



QUERY P S T N R T V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_G3VL73 P S T N R R T T V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_H3AWL1 P S T N R R T T V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_F7DJS4 A S T N R R T T V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_D8GJP9 K D H N R R T S V V T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_R7RQY5 A D H N R R T S V V T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_B0K330 K D H N R R T S V V T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_UPI0003F09D86 I S T N R R T T V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_G1KD94 P S T N R R T T V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_UPI000464C4C6 P D H N R R T V L T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_R7V4K2 I S T N R R T S V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_A9BJ40 R D H N R R T S V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_UPI000359EB21 A S T N R R T S V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_UPI00047DE06B P D H N R R T S V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_B0VF35 A D T N R R T V F T M A G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_H3LV85 P S T N R R T V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_H5Y609 Y S H N R R T S V F T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_H1XW57 A E M N R R T S V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_H2MWN8 A S T N R R T S V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_B7IDC1 F D H N R R S V V T L V G E P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_C5CFQ8 P D H N R R S V V T L V G E P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_F4LWY2 K N H N R R S V F T F I G N P K A V L E A A F L S C K K A A E L I D M R T K H H K G G E E  
UniRef90\_D3BQY2 K S T N R R T V V T F V V G D T T A I V N G A F N A T K V A F L L I D M T K H H K G G E E  
UniRef90\_A7RRV9 A S T N R R T V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_H9UC77 K D H N R R S V V T L V G E P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_J7IVT8 A S H N R R T S V V T F V V G E P E Q S V V K L A A F N A C A K A S E L I D M E Q Q Q Q G G E E  
UniRef90\_UPI000366827C K D T N R R T S V V T F V V G T P D E G V V E E A A F R A I K K A S E L I D M R Q T H H K G G E E  
UniRef90\_F7YYN2 P D H N R R S V V T L V G D P D E G V M V D A L F D M T K K A M E L I D L R Y H H K G G E E  
UniRef90\_R6BM82 E N H N R R S V Y T L V G D P D Q M G E A A F R F A K A C V E K I D M T K H H K G G E E  
UniRef90\_S0FXJ9 K S T N R R T V Y T F V V G D E E A T I T I E G A L A G A R L A K E K I D M R T H H K G G E E  
UniRef90\_B5IFW9 E A T N R R T V V T F V V G T P E E A V K E A A F R G I K K A A E L I D M R Y H H K G G E E  
UniRef90\_UPI0002657737 A S T N R R T V Y T F V V G S R P E D V V V I E G A L N A A R A A Y Q L I D M S R H H K G G E E  
UniRef90\_UPI0003B79A10 E S T N R R T V V T F I G T P E E G I K K A A F K A I K K A S E L I D M R K H H K G G E E  
UniRef90\_F3ZUW8 Q D H N R R T V V T V V G E P E A L K K A V V I E A A K L A I E L I D L N K H H K G G E E  
UniRef90\_F7NDN0 A S H N R R T S V V T F I G E P A A V K Q A A F Q S C A K A A Q L I D M E K H H K G G E E  
UniRef90\_I3VRD7 K D H N R R S V I T F V G D P N D G I K E A A F N V A K K A S E L I D L N R H H K G G E E  
UniRef90\_F8WWD2 K D H N R M V V T V V G E P A A V K K A A V I E A I G I A V Q V I D L M R H H K G G E E  
UniRef90\_K1ZMU3 Q A T N R R T S V V T F V V G S R P S E V I E A A L K A I K K A S E L I D M S K H H K G G E E  
UniRef90\_E0QIN3 E D H N R S V V T M I G E P S K I K E A V L N M A K V A V E L I D M T K H H S G A E E  
UniRef90\_R3TWP9 A S H N R R S V F T L V G D V E G I Q E A A F Q L V K F A S E K I D M T K H H K G G E E  
UniRef90\_D8M296 A S T N R R T S V Y T F V V G N K K S V I T E G A L N A C R V A Y Q L I D M T K H H K G G E E  
UniRef90\_A0A023VKZ6 A S H N R R S V F T L V G D P N S I K E V A F Q L I K Y A S E T I D M T K H H K G G E E  
UniRef90\_UPI00037262BF E D H N R M V V T L V G P E A L K T S V I E A V K I A V K K I D L N H H K G G E E  
UniRef90\_I2F2C8 P D H N R R S V I T I T G S P E A V V E A A L F N M T L K A K E L I D L N N H H S G E E  
UniRef90\_K0N5A7 N S T N R R T V Y T F V V G S R P E A V V I E G A L N A A R A A Y Q L I D M M Q T H H Q G G E E  
UniRef90\_G7V776 E D H N R L V V S L A G E P Q P I C D A V L E A S R I A M Q H I D M N Q H H Q G G E E  
UniRef90\_D9QSH7 K D H N R L V V T M I G S P D A L K K S V L E A M E I A V D L I D M N E H H A G G E E  
UniRef90\_B5Y9A7 P S H N R M V V T M V G E P Q Q V L S A M K N G A R K A V E L I D L N Q H H Q G G E E  
UniRef90\_M1Z8J6 K D H N R S V V T F I G E P E K V I E A A F N A T K T A A E L I D M K T H H R G G E E  
UniRef90\_UPI000362FABC N S T N R R T V Y T F V V A D P D C V V I E G A L A A A R V A R E R I D M R W H H R G G E E  
UniRef90\_F4QAQ9 K S T N R R T V Y T F V V G T P E A V V D A A V A A T H V A H K L I D M R Q H H K G G E E  
UniRef90\_H2YPE5 E S T N R R T V F T F V G D P D S V V V G A F N A A K V A F N R I D M A K H H K G G E E  
UniRef90\_UPI00040EB5F2 E D H N R C V V T V I G E P K I L G A A M V E A I G I A A E L I D L T K H H E G G Q  
UniRef90\_I0GL26 P D H N R R T V I T F V G D R T T V L I E G A F T V A K S A V E L I D L R N H H K G G T  
UniRef90\_UPI000472B8B4 H A T N R R T V V T F V G E P L V I E A A F Q A I K K A A G L I D M S K H H S G G E E  
UniRef90\_T1JH96 S S T N R R T V Y T F V V G S R P D A V V I E A A L K A A R I A W K L I D M S K H H K G G E E  
UniRef90\_I1FLT7 A S A N R R T V Y T F V V G D P V S I V I E G A V N A A K V A H S L I D M R K H H K G G E E  
UniRef90\_UPI0004788661 S D H N R S V V T F V G T L K G V E E A A F N A C K M A S E L I D M T N H H K G G E E  
UniRef90\_M2BUS9 K D H N R S V V T V I G E P E E L K K T V V E A I G I A A G L I D L R K H H E G G A  
UniRef90\_S7NED1 P S T N R R T V Y T F V V G S R P S D V V I E G A L N A A R A A Y Q L I D M S K H H K G G E E  
UniRef90\_E9FR24 T S T N R R T V Y T F V V G S R P S D V V I E A A L A A S R V A Y Q L I D M A R H H K G G E E  
UniRef90\_H5SFH1 A D H N R R T V I T F V V G E P A A V E T A I L N L V A K A V E L I D L T K H H K G G E E  
UniRef90\_J1H124 K D H N R C V V T V V G E P E A V R D A V I E A I G V A T E E L I D M T K H H E G G Q  
UniRef90\_A8MLX5 F D H N R A A V V T V V G E P E A V K H A V I E A M R I A I T E E I D M T K H H E G G Q  
UniRef90\_E6SRZ9 E D H N R L V V T V V G E P E P L R E A V L E A I G V A V R L I D L N T H H K G G Q  
UniRef90\_R5GIJ5 E D H N R M V V T L V G E P E P L K E A V L E A V R V A V S K I D L T K H H Q G G A  
UniRef90\_I4BVQ3 P D H N R L V V S L V G E P E A L K E E S L I K S A K V A I E N I D L N K H H Q G G A  
UniRef90\_C0QDV1 Y A T H R R T V Y T F V V G D P D A V V I Q G A L A A A R V A R K K I D M T R H H R G K G  
UniRef90\_U2E8R9 A D H N R R T V F I G N P E G A E K A M V I D F A E A V I E N I D M T K H H E G G Q  
UniRef90\_R6NR56 E D H N R S V V T V I G E P E P L K K D A M V A A I G K A V E L I D M T K H H Q G G E E  
UniRef90\_U5Q3B1 N A T N R R S V V T F V V G E P E L V I E A A F R A I R K A S E V I D M S H H H S G G E E  
UniRef90\_Q6AKP6 S S T N R R S V F T F V G D P E T V L I E G A L T A A R V A A T L I D M R N H H S G G E E  
UniRef90\_W8UBG9 E D H N R L V V T V V G E P E A V K K A V I E A I G V S T E L I D L R V H H S G G E E  
UniRef90\_B2A3D7 E D H N R T V I T V V G E P E P L V I E A V I A S A K T A H E E I D M T K H H Q G G E E  
UniRef90\_G2FUV5 A D H N R S V V T F I G E P E G V K E A A W K L I C K A A E M I D L D R T H H E G G A  
UniRef90\_R5BXF4 A D H N R S V V T L I G S P E A V T E A A N M A K V A I E L I D M R T H H E G G A  
UniRef90\_UPI0003639264 K A T N R R T V V T M V G T P E E V V C E A A F R A V K K A S E L I D M K K H H K G G A  
UniRef90\_K4FTP1 P S T N R R T V Y T F V V G S R P A A V V I E G A L N A A R A A Y Q L I N M A T H H S G G E E  
UniRef90\_UPI0002886B56 T D H N R S V V T L V G E P S K V I E V I I N M A E K V Y E L I D M S T H H S G G E E  
UniRef90\_T0LHA9 K D H N R A V V T F I G E P E P V K Q A A F L A I A K A A E L I D M E K H H K G G E E  
UniRef90\_Q1PV64 P D Y N R R T V I T F A G E P E A V R D A A F S A I E T A A N V I D M T L Q K G G E E  
UniRef90\_I4AMD3 K A T N R R T V V T F V V G E P E A V L E A A F L A M K K A K E L I D M S K H H T G G E E  
UniRef90\_B3SZY5 A D T N R R T V V T F V V G E P D P V S E A A F L G I K S A A E L I D M S K H H K G G A  
UniRef90\_S4RQ34 E S S H R T V Y T F V A P P G A A V I E G A L N A A R A A Y Q L I D M R R H H R G G E E  
UniRef90\_C9LEK8 E A T N R R T V V T F V V G E P D A V I M E A A F R A V R K A S Q L I D M R Q H H H G G A  
UniRef90\_X5DWK9 K A T N R R T V V T F V V G T P D D V I E A A F R G I K R A A E L I D M R Q H H K G G E E  
UniRef90\_R7JM29 E A T N R R T V V T F V V G E P E A V L I E A A F Q G V K K A A E V I D M R N H H K G G A  
UniRef90\_U2KVS6 A S Q N R S V T T F V V G E P E A V S E A A F L A I L Q E A A K L I D M T V H H K G G E E  
UniRef90\_S7TM65 A S T N R R T V Y T F V V G D P D S I L I E G A L A A A R V A R A R I D M R T H H K G G E E  
UniRef90\_T1FNP0 A S T N R R T V Y T F V V G S P E A V V I E G A V N A A K V A Y K L I D M T K H H T G G E E  
UniRef90\_U5QNA2 L D H N R S V F T L V G S A E G L Q Q A V V R L Y S L A Y K H I D L R T H H Q G G E E  
UniRef90\_E0XRC8 K A T N R R T V V T F V V G T P D E V I T D A A F L A I K K A S E L I D M S Q H H S G E E



QUERY  
UniRef90\_G3VL73  
UniRef90\_H3AWL1  
UniRef90\_F7DJS4  
UniRef90\_D8GJP9  
UniRef90\_R7RQY5  
UniRef90\_B0K330  
UniRef90\_UPI0003F09D86  
UniRef90\_G1KD94  
UniRef90\_UPI000464C4C6  
UniRef90\_R7V4K2  
UniRef90\_A9BJ40  
UniRef90\_UPI000359EB21  
UniRef90\_UPI00047DE06B  
UniRef90\_B0VF35  
UniRef90\_H3IV85  
UniRef90\_H5Y609  
UniRef90\_H1XW57  
UniRef90\_H2MWN8  
UniRef90\_B7IDC1  
UniRef90\_C5CFQ8  
UniRef90\_F4LWY2  
UniRef90\_D3BQY2  
UniRef90\_A7RRV9  
UniRef90\_H9UC77  
UniRef90\_J7IVT8  
UniRef90\_UPI000366827C  
UniRef90\_F7YFN2  
UniRef90\_R6BM82  
UniRef90\_S0FXJ9  
UniRef90\_B5IFW9  
UniRef90\_UPI0002657737  
UniRef90\_UPI0003B79A10  
UniRef90\_F3ZUW8  
UniRef90\_F7NDN0  
UniRef90\_I3VRD7  
UniRef90\_F8WWD2  
UniRef90\_K1ZMU3  
UniRef90\_E0QIN3  
UniRef90\_R3TWP9  
UniRef90\_D8M296  
UniRef90\_A0A023VKZ6  
UniRef90\_UPI00037262BF  
UniRef90\_I2F2C8  
UniRef90\_K0N5A7  
UniRef90\_G7V776  
UniRef90\_D9QSH7  
UniRef90\_B5Y9A7  
UniRef90\_M1Z8J6  
UniRef90\_UPI000362FABC  
UniRef90\_F4QAQ9  
UniRef90\_H2YPE5  
UniRef90\_UPI00040EB5F2  
UniRef90\_I0GL26  
UniRef90\_UPI000472B8B4  
UniRef90\_T1JH96  
UniRef90\_I1FLT7  
UniRef90\_UPI0004788661  
UniRef90\_M2BUS9  
UniRef90\_S7NED1  
UniRef90\_E9FR24  
UniRef90\_H5SFH1  
UniRef90\_J1H124  
UniRef90\_A8MLX5  
UniRef90\_E6SRZ9  
UniRef90\_R5GIJ5  
UniRef90\_I4BVQ3  
UniRef90\_C0QDV1  
UniRef90\_U2E8R9  
UniRef90\_R6NR56  
UniRef90\_U5Q3B1  
UniRef90\_Q6AKP6  
UniRef90\_W8UBG9  
UniRef90\_B2A3D7  
UniRef90\_G2FUV5  
UniRef90\_R5BXF4  
UniRef90\_UPI0003639264  
UniRef90\_K4FTP1  
UniRef90\_UPI0002886B56  
UniRef90\_T0LHA9  
UniRef90\_Q1PV64  
UniRef90\_I4AMD3  
UniRef90\_B3SZY5  
UniRef90\_S4RQ34  
UniRef90\_C9LEK8  
UniRef90\_X5DWK9  
UniRef90\_R7JM29  
UniRef90\_U2KVS6  
UniRef90\_S7TM65  
UniRef90\_T1FNP0  
UniRef90\_U5QNA2  
UniRef90\_E0XRC8

QUERY F G P S A F V P S W G A T V A G A R K  
 UniRef90\_G3VL73 F G P S T F V P S W G A T V T G A R K  
 UniRef90\_H3AWL1 F G P A T F I P S W G A T V T G A R K  
 UniRef90\_F7DJS4 F G D P V F V P S W G A T V S G A R K  
 UniRef90\_D8GJP9 F G P C E M N V K S G A T V I G A R  
 UniRef90\_R7RQY5 F G P S E M N E K S G C A V G A R  
 UniRef90\_B0K330 F G P Q E M N P K S G A T V I G A R N  
 UniRef90\_UPI0003F09D86 F G P A D F V P T W G A T A T G A R K  
 UniRef90\_G1KD94 F G P T S F V P R W G A T V T G A R  
 UniRef90\_UPI000464C4C6 E G P Q V M H P T A G A T V V G A R  
 UniRef90\_R7V4K2 F G P A E F V P S W G A S L I G A R K  
 UniRef90\_A9BJ40 F G P D K P H E S A G V T A V G A R  
 UniRef90\_UPI000359EB21 Y G L T D F I P S W G A T A V G A R K  
 UniRef90\_UPI00047DE06B F G P S E V N V K S G V T A V G V R K  
 UniRef90\_B0VF35 F G P H T F N A K S G A T A I G A R E  
 UniRef90\_H3IV85 F G P T E F V P T W G A T A T G A R K  
 UniRef90\_H5Y609 F G A Q E V H P T A G V T A V G A R  
 UniRef90\_H1XW57 F G P A E F N P Q A G A T V I G V R E  
 UniRef90\_H2MWN8 F G P A A F V P S W G A T V T G A R K  
 UniRef90\_B7IDC1 F G P D Q V H P S A G V V A V G A R E  
 UniRef90\_C5CFQ8 F G P D K V H P S A G V V A V G C A R E  
 UniRef90\_F4LWY2 F G K P E I H P T A G V V A V G A R K  
 UniRef90\_D3BQY2 F G P A K F I P S Y G A S V T G A R N  
 UniRef90\_A7RRV9 Y G P A E F D A K W G A T V A G A R K  
 UniRef90\_H9UC77 F G P D R V H E T A G V T A V G A R E  
 UniRef90\_J7IVT8 Y G Q P K M H P T A G A T V V G A R Q  
 UniRef90\_UPI000366827C F G P A K I H E K A G A L V T G A R E  
 UniRef90\_F7YYN2 F G P D E V H P T A G V V A V G A R E  
 UniRef90\_R6BM82 Y G N H E I H P T A G I V A V G A R  
 UniRef90\_S0FXJ9 F G P S E F V P T W G A T A T G A R  
 UniRef90\_B5IFW9 F G P P E W N A K T G A T V I G A R  
 UniRef90\_UPI0002657737 Y G P S E F V P S W G A T M S G A R K  
 UniRef90\_UPI0003B79A10 Y G D P I F N P K A G A T V I G A R E  
 UniRef90\_F3ZUW8 F G P A E R H P T A G T V A V G A R  
 UniRef90\_F7NDN0 Y G P V R M H P T A G A T A V G A R Q  
 UniRef90\_I3VRD7 Y G P H V M N E K S G V T V V G A R N  
 UniRef90\_F8WWD2 F G P D Q P H P T A G G V V I G A R  
 UniRef90\_K1ZMU3 F G P T L F N P R S G V T A V G A R  
 UniRef90\_E0QIN3 F G K A E M N A K S G C T A V G A R  
 UniRef90\_R3TWP9 Y G E A K I H P T A G V T A V G A R  
 UniRef90\_D8M296 F G P A K F I P R W G A T V C G A R K  
 UniRef90\_A0A023VKZ6 F G D R K I H P T A G V T A I G A R  
 UniRef90\_UPI00037262BF F G P S D I H P T A G V V A V G A R  
 UniRef90\_I2F2C8 F G P S E I H P S A G V T A V G C A R E  
 UniRef90\_K0N5A7 F G P A K F I P G W G A T V T G A R  
 UniRef90\_G7V776 V G E P K L H P T A G A T V I G A R K  
 UniRef90\_D9QSH7 Y G P A E L H S T A G A S V I G A R  
 UniRef90\_B5Y9A7 I G E P V I H P T A G A T A V G A R N  
 UniRef90\_M1Z8J6 F G P D I L N E R A G V T A V G A R  
 UniRef90\_UPI000362FABC F G P A G F V P E W G A T V T G A R  
 UniRef90\_F4QAQ9 F G P A T F V P T Y G A T V T G A R K  
 UniRef90\_H2YPE5 Y G P A K F V P S W G T T A V G A R K  
 UniRef90\_UPI00040EB5F2 F G P Q E V H P T A G A T A I G A R  
 UniRef90\_I0GL26 F G P N E V H P T A G V V A V G A R E  
 UniRef90\_UPI000472B8B4 F G P A E F V P R T G A L A I G A R N  
 UniRef90\_T1JH96 F G P S E F V S N W G A T V T G V R K  
 UniRef90\_I1FLT7 Y G P A Q F V P S W G A T V T G A R  
 UniRef90\_UPI0004788661 F G P V K L N K K S G V T A I G A R  
 UniRef90\_M2BUS9 F G G T E I H P S A G V T A V G C A R  
 UniRef90\_S7NED1 F G P S T F I P S W G A T V T G A R K  
 UniRef90\_E9FR24 F G P S E F V S R W G A T A T G V R K  
 UniRef90\_H5SFH1 F G E R V V H P T A G V S A V G V R  
 UniRef90\_J1H124 F G P D H I H P T A G V T A V G A R  
 UniRef90\_A8MLX5 F G N G E L H P T A G I T A V G A R  
 UniRef90\_E6SRZ9 F G P A E K H P T A G T V A I G A R  
 UniRef90\_R5GIJ5 Y G K A E R H A T A G T V A V G A R  
 UniRef90\_I4BVQ3 I G E P K L H P T A G A T V I G A R K  
 UniRef90\_C0QDV1 F G P A E F V P A W G A T A T G A R N  
 UniRef90\_U2E8R9 Y G P C E M N V K S G C A V G A R  
 UniRef90\_R6NR56 F G P N T I H P T G G V T A I G A R  
 UniRef90\_U5Q3B1 F G P D K F E G R T G A T A I G A R  
 UniRef90\_Q6AKP6 Y G P S E F V P S W G I T A T G A R N  
 UniRef90\_W8UBG9 Y G P A S V H P S A G A T A V G V R  
 UniRef90\_B2A3D7 Y G P A K M H E T A G A T A V G A R K  
 UniRef90\_G2FUV5 F G P S V V G K A G A T I I G A R  
 UniRef90\_R5BXF4 Y G P A E M N E K S G C S A V G A R  
 UniRef90\_UPI0003639264 F G P R E W T A K T G A T A V G A R N  
 UniRef90\_K4FTP1 F G P V I E F V P S W G A T V T G A R  
 UniRef90\_UPI0002886B56 Y G P K E V S V K G G C V A I A A R Q  
 UniRef90\_T0LHA9 F G P A K M H S T A G A V V I G A R  
 UniRef90\_Q1PV64 Y G P S V F V K K T G A T V I G A R E  
 UniRef90\_I4AMD3 F G K A E F R P K T G A T A I S A R  
 UniRef90\_B3SZY5 Y G P S K F N A G A G A T V M G M R  
 UniRef90\_S4RQ34 Y G P A T L V P S W G A T V A G T R K  
 UniRef90\_C9LEK8 F G A R P F V A R T G C T N V G A R  
 UniRef90\_X5DWK9 F G P N E W N D R S G A T A I G A R N  
 UniRef90\_R7JM29 F G D R P F V A R T G A T A V G A R  
 UniRef90\_U2KVS6 F G P T E L G T A G V T A I G A R  
 UniRef90\_S7TM65 F G P A E F V P Q W G A T A T G A R  
 UniRef90\_T1FNP0 F G P I K F Q A S W G A T L V G A R N  
 UniRef90\_U5QNA2 F G P A H P H P T A G A S A I G A R  
 UniRef90\_E0XRC8 F G P A E F V K A K G A T A I S A R

UniRef90\_W7XYM0 1 Q L I E C V P N F S E G R D M N V I H Q I A D E A V E K K V E G V R L I D V V D P A G G  
UniRef90\_M7AX19 V A M S V P N G Y S S E G R D R D K Q V I D A I G E A V E S Q T V P G C V Q L L D V V D D A G G  
UniRef90\_UPI00046A0A4A K L V E C C C V P N F S E E G R D D A S K I R Q V I T D A I A D E A V E S Q T V P G C V Q L L D V V D D A G G  
UniRef90\_U7VCS0 K K L V E Q C C V P N F S E E G R D D A S K I R Q V I T D A I A D E A V E S Q T V P G C V Q L L D V V D D A G G  
UniRef90\_X0ZMP9 N K Q I V E Q C C V P N F S E E G R D D A S K I R Q V I T D A I A D E A V E S Q T V P G C V Q L L D V V D D A G G  
UniRef90\_S4N985 S S K I V E Q C C V P N F S E E G R D D A S K I R Q V I T D A I A D E A V E S Q T V P G C V Q L L D V V D D A G G  
UniRef90\_K9EAL2 S S Q V I E C C V P N F S E E G R D D A S K I R Q V I T D A I A D E A V E S Q T V P G C V Q L L D V V D D A G G  
UniRef90\_G5GAX4 K R I I E E C C V P N F S E E G R D D A S K I R Q V I T D A I A D E A V E S Q T V P G C V Q L L D V V D D A G G  
UniRef90\_H6RGP2 K Q L I E E C C V P N F S E E G R D D A S K I R Q V I T D A I A D E A V E S Q T V P G C V Q L L D V V D D A G G  
UniRef90\_I6ZMQ7 K Q L I E E C C V P N F S E E G R D D A S K I R Q V I T D A I A D E A V E S Q T V P G C V Q L L D V V D D A G G  
UniRef90\_W2BY99 A Q I I E E C C V P N F S E E G R R R P E V I E A C I D E I R S N T A G C Y T L L D D Y S S D D  
UniRef90\_UPI000462EC25 S Q L I E E C C V P N F S E E G R R R Q D D V I E A I L A P L K K S K K G C C Y L L D D S R A D D  
UniRef90\_G9PX41 S Q L I E E C C V P N F S E E G R R R Q D D V I E A I L A P L K K S K K G C C Y L L D D S R A D D  
UniRef90\_D3IH72 K Q L V E E C C V P N F S E E G R R R M E V I N Q I T S V I K E V K G V V K L L D D V D S P G D  
UniRef90\_UPI0002554E37 A K I V E E F I P N F S E E G R R R Q D D V I D L L T S V I K E A R S V P S V K L L D D Y S S D D  
UniRef90\_U2MRF9 K Q L V E E C C V P N F S E E G R R R P E V I N Q I T D I I E R S K G I K L L D D V D S P G D  
UniRef90\_D1VUJ6 K R V M I P N F S E E G R R D L D K V D K I T E C F R N K E K I K L L D D Y Q P D D  
UniRef90\_Q2Z0C9 K L V E C C V P N F S E E G R R D P E V I D A I V G E M T A V D G V K L L D D V E M D  
UniRef90\_UPI000382AB1B Q L I E C C V P N F S E E G R R D I N K I N A I V K I V E G V K L L D D V D S P G D  
UniRef90\_M7TDT5 K L V E C C V P N F S E E G R R N K K T I E V I Y N A I K K H K D V E L L D D F T P D D  
UniRef90\_D2Z7S8 K Y I H A V P N F S E E G R R T E V I E A I V G E I K N V I K G V K L L D D F F P P G D  
UniRef90\_F4L472 L I E C C V P N F S E E G R R D K H V I D Q I T G V I E R Q I V I G V V K L L D D V D S P G D  
UniRef90\_S8FFE1 S Q V V E C C V P N F S E E G R R D S E I V D A L A G V V R R K E G V V K L L D D E T K D D  
UniRef90\_D8P8K0 S Q V V E C C V P N F S E E G R R D L D K I E K L V N A F R R K E G V V K L L D D E T N N D D  
UniRef90\_A0A037YX61 K V V Q C C L P N F S E E G R D L D K I E K L V N A F R R K E G V V K L L D D E T N N D D  
UniRef90\_G4KX06 A K L V E E C C V P N F S E E G R R N E A V F K G L V D T A N S V P G C Y T V M D V Q S D D  
UniRef90\_UPI00047D7059 K K I V E C C V P N F S E E G R R N L E S V I K A I T D E I R A V I D G V V K L L D D Y S S D D  
UniRef90\_UPI00038150CA K K L V E Q C C V P N F S E E G R R R P E V I E A I V A A I R A V E G V V K L L D D Y S S D D  
UniRef90\_R5E0K8 K L V E F I P N F S E E G R R R Q E V I D Q I S E A A Q S V E G V A K L L D D V N V L E D  
UniRef90\_K1LLU6 Q L I E C C V P N F S E E G R R D A Q K I E G L L D V A A Q S T E G V V T K L L D D A S S D D  
UniRef90\_K2FQS4 N K I V E C C V P N F S E E G R R D A K I V I N A I F N A A K N T K S V K L L F E L E S S N  
UniRef90\_F2L002 K Q I I E E C C V P N F S E E G R R N K E V I K Q I T D V V E Q M E G V V K L L D D V D S P G D  
UniRef90\_UPI0003B43D28 N K L I E E C C V P N F S E E G R R D E I I K E I A N A V E G V D N V K L L N I D S P G G  
UniRef90\_E1GXU7 K R I V E E C C V P N F S E E G R R D E E I K E I A T E I E K V K G I K L L N I D S P G G  
UniRef90\_V7I387 R I V E E C C V P N F S E E G R R D P E L L E S I A G C F R G K E G V V K L L D D Y T S D D  
UniRef90\_R7J031 K R I V E E C C V P N F S E E G R R R P E V I E A I V G E I R S K S I A S V A E V S I L D D Q D H  
UniRef90\_E8N3Z1 K L V E C C V P N F S E E G R R D L E K V E T I V N V L K N R E N V K L V S Y E S P D D  
UniRef90\_F7PW22 A K L V E C C V P N F S E E G R R D P A V F Q G L V D T A N S I P G C Y T V M D V Q S D D  
UniRef90\_R5ISV6 A K I V E E C C V P N F S E E G R R D L A K I E K I V T P L R G K Q G V K L L S Y E A D D  
UniRef90\_C3WUD4 K I V E C C V P N F S E E G R R D L A K I E K I V T P L R G K Q G V K L L S Y E A D D  
UniRef90\_UPI000479C4BD I V E Q C C V P N F S E E G R R D L A K I E K I V T P L R G K Q G V K L L S Y E A D D  
UniRef90\_HOUKF8 Q L I E C C V P N F S E E G R R D A V I E A I V A P F K N R K G C Y L L F D D Y R A D D  
UniRef90\_Q1IPR9 S T L V E C C V P N F S E E G R R N Q A D V I D E I I A A M K V D G V Y L L D D R E M D  
UniRef90\_Q97CL1 L I E C C V P N F S E E G R R D K S K V D Q I K S A I S A I P T V V R I L L D D V E M D  
UniRef90\_V1CGP1 K I V E S I P N F S E E G R R N R E T V E S I V D E V R Q S T E G C Y T L M N Y S S D D  
UniRef90\_R5S6D0 A R L I E C C V P N F S E E G R R D E A T Y N E S I V K T A Q S V P G C Y T L M N Y S S D D  
UniRef90\_H6L3U1 K R L I E C C V P N F S E E G R R R P E V I A E I T A A I A S A V E G V K L L N V D P G G  
UniRef90\_F4PYZ7 R I I E C C V P N F S E E G R R D Q K I I D S I A K S I S I S G C Y T L L N V D P G G  
UniRef90\_D7JF10 K Q I I E C C V P N F S E E G R R M N V I K Q I T D E I E K V I T L L L D D V D P G G  
UniRef90\_H1HSK9 K K L L E T V P N F S E E G R R D M E K V A K I A A C F K N R K N I R L L D D C Q T D D  
UniRef90\_E7GPH9 K R I I L T A P N F S E E G R R D Q E K I Q K A L D C F R N R R E H V Q I L R W Y R A D D  
UniRef90\_E3D0P1 K P L I E C C V P N F S E E G R R P E V I E A I V A P F K N R P G V V Y L L F D D Y R A D D  
UniRef90\_UPI0003B5DEF4 K L L E C C V P N F S E E G R R T E V I E A I V S A F R N R P G C Y T L F D D Y R A D D  
UniRef90\_UPI00037A7348 K A L I E C C V P N F S E E G R R D L T I K Q I T D A I E T V E G V V K L L D D V D P G G  
UniRef90\_T0N6D2 K L V E C C V P N F S E E G R R D R E K V I E A I T R E I E T V E G V V K L L D D M E M D  
UniRef90\_B7Q6E5 Q V I E E I S K A I R E T T S G V V S L L G V D P G D  
UniRef90\_E3PY87 R L I E C C V P N F S E E G R R D L E K V E K I V D A I E R T T K D V V K L L D D Y S S D D  
UniRef90\_R5AS68 N R I V E C C V P N F S E E G R R D L D K I E K I I D P F R G K E G V V K L L D D V D P G G  
UniRef90\_A6TVD7 A K L I E C C V P N F S E E G R R D K N V I D Q I V K A I A S A E G V K V I L D D V D P G G  
UniRef90\_R5BAT4 K K Y V L I A V P N F S E E G R R K K E V I E A I V D Q V R N A V E G V K L L S Y E P E  
UniRef90\_I7LIV0 L V E S I M N F S E E G R R T E V V H A I R D A I T A V A G V Q L L D D V Q S D D  
UniRef90\_A9B6L2 L V E C C V P N F S E E G R R R K I V D E S I V A A I A V P T V R I L L D D S E M D  
UniRef90\_T0N264 K I I E C C V P N F S E E G R R N R E V V E S I V A V L T A V S G I V R I L L D D Y S D D  
UniRef90\_Q2LUX1 I V E A V P N F S E E G R R P E V V A A L V E A I Q A P G V W L L D D V S S D D  
UniRef90\_I0I7E9 A R L V E C C V P N F S E E G R R N K E V I D A I S A A I S S T A P G C C S L L D D V D P G G  
UniRef90\_UPI0003EBD3E4 K L V E C C V P N F S E E G R R D L T I K Q I T D A I E T V E G V V K L L D D V D P G G  
UniRef90\_F6QK56 V I D A I S T S I R E T A G C C S L L D D V D A E  
UniRef90\_X1AJR2 R L V E C V P N F S E E G R D E A S K I R Q V I T D A A A R A T V P G V A R I L D D V E W N  
UniRef90\_UPI0003FD7184 K I I L C C V P N F S E E G R D A S K I R Q V I T D A I A S A D G A V I L H R S S D D  
UniRef90\_UPI00037052A0 K K I V E S V P N F S E E G R D D A S K I R Q V I T D A I A S A D G A V I L H R S S D D  
UniRef90\_E3CWQ6 K K I V E S V P N F S E E G T D V G K A V E Q I V F E I E N T P K T K I V D D V D S Q Y D  
UniRef90\_X1HK08 Q I L E C C V P N F S E E G R D A N I E A I A Q S L R S V E G V K L L H V D S G D  
UniRef90\_G8R2T4 K I I E C C V P N F S E E A K D K K T F D A I I D C F R D V E G V A L L D D Y S S D D  
UniRef90\_R6VK38 Q L V E C C V P N F S E E G R R D L A K V D A I V Q A I L A V P E V A L L D D R E S M D  
UniRef90\_Q01W04 I V E C C V P N F S E E G R R D E V I S K I T E A I L A S V K G I K L L D D Q E R D D  
UniRef90\_T0MTF3 N K I L M A E V N I S E E G T N L E L I E K K S F I D E K N I E I V D I Q D S N  
UniRef90\_Q8RDU3 S P L V E C I V N I S E E G R D A D V L E K A L A E A I S Q V P G C K L L H Q D T G  
UniRef90\_UPI00036D5225 Y V E C V P N F S E E G R D R A K V E S I I D S M K K Y P V D V L D D V E M N  
UniRef90\_K4LH66 S R L V E C C V P N F S E E G R N N E E T I D A I A R S H R L C P A A A P D D V D A G  
UniRef90\_T0LAV0 Q I I E C C V P N F S E E G L D A G K L E A I I R A M R V D G V H L L D D W S R D  
UniRef90\_T1A7G1 K V I L M A E V N I S E E G K D L D L V I E Q V K A A L L D G E A V D V M D I N S N  
UniRef90\_W5PTU1 M I E C V P N I S E E G K N E A V I Y Q I T E A V K K H N V K I L S V E P G  
UniRef90\_G8NT53 K V L L A E P N F S E E G T R N Q E L I D Q V T A A A L K N S K D I E I V D L N S N  
UniRef90\_E7GSP1 M L I E S V P N F S E E G R R S E V V M A I L A D A R I D G V K V L G M E G N D  
UniRef90\_B2KCG2 K L V E L I P N F S D G R R N K V I I D L L E K D V K S V P D A K L L D S E M D  
UniRef90\_J1H2T5 K L V E C C V P N F S E E G R R P E V V A A I R D A M A A V D G V T I L D V S S D D  
UniRef90\_UPI0002DBB03A I V E C C V P N F S E E G R R D R V V R E I V R A M R V Y G V S L L D W S M D  
UniRef90\_S0AQU6 K V L L C E L N I S E E G T D S E K I G A I T A A L E D V S G L V L D I N S N  
UniRef90\_W0RGV7  
UniRef90\_I3ZGL2  
UniRef90\_UPI0004786082

UniRef90\_W7XYM0 K A T N R T V V V T 50 M V G T P D E V L I E A A F R A V K K A K E L I D M R K H K K G E  
UniRef90\_M7AX19 P S T N R T V V V T F V G S P D A V V L I E G A L R M A A R V A F Q L I D M G R H H R K G E  
UniRef90\_UPI00046A0A4A K A T N R T V V V T F V G G E P P K E D I V M A A A F M A I K K A A S Q L I D D M N V H Q K K G E  
UniRef90\_U7VCS0 A D Y N R T V V I T V I G G E P D L V V K S A V V I E A M G E A I K L V I D M R K V H K K G Q  
UniRef90\_X0ZMP9 E D Y N R R L V V T V I G G D P E A I K T E S L Y E A I E Q Y A V Q L I D D L N T K H H K G G A  
UniRef90\_S4N985 S N H N R T V V L S L V I G G D P E A I K T E S L Y E A I E Q Y A V Q L I D D L N T K H H K G G A  
UniRef90\_K9EAL2 E A T N R T V I T F V G G E P E A V C D A A F K A V R R A A E L I D D M R Q H H H G A  
UniRef90\_G5GAX4 K A T N R T V I T F V G G E P E A V I E N G A A F R L I K K A A E L I D D M S N K H H T G G E  
UniRef90\_H6RGP2 G D Y N R T V V T M A G S D Q E G I L N G A V N A S L A A A E L I D D M R N H H K G G E  
UniRef90\_I6ZMQ7 E S H N R T V V I T Y I G G D A K A S I V E E A S V K L V K K A A E L I D D L T K H H E G E  
UniRef90\_W2BY99 V D H N R L V V S L A G R P A P I Q D D A L L E A A K V A L K H I D D L N V H H H G G A  
UniRef90\_UPI000462EC25 E D H N R L V I S L V G V P A P I Q D D A L L E A A K V A L K H I D D M N A H H Q G G A  
UniRef90\_G9PX41 E A T N R S T V V T F V G G C P D V V V I E A A F L A V K K A G E L I D D M R Q H H H G A  
UniRef90\_D3IH72 T S A T N R S V F T M V G G D P T G I A E A A F R L C K L A S Q E K I D D L R E H H H G A  
UniRef90\_UPI0002554E37 E A T N R T V V T F V G G P P A R V I E A A Y L A V E K A S Q I I D D M R T H H H G A  
UniRef90\_U2MRF9 K D H N R L V V E V I G G D P R A V V I E A V I E S V K V A S E L I D D M R T H H E G A  
UniRef90\_D1VUJ6 A D H N R A V I T V I G G E P E A V L I E G V F R G M A R A S E L I D D L T K H H E G E  
UniRef90\_Q2Z0C9 K A T N R T V I T F V G G E P K N V I E A A F R L I K K A S E L I D D M S K Q T G G E  
UniRef90\_UPI000382AB1B A D H N R T D V T V G S P E K I K A T V M D I A L K C V E L I D D M S K H K K G G E  
UniRef90\_M7TDT5 A D F H N R T V L E C I P L M E A L L N M A E K A Y E L I D D M E K Q Q K G G A  
UniRef90\_D2Z7S8 Y D A N R T V M T F V G A P L A V V I E A A F Q S I K T A S Q L I D D M R N H H H G A  
UniRef90\_F4L472 E A T N R T V V T F V G N P A V V I E A A F L A V K K A G Q L V I D D M R N H H H G A  
UniRef90\_S8FFE1 P D H H R A V I T F A G R P Y A K E V A Y Q M A R L A S Q L I D D L R N H H H G A  
UniRef90\_D8P8K0 V N L N R T V I L M G S P Q K I K N A V L E A M G I A L E L I D D M R E H H K G G A  
UniRef90\_UPI00037YX61 G T H N R C V F T L V G S P E G I E E V A F Q L C K K A A E T I D D M T K H H E G A  
UniRef90\_G4KX06 K T T N R S V V T F V G A P V V I E A A F L A I K K A G E L I D D M S R H H K S G A  
UniRef90\_UPI00047D7059 A S H N R S V V T F I G P P A R V I E A A F A A A A R A A E L I D N M E H H S G G A  
UniRef90\_UPI00038150CA P S Y N R C V H T V V G D P E A V L I E A G F R M C Q K A V E L I D D M N H H H K G G E  
UniRef90\_R5E0K8 E S H H R V V T L I G N Q P A G I E E I A V R L M R Y A V E Q I D D L T A H H Q T G E  
UniRef90\_K1LLU6 P D H H R M L F T L I G N Q P D N V L I E S V F E A I R V A T E L I D D M N G H H T G G E  
UniRef90\_K2FQS4 E A T N R T V I T F V G E P S V V I E T A F R C V Q K A A Q L I D D M R Q H H H G A  
UniRef90\_F2L002 K A T N R T V I T F A G S P D D G V I E A A F R A I K T A G E L I D D M S K Q Q H G A  
UniRef90\_UPI0003B43D28 K A A N R T V M T F V G S P E D D V V I E A A F C C C V Q K S Q L I D D M R Q H H H G A  
UniRef90\_E1GXU7 V D H N R S V V T V V G T P E K I K G A V I E S V R V A L L S I D D M R Q H H T G A  
UniRef90\_V7I387 K A T N R T V V T F A G T P E A V V I D A A F R S V K K A S E L I D D M R T H H H G A  
UniRef90\_R7J031 M D H N R T V I T L I G P P A A V E E A A Y R G I E K A V E L I D D L N H H H T G G E  
UniRef90\_E8N3Z1 K D Y N R T V V T L L G E P N A A V K E A A V I D L V A E T T K Y I D D L N Q H H H E G G E  
UniRef90\_F7PW22 G N H N R C V F T L L G S P E A M G E A A F Q L T K K A T E T I D D M R N H H K G Q  
UniRef90\_R5ISV6 A N Y N R T V V T V I G D P D E V K K A A V I E S I G I A T K E I D D M R K H H K G G E  
UniRef90\_C3WUD4 E N Y N R L V V T V I G D P Q K V K D A V L E A I G V A K D I I D D L N T H H K G Q  
UniRef90\_UPI000479C4BD Q D H N R L V V S L V G E P Q A I C A D L L E A S R V A V E N I D D L N T H H Q G G A  
UniRef90\_HOUKF8 A D H H R C V I T L V G D R T N I L A E A A I R G V G K A A E L I D D L T K H H T G G A  
UniRef90\_Q1IPR9 S N H N R S V I T F V C D D G K A V I E A A F A G I K K A A E L I D D M D K H H T G G E  
UniRef90\_Q97CL1 K D H N R S V I S Y I G S P K A I E E A S F R L M K K A L K L I D D L R K H H K G G E  
UniRef90\_V1CGP1 G N H H R C V F T L I G S P E A I E E V A F Q L T K V A T E R I D D M N K H H H G G E  
UniRef90\_R5S6D0 K A T N R T V V T F V G E P E A V I E G A F Q G I K K A S E L I D D M S K H H K G G E  
UniRef90\_H6L3U1 V S A N R T V Y T F V G T P D D A V L D A A V A A A R T A Y N L I D D M A K H V H G G E  
UniRef90\_F4PYZ7 Q A T N R T V V T F V G E P D Q A V V I E A A F Q A V K K A G E V I D D M R K H H K G G E  
UniRef90\_D7JF10 V N H N R C V I T A V G E P E A L R D A V I D S F E V A V Q L I D D M T K H H E G Q  
UniRef90\_H1HSK9 P D H N R F G A N V I G E P E A I Y E A M L E A I G T A L E L I D D M T K H H H G G E  
UniRef90\_E7GPH9 E D H H R L V V S L V G H P E A E I Q E S L L E A A K V A R D H I D D M N T H H Q G G A  
UniRef90\_E3D0P1 P D H N R L V V S L V G E P E A L A E S L L L A A E T A V L H I D D M N H H H Q G G A  
UniRef90\_UPI0003B5DEF4 Y A T N R T V V T F V G E P A A A V I E A A F R G I Q K A A E L I D D M R Q H H Q G G E  
UniRef90\_UPI00037A7348 A S H N R S V V T F T C E P Q Y A V V E A A F R G I R K A S E L I D D M D S H H Q G G E  
UniRef90\_T0N6D2 P S T N R T V Y T F V G S P D A V I Q G A L N A A R V A H N R I D D M T K H H K G G E  
UniRef90\_B7Q6E5 K D H N R S V T F L G S P N A V Q E A A L K L A K A A T E L I D D M S R H H T G G A  
UniRef90\_E3PY87 E A T N R T V V T F V G D P E S V Q E A A F R G V R K A A E L I D D M S T R H H G G A  
UniRef90\_R5AS68 A D H N R L V V T F V G E P E P L K K A V L Q A I G I A I K E I D D M T K H H Q G Q  
UniRef90\_A6TVD7 E A T N R T V V T F V G E P E A V L E A A F Q G V K C S A G E V I D D M R E H H H G A  
UniRef90\_R5BAT4 Y D F N R T V V T V I G E P L K E A L L N M A G K A Y E L I N M E Q Q G T G  
UniRef90\_I7LIV0 A D H N R T V I S F A G E A E A V G E A A F Q A T R T A Q G L I N L D T H H R G G E  
UniRef90\_A9B6L2 E N H N R S V V T F L G S D G S R A V V A A F Q G I K R A A E L I D D L N H H H G G A  
UniRef90\_T0N264 A D H H R S V V T F L G S P D T V V A G A L A A C N R A V E Q I D D M R K H H R G G V  
UniRef90\_Q2LUX1 P D H N R T V I T V A G E P D A V L I E G L F R A V A T A A Q R I N L F E H H R G E  
UniRef90\_I0I7E9 A S T N R T V Y T F V G S P E A V V V G A L N A A R Q A F S L I D D M R K H H S G G E  
UniRef90\_UPI0003EBD3E4 G S T N R T V Y T F V G E P D A V V Q G A L N A A K A A F S L I D D M A K H H K G G E  
UniRef90\_F6QK56 I D H N R S V F T F V G S P E K V L I E V A Y K L A A K S L E L I D D L N K H H K G G E  
UniRef90\_X1AJR2 A D H N R C V I T F V G G E P E S L V N A V M G M M T V A T E V I D D L T H H H G G E  
UniRef90\_T1C061 A D T N R T V I T L V G E P E A V L I E G A F T C I R E A A K V I D D M R Q H H K G A  
UniRef90\_UPI0003FD7184 P D H N R S V I T F A G S P E S V L I E G A V R G T A A A A K L I D D L R H H H K G V  
UniRef90\_UPI00037052A0 K D H N R T V Y T W I G T P E A V L L A G A Q N L T E K A L E L I D D M S R H H H G G E  
UniRef90\_E3CWQ6 S D Y N R A V I T F V G T P E A V L K A N I A A A K K A L E L I D D M N K H H K G G Q  
UniRef90\_X1HK08 L A A N R T V Y T F T G E P E A V M E A A F Q M Y L K A Y E L I D D M S K H H L G T G  
UniRef90\_G8R2T4 A D H N R S V V T V I G G P P A A V A K D A A F R A V E R A V A I I D D L T K H H H G G A  
UniRef90\_R6VK38 A D H H R S V V T F V G P P A A V A K D A A F R A V E R A V A I I D D L T K H H H G G A  
UniRef90\_Q01W04 A N H H R C V I S F I G S E D V V I E G A F R G I R E A S T L I N L D N H H K G G E  
UniRef90\_T0MTF3 V D H N R T V F T Y K G E P S A V L N A T K K L A K C A V D L I D D M R N H H K G G E  
UniRef90\_Q8RDU3 A G A H R T V F T F A G E T E A V F T A A Q H I Y K V A A E R I D D M R Q H H T G G E  
UniRef90\_UPI00036D5225 P S H N R T V V T F V G G P E Q V K T A A F L A A Q K A A E L I D D M E R H H R G G E  
UniRef90\_K4LH66 A D H N R S V V T V V G D G D S M V N A M F K S I K R A S E L I D D L D A H H K G G E  
UniRef90\_T0LAV0 A D H H R M V V T L V G E P A A L V E G V F A A M R V A T G R I D D L N H H H R G G E  
UniRef90\_T1A7G1 P S T N R T V Y T F V G R P E D V V I E G A L N A A R A A H R L I D D M S R H H R G G E  
UniRef90\_W5PTU1 A D H N R S V V T I A G S P E A V V I E A A V R G V G K A A Q L I D D L T Q Q T G G V  
UniRef90\_G8NT53 A N H N R T V F T Y K G S P E A V V L D G T K R L A A K A L E L I D D M T K H H T G G S  
UniRef90\_E7GSP1 E D A N R T V I T F A G L K E N I G A A A Y A C I E K A Y E L I D D M S K H H K G R S  
UniRef90\_B2KCG2 S D H N R S V Y T F R G E P R A V L E A A K N L S R V A I E L I D D M T K H H H G G S  
UniRef90\_J1H2T5 P D H H R S V L T V V G E P Q A L V E A I F R A A Q V A V T H I N L H N H H H G T  
UniRef90\_UPI0002DBB03A Y D H N R S V I T V V C P I D N V I D L A F N M I K T A G E N I D M N V Q T G G F  
UniRef90\_S0AQU6 A S H N R S V V T F V V T A E S A V A A A Y A G I A K A A E L I D D L T T H H Q G G E  
UniRef90\_W0RGV7 P A H H R S V V T V A G A P E D A V A E A A Y A R A V G R A A Q L I D D L T G O H H G V  
UniRef90\_I3ZGL2 S D H N R T V Y T F M G A P E D V L I E G A K R V T D A A L A R I D D M T V H K G S  
UniRef90\_UPI0004786082

	90	100	110	120
UniRef90_W7XYM0	H	P	R	F
UniRef90_M7AX19	H	P	R	M
UniRef90_UPI00046A0A4A	H	P	R	F
UniRef90_U7VCS0	H	P	R	M
UniRef90_X0ZMP9	H	P	R	M
UniRef90_S4N985	H	P	R	M
UniRef90_K9EAL2	H	P	R	M
UniRef90_G5GAX4	H	P	R	M
UniRef90_H6RGP2	H	P	R	F
UniRef90_I6ZMQ7	H	P	R	F
UniRef90_W2BY99	H	P	R	M
UniRef90_UPI000462EC25	H	P	R	F
UniRef90_G9PX41	H	P	R	F
UniRef90_D3IH72	H	P	R	M
UniRef90_UPI0002554E37	H	P	R	M
UniRef90_U2MRF9	H	P	R	M
UniRef90_D1VUJ6	H	P	R	M
UniRef90_Q2Z0C9	H	P	R	M
UniRef90_UPI000382AB1B	H	P	R	F
UniRef90_M7TDT5	H	P	R	M
UniRef90_D2Z7S8	H	P	R	F
UniRef90_F4L472	H	P	R	M
UniRef90_S8FFE1	H	P	R	M
UniRef90_D8P8K0	H	P	R	F
UniRef90_A0A037YX61	H	P	R	F
UniRef90_G4KX06	H	P	R	M
UniRef90_UPI00047D7059	H	P	R	M
UniRef90_UPI00038150CA	H	P	R	F
UniRef90_R5E0K8	H	P	R	M
UniRef90_K1LLU6	H	P	R	M
UniRef90_K2FQS4	H	P	R	M
UniRef90_F2L002	H	P	R	M
UniRef90_UPI0003B43D28	H	P	R	F
UniRef90_E1GXU7	H	P	R	M
UniRef90_V7I387	H	P	R	M
UniRef90_R7J031	H	P	R	F
UniRef90_E8N3Z1	H	P	R	M
UniRef90_F7PW22	H	S	R	M
UniRef90_R5ISV6	H	P	R	M
UniRef90_C3WUD4	H	P	R	M
UniRef90_UPI000479C4BD	H	S	R	F
UniRef90_HOUKF8	H	P	R	F
UniRef90_Q1IPR9	H	P	R	M
UniRef90_Q97CL1	H	P	R	F
UniRef90_V1CGP1	H	P	R	M
UniRef90_R5S6D0	H	P	R	M
UniRef90_H6L3U1	H	P	R	M
UniRef90_F4PYZ7	H	P	R	F
UniRef90_D7JF10	H	P	R	M
UniRef90_H1HSK9	H	P	R	M
UniRef90_E7GPH9	H	P	R	M
UniRef90_E3D0P1	H	P	R	F
UniRef90_UPI0003B5DEF4	H	P	R	F
UniRef90_UPI00037A7348	H	P	R	F
UniRef90_T0N6D2	H	P	R	F
UniRef90_B7Q6E5	H	A	R	L
UniRef90_E3PY87	H	P	R	M
UniRef90_R5AS68	H	P	R	M
UniRef90_A6TVD7	H	P	R	M
UniRef90_R5BAT4	H	P	R	S
UniRef90_I7LIV0	H	P	R	L
UniRef90_A9B6L2	H	P	R	F
UniRef90_T0N264	H	P	R	F
UniRef90_Q2LUX1	H	P	R	F
UniRef90_I0I7E9	H	P	R	F
UniRef90_UPI0003EBD3E4	H	P	R	F
UniRef90_F6QK56	H	P	R	F
UniRef90_X1AJR2	H	P	R	F
UniRef90_T1C061	H	P	R	M
UniRef90_UPI0003FD7184	H	P	R	M
UniRef90_UPI00037052A0	H	P	R	L
UniRef90_E3CWQ6	H	P	R	M
UniRef90_X1HK08	H	P	R	L
UniRef90_G8R2T4	H	P	R	Q
UniRef90_R6VK38	H	P	R	M
UniRef90_Q01W04	H	P	R	F
UniRef90_T0MTF3	H	P	R	F
UniRef90_Q8RDU3	H	P	R	M
UniRef90_UPI00036D5225	H	P	R	F
UniRef90_K4LH66	H	P	R	F
UniRef90_T0LAV0	H	P	R	F
UniRef90_T1A7G1	H	P	R	L
UniRef90_W5PTU1	H	P	R	M
UniRef90_G8NT53	H	P	R	F
UniRef90_E7GSP1	H	P	R	F
UniRef90_B2KCG2	H	P	R	Q
UniRef90_J1H2T5	H	P	R	M
UniRef90_UPI0002DBB03A	H	P	R	F
UniRef90_S0AQU6	H	P	R	F
UniRef90_W0RGV7	H	P	R	L
UniRef90_I3ZGL2	H	P	R	L
UniRef90_UPI0004786082	H	P	R	M



UniRef90\_W7XYM0 P I Y C Y E Y A A R Q T K E S R R K N S L A E C R R K G E E Y E A L G K R I E S L D W K P  
UniRef90\_M7AX19 P V Y L Y G E A A A R K E E S R R K N S L P A C R R K G E E Y E A L G K R I E S L D W K P  
UniRef90\_UPI00046A0A4A P A F C Y E E A A A N E E P E R R R N S L A N S C R R K G E E Y E A L G K R I E S L D W K P  
UniRef90\_U7VCS0 P V F L Y E E A A S A T A P P N R R E N S L S K I I R R K G E E F E E G M A K K I I K K E P E W K P  
UniRef90\_X0ZMP9 P I F L Y E E K S A T A T P P N R R E N S L S K I I R R K G E E F E E G M A K K I I K K E P E W K P  
UniRef90\_S4N985 P V F L Y E E K S A T A T P P H R R K N I A K K I R R K G E E F E E G M A K K I I K K E P E W K P  
UniRef90\_K9EAL2 P I F L Y E E A A A T A P E R R R N L A V C R R Q G G E E Y E A L G P E K K I V N D A K A P P D  
UniRef90\_G5GAX4 P T Y C Y E E A A A L K P E R R R N L A V C R R Q G G E E Y E A L G P E K K I V N D A K A P P D  
UniRef90\_H6RGP2 P G Y F Y E E T A A R K E E K R R Q N L A N C R R Q G G E E Y E E G L E A K K K L T D P E N W K P  
UniRef90\_I6ZMQ7 P V Y L Y E E N S A T R P E R R R Q N L A N I R R K K G G E Y E E G L E A K K K L T D P E N W K P  
UniRef90\_W2BY99 P V F L Y E E S S A T R P E R R R Q N L V K I I R R K K G G Q F E E G M A K K I V K K E E P W E P P  
UniRef90\_UPI000462EC25 P V Y F Y E E A A L K P E R R R R L E V I R R K K G G Q Y E E S L L K A D V K K N P D R H P P  
UniRef90\_G9PX41 P V Y F Y E E D A A K R P E R R R R L E V I R R K K G G Q Y E E S L L K A D V K K N P D R H P P  
UniRef90\_D3IH72 P C Y C Y E E A A A F T P E R R Q N L A V C R R Q G G E E Y E A L G A E K L T T E G K Q P P D  
UniRef90\_UPI0002554E37 P S F L Y E E A A S A T R P E R R N L A T V R R K K G G Q Y E E A G M P E K K L L K T E G W A P P D  
UniRef90\_U2MRF9 P T Y C Y E E A A A R T P E R R R N L A T V R R K K G G Q Y E E A G M P E K K V N T P G K E P P D  
UniRef90\_D1VUJ6 P V Y L Y E E D A A T T K E R R N L A K I R R K K G G Q Y E E G F F E K I I K D P D W K P P D  
UniRef90\_Q2Z0C9 P V F L Y E E A A C T R S D D R E N L A N V R R K K G G Q Y E E G L L C Q E E I K S N A S W K P P D  
UniRef90\_UPI000382AB1B S G Y F Y E E N A A T S K D R K N L A T V R R K K G G Q Y E E G L L K E K E I K N P E K P P D  
UniRef90\_M7TDT5 P C F L Y E E A A K R E D K R N L A D V R R K K G G E Y E E G L L K E E I K N P E K P P D  
UniRef90\_D2Z7S8 P V Y F S G E Y A A R T P E R R R E L A G Y I R R K K G G E Y E E G L L K E K V V H L P E R A P P D  
UniRef90\_F4L472 P V Y L Y E E Y A A Q D P Q R R R N L A T I R R K K G G E Y E E G L L A Q K I R Q P E W T P P D  
UniRef90\_S8FFE1 P C Y C Y E E A A A Y R A E R K N L A V C R R K K G G E Y E A L G A E K L A D P D K A P P D  
UniRef90\_D8P8K0 P V F L Y E E K A A T R P E R R R S L E V N I R R K K G G Q L K G M A K R M G D P A W V P P D  
UniRef90\_A0A037YX61 P I Y L Y E E K S A T R P E R E S L E V N I R R R G G Q Y E E G M A K K M N R P E W K P P D  
UniRef90\_G4KX06 P S F L Y E E D S A T S P D R V N L A K V R R K K G Q Y E E G M P E K L L Q P E W A P P D  
UniRef90\_UPI00047D7059 P V Y L Y E E H A A P D K T S V I R R A G G Q Y E E G F T E K I K L Q P Q W K P P D  
UniRef90\_UPI00038150CA P V Y L Y E E A A A T R P E R R N L A R V R R K K G G Q Y E E G L L K E I A R P E W A P P D  
UniRef90\_R5E0K8 P V Y L Y E E K A A K R P E R R V K L Q N I R R K P E Y E E G L L K E I I D K P E W A P P D  
UniRef90\_K1LLU6 P I F L Y E E A A S R V P A E R R N L A R I R R K G E F E E A M A N K L L Q Q T S E W Q P  
UniRef90\_K2FQS4 P V Y L Y E E S A A S R P A E Y K N L A D V R T G E F E E G L L K N N F K P S P D  
UniRef90\_F2L002 P C Y C Y E E A A A K T P E R R N L A V C R R K K G G E Y E A L G P K R M D V T S E V P P D  
UniRef90\_UPI0003B43D28 P V Y L Y E E A A Q P D K E R R N L A S V I R R A G G Q Y E E G F F T K K K Q P G W A P P D  
UniRef90\_E1GXU7 P C Y C Y E E A A A K P E R R R N L A V C R R K K G G E Y E E G L L K E R M M P K E F P P D  
UniRef90\_V7I387 P V Y L Y E E K S A T S P D R R N L A N I R R K K G Q Y E E G L L K E K M A K E G W E S P D  
UniRef90\_R7J031 P T Y C Y E E A A L R P E R R N L A V C R R K K G E Y E A L G A Q R E T D P A E M P P D  
UniRef90\_E8N3Z1 P V Y L Y E E A A T R P S R K N L A D I R R R K G E Y E A L G K Q E M G N P E R T P P D  
UniRef90\_F7PW22 P I F L Y E E A A S S P E A R R N L A K I R R K K G Q F E E G M K D K T K K E E W H P P D  
UniRef90\_R5ISV6 P S F L Y E E D S A S R P A E R R N L A A C R R K K G E Y E E G M S A E K L L Q P E W A P P D  
UniRef90\_C3WUD4 P V F L Y E E S T A T A P N R V S L P D I R R K K G E Y E E G M A E K L L K Q P E W A P P D  
UniRef90\_UPI000479C4BD P V F L Y E E A A T K P E R K N L A T V R R K K G G E Y E E G L D K K F E D E D W A P P D  
UniRef90\_HOUKF8 P V F F Y E E A A S V R P D R T R L E E N I R R K K G E Y E A L L K E L V I K D P S R Q P P D  
UniRef90\_Q1IPR9 P I Y L Y E E S A A Q R P E R R N L E N I R R R K G Q F E E G I L R D S I A D D A R P P D  
UniRef90\_Q97CL1 P V F L Y E E A A T R P E R A D L A A I R R N K G Q Y E E Q L K G A I K E E K W K P P D  
UniRef90\_V1CGP1 P V F L Y E E K S A T P E R A R L A E V I R R R G E F E E N L D E K L L K D E K W Y P P D  
UniRef90\_R5S6D0 P S F L Y E E D S A T R P E R R N L A T C R R K G E F E E G M P E K L L Q P E W A P P D  
UniRef90\_H6L3U1 P V F L Y E E H S A T Q A K W K N L A N I R R S G G E Y E A M A D K L A T P E F T P P D  
UniRef90\_F4PYZ7 P L Y L Y E E F S S T K P H R K Q L R Q I R R S G G E Y E E G L A E K L V S E G T W E P P D  
UniRef90\_D7JF10 P V F A Y E E S A A K P E R R N L A V C R R K K G G E Y E E G L L K R F E E G D T A P D  
UniRef90\_H1HSK9 P V F L Y E E D S A T A P H R A N L A K I R R K K G Q F E E G M A E K L Q D K E W T P P D  
UniRef90\_E7GPH9 P F F L Y E E K S A N T P A R T N L A E I R R K K G E Y E E G M A E K L S P E W K P P D  
UniRef90\_E3D0P1 P V Y Y Y E E D A A L I P E R R K R L E E V V R R K K G Q Y E E V L K E E A R T P A R R P P D  
UniRef90\_UPI0003B5DEF4 P V Y F Y E E S A L R P E R S R L E E V I R R K K G Q Y E S L K E E A G K P E R M P P D  
UniRef90\_UPI00037A7348 P I Y L Y E E S A A S R E N R K N L A T V R R A G E Y E E G L A D K L K G P K W E P P D  
UniRef90\_TON6D2 P V F L Y E E S D A A Q J A S E N R K N L E N I R R R H K G Q Y E E Q L K T E I G K G D Y P P D  
UniRef90\_B7Q6E5 P V Y L Y G F A A Q Q D H R R S V P Q I R R S G G E Y E E G L A D K I G K P E W K P P D  
UniRef90\_E3PY87 H V T L Y E E N S A S A S P H R R Q N L A D I R R R G G Y E E V M A E K L K E E D M W P P D  
UniRef90\_R5AS68 P V Y A Y E E S A A L K S G R K N L A V C R R K K G G E Y E E G L A E K F G G E D G P P D  
UniRef90\_A6TVD7 P I F L Y E E K S A S D S P G R E N L A K I R R K K G Q F E E G M F E K L K E E E W K P P D  
UniRef90\_R5BAT4 P C Y C Y E E A A A F K P E R R N L A V C R R A G G E Y E A L G P E K L A D P A K A P P D  
UniRef90\_I7LIV0 P V Y F S G K A N A R N E F R K S I A S N I R R E A G G Q Y E E G L K K V A H T E R R P P D  
UniRef90\_A9B6L2 A V Y L Y E E A A T R P E R Q N L A D V R R K K G E Y E A W R K A T I G D P A R E P P D  
UniRef90\_TON264 P V Y L Y G E A A A V T S R R R L E N I R R S K G Q Y E E S L R E A I R E D K W K P P D  
UniRef90\_Q2LUX1 P V Y F Y G A A A L T S E R R R E L P A V R R R G G E Y E S L E R E A I R E D P S W K P P D  
UniRef90\_I0I7E9 P V Y L Y A A A T R P E R R R L P D I R R G E F E E G L L E T I H L P E R A P P D  
UniRef90\_UPI0003EBD3E4 P V Y L Y G F A A K N E Q R K I L S N T R S G E Y E K L E E K L K N N E W Y P P D  
UniRef90\_F6QK56 P V Y L Y E E A A S A P H R R N L S D I R R R G G E F E E G L N E E K M K L L E W K P P D  
UniRef90\_X1AJR2 P V Y L Y G S A A R R P E R R V D L P A V R R K K G E Y E E G L R E E E T K N P D R A P P D  
UniRef90\_UPI0003FD7184 P V Y L Y E S A A S R P E R R N L A E V R R R G G E Y E E G L R E E K L R D P Q W Q P P D  
UniRef90\_UPI00037052A0 P V Y F Y E E A A W Q P M R R Q N L V D L I R R K K G E Y E E A I R E A L I D E S R Q P P D  
UniRef90\_E3CWQ6 P V Y Y Y E E A A T K P S R R Q N L V D L I R R K K G Q Y E E A L E K K M K D E A W R P P D  
UniRef90\_X1HK08 P V Y L Y E E S A K I L E R R K N I A F K I R R K G E Y E E G L K K S E D P N R K P P D  
UniRef90\_G8R2T4 P G Y Y Y E Y S A V H P E R V N L A F L R K K G Q Y E S L P A K F D P L P P D  
UniRef90\_R6VK38 P F F L Y E E D S A K L K H S A N L A T I R R K K G E Y E E G M A E K L M D P E T W T P P D  
UniRef90\_Q01W04 P V Y L Y E S A A R R P D S T N L E N I R R R G G Q F E A L L Q E M D T P A R D P P D  
UniRef90\_T0MTF3 P V Y L Y G E A A K I E W R K S L E N I R R N K Q Y E E Q I R N E H K E Q W K P P D  
UniRef90\_Q8RDU3 P V Y F Y E E D A Q E K E Y R K T L P S I R R K K G Q Y E A L E A K M K D P K W A P P D  
UniRef90\_UPI00036D5225 P V F L Y E E K S A S V A H R T N L A A A R R K K G E Y E E G L A E A R S A D P D W L P P D  
UniRef90\_K4LH66 P V Y L Y E E A A L R P E R K S L P K V R R Q G E Y E E G L K E A T G R P E R R P P D  
UniRef90\_T0LAV0 P V F L Y A N A A N T P S R K E L P D I R R K K G Q F E E Q L K E A I A D T N E Y F P P D  
UniRef90\_T1A7G1 P V Y L Y G H A A R P E R S D L A R V R E G Q F E E G L R E A I Q D P S R A P P D  
UniRef90\_W5PTU1 P G E S P G R V A P P H L S S T A A T A G T L H Q E L A V S P R A A G W P P A  
UniRef90\_G8NT53 P V Y F Y E E A A A R P D R V N L E D V R R R G G Q Y E E A L R E S V K D A T R R P P D  
UniRef90\_E7GSP1 P V Y Y Y E D A A T C E S R R N L V R I R R K K G E Y E A L C R E E R M K D P A W V P P D  
UniRef90\_B2KCG2 P V Y L Y E N S A A D E S R R N L A V I R R K K G G Y E T L E E K L K N L P P P D  
UniRef90\_J1H2T5 P V Y Y Y E D A A T A D Y R K S L V S I R R K K G E Y E E G L S Q E K M K D S L W P P D  
UniRef90\_UPI0002DBB03A P V Y L Y E Q A A T K P E R K N L A D V R R R G G Q Y E E G L S H R M V S S L W P P D  
UniRef90\_S0AQU6 P V F M Y A Y S A K T P E R K N L A D V R R R K F Q I E E L R S A T G T G N Y I P P D  
UniRef90\_W0RGV7 P V Y L Y E R A A T R P D R E L A D V R R R G G E F E E G L R A E I E T N A R V P P D  
UniRef90\_I3ZGL2 P V Y F Y E E A A A R P D R I R L E D V R R R G G E F E E G L R D V R S D S G R H P P D  
UniRef90\_UPI0004786082 P V Y Y Y E D A A T K P E R K V L V T I R R K K G Q Y E G F A E K M R D P A W L P P D

UniRef90_W7XYM0	F G S C H W T Q K S G A T A V	G A R N
UniRef90_M7AX19	F G S A S F V P R W G A T V T	G A R N
UniRef90_UPI00046A0A4A	Y G P A T W N A K T G A T A I	G A R N
UniRef90_U7VCS0	F G E R T P H P T A G V T A V	G G R
UniRef90_X0ZMP9	Y G A S E I H P T A G V T A V	G A R E
UniRef90_S4N985	F G P A D R H A T A G T V A V	G A R
UniRef90_K9EAL2	Y G P D Q V H P R A G A T A I	G A R
UniRef90_G5GAX4	F G A R P F V A R T G C T A V	G A R N
UniRef90_H6RGP2	F G P A A F V A R T G A T A I	S A R
UniRef90_I6ZMQ7	Y G P A V F N P K L G A I V T	G A R
UniRef90_W2BY99	F G G R K I H P T A G V M A V	G A R
UniRef90_UPI000462EC25	I G K P E L H P T A G A T V I	G A R K
UniRef90_G9PX41	I G E A C L H P T A G A T V I	G A R K
UniRef90_D3IH72	F G A R P V V Q R T G I T A V	G A R N
UniRef90_UPI0002554E37	Y G E R K L H P S A G L M A I	G A R
UniRef90_U2MRF9	F G A R P Y D A R T G C T A V	G A R N
UniRef90_D1VUJ6	F G P A Q M N E K S G C T A V	G A R
UniRef90_Q2Z0C9	C G P N C I H P T A G A T A I	G A R
UniRef90_UPI000382AB1B	F G P T T F N E T S G V T A I	S A R
UniRef90_M7TDT5	C G P N K M H P T A G A T A V	G A R
UniRef90_D2Z7S8	L G P A K L H P S A G A T V I	S A
UniRef90_F4L472	Y G P D Q G A F P A G A T V I	G A R K
UniRef90_S8FFE1	F G A R L F I A K T G C T A V	G A R
UniRef90_D8P8K0	F G P K H L H Q T A G V T V V	G A R
UniRef90_A0A037YX61	F G P D E L N I T A G A T V V	G A R
UniRef90_G4KX06	Y G E R K L H P T A G I T A I	G A R
UniRef90_UPI00047D7059	F G S A R F D E K R G A T A I	G A R
UniRef90_UPI00038150CA	F G P R L H P T A G A T A V	G A R
UniRef90_R5E0K8	Y G E A K M H P T A G A M P L	G V R N
UniRef90_K1LLU6	Y G P S A P H P T A G V T A I	G V R Q
UniRef90_K2FQS4	F G P S C M H P T A G A T V I	G A R K
UniRef90_F2L002	Y G A R K W M A R T G C T A V	G A R
UniRef90_UPI0003B43D28	F G P A E N D V K R G A T V I	G A R
UniRef90_E1GXU7	F G A R P W M A R T G C T A V	G A R N
UniRef90_V7I387	F G P Q S P H E T F G A V V I	G A R
UniRef90_R7J031	F G G G E F T A R S G A T V V	G A R
UniRef90_E8N3Z1	F G P E Q V G P A G A T V I	G A R Q
UniRef90_F7PW22	Y G R P E I H K T A G A T A V	G A R
UniRef90_R5ISV6	Y G E R K L H P T A G I T A I	G A R
UniRef90_C3WUD4	F G E R A P H P T A G V T A I	G C R
UniRef90_UPI000479C4BD	F G K A I K H P N A G A I A I	G A R S
UniRef90_HOUKF8	V G T D R L H P T A G G T V I	G A R K
UniRef90_Q1IPR9	F G E R R V H P T A G A T V V	G A R K
UniRef90_Q97CL1	F G P S E V G K A G A S I I	G A R
UniRef90_V1CGP1	F G K N I K H E S A G A L L L	G A R N
UniRef90_R5S6D0	Y G E R K I H P T A G I T A I	G A R
UniRef90_H6L3U1	Y G P K A L H K E A G V M A I	G A R
UniRef90_F4PYZ7	Y G P R E F V P R Y G A T V T	G A R N
UniRef90_D7JFI0	F G P K V F V A Q T G A T A C	G A R
UniRef90_H1HSK9	F G P D H I H P T A G V V A I	G A R
UniRef90_E7GPH9	Y G P D T I H P T G G V T A I	G A R
UniRef90_E3D0P1	V G E A A L H P T A G G T V I	G A R K
UniRef90_UPI0003B5DEF4	V G E A R L H P T A G A T V V	G A R K
UniRef90_UPI00037A7348	F G T A T F N	
UniRef90_T0N6D2	F G P L E L S K A G A S I I	G A R
UniRef90_B7Q6E5	Y G P A E F V P R W G A T M S	G A R K
UniRef90_E3PY87	Y G P N E F N P K A G M V A V	G A R
UniRef90_R5AS68	F G N R P W A A R T G A T A V	G A R
UniRef90_A6TVD7	F G P Q T P H P T A G V T A V	G A R
UniRef90_R5BAT4	F G P K E Y V A K S G A I N V	G A R
UniRef90_I7LIV0	I G P A A L H P T A G A T I V S A	
UniRef90_A9B6L2	F G P A V A T P A G A T V V	G A R Q
UniRef90_T0N264	F G P A K V G S A G A S L I	G A R
UniRef90_Q2LUX1	A G P A V F N A K S G A T A V	G A R
UniRef90_I0I7E9	Y G P A K V G P A G A T V V	G A R
UniRef90_UPI0003EBD3E4	F G P A D F V P S W G A T V T	G A R K
UniRef90_F6QK56	Y G T N K F V S S W G A T A V	G A R K
UniRef90_X1AJR2	F G P E K P H P T A G A T V V	G A R
UniRef90_T1C061	V G E P R V H P T A G A V A I	G A R
UniRef90_UPI0003FD7184	F	
UniRef90_UPI00037052A0	I G G P G L H S T A G A V I V	G A R R
UniRef90_E3CWQ6	E G P F A F V P R W G A T V T	G V R
UniRef90_X1HK08	F G P S K F H P T A G A I V T	G A R
UniRef90_G8R2T4	F G S P K N W E R F G V T V M	G A R R
UniRef90_R6VK38	I G P S T I H P T G G A T V I	G A R
UniRef90_Q01W04	I G D P V C H P T A G A I V T	G A R K
UniRef90_T0MTF3	F G P Q E V G T A G A S I I	G A R
UniRef90_Q8RDU3	E G P K E F N P K S G G T V T	G A R
UniRef90_UPI00036D5225	Y G P A L N P T F G A T V L	G A R
UniRef90_K4LH66	F G P A R L H P T A G A T A V	G A R
UniRef90_T0LAV0	F G P K R L G K A G A T I I	G A R E
UniRef90_T1A7G1	Y G E P R L H P T A G A V A I	G A R
UniRef90_W5PTU1	P G P S P F V P G G G A T A T	G A R K
UniRef90_G8NT53	I G G P E L H S T A G A S A V	G A R K
UniRef90_E7GSP1	E G P K D F N A K S G A T V T	G V R
UniRef90_B2KCG2	F G P H E I T P K G G A I T I	G A R E
UniRef90_J1H2T5	E G P K E F V P K S G A T V T	G V R
UniRef90_UPI0002DBB03A	F G P A H P H P T A G A S A I	G A R
UniRef90_S0AQU6	Y G P E V I G R A G A T I I	G A R
UniRef90_W0RGV7	F G A P R V H R T A G A T V I	G A R
UniRef90_I3ZGL2	V G S T E L H P T A G A S A V	G A R Q
UniRef90_UPI0004786082	E G P A V F P P K W G A T V T	G V R

UniRef90\_F8IAK0  
UniRef90\_Q6KZM5  
UniRef90\_Q67JH6  
UniRef90\_UPI00037A65C3  
UniRef90\_V5SDD3  
UniRef90\_Q3AE85  
UniRef90\_C1F119  
UniRef90\_UPI0003B5EFDD  
UniRef90\_UPI0002C30868  
UniRef90\_UPI00047C1063  
UniRef90\_D1CFA5  
UniRef90\_M1ZB11  
UniRef90\_UPI0002B49BCB  
UniRef90\_A9BHV6  
UniRef90\_A0A022QHY0  
UniRef90\_S9YS10  
UniRef90\_K4CFY8  
UniRef90\_UPI00047E6D0B  
UniRef90\_C1A6T1  
UniRef90\_E8X0K2  
UniRef90\_A0A059A072  
UniRef90\_F6HIH9  
UniRef90\_UPI0002B49C02  
UniRef90\_S7TDS4  
UniRef90\_UPI000478D18D  
UniRef90\_B9RW60  
UniRef90\_B9I688  
UniRef90\_V4SVF9  
UniRef90\_UPI0002ADA36B  
UniRef90\_U5FHM2  
UniRef90\_UPI0003AF6AD8  
UniRef90\_UPI000477ABBE  
UniRef90\_W9RAK6  
UniRef90\_Q75ID3  
UniRef90\_M0T945  
UniRef90\_X1ENM3  
UniRef90\_O95954-4  
UniRef90\_X1R7R3  
UniRef90\_R5FRX8  
UniRef90\_I1LUD8  
UniRef90\_B3T6B3  
UniRef90\_S0EWM6  
UniRef90\_K4CFY7  
UniRef90\_K0AYC9  
UniRef90\_H0Y253  
UniRef90\_UPI0003C2921E  
UniRef90\_A0A022QES4  
UniRef90\_M7YNC4  
UniRef90\_M7YNC4  
UniRef90\_I3T9I4  
UniRef90\_K4AIM5  
UniRef90\_UPI000364F483  
UniRef90\_D7TEJ8  
UniRef90\_M4EQR7  
UniRef90\_F2DE54  
UniRef90\_F6PS96  
UniRef90\_R7K7T2  
UniRef90\_K1T4A5  
UniRef90\_V8P718  
UniRef90\_S8C2H7  
UniRef90\_G2LHJ2  
UniRef90\_X1FWW5  
UniRef90\_C6Q2K7  
UniRef90\_T1BWU6  
UniRef90\_R4GBF3  
UniRef90\_UPI00032A5C6E  
UniRef90\_A9TPP5  
UniRef90\_UPI00042B6962  
UniRef90\_W1P8X9  
UniRef90\_Q505N5  
UniRef90\_UPI0003BB7293  
UniRef90\_C5WU82  
UniRef90\_F7DDZ6  
UniRef90\_G1TTZ8  
UniRef90\_G1FKH6  
UniRef90\_E6PJ36  
UniRef90\_H3BF49  
UniRef90\_A7RUE4  
UniRef90\_M3Z9A8  
UniRef90\_UPI00044315E0  
UniRef90\_W5KY26  
UniRef90\_F1R8M2  
UniRef90\_V9LDB5  
UniRef90\_UPI0002C44C2F  
UniRef90\_G3NE61  
UniRef90\_D5A959  
UniRef90\_W7CBH6  
UniRef90\_L5LDQ1  
UniRef90\_H2TJJ9  
UniRef90\_B6SZH1  
UniRef90\_W5MCT4  
UniRef90\_W5X424

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

UniRef90\_F8IAK0 P D H H R S V M T 50 L A G E P T A L V I E A A L V R V S R V A V E R I D L R R H Q G T  
UniRef90\_Q6KZM5 P Q H N R S V I T F T C G G I E A R I V I E A G I S M I K T A A S L I D M E K H H G G L  
UniRef90\_Q67JH6 V D H N R S V I T F T C G G I E A R I V I E A A L R G A E A A S L I D L M K H H K G G A  
UniRef90\_UPI00037A65C3 K D T N R T V V T F V I G G S P E A S V V E K A A F L G I K T A A S S V I D L M N Q O E K G A  
UniRef90\_V5SDD3 A D F D R T V V E L I G R K P E A V R E A I L A S A K A Y E L I D M E K Q Q H G R N  
UniRef90\_Q3AE85 A D F N R S V V T V E L I G K G P E A V K E A L I N M A K A A E L I D M E Q Q R Q G N  
UniRef90\_C1F119 H D H N R S V V T I A G H P A A V Q E A A I R A A G A A E E L I D L T R Q R Q G V  
UniRef90\_UPI0003B5EFDD A D H N R S V F T L I G E G E P L R E C A L N L V G V A A E R I D L E T Q R Q G V  
UniRef90\_UPI0002C30868 E T Y N R T V G Y T L V G D G P E P L R M A V L A M V K A A F E T I D L E S H C G S T  
UniRef90\_UPI00047C1063 A S F N R T V V T F I L G E P D P V K E A L V N M A K S A Q L I D M R K H H K G T  
UniRef90\_D1CFA5 P D H N R S V V T L A A P A D Q I V I E A V M S M I R R A V E L L D R Y H H V G V  
UniRef90\_M1ZB11 Y D F N R T V V T L V G G E P E P L K A A L T A M A G K S Y Q L I D M R E S H H G S  
UniRef90\_UPI0002B49BCB E V Y N R V G Y T L V G G K S C S L I S A V L N M V K A A F S A I D F N S H H C G S  
UniRef90\_A9BHV6 E Y F N R S F I S V V G E L N E I E T F L F E M V K I C V A N I D L R N H H S G Y  
UniRef90\_A0A022QH0 H E Y N R T V G Y T L V S Y R P L H Q S V V A M A E V A Y E A I N L E S R H H C G  
UniRef90\_S9YS10 P S T N R T V Y T F V G S P E D V V E G A L N A A R A A S Q L I D M S R H H R G E  
UniRef90\_K4CFY8 R D Y N R V N Y T L V S Y V S P L H Q T V V A M V A A A Y D A I N L E Q H H S G A  
UniRef90\_UPI00047E6D0B E S D H N R S F V I T I A G E P N A V V E A A V R G A G K A A E L I D L T V I Q Q G L  
UniRef90\_C1A6T1 A S H H R T V I T F V A G S L E A A V P A A F A M A V A R D R I D L T Q Q T G S V  
UniRef90\_E8X0K2 P D H N R S V V T I A G P P A Q V M E A A V L A A G K A A Q L I D L T Q Q T G S V  
UniRef90\_A0A059A072 E T Y N R V G Y T V V S D S C A L R S A V L A M V K T A F D A I D L E M S H S G S  
UniRef90\_F6HIH9 E T Y N R V G Y T L V S D T C A L R G A V L A M V K A A F E A I N L E M H H C G N T  
UniRef90\_UPI0002B49C02 G A Y N R T R Y T I V S Y V S P L L Q T V L S M T Q V A F S H I N L E S H S G T  
UniRef90\_S7TDS4 G E E N H L T I S L A G R P V P Q E A L M A A A R I A L E T I D M N T Y T H G S L  
UniRef90\_UPI000478D18D S D H N R S V V T F L K G S V E D T L R S A V L A M V K A A F E A I D F E Q H H S G S  
UniRef90\_B9RW60 A T Y N R V G Y T L V S S S S C S L R S A V L A M V K A A F E A I D F E Q H H S G S  
UniRef90\_B9I688 V T Y N R V G Y T L V S S C P L K G S V V L A M V K A A L E T I D F G L H H C G S  
UniRef90\_V4SVF9 V T Y N R V G Y T V V S S N S H P L K S T V F A M V K A A F E N I D D L M H H S G S  
UniRef90\_UPI0002ADA36B P E V Q A P P G T N A G P K G H L E R V I N R T V R F T L V S Y P S P L H Q T V L L A M V E A A Y G A I N L E L P S E G E  
UniRef90\_U5FHM2 R V Y N R T V R F T L V S Y P S P L H Q T V L L A M V E A A Y G A I N L E L P S E G E  
UniRef90\_UPI0003AF6AD8 P S T N R T V Y T F V G S P E D V V E G A L N A A R A A A H Y Q L I P L E Q P H H G G E  
UniRef90\_UPI000477ABBE K A H N R S V V T I A G T A A G I V I E A A V R A A A G K A A E L I D L T K Q S S G V  
UniRef90\_W9RAK6 D T Y N R V G Y T L V S S C P L R N A V F S M C R V F H E S I D L E M T H H S G S  
UniRef90\_Q75ID3 D H Y N R V R Y T L A S Y I S P M R R V L L E M I E K A F E S T I D L E T H H T S G T  
UniRef90\_M0T945 E I Y N R V G Y T L V S D V T P L S N A V F E M V K A A F E S I D L E T H H S G T  
UniRef90\_X1ENM3 S D Y N R A V I T F V G P P E A V L K A N I A A A K K A I E L I D M N S K H H Y Q G E  
UniRef90\_O95954-4 P S T N R T V Y T F V G P P E C V V E G A L N A A R V A S R L I D M S K R H H Q G G E  
UniRef90\_X1R7R3 S D H N R A V I S F V G E P E E C L D A A F A G C K K A A D L I D M D E Q K K G E V  
UniRef90\_R5FRX8 V C H N R S V F T I I G R E G I K E A A F D F A K I A L E I D D T K H H K G V  
UniRef90\_I1LUD8 V A Y N R V G Y T L V S E P C H L S N A V L A M V K A A F D S I D F E V H H T G T  
UniRef90\_B3T6B3 A D Y N R T V I T I A G Q A E P V I T Q A A I S L I R K S A E L I D M R L H H S G S  
UniRef90\_S0EWM6 P D H N R S V V S L L G D A Q Q I E A G A S L A A A A E A V K H I D M R R H H Q G G L  
UniRef90\_K4CFY7 E I Y N R V G Y T L V S K I S P L K N A S F A M V K A A F E T I D L Q E H H C G T  
UniRef90\_K0AYC9 H D F N R T V V T V I G E P A P L K E A L T K M A S K S I E L I D M R E Q Q S G T  
UniRef90\_H0Y253 Q D Y N R S V I T I A A S V D K L G S S V V S A C L E A F H A T D M E V H H E G I  
UniRef90\_UPI0003C2921E Y D Y N R S V I T I A A P I D M L G D Y V V S A C I E A F K S I D D L E V H H E G I  
UniRef90\_A0A022QES4 P T Y N R V G Y T L V S S P C T L K G A V L E M V K A A F A A I D L E K H H R G T  
UniRef90\_M7YNC4 E Y Y N R V R Y T L V S Y I S P I R K V L L A M I E A A F S A I N L E V H H S G T  
UniRef90\_M7YNC4 E Y Y N R V R Y T L V S Y I S P I R K V L L A M I E A A F S A I N L E V H H S G T  
UniRef90\_I3T9I4 V A Y N R V G Y T L V S S S C D L T N A V L A M V K A A F D N V D F E V H H S G T  
UniRef90\_K4AIM5 C L Y N R V R Y T L V S Y I S P I R K V L L A M M E A A F S A I N L E L H H S G A  
UniRef90\_UPI000364F483 P D H N R S V V T L L G T Q K A L E A A V P V F F E V A E K Y L N D I R L H H S R G E  
UniRef90\_D7TEJ8 R A Y N R T G Y T L V S Y I S P L Q Q T L L S M V E A A Y E A I N L E L H H H G A  
UniRef90\_M4EQR7 A A Y G R V G Y T L V S A S S P I R K S A V F A M V K T A F D A I N L E S H H C G  
UniRef90\_F2DE54 K Y Y N R V R Y T L V S Y I T P I R K V L L E M I E A A F S A I N L Q A H H S G T  
UniRef90\_F6PS96 H D Y N R S V I T I A A T I E K L G S A V L A T C V I E A F Q V I D M E V Q E G I  
UniRef90\_R7K7T2 A D H N R C V V T A A G A P E A I R S A L I D S A R V A A E E I D L N A H H R G V  
UniRef90\_K1T4A5 E A T N R T V V T F V G S P E A V V I E A A F A G V R R A A E E I D M R H H K G A  
UniRef90\_V8P718 S S T N R T V Y T F V G S P E D V V V G A L N A A K I A F Q F I D M A K H H K G E S  
UniRef90\_S8C2H7 A I Y N R V G Y T L V S R F S S L R N S V F E M V K A A F A A I D L E K H H C G  
UniRef90\_G2LHJ2 P D H H R S V I T F A G S P E A V R A A I A G L A R A V E C L D L S K H H Q G V  
UniRef90\_X1FWW5 S D Y N R A V I T F V G T P E A V L N A N I A A A K A I E L I D M N K H H K G Q  
UniRef90\_C6Q2K7 K D H N R S V T F I G G P E E T K E A A F K L I K K A S E L I D M S K H H S G A  
UniRef90\_T1BWU6 A D H H R S V I S L V G E G D P L L E A V F R M M Q V A T A T I D L T Q H H R G E  
UniRef90\_R4GBF3 Y E Y N R S V I T I A A P I D R L G S S V V A A C M E A F S S I D M A A H H V G I  
UniRef90\_UPI00032A5C6E R T Y N R A R Y S L V S Y V S P L Q Q T V V A M A E A A F N S I N L R Q H H D G G A  
UniRef90\_A9TPP5 H E Y N R V G Y T L A G S V C P L Q S A V T D V V R T A L R T I D L R Q H H S G S  
UniRef90\_UPI00042B6962 V T Y N R V G Y T V V S D S F P L K G A V F A I V K A A L E T I D F E L H H S G T  
UniRef90\_W1P8X9 L P Y N R V G Y T L V G Q I S A L H R A A L A M V E A A F R V I D L E S H H T G S  
UniRef90\_Q505N5 Y D Y N R S V I T I A A T A E Q I G E S V V S A C I E A G F A S I D L E S H H H G I  
UniRef90\_UPI0003BB7293 Q D Y N R S V I T I A A S V D E L N H A V L A A C M E A F R S I D M E A Q S E G I  
UniRef90\_C5WU82 H H Y N R F R Y T L V S Y I S P I R K V L L A M I E A A F A T I N L E S Y S S G T  
UniRef90\_F7DDZ6 P S T N P G P P T F V G E Q S C S I L G V K N R R T K S S L M L P Q C Y L S S  
UniRef90\_G1TTZ8 P S T N R T V Y T F V G Q P E C V V I E G A L N A A R V A S R L I D M S R H H K G E  
UniRef90\_G1FKH6 A A H N R S V L T I V G D A D R L V I E A A L A L A R V A R E R I D L R A H H R G L  
UniRef90\_E6PJ36 F D Y N R S V I T I A A P I D E I G N S V V A A C V I E A F Q S I D M E T H H D G L  
UniRef90\_H3BF49 L D Y N R S V I T I A A P V D S I E E S V F R A C K T A Y E E I D L S K H H G G G  
UniRef90\_A7RUE4 Q D Y N R S V I T I A A G S V D K L G S S V L A A C L E A F Y Q G I D M E V Q E G I  
UniRef90\_M3Z9A8 P S T N R T V Y T F V G P P D A V V I E G A L A A A R V A F Q L L D M S K H H R G E  
UniRef90\_UPI00044315E0 Y N Y N R S V I T I V A S I T L I K E A V F C A C E K A F S L I D M S Q H H V G V  
UniRef90\_W5KY26 S D Y N R S V I T V A N I E L I R E A V L S A C C E C A C S L I D M S Q H H E G I  
UniRef90\_F1R8M2 Y D Y N R S V L T I V A P I E T L G C A I V A A C T E A Y K L I D M E K H H S G I  
UniRef90\_V9LDB5 A A H N R S V L T I V A P I E T L G C A I V A A C T E A Y K L I D M E K H H S G I  
UniRef90\_UPI0002C44C2F H D Y N R S V I T I V A T I D S I R E A V L S A C E K A C A L I D V G A H H N G V  
UniRef90\_G3NE61 K D Y N R V G Y T L V Q S S C P S Q N T V L R M V R A A L Q A I N L E G H H N G T  
UniRef90\_D5A959 P N H N R S V I T L V G D E N G I Q E A A F Q L I K F A S E N I D L T K H H H G E  
UniRef90\_W7CBH6 Q D Y N R S V I T I A S V D E L N H A V L A C V E A F R S I D M E A Q E G E I  
UniRef90\_L5LDQ1 R G Y N R S V I T I V A S V D S I R E A V L S A C V K A C G L I D M R A H H S G I  
UniRef90\_H2TJJ9 D A Y N R V G Y T L V S P S P L R C A A F R V V A A A C E A V D L D A H H A G A  
UniRef90\_B6SZH1 H D Y N R S V I T L V A T P D Q I R G G A I V S C V Q A C E L I D M R R H H S G A  
UniRef90\_W5MCT4 V D H N R T V T A F S G D V A A V E S T L L R L C D L A F G W I D M R D H H V G V  
UniRef90\_W5X424

UniRef90\_F8IAK0 H P R F G A V D V I P F V P L I S G A S T M D D D C V I A S R R N Q V L G G E R L V A G S E M L N Q L I  
UniRef90\_Q6KZM5 H P R M G A T D V L P F V P L I V S S G V C T M E D D C C C V A L S A R R Q V V G G E R L V A G S E M L N Q L I  
UniRef90\_Q67JH6 H P R M G A T D V L P F V P L I V S S G V C T M E D D C C C V A L S A R R Q V V G G E R L V A G S E M L N Q L I  
UniRef90\_UPI00037A65C3 H P R M G A T D V L P F V P L I V S S G V C T M E D D C C C V A L S A R R Q V V G G E R L V A G S E M L N Q L I  
UniRef90\_V5SDD3 H P R I G A V D T T I E I Y P A K R N I T T E E E C C V A F A E E D L G G K E L F L N K R R H G N V V  
UniRef90\_Q3AE85 H P R I G A Q D T I P L F P M R N G I S L E E Q C C A L Q L A R E E Q A G G R E L V N W R R Y T G V  
UniRef90\_C1F119 H P R I G A A D V I P F V P L I R N A S M D D C C V R L A R E A A R E Q V S G S E R S Y P I  
UniRef90\_UPI0003B5EFDD H P R I G A T D V V P F V P L I R N A S M D D C C V R L A R E A A R E Q V S G S E R S Y P I  
UniRef90\_UPI0002C30868 H P R I G A V D H I P F H P L L D A S L E E Q M A G V L A N S E A E N E D V L G N E D L H K K T Q V I  
UniRef90\_UPI00047C1063 H P R I G A Q D T L P L F P L L D A S L E E Q M A G V L A N S E A E N E D V L G N E D L H K K T Q V I  
UniRef90\_D1CFA5 H P R I G V D V V P F V P L L G A A T Q E E S V K A A E I V A S M E R V L G F N E K T L E V V  
UniRef90\_M1ZB11 H P R I G A Q D T I P L F P L L R N A T L E E E C C A L Q L A E E Y I G A M E D V F F G Y S L Q V I  
UniRef90\_UPI0002B49BCB H P R I G V D H I C F H P L L A S A T L E E D A A L I A K Y L A K K I A G M A D V L G S E S F F E L  
UniRef90\_A9BHV6 H P R I G A V D V I P F V P L L S T T F D E A D N L V K R L A S K K I G S E S F F E L  
UniRef90\_A0A022QHY0 H P R I G V I D D I P C H P L L A R A S L H E A A W L A K T A Q A F G R R D V L G A E E F F Q V V  
UniRef90\_S9YS10 H P R M G A L D V L P F V P L V R G V S M D E C V L C A Q A F G R R D V L G A E E F F Q V V  
UniRef90\_K4CFY8 H P R I G V D D I L I H P L A R A S L D E A S W L A K K I A A D I A G N R R F F Q V V  
UniRef90\_UPI00047E6D0B H P R I G A A D V I P F A P L V S G A T R L E Q C C A L L A R E A G A G L E V W R R F F Q V V  
UniRef90\_C1A6T1 H P R I G A T D V V P F V P L L D G A T M D D C C V A L A R E L G A R E V W R R F F Q V V  
UniRef90\_E8X0K2 H P R I G A A D V I P F V P L V S G L S L A E A A M L A R Q A G L Q I A W R R F F Q V V  
UniRef90\_A0A059A072 H P R L G V V D H I C F H P L L G Q D S L D Q V T A A R S L A A V D I G S G S N L Q V V  
UniRef90\_F6HIH9 H P R L G V V D H I C F H P L L Q D A S L K Q T A G I A K S L A A D I G S G S N L Q V V  
UniRef90\_UPI0002B49C02 H P R L G V V D D I V F H P L L A R A S L H E A A W L A K A V A K D I A A M F F Q V V  
UniRef90\_S7TDS4 H L G I G A V D M L P F A P V V T N D S M E A C T T L A R D F F G R Y L F H E T E G V  
UniRef90\_UPI000478D18D H P R Q G A V D V I A A W V P V V K D M S T D E M N E V V H A F G K R Y V G S S G L Q V V  
UniRef90\_B9RW60 H P R L G V V D H I C C F H P L L A R A S L D Q V A E I A K S L A V D V G S S G L Q V V  
UniRef90\_B9I688 H P R L G V V D H I C C F H P L L A Q S A S L D Q A A G I A K S L A V D A G S S D L Q V V  
UniRef90\_V4SVF9 H P R L G V V D H I C C F H P L L A S A P L D Q V A E I A K S L A V D A G S S D L Q V V  
UniRef90\_UPI0002ADA36B H P R M G A L D V C P F I P V V R G V S M D C C V L C A Q A F G Q R L A G S E E L D Q V V  
UniRef90\_U5FHM2 H P R L G V V D D I V F H P L L A R A S L D E A A W L A K T V A A D I A G S E E L D Q V V  
UniRef90\_UPI0003AF6AD8 H P R M G A L D V C P F I P V V R G V S M D E C V L C A Q A F G Q R L A G S E E L D Q V V  
UniRef90\_UPI000477ABBE H P R I G A A D V I P F I P V V S G A S L A D C A V L A R Q A G L L I W R R Y G V V  
UniRef90\_W9RAK6 H P R L G V V D H V C F H P L L S A S L D Q A S T L A K S L A A D I H A L Q V V  
UniRef90\_Q75ID3 H P R I G V I D D M S F H P L L N Q A T M E D A A Q L A K T V A A D I S G N F L Q V V  
UniRef90\_M0T945 H P R L G V V D H I C F H P M A K A S L D E Q A A G I A K S V A A D I L H K L Q V V  
UniRef90\_X1ENM3 H P R M G A I D V C P F I P A Q N V I V E E C C K D L A Q A F F A E A M T K E E L D Q V V  
UniRef90\_U95954-4 H P R M G A L D V C P F I P V V R G V S I V D E C C V L C A Q A F G Q R L A G S E E L D Q V V  
UniRef90\_X1R7R3 H N R F G A T D V T P F I P I S D I S L E E C C A E L A E K L A K K I G D E L L K I  
UniRef90\_R5FRX8 H P R I G V I D H I M P L L K N I S M D E C C V V S K E V A L D D M G S T L Q L  
UniRef90\_I1LUD8 H P R I G V V D H I C F H P L L D A S L D H A A N A A R C L A T D Y G S T L Q L  
UniRef90\_B3T6B3 H P R M G A V D V C P F V P L A E G T H G D C M A S A A A V M E A V L G D D I  
UniRef90\_S0EWM6 H P R T G A V D V L P V V P L R K T V G R E E M V A D T A K T I A K F Q V L A G S N Q L K K I  
UniRef90\_K4CFY7 H P R I G V V D H I C F H P L G T T S V E E C C V K L A D E I L G K E L H E K T G V V  
UniRef90\_K0AYC9 H P R I G A Q D T I P L F P L M N A T V E E C C V K L A D E I L G K E L H E K T G V V  
UniRef90\_H0Y253 H C C L G A V D L I P I Y P L S G V G V E E E G E V A R S I A A Q E S L A L H V P C C  
UniRef90\_UPI0003C2921E H P R L G A V D L V P I Y P L L D V D L E E C C G T V A R S I A A Q E S L A L H V P C C  
UniRef90\_A0A022QES4 H P R I G V V D H I C F H P L S G A S V D H V A G T A K S L A A D V I G S S L Q V  
UniRef90\_M7YNC4 H P R I G V V D D M S F H P L Q A A T M E D A A Q L A K L V A S D I G G N G L L Q  
UniRef90\_M7YNC4 H P R I G V V D D M S F H P L Q A A T M E D A A Q L A K L V A S D I G G N G L L Q  
UniRef90\_I3T9I4 H P R L G V V D H I C F H P L V D A S L D Q A A R T A R C L A S S D M G G S S L E V  
UniRef90\_K4AIM5 H P R M G V N D V S F H P L G Q A T M E D A A S L A K Q V S E I G S N G F F Q V V  
UniRef90\_UPI000364F483 H P R I G I V D V L P F T P W R G V G M E E C K A L A W R V G E E I G S N G F F Q V V  
UniRef90\_D7TEJ8 H P R L G V V D D I V F H P L A R A S L E E A A W F A K M A A A D I G S N K F F Q V V  
UniRef90\_M4EQR7 H P R L G V V D H I C F H P L Y E T S L D Q V S S V A T S L A R D I L Q V V  
UniRef90\_F2DE54 H P R I G V V D D I S F H P L S E P A T M E D A A Q L A K L V A S D I G S N G L Q V V  
UniRef90\_F6PS96 H C L G A V D L I P I Y P L S E V G V E E C G M V A R S L A E K L T Q V P C  
UniRef90\_R7K7T2 H P R L G A L D V L P V V P L L E E T P E S V A D E L V R Q V L G Q D D L F D K L L  
UniRef90\_K1T4A5 H P R M G A T D V L P L I P I S G I T M E E C A E L A R T L A R R I G S N G L Q V V  
UniRef90\_V8P718 H P R M G A L D V C P F I P V V R N V T M E E C C V Y S A N L F G K C L A D E L  
UniRef90\_S8C2H7 H P R L G V V D H I C F H P L A G I S L D Q V S E I A R V L S A D L G S K L Q V  
UniRef90\_G2LHJ2 H P R I G V V D V I P F V P V R G V S T M D C C V A L A H Q V L A Q Q V H Q G L  
UniRef90\_X1FWW5 H P R L G A V D V C P F V P A Q N V T T E E C C K D L A K F A E A L T K E G V  
UniRef90\_C6Q2K7 H P R M G A T D V V P F I P I R D L T T E E C C V I R L A K D L G R K R V A R E L G I  
UniRef90\_T1BWU6 H P R M G A T D V V P F V P L I G A A T M D E A I R L A E R L A E R L V A R E L G I  
UniRef90\_R4GBF3 H C L G A V D L V P I Y P L S G V D L E E C G M V A R N I A E C L A H C V P C  
UniRef90\_UPI00032A5C6E H P R L G A V D D I V F H P L A R A S M D E A A W L A K A V A A D I A G N Q F N V  
UniRef90\_A9TPP5 H P R L G V V D H I C T H P L L A R A S M D E A A W L A K A V A A D I A G N Q F N V  
UniRef90\_UPI00042B6962 H P R L G V V D H I C C F H P L G H T T L D Q A A A I A K S L A A D I G S K L Q V V  
UniRef90\_W1P8X9 H P R L G V V D H I C F H P L A E A S L E D A T R L A R S A A N E L G S N K L Q V V  
UniRef90\_Q505N5 H P C L G A I D L V P I Y P L S G V T L D K C G E V A R D I A E G M A T L P E C  
UniRef90\_UPI0003BB7293 H P C L G A V D L I P I Y P L A G V G V E E C G A M A R T P R E R L A E T L I L  
UniRef90\_C5WU82 H P R L G V V D D L S F H P L G Q A T M E D A A S L A K Q V A Q Q L G N L Q V V  
UniRef90\_F7DDZ6 V P A T T L P L P S F S H K G Q T K M A F K I S S P Y F L G Q Q K A Q P L L V  
UniRef90\_G1TTZ8 R G G P T L S A G V L L G Q A Q A W L W E K G R L C T S T F G S S W A R A P P E  
UniRef90\_G1FKH6 H P R T G A L D V C P F I P V Q N V S M D C C V Q C A N A F G Q R L A E R L H I  
UniRef90\_E6PJ36 H P R I G A L D V L P F V P L L G D A P M A A A V E L A R N A R K I A W E R E G L  
UniRef90\_H3BF49 H C L G A V D L V P I H P L S Q V A L E E E C G T V A Q N T A E T L A A L V P G  
UniRef90\_A7RUE4 H P R L G A V D L V P L H P I T P V T L E E E C G K L A N I G R R I T D T I K S  
UniRef90\_M3Z9A8 H C L G A V D L I P V Y P L L G E V T V E E C G G V A R S L A D D L V L H V P C  
UniRef90\_UPI00044315E0 H P R M G A L D V C P K I P R T P A P P R P C D L C  
UniRef90\_W5KY26 H P C M G A V D L V P F Y P L L G E V D L Q E D D C G K E A Q A G L A T A L T E R V L G T  
UniRef90\_F1R8M2 H P C M G A V D L V P L Y P L L G D V L Q E D D C G K E A Q A G L A T A L T E R V L G T  
UniRef90\_V9LDB5 H C L G A V D L V P I Y P L L S E V G L G E E C A K V A H G V A E R L T A E R V L G T  
UniRef90\_UPI0002C44C2F H P R M G A L D V C P F I P V R D I S M D E C C V L C A Q A F G Q R L A E E L R T  
UniRef90\_G3NE61 H P C M G A V D L I P I Y P L L G E V T V E E C A E A R A V A Q Q L T E R V L T  
UniRef90\_D5A959 H P R L G V V D H I C Y H P L L G D A S L H Q V A S L A R S L A A D L G L T L K V  
UniRef90\_W7CBH6 H P R M G A T D V V P F V P V K D V T M E E C C L E I S K K  
UniRef90\_L5LDQ1 H C L G A V D L I P I Y P L A G V G V E E C G A V A R M L T A R L A E T L V L  
UniRef90\_H2TJJ9 H C M G A V D L V P I Y P L L G E V G V E E C A K E A R A L A Q A L T E R V L Q A  
UniRef90\_B6SZH1 H P R L G V V D H I A F H P L A S A R L E D V T A L A R A V A A D I L G D R L Q V  
UniRef90\_W5MCT4 H C L G A V D L V P I Y P L L G E V G L E E C G Q E A R A V A V S L T E R V P T  
UniRef90\_W5X424 H P R V G A L D V C P F V P L L G D H A V R E S L A L A E R V A A R I G G G Y G V

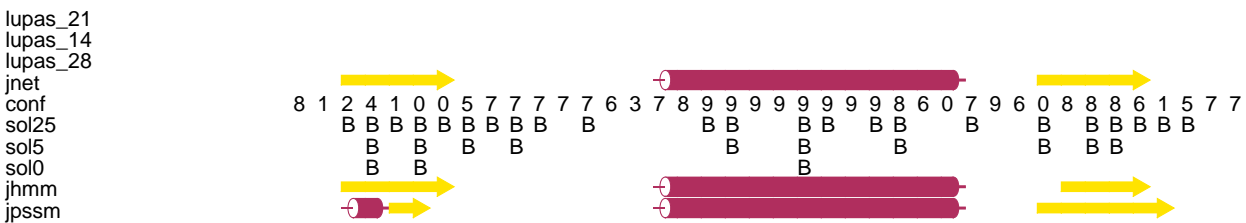
UniRef90\_F8IAK0 P V F Y Y E A S A L K P E R R N L A A V R R G Q Q F E E G L A D R M A K D P P D  
UniRef90\_Q6KZM5 P V F M Y S E S A M V P E R R N L A E N V R R K Q Q F E E G L K E E L T K D T K Y R P D  
UniRef90\_Q67JH6 P V F L Y E E S A A T R P D E R R N L A D V R R R G G E Y E E G L R E L I G D P A K D P D  
UniRef90\_UPI00037A65C3 P V Y L Y E E H S A A K T P D E R R K S L P A V I R R D G E Y E E G F A Q K L A G D P E W K P D  
UniRef90\_V5SDD3 P I F F T G K N A R R P D E R E G L T A I R R K G N Y E E G L R D D V I K D P D R A P D  
UniRef90\_Q3AE85 P I F F S G E N A R I P D R K A Q L D F I R R K G Q F E E G L R D L L P D P K R L P D  
UniRef90\_C1F119 P V Y F Y E A A A R P D D R A Q L E E V V R R G Q Q F E E G L R D E A V N E P A R R R P D  
UniRef90\_UPI0003B5EFDD P T Y L Y A L A S I R P D R T K L S E L R R R G N Y E R L K T A L G D P Y F E P D  
UniRef90\_UPI0002C30868 P T F L Y G A A H E E R R T L D S I R R R G E Q W V G G P K S E Y L A L K P D  
UniRef90\_UPI00047C1063 P T F F A G E A A S N E D R R K A F A Y I R R K G Q Y E E G L R D L L K E D N R K P D  
UniRef90\_D1CFA5 P V Y L Y E W A A R H P E Y R A L P D V R R L Y S Q A I L A G N F L E P D  
UniRef90\_M1ZB11 P T F F A G Q N G R T E D K K S I S Y L R R K G Q Y E E G L R T L L E D E N R K P D  
UniRef90\_UPI0002B49BCB P T F L Y G A A H E E G R K L A V I R R E L G Y F K P I N S E G S K W A G L K P D  
UniRef90\_A9BHV6 P T Y L Y E K S A R N D Y R R N I N T L R K G E F E F L A K K M S F P E W E P D  
UniRef90\_A0A022QHY0 P V Y L Y G A A H P T G K S L E T I R R E L G Y Y R N F T G N K W A G W K P N  
UniRef90\_S9YS10 P V I S Y T E V V S R L G L D E S L P  
UniRef90\_K4CFY8 P V Y L Y A A A H P M G K A L D T I R R E L G Y Y R P N F R G I Q W A G W K P D  
UniRef90\_UPI00047E6D0B P V Y F Y E A A A A R P D R A N N V E D V R R R D G F E E G L R D A V R N K D A S R R P D  
UniRef90\_C1A6T1 P V Y L Y E R A A A S T P A R E N L A D V R R R G E F E E G L R D D V R N P A R R P D  
UniRef90\_E8X0K2 P V Y F Y G A A A A R P D R V Q L E D V R R G Q F E E G L R E A L K D A A R R P D  
UniRef90\_A0A059A072 P A F L Y G A A H E E D G R T L D S I R R R E L G Y F K P N A P N S Q S M P L K P D  
UniRef90\_F6HIH9 P T F L Y G A A H E E E R T L D S I R R R E L G Y F K P N S S G N Q W A G L K P D  
UniRef90\_UPI0002B49C02 P V F L Y S A A H P S G K A P D D L R R E L G Y F R P N Y K G N Q W A G W S P D  
UniRef90\_S7TDS4 P V Y F F Y G E A A I R H E R R K C P A D L R R K G G Y D L L K E E A S A P K R R P D  
UniRef90\_UPI000478D18D P T F L Y Y E D S A T R E D R K S L V K L R K G E Y E S L E E R L K D A E W T P D  
UniRef90\_B9RW60 P T F L Y G A A H Q Q G R K L D S I R R R E L G Y F K P N S G N Q W T G G M K P D  
UniRef90\_B9L688 P T F L Y G A A N V E E G R T L D S I R R R E L G Y F W A G S P K S E S L P L K P D  
UniRef90\_V4SVF9 P T F L Y G A A H E E G R T L D S I R R N L G Y F K P N S A G N Q W A G V K P D  
UniRef90\_UPI0002ADA36B P V Y L Y G E A A R M D S R R T L P A I R A G E Y E A L P K K L Q Q A E W A P D  
UniRef90\_U5FHM2 P V F L Y A A A H P T G R A P D T I R R E L G Y Y T P N F M G N Q W A G W A P D  
UniRef90\_UPI0003AF6AD8 P G  
UniRef90\_UPI000477ABBE P V Y F Y G A A A A R P D R I L L E D V R K G Q Q F E E G L R D A S R D A S R R P D  
UniRef90\_W9RAK6 P T F L Y G A A H E E G R T L D A V I R R R E L G Y F K P N S S G N Q W S G L K P D  
UniRef90\_Q75ID3 P V F L Y G A A H P T G K P L V T A V I R R E L G Y F K P N Y M G I Q W M G V K P D  
UniRef90\_M0T945 P T Y L Y G A A N E G G R T L D S I R R R E L G Y F K P N S D G N Q W S G L K P D  
UniRef90\_X1ENM3 P V Y L Y E E S A T K P E R R N I D N I R R G E Y E E G L K E T K T N E H K P D  
UniRef90\_O95954-4 P G L T A G L S C S L P V R R G S Q D G Q S P D P A G H P G R  
UniRef90\_X1R7R3 P T Y L Y G A A A K N P S R E V L Q K Y R T K S F  
UniRef90\_R5FRX8 P V Y L Y E F S Q E R E E Y R K N L A D V R R N C G F E S L D E K M K D K N W L P D  
UniRef90\_I1LUD8 P T Y L Y G A A H E E G R T L D S I R R R I G Y F K P N S I E N Q W I P D  
UniRef90\_B3T6B3 P V Y L Y G D A A T S R P R A Q L A K L R R G Q Y E A L E A R L S G G V W D D  
UniRef90\_S0EWM6 P T F L Y E W A A R P G R E T A L P K L R Q G G W E H I A Q S V L D P D  
UniRef90\_K4CFY7 P T F L Y G A A Q Q E G R S L D S I R R R E L G Y F H P N S S E N Q W L Q L K P D  
UniRef90\_K0AYC9 P I F Y A A D N A T T E D R K A L A F I R K G Q Y E E G L R D L L K E E S R K P D  
UniRef90\_H0Y253 S V F L F G E A D L P E K R S L V Q R R K Q L G W F T R R D F S A L E P D  
UniRef90\_UPI0003C2921E S V F L F G H A D Q P E K R S L V Q R R K Q L G W F I G R K D S M E N K P D  
UniRef90\_A0A022QES4 A T F L Y G A A H S E G R T L D S I R R G L G Y F K P N S D D N Q W L E L N P D  
UniRef90\_M7YNC4  
UniRef90\_M7YNC4  
UniRef90\_I3T9I4 P T F L Y G A A H E E G M K L D S V I R S A F G Y F K P N S S E N Q W I G M K P Y  
UniRef90\_K4AIM5 P V F L Y A A A H P T G K S V D G A I R R R E L G Y Y R P N H M G N Q W S G L I S P D  
UniRef90\_UPI000364F483 P V Y F Y G E A A K R P E H R D L S Q I R R R G G Y E A L R R E E I A R P E R F P D  
UniRef90\_D7TEJ8 P V F L Y D A A H P M G K P L D I T R R R E L G Y Y R P N F M G N Q W S G W K P D  
UniRef90\_M4EQR7 P T Y L Y G A A H E E Q C T L D S I R R R K L G Y F K A N R E G H E W A G V K P D  
UniRef90\_F2DE54 P V F L Y A A A H P T S K S L S A A R R E L G Y Y R P N H K G V I Q W A G V K P D  
UniRef90\_F6PS96 S V F L F G E A D Q P E K R S L V Q R R K E L G W F S R R E F S S L K P D  
UniRef90\_R7K7T2 P V Y F Y E K S A S A P F R R N L A D V R R G G F E E G L A K K T S E P L W R F D  
UniRef90\_K1T4A5 P T Y C Y E A S A L R P E R R N L A V C R A G E Y E A L P E K L A H A D T A P D  
UniRef90\_V8P718 P T F L Y G A A H H E G R T L A S L R R E L G Y F R P S S S D H H A W S F T P D  
UniRef90\_S8C2H7 A T F L Y G A A H H Q A V T L A A A I R R A V R T A T F V T P D  
UniRef90\_G2LHJ2 P V F C Y G E A A H Q A R T L A A I R R A  
UniRef90\_X1FWW5 P V Y L Y E E S A T K P E R R N I D N I R I G E F E G L K E T K N P E H K P D  
UniRef90\_C6Q2K7  
UniRef90\_T1BWU6 P V Y L Y A K A A R R P E R A D L A K V R E G Q F E G I R A S I S D P A R A P D  
UniRef90\_R4GBF3 S I F L F G H A D L P K K Q S L V I R R R K Q M G W F N K G A S K A A H I I P D  
UniRef90\_UPI00032A5C6E P V F L Y A A A H P T G K E L D K I R R R E L G Y Y R P N V T G F Q W A G W T P D  
UniRef90\_A9TPP5 P A F L Y G A A H R N G R P L D D I R R A L G Y F W I G S N I F P A T M Q P D  
UniRef90\_UPI00042B6962 P I F L Y G A A N E G G R T L D S I R R R E L G Y F K P N F G G I Q W S G L K P D  
UniRef90\_W1P8X9 P T Y L Y G A A H Q G A R T L D S I R R R E L G Y F H P N F P Q D P N H W T P D  
UniRef90\_Q505N5 S I F L F G H A D L Q G A R K S L A E K R R D L G W F K N K E I D L N K L K C D  
UniRef90\_UPI0003BB7293 S V F L F G E A D L P E K R P L V I Q R R K Q L G W F A R R D L G A L E P D  
UniRef90\_C5WU82 P V F L Y A A A H P T G K S V G A I R R E L G Y Y R P N Y K E N Q W L G V K P D  
UniRef90\_F7DDZ6 S V Y L Y G E A A Q K D N R K A L P T I R A G E Y E G L P E K L R L A E W A P D  
UniRef90\_G1TTZ8 P G  
UniRef90\_G1FKH6 P V Y L Y G E A A R K E T R R S L P S V R A G E Y E A L P D K L K H P D W S P D  
UniRef90\_E6PJ36 P S F L Y G E A A L P E R R L L A N A R R D G F E G L A R F A R S D R P D  
UniRef90\_H3BF49 S S F F H F G Y A D Q P Q M R S L V I Q R R K E L G W F R K K S S L N S N E V K A  
UniRef90\_A7RUE4 S V F F F G H A D L P L K R G L V T R R K A V S W Y E G K G D M T F D G I G W D  
UniRef90\_M3Z9A8 S V F L F G K A D L P E K R S L V I Q R R K Q L G W F T R R D S  
UniRef90\_UPI00044315E0 P G L L S P Q L K K A E W A P D  
UniRef90\_W5KY26 S A F F F G W A D V P L R R G L A Q R R K E M G W F Q K I P N M A A S Q P D  
UniRef90\_F1R8M2 S A F L F G W A D S P Q H R G L A Q R R K E I L G W F R K V L N V S N I K P D  
UniRef90\_V9LDB5 S M F Y F G Y A D Q P L K R S L V I Q R R K E S G W F R K S S S N M D G I K P D  
UniRef90\_UPI0002C44C2F P V Y L Y G E A A R M A S R Q T L P A I R A G E Y E A L P E K L K R A E W A P D  
UniRef90\_G3NE61 S A F L F G W A D S P L Q R G L A Q R R R E M G W F K K T P D L Q A I R P D  
UniRef90\_D5A959 P T F L Y G A A H H E N R N L D S I R R A L G Y F K P N H E G S G L Q L S P D  
UniRef90\_W7CBH6  
UniRef90\_L5LDQ1 S V F L F G E A D L P K K R P L V I Q R R K Q L G W F A R R D L S A L E P D  
UniRef90\_H2TJJ9 S A F L F G W A D Y P L Q R G L A Q R R K E M G W F Q K S L D L Q T V R P D  
UniRef90\_B6SZH1 P T Y L Y G A A H R D G R T L A S I R R R Q L G Y F T P T S P G G E Q W A P D  
UniRef90\_W5MCT4 S V F H F G F A D P Q Q R S L V I Q R R K E L G W F R K N P D L R A M Q S D  
UniRef90\_W5X424 P V F L Y E K S E R G R H E A D L P A L R R G G F E A L R D R E I R P D

UniRef90\_F8IAK0 V G P I R P H P S A G A V A V G A R R  
UniRef90\_Q6KZM5 F G P D S L G S A G A V I G A R  
UniRef90\_Q67JH6 F G P R K L H P T A G C T A V G A R  
UniRef90\_UPI00037A65C3 F G P A K F N S R S G A T V M G Y R  
UniRef90\_V5SDD3 L G P A K M H P T A G A T I V G A  
UniRef90\_Q3AE85 I G D V K E F V H K G G T I V S A  
UniRef90\_C1F119 V G G P E L H P T A G A V A I G A R K  
UniRef90\_UPI0003B5EFDD F G P K R L A S A G A T A V G A R  
UniRef90\_UPI0002C30868 K G P L Q V T Q E K G V I V I G A T R  
UniRef90\_UPI00047C1063 L S I D G L S E S A G A T I C S A  
UniRef90\_D1CFA5 F G P F M P H P T A G A C V V G A R  
UniRef90\_M1ZB11 L S I D K L S E K S G A T I V S A  
UniRef90\_UPI0002B49BCB D G P A E A S K A K G V V V I G A T K  
UniRef90\_A9BHV6 F G P N H P H P T A G A T I M G V R  
UniRef90\_A0A022QHY0 E G P E T V S K T K G V V M I G A R  
UniRef90\_S9YS10  
UniRef90\_K4CFY8 E G P E V V S R A R G V V M I G A H K  
UniRef90\_UPI00047E6D0B I G G P A L H P T A G A C A V G A R K  
UniRef90\_C1A6T1 F G P A E L H  
UniRef90\_E8X0K2 V G G P E L H E T A G A S V V G A R S  
UniRef90\_A0A059A072 D G P P R A A Q G K G V I V I G A T R  
UniRef90\_F6HIH9 V G P A Q A A Q A K G V V V I G S T R  
UniRef90\_UPI0002B49C02 E G P N T V S R E R G I T M I G A R  
UniRef90\_S7TDS4 I G E P R L H P T A G A T A V G V G K  
UniRef90\_UPI000478D18D E G E R K F N P K S G A T V T G T R  
UniRef90\_B9RW60 E G P T Q T N Q E K G V V V I G A T Q  
UniRef90\_B9I688 E G P A Q V N Q A K G V L V I G A T R  
UniRef90\_V4SVF9 R G P D Q V T Q S K G V I V I G S T R  
UniRef90\_UPI0002ADA36B F G P S S F V P S W G A T A T G A R K  
UniRef90\_U5FHM2 E G P T H V S R T R G I V M I G A R  
UniRef90\_UPI0003AF6AD8 S G P A S F V P R G G P T A T G A R K  
UniRef90\_UPI000477ABBE I G G P E L H E T A G A S A V G A R S  
UniRef90\_W9RAK6 E G P A Q V P P T K G V I V I G A T Q  
UniRef90\_Q75ID3 E G P D H V S R E R G A I M I G A  
UniRef90\_M0T945 A G P L Q S S L A K G V V V I G A T R  
UniRef90\_X1ENM3  
UniRef90\_O95954-4  
UniRef90\_X1R7R3  
UniRef90\_R5FRX8 Y G T K K H M T A G A T C I G A R N  
UniRef90\_I1LUD8 S G P S Q V T P A K G V V V I G A T N  
UniRef90\_B3T6B3 E D P D R W S G S W G A M A V G V R Q  
UniRef90\_S0EWM6 F G P S H P H P T A G V A I V G A R  
UniRef90\_K4CFY7 E G P P H A T Q A K G V I T I G A T R  
UniRef90\_K0AYC9 L S T D G L S D K S G A T I C S A  
UniRef90\_H0Y253 L G A A P A R R C G L T G V G A  
UniRef90\_UPI0003C2921E I G A T L S Q R Y G L T G I G A  
UniRef90\_A0A022QES4 E G P P R A L Q K K G V V V V G A T  
UniRef90\_M7YNC4  
UniRef90\_M7YNC4  
UniRef90\_I3T9I4 S G P S Q V I P T K G V V V I G A T R  
UniRef90\_K4AIM5 E G P T N V S S E R G A T T V G A T  
UniRef90\_UPI000364F483 V G P C E V H P T L G A T A I G A R  
UniRef90\_D7TEJ8 E G P T M V S R A R G I V M I G A R  
UniRef90\_M4EQR7 A G P Q E V S K A K G V V A I G A  
UniRef90\_F2DE54 V G P A H V S R E R G A T M V G A T  
UniRef90\_F6PS96 I G T T P N K R C G L T G I G A  
UniRef90\_R7K7T2 I G E K P H P T A G A V A V G V R K  
UniRef90\_K1T4A5 F G A R P F V A R T G A T I V G A R  
UniRef90\_V8P718 F G P A T F V P R W G A T V T G A R K  
UniRef90\_S8C2H7 E G P P R A T P R K G V V V V G A  
UniRef90\_G2LHJ2 Y G P P R P H P T A G A V A I G A R  
UniRef90\_X1FWW5 Y G P S E F H P T A G A T I I G A R  
UniRef90\_C6Q2K7  
UniRef90\_T1BWU6 F G A A R V H P T A G A V A I G A R  
UniRef90\_R4GBF3 V G L A P T S R Y G L T G V G A  
UniRef90\_UPI00032A5C6E E G P I V V S R A R G I S M I G A R S  
UniRef90\_A9TPP5 F G P R V A P S S G I V V V G A  
UniRef90\_UPI00042B6962 A G P A Q V S P A K G V I V I G A  
UniRef90\_W1P8X9 A G P K F A S Q A K G V V I V G A  
UniRef90\_Q505N5 V G A K P S W R Y G V T G V G A  
UniRef90\_UPI0003BB7293 L G A A P A R R R G L T G V G A  
UniRef90\_C5WU82 V G P T H V S H K R G A T T V G V T  
UniRef90\_F7DDZ6 F G P G S F I P T W G A T A T G A R K  
UniRef90\_G1TTZ8 F G P S S F V P S W G A N A P G A R K  
UniRef90\_G1FKH6 F G P A M F I P S W G A T V T G A R K  
UniRef90\_E6PJ36 I G D I A A H E S A G A I A I G A R E  
UniRef90\_H3BF49 G G E A T L S S K W G L T G I G A T  
UniRef90\_A7RUE4 I G P A P T P R Y G C T G V G A  
UniRef90\_M3Z9A8  
UniRef90\_UPI00044315E0 F G P S T F V P S W G A T V T G A R K  
UniRef90\_W5KY26 I G P Q P T R Q Y G L T G I G A  
UniRef90\_F1R8M2 I G S Q P T R R Y G I T G V G A  
UniRef90\_V9LDB5 V G T V I S P R Y G L T G I G A  
UniRef90\_UPI0002C44C2F F G P A T F V P S W G A T A T G A R K  
UniRef90\_G3NE61 V G P Q P Q N P F G L T G V G A  
UniRef90\_D5A959 Y G P S Q V L S S T G V V I V G A  
UniRef90\_W7CBH6  
UniRef90\_L5LDQ1 L G A A P A R R C G L T G V G A  
UniRef90\_H2TJJ9 V G P E P R R R F G V T G V G  
UniRef90\_B6SZH1 A G P R T S S A S N G V V V V G A T  
UniRef90\_W5MCT4 V G A M P G K R Y G L T G V G A  
UniRef90\_W5X424 F G P S H A H P K L G V T V L G V R

```

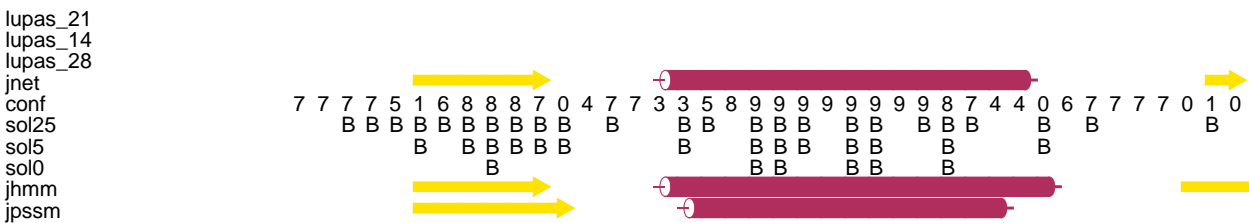
UniRef90_UPI000350AE6F      1      10      20      30      40
UniRef90_UPI00044482CB    S R L A C C K L Y I S E A R N A P A L R A I E R A A A A Q S P A V L V N A F A D
UniRef90_Q9SNU8            L V A C L L N V S E G R R K D L V E N V A K A A L Q R K E T T V L N I F N D
UniRef90_K1U656            L A C C K L Y I S E S R N D A A L R A I E Q A A R G G G G G A V V N R F T D
UniRef90_L1JP83            M A C C K M Y V S T S S N R Q A M E N I E Q A M R G H P Q V P L L H T F R D
UniRef90_D8R013            C C N V Y I S E G R D K A L I G K L E A A A Q A T P G V A L V N V F Q D
UniRef90_A8HWWL3
UniRef90_T1AMQ4
UniRef90_F7GGE2            L A V C L L N I S E V R R K N I V E K I A K A K K N E D T I L N I F S D
UniRef90_F2EHZ1            M L A C C K L Y V S E G R S A A A L R A V E Q A A R H H P A V A L V N T F V D
UniRef90_G7JGF5            L G C C K V Y I S E S R N K S A L E S I E K A A K F F P L A P I I N K F E D
UniRef90_UPI00038908E6    R L A A C L L N I S E A R R K D I V E K I A K A A L H D D N A T V L N I F S D
UniRef90_L0P0V9            S I L G C C K L Y I S E S R N K S A L E S I E R A S K L F P N A P I V N K F E D
UniRef90_X1QQ99            K K I V E S V P N Y S E G T D G D K I E R I V A E I K N T P E T N I V D I Q Y D
UniRef90_I1I92            M L A C C K L Y V S E S R S A A A L R A V E Q A A R H H P A V V L V N R F A D
UniRef90_C1E2A7            V V Y V S E G K D A D V L Q T V A E K A C Q Q H G T R V L N V F R D
UniRef90_UPI0002B8D4D6    K L I E C V P N F S E G K N Q K V I D A I S T S I R E T A G C S L V D V D A E
UniRef90_C6SVV8            S I L L C C K F F V S E S R N N A T L N A I E R V A R S N P E T V I V N M F H D
UniRef90_G3U0L1            L A A C L L N I S E A G R K Y V V E N I A R A A Q K H P E A S V L S I F S D
UniRef90_Q011W5            S R A L A A V V Y V S E G R R T V L D A I E R V A R D A N R V A L V N V F V D
UniRef90_W4ZHx9            R L G I C C L L N I S E A R N R L I L E N V A Q A T R X S T G S V L N I F Q D
UniRef90_I0YZZ2            L A A C C N V Y I S E G L R S T L V Q Q L V C A D K C I S G S A L V H T F V D
UniRef90_UPI0003AF0F10    R L A A C L L N I S E A R R K Y I V E N V A K A A A A A A A A A A A A A A A A
UniRef90_C1MPD0            V V Y V S E G K N E G V V A N L E R T A E E T H G A K V V N V F R D
UniRef90_R6B2N6
UniRef90_M3ZMI5            S R L V A C L L N V S E A R R T D L V E N V A K A A L Y D A E S V T F S L S S Q
UniRef90_C7M2Q3            M L E C V I N I A E G R E T R A V E A I V Q A A A P A L L D V H V D
UniRef90_J3MAT1            L A C C K L Y I S E S R N A S A L R A I E Q A A R A G A G A G X X X X X X X
UniRef90_A4S2F9            A A V V Y V S E G R R T A V L D V I E R V A R E A R P V A L V N V F R D
UniRef90_C9M5F3
UniRef90_D6PB17            M L L A V P N V S E G R D A E V I A A I G R A Y A S G G A R L L D T H D D
UniRef90_UPI000479391F    R L L L A V P N V S E G R D V A T I A A I G G A Y D G A A R A R R L D V H A D
UniRef90_UPI0003B4D66A    R L V G C L M N I S E G R S K E T V E A I A M S A T G R D G C S V L N I F S D
UniRef90_C3Z6X6
UniRef90_M4F5Z7            K K I V E S V P N Y S E G I D A E K I E L I V A E I K N T P N T R I V D I Q Y D
UniRef90_X0VXM1            R L A V C L L N I S E A R R K Y I V E N V A K A A Q K H P E V S V L N V F S D
UniRef90_UPI0002C36CFA    C A V V Y V S E G R N S T L L D A L A E A A R T T A P A G L I R Q F R D
UniRef90_D8LBA3
UniRef90_X1FXJ8            R L A A C L L N V S E A G R K Y I V E N I A K A A K K H P Q V S V L N I F S D
UniRef90_D8TIL8
UniRef90_UPI00029D95CD    A E A D A T H G V A L A N I F V D
UniRef90_Q7P2A9            R L A A C L L N V S E A G R K Y I V E N I A K A A K K H P Q V S V L N I F S D
UniRef90_D3FCR8            V L L A V P N V S E G R D D D A I D A I A A A F T G G D G V R L L D V H R D
UniRef90_UPI0003343AA0    R L A A C L L N I S E A R R K H I V E N I A K A A Q K Y P E V S V L N I F S D
UniRef90_UPI0003F1627A    R L A A C L L N I S E A R R K Y I V E N I A K A A Q K H H E V S V L N I F S D
UniRef90_E1Z5R7            V Y V S E A R D G D L R Q L E S V A R Q A P G A C L A N L F T D
UniRef90_F0YBQ2            F K D
UniRef90_A9V0F7            R V L A L K I Y L S E G R S N V V L D Q L V A L A E A C A G V R L V D T F R D
UniRef90_UPI000454AAE2    S R L V E C V P N F S E G N K K E V I D A I A K A L S Q T Q G L R D W M P G
UniRef90_G3WLF6            R L A A C L L N I S E A R R K N V V E K I A K A A K E H S E V T V L N I F S D
UniRef90_UPI0002BCF652    R L A V C L L N I S E A R R K Y I V E N V A K A A Q K H P E V S V L N V F S D
UniRef90_UPI000328A4B6    L A A C L L N I S E A R R K C V V E N I A K A A Q K H P E V S V L N I F S D
UniRef90_UPI0003C18700    R L A A C L L N I S E A R R K Y V V E N I A K A A Q R H P E V S V L N I F S D
UniRef90_UPI0003C18700    I V Y V S E G R C P S L L S E L A V F A A T A T A T E L A H S F A D
UniRef90_W4GBF7            V I A M V H A Y A D
UniRef90_B8C1N3
UniRef90_A0A024TS71            L A A C S L N V P E G R C P S K V R E L A T L A S T A P P A L V A H S F A D
UniRef90_UPI00046B14FB    L A A C S L N V P E G R R Q H I V E N I M R T V Q K R P E V S V L N T F S D
UniRef90_UPI0002C46275    N I S G A R R K Y V V E N I A K A A K K H P E V S A L N I F S D
UniRef90_K0S0T3
UniRef90_B7FZ02            S T R S A A V V H A Y A D

```





UniRef90\_UPI000350AE6F D A Y N R V G Y T L V A P P P P L H R A A F G V V A A A L E A V D F G A H A G A  
UniRef90\_UPI00044482CB H D Y N R S V I T I V A S V D S I R D A V L S A C Q E A C A L I D M R G H A G V  
UniRef90\_Q9SNU8 D A Y N R V G Y T L V A P L T P S R H A V L G M V R A A L E A I D F G A H A G T  
UniRef90\_K1U656 R T F H R S G F C L A G A P D A V G N A A I A L S R R A A E Y I D L T S H V G E  
UniRef90\_L1JP83 E H Y D R V G Y T L A G S R E N F A D A I V D M I R A A I L N I D D L Q K Q S G S  
UniRef90\_D8R013 E P Y H R T G F T L V G Q P D R L T E A V V R L S R A A L Q L L D L R R H D A S  
UniRef90\_A8HWL3 Y D Y N R S V I T I A A P I D M L G N Y V I A A C T E A F R S I D M A I Q E G I  
UniRef90\_T1AMQ4 H D Y N R S V I T T T A A T I E K I C S I V L V A C V E V F Q V I D M E V Q E G I  
UniRef90\_F7GGE2 D A Y N R V G Y T L V S R L P P L H R A V F G M V E S A L G A I D L A S H A G A  
UniRef90\_F2EHZ1 V A Y N R V G Y T L V S S S C D L T N A V L A M V K A A F D N V D F E V H S G T  
UniRef90\_G7JGF5 Y D Y N R S V I T I A A P I D M L G N Y V I A A C T E A F R S I D M A I Q E G I  
UniRef90\_UPI00038908E6 V V Y N R V G Y T L V S E P C H L I T S A V L A M V K A A F E T I D F E L H S G T  
UniRef90\_L0P0V9 S D Y N R A V I T F V G S P E A V L K A N I A A A K K A I D L I D M N N H E G Q  
UniRef90\_X1QQ99 D A Y N R V G Y T L V A G S S P L R R A V V G M V G A A L D A I D L R S H A G A  
UniRef90\_I1I92 D E Y N R T G F T L V G S V E P L K Q S A L A L T E Q A L K T I D L R N H S A T  
UniRef90\_C1E2A7 G S T N R T V I T F V G S P D A V V Q G A L N A A K A A F K L I D M A K H K G E  
UniRef90\_UPI0002B8D4D6 R S Y N R A R Y D L V S Y V S P L H Q T V I A M A E A T F N A I N L E F H G E G A  
UniRef90\_C6SVV8 Q N Y N R S V I A T A A S V D K L G S S V L A A W V E A F Q S I N M E V Q E G I  
UniRef90\_G3U0L1 R E Y N R T G F T L A G A H D G I A N T A L D I A K K S L E L I D F S T Q H E D A T  
UniRef90\_Q011W5 I D Y N R S V L T I A A P I N H L K T A V C G A C K E A Y R R I D L S K Q E G V  
UniRef90\_W4ZHx9 K P Y N R T G F T L V S P P H E L A G S V V R L A R A A L E T I D L R S H A A S  
UniRef90\_I0YZZ2 V E Y N R T G F T L S G A V E P L R Q S A L A L T E K A L S L I D M E V Q D G I  
UniRef90\_UPI0003AF0F10  
UniRef90\_C1MPD0  
UniRef90\_R6B2N6 C D Y F Q T A F S A L N A P F P P G D A V L S A C Q E A C A L I D M R G H H V G V  
UniRef90\_M3ZMI5 A D H N R S V F T L A G P M V E D A A W S I A E A A H L L D L R H H V G V  
UniRef90\_C7M2Q3 X X X X X X X X X X X X P S P L R H A V F G M V R A A L E A I D F G A H A G T  
UniRef90\_J3MAT1 A E Y N R T G F T L A G D V D D V R R A A L D V A Q V S L R E V D M R A H Q E D A T  
UniRef90\_A4S2F9  
UniRef90\_C9M5F3  
UniRef90\_D6PB17  
UniRef90\_UPI000479391F V D H H R A V H T L A A A P G V L A E S L V A G V R E A V A R I D L R R E R G I  
UniRef90\_UPI0003B4D66A P D H H R T V H T L A G V A G A L A D A L L A G A E E A I A R I D L G A P R G L  
UniRef90\_C3Z6X6 H D Y N R S V L T I A S T V E D I G E A V F Q A C T S A Y Q D I D L S R H E G G  
UniRef90\_M4F5Z7  
UniRef90\_X0VXM1 T D Y N R A V V T F L G T P E A V L N A N V I A A K K A I S L I D M N N H K G Q  
UniRef90\_UPI0002C36CFA Q G Y N R S V I T I A A S V A E L G K S A S A C L E A F Q S I D M E V Q E G I  
UniRef90\_D8LBA3 P Q Y H R T G F T I G G A P D A V A R A S V E V S R R A V R A I D L L E H E A A  
UniRef90\_X1FXJ8  
UniRef90\_D8TIL8 A P Y N R T G F T L V S T A D R L T A A I V R L S R A A L Q L R D L R S H V A T  
UniRef90\_UPI00029D95CD Q D Y N R S V I T I A T S V D K L G S S V L A A C L E A F Q A I D M E V Q E G I  
UniRef90\_Q7P2A9  
UniRef90\_D3FCR8 P D H N R S V V T L A G A P G A L A P A L A A G A R E A I A R I D L R A N D G V  
UniRef90\_UPI0003343AA0 Q D Y N R S V I T I A G S I D K L G L A  
UniRef90\_UPI0003F1627A P D Y N R S V I T I A G S V D K L G L A  
UniRef90\_E1Z5R7 E P Y N R T N F T L V G R S V P L A A A A S T L A R A A L A L L D L R Q H A A T  
UniRef90\_F0YBQ2 E A Y E R S S Y C I G G A P E A V A E S V V A L T R D A L A R V D F R D F R G S  
UniRef90\_A9V0F7 K P Y H R S S L T L L S D S P L A E A G V I G A N A C K L I D M E S H V A S  
UniRef90\_UPI000454AAE2 P S T N P G P T P F V I E A A Q K D N R K A L P T I R A G E Y E G E  
UniRef90\_G3WLF6 Y D Y N R S V I T I A G P V I E N L G  
UniRef90\_UPI0002BCF652 Q D Y N R S V I T I A A S V A E L  
UniRef90\_UPI000328A4B6 Q D Y N R S V I T I A A S V D T L D I A E T L V Q H I  
UniRef90\_UPI0003C18700 P E Y N R S V I T I A A S I D E L G  
UniRef90\_W4GBF7 P T Y N R T S F Y F V G S H V A A S A S S F V K A A L A R L E F S T H R G T  
UniRef90\_B8C1N3 I P Y D R S S F H L A G R S D C V A N V A S S L I V N A L R E I D V D L D S S S  
UniRef90\_A0A024TS71 P T Y N R T S F F F V G S Q V A A S A S A F V T S V L A T L D F S R H R G T  
UniRef90\_UPI00046B14FB Q D Y N R S V I T V A A S V D K L G L V  
UniRef90\_UPI0002C46275 Q D Y N R S V I T I A V I S V D K L G  
UniRef90\_K0S0T3 P V Y N R S S F H L A G T A P H V A S V T S R L I C G A L E E I D L N G E H G S  
UniRef90\_B7FZ02 P V Y N R S S F H L A G T A P H V A S L A S K L A A D A I Q S I D V H T E S V S







170

```

UniRef90_UPI000350AE6F A G P T T P T R S K G V V A I G A T
UniRef90_UPI00044482CB V G P P P R E R Y G L T G V G A
UniRef90_Q9SNU8 A G P E R P P R S K G V V V V G A T S
UniRef90_K1U656 Y G E R K I H P T A G I T A I G A R
UniRef90_L1JP83 F G P E V P D Q R R G I T V C G A T
UniRef90_D8R013 F G P A H F P A S T G I I T A G A
UniRef90_A8HWL3 L G P A T A S A R W G V V T I G A T
UniRef90_T1AMQ4 V G E S R V H P T A G A V A I G A R
UniRef90_F7GGE2 I G N T P N K R C G L T G I G A R
UniRef90_F2EHZ1 A G P D A A S A S K G V L V L G A T
UniRef90_G7JGF5
UniRef90_UPI00038908E6
UniRef90_L0P0V9
UniRef90_X1QQ99
UniRef90_I1I192 A G P G T P S A S K G V L V M G A T
UniRef90_C1E2A7 Y G P S T I P P E S G L L M L G A T R
UniRef90_UPI0002B8D4D6
UniRef90_C6SVV8
UniRef90_G3U0L1 R G G S W P H N S S G V
UniRef90_Q011W5 Y G P S E M S S K I G F G C R G C R
UniRef90_W4ZHx9 L G A P S S R Y G L T G C G A
UniRef90_I0YZZ2 F G P S E L D P R R G L A T V G A
UniRef90_UPI0003AF0F10 L G V A P A R K C G L T G I G A
UniRef90_C1MPD0 Y G P S I V P P E A G V V M L G A T
UniRef90_R6B2N6 F G G A A I H P T A G V T A V G C R
UniRef90_M3ZMI5 V G P P P R E R Y G L T G V G A
UniRef90_C7M2Q3 L R P T R P N P R L G A S C V G A R
UniRef90_J3MAT1 A G P S E G S A R K G V V V V G A T
UniRef90_A4S2F9 Y G P S D V P E R E G F G M V G A
UniRef90_C9M5F3 I G P A A L H P S A G A T I V S A
UniRef90_D6PB17 A G A K E W S A R T G G I T V G A R S
UniRef90_UPI000479391F F G P A A P H P S A G A V L V A A R
UniRef90_UPI0003B4D66A F G P D R P H P T A G A V L V A A R
UniRef90_C3Z6X6
UniRef90_M4F5Z7 A G P L E V S K A K R V V A V G A
UniRef90_X0VXM1
UniRef90_UPI0002C36CFA
UniRef90_D8LBA3 L G P N E V D A S R G L A T V G C T
UniRef90_X1FXJ8 I G P A K L H P T A G A T I V G A
UniRef90_D8TIL8 L G P S E P P P Q S G L V T I G A
UniRef90_UPI00029D95CD
UniRef90_Q7P2A9 F G E R A P H P T A G V T A V G C R
UniRef90_D3FCR8 F G P P R P H P T A G T T L V A A R
UniRef90_UPI0003343AA0 L G A A P D R R C G L T G I G A
UniRef90_UPI0003F1627A L G S T P A P R C G L T G S V S R R
UniRef90_E1Z5R7 F G P A V V P A R S G V C C V G A G R
UniRef90_F0YBQ2 A G P A T V D P A V G V A T I G A
UniRef90_A9V0F7
UniRef90_UPI000454AAE2
UniRef90_G3WLF6 I G L M P E K R C G L T G
UniRef90_UPI0002BCF652 L G V A P A R R C G L T G I G A
UniRef90_UPI000328A4B6 L G A A P A R R C G L T G V G A
UniRef90_UPI0003C18700 L G P A P A R R C G L T G
UniRef90_W4GBF7
UniRef90_B8C1N3 G E L T S A S A K K G A T T V G
UniRef90_A0A024TS71
UniRef90_UPI00046B14FB L G
UniRef90_UPI0002C46275 L G A A P
UniRef90_K0S0T3 S G G S R T S T T K G D S I V G
UniRef90_B7FZ02

```

```

lupas_21
lupas_14
lupas_28
jnet
conf 7 7 6 6 6 7 7 7 7 1 5 8 8 8 4 2 9 9
sol25 B B B B B B B B B B B B B B B
sol5 B B B B B B B
sol0 B B B
jhmm
jpssm

```