

QUERY 1 10 20 30 40  
UniRef90\_UPI000361126B K P V I W T V S V I T S R L L S F E L L F R D I I S T L P E F D D H L A N I T P P I I Q L L G G F F E K A A V  
UniRef90\_W3VE33 K P V I W T V S I S R R L L S F D L F F R D I I T T T P E E F D D H Q A N I T P P I I Q L L G G F F E N A A V  
UniRef90\_UPI000476C2B0 K P V I W T V S I S R R L L S F D L F F R D I I T T T P E E F D D H Q A N I T P P I I Q L L G G F F E D E A A V  
UniRef90\_K8WB3 K P V I W T V S V S R R L L S F D L F F R D I I S T L P E E F D D S E Q A E I T P P L L N L L G G F F E D A A V  
UniRef90\_A0A031GST9 K P V I W T V S V S R R L L S F D L F F R D I I T T T L E E Y D D D N R A T T I E E Q I I H L L L L G G F F E D D A V  
UniRef90\_UPI000368C2A1 K P V I W T V S I S R R L L S F D V L F F R D I I S T L P E E F S A R A G I S A I I N L L G G F F E D A A V  
UniRef90\_J7TL84 K P V I W T V S I S R R L L S F D L F F R D I I S T L P E E F D S N L A S I T P P I I N L L G G F F E K A A V  
UniRef90\_I2B9L7 R P V I W T V S V T R R L L S F D L F R D I I S L L E F F D S L A S I T P P I I N L L G G F F E K A A V  
UniRef90\_G0B550 K P A I W I V S V T R R L L S F D L F R D I I S L L E F F D S L A S I T P P I I N L L G G F F E K A A V  
UniRef90\_J3HTZ1 R P V I W T V S V S R R L L S T E L M R D I I T L L E F F D D G R M A R I E P I I H L L G G F F E D D A V  
UniRef90\_I0KRL2 R P V I W T V S I T H L Y E T F Q E M S N E F S E I A E I T T P I I N L L G G F F E E A A V  
UniRef90\_L8XY14 K P I I W T V S I T H L Y E T F Q E M S N E F S E I A E I T T P I I N L L G G F F E E A A V  
UniRef90\_I7ZD70 P I I W T V S V T R L L S S L L R D V T L P E E F D D G R A Q I D T I I N L L G G F F E E A A V  
UniRef90\_V2IQ45 R P R L C F L S Y K R H L S R F A M T L D E Y A D R A D I E V V I N A R G F F E A A L V  
UniRef90\_B2JT27 R P R I W A M G I S R L L R D L F V D I A S E Y A A R A D I L R V V V N A R G F F D D A V  
UniRef90\_K0MR02 P R L C F V S Y R Q L R E F A A P I A E Y R N R A A I D V V V D G T F A D A L V  
UniRef90\_D3AI96 I L G I A P Y E G M K T I M Q N I A K T R E D L E L D V V Y V G G D L N T A V  
UniRef90\_U2K3L1 R P R I W A V G I S R L S R A F A D L I P S Y A A Q A Q A D F R L V V G K G Y E A A A  
UniRef90\_UPI000370CD66 R I L A I G F L R L K Q L E V A P E Y A A R A R V D V V D R G F D E A A L  
UniRef90\_W7R7Z6 V L G I A P Y K G L G S I L A S Q R D D I Q F Q L E V G D L N E R S G  
UniRef90\_V7I998 I L G I A P Y E G M K S I M A R E L A S Q R D D I Q D L S V F V G D L N E R S G  
UniRef90\_A0A059NYZ6 L L I A P Y E G L A E S I A K N Y K D T D N N F K L V D V F R L G N L E D G V  
UniRef90\_R6ZJ7 I L G I A P Y E G M R S I M L K A A E A R Q S D I D L T V V V G G D L Q E G A  
UniRef90\_A0A023DDK0 I L F I A P Y E P G L K E L A L T L A K E Q S L D I D I T V V V Q G D L L R E A  
UniRef90\_U5T6N6 R P I I L A V G F S R L K E V F R A I V I P S Y A A D A D V H I V D R G F D D A L  
UniRef90\_R6RY24 I L G I A P Y E G M R T V M E R A A Q A Y P E I Q Q M D L D V Y H V T G D L E E G  
UniRef90\_G5HMNO E P I I W A I S G H R L I D T F R A V L G P E F V A R A S I E V A H L A F D E A L  
UniRef90\_R5TBG4 I L G I A P Y D G M K A L M M R L A S Q R D D I Q D L T V Y V G D L E A G  
UniRef90\_I9BW19 R P R I W A I G I S R L N R A F A E W L P V I Y A D Q A D F R I L D K G F E A A A  
UniRef90\_D4KAW8 I L G I A P Y D G M R T A M E Q A A Q A Y P N V E L E V Y T G D L E E G  
UniRef90\_R5C878 I L A V A P Y E G M A D T A L A S Q R D D I Q E L T A Q T G D L N T G  
UniRef90\_K6D8T6 L V I V P Y E G L Y E M M K E M N Q E V D D I Q L E I R L G N L Y E G  
UniRef90\_E5ATQ2 R P R L W A M G I S R L R D L F L D I A R E Y D G R A Q L R V V S R G F E D A V  
UniRef90\_F5L6X1 L L I A P Y P G L K E L A M K V A N E Q E S L D I T V R V G D L E E A I  
UniRef90\_F5SCL9 V L A I A P Y P G L K E L M M K L D E E P D W L D V V K V G D L R E A V  
UniRef90\_UPI00036676D7 V M A I A P Y T G L K E L M I S L G E Q E D F E L Q V E I V E V G D L Y E G  
UniRef90\_M8E5Y6 I L V I A P Y P G M R D V L Y R D V E V K A S A Y D G V A D L R I V A R G Y E A V  
UniRef90\_G8MBT3 P R I W A I G I S K L R D L Y R D V E V K A S A Y D G V A D L R I V A R G Y E A V  
UniRef90\_K0I3L9 I L G I A P Y E A M K T A M Q K I A A Q R D D I Q E L D V Y S H A F F E Y A L  
UniRef90\_C0CT66 R P R V W A L S I S R L R D L F F D I A G E Y V D R A D V R I V S G D L E K G V  
UniRef90\_D5WF68 V M A T A P Y E G R L K E L M V Q V A G G E N F E F E A A S G D L E K G V  
UniRef90\_T5HC65 R P G I A L V S I S R M S T L C E T V A P R Y N E L A R F F S I R A G Y G A A V  
UniRef90\_L2E7W7 I L A I A P Y E G M T E I F E N I S K N R E D I E L I Q T G D L N T G  
UniRef90\_Q5WLI9 I L V I A P Y E G M N T A L Q H A T E A Y P Q A D F D I F T A D L D A A  
UniRef90\_UPI00041BECBC I L V I A P Y T G M A D V F R Q V V Q K K T N A S V D V V I G D L E Q G V  
UniRef90\_G2TI04 L V I V P Y E G L Y E M M K E V Q R E V G D F H F D I E L G N L F E G  
UniRef90\_J4YAF6 R P R I W A V S A Y E L L P L V I Q E C A P E D Y A D R A R V Q M L K A H F D D A A  
UniRef90\_F0FYK0 R P R V W A M G I S R L R D L F R E I A G E F A D R A D V R I V S R A Y E D A L  
UniRef90\_UPI00016AF0BA R P R V W A V G I S R L R A L F R D I A D E Y E E R A D L R I V A R G Y E E A I  
UniRef90\_UPI0004703F6B P R I W A V G V A R L S R T F A Q I L P R Y A G R G E F K L I E A G F E T A A  
UniRef90\_D8GLR7 I L A I A P Y S S M E P L L I K V S K D Y P N I D L T I T V G D L K K G V  
UniRef90\_D1Y7W4 L C I A P Y E G M R D V M M N I A A R R S D L E L V I R V G D L A D G V  
UniRef90\_G4KVM2 V L G I A P Y E G M K T L M S S L A A N Y P Q I D L T L F V G D L E Q G V  
UniRef90\_F4GX91 R L R I A A V G L G L R A L J E S L A P Y S S L A E V V I L D K A Y G D A V  
UniRef90\_UPI0003458413 R P R V W A I G I S R L R D L F R D I A S E Y I E R A D L R I V S R G Y E D A A  
UniRef90\_D4J4P7 V L A I A P Y E G L A H L L K E T I G S Q Y T D M L H L D I F V G D L Q G L  
UniRef90\_R7WY2 R P G I A L V S I S R L Q T L C E T V A P R Y T D R A R F Y S V R E G Y G A A V  
UniRef90\_N8ZID1 P R I C F M S H H L L R T F S K P I L E E Y A F R A Q I E T L D A S F D Q V L  
UniRef90\_A6LWE7 I L F I A P Y F G L K E I A M S V S S E Y K D F Q I D V Y Q G N Y E Q G P  
UniRef90\_G7VV17 V L A I A P Y E G L K E L M I E L A E K E Q F D L E I E V G D L Q A G G  
UniRef90\_D3E9G7 L I A P Y E A M V P I I Q E C I P L F P Q L D I Q Y A V G D L Q K G G  
UniRef90\_M1MIL8 V M A I A P Y E G L K E L M I D I G E E F E L Q A E V S V D I Y L G N M K E G V  
UniRef90\_C0CX53 I L G I A P Y E A L R A A M V K I A K N R P D L S V D I Y L G N M K E G V  
UniRef90\_B0MFE9 I L A V A P Y E G M A D A I S A I A Q T R D D I R M T V Q T G D L D N G  
UniRef90\_R6TRV4 L G I V P Y K G M K T L L L N I A A E Y P Q V E I D V F E G N M E E G A  
UniRef90\_F5Y308 R P R L C F L S Y R Q I R A F A M P I V A E Y A G R A D I E V V D G S F D A A L  
UniRef90\_F7NFB3 I L G I A P Y K G M Q N S M E R V A E A Y S N I Q L D A Y T G D L E E G V  
UniRef90\_E2ZHS7 I L G I A P F E S T R A A M E R V A R E E F P A V R F E A Y T G D L E E G V  
UniRef90\_C4ZHE9 I L A V A P Y E G M A D I T D I A Q S R D D I A L T V Q T G D L F T G  
UniRef90\_UPI00036FD1D0 L V I A P Y P G L V E L T T S L K D E L Q D F D V D I I Q S D L S E V L  
UniRef90\_UPI00047C46F1 I L G I A P Y E E L R K S M E N V G S T F S N I L L N T Y T G D L Q E G  
UniRef90\_J0N1R1 V L G I A P Y E G M K I Q M L N V I E Y P Q I D L T V Y V G D L E Q G L  
UniRef90\_F8FBY4 V L A I A P Y P G L K E L L E A G S R E D A R L E L E V H V A D L Q N A L  
UniRef90\_A6GNB9 F S I S A L A G T L R E I A R Q Y A G S A N I E L V P K A Y E D A L  
UniRef90\_UPI00040D1052 I P Y S G L A E T V K H L R Q E K E L A I D I G V G N L E E G V  
UniRef90\_A1HLP6 K P R I A I A P Y P A L K A E A E A V V A D L G A H V T V Y E G D L D D G V  
UniRef90\_E4PJ7 R V K L C I L G N S K L S K M V H S L I P E F Q S I A E I V I D S I F N D A L  
UniRef90\_UPI000349B8C5 I A P Y S G M A E S V K Q I K L P D D F H V D I E V A N L E D A L  
UniRef90\_D4LRG6 I L T I A P Y Q G M K E I I N D I A S G R D D I E M T T R I G D L A T G  
UniRef90\_B4UAE7 R P I V W A F S T S R L R H V F E S V A P L M A D V A E V R V F D K G F E E A L  
UniRef90\_UPI000344FC76 L G I A P Y E E L K N S M I S V G E Q F D N S L D V V Y T A D L E K G  
UniRef90\_UPI000474A29D V V A V G L H G L R H L L E E L I P S V R N A E V T L I E K A Y D E A V  
UniRef90\_A0A024QEN8 L L I A P Y P G L V E I A K N L Q I P N Y M Q L D I Q T A N L E Q G L  
UniRef90\_E5WM20 L F I A P Y P A M L V E I K E C R K E E K D L D I K I A T G N L G A V  
UniRef90\_I4WIM1 K P R I C L I G N S K L S Q I V H S L I G E F E A V A R I T I T D N I F N D A V  
UniRef90\_C6D3S8 V L A I A P Y V G L R D L M L E M V Q E E T M I R M D V E V A A D L E E A L  
UniRef90\_J3AIM2 K P I L G I A P Y E E L R H S M N L V A Q Q F E S L S I D V F N A N L Q E G R  
UniRef90\_UPI0004788E68 L V I A P Y P A M S H L I E D C R Q E E Q E L D L Y M K V A N L Q E A I

QUERY  
UniRef90\_UPI000361126B  
UniRef90\_W3VE33  
UniRef90\_UPI000476C2B0  
UniRef90\_K8WBY3  
UniRef90\_A0A031GST9  
UniRef90\_UPI000368C2A1  
UniRef90\_J7TL84  
UniRef90\_I2B9L7  
UniRef90\_G0B550  
UniRef90\_J3HTZ1  
UniRef90\_I0KRL2  
UniRef90\_L8XYI4  
UniRef90\_I7ZDT0  
UniRef90\_V2IQ45  
UniRef90\_B2JT27  
UniRef90\_K0MR02  
UniRef90\_D3AI96  
UniRef90\_V2K3L1  
UniRef90\_UPI000370CD66  
UniRef90\_W7R7Z6  
UniRef90\_V7I998  
UniRef90\_A0A059NYZ6  
UniRef90\_R6ZNJ7  
UniRef90\_UPI000370DDK0  
UniRef90\_U5T6N6  
UniRef90\_R6RY24  
UniRef90\_G5HMNO  
UniRef90\_UPI00047BA1FF  
UniRef90\_R5TBG4  
UniRef90\_I9BW19  
UniRef90\_D4KAW8  
UniRef90\_R5C878  
UniRef90\_K6D8T6  
UniRef90\_E5ATQ2  
UniRef90\_F5L6X1  
UniRef90\_F5SCL9  
UniRef90\_UPI00036676D7  
UniRef90\_M8E5Y6  
UniRef90\_G8MBT3  
UniRef90\_K0I3L9  
UniRef90\_C0CT66  
UniRef90\_D5WF68  
UniRef90\_T5HC65  
UniRef90\_L2E7W7  
UniRef90\_Q5WLI9  
UniRef90\_UPI000462FD02  
UniRef90\_H1HRE2  
UniRef90\_UPI00041BECBC  
UniRef90\_G2TI04  
UniRef90\_J4YAF6  
UniRef90\_F0FYK0  
UniRef90\_UPI00016AF0BA  
UniRef90\_UPI0004703F6B  
UniRef90\_D8GLR7  
UniRef90\_D1Y7W4  
UniRef90\_G4KM2  
UniRef90\_F4GX91  
UniRef90\_UPI0003458413  
UniRef90\_D4J4P7  
UniRef90\_R7WZY2  
UniRef90\_N8ZID1  
UniRef90\_A6LWE7  
UniRef90\_G7VV17  
UniRef90\_D3E9G7  
UniRef90\_M1MIL8  
UniRef90\_C0CX53  
UniRef90\_B0MFE9  
UniRef90\_R6TRV4  
UniRef90\_F5Y308  
UniRef90\_F7NFB3  
UniRef90\_E2ZHS7  
UniRef90\_C4ZHE9  
UniRef90\_UPI00036FD1D0  
UniRef90\_UPI00047C46F1  
UniRef90\_J0N1R1  
UniRef90\_F8FBY4  
UniRef90\_A6GNB9  
UniRef90\_UPI00040D1052  
UniRef90\_A1HLP6  
UniRef90\_E4PJ7  
UniRef90\_UPI000349B8C5  
UniRef90\_D4LRG6  
UniRef90\_B4UAE7  
UniRef90\_UPI000344FC76  
UniRef90\_UPI000474A29D  
UniRef90\_A0A024QEN8  
UniRef90\_E5WM20  
UniRef90\_I4WIM1  
UniRef90\_C6D3S8  
UniRef90\_J3AIM2  
UniRef90\_UPI0004788E68

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

QUERY UniRef90\_UPI000361126B UniRef90\_W3VE33 UniRef90\_UPI000476C2B0 UniRef90\_K8WBY3 UniRef90\_A0A031GST9 UniRef90\_UPI000368C2A1 UniRef90\_J7TL84 UniRef90\_I2B9L7 UniRef90\_G0B550 UniRef90\_J3HTZ1 UniRef90\_I0KRL2 UniRef90\_L8XY14 UniRef90\_I7ZDT0 UniRef90\_V2IQ45 UniRef90\_B2JT27 UniRef90\_K0MR02 UniRef90\_D3AI96 UniRef90\_V2K3L1 UniRef90\_UPI000370CD66 UniRef90\_W7R7Z6 UniRef90\_V7I998 UniRef90\_A0A059NYZ6 UniRef90\_R6ZNJ7 UniRef90\_UPI000370DDK0 UniRef90\_U5T6N6 UniRef90\_R6RY24 UniRef90\_G5HMNO UniRef90\_UPI00047BA1FF UniRef90\_R5TBG4 UniRef90\_I9BW19 UniRef90\_D4KAW8 UniRef90\_R5C878 UniRef90\_K6D8T6 UniRef90\_E5ATQ2 UniRef90\_F5L6X1 UniRef90\_F5SCL9 UniRef90\_UPI00036676D7 UniRef90\_M8E5Y6 UniRef90\_K8MBT3 UniRef90\_K0I3L9 UniRef90\_C0CT66 UniRef90\_D5WF68 UniRef90\_T5HC65 UniRef90\_L2E7W7 UniRef90\_Q5WLI9 UniRef90\_UPI000462FD02 UniRef90\_H1HRE2 UniRef90\_UPI00041BECBC UniRef90\_G2TI04 UniRef90\_J4YAF6 UniRef90\_F0FYK0 UniRef90\_UPI00016AF0BA UniRef90\_UPI0004703F6B UniRef90\_D8GLR7 UniRef90\_D1Y7W4 UniRef90\_G4KVM2 UniRef90\_F4GX91 UniRef90\_UPI0003458413 UniRef90\_D4J4P7 UniRef90\_R7WZY2 UniRef90\_N8ZID1 UniRef90\_A6LWE7 UniRef90\_G7VV17 UniRef90\_D3E9G7 UniRef90\_M1MIL8 UniRef90\_C0CX53 UniRef90\_B0MFE9 UniRef90\_R6TRV4 UniRef90\_F5Y308 UniRef90\_F7NFB3 UniRef90\_E2ZHS7 UniRef90\_C4ZHE9 UniRef90\_UPI00036FD1D0 UniRef90\_UPI00047C46F1 UniRef90\_J0N1R1 UniRef90\_F8FBY4 UniRef90\_A6GNB9 UniRef90\_UPI00040D1052 UniRef90\_A1HLP6 UniRef90\_E4PJ7 UniRef90\_UPI000349B8C5 UniRef90\_D4LRG6 UniRef90\_B4UAE7 UniRef90\_UPI000344FC76 UniRef90\_UPI000474A29D UniRef90\_A0A024QEN8 UniRef90\_E5WM20 UniRef90\_I4WIM1 UniRef90\_C6D3S8 UniRef90\_J3AIM2 UniRef90\_UPI0004788E68

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



QUERY D Q R S Y I T E E E E 130 D A R R G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_UPI000361126B V Q R T S Y I T T E E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_W3VE33 E Q R T S Y I T T E E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_UPI000476C2B0 A Q R T S Y I T T E E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_K8WB3Y3 E Q R T S Y I T T E E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_A0A031GST9 A Q R T S Y I T T E E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_UPI000368C2A1 A Q R T S Y I T T E E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_J7TL84 E Q R T S Y I T T E E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_I2B9L7 E Q R T S Y I T T E E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_G0B550 E Q R T S Y I T T E E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_J3HTZ1 V Q R T S Y I T T E E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_I0KRL2 E H R R F Y I T T E E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_L8XY14 E E R F T Y I T T E E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_I7ZD70 E L R S Y T N T E E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_V2IQ45 A Q Y A Y R S T P T E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_B2JT27 I F A S Y R S T P T E E D A R R A G Q I L N E L K A A G T E A V V V G A G L I V T D L L A E E E A G  
UniRef90\_K0MR02 T Q Y A Y Q T P Y H A R R E Q G F E Q L R R D G F Q V I V G S S L V V T D L L A E E E A G  
UniRef90\_D3AI96 D I F T I H N A E D D A T V R V K L H T L K K K N G V R M I L C D M I G S T E L A R R R L L G  
UniRef90\_V2K3L1 P S Y T Y L T R E D D A T V R V K L H T L K K K N G V R M I L C D M I G S T E L A R R R L L G  
UniRef90\_UPI000370CD66 T Q R S Y R S E A Q A A A C V K E S L R R E E G I D V V V A P G M V L D L L A E E E A G  
UniRef90\_W7R7Z6 D L Y T I K E E L E E V W D L L R D I L K Q Q Q G T Q L V L G D V I T T D K A A K E R L L G  
UniRef90\_V7I998 D L F T I K E E L E E V W D L L R D I L K Q Q Q G T Q L V L G D M I T T T L A A K E R M G  
UniRef90\_A0A059NYZ6 R T I T I T N S D E V T K K L E Q L K T E G F S V V I G D V V T V H E A K E R I L G  
UniRef90\_R6ZNJ7 E T F T I H D S R E Q V E E T A L Q Q M L K K R D G A Q R M I L C D M I A S T A K A R L L G  
UniRef90\_UPI00033DDK0 P Y T I L H D Q E V V A E A V S D L A A R G V R A I I G P G L V T D L L A E E E A G  
UniRef90\_U5T6N6 E H F A Y E S A A D A Q E R R V S D L A A R G V R A I I G P G L V T D L L A E E E A G  
UniRef90\_R6RY24 D I L T V R S A E S E V E P E V L G R D L K E E G Y Q M V V C D M V T H T A A R R M G  
UniRef90\_G5HMNO D I L V T I H S E S E V E A T R L R D L K K K N G C R M I L C D M I A N T T A K K L L G  
UniRef90\_UPI00047BA1FF E F R S Y E T A D D A S Y R I Q E L L A G L G V E V V V G A G M V A D L A Q Q A G  
UniRef90\_R5TBG4 D I Y T I H N P E E V Q D L T S R L T E A G Y R M V L C D V V T N S H A R R L L G  
UniRef90\_I9WB19 P A Y T Y R A E E D A T A L I Q T L R Q E G V E V V V G P G M V A D L A E R R A G  
UniRef90\_D4KAW8 D I L T V R S A E E V R H T L E R L K Q G G Y R M V V C D M V T H T I A R E M G  
UniRef90\_R5C878 D I L T F S S E E N A V A A L R T A K K Q G C T L V L C D M T G S N A A K Q L L G  
UniRef90\_K6D8T6 Q T Y T I T K E V E V K E T L T K L K K Q G E V V I G D V V T V Q A A K Q L L G  
UniRef90\_E5ATQ2 V L G S Y R S V Q D A Q A C V Q D L R E R G V G A V V G P G L V A D L A A H A G  
UniRef90\_F5L6X1 P S Y T I H S Q E E V R D L L R L R R E A L E V I L G D T I T Y K T A E E Y T G  
UniRef90\_UPI00036676D7 Q S Y T I R Q P E E E V R D L L R L R R E A L E V I L G D V V T V Q A A A E E T G  
UniRef90\_M8E5Y6 S S F K I T E E E E I Q P L A N L Q Q K G Y E N I I G D A S T T K K A E E L L G  
UniRef90\_G8MBT3 T F F P I D Q A E E I E N G L K L A L A Q R G V Q A V I G D V I S T S M A T R M G  
UniRef90\_K0I3L9 E S A S Y L J A E E D A E A C V L D L R D R G V K A V I G P G L V T E L A E K A G  
UniRef90\_C0CT66 H Q Y A Y Q T P D S A R D C I R Q L R H S D G I R V V V G S S L V V E L A E N A G  
UniRef90\_UPI000462FD02 D I V T I H G S A E E V V G T L Q R L K Q N G Y R M V I C D M I T H T T A K N L G  
UniRef90\_H1HRE2 T F A S Y Q S A Q D A E S V V L D L R D R G V Q A V V G P G M V T D L A A N A G  
UniRef90\_UPI00041BECBC D A C T V S D E R D V E P V L L Q L K E Q G Y Q I I I G D V I T I E K A E Q L L G  
UniRef90\_G2TI04 K Q R A Y R S E D E V R A A V D T L A A E G C T E V I G P G M A C D L A L Q A G  
UniRef90\_J4YAF6 S T V T I H S E E A I H A L K E L K A Q G F E S V L G D V I T V Q A A E A R L G  
UniRef90\_UPI00016AF0BA N I T T F T S E D G A L A A L R Q A R S N G A S L V L C D M T G A N Y A K I L N  
UniRef90\_UPI0004703F6B D I F T I A G A E E V P A A L K K L Q Q D D G Y H M V V C D M I A H T T A R Q L L G  
UniRef90\_D1Y7W4 T F Y Q I D S Q Q D I E G E L K K A M A D D V Q V I I G D V I S T K E A K E R L G  
UniRef90\_G4KVM2 E T M T I T K G T E V N E K L L Y L K S R G Y E V V I G D V V T F Q A A K K L L G  
UniRef90\_F4GX91 D V R A Y D T E N D A R N T V A A L Q R T E G V Q V V I G A G L A V H L A Q Q S S A G  
UniRef90\_UPI00016AF0BA Q F A S Y Q S A Q E A E T R V L E M R E R G I E T V V G P G L V T D L A A N A S A G  
UniRef90\_UPI0004703F6B V F A S Y Q S A Q E A E T R V L E M R E R G I E T V V G P G L V T D L A A N A S A G  
UniRef90\_D8GLR7 P V R T Y R D Q D D A L A Q A K V L K D E G I E V L V G S G L I V D Y A D R M G  
UniRef90\_D1Y7W4 D I F T I H S A D E A R E Q L E K L K K E G R R I V V G D M I T Y T T A R K F G  
UniRef90\_G4KVM2 P V I T I H S A D E A R E Q L E K L K K E G R R I V V G D T I T A I A Q K L D  
UniRef90\_UPI0003458413 D I F T I H S A D M V E P A L R R L Q N E S Y Q A I L C D M I A N T T A K R L L G  
UniRef90\_D4J4P7 E L R S Y T T E E A E A C V Q E L V A S G T E A V V A P G L V V D L A A R S Y G  
UniRef90\_R7WZY2 V F A S Y Q S A Q D A E T C V L D L R D R G V G T I V G P G L V T D L A A R A G  
UniRef90\_N8ZID1 E T H V Y N S E E E I A P A T L E D T L K A Q Q G I T V I E G D T L T H E I A G E M G  
UniRef90\_A6LWE7 R Q R A Y R S V D E V Q A V L E Q T L A A Q G C K V I I G P G M A C D L A Q E A G  
UniRef90\_G7V17 T Q Y H Y K T P Q E A Q L C I Q K L K D K G V E V V I G S S I T V E L A Q K A G  
UniRef90\_D3E9G7 E S K C Y F E H K D I R D L L K E L K Q E N Y E L V I G D N M V Y E T A Q E F L G  
UniRef90\_M1MIL8 S T Y V T F K D S V E G L L V R L K A E G Y R M I I G D V V T V G K A E S I L G  
UniRef90\_C0CX53 K V Y T I H S S E D V A R L L L E L K A A G Y R Q V V G D V I T V H T A E A Y G  
UniRef90\_B0MFE9 S S Y T I K E E A E V P M L I K L K K E D Y Q V I I G D F I T V K K A E S I L G  
UniRef90\_R6TRV4 E I I T I Y H E E D A K E A I K D L K K Q R G I S M V I C D G T V G E N Y A K K M G  
UniRef90\_F5Y308 D I V T F T N E S D A L P A I R K A Q Q N G C T L A L C D M T G L N A A R K L L G  
UniRef90\_F7NFB3 E L F T V K S J E E L E P T L R A H L K D A Q Y D T V L G S D M T A D I L A R N I G  
UniRef90\_E2ZHS7 R Q Y A Y T T P E V A R R C V L R A L R A D G V A V V V G S S V V V E L A Q N A G  
UniRef90\_C4ZHE9 D I L T V R S A D E V A H T L E R L K Q R G Y R M V V C D M V T H T I A R Q M E  
UniRef90\_UPI00036FD1D0 D I V T V H S E A D V R S A L E R L K L G G Y S M V I C D N V T H S V A R E L I G  
UniRef90\_UPI00047C46F1 D I L T F K D S A E A D V R S H L K K A K E N G C T L V L C D V T G A R A K D I L G  
UniRef90\_J0N1R1 P V T V I A H E D E V N G T L E R A K D S G V K L V L G D T V T T R K A A E Y G  
UniRef90\_F8FBY4 E I Y T I D D S S D T L G L K S L K N G I K L V L C D A I T N K L A K I S  
UniRef90\_A6GNB9 D I Y T V D T V E A V E P T L R S L Q E K Q Y H A I L C D V I V N T T A Q R L G  
UniRef90\_UPI00040D1052 P S Y P I E S A A E V E G A L R Q A F G D G V Q L V L G D V V T V Q A A E A M G  
UniRef90\_A1HLP6 N T R T Y R T P E D A R R A V R E L A Q L G V A V V V G S G L V T E L A Q E M G  
UniRef90\_E4PJ7 K M I T I D S R D D A P G K I A A A Q A G I E L V V G D A I S I K Q A T R L L G  
UniRef90\_UPI000349B8C5 V H R T Y K T A E E A R S T F H G E L K D G I G V V I G S S F L C D L A E Q E G  
UniRef90\_D4LRG6 E M F T I S H R N Q V R S Q L E E V K R L G Y N L V I G D V V T V E E A Q K L G  
UniRef90\_B4UAE7 E I V L D E N T E P Y Q Q M E H L K E Q G Y E M V L C D M V G T S I A R E L L G  
UniRef90\_UPI000344FC76 E Q R P Y V T P E E G Q A V D D L S A R N G F K V I V G P G P I C S V A E R S S G  
UniRef90\_UPI000474A29D K I I T I L Q K P A D A Q N I L E E L K K A R N Y Q L L L C D A I T N Q I A L S K S  
UniRef90\_A0A024QEN8 E L R S Y G N E D A R A C V H E L K S M G V E V V A P G L V V D L A R E N G  
UniRef90\_E5WM20 K M I T I Q K S R S E V K H H L Q E L K Q G F S V I L G D V V T V Q E A K Q L L G  
UniRef90\_I4WIM1 E V F T I Q K E E V E A V H H E L R S K G F S V I M G D V V T V E A A K A G  
UniRef90\_C6D3S8 T H R T Y T T A D V I K E V F H Q C R E D G Y G V V V G S S Y T C D L A D Q W D  
UniRef90\_J3AIM2 P I I Q I S D Q T E V R G A L R Q A F G D K V I V L G D A I T N R A A Q E M G  
UniRef90\_UPI0004788E68 K I I T I D Q P E Q T A D L K L K E E G C E L V L C D A I T N H T A L L S  
D V F T V E K A K E V D G L V K N L K Q K G Y E L I M G D V I T M D A A T K H H

QUERY  
 UniRef90\_UPI000361126B  
 UniRef90\_W3VE33  
 UniRef90\_UPI000476C2B0  
 UniRef90\_K8WBY3  
 UniRef90\_A0A031GST9  
 UniRef90\_UPI000368C2A1  
 UniRef90\_J7TL84  
 UniRef90\_I2B9L7  
 UniRef90\_G0B550  
 UniRef90\_J3HTZ1  
 UniRef90\_I0KRL2  
 UniRef90\_L8XY14  
 UniRef90\_I7ZDT0  
 UniRef90\_V2IQ45  
 UniRef90\_B2JT27  
 UniRef90\_K0MR02  
 UniRef90\_D3AI96  
 UniRef90\_V2K3L1  
 UniRef90\_UPI000370CD66  
 UniRef90\_W7R7Z6  
 UniRef90\_V71998  
 UniRef90\_A0A059NYZ6  
 UniRef90\_R6ZNJ7  
 UniRef90\_A0A023DDK0  
 UniRef90\_U5T6N6  
 UniRef90\_R6RY24  
 UniRef90\_G5HMNO  
 UniRef90\_UPI00047BA1FF  
 UniRef90\_R5TBG4  
 UniRef90\_I9BW19  
 UniRef90\_D4KAW8  
 UniRef90\_R5C878  
 UniRef90\_K6D8T6  
 UniRef90\_E5ATQ2  
 UniRef90\_F5L6X1  
 UniRef90\_F5SCL9  
 UniRef90\_UPI00036676D7  
 UniRef90\_M8E5Y6  
 UniRef90\_G8MBT3  
 UniRef90\_K0I3L9  
 UniRef90\_C0CT66  
 UniRef90\_D5WF68  
 UniRef90\_T5HC65  
 UniRef90\_L2E7W7  
 UniRef90\_Q5WLI9  
 UniRef90\_UPI000462FD02  
 UniRef90\_H1HRE2  
 UniRef90\_UPI00041BECBC  
 UniRef90\_G2TI04  
 UniRef90\_J4YAF6  
 UniRef90\_F0FYK0  
 UniRef90\_UPI00016AF0BA  
 UniRef90\_UPI0004703F6B  
 UniRef90\_D8GLR7  
 UniRef90\_D1Y7W4  
 UniRef90\_G4KVM2  
 UniRef90\_F4GX91  
 UniRef90\_UPI0003458413  
 UniRef90\_D4J4P7  
 UniRef90\_R7WZY2  
 UniRef90\_N8ZID1  
 UniRef90\_A6LWE7  
 UniRef90\_G7VV17  
 UniRef90\_D3E9G7  
 UniRef90\_M1MIL8  
 UniRef90\_C0CX53  
 UniRef90\_B0MFE9  
 UniRef90\_R6TRV4  
 UniRef90\_F5Y308  
 UniRef90\_F7NFB3  
 UniRef90\_E2ZHS7  
 UniRef90\_C4ZHE9  
 UniRef90\_UPI00036FD1D0  
 UniRef90\_UPI00047C46F1  
 UniRef90\_J0N1R1  
 UniRef90\_F8FBY4  
 UniRef90\_A6GNB9  
 UniRef90\_UPI00040D1052  
 UniRef90\_A1HLP6  
 UniRef90\_E4PJJ7  
 UniRef90\_UPI000349B8C5  
 UniRef90\_D4LRG6  
 UniRef90\_B4UAE7  
 UniRef90\_UPI000344FC76  
 UniRef90\_UPI000474A29D  
 UniRef90\_A0A024QEN8  
 UniRef90\_E5WM20  
 UniRef90\_I4WIM1  
 UniRef90\_C6D3S8  
 UniRef90\_J3AIM2  
 UniRef90\_UPI0004788E68

170  
 180  
 M T G T F I Y S A A T V R Q A F S D A L D M T R M S  
 L A G V F V H E A S I R R Q A F F E D A L E I A R R Y T  
 L V G V F V Y S A A D S I R R Q A F F H D D A L D L A R R M T  
 L T G V F V Y S A A S I R R Q A F F D D A L L E M A R R L T  
 M T G V F V Y S T Q T I R R Q A F F S D D A I E L S L M S  
 L T A A V F V Y S A T A S V R R A F F D D D A L E L A R R L T  
 M T C I F I Y S N D A V R R A F F T D A I E L T R R I  
 M A A I E L Y S A D T V R R E A F F S N A L S L T R R A  
 L A G V L I Y S T A T V R Q A F F H E A L S R T R  
 L Q G V F I Y S A A T V R Q A F F E D A L E L A R R L T  
 L P G V L L Y S A D S V R Q A F F H A I E L T Q  
 I P S V F L Y S T E T V R E A F F R H A I K I A K Q S  
 V V G L L M Y S A D S I R K S F Q Q A I D L A R M  
 L Q G R L L A Y S L G A V R Q G F E D A L E L A R V A  
 M G A V F L Y S R A S V R S A F D T A L E V A H A T  
 L R G I L A Y S L A S I R S Q G F E D A I E L A R V A  
 L N A I L I T S G S I S S A F D Q A V K L  
 L T G V F L Y S G Q S V K L A L E D A I E A R L  
 M R G L L Y S H D A V R A A L D D A V E I A R A S  
 M Q S M L I T S G S V K E A F H S A K Q M Y R L  
 M N A I L I T S G S I K S A I D Q A V K L Y K  
 L Q G I L I T S G S E A V L E A F D E A K R L Y R L  
 L N A I L I T S G S I S S A F D Q A V K L C  
 L Q S I L I T S G S V L E A F E Q A K Q T Y Q I  
 V T G V F L Y S R G S V E Q A L D S A I E I S R I  
 L D A F L I T S G S L E H S A I D Q A L S I  
 L N S I L I T S G S I E N A F D Q A Y K L C  
 L A G V F L Y S T D S V R D A M E D A I A I A  
 M R S I L I F T S G S V E Q A A F D Q A V K T A  
 M A A V F L Y S G S S V E Q A L E D A I E A V R L  
 F D A F L I T S G S L H S A I D Q A V N T  
 L N S I L I T S G S I N D A I D E A V K L V R S S  
 L T G V L I T S G E A I L E A L E E V R R S Y R L  
 M H A V F L Y S R A C V R A A F D T A L E V V Q A T  
 L Q G I L I T S G S L I E A F N Q A K Q L Y R L  
 L H G V L I T S G E A V L D A F H R A K E T Y Q L  
 L N G I L I T S G S V L K S F Q Q A K R S Y R  
 L Q A I L I T S G S V T E S I S E A V H M A  
 L R S V F L Y S R P S Q A A I D T A L E V A N A T  
 L V G L L A Y S H A S I R Q G F E D A L E L A R V A  
 L N A I L I T S G S I R S A F D Q A V K V  
 M D A V F L Y S R A S V R A G F D T A L E V A Q A T  
 L N G L L I T S G S I A K A F A Y A K K L Y  
 L Q C V F L Y S L G A V R E E A F E R S E L A R M S  
 M N G F L L Y S S G S V R K A F N Q A K R V V K A  
 M N S I L I T S G S I N D A I N E A K K I V H S S  
 L D A F L I T S G S I H T A I D Q A L T L  
 M H G I L I N S G E A C M E A I E E A Q Q V  
 M T G V L I T S G E A T M E A L E E A R R S Y R I  
 M V G V F L Y S R N S V R N A A L E D A I N L  
 M G A V F L Y S H T S V R K A V D T A L E V A Y A T  
 M G A V F V Y S H A S V R A A V N T A L E V A H A T  
 L A G V L V Y S L D T V R A A C L E D A I E S R L  
 M N A F L I T S G S I R A D A F D T S V  
 M N G L L V T S G S I E D A F Q R A L H L  
 L N S F L I T S G D S I R S E A F E R T L D F A R  
 L E G V L L Y S R G A V R Q A F E G A I E V A R L A  
 L A A V F L Y S R A S V Q A A F D N A L D V A Q A T  
 M N A V F I N S G S I H E E A F R Q V I Q M  
 L E H V F L Y S L G A V R E E A F E R S V E L A R V S  
 M Q A I L I T S L Q S I R T A L D Q A L E V G R I A  
 I N S I L I T S G S A V K S A I D E A V R L C  
 L S G V L L T S G S V L K A F Q N A K K I H E L  
 L K G L L I H S G S I M R A L D D A Q L I Y R  
 L N G V L L T S G S V L K A F D N A K K L Y  
 L A S I L V L S G S V E A A F D Q A V E M  
 M N S I L L S S G S I T S A I D E A V K L V  
 L N T I F L I T S G S I R Q A L D R A I A L C R  
 L H G L L A Y S L A S V R Q G F E D A L E L A R V A  
 L D A F L I T S G S L H A A I D Q A L M L  
 Y S A F L I T S G S L H A A F E H A V D I A K  
 L N Y N L V T S G S I E N A V A E A V K L V H S S  
 I Q G V L I T S G S V L E A F E Q A K H I F R V  
 L N T L I T S G S I K R T F E Q A I E L  
 I N S F L I T S G D S I R N A F H H A L L L C  
 Y N G I L I T S G S V L E A L A E V R R M Y  
 L E A I L I T S R Q G V V K A F E E A L R L A  
 L R G I L I T S G E A V L A A F N E A K R I H R L  
 L K G V L I T S G E A I V Q A I H D A E N I A E V  
 L P F V M V Y S R E S C R Y M V R K A L S V A  
 L R G I L I T S G E A I L D A F D E G R R Q Y Q L  
 M N F I L I T S G S I E A A L D Q A V R F S K I A  
 L R A V L L Y G Q D S L E E A I R Q Q A A E V A R L A  
 L N T L L I T S G S I K H A Y Q Q A I T I S Q L  
 L T G M L I Y S Q R L V R E A I E D A V E V G R L A  
 L R G V L I T S G E A L F M D A F E E T K R L H H L A  
 L E G I L I Q S G E A I F D A F Q K A K S L Y  
 M A S V L I Y S R E S C R N L L R K A I R V A  
 Y H G I L I T S G S V I G T M F R E V R R V Y D V  
 L N T I L I T S G S I K T A Y F K Q A I  
 L E G L L I Q S G E A I F E A F H K A K S I Y R L H

UniRef90\_R9M9Y6  
UniRef90\_UPI000472A029  
UniRef90\_W4QI69  
UniRef90\_UPI0003669A04  
UniRef90\_W3ANV7  
UniRef90\_U5LH10  
UniRef90\_UPI000360937B  
UniRef90\_F4LWA0  
UniRef90\_UPI00047B091F  
UniRef90\_G4HP87  
UniRef90\_UPI00037C4FB2  
UniRef90\_K6U6F2  
UniRef90\_R2NW48  
UniRef90\_UPI0004717492  
UniRef90\_R7PCZ6  
UniRef90\_UPI00034D6F3B  
UniRef90\_UPI0002D6D897  
UniRef90\_J0B0P1  
UniRef90\_UPI0004758CDE  
UniRef90\_A0A038GN15  
UniRef90\_R2TBH2  
UniRef90\_I4D4Z2  
UniRef90\_A9BWJ6  
UniRef90\_UPI00034743A  
UniRef90\_U2TJR6  
UniRef90\_I8SGI5  
UniRef90\_UPI0003B66A01  
UniRef90\_W7CXW7  
UniRef90\_J8TV77  
UniRef90\_A7HGQ8  
UniRef90\_L8MH92  
UniRef90\_T1X9X3  
UniRef90\_W3A940  
UniRef90\_UPI0004779AD8  
UniRef90\_N2AH35  
UniRef90\_G9RWX0  
UniRef90\_R6DAZ2  
UniRef90\_W7ZKX9  
UniRef90\_U2RR73  
UniRef90\_M1ZLL5  
UniRef90\_E0P0U5  
UniRef90\_Q5WLA3  
UniRef90\_M5DZX5  
UniRef90\_UPI0003807DC2  
UniRef90\_E9SKU3  
UniRef90\_R5IKU3  
UniRef90\_UPI00047DF96D  
UniRef90\_Q3ACP6  
UniRef90\_J2SZK9  
UniRef90\_R9V151  
UniRef90\_W7ZFQ4  
UniRef90\_C6PWR5  
UniRef90\_UPI00047E46C0  
UniRef90\_UPI00047A7FEA  
UniRef90\_UPI00036B1EC5  
UniRef90\_D0J329  
UniRef90\_R9MV25  
UniRef90\_L0K770  
UniRef90\_M1FK77  
UniRef90\_A0A037Z3W8  
UniRef90\_V7I6R6  
UniRef90\_W0Z0Y9  
UniRef90\_E4RPK2  
UniRef90\_D7UV11  
UniRef90\_G4L112  
UniRef90\_B0KBM1  
UniRef90\_UPI000374E425  
UniRef90\_X1B3Q9  
UniRef90\_F6CLV6  
UniRef90\_G7WEY4  
UniRef90\_F3ACL2  
UniRef90\_E3GDT3  
UniRef90\_T0C9T8  
UniRef90\_A1HNH8  
UniRef90\_T0JRH2  
UniRef90\_R7PHD4  
UniRef90\_I4D114  
UniRef90\_X4BT53  
UniRef90\_D2TKP2  
UniRef90\_I8SIZ3  
UniRef90\_UPI0004796A8B  
UniRef90\_F7NJN2  
UniRef90\_K6Z3W9  
UniRef90\_C9S255  
UniRef90\_UPI0003182FD6  
UniRef90\_K6ZNU9  
UniRef90\_L0F9A7  
UniRef90\_Q2RKJ6  
UniRef90\_F8GXZ5  
UniRef90\_R7PHS2  
UniRef90\_UPI000476FE84  
UniRef90\_UPI0004746D3B





UniRef90\_R9M9Y6 Y D L L C T L K L A G S L S G G I A F V 100 A P S I A E S A R L L C K A M D L S M  
UniRef90\_UPI000472A029 Y D M L R R V L T L L A K S D F P G K K A F V V G F F S N I V T Q G S A K A V I T S D L L L E I T F  
UniRef90\_W4QI69 Y D I L L R T L L L L K D A K N V D K I L G M V G G F F P N V C H G F N Q V A H L D L D T T V I  
UniRef90\_UPI0003669A04 Y D I L L R R T L L L L K D A K N V D K I L G M V G G F F P N V C H G F N Q V A H L D L D T T V I  
UniRef90\_W3ANV7 Y D V L L R A M R L A D N Y H E E Y A I V I V G F R S N I T T E T A H T L C D L L L K E D N R T  
UniRef90\_U5LH10 Y D M L R S V L T L L A N Q N F S P G Q K F A I V V G F S N I T T E T A H T L C D L L L K E D N R T  
UniRef90\_UPI000360937B Y D I L L R S V L T L L A N Q N F S P G Q K F A I V V G F S N I T T E T A H T L C D L L L K E D N R T  
UniRef90\_F4LWA0 Y D I L L R A V A S A K R R C G D H I G L V V G F R S N I Y G S K S L E E V L D G L V K I  
UniRef90\_UPI00047B091F L D L L Q A L S Q A R A L A P G R K A I V V T F N G S N P A K A F A H F D A D L F G D L E I  
UniRef90\_G4HP87 Y D M L R R V L T L A N D F A P G K K A I V V G F S N I T T E T A H T L C D L L L K E D N R T  
UniRef90\_UPI00037C4FB2 Y D L L R A I Y P H F T A N K R K I A L V V G Y E N I T Y G V R S I S D I L L D D A Y L  
UniRef90\_K6U6F2 F D I L L R L K L S A R Q N G Y Q K K F L F L A G Y P S I S K S F K Q L S S E D L L G Y N I  
UniRef90\_R2NW48 Y D I L L G T I R L A R N Y T E N F A I V V G Y A S I T E T A A H L I C C D L L L Q Y N I  
UniRef90\_UPI0004717492 Y D I L L G A I K L A N N Y T E N F A I V V G Y P T V T T Q Q P A H V L C C E M M N Y R M  
UniRef90\_R7PCZ6 N D I L L R A I L L V G N H T S G K I G M M A F K E N I I Q G G F E S L S K L L D L D I V I  
UniRef90\_UPI00034D6F3B Y D I L L R T L T L L N G H T S G K I G M M A F K E N I I Q G G F E S L S K L L D L D I V I  
UniRef90\_UPI0002D6D897 Y D I L L R T L T L L K G Y Q Q S M E M I A F K E N I I Q G G F E S L S K L L D L D I V I  
UniRef90\_J0B0P1 F D I M G S L A S A Q A E P A K A V V T S Y A R P A P E F F E R F K S A F H L D L D M  
UniRef90\_UPI0004758CDE F D V M H A L A R A R R A R P A I A L V T H G D T P A E I R R F L A A Y G L D M  
UniRef90\_A0A038GN15 F D V M H A L T K A R R E G A S A V A L V T H G D T P A E I R R F L A A Y G L D M  
UniRef90\_R2TBH2 Y D I L L G A I R L A E N Y T A N F A I V V G Y A S I T E T A A H L I C C D L L L G N Y K T I  
UniRef90\_I4D4Z2 F D L L A A F R E A K L V S D T V G L V S F D H P S P H L A Q F S D A L F G G A G I  
UniRef90\_A9BWJ6 F D L L Q A L A S A R E L T P R I V G L V S F D H P S P H L A Q F S D A L F G G A G I  
UniRef90\_UPI000374743A Q D M M S A L L R A A E G L G G R R A V G M V S Y T A V I T Q T E L A D F S R I L M K L L G L  
UniRef90\_U2TJR6 Y D V L R Q A I K L S E G L K G R R A V I V G F F S N I T S G A S S L I D L L N L S L  
UniRef90\_I8SGI5 M D V L R A L R Q S T E Y P E K I E L V A G F F E N V Y G C E D L L A T E L L G I T S  
UniRef90\_UPI0003B66A01 Y D I L L R T L L L F Q D S K M P T I E L V G F F S N I C H G V N Q S V I M S L F E W H Y  
UniRef90\_W7CXW7 Y D M I R S L T L A K K Q M A H T A I V V G F S N I T S G A S S L I D L L N L S L  
UniRef90\_J8TV77 Y D L T R S L T L A S S I H N K T A V V G F S N I T S G A S S L I D L L N L S L  
UniRef90\_A7HGQ8 T D A L Q A L A H A R T L G R R V G V V N S F R Q A L P G L E R W K D S L F T V Q L  
UniRef90\_L8MH92 Y D L I R A L D L A R G R A T K V G I V S F D H P S P H L A Q F S D A L F G G A G I  
UniRef90\_T1X9X3 F D L M R A L A A A R A I S P K V G L V S F D G P S E H L A Q L D A L F A M G I  
UniRef90\_W3A940 Y D L L R S I M L A S G Q G E S K A L V S G F N I T T I G A S V S L L E G L D L  
UniRef90\_UPI0004779AD8 L D I V M H S A L A R A R R Q A E S I A L V S P G D T P P E I R N F V A A Y G L D M  
UniRef90\_N2AH35 E D V F H A V L L A R N Y Q E K F A I V V S F P V I A Q R A K E L C V L L R Y D I L  
UniRef90\_G9RWX0 Y D V L C T I Q R A N H E P K V A I V V G Y S N I A Q Q D M G I L R T L P Y Q L  
UniRef90\_R6DAZ2 Y D V L S T I R L V E N Y E G K S A I V V G Y P S I S K M A R L I C G V L P Q S D I  
UniRef90\_W7ZKX9 Y D L T R S L T L A S K L N E K T A V V G F S N I T A G A A A I I K L L H L P I  
UniRef90\_U2RR73 L D L L R A V I T Q A L Q C S S R A A V I V G F S N I T D R V E M L A K F L R N L D I  
UniRef90\_M1ZLL5 L D I L L K A V I E K A K K C S G R R I G V I V G F P N I I C N I S S L A K F L R N L D I  
UniRef90\_E0P0U5 S D M L R D I K M F D H Y V G K F A I V V G V G D V T K N A R I V C D I L L Q K D I  
UniRef90\_Q5WLA3 F D I L L R M I L L I Q A S E N K Q T E I I A G F E N V S L S F T K V T E L I E T D N I  
UniRef90\_M5DZX5 F D L L R V I Y P V S S E N K K I G I I G Y S N V I Y G M K S I S N T L D D N I  
UniRef90\_UPI0003807DC2 Y D I L L R S L I L V K D L S E T T K L I G F P S I C R G V L S V A S F I D D I E F  
UniRef90\_E9SKU3 Y D V L R T I R L A Q N T N G R F A V V G F H S I T Y A A L L K D I L L R Q Y E F  
UniRef90\_R5IKU3 Y D V L R C I K M A Q N T G T K F A L L G F F Q S L T V I A K N L C D I L L R Q Y E F  
UniRef90\_UPI00047DF96D Y D L L R A L K K Y I I G T H K K I A V V G Y S N V I T G A R S I G E V L L G L D I  
UniRef90\_Q3ACP6 F D I L L R Q F K G L I G Y S S E P I G V A G Y M N V I Y G S E V L G E V L N L N L  
UniRef90\_J2SZK9 A D L L R A L G Q A R T H S S Q V A I A S Y N R L N A D L E A M S L F T L T Q I  
UniRef90\_R9V151 F D L I R A L V Q A R D R A S R V G I L S F A Q P Y P E L A A M Q A L F T L T Q I  
UniRef90\_W7ZFQ4 Y D I L R M I L L F Q A E S D H T E I V A F E N I S H N F N K I S E L L D Q T T K I  
UniRef90\_C6PWR5 F D V L K S I H Y A K E I T S E V S V F T Y G K T I F G I K N I E D L L D V T K I  
UniRef90\_UPI00047E46C0 F D L L Q A L A Q A R G A R A S I G L V S F D Q I S D Q L Q Q F E A Q F G T G I  
UniRef90\_UPI00047A7FEA Y D L I Q A I H E S K K Y G N N L C I I G F D D M I E G I Q M I G S I L D D A N L  
UniRef90\_UPI00036B1EC5 Y D M I R S L M M A S N L N E K T A I V G F A N I T S G A Q A L I D L D L P A N L  
UniRef90\_D0J329 L D L L Q A L R Q A K E E A P R V G L V N F E V P S P V V A Q F D S L F G L G L  
UniRef90\_R9MV25 Q E I G L I Q R A K K L S R K I G L A A F E N M L C D L S R M E E L F G V R L  
UniRef90\_L0K770 Y D L L R V L Y K Y R Q H Q S Q I G V I A G Y E N V I Y G V K A T S E L L G I N V I  
UniRef90\_M1FK77 Y D L I R A L N L A K E R G T K A G I L T H Q H T L K D L D E L S S L F T V E V I  
UniRef90\_A0A037Z3W8 T D F L F S V K R A K L I G G D I A I A V S Y H S R M P Y L E E L K S L I N L N I  
UniRef90\_V7I6R6 F D L L R A L E Q A R E H S S H V A L L S Y N R I D R D L Q A M R T L F T V Q V I  
UniRef90\_W0Z0Y9 G D L L R A L I Y Q A K E E T D K K A V V G F Q S I T T S A G V V A E I L L D O D D L  
UniRef90\_E4RPK2 F D L L R T I Y Q A K E E T D K K A V V G F Q S I T T S A G V V A E I L L D O D D L  
UniRef90\_D7UV11 Y D I M Q M L Q S S R E Y M G K R A L V G F Q S I T T S A G V V A E I L L D O D D L  
UniRef90\_G4L112 F D L L N I I K L L E N Y T G K V G I I A Y E N I A K S T R V L C E I L L H Y N Y  
UniRef90\_B0KBM1 F D I L R Q F N G L I G G C K E I G V A G Y K N V I Y G C E V L G E I L L D L N L  
UniRef90\_UPI000374E425 L D I R A M M T N G K V G P D K V I A G F E N V I Y G C C E E M S L L G I H F  
UniRef90\_X1B3Q9 Y D L I R V L H Q A Q Q E T D R I A V V G F S P F T Y G I E G L G D I M G L N L  
UniRef90\_F6CLV6 F D V L Q A L Y S A K G L G E T K I A F L G N Y Q D F S P S F N S L I G L D L N V I  
UniRef90\_G7WEY4 F D V F Q A L T K A L T L I S T K I G Y L H P N D D Q D F L S K A Q G M L H K I  
UniRef90\_F3ACL2 Y D I L R C L K T A E A T H T K F A L L G H P S L T K A A Q T L R S L L K A E F  
UniRef90\_E3GDT3 Y D M V R T I R H L L Q T Y T Q K T A V V G F S A I I K S I Y V L C D R Y  
UniRef90\_T0C9T8 L D I L R T V H H L L K R Y T Q R I G L I G V E N I L C D Y R E L G D R Y  
UniRef90\_A1HNH8 Y D I L R A V K A C Q Q R A T K I A I V V G S Q D M I Y G A K S I E D I M D I K L  
UniRef90\_T0JRH2 F D I L R A L K S V G H V S G T V G V V F M R S F L F E C E K L C D N L V K M P  
UniRef90\_R7PHD4 Y D V L L C L K T A E N T K T K F A V L G F R S L T T A K S I C G N V L K M P  
UniRef90\_I4D114 Y D I L R A L N P L R E I D G T F G I I G F P S V I K G C Q T V A E M L G L N Y  
UniRef90\_X4BT53 F D V L Q A L A K A G K L T S S K I A G L V T Y Q E T P A L L A J A Q N T F H L R L  
UniRef90\_D2TKP2 H G V Y R L Q E A R R K S S K I A A V T G F P Q F C N V L R H Y Q N L T N E E F  
UniRef90\_I8SIZ3 F D I L S A I S L V N G K G K I A F I T T R N I T V K T E H F N E I M N V S I  
UniRef90\_UPI0004796A8B T D I I R A V N R A A K V S S I L S M Q S S K E L I G M L E K S L N I S I  
UniRef90\_F7NJN2 Y D V I H A V H Q C R Q R A R K I A V M G S D S M I Y G A K T I A A V L G V E I  
UniRef90\_K6Z3W9 S D I I C A I L K A S T V N K D V H V I T F D D Y S S L V E L L N Q N T S I N I  
UniRef90\_C9S255 F D L V N A L W L A K R M N R Q A V V M S Y E N P I P Q L E Q F S D L F R V S D L  
UniRef90\_UPI0003182FD6 Q D L A K C F H E S K K V S P K I A L F A F E N M K E E V E G L S S L F R N V S I  
UniRef90\_K6ZNU9 E D I I S A V K R A A Q I S G N I V L I N F A E S S P V V P L L E T A L N V S I  
UniRef90\_L0F9A7 F D I V R A Y F E A K K I G K R I G I V D V E E V V N D L D A F A E V I N D E L  
UniRef90\_Q2RKJ6 Y D L I R A L A R A R A R K D L S G Y I G V A G F R S V I Y G T K S L E S A L G V H I  
UniRef90\_F8GXZ5 H D V M A A I V R A R A L S E R L A V V L H R D A G D M A K F A E V F A L P I  
UniRef90\_R7PHS2 Y D V M K A V N Q C M Q K G E R I A V V G A F R N M V Y G A E Q M C H L V L N L G R L  
UniRef90\_UPI000476FE84 H D V L L A I Q Q A H Q M A R V V M L G R O P L V H G A F L D Q L D V L A V R L  
UniRef90\_UPI0004746D3B F D I L Q G F I R A R Q L G E R V C F I T Y P E F L F D F D E M M K V I G F E V



UniRef90\_R9M9Y6 D L R T Y D S H D T V I E P T L L E L R K Q S E G F Q A L L C D T F A N N T A K R L I G  
UniRef90\_UPI000472A029 D M F T V I N D K N E D T V E P T L L K R L K Q S E G F Q A L L M G D V I T T I N A V I S T I L G  
UniRef90\_W4QI69 E Y R Q T V I Q S K E A D E V M D T A V K K E L Q K N R G I Q I I V V G D D A V T T I L R L A T A K R F L G  
UniRef90\_UPI0003669A04 S Y Q V T V I H S K E Q L E D V D T A V K K D A L Q N R G I Q I I V V G D D A V T T I L R L A T A K R F L G  
UniRef90\_W3ANV7 E I T T I K N E R E E A S A L V E G L K Y R G I T M V I C D M V T T Q N I A R R M D  
UniRef90\_U5LH10 S I V T V D Q A E S D T D M L P S D L K Q K Q F R D L I L M G D V V T T V N V A D H H G M S  
UniRef90\_UPI000360937B S I I T T L H H N S D T K E I L S Q D L Q N K Q F R D L I L M G D D A V T T N K T A L Q M S  
UniRef90\_F4LWA0 S E L E L K T E A D A L S V I K K A K Q D G I Q V I V V G D A V S V R Y S K Q M G  
UniRef90\_UPI00047B091F A Q F G Y S D E A G V H A C V A A L R K A G V G A V A P G L V I A D L A A K Q A G R  
UniRef90\_G4HP87 V I C T V E K A G E V D S I L E A E L K D K G V E L I M G D V V T I E A A A K H R  
UniRef90\_UPI00037C4FB2 G L F T I T Q S I D V E S V I E K A I R W G T D I I I I G D A V S I G L G R E K K G  
UniRef90\_K6U6F2 E S Q C Y N Q H K D I L N N L I D E L K N E S Y E M L V I G D A N T V Y E T A Q E F G  
UniRef90\_R2NW48 K I I T T L D E L T D A S M T L D L L A D E N Y E M I V L C D D A I T T N R L A L S K S  
UniRef90\_UPI0004717492 K I I T T L D N S S S A D N L L N Q L K A D E H Y E M V L C D D A V T T H K L A L S K S  
UniRef90\_R7PCZ6 N I I T T I H S P E D E L D P V L K E L A A G D G C N F I L C C D V I T S T M M A R E N F A G  
UniRef90\_UPI00034D6F3B T F Y P I H E K E I E E K I E L L A S A N D G V V I I G D D V V I T T A A A N E F G  
UniRef90\_UPI0002D6D897 T Y T V I T H E K D E V E L A I Q K A K Q N E V V K I V V V G D T I T V R L A N E L G  
UniRef90\_J0B0P1 E L R S Y R S E A D A R S C V L D L R D R G V D V V V G P G L V V T E L A E R A N Q  
UniRef90\_UPI0004758CDE S Q H A Y R S E R H D A E S L V L D L R D R G V D V V V G P G L V A D L A A D A G  
UniRef90\_A0A038GN15 I C E S Y R S A Q D A E S L V L D L R D R G V D V V V G P G L V A D L A A D A G  
UniRef90\_R2TBH2 K I I T T L N T S D T D T N K L D N L R V E E Q Y E M I L C G S D A I T T N Q E A L S T K K  
UniRef90\_I4D4Z2 R Q F T Y Q K F S D I N E E C L N L K N E G I N V V I G G S F L Q R E A I S T K K G  
UniRef90\_A9BWJ6 A Q F S Y H G P E D A Q A C V R A L Q A A G V G A V V A P G L V A D L A E Q A G  
UniRef90\_UPI000374743A L L R R Y R D D E R V R Q V M L A L R E N A G A M V V I C P S L V V E A A A L G  
UniRef90\_U2TJR6 D I F T L V D T D D V S T V M G L V E N D Y Q I I L C D D V I S A S A A R D A G  
UniRef90\_I8SGI5 V E I A L K N E N E A Q E K I A A A V E N G V E L I V I G D A I S T K L A A R I G  
UniRef90\_UPI0003B66A01 S Y Q V I H S Q D D E V Y Q A V E N A L S R K I Q L I I G D T V T T T A R F G  
UniRef90\_W7CXW7 Q L N T V T H S Q D D V L P L L F D L K E R G I K Q V I G D V V T V T A A T K I G  
UniRef90\_J8TV77 K V I T T V S R S D E V A P L L F K L K E D G Y Q Q I L G D V I T I K T S Q A Y G  
UniRef90\_A7HGQ8 E Q R A Y V T P F E E A R A Q V A E L A A H G F E V V V G S P A C D E A E R A G  
UniRef90\_L8MH92 R Q A T Y T F E E A R Q Q V R Q L A D D G Y R V I V G S S T A V E L A E A S G  
UniRef90\_T1X9X3 A Q F S Y R S P D D A P A C V E A L R A A G V G A V V A P G L V S D L A E Q A G  
UniRef90\_W3A940 K V V T L A E A S D V E P L S T L K A E G V T R I L G D V V T V N A A Q L G  
UniRef90\_UPI0004779AD8 V F S Y R S V J D A E A C V L E L K E R G V G V V V P G L V T D L A A A A G  
UniRef90\_N2AH35 E V H T I R S E Q E A V E L L K K L Q K A G Y T M V V G D M I T A L V A K E F G  
UniRef90\_G9RWX0 D V F T I Q S S S Q H A V T L Q Y L R R E E Y A S V L C D M V T T Y T A A K E M D S  
UniRef90\_R6DAZ2 P V Y T T L D S A Q H L H G L Q S L N A Q G F S L I I G D A V T T Y A A Q R E C  
UniRef90\_W7ZKX9 N V Y T T H S A N E V T S L L L K L K A G Y S H I L G D V I T I N T S H E V G  
UniRef90\_U2RR73 R T F S F E T P E Q I E D T V K Q C A S A R A G Y D L I V G G A A T R D Y A V A E E G  
UniRef90\_M1ZLL5 V E I Q I N S Q E S T E A V K K A S Q L G V D V I V C D R R I A V E T A A R F G  
UniRef90\_E0P0U5 Q I R T I E Q P E E T E A V I S G L K A E G V S L V I C D R V R Y Q A A K V G  
UniRef90\_Q5WLA3 P L T A V M K E E E V E P A I J A A K A A A G R K M I G D A I T T S L A N K H G  
UniRef90\_M5DZX5 E Y Y E I K C N N Q V E K Q I R K A I E N D V T L I I G D T I A I K T A A K H G  
UniRef90\_UPI0003807DC2 P Y T E V T T T E E I G A E V I E K A Y H E G I S N I L G D A V A M K Y V I G K Y G  
UniRef90\_E9SKU3 D I F T L K S T D E I L E S E L N R G L K D A G Y N M I V G D V V T T Q T A K S I G  
UniRef90\_R5IKU3 D I F S F D N W K G S G D L N R M K E Q Q Y K T V V C D M I P Y D H A K M I G  
UniRef90\_UPI00047DF96D C W F K I D K E S E A T D K V N D A I N L G V E V V V G D T I S V M A A K S K G  
UniRef90\_Q3ACP6 I K I E L K K E T E A L F E I A E A K E K G A K I I G D T I G A C C A A Q L G  
UniRef90\_J2SZK9 H Q A S Y T T L E E A R L A V E H A A A G L G C R S I I G S S T V V E L A E Q A G  
UniRef90\_R9V151 R E H T Y T S L E Q A R D Q V E R L V A D G F E V I I G S P T V C Q L A D A G  
UniRef90\_W7ZFQ4 P I T A V T S A E Q V E P A I L Q A K S I G R R I V G D V I T I N L A K K H  
UniRef90\_C6PWR5 Y E Y I F K N E E D I D Q A M N E I K S K G I K V V V G G M P A V L T A K K Y G  
UniRef90\_UPI00047E46C0 V Q F S Y S G P E D A K A C V Q S L R E Q D V G A V V A P G L V A E L A E Q A G  
UniRef90\_UPI00047A7FEA K V Y H I K N E E D G E G Y I R H L L S T G I D A L L G G D T V A E K I A N K Y N  
UniRef90\_UPI00036B1EC5 K A F T V S A S E E V A P L L D L K S Q G Y K Q I A G D V I T L K T A A N A Y G  
UniRef90\_D0J329 V Q I A Y Q G P H D A P A C V Q K L K A E G V G A V V A P G L V A D L A E Q A G  
UniRef90\_R9MV25 L T S Y I D R I E E V P D L L H D M R N E G T D C V I G G D T V C Q E A K I G  
UniRef90\_L0K770 D Y Y K I E E S Q V E S R V E E A V N N N V K T I I G D T L T V R T A K G Y N  
UniRef90\_M1FK77 S Q A V Y T S L E D A R Q K V Q T F V E Q Q Y R V I I G S P T V V D L A E A A G  
UniRef90\_A0A037Z3W8 V E I T P I E K Q E C A E E K I K Y Y V D Q G I T K V F V G D T I G C K V P R K L Q  
UniRef90\_V7I6R6 H E R T Y S D F L E E L E D I R E V A R L G C R S I I G S S L V R E K G D Q Y G  
UniRef90\_W0Z0Y9 H Q V A Y T T L E E A R Q A V L E V A R L G C R S I I G S S T V V E L A E Q A G  
UniRef90\_E4RPK2 E V L T I N Q P Y Y I E N K L N E L K A K F N W V V G D N I S V K I A K K L N G  
UniRef90\_D7UV11 A I F T I H Q Q N E V R G L Q V L K A S E N F D T V L G D M I T T R A K K E V G  
UniRef90\_G4L112 S I F V I D S W N D A R K K V Q M L K D S G Y S L I V G D T V S V A Y A E Q L G  
UniRef90\_B0KBM1 I K V V I E K E E G L R Q V A A A K K G V S L I I G D T I S A Y S A K R L G  
UniRef90\_UPI000374E425 Y E I V I H E E A E A E T K I K E A L A H G V E L I V G D A I S V K L A A K L G  
UniRef90\_X1B3Q9 K V I T L K H Y H Y I E K K L I E T K E Q N Y H W V V G D N I S V K I A K Q L G  
UniRef90\_F6CLV6 E C Y P Y N D I Y E M N N Q I K K L K S N I D V V V S T G L V Y E M A K S S G  
UniRef90\_G7WEY4 K Y Y P Y S T M S E L S L Q M E K A H H D G C E V A V G G G L G L R L A N A F G  
UniRef90\_F3ACL2 P V F S I S D T A T A L H T L H T L S A Q N Y Q T V I C D T V A Y E A A R K A G  
UniRef90\_E3GDT3 D C F E V S E N E D L F P M L S S L Q S Q G Y N F A G D V I T A K A A D S I G  
UniRef90\_T0C9T8 Q I Y P I V S E N D D L D R V R Q A I S D G M E C I V G D G M S T A D Y A K R F G  
UniRef90\_A1HNH8 A V V E V R E E D D A E Q I R N I K N S G V D I V I G G V M S T Q I A E R L G  
UniRef90\_T0JRH2 H E I F V E N E M I A E S M I E T A C R Q Q G I N T F L G D A S S A R L L I E R G  
UniRef90\_R7PHD4 D I F S I N T T S E A S S L D K L K E G Q Y K T V I C D D T V P Y N Y A K I G  
UniRef90\_I4D114 H I C E L G E G D E E L L S V N T E F A Q T K V I V G D T I A V R Y S E L I N  
UniRef90\_X4BT53 E Q R S Y V T  
UniRef90\_D2TKP2 K I C Q V Y N H Y D I E N V V K S L A S D D Y Q L V I G G L T V A E M A K K Y G  
UniRef90\_I8SI3 C F E P V K S S K E I P S K V Q E L I Q E G F E A I I G D V I A T R Q A V A Q G  
UniRef90\_UPI0004796A8B R A E Q Y T T P K E A R E L F D L A R P T V D D A V V G A S L V C G M A N Q A N  
UniRef90\_F7JN2 V C Y A V E R E E D A E R C L Q A A R Q A G T E A V I S G A M A V A I A G K M G  
UniRef90\_K6Z3W9 K H S K Y E T A Q A K Q I Y Q L S K L S S N N V V V G A S L V C G L A S Q N N  
UniRef90\_C9S255 M Q E A Y D G V H D A E K L R I L G S G K S V I G A S L V N E L T E R M G  
UniRef90\_UPI0003182FD6 S L Y K L E K K E D I F T K V D D L F K D A D I V G A M S T A V Y A R K K G  
UniRef90\_K6ZNU9 Q E E I Y T S D Q A R E L F Q L T R Q V N N V V V V G A S L V C G L A A Q H E  
UniRef90\_L0F9A7 V K Y T C H N D E D I A S K G V C Q L R E Q G V D V V M G K V A M A N E A G R Q G  
UniRef90\_Q2RKJ6 E E L I I E A E E A A G I I A E G R S M G L E V I V G D A V S V R S A K E M G  
UniRef90\_F8GXZ5 A F R S Y E S A P D V R N V I D E L R R L D T R V V V G A G V M Q A A A A A G  
UniRef90\_R7PHS2 G C Y A E D D E T K L E M A V H Q A L A K D G N Q A I V G G Y S T V Q I A E R L G  
UniRef90\_UPI000476FE84 D I R T Y Q Q D A E R E L A A L A E N P E V I V G S S L V Q D W A E R L G  
UniRef90\_UPI0004746D3B T I L P Y N S A Q E I E E Q I K V A K E M G I D V V L G G G L S A Q I A K H G

UniRef90\_R9M9Y6 M N S F L V A S S E S I R K A F D Q A L L I C  
UniRef90\_UPI000472A029 M N G T L I Q S S G E A I Y E A F Q K A K S I H Q L  
UniRef90\_W4Q169 L E G G V L I T S S G E A V E E A F Q K A R T L  
UniRef90\_UPI0003669A04 V E Q I M I T S S G E S V E Q A L F Q A K E I G Q V  
UniRef90\_W3ANV7 M N S I L I T S S G E S I L T A F R H A E D L C R  
UniRef90\_U5LH10 L E G I L I T S S G E A I F D A F Q R A  
UniRef90\_UPI000360937B L N T L L I T S S G Q S I K K A Y N D A L E  
UniRef90\_F4LWA0 L E S V L V T S S G E S I S M A L R E A Q E L V A V  
UniRef90\_UPI00047B091F L A S V F L Y S S D E A V F Q R A L D D A V R L A R R A  
UniRef90\_G4HP87 L E G I L I T S S G E A I F E A F Q R A K S V H R L  
UniRef90\_UPI00037C4FB2 I E V Q L I K S S G E A I E N A V Q E A L Q L  
UniRef90\_K6U6F2 I N S I L L T S S G E S V R S A L D E A I R L C  
UniRef90\_R2NW48 I N T I L I T S S G E S V K H A Y Q E A L T I A R  
UniRef90\_UPI0004717492 I N T I L I T S S G E S I K H A Y R Q A I S L V H  
UniRef90\_R7PCZ6 V E P I L I T S S G E A I D T A I D Y S I N M C R V  
UniRef90\_UPI00034D6F3B L Q G I L I T S S G E A I V E T I S H V E Q M V  
UniRef90\_UPI0002D6D897 M Q G V L I T S S G E S I I E A F E K A K H M Y Q A  
UniRef90\_J0B0P1 M E G V L L Y S S Q G A V R Q A L E S A T E L  
UniRef90\_UPI0004758CDE L A G V F L Y S S Q D S V R A A F D T A L E V A R A  
UniRef90\_A0A038GN15 M S S V F L Y S R T S V V A A F E T A L E V A Q A  
UniRef90\_R2TBH2 L N T I L I T S S G D S I K H A F T E A L T I A  
UniRef90\_I4D4Z2 I K G I F I Y S S D G V T R A L D T A V Q V A  
UniRef90\_A9BWJ6 I P S V L L Y S D G A V L Q A L R D A V L L A R  
UniRef90\_UPI000374743A M P A I L I Y S Q G S A R Q A L E E A I E V A R L  
UniRef90\_U2TJR6 L N P A V L I T S S G A S I R Q V F D E A L R Q T R  
UniRef90\_I8SGI5 V N Q G A L I Q S S G E A I Y K A I N E A A L T A H I  
UniRef90\_UPI0003B66A01 L E G I M I T S S G E S V E Q A V V Q A K E V  
UniRef90\_W7CXW7 L Q S I L I T S S G E S L I N A I T E A T H L A  
UniRef90\_J8TV77 L K G M L L Q S S G E S I I R S I E D A L F L Y E  
UniRef90\_A7HGQ8 L K S V L L Y S L E C V C A T I E R A I E M A Q V A  
UniRef90\_L8MH92 A Q G V L A L N S D A V R R T L D E A L A I C R  
UniRef90\_T1X9X3 M A S V L M Y S D D A V R Q A L Q D A V H L A R H S  
UniRef90\_W3A940 M G A L L T Q S S G E S I L Q S L E E A R R L H K  
UniRef90\_UPI0004779AD8 M N G A V F L Y S H A S I R S S F E T A L E V A E A  
UniRef90\_N2AH35 M N P V L I M S G E S I D M T L R Q A Q Q L A V M  
UniRef90\_G9RWX0 V N A F L I T S A E S L R A A F D Q A V  
UniRef90\_R6DAZ2 L D A V L I T S S G E S L E S T L N E A L Y I Y E L  
UniRef90\_W7ZKX9 L K G M L L Q S S G E S V A R A I E E A I Y L I Q  
UniRef90\_U2RR73 A Q F L L I T S R E S V E A S L Q Q A I E Q H L  
UniRef90\_M1ZLL5 I N G Q L I A T D E C I I K S F Y K A I E I A N M  
UniRef90\_E0P0U5 L N A T F M A S M E S I F A G I D E  
UniRef90\_Q5WLA3 L E G I L I T S S G E S V R T A L E Q A D L L G R  
UniRef90\_M5DZX5 F E T K L I T S S G E A V Q N A I L E A Q K V Y Q A  
UniRef90\_UPI0003807DC2 L N G M M I T S S G E S V H Q S L K R A K E L A  
UniRef90\_E9SKU3 L Q T M L I T S P E S V D A V L N N S L S L Y E  
UniRef90\_R5IKU3 L T P I L L T S A E S V K Q A M E N A I  
UniRef90\_UPI00047DF96D L E H R F I M S G E A V I N A T E E A L K I H E I S  
UniRef90\_Q3ACP6 L K S R L I T S S G E A V A N A L S E A F R L A E A  
UniRef90\_J2SZK9 L H G V L S L S A D T V R K A L E E A L G I  
UniRef90\_R9V151 A Q G V L A L D A E S L R H T F D  
UniRef90\_W7ZFQ4 L D G I L I T S S G E S V Y T A L E Q A  
UniRef90\_C6PWR5 L R G V L V E C G E A I Q Q S L Q E A L H I T A E V  
UniRef90\_UPI00047E46C0 I P S V L L Y S D G A V L Q A L R D A V L L A R  
UniRef90\_UPI00047A7FEA I P T V L E T S P Q A I D Q S I Q E A R E I I R I A  
UniRef90\_UPI00036B1EC5 L R G F L I Q S S G E S I V K A L E D A K L I Y  
UniRef90\_D0J329 M A S V L L Y S D S V R Q A L S D A M L L A R  
UniRef90\_R9MV25 C Y S V F T A T E E S V R D A M E R A K S M A  
UniRef90\_L0K770 N Y E L I T S S G E A I L N S I Y R A Q K V Y E A T  
UniRef90\_M1FK77 A E G V F A I N A D A V R R T L D E A L A I C R  
UniRef90\_A0A037Z3W8 C T S Y I T I T S G E A I E D A I Q E A R R I L S M S  
UniRef90\_V7I6R6 L N T Y L V Y S E S S V E E A I D E A I S I A  
UniRef90\_W0Z0Y9 L H G V L S L S E D T A R K A L E E A M  
UniRef90\_E4RPK2 M N A L L I R S S G E A F A Q S I K K A Q D I A E V  
UniRef90\_D7UVI1 L N Y V V S S S E S I E R G L M F A R  
UniRef90\_G4L112 I Q S M L L I S S G E S I S Q A F D N V V T V C  
UniRef90\_B0KBM1 L K S R L I T S S G E A V A A A V S E S F R L A Q A  
UniRef90\_UPI000374E425 V P A I M I H S G E A V Y K V I R E A  
UniRef90\_X1B3Q9 M N A L L I R S S G E A L T Q A I L E A E R  
UniRef90\_F6CLV6 I N A G L V Q S S G D A I Y S A I M R S L E I V H  
UniRef90\_G7WEY4 M A G S L I Y S S R S V A A A L R Q A R E L A  
UniRef90\_F3ACL2 L T P I L L T S A E S L E T A V N H A L Y L W E I S  
UniRef90\_E3GDT3 L N H A M L T S S G E S V S K A I D Q A K K M Y  
UniRef90\_T0C9T8 L P G I L M P S S A S V Q E A I D L A E N I I R A  
UniRef90\_A1HNH8 L K T V F I E T G E A I Y H A L R E A K R V A R V  
UniRef90\_T0JRH2 L K V G L I E S A E S V S K A I T E A I K L A D V  
UniRef90\_R7PHD4 I T P I L L T S S E S L K A A V  
UniRef90\_I4D114 C P V H L I K S G E S L A A A L M Q A E Q L I E A  
UniRef90\_X4BT53  
UniRef90\_D2TKP2 L N A V M D T D N I S I E Q A I N E A R S L L K  
UniRef90\_I8SI3 I C G Q L L E S S G E S L L L G L Q E A K Q V  
UniRef90\_UPI0004796A8B L K S F I Y Y S A D S C R K A T L E E A I S R A R  
UniRef90\_F7NJN2 M N A V L I E S G E A I F Q A V R E A V R T A R V A  
UniRef90\_K6Z3W9 I K S F L I Y S K E S C K A I L K E A I E I  
UniRef90\_C9S255 G H S I F I Y S R S I R L A L E T A V E L A  
UniRef90\_UPI0003182FD6 F Q A C V I H S G D A I K N A L L E A K R I V K  
UniRef90\_K6ZNU9 I P A F L L Y S A Q S C R K T L A N A I R A G R  
UniRef90\_L0F9A7 M K S V V I S S G D S V S R A I E E A R R V  
UniRef90\_Q2RKJ6 L Q A I L V T S S G E A I S Q A I R E A R E V A  
UniRef90\_F8GXZ5 M A G V F L Y S V D S V R L A L E D A I A L A  
UniRef90\_R7PHS2 V P A A M I H S G E A V N H A I S E A I A V A H L T  
UniRef90\_UPI000476FE84 M Q G A M I Y S L P S L R R A L D D A L E L V R I A  
UniRef90\_UPI0004746D3B M K S M Y L T S E R T L K R S L I L J A N K V A E

1 10 20 30 40  
UniRef90\_B3IBG0 I I A I F S V S K T I T Q R I S N V L I E R L D I P V Y E Y H F S D V V  
UniRef90\_UPI00040840B3 I V L I A S G D S I S N L G K Q L Q K K L A F P E S L S I V N T Y M E S Q A V  
UniRef90\_C5F754 I L A I A P Y Q N R L A E E V R D E I A E D F K T L Y V F E S Y V G D L S V I G L  
UniRef90\_L1N3A5 I V L V V A P I S R N L L K T E E V R V I A E R G Q E E R F T V V E A D L R E A  
UniRef90\_A4ACX8 R A R I L L I G Y R K F S E I L I N A V L P D Y R D E A E E V I V E S V A S G S V  
UniRef90\_B5XN53 I L V I F S V S S T I L T Q R E I M N V L T E R K E I P V Y E F R Y S D V L  
UniRef90\_G5HQP0 I A V F V P D Q E M Y G Q V E E I L K E K E Y H V K V K V I E T E E A V  
UniRef90\_J1YID5 I T P Y P Q L G E I L V A E Q C T G I F N C H V Y H G S L E K A A  
UniRef90\_R4K255 I L L L A P Y D G L K Q L A G K I K K S I S I P F S V V A G N L D Q G V  
UniRef90\_G5HKA1 I V F F A P Y P N L L P V I Q R V I G E R P E S R D I Q Y R V V Q  
UniRef90\_I9LH37 K V R L A L I S Y P G M S M I F K Q V A E R A G F D P Y I T V L A A L G E A A  
UniRef90\_E5YAT1 I V S I T P Y P C L A N V I V I A A H P Q R G R I D I V I T A T V D R  
UniRef90\_V5B1N2 I V I A P D L K L M E M F Q Q L R K E T A L E F E L R K G L F E E A V  
UniRef90\_E6VX11 I V F L A P D E D M Y H M A L E T L R H A H P D I R L E R G L L S A G  
UniRef90\_A1HRA8 I L A V A P Y R E L L P T M E E V A Q Q F P D A C A Y T F T H G N L D E A F  
UniRef90\_F2NA51 I V I F S V S K I T Q R I M N V L I E R K L L D V P V Y E F R Y S D V L  
UniRef90\_G8W6Z7 I A F I A P D K Q L F L Q G K V I A D M G L T E Q V S L Y L G R L K R G I  
UniRef90\_UPI00035DE816 I L I V V P I L S V A E F I K T I I Q E Q D D K E E Y E I L V N I G V  
UniRef90\_B9E4B6 K P I L I A P H F K I E Y T A K K V A D R Y N D V D V K L A L L N Q S  
UniRef90\_UPI00047BC86A I L V I A P Y E A L V E Q A E R M N E L C D I T V I P G N L K E N L  
UniRef90\_I8SJS1 I C L I A P F A S M K K L A D E V I L E R D P E W H G N V V A L G S D Q A G  
UniRef90\_C6PP25 K P I L I V A P N S D I L K L I S K R V A K K Y K E V S V V Q L G L I D K A  
UniRef90\_V7I9B3 K D I L V V L A P I K D I Y D K A V Q L V I K E R N Y S N V D V V L G N M G E G L  
UniRef90\_G7WI94 R P K L C L A P N E D I A H T A E N L V I K E R E F N C D I L I G N L K T K G  
UniRef90\_U2WJS3 I L V I A P F P A L A D E V R R V I D E M G K R R G L F R V V V I A D L A A A  
UniRef90\_I9C4I4 I A F I A P D K Q L F L Q G K K I I Q E L G L H H K F D L Y L A R L N R G I  
UniRef90\_R7PDS8 I I W Y A F S E F V E Q A Q K I I F K K L D K D V I V T V W D  
UniRef90\_E1R629 K E I L I A P Y D D L Y A T A S N L V V S K G Y H Q V E V V K G D L D E G M  
UniRef90\_B6WA99 I F I V G Y E A M V R P I E D L K N K Y K N C Q I D Y G I A M L E D G L  
UniRef90\_UPI000393CD1A I A I F S V S R I S E R I S T L L V E K D I D I Q I Y E L E H Y D V I  
UniRef90\_I9MFF4 I C L V A T Y K E F A Q L V R D I K K E L D L P I D V L E G S L E E G T  
UniRef90\_T3GAY1 K E I L V I A P T K G T Y E K S L H I V K K N K Y K A N I D V V E G N L K E G I  
UniRef90\_B1B869 K D I L V I A P F K D L Y D L A N K I I J K E K K Y A N V Q V I L G N L S E G L  
UniRef90\_U2RRX8 R I A L V P Y A S M A N L A W D V F Q E H T E Q M R L Q A L D A S L D I L V  
UniRef90\_S6GPL4 I L A F I S Q T R L S K L L N T V R S Q E H W S V E F E L H E F I A E Q N K  
UniRef90\_R7PN61 I L F I V P Y P E L R E K V E Y V L D N H P E N K R I S A N I Q V L T  
UniRef90\_UPI00036871CC I I G V V S Y P E L S R Q I M A L A A E R Q L Q V E L R E G V L Q E G V  
UniRef90\_R5FBW9 I F F I I P Y P E L E E K V N K I F Q N H P L R A R L R K R I E M R T A  
UniRef90\_S7T998 R P R F A F V S N S E I K A R T V K A E D P D R E N I E I R L A S M E A L  
UniRef90\_UPI00046EBC66 I L V I S P F E E F T N L L Q V K K E S K F D F D V L Y N N L G M T E S T  
UniRef90\_Q214B6 I V V F S V T T S L T K T I K R V L A D M G E S F R V Y E E D L F N V  
UniRef90\_UPI000369C663 K K R I A I M S H N K L T E L R K I S P E L E K F I I I E S S F N K T K  
UniRef90\_UPI000255573D K E I L L V A P Y E Q M Y E S A R R I L R D T K Y R S V E V V S G N L A E G L  
UniRef90\_R9LSQ9 I L V P Y R E M C E L A R P L A T E R A S K H F T V M C L E F T R T E L V  
UniRef90\_L4T1U7 I T P Y P A L A V L V T E Q C T G I F N C H V F H G S L E K A A  
UniRef90\_F4LVD8 D I L L S P N L Q I A E S A I E A K K I Y G L D L T I K C G L M E E A V  
UniRef90\_G5IN22 I A L F V P N E E M F E Q A Q E I L K E K E H V V I V K K I T T E E A V  
UniRef90\_UPI000469DEC0 V L C I S P Y Q S M H I S V Q Q I Y N T Y A E Q I H V Y F E K L D R H E G I  
UniRef90\_U5RVC9 P I C L I S P S K E L V K L A N K I I N S N K K I D V F I K K L D E A  
UniRef90\_I4D6B1 V I V T S A Y P E L T G L V L D S A A K L K M K V I V V E A V L E E A L  
UniRef90\_UPI0003FF825C I A V F L P N E A M C R Q A D A L S K R K N H V I I I R T T I N N L V  
UniRef90\_D1PID8 E D I L F L S P S K P I K T L E V F A R T G Q Q F L V H E A V M D D A V  
UniRef90\_G1V456 I L F I A P Y K G L A R I F R Q V A K D L R C R I K F M D L A F D E A I  
UniRef90\_E5Y9D3 R I A I A S Y G T F E Q F I H Q I K P F Y S E E V E F V I L N A L F E D L K  
UniRef90\_COD4E8 I A F I A P Y P E L A L L A R E V C G E Y S D V A I F Y G L L E N G  
UniRef90\_A1HS80 I L F I S P L Q E L A S L V K E V T N Q E G A P E I D I K V A R M E D G V  
UniRef90\_G7WC24 I L F I V P Y P E L K E K V E H V L S H H T E K N R L N I Q V M T V E E T P  
UniRef90\_UPI00041BFBF9 I V I V P Y P E L K E I V D Y V L A H H P E R E R L D V Q V M T V E D T P  
UniRef90\_R6S466 L A I A P F K G F R D F F L Q E I Q R R N D I E A D I Y F A T L R E T E  
UniRef90\_UPI0003F85AD6 I L I I A P Y L S F Q E T A A P V I Q E F P T V D F E M H T G D E F T A  
UniRef90\_U2R7Y5 K E I V V L T P L R E M K D R A E I V R E Q G Y H N V E V L L G S M S E G V  
UniRef90\_A6P1C1 F I A P Y P Q L A T L A Q Q A D A L N C R L T V I D G A F D S V A  
UniRef90\_D0Z8W3 I T P Y Q T L S A L V M R L A A E Y S C A V H T L E A V L D E V  
UniRef90\_B1EKH8 I V L F L P N D R M I G Q A M Q V I Q N Q E Y Y I D V I K R V D T E N I  
UniRef90\_G5JW9 I A F I A P D K Q L F L Q G K R V I Q E L G L Q G E V E I Y L A R L S R A V  
UniRef90\_D5DPJ7 I A F M A P R F E M I E L A E G I V K K M D A E V L M Q L S K S E N I  
UniRef90\_V4EH56 I A F M A P R F E M I E L A E G I V K K M D A E V L M Q L S K S E N I  
UniRef90\_B8KF59 E D I L F I T P S E P I T N T I S N I F S R I G E S F L V Y E A A L E D A V  
UniRef90\_UPI0003B2E562 I A L L V S R E E M L Y Q A H N I L Q E K P A T I Q E M R V I K T E D S V  
UniRef90\_G5IN24 I V L L V S R E E M L H Q A H N I L Q E K K E I G E M R V I E T K D T V  
UniRef90\_COD8A8 K P I A V I A P Y P E L G A M F R M K S L H D I D F D I Y N A L C D E A I  
UniRef90\_B6WWW5 P N I Y I V S P L Q A L S L A E R L S I R Y N H I A N I T I L N A T L D D V  
UniRef90\_AOA023V5F4 I L L P R Q T L E F A E N V L K K E G I E V Q V L K V E N A N A V  
UniRef90\_UPI00040B7E2B I A L L V S R E E M L H Q T H N I L Q E K K E I S D M R V I K T E D A V  
UniRef90\_UPI0003FFE66B I A L I A P Y E S L A T L C R S I C Q E L D L D V S V H T G S M E D G V  
UniRef90\_Q316Q6 I L G F R R F S E L V Y S V G K Y T Q Q I D L S F H D L G A S S K T  
UniRef90\_F3L448 I A L L V P N D E L F R E L S H D A L Q E M K K R F M M K V I E T E S A V  
UniRef90\_W3ANH6 I L F I V P Y P E L R E K V I S H H P E K K R L D I Q V M T V E D T P  
UniRef90\_C5EPL2 I L F I V P Y P E L K D K V I Y V A H H P E S Q R L D I R V M T V E D T L  
UniRef90\_G5HTK6 R Y R F A L V S H S E E L S R I V R Q N I H H E T E T L F T V V G L D D G  
UniRef90\_UPI0003B5B578 I V V I A P S K L F S D T V Y E V L E E L H I K I P S Y I A T G K E T  
UniRef90\_V5ZET2 K D I L F I S P F E D L Y K I A K K I K F Q G F E E I D V Q M G D L E E G A  
UniRef90\_F0K5P8 I L L F S G Q E R F T A K A E K I L E D R N L K E R C L V V E T A G R K T  
UniRef90\_A6TJU2 I C L I T Y K R L H Q L V D E T I I G T F S D E D K L S V V E G L R N E I  
UniRef90\_C5EVL5 I V F F S P Y P E L S N V I E Q V F R E R P D K D T Y E I I L D S F N N T L  
UniRef90\_R2QLP4 I L I T A S G A H I A S Y A Y K I Q K E Y H A E D S I I V S A F M E N A V  
UniRef90\_COCZY5 F L S P W P E L A E L V K I A D E R N E S V A I L N D S D  
UniRef90\_UPI000377207C R K I T Y F V P Y S R L V P V V R R I Q P R Y E G I A S I E Y F P K M Y D V K V  
UniRef90\_G8QWU1  
UniRef90\_UPI00038059C9  
UniRef90\_UPI0004068B06





UniRef90\_B3IBG0 H G I Y R I L Q E A R K K S Q K I A A V 100 P Q F C N V L R H Y Q N M T D D V F  
UniRef90\_UPI00040840B3 S E L I R S I T T A T E L D S Q N Y A Y I G F M E D V T Q S V S G F L D I L L H R K E I  
UniRef90\_C5F754 L D I L R V I R L T V E V T T K R Y A F I G F P N V T E K I K L L G S Q D I L L S K E I  
UniRef90\_L1N3A5 T D I L R A V I R T V E T T T G R H V G V S F P N M I Y G C T E L L S Q D I L L P E V  
UniRef90\_A4ACX8 T D I V D A V A R A E R R I G Q R V H V F T Y A A K A E S F Q A L P S S L L L G E S L  
UniRef90\_B5XN53 H G V Y R I L Q E A K N K S Q K I A A A G F P N Q F C R A L R H Y Q D E S M T N D E F  
UniRef90\_G5HQP0 Q E M G R V L N R A K K E N P K I A V F Y W E N M L C D T T Y F D E L Y G V F  
UniRef90\_J1YID5 A D L L K S L I P L K N Y P Q H I A F F N Y Q T Y L T D V L L I A Q A L N I T I  
UniRef90\_R4K255 F D I L R A I S S I L S S K G V K K I A F V T T S N L I F K R D Y F N K I L D V L M V  
UniRef90\_G5HKA1 Y D V L A A I H V C R W D G K R I A V V G A F N M V Y G A E Q V N K I V Y D L M V  
UniRef90\_I9LH37 F D V M R S I S E N K K L Y K R I A L F S Y K E K M S G I R D I E K M L G L E I  
UniRef90\_E5YAT1 Y D V L R S I Q E C Q R R R R I G F V G F Y N A F N G I E Q F S G M F G C D I  
UniRef90\_V5B1N2 S D L L K A L P V R D C T R R P I A F F N Y Q R Y L P D V V L L A C S L N I V I  
UniRef90\_E6VX11 H D I I P L I D Q A R A Y H S D H I A V I G F G E I V N A A R V A A P I L S V I E L  
UniRef90\_A1HRA8 F D V I R T V E Q A K Y G T R I A G V V A F F E S T M V M G I D C L G E P I L S G V D I L  
UniRef90\_F2NA51 V D I L M T L R D L E T R G T R I A A V V G F F E S T L K N I P V A A A P I L L G V M A L  
UniRef90\_G8W6Z7 H G V Y R I L Q Q A K K S Q K I A A V G F P Q F C N A L R H Y Q N M T N E E F  
UniRef90\_UPI00035DE816 Q D L A H V F H E A K K L T P R V A M L A F F E N M G H G D L E A L S Q I L G I E L  
UniRef90\_I9M625 L D I L R S V K E C R W D G K R I G I V G S Y D M I C G A K S I E S Q I L M D I E L  
UniRef90\_B9E4B6 Y D L I N A V Y T A K K Y G S N I F I I G F Q N I I E G V G L L R K I L N V N I  
UniRef90\_UPI00047BC86A V D I L M A L S K A S E Q G K K I A F L T T L N I L F Y Q A K H F A N E L M D I S D L  
UniRef90\_I8SJS1 L D I L R T I K Q G V G L G V I G V A G F R N Y L Y E C E T L A G P I L L D L N L V  
UniRef90\_C6PP25 Y D I F S T I A L A K K Y G K N I V V L G F K S L V E E V Q Q I A G P I L L D L N L V  
UniRef90\_V7I9B3 F D V L E S F D R A G D A D E Y V V G V A G Y T N V V Y E A F S D I L K K Y L P K N K V  
UniRef90\_G7W194 I D I L K A L H A S Y F S Y K V V G V V G Y S N T I Y E A S S V L G K Y L L K E I  
UniRef90\_U2WJS3 V D I M R A V L A A G S K A K K V G V S G F E N M V Y G C D D L G A L L R M K E L  
UniRef90\_I9C414 Q D L A Q V F H E S K K L H P K V A I L A F S N M V H D I E L L S T P I L L D I N I  
UniRef90\_R7PDS8 E D M A D T L I E A S R Y G K N I G V I G Y N N L L S G L E R L N S T I L L N V N I  
UniRef90\_E1R629 Y D L M A S Y P Q L M K L D E P I A C I G Y K N I L S S G F D L V S D L G K N V  
UniRef90\_B6WA99 N D L L K S I L I A K N F Q T K T S I I A Y S N L T D G A L E I R I L N L D F  
UniRef90\_UPI000393CD1A Y G I Y K T I E E A K R F G D K I V A I G F P Q Y C N M L K H Y Q S I T H E S F  
UniRef90\_I9MFF4 Y D I F R N I Y P V S G P G R V L G I L G Y Q N A V T G C R A A A Q V L G S I  
UniRef90\_T3GAY1 Y D I L K S Y K E V K N S N E P F G I I G Y F N N V I Y G F D I E E V L K K K I  
UniRef90\_B1B869 F D V L R G F K Y I L N Y N G T I G V I G Y S N I I D G C E V I K E V L K V D L  
UniRef90\_U2RRX8 T D I V N T L L Q L R Q K Y G P V A I L G T Q N M I L G V E K L A S R Q L G V D V  
UniRef90\_S6GPL4 F D V M Q A L W R A Q Q D A T T A V F I N Y N Q T I E Y Q L R Y S L L F N Q V  
UniRef90\_R7PN61 Y D I I R T V A E C R K L S T Q I A I L C G F Y G K I Y E A S D I C K L L G C E V  
UniRef90\_UPI00036871CC F D I L Q A L H A A R K L G R V I A Y L G H R D F T P D F A S I T E I L L A V D V  
UniRef90\_R5FBW9 Y D L I R A L N E C I T L P K K V A F L G N Y T A L G S E A D E L G N F V N C D I  
UniRef90\_S7T998 M D V I R A V M L A R E R S R K I A V T S F S G Q I A G L E I M E D I L G V E I  
UniRef90\_UPI00046EBC66 L D V L R T V H N L K K N N T R I G L M G Y L N I I Q D S K E L G E L L G V K V  
UniRef90\_Q214B6 F G V H K V V Q Q A L E V S D K I A T V A F P L Y A E I M Q N Y S E M C G I P I  
UniRef90\_UPI000369C663 F D I M E N L I K A K S R G N R V I L I S Y K Q K V A H S F S Q E G L F N I D I  
UniRef90\_UPI000255573D F D V T E S L S A A M E K G R P L A I V G Y S N I N Y D E K F L R K L V K T K L  
UniRef90\_R9LSQ9 Q E L M V M L D L K R E L G P R L G L V G F A N M F C D T A Q F N T A L F G V D I  
UniRef90\_L4T1U7 L D I L K S L T P L K R C H P H K I A F F N Y Q N Y L S D V N L V A T A L E V E I  
UniRef90\_F4LVD8 E D I F D A L S K A K K I G N R I L L I G F K N H I Q G F H N L S N L V D L D I  
UniRef90\_G5IN22 Q E L G L V M R A K K E C P R I G I F G W D M L C D T T Y F N E L Y H V V D L  
UniRef90\_UPI000469DEC0 Y D I L S I I Q A S S R I D K I A L V G F P E I T V P F P Q K I A D R F Q K S  
UniRef90\_U5RVC9 S D Y I P I M E K V I K I K K I A F F S Y S E I S N D V K T M C Y L L N I D A  
UniRef90\_I4D6B1 A D V L L A L A A A K N Y S P Q I G Y F S Y P N L M D Q L T K V R K I L Q I E I  
UniRef90\_UPI0003FF825C Q E L G L L I V A K A K L V P R I G I F C W A G M L S D T T Y F D Q L H V R I  
UniRef90\_D1PID8 Q E L G S V V V D L K R E H P R L A L I G F E N M F C D T S C F D D L F G L E L  
UniRef90\_G1V456 F D L V H A I T T A L E Y S P N V A L F V F E S T P I Y N A V Q V V R D F F K S P R I  
UniRef90\_E5Y9D3 W D L L Q A L Q P Y A G H V R N V A F F R Y S T P L P G L S S V E K A L G M R I  
UniRef90\_C0D4E8 F D F L L A L K K A A Q Y G S S T G L I T F G E R V P F V S S V K E L L N V E V  
UniRef90\_A1HS80 Y D I L R T F S E F I G T N K T I G V V G Y R N V V E G C R S V S Q M L G I P L  
UniRef90\_G7WC24 L D I L E A Y L Q A K S L G S L I G I V D V N E M I Q E L A S F E L G S F  
UniRef90\_UPI00041BFBF9 Y D M V R A I S E C C E H P K K I A V C G F S G Q M Y E A K N I C Q F F H I T S A  
UniRef90\_R6S466 Y D M L R A V I E C Q K H P G K I A I C G F F E S R L F E A E E I C C R M V G V N A  
UniRef90\_UPI0003F85AD6 F D I L R A L Q L A M T T Q K R I A V V G Y F D L S D N I H F I L E F L L N Y K A  
UniRef90\_U2R7Y5 L D I L R A L N Q P G F S D Q R V A V V G Y S S I I T N S V K K V F E V L Q L K N  
UniRef90\_A6P1C1 Y D V L Q S F E Q V D D P N E T I G V V G Y S N V V D G Y D L R K L L P N P V I  
UniRef90\_D0Z8W3 L D L L A L L L P L R D Q A A T I G V I S Y R Q P L P G V E L I A Q A L G M R I  
UniRef90\_B1EKH8 L D L L C A L Q P F V H R I R H V A F F N F G E S M P G V A D I A R A L D M Q I  
UniRef90\_G5JW9 Q E L G L L A E A R R I S G K I A V T A S P N M L P D T T H L G E I Y G V I E L  
UniRef90\_D5DPJ7 Q D L A Q A F Y K S K R Q V N P K V A M L A F Q N M K N D V E I L A D I I G I N L  
UniRef90\_V4EH56 Q E I A M L M H E A K K L R P K L A F I G F E N M Y T D I M I F G D I V G V E V  
UniRef90\_B8KF59 T D I V D A V A R A R I G E R V Q V E T Y A E A K P E A E S R L F A L L G G G L  
UniRef90\_UPI0003B2E562 V D M L R A V N R A R F L A D K I A V V G F E S F T Y N A L A K D F F E K P V  
UniRef90\_G5IN24 Q E M A L L I M K A K Q I I R K I A V V G F Q N M F C D M S F F D M I Y D I E L  
UniRef90\_C0D8A8 Q E M A L L V M K A K Q L L K K I A V V G F K N M F C D M S F F D M I Y D I E L  
UniRef90\_B6WWW5 C D R L S M L T K A L E Y G N R I A V V G F G A T M N T S K F I S G L I D V I E L  
UniRef90\_A0A023V5F4 Y D I I D A L R P Y L G L N K N I G V I G F R S V I D G C M K I A R M L N L Q L  
UniRef90\_UPI00040B7E2B R E I G M M I R K A K G M L K K I G I V A F K N M F D S L D H L D E L F D C T L  
UniRef90\_UPI0003FFE66B Q E M A L L V N K A K Q L L K K I G V V G F R N M F C D M S Y F D I Y G I E M  
UniRef90\_Q316Q6 F D I Y L C L E P L L R S G K S I G V V G H S D I L R K A K G A S A A L G F T I  
UniRef90\_F3L448 A D V I E A C L K A K Q V S S K V H L F T Y A E M P T R L I A Q L G D K G I T V L  
UniRef90\_W3ANH6 Q G L I D M L G R A R R I H P N I A I V M S K N M A C D M T G I G E K C L G V N L  
UniRef90\_C5EPL2 Y D M V R A I S E C K Y H P K K V A V L G F S G Q M Y E V K N I C R F F K I D V  
UniRef90\_G5HTK6 Y D I V R A I S E C C E H P K K I A V C G F S G Q M Y E V K D I C R L F K T S A  
UniRef90\_UPI0003B5B578 S D I V T A L N A R E L G N R I G L T S I S E G H E G F E T I R E L L K M N V  
UniRef90\_V5ZET2 E D I F Y S Y K K A R L K Y S S K I G F I G L E S S Y K T A K R F K E I S N F D L  
UniRef90\_F0K5P8 F D T M R A V Y N A K R F G N E L A L I A Y K H S V D K H E I E A M L G V K I  
UniRef90\_A6TJU2 F D I L K S F K L I Q Q I K E P L A I I G Y H N V I K G Y D I E D L F D M D V  
UniRef90\_C5EVL5 Y D I L L A L S K A K T M D D K P I I I P Y G N Y L K P L R E I E N I L S T V I  
UniRef90\_R2QLP4 E E L L V A Y Q Q A Q M I S N R I A I L G Y G S I Y T M L Q R F Q R I S Q E E F  
UniRef90\_C0CZY5 F D Y M S A V K R G L Q Y G K V A I V S Y C A P V S D M Q Y F L E D N R T C L  
UniRef90\_UPI000377207C Y D V T A A V D R C L K E H P K I A V V G A F N M V Y G S E S V S Q V Y K D V  
UniRef90\_G8QWU1 Q D I I Y S A V E K A A S L T G K L A Y I G E E K A L E S A K V F L T K L G Y R L  
UniRef90\_UPI00038059C9 F D I L N A F S N A R Q T S D I G F I G E E W K T F D K E I V E K I E K I  
UniRef90\_UPI0004068B06 S D I A N A I A Q C R R N T D K I G L I G D Y S N M K D I E S M S C L F N I D F

UniRef90\_B3IBG0 K I C Q V Y N H N D I E N V V K N L A D N D Y Q L V I G G L T V A E M A K K Y D  
UniRef90\_UPI00040840B3 R L Y S V E N S S Q D I Y D N I L R A K R E H I N L V I G G V I T Q E L A R E K N G  
UniRef90\_C5F754 Q V I T E I S S A E E A P E E L I A G L K V Q G Y S M I V G D D A V S F N E A R K N G  
UniRef90\_L1N3A5 M P L E I H S S A E E A E E K L R A G V S A G V D V I V G D A V S V R I A H S C G  
UniRef90\_A4ACX8 A H D S Y T T T D E A S E E K L L A M A S A A G T D V V V V G P S Y T C E L A A R R Y G  
UniRef90\_B5XN53 K I C Q V Y N H H D E I E N V I K N L S E N D Y H M V I G G L T V A E M A K R Y N G  
UniRef90\_G5HQP0 L R Y Q V F K E D E F W R S V F A R A C E D H P D L I L G G K S T J A E M A D R Q Q  
UniRef90\_J1YID5 D E F V F L S H A D M T E K L E Q C R R R Y A T V T G G F P V T D S A R Q Y A  
UniRef90\_R4K255 D F E C C S K V S E I P G K V E Y L I N K G V D A I A G D V I A T R E A L R K G  
UniRef90\_G5HKA1 S C Y A E D D E T E K L E T A V L R A K A D G N Q V I V G G Y S T V Q L A E Q C N  
UniRef90\_I9LH37 Y E Y T F H L Q E D I E A G I L D A K K K G I A L V M G G L A I R L A E Q T Y N  
UniRef90\_E5YAT1 R V Y I P E C A A E E T R S H A L E L A K Y A R G H Y T D V I V G G G Y S V Q Q D A G L L G  
UniRef90\_V5B1N2 D E F V F I S H E E D M T S Q L E Q C Y A R G H Y T I V A G G G P V T E T A R H Y Q  
UniRef90\_E6VX11 S L F Q L H S A K E I P M V V D E I C R Q G F T V V V V G N P Y S V S L A E S F G  
UniRef90\_A1HRA8 R Q Y I A T D E F Q A E E T R S R V L Q A F R E G G A D V V V G G V I T S R K S A Q A R H H  
UniRef90\_F2NA51 D T F P I A F E D E I E L A L D D I A E R G D Y T L I V G G D L V S R E T A A R R D  
UniRef90\_G8W6Z7 K I C Q V Y N H N D I E N V I K N L S E N D Y H T V I G G L T V A E M A K K Y N  
UniRef90\_UPI00035DE816 R V Y P L Q S T A D D I P Q R S I A E V L K K D T T D L V V G G I K T V L L A A K E G  
UniRef90\_I9M625 V T V E V N N E D D A E L R S I A K L K E D G D I V I V G G V M S V D L A R R I G  
UniRef90\_B9E4B6 H I Y Y I N D E H D G E R Y I K N L I N S G I D V I L G G T V A E N L A L K Y N  
UniRef90\_UPI00047BC86A Q I L P C Q D D A N E T P A K V K H L I E E G I D A V V G D V S V A T Q Q A I E R G  
UniRef90\_I8SJS1 R V I A L E N K A E T A E R I F A A S E G I K V V I G D A N S V E L A R Q I G  
UniRef90\_C6PP25 K A Y H I E H E E E G E S Y I K K I A S G I D S L L G G T V A E N I A S K F G  
UniRef90\_V7I9B3 V K V E I T S S E G D I H S L I E G E Y K N K G I K T Y I G D A N T I R I A E S N L N G  
UniRef90\_G7WI94 I E I P I D S S I L Q D R L K E E V N Q G L E V I V G D T M A S N L A S N L G  
UniRef90\_U2WJS3 V E I K I K G E A E A K E K I A H A M E D G V D L L I G D A V S V R V A R A K K G  
UniRef90\_I9C4I4 T L Y P L K T V D E D D L P S K I A E V L A V T D A D I V V G G I K T I L R A A K K G  
UniRef90\_R7PDS8 R Q I F A V I D E D D T F H Q I Q K L V A N E G V D V I V G G L I Q T R Y A A R K L E  
UniRef90\_E1R629 K T I E I T H E S D V G T L I S E C V R E G I T V F A G G A I V G R I C E S R G  
UniRef90\_B6WA99 K I H Y I K N D L D I E N L K L K E E G Y Q Q I L G D S L A I K V A K D L N  
UniRef90\_UPI000393CD1A K I C Q V Y N H K D I E D L M A K I K S D G H V V I G G L T V N Q F A S K Y D  
UniRef90\_I9MFF4 H E V I L T N W E N V R A Q V K Y L M E E G V N T F I G D T S V M T H L E F P T  
UniRef90\_T3GAY1 T M I E I K E E E Y D A I E K Y R K K G I N T Y I G D T T V A H I V R K R L N G  
UniRef90\_B1B869 V K I L E V D E S T A E Q D T V K P Y I R E N G I T V F V G D T T G T Y V T R K L L G  
UniRef90\_U2RRX8 T P Y C F Q E N S E I R R C V E Q A A R D G K R V I V G G G T G C R L A E E I G  
UniRef90\_S6GPL4 E Q Y L Y H S V A E V V D L V H R V V Q R P N C L I I G A S H V C D I A E S M H  
UniRef90\_UPI00036871CC E I Y P A S N H K D L E A S I D E V A H H C D A L I G G Y S A V E L A E K H G  
UniRef90\_R5FBW9 Q C Y P Y S N E Y E M N C Q V A R I L D E G A E V V V S T G Q C I E M S R R S G  
UniRef90\_S7T998 K S Y H S E S T D D I T K A I D Q A V A D G Y T A F I G G Y S V N L I C S Q R R  
UniRef90\_UPI00046EBC66 R Q L P F R T T P E L V A A I S K A V A E G F T C I V G G G I C K T L I C S Q V R G  
UniRef90\_Q214B6 Y P V H H G T N K E L E Y L I H R A L N E G I E I I V G D G L S V S T A A E Y G  
UniRef90\_UPI000369C663 S T R V I R E S G E I E E A L E E L Q A R G I R V V I G G S L V A R M A K R F G  
UniRef90\_UPI000255573D F E E C Y S D E I E L N S I L E G L K D N K E N I V I G S S L V C R D C D E L K  
UniRef90\_R9LSQ9 T I V N L G E T D D V R Q V V S N C A A Q G Y T M F L G D A V V K N V C D E A G  
UniRef90\_L4T1U7 R L Y M V E D T A G L A P A T E Q A Y Q D G C N A V I G G D A I S C E H A R H M Y  
UniRef90\_F4LVD8 E E F I F L S H A D M V D K K C R T R N F Q T V A G G L P V I C D T A E H Y E  
UniRef90\_G5IN22 K Q E I I Y N E D D A Y E K I L K A R L E G Y E V V V G G E V Q C G I A K M L G  
UniRef90\_UPI000469DEC0 R R Y L L K D K N E W R N T I E Q A V G D G L D L I I G G E A A L E G G R Q A G  
UniRef90\_U5RVC9 P V Y S V Q N D T D L N G T I K A I K D S G F N T V I G D T S V E N M A E Q F N  
UniRef90\_I4D6B1 D Y Y T F N T F K D C E M C I K N A M V K N I V L G I G G T S T E Y F A R K Y G  
UniRef90\_UPI0003FF825C K H Y S F R N D R E L T A Q M E Q A H H D G C E V T V G G G R G A L L A R A F G  
UniRef90\_D1PID8 V T Y H L N D E D W Y E R V E H A I S D G V D V L I G G E K C V R Y A A Q K N  
UniRef90\_G1V456 R R Y M V E H S N Q L A P Y T E Q A A R E G C V G V V G G D I V C E T A R R I Q  
UniRef90\_E5Y9D3 L T E T V D S L D E I R P R I A R L V K N G V G A F V G G S P V V N A A R E A G  
UniRef90\_C0D4E8 K E H L Y G S K N E M H L R L I Q L D P A D V E L F V A G T L V C Q W A T A A G  
UniRef90\_A1HS80 T E R V Y H Q S S E I D Q V L S D L Y N Q I E D V I G T A F V L E R A A L K G  
UniRef90\_G7WC24 R E M T L N N E E V M R A Y L Q Q L E R T P V D V V V G D A L V N S K L L L E V  
UniRef90\_UPI00041BFBF9 V K Y T L K D Q E D I L K G V A A L K E A K V Q V V I G K I A M A N E A K K L G  
UniRef90\_R6S466 E I Y A P V H H E D L P K T L E K A L A A G C D A L I G G Y S A N T L A R Q Y G  
UniRef90\_UPI0003F85AD6 A V E A P V L H D D L E K T M E R T L A S G C D A V V G G Y S A C I L A E H K G  
UniRef90\_U2R7Y5 E I I S P K N P E E M E A L M T Y E E H I S L F V G D G A C V H C A K E L N  
UniRef90\_A6P1C1 T E I Y E V R Y A E V K E R V A E L A D R G F S L I I G D V P S V N A A M A N G  
UniRef90\_D0Z8W3 V L V E L K R E S D I Y A V I E D H K R R R N I K T Y I G D A N I T R I Q R L N  
UniRef90\_B1EKH8 C Q D V F H S R E D I D A L I Q R D E M R N L D I V G G L V V R A A Q R L G  
UniRef90\_G5JW9 D E Y V F H T Q E E M Q S Q L L I S R Q L G A E M A I L G G Q L T V R L A G A V Q  
UniRef90\_D5DPJ7 S I Y L L D S N V D V R L V Q K I A E S K P D V I V G G S N V V K A A G E F H  
UniRef90\_V4EH56 K T Y L V K S R E D I L P A V D R A V R D K S D A L I G G D I V N T Y A K G L G  
UniRef90\_B8KF59 Q H E S Y T T D E A E S L L A M A V A D S A D V V V G P S Y I C E L A S R R G  
UniRef90\_UPI0003B2E562 I V E T L T D L A D I S E R L R Q L I A R G V K A F V G S S P V V N A A R A L G  
UniRef90\_G5IN24 R R Y Y A K H G G E L S E A A R K A V E E D A D L L I G G D T A V K A A T E A G  
UniRef90\_C0D8A8 R T Y F A S A G E E L E N T A R K A A K E Q A D L I I G G D T A V S V A T E Y G  
UniRef90\_B6WVW5 K F Y R I T S A S E V E N T C K T I T D D G F R I I A G T P R A T A Y A A R F G  
UniRef90\_A0A023V5F4 T E F I I D E M A N P C I E N V R N D Q I D L I I G D A I C P L Y F G T H S  
UniRef90\_UPI00040B7E2B R F Y E L K A L E E E T R M K V S Q A I A D G V D L I I G G V K A N Q T A F E I G  
UniRef90\_UPI0003FFE66B R T Y F A D K S H L L E D M T K Q A I G D V D L I I G G D T A V G I S G E A G  
UniRef90\_Q316Q6 D F Y A T A H P G M G H I T M E A A R R Q G I A A I A G D A V A A R T A E R Y G  
UniRef90\_F3L448 I H K F Y R T S D E A S E V F Y L S L A E K P E V V V G P S Y T C H M A E K E G  
UniRef90\_W3ANH6 R E Y L V Q N P E L L K P A A M Q A I E D R A D L I I G G S T V L N M A D N A G  
UniRef90\_C5EPL2 E V H A P V R H E D L A A K L D Q A I A A G C D A L I G G Y S A N T L A R Q K D  
UniRef90\_G5HTK6 E V Y A P L N P E E L P A T L E K A K A A G C D A L I G G Y S A N L L A R Q Y N  
UniRef90\_UPI0003B5B578 R E I V F H H R D P A T R I E K A V S E G V D I I V G G G L S R K I A D Q L D  
UniRef90\_V5ZET2 E I P K L N S L Y E F E H T I K E L I D D G I E I F I G G K T T K E I T S K Y N  
UniRef90\_F0K5P8 K E F L E S S E D E I T T L I S K V K T E N I K I V V S G K T V T D E A I K Q G  
UniRef90\_A6TJU2 T K I L L D N T K S V E G Q I K E C V N G V K V V G D T V V N R I A P Q Y G  
UniRef90\_C5EVL5 V Q R S Y I E I E D L N R I I I E E K E K G R R C V I G S G L A C D L A E K H G  
UniRef90\_R2QLP4 L A I K I D D V K N V S H L M K E A A A K G Y D T F V G G I T T R E A C S E L G  
UniRef90\_C0CZY5 V N L I Y E D T E L Y Q L I E K S A V D V V V G A A H P V E I G E E L G  
UniRef90\_UPI000377207C T I K S Y F T E K E I K E I V K Q A I E D G A Q M I V G G C S T V A I A Q E H R  
UniRef90\_G8QWU1 S L A E C S T S Q D I R T A V K L A K A A L V K V I V G G L F A N S I A T A E N  
UniRef90\_UPI00038059C9 K S Y E C S E E D I Y R E V E L A S D K G L K V V V G G T V T Y K I A P A F D  
UniRef90\_UPI0004068B06 A V Y M I D N P D Q I E D M V K R A I E E G C D A L I S G S H A N K C V I K N G

UniRef90\_B3IBG0 L N V I M G D T D N S L E Q A L D V A  
UniRef90\_UPI00040840B3 L K C V L L E S S E S L K E A Y E R A L E V A  
UniRef90\_C5F754 L N S L L I E D S S G E S I Q N A L V A A R Y L L  
UniRef90\_L1N3A5 M C A T A I E D S S G Q A I H Q A L L G A A S L I A  
UniRef90\_A4ACX8 L P A V L L Y S R E S A R A M L D E A L R Q A R A  
UniRef90\_B5XN53 L N V I E E G D A D N N S L E Q A L N E A H  
UniRef90\_G5HQP0 L P S L F F S T G E S I R T A M D N A E S L Y R M A  
UniRef90\_J1YID5 M Q G L L I E N G E S V N S A L R E A L A I V E T T  
UniRef90\_R4K255 I H G E L L E S S G E S V V Q A L V Q A K E I L E I T  
UniRef90\_G5HKA1 I P A V M I R S S G E A V N Q A L T E A L A L A I T  
UniRef90\_I9LH37 L E S I L I E C G E A L Y R S M Y E A V N L A E L  
UniRef90\_E5YAT1 L P A I L L I R T G E T Y A Q S L E E A I R  
UniRef90\_V5B1N2 M Q G L L I E N G E S V N S A L R E A L A I V E T T  
UniRef90\_E6VX11 I K G F P L R T P K S V L T T L D E A A K L V D M A  
UniRef90\_A1HRA8 Q P Y V L I K S S G  
UniRef90\_F2NA51 M R V H L L R S G D S V R G A F E R A M L I  
UniRef90\_G8W6Z7 L N A I M D T D N S I E Q A L N E A D S L L K  
UniRef90\_UPI00035DE816 L R T Q L T R S G E S I R A A F L E A K K I A  
UniRef90\_I9M625 M N S L F I E S S G E G V Y F A L Q E A K R V A A V  
UniRef90\_B9E4B6 I P T V L L T S A V T V D S S L K E A R R I K S T  
UniRef90\_UPI00047BC86A I Y G C L L E S S G  
UniRef90\_I8SJS1 L G G Y V I G T G D A I Y K A I K E A E L V A E V  
UniRef90\_C6PP25 I H T V H L E T G E A I E K S I K E A V R I L E V S  
UniRef90\_V7I9B3 C R G I V I H S Q E S I L S A I Q E A R R I Q K A T  
UniRef90\_G7WI94 I Q G L L I A S G K A I Y E A L S Q A E D L A  
UniRef90\_U2WJS3 L A A K T I D S S G Q A I F Q A L T E A L L I A R V  
UniRef90\_I9C4I4 L M T H L I R S G D S I R T A L L E A Q K I  
UniRef90\_R7PDS8 L P A V R L E T D K S L S Y A C R E A E K L I  
UniRef90\_E1R629 L R C Y I W A S S E A I I A A M D E A L R I L N A S  
UniRef90\_B6WA99 F N T V L F Q T G E S L E N S L E Y A I M I  
UniRef90\_UPI000393CD1A I N V V M D T D N S I E V A L N Q A V N L I R  
UniRef90\_I9MFF4 L D V R L T T S R E S I L P A V E D A M N L L R V  
UniRef90\_T3GAY1 C K G L L I E S E E N I L R A I Q Q A E Q I L E A T S  
UniRef90\_B1B869 C T S Y M I T S G E A L T N A I E E A A R L L K I S  
UniRef90\_U2RRX8 L T S M L I T S G E A F W N A I S E A K Q Q A K I S  
UniRef90\_S6GPL4 A K S V R I Y S Q D A I H Q A L I S A Q Q L A  
UniRef90\_R7PN61 I P S R L I R T G E T I L Q A I N E A R T V E  
UniRef90\_UPI00036871CC L K A V L V Q S G E T V Y S S L E R A R E L A R  
UniRef90\_R5FBW9 L P S V T I R T G E A I T R A L D E A V R T V D V  
UniRef90\_S7T998 G E G F V V V P G G E R I Q Q A L E E A R V I A Q  
UniRef90\_UPI00046EBC66 L P G L L I P Q K E T V I E A L H T A K T I  
UniRef90\_Q214B6 I A A I M G D A D E M A I R L A V I E Q A R H T  
UniRef90\_UPI000369C663 I D S I L V Y S E D S I K N A I N Q A I Q I  
UniRef90\_UPI000255573D Y D C Y L Q E S S S I Q A A M D E A L R I C  
UniRef90\_R9LSQ9 M T C R F I P S G E S V R T A L E T A G R V C  
UniRef90\_L4T1U7 M Q G I L I E N G E S V N S A L R E A M A I V E T T  
UniRef90\_F4LVD8 I P Y V L L T S P S S F Y T A Y Q E A L R I  
UniRef90\_G5IN22 I P G I Y M A S G E A I R L L A L K N A E S L Y Y M S  
UniRef90\_UPI000469DEC0 L N T I F I T S G E T I K T A L L N S F S I  
UniRef90\_U5RVC9 L N H L V V E S S P S V K K A I E V A E Q L L K V  
UniRef90\_I4D6B1 M E S F L I F S S S T I V S A L E G A R E I V  
UniRef90\_UPI0003FF825C F P A V Y L T T G E S I E I A I N Q A E T I Y D M A  
UniRef90\_D1PID8 L P Y R F T P S G E S M R E A L D T A S R I C H A  
UniRef90\_G1V456 A H G V H I D M E K R Y D A I E E S I R I V R L H  
UniRef90\_E5Y9D3 F P T L E I I D G E S A K R T L L E A V N V A R A  
UniRef90\_C0D4E8 M R G H Y I W S V D G V K T A V D T A V Q V A  
UniRef90\_A1HS80 R E V R L I M S G E A V C E A I E E A Q R I I K V  
UniRef90\_G7WC24 M Q A V V I R S G E A V Q R A L A E A R R V L E V  
UniRef90\_UPI00041BFBF9 L P S V I I R T G E T L L Q A I D E A I N  
UniRef90\_R6S466 I P S V V I K T G D T V A R A V D E A V R  
UniRef90\_UPI0003F85AD6 A E S V L V T T G E S M Q K A V S D A V E I C E M  
UniRef90\_U2R7Y5 L R G L L I S S E D C I R Q S V I A A I  
UniRef90\_A6P1C1 C N G L M I Q S Q K S  
UniRef90\_D0Z8W3 V N A R L L T D E D A I H R A L Q Q A I L L A Q A  
UniRef90\_B1EKH8 F P C V L L E T G E S V R Q L L Q E A A N I A  
UniRef90\_G5I JW9 I K A T V Y F S T Q D G L R E A F R V A K M M  
UniRef90\_D5DPJ7 F K A I S I E S G N S V R T A L L E A K K I  
UniRef90\_V4EH56 V P C L F L E S E D S I S Q A F E I A E K I V  
UniRef90\_B8KF59 L P A V L L Y S R E S A R Q M L D E A L R Q A R V  
UniRef90\_UPI0003B2E562 A Q G V H I D M D P R V I Q A I E E G K R I V S L  
UniRef90\_G5IN24 K P S L F L S T E D S L K N A F S M A E R V  
UniRef90\_C0D8A8 I P S L F L S T E D S M R N A M A I A E R M  
UniRef90\_B6WWW5 A I G I L L T E F S T V E S V F S D A I K L M E I  
UniRef90\_A0A023V5F4 M H F I P F H S G E S I E L A L H E A I Q L Y Q A  
UniRef90\_UPI00040B7E2B F P S L F V I T G E S I R S A L G L A I H M I D L A  
UniRef90\_UPI0003FFE66B I P S L F L S T E D S L R N A L S M A E S M  
UniRef90\_Q316Q6 M E G V L V Q N G D S V T N T L Q Y A V A T Y  
UniRef90\_F3L448 I P S I L L Y S R E S A E D M I E N A M A V A Q R S  
UniRef90\_W3ANH6 I P S L Y L N T E D S V K N A I K E A F L L A  
UniRef90\_C5EPL2 F P A V V I R T G E T V L Q A V D E A I H  
UniRef90\_G5HTK6 I P S V I I R T G E T V L Q T L D E T L H  
UniRef90\_UPI0003B5B578 V K S V I V K P G Q N V R E A I K Q A R S L A  
UniRef90\_V5ZET2 K P C L E T E V I E K S I H A S I N E A I H L Y N I  
UniRef90\_F0K5P8 L Y S G E T I N S G E S L R R A L E E A L N L I E V  
UniRef90\_A6TJU2 C K S I L I E S S G E A V L S A M N E A I R V L K A A  
UniRef90\_C5EVL5 M K S I F L Y P Q E S I K A F L Q I A V D L A  
UniRef90\_R2QLP4 L N H V M L D S D S S I K I A L D Q A L S L I  
UniRef90\_C0CZY5 K R T V L I Y P G K S L E S I D S A K L L A  
UniRef90\_UPI000377207C I P C Q L I E S G E A I N N A I D E A I R T V V I T  
UniRef90\_G8QWU1 I P C V I L E S Y E S V L Q A Y F E A L A V Q E A A  
UniRef90\_UPI00038059C9 I K C I L L V S K Q A I I E S F E K A K E A V R V  
UniRef90\_UPI0004068B06 F K G I I E N S E A I M R A L D S A A G L I K

1 10 20 30 40  
UniRef90\_G1UVH0 P R I F F A P D E S L I Q A F Y Q A T P K D E H N I L L A M S V L L D Q S A  
UniRef90\_UPI000463DB22 I L A I V P Y E E L S P I F Q Q A A T K F P E L S V S V L V Y N A E T I L  
UniRef90\_W0AWM4 I T L I A A D R T L F S L V H E I K L S M Q L F P E I I V V R G I L G E G V  
UniRef90\_I8SBL1 I I F F I P R L Q D A A L V E I F K E N N S K W T L E V C F A K G V  
UniRef90\_D4M2B2 L L P E E R M V E P A R K I I E E N H L D V V Y L E A V I H T V D A V  
UniRef90\_F7NGL4 K K I A V L A P H S T K L I E L K A L F A D S Q N E I A F A V G S L S E G L  
UniRef90\_R4KEW5 P R I G I I F N E S H L I D I C S E A Y Q D F K N D E I A Q P D P L D E K E I  
UniRef90\_G5HXZ6 D I L F V V P Y P E L E P V V Q E V Y R D Y P E K D R V T V E F K V M T V  
UniRef90\_UPI0003752A4 I L E V A P F K E I A D V A K R V I L E M E L L S I P V I I A N N E T A L  
UniRef90\_R5BQU8 I L L I A C T Y K E L M K Q Y R K I L K E H L N I D I E V M D N R Y G K D M  
UniRef90\_S3K1Z8 D I V L I A P Y E K M L S D A K H V I E R Y T N I A A V F G D L S A G  
UniRef90\_U1X366 I L L V I A P S S G L K E L F I E A S L K L Q Q E I T I E V G K G E E G  
UniRef90\_G9YR10 L L P R E E M V E P A G R I A R E L E M D V V L N Q S V P T E R I  
UniRef90\_G5FCH0  
UniRef90\_X3Q3G9 K P V I W T V S V T E R X X X L F R D I S L E F D H L A T I T P I Q L G F E K A V  
UniRef90\_UPI00040ED091 I A F I A P Y K N L V D I E A Q S I V E A S N Y P A R V Y V G D L H Q G V  
UniRef90\_R6L2V6 I A I L L P K E Y M L E Q A R N V I R E D E L D I D I K V I K T S D S V  
UniRef90\_X0ZMV9 L E E G A  
UniRef90\_V7I5V7 I T P Y P D L I K D V E R I I I E N S Y G K K F D S I S H E F  
UniRef90\_U7UF13 K R I L L L S P S Q R L A E D A E K I I D E Q S L D V E V P D I H K N V M N A V  
UniRef90\_F0RSP9 I F I A P Y K N L V A T V I E A F A E H P K R E E I K H V V N F K G V  
UniRef90\_E1R2V5 I T F I V P Y A S M K G T V E I F S Q H P E R S V I S V I M R T F D E I D  
UniRef90\_R2SLJ7 I V I V S P S S F S N Q A L Q V M N E M G L H F P I L H A S G E E Y F  
UniRef90\_D9YA95 Y E I I E E C K N A M A N S P D E I R Y E L V N F E T G  
UniRef90\_UPI000380F441 E D M E F R L E E V V  
UniRef90\_UPI000287CCBC I V F V V P Y P E M E E N V K E I F D N H V Q K D M L Y E N I S V V  
UniRef90\_T0BE25 R I A I V G L G D F I D I A K R V A N D F Q K D Q S I D I K V L E N P E D V  
UniRef90\_G5HKL7 I C C V T Y G E L D Q L V R Q V I D S Y D E T C C F D I V E G V R E E N L  
UniRef90\_UPI00046F69B5 I I M V V P F G G M R E T F Q E I A E D L P E E Y E F E V L R A A T S D E V  
UniRef90\_J7IPW9 I V L T S P N K E Q T Q L V E K V I T D F N I Q I T I I E T S F E A A V  
UniRef90\_X8GVB9 F L F P E E Q M V K D A E E M I A E R Q L E I A V R V Y T A D A V  
UniRef90\_D4K524 P K I C L I S P T E L A R R A K P L I M R R G M D V R V E V A E L E A A  
UniRef90\_R6JVK3 I V L L V P R E E M L Y L A H N I L Q E K K A I A Q M R V I Q T E N T V  
UniRef90\_A8S1K8 Y P E M L E D I Q A V C Q T M H I E P T I E I A Q Q G L L D K L  
UniRef90\_T5R2F3 I L I A P Y P E M G A V F T P I A R R M G C R L R V V V G Q E D A A  
UniRef90\_G9XHZ7 I V L T S P D K K T T R L L V E K I R K E Y N F E I D A Y E A T F D D A V  
UniRef90\_A0A022AG26 K P I N I L T V T Y N G F R S L V E Q A I S E V E S N E I D L V E C H I S D V  
UniRef90\_G5HTL3 R K I T Y F V P Y P E L I P V V R W L M D Q P C Y Q G I F V N A F  
UniRef90\_I4AE55 I F F V A L T P G M A Q I A E K T R Q D L N L S F P I E V V S F E K G K  
UniRef90\_V7I856 I I V P N K E T N D R I L R I L K D E I L K K N L I V S M L T E D D V  
UniRef90\_Q8VPT1 R P R V W A M G I S R L R D L F R D I A N E Y E G W P I F A W S R G F E E A A  
UniRef90\_UPI00047C023D K V I G I T A S D Y E L K E K I E K L Y S R K S G N I I I D I I K V D L L E E Q  
UniRef90\_G7W614 I V L T S P N Q E V T R L V E K M R K E L N I N L T L L E A S F T D A V  
UniRef90\_W7L7D3 I A I L P L D A L I Q V S R E A A K K T G E D V A V R K V S F Q N A  
UniRef90\_R6TGB4 I C F I A P S E S L A Q R A K I I A R Q R E L S I P V Y T A V L E D A V  
UniRef90\_N2B408 V L V P N K E L A D Y A L Q I I A E E K D S C R V E V I R T S H A  
UniRef90\_H5Y397 I V L T S P N K E V T Q L V E K I R K E L N V Q V T V V E T S F E A A V  
UniRef90\_E5Y1M1 I C A I V S D N S A A E Q L E L C Q H S I S S P V R I T T E S S K C  
UniRef90\_V7YNP7 P L C F V S P Y P Q L A K A A E A L V A Q L D Y A V T I H Q T T L N R I L  
UniRef90\_D6DHK6  
UniRef90\_UPI0003B741CA K P R I L C V S Y D E M A Q L V R H S A G Q F G V E V D V F D G G I Y S N G  
UniRef90\_I4D665 I I V T S P D K E V T Q L V E K V Q R D L N I N V S I V E I S F E S A V  
UniRef90\_R4KFR4 I V F V V P Y P E M E K D V R E V F D N H P K R E N I S V V Q A E E I T V  
UniRef90\_D6DE26 D I V I F A S E T F A E A A R K I I A E R H L E S H I S L S T E A T G E Q T L  
UniRef90\_G8QQE8 I L V V V P Y L E L Q E Q F D K V I S Q Y D L D G F S I S T T H F V  
UniRef90\_UPI00036EA492 I A F I A P D Q I L L K N S K Q I A L E L G C Y E Y T D F Y F S Q L N D A  
UniRef90\_U3CIG2 V A P Y E E L A T A A E R L Q A L E P V P V D I I K V V Y R T D L T H V  
UniRef90\_UPI0002E3FC5E E P R I V M L P F K A P D I V L K V E R E L G I P I K V V H G V L E K A V  
UniRef90\_R7GHM6 I L V V V P K E Y L R D I L A L D A I K T L E V N A D V I L S D V M S M D E V  
UniRef90\_M1MLI0  
UniRef90\_C6Q0L1 D I I L S S S T D F T K K Y R N L L K K K N L N Y P I F E A T G D K T L  
UniRef90\_G5HGZ6 I A L V V P C E N F I A H A S Q I L S Q H N R F H E Q E D S E T Y V M D E I  
UniRef90\_T4NUK1 K K I G I I A S D I E L K E R I E L Y R E E N G T I I D I L N L D L M E N Q  
UniRef90\_R9RD76 I A F L V S G E R M F K K I K R Y I D K E N I V V V E T S I S N A L  
UniRef90\_W0EG88 I F F A A L T Q G M A Q V A E Q V M R E L H L S F P I E V V S F D K G P  
UniRef90\_UPI00045EB7F7 I L I F M P R N N M R E R F E A V S K L S P K G E D I R M E L I H V F G T  
UniRef90\_R5EWB2 F I P Y M N M K S R F E A A V S R L E P Q D D V R V L H H V F  
UniRef90\_I4D7L3 K S I F F A A L T P D M A Q I A E Q V R R E L N L S F P I E V V S F D R G P  
UniRef90\_F7NNJ0 I V F I A P N A E I G R I A E N L K V D P D E Y N V I Y A R L I E E G V  
UniRef90\_E2ZCY8 M W E L A K T V I S E L D H T D T D Y D L Y E A D L L N Q  
UniRef90\_UPI00046FFC57  
UniRef90\_A8MEE7 K K I G V I A S D E E L K S R I I E L F R D D V Q R G K I M I D V L D S D T I  
UniRef90\_K1KM19  
UniRef90\_X0YK73 I V F I A P Y K K L G E L F S E V C Q E I N K D I P V V I G D L E E G A  
UniRef90\_U2TAA4 I L F V A P T E D M K H R V E G V L A D L H L S M P V I V S C D K N V  
UniRef90\_E1R624 I V F L V P S S L I P K V I S E V Y N N L P N K F D F S I L K C P T L E E A V  
UniRef90\_R5FF35 I A L A V P Y K G F I E N A Y Q I F R Q H N E F Y R V D Q E N Y M E E V I  
UniRef90\_E8LK85 I L I V A P F K H L A Q L A Q R V L A E I H I D I P I V V G N D L G G F  
UniRef90\_J0NB53 V V S P S T M T S K F R K V L A E R K L S C P V V Q A S Q K N A  
UniRef90\_UPI00035E3FB7 P V C F I A P Y K K L A N L A S R R A A A L A L N I D V I E G D L Y E G L  
UniRef90\_J0N9Z5 R D I M I F A A S D V E T S V A R Q I I Q K R L T S R V G I I E A T G K H T I  
UniRef90\_J0MW56 I L I I I P S Q V Q D K M R L W A E K I R D P A I S V Q T M H V Y G T S  
UniRef90\_H3K815 I L F I A P H E E I A S I A K K T L I E M N L S I P L I V A K N K I A  
UniRef90\_R6URR5 V M V F A P S P D L M E P M R K L A Q E Y S D E V N I D V I H R A K N K I A  
UniRef90\_H1HVQ4 I C F A L G Y P G L T E M A K K T I E D M K L S D T E F M L R D C T P G T L  
UniRef90\_F5RJQ4 I L F A P A A D I A Q K A E R I I R R R L R D I P V I T A D D K N V Q  
UniRef90\_B6WY35 A E K V Q T Y A Q E H G W P L E E V R L A T M E E A L  
UniRef90\_W2E137 I A V I S P S S T L T A V M R C I L G Q R G L S L G V V E A A Q H D A V  
UniRef90\_A1HSK4 D I V V I A T H G E W A S L T R Q L A A G D S A V S V V Q A R L A A G  
UniRef90\_UPI00026283F5 I L L V I T H Q N F S S L V Y D A K K M V N L P F N L D I I E V I F G E L N  
UniRef90\_F0RZN7  
UniRef90\_R7PES8 L I I S V Y P G M M N D I N A V C G S L Q I N P T I L E W E I A E N T L I



UniRef90\_G1UVH0 A S V V V E Y A R T S S E V I I S R G G E G L A E L L R K T S T P L V V Q I Q V T 80  
UniRef90\_UPI000463DB22 L D I R K A V T E K A M D V I I S A R H R E G G L S F L L T P Y I D V V P A V P L I E F S P  
UniRef90\_W0AWM4 A V A A N Q K I R Q G A E I V I I S A R R G A T S K A L R R E A F P S F P V I E L I E Q R S A  
UniRef90\_I8SBL1 R Q I S N Q R K I Q Q A D V V I I S A R R G L T G Y A A K R L L D T P F V I E L I E Q R S A  
UniRef90\_D4M2B2 N K A R I A V E T G A H I L V A R R G Y Q A K L I K E Y T N I P V V V I E I V R F H A G  
UniRef90\_F7NGL4 L K A K Q L I E C G V E I I I S A R R G E T A F N I S E D A Y P I A V I D A R S P V T S F F  
UniRef90\_R4KEW5 L A A A K K L E K C G D I L I I S A R R V D T V E A L L N I S E H L N I P V V I A R S V T S F F  
UniRef90\_G5HXZ6 D M V R Q Y K M E R E Y D V L V G R N F T F E E L R Q Y P T K T P V I V I N T I P L T S F F  
UniRef90\_UPI0003752A4 P A I K K F P N V S V L I I T R R G G T A A D Q L K V L P E K T P V I V I E I I N T S G A  
UniRef90\_R5BQU8 S K I F E Y V A Q F G K E V I I T R R G G F L A Q Q I G A H L P F K V I V I E I I H I G A  
UniRef90\_S3K1Z8 L T I A A S D A L K N G A K I L V S R R G G T Y S L L Q Y V S P V L P V V I E I I K T T S P  
UniRef90\_U1X366 L T I A R K Q E K N G Y D V I V S A R H G T T A H L L Y Q H C H R L P V V V I E I I Q Q L T S G G  
UniRef90\_G9YR10 L D L M E D C R R A G A D L V V A R R G R Q A S I L L K E H T D F P V V V I E I I Q Q L T S G G  
UniRef90\_G5FCH0 A E K F N L Q R V D A V I A R R G T A D L L R R R R L P L T V I V I D I P V S G G  
UniRef90\_X3Q3G9 T Y I R K K L A T E R C D A I I A A G S N G A Y L K S R L S I G V E I I L I K E A S V  
UniRef90\_UPI00040ED091 K A A R Q A L A E G A K I I I S R R G G T A R L I R Q E L L G V E V I I L T T G A S V  
UniRef90\_R6L2V6 Y E A R Q A V E Q G A E V V L A R R G V Q A A F I R Q Y T N I P V V A E L V L T T G  
UniRef90\_X0ZMV9 R K A V E L E E Q G V D V I I S R R G G T A I A I K K K V N L P V V I E I I Q S L T S G G  
UniRef90\_V715V7 S E P D K I T I A S D G V I I V S A R R G Y A S E V I R K K Y P I P V V V I E I I S T G  
UniRef90\_U7UF13 A Q P E I R R S T L V G D I E I A R R G L T A S Y L N Q L W D A T V I V I E V P M S G G  
UniRef90\_F0RSP9 T L N L D T D L V I A R R G Y S A N R I K K L G I P L I V I E V T V M T P V S G G  
UniRef90\_E1R2V5 D K I Q Q M V E N T P V Y A I I T R G Y N V K F L R E K L P V P I V I D V I R Y T F  
UniRef90\_R2SLJ7 P K M A R E C L D N G F E V I I C H G G T G D T I F R S V P H S P L V K I E R S D G  
UniRef90\_D9YA95 I P T D K I H E E V E A D V I I S R R G L V T K L L K E H N S T P L V D I I P V Q G  
UniRef90\_UPI000380F441 H A E K I N V D E L K G D I V I A R R G L T F E K I K K Y K P L P K I K L L T I S A  
UniRef90\_UPI000287CCBC T Q L V P R L Q S D N T D I I I T G R L N K M L M E K T N I P V V I N N Y K L V T P  
UniRef90\_T0BE25 D R I L N R S I L E G A E I I I A G G A N A E V I R G Y F K V P V V I E I I N Y K L V T F  
UniRef90\_G5HKL7 G L V K G L L E P D K R V I A S G G A T L E L L R K E T N T Q Q L V E I I K L P R E  
UniRef90\_UPI00046F69B5 D E A R N A L M N G A K V I V A R R G F Q A L L I R E Y T N T P L V E V K L T V  
UniRef90\_J71PW9 V S L A K L L L T Q N D Y L F I S R R G T R D L L R K S L N I Q V V E I I P G E A  
UniRef90\_X8GV89 V E A R N S I A A G A D I I I A R R G L Q A S L I K Q Y T D V E I V I E V A T A  
UniRef90\_D4K524 N Q M F L E L P D V I I T S R G A T A G M I E Q Y F P E I V I R A E P D N  
UniRef90\_R6JVK3 V A V A R A T P P D D C D V F L S R S I N V A F L K R H T A V P V V T T E M T A  
UniRef90\_A8S1K8 E L I R G K V A H R H W D P I I C T G G T L G L L R D N L N G M P W V V I F P T E  
UniRef90\_T5R2F3 Q D V A Q S L V E N G C Q L L A T G A T A S F L R Q K K L N I D I Q V I R P V I  
UniRef90\_G9XHZ7 P T M Y D V E V E D D C D L V I A R R G Y S T H V I R E R F S G A I V E I P I T G  
UniRef90\_U0A022AG26 E I I K A N P Q V D V M I S R R G L M V D L L R E N T D K P V I V G L T M T I  
UniRef90\_G5HTL3 V L Q A K A L I K R G A S A I I A R R G G T Y D I M R A N L P V V I E I I L A F L A  
UniRef90\_I4AE55 A E I A A A P P H Q R P D V V V A A G S N G T W L K A R I D L P V V L V Q P T G  
UniRef90\_V71856 G K I L E E K R G A Q I I I G R G G G Y K L I L D T V N V P L I N M K V  
UniRef90\_Q8VPT1 E Q V K A V L A E N R Q R V I A S G G A T L E L M R E E F S L N L V S I H P A E  
UniRef90\_UPI00047C023D I A A A K E F E K S G T E V I I S R R G T M G K L I E S D L S L P V V Q I P I T G  
UniRef90\_G7W614 T L A K D M I Q G G T W L F I A R R G V T R E L I E H T T Q T V P V K V P V L A  
UniRef90\_W7L7D3 V Q A A R D A I G E G A N V I V A R R G L Q A D F I R E Y T K V P L V N I S M T G  
UniRef90\_R6TGB4 A V V K G L L S Q D R I R V I A S G G A T L E L L R Q E F S A H L V S V H P T E  
UniRef90\_N2B408 I V A T K R V I E E G A A V I V S R R G S V W S T I K K A F P V P T L Q T P K T C  
UniRef90\_H5Y397 D E L P L L E S R G H Q V I I T R G L L A E L L K S Q G D I P V V I E I I A V P A  
UniRef90\_E5Y1M1 H L H A L E V E N R Y D V I I S Q A G T A I A I Q Q M V S T P V V P I Q L T A  
UniRef90\_V7YNP7 S L V K D I I S Q N R I K V V L A S G G A T L E L L R Q A L S T P M I S I H P T E  
UniRef90\_D6DHK6 N E L E G D I V I A R R G L T F N K I E K Y K P M P K I E L S I S T  
UniRef90\_UPI0003B741CA S C A L E Y A R A G S R I F I C H G R N T S A I E H H V S V P V I N V P Y L S Y  
UniRef90\_I4D665 G T D S K L I E S L D A D A V A R R G I T A S A I S Q K P S I H V V P I I M D S  
UniRef90\_R4KFR4 V S L A R S L E N T D V D A I I S R Y G T A L L L N A K I S I P I V E I M I T G  
UniRef90\_D6DE26 T S D I A Y L E A D K N Y G M L I S R R G C A E L L R T R S L P V I M E K L S D  
UniRef90\_G8QQE8 E S V T I L V E A G E V D A V I S R R G I T Y R M L R Q K L Q L P V I S S H M T D  
UniRef90\_UPI0002E3FC5E I Q K I T K S K A K I V V A R R G Y Q A T Y L E E N T P F T I V P T C L I T S  
UniRef90\_M1MLI0 E I A N Q F V T E G A K I I T R G K N L S L L R Q N I N T N L I D V R Y T Y  
UniRef90\_C6Q0L1 E I G I K Y I A Q G T K V I I T R G N N L A I R K N L N A V L I D V R Y T Y  
UniRef90\_G5HGZ6 I M N N S N A G H I D A D L I L T R G L L A Q I L A N L P D I P V V Q L S V P T  
UniRef90\_T4NUK1 G R I L V E K G A Q A I I G R G G G Y S L V I D T V N V P V I P M N M K S  
UniRef90\_R9RD76 E K A K E L I D K G V K V I L T K F A I K I K I E D E I D I P I L S E N N I  
UniRef90\_W0EG88 E V V R A N P Q V D V M I S R R G L M V D L L R E H T D K P V V G L T M T I  
UniRef90\_UPI00045EB7F7 P D S L S K N K D A E I M V A R R G M T Y D R L K K L F P K H I V E I Q L T S S  
UniRef90\_R5EWB2 G T P E S L S R Y G D A D I L V A R R G M T Y D R L R Y L F P K H I V V E I R L S S  
UniRef90\_I4D7L3 D V V R A N P Q D V M I S R R G L M V D L L R D H T D K P V V G L T M T I  
UniRef90\_F7NNJ0 K A A G R A L Q K G A R V F I S R R G F T C H L I E E A F D A S I V D V R Y T A  
UniRef90\_E2ZCY8 D E V V H T A L K E G T Q V F V T G G S A A R F K R N Y S L P L I E F R V R D  
UniRef90\_UPI00046FFC57 D E Q G R I L E G K G A R A I I A R S G G Y K H T V G K V N I P V I H L N V T T  
UniRef90\_A8MEE7 D I L I C G V V L A E R L K N V R G Y I V P L R V Q T  
UniRef90\_K1KM19 R K A V E L E E Q G V D V L I S R R G G T A I A I K K K V N L P V I V E I Q V S G  
UniRef90\_X0YK73 I A D A K E Y G K L D V I I S R R G G I A E E L K K L P G T S V I E L G T S G  
UniRef90\_U2TAA4 N I D F T G Q I I I A R R G Y M A Y T L Q S E H R G V T L I E I P T M S G  
UniRef90\_E1R624 V T S E N N Q I K I E A D I V L T R G L L A E L A S S K D I P V V I E I T V P A  
UniRef90\_R5FF35 D T L A L N Y P D A K I F I S R R G G S A K A L R S K F D R V I D I Y A S F  
UniRef90\_E8LK85 I P V A K Q M I G E G A K I I I S R R G N T A R M L R S N L E I P V I E E K H T F  
UniRef90\_J0NB53 A A A R N G I R F G N Q I V I S R R G G T A Q L I D D Q L D V K V V H L R Y T P  
UniRef90\_UPI00035E3FB7 R N A K E A V S A G A K V I I A R R G M T V R L L E E N V P L P V I V D V P Y L S  
UniRef90\_J0N9Z5 N P P E Q Y R D A D I V A R R G M T C S A L R E N Y P K H I V I E I N M T S  
UniRef90\_J0MW56 V N I A K Q S E S T S I I I S R R G G T V R D L K K Y T N K I I V D I G I S L  
UniRef90\_H3K815 P E I L W Q L N D R Y D V I V A R R G I T Y N K L R D Y P Q K H I T Q L Q V F D G  
UniRef90\_R6URR5 R E V L G E A V S N G F E V F V A G R G S N Y A K F K Q I S T L Y I Q E L Q V T E  
UniRef90\_H1HVQ4 T A V L A Y P E P F V I I S R R G G V A E E V K K L P G R T V V E V T T S F  
UniRef90\_F5RJQ4 P V A K R L F D Q G V D V I I S R R G G G T G K L L R R H L N E P V V T I S R S H  
UniRef90\_B6WY35 L K A R E L A S G V S V I I S R R G R T A S V L R R Q L R V P V I E V K H T F  
UniRef90\_W2E137 V A A A R Q A V A E G A R V I I S R R G V T C G M I A A A L P V P L E V V K F T G  
UniRef90\_A1HSK4 N Y I D T D S I M K Y D L V I T S G A H L E F I H N E L K V S F Y P L E I S E  
UniRef90\_UPI00026283F5 Q V I E P L H A D I V A R R G I T A I A I A Q K P S H V P L N W I N  
UniRef90\_F0RZN7 S H L R N M F R E T G V D A I I S R G A T A N L I E Q N I P E A V V R A E P G D  
UniRef90\_R7PES8

UniRef90\_G1UVH0 F D I L T D A M R E A Q K I S R N M T F I 100 A Y A N M L E G A K K I M D L L D L D L D L 120  
UniRef90\_UPI000463DB22 Y D I L L R A L I R A G A Q Q C C N E S P F A V V I G S P D V I S S A R R L L A R E I V N N E K L L  
UniRef90\_W0AWM4 F D D Y I S A L I N L A Q Q S I G V Q K I A A A I A L P H L V E G L V T A T A R E V I S G M E L H  
UniRef90\_I8SBL1 Y D I L R A V L I D C R K A V G P K I A A I V I G S P D M V C N V N T I K E I V S G M E I  
UniRef90\_D4M2B2 Q E I G L L I Q K A K K E H P H I A I V I A S F E N M L C D M S Y M E Q L F D T R I R L  
UniRef90\_F7NGL4 F S N D L A L A L E K T A R N Q Y G E R N L A V L V T F H P S M L K Q E L S D W P E T A I G I G V K E I  
UniRef90\_R4KEW5 F S N V L D A L E K T A R N K G G R N L A V L V T F H P S M L K Q E L S D W P E T A I G I G V K E I  
UniRef90\_G5HXZ6 Y D I V Q A L Y E A K N H C R K R A G I V T G R F F H M Y Q Y E H M E S E I T G V K T  
UniRef90\_UPI0003752A4 T D I L L L I E K A L C K G K R I A I V T K D N L I D N V A E T D F S E L L N V K L  
UniRef90\_R5BQU8 A D M F R A L Y P L A G K G Y T V G V V E S E P Y V K V A K Q V A E I L N I S L  
UniRef90\_S3K1Z8 I D F A A T I R A L L Q N I D D V I G V V G Y A N S M N G Y E L L K E L L G K H V I  
UniRef90\_U1X366 Y D M I R T L M L L Q S G F P G K I V G I L G S N R T L Q G A E T L G E I L L T M P E L  
UniRef90\_G9YR10 L E I A R L L H R A R S R L P P K I G V V T I P N M V L G N I Q G F E I F D I P E L  
UniRef90\_G5FCH0 T D L I Y C L K T A R D L R G S N I G I V G S R N M L L G A D H I G E I L L G M E V  
UniRef90\_X3Q3G9 F Q R T L A Y A L A K A G K L T S R I G A V A G F E P L I N L V A P V C E V L G R T Y  
UniRef90\_UPI00040ED091 Q E I G L M I A S A K K K C P Q I A L I G F K N M F S D T T Y A D E L F D I R L  
UniRef90\_R6L2V6 Y D I L R V L H A Q Q E T D R I A V V G F S P F T Y G I E G L G D I L M G L N G I  
UniRef90\_X0ZMV9 Y D L I N A I A E A C R E K P E K I G L I G N Y H N I R D M K S L Y N L M G S N G I  
UniRef90\_V715V7 N S Y V R I F E C I K G I K G K I A F F S L G D V P G T V K I L L G A M L N L D I  
UniRef90\_U7UF13 Y D I L R A M S E G V R L S K S I A L T A T S N A I Y G V D N F S T I F L P P V  
UniRef90\_F0RSP9 F D I T T A L N S C R Y R P E K I A L I G P L N T V Y G I D E I K N N I V F P C C  
UniRef90\_E1R2V5 E D I Y H S F Q H A L E I S N K V A F I S T D V A H D R A K V F Q E M T Q Q P M  
UniRef90\_R2SLJ7 M D V L R A L R V A K Q R Y S D K I V L A S A Q D E F H D A V E M E R L I N I N I  
UniRef90\_D9YA95 I D L I R S L V D C K E R R S K K I A V I G A N M I Y G V E N L E S I I D L P I  
UniRef90\_UPI000380F441 V D I I N A L R M C R Y S P K K I A L M G D Y T S I L E A K P F F D L L N C N I  
UniRef90\_UPI000287CCBC T D I L I A V L A K T S V P Y S R N I A I A D I E D L E Y S L L Q L E I L K L  
UniRef90\_T0BE25 L D Y M Q A V Q S G F R E G K K V C L V S Y M T H M N S L R E Y L E Q I Q R P V  
UniRef90\_G5HKL7 S D L V S A L L Q M R D T Y G P A G I I G S P N M L L G I E E L A R N L Q L D V V  
UniRef90\_UPI00046F69B5 Y D I V L A F D K A K R Y G D E I A L F L A G E D L P V I E K I S E N V L G L K V  
UniRef90\_J71PW9 Q E V G L L I K R A K R L T G K I A L I V F R N M V T D L S H I E E L F N R F  
UniRef90\_X8GV89 S D Y I P A I Q Q L R H E R G L I A F F S F E E I S N E L R T I C Y L L D L K M  
UniRef90\_D4K524 Q E M A L L V V K A R Q I V G K I A V V G F Q N M F C D M S Y F E T I Y D I K L  
UniRef90\_R6JVK3 L E I L E I L N K A R E Y V S R I G L L L F D E Y V Y K I K T V E H L I D V E V  
UniRef90\_A8S1K8 M D L L R L L L P D V G K V R R V A W F R Y A G P L R D V D C V A G V L G M E I  
UniRef90\_T5R2F3 Y D L V K A I E Q A K K T K K T I G L F N P G Q I T E A I K A V C S A I Q I D A  
UniRef90\_G9XHZ7 F D V I K A I S N L K Y K R I A L V G N T S T V I D L E N Y S D I F A L N I D I  
UniRef90\_A0A022AG26 S D I V K A I A Q C R K N T Q K I G L I G D Y S N M K D I L Q S M S D I F N I N F  
UniRef90\_G5HTL3 D E M L E A V Q R L I A E S G T K V G V V A H R G F L D M E S S D F T L G D L T I  
UniRef90\_I4AE55 Q D I L F S I N K A N R S G K D L A V V V Q E R I I F E P E M W K L L G D V D I  
UniRef90\_V71856 F D V M Q A R A R A P R G R P R S A R H L W R A P A E V R L R E R V G L D V  
UniRef90\_Q8VPT1 I D L L K A I K I A S T Y S K K I V L V G Y D E V D F D Y S S W K N I M S V D V  
UniRef90\_UPI00047C023D Y D L V L A L D Q A C R F G G N V G L L L A D E A I P 7 I E N L S S A L R L S K V  
UniRef90\_G7W614 Y D L L R T I K E A Q K L G Q R I G L A D S R D V I Q G I E T I E S V L N I S M  
UniRef90\_W7L7D3 S D Y I P V E E K I Q H I Q G L I A F F A S E P I S D E L Q T L C Y L L N I S M  
UniRef90\_R6TGB4 Q E V G L L V E E A R Q L T G K I A F V G H Y T M F P D S S Y M N E I F H A T L  
UniRef90\_N2B408 Y D I V L A L D Q A K M L G K E V G L L L A G E N V P V I D K L S A V L G L E V L  
UniRef90\_H5Y397 C D A I E F L T P A K Q Y D T N I G V V S F S H I A K M V T V A P H L G N V S L  
UniRef90\_E5Y1M1 Y D L L D A L I T P A K G Q K T G T V G I V G F S S V I K G C A R V A E Q L N I N Y  
UniRef90\_V7YNP7 T D T L R V V L K C I E H A R K V G I I A S H N M V M G A A E I Q R F L D L P V  
UniRef90\_D6DHK6 N D I V T P L R E A S E R H Q N L L C I T Y D S N I E S L A A F A R L K N F  
UniRef90\_UPI0003B741CA W D I V L A L D L A R T F G K E L G L F V A G E D P K I L K L S T R V L G L A V  
UniRef90\_I4D665 L D I I N A L K K C R D K P K K I A F I G E H E S I S E A E P F F D L L G C D T  
UniRef90\_R4KFR4 E E I Y S S F E A A G A Q P P E Q I A M V G F D K A H D I M R T F R R I S G L D V  
UniRef90\_D6DE26 G D L F E A L A K A V G A R T C R I G I V I N E E L C G E D I T S R I L E Y P V  
UniRef90\_G8QQE8 Q D L A Q A F Y E A K K L H P R L T Y L A F E N M A N D I I R L S N I L D I D L  
UniRef90\_UPI00036EA492 F D L F D A L Y S P F M N T S M R I A I I G F R S V I Y S C M A V A E K L N V T C  
UniRef90\_U3CIG2 L D V L K A L Y I A R Q M G E R I A V L G Y E F S Y E F N D L T D M I G N G N  
UniRef90\_UPI0002E3FC5E N E I A L L I K K A C E I A Q K I T L F G Y K N T F G D I S H L D E V F D A N I  
UniRef90\_R7GHM6 E D I Y F S L K E A K N Y S N K I A Y I G F D L A Y A H V A A K F K A I S G E D F  
UniRef90\_M1MLI0 E D V Y F S L E K A K Q Y S D K I A Y F G F G L A H A V A S K F K N I S G E D F  
UniRef90\_C6Q0L1 A D I L R T I R K C T R L Q K Q I G I T A A G N M L A G I T G L S D L C D V P I  
UniRef90\_G5HGZ6 T D L L R A J E I A K K Y S K V V L I G D N E V S F D Y V G W R N V I S T E D I  
UniRef90\_T4NUK1 S D Y I E L K E I N V K S K V A F V D Y I E A P E S L V N L A K I I S N E I  
UniRef90\_R9RD76 T E I L E A V Q R I A G G A S K V G V V A H R G F L E M G N S D F V L G E T T I  
UniRef90\_W0EG88 F D I V D A L V R C K E T P H R I A L C L Q K Q E F A S V K N L E V L C C G A G I  
UniRef90\_UPI00045EB7F7 F D L L K A L I C A R Q H P K K I A L C V R Y M D E S A V S L E K L C Q A E I  
UniRef90\_R5EWB2 A E M L E A V Q R L I N G A V K V G V V A H R G F L D M D D S D F A V G E T M I  
UniRef90\_I4D7L3 F D L L R A Y L Q A A T C S Q S I A I V D I Q P V I D G M N S V E A I L N L N V  
UniRef90\_F7NNJ0 I D Y M V A I Q H A K A Q L G S K I G V V Y H K D I V P R L S M Y E Q L S E T M V  
UniRef90\_E2ZCY8 A D I L R T I R N C Q R Y G Q K I G I I A A G N M L A G I T G L S D L C D A P I  
UniRef90\_UPI00046FFC57 P D I I Q A I V T A K Y S K D I V L V I S D L D Y F D Y D S W K D L M N A N I  
UniRef90\_A8MEE7 Q D F I K A L M E A S K Y S K V C V V N Y E D K N Y E V K L K E L L G L N  
UniRef90\_K1KM19 Y D L I R V L H Q A Q Q E T D R I A V V G F S P F T Y G I E G L G D M  
UniRef90\_X0YK73 N D L L R A A E M L Q A Q G H R I G I V M R A N I L F D K M H D F Q I G D T K L  
UniRef90\_U2TAA4 Y D I L H A A N E A F Q H R K I A F I T A D S E N Y E S F V I D S G N F N I  
UniRef90\_E1R624 A D I L R T I R N C V E H K Q K I G I I A A G N M L D G I T E L W D L S E A P I  
UniRef90\_R5FF35 Y D V A I G I A L T R G C R N I G V V T H D N I L G M T S A D I F G I E K V  
UniRef90\_E8LK85 F D C Y I G Y Q K A L K I S D K L A F L A T S D S L K L N K S K P L K N A  
UniRef90\_J0NB53 F D F L I E H L I G N L P G R T A V I G F A D L V P T A E K T Y G A L G L S L  
UniRef90\_UPI00035E3FB7 E E I Y E S V Q M G D C A P E E I A L I G F D S A Y D T M L R F R R I S G M D V  
UniRef90\_J0N9Z5 F D V L D A I A E S K R R P Q K V A V C M Q S A S I M D V A S L E L S G L K V  
UniRef90\_J0MW56 T N I L K S I E K L H L A G C K N I A I S N N N I E P E S I N I H Q T S V  
UniRef90\_H3K815 L D V L E A L R R C R E H P A H L G L C L D R D Q L Q D L V A M E V C G A K I  
UniRef90\_R6URR5 I D Y L I A L K K A E S C G H N P A I V L Y K S Q P V D I S L S Q L S G K D V  
UniRef90\_H1HVQ4 N D I L A A V A S L D T A G R R V A V V M R G N I L F E A P Q N F S L S G L D I  
UniRef90\_F5RJQ4 M S L I Q A L M E A R E Y T D N V A V T C Y D A I P P W S E L F S R L L H I R L  
UniRef90\_B6WY35 F D C I N A Y H R A R Q V S A R I A F L G Y A T I L E K A R P F M P E V A C  
UniRef90\_W2E137 F D L R A L L E A Q A A G G P V A I V D R Q E V L A G L A A I E E I L G V P A  
UniRef90\_A1HSK4 A D L V Q S L V K A S N F A G S N I L L M T Y A N K T H E L K E Y V R I L D V N L  
UniRef90\_UPI00026283F5 A D L L S A L S Q A K A A S G P H I G L I T N E Q L C E Q E E L A T L V G L D V  
UniRef90\_F0RZN7 L E L L E T L K A A K N H G P R I G L L M F E D Y L Y N L Q A A K E L L G I N L  
UniRef90\_R7PES8

UniRef90\_G1UVH0 R F V A L S S P R D C L E A I F T A L 140 E H K A E V I V G G A Q V V K V C R E N S 160  
UniRef90\_UPI000463DB22 H L H E Y Q N D R Q A R S C F S T V L E E K I N L V I T D M S C A G I A D S F G  
UniRef90\_W0AWM4 R I L Y S I F K E E D E V E P L I L R A V H E G A A V V V G S S S T S T A A A R L K  
UniRef90\_I8SBL1 E I L L I E D E A D G E R K I S E A R V L R G V T T V I G G G T A T S L A E S F G  
UniRef90\_D4M2B2 D V I Y L K R I E E A E S I A D F E E R P D L I I G G E G T C R A A E T M G  
UniRef90\_F7NGL4 K K Y Y L T S R G Q V N A E I D Q A V K D G A D V L L G G F T T I S A A R Q R N  
UniRef90\_R4KEW5 A K F Y I H S R Q D A L D E T I H E V K R F N P D V V V G G V L I A S H A S D L S  
UniRef90\_G5HXZ6 S Y H P V A Q G H D L E Y C V A E A V S Q G C D C I I G G Y S A Y L Y L K R T D  
UniRef90\_UPI00037522A4 Q V R P C R S D R E I A K R V M F A L E K E G I D Y I I G C K R A V E A A V A C Y  
UniRef90\_R5BQU8 N I Y L V E N V D E D F E K G L J A A K R D G V D V V V G G A H S Y E F F Q D Y G  
UniRef90\_S3K1Z8 R A E L K N N D S V E D K I K E C V D S G A K V I V G D A V T C R T G S A L G  
UniRef90\_U1X366 N F F P V E S Q E E R L P A V Q Q A A A Q G I Q A I V S D I G Q A E A A S Y G  
UniRef90\_G9YR10 H T Y F I S G L S E M E R G A V Q A A V A D G M D V I L G G D F V N A Y C R R L G  
UniRef90\_G5FCH0 K M Y F R D A P G D V V I S V L E G R A I K D G C E V I I G G V E S C Q F A K K H G  
UniRef90\_X3Q3G9  
UniRef90\_UPI00040ED091 R S F E L K E R S S F Q A Q M D G I G Q W N P D V V I G D A L A Y H W A Q A R G  
UniRef90\_R6L2V6 K F Y D I T A I E Q A A E K V D L A I Q E G A D V L L G G D T V N A L A A Q K G  
UniRef90\_X0ZMV9 K V L T L E D W Y D I E D K K L I E L K E Q D N Y H W V V G D N I S V K I A K Q L G  
UniRef90\_V7I5V7 R I Y S G Q G H S T I E D S V S K A V S D G C D V I I G G N Y I C Q C A K Q K K  
UniRef90\_U7UF13 R Y Y Y F T D E E T A E M A V K N A A E D G C I I G V G G S L T T V L Y S G K Y N  
UniRef90\_F0RSP9 A T Y E I G P L D E V E P T I R K A V S D G A D L I I G G N S V T S L K A K A M G  
UniRef90\_E1R2V5 E G Y Q V D D P A Y L P E T I D R V M Q E G A E A V I A G R T G Y Y L C R D R G  
UniRef90\_R2SLJ7 V T P K V N T L P D I L P I A V Q R L I G E G I E V F I G G R A T E E A A S N L G  
UniRef90\_D9YA95 Q S A T Y D S P E M M R Q A I Q Q C V L Q G G F K V L I G G G V S K A C M E E Y G  
UniRef90\_UPI000380F441 Q K Y I L E D I T A S D R T V D L A A S D G C E I L V L S G M N T N K Y A E R I G  
UniRef90\_UPI000287CCBC E I Y N E K Q A E N I P S I F E A A K K D G C D A F V G G Y S V C R F V K K Q N  
UniRef90\_T0BE25 V Y I T Y G T D I E L D F K I A Q F S K T K G S I I G T G T A V D S A K K F G  
UniRef90\_G5HKL7 M E L I Y E D T E E L E E K I R Q S E A A D V F I G N G L A V Q L A N S L G  
UniRef90\_UPI00046F69B5 R P Y I L N T E E E I Y R Q V D Q A I S Q G C R V I L G G Q R G C D Y A W Q Q G  
UniRef90\_J7IPW9 D V Y V Y N N W Q L E V Q V E N A V Q N G C K V I I G G D K I S A L V S K R G  
UniRef90\_X8GVB9 R L F Y I E K A M E A L E V L E G V K N D R P D C I I G G N V A I K A A Q E Q G  
UniRef90\_D4K524 K H Y C F S D S L S C Q S A V Q Q A V A D G A A W G L G G V V S E R F A K L Y D  
UniRef90\_R6JVK3 R T Y F A A N G S G L K E S K A M E A V E D G A D L M I G G D I A L V E T A K E A D  
UniRef90\_A8S1K8 R I Y P F R S R A D I L E S Q V L R G K R D G M D V M V G G G L A L R M G K C G  
UniRef90\_T5R2F3 R E C L F R S R A E A R D M A A E L E P G S V D L V V G G T Y V R D F V A P L G  
UniRef90\_G9XHZ7 H I Y R Y N S W K E V L K V Q V E K A Y Q D G V E A I G A G K I S S A V E R K N  
UniRef90\_A0A022AG26 Q Q F N Y D S Y L D A L K V T I H L I K N Q G F D A I I G S P V A V E L A L N E N  
UniRef90\_G5HTL3 V V Y V I D N P D Q I E D M V K R A I E E G C D A L I S G S H A N K C V I K N G  
UniRef90\_I4AE55 H I R P W S T L G D I P T I L E R L N K I G V H A I A G D K G G Y T T A E E R G  
UniRef90\_V7I856 K V Y R Y S R I E N D I D N V L K K L I E S N E D L V I G G A L T Y S K A V R A G  
UniRef90\_Q8VPT1 V F A S Y R P C G A E A C V L A C A P G V G A V V G R V C D D L A A R L G  
UniRef90\_UPI00047C023D T E E W F K S K Y E I R N R V I K Y L D Q K D D V I V G S G I A C S F A R Q Y K  
UniRef90\_G7W614 R I Y T Y H N W Q D I E V Q V E K A K K D G Y Q V L V G G E K I S L V H T K G  
UniRef90\_W7L7D3 E K H S V V S P E E A E A A V E A L R K K E I D V L I G K S I F I N K V K K D S  
UniRef90\_R6TGB4 R Q Y Q F S D T T S C R A C M Q Q A A V K D G A V W G V G G V V S A Q Y A Q E A G  
UniRef90\_N2B408 L F Y T Y E D R N R I E T I V Q Q A A L E H P D V M I G G E R V L K C L Q Y P  
UniRef90\_H5Y397 K V Y V Y N S W Q E L E L Q V T K A R R D G N K V V L G G E K I S S L V S K K G  
UniRef90\_E5Y1M1 T V H Q N N P D D I E K G C Y E M R D K G M K V L V G G G H A V Q W A Q K L G  
UniRef90\_V7YNP7 K L F T L Q N D K E T I S C L K Q L A S T P L D C I I G D T V C Q D Y F S T A G  
UniRef90\_D6DHK6 E T Y I L T Q N W N G P K L V D Q A V R E G C D A I V G G V N T C S Y A S S I N  
UniRef90\_UPI0003B741CA R Q V I Y R N E Q D F N S I A R L P T L K D V A I V G G G C V I E K A A Q Y G  
UniRef90\_I4D665 K I Y V Y R T W E E L E D Q M K R R D R I Q V V L G G E K I Q D L V N Q F G  
UniRef90\_R4KFR4 E I Y S E K Y A E N I P S V F Q I A K K N C C D A F V G G Y S V Y R F A K F K N  
UniRef90\_D6DE26 Q L I E P K S P D T I M D E L K T A L R P G T E A L I G G F S V I E A T R E L G  
UniRef90\_G8QQE8 S V C R V H D Q D D V Q R A V F E L K A K G C K V F V G G L T L C R I C Q N N G  
UniRef90\_UPI00036EA492 R V L K L K T S E D I H K T I D H I S L K N T D V L M G G A N A V S Y A A S C G  
UniRef90\_U3CIG2 E L L T I E D D N N I D Q Q I M Q L K S Q K F D W I I G D A V Y K D Y F E S F S  
UniRef90\_UPI0002E3FC5E S Q Y Y F E D L D G F I E S A K R A K A D G I E V V V G A Y A V A L A Q Y Y G  
UniRef90\_R7GHM6 K L E M L N D D E S I I K L E E A K R D M V D V V I G G N K V V R L A K E K N  
UniRef90\_M1MLI0 L L I Q P D S V S H V I D E V V K K Y S D N G I E V F I G G I T V A N S A K K Y G  
UniRef90\_C6Q0L1 L L V K P D S V A N I D E M V K K L S E Q G I D V F I G G I T V A K A K K Y G  
UniRef90\_G5HGZ6 K T Y L L S P N W N N E A L A D Q A I R E G C Q V I L G G L N T C R Y A Q M I H  
UniRef90\_T4NUK1 T E E W F E S K Y E I R S K V V K Y L N D Q K D E V I V G G G L A C S F A R Q Y G  
UniRef90\_R9RD76 I F K T F I S E E E C D E I I K D L K N K S Y S L L I G S M L T K K Y A N K Y G  
UniRef90\_W0EG88 H V R P W N T A E D L P K I L E Q L S Q I G V N A I T G D K G G Y T A A K E R G  
UniRef90\_UPI00045EB7F7 A F Y D I S D E E S C K Q A I K D L K K G I D V V V G A G T I C G L C D K S G  
UniRef90\_R5EWB2 A Y Y T V H D E A S T L E A I H S A R A N G A D V F V G A G T M C G L C D K E A  
UniRef90\_I4D7L3 F V R P W N T L E D I P K I L E Q L N K I G V N A I T G D K G G Y T A A K E Q N  
UniRef90\_F7NNJ0 G T K T V K D Y H S Y M D G I D Q A V A K G Y D C V I G N Q A L V N A A A A R G  
UniRef90\_E2ZCY8 C P I V F D D V S D L K E S I E K T D C E V V I G A A A T I D L A I T L N  
UniRef90\_UPI00046FFC57 K T Y L L S P N W N N E A L V D Q A V R E G C E V I I G G L N T C R Y A Q M I H  
UniRef90\_A8MEE7 I L E R F H S K D E I Y E R V L K Y K D I K K E V I V G G G I P C S L A R K W G  
UniRef90\_K1KM19 E Q H V Y T S A E N A E E V V K E L S K D T Q N V I G S G L I V N L A K K H G  
UniRef90\_X0YK73  
UniRef90\_U2TAA4 C L Y P C E T Y E A I E A T I R T L D E T G M D G I A G C M Y A V H V A K S R H  
UniRef90\_E1R624 V G Y S F R E E S E I L E P T I E K A E E D G V G A I I C G E R V Y S Y A A K R H  
UniRef90\_R5FF35 R T F V L T P D W N E M L V K R A V S E G C K V I L G G V N T C R Y A A E N H  
UniRef90\_E8LK85 T V I P C S N A D E I V L A V D H C I K N G A D G I V G C V A A V N A A H K H  
UniRef90\_J0NB53 L I C P I D K E E Y V R A E M E K L A H M G I E V A I G G I S L R D L V T Q C G  
UniRef90\_UPI00035E3FB7 L Y I N L D M H Q D Q E S L T E L I R L K G V N L I I G D A A A G N I A M R G G  
UniRef90\_J0N9Z5 Q V I D P K S P D T V L E Q D I T G E L R P G T R L L I G G F S V K Q A A D A H E  
UniRef90\_J0MW56 L A Y D V T N E S Q L E E A L R E G Q A A G A E V F V G G L T L C Q Q C S K Q N  
UniRef90\_H3K8I5 K I C P Y S N D E D V S K I E N L L P K N I D G I I G D I K P V E L A K K Y N  
UniRef90\_R6URR5 R I Y D V Q D E E T A I R T A E T C Q A D G M D A L V S G T V Y N F C Q E R G  
UniRef90\_H1HVQ4 G L L V Y E D L L E L R D I E K S V I Y D V L I G T T V V R D Y A L Q C G  
UniRef90\_F5RJQ4 L V R P C D T Y E E I E A T V K S L A Q K K V D G I A G C R Y A V R V A E A K  
UniRef90\_B6WY35 Q P I R F T S S R E L T L G I T Q A I A Q G A G C V V G G G V C V S I A Q A H H  
UniRef90\_W2E137 R I D P L G S H Q T T E A Q L D R L L A E G I E V A I G G L S L R Q V A V I A R G  
UniRef90\_A1HSK4 R K I A I D D Y R Q Y R A G V D Q A V R A G A A C I I G N Q A V D E A E A Y G  
UniRef90\_UPI00026283F5 I Q L G F K N L D D A T N G L R E Y K S K G Y T V I G T S S V C Q I A R D L G  
UniRef90\_UF0RZN7 S V F Q V T D Q N D V L E Q V S T L Q K Q C G C T M F V G G L T M C Q R I C E R N  
UniRef90\_R7PES8 T L Y P F R S R E D I I R L V R Q G S T D G M D V L V G G G L A Y R T G N S C G

UniRef90\_G1UVH0  
UniRef90\_UPI000463DB22  
UniRef90\_W0AWM4  
UniRef90\_I8SBL1  
UniRef90\_D4M2B2  
UniRef90\_F7NGL4  
UniRef90\_R4KEW5  
UniRef90\_G5HXZ6  
UniRef90\_UPI00037522A4  
UniRef90\_R5BQU8  
UniRef90\_S3K1Z8  
UniRef90\_U1X366  
UniRef90\_G9YRI0  
UniRef90\_G5FCH0  
UniRef90\_X3Q3G9  
UniRef90\_UPI00040ED091  
UniRef90\_R6L2V6  
UniRef90\_X0ZMV9  
UniRef90\_V7I5V7  
UniRef90\_U7UF13  
UniRef90\_F0RSP9  
UniRef90\_E1R2V5  
UniRef90\_R2SLJ7  
UniRef90\_D9YA95  
UniRef90\_UPI000380F441  
UniRef90\_UPI000287CCBC  
UniRef90\_T0BE25  
UniRef90\_G5HKL7  
UniRef90\_UPI00046F69B5  
UniRef90\_J7IPW9  
UniRef90\_X8GVB9  
UniRef90\_D4K524  
UniRef90\_R6JVK3  
UniRef90\_A8S1K8  
UniRef90\_T5R2F3  
UniRef90\_G9XHZ7  
UniRef90\_A0A022AG26  
UniRef90\_G5HTL3  
UniRef90\_I4AE55  
UniRef90\_V7I856  
UniRef90\_Q8VPT1  
UniRef90\_UPI00047C023D  
UniRef90\_G7W614  
UniRef90\_W7L7D3  
UniRef90\_R6TGB4  
UniRef90\_N2B408  
UniRef90\_H5Y397  
UniRef90\_E5Y1M1  
UniRef90\_V7YNP7  
UniRef90\_D6DHK6  
UniRef90\_UPI0003B741CA  
UniRef90\_I4D665  
UniRef90\_R4KFR4  
UniRef90\_D6DE26  
UniRef90\_G8QQE8  
UniRef90\_UPI00036EA492  
UniRef90\_U3CIG2  
UniRef90\_UPI0002E3FC5E  
UniRef90\_R7GHM6  
UniRef90\_M1MLI0  
UniRef90\_G6Q0L1  
UniRef90\_G5HGZ6  
UniRef90\_T4NUK1  
UniRef90\_R9RD76  
UniRef90\_W0EG88  
UniRef90\_UPI00045EB7F7  
UniRef90\_R5EWB2  
UniRef90\_I4D7L3  
UniRef90\_F7NNJ0  
UniRef90\_E2ZCY8  
UniRef90\_UPI00046FFC57  
UniRef90\_A8MEE7  
UniRef90\_K1KM19  
UniRef90\_X0YK73  
UniRef90\_U2TAA4  
UniRef90\_E1R624  
UniRef90\_R5FF35  
UniRef90\_E8LK85  
UniRef90\_J0NB53  
UniRef90\_UPI00035E3FB7  
UniRef90\_J0N9Z5  
UniRef90\_J0MW56  
UniRef90\_H3K8I5  
UniRef90\_R6URR5  
UniRef90\_H1HVQ4  
UniRef90\_F5RJQ4  
UniRef90\_B6WY35  
UniRef90\_W2E137  
UniRef90\_A1HSK4  
UniRef90\_UPI00026283F5  
UniRef90\_F0RZN7  
UniRef90\_R7PES8

170 180  
I P A V L L N S Q E S L R Q A C D G A L R I I E A  
L C T I P L Y G R E S V N H A L S E A G S I V  
V P H V V V Q S G E S I I A A M T E A Q R I Y E M  
L T M M L N S G E G I Y Q A L R E A R V A  
Y S T L F Y Q S G E S L K E A L L A A K N  
L P C V E I F T G M Q A Y M E A V S S A K  
L S Y E L I Q M K D T I I R S I W K A L D V F R A  
L P V V T I K S R E T I F N V L E E A V H I A  
V D H A Y I E S S E S I R K A I K E A Q N I V  
I P Y V V V E S S E S I E N S L Q N A L E M Y T F S  
Y T C F L L E S G  
V H V L A L I P G E A V M S A L T E A K R L  
K R T L F F D T E D S L R T S L L H A R N V G Q V A  
L E C L L I H T G K A L W Y A F G E T K R V F R M  
L D A Y L I E S S E T L L D A F E R A M L V Y  
I P A Q F I D S E E S L R S A I G V A K K M I  
M N A L I Y  
I Q H L L I R T G D A I E R S L S D A W H L V  
L E Y L L D N S R E D I E M A L D S A H Q V L K S T  
L C A Q R I E V G E S V R Q A I D E A W R L  
I N S I M I E S G K T I L Q A I D E A V R S I R L  
A R S V D I L V E E S I K T A L T E A I H L V Q L  
G R G F I I K T Q R S L Q L A F K R G R H L A H  
L K T M L I E T G E S F R Q A L V E A K R L A V V S  
A K C L I I K T G E A I L N A I N E A I R S Y E  
L N S T L I Y S E Y S V V E S I N R A L E I V R  
R K G V I L Y Y G  
V A C M Q L Q S G K S I A N A I Q M A M Q I G I I S  
L Q Y I S V S A G E T I R N A I Q L A Q D M I K  
Y M T L F Y S S R E S V V E A V E A A V  
L P Y L R V E S S D S I L H A L D T A Q Q L Y  
I P S L F L S T E D S L R T A F S M A E S L I  
M N V C F V E S G R S L K K A I R Q A E S I I  
F P T  
I Q Y V S V T S G E T I R R A F K Y A Q L L V D L  
L V I G H L A I S V P S L K D L L Q N A L R  
F K G I I E N S E E A I A R A L N S A A S L L K  
Y M V E L L E S G P A V R R S V N E A L K I A R A  
L Q S L N I E S D E T I I R T Y K Q A Q E I  
L V P F F V Y S R S S V Q L A F D N A L E V V Q A T  
M N N V I N S D D S I K E V I E Y C K K L  
L Q Y I Q V S A G E T L R S A L Q R A K D I I E A  
I K T V I L T S G E S V I Q A I H E A R S L I D V  
L P Y T V T E S S D S I F Q A I E T A C Q L C Q L  
L P L F L R T R E D S L R K A L H V A R R M V  
L H Y I P V S A G E T L R N A L G W A K A T I E A  
L H G V L H T S A D G V I Q V L N E A D R I  
L  
V P N L F I S T G D S F W Q G I T A A K R A A A I S  
L P Y Y L I R S S D S V H Q A V L S A R N I V  
L H F V S V S A G E T I K N A L I H A K  
E K C V L V K T G E A I L R A I N E A I R T Y E I  
L R H L P L M V E P S I S L A I D S A L S I  
L E Y E H V K T G Q A I I H S V E D A V A A R  
F L T Q L V Q S G D S L R E A F K S A Q K I  
K Y T I I E S S D S I L R A I E D A N E L C K  
L K A V L V E S V R S I A Q S V Y R A I D A I A M  
M E A I F C D S S D S I I N A L K T A K N M  
V K S I M I D V D E S L D I A L N E A I S L  
V K N I M I Q V D E S L E I A L D D A I  
V P N M L I E T S E E A F W D A L S S A K R A  
I D S V F A T S D E S I R E A V I E Y C K K L  
L K S Y E V E S E S D S I L M Y I E I A E Q I I K F T  
Y K V D L L E S G  
I P R I H I E T K D A I E Q A L L E A V N A A R  
L N R V H I H T K D A I E Q A L K Q A M D A A R  
F I V D I L L E S G K A V K R A I N E A L K I A Q V  
L T G V L L R S G E G I E L A V A A A R Q I  
K P Y V R L Y A G E T I R D A C L R A R D L A  
I P N M L I E T S K E A F W D A L S S A K R A  
M D N V E L N S K E S I Y E V M G H A K E V I  
M K G I L L W Y D Q E T I Q L A V G I A F D I L R A  
M L C T Y V D S S A S I L R A V R E A V R I V R A  
L P A V L I K M G E S I K S S I L E A Y R V  
V S F M M I T S Q E A F W N A L S D V K R  
I Q C E Y L D S D F S M R N A I F D A I A V  
I Q Y I M T E T D E A V N R D A I D E A L  
V D F K L V E T G E S I D E A L K S A S E Y Y Q  
L R H V M L H S G N V E T A I D R A L N I  
L A C T H I K T S D T L E R A V S E A I S T A Q  
I N S I Y I E S D I S I R K A I N E A L I L A  
V P C T Y V H L R E T L R R T L S E A M K A A H  
R Q Y V L A Y T G D T I R S A I M R A R N T A  
I P S A Y V T S E K S I E K A L D D A L K I  
C P G I V V C P G E A L E R A F E E A S N I A Q A  
M H Y I M  
L R G I L L R S G E G I R H A L E L S R Q M  
M N E V L I Y S T E Y L K M E F I K A Y Q L A  
L P F I H V K T G Q A V H A V N E A V G A A R  
I K V L P V Y S G Q A L R N A V K Q A L S I I



UniRef90\_G9YEVO  
UniRef90\_R6RWE7  
UniRef90\_D8WVV3  
UniRef90\_U7UHF3  
UniRef90\_U1FJD4  
UniRef90\_G5HST4  
UniRef90\_C7XT03  
UniRef90\_G1UX14  
UniRef90\_G5HHN8  
UniRef90\_COCTF4  
UniRef90\_T0U0M2  
UniRef90\_F4LSJ4  
UniRef90\_V8FZK0  
UniRef90\_W0EDD6  
UniRef90\_G5HGF8  
UniRef90\_G5HNF4  
UniRef90\_R6SUW3  
UniRef90\_C6PUJ2  
UniRef90\_E7GHC9  
UniRef90\_UPI00035E7D69  
UniRef90\_B6WVJ9  
UniRef90\_N9W9P1  
UniRef90\_G9XQS2  
UniRef90\_UPI000471343F  
UniRef90\_C6Q0L6  
UniRef90\_H1PX10  
UniRef90\_L0F386  
UniRef90\_R9LVZ0  
UniRef90\_E5Y5D6  
UniRef90\_G1V0N3  
UniRef90\_G5HZQ7  
UniRef90\_J0WZR7  
UniRef90\_M1MJS9  
UniRef90\_E5Y9N9  
UniRef90\_U4Z144  
UniRef90\_U7UWU9  
UniRef90\_V1W2S8  
UniRef90\_UPI000464DDB3  
UniRef90\_T0IHG0  
UniRef90\_D3LTH8  
UniRef90\_M1Z5T7  
UniRef90\_A0A011HWQ4

```

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

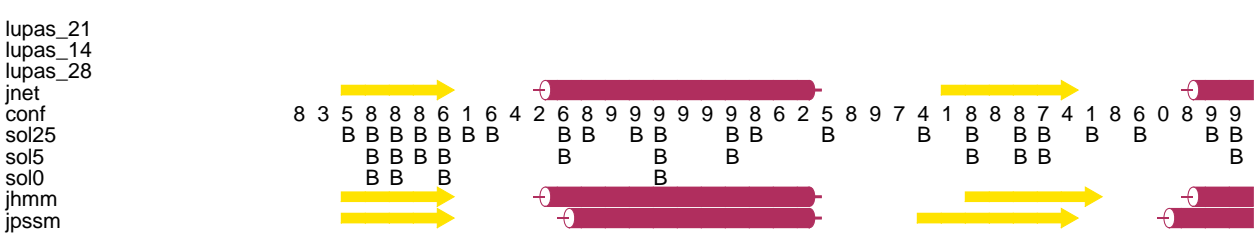
I L F L A P Y F G L K E I A M S V S Y E Y K D F Q I D V Y Q G N Y E Q G P
I L L T S P Q R E F T V L L D K V K K E F D L N I T V R E T T F E D A V
Y E S M L Q T V D E V C K D L G C Q Y D F I D F H D I T E N L S
R F W Y I S I S K A C E Q V L Q A A G E L G V E M E L R V I D R E V I E D T L

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

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

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

```





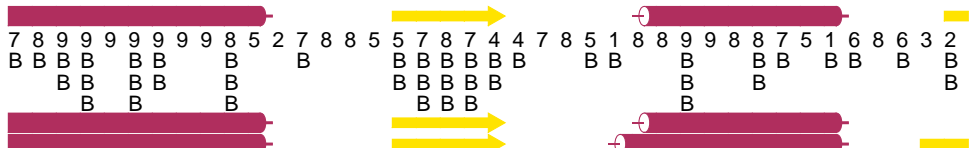
UniRef90\_G9YEVO  
 UniRef90\_R6RWE7  
 UniRef90\_D8WVV3  
 UniRef90\_U7UHF3  
 UniRef90\_U1FJD4  
 UniRef90\_G5HST4  
 UniRef90\_C7XT03  
 UniRef90\_G1UX14  
 UniRef90\_G5HHN8  
 UniRef90\_COCTF4  
 UniRef90\_T0U0M2  
 UniRef90\_F4LSJ4  
 UniRef90\_V8FZK0  
 UniRef90\_W0EDD6  
 UniRef90\_G5HNF4  
 UniRef90\_R6SUW3  
 UniRef90\_C6PUJ2  
 UniRef90\_E7GHC9  
 UniRef90\_UPI00035E7D69  
 UniRef90\_B6WVJ9  
 UniRef90\_N9W9P1  
 UniRef90\_G9XQS2  
 UniRef90\_UPI000471343F  
 UniRef90\_C6Q0L6  
 UniRef90\_H1PX10  
 UniRef90\_L0F386  
 UniRef90\_R9LVZ0  
 UniRef90\_E5Y5D6  
 UniRef90\_G1V0N3  
 UniRef90\_G5HZQ7  
 UniRef90\_J0WZR7  
 UniRef90\_M1MJS9  
 UniRef90\_E5Y9N9  
 UniRef90\_U4Z144  
 UniRef90\_U7UWU9  
 UniRef90\_V1W2S8  
 UniRef90\_UPI000464DDB3  
 UniRef90\_T0IHG0  
 UniRef90\_D3LTH8  
 UniRef90\_M1Z5T7  
 UniRef90\_A0A011HWQ4

```

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

```

lupas\_21  
 lupas\_14  
 lupas\_28  
 jnet  
 conf  
 sol25  
 sol5  
 sol0  
 jhmm  
 jpssm







```

UniRef90_G9YEVO      R P E L I P L Y A G E T I R N A C T Q A A K L S K
UniRef90_R6RWE7     I P V C F A E S S A S L E H A L L Q A L T I I
UniRef90_D8WVV3     M T E Q F N L S K E S V V T A L E T A K E L A
UniRef90_U7UHF3     K Q A T L L Y A G E A I R D A C I R A G E L A H
UniRef90_U1FJD4     F A H V H I K N G H A I E N A I D E A I T A G R A
UniRef90_G5HST4     I A S G Y F Y S T E S V R N A I I Q A E A L Y Q A
UniRef90_C7XT03     L K S Y E V E S K D S I L M Y I E I A E Q I I K
UniRef90_G1UX14     C R G V V V K P G E A L E R A L D E A L N I A R
UniRef90_G5HHN8     L N V I F D I S F E E A W H A I V E A Q H S A
UniRef90_C0CTF4     I P Y T V V E N T E S V S I A L D A A L Q L I
UniRef90_T0U0M2     L N T L L I T S G E S I K S A Y E D A L S I I
UniRef90_F4LSJ4     L T T E L L D S G A S I K R A I E E A A K I A R
UniRef90_V8FZK0
UniRef90_W0EDD6     M Q Y I S V M G G E T I R A A L G R A K A I
UniRef90_G5HGF8     Y P V V F V T S K D T I K K T I I Q A C S I
UniRef90_G5HNF4     I S C Y F N P D N E S I Y R A I Q Q A T A L V E
UniRef90_R6SUW3     M A I T N V P Y D E S D I L S A V H L A Q
UniRef90_C6PUJ2     I D N V S I A S N E S I C D I F E H A K Q L V
UniRef90_E7GHC9     L K N I P L M V D P N V S L A I D S A L N I
UniRef90_UPI00035E7D69 M Q S L V V Y T E E S I T E A L L R S K E
UniRef90_B6WVJ9     F H A I P L L S E E A V Y K V F L E A K H I I E M
UniRef90_N9W9P1     L K S I L L S S D E A M N K A I E D A I N I
UniRef90_G9XQS2     I N S V A I T M G E A N Y L A I T E A F S V A K A
UniRef90_UPI000471343F K I G I L F D V D E K V E F S I Q T A R S L
UniRef90_C6Q0L6     V K V Q L D I N T S S I K R A I D E A L K I V Q A
UniRef90_H1PX10     I D F Y L I K S E N S I Q K A F E E A K K M
UniRef90_L0F386     V N S V A I T M G E A N H L A F N E A F N V A K A
UniRef90_R9LVZ0     G R C A P L Y V I G E A I R T A V I E A I
UniRef90_E5Y5D6     F L V F P V E N R F T V K E T I H K A L S I A
UniRef90_G1V0N3     G Q I F L D E P Q P N I R N A V S R A I T I A E
UniRef90_G5HZQ7
UniRef90_J0WZR7     V P F V H V D I D R E A Y I D A V E K A Q
UniRef90_M1MJS9     I S T C L H W E R E A I W I A I R E A Q H
UniRef90_E5Y9N9     G S V F L L P Q R A N I R N A L N R A I L L A E
UniRef90_U4Z144
UniRef90_U7UWU9     F N T V L E F T S Y E T L E N F L G Y A I M I L K Q T
UniRef90_V1W2S8     S Q F R L L S S P A S I T E A L E E A R S L Y
UniRef90_UPI000464DDB3 I D N T T I E V G E S I R E F I N Y S K N M L K A A
UniRef90_T0IHG0     I P C F S I T V G E T V F E S V R R A R E L V
UniRef90_D3LTH8     F P T F P I Y P G E S L L S A L N Y A R E L
UniRef90_M1Z5T7     L I P I V I K S G E A F I S T I E E A I R I A T A T
UniRef90_A0A011HWQ4

```

