



QUERY UniRef90\_W5ND59 UniRef90\_UPI00032AD850 UniRef90\_V8NVL2 UniRef90\_V4ATW6 UniRef90\_U3JC12 UniRef90\_D3LWV7 UniRef90\_A4I160 UniRef90\_H2MQ94 UniRef90\_O96085 UniRef90\_V2ZJ67 UniRef90\_H2M3L4 UniRef90\_W4E2T5 UniRef90\_D5GS31 UniRef90\_B3L3R4 UniRef90\_UPI000248C982 UniRef90\_UPI00047DE5F2 UniRef90\_UPI000310EFED UniRef90\_H2MCU7 UniRef90\_H3SJK0 UniRef90\_E9HFQ8 UniRef90\_D3UQZ1 UniRef90\_B1KTC8 UniRef90\_W6SI20 UniRef90\_R6CZ59 UniRef90\_UPI00047CE7F5 UniRef90\_NOC1F3 UniRef90\_UPI00028850B2 UniRef90\_UPI0003B6402E UniRef90\_F0SX85 UniRef90\_G7W7W2 UniRef90\_D0WMC8 UniRef90\_A9UZ44 UniRef90\_B7ISX4 UniRef90\_B1R1S6 UniRef90\_H3A926 UniRef90\_S9XEA7 UniRef90\_Z9JR06 UniRef90\_E1L5N9 UniRef90\_L1QC51 UniRef90\_R4KFF9 UniRef90\_E8SIP6 UniRef90\_UPI0003687272 UniRef90\_UPI000349E8BA UniRef90\_F2JP11 UniRef90\_C8W1J2 UniRef90\_UPI00047961D4 UniRef90\_J3EQ30 UniRef90\_K0YTZ5 UniRef90\_UPI00037BFA7C UniRef90\_UPI0002E393A3 UniRef90\_B4U510 UniRef90\_E1ICA8 UniRef90\_UPI000371780B UniRef90\_D8GJ81 UniRef90\_T0IQ96 UniRef90\_G2KUJ9 UniRef90\_UPI00047DC617 UniRef90\_E0NGE3 UniRef90\_U2TIR7 UniRef90\_H1CZV3 UniRef90\_E3B7F9 UniRef90\_R7KAY0 UniRef90\_F4EG06 UniRef90\_C9KMW8 UniRef90\_E6MGL7 UniRef90\_R5IH47 UniRef90\_UPI000360F914 UniRef90\_UPI00046F8A9B UniRef90\_UPI00046FF162 UniRef90\_UPI0003B5CA25 UniRef90\_Q1ATZ8 UniRef90\_A0A033UAW0 UniRef90\_S2ZQH4 UniRef90\_R7AUUV4 UniRef90\_R6AWZ6 UniRef90\_K0AZZ3 UniRef90\_A7NHN4 UniRef90\_UPI0002F63948 UniRef90\_R7Y1V5 UniRef90\_R6CGZ7 UniRef90\_G9ZQ67 UniRef90\_W4FC85 UniRef90\_UPI00030A8A6C UniRef90\_UPI0003B3F86C UniRef90\_D7CKY8 UniRef90\_F6STX6 UniRef90\_A8LE00 UniRef90\_C9ADD6 UniRef90\_N1ZWJ7 UniRef90\_V7HZD3 UniRef90\_UPI00037C7D7F

50 60 70 80

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

QUERY	90	100	110	120
UniRef90_W5ND59	L K G S R G F F N L L I D Y L A T I Q K Y S G R E S S V P F F E H Y V R L K S S			
UniRef90_UPI00032AD850	L K G G Y K F F A D L L D Y I K A L N R N R N S D R S T S V P M T V D F I R L K S S			
UniRef90_V8NVL2	L K G G Y K F C A D L V D Q H L K N I S R N S D R F C S M K V V D F I R L K S S			
UniRef90_V4ATW6	L K G G Y K F F T D L L D K I K A L N R N S S E E S V P L A V D F I R L K S R			
UniRef90_U3JC12	L K G G Y K F F A D L L D H I K A L N Q N G D K S V P V T V Q F D F M S C S S Y			
UniRef90_D3LWV7	L K G A V T F F T D L L A R T I E A P V Q F D F M S C S S Y			
UniRef90_A4I160	L K G G Y R F C T D L V E H I K N L S R N S E R F I I S M R V D F I R L K C			
UniRef90_H2MQ94	L K G G Y Q F C A D L V D R I K A L S C N S D H T L P M R V H F I R L K S S			
UniRef90_O96085	L K G S R S F F T S L L K Y L D R I H N Y Y A D A S T N S Y R E H Y V R L K S S			
UniRef90_V2ZJ67	L R G S F T F M A D L L K Y I K A L N Q N S D K S V I T V P P L T V D F I R V K S S			
UniRef90_H2M3L4	L K G G Y K F F A D L L D Y I K A L N Q N S D K S V V I T V P V E M D F M A V S S Y			
UniRef90_W4E2T5	L K G G Y Q F F T D L L D F I K N Y N A S A A R S F Q M Q V D F I R L K S S			
UniRef90_D5GS31	L K G S R G F F S A L L K Y L N R I H N Y S S T E S A K H L Y V E H Y V R V K S S			
UniRef90_B3L3R4	L K G A F I F M A D L V K Q I T I P L E L D F M A V S S Y			
UniRef90_UPI000248C982	L K G A V M F M T D L A Q S I D L P L D M D F M A V S S Y			
UniRef90_UPI00047DE5F2	L K G A V V F M A D L V R Q I D I P C E M D F M A V S S Y			
UniRef90_UPI000310EFED	L K G G Y K F C V D L V E R F I K T L G R N S N R Y L E T R V E F I R L K S S			
UniRef90_H2MCU7	L K G A F V F M A D L V K R I N S L N R N Q G E R S T V P L E L D F M A V S S Y			
UniRef90_H3SJQ0	L K G G Y K F Y T D L I D K I N S L N R N Q G E R S V P L S V D F I R L R S			
UniRef90_E9HFQ8	L K G A T P F M T D L L K R V D T Y L E M D F M D V S S Y			
UniRef90_D3UQZ1	L K G S V P F M A D L L K R I T I P C T M D F M A V S S Y			
UniRef90_B1KTC8	L K G S V P F M A D L M R S V D C H A R I R E I T I P V T M D F M A V S S Y			
UniRef90_W6SI20	L K G S V P F M A D L M R S V D C H A R I T L P I R V E F M S V S S Y			
UniRef90_R6CZ59	L Q G S F V F L A D L V R Q I V D T D I E L D F M L V S S Y			
UniRef90_UPI00047CE7F5	L K G S V P F M A E L I K H I P C S M D F M S V S S Y			
UniRef90_NOC1F3	L K G S V M F M A D L M K E I L K R E I K L P L R Y D F M A V S S Y			
UniRef90_UPI00028850B2	L K G A V M V M A D L A R A L S I P L E M D W M A V S S Y			
UniRef90_UPI0003B6402E	L K G A V M V M A D L A R A L R E I K L P L R Y D F M A V S S Y			
UniRef90_F0SX85	L K G A V P F L A D L I R E I K L P L R Y D F M A V S S Y			
UniRef90_G7W7W2	L K G A V P F M S D L I R E I K L P L R Y D F M A V S S Y			
UniRef90_D0WMC8	L R G A V M T M A D L S R K I R I P L E M D W M A V S S Y			
UniRef90_A9UZ44	L K G G H Q F F A D L V D R I K M L N E S G P L S L P L R I D F I R A K S S			
UniRef90_B7ISX4	L K G A M P F M A D L L K R T D T Y L E M D F M A V S S Y			
UniRef90_B1R1S6	L K G S V V F T A E L I K N I D I Y C E L D F M A V S S Y			
UniRef90_H3A926	L K G G Y K F F T D L L E Y M R V L N Q N R D K S M P L T M D F I R L K S S			
UniRef90_S9XEAT	L K G G Y K F F A D L L D Y I K A L N R N S D R A I D L P V E M D W M A V S S Y			
UniRef90_Z9JR06	L K G A V M V M S D L A S V D V S F D F I S C S S Y			
UniRef90_E1L5N9	L K G A I V F Y T D L A R T I D D N I T I P C E I D F M A V S S Y			
UniRef90_L1QC51	L K G S V I F A A E L I K I D V R I D F M A V S S Y			
UniRef90_R4KFF9	L K G A V V F M A D L A R A M N D L P L A I D F M D V S S Y			
UniRef90_E8SIP6	L K G S V L F M T D L I K H I R A I D V P V M I D F M A V S S Y			
UniRef90_UPI0003687272	L R G A V M F M A D L A R A L H S L P V A M D W M A V S S Y			
UniRef90_UPI000349EEBA	L K G A V M V M A D L A R A L H S L P V A M D W M A V S S Y			
UniRef90_F2JP11	L K G S N I F T S D L V R K I N L P L K M D F M A V S S Y			
UniRef90_C8W1J2	L K G A A V F L A D L V R Y I S I P V Y F D F M A V S S Y			
UniRef90_UPI00047961D4	L K G S V M F L A D L M K E I D I P C T M D F M A V S S Y			
UniRef90_J3EQ30	L K G A M L F M A D L V R Q I D T H L E M D F L D V S S Y			
UniRef90_K0YTZ5	L R G A V M V M A D L S R K L H T P L E M D W M A V S S Y			
UniRef90_UPI00037BFA7C	L K G A V M V M A D L A R A V H S P V K M D W M A V S S Y			
UniRef90_UPI0002E393A3	L K G A M L F M A D L V K R M D I H L E M D F M D V S S Y			
UniRef90_B4U510	L K G S V P F M A E L M K H I D T H R A I D L P L T F D F I A V A S S Y			
UniRef90_E1ICA8	L K G C T M F M M D L A R A I D L P L T F D F I A V A S S Y			
UniRef90_UPI000371780B	L K G S V P F L A E L T K H I D T H I E L E F M I V S S Y			
UniRef90_D8GJ81	L K G S V P F M A D L L K H I D T H I E L E E I T I P C S M D F M A V S S Y			
UniRef90_T0IQ96	L R G A V I F M A D L A R A I K L P V A I D F M A V S S Y			
UniRef90_G2KU99	L K G A V P F M S D V T K R M N I Y M D L D F I D V S S Y			
UniRef90_UPI00047DC617	L K G A M L F M A D L T K R I D T Y I E M D F M D V S S Y			
UniRef90_E0NGE3	L T G A M F F T D V V R E F D G Y A Q I D F I D V S S Y			
UniRef90_U2TIR7	L R G A F V F T A D L V R A I D I P C S V D F M A V S S Y			
UniRef90_H1CZV3	L K G A M P F L C D L M R S I D I P V T L D T M C V S S Y			
UniRef90_E3B7F9	L K G A I L V M A D L M R A L L P G S V P M D W M A V S S Y			
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QUERY  
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UniRef90\_V7HZD3  
UniRef90\_UPI00037C7D7F

	F	G	E	R	L	K	A	V	G	170	P	K	S	M	R	I	A	T	L	V	E	K	R	T	D	R	S	N	S	L	180	K	G	F	V	I	E	200										
UniRef90_W5ND59	L	L	E	L	L	K	Q	Y	N	P	K	M	I	V	K	V	A	S	L	L	V	K	R	T	P	R	S	V	G	Y	R	P	D	D	Y	A	G	G	F	F	F	E	E	V	I	E	D	
UniRef90_UPI00032AD850	L	L	L	S	S	I	K	Y	Q	P	R	M	I	V	K	V	A	S	L	L	V	K	R	T	P	R	S	V	D	G	F	R	P	H	Y	A	G	F	F	F	E	E	V	I	E	D		
UniRef90_V8NVL2	L	L	L	D	S	I	K	K	Y	Q	P	R	M	I	V	K	V	A	S	L	L	V	K	R	T	P	R	S	V	D	G	F	R	P	H	Y	A	G	F	F	F	E	E	V	I	E	D	
UniRef90_V4ATW6	L	L	E	L	L	K	Q	Y	N	P	K	M	I	V	K	V	A	S	L	L	V	K	R	T	P	R	S	V	G	Y	R	P	D	D	Y	A	G	G	F	F	F	E	E	V	I	E	D	
UniRef90_U3JC12	L	L	L	S	K	I	K	D	K	K	P	R	M	I	V	K	V	A	S	L	L	V	K	R	T	P	R	S	V	Q	P	G	Y	R	P	D	D	Y	N	G	F	F	F	E	I	I	P	D
UniRef90_D3LWV7	L	L	V	P	L	L	K	D	R	K	G	A	R	M	I	V	K	V	A	S	L	L	V	K	R	S	R	R	S	V	E	V	P	V	P	D	D	Y	N	G	F	F	F	E	I	I	P	D
UniRef90_A4I160	L	L	L	S	Q	L	E	K	Y	K	P	K	M	I	V	K	V	A	S	L	L	V	K	R	S	R	S	V	S	N	Q	Y	R	P	D	D	Y	N	G	F	F	F	E	I	I	P	D	
UniRef90_H2MQ94	L	L	L	K	H	V	E	K	S	F	R	P	K	M	I	V	K	V	A	S	L	L	V	K	R	V	Q	L	L	S	P	T	C	V	P	D	D	Y	N	G	F	F	F	E	I	I	P	D
UniRef90_O96085	F	C	D	Y	L	K	K	F	R	E	P	K	T	I	A	V	S	A	L	L	Y	I	K	R	T	P	L	W	N	G	F	K	A	D	F	V	T	G	G	F	F	F	E	I	I	P	D	
UniRef90_V2ZJ67	L	L	N	I	L	H	N	R	H	P	A	S	V	R	V	L	C	T	L	L	D	K	P	D	R	R	S	T	K	P	V	D	L	H	Y	A	G	F	F	F	T	E	V	I	E	D		
UniRef90_H2M3L4	L	L	L	S	L	L	G	E	C	H	N	A	K	M	V	V	S	L	L	V	V	K	R	T	P	R	S	S	G	Y	R	P	D	D	Y	N	G	F	F	F	E	V	I	E	D			
UniRef90_W4E2T5	L	L	I	D	M	L	G	E	R	N	A	A	K	M	V	N	V	V	T	L	L	F	D	K	P	S	G	R	A	V	N	L	E	A	Q	Y	T	G	G	F	F	V	I	E	D			
UniRef90_D5GS31	L	L	E	L	M	K	K	F	E	P	A	N	V	K	V	A	S	L	L	F	V	K	R	T	P	L	L	S	V	G	Y	R	P	D	D	Y	N	G	F	F	F	E	I	I	P	D		
UniRef90_B3L3R4	F	C	E	Y	L	K	K	R	F	E	V	K	T	I	A	I	T	A	L	L	F	F	D	K	P	L	W	N	G	F	K	A	D	F	V	T	G	G	F	F	E	I	I	P	D			
UniRef90_UPI000248C982	L	I	D	V	L	E	K	S	R	R	G	A	L	S	V	K	V	A	S	L	L	V	K	R	T	P	R	R	S	S	G	E	L	P	D	D	Y	N	G	F	F	F	E	V	I	E	D	
UniRef90_UPI00047DE5F2	L	I	D	V	L	E	K	S	R	R	G	A	L	S	V	K	V	A	S	L	L	V	K	R	T	P	R	R	S	S	G	E	L	P	D	D	Y	N	G	F	F	F	E	V	I	E	D	
UniRef90_UPI000310EFED	L	V	E	Q	L	K	H	T	R	E	A	A	S	V	K	V	A	S	L	L	V	K	R	T	P	R	R	S	S	G	E	L	P	D	D	Y	N	G	F	F	F	E	V	I	E	D		
UniRef90_H2MCU7	L	L	L	K	H	V	E	T	F	R	E	Q	A	K	M	V	K	V	A	S	L	L	V	K	R	V	P	N	T	A	E	S	L	T	D	Y	T	G	G	F	F	E	I	I	P	D		
UniRef90_H3SJQ0	L	L	I	E	V	L	Q	E	F	R	K	A	N	S	I	R	V	T	L	L	F	D	K	P	A	R	R	T	V	N	L	E	A	D	Y	K	G	F	F	V	L	I	P	D				
UniRef90_E9HFQ8	L	L	L	G	L	L	E	E	F	R	K	A	K	C	V	K	V	A	S	L	L	L	V	K	R	Q	P	R	A	S	N	G	Y	T	P	E	Y	C	G	F	F	E	V	I	E	D		
UniRef90_D3UQZ1	L	L	P	A	G	D	L	I	K	Y	R	K	A	K	S	V	K	V	A	S	L	L	V	K	P	A	R	N	V	A	I	E	A	D	Y	K	G	F	F	V	I	P	D					
UniRef90_B1KTC8	L	L	L	E	N	L	R	A	R	K	P	A	S	I	N	I	A	C	L	L	N	K	E	E	R	R	K	A	E	I	D	V	H	Y	L	G	F	F	N	V	I	P	D					
UniRef90_W6SI20	L	V	D	Y	L	K	K	R	R	N	P	K	N	I	R	I	A	A	A	L	T	T	K	P	A	R	R	K	V	K	D	A	K	Y	S	C	F	F	E	V	I	E	D					
UniRef90_R6CZ59	L	R	E	L	L	K	K	E	R	N	P	K	N	I	R	I	A	T	L	L	N	K	P	A	R	R	E	I	A	P	D	Y	S	C	F	F	E	V	I	E	D							
UniRef90_UPI00047CE7F5	L	L	P	S	L	Q	E	R	R	G	P	A	S	L	K	L	C	V	L	L	D	K	P	D	R	R	V	K	E	V	S	D	Y	T	G	G	F	F	E	I	I	P	D					
UniRef90_NOC1F3	L	C	N	L	F	K	E	R	N	A	A	S	V	E	K	I	A	T	L	L	D	K	P	E	G	R	R	L	V	D	S	I	E	A	D	Y	T	G	G	F	F	E	V	I	E	D		
UniRef90_UPI00028850B2	L	K	D	Y	L	L	Y	S	R	R	K	P	A	N	S	L	V	E	I	A	T	L	L	N	K	P	E	R	R	Q	T	S	I	K	P	K	Y	M	G	F	F	E	I	I	P	D		
UniRef90_UPI0003B6402E	L	R	E	N	L	T	T	R	G	P	A	S	L	V	E	I	C	A	L	L	R	K	P	D	A	A	K	V	S	E	V	D	V	K	Y	M	G	F	F	E	I	I	P	D				
UniRef90_F0SX85	L	Q	E	N	L	G	R	R	K	P	L	S	M	K	V	I	A	A	A	L	D	D	K	P	G	R	R	R	T	E	V	Y	P	N	Y	N	G	F	F	V	I	P	D					
UniRef90_G7W7W2	L	K	D	N	L	I	J	A	R	R	K	P	L	S	M	K	V	I	A	T	L	L	D	K	A	P	A	R	R	Q	V	D	Y	P	N	Y	N	G	F	F	S	I	I	P	D			
UniRef90_D0WMC8	L	R	S	N	L	L	S	R	G	P	E	S	V	R	I	A	T	L	L	R	K	P	E	A	A	K	V	A	I	D	V	D	Y	T	G	G	F	F	S	I	I	P	D					
UniRef90_A9UZ44	L	L	A	T	L	R	E	Y	E	K	A	K	S	T	L	R	V	I	V	T	L	L	V	K	R	T	P	L	S	N	G	Y	K	P	H	C	T	S	F	F	F	E	V	I	E	D		
UniRef90_B7ISX4	L	L	V	D	L	F	K	Y	R	K	A	K	S	I	E	V	A	L	L	N	K	P	A	S	R	R	K	V	D	L	K	A	D	Y	K	G	F	F	E	V	I	P	D					
UniRef90_B1R1S6	L	L	L	K	Y	L	K	A	R	K	A	A	S	I	E	V	A	L	L	N	K	P	A	S	R	R	K	V	E	L	P	V	K	Y	I	V	G	F	F	E	V	I	P	D				
UniRef90_H3A926	L	L	T	S	L	L	K	S	Y	K	P	K	V	I	K	V	V	S	L	L	V	K	R	K	S	R	S	C	L	Q	V	H	P	D	Y	V	V	G	F	F	E	V	I	P	D			
UniRef90_S9XEA7	L	L	L	S	L	V	K	H	N	P	K	M	V	K	V	A	S	L	L	V	K	R	T	P	R	S	V	S	G	Y	R	P	D	D	Y	N	G	F	F	F	E	I	I	P	D			
UniRef90_Z9JR06	L	L	L	S	N	L	R	S	R	G	P	R	S	V	E	V	K	E	V	C	T	M	L	R	K	P	D	A	A	R	K	V	E	I	D	V	R	Y	V	G	G	F	F	I	P	D		
UniRef90_E1L5N9	L	L	L	D	N	L	K	A	R	K	A	K	S	R	E	I	L	V	A	L	L	N	K	P	D	R	R	K	M	D	I	D	V	D	Y	V	G	F	F	F	E	V	I	P	D			
UniRef90_L1QC51	L	L	L	N	Y	L	R	A	R	K	A	N	S	V	E	I	V	S	L	L	T	K	P	S	R	R	K	V	D	I	D	V	K	Y	V	G	F	F	S	I	I	P	D					
UniRef90_R4KFF9	L	L	L	D	I	L	Q	A	R	R	N	P	A	S	V	E	I	C	T	L	L	D	K	P	S	R	R	R	E	V	N	V	P	V	D	Y	N	G	F	F	A	T	I	P	D			
UniRef90_E8SIP6	L	I	T	E	L	L	Q	S	R	R	V	N	S	L	E	I	V	T	L	L	D	K	P	N	R	R	K	A	D	I	E	A	K	Y	N	G	F	K	K	T	V	I	P	D				
UniRef90_UPI0003687272	L	V	I	D	N	I	K	S	R	O	P	A	S	V	E	I	C	C	T	L	L	N	K	P	E	R	R	K	V	D	L	E	V	N	Y	N	G	F	F	T	V	I	P	D				
UniRef90_UPI000349E8BA	L	V	G	N	L	K	S	R	G	P	A	S	V	E	I	C	C	T	M	V	R	K	P	L	A	F	D	V	D	L	E	V	R	Y	V	G	F	F	D	L	I	P	D					
UniRef90_F2JP11	L	K	E	L	L	T	R	N	P	A	S	L	V	E	I	C	C	C	T	L	L	D	K	P	A	R	R	K	E	S	V	N	I	D	Y	N	G	F	F	E	V	I	P	D				
UniRef90_C8W1J2	L	V	Q	S	L	L	T	R	N																																							

QUERY	V	W	I	V	G	C	Y	D	F	N	E	M	F	R	D	L	D	H	I	V	A	V	L	S	D	A	A	R	K	K	F	E	K	
UniRef90_W5ND59	K	F	V	V	G	Y	A	L	D	Y	N	E	Y	F	R	D	L	N	H	I	V	C	V	I	S	E	D	G	K	E	K	Y	K	E
UniRef90_UPI00032AD850	L	F	V	V	G	Y	A	L	D	Y	N	E	Y	F	R	D	L	N	H	I	V	C	V	I	S	E	H	G	K	E	K	Y	R	
UniRef90_V8NVL2	L	F	V	V	G	Y	A	L	D	Y	N	E	Y	F	R	D	L	N	H	I	V	C	V	I	S	N	N	H	G	K	A	K	Y	R
UniRef90_V4ATW6	K	F	V	V	G	Y	A	L	D	Y	N	E	Y	F	R	D	L	N	H	I	V	C	V	I	N	Q	H	G	E	K	Y	R		
UniRef90_U3JC12	K	F	V	V	G	Y	A	L	D	Y	N	E	Y	F	R	D	L	N	H	I	V	C	V	I	K	E	N	A	K	E	Y	R		
UniRef90_D3LWV7	A	F	V	V	G	Y	G	L	D	Y	A	G	Y	R	N	L	P	Y	I	V	I	G	V	L	K	E	N	V	Y	Q				
UniRef90_A4I160	K	F	V	V	G	Y	A	L	D	Y	N	E	Y	F	R	D	L	H	H	I	V	C	V	I	N	E	K	G	K	N	K	Y	K	
UniRef90_H2MQ94	R	F	V	V	G	Y	A	L	D	Y	N	E	Y	F	R	D	L	N	H	I	V	C	V	I	S	E	S	G	K	K	Y	K		
UniRef90_O96085	F	F	L	V	G	C	A	L	D	Y	N	E	N	F	R	D	L	N	H	I	V	C	V	I	S	E	E	G	I	K	T	F		
UniRef90_V2ZJ67	A	F	V	V	G	Y	G	L	D	Y	A	E	K	Y	R	N	L	P	Y	I	V	I	G	I	L	K	P	E	V	Y				
UniRef90_H2M3L4	A	F	L	V	G	Y	A	L	D	Y	A	E	Y	F	R	D	L	S	H	I	V	C	V	I	N	D	R	A	K	E	K	Y	K	
UniRef90_W4E2T5	A	F	L	V	G	Y	G	L	D	Y	A	E	Y	F	R	D	L	P	Y	I	V	V	G	V	L	K	P	E	I	Y	T	K		
UniRef90_D5GS31	E	F	V	V	G	Y	A	L	D	Y	N	E	Y	F	R	D	L	N	H	I	V	C	V	I	N	E	H	G	Q	K	K	Y		
UniRef90_B3L3R4	A	F	V	V	G	Y	S	L	D	Y	A	E	K	F	R	D	L	D	H	L	C	V	I	N	E	E	E	G	I	N	K	F	R	
UniRef90_UPI000248C982	A	F	V	V	G	Y	G	L	D	Y	A	E	K	Y	R	N	L	P	Y	I	V	V	G	V	L	K	P	E	V	Y				
UniRef90_UPI00047DE5F2	E	F	V	V	G	Y	G	L	D	F	A	E	K	Y	R	N	L	P	Y	I	V	I	A	V	L	K	E	E	I	Y	K			
UniRef90_UPI000310EFED	E	F	V	V	G	Y	F	G	L	D	Y	N	E	K	Y	R	N	L	P	Y	I	V	I	A	G	I	L	K	P	E	V	Y	S	K
UniRef90_H2MCU7	R	F	V	V	G	Y	A	L	D	Y	N	E	Y	F	R	D	L	N	H	I	V	C	V	I	K	S	K	T	G	K	L	K	Y	K
UniRef90_H3SJQ0	E	F	I	V	G	Y	G	L	D	Y	A	E	R	Y	R	N	L	P	Y	I	V	I	G	V	L	K	P	N	I	Y				
UniRef90_E9HFQ8	K	F	V	V	G	Y	A	L	D	F	N	E	Y	F	R	D	L	H	H	I	V	C	V	I	N	N	G	I	N	K	Y	K		
UniRef90_D3UQZ1	E	F	V	V	G	Y	G	L	D	F	A	E	R	Y	R	N	L	P	Y	I	V	I	G	V	L	K	P	E	I	Y	S	E		
UniRef90_B1KTC8	Y	F	L	V	G	Y	G	L	D	F	A	E	K	Y	R	N	L	P	Y	I	V	I	G	V	L	K	E	E	E	Y	K			
UniRef90_W6SIZ0	K	F	V	V	G	Y	G	L	D	Y	A	E	K	Y	R	N	L	P	Y	I	V	I	G	V	L	K	E	E	I	Y	K			
UniRef90_R6CZ59	E	F	V	V	G	Y	G	L	D	F	A	E	K	Y	R	N	L	P	Y	I	V	I	G	V	L	K	P	E	V	Y	E	K		
UniRef90_UPI00047CE7F5	A	F	V	V	G	Y	G	L	D	Y	D	Q	K	Y	R	N	L	P	Y	I	V	V	G	I	L	K	P	E	V	Y	S	K		
UniRef90_NOC1F3	E	F	V	V	G	Y	G	L	D	Y	D	E	Y	R	N	L	P	Y	I	V	V	V	G	V	L	K	E	E	V	Y	T	K		
UniRef90_UPI00028850B2	A	F	L	V	G	Y	G	L	D	F	A	E	K	Y	R	N	L	P	Y	I	V	I	G	V	L	K	E	K	I	Y	T	K		
UniRef90_UPI0003B6402E	D	F	V	V	G	Y	G	L	D	F	A	E	K	Y	R	N	L	R	S	V	G	G	L	L	A	P	H	V	Y	E				
UniRef90_F0SX85	E	F	V	V	G	Y	G	L	D	Y	N	E	A	Y	R	N	L	P	Y	I	V	I	G	A	L	K	P	E	V	Y	T	E		
UniRef90_G7W7W2	E	F	V	V	G	Y	G	L	D	F	N	E	Y	R	N	L	P	Y	I	V	I	G	V	L	K	Q	E	A	Y	E				
UniRef90_D0WMC8	E	F	V	V	G	Y	G	L	D	Y	A	E	R	Y	R	H	L	P	F	V	V	G	T	L	A	P	H	V	Y					
UniRef90_A9UZ44	H	F	V	V	G	Y	A	L	D	Y	N	E	Y	F	R	D	L	P	H	V	A	T	L	K	N	D	T	G	K	E	K	Y	K	
UniRef90_B7ISX4	E	F	V	V	G	Y	G	L	D	Y	K	E	Q	Y	R	N	L	P	Y	I	V	V	G	V	L	K	P	S	V	Y				
UniRef90_B1R1S6	A	F	L	V	G	Y	G	I	D	Y	A	E	K	Y	R	N	L	P	C	H	V	I	L	K	P	E	I	Y	E	K				
UniRef90_H3A926	I	F	A	V	G	Y	A	L	D	Y	N	E	Y	F	R	D	L	N	H	I	V	C	V	I	N	E	K	A	K	G	K	Y	Q	
UniRef90_S9XEA7	K	F	V	V	G	Y	A	L	D	Y	N	E	Y	F	R	D	L	N	H	I	V	C	V	I	N	E	T	G	K	A	K	Y	K	
UniRef90_Z9JR06	K	F	V	V	G	Y	G	L	D	Y	A	E	T	Y	R	N	L	P	Y	I	V	V	G	V	L	K	R	S	V	Y	E			
UniRef90_E1L5N9	Y	F	V	V	G	Y	G	L	D	Y	A	E	Q	Y	R	N	L	P	Y	I	V	I	G	V	L	K	E	S	V	Y	Q	K		
UniRef90_L1QC51	E	F	L	V	G	Y	G	L	D	F	A	E	K	Y	R	N	V	P	F	V	V	G	V	L	K	R	E	V	Y	E	K			
UniRef90_R4KFF9	K	F	V	V	G	Y	G	L	D	Y	N	E	K	Y	R	H	L	P	E	I	Y	V	L	K	K	E	I	Y	Q	S	V	K		
UniRef90_E8SIP6	E	F	V	V	G	Y	G	L	D	Y	Q	E	K	Y	R	N	L	P	Y	I	V	I	G	T	L	K	S	E	V	Y	A	K		
UniRef90_UPI0003687272	E	F	V	V	G	Y	G	L	D	Y	A	E	K	Y	R	N	L	P	F	I	V	I	G	T	L	K	P	A	I	Y	A	E	K	
UniRef90_UPI000349EEBA	E	F	I	V	G	Y	G	L	D	Y	A	E	R	Y	R	N	L	P	L	I	V	I	G	T	L	A	P	H	V	Y	E			
UniRef90_F2JP11	G	F	I	V	G	Y	G	L	D	Y	A	E	R	Y	R	N	L	P	Y	I	V	I	G	T	L	K	R	S	V	Y	E	K		
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K E

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E H

M H D  K D P N  P P S

M H S E K N F N  P E N  
K D

D H P R  D  L  I  P K G M P S   
Q D

P E H

M H D K K D F N  P A N

S S E E A P D Y G R G

M D D W P G Y D  N  F T Y P Q H

D T P P W

N Q

P A H

E  K E D Q Q H A  E H F  C  P R H  
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D V Q L E M D F M D V S S Y  
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D F M D V S S Y  
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D V M D V S S Y  
D F L A I S S Y  
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V T A P M D W M A V S S Y  
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D L P L S L D F M A V S S Y  
R E V D L Y A E L F I K I S S Y  
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V P L D I D F M T I S S Y  
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R E I D L P V V F D F M D V S S Y  
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UniRef90\_Q54NJ8 L K G S F V F M S D L V R S I H L P N T N V S L E F M S I S S S Y

UniRef90\_UPI0003EBE231 L K G G Y R F C A D L I E H Q S K F R X M C L Y V D F I R L K H

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UniRef90\_HOUJQ9 L R G A A I F M S D I V R A I D P S V N V A M E F M R V S S S Y

UniRef90\_B9CVX3 L R G S F M F M A D L V R L L D L P V E V D F L T A S S S Y

UniRef90\_F5YSA8 L K G A V L F V T D L A R A I P L P T Q F E F M A V S S S Y

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UniRef90\_R5GUG7 L N G A F I F M A D F C R A V K I P C E V G F M C A K S S Y

UniRef90\_V4KL91 A T G A C L F L A D L V R R I D F P I S I D F I R A D S S Y

UniRef90\_B5YBT7 L K G A V Y F A V D L T R N L S I P F V L D F I S I L S S Y

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UniRef90\_A5Z5N9 L K G S V F Y T C E L A K R I T I P V T L D F M S V S S S Y

UniRef90\_B7FYM2 L K G A C P F Y T H L T D A L Q D L C Q G Y D M E F V R A S S S

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UniRef90\_V1CIE1 L R G C V P W I G D L M K N I D L P E L K I D F M A C S S S Y

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UniRef90\_F5TAR3 L R G S F V F L A D L V R E I N E P I V V D F I T T S S S Y

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UniRef90\_UPI0003B342FA L R G S V I F L A D L A R L I T V P V V L D F M T T S S S Y

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UniRef90\_E8JL7 L N G A F I F A A D L C R A I D L K L E I D F I R V T S S Y

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UniRef90\_T4VV16 G S S T E S S G T V K I I L K D L D V D I E G K N V L V V E E D I V V E D T T G T T L S N K  
UniRef90\_Q1Q411 G D S T E S S K G E V N I I H N F K I D I E E G K H V L V V E E D I V V E D T T G T T L K H  
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UniRef90\_HOUJQ9 G N G T D S S G E V K I I L Q D L D E N P V L K G R D N V L V V E E D I V V E D T T G T T L R K  
UniRef90\_B9CVX3 G S G T S S S R D V K I I L K D L D D G E I S S G K D R D V L V V E E D I V V E D T T G T T L S W  
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UniRef90\_R5GUG7 Y E G T S S S C G E V I I T K D I T K Q D I S G Y H V I V E E D I V V E D T T G T T L K A  
UniRef90\_V4KL91 G S G T V S S G T P R I I S F D L K L D I T N K H V I V E E D I V V E D T T G T T L N C  
UniRef90\_B5YBT7 G S S R E S S Q G I V R I I L K D L D V N I Y K K D L L I V E E D I V V E D T T G T T L S Y  
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UniRef90\_E0QK84 G M S T S S G V V I I N K K E I D E D I E G K N V L V V E E D I V V E D T T G T T L K Y  
UniRef90\_R5EE02 G D G M V S A G N I T I K K E I D E D I E G K N V L V V E E D I V V E D T T G T T L K H  
UniRef90\_A0A023VWZ86 G A G T T S S G I V R I I L K D L D E E S I A G K H V I V V E E D I V V E D T T G T T L S Y  
UniRef90\_R6K810 G S G T K S S G N I V I K K D L D E S I E F G H V I V V E E D I V V E D T T G T T L S Y  
UniRef90\_X8K399 G S A T T S S G V V K I I T K D I D G M N L I F E D K N I I V E E D I V V E D T T G T T L Y  
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UniRef90\_S6GEZ6 G N S T E S S R E V K I I L Q D L S E G I E G R D V I V V E E D I V V E D T T G T T L S K  
UniRef90\_X0W0K8 G M G K T S K G Q I T V L K D V T T D V A G R H V I V V E E D I V V E D T T G T T L Q H  
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UniRef90\_C4LBK5 G N S T T S S R E V R I I L K D L D D E I K G K D V L V V E E D I V V E D T T G T T L S K  
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L L E T L K R K Y R P A K S S I V V A T A L L V N K R E S V R R N V D L P I E F Y G F F D E I P P  
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L L Q T L A G R A P N S S L S V C C T F L D R K N S R R R V Q V V P V D E F Y R G M G F F D E I P P  
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V M S H L K A K N P S S I K C C V L L D D K P S R R R R K V L P D Y C G F F E I P P  
L L S N I E K Y K P N M V K V A S L L V K R T P R S D G F R P D Y A G F F E I P P  
L R G L M L Q H K P A S S L K I A T C L D D K P E R R R R L V P I E A D Y V C F K I P P  
L R R V L M E R G P K S S L A I C C S L L D D K K E R R R R A D I S V P I E A D Y V G F F T I P P  
I V E H L K E M E P N S S L K T C C V L L D D K P A R R R R Q V E I T P D Y V G F F T I P P  
L I P M L K E R K P A S S L K I T T L L D D K P D R R R R E D D V T V D Y V G F F E I P P  
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L Q K D L K D R G P K S S L K I C C S L L H K P A R T H E N K N K I D Y L V G F F E I P P  
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H

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Q

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M E P A C

M S K K

G R N M A G E E A P D Y

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UniRef90\_H1XNZ8 M T S H I H T L F D E A I A Q R V S A L A E E A E G K P Q N L V V A V  
UniRef90\_AONX40 D E A D C L V D E H Q I D A A L D K M A Q Q I T T D L G D K L P V V L C V  
UniRef90\_F6CTL3 K H I V E V L I D R N K I N A R V T E L G K E A E H Y Q Q N N M V L I G L  
UniRef90\_C5WCM2 R D K D I E V L F S A S K I A R R N T E L A K E A E H Y D Y H D L V I S V  
UniRef90\_F7Y337 R V L F D E T A I A N R N E E L A A A I V A A K P E N L L V V A V  
UniRef90\_UPI00037CB3AB V L F E A E K I K E V V K R M G A E I T A A Y G N E P L V A I S I  
UniRef90\_H3NMJ5 Y I F A A Q I A E R N A E L G R E I S R S Y Q G E S S L V I C V  
UniRef90\_G0QSX3 F I T A A Q I A E R N A E L G R E I S R S Y Q G E S S L V I C V  
UniRef90\_F0JCN5 F I T A A Q I A E R N A E L G R E I S R S Y Q G E S S L V I C V

UniRef90\_R4LJJ1 LGGAAATFTV[90]LARRALV 100 D[V]P[110]LE[120]GWMAMRSY  
UniRef90\_S3VM78 LRGSSVYFFS[90]DLTRSV[100]PY P[110]PIE[120]LDFIQAKS  
UniRef90\_P37171 LRGSSFVIF[90]ADLTV[100] R[E]I[G]V[110]P[120]CE[120]VDFLEAVSSY  
UniRef90\_G6A1L7 LRGSSFVIF[90]ADLTV[100]RRLN C[90]R[K]I[D]V[110]P[120]HE[120]VDFMTVSSY  
UniRef90\_K8W3U9 LKGSFVIF[90]MADL[100] R[E]L[110]P[120]VE[120]VDFMTVSSY  
UniRef90\_A3K6G1 LRGSSFVIF[90]ADLTV[100]REL R[110]L[120]P[120]VE[120]VDFLEAVSSY  
UniRef90\_U2Q512 LRGSSFVIF[90]SADLVRAL[100] D[V]K[T]K[V]G[110]F[120]MT[120]VSSY  
UniRef90\_K4KV96 LKGSFVYF[90]LADLTV[100]TRHL[110]P[120]LS[120]ID[120]FLSIRAF  
UniRef90\_M6DET7 LKGGIF[90]YFFS[100]DLTKAV[110]P[120]PIE[120]LDFIQAKS  
UniRef90\_E5SMS3 LKGAFF[90]YFFS[100]SLYDKL[110]V[120]R[120]R[120]N[120]N[120]C[120]T[120]GN  
UniRef90\_K4IMH4 LKGAFF[90]NT[100]LAA[110]LSQ[120] A[V]T[110]I[120]P[120]V[120]Q[120]IE[120]FMS[120]ISSY  
UniRef90\_E1Y8A8 LKGAFF[90]V[100]FMS[110]DL[120]MR[120]CL[120] T[110]I[120]P[120]VE[120]VDFV[120]C[120]T[120]SSY  
UniRef90\_U2EDE6 LRGSSFVIF[90]AADLTV[100] T[110]V[120]P[120]TK[120]IG[120]FMT[120]T[120]SSY  
UniRef90\_UPI00041EA72F LNGCV[90]RF[100]MADL[110]LR[120]HI[120]DI[120]A C[90]E[110]V[120]S[120]L[120]IK[120]V[120]A[120]S  
UniRef90\_L1MC98 LRGSSFVIF[90]AADLTV[100]MR[110]GI[120]S[120]I[120] P[110]CE[120]IN[120]F[120]V[120]R[120]F[120]SSY  
UniRef90\_K2IQV1 LRGSSFVIF[90]ADLTV[100] R[E]L[E]M[110]N[120]V[120]E[120]VDFLEAVSSY  
UniRef90\_U6BBH6 LKGSFVIF[90]AADLTV[100]M R[E]L[K]G[110]S[120]V[120]Q[120]I[120]DT[120]V[120]A[120]C[120]SSY  
UniRef90\_R6HH34 LKGSFV[90]P[100]FMWE[110]LAKR[120]I[120]K[120]N[120]N[120]I[120] I[110]F[120]E[120]F[120]L[120]E[120]V[120]S  
UniRef90\_S8CEJ4 P[90]P[100]P[110]I[120]AV[120]V[120]GV[120]AT[120]G[120]A[120]F[120]M[120]F[120]V[120]A[120]D[120]LV[120]K[120]K[120]I[120]D[120]L[120]S[120]I[120]A[120]V[120]D[120]F[120]I[120]R[120]V[120]E[120]S  
UniRef90\_UPI00029B1602 LRGSSF[90]MF[100]SADL[110]MK[120]L[120]ID[120]F P[110]C[120]E[120]IS[120]F[120]V[120]K[120]L[120]A[120]S  
UniRef90\_UPI00028A1B9F LKGSF[90]Q[100]P[110]FMS[120]DL[120]K[120]Y[120]I[120]N[120]T[120]Y[120]I[120]S V[110]D[120]Y[120]M[120]S[120]V[120]S  
UniRef90\_A0A031LKR7 LRGSSFVIF[90]MADLTV[100] C[90]R[110]T[120]I[120]E[120]K[120]P[120]H[120]E[120]L[120]D[120]F[120]M[120]T[120]V[120]S  
UniRef90\_D3SNW9 LKGSFVIF[90]VADLTV[100]RFM E[110]I[120]P[120]V[120]Q[120]V[120]D[120]F[120]M[120]V[120]S  
UniRef90\_A3I296 LRGSSFVIF[90]MADLTV[100]CRA[120]I[120]D[120]L[120] P[110]L[120]E[120]C[120]S[120]F[120]V[120]K[120]L[120]S  
UniRef90\_M4UNP0 LRGSSFVIF[90]LSDLA[110]RARAL[120]T[120]I[120] P[110]V[120]K[120]L[120]D[120]F[120]M[120]T[120]S  
UniRef90\_C9PMV8 LRGSSF[90]MF[100]MADLTV[100] R[E]I[110]S[120]L[120]P[120]V[120]E[120]I[120]E[120]F[120]M[120]T[120]T[120]S  
UniRef90\_A0A059BT40 P[90]V[100]F[110]VA[120]VA[120]T[120]GA[120]F[120]L[120]F[120]VA[120]D[120]LV[120] R[K]V[110]E[120]L[120]P[120]L[120]V[120]V[120]D[120]F[120]V[120]R[120]L[120]S  
UniRef90\_A0A023SCL9 LRGSSF[90]C[100]I[110]F[120]LADLTV[100] C[90]R[110]Q[120]T[120]Q[120]L[120]P[120]I[120]T[120]L[120]D[120]F[120]M[120]T[120]A[120]S  
UniRef90\_UPI0003638018 LNGAF[90]FM[100]LSDL[110]IK[120]K[120]I[120]D[120]F T[110]C[120]E[120]I[120]S[120]F[120]V[120]K[120]L[120]A[120]S  
UniRef90\_UPI00028A1B9F LNGAF[90]F[100]LADLTV[100]VRQ[120]I[120]N S[110]I[120]P[120]C[120]Q[120]L[120]C[120]F[120]L[120]Q[120]A[120]S  
UniRef90\_W6A9J7 LKGSF[90]CV[100]P[110]FMGK[120]FLEN[120]F S[110]L[120]S[120]C[120]Q[120]T[120]E[120]Y[120]M[120]L[120]I[120]S  
UniRef90\_R6EVI8 LRGSSFVIF[90]AADLTV[100]MRM[120]I[120]N V[110]P[120]C[120]E[120]I[120]S[120]F[120]V[120]K[120]M[120]S  
UniRef90\_C9LE49 LNGAF[90]F[100]FAADLTV[100]RGI[120]T[120]I[120] P[110]C[120]E[120]I[120]T[120]F[120]V[120]R[120]L[120]A[120]S  
UniRef90\_UPI00036A5A49 LNGAF[90]FM[100]LSDL[110]MK[120]A[120]V[120]D[120] T[110]P[120]L[120]E[120]M[120]S[120]F[120]V[120]K[120]I[120]S  
UniRef90\_D6D261 LRGSSF[90]MF[100]TADLTV[100]LKH[120]I[120]T[120]I[120] P[110]C[120]E[120]I[120]S[120]F[120]V[120]K[120]L[120]A[120]S  
UniRef90\_Q2NVR8 LRGSSF[90]FM[100]MADLTV[100] C[90]R[110]V[120]V[120]T[120]V[120]S[120]H[120]E[120]V[120]D[120]F[120]M[120]T[120]A[120]S  
UniRef90\_UPI0003B6F4B1 LRGSSFVIF[90]IADLTV[100]RELK I[110]P[120]V[120]E[120]V[120]D[120]F[120]M[120]T[120]V[120]S  
UniRef90\_U5C9M7 LRGSSF[90]MF[100]LSDLA[110]KRV[120]T[120]I[120] P[110]P[120]A[120]E[120]I[120]S[120]L[120]V[120]K[120]T[120]A[120]S  
UniRef90\_R5AJ56 LNGAF[90]P[100]FAADLTV[100]FR[120]A[120]I[120]N[120]T[120]D[120]A[120]E[120]I[120]A F[110]I[120]R[120]L[120]S  
UniRef90\_R6DRP9 LRGAV[90]M[100]WMA[110]DM[120]K[120]N[120]I[120]N D[110]T[120]E[120]I[120]D[120]F[120]L[120]V[120]A[120]S  
UniRef90\_UPI000464A8EE LKGSF[90]P[100]FA[110]QL[120]T[120]K S[110]I[120]D[120]I[120]D[120]I[120]D[120]F[120]M[120]T[120]V[120]S  
UniRef90\_UPI0003344FF2 C[90]E[110]K[120]D[120]R[120]F[120]L[120]E[120]L[120]Y[120]D[120]Y[120]I[120]K[120]N[120]F[120]Q[120]N[120]S[120]K[120]K[120]F[120]T[120]S V[110]M[120]V[120]Y[120]F[120]M[120]K[120]L[120]Q[120]S  
UniRef90\_I3Z1L8 LNGAF[90]FM[100]LSDLA[110]KYL[120]D[120]I[120] P[110]T[120]E[120]I[120]S[120]F[120]M[120]K[120]V[120]A[120]S  
UniRef90\_D7JE63 LRGSSF[90]MF[100]AADLTV[100]MKR[120]I[120]T[120]F R[E]L[110]D[120]L[120]P[120]C[120]E[120]V[120]D[120]F[120]L[120]E[120]A[120]V[120]S  
UniRef90\_Q0FAJ3 LRGSSFVIF[90]IADLTV[100] R[E]L[110]D[120]L[120]P[120]C[120]E[120]V[120]D[120]F[120]L[120]E[120]A[120]V[120]S  
UniRef90\_T0RWJ5 LRGSSF[90]MF[100]VADLTV[100]IRAME R[E]L[110]E[120]I[120]P[120]C[120]H[120]I[120]H[120]F[120]L[120]Q[120]A[120]S  
UniRef90\_D6PE61 LKGGF[90]IF[100]LADLTV[100] R[E]L[110]E[120]I[120]P[120]C[120]H[120]I[120]H[120]F[120]L[120]Q[120]A[120]S  
UniRef90\_Q9ZNK6 LRGSSF[90]FTADLTV[100]RELQ[120]V[120]K[120]T[120]K[120]I[120]G F[110]M[120]T[120]T[120]S  
UniRef90\_Q27541 LKGSF[90]MFTADLTV[100]ARF[120]L[120]K[120]D[120]E[120]G V[110]P[120]V[120]R[120]I[120]E[120]F[120]L[120]C[120]A[120]S  
UniRef90\_D8GRR9 LRGSSF[90]IFTADLTV[100]VRQ[120]I[120]K[120] L[110]P[120]V[120]K[120]I[120]G[120]F[120]M[120]T[120]T[120]S  
UniRef90\_I5CAF9 LNGAF[90]FM[100]CS[120]DLV[120]K[120]E[120]I[120]T[120]I[120] P[110]M[120]E[120]L[120]Q[120]F[120]I[120]K[120]I[120]S  
UniRef90\_S2DR20 LNGAF[90]FM[100]LSDLTV[100]KNI[120]D[120]I[120]I[120] P[110]T[120]E[120]I[120]T[120]F[120]L[120]K[120]I[120]S  
UniRef90\_Q07010 LKGSF[90]VFTADLTV[100]MVR[120]L[120]G[120]D[120]F[120]G V[110]P[120]T[120]R[120]V[120]E[120]F[120]L[120]R[120]A[120]S  
UniRef90\_UPI0001FFEABE LKGA[90]V[100]M[110]F[120]M[120]T[120]D[120]E[120]A[120]R[120]A[120]L[120] P[110]V[120]P[120]T[120]Q[120]L[120]E[120]F[120]M[120]A[120]V[120]S  
UniRef90\_R7NVM4 LNGAF[90]FM[100]AADLTV[100]MRN[120]L[120]T[120]I[120]I[120] P[110]P[120]S[120]E[120]I[120]S[120]F[120]V[120]K[120]L[120]A[120]S  
UniRef90\_UPI0004754778 LNGAF[90]MF[100]AAGL[110]MK[120]E[120]V[120]S[120]I[120]I[120] P[110]P[120]S[120]E[120]I[120]T[120]F[120]V[120]R[120]L[120]A[120]S  
UniRef90\_UPI00035FAE70 LKGSF[90]VFAADLTV[100]RAL[120]H[120]A[120]A[120]G[120]M[120]A P[110]P[120]E[120]V[120]E[120]F[120]I[120]S[120]L[120]S  
UniRef90\_C9MTS6 LRGSSF[90]MYAS[100]DL[110]MKNI[120]T[120]I[120]I[120] P[110]P[120]C[120]E[120]I[120]S[120]F[120]V[120]K[120]L[120]A[120]S  
UniRef90\_B4UWA8 A[90]T[100]GA[110]F[120]L[120]F[120]LADLTV[100]VR[120]R[120]I[120] R[E]L[110]E[120]L[120]P[120]L[120]A[120]V[120]D[120]F[120]V[120]R[120]A[120]E[120]S  
UniRef90\_UPI0003725454 LRGSSFVIF[90]IADLTV[100] R[E]L[110]D[120]L[120]P[120]V[120]E[120]V[120]D[120]F[120]L[120]E[120]A[120]V[120]S  
UniRef90\_DOMHA1 LNGAF[90]VF[100]LADLTV[100]MRY[120]I[120] T[110]I[120]D[120]P[120]C[120]E[120]V[120]D[120]F[120]L[120]K[120]I[120]S  
UniRef90\_UPI000255ADCB LRGSSF[90]MF[100]VSD[110]FL[120]K[120]A[120]Y[120]P[120]Y P[110]C[120]E[120]V[120]S[120]F[120]V[120]K[120]L[120]S  
UniRef90\_UPI000411D081 LKGSF[90]VFAADLTV[100]LSRA[120]I[120]D[120]L[120]I[120]D[120]L[120]D[120]I[120]E[120]F P[110]L[120]E[120]V[120]S[120]D[120]F[120]M[120]D[120]V[120]S  
UniRef90\_F5WV71 LKGSF[90]VFAADLTV[100]RL[120]K[120]Y[120]I[120]D[120]L[120]D[120]I[120]E[120]F V[110]P[120]C[120]E[120]I[120]S[120]F[120]I[120]R[120]V[120]A[120]S  
UniRef90\_UPI0003B567D5 LRGSSF[90]MFA[100]S[120]DL[110]K[120]LV[120]Q S[110]V[120]D[120]V[120]D[120]S[120]M[120]V[120]D[120]F[120]V[120]I[120]A[120]K[120]S  
UniRef90\_E4QST5 LKGSF[90]L[100]F[110]L[120]T[120]E[120]L[120]I[120]Q R[S]V[110]T[120]I[120]P[120]C[120]E[120]V[120]D[120]F[120]M[120]K[120]L[120]S  
UniRef90\_UPI00036AA3A4 LKGAFF[90]IF[100]LADLTV[100]M R[E]F[110]S[120]V[120]P[120]V[120]K[120]V[120]D[120]H[120]S[120]I[120]D[120]F[120]L[120]T[120]A[120]S  
UniRef90\_UPI0003F09B7E LKXG[90]Y[100]E[110]F[120]CA[120]H[120]L[120]V[120]E[120]H[120]L[120]K[120]N[120]I[120]S[120]Q[120]N[120]S[120]D[120]G[120]F[120]V[120]S[120]M[120]K[120]V[120] D[110]F[120]I[120]R[120]L[120]K[120]S  
UniRef90\_M2WWM4 LTGSF[90]VIF[100]LADLTV[100]LRNMT[120]C[120]D R[E]F[110]S[120]V[120]P[120]V[120]K[120]V[120]D[120]H[120]S[120]I[120]D[120]F[120]L[120]T[120]A[120]S  
UniRef90\_W0DDM3 LKGSF[90]VIF[100]TADLTV[100] R[E]F[110]S[120]V[120]P[120]V[120]K[120]V[120]D[120]H[120]S[120]I[120]D[120]F[120]L[120]T[120]A[120]S  
UniRef90\_D5E532 LKGSF[90]IP[100]FLA[110]QL[120]I[120]K D[V]K[110]V[120]D[120]H[120]S[120]I[120]D[120]F[120]L[120]T[120]A[120]S  
UniRef90\_A8ZYX2 LKGAFF[90]VF[100]FADLTV[100]R[120]T[120]I[120]D[120]I[120] T[110]I[120]P[120]V[120]E[120]V[120]D[120]F[120]V[120]G[120]V[120]A[120]S  
UniRef90\_V8CNJ7 LRGSSF[90]MYA[100]ADLTV[100]MK[120]R[120]T[120]I[120]D[120]I[120] P[110]C[120]E[120]I[120]S[120]F[120]V[120]K[120]L[120]A[120]S  
UniRef90\_UPI0002626351 LKGSF[90]LFA[100]ADLTV[100]ARQL[120]I[120]K S[110]I[120]P[120]C[120]R[120]I[120]E[120]F[120]V[120]R[120]A[120]S  
UniRef90\_UPI00039EAD12 LKGSF[90]LFA[100]ADLTV[100]RAM[120]H[120]D[120]A[120]G[120]V[120]E[120]P D[V]E[110]F[120]I[120]T[120]V[120]S  
UniRef90\_G9XFX0 LKGSF[90]LFA[100]ADLTV[100]SKNI[120]K[120]P[120]V[120]T[120]K[120]I[120]S D[110]F[120]M[120]T[120]T[120]S  
UniRef90\_UPI0004162068 LRGSSF[90]MFA[100]AEL[110]MK[120]K[120]V[120]T[120]V[120]A[120]S[120]E[120]I[120]S F[110]R[120]T[120]L[120]S[120]I[120]P[120]V[120]R[120]C[120]E[120]F[120]I[120]Q[120]L[120]S  
UniRef90\_UPI0003651C8A LKGA[90]LFA[100]ADLTV[100] R[E]F[110]T[120]L[120]S[120]I[120]P[120]V[120]R[120]C[120]E[120]F[120]I[120]Q[120]L[120]S  
UniRef90\_UPI0003798209 LRGSSF[90]MFA[100]ADEF[110]K[120]Y[120]L[120]T[120]D[120]S[120]E[120]V[120]C V[110]F[120]I[120]K[120]L[120]V[120]S  
UniRef90\_UPI0002897E66 LRGSSF[90]MVI[100]S[120]DL[110]V[120]K[120]H[120]Y[120]K G[110]A[120]C[120]E[120]M[120]S[120]F[120]V[120]K[120]M[120]A[120]S  
UniRef90\_D3ICF2 LRGSSF[90]IFAADLTV[100]MR[120]M[120]L[120]T[120]I[120] P[110]P[120]C[120]E[120]I[120]S[120]F[120]V[120]K[120]L[120]A[120]S  
UniRef90\_W0P1T2 LRGSSFVIF[90]IADLTV[100] C[90]R[110]S[120]I[120]Q[120]V[120]K[120]H[120]E[120]V[120]D[120]F[120]M[120]T[120]T[120]S  
UniRef90\_M1Q2F7 M[90]K[100]S[110]L[120]Y[120]F[120]MADLTV[100]TRK[120]L[120]D[120]I[120]S[120]V[120]K[120]L D[110]F[120]L[120]E[120]L[120]S[120]H  
UniRef90\_H1XNZ8 LRGSSF[90]IF[100]LADLTV[100]LRN[120]L[120]I[120]D[120]V[120]E[120]V[120]D[120]F[120]L[120]R[120]I[120]S  
UniRef90\_A0NX40 LKGSF[90]IF[100]FAADLTV[100]VRAM[120]H[120]R[120]A S[110]L[120]Q[120]P[120]E[120]M[120]F[120]M[120]H[120]L[120]S  
UniRef90\_F6CTL3 M[90]N[100]G[110]L[120]I[120]P[120]T[120]A[120]L[120]I[120]E[120]R[120]L[120]N[120]F P[110]L[120]E[120]L[120]D[120]Y[120]I[120]H[120]A[120]T[120]R  
UniRef90\_C5WCM2 LRGSSF[90]IF[100]MADLTV[100]CR[120]N[120]I[120]K[120]I[120]E[120]H[120]E[120]I[120] D[110]F[120]M[120]T[120]T[120]S  
UniRef90\_F7Y337 LKGSF[90]LFAADLTV[100]RAM[120]H[120]D[120]V[120]G[120]L[120]S[120]P E[110]V[120]E[120]F[120]I[120]F[120]I[120]S  
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UniRef90\_R4LJJ1 T T A K R S S G S 130 L L K D L D D E L L 140 A Q G G R H V V V V E E T V V D T T G G G L T M S W  
UniRef90\_S3VM78 Y E G T T S S T G E V K R L L T K D L L D R E T G S L L I A Q G G R R H V V V V E E D I I V D D T T G G G R T L L Q V  
UniRef90\_P37171 G G N E M T S S T R R E Q V R V I I K D L L D E R E T G S L I I I G G G N R R H H V V V V E E D I I V D D T T G G G H T L L S K  
UniRef90\_G6A1L7 G N A M T S S S R R D V K R I V K D L L D E S D S G I I R R E G G R K H V V V V E E D I I V D D T T G G G N T L L N K  
UniRef90\_K8W3U9 G D A T E S S T R E G K V K V L N D I L P D S N G I E E G Y G Y H V V V V E E D I I V D D T T G G G H T L L H H  
UniRef90\_A3K6G1 G H A E E S S T G K V K V L N D I L P D S N G I E E G Y G Y H V V V V E E D I I V D D T T G G G H T L L H H  
UniRef90\_U2Q512 P D E T N K S T G I V K F A K D L L D D S E I I T S R K H I V L V V E E D I I V D D T T G G G L T L A F Y  
UniRef90\_K4KV96 Y V G M T K S T G N V V E L I K D L D D S E I I T S R K H I V L V V E E D I I V D D T T G G G R T L L K E K  
UniRef90\_M6DET7 Y V G M T K S T G N V V E L I K D L D D S E I I T S R K H I V L V V E E D I I V D D T T G G G R T L L K E K  
UniRef90\_E5SMS3 P G R K T S E G D L D L R M M D L D C D C V R R K G R H I L I V V E E D I I V D D T T G G G Y T L L H W  
UniRef90\_K4IMH4 G S D T R S S S G K S V I N M S K E I P D D N I K K E D D V L I V V E E D I I V D D T T G G G T T L L M Q F  
UniRef90\_E1Y8A8 G H S E Q S S S G S V I N M S K E I P D D N I K K E D D V L I V V E E D I I V D D T T G G G T T L L M Q F  
UniRef90\_U2EDE6 Y E G T Q S S S G S E L T Q I L G L L V E D I I H H R H H V V L I V E E D I I V D D T T G G G L T L M E Q  
UniRef90\_UPI00041EA72F Y E G M N S S S G S V K I E L L L G L L N R G A S L I K G R R T D V V V V E E D I I V D D T T G G G L T L M Q T  
UniRef90\_L1MC98 Y E G M N S S S G S V K I E L L L G L L N R G A S L I K G R R T D V V V V E E D I I V D D T T G G G L T L M Q T  
UniRef90\_K2IQV1 G N A T E S S S G R V V Q T L K K D L L D D S E I I T S R K H I V L V V E E D I I V D D T T G G G H T L L H F F  
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UniRef90\_R6HH34 Y E G T S S S S G K V P T I P F D L K K Q S S E G G K H V L L V V E E D I I V D D T T G G G R T L L M A C  
UniRef90\_S8CEJ4 Y S G T V S S S G K V P T I P F D L K K Q S S E G G K H V L L V V E E D I I V D D T T G G G R T L L M A C  
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UniRef90\_R7GJG5 Y D G M T S S S G S I T I K K D L L D D D D V I R R G R K D D V V V V E E D I I V D D T T G G G V T T L E N  
UniRef90\_A0A031LKR7 G S G T T S S S R D V K I L K D L L D D D D V I R R G R K D D V V V V E E D I I V D D T T G G G N T L L S K  
UniRef90\_D3SNW9 G S S Q E S S E G N V R V I Q D L L S V D I K T N R K N V L L V V E E D I I V D D T T G G G Y T L L R E  
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UniRef90\_M4UNP0 Y G S S T V A G V K I S K D L L D D D D V I K G D E H V L I V V E E D I I V D D T T G G G Y T L L S K  
UniRef90\_C9PMV8 G S G M T T S H D V K I S K D L L D D D D V I K G D E H V L I V V E E D I I V D D T T G G G Y T L L S K  
UniRef90\_A0A059BT40 G S G M T S S G A P A V L L D L K D D D V I K G D E H V L I V V E E D I I V D D T T G G G Y T L L S K  
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UniRef90\_UPI0003638018 Y E G T C S T G N V E C L L L G L L N N D D I A G R K H V I V V E E D I I V D D T T G G R S I A H  
UniRef90\_UPI00028A1B9F K D Q K V S S G E V E L L M H N L D L R E N R H I V L V V E E D I I V D D T T G G L T L L K Y  
UniRef90\_W6A9J7 G S N I K S S G K P E L L L L L L K K P I R E N R H I V L V V E E D I I V D D T T G G L T L L K Y  
UniRef90\_R6EVI8 Y E G T A S T G K V K Q L I L G L L N D D D I K G R T T V I V V E E D I I V D D T T G G L T L M Q T  
UniRef90\_C9LE49 Y S G V A S T G K V K Q L I L G L L N D D D I K G R T T V I V V E E D I I V D D T T G G L T L M Q T  
UniRef90\_UPI00036A5A49 Y S G V A S T G K V K Q L I L G L L N D D D I K G R T T V I V V E E D I I V D D T T G G L T L M Q T  
UniRef90\_D6D261 Y Q G T S T G V I K E V I G L L N E D I A G R T T I V I V E E D I I V D D T T G G L T L M Q R  
UniRef90\_Q2NVR8 G S G M S S S S D D V K I L K D L L D D D D V I R R G R K D D V V V V E E D I I V D D T T G G G N T L L S R Q  
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UniRef90\_U5C9M7 Y S G T V S T G D V K R T L M G L L D D D L T G R S D V I V V E E D I I V D D T T G G L T L M D F  
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UniRef90\_I3Z1L8 Y V G T D S K G E V T D L I L L N R R V I V V E E D I I V D D T T G G L S M T H  
UniRef90\_D7JE63 Y H G T T S S D E M L E L I G L L K E N L K G R T D V V I V E E D I I V D D T T G G K T M S K  
UniRef90\_Q0FAJ3 G N S T S S S G V R L L K D L L D R D I A G R H V L V V E E D I I V D D T T G G H T L H H  
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UniRef90\_D6PE61 Q D R K T S S G V V R L S H D L L Q L T E G K H V M V V E E D I I V D D T T G G L T L L Q R  
UniRef90\_Q9ZNK6 G N S E N S S G T V K V V N D V P D D N I E E G F D V L V V E E D I I V D D T T G G M D S A I T M E Y  
UniRef90\_Q27541 G T D V K T S G E V R R L L D V V R D D N I P V I E E N R H V L V V E E D I I V D D S G A I T M E Y  
UniRef90\_D8GRR9 G N S E T S S G E I K I V N D I L D D L L K G Y D V L I V V E E D I I V D D T T G I T M D F  
UniRef90\_I5CAF9 Y A G T R S T G E V S E L L G L L Q S T E I I E R G K K E D V I V V E E D I I V D D T T G L S M S Y  
UniRef90\_S2DR20 Y K G E K S T G K I N Q L L G L L Q S T E I I E R G K K E D V I V V E E D I I V D D T T G L S M S Y  
UniRef90\_Q07010 G H D T K S C G R V D V K A D G L C D I R G K H V V V L E E D I I V D D T T A L T L R E W  
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UniRef90\_UPI00035FAE70 G A G T S S G A V R V V K D I E S E S I A G R D V L V V E E D I I V D S G A T L D F  
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UniRef90\_B4UWA8 G S G Q S N C A P T I S L D L K V D V K G R H V I V V E E D I I V D D T T G H T L C K  
UniRef90\_UPI0003725454 G D G M E S S R E V R L L K D L L R D G A I R G R D V L V V E E D I I V D D T T G G Y T L S H  
UniRef90\_DOMHA1 G A E K V S S G Q V Y E L K K L R D A D I R G R H V I V V E E D I I V D D T T G G L S M Q F  
UniRef90\_UPI000255ADCB Y Q G L T S T G I V E T L L D V S E D I A G K S V I I V E E D I I V D D T T G R T L Q Q  
UniRef90\_UPI000411D081 Y E G F H S S T G K P Q I S L S I K E K L I E G R D I L V V E E D I I V D D T T G N S I Y H  
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UniRef90\_UPI0003B567D5 Y E G T S S T G E I V K E V L G L L T E D L A G R H V V L V E E D I I V D D T T G H T M R M  
UniRef90\_E4QST5 F G G S E S T G E L K V I T D I D Q I K Q K D V I L V E E D I I V D D S G L T L S K  
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UniRef90\_M2WWM4 Y E G T E S S T G T V I E G L L E L L N I K S R D V L L V E E D I I V D D T T G L T L K W  
UniRef90\_WODDM3 G S S Q E S S G S V R I L Q D L S M D I K D Q K V L V V E E D I I V D D T T G Y T L K K  
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UniRef90\_A8ZYX2 G A Q T E S S G N I E L T K P I E S D I T G R Q V L V V E E D I I V D D T T G A T A R F  
UniRef90\_V8CNJ7 Y M G T E S S G E V T E V I G L N E D I A G R E I V I V E E D I I V D D T T G R T M E R  
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UniRef90\_UPI00039EAD12 Y G A G T K G G E I R L L R D I D S D V L E G R D V L I V E E D I I V D S G K T L N F  
UniRef90\_G9XFX0 G D G E I N L G K V I L K D I D Y D L N G Y D V I V V E E D I I V D D T T G G T M F  
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UniRef90\_UPI0003798209 Y K G L K S T G D V T T A I I G L E E D L H D K N V V V V E E D I I V D D T T G K T L H Y  
UniRef90\_UPI0002897E66 Y G T Q S T N Q V N Q L L G L L D D D V T D R T V V I V E E D I I V D D T T G N T L V A  
UniRef90\_D3ICF2 Y Q G T T S T G T I K E V L G I N E D I T N R T V I V V E E D I I V E T G K T M K R  
UniRef90\_W0P1T2 Y R G G V S S G D V K I L K D I N E D I Y N K N V I V V E E D I I V E T G K T L S K  
UniRef90\_M1Q2F7 Y S H N D E S G E I R V I T R D L E F S I S N K E V L I V E E N I I V N T G L T H N Y  
UniRef90\_H1XNZ8 G D G R E S S H I K I L K P L S A D I N G R D V I V V E E D I I V D S G L S V Q F  
UniRef90\_AONX40 G A G T E S S D T I R L R L R D V L E S D V N G R D I V I V E E D I I V D S G R T L A F  
UniRef90\_F6CTL3 Y G M E T E G T S L N W L S Y P K T N L K G R H I L V V E E D I I V D D Q G H T L L Q A  
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UniRef90\_F7Y337 Y G A G T S S G E V R V L R D I D N E V R G R D V L V V E E D I I V D S S G K T L S F  
UniRef90\_UPI00037CB3AB R S G T V S S G Q V A I L R D V E S E V R G R D V L V V E E D I I V D S S G R T V V F  
UniRef90\_H3NMJ5 G D N F E T S G R V D L V H D V I R S Y N L E D K N I I V E E D I I V D S S G Y T L N A  
UniRef90\_QOQSX3 Y Q G T E S T E Q L Q L I G L L K S D I K G K N I I V E E D I I V D S S G Y T L N A  
UniRef90\_F0JCN5 G S A T S R S E D I V F S K D L E I A I E G K D V L V I E E D I I V D T G H S M D F



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G L I V G Y G L D Y R G R Y R N L R C A A I L L A P H  
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E F V I G Y G I D Y A Q Q G R N L P H I G F V R K S  
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V F V V G F G L D Y G N Y R N V P Y V F  
Q F V V G Y G L D Y Q E K Y R N L P Y I A A Y K R E E  
E F V I G Y G L D Y D G K F R N L P G V F I Y S E E E  
L F I V G F G F D Y N E F R E M D H I C V I R S E S A  
E F V V G F G L D Y D E Q Y R N L D S I A V L R S E E Y  
G F L V G Y G L D Y A E K Y R N L P E I Y Q L K  
V F V V G Y G L D Y G D Y R N V P Y V F  
L F V L G Y G L D Y K G L G R E L N D I Y V L K N E  
D F I V G Y G L D Y D G F G R N L P A I Y T V V E  
A F V V G Y G I D F A Q A N R N L P Y I G T V  
Y F V V G Y G I D C A E E Y R N L P Y I G  
K F V I G F G L D D D N Q N L R N L P Y I G  
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M F L V G Y G L D W D E E G R N L R G I Y  
K F V V G Y G L D Y D S L G R N L P E I Y  
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Y F V V G Y G M D Y A E L Y R S L P Y I G V L K P E Y Y  
E F V V G C G T D Y A Q K Y R N L K F I G K V V P Q E  
E F I V G Y G L D Y D Q L G R N L K D I Y V V  
R F V V G Y G L D F A E R Y R E V P H I A C L D  
D F L V G M G L D V N E R F R N L P Y I G V I D T E K L K N W K  
D F I L G Y G L D Y D Q Q G R N L R D I Y T V V E  
D F I L G Y G L D Y D G E G R N L P N I Y T V T E  
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D F I V G Y G L D Y D G F G R N Y P D I Y T V V D  
E F V V G Y G I D Y A Q H Y R Y L P Y V G K V  
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L F I V G Y G L D Y D Q K Y R N L P Y I S Y L E  
Q F V V G F G F D W E E K L R Q L P Y L G V I K K E I I A K  
L F V M G Y T L S Y K N Y F R N L R Q A P V I V E  
K F V V G Y G L D Y D G Q G R N I P S I Y Q L K  
D F I V G Y G L D Y N G Y G R N L P D I Y T V T E  
E F V V G Y G I D Y A Q R N R N L D H I G K V  
K F V I G Y G L D F N G L Y R E L P Y I G  
R F V I G Y G L D Y A E R Y R E I P D I F  
L F V V G Y G L N Y G D Y R N I P Y I F  
A F V I G Y G M D F A E A Y R E L R D V C V L K K E Y Y E K  
V F V A G Y G L N Y G D Y R N V P Y I F  
K F V V G Y G L D Y N G F G R N I G E I Y Q L K E D E  
K F V V G Y G L D Y D G F G R N L P E I Y Q L N  
V F V V G Y G L D Y D Q S Y R E V R D V V I L K P S V Y E T W G K  
E F V V G Y G L D Y A E R Y R D L P Y I G T L D P K V Y A  
D F I V G Y G L D Y D G L G R N Y R D I Y T V M E  
L F V V G Y G L D Y D G Y G R N L K D I Y K V K  
L F V V G Y G M D V A H A F R E L P F V G V V E E  
D F I V G Y G L D Y D Q E G R N L R D I Y T L  
Y F V V G Y G M D F A E L Y R N L P Y I G V L K P E H Y Q  
K F V I G Y G L D Y G Q L A R N L A S I Y L D D  
N F I V G Y G L D Y N E L G R N L R E V Y T L N Q T  
K F V V G Y G L D Y D D L G R N L P D I Y Q V  
L F V I G F G M D Y D K H Y R Q L P Y I G I L K D T V Y K  
D F I V G Y G L D Y D G L G R N Y P N V Y  
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230

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220  
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G F L V G Y G L D W N G Q Y R N L K G I H R L E Q  
D F I V G Y G L D Y D Q Q G R N L R D I Y T L V Q E  
R F V V G Y G L D Y A E R Y R E V P D I R C L D  
Y F V V G Y G M D V A H S F R Q L P Y V G R V M D E  
K F L V G Y G L D F K D R Y R N I P Y V C V L D E  
D F I V G F G L D Y D G Y G R N L A D I Y K I K  
T F V V G Y G L D Y A Q K Y R N L R E I Y H I K  
K F V V G Y G L D Y D G L G R N Y K D I Y Q L A E E  
K F I V G Y G M D Y D K H G R N L P E I Y Q I K E  
D F I L G Y G L D Y D H Q G R N L R D I Y T I V E  
D F I V G Y G I D Y A Q S Y R Y L P Y I G K V  
G F V V G Y G L D Y K E K Y R N L P Y I V E Y N R E  
K F V V G Y G L D D A Q L K R N L R S I Y F I E  
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1

10

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30

40

V P A Q

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M Q L H

H  
Q P

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H

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E H

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D L F C L P N H

I P A E

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UniRef90_E0MS94					I V A I
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UniRef90_D7AHF6					I V A I
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Y Q R G M Q K G E L I I S G L E K L R A E E K H I I V E D D I F D G G D T L L A S E  
Y Q G T T S G G E M A W R Y R P S D A I R G E H V L V L D D D I L D D E G G T L V D Q  
Y E G T S T Q N I N T L I G A G N L E G K D V I V V E D D I V D D S G H T L E H  
Y Q G T N Q G E M S E L L I G L G I D L K G R D V I V E D D I V D D S G N S L K H  
Y E G T E S S G T M K Q A F G L P E D L H N R D V I V E D D I V D D T G F T L H  
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Y R G A T T G S E L H W L R E P Q C D M K G R T V L V L D D D I L D D E G H T L L K A  
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Y F V V G Y G M D V A Y A F R E L P F V G L V  
R F I V G Y G L D Y S Q K Y R H L P Y I G Y V  
L F V V G Y G L D Y E E R Y R N L P Y I G Y L E  
E F I I G Y G L D Y Q E R L R N L P Y V A T C D T N K L K D W K  
L F V V I G Y G M D V A H A F R E L P F V G I V E E  
K F I V G Y G L D Y D G L G R N L P D V Y Q L A E  
Y F V V I G Y G M D V S H A F R Q L P F I G Y I P D A E  
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E F V V I G Y G L D Y Q D H Y R N L P F V A A L D P E E I A  
K F I L G Y G L D Y D E Y G R N L P E V Y Q L K Q  
K F L L G Y G L D Y D G Y G R N L P E V Y I L N D  
L F V V G Y G L D F E G L G R N L K D L Y Q I V D  
K F V V I G Y G F D F E K D M Y R N V P Y I F N V T E E  
R F V F G C G M D Y K G Y F R N L R A I Y G I E  
R F L F G Y G M D Y K G Y W R N A P G L Y A V K

230

220  
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V V  
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Q L N  
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I Y  
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Y A  
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V V E  
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V G E E

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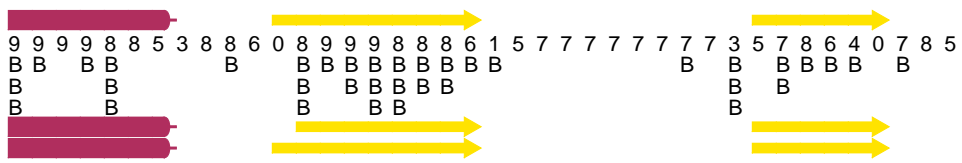
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