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D F G P M D R A L E E K Y D W I L F T S V N G V K S F F K R L N D K T K D L R D  
A D V Q A E I K A L L S N W D W L I F T S V N G V K H F F S Q M D E A G L D A R  
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S A K Q S V K S A L N T Y D W V F F T S V N G V E F F F R H L E Q E G K D I R S  
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A E L D A A V A R L A D Y G W L I F T S V N G V R H F W Q R L E A A G K D S R  
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130 140 150 160

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L Q A G D Q I L I P R A E V A R E I L P E E L T K K L G M Q V E V V P A Y R T V A  
L Q G Q D V L I P R A K V A R E V L P E E L T K K A G M C V T V L P V Y E T R L  
Q P G H K I L L P R A D I A R K E L P G E L R R I G C E V A E I D V Y Q N Q P  
P L F G Q T I L V T R A S H Q A A G L S Q A I E E L G G A A L E F P V I K T I T E  
L A P G E R V L V T R A D I A S D L A E A L T R A G A A V S D V T A Y R T V A  
P E N S R I L F P R V Q S G G R E V L I T E L E Q K G A K V D A V P A Y E S G C  
P E G Q K I L F P R V E T G G R E V L V K D L S V V G A K V E V A A Y Q S G C  
P L F G K R V L V T R A T D Q A S R L S R L Q E Y G A K V V E L P A I R I V P  
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P E H Q K I L F P R V E T G G R D I L V Q E L S Q Q G A E I V E V P A Y E S G C  
P E N K K L L F P R V E S G G R E V L V K E L G T K G A E V I E V S A Y Q S C C  
P L R G K T I L V T R S A G Q S S Q F T E L Q A A G A N V I E M P A L E I S P  
Q E S K D N V A L F R A Q V A N S E L P K A L E K L G A I I D D I P V Y K T V P  
L K N K D S I L I P R G A N S R D F L V D K L S E L C T K E V H T Y K T E I  
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P L H G K R V L V T R T R Q Q A S Q L T T K I K A L G G E V V E F P T I E I K P  
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G D V E K H V V V Q L Y G D S V P S L Q Q E L V K Q G A L Y K E V W P Y H T P P  
P A G L K I L F P R V E S G G R A Q L V Q E L S Q K Q A L V T E V P S Y Q S A F  
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L R G M E V L L Q L H G D P A P R V L V R E L E E Q G A V T C R Q I L P Y R H I A  
R E A V R A L L P R G D L A R K S L P E A L R A L G V I E P V E I D V Y E T V P  
S D G Q R L L F A R G N L S R F L P R V F E E R G F A V I E A L T V Y E T I I  
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E K G M K V L V P K G N L A R D Y I A S S L S E K G A K V D E I I V Y E T I F  
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P E Y D G R V L P R A D I A T D V L V D G L A N L G W E V E D I V A Y R T V R  
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170 180 190 200

D P E G I L R L E E A L L R G E V D A L A F V A A Q V V E F L F E G A K D P K A  
G E G N A G L R L E E L I D K E K V D I I T F T S S S S T V R N F V K M L G D R R D Y  
S E N D P G P L R E D M L A E A K K I Q L L T F T S S S S T V K N F V N Q M L G D A P N  
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A K L Q D N I L Q L L K E Q G T E I D C I T F F A S S S S T V R N F F E H I P I T V L  
A Q P K D I N L V D K I K H G E I N F I T F T S S S S T V R N F V Q I I G E K N  
P E E T K I V F K E E F K Q G E I D I I T F T S S S S T V K N F F R L L L E L E Q  
G S G D A G I L K Q M M N A G E M I S A V T F T S S S S T V A R N F V E M L G E D A A  
S A A R R D D V L A R M E A G E V H C V T F G S S S S T V R N F F S L V P A D T V  
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A G E T P E E L L K L L E K G R I H A V T F T S S S S T V T N L L A A L T G D M G A  
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L E D Y A P V R E A I D R L A G Y D W A I F T S V N G V R H F W N Q L E L V G K  
P S S W M A L D Q A I A H F D F N W L I L T S A N G V R N F F F D R L Q A K G K N  
P P E R D P Q A L A A I K N G N I D V I T F F A S S S K T V R N F C E L L G A Q E S N  
C G E D D E E L M K L F A E G G I H A V T F T S S S S T V T N L L K V L A E R M G A  
P S S D D Y A G L D K G I A T S S F Q W I V F T S Q N G V N C F F D R L Q F R Q G K  
P S S W E Q L D L A I E A L S S F D W V I F T S A N G V K F F F Q R L Q E L G Q K  
P G E I A P P A A A A L Q N H T V N I I T F F A S S S K T V K N F R K L L D K E N S N  
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P P M A D E I R Q A L E R G Q A L H A V T F T S S S S T A S N L F A L L N W P A G A  
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P S S W H E L D Q A I A N I A Q F Q W L I L T S A N G V N Y F F F R L E N L L G T  
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P Q D I D E I A L R S L Q T H Q I D I L T F F A S S S K T V R N F H Q L I K A L P D  
P K Q I N P Q A W Q V L Q E G M A D I V T F F A S S S K T V Q S F Y H L V K K S K Y  
P Q D F S A L D S T V E R E D R Y D W V I F T S S V N G V D S F F D R V A V L E K  
P S K I D P E V W Q A L Q K T V N I I T F F A S S S K T V Q N F Y Q L I K Q E L E  
A A P P S P E V R D M I K T G G F D A V C F T S S S S T V K N L V G I A G K P H A  
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S E N L A E I D K K M K A I D V A D Y L I F T S V N G V D S F F K R L R T L K K  
T S S P D Q L A V T M Q Q L E S Y D W A I F T S S V N G V E S F F E H L R E N R M  
P A G A K E R L E A I M A D G L G V I T F T A S S S T V D N L M D M L D E P K L  
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P G H M P E E V W Q S I V N Q T V D V I T F F A S S S K T V S H F R Q L L A Q T S Q  
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LR E A L N T R V V K A L A V G R V I T A D A L R E W G V K P F Y V D E T E R I L G 210 220 230 240  
NK L L L A D V V T T A S C G G P I I T A S G T A E E F G L E V D I I A E E E Y T T I G D G G  
L L Q D L L L A D S V K I A S C G G P I I T A S N K T A K E E F G L E R V D I V I E A E Q E Y T T I I D D G A  
V F H K Y K A D S V K I A S C G G P I I T A S K T L K E F G F E P H I I E Q A P E E E Y T T I L E A G  
E Q L L K N I I F V I S C G G P I I T A S K T L K E F G F E P H I I E Q A P E E E Y T T I L E A G  
D Q D P R E L L C G I R L V A C C I G G P V I T T A K T A E A A G L K V T L M A P E E E Y T T I R A M D S  
Q D P L L L K D V E L V A C C I G G P V I T T A K T A S T C Q Q Y G L I E V N S T A N E E Y T T I P I G D  
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I A S L N L G K V Q Y A S I I G G P V I T T A S T S E T M R A L G L R V D V I E A P K E Y T T I P P G  
E V D L L K N T T L F A S I I G G P V I T T A S T S E T M R A L G L R V D V I E A P K E Y T T I P P G  
E L Q R L L L E G V T L L A S I I G G P V I T T A S T S E T M R A L G L R V D V I E A P K E Y T T I P P G  
K A H P L L E V V K L A C C I G G P V I T T A S T S E T M R A L G L R V D V I E A P K E Y T T I P P G  
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H L L L E S N V K I A S I I G G P I I T T A K T A K K L G L P V D V V Q A K D A Y T T I A G G  
T A D R L L I K N V A V A S I I G G P I I T T A K T A K K L G L P V D V V Q A K D A Y T T I A G G  
D I A S L L S G C V I A C C I G G P V I T T A K T A E K A G L S V H I C P A D Q Y T T I I D D S  
D P V A A L L Q G V D I A C C I G G P V I T T A K T A E K A G L S V H I C P A D Q Y T T I I D D S  
I E E V T Q T A R V V C I G G P V I T T A A T A E Q E M G M R V S K V L A S E Y T T I V P G  
D A R A F G G M Q V I A A I G G P A T A E A L L E R G I R P D F I P P K Y V A E S  
D P H A L S Q T K I A V V G K K T A A S L Q K Y E L G P D F I P P D F V A D S  
E W Q K W L S G V T I A S I I G G P K Q T A S A T C Y E F L G R V E L E A M E Y T T L D G S  
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H P L S L L E N V C I A S I I G G P E T S K T C Q Q L L G R V D V E A Q Q Y T T L E G G  
D L L S L L D N V C L A S I I G G P Q T S K T C Y Q L L E L R V D I E A Q E Y T T L E D G G  
Y E E L L V S D V K V A C C I G G P V I T T A T A R E Y N L N L E P D I I J A K E Y T T I A G G  
L I N N I P A A A I I G G P V I T T A N T A C K K A H A G I T T V D V E A D V Y T T I A D G G  
D K S L L L D N V A K A S I I G G P I I T T A N T A C K K A H A G I T T V D V E A D V Y T T I A D G G  
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D A R A L L C Q L K I A V V G Q K T A A S L A K Y H L K P D F C P P N F V A D S  
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A N L D S V C I A S I I G G P L T S K A C Q Q Q F G R V D I E A A T E Y T T L E G G  
P I S Q Y L L A G L C C I A S I I G G P Q T S K T C C Q Q L L G R V D V I E A E E Y T T L E G G  
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L L L Q N V K I A S I I G G P V I T T A T L S R F G F T P A I E P E D Y T T I P G  
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D I R D I G K G K V V A I I G G T A T A E A L E E R G L V V E L I P E V F T A E G  
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QUERY  
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UniRef90\_UPI00037C6081 G F T I G I T A A R R A D E F S A L L E R R G A V I E R T P A I Q L I P L A D D

UniRef90\_NOAWR5 K K V L V P R G K Q A K P F S D L V K K N G G I P I E I P L I A F R P V Q L N

UniRef90\_T5HRG9 G R R I A I G A S R K T D E M S T L I K K Q G G V P L I R S L Q G T V F L A E K

UniRef90\_G8LU07 G K K I V V P K I S G T L C T K L R N L G A E V Y E Y P C I E I E E I F D N

UniRef90\_X0VN78 G R R V L V T R S R Q A S A L S E R L R E L G A E P L E Y P A I E I A P K D I

UniRef90\_F0M5Q8 G F R I G V T S D R R S S D L I E A L E R R G A E V L H A P A L K I A P V Q E D

UniRef90\_UPI00037873C8 G Y T V G V T A D R R R D E L A A L I E R R G A R V V I A P A L R I V P L D D S

UniRef90\_UPI0002F1247E G W R V L I P R T E R Q G R S T A R E L A E L G A I G T I V P T I A I Q P T T Q

UniRef90\_UPI0003C76BD4 G F T V G V T A A R R A D E L G A L L Q R R G A A V L H A P A L R I V P L D D A

UniRef90\_W2EU64 G W R V L V P R T K Q S K G L S E Q L R S Y G A V P E E V P T I S V E P T P Q Q

UniRef90\_UPI000344B2A1 G F T V A V T A A R R A E E L T A L L T R K G A H V I A A P A L Q I L P L A D D

UniRef90\_R5I707

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UniRef90\_UPI000345A3F8 G W R V L V P R T K Q A A G L S G Q L R D Y G A V P E E V P T I S V E P T P Q Q

UniRef90\_V6J467 G K Q V L V T R A H Q S A A M C A R I H A Y G G E A V H V P L I D Y R Q T P L T

UniRef90\_L8DJF6 G F T V G I T A S R R A E E F A T L L E R R G A T V M H A P A L R I P L A D D

UniRef90\_W4DA39 G I T V A L A G P R K A E D M A K L V E N M G T A L H R P A Q G T T F L D D A

UniRef90\_S6A3C3 G K A V L V T R G K Q A T S F S A K L R A A G A M P V E I P L T S I R P A A P

UniRef90\_E0XXC8 G Q R I L V T R E E G P D S L S E S L T Q L G A Q V H I H P L I S I Q P P D S W

UniRef90\_I0JPF3 G K T I L V T R A S Q A R P F V D R I N K E G G E A L Q T P L L H F Q L N D S K

UniRef90\_K9YXH2

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UniRef90\_I0H7T1 G R R I V V Q E H E P Q T E F V D A I R N A G A A V V E V P V Y R W A M P P D P

UniRef90\_UPI0004788989 G K T C L I P R Q G Q G K D L A E K I R R L G G E P L S I P L I D F K E A E P S

UniRef90\_L5NAM7 G K G T L V T R G K Q A Q R F I K H I E K Q G G V A Y H A P L L T F Q L K D T K

UniRef90\_I4EZ30 G Y T V A V T A A R R S E E L G A L L D R R G A R V V Y A P A I R I V P L P D D

UniRef90\_NOE1D6 G W N V L V P R T K Q S E S I D R R L S R Y G A I S T V V P T I S V E P T P Q Q

UniRef90\_H2AAM7

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UniRef90\_I1CYC3 G V T V G I T A E R R A S E F I A L E R H G A T V V H A P T I R I V P L P D E

UniRef90\_H2G5P5 G W R V L V P R A K Q A G P M S S R I A A Y G A I A Q E V P T I S V E P P N P A

UniRef90\_M1ZF43 G L K L V I T R A K E A G S F S E K V R E L G G I P I A I P M I R I L P A Q D E

UniRef90\_UPI00034A958D G F T V A V T A A R R A D E L A A M L R R K G A E V V A A P A L R I V P L S D D

UniRef90\_R7DB32 G W K V L V P R T K R S S R T A E E L R R R G A E V L E L P S I R T V P L E D Q

UniRef90\_E7C240 G Q R V V V T R A T Q S T N L K S L N K Q G A E V V E I P T I R L V E P D D K

UniRef90\_C2WCN0 G K T V L I T R A H Q A R Q M S V A V K K E S G I P M E I P L L R M E G V S Q Q

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UniRef90\_Q59294 G T K I L V T R P K E S S T L V E K L R Q L G A E V V E Y P C I E V V P I P Q N

UniRef90\_D4LHT2 G W K V L V T R P K E L S R T A D M L R E K G A E V L E L P A I R T V P M E D Q

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UniRef90\_Q6SHZ5

UniRef90\_R5C190

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UniRef90\_U5DKB4 E V E D L R E F V E N G A D W V I F T T G I G F E T L V D L A T K L G L S F L K

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UniRef90\_BONJD0

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UniRef90\_E3B6D2 A P E V R E A I K S K F D A V C F T S S S T V R N L V G I A G K P H

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UniRef90\_U7KS64 M D R A I K G L V E G R Y K W I V E T S V N A V S A V W D K I A Q L G L D A R D

UniRef90\_A8FE05 E L E P G I E F V K G A D W V V L T T G I G T D L I E S A E E L G E E F M H

UniRef90\_UPI0002FE557D K E E K R L A S L N V Y D W L I F T S K K G V Q F F F E F V D

UniRef90\_UPI0003FB538B

UniRef90\_R6JD31 R E F A E S V V H A H T Y D W L V F S S P N G V E R F F Q A F F A V Y R D I R S

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UniRef90\_UPI00047492CC M E R A I H A L V D G D Y Q W L G L T S V N A V R A V K W L A D L G L D V R S

UniRef90\_K9EMZ5 S W T A L D Q A L E Q R F D W L I L T S A N A V N F F L D R L L I E N K Y D L R Q

UniRef90\_UPI00037C6081 T E A A T E K V A H P P E I V V A T T G I G F R G W M E A A E D W G M A L V E

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UniRef90\_T5HRG9 E V G P D L R A V E T G A D W V I F T T G I G T E T L V S L A E K L G I G E R Q

UniRef90\_G8LU07 E L L K N E I D H I S D Y S W L V F T S K N G V K I F F D F I K R E A K D F R

UniRef90\_X0VN78 A P L D E A I A R L P T Y D W L I F T S A N A V R A L V D R M S E K G T D I Q

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UniRef90\_UPI00037873C8 Q L R E A T R Q L D N P D V V V A N T G I G M R G W L E A A E G W G L P L R M

UniRef90\_UPI0002F1247E M E R A I Q G L V N G D Y Q W V G L T S V N A V R A V R E W F E F G L D A R

UniRef90\_UPI0003C76BD4 E L L D A T R Q L V I G S P D I V V A T T A I G F R G W L E A A W G Y G E E L L A

UniRef90\_W2EU64 M D R A I K G L V T G R Y E W V A F T S A N A V K A V R E K F E E Y G L D A R

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UniRef90\_UPI000345A3F8 M E R A V R G L V T G R Y Q W V A F T S V N A V R A V R E K F E E Y G L D A R

UniRef90\_V6J467 E E Q K N W L K S V K Q A D W V I L T S Q N S V D Y F I R V L D H V E

UniRef90\_L8DJF6 A E L E T A A V I A D P P E I T V A T T G I G F R G W I E A A D G W G R E L G R

UniRef90\_W4DA39 A L R E L I A W T E Q P P E L A I L T T G M G L D A L F E T A A K L A L R F L E

UniRef90\_S6A3C3 E D I A A A V E R L H D Y R W L V L T S A N A V R F F C P Y L P P

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UniRef90\_I0JPF3 E N Q E I L K K L H N Y V W V F I T S S N G V K F F F E L V N Q Y G I C I P D

UniRef90\_K9YXH2

UniRef90\_UPI000364B44B E L R A V T R A L D A P D V V L V S T G I G L R G W L E A A E G W G L P L R A

UniRef90\_A0Q2B0 E L I E E I K N I E K Y S Y L I F T S R N A V N I F F E N L F K L G F D S R

UniRef90\_Q1JVVU Q R L D E A L A R L Q D Y D D L I L T S V N A V D M V F S R L G K G V V P Q T

UniRef90\_I0H7T1 V R R M A E Q V A A G Q I D A V I F T S A P A V K A F L R I A Q D A N A D V I G A

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UniRef90\_L5NAM7 S S S H L L H E L H D Y S W V F M T S S N G V K F F F E L L R K H G R T V P P

UniRef90\_I4E230 A D A A T R E V L A A P V D L V V A T T G V G F R G W L E A A E A W D L P L R E

UniRef90\_NOE1D6 M E R A I T G L V T G R Y E W V G F T S V N A V K A V R E R F E A L G L D V R S

UniRef90\_H2AAM7

UniRef90\_F5XF74 M D K A I R G L V E G R Y E W V A F T S V N A V K A V R E K F D E Y G L D A R S

UniRef90\_Q2NF31 E L V Y I L E N I E T F D W I V F T S P A G V K S F F K L C K L D

UniRef90\_I1CYC3 Q L R A A T N A I L Q G V D V V A V T T G A G F R G W L E A A D G W G V S L T R

UniRef90\_H2G5P5 Q L E R A T K G I E G R Y Q W V V F T S V N A V K I V R E K I V S F G L D S R

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UniRef90\_UPI00034A958D Q R L A A V I E L T R R P A D V V V A T T G I G F R G W V I E A C E T W G M P L L S

UniRef90\_R7DB32 S T L V H A F E E I S S Y Q W I V F T S P T G V I F F D E L K K A H K D I R S

UniRef90\_E7C240 E P L K D V L L G L G S Y Q W L V F T S V N G V D R F F S Y F K G F D D L R D

UniRef90\_C2WCNO V F Q S V S Q Q I H L Y D W I I F T S K N G V S F F L D G L G E R I P

UniRef90\_N4WF84 M N D Q A L T R L A S Q D D W L E F T S T N T V H F F H Q Y C K R L N I H V H N

UniRef90\_Q59294 E K L Y H A C E N I R E Y G W I L T S K N G I Q I F F D Y L N S K G L D A R

UniRef90\_D4LHT2 S R L Y K A L D H L I E E Y Q W L V F T S P T G V R V F F E L L R H G K D I R

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UniRef90\_Q6SHZ5

UniRef90\_R5C190

UniRef90\_M9SL79 R E E A T E E L V A R P P E I V V A S T A V G F R G W V I E A A E G W G V G L R E

UniRef90\_R7CNN1 G R L Y E A F E K L D T Y Q W I I F T S P A G V I F F D E M D R K E M D V R S

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210 220 230 240

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90 100 110 120

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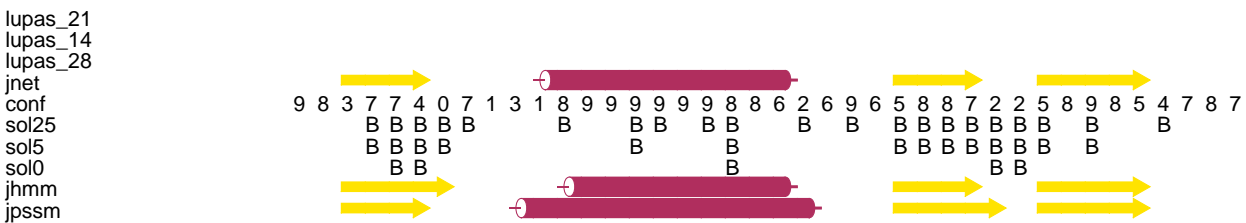
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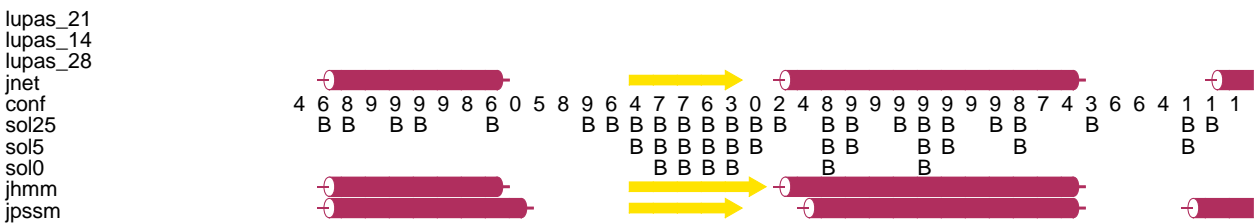


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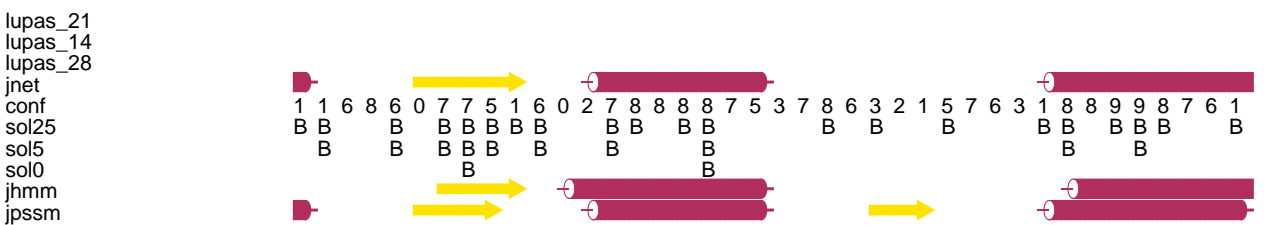
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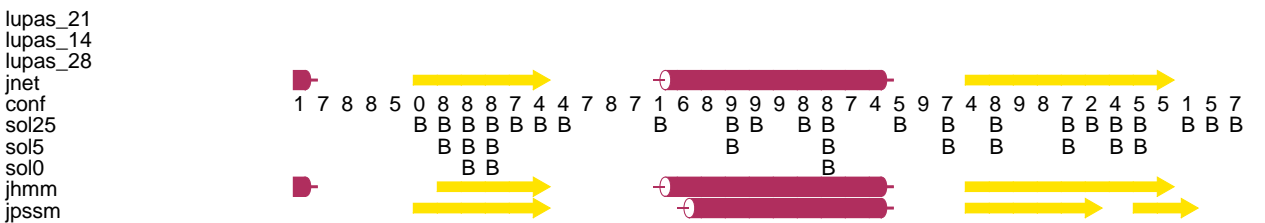




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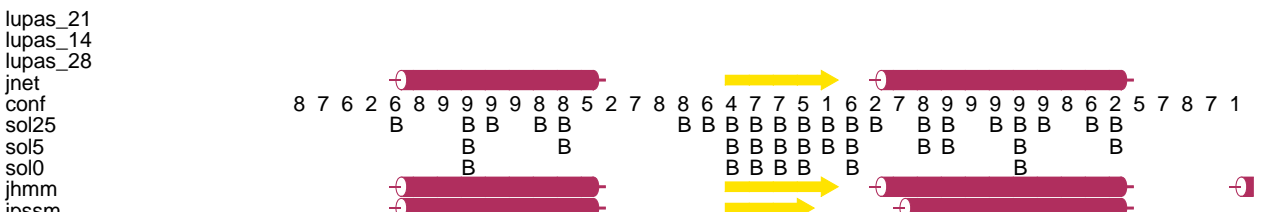
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