	Q	I	I	P						
UniRef90_X6DYQ6	F	A	S	A	N	V	W	Q	S	V	N	I	H	P	F					
UniRef90_K9RGP8	Y	W	K	N	G	I	W	T	E	Y	F	V	K	E	W	V	Q	A	F	
UniRef90_UPI00047220BA	F	S	Q	G	A	L	F	A	E	V	R	I	S	R	W	R	Q	A	Y	
UniRef90_F6F292	F	T	K	A	G	L	F	D	E	V	R	L	C	H	W					
UniRef90_J8V2U8																				
UniRef90_UPI0003649BFD	F	T	R	A	G	V	Y	G	Q	S	T	I	H	A	F					
UniRef90_UPI00037DA499	Y	S	K	T	G	V	W	V	N	I	D	I	K	P	V	K	V	A	F	

UniRef90_UPI000440B348 1 F V V Y A P D Y T D A L S R R L A V R A Q H L A K A Q T L H D S G V V K L 40
UniRef90_UPI0003B78D43 M Q F L V K A Y D G E D M L E K R R M E V R P R H L L E G M K A L G K Q I I V
UniRef90_N2J518 M P F L I E T W D K P N G M T T Q L R R Q A D N R P A H L L D F L R E N A S P K L L A
UniRef90_UPI00037981D0 M N F T V Y C L D H P N G M V E R R L A C Y L Q T D H H K A Y L Q T S P V K A L I
UniRef90_M2PBJ8 F V V Y A P D K E P E T L Q H R Q S L K A H L L A A N A D L I N S G V F K V
UniRef90_A8N6F0 F L V Y A P D K E G T F E K R R L S V R P A H L I E V A H E R N I A G I V K L
UniRef90_W7U837 R L Q F A L L G L D K E G A L P V K R M Q T R E A H L L A Y U M R K S K R I V T
UniRef90_UPI0004409C14 Q F Q F M V Y C P D K T D A F Q R R L S V R E K H L L E N A K V L G D N G T L K F
UniRef90_A3TXX2 M L F A L M A H D K P G A L D V R N Q N R A A H L L A Y V E E T G V V A Q
UniRef90_M2XHU3 L Y V V Y C L D D P N K E H I R L E Q R P Q H R S W W Q N E T R V V S
UniRef90_G7XAG5 W L C I T P D T P E G P E L R K K V R A T H M E G V G P L V Q A G K L V A
UniRef90_A9UA5 R Q Y F A L I Y D Y V P D L L E K R G P H R P A H R A Y L S S L I E A E G K M C L
UniRef90_UPI0002F7E5C1 M K F A A T I E Y L Q D A E K V G A I R P A H R A Y L S S L I E A E G K L V A
UniRef90_A4SXW7 M I Y A T L L M D R P G T A D L R I Q V R P D H R A Y L A K L S D R M A F
UniRef90_UPI0002D30EE4 Y V M W G S Y C E D V L E K R A P Y R A D H L I E G L Q Q K D K G V L V A
UniRef90_B0D8U1 F F V Y A P D K E G T F E R R L S V R P T H L E T A K E R T L D G G I R I
UniRef90_U5QPK2 Y V L T G T Y C P D V L E K R A P Y R E A H L L G R L A G L K A A G K V I T
UniRef90_E5R406 W I V M M P D K P G M L E K R V E V R N T H L L Q N L G P L L E A G S L L L
UniRef90_A2TRT1 Y Y I L T Y T F L E N Y L E K R T P Y R K D H F E V A K A V A A G S L L L
UniRef90_UPI0003670366 M H Y L L F Y E T A P D Y L E R R S Q F R A Q H L L A H G W L A A D R G E L L L
UniRef90_S6AY74 M K A E A R L V L
UniRef90_Q3AYG3 F V L W G T Y C S N A L E K R T P Y R E E H L S R L K S L K Q D G L I T
UniRef90_N1MTU8 M F Y A V I A R D R P H G Q E Q R N A L R S P H F D Y L N G L G R K V V F
UniRef90_UPI0003663AF7 M H Y T V Y C L D H D G M V E R R L S H Y D A H K A Y L A T A P V K M V M
UniRef90_V2WVX7 L F Y V H A P D R E G T F Q K R L S V R P Q H L E L L K A N V A D G S V R V
UniRef90_C7YSC1 F L V V V P D K P G V R E K R L E V R H I H F S N M L P N V E N G S W K T
UniRef90_UPI0003704990 M P F L I E T W D K P A H Q P V R Q A S R A A H L L A Y L E A N K A L L A
UniRef90_Q46TP2 M L Y A F H L I D K P G V G E L R L K V R P A H H K I Y L G A V K D Q L I A
UniRef90_UPI00035C6933 M D F L V I A Y D H E G A L G R L L A R D A H L L E V A K K L K E E G H F I N
UniRef90_R7SKC0 F V V Y A P D D D G A F Q R R L S V R Q A H L L D N A A E Q A K E Q G V V L L
UniRef90_B7KJ0 Y V M W G S Y C E N A L E K R T P Y R Q V H L D G L A A Q K E Q G L I T
UniRef90_R4WVJ4 M H Y L L I Y E L C P D Y M E R R A Q F R D A H L L A L A W A A V E R G E I V L
UniRef90_HOQU8 F A V T Y A Y A N S S A G R D E H R P R H V E F L Q E Q F D G G T L V K
UniRef90_UPI0001583D5B W L V V L P D N E G A L E R R V S V R P K H F F E G L K T G L E S G F W K M
UniRef90_W1S5C4 M P F L I L T F D K T G H A H V R D A H R A D H Y A H L R A H Q A Q L V A
UniRef90_R7QM9 C V D K P S S A L R A A T R P A H L D W I A A Q E S L F R F
UniRef90_UPI00047A70EB F A V E I V Y S P D Q N D R E E H R P S H R E W L G T L V E Q G R V L A
UniRef90_B4WQD9 F V M W G S Y C E N A L E M R G P Y R E A H L K G L S D Q K E K G V L T A
UniRef90_MOQ78 F A V H T Y T H P A K A Q L R D E H R P A H R T W L S E E N S A G N V L L
UniRef90_L0FVR5 M Y F L T Y T V D D T T E L R L P Y R E D H L N V K A Y Q K G M V M
UniRef90_W3X8L4 F L V V V P D K P G A Q P K R L E V R P K H F E G L T D L V D K G I F K V
UniRef90_F8GY93 M H W I Y A V D K P S M L P T R T A N V D K H R E Y L A A H P I R T L I
UniRef90_S8A3G6 W L V I L P D K T D A D A R R L E V R G K H L E A A M E R A S Q G I I N F
UniRef90_A8EVZ1 M Q Y L V I A Y D N D G A L E R R L E S R E A H L I E G A R K L M S E G K I I D
UniRef90_UPI0003038249 F A V T Y T Y G P D T E K R M G V R P A H R E W Q A A Q L E A G R L L A
UniRef90_F7UNU3 Y V L W G T Y C D N V E E K R A P H R Q A H L D G L K V Q K E S G V L V T
UniRef90_K2KB32 M K Y A V I C T D K P G S L H I R T D T R P D H V A Y L K S C G V V
UniRef90_G3XQJ3 F L C I T P D R P N V S S L R K M V K R G H H Y E G I P L I A Q G K L V D
UniRef90_Q0UTN9 W L V I V P D F K G A L D K R L M G A R P K H L E G L K S D R D D M W L W
UniRef90_D7DWG8 Y V M W G T Y C E D V L T K R E P Y R Q A H L L E G L A K Q K Q S G V L I T
UniRef90_B8HVB0 Y V M W G N Y C C E N V L E K R A P Y R D A H L L Q G L A A Q K A A G T L I T
UniRef90_UPI00036CAE20 Y V M W G T Y C C A D V L E K R A P Y R D A H L D N L K A L K E S Q V I T
UniRef90_E4TV01 Y Y L L F Y K T I E N Y V E K R D P Y R S E H L K I A E D A H Q N G S L V M
UniRef90_UPI0003465D66 Y A V T Y T Y A E N S T E A R D Q H R P A H R A Y L D E L S Q Q D V I L C
UniRef90_K9AKV7 F A V T Y V Y G P D T E T R M E H R P H R R Q W Q A L N E A G T I L A
UniRef90_L2FZ82 F L C I I P D K P G T R E K R I E V R S Q H F A N A M P L M E S G V W K T
UniRef90_T0PHU3 M Q F L V T G Y D G E N A L E R R L T Y R E E H L A L A A S M K E S K N F L C
UniRef90_R7SNG5 Y F A V Y A P D Y T D A L E R R L K V R E E H L A N A H K E P R L K V
UniRef90_D6AZP7 Y A V T Y T Y A D D S A A A R D T H R P A H R A Y L S T L S E Q G I L V
UniRef90_R8BRA5 W L V V V P D K P G V Q E T R L K I R P D H F K G M K F I E S G Q W K M
UniRef90_UPI0004621BA4 F L V Y A P D D E G A L Q R R L S V R P A H L Q R A K E I A K G V I K V
UniRef90_A0A059FNL8 L Y S L H C L D K E D G A L R A Q T R P A H L L A W A A G L G S T V R M
UniRef90_U7Q4Y6 Q T E W L V V V P D F N T I Q K R L D I R P T H F A N L E P V K S R L K F
UniRef90_Q8DMG8 F V A W G R Y C E D V L E R R A P H R Q A H L N G L A A Q K D Q G L L I T
UniRef90_UPI0003FE69F0 Q Y V I Y A F D G T D A L A R R M A A R S L H L D V A T Q L K A N H N F I V
UniRef90_UPI00034869D7 F V M W G S Y C D N A L E K R T P Y R A D H L L A G L G Q Q K E S G L V T
UniRef90_UPI00040255FC M E F L C Y H R D R P G S L A L R E L S E H H W S Y M D Q Y A K E M I A
UniRef90_UPI000440AEB0 H F A V W A P D Y P D C L K R R L A V R P N H A T N I K T L I E N G I L K V
UniRef90_X0MZZ9 M E F L C Y H R D R I G S L P L R E E L T E H H W A Y M D R Y A E E M I A
UniRef90_Q05RD0 F V L W G T Y C E N A L E K R T P F R D E H L G R L K L L Q D Q G T L I T
UniRef90_B0CB59 M W G S Y C D G V L E K R A P Y R Q A H L D G L N A Q K E A G T L I T
UniRef90_K9SV01 Y V M W G S Y C D G V L E K R A P Y R Q D H L D N L Q A L K N N G Q L I T
UniRef90_G7LZ3 F A V H Y D Y A P D K A A V R D E H R P L H R K W L G E A H A G T V L T
UniRef90_UPI0003B70E15 M H Y L L F Y R F R A D H A Q R R E P Y R A D H L S Y A R A A V A R G E L L L
UniRef90_G2QT17 W L V V T P D F P G A Q Q K R L D V R P E H F A N L R P F R E S G V Y Q M
UniRef90_I4XC3 M P Y L I E T F D K P G H Q K R R R E T R D E H L R F L E A N K A L L A
UniRef90_W0ITN1 M L F A V H C L D H A D G L P R R Q A N Y D A H K A Y L S A G T V K T V I
UniRef90_M7XRT8 M Q Y V I V A R D A P S A L E R R L A A R G T H M E G I R A R K Q V G E T V D
UniRef90_Q46QL7 M K F A A I V E Y V N E P E R L A Q F R P A H R A Y L Q A L L Q H G R L V I
UniRef90_U7QI61 Y L L F G T Y C D H V L S K R E P Y R K A H L I E G I K K Q K E A G I V V T
UniRef90_Q7U623 F V L W G T Y S A D A L E K R V P F R Q E H L T R L Q S L K D D G V L I T
UniRef90_V2XBB8 F L V Y A P D K E G T H E L R C Q V R E R H L A A V Q P V I K S G V M K V
UniRef90_N6X277 F F A V T Y A Y D P E L S E L A D E I R P T H R A F L S D L R D K G L N V A
UniRef90_D8TY91 Y F L L E Y K Y V P D L L E K R A P F R S A H L D G A K K Q A E A G K M V L
UniRef90_S2J893 H F M V V L H Y T D S L D E R R L S V R D K H L Q G A K A E S G N L L V
UniRef90_D8QBU1 F L V Y A P D R E G T F E K R M S V R P A H L L E N A S S L I S S G V V
UniRef90_UPI0003B5EC80 M L F A V T C T D R L G A L D M R L K H R S E H L L W A S A E D S P V K M
UniRef90_UPI0001BC2BE0 F A V N Y V Y G P D T D T R M S R P A H R A W Q S E L Y E A G T V L A
UniRef90_D1BS78 F A V T Y E Y S P D S A R L G E L R P E H R A F L S G L H D A G S V I V
UniRef90_UPI0003669DA7 M H H V V H C L D H P N V I G D R R Q A S Q N D H R A H L Q G A P G K L L V
UniRef90_Q55YN7 L Y L C V C P D Y P N V F E K R L A R E A H L A G S K V S R E A G T L L F
UniRef90_UPI0004728183 M Q F L V I F G Y D G K D A M E R R M A S R E A H L A G V K K M K E E G K C I Y

UniRef90_UPI000440B348 G G A M V A E E S E D A S K R K M E G S V M I Y E A G S L A E V M E Y I H N D P
UniRef90_UPI0003B78D43 A G G L L D E E S E D A S E G K M K G S A L V M E F E N R A A L E M E Y L E N S E P P
UniRef90_N2J518 C G A K L D D E D G A N A S G S L Y I V D V E T R E E A E A F L A Q D D P P
UniRef90_UPI00037981D0 S G P L T L L E D G G Q T M I G S F F L Y E A E R I E D I K A F V T K D D P P
UniRef90_M2PBJ8 G G V L L S D D S V G S P D A K M A G S L I I L E A E N I E A V R D F I T K D P P
UniRef90_A8N6F0 G G A V L T P E S S P T A Q K K M V G S A F I F E A E N L E E E V G K M V I G D P
UniRef90_W7U837 A G P L F S L D D A E E G S P V V G S L V I F N A E N L E E E V G A K F I Q N D P
UniRef90_UPI0004409C14 G R A I M S P E S S P G A E Q K M V G S M M V Y Q A A S L E E A K K I V I E S D P
UniRef90_A3TXX2 A G P L L D D D A G E M C G S L V I L D V E D A A A S A W A S G D P
UniRef90_M2XHU3 V G P M A S L N D D S S S L I G S L F F V T G E S V E E V Q A S H W A S Q D P
UniRef90_G7XAG5 G G A M L A T H P E E G K D L S F K G S M L V Y M A E N L E E E V H Q L I N G D P
UniRef90_A9RUA5 G G A W G D P V D G A L F I F L V N S A D E V Q E K F V D R D P
UniRef90_UPI0002F7E5C1 S G P F A D A S G A L I I Y E A D T V E G V E A I M K N D P
UniRef90_A4SXW7 A G P L T S E D G K T V V G S L L A I D F A S R A D V D A W L K E E P P
UniRef90_UPI0002D30EE4 L G P T I D N T R V F G I Y E A D S E A T V R K L V E G D P
UniRef90_B0D8U1 G G A L L T P E S T P T A D K K M I G S T F I Y E A G T I D E V K A L I Q S D P
UniRef90_U5QPK2 I G P T R D L T R V F G V Y E T D S E A E A R E L I E S D P
UniRef90_E5R406 G G S T L D Q H P A E G E P P M N G S A L V V I A A E S V E E I R E T I L S K D P
UniRef90_A2TRT1 G G A T E G P G E T G V L I F Q V I D K S Q V V Q F W A S Q D P
UniRef90_UPI0003670366 G G A L A D P V D G A I L L F Q C D D P A I V E D F A R N D P P
UniRef90_S6AY74 A G P H P A V D S S D P G S A G F S G S L L V A E F D S L E A A K A W A D A D P
UniRef90_Q3AYG3 L G P T E G S T H V F G I F E A E T L S V V Q K V I A E D V
UniRef90_N1MTU8 A G A L F G D D G R M D G S L M V V I E A E S L D D A K A L A A G D P
UniRef90_UPI0003663AF7 S G P L L A A E S K T M I G S F F L Y E A D D I G Q V V R F N T N D P
UniRef90_V2WVX7 A G V M L T E E S L H A A D R K M I G S T L I W E A E S V E E V R K K I E S D P
UniRef90_C7YSC1 G G A L L V P K D D S P D S L D F M G S T L V C V A K S V E E V R E Q L S K D P
UniRef90_UPI0003704990 C G A K L N D D G S D A G G G F Y I V D L D T R E A T Q A F I D A D P
UniRef90_Q46TP2 A G P L L A E D G E T M V G S L L V I D F P S L A A R E W L S R E P P
UniRef90_UPI00035C6933 G G A L L D K N G K M I G S T L Y M R F E N K K E L Q K C L E N D P
UniRef90_R7SKC0 G G A M L T P Q S I A P A E K K M V G S L F I C E A D S L E T V R S L M E S D P
UniRef90_B7K9J0 L G P T Q D N T M V F G I Y E A E N E D Q V R S I E G D P
UniRef90_R4WVJ4 A G A L D S P A D R A M L L F H S D S P A V A E A F A K G D P P
UniRef90_HOQUUD8 S G P F G P E E D P G A L L I T E A D S K A D V I E A L M N K D P
UniRef90_UPI0001583D5B G G A F L S E P T G D S P L K F Q G S C M I A L A S S K A E V I E V L K K D P
UniRef90_W1S5C4 S G G L R D D A D E H F I G G A I M L D T D S R E A A E E F A N T D P
UniRef90_R7QMh9 A G P L H P P D A T S Q P L G S L L I M H G A S A A S I E R Y L Y D D P
UniRef90_UPI00047A70EB S G P F S D G T G A L L I F T A D T E N D I H S L V S Q D P P
UniRef90_B4WQD9 L G P T V D N T K V F G T Y E A D S E E A V R Q L V E G D P
UniRef90_MOQQT78 A G P Y P D G T G A L I L V V G P D L D G A E A F L A N D P P
UniRef90_L0FVR5 A G A L D A P A D K A V I I F N C P D E A P I R E F V N G D P
UniRef90_W3X8L4 G G A L L H D V P E G T D A A K F H G S T L V M V A E S V E E C K E I L R K D P
UniRef90_F8GY93 S G P L T D D A G T N M T G S F F L V E A D S R A E V I E F N R N D P
UniRef90_S8A3G6 G G I M L H E H I K E G E T P K F K G S L M L F K L E T K E E V L E I K S D K
UniRef90_A8EVZ1 A G A L I E D D M M V G S T L F V D F E N D E E I D E W L L N E P
UniRef90_UPI0003038249 S G P L E D E L T P G G L L I Y R G K D K E E I A T L L A Q D P P
UniRef90_F7UNU3 I G P T K D L R Q V F A I Y R D A P D Q D T V E A K L V Q G D P
UniRef90_K2KB32 E Q A G P F L D S E G K M C G S L V I I E V D D L D A A N A W A A N D P
UniRef90_G3XQJ3 G G A L F K E H P E E G K E A H F K G S V L V Y R G E N A E E V R D I T S K D P
UniRef90_Q0UTN9 G G A M L P I K E G D S G P P K M K G S A M L I G A K T R E E V V E R L K K D V
UniRef90_D7DWG8 L G P T K D V T K V F G I Y E A D D E A T V H Q L V E A D P
UniRef90_B8HVB0 L G P T K D L T K V F G I Y E A E D E A M V R Q W I E A D S
UniRef90_UPI00036CAE20 I G P T Q D L T M V F G V Y A A E D E D S V R K L I E S D V
UniRef90_E4TV01 A G A M A E P A D G A V L I F K G E S P K I A E D F A N S D P
UniRef90_UPI0003465D66 S G P F G P D D A P G A L L L F R A D S A Q E A L T R T E P D P
UniRef90_K9AKV7 S G P L L D D S P V P G G L L I L S A A D V A E A H L R D D P
UniRef90_L2FZ82 G G A L L D P K S D S S D D M S F V G S H V V V V G D S I E Q V R E D L R K D V
UniRef90_T0PHU3 A A A L V D E K E Q M I G S V L M V D F P S R E D L D K W L A M E P
UniRef90_R7SNG5 G G A L L S P N D T P D A E K K M A G S L M I F E A N S Y A E V K A L I E S D V
UniRef90_D6AZP7 S G P F G A D E P A G A L L F R A G S K D E V L A L T E K D P
UniRef90_R8BRA5 G G A L L E D M P A D D E V S K F A G S T L I T V A E S K E A A L A T I K D D V
UniRef90_UPI0004621BA4 A G A M L T P A S S P D A E K E M V G S V F I C E A E S L D A V R E L M S D V
UniRef90_A0A059FNL8 A G P L I S A D G A M V G S L F I V E A D S L E D V R A L S A R D P
UniRef90_U7Q4Y6 G G A L L K D D P A D P K T F D F A G S S F I V L A D S K E V I E F L K D V
UniRef90_Q8DMG8 I G P T K D L R Y F F A I Y E A D S E V R Q L I E N D P
UniRef90_UPI0003FE69F0 G G A M L D E T G K M V G S T M I V I Q F E T K E A F D A W F S T D P
UniRef90_UPI00034869D7 L G P T V D N T Q V F A I Y E A P D E S T V R K L V E G D P
UniRef90_UPI00040255FC R G P T F S D D G E T L T G S V H I L D P D P A A R A F A F D P
UniRef90_UPI000440AEB0 A G F T I T P D S L D N S E R K M N G S M L V V A A N M A E V R T I I E S D P
UniRef90_X0MZZ9 R G P T F A A D G D T P S G S L H V L D L P D P A A R A F A F D P
UniRef90_Q05RD0 L G P T E G S T H V F G I F E G T D I A Q I R D L L I E S D V
UniRef90_B0CB59 I G P T K D I K M V F G I Y D A E D E T V R K L V E S D P
UniRef90_K9SV01 I G P T Q N L Q K V F A V Y V A D T E A E A R S L I E A D P
UniRef90_G7GLZ3 C G P Y P D G T G A L I L I R A E S L D A V Q A F L A D D P
UniRef90_UPI0003B70E15 G G A L A D P M D G A V L L F H G D S P D A A R A F A E N D P
UniRef90_G2QTI7 G G A L L V P T S A D P S T F S F A G S T L V M L A S S R E E I K E V L R Q D V
UniRef90_I4XC3 C G A K L A D D G S D L G G L Y V V D L E T R D E A E F I A D D P
UniRef90_W0ITN1 S G P L V A A D G E T M I G S L F V F E A D Q I D D V I A F N N D P
UniRef90_M7XRT8 G G A L L D E D G H M V G S I V M C E F P D R A S L D A Y L A N D P
UniRef90_Q46QL7 A G P F A D G S G A L F V Y E V A N E S E A S K L A A N D P
UniRef90_U7QI61 I C P T Q D L T K V F G I Y E A E N E E I V R Q L I E S D V
UniRef90_Q7U623 L G P T E G S T H V F G I Y E A D A I G T V R Q L V E S D I
UniRef90_V2XBB8 G G M M P L S D P E A P Q K G A K G S L I I Y E A D S M E Q V R A M V E S D P
UniRef90_N6X277 S G P L G G D T P G A L I I I E A E T L D E V E A L L D E D P
UniRef90_D8TY91 A G A F G E T P E G A L F I F K A D V T R E E I E Q F V I A D P
UniRef90_S2J893 G G A I L D N H E S S K M K G S V L L I A A K S I E E I D D M I I Q D P
UniRef90_D8QBU1 G A L G T P E S V T S P N K K L V G S V L I V E A E S I D E V K A K V E A D V
UniRef90_UPI0003B5EC80 A G P L L S A E G D P V G S L L I V E A E D E A A L R D L L A T D P
UniRef90_UPI0001BC2BE0 S G P L D N V P A P G G L L M Q A A S R E D I E A H L A N D P
UniRef90_D1BS78 S G P L P A D D G G A G G A L I L I E A D D A D A V A T L L D T D P
UniRef90_UPI0003669DA7 A G P L V Q G E D Q A V I G S F F L Y E A D A T A E Q V E S F L R N D P
UniRef90_Q55YN7 G R A Y M D E A S A T S N G T G L G S T M L Y R F P T I E E A W E R L K S D P
UniRef90_UPI0004728183 G I A M L D E K E R M I G S V M V M D F P S R A E L D A W L K V I E P

UniRef90_UPI000440B348 YWVVENVWEKLDIRPF
UniRef90_UPI0003B78D43 YVVENVWQKIEVETMNVVL
UniRef90_N2J5I8 FSQVGLPEKVNIRWRKA
UniRef90_UPI00037981D0 FNRAGLWKSIDIRPFK
UniRef90_M2PBJ8 FYTSGKWEKLAIHPIHVI
UniRef90_A8N6F0 Y Y T S G V W E K L I I L P F V N A
UniRef90_W7U837 YAKAGL FKE
UniRef90_UPI0004409C14 Y Y T S G V W E R V V V L P F
UniRef90_A3TXX2 Y A R A G L F E S V T L K P W K R V I
UniRef90_M2XHU3 Y A E A G L F Q Q V S V Y Q W K R V
UniRef90_G7XAG5 Y A K S G V W D
UniRef90_A9RUA5 Y V S N G L V T K L D I R P
UniRef90_UPI0002F7E5C1 F H A A G V F L K W S I R P W K M V F
UniRef90_A4SXW7 Y T K A G V Y E K P I V H V F N N M W
UniRef90_UPI0002D30EE4 Y W R N G I W T A Y E I Y A W N Q V F
UniRef90_B0D8U1 Y Y T A G V W D K I V I L P F
UniRef90_U5QPK2 Y W Q H Q I W T S Y E L F E W I Q A F
UniRef90_E5R406 Y A T S G V W D
UniRef90_A2TRT1 Y V K N G I V S S W E I K E W N V V L
UniRef90_UPI0003670366 Y V A A G I V T S W K V R P W T T V
UniRef90_S6AY74 Y R A A G V Y A E V V V K P F K Q V F
UniRef90_Q3AYG3 Y W R E G I W T A V N V Y P W I Q A F
UniRef90_N1MTU8 F A V Q G L Y A S W E V K R W T
UniRef90_UPI0003663AF7 F N E A G I W K S V D I R P F L K
UniRef90_V2WVX7 Y Y Q N D V W E K I V I T P
UniRef90_C7YSC1 Y A T S G V W D K I Q I Y P F R A A F
UniRef90_UPI0003704990 F A L A G L F G E V R I T R W R K A Y
UniRef90_Q46TP2 F T R A G I Y G A S S V L A F N N M W
UniRef90_UPI00035C6933 Y I K G D V W E K I E V K K I K L V
UniRef90_R7SKC0 Y Y T S G V W D K
UniRef90_B7K9J0 Y W K N G I W T E Y E I K E W I Q A F
UniRef90_R4WVJ4 Y V T N G L V E R W E V R K W N T V
UniRef90_HOQUD8 F Y L N G L V E Q R S I R Q W N V F F
UniRef90_UPI0001583D5B Y A E N D V W D
UniRef90_W1S5C4 F T R A G L F E R V E I I R W R P A F
UniRef90_R7QMh9 Y A K A G L F E S V D V R R W
UniRef90_UPI00047A70EB F A R A G V I S A V K T T E W K P V M
UniRef90_B4WQD9 Y W Q N G I W T E Y S V Y E W N Q V F
UniRef90_MOQQ78 F I A H Q A V D E V R V V E W T P V F
UniRef90_LOFVR5 Y V Q N Q L I S S Y D I R P W N V V I
UniRef90_W3X8L4 Y S T S G V W D N A Q I W P
UniRef90_F8GY93 F W S L G I W E S V D I H A F
UniRef90_S8A3G6 Y I E N N V W E K M E L Y P F R T A L
UniRef90_A8EVZ1 Y V K N N V W
UniRef90_UPI0003038249 Y A D A G V I D D T T I R A W T P V F
UniRef90_F7UNU3 Y W Q N G I W T E Y E V K E W I Q A F
UniRef90_K2KB32 Y A K A G L F A D V R I E A W N K V I
UniRef90_G3XQJ3 Y A T S G V W E K V Q I E P
UniRef90_Q0UTN9 Y V Q E G V W E K V E I P F K S A L
UniRef90_D7DWG8 Y W Q N G I W T E C T V K E W I E A F
UniRef90_B8HVB0 Y W Q N G I W T D Y Q V Y E W T Q A F
UniRef90_UPI00036CAE20 Y W Q N Q I W T S Y E V R E W I Q A F
UniRef90_E4TV01 Y V K N G L I K S W E V R P W T V V I
UniRef90_UPI0003465D66 F R I E G L V A D V S V R E W I P V L
UniRef90_K9AKV7 Y A E I G V I D S V T I R Q W T P V F
UniRef90_L2FZ82 Y A T S G V W E N A Q I Y A F R A A W
UniRef90_T0PHU3 Y V K G N V W Q T I E V K P C K V A
UniRef90_R7SNG5 Y W T G N V W E K T V I R P W
UniRef90_D6AZP7 F R V E G L V A R T D V A E W L P V L
UniRef90_R8BRA5 Y V K H G V W D K V M L W P A K I A F
UniRef90_UPI0004621BA4 Y H T A G V W D K
UniRef90_A0A059FNL8 Y N Q A G V F G R V D I H E T R W S I
UniRef90_U7Q4Y6 Y V E A G V W D N A Q I Y A M K T A F
UniRef90_Q8DMG8 Y W Q H Q V W T D Y S I H E W I Q A L
UniRef90_UPI0003FE69F0 Y I T M N V W Q K I E V H P F R V A
UniRef90_UPI00034869D7 Y W Q N G I W T E Y T V K A W I Q A F
UniRef90_UPI00040255FC N Y Q A G A Y R D V L V R R W R N M L
UniRef90_UPI000440AEB0 Y W D G K V W E K L T I M P F V A V
UniRef90_X0MZZ9 N Y Q A G V Y R D V L L R R W R N T L
UniRef90_Q05RD0 Y W R E G I W T A L E V Y P W I Q A F
UniRef90_B0CB59 Y W Q N G I W T E Y E I R E W I Q A L
UniRef90_K9SV01 Y W Q H Q L W T E Y E I Y E W V Q V F
UniRef90_G7GLZ3 F H T H D A I A A V R I N E W T Q V Y
UniRef90_UPI0003B70E15 Y V Q G G L V E S W E V R P W T T V
UniRef90_G2QTI7 Y G K S G V W D
UniRef90_I4XC3 F S R V E L F E R V T I T H W R K A Y
UniRef90_W0ITN1 F A H A N V W R Q V D I N L F L K
UniRef90_M7XRT8 Y A R E K I W D D I Q L Y P F R R V
UniRef90_Q46QL7 F A K A S L F R S V V M K P W K L V F
UniRef90_U7QI61 Y W L N G I W T E Y E V K E W I Q V F
UniRef90_Q7U623 Y W K Q G I W T A L E V Y P W V Q A F
UniRef90_V2XBB8 Y Y T S G V W E K L V I C P F L P A
UniRef90_N6X277 F K K E K V V S E R V V R P W N P V I
UniRef90_D8TY91 Y V Q N G L V P S W Q V K P Y A V V
UniRef90_S2J893 Y Y K A K V W E K W E V Y P I K W
UniRef90_D8QBU1 Y Y T N D V W E R L V I L P F F P A
UniRef90_UPI0003B5EC80 Y A K A D L F S D V F W I P F K W T
UniRef90_UPI0001BC2BE0 Y A S V G V I D E T L V R E W T P V F
UniRef90_D1BS78 F R R E G L I A E R T V R D W L P V I
UniRef90_UPI0003669DA7 L N K A G V W K S V E V R E
UniRef90_Q55YN7 Y W V Q G V W D K E R V T
UniRef90_UPI0004728183 Y V V G K V W E R I E V

UniRef90_J9SED2
UniRef90_B2JGQ8
UniRef90_UPI0001F2B17A
UniRef90_A0A009P2G9
UniRef90_UPI0004744D52
UniRef90_A0A037ZM79
UniRef90_L8MSA1
UniRef90_A3Z2M6
UniRef90_A0A059G837
UniRef90_W9YXZ8
UniRef90_Q6FY51
UniRef90_UPI0004795D53
UniRef90_UPI000364E365
UniRef90_W077P0
UniRef90_F5Y2V6
UniRef90_A8MEB6
UniRef90_C5DJF4
UniRef90_UPI00047D48DC
UniRef90_A0A022FSC6
UniRef90_M2WJ54
UniRef90_UPI000363A700
UniRef90_E3IU28
UniRef90_W1N6V6
UniRef90_E1VUB2
UniRef90_I1DTN0
UniRef90_B7G566
UniRef90_C5P5U7
UniRef90_F4GDF7
UniRef90_A9APB4
UniRef90_Q6CFD9
UniRef90_UPI00038035F1
UniRef90_C5P5V1
UniRef90_UPI0003689CF6
UniRef90_H0R1Y7
UniRef90_H6R3Y7
UniRef90_UPI0003F4A19F
UniRef90_UPI0003732107
UniRef90_C9SEM4
UniRef90_J9VHA0
UniRef90_Q0C5X6
UniRef90_A2BVN7
UniRef90_UPI000380B2AD
UniRef90_UPI00045E936C
UniRef90_UPI000360A1EB
UniRef90_N1QG96
UniRef90_UPI0003654E7B
UniRef90_J7LUX5
UniRef90_Q0C275
UniRef90_B8BUG5
UniRef90_B4VDZ3
UniRef90_A0A022G5S9
UniRef90_J7LMW1
UniRef90_B8HG43
UniRef90_UPI00036936E3
UniRef90_Q0S1R2
UniRef90_UPI0004772D8A
UniRef90_UPI000360D93C
UniRef90_UPI0003B48594
UniRef90_A9CHP5
UniRef90_UPI00047EB274
UniRef90_UPI0003B3538F
UniRef90_T2L7L8
UniRef90_I3C4U9
UniRef90_A6TVX4
UniRef90_H2GUH4
UniRef90_K6VAW3
UniRef90_C6WR23
UniRef90_UPI0003822554
UniRef90_D7CWR2
UniRef90_Q1LE85
UniRef90_F2J6A8
UniRef90_C1D1P2
UniRef90_W7THJ9
UniRef90_UPI0004561781
UniRef90_A0A031K438
UniRef90_B9QUL4
UniRef90_UPI000404FBC2
UniRef90_UPI0003F82C8A
UniRef90_B0T284
UniRef90_R4XH16
UniRef90_UPI000475F36C
UniRef90_G8AJZ5
UniRef90_A0A059FDQ2
UniRef90_D1BHL9
UniRef90_L2TWI3
UniRef90_C5DY43
UniRef90_K9DE57
UniRef90_UPI00035F00D1
UniRef90_UPI000371FE56
UniRef90_A5DEF3
UniRef90_G7H243
UniRef90_X8JPI0

UniRef90_J9SED2 A G P Y P 50 D G S G A L T V T R A A D L E A A E A F L A N D P
UniRef90_B2JGQ8 A G A L A D P V D T A V L L F E G D S P A V A E S F A K A D P
UniRef90_UPI0001F2B17A G G A L L E T H S T E T D D A K I K G M V V Y T A E N E E E V R G I T E K D V
UniRef90_AOA009P2G9 C G A K L D E N G Q D L G G G I Y I I D V A S S R E A A Q K F I E Q D P
UniRef90_UPI0004744D52 A G P L T H D D E R T M L G S L L V I D F H S R E A A H S W L A D E P
UniRef90_AOA037ZM79 A G P F L D E S G G M N G S L V V I E Q P D M A A A E A W A A N D P
UniRef90_L8MSA1 V G P T Q D V T K V F A I Y V A P D V A A A K K L V E S D P
UniRef90_A3Z2M6 A G P L L N D E G E M V G S L V I L D V E D M E A A Q E W A N N D P
UniRef90_AOA059G837 A G P L L A D D G E T M I G S V F L L Q A D S E A D A K A F S A D P
UniRef90_W9YXZ8 G G G T L A G N T V D G S A I I A R A K S E A D I M S V L K T D I
UniRef90_Q6FY51 A G A I Y N E P A Q A G G E R T F A G S H L Q I V A D T K E E A L E L V H N D V
UniRef90_UPI0004795D53 G V A L L D E N D K M I G S C V V V D F P T R K D V D Q Y L E L E P
UniRef90_UPI000364E365 R G P T F T D D E L P T G S V H I V D L P D V A A V R A F A F D E P
UniRef90_W0T7P0 A G A I Y K D V I D G K P T N F A G S H L T V V A D T K E E V I Q I T K N D V
UniRef90_F5Y2V6 G G S L R V E E S Q V P K G G L W I A Q A E S K E Q L E A L L K T D P
UniRef90_A8MEB6 A A A M L D E E D K M I G S T M I V E F P S K E A I E W F A E E P
UniRef90_C5DJF4 A G A I Y H E V G P D G K P T N F A G S H L Q I S A N T K E D A L Q V V K N D I
UniRef90_UPI00047D48DC S G P F G P E E S P G A L L L L A G E T K A D V E A L M D Q D P
UniRef90_AOA022F5C6 R G P L M S D G G E H M I G S L F L V A R S K E A V I A F N R S D P
UniRef90_M2WJ54 A G P F L D N S G A L L L L A T P N C E A A A K L A D D P
UniRef90_UPI000363A700 A G P F L N E S G D M C G S V L L V E A E D E A A A R A I F A T D P
UniRef90_E3IU28 I G P L T A E D G L A I G A V F A L R V A T T S E A S R F L A G E P
UniRef90_W1N6V6 G G A I V D D E G K M I G S N V H C Q F D N R S E L D A W L E R D P
UniRef90_E1VUB2 S G P T P V N D G A L L L I F A A E S P E A L N E V L L N D P
UniRef90_I1DTN0 G G A V G E P A D S A L L L F N C D S A D I P A A F A K A D P
UniRef90_B7G566 G G P T G A V G T N V P T G A L F L F T D R D A A R E F V A R D P
UniRef90_C5P5U7 G G P L L A H D P E S P A D L A V T G S V M L T R A G T E E E V R K L V I A G D P
UniRef90_F4GDF7 A G A K L N D Q D G T D A G G V Y I V D V D T R E E A E R F I A G D P
UniRef90_A9APB4 A C G A K L D D D G A A A S G G I Y I V D L D T R E A A E R F I A A D P
UniRef90_Q6CFD9 C G G G V A D K H P G A G E T P V T G S T L I V Q T D D R D S I V E K L A K G D V
UniRef90_UPI00038035F1 C G P L L S D D D T E E W L T A I L A E L P D R T A E R L L A Q G P
UniRef90_C5P5V1 G P L L S P T S M E D G L Q K I T G S I H L T K A R T E E E V W E L V R D D P
UniRef90_UPI0003689CF6 G G V M L N D D G K M I G S N A H F Q F I D R N A F E A W L E Q E P
UniRef90_H0R1Y7 S G P F T N G S G A L F L V R A D S E D A A R T L A D P
UniRef90_H6R3Y7 S G P Y P D G S G A L L V F R A D D E P A L R A L L A E D P
UniRef90_UPI0003F4A19F A G A L P K P D T E P E G V P R I A G S L M V Y I F P T L E D C W A R V K E D V
UniRef90_UPI0003732107 G G A L L N D E G K M I G S S A H F R F V D R Q D L D A W L E T E P
UniRef90_C9SEM4 G G A M L R A Q P Q E Q E L D I S G S I V V A R A A T A E E V L A V L K E D I
UniRef90_J9VHA0 S G P I L P E A S L P E G T P N I A G S F M V Y K M D T L E Q V W T R L K E D V
UniRef90_QOC5X6 A G P L L S E A S G K M V I G S V F L I V A E S A S A R A I N A E D P
UniRef90_A2BVN7 L G P T K C T K Y L F G I F N A N D K N E L R E L I E K D I
UniRef90_UPI000380B2AD R G P T L T E D G K T P T G S I H I L D L P T P A A A Q A F A L N E T
UniRef90_UPI00045E936C A G P L L D A T G N T R I G S L L I V E A D S L Q D V Q A F S E G D P
UniRef90_UPI000360A1EB A A A L L N D E G K M A G S M I V C D F E S R E A L E E W L D N E A
UniRef90_N1QG96 G G P Y L S S T N S I Q E P L D M S G S V L L A W A N S P E E V K D V L Q K D I
UniRef90_UPI0003654E7B A G A M T E A P P R G L I V W R T D G P G P A E E F V R K D P
UniRef90_J7LUX5 S G P Y G D G A G A L L I F K S A D E A E L N D L L K Q D P
UniRef90_QOC275 A A P L R D D A G E A F T G A L L V I T A S S I A D A R A F I E A D P
UniRef90_B8BUG5 G G P T L T P G E S V P S G A L F I F T T K E A A E K F V A E D P
UniRef90_B4VDZ3 R G P T F A P G G D A P S G S V H I V D L P D P A A A R A F A F D E P
UniRef90_AOA022G5S9 A C G A K L D D D G S D A G G G F Y I V D V D T R D A Q Q F I D A D P
UniRef90_J7LMW1 G G A V G D G P F F T A L L I F T G T D A L Q T A R A F A A A D P
UniRef90_B8HG43 S G P Y G D G A G A L L I F K A D N E A S L N S V L K Q D P
UniRef90_UPI00036936E3 S G A Y P D G T G A L L L F R A E S A D A D L R E L L S K D V
UniRef90_QOS1R2 S G P F A D G S G A F I I V D A A D A E T V L E L F T H D P
UniRef90_UPI0004772D8A G G P L R D D H G E M I G T A L V F E A T S R A A V E Q F M A D D P
UniRef90_UPI000360D93C S G P W T D D T G A L L L Y N V A D E A E V R E I L L A N D P
UniRef90_UPI0003B48594 S G P Y A T I E E A P D A A L L I R A E S A D A V R E L L R E D P
UniRef90_A9CHP5 S G P M S A G D G G P P A A L I I A E A H S L E D V I A F S D A D P
UniRef90_UPI00047EB274 G G A L A N P A D G A V L L F K G D S P E V A E N F A K S D P
UniRef90_UPI0003B3538F A G A V G D P P H T G M L V F R G D S E K V A E T F V V D D P
UniRef90_T2L7L8 G G V V L N D E G K M I G S N A H F R F A T R E D L E A W L A Q E P
UniRef90_I3C4U9 G G A M E N P A D E A L L I F K A E S D K I A I S F A E N D P
UniRef90_A6TVX4 A V A I L D A T E K M V G S V L V V D F P T R E D L D E W L K I E P
UniRef90_H2GUH4 S G S G P F I D G N G G A L L V I E S A T I D D A Q A L M D K D P
UniRef90_K6VAW3 S G P Y V G V S E A L L I F T A D T A D A V E G F L A G D P
UniRef90_C6WR23 A G P Y A D E T S G A L L V Y E A D E D E L R A L L D A D P
UniRef90_UPI0003822554 G G A A G E G P F K G L L I F T G E N P L E A A K A F A E A D P
UniRef90_D7CWR2 G G A L L D G A G T M I G S A L L L E A P S L E A A R E L L E N D V
UniRef90_Q1LE85 A C G A K L N D D G S D G G G I Y I V D V D T R E A A R A L I E A D P
UniRef90_F2J6A8 T G S A L W A D A G E Q G I G N F G I L E A E S R E A A L A F A E G D P
UniRef90_C1D1P2 G G A L A D P A D G A V L L F Q G D S P A A A E T F A R T D P
UniRef90_W7THJ9 G G A L A D P V D M G V L V F T D K S V A E N F A A D A
UniRef90_UPI0004561781 G G A L L E L D E E L G P G V Y M G G S V L V V L G E S I A D V R A R V M E D E
UniRef90_AOA031K438 A G P L L G E D G Q M I G S M M I V E A E E I G A V R N F H E A D P
UniRef90_B9QUL4 S G P L T K D D G S T M R G S F F L I E A D N R E K I K D M F A N D P
UniRef90_UPI000404FBC2 G G A L L D D E G R M V I G S A V I Y E A P D R A A L D A I T A A D P
UniRef90_UPI0003F82C8A A G P Y V G T H D A L I V V R A E D E A D A L L L E D D P
UniRef90_B0T284 A G A L L D D N G Q P I G S L I V V E A D D K A A Q A Q A D N D P
UniRef90_R4XH16 G G A M L N E G K P I G S A L L L Q A D T V A E I R E Q L K N D P
UniRef90_UPI000475F36C V G P L K R A D G L I I G S L L I V K A E D E A A A R A I L A G D P
UniRef90_G8AJZ5 A G P L T G D D G E G S A G S L I L V E A D S R G A V E A F V S G D P
UniRef90_AOA059FDQ2 A G P L L D E G G N M V I G S V F L I E A G D L A A A K A I H A Q D P
UniRef90_D1BHL9 S G P V S D D D M Q G A L L L L Q G E S A E A V S A I L D A D P
UniRef90_L2TWI3 S G P Y A D D S G A F I V V A A D T A E T V E Q L F A Q D P
UniRef90_C5DY43 A G A I Y N E P K A P G E P R T F A G S H L Q V V A D T K E E A I E I V K S D I
UniRef90_K9DE57 A G A L A E P A D H A V L V F D C E T A R E P V Q L F A A R D P
UniRef90_UPI00035F00D1 S G P L K N T P L R A G F A V L I F R A E T R D E V Q S M I S A D P
UniRef90_UPI000371FE56 R G P T F A G E A V T G S V H I A D L P G P A A A R A F A F D E P
UniRef90_A5DEF3 V G P L F A D T N K T K F V I G S S Y N L R A N S R Q E V V E L K Q D I
UniRef90_G7H243 A G P F A D G S G A W L M I V A E S R D D V A N Y L A G D P
UniRef90_X8JPI0 G G A M L A P D S D A G G P K K M I G S V I F I R G N S L E E V T K K V K E D I

UniRef90_J9SED2 F Q A H Q A V D A V R I D E W T Q V F
UniRef90_B2JGQ8 Y V L N G L V T Q W R V R P W T T V
UniRef90_UPI0001F2B17A Y A T S G V W E K V Q I W P
UniRef90_A0A009P2G9 F Y I G G L F Q K I K I D R W R K A Y
UniRef90_UPI0004744D52 F T K A G L Y S S M A V H A F
UniRef90_A0A037ZM79 Y K L A D L F E N V T I S A W N R V L
UniRef90_L8MSA1 Y W Q N G I W T D Y Q I H E W L Q V Y
UniRef90_A3Z2M6 Y A K A E L F S G V E L I P W K K V I
UniRef90_A0A059G837 Y S R A G V F G E V R L N E V R W A I
UniRef90_W9YXZ8 Y A R S G V W E K I K F I P F K C V Y
UniRef90_Q6FY51 F A K N G I W E N I I T Y Q F G C A
UniRef90_UPI0004795D53 Y V K G N V W K E I N V M P C K V A
UniRef90_UPI000364E365 N Y Q A G A Y R D V L I R R W R N L L
UniRef90_W0T7P0 F A K E G T W E N A I I Y P F G C A Y
UniRef90_F5Y2V6 F Y V A G L R Q S Y E I L H W S K A
UniRef90_A8MEB6 Y I R N K V W E K I E I V P C K V
UniRef90_C5DJF4 F A K E G I W E N I I I Y P F G C A
UniRef90_UPI00047D48DC F H Q S G L I E E R T V Q Q W N I F F
UniRef90_A0A022FSC6 F Y Q A G V W Q T I H L H R F Q P
UniRef90_M2WJ54 F I H A G I V V D I H Y T E W R P V L
UniRef90_UPI000363A700 Y A K A G L F K D T V V R P W R W A
UniRef90_E3IU28 Y H Q A G V F E S V V V H P M R Q
UniRef90_W1N6V6 Y V T Q K V W E H I E I R T V K L V
UniRef90_E1VUB2 F K K V G G V G K A T V T E W N P V M
UniRef90_I1DTN0 Y V V N G L V K R W Q V K P W H T V
UniRef90_B7G566 Y V A H G I V T A H T I Q E W N V V
UniRef90_C5P5U7 Y A K V G F W E N A V V S P F R C V
UniRef90_F4GDF7 F H A H G L F R E V R V Q R W R K A F
UniRef90_A9APB4 F A L A G L F E R I A I V R W R K V Y
UniRef90_Q6CFD9 Y A K E G V W D L T N V K
UniRef90_UPI00038035F1 D A R A D L Y E S I E V H D W
UniRef90_C5P5V1 Y A K L E V W D
UniRef90_UPI0003689CF6 Y V T Q K V W E H I D L R E V K
UniRef90_H0R1Y7 F Q K V G V S D V R A I E W T P V F
UniRef90_H6R3Y7 F A R K N L I T E V R V N E W L P I F
UniRef90_UPI0003F4A19F Y W K H D I W D K S K I
UniRef90_UPI0003732107 Y M T G R V W E H V D I R E V K
UniRef90_C9SEM4 Y A H T G V W D N V Q I Y P V R
UniRef90_J9VHA0 Y W R A D I W D K E R I
UniRef90_Q0C5X6 Y T K A G V F G E V R I N E T R W A I
UniRef90_A2BVN7 Y W Q K G I W I S I D I Y P W I Q A F
UniRef90_UPI000380B2AD Y Y Q A G V Y R D V M L R R W R N T L
UniRef90_UPI00045E936C F R R L D V W A T V Q I H A Y V V A
UniRef90_UPI000360A1EB Y V K G N V W E T I E I
UniRef90_N1QG96 F T K E K V W E E L R I L P F K
UniRef90_UPI0003654E7B Y V A N G L V D E W S L R P W N V V
UniRef90_J7LUX5 F A E A G V I A G I R T T E W A P I I
UniRef90_Q0C275 Y Y Q A G I W D T V E I
UniRef90_B8BUG5 Y V A N G I V T G H S I L E W T V V
UniRef90_B4VDZ3 G Y Q A G V Y R D V L L L R W R
UniRef90_A0A022G5S9 F T Q A G L F A E V R L T R W R K A Y
UniRef90_J7LMW1 Y V V N G V V T S W T A R P W R T V
UniRef90_B8HG43 F A A A G V I A G I R V T E W S P V
UniRef90_UPI00036936E3 F A T E N L I E R T E I H E W V P V M
UniRef90_Q0S1R2 F A R N G L V A A S R L V E W V P V L
UniRef90_UPI0004772D8A Y V K A K L F S R L E T D V W T
UniRef90_UPI000360D93C Y T S E D V Y D I V D L R E W R P L F
UniRef90_UPI0003B48594 F Q Q L G L V E Q V A I R E W T P V L
UniRef90_A9CHP5 F V V H G V Y N R I R I L N W T P T L
UniRef90_UPI00047EB274 Y V L N G I V K R W Y V R Q W T T V
UniRef90_UPI0003B3538F Y V E A G L V T R W S V R Q P W T I V
UniRef90_T2L7L8 Y M T E R V W E Q V D I R E V K
UniRef90_I3C4U9 Y V K N G L V K L W S V R K W N V V
UniRef90_A6TVX4 Y V T G E V W K I I E I K A C K V
UniRef90_H2GUH4 F Y S E G A I S K R T V H T W N P V L
UniRef90_K6VAW3 F Q K A G L V A T H T V T E W N P I L
UniRef90_C6WR23 Y A P A G V V A E I R V H E W K A L L
UniRef90_UPI0003822554 Y V I N G V V T S W T A S P W T T V L
UniRef90_D7CWR2 Y F K E G V W Q Q L E I Y P F R R A
UniRef90_Q1LE85 F F T A G L F A D I R I V R W R K A Y
UniRef90_F2J6A8 F H I G G V V E S I L E L
UniRef90_C1D1P2 Y V L N G L I G R W E V R R W H T V
UniRef90_W7THJ9 Y V K A G L V K V W Q V R R Q W T V V
UniRef90_UPI0004561781 Y V K A Q V W D R L K I F P F L Q A
UniRef90_A0A031K438 F T L A G L F E T V H I F Q W
UniRef90_B9QUL4 L Q A A G V W A E V T V R Q
UniRef90_UPI000404FBC2 Y V T G G V W R D I E I K P F R L A
UniRef90_UPI0003F82C8A F Q Q A G F I A T R T P R Q W N P V I
UniRef90_B0T284 F T A A G V F E S V E V H P W R L A I
UniRef90_R4XH16 Y I E G R V W D R I Q I I P V R T A
UniRef90_UPI000475F36C Y L T G G V W Q L I R V D E F T P L L
UniRef90_G8AJZ5 F A V H G V W E S F E V Q A F R
UniRef90_A0A059FDQ2 Y V T E G V F G H V H I N E T R W A I
UniRef90_D1BHL9 F A Q Q E L V A A R A V T E W T V V E
UniRef90_L2TWI3 F V T H G L V P T H R I I E W T P V L
UniRef90_C5DY43 F A K E G V W D N L I V Y Q F G C A I
UniRef90_K9DE57 Y V T H G L V R A F H V R Q W N T V
UniRef90_UPI00035F00D1 F A R E G L I A K L E I H E W D P L F
UniRef90_UPI000371FE56 N Y Q A G A Y R D V L I R R W R N T L
UniRef90_A5DEF3 F Y K E G I W D N A I I Y P Y T V V
UniRef90_G7H243 F A K V G A I A A T R I H E W V N I F
UniRef90_X8JPI0 Y Y K S G V W E K L V I L P Y V E A I

UniRef90_C1B3D9
UniRef90_J7S504
UniRef90_N9UWMO
UniRef90_UPI0003B3B265
UniRef90_UPI00035DAA32
UniRef90_K0YQX7
UniRef90_UPI00035E1D82
UniRef90_UPI00035C3C0F
UniRef90_A4S089
UniRef90_UPI0003771AED
UniRef90_R4LCF4
UniRef90_UPI000380D31C
UniRef90_V4NNZ1
UniRef90_W6Y5M8
UniRef90_UPI000346B0B9
UniRef90_A0A059DKN1
UniRef90_H3NVV6
UniRef90_UPI00045EA9E4
UniRef90_N4VXC3
UniRef90_C0ZYL0
UniRef90_UPI00016A33A7
UniRef90_UPI00035DAB14
UniRef90_B3R6N2
UniRef90_A0A024JJ52
UniRef90_M1VGT1
UniRef90_A2C130
UniRef90_W5XSC7
UniRef90_A0A031JMD7
UniRef90_J6CX03
UniRef90_S8F4L5
UniRef90_M2QLY8
UniRef90_Q75CT8
UniRef90_W9FMZ2
UniRef90_UPI000380AE3D
UniRef90_C2GI95
UniRef90_R7SQL6
UniRef90_UPI0003820202
UniRef90_M1JV02
UniRef90_A0A021VL03
UniRef90_S6GGU3
UniRef90_H3GX85
UniRef90_C5BV45
UniRef90_UPI0004082729
UniRef90_M2Z415
UniRef90_W5WL75
UniRef90_UPI000466AB61
UniRef90_Q63UK6
UniRef90_I2G3J9
UniRef90_M5EIF1
UniRef90_UPI0004622574
UniRef90_Z9JUR9
UniRef90_K0KG81
UniRef90_UPI0003B2FBD6
UniRef90_G4R6E3
UniRef90_W4KMX1
UniRef90_UPI000477493E
UniRef90_F5L4C6
UniRef90_UPI0002DEEB2A
UniRef90_W5TMH7
UniRef90_UPI000370E3B3
UniRef90_D5X2B8
UniRef90_E9UZ21
UniRef90_V6MBZ7
UniRef90_UPI0003W7W2B8
UniRef90_UPI0003750FA4
UniRef90_N1UU41
UniRef90_B6A3C1
UniRef90_S3XAE4
UniRef90_V4Q109
UniRef90_UPI0003B61BEA
UniRef90_A0A024RGK0
UniRef90_A7TNS1
UniRef90_UPI0002D8E270
UniRef90_UPI0004651A44
UniRef90_UPI0004621C59
UniRef90_E3KZR6
UniRef90_W8A632
UniRef90_UPI00025596AE
UniRef90_E6J673
UniRef90_D2PT88
UniRef90_D3Q0P1
UniRef90_K6ZS86
UniRef90_J6EXT4
UniRef90_K0F8Z4
UniRef90_UPI00034BD81D
UniRef90_M2XJV5
UniRef90_K6YR01
UniRef90_UPI0003713FFD
UniRef90_C8V4J7
UniRef90_M8B6R5
UniRef90_K0KNL3
UniRef90_I2H1Y2

1 10 20 30 40

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

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

UniRef90_C1B3D9 C G P Y 50 G N D A G A F I T V N A D T T E T V R A L F A D D P 80
UniRef90_J7S504 A G A I Y N E P T T P G G D R T F A G S H L Q I V A D T K E E A L E V I H G D V
UniRef90_N9UWMO A G A T F A D D G K T V R G S G N Y I V D M T R E E V D E F V I A N D P
UniRef90_UPI0003B3B265 T G R T A T L H E Q G S L T I M L A R D T A E E A K Q I L A D D P
UniRef90_UPI00035DAA32 S G P Y V D G S G A L L I V E G T D T A S V A T L F E Q D P
UniRef90_K0YQX7 S G P V T G G H P T A L L I F E A E D N D K V A S L L D E D P
UniRef90_UPI00035E1D82 A G P L A D N T G G L M L W Q A E D E T E L G K L I D T D P
UniRef90_UPI00035C3C0F A G A W A P T E D P G G L L I F R S E D R A G V Q T L V D E D P
UniRef90_A4S089 A G A L L D P V D Q G V F V F R K N C E A E I E A F V K A Q D A
UniRef90_UPI0003771AED T G P Y T D G S G A L L L F R A D D A E E I E K V L A Q D P
UniRef90_R4LCF4 R G P T L T P D G T A P T G S L H I V D L S S A A A R A F A F D E P
UniRef90_UPI000380D31C A G P L G D G T G G I T L Y Q A D D E A H L K E T I D R D P
UniRef90_V4NNZ1 A G A L V D P V D G V L L F K A G D R S V A E D F A R T D P
UniRef90_W6Y5M8 G G P F L R E R S N G E F N E P L G S M L L A W A E S P D K V L D E L K K D V
UniRef90_UPI000346B0B9 R G P T L S D D D G E E H T G S V H I V D L A D R E Q A E R F A A E P
UniRef90_A0A059DKN1 G G A L R T D P D G P A E T G S A M I I K A D N L E D A R A F A D Q D P
UniRef90_H3NVV6 A G P L L N D Q D E M V G S V L I I D F D S D D A A A F C A A D P
UniRef90_UPI00045EA9E4 G S G P F T D G E P G A L L I L T A H D A E A L D G L L A G D P
UniRef90_N4VXC3 G G A M F E Q H P A E G K Q T V F K G S M I I Y T V Q N A D E A W G L I R N D P
UniRef90_C0ZYL0 S G P F A D G N G A L L I V D A A D A D T V S L L F T H D P
UniRef90_UPI00016A33A7 A G P F A D P A Q G A L G I F A S R E A A E E F A S G D P
UniRef90_UPI00035DAB14 A G P L D G D T G G M A L Y Q A T D R E H L Q R I D A D P
UniRef90_B3R6N2 A G S L R E A P N E G A V G G L W I V R A D R A E V E A L I Q T D P
UniRef90_A0A024JJ52 A G A L P E F P A A E G V V P D F K G S A V I V R A E N R D D A I A F L K Q D V
UniRef90_M1VGT1 A G A V F E E A P S G D A A K P R G T I L I V R F N D V H E L R S W L A G D P
UniRef90_A2C130 L G P T K C N R Y V F G I F K S E D I E Y I R S L I K E D V
UniRef90_W5XSC7 S G P F T D S K G G A L L V L Q L D E L E D V I T I M D G D P
UniRef90_A0A031JMD7 G G A V E D P L D T A M L L F A G E G P E A E A F A E V D P
UniRef90_J6CX03 S E N P G E A G F T G S T V I A Q F A S L A D A Q Q W A S E D P
UniRef90_S8F4L5 G G A I L T D D Q K L P A T P G T V G H T Y I V K A D D L A A A R K F F E Q D P
UniRef90_M2QLY8 G G A L L T E P A V I G A P D D K M V G S C M I V E A E S L E A V R E H I K K D P
UniRef90_Q75CT8 A G A I Y K E V V D G R P S Q F A G S Q L T L V A D S R E E A L A I I R D D P
UniRef90_W9FM22 R G P T V S D D D G E E H T G S V H I V D L A D R A A E R F A R E E P
UniRef90_UPI000380AE3D S G P F D D D G A P G A L L V F A A E D A G A V E R L T D E D P
UniRef90_C2GI95 S G P L V G T D P G E A L I V L Q L P D N A D A K A V M D N D P
UniRef90_R7SQL6 G G A L L P E G S N S S D A G N L A G S Y L V V Q A D T I E Q A W D A L K K D V
UniRef90_UPI0003820202 A G P F T D Q S G A L L I Y D V A D E A E V R D I L A K D P
UniRef90_M1JV02 A G A T F T D D G K S V K G S Y V V K V A D M A E A R K F V D D D P
UniRef90_A0A021VL03 S G P L P V H D G P V A H A A I G T G A L L V R A E S V E G A L L D E D P
UniRef90_S6GGU3 G G G I L D D A G K M I G S C A H V Q F N S R A E V E H W I A N D P
UniRef90_H3GX85 G G A L V N P P D A G V F I F N V A D K T L I E D F A K A D P
UniRef90_C5BV45 S G P F T G S P G A L L V R G D D A D E A L R A L D A D P
UniRef90_UPI0004082729 S G P Y G D G A G A L L V F K A D S E A A L L E E L K Q D P
UniRef90_M2Z415 C G P Y T D D S G A L L V D A D T A E T V R S L V S D D P
UniRef90_W5WL75 A G P W A A D D G A L L A F E A D E A A L R G Y L D A D P
UniRef90_UPI000466AB61 A G P V D G D T G G M V V Y R A Q D R E H L Q R I L D A D P
UniRef90_Q63UK6 A G A L A D P A D E A V L V F D A P S P A A E A F A Q A D P
UniRef90_I2G3J9 G G A L L E I D D Q D V G P G P H M G G S A L V V L G E S V E D V R Q R V M K D E
UniRef90_M5EIF1 S G P L V E D D G I T M K G S L L I V D A D S R G A V E A F N G A D P
UniRef90_UPI0004622574 G G A M L S P N D K P D V E K K M I G S F M I L E C D T Y E D A K K M I E E D V
UniRef90_Z9JUR9 S G P Y T D E D G G A L L I L Q G E T A A E V L S V L D P D P
UniRef90_K0KG81 S G P Y T D Q S G A V L V Y E V A D E A E L R E L L A A D P
UniRef90_UPI0003B2FBD6 S G P L N D S P E G A L L L R I I D D T D E A T A L L A D D P
UniRef90_G4R6E3 A G A M R A E P G G S P V G G S M L W I F E A E T R A E V I K I I A E D P
UniRef90_W4KMX1 G G V T P E T T N P V P E R K V T G S M L I V E D S V A E V R K I I E V D C
UniRef90_UPI000477493E Y G P L T V D G T G E A V G S V F V V I E A P A R E A V E R Y F A T D P
UniRef90_F5L4C6 N G R F T D G T G G L V I Y K A A S L D E A K S Y A E N D P
UniRef90_UPI0002DEEB2A A G P L L G A A G P V G S L M V V D F D D E A H V I Q A W L A E E P
UniRef90_W5TMH7 T G P Y A D G S G A L L F S A V D A A T M E T L L A E D P
UniRef90_UPI000370E3B3 A G A L E S P V D T A A L L F E G D S P A A A E A F A N A D P
UniRef90_D5X2B8 A G S L R T E P D A V P Q G M W V V I E A P T K E D V V G L I E S D P
UniRef90_E9UZ21 R G P T F A D D D T L T G S V H I L D L P D A A A R S F A F E E P
UniRef90_V6MBZ7 A G P F T D K Q G G L V I Y K A D S M E A R H L A E A D P
UniRef90_W7W2B8 R G P T L A D D G S P T G S V H I L S H P A A A R A F A F D E P
UniRef90_UPI0003750FA4 G G A F D D G K E A G L L F K V G N K Q E V A H F V L N D P
UniRef90_N1UU41 S G P Y A D G A G A L L L F T A D E A S L L Q E L K Q D P
UniRef90_B6A3C1 S G P S A P P A E G K G S T A V V I A D V E T L A E F E T F S A G D P
UniRef90_S3XAE4 S G P Y V G T D R D R A L L I F E A D Q A A L I A L L D A D P
UniRef90_V4Q109 G G A L A G P A D G G V L L F L G A D S V A E S F A Q A D P
UniRef90_UPI0003B61BEA A G P T S D L S G E L M E G C G L I I Y R A D S M E S A R Q L A D A D P
UniRef90_A0A024RGK0 A G A L T D P L D S G V L L F R A E C V E Q V I E Q Y A A Q D P
UniRef90_A7TNS1 A G A L Y N D D G S F A G S H L Q I V A D T K E Q A L E V V K G D V
UniRef90_UPI0002D8E270 L G P T K C T R Y L F G I F N A E N E K D V K E L L E K D I
UniRef90_UPI0004651A44 S G P L P A H E G A P A G A L L V L D G E T P A V A A V L D E D P
UniRef90_UPI0004621C59 G G G L L P A D T D A D A A T K M T G S F I I A Q A E S I D A L W A L L K K D I
UniRef90_E3KZR6 A G A M L E S D E S N N F D P K M I G S W L I K A R S I D E A R R L C L N D I
UniRef90_W8A632 S G P Y A D G S G A L L L V K S E D L E S V I T K L F E D D P
UniRef90_UPI00025596AE I G S A I L G E S G G I G N F G V L E A A S L A E A R A F A E G D P
UniRef90_E6J673 V G P F V D G S G A L L L V E A D D D E A A R S L V N D D P
UniRef90_D2PT88 R G P T L T E D S E E A E T T G S L H I V E L A D V D A A R A F A Y D E P
UniRef90_D3Q0P1 R G P T L S D D D G E E H T G S V H I V D L D D R A A A D R F G D E P
UniRef90_K6ZS86 A G P L K D D S L I I G S L Y V L E A D T I E Q A E Q L H R D P
UniRef90_J6EXT4 G R A F L D D K P H E D Q L S G M D G S V M I L R Q P T I E A A W D R I K A D E
UniRef90_K0F8Z4 S G P Y P D G S G A L L V F Q T A D A D A L H A L L A V D P
UniRef90_UPI00034BD81D A G P L W T D D G Q Y F E G D G M L I Y R A T S V E E A T A I A Q A D P
UniRef90_M2XJV5 T G P Y A D G S G A L L L V S A D E D A A R T L F R T D P
UniRef90_K6YR01 A G P L K D N G E I V G S L Y V L A T E G I D E A K A I F S D P
UniRef90_UPI0003713FFD A G A L N D P V D T A V L L F T G E S P A A E A F A K A D P
UniRef90_C8V4J7 G G P S L A A H P K A A G E D A I V G S V M C I R A G S E E E V R E M I R N D P
UniRef90_M8B6R5 S G P M S A V A D G P S A A L I A Q A R S I E D V I A F S D A D P
UniRef90_K0KNL3 V G A I F H E I P E D D K P K F A G S S L N V V A N S R E E V I E L N Q D I
UniRef90_I2H1Y2 G G A L L D D N G N M I G S H F E L K V I E T K E E A M K L I N E D P

UniRef90_C1B3D9 F A V H G L V P D Q R I L L H W T P V L

UniRef90_J7S504 F A K E G I W D

UniRef90_N9UWMO F T L A G I R E S L V I Q P W L K A

UniRef90_UPI0003B3B265 Y A Q A G I V K S M T V R E W S P V

UniRef90_UPI00035DAA32 F A V E N L V E T S T I V E W K P V M

UniRef90_K0YQX7 F K E A G V I R E R I I G E W N P V I

UniRef90_UPI00035E1D82 Y A L E G V V A Q R T V R E F K P V L

UniRef90_UPI00035C3C0F Y T K A G V V A T A D I R E W A P

UniRef90_A4S089 Y Y V A G L V P R Y A L R P W M V V

UniRef90_UPI0003771AED F S R A G V I D A V R F A Q W Q P V F

UniRef90_R4LCF4 N Y Q A G V Y R D V L L R R W Q N A L

UniRef90_UPI000380D31C Y F L E G V V A E R T V R E F K P V I

UniRef90_V4NNZ1 Y V V N G L V R C W K V R E W T V

UniRef90_W6Y5M8 Y T T E G V W D K A Q I F P F K S T L

UniRef90_UPI000346B0B9 Y G R A G L Y S R I T V D P

UniRef90_A0A059DKN1 F E S A G V Y A D T E I K V F R

UniRef90_H3NVV6 Y A Q A G L F Q D V A I T R W R K T L

UniRef90_UPI00045EA9E4 F A R E G L I A R T V V R P W D I V I

UniRef90_N4VXC3 Y A K S D V W E K A Q V I P Y

UniRef90_C0ZYL0 F A I A D L I E K V R I T E W V P V L

UniRef90_UPI00016A33A7 F V T G G V V S N W T L Q E W Q E V L

UniRef90_UPI00035DAB14 Y Y V E G A V D E R T V R E F T P V L

UniRef90_B3R6N2 F W T Q G L R E R V E L H S W H R A F

UniRef90_A0A024JJ52 Y V S E G V W D

UniRef90_M1VGT1 Y Q E S N V F E H I H I F G F Q P I I

UniRef90_A2C130 Y W R E G I W T D F E I Y S W T Q A F

UniRef90_W5XSC7 Y W I E E L V Q K R E I R E W N P V I

UniRef90_A0A031JMD7 Y V T E G L V E R W N V R R W V T V

UniRef90_J6CX03 Y V E A G V Y A D V I I K P F K R V F

UniRef90_S8F4L5 Y Y K A G L F D N A N I K

UniRef90_M2QLY8 Y W T S G V W D R V A I H P F Y W A

UniRef90_Q75CT8 F A K H G V W E N V V L Y P F G A

UniRef90_W9FMZ2 F W K A G L Y R D L T V V E

UniRef90_UPI000380AE3D L V R H G V V T E R T V R P W K V V L

UniRef90_C2GI95 F H K K E K I A S R T I K E W D P V L

UniRef90_R7SQL6 Y Y S S G V W D K V T V T P

UniRef90_UPI0003820202 Y T A A D V Y E I A S L Q E W Q Q L F

UniRef90_M1JV02 F T K A G L R A V V F I Q P W I R A

UniRef90_A0A021VL03 F R Q A G V L A A R T A R E W D P V

UniRef90_S6GGU3 Y T T A

UniRef90_H3GX85 Y V L N D L V T S Y S I R E W T V V

UniRef90_C5BV45 F A A A G I I A D R E A R A W E P V I

UniRef90_UPI0004082729 Y N R A A L V S G M R V K E W N P I L

UniRef90_M2Z415 F V V H G L V P Q H R I T G W T P V L

UniRef90_W5WL75 Y K A A E V I S E T R I T E W N P L L

UniRef90_UPI000466AB61 Y S V E G V I A E R T V Q E F T P V L

UniRef90_Q63UK6 Y V A N G L V K R W R V R P W T V V I

UniRef90_I2G3J9 Y V Q G N V W D K L K L W P F L Q A

UniRef90_M5EIF1 Y R K

UniRef90_UPI0004622574 Y W T G N V W E K T V I R P F

UniRef90_Z9JUR9 F R R E G V V L E R S I R P W N V V I

UniRef90_K0K81 Y T P A G V V A E T R V H E W Q T V M

UniRef90_UPI0003B2FBD6 F Q R E G L V T E V S V R S W D P V I

UniRef90_G4R6E3 F Q I H G L R S S T T I N A W G T A

UniRef90_W4KMX1 Y W T E N I W E K L E I R P Y

UniRef90_UPI000477493E F R M G G V W E R V R V D C F S P

UniRef90_F5L4C6 Y V L H G A R G C E I H E W E M V

UniRef90_UPI0002DEEB2A F T Q N G L F A Q L D V Q L F

UniRef90_W5TMH7 F A Q E G L I T D K R F V E W T P V M

UniRef90_UPI000370E3B3 Y V A H G L V K S W R V R P W K T V

UniRef90_D5X2B8 F F T S G L R A S Y E L L H W S K A F

UniRef90_E9UZ21 G Y Q A G A Y R D V M L R R W H N S L

UniRef90_V6MBZ7 V V V E G A R T L E L R E W N P

UniRef90_W7W2B8 T Y Q A G A Y R D V M L R R W T N M L

UniRef90_UPI0003750FA4 Y Y K A G L V T S W E A K L W H V V I

UniRef90_N1UU41 F N V Q N L V S A L K V T E W K P V I

UniRef90_B6A3C1 F V R A G V Y R S V D V F E W R P S F

UniRef90_S3XAE4 M S V N N I I E T R T V T E W N P V I

UniRef90_V4Q109 Y V V N G L V K S W K V R E W S T V

UniRef90_UPI0003B61BEA M H K T G A R S Y T L R K W

UniRef90_A0A024RGK0 Y V V N G L V T R W H I R E W

UniRef90_A7TNS1 F A T G G I W D S I T I Y K F G C A

UniRef90_UPI0002D8E270 Y W E K G I W I S L E V Y P W I Q A L

UniRef90_UPI0004651A44 F A R A G L V A E R A V R P W S P V I

UniRef90_UPI0004621C59 F Y T S G V W E K V F V T P

UniRef90_E3KZR6 Y A K E S A W D K L Q I T P V K T

UniRef90_W8A632 F N R E G L L E D K S L A E W L P T M

UniRef90_UPI00025596AE L N R E G L V A E I T E M T P

UniRef90_E6J673 H C L R G L V S E I I V R E W R P V F

UniRef90_D2PT88 Y Y R A G A F E S V L L Y G F R R

UniRef90_D3Q0P1 F W Q A G L Y E D I T

UniRef90_K6ZS86 Y Y L A D I W A N V K V H E F N

UniRef90_J6EXT4 Y W K Q G V W E K V V V R E

UniRef90_K0F8Z4 F A R E Q L I D D V R V V E W L P V L

UniRef90_UPI00034BD81D M H T S G A R T F K V R P W

UniRef90_M2XJV5 F A R A D L I E S A R F T E W T P V M

UniRef90_K6YR01 Y Y L A N I W Q T V T I H E F N

UniRef90_UPI0003713FFD Y V Q A G L V K R W R V R E W T T V

UniRef90_C8V4J7 Y A K L I G Q V S I R

UniRef90_M8B6R5 F V I H G V Y N R L H I L S W T P T L

UniRef90_K0KNL3 F A K E G I W E N A L I Y P Y G V A

UniRef90_I2H1Y2 F V K G G V W D S I Q I R K F Y C V

UniRef90_C8X9S5 1 10 20 30 40
UniRef90_W9W8V2
UniRef90_E9D0X1
UniRef90_UPI0002626E03
UniRef90_F9XEF4
UniRef90_H0A8M2
UniRef90_U4WRA6
UniRef90_L7KKC7
UniRef90_C2CNZ1
UniRef90_Q5AUZ7
UniRef90_H1S8R0
UniRef90_F6EKK4
UniRef90_C8XH95
UniRef90_W4G9M6
UniRef90_Q5Z0V4
UniRef90_M1P7R0
UniRef90_UPI000371E71D
UniRef90_W1TPE8
UniRef90_D3Q5Y0
UniRef90_F8JL58
UniRef90_W2BUT1
UniRef90_UPI0003736C49
UniRef90_W9ACE7
UniRef90_UPI0003700386
UniRef90_UPI000368FC94
UniRef90_UPI00041FC221
UniRef90_C5T8S7
UniRef90_G7UJG9
UniRef90_D5P083
UniRef90_M5FNY3
UniRef90_UPI00037630B4
UniRef90_E0DFJ8
UniRef90_D1C739
UniRef90_F5SGY6
UniRef90_A9UWG7
UniRef90_H3SDA2
UniRef90_F4CL98
UniRef90_A5DMD2
UniRef90_L1MG13
UniRef90_H6MYZ0
UniRef90_A0A022LQA3
UniRef90_E2S1M4
UniRef90_A1TIB9
UniRef90_E6SFE7
UniRef90_UPI0003454A8A
UniRef90_F0L2E6
UniRef90_UPI00047AFB7B
UniRef90_B2GL74
UniRef90_L8HCG9
UniRef90_C1B436
UniRef90_Q46S42
UniRef90_E3B6B4
UniRef90_I6XVU4
UniRef90_UPI0003B42594
UniRef90_A0A10ZYH8
UniRef90_UPI00035F3DC5
UniRef90_UPI00047C8D48
UniRef90_X7YWC2
UniRef90_D4Z910
UniRef90_W5WAD2
UniRef90_M5FSA6
UniRef90_G8BR75
UniRef90_H8VWJ7
UniRef90_UPI000349E7CE
UniRef90_K8XL14
UniRef90_Q140E9
UniRef90_QQRZH9
UniRef90_H0EQQ1
UniRef90_F8I5T5
UniRef90_F4Y9I7
UniRef90_UPI00044088DA
UniRef90_B9QUL1
UniRef90_UPI00037728F8
UniRef90_X4RAE2
UniRef90_Q7UE98
UniRef90_K0YRM7
UniRef90_Q93DQ4
UniRef90_A0A024PMP1
UniRef90_B9J9X7
UniRef90_J2KT27
UniRef90_UPI0002F9A90B
UniRef90_W4PZJ4
UniRef90_UPI00035E7FED
UniRef90_UPI000404411C
UniRef90_C3XMB5
UniRef90_U1Y6B2
UniRef90_A3Y6U1
UniRef90_J4H500
UniRef90_G0CS68
UniRef90_F6G7Y5
UniRef90_UPI0004668446
UniRef90_V6JXN3

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

UniRef90_C8X9S5 S G P L L 50 T S G G P G A L L I L D A D D A D H V A R L L D Q D P
UniRef90_W9W8V2 G G A L L S P S Q P G E A P A V N G S V M I V Q Q E N A D A V R Q R L E N D V
UniRef90_E9D0X1 G G A V L S H H P K N G E A P P M K G S A L I V I Q A E D A D S E E I R Q A V L D A K D V
UniRef90_UPI0002626E03 A G P F A D D S G G V F L I Q A E D A D S E E I R Q A V L D A K D V
UniRef90_F9XEF4 G G P Y L G G P V Q D D A P M D M L G S V I L V R A S T R E E A L G E L R K D
UniRef90_H0A8M2 G G P V L D A E G K P C G S L L L V E A P D E A A A A F A A A D P
UniRef90_U4WRA6 K G P F A D G S G G M V I Y I A D T L E E A T Q I A E S D P
UniRef90_L7KKC7 S G P Y P D G S G A L I L V R G S D L D E A E A F I A N D P
UniRef90_C2CNZ1 S G P F P D A K G G A L I L V R G S D L D E A E A F I A N D P
UniRef90_Q5AUZ7 A G P F F E K H T P G N P R R P F K G S V M V V N D V S K E Q I W E R L K S D P
UniRef90_H1S8R0 A G A L C G E D Q Q P Q G L F L A I N C A E R A Q A G E F I A D E P
UniRef90_F6EKK4 A G A F A D G T G A L I L V A A D D V D A L R K L L A D D P
UniRef90_C8XH95 A G A Y P Q G P A G A L L V F R A D S A E A V A S L L E T D P
UniRef90_W4G9M6 G G A F A D P V D G A A F V I D A D A A Q V E A F A K S D P
UniRef90_Q5Z0V4 I G T F G D P Q T E G S M A I F R T R E A A E E F A R A D P
UniRef90_M1P7R0 S G P Y T D G G S A L I L E S A T V A D A E E L M N Q D P
UniRef90_UPI000371E71D S G P Y V D G R G S A L I I E G A E T T D A L A V M D E D P
UniRef90_W1TPE8 V G S W V N D P H P G A L I A V E A E S E D A L A L A D E D P
UniRef90_D3Q5Y0 A G P F P D Q S G A L I F D V D S E A E V D A L L D D P
UniRef90_F8JL58 A G A L A E P V D R A L L V W R T D D P S V V E D F A R H D P
UniRef90_W2BUT1 G G P L I D A A A S A L L I F K A S D E K D C E E M I G K D P
UniRef90_UPI0003736C49 A G A L A D P F D R A L L V W S A G S E D A V Q A F V A D P
UniRef90_W9ACE7 K G R F T D G A G G L V I Y Q A D S L E E A E V L V K A D P
UniRef90_UPI0003700386 R G P T L S G D G E D H T G S V H I V D V D D R A A A E R F A Y E E P
UniRef90_UPI000368FC94 R G P T M A D D G E T P T G S V H I L D L P D A A A R A F A F D E P
UniRef90_UPI00041FC221 A G P W A D D S G G F L V I K A A D R A E L D A L L A V D P
UniRef90_C5T8S7 A G S L R R K D P G L P P V G G L W V V R A D S R A E V Q A L V E T D P
UniRef90_G7UJG9 A G S L R E K N N D Q P V G A L W V V K A E H E E A L S I F S D D P
UniRef90_D5P083 S G R L T E C D P L G A L L I I K G D S V E E V E I M N Q D P
UniRef90_M5FNY3 G G A I L D K A G N M V G S G M V L S R A E T E E A W A V I K A D H
UniRef90_UPI00037630B4 G V P L I E R D G R I A G S L M V L S G E T E A D R D A Y L A E D P
UniRef90_E0DFJ8 S G P Y T D G D G D A L I V I Q L D D I A D A E A L M A D D P
UniRef90_D1C739 S G P F T D D S G A L I I Y E A E S E E E A R R L E T D D P
UniRef90_F5SGY6 K G P F A D G S G G M V I Y I A D T M E E A R E L A E G D P
UniRef90_A9UWG7 G G A A A N P V D A G F L I F R S P Q E A R E F A E Q D P
UniRef90_H3SDA2 K G A F G D G S G G M V I Y V A D S M E E A R Q L A E N D P
UniRef90_F4CL98 A G P L S D P F D G T A I G V I F T S R E A A E Q F I A G D P
UniRef90_A5DMD2 A G P L Y H D I E K T K F A G S T F H L I A N S K E E T I E F L K K D
UniRef90_L1MG13 G S G P F T D G S G G A L I T L D A A T L D D V R A L M N S D P
UniRef90_H6MYZ0 S G P Y P D G T G A L I M I R V D M I D A A E A F M A N D P
UniRef90_A0A022LQA3 V G P Y T D G S G A L L V E A S E A G A R T L V A E D P
UniRef90_E2S1M4 T G P L T D S K G G A L I V G L A D V A D A L L M D N D P
UniRef90_A1TIB9 G G L R Q E M G Q T P K G G L W V A E A D S K Q I E L L K S D P
UniRef90_E6SFE7 A G H D E F S E G E V T V E E P P N G A L I I V E A D S L A D V L A T F E E D P
UniRef90_UPI0003454A8A A G A L T D P V D G A V L L F T G E T P A V A E D F A R A D P
UniRef90_F0L2E6 S G P M Q A E S G S A A A L I I A E A R C I E D V M A F S D A D P
UniRef90_UPI00047AFB7B R G P V F G T E D E D T L F G S V H I V D L P D A V I T A R A F A F D E P
UniRef90_B2GL74 S G P L G D D A A L V V L E A A D A E V E R L T Q D D P
UniRef90_L8HCG9 G G A F A D A A G A A Y V F K V P R R E D V E E F V R A D P
UniRef90_C1B436 S G P F A A G E D P G A A M I Y D A D R Q D V V D V V E G D P
UniRef90_Q46S42 A G A L C G E D G L P R G L F L V L D C E R E Q A E A F I A N E D P
UniRef90_E3B6B4 S G P L A E P D G A L L V I A A P T R E D V A E R L D R D P
UniRef90_I6XVU4 G G A Y P D A T P P S A L L V F K A E S A E T V S E L L T G D P
UniRef90_UPI0003B42594 K G P F A D G S G G M V I Y I A D S L E E A R E L A E Q D P
UniRef90_A0A010ZYH8 R G P L L T G D G S V A T G S L H I V D L P S A A R A F A F E E P
UniRef90_UPI00035F3DC5 S G P Y T D G L G S A L I I R L E S I D D A I Q L M N D D P
UniRef90_UPI00047C8D48 A G P L W T D D G E Y F E G D M L I Y R A G S V S E A Q A I A D G D P
UniRef90_X7YWC2 A V G T T F A E G G D L V G S T Y L V D V D D W N A A R A F I A E D P
UniRef90_D4Z910 A G P L V D A N G G L M V Y D V P D R A A L Q E V L D S N E P
UniRef90_W5WAD2 G G P M V T E E G K M T G S T M F I N A D S R E K V R A I V S E D T
UniRef90_M5FSA6 G G A M F N E E G S P V G S H I Q I V A D S R E Q V L E M L K K D V
UniRef90_G8BR75 A G A I Y T D E S K T N E E G S P V G S H I Q I V A D S R E Q V L E M L K K D V
UniRef90_H8VWJ7 A G A I Y T D E S K T N E E G S P V G S H I Q I V A D S R E Q V L E M L K K D V
UniRef90_UPI000349E7CE S G P F G P D D A P G A L L L R A D S A A A L A Y T E P D P
UniRef90_K8XL14 C G P Y A D D S G A F I L V I E S D T T A T V A Q L F T Q D P
UniRef90_Q140E9 A G A L F G E D D R M D G S L M V V E T D S L A E A K A V V E R D P
UniRef90_Q0RZH9 S G P L A D H T G A Q F I V D A D E D T V T R L F T H D P
UniRef90_H0EQQ1 G G A L L D E V P K E G E A M G I V G S A L V C V A S K E E I F E V L K N D
UniRef90_F815T5 A G P F P D G S G G L V I Y R A N S E D E A R T L A E Q D P
UniRef90_F4Y917 G G A V L D E A E T A P R G S V Y V F E A K T A S E A R R F T D E D P
UniRef90_UPI00044088DA G G P Y M S P E S V S G G E K K A I G S A F V I K V Q S Y E A A K K L I E D D P
UniRef90_B9QUL1 A G P F W A D D E H T W N G E G M V I R A D S L E H A R Q I A E T D P
UniRef90_UPI00037728F8 F G R F T D G A G G L V I Y Q G E N L E Q V E S W V K Q D P
UniRef90_X4RAE2 S G P L E G N G A L L I V D A D D A V G A L A V V D A D P
UniRef90_Q7UE98 A G P F W T S D E K F C E G E E M I I V R A D D T E A R K I A D A D P
UniRef90_K0YRM7 S G F L R D R G E N D A L I I R A N S A Q D V F K I L A D D P
UniRef90_Q93DQ4 S G P M X D N P T A L L I W X A E S L E A L A K L L D Q D P
UniRef90_A0A024PMP1 K G R F T D G T G G L V I Y K A D D L S E V E E M A K L D P
UniRef90_B9J9X7 A G P L S R Q G D A F A G G L W L A E A D D A E A V D R L V K E D P
UniRef90_J2KT27 A G P F L E Q N K E N Y R G M F I F N T K S K E E A E Q W V K T D P
UniRef90_UPI0002F9A90B A G P H P A I D S N D P G A A G F T G S L T V A E F D S L A A A Q A W A D A D P
UniRef90_W4PZJ4 K G P F V D G A G G L V I Y K A D S F E A A K K L A E A D P
UniRef90_UPI00035E7FED A G P W A D D T G A L H I Y E V A D E A E L R E I L S R D P
UniRef90_UPI000404411C A G T L A E P V D T A L L L F R G D S A G V A E R F A A A D P
UniRef90_C3XMB5 S G P Q N P K K G L V I G K F D S K E S V E T F F K Y D P
UniRef90_U1Y6B2 A G P F T D G K G G M V I Y I A D T Y E E A L D L A Q N D P
UniRef90_A3Y6U1 G G G L R N E P G A A F V G G L W L E V I E S F E R A E V L V Q N D P
UniRef90_J4H500 G G G V L T P E S V P G A E E I M I G S F L I C A G E S L E A V L E T L K K D V
UniRef90_G0CS68 T G P F V D G D G G A L L V V R L P T L D D A T A I M D R D P
UniRef90_F6G7Y5 S G P F F P R E G G G L A R G A S R E A D E A I V A R D P
UniRef90_UPI0004668446 V G S A I L T E S G E T A G N F G L E A R S L E A D R K F A E G D A
UniRef90_V6JXN3 A G P L T G E N A G I L L Y E A D D R E H L I Q R L L D E E P

UniRef90_C8X9S5 F W S L G L T A D R Q L R G W A P F F
UniRef90_W9W8V2 Y H K K A I W D
UniRef90_E9D0X1 Y A T S G V W D
UniRef90_UPI0002626E03 Y V V E G A L E S F T V R E F K P T L
UniRef90_F9XEF4 F A R K A V W D Q A L V L P F K S T I
UniRef90_H0A8M2 Y A K A G L F A S V T I R P F R A V Y
UniRef90_U4WRA6 Y V V E G V R R L E L H Q W N
UniRef90_L7KKC7 F N A H Q A V D G V R V V E V T Q I Y
UniRef90_C2CNZ1 F F T S G A V T A R D F R E W N P V I
UniRef90_Q5AUZ7 Y I Q E R I W D N A R V I P F
UniRef90_H1S8R0 Y C R A G L F E R T E V D R F N Q
UniRef90_F6EKK4 F A T G G F I H G V Q I R E W S P V L
UniRef90_C8XH95 F R H H G L V T G C E I R Q W
UniRef90_W4G9M6 Y V I N K L V T K F D V R P Y N V V
UniRef90_Q5Z0V4 F V L N G V V K N W V V R A W
UniRef90_M1P7R0 F H R D R V L D D R T I R A W N P V L
UniRef90_UPI000371E71D F H R E G V L A G R D I R P W N P V L
UniRef90_W1TPE8 F F L A G F I T D R K V H Q W N V I I
UniRef90_D3Q5Y0 Y Y R A K G V T V V R K Q P W N P
UniRef90_F8JL58 Y V R E G L V T R W T V R P W S V V
UniRef90_W2BUT1 M Q T E G V M E Y S I T E W N P V
UniRef90_UPI0003736C49 Y L A N G L V T E W R I R T W N T V
UniRef90_W9ACE7 Y V E K G A R N Y E V H E W T M V L
UniRef90_UPI0003700386 Y W S A G F Y E P L T V
UniRef90_UPI000368FC94 G Y Q A G A Y R D V L L R R W R N L L
UniRef90_UPI00041FC221 Y T V D G V A A E R V I R E W K I V L
UniRef90_C5T8S7 F W R H G L R A S C E I L H W S K A F
UniRef90_G7UJG9 F W I H G L R A S V E V L S W S L A F
UniRef90_D5P083 I Y S G G F V S E R L V R K W N L A F
UniRef90_M5FNY3 Y W A N N V W E K I L V R P F R
UniRef90_UPI00037630B4 F A R E G V W T R I D A M P F R I A L
UniRef90_E0DFJ8 F H T N N A L T G R V F H T W N P V L
UniRef90_D1C739 F H A A G V F V S Y E L K P W Q Q V F
UniRef90_F5SGY6 Y V V K G V R R L E L R E W K
UniRef90_A9UWG7 Y V R G E L V R K Y E I R E W S V V
UniRef90_H3SDA2 Y V V E G V R H L N L R E W K
UniRef90_F4CL98 F V L G G V V A R W T V R G W
UniRef90_A5DMD2 Y Y E K G I W D S V V A H P
UniRef90_L1MG13 F Y V E G A L T G R S F H T W N P V I
UniRef90_H6MYZ0 F N A H Q A V D S V R I V E F T Q V Y
UniRef90_A0A022LQA3 H C L R G L V S D V T V R G W M P V Y
UniRef90_E2S1M4 F Y Q A G C I T G R S F R E W N P V
UniRef90_A1TIB9 F F I A G L R Q S H E I L H W C K A
UniRef90_E6SFE7 Y W A G G Y V L R R V V R E W N P
UniRef90_UPI0003454A8A Y V R E G L V T R W Q V R G W Q T V
UniRef90_F0L2E6 F V I H G V Y K R I R I L N W T P T L
UniRef90_UPI00047AFB7B C Y Q A G A Y R D V L L R R W
UniRef90_B2GL74 L V V H G V V T E H T V R E W S V T I
UniRef90_L8HCG9 Y F E H G L V S H Y S I K E W
UniRef90_C1B436 F R K H G Y V A S Y D I T E W L P I
UniRef90_Q46S42 Y N R A G L L E H W E V E P
UniRef90_E3B6B4 F L L E G I V V E R T I R P Y T P V L
UniRef90_I6XVU4 F R S N D V L A D V R I V H W T P V I
UniRef90_UPI0003B42594 Y V K E G V R R L E L H E W K M A
UniRef90_A0A010ZYH8 N Y Q A G V Y R D V L V R R W R N
UniRef90_UPI00035F3DC5 F H K E K V L A G R S L R E W N P V I
UniRef90_UPI00047C8D48 F A L E G A L A A V K A T E W K P
UniRef90_X7YWC2 M H A S G A R T Y R I R P W
UniRef90_D4Z910 M T V S G A R Q S I D I L E W R
UniRef90_W5WAD2 Y V Q A G L V A Q T L V R E W N P
UniRef90_M5FSA6 Y Y K S G V W D P A N I A I W
UniRef90_G8BR75 F A R E N V W E S A I I Y K F D C A
UniRef90_H8VWJ7 Y Y K E G I W D S V Q I Y P
UniRef90_UPI000349E7CE F R T E G L V S D V S V R E W I P V
UniRef90_K8XL14 F V I H E L V P E H R I L E W T P V M
UniRef90_Q140E9 F V V N G L Y A S Y E V K R W T
UniRef90_QQRZH9 F A Q A N L V A K V L I G T W N P V
UniRef90_H0EQQ1 Y A K N E V W D
UniRef90_F8I5T5 V V A Q K A R T L T L K T W S P
UniRef90_F4Y9I7 L T V A G T R S A I T I R P W R Q A
UniRef90_UPI00044088DA Y Y V Y D V W D K A K I L P F
UniRef90_B9QUL1 M H S S G A R S F T V R P W
UniRef90_UPI00037728F8 Y V V N D A R T Y E I H E W D M V
UniRef90_X4RAE2 F N S A C L I A D R E V L E W T Q I Y
UniRef90_Q7UE98 M H A K G A R S Y V V R P W
UniRef90_K0YRM7 F A L Q G F V E T C K I R E W V P T I
UniRef90_Q93DQ4 F D I A G Y I G E R T I T E W N P V F
UniRef90_A0A024PMP1 Y V A K G A R N Y E I R E W D M V
UniRef90_B9J9X7 F W S A G L R K S V Q I L V W N R V F
UniRef90_J2KT27 A V I Q A G V F S Y E I F P W
UniRef90_UPI0002F9A90B F V A A G V Y G N V V V K P F R Q T L
UniRef90_W4PZJ4 Y V I Q G V R T L Q L H E W G M V
UniRef90_UPI00035E7FED Y T A V D A Y D I A V L R E W T P L L
UniRef90_UPI000404411C Y V L S G L V H R W R V R P W
UniRef90_C3XMB5 Y A Q N N V A T Y Q V L E F T P V L
UniRef90_U1Y6B2 V V V E G A R T L E L R E W
UniRef90_A3Y6U1 Y Y V S N L R N Y E I L V W G K A
UniRef90_J4H500 F Y H S G V W E K L V I L P A K V A
UniRef90_G0CS68 F Y A E G A L T G R T A H T W N P V I
UniRef90_F6G7Y5 F V V E Q L V E A R V I
UniRef90_UPI0004668446 F N L A G I V E T I E L T P
UniRef90_V6JXN3 Y V E G G I V A R T R V R E W A P

1 10 20 30 40
UniRef90_D5NUF1 Y F A V T I Y D Y N A N N P R L D E V R P Q H R E F I E T L H N Q E Q I L L
UniRef90_D5BP43 Y I V L F E D D E A F A A E R Q H N M K A H L S F L A A H A D Q Q G R L I
UniRef90_F8F4S7 Y Y V V M L P M L D E E K S R V Y R P E H R L A Y F L E E Q R L D G G S L F A
UniRef90_M2XB50 A V T Y V Y G G D P Q A L A T E H R P R H R D F L R E L L D G S L V L
UniRef90_I4FOY8 Y R A V E D F M P L A L Q H G P A H V A R L H E F R D R G L L M
UniRef90_J9NJ72 Y L V I T P L D P D V L A K R Q V L L K A P H N Q D A A P L V K A G R V P F
UniRef90_L8DJH7 L I A V T Y L Y S P T T A D G R D T H R A A P R A W L A G L F E Q K T L I S
UniRef90_F2LA52 M Y Y L L T Y D L V D N Y L E R R G Q Y R D E H L A L A Q A A T E R G E L L L
UniRef90_A0A011HAJO M Y Y L L L Y S F I L D N F E S L R K P Y R E A H L K L V D E Y F K S G F L V G
UniRef90_A3VD09 M F F L M E N I H H P G K Q D E R D R L R P D H R D W V G S G G N G L C S V L
UniRef90_J2L5P2 M R W V A I F D D K P G M L A V R Q E R E P L H L A Y L R T H E S E I L L
UniRef90_E8V389 M K Y I N L C H E Y I D D L N R V J A E L R P A H R Q Y M A Q L D S E N K L W A
UniRef90_F5XDT5 M Q W I A I F E D H P D R L R L R T D L F D A H V E Y L H A R K K T I R L
UniRef90_A6WFL6 F F V V T Y A Y T P D S A A R D E V R P T H R A W L A S L G D I L V V
UniRef90_D7VW18 H I E D K A Q M S E L M K A R D A H H M N N I G K L A N E G K T I V V
UniRef90_I818B4 F A V E Y T Y D A D R S E E A D Q V R P E H H R A F L R D L L D Q G R L L A
UniRef90_UPI0003B30E3F Q Y F I I V P D H P S A P R L E V R P K H F T K I S Q E S P T N R C L F
UniRef90_G1XKN8 Y N V I I Y D L P N A D R S K V R A Q L P Q H V A D I P Q H V P N P I R S
UniRef90_C5MCO Q M Y F A V F L P M A D R E K S E R F R P Q H L A F L E K M R N A G H V R A
UniRef90_W3A909 M K T Y I F C I L K T G S N E E K T K Y F E G H M A N I N R L A D E G K L I V
UniRef90_V6S6V9 L Y V V F S D P T S G L G P V L E N L D P H V Q H Q T R L E M D G V M F A
UniRef90_J2J7D0 M M Y V A M L P I I D E A K N S Q F R P A H L E Y I N K L F L E G K V V M
UniRef90_UPI0002D3AF99 M L F V V I G S S A G K T R D E L M A I Y P R H K A F L D Q F L T R G E V V G
UniRef90_D6TXS7 F V V E Y A S P E T S S G R D H R T D H R A W L R E L E R R K I L V R S
UniRef90_L8DIU0 W L V Q I P N Q S G S A Q A R K D S F A E H M S Y N K T H I E A G R M V L
UniRef90_H9BFC0 L F V V D L T Y I A D F S K V D A L L E P H R A F L K S G Y D H G V F L A
UniRef90_B9QWQ5 Y A V L W T Y T A D A E K V A R H K D S H M Q Y I L K S L A A G G A I V E
UniRef90_A2SIL1 F Y A V F S T P A N G I E A V M E N L H E H L E H Q C Q I E A R D G I L V A
UniRef90_UPI00031BFA98 F Y V V F S K P T N G I G P V M E N V P V H L E H Q R K I E R E G I L V A
UniRef90_Q473C1 L Y V V E T P I V A A E Q V I K E T L P K H L A Y Q E Q L E R E G K L F L
UniRef90_UPI000362FE4C F V I L K T G K T N I T D K M T E L M R G H L S N I G K L A E E G K L T V
UniRef90_R9CVY9 A H R E Y L S K G Y E Q K T L L A
UniRef90_K6H666 M T Y V Y L M D N K K A L S K D I V E K H V Q Y L K K L D N S G K L L
UniRef90_E0QI02 M A F V L T L E F G A D E R R L A A R P A H R E R L T R L H A D G V L L M
UniRef90_UPI000367A79A W L I H I P D L P D A K E R R A A V F P Q H I Q R M K S D P Q D F W V E G
UniRef90_C7ZG99 Q F I I V L R Y V P I E T V D E Y V I A H R E Y L S K G Y E Q K L L L A
UniRef90_Q0RA3 M I Y V V L F K D N P D A P D L R R R H M A A H L K F L Q A N P Q I K A
UniRef90_A0A059IME4 M I Y V V L F K D N P D A P D L R R R H M A A H L K F L Q A N P Q I K A
UniRef90_UPI00037610CE A P E R L L A A R P A H R A H L N R L H Q E G H L L A
UniRef90_W4D0I6 Y V I L L S P T N Q D R R M E I R G H V K H L Q E L D R K G Q L V L
UniRef90_S8FR11 Q F I L W A P Y K P D F A A R Y K A H F D A H I A G G T K L V A A G V M K L
UniRef90_UPI00040A0268 Y F A V Q L P M L D E K K S A D Y R E S H L R Y L E E L T E K G H I F T
UniRef90_I4X0S5 Y F A V L L P M K D A D K S R E F R P Q H L A F L K D K R D S E Q V T A
UniRef90_I3TNE7 M Q F L V I A R D G T D A E A P A R R A A A R H L E N A R K M K A D S G H L I T
UniRef90_C4IAG4 M P Y L I S C F Y V V D G A K R L A I R D V H L E Y I L K F K E K I A L
UniRef90_E6TVS3 M R Y L I L L T P I D G V V L H N Q P F M P E H A V Y V Q N E Y N N G S I V L
UniRef90_W4QA71 M A Y A I L H M A K P E L N E K H R Q S H L D Y L T N L E E Q G K I F A
UniRef90_C5ZZ64 L F I L L Y T Y T K E L A E I T E K I L A S H R E Y L K T G Y A S G N L L A
UniRef90_UPI000379FDCC M E F F Y I H R S R P G S D E L R G E L R E A H W S Y M D G F A D E L I A
UniRef90_E3HXQ0 Q M L Y V V I R T P A D L S K F Q G L L E A H L Q W A T S A E K R G E L F A
UniRef90_U2JTX5 E N K K A L N M E L V K K H V A Y I L K K L D T A S G K L L L
UniRef90_A3JTK7 L F V V N T Q P A G D M E L V K A T L P D H L A Y I L G S L E T A G S L F L
UniRef90_D4B2F5 W I V M L P D K P G M L A K R V E V R K T S A R Y W N P G S S R W E F F A
UniRef90_F0F0T2 F I I A L T Y T A P L E Q V E Q H L A A H R Q F L D K H Y Q S G V F L F
UniRef90_UPI00047B1960 E L N D L Y R P Q H L E I L K Q L E G K G V Y K
UniRef90_V8CBP5 L F I T E V N Y T A S L E V I D S I V G E H R A Y L A K G Y E Q G F L L A
UniRef90_E2LTL1 L F Y V H A P D R E G T F Q K R L S V R P Q H L E L L K A N I A D G S V R V
UniRef90_G3ATA4 S I E Y N V I I Y D N P H A D R S K V R A E H V A N I P S N V P S P I L S
UniRef90_UPI000382AF6F D K R M D I I R A H V K H L Q E L E R S G Q L V M
UniRef90_D0TJ67 M F L A I L T Y K K P L T S E V D R F L A A H R K Y L A N H Y A D G D F I A
UniRef90_F0IG18 Y L I I L T Y Q K D L T E V E K H L E A H R T Y L D K H Y V S G H F I A
UniRef90_X0Z678 F Y A I I R P Y R P N K E E E E I M V D H F N Y L K S L M N Q K K L F L
UniRef90_F2JUW5 M F V V S I T Y S V A L S E I V D A L P D H I A F L D Q Y Y E Q G N F I A
UniRef90_C4GN10 L A E I E A A L P D H I A Y L E R H Y R A G T F L L
UniRef90_UPI0003607790 F A V T F Y D A P E Q F Q R L V E T Y P R H R A Y L D E F A A G G E V L M
UniRef90_UPI0002F3CF43 K N Q E V R S R H L A Y L E Q L Q R A G K V W G
UniRef90_R4T4D4 W F L V E I T Y V Q E K L A D V R P R H R K F L T D L A D Q G V V
UniRef90_R7WNT9 M A F F L V R Y C Y T D D T A G R D A H R A R H K D Y L S E A A E R G M L L G
UniRef90_H6RJM4 L R R A M L E R H W D Y M D Q F A G R M V F A
UniRef90_W1SDW2 E K N K E V L P R H Q Q Y L D E L D A Q G K I F A
UniRef90_F2A3Q0 M L Y V V T L T Y R P M D D I K A H L D T H R E W L A E H L K A G T I I A
UniRef90_U5HBP6 Y L C I L L P D F V E G L S V R A S H L E H A A E G H K N G W I K E
UniRef90_UPI0003B5C42D Y F V V S Y S Y R A D N P R L D A L L S Q H D A Y V R E L A S A G R I V A
UniRef90_G8RRD5 Q T R P A H L E W L K G E V A A G R I V L
UniRef90_Z5XJE9 M F H V L T I T Y K P L D V V D Q S R P A H L A F L N D E V E A G R L L L
UniRef90_UPI00030D322A Y F A V F L P M K D E L E Q S R D F R P Q H L E F L K E G R D E G S L L M
UniRef90_A5GIP7 L E Q R R P H L E A H R A W V A K E T Q A G R R I R
UniRef90_U2QT1 F I A V L T Y K K S L E E V S K F R P E H L D F L E T Y Y K S G K F I V
UniRef90_UPI00037AC2FB M K Y Y V F A K D L P E K S E L Q K A I D A H L E Y L K S Y F D D G S I L V
UniRef90_UPI000237EDB2 M P I F I V R M D H P D G D G W G Q Y V L P H V L Y L K Q L I Q E G K L L A
UniRef90_UPI000378DFF2 W A V L F T D S P E M M D V R A R R D A H V A Y V R A H P E L L A
UniRef90_UPI000474AC4B L F V V L R K P R D L S R L A E L L E A H L M W A I V A E K R G E L F A
UniRef90_B2UH65 M L Y L I L F T Y R A P L S E M E R V L P A H R A H L D A H Y A S G H F L M
UniRef90_UPI0003801E55 F A I H Y T Y P D D A T E M L T I R P E H R E W L S G L S G L L V A
UniRef90_D3A1W9 F I V S L E Y I K D L A A V E T Y L S E H R A Y L E R Y Q A G V F V M
UniRef90_A5DSQ2 Y L V T V F D L P T A D R S K V R A Q H V K D I P A N V P N P V R S
UniRef90_UPI0002E666CF L Y V V L R T P V D L S R I N E L L P A H L E W A V I Q C E K R G L E A
UniRef90_F4CPE6 F L C F T E P A E G S D E D I R P N L D S H K Q W L S D I E R S A Q L L F
UniRef90_C7NFU0 F F V V R L T Y T A A L E E V D A V R D D H R A H L R V A V Q R G L I V A
UniRef90_X5L825 M F H V L T T Y V Q P L D V V D Q T R P A H I A Y L E E E V A A G R I V L
UniRef90_X7E529 M E V F V I E S T P A G D P E L L V K Q T L A D H I A Y Q A E Q E A G T L M F
UniRef90_G3AH47 M Y Y A A V F D F P D I D R T K V R P Q H F A E I L V P S V A N P I V A

UniRef90_D5NUF1 GS G P F T D S K 50 60 70 80
UniRef90_D5BP43 S A A G P L M D S V V D S G A R G G L L I L K L D T V D D V V T I M D G D P
UniRef90_F8F4S7 N G R F P D G S G G M V I Y K A D H L E E Q A Q Q W A A E D P
UniRef90_M2XB50 A G P Y D D D L P A G A L L L M R A E T P E A A L E L L A P D P
UniRef90_I4FOY8 V G T F D D D L P A D E P M N G D A M G V F T T R E A A E E F I A G D P
UniRef90_J9NJ72 F G S T L A H H S P E G Q Q V A E N G T V M I I K A E S D A A S V E T E L F A Q D P
UniRef90_L8DJH7 S G P Y A D G S G A L L L V D G P D A A S V E T E L F A Q D P
UniRef90_F2LA52 A G A L A D P A D C A V L V F T G A S P A A A E A F A H A D P
UniRef90_A0A011HAJ0 A G A L G V D L D A G M L V F K V N N E H V T N K F L E S D P
UniRef90_A3VD09 I G S A L W N D D G D A I G H W G V L E A D T L A D A R T F A E G D P
UniRef90_J2L5P2 A G G L R E A P G G G F V G G L W V L E V E S R D R A V A L V E N D P
UniRef90_E8V389 A G P F S D G T G A L F I Y E A A D A H A A E E L L H A D P
UniRef90_F5XDT5 A G A L R S D S D A P W V G V W I I S A R C R M D A V E C C C S D P
UniRef90_A6WFL6 S G P T D A D G A F L V F E G A D A A E V G A V V D A D P
UniRef90_D7VW18 A G P F L E K N K E N Y R G M F L F N T K S K E E A E Q W V K T D P
UniRef90_I818B4 A G P T L A A H P K E P E D K E T S S V M M F R A R T E E E V R A I V S K N A
UniRef90_UPI0003B30E3F S G P W V G A A P G A L L L V V A D D T A A V E S L L D A D P
UniRef90_G1XKN8 G G A Y L S S Q P S T P E K W P F V G S S L A L E L P A E E A V K E W L K N D P
UniRef90_C5MCCQ0 A G A I Y H D E A K T K F A G S A F H L V A N S K E E V I E F L K N D P
UniRef90_W3A909 N K F A D G S G G L V I Y N A L S F E E C E A Y V K Q D P
UniRef90_V6S6V9 A G P F M K N D R N Y R G L F I F N C T T V E E A Q K L V E T D P
UniRef90_J2J7D0 A G P F S S E D E Q Q W D G S G M F I Y R A D S L E Q A R K F A D S D P
UniRef90_UPI0002D3AF99 A G P F T D K R G G M V I Y R A D T W D E A L A L A Q A D P
UniRef90_D6TXS7 V G P F T D P G G G N M G L F R S R A A E A F A K S D P
UniRef90_L8DIU0 S S P L P D H S G S T M I V E G A D K E T V E R L L A H D P
UniRef90_H9BFC0 A G P L V E A L P Q D G Q P P V I T G S I M V W K A T A R E M L D K W L S D N P
UniRef90_B9QWQ5 S G P K E P R T G G V I L A R A D T R A E R Q K L I D Q D P
UniRef90_A2SIL1 G G A W R D G S G A L I I F R A S D R E Q I R G Y L D A D P
UniRef90_UPI00031BFA98 A G P H W S D D E Q Y W D G D G L F I I R A A S I E H A N R I A A Q D P
UniRef90_Q473C1 A G P H W T D D E K F W D G E G M F V L R A S S T E Q A R E L A A A D P
UniRef90_UPI000362FE4C A G P L S D H T G L S M E G G L I V Y R A C S Q E A D A L A K A D P
UniRef90_R9CVY9 A G P F L E K N D K N Y R G L F I I N S D S K E A T E K L L Q S D P
UniRef90_K6H666 S G P Q E P R T G G I F I A R A E S R N E I E S F C H Q D P
UniRef90_E0QI02 C G P F T D Y E G G M V I L E C N N I E A R A I A E S D P
UniRef90_UPI000367A79A A G P W R D G S G A L L V F D T D E S G T E A E L A A D P
UniRef90_C7ZG99 G G A T L K D R A S P G Q P P Q I T G S A M L V F A S R R D D V V A R L K D D P
UniRef90_Q04RA3 S G P Q E P R T G G I F I A R A G S R K E I Q S F C Q E D P
UniRef90_A0A059IME4 A G P L A E A G N P A G G L W L V E A D D A R D I E T L T R R D P
UniRef90_UPI00037610CE A G P W A D E S G A L L V F T V D R P E L D A I L E A D P
UniRef90_W4D0I6 C G P F S D C P G G M V I V R A N S R E E A V L L A E K D P
UniRef90_S8FR11 A G P A F A P T A D P W A E R E T V A S V A V Y E A E G L E S A R K I V E A D P
UniRef90_UPI00040A0268 Y G R F V D G S G G L V I Y Q A D D L E T A T N L A K N D P
UniRef90_I4X0S5 N G K F T D G S G G L V I Y R A E S F E A C E A L V K A D P
UniRef90_I3TNE7 G G A M L D E A G T M I T G S S M L A E Y P D R A A L D A A L A A D P
UniRef90_C4IAG4 A G A L A G D D N A A T G M F I S L N V I E T K A D A E N F L R D E P
UniRef90_E6TVS3 A G P A G S T G G A I V I D A V K S E E D V I K F A E N D P
UniRef90_W4QA71 K G P F V D G N G G M V I Y E A N H F D E A Q L L A N E D P
UniRef90_C5ZZ64 S G P Q N P R K G G I V I G Q F D N K E A A I N F T K Q D P
UniRef90_UPI000379FDCC R G P T A L G S V H I V D V P D A A A R E F A F A E P
UniRef90_E3HXQ0 S G P F V S E Q A G V P G A A G M S I I R A S T L E A A H Q I L S E D P
UniRef90_U2JT X5 C G P E T D Y D G G M V V L E C R N I E E A R A F A E S D P
UniRef90_A3JTK7 A G P V S D T G E H M Q A A G M V I L R A T S M E E A R K L A D A D P
UniRef90_D4B2F5 A G S M L D H H P A E G E P P P M N G S T L I V A A E G V E E T R E I L S K D P
UniRef90_F0F0T2 S G R K E P R T G G I V I A R A A S R A E L E R I I G E D P
UniRef90_UPI00047B1960 K G P F L D G S G G L V I Y I A D N Y D E A K L L A E Q D P
UniRef90_V8CBP5 S G P R N P K T G G L I I G R F P S L E S V I Q E F T K N D P
UniRef90_E2LTL1 A G V M L T E E S L H V A Q E N M I G S T L I W E A E S T E
UniRef90_G3ATA4 A G A I Y H D D A K T Q F A G S A F H L V A N S R E E V L E F L K K D V
UniRef90_UPI000382AF6F R G P F D D S P G M V I I R A E S R E E A Q R I A G R D P
UniRef90_D0TJ67 S G P Q N P R V I G G V I M M K A E S R E A V D A I I A E D P
UniRef90_F0IGI8 S G A Q V P R Q G G V I L C K A D S R G E V E A I I T Q D P
UniRef90_X0Z678 A G P T L I P E D P F G L V I F E T E N E D E A K E L L D N D P
UniRef90_F2JUW5 S G P K L P R T G G V I L A Q A E N K E A Q L L S L L T Q D P
UniRef90_C4GN10 S G R K Q P C T G G V I V M Q A D S R E A Q V A Q L I A E D P
UniRef90_UPI0003607790 I G T F G D P A T Q G S M A I F R S R E A A E R F L E G D P
UniRef90_UPI0002F3CF43 R G P F A D G S G G L V V Y I A D S W E A A R Q L A E S D P
UniRef90_R4T4D4 A L G G P L G D G S G G I S M Y Q A A D E A L L E I I D Q D P
UniRef90_R7WNT9 S G P F A A D E E A G A A M I Y R A S C K A D V V E V V E G D P
UniRef90_H6RJM4 R G P T E A D D G T L T G S V H I V D L P D V T A A R A F A F D E P
UniRef90_W1SDW2 R G P F L D E S G G L V V Y V A D S F E E A H A L A V K D P
UniRef90_F2A3Q0 A G P M E P A V I G G I V L A H C A T R E E L D A M L K N D S
UniRef90_U5HBP6 G G A T F E G A V G S K M T G S F E L L V R E E S K E K A L E R L S K D P
UniRef90_UPI0003B5C42D A G P L T D S A G G T L I I V K A D T P A G V L E L L A D D P
UniRef90_G8RRD5 A G R L E D E T G A V L I T G D I S A D E A R A I V D D D P
UniRef90_Z5XJE9 A G R L E T G T G V L I T A D I S T E D A Q S L I D R D P
UniRef90_UPI00030D322A N G R F V D G A G G L V I Y Q G E S L D A V E S K V R A D P
UniRef90_A5GIP7 S G F L V D E R R H P G G G G L L I F E A E S Y G E A L A W V S H D P
UniRef90_U2QTY1 S G R Q T P P E G G I I I A N N V T R E E L E S I L K E D P
UniRef90_UPI00037AC2FB S G P K A E I G G G I V V K C D D I E E K F C K G D P
UniRef90_UPI000237EDB2 S G P L K G T P L R S G F L I M Q G A N L Q E T E D M V I A K D P
UniRef90_UPI000378DFF2 G G L K T N P E G D F C G A L W I V E L A S R E D V V Q L I L R D P
UniRef90_UPI000474AC4B S G P F V S A H A S P G E L G G M S I L R A A D E A L R I V Q A D P
UniRef90_B2UH65 S G P F F P R E G G G I L A Q A G S R D E I D A I V M R D P
UniRef90_UPI0003801E55 G G I D E V S E G E P T D Q E A V N A A L I V C S G E S L E A V T E T F D Q D P
UniRef90_D3A1W9 S G R K Q P R T G G I L L M K A S G R E Q V E K L I A E D P
UniRef90_A5DSQ2 A G A I Y T D E S K T K F A G S T F H L V A D N K D E I I E F L K K D P
UniRef90_UPI0002E666CF S G P F V Q E G A A P G A G G G M S I F R A D S V A E V E R I L S G D P
UniRef90_F4CPE6 A G P M L G D D Y R Y S G S G L L V L R A G S I A E A K E L A D R D P
UniRef90_C7NFU0 A G P Q D P R T G G V I I A R G A R D E L E A H L A D D P
UniRef90_X5L825 A G R L E S G T G A V L V T G D L S E E E V E D V I A R D P
UniRef90_X7E529 A G P L S D D S G E N M N G S M I I Y K A A N L E M A K N I T E K D P
UniRef90_G3AH47 G A L Y H D D A K T K F A G S W L Q L D L T S K E E V I E F L R K D V

UniRef90_D5NUF1 Y W I E E I V N K R D I R E W G P V
UniRef90_D5BP43 F W P T G L R K S H R I L Q W R Q V F
UniRef90_F8F4S7 Y V L H G A R R A Q V R E W E M V
UniRef90_M2XB50 L L E V G V I T E R T A R P W K
UniRef90_I4FOY8 F V L G G V V A S H S V R P W N E V L
UniRef90_J9NJ72 F T I E G V W D K L S I W P F K I A
UniRef90_L8DJH7 F A V E N L I E S A T F L E W T P V M
UniRef90_F2LA52 Y V K N K L V R H W Q V R Q W N V A
UniRef90_A0A011HAJ0 Y Y K N K M V I D F K I K K W H V V
UniRef90_A3VD09 F Y T Q G V V A D L K L T R
UniRef90_J2L5P2 Y
UniRef90_E8V389 Y F T G G A L G K F E L T A W N P A L
UniRef90_F5XDT5 F F I H G L R R S Y E L F Q W G R A
UniRef90_A6WFL6 F V T D G V V G S R T V V G W T P V L
UniRef90_D7VW18 A V Q A G I F S Y E I F P W
UniRef90_I818B4 F V E A G V W D R A V V A P F K C G F
UniRef90_UPI0003B30E3F F H R E G L I T R R T V R R W N P V I
UniRef90_G1XKN8 Y S T G G V W E N A R I F R F K
UniRef90_C5MCQ0 Y Y R E G V W D N V V I N P
UniRef90_W3A909 Y I Q N G A R K Y D I H E W E A V W
UniRef90_V6S6V9 A V K A K I F E V E L T P W
UniRef90_J2J7D0 M H I S G A R T Y T I K T W
UniRef90_UPI0002D3AF99 V V V E G A R S L E L R E W S P
UniRef90_D6TXS7 F F L E G A V K E Y Q I K E W
UniRef90_L8DIU0 F A L A H L I D H V R V E E
UniRef90_H9BFC0 F A T S G V W D K M E C T P F
UniRef90_B9QWQ5 F K Q E G V A A Y H V T E F N P V M
UniRef90_A2SIL1 F T T E G V I V A T Q I H E W V A A I
UniRef90_UPI00031BFA98 M H K C G A R T F S V R P W
UniRef90_Q473C1 M H Q C G A R S F T V R P W
UniRef90_UPI000362FE4C M H V R K V R N Y T L R K W
UniRef90_R9CVY9 A I A A G V F D V E I Y P W
UniRef90_K6H666 F Y T N G V A E Y Q I L E W N P V
UniRef90_E0QI02 F I E G G Y K T Y E I R
UniRef90_UPI000367A79A Y Y R T P G V T V R E I R E W S P
UniRef90_C7ZG99 L V K E R V W E N A Q I Y P F
UniRef90_Q04RA3 F Y K N G V A E Y Q I L E W N P V
UniRef90_A0A059IME4 F W P S G L R A T H R I L A W N R V
UniRef90_UPI00037610CE Y Y R T P G V E V A S V R E W K P V
UniRef90_W4D0I6 Y V L S G I R S Y E V R T W
UniRef90_S8FR11 F Y S G G V W E K V Q L N P
UniRef90_UPI00040A0268 Y V L N G A R D Y E I K E W
UniRef90_I4X0S5 Y V V E G A R K Y E I F E W D A V W
UniRef90_I3TNE7 Y T V Q G V W Q S F E I R P F R I A
UniRef90_C4IAG4 Y N D A G L F A T I E I Q R
UniRef90_E6TVS3 T V K N G I F S Y E I K Q W
UniRef90_W4QA71 Y V K L G V R R L E L H E W N
UniRef90_C5ZZ64 F Y L Q N V A K Y E I L E F E P V L
UniRef90_UPI000379FDCC C Y Q A G V F R D V L V R R W H N S L
UniRef90_E3HXQ0 F I K N G V Y I P E I K K W
UniRef90_U2JTX5 F I E E G Y K T F E L R
UniRef90_A3JTK7 M H S T G A R T Y T L K K W
UniRef90_D4B2F5 Y A T S G V W D L D N V R S F
UniRef90_F0F0T2 F H Q A G I A D Y E I T E F I P A
UniRef90_UPI00047B1960 Y I I Y G V R S L D L R Q W G I V
UniRef90_V8CBP5 Y N L K N A A T Y N L I E F S P V L
UniRef90_E2LTL1
UniRef90_G3ATA4 Y Y R E G I W D N V I I N P
UniRef90_UPI000382AF6F Y I L T G V R S Y E L R T W
UniRef90_D0TJ67 F H I N G I A D Y Q I V E F T P T M
UniRef90_F0IGI8 F H K H Q I A S Y Q I I E F I P T
UniRef90_X0Z678 S V K A G I Q E I A D F R P I R
UniRef90_F2JUW5 F Y K A G I A N Y E V T E F
UniRef90_C4GN10 F H Q A G L A Q Y S I T E F L P T
UniRef90_UPI0003607790 F V T E G L V Y R T R I Q D W D P
UniRef90_UPI0002F3CF43 H V R E G S R K L D L R E W Q A I L
UniRef90_R4T4D4 Y H L E G V V A K R T V R E F K P V I
UniRef90_R7WNT9 F R C R G Y V A S Y E V T E W I P M I
UniRef90_H6RJM4 G Y Q A G V Y R D V M L R R W R N I
UniRef90_W1SDW2 H V V E G S R N L E L R E W K
UniRef90_F2A3Q0 F H R Q N L V E Y D L R C F K P A L
UniRef90_U5HBP6 Y A T A G A W D
UniRef90_UPI0003B5C42D L I K A G V V T Q R C V R R W E P A
UniRef90_G8RRD5 Y T A A E V A R Y E L T P F N G A F
UniRef90_Z5XJE9 Y T L A G V V
UniRef90_UPI00030D322A Y I V N G A R Y Y E L H E W
UniRef90_A5GIP7 M I Q A G L V D W I L L Q E W I P V
UniRef90_U2QTY1 F Y K N E L A D F K I L E F T P A
UniRef90_UPI00037AC2FB L V K A G I Q E Y R I T E F K
UniRef90_UPI000237EDB2 F S P E G L I C D L R I E E W D P L F
UniRef90_UPI000378DFF2 F Y S A D H R R Y V I Y S W G K I L
UniRef90_UPI000474AC4B F I A N G L Y D V E I R K W
UniRef90_B2UH65 F V L E N L V E V R L I A W G P
UniRef90_UPI0003801E55 Y W L G G H I L R R V V R R W D P
UniRef90_D3A1W9 F H R E G V A K Y T I T E F I P T
UniRef90_A5DSQ2 Y F K E G V W D N V Q I Y P
UniRef90_UPI0002E666CF F I Q Q G V Y A A D I K K W
UniRef90_F4CPE6 F H S Q G L R S Y R I V P W
UniRef90_C7NFU0 Y V T H G L V E V D L T P F A A V
UniRef90_X5L825 Y T L A G L I R
UniRef90_X7E529 M H S R G A R V Y K I R R W
UniRef90_G3AH47 Y Y R E G V W D S A I I Y P

UniRef90_UPI000360810D 1 MF H I L T L T Y K P T D V V D Q T R P A H V A W L N D E V A A G R V L L 40
UniRef90_H8MK94 H Y L V L L K R A P N A P D A L L Q K L Q G E H L A H L T R M G E S G K M V L L
UniRef90_UPI00034519CF MK K Y V F C L L K S G S N E E S K K L F E G H M A N I G K L D A K E G K L V L V
UniRef90_C9PVT4 M V F V Y L M N N K D L N L Q V V I Q E H V E H L R T L D Q E G R L V L
UniRef90_J3DJL9 F V I S I T Y T K S A S E I D A L L T A H K Q F L N E Q Y A D G V F L M
UniRef90_F2R6V4 M A F V V E I V F R G N G S D R L G L A E A H R T Y W K R M A A R G I L L G
UniRef90_K9QN26 S V E Q R R P T L E A H R C W V S D E A A A G R R L R
UniRef90_W0GW32 R L A A R P A H R D R L Y R L Q R D S G T L L A
UniRef90_UPI000382B38E MS Y Y L V K F V H T D M K G W Q Q H I R D H A I Y L Y Q L V E S G D L L V
UniRef90_L7WVWS5 H F M L E I T Y V P L E E Q T E T K L A E H R A F L Q T G Y D Q G W L L C
UniRef90_A9AZK4 Y V V E L T Y K K S V E E V D V Y L D A H R A F L D E H Y A K G V F L L
UniRef90_K5ABP4 N I F I A I L T Y K K P L D E V V K F R P A H L D F L D E Y Y N A G K F I V
UniRef90_D0GLV2 L W H I S T D Y R A D T A A E R D A I R G E H L S F L L E N K D T V H S V G
UniRef90_K0YDV9 L S Q V D A L L P G H I A Y L E R H Y R S G E F L C
UniRef90_R9ME34 W L V K I E D I E G A D R T P Y Y P E H M Q N L K N F D E K I L V G
UniRef90_H2AU47 M E Y V V F Y A T D R A A A D R I P E V Y P R H R E Y L D A F A D G G I L G
UniRef90_C1AYS2 F L L T Y G Y H D T P L R A E R R D D H L A H L A S L T E R G E H L L A
UniRef90_A0A01OYS02 M P H R G A H L A H A R A A E R G E L L L
UniRef90_H8GYK3 E Q R H A Y L A E H K F W V E K L K S T G K K L A
UniRef90_A9BCK5 S I E E Q R R P F L E A H R H W L D Q H I G L G R R I R
UniRef90_Q3AW60 L F V V I R K P R D L T H M P V L D A H L K W A I R A Q E R G E L F A
UniRef90_A0A059L3S5 S P E K R A E L Q R G H L D N I T K L A E E G K M V L
UniRef90_UPI00041D1453 M E C V V I Y T V R E G I D R S R M E T Y P R H K A Y E A F H A E G G L V
UniRef90_UPI000372F15F K F L A E H R A Y L K L G Y A D S N M L L A
UniRef90_N2BPY7 W A V L F R D A P A M M D I R A A R R D A H V A Y V E D H P E L R
UniRef90_UPI0002DDA806 L F V I D L T Y V T A L E N V D P L E P H M A F I E R N Y G T A S R F L A
UniRef90_A9CWY8 F I I V P D H P S A P R L E V R P K H F S K I A E T A S G R T L M
UniRef90_S8BKD0 M F L I I V D Y K K P L E E V I E R Y L A E H W A F L D R Y F A Q G K L L C
UniRef90_R7JR39 H P D G S G W D T H V R E H V L Y L K G L I N A G K I I A
UniRef90_J1Q9B1 Q A N V E A H V A W L E T L H D T G K L S L
UniRef90_A0A059F8D1 W L V K V K D N K D V D R A P Y Y P E H M R D L P S L V D G G I V V
UniRef90_H2AU37 A Y L P A H I D Y L D R H Y A A G T F L L
UniRef90_V7IF55 A E R A L F A G H F S N M G R L A E E G K L V L
UniRef90_Q0C3X9 E V T A Q H R P A H L E Y V R N L I R S G R I V M
UniRef90_UPI000360BDEB E H V L Y L K K L I A Q G R L L A
UniRef90_U8R3R8 L F V V D L H Y V A S F D D I E P E L D A H V E F L K E N Y A S G N F I A
UniRef90_UPI00047E266F F V V T L T Y K V P L T T V D Q Y L E A H L A Y L D R G Y A A G H F I V
UniRef90_L0WIJ3 M F L I L L K Y I R P L D Q V E A H L A A H R E Y L R R R Y A D G S F L M
UniRef90_E6PU06 F V V S I T Y R T D L S Q V E L L A E H L R F L D A N Y Q A G H F L A
UniRef90_A4CAK4 D Q Y V P A H V E Y V R K L I A N G H Q A R
UniRef90_K9YX64 Y F K V S Y D Y V E D A Y Y K R I P H R E N H L K N L E A L K A Q N Q T L T
UniRef90_J9F9V6 M P Q L L I A M D G T D T A A R R A A N R E H H A A A A G R L H A A G L Y L L
UniRef90_UPI0003AD05BA M F V I L L N Y V K P L E D I D R V I A P H R A F L E R H Y A S G H F L L
UniRef90_UPI0002F549A8 H M A H I R K M A A D G K L V M
UniRef90_J1FGT7 W I V N V Q D K P E A D R A P Y N D R H M A A L P G L F E K K V L V S
UniRef90_H2AU46 Y Y M V I I Q N A E N M N D H I M K Q H M A Y T Q K A M D R G M I L I
UniRef90_G5HGC4 L W F I E S T Y L K K P A E E R A A V T P L H R E W L D G H Y K S G V F I T
UniRef90_F0RLC8 M A F L K K G P N R S G T D E E R A R L Q R A H L D N I G R L A K E G K L V L
UniRef90_A1S6C4 T P E Q R Q E I Q A G H M A N I G K M A D M G K L I V
UniRef90_UPI00040100DE M Y I A N L T Y L K P L S E V I E K Y L E E H V A F L D R Y Y E A G K F I C
UniRef90_J1H3L4 F L V E Y L Y V P E I E R R E I R Q D H R A Y L D D S F E T G T L R F
UniRef90_Q0RV79 Y V I D I H Y H A S L E R I D D A L E R H R A Y L Q P L F E R G I F I A
UniRef90_B1YN84 M L Y A V H C E H F P N A F A E P R F G E H R A Y W D A S V C T L M
UniRef90_UPI00046F9087 Q R E E L F K G H H F S N M D E M E K S G R L K M
UniRef90_C6X213 H R E H L D R L V T E G H L L L
UniRef90_C6HX4 A A H R R F L Q Q G Y D E G R F L L
UniRef90_H0TL75 M K V A L R C T F A S H S F P Q Y T A V Q Q D H L R Y L E A H K E Q I V C
UniRef90_B8HM58 Q Q Y Y M V F L K S G P G S T E A A E L Q K K H M A H L E R L A T E G Y T S L
UniRef90_UPI000428B6A3 F V I S L T Y T A P E S E I V D V H L P A H V E W M K Q A V A D G A L L A
UniRef90_UPI0003B4844B Y F V F H V V Y Y K T P F S E I L V L V P A H R A F L D G C V K D G S L L L
UniRef90_T0Z534 L F V V D I E Y V V P F E Q I E P V L E P H M A F V K Q G Y A D G H F L C
UniRef90_Q0FV62 E I L K K Q Y L A D H K I W K E L I A S G K N I S
UniRef90_Q7VA00 F V I S I D Y K V D F D L I D P L I D E H F E F L N K E Y K G L F V V
UniRef90_A4BB80 F Y M V F S T P M G D E A K V Q E M L P E H L A Y Q A E Q E S L G T L F L
UniRef90_UPI000471550F M S A H K A H L R N E D G V P E G F R I L A
UniRef90_W8FKZ2 F V L E L T Y T A P L A A V D A V L P A H V A W L D E Q Y E H G V F L A
UniRef90_B5HSS5 Q Q Y F M V F L K S G E N R S Q S K Q E L Q K L H L A Y L G A M Y Q K G Y A D I
UniRef90_K2QNQ4 F V L E L T Y T A S A D R V N E A A R P E H L A W V D D H F A N G T F L A
UniRef90_G2P4B1 S L E E V N K V L E S H L E Y L D K Y F A K G K F I C
UniRef90_D0GN82 F V V S L T Y K K P I A E V E L H L A A H L A Y L E Q Y Y A A G T F I A
UniRef90_A9L3K9 Y A V R Y T Y D E R T D V R D T F R P E H R A Y L S T L A D E G R L L
UniRef90_F4GYZ3 E E R M A A L P R H R E N I L R L H R E G K V F A
UniRef90_UPI00036B16E8 F I L N L T Y V T T D I A E V D A L L A D H L A W L E A G R G K G H F L A
UniRef90_A0A031JRG8 E V V E Q T R P A H L A W L E Q E V A A G R I V L
UniRef90_K5B9C2 Y L M I S K Y K P L A E V D A R E D H L T F L A G L E A R G L S V T
UniRef90_I0GWZ4 F I V S L T Y K T E L S E V D K H I E D H I Y L R K Y Y T L G K F I T
UniRef90_M4U4K6 E A H L Q W L E S V R S S V L I A V
UniRef90_D4GN79 H V L Y L K K L I K Q G H L I V
UniRef90_Q4L9B8 M F I V S L T Y T C E L D Q I N A H L E A H I A Y L K N Q Y A L G H F V A
UniRef90_UPI00037ACA45 F I I S L T Y K V E L E E V D K H L D A H L A Y L K D A Y A N G N F I A
UniRef90_Q6AKB2 M E L A D D F Y K K G L L M
UniRef90_S7WPP1 M F I I N L T Y L K P L E E V I E R F L P E H V I E L D R Y Y E N G H F I A
UniRef90_UPI000369C9A8 H Y L V I A M R R P G F D P A V V A P H L A Y L D D L H A R G L L A S
UniRef90_UPI0004642943 L F V I D L H Y T A D L R E I D A L A E H R S F L R D Q Y E A G L F L A
UniRef90_U7GHM3 Y F A V T Y T Y G A P E A D L A T R A E H R E Y L A G L P E L V V
UniRef90_UPI0003C7F28C M F I V S I T Y T A P L E A I D A A L P D H I A F L D R Q Y A A G V F I A
UniRef90_W8WVG9 F I I S L T Y T A G L E A L E P H R P A H R A W L D R G I A D G W L L
UniRef90_T0HJT3 F A V L L T M K D E E K S Q K Y R P Q H L K F L D E E L N G N V L A
UniRef90_UPI0003B723D0 V V L T Y V K P L D Q V D A Q L A H V E W L K Q G Y A D G I F L A
UniRef90_I6W41 M F I V S I T Y T K P A G D I D A L L T A H K K F L N Q Q Y A E G V F L M
UniRef90_D8IR31 P L H E E I I K D H V E Y L K E L K S Q G R L V L
UniRef90_B8FPX8

UniRef90_UPI000360810D A G R Q E P A T G G V L L T G D I S V E E A Q Q L I D K D P
UniRef90_H8MK94 A G P F D E Q D D V G M R G A C I Y R T A T K Q E A R Q L A E Q D P
UniRef90_UPI00034519CF A G P F M K N D R N Y R G I Y I F N V E T S E E A K A L V A T D P
UniRef90_C9PVT4 C G P F A D Y P G G M V V F R A D S E F E A K A L R I A E S D P
UniRef90_J3DJL9 S G R K V P R S G G I I I A D A T D R A E V E A I I E T E D P
UniRef90_F2R6V4 S G P W R D G T G E L L V C E A P D R R E T L E R V L V A D P
UniRef90_K9QN26 S G Y W S K F G G M L L F E A N S M E E A E A I V A S D P
UniRef90_W0GW32 S G Y L V D G D R Q P G G G L L M F E A S S Y A D A L A W V Q N D P
UniRef90_UPI000382B38E A G P V E N E D K S K L E W A D D S G A L L V F D A T R D R L D A L M A D D P
UniRef90_L7WWS5 S G P V E N E D K S K L E A Y L V L K A N N E D Q L M S L K A D P
UniRef90_A9AZK4 S G P Q N P R I G G I V I A R A P S L E E A L Q T L F A N D P
UniRef90_K5ABP4 S G P K E P R T G G I I I V D A Q T E E E A R S Y I E Q D P
UniRef90_D0GLV2 S G R Q T P P V G G V I V A H N V T K D E L E S I L K E D P
UniRef90_K0YDV9 A R I D E E G N R V G G E Y L L D V P D R E A A R A F I E R D P
UniRef90_R9ME34 S G R K T P R T G G V I L C R A S S L A E A R A I L E E D P
UniRef90_H2AU47 A G A L T T P E G K E T G G L L I I A A K T K E E A I E V K R D V
UniRef90_C1AYS2 I G P F D D P A S N G S M A V F S S R E R A A Q F I A H D P
UniRef90_A0A010YS02 A G P L A D L T G G V I V L E A D D E A A Q A L A V D Q D P
UniRef90_H8GYK3 S G P L A D P M D G A V L L F R A E G P P A R A F A E A D P
UniRef90_A9BCK5 S G Y L V N E E K C P G G G L L V I E A N C F E E A K L L V E Q D P
UniRef90_Q3AW60 S G F L V D D Q R R P G G G G M L I F Q A S S Y A D A L A W V S Q D P
UniRef90_UPI00041D1453 S G P F V S D Q A A P G E L G G M S I L R A A D Q A E A E R L I Q G D P
UniRef90_UPI000372F15F A G P F F G N E E L R G L F F F N V A S I E E A Q Q L T E T D P
UniRef90_UPI000372F15F A G P F Q T A D P E L S S M G I F T S R Q S A E R F V A A D P
UniRef90_N2BPY7 S G P R N P K D G G L I I G R F E S R K D S A L A F A K N D P
UniRef90_UPI0002DDA806 I G G G L K P D I D G D F C G A L W I V E A E D R I E V E H L I H G D P
UniRef90_A9CWY8 S G A K V P R T G G V I I A R G Q S L Q D L E T L I R D D P
UniRef90_S8BKD0 G G A Y L A E Q P R D A T T W G F E G S A L V L E L P E E G A K E W L R T D P
UniRef90_R7JR39 T G P Q N P R T G G V I V S K A A N R A E A E A F T R E D P
UniRef90_J1Q9B1 S G P L K G A A L R S G F I L F R A R D I S E V K A M V I E A D P
UniRef90_UPI000459F8D1 C G P C D D D G T A I L V L S C G T L E E A I E I A N S D P
UniRef90_H2AU37 A G A L T T P E G K E I G G M F I V T A K T K E E A I E I V K R D V
UniRef90_V7F55 S G R K E P R T G G V I I M R A D S R V Q A E A V I A E D P
UniRef90_Q0C3X9 A G P L G G E D G R R G L F I L N T P I E T A K A W V A S D P
UniRef90_UPI000360BDEB A G R F K D G S G G F Y V I E A K D L S E A L S I V E G D P
UniRef90_U8R3R8 S G P L K G T A L R A G F L I L K A D S L Q E A Q A L I A A D P
UniRef90_UPI00047E266F S G P K V P R T G G V I I A T A E T R E A L E R I L A G D P
UniRef90_L0WIJ3 S G R K V P R T G G V I L A R A D S R N D L L S L L E Q D P
UniRef90_E6PU06 S G R M E P R T G G V I L A Q A A S R G A E A M M H E D P
UniRef90_A4CAK4 S G P K V P R T G G I L L A N I P S R E A L H T L L E N D P
UniRef90_K9YX64 T G Y W G D M G G M L L F E A E S L E E A Q T I V E N D P
UniRef90_J9F9V6 S V P F F P F D G N V M F I E T E D K S Y V E N C I K N D P
UniRef90_UPI0003AD05BA G G P L R H P G E E Q V I I G S L I V T N F A T Q S E F D D W L R N E P
UniRef90_UPI0002F549A8 S G R Q E P R T G G V I I A A A K D R A E V E A I V R Q D P
UniRef90_J1FGT7 A G P F L D N G E L R G I F I F D V A S L E E A K A L T E A D P
UniRef90_H2AU46 A G A L I G D N G K E V G S S F Q V V A E S K E D A I N V I K A N I
UniRef90_G5HGC4 S G L K A D M S G G M F I M R A E T L E E T E H Y L A N E P
UniRef90_F0RLC8 S G R K Q D E T G G V I E A Q A E T E E Q L R E I F A T S D P
UniRef90_A1S6C4 A G P F L H D G E L R G I Y L F D V K T V E E A R E L T E S D P
UniRef90_UPI00040100DE A G P F F G N D D L R G I Y I F D V Q S I E E A K T L T E T D P
UniRef90_J1H3L4 S G R K N P R I G G V I L F H A K D E A E M K Q I L S E D P
UniRef90_Q0RV79 A G A V R D P V D R G V L L V E A D S R G K A M Q W A T A D P
UniRef90_B1YN84 A G P K V P R E G G V I L A A R I D R D E L D A I L D T D P
UniRef90_UPI00046F9087 S G Q L F A A D G V T L V I G S F F V M R A Q S T E E Q V R A F S L N D P
UniRef90_C6X213 A G P F A T K N N L G Y R G I F L P D V K T E A E A K S L L E K D P
UniRef90_C6HZX4 S G P L V P R T G G L L L M K A S D R A A V I E R M L A E D P
UniRef90_H0TL75 S G P S I P P T G G V L I A R A Q S R E Q L D E F L A E E P
UniRef90_B8HM58 S G V T L H E D G S P S I L I M L E V S D L G L A E S F I E A E P
UniRef90_UPI000428B6A3 T G P M G D D G D L R G I V V F N T A T L A E A D S L A N L D P
UniRef90_UPI0003B4844B S G R K V P R T G G V I I A K A A S R A E A E A F A A S D P
UniRef90_T0Z534 S G P L V P R T G G L L L M R G R D R G E I E S L L S G D P
UniRef90_Q0FV62 S G P K N P R T G G I V I A I G E T L A A I E A L M A E D P
UniRef90_Q7VA00 S G Y L T D Q E R N P G G G L L E I E A T N F E A K D I I Q Q D P
UniRef90_A4BB80 S G R K E P R T G G I I I V K N E S L N I E K I I K E D P
UniRef90_UPI000471550F A G P I S D I S G E W M Q G I G L I I Y R A A S F E E A K I A D A D P
UniRef90_W8FKZ2 S G P M Q A E S G G S A A A L I A E A R C I E D V M A F S D A D P
UniRef90_B5HSS5 S G P K N P R D G M I I A V A E D R A R I E R I T A G D P
UniRef90_K2QNQ4 S G P F G D D G T I R G V S I Y N V P T L E M A D S L A N A D P
UniRef90_G2P4B1 S G P K N P R D G G V I L A L G D D R A R I E E M V A S D P
UniRef90_D0GN82 S G R R F F P E M G I I L F N S D N L E E A K K I M Y E D P
UniRef90_A9L3K9 S G R K V P R T G G V I L A K A E S R A A L E A I L Q Q D P
UniRef90_F4GYZ3 S G S G G P F A D G E P G A L L V F R A D D R D A L D A L L A A D P
UniRef90_UPI00036B16E8 A G P L A D R S G A L L I F S V E R D E L D R I L A D D P
UniRef90_A0A031JRG8 W G R K V P R E G G A I I A K G D S R E A V E A L A A T D P
UniRef90_K5B9C2 A G R L E D Q S G A I L V T G D M T A E Q A Q D I L V A R D P
UniRef90_I0GWZ4 A G R Q E P A V I G I I L D V D T E A E A H E L I A Q D P
UniRef90_M4U4K6 S G R K V P R I G G I L L V N A S N K A E V D A I I K E D P
UniRef90_D4GN79 S G T V N A R K D K K E A T A H P D G A L W T V E A A S K E A V A L L K Q D P
UniRef90_Q4L9B8 S G P T V N A R K D K K E A Y L I F K V K N R N V L M T L L E K D P
UniRef90_UPI00037ACA45 S G R K V P R T G G V I L A R F D S R E E L D A A L Q L D P
UniRef90_Q6AKB2 S G R K V P R T G G I I I E S K V K N R D Q L E T I L K K D P
UniRef90_S7WPP1 G G A L S R P T D K A V L I F R S E I V S A V E S F V K E D P
UniRef90_UPI000369C9A8 S G R Q V P R V I G G V I L A K A D S K D E L K A I I R H D P
UniRef90_UPI0004642943 A G G F A D G T G G A Y V L Q G D S L A E A Q A L A D A D P
UniRef90_U7GHM3 S G P K Q P R T G G V I L A R A A D R V E V D L A I N K D P
UniRef90_UPI0003C7F28C S G P W D D G R G A L L V F R A E S A V A V D G L V T R D P
UniRef90_W8WVG9 S G R K V P R T G G V I L A A A S R E A L S A L L A E D P
UniRef90_T0HJT3 A G P R N P R D G G I L J A R G T R A E L Q E Q A T D P
UniRef90_UPI0003B723D0 Y G R F V D G T G G L I M Y R G E E E A V R E I V E Q D P
UniRef90_I6W411 S G R K I P R S G G V I L A K G D D M D G L Q N W L S Q D P
UniRef90_D8IR31 S G R K V P R T G G I I A D C A D R A E I E A I M E S D P
UniRef90_B8FPX8 C G P F T D Y P G G M V V L L A E D L A E A T S I A Q A D P

UniRef90_UPI000360810D Y T V A G L Y E R V S 90
UniRef90_H8MK94 M V K A G R L Q V E V L A W
UniRef90_UPI00034519CF A I K A N L L E A E L T P W
UniRef90_C9PVT4 F I A S G
UniRef90_J3DJL9 F Y I G G V A E Y E I T E F V P
UniRef90_F2R6V4 Y A Q A Q L I G E V R I R E W N
UniRef90_K9QN26 L V K N G C V N Y Q L Y E W K L V
UniRef90_W0GW32 M I I A G L V D W Q V Q E W I P V
UniRef90_UPI000382B38E Y Y R T D G V Q V V G V R E W T P V
UniRef90_L7WWS5 F W K E G L V A D Y S I E Q W T P M F
UniRef90_A9AZK4 Y Q I A N F A D Y R F V E F N P V
UniRef90_K5ABP4 F F V H G V
UniRef90_D0GLV2 F Y K N E L A D F E I V E F T P A
UniRef90_K0YDV9 Y S V N G H L A E V R I S A F G A A I
UniRef90_R9ME34 F Y A E G I A D Y R V I T E F I P
UniRef90_H2AU47 F A R K G I F K M D T I T
UniRef90_C1AYS2 F V L E G I A H P S D I R E W
UniRef90_A0A010YS02 Y T I L N V T K D R S L R E W K
UniRef90_H8GYK3 Y V Q A G L V E S W D V R E W T T V
UniRef90_A9BCK5 M V K N N L V T W E L Q E W I P V
UniRef90_Q3AW60 M I V E G L V A W Q L Q E W I P V
UniRef90_A0A059L3S5 F I A H G V F E A D V R K W
UniRef90_UPI00041D1453 A I Q A G I L K M D L K E W
UniRef90_UPI000372F15F F I T E G L A E C R L L E W N A V
UniRef90_N2BPY7 F C I N N V A E Y E I I E F E A V L
UniRef90_UPI0002DDA806 F Y V P A F R S Y E I F T W G K I L
UniRef90_A9CWY8 F H S A G I A D Y T I T E F R P
UniRef90_S8BKD0 Y S A G G V W E K A R I I K F R
UniRef90_R7JR39 F F R H E I A D Y T I V E F E P T
UniRef90_J1Q9B1 F S R E G L I A S L E I A Q W D P L F
UniRef90_A0A059F8D1 F V E S G A Y A T R T V H A F
UniRef90_H2AU37 F A R K G I F
UniRef90_V7IF55 F Y Q A K L A E Y Q I T Q F I P T
UniRef90_Q0C3X9 T V E A G V F T
UniRef90_UPI000360BDEB Y K K A D V R E F V V R E
UniRef90_U8R3R8 F T R E D L I C G L S I E Q W D P L F
UniRef90_UPI00047E266F F N S K K L A R Y T V T E F R P
UniRef90_L0WIJ3 F H Q A G I A D F D I V E F V P
UniRef90_E6PU06 F Y T A G V A E Y T L V E F H P T M
UniRef90_A4CAK4 F Y R D G I A V Y E I T E F
UniRef90_K9YX64 L V K N G C V T Y E L H Q W
UniRef90_J9F9V6 Y L K N K I V E K F D I Q E
UniRef90_UPI0003AD05BA L M R G G V W Q S T Q V
UniRef90_UPI0002F549A8 F H E A G V A E Y T I V E F L P T M
UniRef90_J1FGT7 A V K A G K L I M E L H P W
UniRef90_H2AU46 F A K E G V Y
UniRef90_G5HGC4 F C L N G L Q E Y K V I E F N P
UniRef90_F0RLC8 F V V Q G C S E Y R Y V P F T P V
UniRef90_A1S6C4 A V K A G
UniRef90_UPI00040100DE A I Q A G V L K M D L K E W
UniRef90_J1H3L4 F H I N G I A S Y E M I E F N P T
UniRef90_Q0RV79 V V R A G L V R A I H V H E
UniRef90_B1YN84 F V T E G L A T Y R V T E F K
UniRef90_UPI00046F9087 F N K A S L W K R I E I N P I N V
UniRef90_C6X213 T V K N G I F E V E I L P F
UniRef90_C6HZX4 Y A K A Q V A R Y E V L E F S P V
UniRef90_H0TL75 F C R A K L M R F C R V I E F D P V
UniRef90_B8HM58 Y N Q A G C F E Q V V L R
UniRef90_UPI000428B6A3 M V K A G R L K V E L H P W
UniRef90_UPI0003B4844B F V A E G V
UniRef90_T0Z534 Y A K A G V A R H D L Q E F Q P V
UniRef90_Q0FV62 F V S A G V V K V Q I T E F
UniRef90_Q7VA00 M L R N N L V N W E I Q E W V P V
UniRef90_A4BB80 F H R E G V A D Y Q I T E F V P
UniRef90_UPI000471550F M H R S G A R S Y V M R R W
UniRef90_W8FKZ2 F V I H G A Y N R I R I L N W T P T L
UniRef90_B5HSS5 F V T A G V C A Y R V T E F
UniRef90_K2QNQ4 M V Q A G R L E V E V H P W
UniRef90_G2P4B1 F L V A G I G E Y T I T E F
UniRef90_D0GN82 F Y T E E I A D Y E I I E F
UniRef90_A9L3K9 F C I A D V A E F E V I E F V P T
UniRef90_F4GYZ3 F A R E G V V A V T D V R Q W D L V L
UniRef90_UPI00036B16E8 Y F R S E G C T I A S I R R W T P M L
UniRef90_A0A031JRG8 F I G G G V A K V D V I E W V P T F
UniRef90_K5B9C2 Y T S A G V A R Y E R F S F N G A F
UniRef90_I0GWZ4 Y V I Q R G L A E Y T A T G W H P T
UniRef90_M4U4K6 F N I A N V A S Y E V T E F I P T M
UniRef90_D4GN79 F W L E G L R Q N V E I R L W R R A F
UniRef90_Q4L9B8 F W Y K G L I S N Y T I E E W K P L F
UniRef90_UPI00037ACA45 F Y K E K L A S Y E I Q E F I P T M
UniRef90_Q6AKB2 F N Q A G I A K Y D I T E F I P
UniRef90_S7WPP1 Y V K N G L V E S W D I R E W S V V
UniRef90_UPI000369C9A8 F Y R E H I A R Y D I T E F V P
UniRef90_UPI0004642943 L A R T G S S D L T V R E W K L A
UniRef90_U7GHM3 F K S A G V A E Y T V T E F K P V M
UniRef90_UPI0003C7F28C F V E A G F V A D R A V H A W N P I L
UniRef90_W8WVG9 F S R K G L A T Y Q V I E F I P
UniRef90_T0HJT3 F F Q N G L S T F D L I E F N A V
UniRef90_UPI0003B723D0 Y I Q L G A R D Y H M H E W
UniRef90_I6W41 F Q Q S G V A K V E I V P F
UniRef90_D8IR31 F F I G G V A E Y E I I E F V P
UniRef90_B8FPX8 F I A S G

UniRef90_A0A023BRH5
 UniRef90_UPI00026302F5
 UniRef90_V1L5G9
 UniRef90_D4BBF4
 UniRef90_D0WMS4
 UniRef90_D3E964
 UniRef90_F9QBF9
 UniRef90_Q5X8W4
 UniRef90_S9SZZ2
 UniRef90_U3BK82
 UniRef90_I4VYH8
 UniRef90_UPI0003ACDBA2
 UniRef90_A0YWP0
 UniRef90_K9XTW3
 UniRef90_S4AY41
 UniRef90_H8XUR4
 UniRef90_I2EVB1
 UniRef90_K9SGM0
 UniRef90_J9ZBZ7
 UniRef90_A7HWI3
 UniRef90_UPI000370D5BD
 UniRef90_UPI0003727B9D
 UniRef90_O34446
 UniRef90_I0H637
 UniRef90_UPI00037FBD55
 UniRef90_D4F8Z7
 UniRef90_W5TYA3
 UniRef90_E4U1C3
 UniRef90_F4HAN7
 UniRef90_Q1GFB0
 UniRef90_X0N1Y1
 UniRef90_T0BZ10
 UniRef90_E8JX12
 UniRef90_B3E9G0
 UniRef90_G0H1K9
 UniRef90_M7XBJ9
 UniRef90_R7ZXY1
 UniRef90_E0U5N8
 UniRef90_B2IKA2
 UniRef90_Q1QUK3
 UniRef90_J1SCR5
 UniRef90_UPI00036F6DC0
 UniRef90_UPI0003F5F3D8
 UniRef90_UPI000255B57C
 UniRef90_U2RKF0
 UniRef90_E1JW73
 UniRef90_L0G5G0
 UniRef90_UPI0004695435
 UniRef90_UPI0003AD594F
 UniRef90_I2AYY2
 UniRef90_K9THC1
 UniRef90_H3RJC7
 UniRef90_UPI00036B13EC
 UniRef90_UPI000376BAF9
 UniRef90_UPI0003657FE0
 UniRef90_G8R4U2
 UniRef90_A3YBD8
 UniRef90_UPI00047AA2FE
 UniRef90_UPI0003456CD7
 UniRef90_R7CTW5
 UniRef90_C4GK44
 UniRef90_W4T769
 UniRef90_X5QTF8
 UniRef90_B8CMG0
 UniRef90_D7VR49
 UniRef90_C8KYR6
 UniRef90_UPI000372D1A7
 UniRef90_F8G8R1
 UniRef90_S5VY75
 UniRef90_V6KJ39
 UniRef90_E3I429
 UniRef90_UPI00039B8BDB
 UniRef90_UPI00040C140F
 UniRef90_F3LE09
 UniRef90_D5X2N3
 UniRef90_UPI000479AF99
 UniRef90_C6CMQ6
 UniRef90_UPI0004277B5F
 UniRef90_UPI00036A38B6
 UniRef90_V9HE15
 UniRef90_S9TJU5
 UniRef90_G7VKZ7
 UniRef90_UPI0002E36BC3
 UniRef90_W4LXCX0
 UniRef90_K9WVW4
 UniRef90_E3D0T4
 UniRef90_A6CK60
 UniRef90_E4U3Y6
 UniRef90_UPI00041E7036
 UniRef90_X2HCV8
 UniRef90_UPI0003FE927B
 UniRef90_R9K6M8

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

UniRef90_A0A023BRH5 G G P 50 K S P R T G G I V I A N C D S K E E V Y E I L D K D P 70 80
UniRef90_UPI00026302F5 A G R K V P V T G G F F M A R G S L D E S V K A W A A G D P
UniRef90_V1L5G9 S G R R I P R N G G V I L A K C D N I E S L E E R L S Q D P
UniRef90_D4BBF4 S G R K I P R S G G V I L A K C D E M E K L E R Y L S Q D P
UniRef90_D0WMS4 F G P L G D D S A L I L V E A D S P E A G L N V L A G D P
UniRef90_D3E964 C G P F A D Y P G G I V I I Q A E D L M E A T N I I A N A D P
UniRef90_F9QBF9 S G R K E P R T G G I I I M N V K E L D E V N Q I I E Q D P
UniRef90_Q5X8W4 S G P M K P P T T G G I I I A A T N D R A H L E S V I F K Q D P
UniRef90_S9SZZ2 S G P K E P R T G G I I V V D A Q T S R E E A R S Y I E Q D P
UniRef90_U3BK82 S G R K V P R T G G V I L A L A Q S R E M L D A V L A E D P
UniRef90_I4VYH8 S G G F S D K S G G A Y L L R A D D L A A A Q A T V Q R D P
UniRef90_UPI0003ACDBA2 S G P L L S G P G T G P G S G V T V L R A G D E E T A R R I A A E D P
UniRef90_A0YWP0 K A K T G Y W G K R G G G M L L F E A A S S L E E A K E I V A N D P
UniRef90_K9XTW3 K A R T G Y W A E F G G G M L I F E A S S L E E A K E I V A N D P
UniRef90_S4AY41 S G R K N P R T G G I L L A R L S S K D E A Q S L I V K E D P
UniRef90_H8XUR4 A G P F M K N D K N Y R G I F I F N C T T I E E A Q K L V N S D P
UniRef90_I2EVB1 A G P F T D D T D L K G I Y I F D V K T I E E A Q K L C E T D P
UniRef90_K9SGM0 S G Y W A E L G G G M L L F E A A N L A E A Q A I V Q A D P
UniRef90_J9ZBZ7 S G P M V P R T G G I L W I R A P R R R D E V E Q I V R E D P
UniRef90_A7HWI3 A G P L L E T N G G L A V I R A R D R D E A A E L L A A D P
UniRef90_UPI000370D5BD S G P Q E P R T G G V F I A R A K S R N E M E F F C H Q D P
UniRef90_UPI0003727B9D S G R M L D G T G G L L L G R A D S Q A Q L E D V F K D D P
UniRef90_O34446 F G P F S D A T G G A Y V I E A D S L E E A A E I G H A D P
UniRef90_I0H637 R G P T L T D D G E T A T G S L H I V D L P D P T T V T T F
UniRef90_UPI00037FBD55 K A R T G Y W A Q G G G M L L F Q A A S L A E A Q E I V A Q D P
UniRef90_D4F8Z7 S G R R I P R N G G V I L A R S E S L E A L Q A R L Q R D P
UniRef90_W5TYA3 S G R R V P R T G G V I V V D I E T R A Q L E I T L R Q D P
UniRef90_E4U1C3 S G R K V P R D G G I I L A R A V S S R E E I T I I T L D P
UniRef90_F4HAN7 F G P Y D N H Q G G L I L S Q A D S E E T L Q A I L S E D V
UniRef90_Q1GFB0 A G A L D D G P G G L I L A V G E D R A A L E E R L A T D P
UniRef90_X0N1Y1 S G R K N P R D G G V I I A A G S D R A T V E E L A A D D P
UniRef90_T0BZ10 C G P C K D E T A I M I L K A D S L E E A E E L A G D L
UniRef90_E8JX12 S G R K N P R T G G I I L V N T D S K E T V Q K I I S E D P
UniRef90_B3E9G0 S G R K V P R T G G I I L A T G V S K E Q L A E I L S E D P
UniRef90_G0H1K9 S G R K I P R T G G V I I S N V K T K A E V L D M L K D D P
UniRef90_M7XBJ9 A G P F F G N E D L R G I F V F D V S T M D E A A S L T A Q D P
UniRef90_R7ZX11 A G P F L F V F D S A D V E Q V K G W L A G D P
UniRef90_E0U5N8 S G K A K T G Y W G E L G G G M L L F E A N S L E E A Q K I V K H D P
UniRef90_B2IKA2 S G R Q E P R T G G V I L A K G P T K A E I E H I L R L D P
UniRef90_Q1QUK3 S G R K S P S G G I I L A K A T S R R E R L V A W L D E D P
UniRef90_J1SCR5 A G R K V P R D G G V I L A A G P D R A T V E R I V A E D P
UniRef90_UPI00036F6DC0 N A K T G Y W A K K G G M M V F E A A S M A E A Q A I V A N D P
UniRef90_UPI0003F5F3D8 A G R Q P E T G G V L I A R G E R S D V E T W A A Q D P
UniRef90_UPI000255B57C S G P F G D D G E I R G I T I Y N V P N L E M A D S L A N A D P
UniRef90_U2RKF0 S G R K N P R T G G V I L L N A E N L E E A V K K I I T S E D P
UniRef90_E1JW73 S G R R E P R T G G V I L A R C N R E A L L A I J A R D P
UniRef90_L0G5G0 A G P F F G K G D L R G I F I F D L E T I E E A E K L T A E D P
UniRef90_UPI0004695435 S G R K N P R N G G I I L A K F D S L R E D A Q T A L K D D P
UniRef90_UPI0003AD594F S G Q T V P T S R G G L I I A A G V D R Q G A E D I A A E D P
UniRef90_I2AYY2 S G P K S D K T G G L I L A K G D I E D V K K F I E N D P
UniRef90_K9THC1 N A K T G Y W K R R G G G M L L F E A E S I E E A Q Q I V A E D P
UniRef90_H3RJC7 A G P L E N Q Q G G V V L F L A S D E Q A V R D R L T E D P
UniRef90_UPI00036B13EC A G P M V P R T G G I L V V R S G G T R Q E L E T L K D D P
UniRef90_UPI000376BAF9 A G P F M D S G E F R G I Y I F D V I E T V E A K A L T E S D P
UniRef90_UPI0003657FE0 A G P L G K N E N N Y R G I F I L S N I N S A D E A R E L L T D P
UniRef90_G8R4U2 A G P F G D D G E V R G I L V M R V S D K E K A E E L A A M D P
UniRef90_A3YBD8 S G R K E P R T G G I I L A K A L N L E E V L N K V L A K D P
UniRef90_UPI00047AA2FE A G G F E D Q T G G A Y V V T A D S L E E A K S L V N K D P
UniRef90_UPI0003456CD7 S G P R V P R C G G V I L A G D D R A R I D R V I G Q D P
UniRef90_R7CTW5 S A L Y A D M T G V V N I V F A D T S R E E V E A F Y E N E P
UniRef90_C4GK44 T A P F T D T Q A H Q G M I F A Q A E S R E A L Q A I L A E D C
UniRef90_W4T769 S G R K E P R T G G I I I A K A A S K K E I E Q I I T E D P
UniRef90_X5QTF8 S G P K R P R T G G I I I A R G P R E E L D A R L A D D P
UniRef90_B8CMG0 A G P F L E Q G D L R G I Y I F D V V S I E E A Q A L T A S D P
UniRef90_D7VR49 A G P L G K N Q N N Y R G I F I L N N I N T L E E A K E I L Q T D P
UniRef90_C8KYR6 L G P Y L D K E R A G V I I A Q A E S R E E Q L E Q I L A E D V
UniRef90_UPI000372D1A7 K G P F T D H S G G F I I F S V K T M E E A Q Q I A G Q D P
UniRef90_F8G8R1 S G P Y N N R S G G F I I S V M D L E S A K E Y V R N D P
UniRef90_S5VY75 S G R K N P R D G G V I L A V A E D R A R I E E V V A G D P
UniRef90_V6KJ39 S G R K K P R D G G V I L A V G D D R E S V E A L V A A D P
UniRef90_E3I429 S G R R I P R T G G V I L A R G D S L E A I E S R L S E D P
UniRef90_UPI00039B8BDB A G P L H A E V I G G F I L A H A P E T M Q V R A M L A Q D P
UniRef90_UPI00040C140F C G P F H D Y P G G M V V F N A D N Y D Q A I L I A E S D P
UniRef90_F3LE09 S G R K V P R T G G V I L A Q A E S K T V L E H I L Q E D P
UniRef90_D5X2N3 S G R K E P R T G G V I L S K A E T R A E L E S I V A N D P
UniRef90_UPI000479AF99 S G K A R T G Y W A Q M E G M M V F E A A S M E A Q A I A N D P
UniRef90_C6CMQ6 A G P L E D G T G G F I L A Y G T E S A A V V E M L S D D P
UniRef90_UPI0004277B5F S G P L E P R F G A I W L V R V Q D L A D L D A L R D G D P
UniRef90_UPI00036A38B6 A G P F A D D S G I Q G V V I Y S T P T Y E A A S L A N Q D P
UniRef90_V9HE15 S G L K E D M S G G I L I M K A N S F E D V I E A Y L N S D P
UniRef90_S9TJU5 S G P K T P R T G G A I L A Y G N D R A E V E A R L A E D P
UniRef90_G7VKZ7 S G R K N P R T G G I I V A K A E S A D E L A Q I Y N T D P
UniRef90_UPI0002E36BC3 S G Y W A V R G G G M M I F E A E S M E Q A Q A I V A E D P
UniRef90_W4LXCX0 A G R T L N T D E S S F G I V I L Q A D S E T T A R Q V M N H D P
UniRef90_K9WVW4 S G Y W A Q H R G G M L L F E A A S M T E A R A I V A R D P
UniRef90_E3D0T4 A G R R E P R T G G V I L A R G E D E G A L R E I L K E D P
UniRef90_A6CK60 A G K T K G L D E S T F G I V I F E S D S D E A L S I M N G D P
UniRef90_E4U3Y6 S G R K V P R T G G V I L A R S V S R E E I E T L I T L D P
UniRef90_UPI00041E7036 S G L K E D M T G G I F I I K S E T L K K V I E E Y L M N E P
UniRef90_X2HCV8 S G R Q V P R T G G V I L C R A A S K E S A Q S I M V K D P
UniRef90_UPI0003FE927B S G R K E P R T G G V I I S T I G D R S K L N D V I A Q D P
UniRef90_R9K6M8 C G P F Q G Y P G V I A G M I V I F K T E S Y E A E A L C K L E P

UniRef90_A0A023BRH5 L I Q K E V A E Y S I I E F T P V M

UniRef90_UPI00026302F5 F A T A G A Y E F I E V I A P

UniRef90_V1L5G9 F N K L N I A K T E I I P F

UniRef90_D4BBF4 F Q Q A G V A K V E L I P F

UniRef90_D0WMS4 F R E L G V I K N A N A R V W N P A

UniRef90_D3E964 F I A S G C K S Y E I R

UniRef90_F9QBF9 F H Q H Q I A D Y Q V I E F

UniRef90_Q5X8W4 Y Y L A E I A E Y Q F I E F T P V

UniRef90_S9SZZ2 F Y V H G V A K Y H Y I A F R P T

UniRef90_U3BK82 F Y Q H A L A D Y D V T E F V P T

UniRef90_I4VYH8 A H T S G G W T I T V H E W

UniRef90_UPI0003ACDBA2 F V R A G L R T F E V Y R W R V

UniRef90_A0YWP0 L V Q N G C V S Y E L L E W C V V

UniRef90_K9XTW3 L I K N N C V K Y E L H E W K I V

UniRef90_S4AY41 F L I H G I A T Y S I I E F V P T

UniRef90_H8XUR4 A V Q A N L

UniRef90_I2EVB1 A I K A G S L M M E L H P W

UniRef90_K9SGM0 L I A N H C V K Y Q L H E W R L V

UniRef90_J9ZBZ7 Y A R E K I A S F E I L E F D P

UniRef90_A7HWI3 A I A G G I F T A E V N S W F V T F

UniRef90_UPI000370D5BD F Y S N G V A E Y Q L

UniRef90_UPI0003727B9D F V V N G C S E Y T Y T P F T P V

UniRef90_O34446 L V A S G S S E L T I K E W K

UniRef90_I0H637

UniRef90_UPI00037FBD55 L V K N G C V K Y Q L F E W R V V

UniRef90_D4F8Z7 F Q Q H G L A R C D I I P F

UniRef90_W5TYA3 F G L A G A A T Y E V I E F V P T

UniRef90_E4U1C3 F Y R H Q I A S Y E I T E F N P T M

UniRef90_F4HAN7 F Y H N G L A D Y Q V T A F N P

UniRef90_Q1GFB0 F V R D G L V A V D I T A F T P

UniRef90_X0N1Y1 F V R A G V C E Y R I T E F T

UniRef90_T0BZ10 F T R A N Y Y Q D R R L V E

UniRef90_E8JX12 F Y I Q E I A A Y T F T E F

UniRef90_B3E9G0 F N Q H G V A S Y E V T E F E P

UniRef90_G0H1K9 F Y I N E I Y D Y E I I E F T P S L

UniRef90_M7XBJ9 A V A A G V L K M D L R E W

UniRef90_R7ZXY1 A I E E G F L K A S L Y P W

UniRef90_E0U5N8 L I E N K C V E Y E I H E W R I V

UniRef90_B2IKA2 F Y K E Q I A E Y Q I V E F V P

UniRef90_Q1QUK3 F I V A G V A Q Y R V E E F L P T

UniRef90_J1SCR5 F V L A G V C E Y R V T E F

UniRef90_UPI00036F6DC0 L I I N D C V S Y K L Y E W K I V

UniRef90_UPI0003F5F3D8 Y R L A G V A T N E F V E F T P

UniRef90_UPI000255B57C M V K A G R L K I E I H P W

UniRef90_U2RKF0 F N I N K I A E Y E I T E F

UniRef90_E1JW73 F W R E G A A R Y E V V E F V P

UniRef90_L0G5G0 A I K A G V L Q M E L L E W

UniRef90_UPI0004695435 F Y Q N D I A A Y D I T E F

UniRef90_UPI0003AD594F F V K A G V Y R I T T V T P

UniRef90_I2AYY2 F Y T N N I

UniRef90_K9THC1 L V K Q G C V K Y D L Y E W

UniRef90_H3RJ7 F V A L G L V D

UniRef90_UPI00036B13EC F Q V H G L A D Y T V T E F K

UniRef90_UPI000376BAF9 A I Q A G L V M E L H P W

UniRef90_UPI0003657FE0 A I K N G L L D F E I F T W

UniRef90_G8R4U2 A V K A G R L V M E I H P W

UniRef90_A3YBD8 F Q I A G I A D Y E I T E F L P T M

UniRef90_UPI00047AA2FE M N Q E N E S V T V K E W N

UniRef90_UPI0003456CD7 F V C E G A A S Y E V L Q W N

UniRef90_R7CTW5 F H R A G A Q D Y V V R E I N

UniRef90_C4GK44 Y Y P N H A Q Y D I R E F A P

UniRef90_W4T769 F Y I Q E V A D Y A I T E F I P

UniRef90_X5QTF8 F A K A G A A D Y E I T E F T

UniRef90_B8CMG0 A I K A G S L I M E L K P W

UniRef90_D7VR49 A V K A G L L D I E L F N W

UniRef90_C8KYR6 Y Y P N L A D Y Q L R E F K A A M

UniRef90_UPI000372D1A7 A A L N N T R E F T F K E W K C S I

UniRef90_F8G8R1 F Y L N D I G D F D I K D F I P T

UniRef90_S5VY75 F V V A G V C A Y R V T E F

UniRef90_V6KJ39 F V I G G V C A Y R I T E F T V

UniRef90_E3I429 F Q R L I G L A K V E I I P F

UniRef90_UPI00039B8BDB F V I H R L V E V D L Q A C E P A I

UniRef90_UPI00040C140F F I Y S G

UniRef90_F3LE09 F A K A N I A E Y E I T E F I P T

UniRef90_D5X2N3 F H R E Q I A E Y E I T E F L P

UniRef90_UPI000479AF99 L V K N D C V N Y K L Y E W R I V

UniRef90_C6CMQ6 F V H Q G L V R V E I K T I E P A I

UniRef90_UPI0004277B5F F H K A G L T N Y E L M P W K V

UniRef90_UPI00036A38B6 A V L A G R L V V E I H P F

UniRef90_V9HE15 L K I A G S Q E Y R I M E F T P

UniRef90_S9TJU5 F V I G G L A R Y T V H E

UniRef90_G7VKZ7 F F I N N I A E F N V T S F T P

UniRef90_UPI0002E36BC3 L I K N G C V D Y Q L Y E W R L V

UniRef90_W4LXC0 A V K H E V M H A E L F P Y R I A L

UniRef90_K9WWW4 L V H N G C V D Y Q L Y E W R I V

UniRef90_E3D0T4 F H R E G A A E Y D L I R F V P T L

UniRef90_A6CK60 A V K E G V M T A E L F P Y Q V A L

UniRef90_E4U3Y6 F Y R H H V A E Y E I S E F S P T M

UniRef90_UPI00041E7036 F K I N E I Q D Y K V I E F N P

UniRef90_X2HCV8 F Y I H Q I A E Y E L I E F I P T

UniRef90_UPI0003FE927B F H R E G L A S Y E V T E

UniRef90_R9K6M8 L V A E G Y A T Y T L

UniRef90_H6LFK4
UniRef90_H8KT06
UniRef90_M7NI98
UniRef90_UPI00026CB1A5
UniRef90_R5VCV4
UniRef90_V9VW84
UniRef90_UPI0003710F71
UniRef90_T2KRM1
UniRef90_B8CG75
UniRef90_B6B8D6
UniRef90_D8FYY7
UniRef90_G8RV61
UniRef90_K9ZCA7
UniRef90_C5EPM6
UniRef90_W9BM00
UniRef90_D5BDQ5
UniRef90_B4VHD3
UniRef90_Q2BYH6
UniRef90_D5T3Y2
UniRef90_NOAMY3
UniRef90_W4RL76
UniRef90_M5PEZ0
UniRef90_D7C0P8
UniRef90_Q98H68
UniRef90_A3Z8S1
UniRef90_UPI00046ADD45
UniRef90_Q12ND0
UniRef90_C6PZ09
UniRef90_UPI000375C3FC
UniRef90_U1LB18
UniRef90_E6KJA7
UniRef90_J3F1J5
UniRef90_W1N617
UniRef90_UPI000344D9E8
UniRef90_UPI00034B8FF7
UniRef90_K9U3Q6
UniRef90_M4Z2V2
UniRef90_UPI000289533B
UniRef90_C6ST42
UniRef90_F8LMJ9
UniRef90_V5CV86
UniRef90_UPI0003025650
UniRef90_V2XVS3
UniRef90_K9YKH5
UniRef90_T2J8M6
UniRef90_F0BJ74
UniRef90_J7GLP1
UniRef90_UPI0002D5BDC1
UniRef90_UPI00035F6CAD
UniRef90_B5H4S2
UniRef90_UPI000367CECA
UniRef90_UPI00034C1F7A
UniRef90_UPI0002198267
UniRef90_Q1PJ5
UniRef90_UPI000225B446
UniRef90_X6PGM5
UniRef90_UPI00038203F9
UniRef90_UPI0003F5665E
UniRef90_A2CC80
UniRef90_Q0RJD5
UniRef90_R2S3V3
UniRef90_C9CWF1
UniRef90_K2DYV9
UniRef90_R4WNY1
UniRef90_H2BTL6
UniRef90_R2PBA7
UniRef90_B2SX06
UniRef90_UPI000407D678
UniRef90_UPI000476FC62
UniRef90_UPI0003476FFA
UniRef90_C5CS73
UniRef90_M1WP88
UniRef90_G8M3D8
UniRef90_Q5YTL3
UniRef90_UPI0003448FD8
UniRef90_I6R8Y4
UniRef90_Q115E6
UniRef90_U1M391
UniRef90_UPI000237CA55
UniRef90_W6S6U0
UniRef90_E6PJ02
UniRef90_C8PL87
UniRef90_UPI000467DCC7
UniRef90_B6R5E3
UniRef90_G9PXQ9
UniRef90_Q2LQM0
UniRef90_Q4UM11
UniRef90_A4CSR8
UniRef90_W9HT88
UniRef90_C1B5Q0
UniRef90_S6HL87
UniRef90_V5AC16

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

UniRef90_H6Lfk4 S G P 50 K I E T G G 60 I L V V K C ED I N K F C S D D P
UniRef90_H8KT06 F G P V F D P N G A F G V G I V E A S S E E E V K T L T D N D P
UniRef90_M7NI98 K G R F A D G S G G M V I Y E A E S L E A A E E I A K Q D D P
UniRef90_UPI00026CB1A5 S G P F M L K A G G L N G E L D D N G M T I F K A D D L A A A T K I A T Q D D P
UniRef90_R5VCV4 S G R R N P R T G G C L L C N A S N E A E V K A I I T K E D P P
UniRef90_V9VW84 G G A L A M R P M Q D F P G A I W N V I E A E S R R Q D V L E R L I L Q D P
UniRef90_UPI0003710F71 S G G A V I L L I A G E D R A R I T V L L E Q D P
UniRef90_T2KRM1 S G G F G D D G E V R G V T I Y N V P T Q K I A D S L A N A D P P
UniRef90_B8CG75 I V S G Y R V D A N D R P G G G G L L I F A A E S E E A A E K L V R E D P
UniRef90_B6B8D6 A G S M T D G E G G A I L A V G E S E Y E D L T A R V A Q D P
UniRef90_D8FYY7 K A K T G Y W A R R G G G M L L F E A G S M E E A I A I A A K D P P
UniRef90_G8RV61 Y G P V A D P E G V W G L G V L R A A S D R A E V L A L A E N D P
UniRef90_K9ZCA7 K A K T G Y W A Q K G G M M L F E A A S M D E A Q A I L V A G D P
UniRef90_C5EPM6 S G L K T D M S G G V F I T R A D T A E Q A E A Y L D N E P P
UniRef90_W9BM00 A G R T D G R G A V L V V G D M S A A E A D A V L A G D P
UniRef90_D5BDQ5 I G P F E D S S D I K G I A V Y N T R T L K E A D S L A N L D P
UniRef90_B4VHD3 C G P F F P H D G T G L W V I Q A E N L E E A Q E I V N S S P P
UniRef90_Q2BYH6 S G R K V P R T G G L L A Q A E N R S E L E T K I L N N D P
UniRef90_D5T3Y2 S G R K E P R T G G M L I A Q A E S L D E L T A R V A Q D P
UniRef90_NOAMY3 Y G P F S D A S G G A Y L I R A G S L E E A K R I G H A D P P
UniRef90_W4RL76 A G P L K N N E Q A M L L N C N G I D E A I R L V E K D P
UniRef90_M5PEZ0 Y G P F G D G S G G A Y L I Q A D S F E E A Q K I G H S D P
UniRef90_D7C0P8 S G R K L P R D G G I T L A V G D D R A R I E R L V A T D P
UniRef90_Q98H68 S G P L L I A Q C P R E L L D A R L A A Q D P
UniRef90_A3Z8S1 S G F L V D G A G Q P G G G L L V L E A E S Y A Q A L A L V A Q D P
UniRef90_UPI00046ADD45 S G R K I P R T G G I I L S K L S S L E K L E K I L N Q D P
UniRef90_Q12ND0 G G R K V P R T G G L L I S Q H D N E E E L R R V L N S D P
UniRef90_C6PZ09 G G G F A N E S G G M I M F E A K D L E E A K T I A E K D P
UniRef90_UPI000375C3FC T G G F S D R S G G A Y L L Q G V D D L A Q A Q A I V A A D P
UniRef90_U1LB18 S G R K I P R T G G V I L V K A S S E V E L L D I V R Q D P
UniRef90_E6KJA7 S G R K N P R T G G L I L M Q G M N K E A V V Q E I I R Q D P
UniRef90_J3F1J5 S G R K D P R T G G I I T A V I G A R N E I S E V V T E D P
UniRef90_W1N617 S G R K V P R T G G V I L A V A E S L E A V E Q I V A Q D P
UniRef90_UPI0003A4D9E8 T G G F S D G S G G A Y V L C N V D S L A Q A Q A I V A T D P
UniRef90_UPI00034B8FF7 S G P Q V P R V I G V I L V R N L G R E A L D V V L A Q D P
UniRef90_K9U3Q6 Q A K T G Y W G C L G G G M M L F Q A N S M T E A E A L V A Q D P
UniRef90_M4Z2V2 T G P L E P R T G G L L V R C A N D R A G L D R M M N E D P
UniRef90_UPI000289533B A G R Q N P R T G G V I V A R G Q K A E A E A L A A T D P
UniRef90_C6ST42 S G R K N P R T G G I I L A K A A D L A E A T E R I T S E D P
UniRef90_F8LMJ9 S G R K N P R T G G L I L V R A K A N K E A V Q E I I T H D P
UniRef90_V5CV86 A G P L S D N S G G F I L M Q A Q D E K Q I E A Y L Q R D P
UniRef90_UPI0003025650 S G Y L I D I L K K P G G G L L M I E C T S Y E A E K I K S D P
UniRef90_V2XV33 A G V F K G Y P G V A G M Y I L K A E S L E A A E E L C K R E P
UniRef90_K9YKH5 E A K T G Y W K E A E G G M L I F K A E S M E A K T I V E N D P
UniRef90_T2J8M6 E A K T G Y W G E Y G G M L L F K A D S L E E A Q A I V K Q D P
UniRef90_F0BJ74 T G G F S D G S G G A Y V L I N V D S L A Q A Q A I V A R D P
UniRef90_J7GLP1 S G R R I P R N G G V I L A K C E S L A S L E E R L R E D P
UniRef90_UPI0002D5BDC1 A G D T C V T E K S D V E L V I T K A Y T E E A K N L M N D P
UniRef90_UPI00035F6CAD A G P L E D K A G G F I L A F G S S L E E I E Q M L A A D P
UniRef90_B5H4S2 S G R K K P R D G G I L A V G D D R A G I E K I A A T D P
UniRef90_UPI000367CECA A G P M G K N E K N Y R G I F I E Q D V A S M E E M Q H I L Q T D P
UniRef90_UPI00034C1F76 A G P T I P R K G V I L A V R I E R E K L D A L L A T D P
UniRef90_UPI0002198267 S G R R V P R V I G V I L A Q G V S R D A L E A M L A E D P
UniRef90_Q1PJ5 S G F L V N G L K Q P G A G G L L I T E I E T Y K D A L E I I K N D P
UniRef90_UPI000225B446 S G P Q I T P R T G G I I I A K A K D R A E I E Q L M N R D P
UniRef90_X6PGM5 S G R R V P R N G G V I I A Q C N D I H A L E Q R L S Q D P
UniRef90_UPI00038203F9 S G P F V P R T G G F L V A G D V E R S R I V D A L D V D P
UniRef90_UPI0003F5665E S G L K D M S G G I F V M K A E S I E E V E G Y L S E E P
UniRef90_A2CC80 S G F L V D A E Q R P G G G G L L L Q A D S F E A A K R L V E Q D P
UniRef90_Q0RJD5 S G P R T P E E T G G V I L A D G V E R A T L D R I L A E D P
UniRef90_R2S3V3 A G V F G D M T T E E I D G A M V I F E A E N L A E A K A I S D A D P
UniRef90_C9CWF1 A G S L D D G A G G A L L A C D D D R D A L E A R V S A D P
UniRef90_K2DYV9 A G P F A D K S G G A Y L F K A A N L E E A R A L A F S D P
UniRef90_R4WNY1 S G P F M E K A G G L S G V L A D G G M T I F K A G D R A E A E K I A T D D P
UniRef90_H2BTL6 T G P M G D D G E L R G I V I Y N T P T Q K E A D S L A R L D P
UniRef90_R2PBA7 A G V F G D M S T E E I D G A M V I F E A E S L A E A K A I S D A D P
UniRef90_B2SXD6 A G P K V P R D G G I L A V H I E R D K L D E I L A S D P
UniRef90_UPI000407D678 S G R K N P R T G G V I L V R N V N R P A L D I L K Q D P
UniRef90_UPI000476FC62 S G A K V P R S G G V I L A V A A S R A E V E Q L I T E D P
UniRef90_UPI0003476FFA S G T A R R Q D R S G G L V M M R A D S L A A E V E A F V A R D P
UniRef90_C5CS73 S G R Q V P R K G G V I F A R S G D R A E L E A V L A R D P
UniRef90_M1WP88 S G Y W A K R G G G M L L F E A N S L D E A Q A I V E A D P
UniRef90_G8M3D8 A G P K V P R E G G V I L A S D I E R E R L D A I V A E D P
UniRef90_Q5YTL3 S G K F C D G S G G A Y V V L A E S L D D A R A L A F A D P
UniRef90_UPI0003448FD8 E A K T G Y W A E L G G G M L I F K A D S R D E A D S L V L Q D D P
UniRef90_I6R8Y4 A G P L S N G T G G F I L F Q G D N I S D I H N F L Q D D P
UniRef90_Q115E6 S G Y W G K L G G G M L I F E A S S M A E A E K I V A E D P
UniRef90_U1M391 S G R K K P R T G G V I I S T I N D R K T L E R E L A H D P
UniRef90_UPI000237CA55 S G P R T P N T G E V I I S C L Q D I E S L H A L L N Q D P
UniRef90_W6S6U0 S G L K A D M S G G I F V I K S E S I E K L M E Y L S S E P
UniRef90_E6PJ02 S G P M E P R E G G V I I A N S M P R E K L D E A M L A E D P
UniRef90_C8PL87 S G R K V P R T G G I I L I N A K D R T E L D E I J A Q D P
UniRef90_UPI000467DCC7 S G R K V P R T G G L I I A R G S L D E V R A L C E A D P
UniRef90_B6R5E3 S G P K V P R S G G V I I A T A E S R E L L E L L T K D P
UniRef90_G9PXQ9 S G R R N P R T G G A I L F S V D E R A E L D A I L A E D P
UniRef90_Q2LQM0 G G P F L D S S G G A T L L E L E G I E E A R A I A E H D P
UniRef90_Q4UM11 S G P I H P R I G G I T L A N L E K L N Q L K D I L K E D P
UniRef90_A4CSR8 T G F L V D G K G L P G G G G L L M V I E A E S Y A Q A L A L L R G D P
UniRef90_W9HT88 G G T K N S P K P E N N S F A G R K V P R T G G V I M A N C A N L D E A L I A I A A G H P
UniRef90_C1B5Q0 G G E T L V S D G P F A E T K D F V G G F V V V D C A N L E Q L Q K I I E Q D P
UniRef90_S6HL87 S G R K V P R T G G V I M A N C A N L E Q L Q K I I E Q D P
UniRef90_V5AC16 A G P L E P R T G G F V L A A C D N R A E L D A M L E K D S

UniRef90_H6LFK4 L V K A G I Q E Y R I S E F K
UniRef90_H8KT06 A S K I N H Y E V Y P M K A V L
UniRef90_M7NI98 Y V E K G A R G I E I K E W I A S F
UniRef90_UPI00026CB1A5 T V K S G M L D V E I K M F
UniRef90_R5VCV4 F Y F K G T A D Y E I
UniRef90_V9VW84 Y F V A S L R S Y K I T E W G T A
UniRef90_UPI0003710F71 F R R G G V A E Y E L V E F
UniRef90_T2KRM1 M V K A G R L E I E I R P W
UniRef90_B8CG75 L V K N E C V D W Q L N K W
UniRef90_B6B8D6 F V T G G I V E
UniRef90_D8FYY7 L V V N G C V T Y E V Y Q W C V V
UniRef90_G8RV61 S V T A G V
UniRef90_K9ZCA7 L V H N G C V T Y Q L Y E W R I V M
UniRef90_C5EPM6 F K L H G T Y R W V E F E P
UniRef90_W9BM00 Y T R A G V Y D R V S F T
UniRef90_D5BDQ5 M V K A G R L T I E V H P W
UniRef90_B4VHD3 R V R D G L A D S A R I V E W
UniRef90_Q2BYH6 F K I Y N L A N Y E I T E F V P
UniRef90_D5T3Y2 F F I N N I
UniRef90_NOAMY3 I I K T G S S T I V V K E W
UniRef90_W4RL76 F I K E K Y Y I T Y D I N E L I V A
UniRef90_M5PEZ0 L I E S G A S I L V V K E W
UniRef90_D7C0P8 F S V A G L C E Y R I T E F
UniRef90_Q98H68 F A K A G A A D Y E V T E F
UniRef90_A3Z8S1 M V A R G L V N W T L Q Q W R P V
UniRef90_UPI00046ADD45 F K I N N L A K Y E I Q E F I P V M
UniRef90_Q12ND0 F I K S G A V S Y V I T E F I P V M
UniRef90_C6PZ09 I I Q R G L F R V K I Y E W
UniRef90_UPI000375C3FC L A I Q G C S D L T V Y E W N
UniRef90_U1LB18 F Y V A E V A R Y D I T E F V P
UniRef90_E6KJA7 F Y K N K I A Q Y D I E F T
UniRef90_J3F1J5 F V V N G V A E Y T I T E F I P T M
UniRef90_W1N617 F C I H Q L A E A E I T E F T
UniRef90_UPI0003A4D9E8 L A T M Q V S D L S V H E W T
UniRef90_UPI00034B8FF7 F Y R E G I A Q Y Q I T E F A P
UniRef90_K9U3Q6 L V K S S C V K Y E L Y E W R I V
UniRef90_M4Z2V2 F V V H R L V E V E V R A F T P M L
UniRef90_UPI000289533B F V T G G V A T A R V I Q F N A S F
UniRef90_C6ST42 F K I N E I A N Y D I I E F
UniRef90_F8LMJ9 F Y Q N K I A Q Y D V I E F
UniRef90_V5CV86 F I I N A L V E R V A V E P
UniRef90_UPI0003025650 M V T N N I V D W K L H E W
UniRef90_V2XVS3 L V A E G F A T Y K L K A L Q P A
UniRef90_K9YKH5 L V R N K C V E Y V I H Q W
UniRef90_T2J8M6 L I V N H C V K Y E L H E W C V V
UniRef90_F0BJ74 L A L R G A S T L T V H E W K T
UniRef90_J7GLP1 F Q A L K L A T V E I I P F E P
UniRef90_UPI0002D5BDC1 G I K E G I M E G S L Y N F K
UniRef90_UPI00035F6CAD F V A H G L V R
UniRef90_B5H4S2 F V V G A V C T Y R I T E F
UniRef90_UPI000367CECA A V E A K L L D V E I Y N W
UniRef90_UPI00034C1F76 F A Q Q D L A T Y D V T E F K
UniRef90_UPI0002198267 F K Q A E A A D Y Q V V E F V P T M
UniRef90_Q1PJ5 M I K N N I V E W Q L N E W
UniRef90_UPI000225B446 F S I E K I A K Y E I E F
UniRef90_X6PGM5 F Q K M G L A E S V I I P F
UniRef90_UPI00038203F9 F V R S G A A T Y E I H E F K
UniRef90_UPI0003F5665E F K V F G L Q D Y N V I E F
UniRef90_A2CC80 M I V E G L V K W D L Q Q W I P V
UniRef90_Q0RJD5 F Q Q A G V T A T D V I A F T P V
UniRef90_R2S3V3 V F Q G G F Y H Y E I K Q W
UniRef90_C9CWF1 F V R E G I V T A E I T G F T P V
UniRef90_K2DYV9 V H T S K S S I V T V Y E W N
UniRef90_R4WNY1 T V I Q S G M L N V E V K
UniRef90_H2BTL6 M V I A G R L K V E V H P W
UniRef90_R2PBA7 V F Q D D L Y R Y E L K Q W H V V
UniRef90_B2SX6 F A Q Q K L A R Y E V T E F K
UniRef90_UPI000407D678 F Y Q N E I A D Y D I T E V I P T
UniRef90_UPI000476FC62 F H A K Q I A R Y H I T E F Q P
UniRef90_UPI0003476FFA Y A T A G V A A F E I T A Y D V A
UniRef90_C5CS73 F V I Q N G V A S T H V I E F V P
UniRef90_M1WP88 L V K H D C I N Y Q L N E W R V V
UniRef90_G8M3D8 F A K Q G L A H Y D I E F
UniRef90_Q5YTL3 L H V T G A S E L T V Y E W
UniRef90_UPI0003448FD8 L V K N N C V E Y E L H Q W N I V
UniRef90_I6R8Y4 F I I H N I A D A E V M S I E P A L
UniRef90_Q115E6 L I K N N C V T Y E I Y Q W
UniRef90_U1M391 F Y R E N I A S Y E I T E V I P T
UniRef90_UPI000237CA55 F Y K K R I G Q Y Q I E F S P
UniRef90_W6S6U0 F K V S G I Q D Y K V I E F
UniRef90_E6PJ02 F L R E G V S E Y R V I E F
UniRef90_C8PL87 F F Q N G V A K Y E I E F A P T
UniRef90_UPI000467DCC7 F V S E G V A R Y E L T E
UniRef90_B6R5E3 F Y Q Q S V A T Y T V T E F R P
UniRef90_G9PXQ9 F R I N G V T E
UniRef90_Q2LQM0 C V I S G I M T V A V H P W
UniRef90_Q4UM11 F Y I N D I A E Y E I T E F T P T
UniRef90_A4CSR8 M I A R G L V D W T L Q Q W M P V
UniRef90_W9HT88 Y A R W G G V E I R P
UniRef90_C1B5Q0 F H R A A V A R Y Q I T E M I P T M
UniRef90_S6HL87 F H V H K L V D Y T I V A A T P A L
UniRef90_V5AC16

UniRef90_T1ZBJ0 MF I V N L T Y I K P L D E V I E K H L Q K H I D F L D Q H Y K K G F F I A 40
UniRef90_N9TXV6 MF V V T L T Y V K P L A V I D E L I P A H V E W L K A H Y A A G G H F L A
UniRef90_UPI000405EE3D Y A V I L H Y K A P L S D M D R H V D A H R V W L R E H Y A A G G H F L L
UniRef90_UPI00037B4300 MF I L L L K Y I K P V E E V D K E L E N H I K Y L N K Y Y S L G K F I C
UniRef90_F0KED5 H R D F L K Q L R E S G E L V V
UniRef90_UPI00034B7703 H Y E H L D R L K K E G C L E M
UniRef90_UPI00046E7EE8 H V A N L K K L D D D G H L E L
UniRef90_R9ME09 K A A V I E R H V A N L K K L D D D G H L E L
UniRef90_N9TW21 V T G P T P T E A A H I A A H F T Y L E A L C R R R G V V R L
UniRef90_F5YK24 M S K F V A I F D I S D K P Q P R D A L I R H I D H L K A L R K K N I L F M
UniRef90_I6WQ81 L F I L L E L T Y H R G L A P V E A N L Q A H K E Y L A K N Y S A G R F L A
UniRef90_U5E4D8 V V E P H R E F L R E L L A K G Q L Q E
UniRef90_K9UAG6 P A H K A Y V Q G L I D R G H
UniRef90_U1ZW82 MF V V S L T Y R V P D E I V D F H R P G H M A W L K E A F D G G V F V A
UniRef90_UPI000427D262 F L V L T K Y V K S M D E I L E R L L P S H S E H L Q N Y Y A N G K K L I V
UniRef90_UPI0003633D59 F V L E L T Y T A P M E R A D A L M R E H I A W L D E S Y A A G G V F V A
UniRef90_R9TX12 Y L L I T T R T E N F E D Q Y V P A H Y Q F L D R L K A E N R L E M
UniRef90_A9KIB8 M K Y F I I E G N I T N P E L M N D D I M K E H M A Y T Q K A M D K G L V L M
UniRef90_F7QMA8 M K Y F L F V P G P D F L P E Q V Q L M K A H G E F L Q A M L E Q G G V V A
UniRef90_Q1IVF6 M Y A L A I I R Y R R P L E E V V N V T N A H R A Y L G E L K A Q G I L I A
UniRef90_U5MUW9 K Y L D T H I S F L E K Y Y K E E K F I C
UniRef90_A6X279 MF V V N L T Y I K P L E E I G R H L E A H R E F L D R Q Y A D G V F L A
UniRef90_U2FB80 E R A E E L F A E H R G W F T K Y V D R G N G V F L A
UniRef90_UPI000289EE1B M I F A I T L S Y R P V D Q V K V H L D A H K A W L Y D Q H I Q A G T I L F
UniRef90_UPI0003684374 E K L S A L F K G H M E N I V K L V T A N K L I I
UniRef90_UPI00046FFE09 H L E E H V R F L E K Y Y N S N K F I F
UniRef90_W1U5K0 MF I V N L T Y I R P L E E V I E K Y L A E H I T F L N K Y Y G T D N F I C
UniRef90_UPI000347317C V R P H I E Y V K D L I A K G H
UniRef90_E9UQM4 L V A V L Y A Y N D L P D V R A E H L D A H R G F L A S Q D N L V L
UniRef90_Q8EEC5 F V I S L T Y K K P L A D V I E L H L A A H I A Y L D A Y Y A K G V F I A
UniRef90_UPI000312F688 Y L V M A M R R P G F D P A V V Q P H K D F L Q G L R A G R L E M
UniRef90_V2YBL0 M E Y L Q K I A R E R Y L A
UniRef90_UPI000376DB57 L F V L R L H Y T A T E E D A A P F V P G H V A F L E R H H G T G T F L L
UniRef90_UPI00047C14BD Y I F V I L K T G P N V T Q D K K F I F A G H M S N M N V M V K A D K L I V
UniRef90_M7N5N6 H L D N I G R L A R E G K L V V
UniRef90_J3HPA2 F I V S L T Y V A P L A D L D A A M A D H I A F L E K H Y A T G T F V A
UniRef90_C4U804 Y V V S L T Y H Q S I D V V E P L T E S H K A W L K K Y A A G G V F I A
UniRef90_F2RF06 MF V M E L T Y T A P V E R V D A L L D A H I E W L D A Q Y A A G V F I A
UniRef90_K6U382 MF I V L K Y E K T I E D V M R Y L D D S H N V F L K K Y Y D L N K F I C
UniRef90_R2SQU4 M L Y A R T D Y K L D E R E V T E E A M S M T Y L Q Q L A N E R Y L L
UniRef90_A0A023Y112 Y L V L V I T R T P D F R D E V G A E H V R F L D E V R A R G Q L L L
UniRef90_C6W5G5 H M Q N I N R L V E S G K L V V
UniRef90_A4CI4 M A F L K R G G S R S Q S Q E E A D S L Q Q L H I A H L G R M Y E S G Y A D I
UniRef90_UPI0002001381 M P W F V K Q E T F L R S Y A E M K P H L Q A H R A W V E Q L R E A G T V L S
UniRef90_A3XB16 Q W T V T F S D D P A M S R V R A A R R L A H I A F V R E R P E L Q I
UniRef90_U4KCF6 T G A M E L A K Q H M Q S H K A W L D E G I K N G T F I L
UniRef90_G2YZT2 H M T N I N N L V N E G K L I V
UniRef90_R2PHZ5 E Y R K L N R A A H V D N L R K L D D D G G C L A L
UniRef90_V7IBV8 D D H F E R L K S M N T G S L I L
UniRef90_B1MWJ1 F I I E L T Y I K P I A E V E H F L P A Y I E Y L D K Y Y K S G H F I M
UniRef90_J1SN83 M L I L S L T Y M K P N E E A D K H M E P H M A W V K E G Y A K G W F L A
UniRef90_B7KLQ6 L F A V V V A T V A E Y Y E Y K K E H P E H L A W F E E Q A K K G V F I C
UniRef90_UPI00037E11A2 P L L Q A H V Q W L Q Q G F D D G V F A L
UniRef90_J2INT3 F I V T L K Y K K P L S E V D R F V E H H R T Y L D A C F K E D Y F L A
UniRef90_UPI0003744280 D H L A Y V R D L V A K G H Q A K
UniRef90_K9REJ8 D K Y V P A H K A Y V E D L K N K G H
UniRef90_Q65SN7 M Y I T N I A V N D H V S A E Q H D K L F A E H A E W F K K Y F Q A G T F L M
UniRef90_UPI00034C6F7C M Y L V L L R L S A N G S A A A D H M E A H R E W F R Q G M E D G V F L L
UniRef90_K9VZ05 M P W F V K I E D K P T F D Q N V P A H Q A Y V Q E L I T K G H Q A R
UniRef90_C6DBF2 M L Y A I I Y Y T S P K D E L E K S I D A H K K W L A D N I K K G S V I F
UniRef90_G5FGF9 M Y V M L I E K S K T Y N K L T K A V T E H V E N I R K L D D E G K L E I
UniRef90_A4T329 H M T Y W Q E L L A A G R V V V
UniRef90_R9MR10 K Q V V K E H V E N I R K L D D E G K L E I
UniRef90_I5BYJ7 Y V V P I I E D V E P H M E G H M A W L E K Y Y A S G T F I A
UniRef90_R5PJX7 F V L L V N Y K K T L R D V I E E N L D A H R A Y L D K Y Y A L R K F I F
UniRef90_UPI0004678C4A M I F S V I L T Y R P I D E V N Q H L G T H K A W L A E N V K A G R V I L
UniRef90_I2ABD6 L F V I R H L P G N F R P E V A P T V A E H F A Y V R Q L E S G A I L L
UniRef90_UPI00036FDB5F Y A I T L R F A D R S K A S Q F M D A H N D W I R R G F D E G V F L L
UniRef90_I4BDR6 M T D V E Q Q A M A Q H M T Y W E T L L A A G R V V V
UniRef90_W0HUM8 F L I T L R Y N Q P M S Q V T A L Q E D H I N W L K T Y F A E G I F I A
UniRef90_UPI00037DB32F MF I I N L T Y K V P L E K V D Q Y L E D H I T Y L N K Q F E S G N F L A
UniRef90_K9S679 M P W F V K I E T G I V E K F D Q Y V P A H K V Y V Q Q L I D Q G H
UniRef90_UPI0003B6BDBD M C A V L L S Y V R P L D E V D A Q L A A H V A W L E Q G F A E G V F I I
UniRef90_C7PJY0 Y M E Q H R A F L E K F Y K S G Q F I L
UniRef90_S7JRS0 E L T Q E H H K K Y L E G Q Y E S R L L M F
UniRef90_A2BYN9 E H I N W V K N L N K R G I D I K
UniRef90_H7CU89 M K Y F I V E G I L K D S D K I N E D I M K K H M A Y T Q K A M D E G I L L V
UniRef90_E8XW73 A L F T R H V S W F Q Q Y F N A G K F V L
UniRef90_UPI00037375EC M M F A I T L S Y R P L E Q V K V H L E A H K A W L V R F I E A G S I L F
UniRef90_A0A023RWX0 M I V V T L T Y K K P L A E V D A V L K E H I A F L D H Y Y E Q K F L A
UniRef90_UPI000469A7F9 L E D L D G H M E T H V Q Y L K K Y Y D Q N I F V A
UniRef90_D9STZ1 D M T A E E R E I M Q H I T Y W E D K A E K G I A I V
UniRef90_UPI00036B768E L C I V S L T Y G T D L D A I D A A M S D H V D W L R A C Y V I E G R L I A
UniRef90_C6DAL2 M F L I N I S L K D S N T D D K T A D Q R E Q H R H W E A K Y F K E G N F I L
UniRef90_A0AXA9 M L F A I K L D Y V R P F E E I Q A H L D A H K A W L I K Y A Q A G N I L A
UniRef90_UPI0003B5D353 E A R D A M F A G H F A N M G R L A K A G K L V T
UniRef90_UPI00034B5358 M L W F V K I E K G I V D K A T F D R F V P A H K S Y V Q L L I D R G H
UniRef90_UPI000380638A A A H Q A F L E T L R Q N G K L E L
UniRef90_F0M8E2 M Y V V S L S Y R V P Q D I V D F H N A G H I E W L Q K A F D D G V F I A
UniRef90_D6U8N7 H V G Y M L Q L H A Q G I L A W
UniRef90_UPI000426DE45 L D R V D A L M K D H A G W L D T Q Y A A G V F I A
UniRef90_L1KIA9 H V A Y L E R H H R D G T F L V

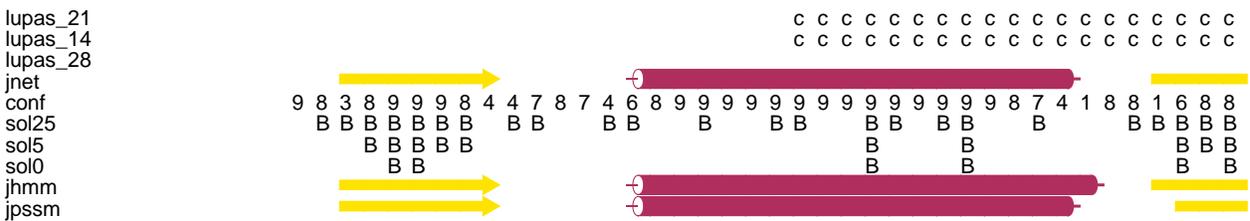
UniRef90_T1ZBJ0 S G 50 RKN P R T G G 60 I L M K A K D K K T I Q E I T H D 80
UniRef90_N9TXV6 S G R R V P R N G G V L L A D G M T R E A V L D E R V L A G D P
UniRef90_UPI000405EE3D V G P Y T D K E M A G I M I S G A E M P R A E V L D D A I L L A G D V
UniRef90_UPI00037B4300 S G P Q R P R V I G G L L L A A A M P R A E V L D D A I L L A G D A
UniRef90_F0KED5 S G R R N P R I G G V L L C K A E S Q K E V K E I L L E K D P
UniRef90_UPI00034B7703 A G A F T D Q S G G A Y V V I S A A S L A E E A T S I I A S R N D
UniRef90_UPI00046E7EE8 Y G P F S D Q S G G A Y L I S A S S L A E E A E E I A S N A D P
UniRef90_R9ME09 G G A F K G F P G V A G M Y V L R A G S Y E E A E E L C K A E P
UniRef90_N9TW21 A G R T L D E G P D T F G L V I F D A V D E S A A R A V M E G D P
UniRef90_F5YK24 C G P L K D T H K A I Q V L E A D S Y D E A D G Y V K M D P
UniRef90_I6WQ81 S G R K E P R N G G I L L A T G T R K E M E E I I R T M D P
UniRef90_U5E4D8 S G R F T D G S G G A Y V L A D S L E A A T A I A H A D P
UniRef90_K9UAG6 Q A K T G Y W G E R G G G M M L F Q A D S L V E A K K I V A A D P
UniRef90_U1ZW82 S G R L R R V P A V I G G V L L S N V D R A T L D E S L A K D P
UniRef90_UPI000427D262 S G N P R T G G F M L F N V T T K E E L E S I L A D K D P
UniRef90_UPI0003633D59 S G R K N P R D G G V I L A V G T D R R A R I E I A A A D P
UniRef90_R9TX12 F G P F S D A S G G A Y L I S A E S L K E A T E I I G N S D P
UniRef90_A9KIB8 S G L K E D M S G G L T L M K S E S L N E V E Y L S N E P
UniRef90_F7QMA8 H G P V A D P A G G W G M S L F Q M A D N E S A D D V R A I J A E P
UniRef90_Q1IVF6 S G P F D P R I G G G L L R V P D G D V A D R V R D N D P
UniRef90_U5MUW9 S G R K N P R T G G I L L C N A Q N I D E V N T A I I K E D P
UniRef90_A6X279 S G P K N P R N G G V I L A S G K S K S E D A I L R L D P
UniRef90_U2FB80 L G P F V D D E H A G V V V V D A K D R K E L D E I L S Q D V
UniRef90_UPI000289EE1B A G P L E Q Q N G G F L L A Q Q G E H L A D L Q K L L D E D P
UniRef90_UPI0003684374 A G P F A K N P E Q Y R G L F I F T T Q N K E E T L A L L E A D P
UniRef90_UPI00046FFE09 S G R K V P R T G G V I L N A T S K E E L D F I L K E D P
UniRef90_W1U5K0 S G R K N P R N G G V I L C N A K N I E E V K E I S E D P
UniRef90_UPI000347317C S G N A K S G Y W G C R G G M L F E A E S M E E A K A L V E R D P
UniRef90_E9UQM4 S G P S S D G S A L L V F E G E I A G V E A T L D D D P
UniRef90_Q8EEC5 S G R K V P R T G G V I F A K A E S R A V L E A I Q Q D P
UniRef90_UPI000312F688 S G G F S D Q S G G A Y L M L A A D M S E A L S I A H Q Q D P
UniRef90_V2YBL0 A G V F G N M E L G T M D G A M V L F E A K D L E E A Q K I A N D D P
UniRef90_UPI000376DB57 S G Q T V P T S D G G V I L A H G P E R A A V E R L A A E D P
UniRef90_UPI00047C14BD A G P M G K N D K S F R G I F I L N V A T K E E A E K L L K T D P
UniRef90_M7N5N6 A G P L G K N E K T Y R G I F I L N V P T L E E A A R L L E T D P
UniRef90_J3HPA2 S G R K V P R T G G I L L A R A E S E A V L R K V L E E D P
UniRef90_C4U804 S G R K V P R T G G I L L V K S I A R E E L R K I V S E D P
UniRef90_F2RF06 S G R K N P R D G G V I L A A G V D R A E I E R I A A A D P
UniRef90_K6U382 S G R Q E P K V G G L I L C N G K N K E E L N S I K E D P
UniRef90_R2SQU4 A G V F G N M E T E E V D G A M I L F E A E D L A E A Q R I S D E D P
UniRef90_A0A023Y112 T G G F T D K S G G A Y V L Q D V A D L A A A Q A L V D T D P
UniRef90_C6W5G5 A G P F F K N D K Y R G I F I L N T D S I E E G R K L V E T D P
UniRef90_A4CI14 S G P F G D D G D I R G V T I Y N V P T L E E M A D S L A R L D P
UniRef90_UPI0002001381 S G Y L V D G V G Q P G G G L L L I Q A A D Y A E A E A L V L Q D P
UniRef90_A3XB16 G G P L A M T P M Q D F P G A I W T V Q A A T R A D V E Q L L S D P
UniRef90_U4KCF6 V G P G P G G A L F V Q G V N R E E L E A K L S E D P
UniRef90_G2YZT2 A G P F E K N D K N Y R G I F I L H N I Q S I E A A K D L Q S D P
UniRef90_R2PHZ5 G G A F K G Y P G M A G M Y L L K A N S Y E E A E T I C Q S D P
UniRef90_V71BV8 A G R T Q T K D S E T F G L V I F E A A D D N E A E T I M R S D P
UniRef90_B1MWJ1 S G R K E P R T G G M I V A Q A E S L E E L T Q I Y N T D P
UniRef90_J1SN83 S G R K V P R T G G V V L A V G E R A E L I E A Y V A A D P
UniRef90_U7KLO6 C G P F V P P D G T G I W I E A E T I E E A K A L V D T S P
UniRef90_UPI00037E11A2 A G S L P P Q A G G A I L A H G L S R A D L E R R L Q A D P
UniRef90_J2INT3 A G P T N P R S G G V I L T R A L A R P A L D A I L L Q E D P
UniRef90_UPI0003744280 S G Y W A P E Y G G M L L F E A A S M A E A K A I V E A D P
UniRef90_K9REJ8 E A K T G Y W A Q Y G G M L L F K A A S M D E A Q A I V S R D P
UniRef90_Q65SN7 L G P F K D Q A N A G V I E A V T E S R A E L D R L L A E D C
UniRef90_UPI00034C6F7C A G S I E P N R G G A L L A T G T T E S R E D L Q A R V A K D P
UniRef90_K9VZ05 T G Y W K Q K G G M M L F Q A T S M A E A Q A I V A E D P
UniRef90_C6DBF2 A G P L D D G T G G F L L A Y G L D S T D M E D I L A Y D P
UniRef90_G5FGF9 C G V F K G Y P G M A G M Y I L K T D S R E E A E L C K M E P
UniRef90_A4T329 Y G P V A D P E G M W G L G V L R V A D R A E A L A I A E A D P
UniRef90_R9MR10 C G V F K G Y P G M A G M Y I L K T E S R E E A E E I C R S E P
UniRef90_I5BYJ7 S G R K V P R T G G V I L A R G D R E A L E A C L S E D P
UniRef90_R5PJX7 S G R R N P R T G G C I L C N A V S E A E V N E I K E D P
UniRef90_UPI0004678C4A A G P Q D N A G G G V V L A A C A D R T E L D A M M A Q D S
UniRef90_I2ABD6 S G P L L A E G A G G L M V L S P R D A E A S R I A E N D P
UniRef90_UPI00036FDB5F V G S L Q P N A G G A I L A H N A S R A E I E A R I K D D P
UniRef90_I4BDR6 Y G P V A D P E G V W G L G V L R A G D R A E A L A I A D A D P
UniRef90_W0HUM8 A G R K I P R T G G V I L A R S M A R D E L E R I L A E D P
UniRef90_UPI00037DB32F S G R K V P R D G G I L L S K V S D K A T L V E I L D Q D P
UniRef90_K9S679 E A K T G Y W K E R G G M L L F R A E S L E A Q A R Q I V K H D P
UniRef90_UPI0003B6DBD A G R R Q P R S G G V I V M R G A R A A V D A V M A T D P
UniRef90_C7PJY0 A G R R K P K S G G L I I C K A S S R K E V E Q I T E D P
UniRef90_S7JRS0 G G R K V P R T G G I L L S A H P T K E S L I E V L E S D P
UniRef90_A2BYN9 S G Y L V D E F K R P G A G L L I E M N T Y K D A L E I K N D P
UniRef90_H7CU89 S G L K S D M S G G I F V V K S E S V E K L E S Y L S K E P
UniRef90_E8XW73 I G P Y S D R E R A G V I I A Q T E S R E E L D A L L S E D A
UniRef90_UPI00037375EC A G P L Q Q G G F I L A Q G E R L G D I E L M L T E D P
UniRef90_A0A023RWX0 S G R R E N R V I G G V I L V L S S S I Q E A E K I I K N D P
UniRef90_UPI000469A7F9 S G R K V P R T G G I L L A L A K D E E A Q K I L M E D P
UniRef90_D9STZ1 F G P V F D P K G G Y G L G V I E V D E E Q V H A L I K D D P
UniRef90_UPI00036B768E S G R K Q P R T G G I V I A I G T R A E V E A M V S L D P
UniRef90_C6DAL2 L G P Y Q D K E H A G V I I A Q A E N R E A L E K L A E D V
UniRef90_A0AXA9 A G P L H G E S G F V L A Y A G Q P R D I E T M I A E D P
UniRef90_UPI0003B5D353 A G P F S D D P A G W R G L F L F A V I T D I E E A K R L V A T D P
UniRef90_UPI00034B5358 S G E A K T G Y W G E R G G M L L F K A E S Q A A E A I V A Q D P
UniRef90_UPI000380638A A G P F T D K T G A Y L M H A E N L E E A H A I A M T D P
UniRef90_F0M8E2 A G R K V P R T G G L L L S Q A D R A T L D A C L K Q D P
UniRef90_D6U8N7 G G A F T G G S F S A E A G G L N I T A A N N L E D A C R I M N A D P
UniRef90_UPI000426DE45 S G R K N P R D G G V I L A V G E D R A E I E R L A A T D P
UniRef90_L1KIA9 S G Q T V P T S I G V I I A H G V D R P T V I E H I T A Q D P

UniRef90_T1ZBJ0 F Y Q N E L A K Y D I I E F
UniRef90_N9TXV6 F R Q A A A A E Y E V T E F V P
UniRef90_UPI000405EE3D Y Y A G G M A D Y E V R S F K A A M
UniRef90_UPI00037B4300 F A R A G L A D Y Q V V E F
UniRef90_F0KED5 F Y L K N I A E Y E I I D F S P T
UniRef90_UPI00034B7703 M N E K N E A V Y K V K E W N
UniRef90_UPI00046E7EE8 L I R R G S S T V T V K E W R
UniRef90_R9ME09 L V T E G
UniRef90_N9TW21 A V V H G V M Q A R L W P F R I A L
UniRef90_F5YK24 H T T A G Y F T G Y V L Y E W
UniRef90_I6WQ81 F T I N D A A K Y S I T E F L P
UniRef90_U5E4D8 V H T S G V S E L T I Y E W
UniRef90_K9UAG6 L V Q N H C V T Y E L H E W R I V M
UniRef90_U1ZW82 F Y S N G V A D F E L I E F N
UniRef90_UPI000427D262 F K I N G
UniRef90_UPI0003633D59 F A V H G V C S Y R I T E F T
UniRef90_R9TX12 I V D S G V I K E W Q I K
UniRef90_A9KIB8 L K M N G I Q D Y K V L E F
UniRef90_F7QMA8 M I K A N I G A R Y E V L P
UniRef90_Q1IVF6 Y V K S G M A Q Y E L L A W N P
UniRef90_U5MUW9 F Y K E K V A T Y E I T E F I P T
UniRef90_A6X279 F R Q H G L A T Y D V V E F T P A
UniRef90_U2FB80 Y H A P G Y A E Y S V R E F K
UniRef90_UPI000289EE1B F A V Y Q L V T F D I Q R C E P A I
UniRef90_UPI0003684374 A I K A G L L K A S I Y S W
UniRef90_UPI00046FFE09 F Y Q N K I A Q Y E V I E
UniRef90_W1U5K0 F N L N K I A E Y E I I E F Q P T
UniRef90_UPI000347317C L V V N N C V T Y D L Y E W C V V I
UniRef90_E9UQM4 F L A V I G L I K E R R V F E W T P V L
UniRef90_Q8EEC5 F Y
UniRef90_UPI000312F688 A H I S G G W D I T V Y E W N
UniRef90_V2YBL0 I T Q R G Y Y R C D V Y Q W N V M L
UniRef90_UPI000376DB57 F V A N G V A A Y T I T A V T P
UniRef90_UPI00047C14BD A V H A G L L D A V Y F P W
UniRef90_M7N5N6 A V K E K L L E A E L Y S W
UniRef90_J3HPA2 F H T R K L A N F D V Q E F I P T
UniRef90_C4U804 F N A V A D Y S V T E F V P
UniRef90_F2RF06 F S V E G V C A Y R I T E F
UniRef90_K6U382 F Y K N N I A K Y E I T E F I P T
UniRef90_R2SQU4 I I K G G F Y R Y E I L K C W N
UniRef90_A0A023Y1I2 L L V H G S A T A R L H E W
UniRef90_C6W5G5 A V Q A K L L D
UniRef90_A4CI4 A V R A G R L E I E I H P W
UniRef90_UPI0002001381 M V R S G G V D W R L Q E W R P
UniRef90_A3XB16 Y Y V A S L R R Y K I R A W
UniRef90_U4KCF6 F V R E K I V E V S I I E
UniRef90_G2YZT2 A I K N G L L D Y D V L Y W
UniRef90_R2PHZ5 L I V A G Y A T Y E L H Q
UniRef90_V7IBV8 A V A G K I M T G E F Y P Y K V A L
UniRef90_B1MWJ1 F F I N N I
UniRef90_J1SN83 F T I H G V A E Y E I T E
UniRef90_B7KLQ6 R A K D G M L S A A R V V E W N
UniRef90_UPI00037E11A2 F V A A G V V R S V E V A P A K A A
UniRef90_J2INT3 F Y R E G V A D Y D V V E F E P
UniRef90_UPI0003744280 L I A N H C V E Y E L H E W K I V
UniRef90_K9REJ8 L I E N N C V D Y K L Y E W R
UniRef90_Q65SN7 Y Y P N L A S Y E I R E F E P
UniRef90_UPI00034C6F7C F V I N D V V T
UniRef90_K9VZ05 L I K N N C V N Y K L Y E W C V V I
UniRef90_C6DBF2 F V N L G L V K T E I K
UniRef90_G5FGF9 L V I G G
UniRef90_A4T329 S I I A G V
UniRef90_R9MR10 L V M G G
UniRef90_I5BYJ7 F A V H G I A E V E I T E
UniRef90_R5PJX7 F Y Y K G I A D Y Q V
UniRef90_UPI0004678C4A F I R H G V Y A A Y S C K P
UniRef90_I2ABD6 A I K S G L V V A D V L P W
UniRef90_UPI00036FDB5F F V A E G V V S A D I L E F T P
UniRef90_I4BDR6 S V V A G I Y E V L E I
UniRef90_W0HUM8 F T A V A D Y D I T E F M P T L
UniRef90_UPI00037DB32F F K S N D L A D Y Q I I E F V P
UniRef90_K9S679 L V K H Q C V C Y E L H E W C I A L
UniRef90_UPI0003B6BDBD F V A S G V A T F E V V P F
UniRef90_C7PJY0 L Y Q L J A L Y E I I E F E P
UniRef90_S7JRS0 F V A S G A V S Y L I T E F I P V M
UniRef90_A2BYN9 M I K N N I V E W K L N E W
UniRef90_H7CU89 F K L Y G I Q D Y K F V E F N
UniRef90_E8XW73 Y H P N L A E Y E I R E F I P
UniRef90_UPI00037375EC F V V E Q L V T
UniRef90_A0A023RWX0 F Y I H D V
UniRef90_UPI000469A7F9 F Y K H R L A D F T I T Q F
UniRef90_D9STZ1 A V K A G L
UniRef90_UPI00036B768E F V A R G L A T A E I T P F T
UniRef90_C6DAL2 Y Y P L D L A N Y D V H E F N A I F
UniRef90_A0AXA9 F H I H G L
UniRef90_UPI0003B5D353 V I I N G
UniRef90_UPI00034B5358 L V Q N Q C V I Y E L H E W H I V
UniRef90_UPI000380638A L H Q S S V V T V H E W
UniRef90_F0M8E2 F Y T N G V A D F E V M E F H A A
UniRef90_D6U8N7 A I R D G I C V Y K V R P W M P L L
UniRef90_UPI000426DE45 F A A H G V C A Y R I T E F
UniRef90_L1KIA9 F V L N N V A K Y T I T T I T P

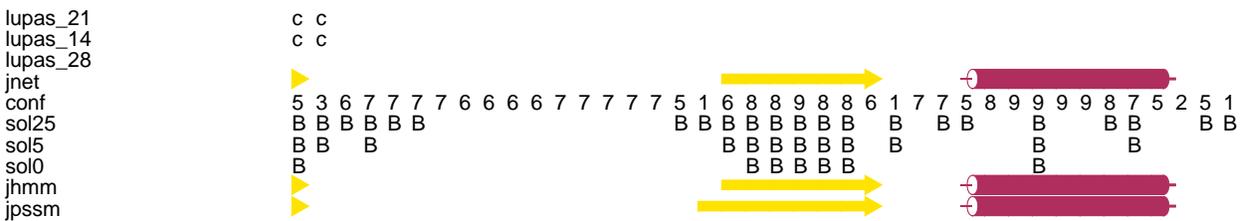
UniRef90_UPI0003723D8B
 UniRef90_UPI000361E5A7
 UniRef90_R4JZN7
 UniRef90_K6E6M8
 UniRef90_F5UIX0
 UniRef90_D6K550
 UniRef90_UPI0003667E7E
 UniRef90_I3TUY3
 UniRef90_UPI00036D4EC7
 UniRef90_S9QW57
 UniRef90_A8L385
 UniRef90_A4WA24

```

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



		50		60		70		80
UniRef90_UPI0003723D8B	S G		R Q D P	R T G G	V V L A	R A T D	R G A L	G R V L A L D P
UniRef90_UPI000361E5A7	A G		R K I P	R T G G	L L L S	N A D R	A S L D	A A L A K D P
UniRef90_R4JZN7	F G P V F D P K G G Y				G L A I V E V A	N E E Q V H	S L I A	D D P
UniRef90_K6E6M8	I G P F M N H			T G G L	F I F E	A E S I	E K L E	D I I F N D P
UniRef90_F5UIX0	C G P F F P Y D G T				G L W V I Q	A E N V	E E A Q	T L V S S S P
UniRef90_D6K550	A G P L			E P R T G G	V V L A	E G T R	A E I E	A A V A S D P
UniRef90_UPI0003667E7E	S G		R K V P	R T G G	V I M A	R G T M	A A V E	E I C R Q D P
UniRef90_I3TUY3	A G		R R V P	R S G G	F I L A	T G L A	R E A L	D R I I A A D P
UniRef90_UPI00036D4EC7	A G R M S D D				S G S F	L L W E	V D T L	D E A R N I A M E E P
UniRef90_S9QW57	A G P V L D P		A G V F	G M A V	F E A E	S I D E	V R R L	L L E R D P
UniRef90_A8L385	S G Q L P P D A G E				V V L A	V G G R	G D L E	T V A G Q D P
UniRef90_A4WA24	I G P Y S D R E R A				G V I I	A Q A V	N R E E	L E T I L L R E D A



90

```

UniRef90_UPI0003723D8B F G I A E V A T H T V I D W R P
UniRef90_UPI000361E5A7 F Y V N G V A E F E V M E F
UniRef90_R4JZN7 A I K S G L L K T E F Y P M R A V L
UniRef90_K6E6M8 A L L E E K F E V K L Y P W E P L I
UniRef90_F5UIX0 R A R D G L A E S T R V V E W
UniRef90_D6K550 F V T S G A A T A E I L S F R P V Y
UniRef90_UPI0003667E7E F V S E G V A S F E L T E V N
UniRef90_I3TUY3 F V T A G V Y D V Y E V A P T K A A
UniRef90_UPI00036D4EC7 Y Y K L G I S T F I L K E W K
UniRef90_S9QW57 A R A V G R Y E V S P M G P S I
UniRef90_A8L385 L V R S G V W E I L T V D P
UniRef90_A4WA24 Y Y P N L A K Y E I R E F T P

```

