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

QUERY UniRef90\_H2SYY4 UniRef90\_UPI00034FCD0E UniRef90\_UPI0003595439 UniRef90\_K1RWQ9 UniRef90\_F7HEE6 UniRef90\_UPI0001CBAA7A UniRef90\_UPI0004409471 UniRef90\_V5HYA5 UniRef90\_UPI0004622138 UniRef90\_A9NUR1 UniRef90\_K5WBN4 UniRef90\_L7M111 UniRef90\_T1ETZ3 UniRef90\_I0YW03 UniRef90\_D8PXR5 UniRef90\_UPI00044169A3 UniRef90\_R7TNG1 UniRef90\_UPI00042B8ED9 UniRef90\_UPI000440CF36 UniRef90\_M5GBW7 UniRef90\_D6WM97 UniRef90\_V2XFD3 UniRef90\_T0PLH3 UniRef90\_V4CLQ6 UniRef90\_A9TGN0 UniRef90\_F7HEH5 UniRef90\_E0VDC3 UniRef90\_W4VZA0 UniRef90\_B3RPB8 UniRef90\_X8JDF9 UniRef90\_A5ADE1 UniRef90\_G0SUC9 UniRef90\_T1IJQ0 UniRef90\_UPI0003EE0C36 UniRef90\_E1Z570 UniRef90\_A0A024UQC5 UniRef90\_A0A023GI42 UniRef90\_F6WZS8 UniRef90\_K4AT26 UniRef90\_F4NSM8 UniRef90\_UPI00044154C6 UniRef90\_UPI0002B42341 UniRef90\_S2J338 UniRef90\_K7IRJ0 UniRef90\_UPI0003945670 UniRef90\_R4XAX4 UniRef90\_L8HUZ2 UniRef90\_D8SYB5 UniRef90\_E9GG91 UniRef90\_K5X510 UniRef90\_UPI0003C38E5D UniRef90\_P0CQ03 UniRef90\_R4WVS5 UniRef90\_U1M7D6 UniRef90\_Q17M03 UniRef90\_UPI0002651CE4 UniRef90\_F4P9P4 UniRef90\_F2U1E3 UniRef90\_G4MRK2 UniRef90\_D8TR09 UniRef90\_U5H6S5 UniRef90\_U9SVD3 UniRef90\_R9AE63 UniRef90\_M2W164 UniRef90\_L1IZE4 UniRef90\_A0A024JAK5 UniRef90\_K3WQ47 UniRef90\_H6BT10 UniRef90\_M7B9P2 UniRef90\_H9J1K7 UniRef90\_R4G3E0 UniRef90\_H3AZE6 UniRef90\_B6JUX9 UniRef90\_Q67X79 UniRef90\_S2JAI7 UniRef90\_U4L880 UniRef90\_G3Q3R3 UniRef90\_Q4PCR0 UniRef90\_E9C037 UniRef90\_G2WZ77 UniRef90\_V9EZU5 UniRef90\_A9V701 UniRef90\_F0VZ88 UniRef90\_Q7Q8F6 UniRef90\_C7YKN5 UniRef90\_C4JHD1 UniRef90\_M2RC85 UniRef90\_L8HIY6 UniRef90\_UPI00045600A1 UniRef90\_W8CDJ2 UniRef90\_C5GGW3

90 100 110 120

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



QUERY	170	180	190	200
UniRef90_H2SYY4	F K V V	F N R Y L	E S E V	M R K L
UniRef90_UPI00034FCD0E	F R V V	F N R Y L	E S E V	M R K L
UniRef90_UPI0003595439	L R V V	F N R Y L	E S E V	M R K L
UniRef90_K1RWQ9	L K V V	F N R Y L	E S E V	M R K L
UniRef90_F7HEE6	H K V V	F N R Y L	E S E V	M R K L
UniRef90_UPI0001CBAA7A	F K V V	F N R Y L	E S E V	M R K L
UniRef90_UPI0004409471	F K V V	F N R Y L	E S E V	M R K L
UniRef90_V5HYA5	L K V V	F N R Y L	E S E V	M R K L
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D Y I Q P V R R I L N E E D L T R W Q S S E S Y N G L V A F I V R L A D S V K G  
F K R P E R L I K N E A S M D K W L N S S E A Y S N F I G W I K L I L A S S V R G  
N F Q A P T K K I N D G A D V S H F L T S K A Y R D I C V F V L Q L L N R S L C P  
Q F I R P V S R I L S P Q D L E A F H S S P A Y T L I L A F I L T N L N E G V K G  
S Y I T P T K R I H N I H H L A Q W Q R S R A Y Y H D L I G Y I N G L T L S S A I Q G  
T F L P T K R I N E G H D V P F L T S R A Y S D I G I F M M Q L L N T A M C P  
D F K K P S R R I L S A N D H A L F L D S S P A Y K L L L A F I F G L A D M V A D  
S F Q Q P V R R I L T P A D L A L F Q S S Q T Y D I L T S F I N D L N N S A V L N  
S F A V P A R R I L S K R D H E L F L A S S P S Y D A V V G W F V F G L A C A V V D  
F A I P V K R I N D G D D V S F F L T S K A Y K D I M T F L L Q L L N A S M F P  
T F I K P V R R I N E G H D V P H F L T S R A Y S D I G T F V L Q L L D T A M C P  
V A P V R R I F T E V D M P R W L T S S A Y H N I E A L I M R L R L T A A V Q N  
F V V P S K V I T N Q N D L N R F L A T D T A K E L L S F I Q R M G D N V I G  
T H P V R R I L S R E D H E A F L S S P T Y T L L L A F I F N L Q L L N R S D S V F C  
N F A T P T K R I N D G D D L S A F F T S T A Y R D I L T A F W L L Q L L N R A S R P  
F I K P R K R I L T Q R H L D H F K H S K V Y A E I V G M I Q I C L N E S S V K S  
T F E L P S K K I V N E G S D V S I F L T S G A Y R D I M T F I L Q L L N R A M V P  
F T K P S R R I L S K K D H D L F L A S S P T H D L L V A F V F G L A C A V V D  
F I K P V K R I H E S V D V C E F L I S L A Y R D I G I F I M A M N H A V C P  
F A A P S K R I N D G D D L A S F F T S T A Y T H L T T W L F Q L L N R A M V P  
F E A P S K R I H D G P D V A H F L T S K A Y R D I C V F V L Q L L N R A L C P  
T F L E P S K R I N E G D D V S E F L C S K A Y V D I M T F V L L Q L L N R S M F P  
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T M V R P E K R I K T E A D L Q V F L Q S S R Q F A E L W A F L R L N Q S V K N  
F L P P V K K I R T D T D V E A F W K Q T T G Y K D Y A L F I R R L N N S S V V G  
S F Q T P T K R I N A G T D L A T F L T T A Y R D I M T F I L Q L L N H S L C P  
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S S E P A K R I N S E E D V V T F R S S T A Y A R D I M T F I L G F L G D A A V D  
Y Q L P S K R I N D G D D L T F F A S T A Y R D L L S W L L Q L L T R A M F P  
T F R T P T R R I L S P H D H D L F K A S P T H A L L L S W L F T L A D S V Q D  
F S T P V K K I N D G D D L N F F L S S L A Y R N L M Q W L L Q L L T R S M F P  
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F A T P T K K I N D G H D L T L F L N S V A Y R D I T A W L L Q L L N R A M F P  
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M K P I R R I S N D D L A K W L D S D A Y K I V E F V E A L O D S V L G  
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S P P G A P D P S H V V K P A I V E R E R R L N M Y F S A I I G G F I N D V V K K G P  
K S H K H M R P K A I H D A E L L E A F S P E Y M Y L S C A I A F F I N S V L K T T H S  
L R H P Y I T P R A I H Q D L T I E E G A A D Q Y L Y L D D Q V I A F F I N S V L K T T V G S  
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A N H S I L L E P R S I H V D E K V V N E H H K D Y M F L E C C I L F I F I T E M K K T T A S P  
S P P E A P E P S S I V S K A N L V A D K E K G A Y M Y F S A C V A Q S F I F E V K K T E S  
M D H P Y L R P K S I H S D P E L V A E C A P A Y M Y F S A C V A Q S F I F E V K K T E S  
L H H P F I T P L A I H Q E L T L E E F A H D F L Y L G Q V I N F F V N S T K T T V G  
I D H P H L E P R H F V D E K A V E N H K D Y M F L Q C I L F I F I T E M K K T T V G  
T R P I T P K P G D V T K P A V V E N R Q T N M Y F S A I I G G F I N D V V K K G P  
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A P F S R P R P L T I H Q K D Y V E E F K D K Y L Y F G C I A F F I N Q V T K T T G S P  
A N N K S F V P E S D V L K A T T V E A N R H K Y L F F S A I I N F I Y D V K K R G P  
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V H H K Y L R P K S I H V R D P E I L E M C A N D N M Y L G Y V V G R F I N N E L K N V S  
S T H P H M K P K S I H N P E L V E M Y K N K Y M Y M E C I D G F I N N I K T T S  
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L H H P Y I T P R A I H H D L T L E E A A G D Y L Y L G Q V I A F F V N S T K T T V G  
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L L V F P K Y L E L M R R L V I L T Y Y L L E P A G L D D D Y H F F P F F L F G G A S Q  
L G V I E P Y L N V V R K L I Q T T Y T L L E P A G L D D D Y H F F P F F L F G G A S Q  
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L G V L E P Y L R V V R R L I L T Y T L L E P A G L D D D H S F F L P Y I F G S A Q L L  
L Y V S H E T Y L R V C R R R L V Q K Y R L L E P A G L D D D H S F F L P Y I F G S A Q L L  
L K C L D T Y L H V R R L V T T Y T L L E P A G L D D D H S F F L P Y I F G S A Q L L  
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S T H K H L K P S S I L H N D D L I E M F A D K Y L Y F L A C C I E F I N S V K R T T T  
S N H K H L K P K S I L H N D E I V D M F K D K Y L Y F G C C I A F I N S V K T T A S  
I G C Q K Y R P T V I S N C E I A E R E K D N Y L L E G C C I A Y I Y Q C C P S  
I E H K Y I R P K S I L R N D E I V N S F S D E Y M Y L G C C I R F I G K V K K S G S  
D A Q A P L Q P R E I L D K S L V R E Y K D T N F Y C Q G G I N F I N E V K M G S P  
T T H K H L K P L S I L H N N E L V E M F A H R Y L Y F G C C I A F I N K V K K S A S  
R G Q S L A P S S V L N P P L V E S P T N L Y N M Q V A F I Y Q L K K G P  
I R N A P M R P R D V K D S L V K Q Y A K S N L Y C Q C C I A F I F Q V K T T G P  
S T H K H L K P K S I L H N P E V V E M F A D R Y L Y F G C C I A F I N K V K T T A S  
S T H K H L K P K S I L H N P E V V E M F A D R Y L Y F G C C I A F I N K V K T T A S  
Y N T D S V P S D V L R K P L V E P P T N L Y F Q S I N R I H K A K T T G P  
T R P L A P K T G D I T R A L E V V E E N R Q R N L Y F S A I G F I N D I K T T G S  
V G H K F I R P R A I H D A E V V E E Y A K D Y M Y F A C I A F I N S I K T T A S  
T N N P P L K P M D I V N K D L V C E Y A N T N M Y C S A I K F I D C V K K T T G P  
R D R Q D I P V S S I L H P P L V E P P E N L Y M S I M R I H E V K H G P  
V N S Q Y V D P S S I L H K P D D I L K K Y E K E Y M Y L H C C I D F I K Q Q K K G P  
I E H K Y I R P K S I L R N D E I L N S F A E E Y M Y L G C C I H F I N K V K T T G S  
R D Q T E I P V S A V L H P P L V E P P T N L Y F M S I M R I H S Q V K H G P  
L H H R Y I T P R A V H Q P L T L E Q F G D D Y L Y L Q Q V A F F I V N S V K T T G S  
S P M T R S R P S S I L H N K D I V D M Y K D K Y F Y Y Q C C I D F I N S V K T T G P  
L D H K Y I K P K S I L H P D K D V V E D Q F H S T Y M Y L A C C I H F I N S V K T T A S  
V A H S P K P K N F P D Q V V A E D N A S T Y M F F A A I H F I H Q V K K G P  
V G H F S P N S V R D E K I L K E N S D D F L Y F S S I K Y I K E M K K S G P  
I N H P E L K P D S I L D K S L V S L Y E H D N N F Y F D C C V A R I Y K V K N A S  
L D Q E D I P S A I L Q P L L V E P D N N L Y F M Q I S A R I N S A V K S G P  
S K H K H L K P L S I L H N E E M V E M F K D K Y M Y F G C I D F I N S K T A T

	250	260	270	280
UniRef90_T5AR14	L R W H S P M L	S S A V K S W S K I	D N E G G M R R M F A A E I	V L G K L P V I M Q
UniRef90_Q9P7H4	L R F H S P M L	S S A V K T W S K I	D N E G G M I K M Y R A E E	V L G K L P V I M Q
UniRef90_C1BSE6	F A E H S P M L	S S A V P K W E K I	N N E G G L I K M Y K A E E	V L S K F F T I M Q
UniRef90_M7P3A5	L R W H S P M L	S S A V P K N W K N V	N N E G G L I K M Y K A E E	V L S K F F T I M Q
UniRef90_M1WES5	F W E H S P L L	S S G I K A G W G K I	N N K G M I K M F N A E E	V L S K F F P V V Q
UniRef90_G7DW12	F R E H S P L L	S S G I V A S W S K V	N N K G M I K M W S A E E	V L S K F F P V V Q
UniRef90_G8JNR4	L R W H S P M L	S S G V V R T W S K V	A E S G M V K M Y K A E E	V L E K A P P I M Q
UniRef90_M7NQW3	F Y E H S P Y L	S S G I E Y W K K V	N N S G M L K M Y Y A E E	V L G K F F P V I Q
UniRef90_Q6CFX5	F Y E H S P L L	S S G I A T W A K I	H E D G M L K M Y I A E E	V L G K F F P V I Q
UniRef90_W2S5U4	L R W H S P M L	S S G A K T W G K I	R D D G M V K M Y A A E E	V L A K L P P I V Q
UniRef90_C4Y333	L R W H S P M L	S S A A K T W G K I	R D D G M V K M Y A A E E	V L A K L P P I V Q
UniRef90_G8BGV7	L R W H S P M L	S S A A K S W G K I	R N E G M I K M Y K V E E	V L G K L P P I V Q
UniRef90_M2R388	F H E H S S Q L	T G V V S W A K V	N S G L F K M Y E A E E	V L G K R V V V Q
UniRef90_A3LNJ4	L R W H S P M L	S S A K S W Q K I	K E G G M I K M Y K V E E	V L G K L P P I V Q
UniRef90_R1BUZ3	F G E H S P Y L	S S A I D S W A K V	V K G G L L R M Y E G E E	V L G K L P P V V Q
UniRef90_F4PH06	L V E H S P M L	S S G V P K T W A K V	N E G M V K M Y K N E E	V L G K L P P V M Q
UniRef90_K7IAU1	F H E H S N Q L	W N I S A A V P H W K K V	N N S G M F K M Y E G E E	V L K K F P P V V Q
UniRef90_F9X0Z4	L R W H S P M L	S S A A K G W A K V	N E G G M R K M F L A E E	V L G K L P P V A Q
UniRef90_O36016	F Y E H S P L L	T A A V P W S K V	N N Q G L I K M Y D V E E	V L S K Y P P V V Q
UniRef90_F2SC48	L R W H S P M L	S S G A K N W Y K V	E A G M K K M F T K E E	V L G K L P P I M Q
UniRef90_B2A9Y5	L R W H S P M L	S S A A K S W T K I	N E G G M R K M F V N E E	V L G K L P P V M Q
UniRef90_S3C391	F W E H S P L L	S S G I K G W G K I	N N K G M I K M F N A E E	V L S K F F P V V Q
UniRef90_G4VD10	F E E H S H T L	Y G I S S E V P K W E K V	N N S G L I K M Y K G E E	V L E K F F P V V Q
UniRef90_U7PZF2	F W E H S P L L	Y D I V S S G I Q G W G K I	N N K G M I K M F D A E E	V L S K F F P V V Q
UniRef90_S9VY01	F Y E H S P L L	Y D I V T A A V P S W S K V	N N Q G L L K M Y D V E E	V L S K Y P P V V Q
UniRef90_D5GC69	F W E H S P L L	Y D I S S G V Q G W G K I	N N K G M I K M F N A E E	V L G K F P P V V Q
UniRef90_J3MCH8	F A E H S P M L	H D I S S G V P H W K K V	N T G G L L K M Y K A E E	V L E K V P P I M Q
UniRef90_D8PYX1	F H E H S S Q L	H A I T G V V R T W S K V	H T G L L K M F E A E E	V L G K R V V V Q
UniRef90_Q75BY1	L R W H S P M L	D D I S S G V R S W T K V	S E G M V K M Y K A E E	V L G K L P P I M Q
UniRef90_A0A010QZT4	F W E H S P L L	F D I V S S G V K G W G K I	N N K G M L K M F N A E E	V L Q K F F P V V Q
UniRef90_A8NVH6	F H E H S S S L	H S I S A G V P N W G K V	H S G L F K M Y E A E E	V L G K R V V V Q
UniRef90_U6HFC5	F A E H S S C L	Q S L S S G V P N W E K V	N S G M I K M Y K A E E	V L N K F P P V V Q
UniRef90_C5DXS0	L R W H S P M L	H D I S S G V K T W A K V	A E G M L K M Y K A E E	V L S K L P P I M Q
UniRef90_M7WP72	F H E H S P L L	H Q I S T V P T F Q K V	T K G L W E M Y K A E E	V L A K L P P V V Q
UniRef90_E4WY06	F C E H S N M L	W G V S A C V L W D K V	I N G F M K M Y K A E E	V L G K F P P V M Q
UniRef90_G0RPU6	F W E H S P M L	F D I S S G I K G W G K I	N N K G M I K M Y N A E E	V L S K F F P V I Q
UniRef90_Q6C712	L R W H S P M L	F D I S S G V K T W A K V	N N Q G M V K M Y D A E E	V L S K L P P I L Q
UniRef90_W3WWW71	F G E H S S V L	H S L S S Q V K G W G K I	N S G M L K M F N G E E	V L S K F P P V V Q
UniRef90_G0WBD8	L R W H S P M L	D D I S S G V K R W S K V	A E G M V K M Y N A E E	V L S K L P P I M Q
UniRef90_U4LJE3	F W E H S P L L	Y D I S S G V K G W G K I	N E G M I K M Y L N E E	V L N K F P P V V Q
UniRef90_B9RJN0	F A E H S P L L	D D I S S G V P N W N K V	N S G L L K M Y K A E E	V L E K V P P I M Q
UniRef90_G0VCE9	L R W H S P M L	D D I S S G V K K W S K V	A E G M L K M Y T A E E	V L G K L P P I M Q
UniRef90_R7ST77	F H E H S S Q L	Y S I T G V Q Y W H K V	H S G L F K M Y E A E E	V L G K R V V V Q
UniRef90_H3CP27	F A E H S N Q L	W N I S A V H S W S K V	N N Q G L I K M Y R A E E	V L E K F P P V I Q
UniRef90_C1FDZ7	I S E T S P L L	H S I S S G V M S W E K V	N N R G L L K M Y V E E	V L G K F P P I A Q
UniRef90_B0CXB0	F H E H S S Q L	H S I S A G V A S W N K V	N N S G L F K M Y E A E E	V L G K R V V V Q
UniRef90_G8ZMV8	L R W H S P M L	D D I S S G V K E W A K V	Y Q G M V K M Y D A E E	V L C K L P L M Q
UniRef90_UPI0004422237	F L A S T P F A	M Q I S P L W K		
UniRef90_C5FCX2	F W E H S P M L	Y D I S S G I K G W G K I	N N K G M I K M Y N A E E	V L S K F P V V Q
UniRef90_N1JG10	F W E H S P M L	F D I S S G I R G W G K I	N N K G M I K M Y N A E E	V L S K F P V I Q
UniRef90_UPI0004624A02	F H E H S S Q L	Y A I T G V K N W T K V	H S G M L K M Y E A E E	V L G K R V V V Q
UniRef90_A0A023FY36	F H E H S N Q L	Y A I T G V V P N W G K V	H S G L F K M Y E A E E	V L G K R V V V Q
UniRef90_UPI0004407EFD	F F E H S S Q L	Y A I T G V V P N W G K V	H S G L F K M Y E A E E	V L G K R V V V Q
UniRef90_C5DF02	L R W H S P M L	F D I S S G V K T W A K V	A E G M I K M Y K A E E	V L N K L P P I M Q
UniRef90_C5DH28	F S E H S P M L	F D I S S S V P T W S K V	A E Q R G L L K M Y F A E E	V L N K F P V V Q
UniRef90_F0XHE4	L R W H S P M L	D D I S S A T R S W A K V	E A G M R R M F L A E E	V L R K L P P V M Q
UniRef90_A7TH52	L R F H S P M L	D D I S S G V P K K W S K V	A E G M I K M Y R A E E	V L S K L P P I M Q
UniRef90_M0RL43	F A E H S P M L	D D I S S G V P N W S K V	N S G M L K M Y K A E E	V L E K V P P I M Q
UniRef90_F0X9M7	F W E H S P L L	F D V S S G I A G W G K I	N N K G M I K M Y N A E E	V L S K F P P V V Q
UniRef90_E3QU95	F W E H S P L L	F D V S S G I K G W G K I	N N K G M L K M F N A E E	V L Q K F P P V V Q
UniRef90_Q6FK00	L R W H S P M L	D D I S S G V K K W S K V	A E G M I K M Y K A E E	V L G K L P P I M Q
UniRef90_D2VKY5	F G E H S P L L	N D I S S G V P R W T K I	N S G L I K M Y Y D E E	V L F K F V V I Q
UniRef90_G8ZNZ6	F R E H S S M L	Y D I S S T V Q T W S K V	Q S G L L K M Y Y V E E	V L K K F P V V Q
UniRef90_S6EXH4	F S E H S S M L	Y D I S S T V H S W S K V	E K G L T K M Y A E E E	V L K K F P V V Q
UniRef90_J4H1J7	F H E H S S Q L	H S I A G V A S W A K V	N S G L F K M Y E A E E	V L G K R V V V Q
UniRef90_K5X428	F F E H S S Q L	Y S I T G V P N W G K V	N S G L F K M Y K A E E	V L G K R V V V Q
UniRef90_G8BSE4	L R W H S P M L	D D I S S G V K K W S K V	A E G M F K M Y E A E E	V L I K K L P P I M Q
UniRef90_H2AZ97	L R W H S P M L	D D I S S G V K K W S K V	S E G M I K M Y V A E E	V L S K L P P V M Q
UniRef90_C1L745	F E E H S H T L	F D I S S Q V P K W E K V	N C K G M I K M Y K A E E	V L D K F P P V V Q
UniRef90_Q54WH6	L L J E H S P M L	V D I S S G V K N W S K V	N E G M I K M F K S E E	V L G K L P P I M Q
UniRef90_P40454	F E E H S P L L	Y D I A T V P R W S K V	C K G L L K M Y S V E E	V L K K F P P V V Q
UniRef90_Q12461	L R W H S P M L	D D I S S G V K T W S K V	A E G M I K M Y K A E E	V L S K L P P I M Q
UniRef90_G4TRA6	F F E H S A Q L	H A I T G V P N W D K V	N A G M L K M Y E A E E	V L N K R V V V Q
UniRef90_G0VHM3	F S E H S P L L	Y D I T S V T T W S K V	Q R G L I K M Y M D E E	V L K K F P V V Q
UniRef90_W0T5G0	L R W H S P M L	D D I S S G V K K W S K V	A E G M V K M Y Q A E E	V L S K L P P I M Q
UniRef90_J7RBJ3	L R W H S P M L	D D I S S G V K K W S K V	A E G M V K M Y Q A E E	V L S K L P P I M Q
UniRef90_J0WVK3	F H E H S S Q L	H A I A A V P H W G K V	N S G M F K M Y D A E E	V L S K R V V V Q
UniRef90_G3J3P1	F W E H S P M L	F D I S S G V K G W G K I	N N K G M I K M Y N A E E	V L S K F P V V Q
UniRef90_A8PDL7	L R W H S P M L	D D I S S A V K T W D K V	N E G	
UniRef90_A7TGV5	F S E H S P M L	Y D I S S S V H N W S K V	E S G L L K M Y M V E E	V L N K F P V V Q
UniRef90_F8PX02	F H E H S S Q L	Y S I A G V P N W G K V	N S G L F K M Y E A E E	V L G K R V V V Q
UniRef90_Q22Z03	F F E H S P L L	N D I S S G A A N W T K V	A Q G M V K M Y Q A E E	V L G K F P V V K
UniRef90_F0ZRK5	L L J E H S P M L	V D I S S G V K N W S K V	N E G M I K M Y K Q E E	V L N K L P P I M Q
UniRef90_V2Y7E5	F H E H S S Q L	H S I A G V P N W G K V	N S G L F K M Y E A E E	V L G K R V V V Q
UniRef90_U7Q662	L R W H S P M L	D D I S S A T K T W E K V	E G G M R R M F V A E E	V L R K L P P V M Q
UniRef90_C4R6T6	L R W H S P M L	D D I S S G V R K W S K V	S E G M Q K M Y K A E E	V L C K L P P I I Q
UniRef90_I1CCE3	L R W H S P M L	D D I S A C K T W A K V	N N Q G M I K M Y K A E E	V L A K L P P I M Q
UniRef90_T1KS02	F P E H S N Q L	W N I S S G V E N W S K I	N N R G L L K M Y T D E E	V L N K F P V V Q
UniRef90_K8EMT0	L S E T A P L L	Y D I S F L P T W K K I	N S G L L K M F K A E E	V L C L G N F L V M Q
UniRef90_B0EBF7	F F E S S P D L	Y S I S A A E S W E K I	N N K G M F K Y H A E E	V L C L D K Y P V V Q
UniRef90_R7S136	F Y E H S S Q L	Y S I A T V P N W T K V	H N G L I K M Y E A E E	V L S K R V V V Q
UniRef90_I2H0U7	L R W H S P M L	D D I S S G V K K W S K V	S E G M I K M Y S A E E	V L G K L P P I M Q

UniRef90\_T5AR14 H F L F G S L I P A A A G M S  
 UniRef90\_Q9P7H4 H Y L F G H L I P A S P G M S  
 UniRef90\_C1BSE6 H V Y F G S I F K L K P  
 UniRef90\_M7P3A5 H Y L F G R L I P A A E G M T  
 UniRef90\_M1WES5 H F P F G S L F S W D T D P S  
 UniRef90\_G7DW12 H F Y F G Q L L P W L S S P S  
 UniRef90\_G8JNR4 H F F F S T F L P G P E N V S  
 UniRef90\_M7NQW3 H F L F G N L F P F D P V  
 UniRef90\_Q6CFX5 H F Y F G S L Y P W  
 UniRef90\_W2S5U4 H F L F G S L I P A T K D M  
 UniRef90\_C4Y333 H M M F G S I L T A P E G V  
 UniRef90\_G8BGV7 H F M F G E I L K C P E G  
 UniRef90\_M2R388 H I P L G G L L D W Q A S T S  
 UniRef90\_A3LNJ4 H F M F G T L I  
 UniRef90\_R1BUZ3 H L R F G A L L P W  
 UniRef90\_F4PH06 H F F F G S I L P F  
 UniRef90\_K7IAU1 H M M F G S L F S F D  
 UniRef90\_F9X0Z4 H F M F G S I L P A A E G M S  
 UniRef90\_O36016 H F H F G N L F P F N P L V A  
 UniRef90\_F2SC48 H F L F G S L I P A T E Q M  
 UniRef90\_B2A9Y5 H F L F G G L I P A T E E M  
 UniRef90\_S3C391 H F P F G S L F S W D E D P  
 UniRef90\_G4VD10 H F L F G S L L S F D K V  
 UniRef90\_U7PZF2 H F V F G S L F S W D E  
 UniRef90\_S9VY01 H F H F G K L F P F  
 UniRef90\_D5GC69 H F R F G S I F S W  
 UniRef90\_J3MCH8 H F L F G S L I K W E  
 UniRef90\_D8PYX1 H I P L G G L L E W N  
 UniRef90\_Q75BY1 H F F F S R F L P V P D G V S  
 UniRef90\_A0A010QZT4 H F T F G S L F S W D  
 UniRef90\_A8NVH6 H I P L G G L L K W D P K A S  
 UniRef90\_U6HFC5 H F L F G N L L K F E P A P  
 UniRef90\_C5DXS0 H F Y F G N L L P C P E G I S  
 UniRef90\_M7WP72 H C R F G E Y  
 UniRef90\_E4WY06 H F Y F G S L L R L E P M T  
 UniRef90\_G0RPU6 H F P F G S L F S W D E  
 UniRef90\_Q6C712 H F M F G Q L I K A P E G V S  
 UniRef90\_W3WW71 H L P F G S L L S W E  
 UniRef90\_G0WBD8 H F Y F S E F L K C P E G V S  
 UniRef90\_U4LJE3 H F P F G T I F P W  
 UniRef90\_B9RJN0 H F L F G W L I K C  
 UniRef90\_G0VCE9 H F Y F S E F L K C P E G I S  
 UniRef90\_R7ST77 H I P L G G L L A W D  
 UniRef90\_H3CP27 H F K F G S L L S I Q P V  
 UniRef90\_C1FDZ7 H F L F G T I L R M D P A  
 UniRef90\_B0CXB0 H I P L G G L L E W D P P P S  
 UniRef90\_G8ZMV8 H F Y F S E F L P C P E G V S  
 UniRef90\_UPI0004422237  
 UniRef90\_C5FCX2 H F P F G S L F V W E  
 UniRef90\_N1JG10 H F P F G S L F T W D  
 UniRef90\_UPI0004624A02 H I P L G G L V K W D P S P  
 UniRef90\_A0A023FY36  
 UniRef90\_UPI0004407EFD H I P V G G L V E W D P V  
 UniRef90\_C5DF02 H F F F G S F L Q C P E G I S  
 UniRef90\_C5DH28 H F W F G G L F P W T S  
 UniRef90\_F0XHE4 H F L F G S L V P A A V G T T  
 UniRef90\_A7TH52 H F Y F G E F L Q C P E G V  
 UniRef90\_M0RL43 H F L F G W L I K W E  
 UniRef90\_F0X9M7 H F A F G S L F A W T A D P  
 UniRef90\_E3QU95 H F T F G S L F A W D  
 UniRef90\_Q6FK00 H F Y F S E F L V C P E G I S  
 UniRef90\_D2VKY5 H F L F G K L L P F E  
 UniRef90\_G8ZNZ6 H F W F G G F Y P W  
 UniRef90\_S6EXH4 H F W F G G F Y P W  
 UniRef90\_J4H1J7 H I P L G G L  
 UniRef90\_K5X428 H I P L G G L L E W E P S  
 UniRef90\_G8BSE4 H F Y F N D M F L I C P  
 UniRef90\_H2AZ97 H F Y F S E F L A C P T G I S  
 UniRef90\_C1L745 H F L F G S L L S F D R V  
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S V G N A T R L D D Y G T G H E L A F L A F M F C C L F K K L G G V L Q L N D N Y A S V G  
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L M L F G R Y L H L V R R L V T T Y A L L P A F I D D D Y Q V L P Y I F F W G A A Q Q L L  
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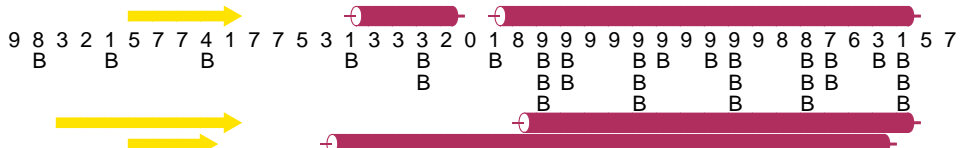


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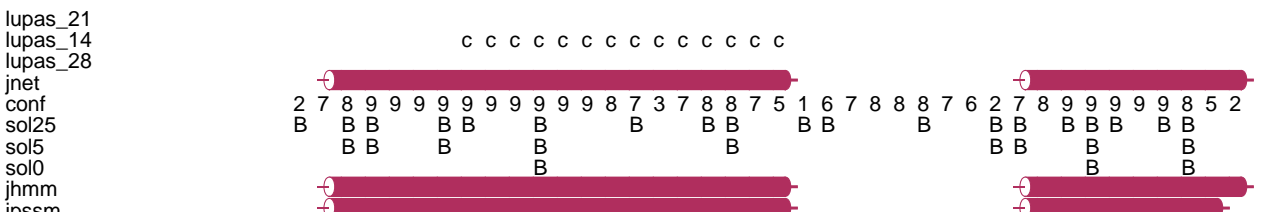
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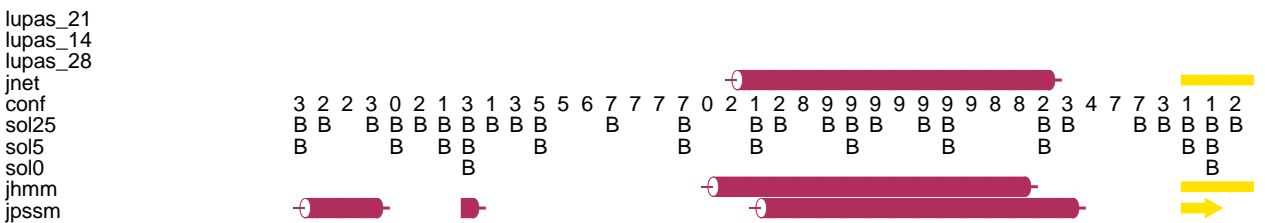
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