

1 10 20 30 40  
QUERY E E E T R E L Q S L A A A V V P S A Q T L K I T D F S F S D F E L S D L E T A L 40  
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QUERY UniRef90\_B4LTJ1 UniRef90\_E2BNK0 UniRef90\_UPI0003599B43 UniRef90\_K1QIC6 UniRef90\_V9KI47 UniRef90\_W5JZ53 UniRef90\_L01779 UniRef90\_J9JUG8 UniRef90\_T1JG26 UniRef90\_V4BDL9 UniRef90\_W5KBT8 UniRef90\_E0VPK2 UniRef90\_K1R014 UniRef90\_H3C4N0 UniRef90\_A7RY89 UniRef90\_F1Q4Q7 UniRef90\_UPI00039420C0 UniRef90\_B3RPK8 UniRef90\_H2YVD3 UniRef90\_UPI0002A4981F UniRef90\_P12252 UniRef90\_Q5TUZ0 UniRef90\_K7JB77 UniRef90\_K1Q9Q8 UniRef90\_V9KH37 UniRef90\_G4VPI6 UniRef90\_V8PH88 UniRef90\_F1NLV7 UniRef90\_UPI000258DF67 UniRef90\_B3S4Q2 UniRef90\_W4XSF6 UniRef90\_T2M5J4 UniRef90\_H9K3A2 UniRef90\_L7WMY9 UniRef90\_P52731 UniRef90\_A0A023F539 UniRef90\_U6HPK0 UniRef90\_H2UC98 UniRef90\_UPI00044319A1 UniRef90\_M9NF02 UniRef90\_UPI000444809E UniRef90\_UPI0002B8EBD5 UniRef90\_G1Q9I0 UniRef90\_H2LW17 UniRef90\_UPI0003315F0E UniRef90\_UPI00045744A4 UniRef90\_I3JFY9 UniRef90\_L7M6E5 UniRef90\_G7YCW0 UniRef90\_I1FF71 UniRef90\_U6HNN7 UniRef90\_UPI0003B502F9 UniRef90\_L7MET7 UniRef90\_A0A023F0G6 UniRef90\_L9KNU5 UniRef90\_UPI0000D577EC UniRef90\_UPI000359B1C1 UniRef90\_K4E2Y2 UniRef90\_H2TXD1 UniRef90\_Q0IHS9 UniRef90\_UPI00042D06C1 UniRef90\_V9KHS7 UniRef90\_S4RQU1 UniRef90\_W8B7P2 UniRef90\_UPI0003C1473D UniRef90\_H3B373 UniRef90\_D2W310 UniRef90\_UPI00020607C8 UniRef90\_UPI000350237F UniRef90\_UPI0003F09B67 UniRef90\_G4VM44 UniRef90\_L5K4H1 UniRef90\_UPI000395DAC8 UniRef90\_UPI000443B51E UniRef90\_K1PID2 UniRef90\_Q3UEI1-2 UniRef90\_F6KPR5 UniRef90\_W5K950 UniRef90\_G6CK78 UniRef90\_A2F408 UniRef90\_UPI0001D38A2C UniRef90\_A2FKH2 UniRef90\_M3XK36 UniRef90\_F2TZN0 UniRef90\_L5LPD1 UniRef90\_T2MHY9 UniRef90\_UPI0003502251 UniRef90\_UPI00022B437F UniRef90\_A2G2M9 UniRef90\_K1QRU7 UniRef90\_I1FVK8

50 60 70 80

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

QUERY N WR H A F N T A Q C M F A A L K A G K L Q N K L T D L E L L A L L I A A L S H  
UniRef90\_B4LTJ1 N WR H A F N V A Q Q M F A I L L T T G R E W W K F F M T D A V L E C L A L L I A G C L L C H  
UniRef90\_E2BNK0 N WR H A L N V A Q Q T M F A M L L K Y T T G R E M E Q F F M T D A V L E V L F A L L M A A C C L C H  
UniRef90\_UPI0003599B43 N WR H A F N V T C Q M F M F T M L Y T T G G L R P K F D A G L E V L F A L L M A A C C L C H  
UniRef90\_K1QIC6 N WR H A F N V T Q T M F T I L L Y T T G G L R K K F E D A G L E V L F A L L M A A C C L C H  
UniRef90\_V9K147 N WR H A F N V A Q Q C M F A L L K S T T A G R I Q N K L T T D D M E V L A L L I A T L L C C H  
UniRef90\_W5JZ53 N WR H A F N V S Q C M F V M I T T A G F Q E V L T T D T D L E T L A L L I M V G C L L C H  
UniRef90\_L01779 N WR H G F N V A Q Q M M F A M L T T S G Q M S Q Q F T D D L E V F A L L V G S L L C H  
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UniRef90\_V4BDL9 N WR H A F N V T Q T M F C M F K T G H M S N L L T N T E R L A L I I G C L L C H  
UniRef90\_W5KBT8 N WR H G F N V G Q T M F C L L Q T M F A L L M G C E M K G T F S D D L E D A F A M V A A A F C C H  
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UniRef90\_K1Q9Q8 N W T H A F A V A H F C F L C I K N L N L Q Q S L D D I E L F A L L V S C L L C H  
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UniRef90\_W4XSF6 N Q I H A A D V V H S T H F L L S A P A L E N V F T D D L E T M A A L F S A A I H  
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UniRef90\_I3JFY9 N F R H C F C V S Q M M Y G M I H L C N L Q E K L T L T D M G L M T A A V C H  
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UniRef90\_U6HNN7 N H I H G A D V L Q T V H V L L Q A E T L D H V F S D I E I L S L F A A A I H  
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UniRef90\_L7MET7 N S V H A A D V T Q A M H C F L L E D K I R E H M T P V E A M A S L I A A V T H  
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UniRef90\_H2TXD1 N W K H A V T V A H C M Y A I L Q K N T S G M F T E Y I E K K G L L I A C L C H  
UniRef90\_Q0IHS9 N W M H A F S V S H F C Y L L F K N L E L V N Y L E Y I E F A L F V S C L C H  
UniRef90\_UPI00042D06C1 N S T H S A D V L H A T A Y F L C K E R I K Q T L D P L D E V A A L I A A T I H  
UniRef90\_V9KHS7 N S T H A A D V L H A T A Y F L C K E R V K Q S L D Q Q A D E V A A L I A A T V H  
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UniRef90\_W8B7P2 N N I H A A D V T Q T T H Y V L C Q T G L M N W L T D L E T F A T L L A A A I H  
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UniRef90\_F6KPR5 N W T H G F S V A N T M Y T V I K H S E D A F R P I E R L A L L E I G S L C H  
UniRef90\_W5K950 N W K H A V T V A H C M Y A I L Q K S T S G I F T E L E K K G L L I A C L C H  
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UniRef90\_L5LPD1 N WR H G F N V G Q T M F S L L V G Q S Q K R Y F T D D L E A L A M V T A A F C H  
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UniRef90\_I1FVK8 N F R H C F C V T Q M M Y G M I H L L K L Q D V F D S L D V I L L T S C I C H



QUERY UniRef90\_B4LTJ1 UniRef90\_E2BNK0 UniRef90\_UPI0003599B43 UniRef90\_K1QIC6 UniRef90\_V9K147 UniRef90\_W5JZ53 UniRef90\_L01779 UniRef90\_J9JUG8 UniRef90\_T1JG26 UniRef90\_V4BDL9 UniRef90\_W5KBT8 UniRef90\_E0VPK2 UniRef90\_K1R014 UniRef90\_H3C4N0 UniRef90\_A7RY89 UniRef90\_F1Q4Q7 UniRef90\_UPI00039420C0 UniRef90\_B3RPK8 UniRef90\_H2YVD3 UniRef90\_UPI0002A4981F UniRef90\_P12252 UniRef90\_Q5TUZ0 UniRef90\_K7JB77 UniRef90\_K1Q9Q8 UniRef90\_V9KH37 UniRef90\_G4VPI6 UniRef90\_V8PH88 UniRef90\_F1N1V7 UniRef90\_UPI000258DF67 UniRef90\_B3S4Q2 UniRef90\_W4XSF6 UniRef90\_T2M5J4 UniRef90\_H9K3A2 UniRef90\_L7WMY9 UniRef90\_P52731 UniRef90\_A0A023F539 UniRef90\_U6HPK0 UniRef90\_H2UC98 UniRef90\_UPI00044319A1 UniRef90\_M9NF02 UniRef90\_UPI000444809E UniRef90\_UPI0002B8EBD5 UniRef90\_G1Q9I0 UniRef90\_H2LW17 UniRef90\_UPI0003315F0E UniRef90\_UPI00045744A4 UniRef90\_I3JFY9 UniRef90\_L7M6E5 UniRef90\_G7YCW0 UniRef90\_I1FF71 UniRef90\_U6HNN7 UniRef90\_UPI0003B502F9 UniRef90\_L7MET7 UniRef90\_UPI00023F0G6 UniRef90\_L9KNU5 UniRef90\_UPI0000D577EC UniRef90\_UPI000359B1C1 UniRef90\_K4E2Y2 UniRef90\_H2TXD1 UniRef90\_Q0IHS9 UniRef90\_UPI00042D06C1 UniRef90\_V9KHS7 UniRef90\_S4RQU1 UniRef90\_W8B7P2 UniRef90\_UPI0003C1473D UniRef90\_H3B373 UniRef90\_D2W310 UniRef90\_UPI00020607C8 UniRef90\_UPI000350237F UniRef90\_UPI0003F09B67 UniRef90\_G4VM44 UniRef90\_L5K4H1 UniRef90\_UPI000395DAC8 UniRef90\_UPI000443B51E UniRef90\_K1PID2 UniRef90\_Q3UE1-2 UniRef90\_F6KPR5 UniRef90\_W5K950 UniRef90\_G6CK78 UniRef90\_A2F408 UniRef90\_UPI0001D38A2C UniRef90\_A2FKH2 UniRef90\_M3XK36 UniRef90\_F2TZN0 UniRef90\_L5LPD1 UniRef90\_T2MHY9 UniRef90\_UPI0003502251 UniRef90\_UPI00022B437F UniRef90\_A2G2M9 UniRef90\_K1QRU7 UniRef90\_I1FVK8

170 180 190 200

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

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UniRef90\_UPI0001D38A2C S S W K S A K L I S L F Q L H P P R S F F Q L K M L I K C C C D I S N E V R P M
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UniRef90_W5JZ53	P	I	M	D
UniRef90_L01779	E	E	A	R
UniRef90_J9JUG8	E	E	M	R
UniRef90_T1JG26	S	E	M	R
UniRef90_V4BDL9	S	E	M	R
UniRef90_W5KBT8	E	V	S	M
UniRef90_E0VPK2	N	V	M	R
UniRef90_K1R014	E	V	M	R
UniRef90_H3C4N0	E	V	M	R
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UniRef90_F1Q4Q7	E	E	M	R
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UniRef90_B3RPK8	T	V	M	R
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UniRef90_K7JB77	D	D	L	N
UniRef90_K1Q9Q8	D	N	T	K
UniRef90_V9KH37	E	L	M	R
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UniRef90_F2TZN0	E	S	M	R
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290 300 310 320

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



QUERY W Q A [ ] A E  
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UniRef90\_S9UL78 N S M H A A D V L H I V S F I L T K G I E K C Q L K D E Q V F S A V L A A S I H  
UniRef90\_H0ZDS7 N R I H A T D V L H A V W Y L T T R P I P G F Q Q I R S E L M A L Y V A A A M H  
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UniRef90\_F0VIX3 N Q I H A A A V A H M F H P T L G A S P S E G S Q L F A H Q L A L T V A A I G H  
UniRef90\_T2MDA4 N R I H A A D V L H G V Y Y L T K H K Y M G N V M P E L L E L M A L Y T A A A M H  
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UniRef90\_V4Z1J2 N F Y H A H V E Q V C W M F L S A Y G C R N I L S P L E Q L G I L L A A L C H  
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UniRef90_M7BNN5	D	V	H	P
UniRef90_B7PZJ5	D	V	H	P
UniRef90_A8ITN3	D	F	H	K
UniRef90_UPI000273A61A	D	Y	E	H
UniRef90_H6BRM7	D	V	H	P
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UniRef90_A4VDP2	D	V	H	R
UniRef90_V5FL26	D	V	H	P
UniRef90_K7H9V8	D	Y	H	P
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UniRef90_M3ZXX5	D	Y	H	P
UniRef90_W4ZL36	D	Y	H	P
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UniRef90_H1VGT2	D	V	H	P
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UniRef90_V8P1E8	D	V	H	P
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UniRef90_K3X4R9	D	A	D	H
UniRef90_G7Y2X2	D	I	D	H
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UniRef90_O76104	D	V	D	H
UniRef90_UPI0003500226	D	L	D	H
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L S K P Q C N I L E K A T D C A Y A R A I R K Y I I E W I L A T D M K M H F D H I  
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M Q E D E M N L L A N L R S K D D W R D L R N L V I E M V L S T D M S G H F Q Q I  
L R R H W P P A F Q D R T M R K L M I S T L L A T D M G I H S T D Y M H H L G H L  
G M L R E S R L L A H L P K E M T Q D T E Q Q L G S L I L A T D I N R Q N E F L  
L N T H G C N I F K H F S R K D Y Q R Q M L D L M R D L I L A T D L A H H L R I L  
L R Q S N A N I F K N L T I Q K V Q Q I R R Y V I N N I L A T D M S K H F D Y L  
L R R H W P A A F K D K Q I R R L L I S S I L A T D M G V H H K F M  
L C R T E E N H F I E N L D P A E M K R F R Y L V L E Y I L A T D L K Q H F E I  
M Q M E E M N I F L A N L D H V E F K R F R F L V I E A I L A T D L K K H F D F L  
Y S Q P E Y N F L A N L D H V E F K R F R F L V I E A I L A T D L K K H F D F L  
F S K P E Y N F L S S L D J A E F K R F R F L V V E Y I L A T D L K R H F D F L  
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L N D S S S K I L D G L S T T E F K S C I D Y L R E L I L A T D L A N H F R I L  
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L Q A E N C D I F Q N L S A K Q R L S L R R M V I D M V L A T D M S K H M N L L  
V E D K Q I E S K L P V D Q E R L L E E M K Y A I L C T D L A V Y F Q L R  
C A K E E S N I L A G L N D K Q F E N F R K L V I D M V L A T D M V F H N E H L  
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G R S E E E V E K D K T P T S S D  
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N K F  
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	130	140	150	160																																					
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UniRef90_F0VEP1	DLIA	HP	G	R	N	N	A	F	M	V	N	A	N	T	E	L	A	L	T	Y	N	D	R	S	V	L	E	N	M	H	A	S	L	T	A	F	R	L			
UniRef90_L1IP89	DLG	HP	G	V	N	N	A	F	L	I	N	K	Q	Q	H	P	L	A	I	K	Y	N	D	R	S	V	L	E	T	H	H	A	T	L	A	L	D	L			
UniRef90_A0CR51	DYGG	HP	GL	T	NA	F	L	I	N	S	R	NE	L	A	L	T	Y	N	D	R	S	V	L	E	N	E	M	Y	H	H	P	S	Q	C	F	K	L				
UniRef90_W4JX48	DVIG	HP	GF	T	NG	F	M	K	N	A	K	A	E	L	A	S	S	L	Y	D	D	K	S	P	L	E	N	Q	M	H	F	T	L	L	H	L	H				
UniRef90_UPI000359B2BF	DLD	HP	G	Y	N	N	T	Y	Q	I	N	A	R	T	E	L	A	V	R	Y	N	D	R	S	V	L	E	N	H	H	C	A	L	A	F	Q	I	L			
UniRef90_H3GHE7	DVGD	HP	GH	T	NG	F	E	V	V	S	G	S	Q	L	A	M	L	Y	S	D	E	S	V	L	E	N	H	H	A	Y	T	T	F	R	L	I	L				
UniRef90_F0VH18	HFG	HP	GV	S	N	T	F	L	V	K	S	R	H	P	R	A	I	R	Y	D	D	E	S	V	N	E	N	Y	V	A	S	T	T	L	S	C	L				
UniRef90_A2DBZ3	DVNH	HD	GT	N	T	L	F	L	N	Q	T	S	S	Y	L	V	D	L	Y	G	K	E	S	T	L	E	N	H	H	V	S	E	A	L	R	I	L				
UniRef90_F5HHP2	DVVG	HP	GL	S	NA	F	M	K	N	A	R	V	P	L	S	Q	V	Y	E	D	K	S	V	L	E	N	M	H	C	M	L	V	V	Q	L	L					
UniRef90_S2JSI2	DAG	HT	G	Y	N	N	D	F	F	I	N	A	K	T	E	L	A	I	R	Y	N	N	V	S	T	D	M	F	H	Y	D	L	L	S	E	A	L				
UniRef90_B0WNW8	DLD	HP	G	V	N	Q	P	F	L	I	A	T	S	N	E	L	A	A	L	Y	E	N	T	S	V	L	E	N	H	H	W	R	S	A	V	I	G	C			
UniRef90_J9ELJ5	DLDL	HR	G	K	N	N	A	F	M	K	S	M	S	S	P	L	A	S	I	Y	S	T	S	V	M	E	N	H	H	F	N	Q	T	V	I	I					
UniRef90_Q4YQB6	DIG	HP	G	Y	N	N	L	F	I	N	A	S	F	H	P	L	A	I	Y	N	D	R	S	V	L	E	N	Y	H	A	S	T	F	K	I	L	I				
UniRef90_A0A058ZHH3	DLC	HP	GL	N	N	F	H	V	N	A	R	N	A	L	S	M	L	Y	N	N	T	S	V	L	E	N	H	L	H	T	T	F	T	F	C	L	L				
UniRef90_B2WAK6	DVDG	HP	GV	N	N	A	F	L	V	A	L	N	S	A	P	L	A	Q	L	Y	N	D	R	S	V	L	E	N	S	F	H	C	A	A	Y	S	Q	I			
UniRef90_T1INE9	DVDG	HP	GV	T	N	N	Q	F	L	V	A	L	N	S	E	L	A	L	M	Y	N	D	E	S	V	L	E	N	H	H	L	A	V	A	F	K	L	L			
UniRef90_W7K1C6	DLDG	HF	GR	T	N	F	L	K	N	C	C	N	F	L	A	S	I	T	Y	N	D	K	S	I	L	E	N	Y	H	C	S	Y	L	F	N	I	L				
UniRef90_UPI000386FC7D	DYE	HT	GT	T	N	N	F	H	I	Q	T	R	S	D	S	A	I	L	E	Y	N	D	R	S	V	L	E	N	H	R	V	I	S	A	A	Y	R	L			
UniRef90_T0Q9Y2	DLD	HP	GV	T	N	N	H	I	V	V	J	A	K	H	A	L	E	Y	G	D	G	S	A	S	E	R	M	H	A	A	E	T	R	R	L	L	I	L			
UniRef90_O00408-6	DLD	HR	GT	N	N	S	F	Q	V	A	S	K	S	V	L	A	A	L	Y	S	S	E	S	V	M	E	R	H	H	F	A	Q	A	F	A	I	L				
UniRef90_F0YJF8	DYS	HP	GS	S	NA	S	H	E	V	K	V	A	S	P	L	A	L	R	Y	S	D	D	T	V	L	E	E	R	H	H	L	A	A	F	M	V	L				
UniRef90_E4X007	DVD	HP	GV	A	N	S	A	F	L	E	K	N	S	C	D	A	L	Y	I	L	Y	G	D	S	G	T	L	E	E	R	H	H	F	S	T	L	C	K	L		
UniRef90_F0YND2	DLD	HP	GL	S	N	T	F	Q	C	K	A	R	T	P	L	A	V	R	W	D	D	E	S	P	L	E	N	H	H	L	W	C	S	R	K	L	L				
UniRef90_J9J7X2	DLDG	HD	GF	T	NG	F	H	V	N	A	L	T	N	D	R	A	I	T	Y	N	D	R	S	V	L	E	N	Y	H	V	A	Q	T	F	A	L	I	L			
UniRef90_A0DK29	DVLS	HT	GR	T	N	F	E	V	I	N	A	L	T	N	S	E	L	L	T	Y	N	D	R	S	V	L	E	N	Q	H	A	A	T	S	I	K	L	L			
UniRef90_M4BFL8	DVD	HP	G	H	T	N	D	F	E	V	K	S	G	S	Q	L	A	M	L	Y	C	D	E	S	V	L	E	N	H	H	A	Y	T	T	F	R	L	L			
UniRef90_L5KLM0	DVD	HP	GR	T	N	S	F	L	C	M	A	G	S	E	L	A	S	L	Y	N	D	T	A	V	L	E	S	H	H	T	A	L	A	F	Q	L	I	L			
UniRef90_D7G214	DLD	HP	GL	T	N	S	F	Q	M	A	T	E	S	P	L	A	S	L	Y	N	D	Q	A	P	L	E	N	H	H	L	A	I	M	F	Q	L	L	L			
UniRef90_Q01C17	DVG	HP	GL	N	N	A	Y	L	V	A	R	Q	T	D	V	A	E	R	W	N	N	V	S	V	N	E	N	G	H	L	Y	T	A	N	T	L	L	L			
UniRef90_UPI000440EEC0								R	V	E	C	T	Y	Q	I	N	A	R	T	E	L	A	V	R	Y	N	D	R	S	P	L	E	N	H	C	A	V	A	F	Q	L
UniRef90_B8C496	DVK	HP	GL	N	N	T	F	Q	V	N	S	R	S	E	L	A	V	Q	Y	N	D	V	I	S	V	L	E	N	S	L	T	W	F	Y	Q	K	L	L			
UniRef90_W5LK30	DLD	HP	GV	N	Q	T	F	L	I	K	T	S	H	Y	L	A	S	L	Y	Q	D	T	S	V	L	E	N	H	H	W	K	C	A	V	I	S	L	L			
UniRef90_T1G9G6	DLD	HT	GF	N	N	T	F	H	I	N	A	Q	T	E	L	A	L	R	Y	N	D	A	S	P	L	E	N	H	H	S	A	T	A	F	H	I	L	L			
UniRef90_UPI000359D027	DLD	HP	GV	N	N	S	F	L	V	V	J	A	K	H	A	L	E	Y	Q	S	V	G	C	C	S	D	M	L	C	S	F	T	F	M	L	L	L	L			
UniRef90_G7N6G9								L	S	T	V	J	S	D	H	G	S	T	S	D	S	D	S	D	S	G	F	T	H	G	H	M	G	Y	V	F	S	K	L		
UniRef90_W4YP07	DLD	HR	GT	N	N	T	F	Q	V	K	T	S	S	P	L	S	L	L	Y	G	T	S	T	M	E	H	H	F	D	H	C	L	I	M	L	L	L	L			
UniRef90_Q8I5V4	DTG	HP	GL	N	N	N	F	L	I	N	S	E	N	N	L	A	L	T	Y	N	D	N	S	V	L	E	N	Y	H	C	S	L	L	F	K	T	L	L			
UniRef90_F1L3D5	DTD	HR	GT	N	N	A	F	Q	L	Q	S	K	T	P	L	A	Q	L	Y	S	S	E	S	V	L	E	N	H	H	F	A	Q	T	V	I	S	L	L			
UniRef90_W7ACZ2	DVVG	HP	GL	N	N	F	F	L	I	K	S	E	N	E	L	A	L	T	Y	N	D	S	N	V	L	E	N	Y	H	C	S	L	V	F	K	T	L	L			
UniRef90_E0VD88	DID	HS	GL	T	N	N	F	L	Y	L	T	N	D	L	A	T	Q	L	Y	D	D	C	P	G	E	M	H	Y	R	Y	E	F	T	L	L	L	L	L			
UniRef90_K0RNU8	DIR	HP	G	Q	N	N	S	Y	Q	I	T	K	R	T	D	L	A	R	V	Y	N	D	R	S	R	A	C	Y	M	L	D	S	L	R	V	L	L	L			
UniRef90_A0A023B3K1	DVD	HL	GV	T	N	N	Y	L	I	A	V	E	H	P	L	S	I	L	Y	N	D	M	N	T	L	E	Q	H	H	C	A	F	I	F	T	L	L	L	L		
UniRef90_G3AF04	DVVG	HP	GV	T	NA	F	M	I	K	N	G	A	P	T	S	L	I	F	N	D	R	S	V	L	E	S	Y	H	S	V	F	I	N	L	L	L	L	L	L		
UniRef90_H3A551	DLD	HT	G	Y	N	N	A	Y	Q	I	N	A	R	T	E	L	A	L	R	Y	N	D	I	S	P	L	E	N	H	H	C	A	V	A	F	E	I	L	L		
UniRef90_T0S9U9	DLDG	HP	G	N	D	N	A	F	E	V	A	T	S	S	E	L	A	S	R	Y	N	D	I	S	V	L	E	N	H	S	L	A	L	F	G	L	L	L	L		
UniRef90_UPI000359E8A																																									
UniRef90_M7CCS7																																									
UniRef90_D4D1D3	DVG	HP	GV	N	N	M	F	L	V	K	L	N	A	P	L	A	Q	L	Y	N	D	R	S	V	L	E	N	A	F	H	C	A	A	L	K	S	L	L			
UniRef90_K0TNY7	YAH	HP	GL	N	N	N	Y	Q	V	N	S	R	S	E	L	A	V	Q	Y	N	D	V	I	S	V	L	E	N	S	V	T	W	O	V	L	F	L	L	L		
UniRef90_F0VDZ5	DIG	H	Q	G	K	N	N	A	F	Y	L	A	S	R	S	P	L	G	I	T	Y	N	D	I	S	V	L	E	N	F	H	A	S	L	T	F	K	I	L	L	
UniRef90_M4ASA3																																									
UniRef90_X6LI13	DVG	H	D	G	Y	N	N	A	F	H	L	A	T	A	S	N	L	A	L	L	Y	G	D	T	S	L	L	E	N	Y	H	L	V	S	E	T	F	R			



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UniRef90\_BOWNW8 L L E S G V A E Q I Q Q G I R P E L E K Q I S S I L A T D I T R Q Q E F I  
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UniRef90\_B2WAK6 L R R Y W P R A F A D I P M R K L M I N N I L A T D M G L H F K Y M  
UniRef90\_T1INE9 L Q N D D C D I L I T L S K K Q K Q T L R K M V I D M V L A T D M S K H M S L  
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UniRef90\_F0YND2 L V I T K H D L L G G V A D E R D R A R F L G V V R A M I L S T D M A K H T K L M  
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UniRef90\_Q01C17 L K Q Y D V L K D F A D D D R V L V L K L L Q K M V L C T D M E V H A D L V  
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UniRef90\_B8C496 L L G P E R D I F S G L N K Q Q F S V S R S L I K A V L D T D M T H H F S M M  
UniRef90\_W5LK30 L R E S G L L S H F P F E D R K N L E K R L G S L I L A T D I S R Q N E Y L  
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UniRef90\_G3AF04 L E K P E H N I F R N L T T E Q Y K R I R E G M I K C I L A T D M V R H N E I L  
UniRef90\_H3A551 L R D P C C N V L G S L D A S Q V A T L R Q C I I Q C L L H T D I K Y H A E L V  
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UniRef90\_M4SA3 L S L P D C N W M Q S H P L S I R R Y L G I R Q I F A T D M K H H G T N M  
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UniRef90\_J3PN51 L Q L T E N N I F E T L D P A E T K R F R Y L V L E Y I L A T D L A K H F E I I  
UniRef90\_A0A16UJN3 L K K N N N W Y Q R L T R P M R N Y F R N V M I N L V L A T D M H F H F R E L  
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UniRef90\_A0A024TWA7 V R T P A T N I F I N F T N K E F I V R Q N T V R C I L G T D M S K H T D I L  
UniRef90\_U6IK40 V R T P A T N I F V N F T A K E I E I V R E N T V R C L L G T D M A K H T D I L  
UniRef90\_U6HHZ2 L N K H N T A N S H D M A Y H S E L V K Q A D Q L S H F I E Q S K K S S N K R  
UniRef90\_S2J2J8 M K C F F V K D D R C V E I A R W S I L A T D M A K H D T Y V  
UniRef90\_W1QFL0 L A D E T L N I F E Q N L N R R Q T E H V F H L I D I A I I A T D L A L Y F K K R  
UniRef90\_UPI000440C370 L S T H W Q R E L L T I S S S K A H P N Y D V I S E T I L A T D M A L H A D Y V  
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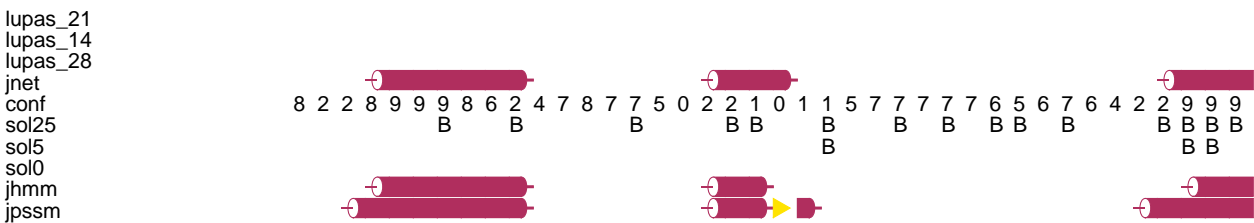
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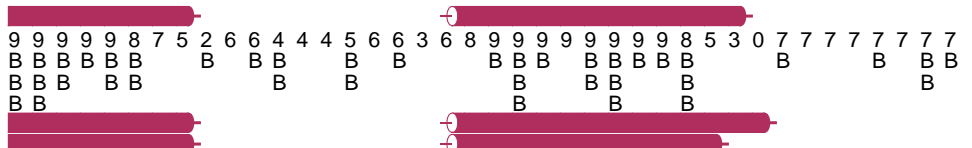
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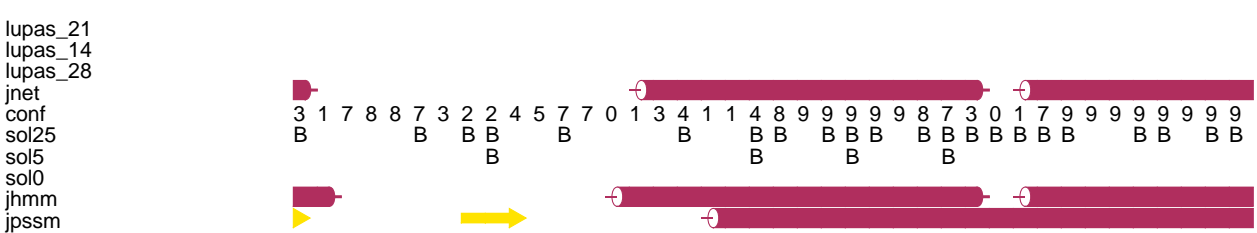




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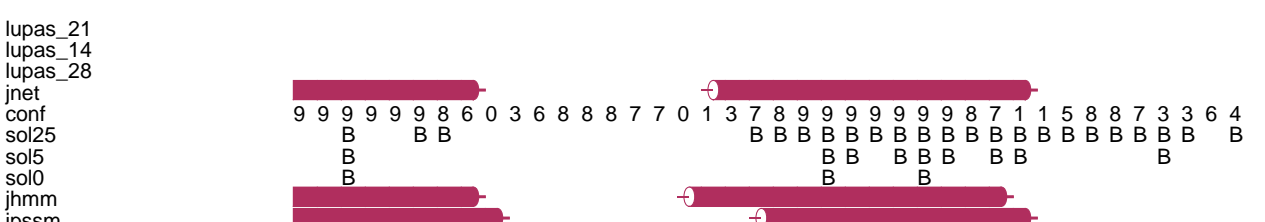
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A E F N A K V G L P N A V Q R D P Q C D K M  
N R L K S F K T N N E I L N H D N T V K L I S A L L I K C A D I S N V T R P L  
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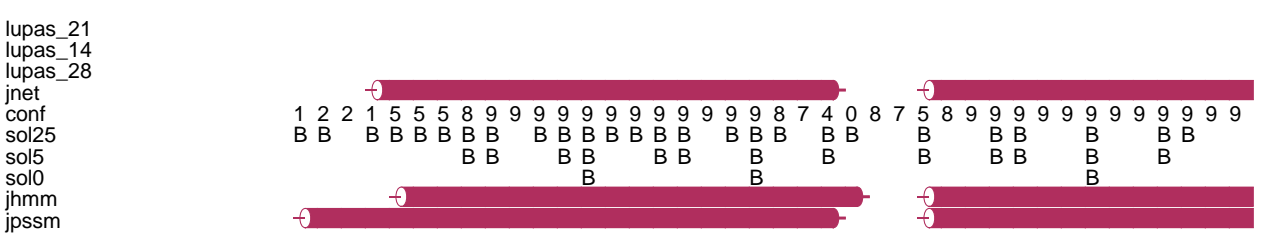






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