

QUERY  
 UniRef90\_F7BCH2  
 UniRef90\_UPI0003C169C1  
 UniRef90\_UPI0003F05962  
 UniRef90\_UPI0002740704  
 UniRef90\_W5MX12  
 UniRef90\_M3ZG84  
 UniRef90\_UPI000328A1C8  
 UniRef90\_H3B8A8  
 UniRef90\_E0VSK0  
 UniRef90\_P18755  
 UniRef90\_W5MBY5  
 UniRef90\_S4RGR3  
 UniRef90\_V9KZW6  
 UniRef90\_UPI0003D0CC69  
 UniRef90\_UPI00034FD7D9  
 UniRef90\_D2A2D2  
 UniRef90\_F2X0X7  
 UniRef90\_E3WEU4  
 UniRef90\_G3P5V4  
 UniRef90\_V4B387  
 UniRef90\_A7XDP6  
 UniRef90\_H3AP74  
 UniRef90\_T1J9J7  
 UniRef90\_G3SSN5  
 UniRef90\_E2AGM8  
 UniRef90\_E9G6P2  
 UniRef90\_B5LVY0  
 UniRef90\_P19102  
 UniRef90\_C3Y103  
 UniRef90\_M7BKR2  
 UniRef90\_W5MXR9  
 UniRef90\_UPI000441B282  
 UniRef90\_C3ZH92  
 UniRef90\_E2BA48  
 UniRef90\_X1WJF4  
 UniRef90\_H3A1B0  
 UniRef90\_G6DKR7  
 UniRef90\_E0VXR1  
 UniRef90\_A0A026W901  
 UniRef90\_W8AQI8  
 UniRef90\_S4P5B6  
 UniRef90\_T1J6M9  
 UniRef90\_G3Q5X7  
 UniRef90\_I3V7X0  
 UniRef90\_UPI0002B8DDC4  
 UniRef90\_UPI000359EE54  
 UniRef90\_J3JVV6  
 UniRef90\_E5SEX9  
 UniRef90\_T1JMU8  
 UniRef90\_F7ILE8  
 UniRef90\_N6UHN7  
 UniRef90\_D2A3W6  
 UniRef90\_Q0V9C6  
 UniRef90\_V3ZR45  
 UniRef90\_D2KQB3  
 UniRef90\_B5X2E9  
 UniRef90\_V9KTE6  
 UniRef90\_E0VDJ0  
 UniRef90\_UPI0003F09920  
 UniRef90\_A0A023F2Y3  
 UniRef90\_G1R180  
 UniRef90\_D1LX02  
 UniRef90\_T1JZB4  
 UniRef90\_U5EU12  
 UniRef90\_UPI0002658B7C  
 UniRef90\_R7V048  
 UniRef90\_UPI000388C6DA  
 UniRef90\_T1KEY8  
 UniRef90\_UPI0003506CC8  
 UniRef90\_W4ZJW0  
 UniRef90\_UPI0003C136FA  
 UniRef90\_Q7QAA1  
 UniRef90\_B4NFA4  
 UniRef90\_V5HAV1  
 UniRef90\_V8PBK1  
 UniRef90\_A0A022T3U5  
 UniRef90\_B7P8L1  
 UniRef90\_UPI0003EE3492  
 UniRef90\_L7M4V2  
 UniRef90\_UPI000440DF92  
 UniRef90\_P41157  
 UniRef90\_Q501S1  
 UniRef90\_Q1LUW5  
 UniRef90\_R7TVM3  
 UniRef90\_UPI00021A4B5F  
 UniRef90\_V5GTJ6  
 UniRef90\_K1R6F0  
 UniRef90\_B4GYV7  
 UniRef90\_H3B019  
 UniRef90\_UPI000252C844  
 UniRef90\_T1H4E5

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

QUERY

UniRef90\_F7BCH2
UniRef90\_UPI0003C169C1
UniRef90\_UPI0003F05962
UniRef90\_UPI0002740704
UniRef90\_W5MX12
UniRef90\_M3ZG84
UniRef90\_UPI000328A1C8
UniRef90\_H3B8A8
UniRef90\_E0VSK0
UniRef90\_P18755
UniRef90\_W5MBY5
UniRef90\_S4RGR3
UniRef90\_V9KZW6
UniRef90\_UPI0003D0CC69
UniRef90\_UPI00034FD7D9
UniRef90\_D2A2D2
UniRef90\_F2X0X7
UniRef90\_E3WEU4
UniRef90\_G3P5V4
UniRef90\_V4B387
UniRef90\_A7XDP6
UniRef90\_H3AP74
UniRef90\_T1J9J7
UniRef90\_G3SSN5
UniRef90\_E2AGM8
UniRef90\_E9G6P2
UniRef90\_B5LVY0
UniRef90\_P19102
UniRef90\_C3Y103
UniRef90\_M7BKR2
UniRef90\_W5MXR9
UniRef90\_UPI000441B282
UniRef90\_C3ZH92
UniRef90\_E2BA48
UniRef90\_X1WJF4
UniRef90\_H3A1B0
UniRef90\_G6DKR7
UniRef90\_E0VXR1
UniRef90\_A0A026W901
UniRef90\_W8AQI8
UniRef90\_S4P5B6
UniRef90\_T1J6M9
UniRef90\_G3Q5X7
UniRef90\_I3V7X0
UniRef90\_UPI0002B8DDC4
UniRef90\_UPI000359EE54
UniRef90\_J3JVV6
UniRef90\_E5SEX9
UniRef90\_T1JMU8
UniRef90\_F7ILE8
UniRef90\_N6UHN7
UniRef90\_D2A3W6
UniRef90\_Q0V9C6
UniRef90\_V3ZR45
UniRef90\_D2KQB3
UniRef90\_B5X2E9
UniRef90\_V9KTE6
UniRef90\_E0VDJ0
UniRef90\_UPI0003F09920
UniRef90\_A0A023F2Y3
UniRef90\_G1R180
UniRef90\_D1LX02
UniRef90\_T1JZB4
UniRef90\_U5EU12
UniRef90\_UPI0002658B7C
UniRef90\_R7V048
UniRef90\_UPI000388C6DA
UniRef90\_T1KEY8
UniRef90\_UPI0003506CC8
UniRef90\_W4ZJW0
UniRef90\_UPI0003C136FA
UniRef90\_Q7QAA1
UniRef90\_B4NFA4
UniRef90\_V5HAV1
UniRef90\_V8PBK1
UniRef90\_A0A022T3U5
UniRef90\_B7P8L1
UniRef90\_UPI0003EE3492
UniRef90\_L7M4V2
UniRef90\_UPI000440DF92
UniRef90\_P41157
UniRef90\_Q501S1
UniRef90\_Q1LUV5
UniRef90\_R7TVM3
UniRef90\_UPI00021A4B5F
UniRef90\_V5GTJ6
UniRef90\_K1R6F0
UniRef90\_B4GYV7
UniRef90\_H3B019
UniRef90\_UPI000252C844
UniRef90\_T1H4E5

F E M N G K A L L L T K E D F R Y R S P H S G D E L Y E L L Q Q H I L K Q
UniRef90\_F7BCH2 F E M N G K A L L L T K D D F F R Y R A S P S S G D V L Y E L L Q Q Y I K T Q Q
UniRef90\_UPI0003C169C1 F E M N G K A L L L T K D D F F R Y R A S P S S G D V L Y E L L Q Q Y I K T Q Q
UniRef90\_UPI0003F05962 F E M N G R A L L L T K D D F F R H R A S P A S S G D V L Y E L L Q Q Y I K T Q Q
UniRef90\_UPI0002740704 F A M N G R A L L L T K D D F F R R R A S P S S G D V L Y E L L Q Q Y I K T Q Q
UniRef90\_W5MX12 F E M N G K A L L L T K E R F F R L R C P S S G D V L Y E L L Q Q Y I K T Q Q
UniRef90\_M3ZG84 F G M N G A N L L L A M G K E R F L D L A P F V G D V L W E H L E M L Q Q K E
UniRef90\_UPI000328A1C8 F E M N G R A L L L T K E D F F R L R A P G S G D V L Y E L L Q Q Y I K T Q Q
UniRef90\_H3B8A8 F C M D G A T L L L A L G K E N F L E L A P F V G D I L W E H L E M L Q Q K E
UniRef90\_E0VSK0 F Y M K G K D I L L A M G K E N F L E L A P F T G D I L W E H L E I L L Q K
UniRef90\_P18755 F C M S G A L L L A L G K E R F L E L A P F V G D I L W E H L E I L L Q K
UniRef90\_W5MBY5 F N M T G Q E L L L D L G K E R F L E L A P F V G D I L W E H L E Q M M K
UniRef90\_S4RGR3 F E M N G K A L L L T K D D F F R Y R S A S S A G D V L Y E L L Q R I L T K
UniRef90\_V9KZW6 F E M N G K A L L L T K D D F F R Y R S P S S G D V L Y E L L Q L L L
UniRef90\_UPI0003D0CC69 F L M N G Q N L L L S L G K E H F L E L A P Y V G D I L W E H L E Q M L K
UniRef90\_UPI00034FD7D9 F V M N G R A L L L T K E D F K K R S P S S G D V L Y E L L R H I K T
UniRef90\_D2A2D2 F Q M N G K A I L L T R T D L A E R A P G S G D V L Y N V L Q L L V R
UniRef90\_F2X0X7 F A M K G H E L L S M P K E E F L S R A P F A G D I L W E H L D M L R K K E E
UniRef90\_E3WEU4 F R M A G R E L L S L S K E F L L G R A P F M G D I L W E H I D M L R K K E
UniRef90\_G3P5V4 F E M N G R A L L L T K E D F R R R C P S S G D V L Y E L L Q C V K Q Q E
UniRef90\_V4B387 F A I K G K D L L K L E K E A F L N R C P Y V G D I L F E H I D I L Q K E
UniRef90\_A7XDP6 F N I D G R D L L R L T R D F M K L A P Y N G D I L M A H L C V L R K
UniRef90\_H3AP74 F H L S G Q A L L L G K E R F L E L A P F V G D I L W E H L D Q M M K E
UniRef90\_T1J9J7 F V M K G K D M L L A L G K E A F L D R A P F M G D I L W E H L D I L Q K
UniRef90\_G3SSN5 F Q M N G R A L L L T K E D F R H R A P S S G D V L Y E L L Q Y I K T Q
UniRef90\_E2AGM8 W Q M T G K Q L L A M G K E S F L E R T P F M G D I L W E H L E I L L Q K
UniRef90\_E9G6P2 F R M R G R D M L L A M S G E N F L L A R T P F M G D I L W E H L E I L L Q K
UniRef90\_B5LVY0 F T M K G C E L L A M S G E V E F L S R A P F A G D I L W A H L E S L Q K
UniRef90\_P19102 F L M N G H E L L S L G K E R F L A L A P F V G D I L W E H L E E M M K E E
UniRef90\_C3Y103 F T V T G R E L L S M D K D R F L S L A P F V G D I L W E H L D M L Q K E
UniRef90\_M7BKR2 F E M N G K A L L L T K E D F F R Y R S P H S G D V L Y E L L Q H I L K Q
UniRef90\_W5MXR9 I H I A G R E L L L S L T Q E D F L Q R V I P H G E I L W S H L E L L R K
UniRef90\_UPI000441B282 F Q I D G K E L L K M T K D D F Q R L T P Y N A D I L S H L H Y L R K
UniRef90\_C3ZH92 F Q A T G K D L L S S L Q K D D F L A R S P A G G E I L W T H L E L L R K
UniRef90\_E2BA48 W N I T G E Q L L S L T L K D F Q A K V I P H D G D V F W T H L E L L K K
UniRef90\_X1WJF4 F Q M N G K A L L L T K Q Q E L G E R C P G A G D I L Y N V L Q L L R R K
UniRef90\_H3A1B0 L N I H G R E L L A L G Q E E F F Q R A P R G E I L W S H L E L L R K
UniRef90\_G6DKR7 F R A Q G K D I L L A M G R E E F V A R A P F M G D I L W E H L E I L Q K
UniRef90\_E0VXR1 F K M D G V T F L L Q L T T E N D F Q Q R A P Q S S S T L H A H L E I W K
UniRef90\_A0A026W901 F Q M N G K A L L L T K A D L G E R C P G A G D V L H N V L T M L V R
UniRef90\_W8AQI8 W S M T G K E L L S L T H E E F R R K L P K D G N V F W T H L Q L L K
UniRef90\_S4P5B6 F Q M N G K A L L L T K T P E L G E R C P G A G D V L H N V L Q M L V R
UniRef90\_T1J6M9 W D M N G K D L L E M T H D F F M Q R V I P Y D G D L F W T H L E L L R K
UniRef90\_G3Q5X7 F Q M N G K A L L L L T K E D F R Y R S P H S G D V L Y E L L Q H I L K Q
UniRef90\_I3V7X0 F T M T G Q I L L C K F T R E E F L R L A P S Y N G D I L M A H L C V L R K
UniRef90\_UPI0002B8DDC4 F R M P G T A L L C R R M T E R D M H K L A P S C G D I L H A R L E I W R
UniRef90\_UPI000359EE54 F N L N G E Q L L C A M T H P E F V Q H I P N D G D I F W T H L E L L R K
UniRef90\_J3JVV6 W Q M T G K A L Y E L T M A D F Q K I V P N D G D V E W T H L E L L R K
UniRef90\_E5SEX9 Y A L S G R D L L C A L T R E E F L N R S P F V G D I L W E H L D T M Q K
UniRef90\_T1JMU8 F H M D G N A L L C H L G E S D F H Q R A P P C G D I L Y A Q L D I W R T
UniRef90\_F7ILE8 F G M N G Q M L L C A N L V K E R F L E L A P F V G D I L W E H L E Q M L K E
UniRef90\_N6UHN7 F R M K G K D I L L A M G K E A F L A R A P F V G D I L W E H L E L L Q K
UniRef90\_D2A3W6 W S M T G R E L Y N L T V S D F Q K I V I P Y D G D I F W T H L E L L R K
UniRef90\_Q0V9C6 Q E L T G K D L L A L S E D N F R E R S P L C G D V L Y A H L D I W K
UniRef90\_V3ZR45 F R M T G K Q L L A A M T H A E F V K Y V I P S D N D V F W T H L E L L R K
UniRef90\_D2KQB3 F G I D G K Q L L C K M T R E D F T R L S S Y N A D V L L S H L N F L K Q
UniRef90\_B5X2E9 F D M N G Q E L L L S L G K E S F L D L A P F V G D I L W E H L D Q M M K E
UniRef90\_V9KTE6 L N L P G K D L L S S L Q E D F L Q R V I P K G E I L W S H L E L L R K
UniRef90\_E0VDJ0 F Q M N G K A L L L S L T K S D L N E R C S W S G R V L H N V L Q L L R E
UniRef90\_UPI0003F09920 F K M N G L N L L C M L S E D D F R A R A P H C G D I L H A Q L D I W R
UniRef90\_A0A023F2Y3 F Q M N G K A L L L V L T K A D F L N E R S P G C G D V L H N V L H M L M R
UniRef90\_G1R180 F E M N G R A L L L T K D D F F R H R A P S S G E
UniRef90\_D1LX02 F T M D G K E L L C K M S R D D F C R L T P Y N S D V L L A H L L F L R Q
UniRef90\_T1JZB4 L N M K G K D V L L N M K R K E D F L A L T P Y M G E I L W E H L D L L R K
UniRef90\_U5EU12 F Q M N G K A L L L V L T K N D L A E R C P G A G D V L H N V L Q M L V R
UniRef90\_UPI0002658B7C F T L D G R E M L L A M G K E A F L A R T P Y S G D I L W E H L D I M Q K
UniRef90\_R7V048 F K M D G R Q L L T T M G R E A F L A S T P F V G D I L W E H L E I L Q K
UniRef90\_UPI000388C6DA F Q V D G K E L L C K M G K E D F L R L S P Y N A D V L L S H L A Y L R Q
UniRef90\_T1KEY8 F Q M D G M T L L S L S E Q D F K N R A L Y C G D V L Y A Q L E I W K T
UniRef90\_UPI0003506CC8 F E M N G K A L L L T K D D F R F R A P G S G
UniRef90\_W4ZJW0 F T M N G K A L L L M P K Q S F C D R A P E C G D I L Y E L L Q K L F R K
UniRef90\_UPI0003C136FA F Q I D G K E L L C K M T K K D F M R L T P Y N T D I L V S H L N Y L R Q
UniRef90\_Q7QAA1 W S I S G K E L L E L D L D D F K L K A P N D G G L F W M H L E L L R R
UniRef90\_B4NFA4 W Q I N G K E L L A M T H E E F S K K L N D P G N I F W T H L Q L L K
UniRef90\_V5HAV1 W N L T G K Q L L S L S H A E F V R R I A F D G D L E W T H L E L L R K
UniRef90\_V8PBK1 L S I P G R E L L S L S Q E D F F Q R V I P R G E I L W S H L E L L R K
UniRef90\_A0A022T3U5 W N M T G K Q I L L A M G K E S F I A R A P F M G D I L W E H L E L L Q K E
UniRef90\_B7P8L1 F H M N G K A L L L T K A D F L E R A P K A G D V L F N A L Q L L L H R
UniRef90\_UPI0003EE3492 F E M N G K A L L L T K E D F F R Y R S P H S G E S L W H V L
UniRef90\_L7M4V2 W N L T G K Q L L C D L T Q P E F M R R V I S F D G D T F W T H L E L L R K
UniRef90\_UPI000440DF92 F E M N G K A L L L T K E D F F R L R C P S S G
UniRef90\_P41157 F N I D G K E L L C K M S K E D F L R T S L Y N T E V L L S H L N Y L R
UniRef90\_Q501S1 F D M S G R E L L C E L G K D R F L D L A P F V G D I L W E H L E Q M M R
UniRef90\_Q1LUV5 F H T D G K E L L C K M S K E D F L R L T S Y N T E V L L S H L N Y L R
UniRef90\_R7TVM3 F Q M N G H Q L L C D L K H H D F I K L I P H D N D V F W T H L E L L R K
UniRef90\_UPI00021A4B5F F A L T G E Q L L S L S K E D F M R R A P P T G E V L L S H L N L L
UniRef90\_V5GTJ6 F N M D G S A L L L S E E D F V R M R A P G S G D I L S A Q L E I W K
UniRef90\_K1R6F0 F K I S G K Q L L E L T H E E F V K L I P N D G D I F W T H L E L L R K
UniRef90\_B4GYV7 W Q I N G Q E L L A M T H E E F S Q K L P H D G N V F W T H L Q L L K
UniRef90\_H3B019 F W V T G A Y L L C S L G K E H F L E L A P F I G D I L W E H L E W M L K
UniRef90\_UPI000252C844 F Q M N G K A L L L T K A D L G E R C P G A G D V L H N V L Q M L M R E
UniRef90\_T1H4E5 F Q M N G K A L L L T R Q D L G E R C P G A G D V L H N V L Q M L M R E

50

60

70

UniRef90\_Q4S5P4  
UniRef90\_S4R8Q6  
UniRef90\_K1RA68  
UniRef90\_D2A0N6  
UniRef90\_W5KP33  
UniRef90\_B5X490  
UniRef90\_B4JY97  
UniRef90\_C3Y560  
UniRef90\_K1QIK3  
UniRef90\_Q86MD8  
UniRef90\_Q17H53  
UniRef90\_M4AU35  
UniRef90\_W5JGW2  
UniRef90\_K7ISK4  
UniRef90\_F1S6G7  
UniRef90\_T1I8G0  
UniRef90\_UPI0003EC432C  
UniRef90\_UPI0004572D76  
UniRef90\_V9KQD4  
UniRef90\_UPI0003C3727D  
UniRef90\_C3XR03  
UniRef90\_T1J9H1  
UniRef90\_H9JNM0  
UniRef90\_G6CL56  
UniRef90\_Q5PR65  
UniRef90\_E0VPY1  
UniRef90\_U4UQR8  
UniRef90\_UPI0003502CBB  
UniRef90\_T1EF52  
UniRef90\_UPI0003C3522F  
UniRef90\_S4RMW9  
UniRef90\_Q703F5  
UniRef90\_B4JRH2  
UniRef90\_F6Q0N1  
UniRef90\_A0A044TPD8  
UniRef90\_U4UDB3  
UniRef90\_E9GNE4  
UniRef90\_A7RTM4  
UniRef90\_K1PJU2  
UniRef90\_E9RH23  
UniRef90\_F7E9J5  
UniRef90\_H2Z659  
UniRef90\_T1IWP8  
UniRef90\_UPI0002B4D43C  
UniRef90\_T1FYE7  
UniRef90\_F7F5N2  
UniRef90\_V8NQM2  
UniRef90\_K1QRH2  
UniRef90\_R7TQ56  
UniRef90\_W4Z0C3  
UniRef90\_W4Z0C3  
UniRef90\_E9HI84  
UniRef90\_Q17AZ6  
UniRef90\_A0A023F3U9  
UniRef90\_E9G0C6  
UniRef90\_R7VN95  
UniRef90\_UPI0003C363CB  
UniRef90\_F7DTC2  
UniRef90\_C3Y5I3  
UniRef90\_UPI0002990435  
UniRef90\_G3U7V7  
UniRef90\_B0WHJ0  
UniRef90\_F6RHY2  
UniRef90\_T1GM56  
UniRef90\_E0VN06  
UniRef90\_V9KE42  
UniRef90\_W4YFJ9  
UniRef90\_D2A130  
UniRef90\_UPI0003C2898B  
UniRef90\_B7QL77  
UniRef90\_UPI0003F05926  
UniRef90\_UPI0004543442  
UniRef90\_G3N712  
UniRef90\_UPI0003EBE0D1  
UniRef90\_UPI0002B44754  
UniRef90\_R7TD80  
UniRef90\_UPI0003C1AF22  
UniRef90\_E9HP58  
UniRef90\_UPI00039415C6  
UniRef90\_T1J9J6  
UniRef90\_H0XJJ2  
UniRef90\_L7LUJ7  
UniRef90\_A7S6A4  
UniRef90\_H2Y917  
UniRef90\_UPI0003292022  
UniRef90\_UPI0003C8DCE0  
UniRef90\_UPI000441C71B  
UniRef90\_Q1L8J3  
UniRef90\_A0A016V4P8  
UniRef90\_Q5TW03  
UniRef90\_K7FP28  
UniRef90\_UPI0002659C41

UniRef90\_Q4S5P4 Q E L T G R D L C S M T E A D F R Q R S S Q F G D V L Y A H L D I W R  
UniRef90\_S4R8Q6 L A L S G R A L C S L G K E R F F L R L A P Y V G D I L W E H L E I L L R E  
UniRef90\_K1RA68 F T M R G K P S L A A Q L K R E D F F L D L A P Y L G G E I L M W E H L E I L L K K  
UniRef90\_D2A0N6 W D M N G K P S L A A Q L K R E D F F L D L A P Y L G G E I L M W E H L E I L L K K  
UniRef90\_W5KP33 Q D L S G S E L C M M S E E D D F F R Q R A S Q C G D V L H A H L D I W K  
UniRef90\_B5X490 F H L E G K A L C K M T K E E D F F M S R L S A Y N A D I L L G H L N Y L R Q  
UniRef90\_B4JY97 W Q L S G G A L C A M S H E E Q F F R Q R A S Q C G D V L H A H L D I W K  
UniRef90\_C3Y560 F G M N G K A L S L L G K E G F T D R V P F A G D V L Y N L L H N L L Q  
UniRef90\_K1QIK3 F D M N G K A L C L L K R K E S D F M E R V P K N G D L L Y N A L N K L L V H K  
UniRef90\_Q86MD8 F N I Q G S V L C A L R K E S G F L K L C P F V G E I L L E H L E Q L Q K  
UniRef90\_Q17H53 F K M S G R D I I G L G R E E G F L A I A P F T G D L L W E H L E I L L Q K  
UniRef90\_M4AU35 Q E V T G K D L C A M S T E E E F F R Q R S P L C G D T L Y A H L D I W K  
UniRef90\_W5JGW2 W N I N G R E L C A D M S T V E Q F F R S K I P N D G G L F R T H L E L R K  
UniRef90\_K7ISK4 F N I D G G V T L V S L S E E E F F R R A P Q C G S M L H A Q L E I W K  
UniRef90\_F1S6G7 F N M D G K E L C K M S K E E E F F R R A T S Y N T E V L L S H L N Y L R K  
UniRef90\_T1I8G0 W A F K G T E L V N M S L Q S F R E K V P N D L F W T H L E L L R K  
UniRef90\_UPI0003EC432C Q E L G G K E L C A M S E E Q F F R Q R S P L G G E V L H A H L D I W K  
UniRef90\_UPI0004572D76 F N L S G R E M C C Y L T V E Q F F K E R A A T G G D V L H A H L D I W K  
UniRef90\_V9KQD4 H N T D G K E L C C Q M N K E D D F L R L T S Y N A E V L S H L N Y L R  
UniRef90\_UPI0003C3727D W S I S G R Q L C S L S H E E F F R K K I P T D G N V F W T H I Q L L K  
UniRef90\_C3XR03 F D M D G K E L C C R L Q R D D F V R L T N H N G D V L F A H L L F L R  
UniRef90\_T1J9H1 F Q M N G K A L C C L M N V D M F V Q R V P L G G K L L Y K D F Q L R L  
UniRef90\_H9JNM0 W N I A G T G L C T M S N V E F K E K V P S D G D L F W T H F E L L R K  
UniRef90\_G6CL56 F A M D G T A L V A L T E E E F F Q R A P Q A G S T L Y A Q L E I W K  
UniRef90\_Q5PR65 F Q V D G K Q L C R M S R E E L Q R L S S Y S A D V L L S H L H Y L R  
UniRef90\_E0VPY1 W M I N G S D L C C K M S L D S F K K K V P K D D D L F W T H L E L L R K  
UniRef90\_U4UQR8 F E M N G K A L C L M S P N M F L R V P L G G K L L Y K D F Q L R L  
UniRef90\_UPI0003502CBB F L M N G K A L L L L T K E D F F R Y R C H S G N  
UniRef90\_T1EF52 V N M S G A Q L V N L S H S D F T K I F P D V G D V F W T H L E L L R R  
UniRef90\_UPI0003C3522F R N L K G R D M I E L G K E R F L A I T P Y T G D L L W E H V D I L L Q K  
UniRef90\_S4RMW9 F H L D G K D L C C K M T K E D M A Q L S A Y N A D M L L S H L N Y L R  
UniRef90\_Q703F5 F L M N G K A L C C L M S L G M F L S R V P L G G K L L Y K D F Q L R L  
UniRef90\_B4JRH2 C K M T G R E M V C E L G K E K F L A I T P F T G D I L W E H L D I L Q K  
UniRef90\_F6Q0N1 F C L S G S M M C S L R K E S F L H L C P F V G E I L W E H L D R L Q S E  
UniRef90\_A0A044TPD8 L Y M N G R T L L S M T Q D D F M A R A P E G G D T L H A Q L Q L W K T  
UniRef90\_U4UDB3 W D M S G T D L L A L S E K D F T S R A A Q G G M I L H A Q L E I W K  
UniRef90\_E9GNE4 W A F D G P S L C N M T H T E F I Q R I P K N P D L F W T H L E L L R K  
UniRef90\_A7RTM4 F E M N G K A L C C L M T L D M F L Y R V P E G G R V L Y H D F Q R R L R  
UniRef90\_K1PJU2 H N I E G R Q L C C S M N K E Q F T H L F P H N A E S L F S H L N F L R  
UniRef90\_E9RH23 F P I D G R E L C C A L T K A D M A R F V P Y N A D I L G H I N F V R Q  
UniRef90\_F7E9J5 M Q V D G K E L C C R M A R E D F L R M A S Y S T E M L M S H L A Y L R R Q  
UniRef90\_H2Z659 F N V N G R A L C C R E M A K E H F H R I S A K N A D V E M S H L S Y L R R  
UniRef90\_T1IWP8 L T L G G K E L C C R L P Q K E D E F V R L I P Q P A G Q I L F M H L S Y L R R Q  
UniRef90\_UPI0002B4D43C F Q M N G K A L C C L M D L S M F L Y R V P D G G E R L Y H D F Q S R L Q R  
UniRef90\_T1FYE7 F N Q S G R D L Y N R S R D A F I K L A P N T D V L W K H L E F L K R  
UniRef90\_F7F5N2 L N M S G Q V L Y N L G K E D F L E L F D F V D D I F W E H L D Q M T E E  
UniRef90\_V8NQM2 F N M D G K E L C C K M N K E D F L R V T S Y N T E V L  
UniRef90\_K1QRH2 F R M T G E Q L C C R L S S D N F K R R S P E A G A N L Y A Q L D V W K  
UniRef90\_R7TQ56 F Q M N G K A L C C M L T K S D F I D R A P G M G D V L F N T L E S L R S E  
UniRef90\_W4Z0C3 I V M T G S E M C C A L T K E E F C E R F K E S E D L F W T H L E L L K R  
UniRef90\_W4Z0C3 I V M T G S E M C C A L T K E E F C E R F K E S E D L F W T H L E L L K R  
UniRef90\_E9HI84 F H M N G K A L C C L M N V E M F V Q R V P L G G K L L Y K D F Q M R L  
UniRef90\_Q17AZ6 F P E S G N Q L A L L S M D E F V R R I P Q G G D K L H G Q L D L W K  
UniRef90\_A0A023F3U9 F K M A G H S L V T L T E Q D F Q R R A P E G G S L L H A Q L E L W K  
UniRef90\_E9G0C6 F Q M N G K A L C C L L N K S D J A E R A P G S G D V V H N  
UniRef90\_R7VN95 Q E L S G K D L C A M S E E Q F C Q R S P A C A  
UniRef90\_UPI0003C363CB F N E S G A A L Q L T E E E F V R R I P E G G E K L H A Q L E I W K  
UniRef90\_F7DTC2 H E R R L C I L T K E D D F P R A P P R A P G S G D V L Y E L L Q Y I K T Q  
UniRef90\_C3Y5I3 F I M N G K G L C C L M D K K G F V Y R V P G K G E V L Y L D F Q E R L F Q  
UniRef90\_UPI0002990435 R C L Q G R D L C C A L D K D A F L A L I S D C G E I L W E H L E D M R K  
UniRef90\_G3U7V7 L N I S G R E L C C S L N Q D F F R V P W G E L L C S H L D L V L K  
UniRef90\_B0WHJ0 F P E C G R E L A Q L P M D E F V R R I P Q G G D K L H G H L E L W K Q  
UniRef90\_F6RHY2 F N V S G L Q L C C N M T R D D F T E A A G L C G G Y L Y S L L Q E I R T Q  
UniRef90\_T1GM56 F P M N G K A L C C L M T L D M Y L S R V P V G G K M L Y S R D F R  
UniRef90\_E0VN06 F P K T G V E L C C E L T K S D F E K I T G D S G E L L A V H L A H L R  
UniRef90\_V9KE42 F A V D G K E L C C K M S K E D Q L T H M S S Y N S E V L L S H L N Y L R  
UniRef90\_W4YFJ9 F V M N G R A L C C L M K R E G F L D R V P E N G A I L F E D F R R L R Q  
UniRef90\_D2A130 F P T T G K E L C C E L T R T D F E T K A G R T G T L L A K H I A H L R  
UniRef90\_UPI0003C2898B F N I N G K L Q L C C S M S Q E E F V H A A G T C G E Y L Y V L Q N I R  
UniRef90\_B7QL77 F L M N G K A L C C L M N M E M F V Q R V P L G G K L L Y K D F Q L R L  
UniRef90\_UPI0003F05926 F H M N G K G L S F L R K E H F V S R A P S Q G V V L F Q D F R R R L  
UniRef90\_UPI0004543442 F N I D G K E L C C K M T K E D D F Q R L T P  
UniRef90\_G3N712 R G L Q G S A L C C G L E R D A F L S L M S D C G E I L W E H L E T M R K K  
UniRef90\_UPI0003EBE0D1 F E M N G R A L C C L T K E D F R L L A A V G A A V  
UniRef90\_UPI0002B44754 F D M D G K A L C C R L T R E E F L H S S A Y G G D I L S Y L C R L  
UniRef90\_R7TD80 F P M N G K A L C C L M T P E E F S F R V P S A G R L L F R D F R L R L  
UniRef90\_UPI0003C1AF22 F D I N G M Q L C C S M S R Q E F V I A A G V Y G D Y L H R L Q N L R  
UniRef90\_E9HP58 F H M E G A V L V A L T E E E F F R S R A P Q G G D T L Y A K L  
UniRef90\_UPI00039415C6 R G L D G S E L C C G L T Q E A F L G L S D S G E L W E H L E T M R R E  
UniRef90\_T1J9J6 F P R N G A E L C C K M T K E D L K K I T K R T G N K L A A H L R I L R Q  
UniRef90\_H0XJJ2 F N I S G L Q L C C S M T K E E F V E A A G V C G E Y L Y F L Q N V R A Q  
UniRef90\_L7LUJ7 F H M N G K A L C C L S K A D F L E R A P K A G D V L F N A L Q L L H R  
UniRef90\_A7S6A4 F L M N G K G I C C M L P P E G F V Y R V P R G G D V L Y N D F H K R L K  
UniRef90\_H2Y917 P N I D G L Q L N S M T Q N D F V A N F A Y G N V L W S H L A L L K K  
UniRef90\_UPI0003292022 F E M N G R A L C C F L T K D D F R L R A P G S  
UniRef90\_UPI0003C8DCE0 F D V S G P Q L C A M T Q E E F V E A A G A C G E Y L Y F I L Q S V R A Q  
UniRef90\_UPI000441C71B F E M X G R A L C C L L T K D D F P L S S L V S A D V L Y E L L Q Y I K T Q  
UniRef90\_Q1L8J3 F H T D G K E L C C K M S K D D F L R  
UniRef90\_A0A016V4P8 L S G R A L L S M S Q K D F V A L A P E G G D T L Y A Q L Q L W K T  
UniRef90\_Q5TW03 F P E N G A Q L A A L P L E E F V R R I P Q G G D K L H G Y L D L W K Q  
UniRef90\_K7FP28 F D I D G E H L C S M T L H E F T Q A A G T A G O L L Y S N L Q H L K  
UniRef90\_UPI0002659C41 W L I S G K Q L G Q L T H E Q F L E K V P Y D S D L M W T H L E L L R K



1 10 20 30 40  
UniRef90\_B3RIG6 D P R N W T Q A H V K Q W L L W S I D E F N F N D L S T N N  
UniRef90\_V8P6N5 L Q P I Y W S R D D V G Q W L K W A E K E F S L R T I D S N N T  
UniRef90\_B4LJ55 G L P I D P R D W T R A D V V W K W L I S M A V S E G L E V T P F E Q K  
UniRef90\_F6PYN8 L H P Q Y W S K F Q V W E W L Q Q L V N Q L D A N C I P F H D  
UniRef90\_A4PIG5 P W E W S E D G V F A W M S H V V N Q F D L D A S N L K N  
UniRef90\_H2YN27 V P T D L N S W T N S F V V Q W V Q Q W V A R E Y Q V P D S N L K N  
UniRef90\_W5LZE4 T Q P Q Y W T K F Q V W E W L Q Q Q T V H Q I D A T S I P F Q N  
UniRef90\_B4NAS5 L Q I S P D P N A W T S A Q V H A W L R S T L A Q F K L P P V N E L Q  
UniRef90\_V9LGE7 P S W L S I L P E E W S N R H V W E W L Q Q F C Y C H K L N C I P F A Q N  
UniRef90\_W5LE55 L H P Q Y W S K Y Q V W E W L Q Q Q M M H Q I D A T A I P F F N N  
UniRef90\_A0A034W792 L Q I S Q D P C D W S V S Q A H S W L R S T V A Q F K L P E I E E A K  
UniRef90\_V4A795 L W T K A H V V Q Q W L Q H W A L K Q Y S L R D I E E A K  
UniRef90\_H3AM60 H P Q Y W T K F Q V W E W L Q H I L M Q L D A N C V P F Q D  
UniRef90\_UPI0003F05BFA P Y L W T Q E H V L S W L R Q C M Y E I D Y S D I Q M Q D  
UniRef90\_H2YN34 V P A D P L L W N P C H V V T S W L E W V V S E Y G L H H L D L T K  
UniRef90\_K1Q5D1 L E I C P D P T K W T N Q E V N K W I V W Y G D Q F G A P Q G L T D R  
UniRef90\_U5EVB3 L D I P S D P Q K W T S N Q V Q S W L K S T L K Q F K L T H Q P M E N  
UniRef90\_F1SGV1 Q C R L G I P K N P W L W T E S Q Q R A W L S W V S A K F G L S R L D D T R  
UniRef90\_B7P0W7 R L P A D P R Q W D S S D I R A W L S W V S A K F G L S R L D D T R  
UniRef90\_O97145 L N L I P N V Y C W T P E D V Q K W L L C V A N R F E L G E L E M G H  
UniRef90\_V4AB83 S D P Q L W N S W H V V Q Q W L E W A V L E Y G L R G V D A T R  
UniRef90\_UPI000443CA61 H F P Q D P S L W S E W V S H W L D W C Q A E F G L H G S E L R G  
UniRef90\_H2YBF1 L P K D P M Q W S E V H V M T W V R D L S I T F R F E V D L S L  
UniRef90\_UPI00046B2038 P E H W T Y R R H V W E W L Q A C C D Q Y R L S C L S L C H  
UniRef90\_C3Y5J1 S H P M N W S Y Q Q V R G F L T W A V A E Y E L P P I N F E H  
UniRef90\_H2RXQ9 S Q P Q F W T K F Q V W D W V Q Q V M H Q I D T S S F P F Q S  
UniRef90\_V5GLW6 V P C D P Q E W T S S I K S W L E W S S R K F S L E G P P D P E K  
UniRef90\_G7YXA7 V P R D P A E W N A T Q V I M W I N W A F K E F R I E G I K G E K  
UniRef90\_Q4H3K3 V P S E L S S W T N S H V V Q W L T W V V H E Y K L Q K V D C S R  
UniRef90\_G3PC15 P Q L W S K F Q V W E W L Q Q V M N Q I D A S S V P F Q N  
UniRef90\_F4X1G4 M H W A I R E F S L E G V A M Q Q  
UniRef90\_F6VDI0 P D M W S Q Q Q V M D W T S Y N V N K W D A S T M D T S Q  
UniRef90\_UPI000359A82B L N V P Y D P M L W D V E N V Q T W V S W V C Q K N F S N I S A Q F  
UniRef90\_A8WFJ9 L G L P N D F Y L W S E H G A R W I N E M C M K N F L Q P P R N  
UniRef90\_UPI0003DE8ACC V M V P S D P S E W N S N H I T S W I S W C T K A F S I L K P I N M I K  
UniRef90\_H3B3L6 V Q L P M D I T G Q P L W S K M D I V L E W L S Y H I N K Y D A S T I N F S F  
UniRef90\_H2LZA8 R L P A H L R L C G F F L I M E D I Y Q R K R W E K Q K A L S I L L D S G  
UniRef90\_UPI000329954D Q V P F D P H A W N T E H I N S W V K W L T K Q F K I L P E P D I S R  
UniRef90\_UPI00046B75C9 R E Q P S Q F W S K A Q V L D W I S F Q V H K F D A S T I D F A S R  
UniRef90\_V5H5Z6 L G I P S R D P S Q W D A S V L S W L R W T S R Q F G L P E P V A E Q  
UniRef90\_I1FSA3 H L P S D P T Q W N E S N V F T F S Q W T S A E F Q L P I N L I Q L  
UniRef90\_K7IVQ8 P V M L P S D P S E W N S S H V S S W L S W C S Q A F S L K P V P L G S  
UniRef90\_Q7QG46 L P N D P H Q W N A E H V S T W I S W V S K N F D L P P L E P A R  
UniRef90\_W5N3W7 S A Q L P A E L N T D P Q F W S K Q N V L E W I S Y H E T K F D A S T L N M A Y  
UniRef90\_F6ZTC4 P Q S W T R A Q V L D W I G Y Q V N K Y D A N A I D F S R  
UniRef90\_UPI00022F3F88 Q P Q F W S K T Q V L D W I S Y Q V N K Y D A S S I D F S R  
UniRef90\_E9ILX0 V P S D P S K W T S S H I N E W I S W C S R T F A I R G S I A T I  
UniRef90\_UPI0003C27E95 P T W F S E L P H L W S K A Q V L E W I S Y H V N K Y D A S A L D F S C  
UniRef90\_U3ICL2 D P A D W S P A N V Q K W I L W T E H Q X X X X X X X X  
UniRef90\_Q0IF58 V P T N P Q E W T S E H I A S W V Q W L S K K F Q I P S L I E P A R  
UniRef90\_P29776 P V E V P V D P H A W T P E D I A S W V R W A T R K F K L P E P D I D R  
UniRef90\_B4N0R1 L P V D P H A W S T E D I A Q W V K W L T N K C E I P E P D I Q R  
UniRef90\_UPI0003F07F87 G I P P D P N T W S V E H T A T W I R W L N D V C C L E N T V V T T  
UniRef90\_G6DRJ0 R A R I P E D P M Q W S V Q H V R L W I Q W A V R Q F S L M G L K L A D  
UniRef90\_C3YCW3 L Q I P L D P L S W L R D V R T W L R H L A A R H Q I L T V D L R L  
UniRef90\_T1EUD7 T I Q V A N N L P T R L E D W T C D H V R L W L R W A S S H F P F D D P H S D D  
UniRef90\_UPI0004576300 S T D P S Q F W G E E V L D W L S Y Y I N Q Y D T S T I L S P  
UniRef90\_E4YD94 T C N V P S G F E I H P S L W T A G D V I Q W A N W I K D E F R L D S F N I N  
UniRef90\_L8YH03 V P S D P S E W N S S H I A S W I Q F C C D Q Y K L D C I P F Q E  
UniRef90\_U3KIY9 W L G E Q P Q L W S K A Q V L D W V S Y Q A E K H R C D P I D L S R  
UniRef90\_E2A1Q7 V P S D P S E W N S S H I A S W I S W C S R T F S L R P I A A I  
UniRef90\_A5PJQ8 W L G E Q P Q L W S K A Q V L D W V S Y Q A E K H R C D P I D L S R  
UniRef90\_UPI000258E033 V P S D P S E W N S N H I A S W I S W C S R V F T V P P D P A E  
UniRef90\_G1KCK4 P H C W S R S Q V L E W I S Y H V N K Y D A S A I D F S C  
UniRef90\_J7HHE3 I K E F S L E G V S V I G N  
UniRef90\_F0ZGY1 K D P N D W S I E D T K S W L H F K K R S P Q L K D V D L T K  
UniRef90\_E5T1F4 P V E W S H I K S A S D I W S I K G V S L A G I I E H  
UniRef90\_U3IA46 P Y F W T K V Q V L E W I S Y H V N K Y D A S I I D F S C  
UniRef90\_H2YIJ4 L S Q D P S T W T R N H V K E W L V S A T K E Y N F Q D L D L K K  
UniRef90\_A0A044TWA7 L S K E P Q E W T M G D V I A W L H V A K R N D I P D L E M Q K  
UniRef90\_V4CJP2 R K H P E N W N S E E V L D W L I Y T G Q E K G L N M S E L A F  
UniRef90\_C3Z643 C W L P R D P F T W S P W H V K W W V Y A M S R V Y S L S V L P M  
UniRef90\_Q91921 E F G L T D I N V N S F  
UniRef90\_U6DF84 P A W F S E L P Y F W S K A Q V L E W I S Y H V N K Y D A S A I N F S C  
UniRef90\_UPI00035978E2 V S L D V S A W T T D H V K E W L Q T G I S E Y N L T G L D I E T R  
UniRef90\_K0A259 W A V R E Y S L Q D V H I V Q  
UniRef90\_T1G2P5 L P D P L D W S M S D V Q T W L I W V T L E L S L Q S F D L T K  
UniRef90\_UPI00034F7835 L P L D P R S W C R A D V G A W V S R R G G L P E R  
UniRef90\_T1JXG1 S K P P D Q W T S E D V W H W I S W A G R N I D V D D V P L A Y  
UniRef90\_V9KRD6 W L Q L D P R L W S R L Q V L E W L A Y H V H K Y D A N N I D L S Y  
UniRef90\_T1KQD6 K Y P Y L W D Y V D I N K W L D W L E K E F L P P I N K S Y  
UniRef90\_C4QKE3 D V I M W L N W A C K Q F R I E G L K G E K  
UniRef90\_F1KTA1 K E P Q D W S M E D V I A W M L D V A K R N R I P D L E M Q K  
UniRef90\_R7TIX5 P E L W S V D D V I A W I Y E V A D K Y R I S P L Y A E N  
UniRef90\_E4XVY9 P R D P V N W S A Y Q V S Q W V D W V R Q E F S I H G Y V I Q M  
UniRef90\_W5UCU0 N P Q F W N R R N V L D W L D F H E S K Y D A T L L N L D C  
UniRef90\_R4I4A8 W V M K E F G I E E M E V G  
UniRef90\_E0VBI4 R K D L K D W T S N D V M H W I A N V S Q K F P Y E F I N A N A  
UniRef90\_Q54I31 K D L K D W S I E D T K E W I E F K K R G P N L E N V D F S R  
UniRef90\_W5KND5 N P Q Y W T K R N V L D W I E F H V E G F D A S L L N M E F  
UniRef90\_Q4TA74 P Q Y W T V E N V L E W I S D H S N K I D A H S L S L A L

UniRef90\_B3RIG6 F E M N G K Q L C Q L R R C D L M A L S P F A G D I L Y K H L Q L L L

UniRef90\_V8P6N5 F E M N G K A L L L L T K E D F R Y R S P H S

UniRef90\_B4LJ55 F P M N G K A L C L M S L D M Y L C R V P V G G K M L Y R D F R

UniRef90\_F6PYN8 F D I A G E H L L N M T L P D F T Q A A G S A G H I L Y N N L Q N L K

UniRef90\_A4PIG5 L H I A N G K E L Q M F S Q D E F F K K V P Y A G N V L W A H L Q F L S T

UniRef90\_H2YN27 Y K T T G G A E L R K M S L Q D F F K K L T S S S A D I E Y S H L Q Y L L K

UniRef90\_W5LZE4 F D I D G R Q L C A M S F Q D F T R A A G S V G P L L Y Q S L T E L R

UniRef90\_B4NAS5 F S E D G T A L A L L S E E E F M R R M P E S G S T L H A Q L E I W K

UniRef90\_V9LGE7 F N V N G R Q L C S M T Q S Q F I S A A G I Y G E I L Y Q S L H Q

UniRef90\_W5LE55 F D L D G R Q L C S M T Y Q D F T R L T G S F G P I L Y Q S L T D L S Q

UniRef90\_A0A034W792 F P E N G A A L I L L S E E E F K R R V P E S G S D L Y A Q L E V W R

UniRef90\_V4A795 F S T D G G V K L S Q M S K E D F H E M S P Y N A D I L M K H L G Y L R Q

UniRef90\_H3AM60 F D V D G E Q L C N M S L Q E F S Q A A G P V G Q L L F S N L Q S L R

UniRef90\_UPI0003F05BFA F N L T G Q Q L M Q M T K D D F M Q N A T K N G A I L Y E K L

UniRef90\_H2YN34 F N V S G G T E L C R R M N V E E L R Y T T R Y N S E V L V Q H L K F L K Q

UniRef90\_K1Q5D1 F R M S G G E E L C R M L T L E E D F R K Q K S K D A G P N F H A Q L D V W K

UniRef90\_U5EVB3 F P E N G E Q L I L L S E E D F V G R M P Q A G S T L H A Q L E V W K

UniRef90\_F1SGV1 F G M T G Q V L C A L L G K E S D F L E L A P F V G D I L W E H L Q L Q V Q E

UniRef90\_B7P0W7 F P D N G P A L C A L T L S D F R E R T D R S A D I L N T F L A S R K

UniRef90\_O97145 F Y I N G P T L A T L Q D V D F R H R A P K C G D I L Y S V V C L L K

UniRef90\_V4AB83 F H L D G R Q L C R L S R D E A F L C R L A P Y E A D V L F T H L S Y L R Q

UniRef90\_UPI000443CA61 L Q G S Q L C G L S R D E A F L G L M A D C G E I L W E H L E T L R

UniRef90\_H2YBF1 F V M N G K G V C C L V S L D G F R F R S P A G G A L L Y T D L Q Q

UniRef90\_UPI00046B2038 L N V S G G L Q L C C M S R E E D F L E T A G V S G E H L Y L L Q S I R T Q

UniRef90\_C3Y5J1 F R V N G A K L C C M M S R E E F S L L C P N Y G D I L Y

UniRef90\_H2RXQ9 F D M D G H Q L C C N L S H Q D F V R A A G S V G S I L F Q S L T E L K

UniRef90\_V5GLW6 F P K T G A E L C D L S R T E F F E T R A S R S G T L L A K Y I A H L L R

UniRef90\_G7YX7 F D M P G T Q M L E L T A A D W R R L V P N V S V N F L T H L E L L K R

UniRef90\_Q4H3K3 F K I T G I D L S K M T V K D F K N L T S K D A D V F F S H L Q Y L K

UniRef90\_G3PC15 F D M D G H Q L C G L S Y Q D F I H A A G S A G P V L F H S I T E L L K

UniRef90\_F4X1G4 Q P M T G K Q I C A M G K S F L A R A P F M G D L W E H L E L L Q K

UniRef90\_F6VDI0 C E M D G Q R L C Q L S K E D M T R I F G G L G D K L Y G H L C Q L R

UniRef90\_UPI000359A82B H R M N G R V L C S L Q A S D F A S Y G R V G E S L S T E L E L W K

UniRef90\_A8WFJ9 C S I T G I D L L G M S Q K D F E M L L P A G G D T L H A Q L Q V W K T

UniRef90\_UPI0003DE8ACC F P S T G K E L L K L S S D Y W E T I P G G K I L A R H L G Y L Q F Q

UniRef90\_H3B3L6 C D M D G T T L C Q L A C K D L V A I F G P L G E Q L H Q H L R

UniRef90\_H2LZA8 F R V S R T L F C L Q Q N F L H L C P S A G D V L Y E L L Q H I L K Q

UniRef90\_UPI000329954D F P T T G S E L C E L S R A D F W V C A G S G G I L L A K H F A L

UniRef90\_UPI00046B75C9 C D M D G A A L C S C A P E E L R R V F G P L G D Q L Y A Q L

UniRef90\_V5H5Z6 W D M P G S S L V T L S E E D F T R R A P Q V

UniRef90\_I1FSA3 F Q I N G L Q L C S F T Q Q Q F H G L A K E S G H T L F T F L E K I K

UniRef90\_K7IVQ8 P S T T G R D I L D W S A Q A W K E R C P G S G R V L A R H L G Y L R L Q

UniRef90\_Q7QG46 F P Q A G S E L A P F T K A D F W V C A G S G S G N T L A K H F A H L V R

UniRef90\_W5N3W7 C T L E G S V L C Q M S R D T M L S M F G P L G D R L Y H S L Q D L K

UniRef90\_F6ZTC4 C N M D G A M L C C R Y G R E E L R L V F G S P L G D E L Y S Q L Q E L

UniRef90\_UPI00022F3F88 C D M D G A T L C S C A L E E L R L V F G S L G D Q L Y A Q L R

UniRef90\_E9ILX0 L P S T G K E L L Q L T L Q N W Q D I G G S E G G L A R H L A H L R L Q

UniRef90\_UPI0003C27E95 C N M D G L T L C H C T Q E Q L R N I F G P L G D E L Y N R L H E L S R

UniRef90\_U3ICL2 X E L S G K D L C A M S E Q Q F C Q R S P V C G D V L H A H L D I W K

UniRef90\_Q0IF58 F P N G G V E L A K F T K A D F W V C A G S G G N T L A K H F A H L L Q

UniRef90\_P29776 F P K D A Q E L C D L S R A D F W V C A G S G G M L L A Q H F A L

UniRef90\_B4N0R1 F P K T G A E L C E L S R A D F W V C A G S G G I L L A K H F A Y S L Y Q

UniRef90\_UPI0003F07F87 L G I D G A T I C S M T E Q E F S R K F G D N A D V I T F R H L Q F W K T

UniRef90\_G6DRJ0 W S L T G A E L C E V T N V E F K

UniRef90\_C3YCW3 F H M N G R G M C L M N L Q G F E Y R V P V N G H I L Y E D F

UniRef90\_T1EUD7 I N V T G V E V C C Q W Q L K D A Q V L A P D V N N L F W T H I Q L L K K

UniRef90\_UPI0004576300 S D T N G R H L C E M S F E M F I G T F G H L G E E L Y R S L Q N L K K K

UniRef90\_E4YD94 N I D G R E L L T L S R D E F F L Y L W P V G D I P W E H I N F L K T

UniRef90\_L8YH03 F D V S G E H L C S M S L P D F T R A A G T A G Q L L Y S S L Q Q L K

UniRef90\_U3KIY9 E N I N G L Q L C N M T Q E Q F V D A A G L C G E Y L Y F L Q N C R

UniRef90\_E2A1Q7 L P T G K E L L K L S R D W Q K I S G T E G R L A R H L G Y L H L Q

UniRef90\_A5PJQ8 C E L D G A A L C R C A P E E L R L L F G P L G D Q L Y S Q L

UniRef90\_UPI000258E033 F P S T G K E L L K L S S D F W R G I S G P L G D L A R H L G E I L Q L Q

UniRef90\_G1KCK4 C N M D G Y T L C Q Y S R D Q L G I F G P L G D E L Y E R L H E I

UniRef90\_J7HHE3 F R M A G R E L C S L S K L E F L G R A P F M G D I L W E H I D M L R K E

UniRef90\_F0ZGY1 F E W S G R D Q L M A L S L E E D F Q S M S P F G L S L Y R N L H S L S K

UniRef90\_E5T1F4 Y A L S G R D L C A L T R E E F L N R S P F V G D I L W E H L D T M Q K

UniRef90\_U3IA46 C N M D G H T L C H C S R D Q M R H I F G P L G D E L Y

UniRef90\_H2YIJ4 F S T D G Y K L C Q M T M R D L C R V T S K N A E V I L N K L S V L K Q

UniRef90\_A0A044TWA7 F N C T G M L L I Q M R E T D F Q Q R D A V Y G S L Y A E F R K L F E E

UniRef90\_V4CJP2 Q N I C G A E L C R L S M D E F R N L E P K Y G K S L Y E M L R N L L

UniRef90\_C3Z643 F E M N G R G L C L L S L P G F M Y R E Q T G G Y L L Y S D L R Y R L

UniRef90\_Q91921 L G I T G R E L C N L N Q E D F F Q R V P R G E I L W Y H L E L L R K

UniRef90\_U6DF84 F N M D G K E L C K M N K E D F L R A T S Y N T E V L L S H L S Y L R

UniRef90\_UPI00042BCA38 C N M D G Y T L C H C T P E Q L R L V F G P L G D

UniRef90\_UPI00035978E2 F S V D G A R L S Q M S W E E L Y N L A P D N V H V L Y P Y L N Y L R K

UniRef90\_K0A259 F N M D G K N L C R M P R E E F C R L T E F N A G V L L S H L N F L K Q

UniRef90\_T1G2P5 V S Y T G R Q L I E R G R S F L K L L P E S S D V V W E H F Q I L V K

UniRef90\_UPI00034F7835 F P M N G K A L C L M S R D M F A S R V P N K G F E L H Q D F R R L

UniRef90\_T1JXG1 A N M N G Q Q L C S M S K I D F I S M N P K Y G A H I Y D T L N Q L

UniRef90\_V9KRD6 C D M D G A T L W G L S G N Q D L V V I F G P L G E E L Y R S L H S L

UniRef90\_T1KDQ6 F P D N G A Q L C S M N Y D F A N I V K E S T K I L F D N L H L K R

UniRef90\_C4QKE3 F N M P G S R M F V L T P D D W R R L V P N A N V N F L T H L E L L K R

UniRef90\_F1KTA1 F S C T G P L L L M T E Q N F K D R D P N Y G S L L F S E F R K L V T E

UniRef90\_R7TIX5 F N C D G K I L C S M S V E E F E A C D S K N G R R F H D C Q D L R R

UniRef90\_E4XVY9 D G I D G L Q L S R M T K N D F L N W P P F V G E I G W E N L H W L

UniRef90\_W5UCU0 C N M D G A V L C S L S R D A M M A A F G Q L G E T L H Q S L E N L K H K

UniRef90\_R4I4A8 H I P G R Q L C G F S Q E E F L Q R V P S G E I L R S H L E L L R K

UniRef90\_E0VBI4 F N V D G K T L L S L T K E F L E S D E K Y G N L L Y H A L H

UniRef90\_Q54I31 F E W D G E Q L S L F S M S D F Q R M S P Y G V A L Y R N L

UniRef90\_W5KND5 C N M D G T V L C Q L S R E T M T G M F G L G G E R L Y Q S L E V L K

UniRef90\_Q4TA74 C S M N G Y S L C Q M A Q D Q M M E V F P Q L G S H L Y Q S L Q E H R T K

UniRef90\_F1S5B5  
UniRef90\_E7FB26  
UniRef90\_UPI00045744A7  
UniRef90\_K1PHW2  
UniRef90\_X1X3P4  
UniRef90\_E3MCE1  
UniRef90\_J9KXD1  
UniRef90\_K1QAA0  
UniRef90\_E5S0I7  
UniRef90\_T1EQF6  
UniRef90\_T2MDI3  
UniRef90\_UPI00038702E1  
UniRef90\_M3ZK83  
UniRef90\_G6DN22  
UniRef90\_J7HI13  
UniRef90\_T1JI31  
UniRef90\_W2TRH7  
UniRef90\_I3NWL8  
UniRef90\_U6NZN4  
UniRef90\_UPI0002A4C441  
UniRef90\_F4Q269  
UniRef90\_G1S8Y7  
UniRef90\_B7P7R0  
UniRef90\_G6D1A6  
UniRef90\_G3PCW2  
UniRef90\_Q66P11  
UniRef90\_H3FE51  
UniRef90\_A8X4A2  
UniRef90\_T1JE16  
UniRef90\_UPI00034F5E89  
UniRef90\_W4ZIS6  
UniRef90\_F4PR28  
UniRef90\_U6IDF6  
UniRef90\_C3Y026  
UniRef90\_L8GJR5  
UniRef90\_E9GUC5  
UniRef90\_F4PVQ3  
UniRef90\_UPI000328FFB5  
UniRef90\_L1K1X7

1                    10                    20                    30                    40

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



