

| QUERY                  | 1          | 10         | 20           | 30        | 40        |          |        |
|------------------------|------------|------------|--------------|-----------|-----------|----------|--------|
| UniRef90_R5A321        | VSRKQVVFNF | NSAGPSSMLP | PEEAVLKRKA   | AAEAEMLDY | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_J0N0X7        | MKRVRVYNF  | SSAGPSSMLP | PEEAVLRRQA   | AAEAEMLDY | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_Q0AA59        | MSRVRVYNF  | SSAGPSSMLP | PEEAVLRRQA   | AAEAEMLDY | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI0003A66C7C |            | VFNFSAAGP  | AAVLPKPE     | VVLEQQQA  | QAEELLDY  | NQGGSSGG | QSSVVM |
| UniRef90_UPI00037B71BF | KRAYNF     | NAGPAAALP  | LEVLEQQQA    | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_S6AFY8        | MERTYNF    | FGAGPAAALP | PEEAVLLEQQQA | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI0003674296 | MKQVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI000255A0A7 | MTRKVNF    | SSAGPAAALP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_W0TNS4        | MSRTYNF    | SSAGPAAALP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_G0GC61        | ERVYNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI00035DF0AD | MAKRVYNF   | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI00035EC19E | MPRVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_D5BWP8        | MTRVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_I4DC33        | MARIVYNF   | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_D5CTY3        | MSRIVYNF   | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_R6VT20        | MERVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_B9IRL8        | MARIVYNF   | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_D9SM41        | KRALYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_R7GD30        | MTRAYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_N6V2S9        | MTQIYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_M4R5G8        | MRRVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_I0HND6        | MRRVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_X8J9M2        | ERVYNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_U2E4C4        | MARVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI0003822EF7 | KRAYNF     | NAGPAAALP  | PLAVLEERA    | QAQAEFLV  | DFQGGSSGG | QSSVVM   | MEMMS  |
| UniRef90_G4H814        | KRAFNF     | NAGPAAALP  | PLAVLEERA    | QAQAEFLV  | DFQGGSSGG | QSSVVM   | MEMMS  |
| UniRef90_T0JSL2        | KRAHNF     | NAGPAAALP  | PLAVLEERA    | QAQAEFLV  | DFQGGSSGG | QSSVVM   | MEMMS  |
| UniRef90_R8APA0        | MQQVVFNF   | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI0003B7734C | MSRQVYNF   | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI00016C0F1E | MQRVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_R6A053        | MTRVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_P19689        | MTQVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI00046F68AE | MTRYVNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI0003B3F712 | MSKVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_E6UBZ3        | MGRVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI00047A3518 | MNRVALNF   | NAGPAAALP  | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_F9ZGK9        | MDQTYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_B7GY87        | RAYNF      | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_R2QN50        | MKTVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_W8YRV7        | KRAYNF     | NAGPAAALP  | PLAVLEERA    | QAQAEFLV  | DFQGGSSGG | QSSVVM   | MEMMS  |
| UniRef90_Q5E6F2        | MEKVFNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_C3Z0U0        | MNRVINF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI00046719E1 | MARAYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_V2G3X7        | ERVYNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI0003792343 | MTQVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_U7DBF0        | MARVWNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI0002FA52CA | MEKRVHNF   | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_V2YD79        | TRVYNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_I3KJY9        | KQTIINF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_D4K0L7        | MARVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_W7D561        | MERVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI00047C1DEB | RAYNF      | NAGPAAALP  | PLAVLEERA    | QAQAEFLV  | DFQGGSSGG | QSSVVM   | MEMMS  |
| UniRef90_R5G1P8        | NRVYNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_V7CH50        | ERVVNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_C9QID1        | MGNVNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI000288D299 | NRAYNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
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| UniRef90_UPI0002D76CC6 | MTRHVNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_W5XKA0        | RVFNF      | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_R5DGM5        | MKRTVNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_I1H9J2        | RVYNF      | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_F8IGS5        | RRVDNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_Q8RLW0        | MNQVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_D4KFY3        | NRIYNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_P44336        | MSQVNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_Y0KGGK4       | MKQIYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI0003A31806 | MRKVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_M7U0D9        | RIYNF      | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_I5B2E6        | ERIVNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_E8RDB7        | ERVYNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_D7UV31        | KRVYNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_N9V6W2        | MNQVYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_A8FBL5        | MKRTVNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI0003633E35 | MNRVNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_W7CI26        | MKRAYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_A4W8S7        | MAQVNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
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| UniRef90_F2I5B7        | MTRLWNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI00046EFEC3 | MARPWNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_Q5WHT9        | MNDVHNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_R5HAY6        |            |            |              |           |           |          |        |
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| UniRef90_D2TZM5        | MSQIYNF    | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_T1PFD6        | VIINF      | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_D3HFC4        | VIINF      | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_UPI00036BD0ED | NRVYNF     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |
| UniRef90_A7HB27        | MSRKMN     | SSAGPAAVLP | PEEAVLQQAQA  | QAEELLDY  | NQGGSSGG  | QSSVVM   | MEMMS  |

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170 180 190 200

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I P N Y G E V P I V A D M S S S N I L L S S D Y D I H Q F G L I Y A G A Q K N N L G A P P  
I P E T G D I P L V A D L S S S T I L L S R R P L D V V S R F G L I Y A G A Q K N N L G A P P  
F P G T S L P L I A D M S S S D I L L S K K I L D V V S R F D L I Y A G A Q K N N L G A P P  
L P D A G K V P L V A D M S S S C I L L S Q P L E V V S R Y G L I Y A G A Q K N N L G A P P  
P P E T G D V P L V A D M S S S N I L L S S V Y D V S K F G L I Y A G A Q K N N L G A P P  
E P N F G N D V V T D L S T I L L S S P L D V V S R Y G V I Y A G A Q K N N L G A P P  
Q P N V P E I P L I A D M S S S T I L L S R P P I D V V S Q F G M I Y A G A Q K N N L G A P P  
Y P D A K S N L V A D M S S S D F L L S H P V D V S Q F A L I Y A G A Q K N N L G A P P  
W P D A P D V S L V D A S S S H F L L S R P P L D V V T R C G L L F A G A Q K N N L G A P P  
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V P E T G S V P L A C C D M S S S D I L L S R P P V D V S K F G L I F A G A Q K N N L G A P P  
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QUERY T F S I Y M L R N V L D W I K D L G G A 250 260 270 280  
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QUERY

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|                        | 170                               | 180   | 190 | 200 |
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| UniRef90_R5KBH8        | V V I K R H G K V L I V D A M S   | S F G G V P V D M A G I D F M I S S A N K C I G V           |     |     |
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| UniRef90_K2JIH7        | I P A D R D G L T I C D A T S     | A A F A M D L P W D K L D V T T F S W Q K V M G G           |     |     |
| UniRef90_UPI00036C746E | D A A P P N A L L F V D A V S     | S L P H P A F D Y S Q I D S I Y F S V I Q K C F G P         |     |     |
| UniRef90_K9QK50        | L C R E F G T L L L V D T V T     | S L G G V P I D E W G V D L A Y S C S Q K G L G P           |     |     |
| UniRef90_D1YYK5        | L A K K Y N A L F V M D C I T     | S A G G V E V D K W G I D I A V T G A S Q K C L G P         |     |     |
| UniRef90_A9BAU4        | L C R K T D C L L L D T V T       | S L G G V P L D E W K V D L A Y S C S Q K G L G P           |     |     |
| UniRef90_E8UY84        | I S E T R E G L T F C D A T S     | A V F A M D L P W K L D V T T W S W Q K V L G G             |     |     |
| UniRef90_I4C388        | L C R E F N A L L L L D T V T     | S L G G A P V D H W H V D L A Y S G S Q K C I C P           |     |     |
| UniRef90_A7GMM0        | I A D V Y G K V I V D A M S       | S F G G V E M D V A Q I D F M I S S A N K C I G V           |     |     |
| UniRef90_A0A017HJG4    | I P A D R K G L T I C D A T S     | A A F A Q E L P W D R L D V T T F S W Q K V M G G           |     |     |
| UniRef90_UPI0002EFF3E9 | I A K Q Y H A L T I V D A V T     | S L G G V P V D E W E L D A V Y S G S Q K C L C V           |     |     |
| UniRef90_Q2BGU9        | I A H D N G A L A I V D A V T     | S L G G L D V D V W G I D A I Y S G T Q K C L C P           |     |     |
| UniRef90_Q2W2C7        | L K S D R K G L T I C D A T S     | A V F A M D M P W D K L D V V T W S W Q K V L G G           |     |     |
| UniRef90_R6IGV7        | F C K R N R I F L I V D C V S     | T F L A D P F D M Q E A D I M I T G S Q K A L C P           |     |     |
| UniRef90_A0A037Z581    | L L K N K N I F I V D A V S       | S L G G L D M D W G I D I L V T A S Q K A M S P             |     |     |
| UniRef90_A3U269        | I P S D R A G L T I C D A T S     | A A F A Q D L P W D K L D V T T F S W Q K V M G G           |     |     |
| UniRef90_UPI0001DD1129 | L A A D R K G I T I N D A T S     | A V F A Q E M D W A K L D A T T Y S W Q K V M G S           |     |     |
| UniRef90_UPI0003B5B394 | L T R V R P T L V V D A V S       | G L G A D D M D N W G V D V V V S C A Q K G L M P           |     |     |
| UniRef90_S2EBI8        | A N K Y P E K I I A V D T T S     | S M G G I E M D N F S L A D I W Y A S V I Q K C F G P       |     |     |
| UniRef90_E8QWB9        | I V A R T P A L F A V D G I S     | G V G A M E C D D W G I D L L C V I G S Q K A L M P         |     |     |
| UniRef90_E1Z357        | V R K T H P A V L L V D G V S     | S I G G A L D F D Q W R V D V A V T G S S Q K A L S P       |     |     |
| UniRef90_A5N3U9        | V K K Y P E V V V C L D T V S     | S M G G I E V D E L G V D I C L T S T Q K A L G P           |     |     |
| UniRef90_L9VFR9        | V A D Y P D T Y F V V D A V S     | A L G G V D I D E H N I D V T F A S T Q K A F A P           |     |     |
| UniRef90_G0IZQ5        | L A D K Y N K C F I L D A M S     | S F G G V P L D I R K I D F L I S S A N K C I G V           |     |     |
| UniRef90_E3G8D2        | I A D V Y N K Q Y I V D A M S     | S F G G I P L D V A N I D F L I S S A N K C I G V           |     |     |
| UniRef90_F2PAG4        | I A R K H D C L T I V D A V T     | S L G G V P V D E W Q L D A V Y S G S Q K C L C T           |     |     |
| UniRef90_D4GV47        | V P H D H D A L V V A D T V T     | S L G G V E A D D W G I D V A Y S G P Q K C L C P           |     |     |
| UniRef90_UPI00025592D4 | V E E I A E V V L I D S M S       | A F G A V I S A K Q F I D A L I S S A N K C F G V           |     |     |
| UniRef90_M3C634        | I P A D R D G L T I C D A T S     | A V F G M D V D F A K L D V V T W S W Q K A L G G           |     |     |
| UniRef90_M8EDV5        | V R E K S D A L F I V D A V S     | C L V A C M E D E W G V D I V V T G S Q K A M L P           |     |     |
| UniRef90_UPI000360D368 | I K D D R K G L T I C D A T S     | S V F A C P M D W K L D V I T W S W Q K V L G G             |     |     |
| UniRef90_F5RAV4        | I A D D R A G L S I C D A T S     | A A F A M D L P W H K L D V T T W S W Q K V L G G           |     |     |

UniRef90\_D2B9J9 D G G L W L A L M S P A A L A R V E E I A S S G R Y I P E F F K D Q T Y N T P S 210 220 230 240

UniRef90\_UPI00036FEB40 D G G L W L G L F S P A A I A R V E E I A S T D R W L D N S R K D Q T Y N T P S

UniRef90\_R7XSK4 D G G L W I A A R A D E E I A G T D R R H I P A F F D L P T A I D N N N Q T Y N T P S

UniRef90\_UPI0003610949 D G G L W I A V R I A D A I A A S D R R W V P D F L S L P T A V D N N N Q T Y N T P A

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UniRef90\_H5U205 D G G L W I A V M S P A A L E R I L D Q I A H T D R W C P N S A K N N Q T Y N T P A

UniRef90\_UPI00047D4482 D G G I W F L K R J E K L A A S D R W V P A F F D L K T V L D N E Q T Y N T P A

UniRef90\_S4APB8 D G G L W V A A F S P A A T E R A E R V H A S G R H V P N S R K N N Q T Y N T P A

UniRef90\_U2RBN1 D G G L W L A L L S P A A I A R V E E I A A T D R Y K N A I D N N N Q T L N T P A

UniRef90\_UPI0002F7F4FC D G G L W V A L L S P R A L A R V E E I A A T D R F L E N S R K D Q T Y N T P A

UniRef90\_W7SJ57 D G G L W L S L M S P A A L E R V A E I A G A S D R W L D N S T K D Q T Y N T P S

UniRef90\_G4BEH6 P G L A M A A V S E E V F E R A R K I P E R G L Y F E F L E K Q W S T P T T P P

UniRef90\_I3TCN8 D G G I W F A L V S P A A T E R I E R V T S S G R Y I P N S R K N N Q T L N T P A

UniRef90\_UPI00046AB49E D G G L W L I A R A D E E I K A S G R Y I P A F L D L V T A T E D N N N Q T L N T P A

UniRef90\_UPI00047720AC D G G L W F A I V S P A A I D R I E R I P A F G R Y K Q A V D N N N Q T L N T P A

UniRef90\_UPI00035FB149 D G G L W F A A M S P A A I D R I E A K I H A S D R F I P N S R K N N Q T Y N T P A

UniRef90\_UPI0004244BCD D G G L W A I E R J E K I A A S D R F Q P A F L S L K K A L D N N N Q T Y N T P A

UniRef90\_C2GIF6 D G G L W L A A M S P A L E R I E R I T N S G R F I P A F L D K N N Q T Y N T P A

UniRef90\_UPI0003826329 D G G L W L A A M S P A L E R I E R I T N S G R F I P A F L D K N N Q T Y N T P A

UniRef90\_B3Q6Y1 E A A H G M L I L S P R A V I A R L E S Y T P T W P M P K I I F Q G E T I N T P S

UniRef90\_UPI0003151808 D G G L W I A V F S P A I A A S D R H I P A F F D L K T A L D N N N Q T Y N T P A

UniRef90\_D1BCI9 D G G L W L A V V S P A A G R W I P E F L S L Q N A V T N S R A N N Q T L N T P A

UniRef90\_W6F975 D G G L W V A A L S P A L E G A R R W V P P F L S L T N N S R K D Q T L N T P A

UniRef90\_A1SEM0 D G G L W L A F S P A A L E R A A T V A A S G R H I P A F F D K N N Q T Y N T P A

UniRef90\_F2IX69 E A A H G M L I L S P R A V I A R L E S H T P A W P M P K I I F K G E T I N T P S

UniRef90\_UPI00047D05A3 D G G L W L G L F S P A L N G S D R W I P D F L N L Q T A I D N N N Q T Y N T P S

UniRef90\_UPI0003696E3D D G G L W I A I M S P A I K A S G R W V P A F F D L S L A L E N D K Q T Y N T P A

UniRef90\_U1QVP1 D G G L W V A I V S P A A G R W V P P F L S F T K A V A N S R K H Q T L N T P A

UniRef90\_D3YJ67 A G I T V V I I R E D L L G K A H K H I P S I L D Y T V I Q V K A D S M Y N T P P

UniRef90\_UPI00035FEE3A D G G W L G L F S P A A L E R A A R W I P D F L D L Q T A I D N N N Q T Y N T P A

UniRef90\_J1LNT8 D G G L W V A V L S P A A I E R A R R I E A A P Q G R W N S R K H Q T L N T P A

UniRef90\_GOQTZ3 A G S V V L I I R E N L I Q N P H P Q C P Y M L D Y N V L K Q T D G V P N T V P

UniRef90\_F0VDN0 P G A S P I T V M S P R A L E K I R A R R A K V P N W K Y W G P Q R Q Y H T A S

UniRef90\_G8SB65 D G G L W L A L M S P A A I E R A R R I E A A P Q G R W N S R K H Q T L N T P A

UniRef90\_UPI00036B5C1E E A A H G M L I L S P R A V I E R L E S Y T P A W P L P K I I F E G D T I N T P S

UniRef90\_UPI000477B3D8 D G G L W I A I A E R L E A F A Q E H P E S G R W V P P F L F K H Q T L N T P A

UniRef90\_A9D381 E G G H G V L I L S P R A V I E R L E S Y V P A W P L P K I I F K G E T I N T P S

UniRef90\_D5UJF8 D G G L W L A L A L S P E A V I E R A A R I E G A G R W V P N S R A N Q T L N T P A

UniRef90\_S3ABQ3 D G G L W V A A L S P A A I E R A R R I L E E G S D G R W N S R K D Q T L N T P A

UniRef90\_Q3A8Q3 P G L A F I S F S Q K A L E A A Q D N K N K G F Y F S L P A A K W N T A Y T P A

UniRef90\_A7IEK9 E G A H G I L L L S P R A V I E R L E T Y K P A W P L P K I I F E G E T I N T P S

UniRef90\_Q1GV14 E G G H G V L I L G P R A V I E R L E T H T P A W P L P K V F R K D Q T L N T P A

UniRef90\_K6X0J3 D G G L W L A L L S P A A I E R A E R I G D G R W I P N S R K D Q T L N T P A

UniRef90\_D0I0J3 P G F G F V I A K R S E L E Q C Q G R A R S Y D Q W Q C M E K N R G W R F T S P

UniRef90\_B8H433 E G A H G V L I L S P R L E S Y T P A W P M P K L F R M T K A N K A T I N T P S

UniRef90\_M8DETO P G F G F V I A K T A S L E A C K G Q A R S Y D Q W E T M E K H D G W R Y T S P

UniRef90\_UPI000367D457 E A A H G M L I L S P N A V K R L E N Y T P D R P L P K V F R M T S T I N T P S

UniRef90\_B8BW06 E G A H G M L I L S P K A V I E R L E S Y T P E N R V E A G F K G A T I N T P S

UniRef90\_A6TU59 P G L A V C S F S Q K A L D A A R K V E N R G L Y F D I Q K K D Y Q Y P S T P S

UniRef90\_I2GKJ8 A G L G V W I A G K S C L E K A E R L Q R Y D S M L W K N Y Q T F E T P A T P N

UniRef90\_G2KMQ9 E A A H G M L I V L S P R A V I E R L E T Y T P D R P L P K I F R L V E T I N T P S

UniRef90\_R4VV10 P G A S P L T L N D R A M E K V R A R E E P A R S W D Y W G D E R A Y H H T A P

UniRef90\_R5KBH8 P G F G F I I A R S L L E Q C K G V A R S Y D Q W E T M E K H G K W R F T S P

UniRef90\_UPI00034C648D E A Q H G V I V L S P R A V I E R L E S Y D P G R P L P K I F R K G D T I N T P S

UniRef90\_U2ECP6 P G M A L C T F S K K A V E R A K Q V P Y R G L Y Y E Y I L K K Y Q Y P S T P S

UniRef90\_E0UI97 P G A S P F T M S P K A L E K L Q S R K T P V T N W K Y W G E Q R V Y H H T A P

UniRef90\_F4HLJ5 P G L A I G A F S E R F I E A E K M P E R G W Y F K Y L K E K E S T P S T P S

UniRef90\_UPI00047B0375 P G M A I C T F S E K A R K R A E G V K N R G Y Y L K Y I Q K H Q Y P S T P S

UniRef90\_U2WRV4 E A A H G M L I L S P R A V I E R L E S Y T P P W P L P K I I F K G E T I N T P S

UniRef90\_B0BZV8 E A A H G M L V L S P R A V I E R L E S Y S P A W P L P K I F Q T G A T I N T P S

UniRef90\_U6B7H2 E A G F G V I I L S P R S V E R L E N Y S P A R P L P K I F R S G H T I N T P S

UniRef90\_K2JIH7 E A A H G M I V L S P R A V I E R L E T Y T P A W P M P K I I F K G E T I N T P S

UniRef90\_UPI00036C746E A G L G V W L N E R C L E K A H A S Y H S I P A L L E K A K A N Q T P E T A P N

UniRef90\_K9QK50 P G A S P F T M S P R A W E K L Q R R S T K V I G N W K Y W G S E R V Y H H T A P

UniRef90\_D1YYK5 S G L S S V T V I S K K A W D S M V K N P P Y Y M D L K K Y A E R S E T P Y T P S

UniRef90\_A9BAU4 P G L G P F T I N E R A E A K L N R R S D K V P N W K Y W G S D R V Y H H T A P

UniRef90\_E8UY84 E G A H G M L V L S P R A V I E R L E T S Y K S P R P L P K I I F S G E T I N T P S

UniRef90\_I4C388 P G I A P F T M S K R A V E K L K R R K T K V A S W K Y W G S E R T Y H H T A P

UniRef90\_A7GMM0 P G F G F V I A K R T E L E Q C K G R A R S D Q W E T M E L Q N G K W R F T S P

UniRef90\_A0A017HJG4 E A A H G V L V L G P R A V I E R L E S Y V P D R P L P K I I F Q G E T I N T P S

UniRef90\_UPI0002EFF3E9 P G L S P L T L L S P K A I E K I N A R T T P V Q S Y W S G E G K R S Y H H T A P

UniRef90\_Q2BGU9 P G I S P V S F S D K A V E A V K N R K N L V M G Y W G G S G K R A Y H H T A P

UniRef90\_Q2W2C7 E G A H G M L V L S P R A V I E R L E T Y K P S W P L P K I I F K G E T I N T P S

UniRef90\_R6IGV7 P G I A V M V F S K H A L Q R R T K C C C Q Y L D L K L A L K N M E R G Q T P W

UniRef90\_A0A037Z581 P G L A F L G V I S E K A L E N A K K S D L P R F Y F D F D K E N P E N P Y T P A

UniRef90\_A3U269 E A A H G M L I L S P R A V I E R L E S Y T P A W P L P K I I F R M T E T I N T P S

UniRef90\_UPI0001DD1129 E A Q H G M L I L S P K A V I E R I E S Y D P D W K L N T A I F E G A T I N T P S

UniRef90\_UPI00035B5394 P G L A V V A L N G R A W D A E V S H S D L P K Y F D F R K A Y E T P Y T P A

UniRef90\_S2EBI8 A G L G V L V V S P R A I Q K A E A R Y N S L N F M L E N A K Y Q T H Y T P N

UniRef90\_E8QWB9 P G L A F V S V I S P K A W A R I D A Y P N P C Y Y R K K M A D F D T P Y T P A

UniRef90\_E1Z357 P G L A M V C A S D K A L A A M K R V Y Y D F A D M L R T N P S G N V P Y T P L

UniRef90\_A5N3U9 P G I A A C S F S E K A V E R A K K V E F R G Y Y L D I Q K N Y Q Y P S T P S

UniRef90\_L9VFR9 P G L A V C V I S D A A Y E R E L E T D S A S W Y L D Y Y D R K G Q T H S T P A

UniRef90\_G0IZQ5 P G F G F I I A R R E V L Q A C K G N S R S H Q W K A M E N D P G K W R F T S P

UniRef90\_E3G8D2 P G F A F V I A R Q S A L E A C K G N S R S Y F A Q W R C M E D N H G W R F T S P

UniRef90\_F2PAG4 P G L S P L T F S Q K A L D K I Q Q R K T K V Q S Y W S G E G K R S Y H H T A P

UniRef90\_D4GV47 P G A S P L T L N D R A M D K V L S R E E P T R S W Y Y W G D D R S Y H H T A P

UniRef90\_UPI00025592D4 P G F G F S I I R Q S A L E A S K G N A H S L D Q W Q Y L A K T G S W R Y T P P

UniRef90\_M3C634 E G A H G M L A L S P A A V I E R L A V F R P D R P L P K V F R D G F F V N S P S

UniRef90\_M8EDV5 T G L A F L A A S K R A W E V I D R K K P L A F Y R K S F A D K T T P Y T P A

UniRef90\_UPI000360D368 E A A H G M I A L S P K A L E R L K T Y Q P S W P I P K I I F E G E T I N T P S

UniRef90\_F5RAV4 E A A H G M I V L S P R A V I E R L Y R H T P A W K L T E D L F E G N T I N T P S

UniRef90\_D2B9J9 V S T L F L L A D Q I E W M N G N G G G L A W T T A R T A E S S A R R L Y T W A E K  
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UniRef90\_R7XSK4 V A T L F L L M A E Q L D W M N A N G G G L A G M V E R T T A D S S S D A L Y G W A E K  
UniRef90\_UPI0003610949 I A T L L L L A E Q I D W L L S N G G G L D W A V K R T T A D S S S Q R L Y R W A E A  
UniRef90\_K5BJ24 I G T L L L F A E Q I D W M L G N G G G L D W A V A R T A D S S S Q R L Y R W A E A  
UniRef90\_H5U205 L A T L L L F D N Q I Q W M L G N G G G L D W A V A R T A D S S S G R L Y S W A E A  
UniRef90\_UPI00047D4482 L G T L L L L M A E Q I D W F L N E H G G G L D W A A G R S A D S S S G R L Y A W A E A  
UniRef90\_S4APB8 L A T L F L L A E Q I D W L N G Q G G G L A W S T A R T K D S S S T R L Y G W A E E  
UniRef90\_U2RBN1 V A T L A L L D N Q I E W M N G N G G G L A W A D A R T R E S S S G L Y T W A A G D  
UniRef90\_UPI0002F7F4FC L A T L L L L A E Q I E W M N A Q G G G L A W A G A R T E S S S G L V Y T W A A E D  
UniRef90\_W7SJ57 V A T L F L L A E Q I E W M L G N G G G L E W T T A R T A D S S S R L Y S W A E A

UniRef90\_G4BEH6 I S L I I G L D V M L R I I D R M G G K D A W L K M Y A E R A E T I R R R R V  
UniRef90\_U3TCN8 L A P L A M M D E Q L R W L N G Q G G G L A W A A A R T A E S S A N V L Y D W A E R  
UniRef90\_UPI00046AB49E L A T I F L L A A E Q T D W M N A N G G G L S W A A A N R T A E S S A G L I Y D W A E K  
UniRef90\_UPI00047720AC L A T I F L L A E Q T D W M N A N G G G L S W A A A N R T A E S S A G L I Y D W A E K  
UniRef90\_UPI00035FB149 I A T L F L L A E Q I V E W I T G N G G G L L Q W A D A R T R E S S Q A L I Y Q W A E A  
UniRef90\_UPI0004244BCD V S T L L L M D N Q V Q W M N A N G G G L A G M V E R T T A S S S K S L Y T W A D A  
UniRef90\_C2GIF6 V A T L L L M L A D Q I R W M N E N G G G L D G M V A R T R Q S S S I L L Y S W A D A  
UniRef90\_UPI0003826329 V A T L L M L A D Q V E W M N D N G G G L D G M V A R T T A S S S T A L Y S W A E A  
UniRef90\_B3Q6Y1 M L C V E D Y I D A L Q W A K S V G G G L K G L I A R A D A N T K V L T D W Q A K  
UniRef90\_UPI0003151808 L S T L F L L N D Q L E W L L N G R Q G G L D W A V R R T A D S S A R R L Y G W A E D  
UniRef90\_D1BCI9 I A T L F L L G E Q V R W M L D Q G G G L D W A A A R T A E S S A A H L Y S W A E S  
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E A S V A N V L T P A D K V L V V N G G S F G G E R F V E L C K E H Q I P H V A I  
E A A V V N F F S Q G G D P V L V G V C G V F G G E R F A K I C K A Y G L N V K T I  
E S V L S S S I G K D E K L L I L A N G A Y G E R M T D I A K H N K I N Y V M Y  
D M V G L G M V K R G D R V L V H V C G E F S G K W F K A S K R I P W I E A  
E A G I I N T L S R Q D K V L C G D N G K F G G E R W V K V A R A Y G L N V Q V N  
E I A M W N L L G P R P V N I M V W D S F S S D W A N D I Q F Q L K L E N V H I  
E I I A Q S L T S H H S A H H Y N G A F G G K K W F S Y A S H I S L F P V E Q  
E A G I I N F L S A G D R V L V G N G K F G G E R W G E V A Q A Y G L N A E I I  
E T V V C N L I S P G D K M I V C V N G V F G G R M A D V A A R C G A E V I K L  
E A A V I N T V S P G D R V L A L V T G N F G G E R F A N I A R A Y G A E V D E V  
E S V I G T A L P E N G K L L I L S N G A Y G G N R M G E I A Q V L K I N N I E  
E A A I A N V V E R N D K V L V A V N G L W G A R V F D L S S R Y G A K V T T T I  
E A A I G T L V P R T G H V L V P N N G A Y C A R A L A R I C K V L G R R L T T I  
E G A V R S C T A K R A A I F S V G A F G D K W Y K I A T G N G V P S D I F  
E A A A V N T L S R E D E A A V V T G A F G G D R F A N I L S S M E V T L R R L  
E A C F V N L L S P G D K V I V C G R N G V F G G R M R E N V V R C G A N A V L V  
E A G I I N T L S K G D T V I C G E N G K F G G Q R W V K V A K E F G L K V I Q I  
D A M I Y S V L A P G E K V L A Y I V G E F G R R A V N T M K A R G L N V R L L  
D V C L N S L L P A D K K V L V V N N G A Y S T R A V E I C E Y Y G L P H I N L  
E A A I A N L T E V G D T H I I C V N G Y F G E R A L D M H S R Y G A K V E H I  
E A G I I N F L S P G D R V L V G T N G K F G G E R W A E V T D A Y G L Q T E R L  
E A S V S I L S P E N D K A L V V E A G K F G G E R F S Q L V S S F G A Q A T I A  
E S V L G S A V P A E G K L L V L S N G A Y G G R M A D I A R C L G A T V D V A  
E A A L G C T I D K D D K V L T I E N G K F G G E R F K D I A A R Y G Q V V P  
E A G I I N F L S P G D R V L V G N G K F G G D R W A K L S R A F G L Q V E E I  
E A T L A N T V S P G D T V L V A V K N G Y F G N R L V D M A G R Y R A N V K V I  
E A A I G T L V S P R D G H V L V P N N G A Y C Q R I A K I C R V L G R Q L T T I  
E A G I I N T L S P G D R V L V G V N G K F G G E R W A E M S E Q F G L C H E R V  
E A A L A T A I P R P D G K A L I L M N G A Y G G Q R A A K T L D Y L G R A H I A L  
E S T L L S L V E D R M L V P T S G A F S E R Q A N V A E R L G K T V D R V  
E A G I I N F L S P G D R V L V G D N G K F G G E R W A K V A K A Y G L N V D V I  
E A A L T N T L S P G D K V I V S R Y G Q F S A L W T D L A Q R I G L N D V Q V I  
E A C F V N L V E A G D K V I V C R N G V F G G D R M I Q N V T R I G A E A V V V  
E A T A V N T V N A G D D V V I T V G A F G G D Y F V S I C E K Y G N V H K L A  
E A C V V N L V E P G D V V I V C Q N G V F G G R M K E N V E R C G G I A V D V  
E A A L V N T L D P G D R V L C F E T G H F S T L W E E M A R S L G L R T E I V  
E A C F V N L V E P G D K V I V C Q N G V F G G R M K E N V E R C G G A T A I M V  
D V T L N S L L A K G K R A L V C N N G S Y S Q R A C D V L M A Y H M P F V E V  
E M V L W S L L G T R P V D V L A F E S F S A T W A N D I I A Q L Q L P D A  
E A A L T N T L S K G D K V L S A R F G Q F S H L W I E M C K K L H I D V E V V  
E T C F A N L V E P G D T V I V C R N G V F G G R M K E N V E R C G G K V V L V  
E T V F V N L L E P G D K I V I G V N G L F G G E R M V D V A E R C G A E V I R I  
E A A V A N L L D R N D R V S F V N G L F A E R M T E A A R F Y S D R V E A F I  
E A A M V N V F S P G D K V L M C E T G Q F A V L W R G I A D K F K L D V D F I  
E T C F V N L L E P G D T V I V C R N G V F G G E R M R Q N V E R C G A T A I T V  
E R I L Q S C V E K R S C H L V N G A F S K R F A H T A K E L C L E T E I I  
E A C F V N L L E P G D K A L V C V N G V F G N R M I E N V T R C G A T A I R L  
E S V I G S A I P E D G K L A V L I N G A Y G E R I A Q M A E R L R I P T V I A  
E S M I A A L V P A Q G D T L I V C Q N G V F G G E R L A Q I A T Q Y Q I P H T I V  
E C C F V N L L E S P G D T V I V C Q N G V F G G R M K E N V E R C G G A T A V I V  
E A A I T N T L S P G D K V L A Q R F G Q F S H L W I D L C K R Q G L D V V V Q  
E T C L V N L L E P G D Q A I V A V N G V F G G R M V E N V V R A G G V P I V V  
E T C F V N L L E E G D T V V V I R N G V F G G R M R E N V V R A G G T P V M V  
E A A L V N L L S P G D H V L M Y E T G H F A F L W N Q L A T R L G L K T E V L  
E A A L V N L L S P G D S F L V G A N G L W G L R A V D I G E R I L G A R V H P M  
E A A V A N V V E Q G D E V V S L V N G K F G G R F A R I L A D R Y T D A V T R V  
E T A M V N F V P A G A K V L N V V I G D F G E R W S K A N A E L G Y A V E H L  
E A A L T N T L S P G D R V L A A R N G M F S H R W I D M C Q R H N L D V T I V  
E A A I N T L L P R N G H M L V L I N G A Y G K R M A K I V E M M G R Q V S V F  
E A A V S N V I K P G D K V L T L N G K F G G E R W T K M A A K Y G A V D E Y  
E A A L S N T L S P G D E K V L M F E T G H F A T L W K M A E F L G L P G I E G  
E S V I S S V I G E G K L L I L S N G A Y G E R M A E I A Q V Y H V D H E V L  
E A G I I N F L S K G D R V L V G D N G K F G G E R W G D V C A D A Y G L N A E R I  
E S V L Q T A L S E K D H V L I I S N G A Y G N R M I E M A Q R I N K R T A V  
E A V V M N C F T E K D R V L V I N G G S F G G R F V E L C E I H D V P H D V L  
E T C F V N L V E P G D K V I V C A R N G V F G G R M K E N V E R C G G I A V V Q  
E T A L S N C L N A G D K V L A Q N G M F S H R W I D M C L R H G L D V Q V V  
E A T L A T L L G P D D K L L I L M N G A Y G Q R I A K I C D Y L G R P Y T T I  
E M S L W A L C G S E G D V D V L S F E S F S G E W A R D L R E V L A L P D L R V  
E A A L I N T L S E G G D R V L M Y E T G H F S M L W M K M A R V L G L N P E F I  
D V M I Y N F I K P G D E V L V P I N G E F G E R L A Q S V I E S R G A V K R I  
E T A L S N T L S P G D T V L A A R N G M F S H R W I D M C Q R H G L E V E I V  
E S V L S S V I R P E D T V L I C S N G A Y R Q R M I N M C E C L K L N Y T I Y  
E M V L W S I L G T R P V A F E S F S A T W A N D I I A Q L K L S D A R V L K A  
E A V F A T L L D P T S K T L V L M N G A Y G Q R A A K I L Q R M G H A H V V T L  
E A A L V N T L Q P G Q R L L I C E T G H F S T L W A K M A A R L G L E V E V I  
D M V A S N L L E A D D N L V I N T G Y F G D H F G D C F S Q Y G A N V T Y L  
D V C L N S L L P A E K K S L H V N N G A Y S A R A A E I C D Y Q L P Y I N L  
E R I I Q N L V E R K S L H V N N G S F S K R F A E V A L Q L Q R S E A I  
E A A V V N I M H S A E K A I V V N A G K F G E R W G K I C Q A Y G V E V I W L



UniRef90\_E2SNQ1 L S R K Y Q K V F I 170 D A M S S F G G G I P V S E W H I D F L I S S S A N K C I G V

UniRef90\_U3JL12 L C H R T H G C L L L V D A V A S L G G A P M D Q Q E I D V L Y T S G S N Q K V L A P

UniRef90\_UPI000414BE27 V D E S N T D A L F T F D A V S C L G G A V P C D E W G L D I I A T Y S G S Q K K A M L

UniRef90\_K7AUV7 V D S N R K G L F F C D A T S A V F G A Q K M D W E K L D V I T Y S W Q K K A L G G

UniRef90\_K6DPQ7 V H T C S D A L F I V D G V T S C I G G A P M D Q W G L D I L V T S G T Q K K A M M P

UniRef90\_I0JY52 I V J A E S G A L F L F D T V T S L G G S P I P D W S K V D A T F S A T Q K K C I G P

UniRef90\_UPI00040BE4F9 L R A Q C G E N I T I T D A T S S M A G G V V L P W D S A D I O V W Y G S V Q Q K C F G

UniRef90\_F7XED4 L R A E A G L L S V V D T V T G L G G I P V D E W Q A D A V Y A G T Q K C L A P P

UniRef90\_D7NDN7 F C K R N H L F L V V D A I S S F L G A D E F D M K A L D V M I T G S Q K A L C P

UniRef90\_B8I045 L T K D T E R L L V V D A I S S L G L G L D M D N W G I D L V V T S G S Q K A M A P P

UniRef90\_UPI00041068BA H V K A H G A L M I A D A V T S S L F N L P I D E W G I D V V A S G S Q K Y M I P P

UniRef90\_U7UCC0 F C R R N K L L L V A D A I S S F L G A D D F N M W D V D V M V T A S S Q K A L C P

UniRef90\_B5YB28 V K Q N P E R L L V V D A V S S L G A I P T D D L K V D V V V T A S S Q K A L T P P

UniRef90\_B1C913 I T K N Y N K I F L V D A M S S F G G I D I P V E K Y D I I I S S A N K K C I G V

UniRef90\_UPI000478D2F6 L P E V I G D C L L A V D A T S G A G Q I A C D L S R V D V F L F S P Q K K Y F A S

UniRef90\_Q7UA55 V K A H G T A L T I A D C V T S L G G A V P M D A W G V D V V A S G S Q K Y M L P P

UniRef90\_UPI00038138E9 I N A S R N G L S I C D A T S A A F A M D I D W P K L D V G T F S W Q K C L G G P

UniRef90\_F8ELE3 I R A M T D A L I A I D A T S S L G A G V A F D W T L G D V W F A S V Q K K C L G P P

UniRef90\_D8G1J5 V K A H G E A L I M V D A V T S L G A G V P M D E W G I D V I A S G S Q K A M I P P

UniRef90\_UPI00029B3612 L C H E H G A L I A V D C V T S L G G Q P V D E W Q L D A V Y S G T Q K C L C P P

UniRef90\_F6CII1 L V A E T P A L L V V D G V T S G V G G I E M D E W Q V D I L V T S A S Q K A M M P P

UniRef90\_H1PP55 L V K Q F N K I Y I V D A M S S F G G I E I D I E E V D F I I S S A N K C I G V

UniRef90\_B3RZH7 L C H K H N C L L V D T V A S L G G I P I K V D E I D I V Y S G A Q K C L S P P

UniRef90\_E8TX13 V V J A R H P G R L V D A M S S F G A G I E T D A T P F D A V I A A S G K C L G P P

UniRef90\_B2UQ05 L K K Y P D V V W C M D A M S S A A G I E T D K L G V D V L V T S G S Q K A L A P P

UniRef90\_F5SBE0 V R E Q T D A L T V V D G V T S C I G G V P A G V W G I D I L V S G S Q K A L M P P

UniRef90\_UPI000393DC17 L A K Q Y G L L T I V D A V T S L G G V P V D E W Q L D A V Y S G S Q K C L C V P

UniRef90\_UPI00047495EA I R K H K G A L S I D C V T S I G A G V P I D E W E L D I V A S G S Q K Y M I P P

UniRef90\_G0EHI5 L V H K H G A L L V D S V T S G F A G E R M D D W G V D V V A T A T Q K C L A P P

UniRef90\_R7H8J0 L A H E F G A V F I V D T T S T L A M R P I D V D N I D F C M A S A Q K G M A M

UniRef90\_C5M031 L C R E H D C L L L D T V T S I C G V P V D E W M V D A A Y A G T Q K C M G P P

UniRef90\_UPI00035FE045 Y V K A H G A L M M A D T V T S L T S V P V D E W S L D V V A S G S Q K Y M I P P

UniRef90\_W0JJV6 D E K Y P E V V F V V D G L T A V G C I D L D E W G I D I L L T S S Q K A M L P P

UniRef90\_H2G066 L C K Q A G K T L I V D A M S S F G G V P M E V G E I D F I S S A N K C I G V

UniRef90\_Q12Y10 L A K K Y G A L F I M D G V T S I G G V K V D E W G V D I A V V I G S Q K C I A P P

UniRef90\_K9T8U3 V K N H G K C L L I V D A V T S L G A G V P L D E W G L D V V A S G S Q K Y M I P P

UniRef90\_Q0I9V1 L C R K H D C L L L D T V T S L G G V P I D E W K V D L A Y S C S Q K G L C P P

UniRef90\_Q39BS5 V V A K H G R A L I V D A M S S F G A L D I D A T P F D A V I A A S G K C L G V

UniRef90\_Q2JKM4 A R E H G E A L L V V D G V T S V G A G M P M D E W G L D V V A S G S Q K Y M I P P

UniRef90\_U3HA72 V V K T H G K R L I V D A M S S F G A V P L T V D P F D V L V S S A N K C I G I P

UniRef90\_U1QBY2 L G D Y P D T Y F V V D A T S C L G G D Y I D I E N I D C I F T S V Q K A F A P P

UniRef90\_B0JTM3 V K D H G E A L I I V D A V T S L Y H I P I D E W G L D V V G S G S Q K Y M I P P

UniRef90\_UPI000376F31B D A A K H H P A L L Y V D G V T S I G C I D M D E W G V D L A V A G S Q K G M L P P

UniRef90\_Q47UK5 M A Q E H D C L T I V D A V T S L G G V E V D E W G I D A I Y S G T Q K C M C V P

UniRef90\_X2GRD3 V R E E S D A L V I V D G V T S C I G G A P M D A W G I D I L V T S G S Q K A M M P P

UniRef90\_UPI0000E1170C L A K H D C M T I V D A V T S L G G I E V D E W G I D A I Y S G S Q K C L C V P P

UniRef90\_I2NBJ8 I R R A H P A L L V D T I S S L G S I D H D E W G V D V T V S Y S Q K G L M P P

UniRef90\_UPI000362A208 L A Q D H G C L V I V D A V T A L G G I E V D A W N I D A I Y S G T Q K C L C V P P

UniRef90\_S3AR91 L A H K Y G A F F I D S T S A Y A M L P I N V D N I D F C M A S A Q K C I G M

UniRef90\_D5QCJ1 I P A D R G G L V I C D A T S A A F A M D L P W D K L D V V T W S W Q K V L G G

UniRef90\_J9Z2G7 K A T N H P A L L F V D G V T S I G S I E M D S W G V D V A V S G S Q K G M L P P

UniRef90\_UPI00047E5D2D L A H H H G C L V I V D A V T S L G G S P V D E W N V D A I Y S G S Q K C L C T P

UniRef90\_U1WGA6 L V H A H E A L I V D A V T S L G G V Q I D E N E V D A C Y S G T Q K C I A P P

UniRef90\_UPI000362215B V P R R N G I A L I I D G V T S I G G Y P M E L S R W G V D T C F G T Q K C L A P P

UniRef90\_Q89HF4 L R V K H P A L L M V D T I S S L G S M E H D A W G I D V S V A G S Q K G L M P P

UniRef90\_I1DY13 L A Q R Y G C L S I V D A V T S L G G V E V D E W G I D A I Y S G S Q K C L C V P

UniRef90\_M7NRM1 I A D L R K A L L A V D V V T S A T P Y L T F D V E Q V D S L F F S V Q K K G F G P P

UniRef90\_I2JN72 L A K Q Y G C L S I V D A V T S M G G V P V D K W A D A V Y S G S Q K C L C T P

UniRef90\_UPI000248DC02 T A K Q H G K T L I T D A M S S F G G I A I D V A G I D F L I S S A N K C I G V

UniRef90\_UPI0003007F05 L V A A R G V R L L V D A V T S F G G A E A I D F S S I D A V A S T A N K C L G V

UniRef90\_UPI00036A9916 V A H R Y D C L T I V D A V T S L G G S P I V D D W G V D V I Y S G T Q K C L C T

UniRef90\_J7Q410 D N A K H P A M L F V D G V S S V A S L E M D E W G V D V I V S G S Q K G M L P P

UniRef90\_Q2SBF7 L A H E R G V L S V D M V T S V C G I E V D V W K A D A V Y S G A Q K C L A V

UniRef90\_UPI00035CBF4B I A K H H D C L T I M D A V T S V G G I P I D A W G V D A V Y T G S Q K C L C T P

UniRef90\_A0A024IF58 D A A K H P A L L V D T I S G L A G A D H D E W G V D V S I S G S Q K G L M P P

UniRef90\_UPI0003F0DC62 L C H R Y K C L L V D S V A S L G G T P M D Q Q E I D I L Y S G A Q K V L A P P

UniRef90\_U1N1P5 I A R E S D A L F L V D G V T S I G G D V F S L W H I D I A L T D A Q K A L A P P

UniRef90\_D6TII6 E A A K H G A L L V D G V S S V G A L P M D E W G V D V A F T G S Q K L M C P P

UniRef90\_S5YBC1 D A A G H P A L L F V D G V T S I G S M D M D E W G V D I A V T G S Q K G M L P P

UniRef90\_V5SAH9 D A A H H P A L L F M T D T I S S L G T A D H D E W G I D V T V S G S Q K G M M P P

UniRef90\_G0A8F6 V V A Q H K K S L T I D A M S S F G A L E I D A A K F D A L I A A S G K C I G P P

UniRef90\_C8W036 L V A K H K A L L I V D T V T S L G A I E F D E W N V D I A A T S G S Q K A L M P P

UniRef90\_I5CKG1 D A A G H P A L F L V D T I S S G L A C V D H D E W G V D V T V S G S Q K G L M P P

UniRef90\_E0RHM2 L C A L H E V D L I V D A M S S Y G A L P I N M S K V S F L I S S A N K N L G M

UniRef90\_UPI000380AB15 V K A H G Q A L I V D A V T S L G G A M P I D A W G L D V V A S G S Q K Y M I P P

UniRef90\_U7PCG8 I A E K Y N L I T I V D A M S S F G G I P I H V E N I D Y L I S S A N K C I G V

UniRef90\_E9S8J8 F C R K N N M F Y V C D C V S A F L A D P F D M A H C D I M I T G S Q K V L C P P

UniRef90\_S6AK47 I A H Q H N C L A I V D A V T S L G G S P V D E W M I D A I Y S G T Q K C L C T P

UniRef90\_M9R2A0 E A A N H P A M L F V D G V T S I G S M D M D E W G V D V A V T G S Q K G M L P P

UniRef90\_UPI00037D5772 I A E V T Q S L L I D S M S A F G A L S V D A S P F D A L I S S A N K C F G V

UniRef90\_A0A023D655 I P A T H E G L V I C D A T S A A F A M D L P W D R L D V V T W S W Q K V L G G P

UniRef90\_Q28T83 D D I G H P A L L M V D S V T S G L A S V D F D E W G V D V C V S G S Q K G L M P P

UniRef90\_A8MCX2 L I H D N G G V L L I D S V S G V A E P L N N D A D A V A T A T H K A L L A P

UniRef90\_Q1GD35 D A A A R P A L L F V D G V T S I A S M D M D E W G V D V A V T S G S Q K G M L S

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V S L V F G L A E V C E M I E S E E G L A S Q I T I K R H E Q M R D M T R A A I V R A  
M L C V V D Y L D A L D W V E S L G G V L A S A T I A J A D Q N L A T I A A F V I E R Q  
V S L L Y G L S A V C D L I D A E E G G F S Q T V J A R H H D L M K N M V R A A M K A Q  
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V N A L Y G L H E S L S R L L G E G L E T A W A R H R A A H D R L V E R L Q G L  
T P A V G L R Q A L N M R L R E E G G E E A E R R K I K A L A E D F R K  
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U Q T I Y A T L Q A L K E Y F A E E G E E A K W A R H H T R V F N A I H K G L D E K  
I S M I Y A M R A A L Q L V A E E G L E N V W A R H H Q S N A D Y L V D E L K K  
I N L F Y A M Q A A L R M M K A E E G L E N I F A R H H E R L R Q A A R A A V K A  
U T L V L G L N A A V D M M L E E E G L G A N V F K R H H F L A K A V K A A L L A  
T H V V R A F A Q A A L T E L E R E E G G V P G R L A R H Y Q R N Q R A L V A G M E R  
V P L F F G L Q E A L K I V M E E E G M D A R I K R Q A T G A A A V R A A M D A I  
U N L M Y G L Q A S L Q M M K A E E G L E N I F A R H R R S L T Q A T R A A I T A K  
V N M N F G M R E A L R L L A E E G L D M A W A R H R S N A E A L W S G L E S  
T H V V A A L D A A V G Q Y V D E E G G L A A R G G R Y Q R N Y R A L I D G M L A  
U N L F Y A L R T T L Q M M R A E E G G V A I Y R R H A R L S Q A T R A G V K A  
T H S V V A F H A A L E Q H A A E G G V P G R L J A R Y T R N R D V L V A G M R E  
I P L M L A Y R K Q M K H M L D E E G H A A A R D Q R H R E M A E Y T R E W A R E  
U N L M Y G L Q A S L Q M M R E E G L A A I F A R H H Q R L T K M T R A G M R A  
L P L Y G L R E S M K M F E E G Q E N V F Q R H H Y L A S G V R A A V S A  
V N S L Y A L H E A L V M L H D E E G L E N S W A R H K E Q H E V L A K G L K E  
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U Q T I Y A A R Q A I K E Y F Q E G E A A K W A R H Y Q R V M A A I R R G I D R  
M L V E D A L D G L R W A E Q V G G L T G L J A R S R A N L A V I A Q W E A R  
M P L R G L R E A L T M M H E E G L E N D N I Y S R H L F L A Q A V A K A S E  
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I S M N Y A L R E A L R I L V E E G L E N T W E R H H W K L G R A L Q S G L E G  
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R P Y L A I P G P S V M P D R V L Q A M Q R P A P N I Y T G A L G  
E Q R L L M G P G P V N V Y P A V L R A L S L P M L G  
L L L T P G P V E F D D A V L Q S M S H F S E S  
L L F T P G P L S L S L A V K S Q M Q L D L A  
I L L T P G P L N N Y P E V S E I L S E S V L H  
P G P T P I H P R A Q R A L L R G M L G  
P G P V E V A D E V L Y A N A H P S V S  
M L L F T P G P T P V P E S I R V A M G E P T I H  
P G P T E V S D E V L Y A N A H P S V S  
P G P V E V T D E V L F A N A H P S V S  
K L L L I P G P V E V T D E V L F A N A H P S  
E R R L V M V P G P L N Y E P S V L R E L A V S G L D H  
M L L F T P G P T P V P E S V R L A M A E P T L  
R H Y L A I P G P S V I P D R V L G A M H R A A P N I Y M S H Y S E S  
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L L L G P G P S N L A P R V L V A G G Q Q M  
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UniRef90\_Q45278 D L V A S N L L V E P G E S V L V L G T G Y F S D G F A D C L R V Y G A D V T E L

UniRef90\_J3NZU9 E T C L V N L L V E P G E R L V L D N G M G R E T A Q R L G A V D V L

UniRef90\_A1VA20 E A A L V S L L V E P G A R L L I L R A G R F G L L S E I A Q R I G A E I R T I

UniRef90\_B5ZKQ4 E A V J A G L V R P G E D R V L V I S N G H F G D R M E K I L V Q R Y G T A V P L

UniRef90\_T0Z9L7 D L V S A N L I E P G E E A L V L S T G Y F G D S F A D C L T T Y G A K P T K L

UniRef90\_G0RJH8 E A V M V S L I L P G E R V L I P I F G R F G H L L H E I A E R C G A E V F V L

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UniRef90\_A8N9Z2 E A A I A S L V E P G T E A L V L C L S N G L Y G D G F A D F V E S Y G G E A T L V

UniRef90\_MONL63 E A S L S N I L S P G D K V L V P A T G R F G I G W G Q T A A A L G A D V E T I

UniRef90\_UPI0004686ACA E A A C A S L T E P G D R V L V L D N G V F G E G F K D F V S I Y G G T P V L Y

UniRef90\_R6GHV9 D L V A A N L A E P G E N V L V L S T G Y F G D G F A D C F R V Y G A N V D Q L

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UniRef90\_C7Z0S0 E A A C A S L T E Q G D R V L C I D N G I F G K G F G D F S K M Y G G E V V Y F

UniRef90\_K0B3J3 E A A L V S L L Q P G D R V A L V N Y G R F G L L Q E I L T R L D V R F E T V

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UniRef90\_X1SXQ6 E A M L S N L L E D G D R V L T A V N G I W A E R A V E M S T R Y G A D V R T L

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UniRef90\_M7ADS4

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UniRef90\_E0TCW6 E A S L V S L T R P G D R V L V I N F G R F G L L L E E I L T R I G A K I S R L

UniRef90\_EOURC9 E A S V I N L C K N T L L N V N S G K F G D S F A D C L Q T Y G A V I D Q V

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UniRef90\_UPI00038198F8 P G L A F V W F S D R L A A R A T P Y W D W T P R T Q A E Q L W Q F W G G T P P S

UniRef90\_V7ES16 E G G H G M I A L S P R A Q A R M R L H N A D G S V N K A F F G G R T I S T P S

UniRef90\_F4RY19 P G L C I C V A S E R A I K V F E E R K S R P G S Y Y A S W K K W A Y F A T P P

UniRef90\_UPI0003628E45 P G L G L L A L S E R A L E R L K G E S V S G Y N W L P V M R N A F E E Y F S T L

UniRef90\_F9Z619 A S M S F L S V S D R A W E I I E V G Y V I G Y D F R T A V K N A Y F P Y T P Y

UniRef90\_Q45278 P G L A F V I A S R E L L E K A V Q E P R S F H Q W L S L E R T G E W R S T P P

UniRef90\_J3NZU9 A G L S I S M F S A R A I K A F E A R K T P P A S Y F A S L K N W S Y F A T P S

UniRef90\_A1VA20 P G L A P V A F S M R A L D R V G R R R T P Y F D I A L H L D Y W Q C H L M P S

UniRef90\_B5ZKQ4 P G S A P I T I S D R A A A H I M A R R H V E M I M E Y W S E K R L N H H T E A

UniRef90\_T0Z9L7 P A G L S I S V H L S D R A Y E G E L A P R S Y Y N D L K E H L K S L E K D D T P F

UniRef90\_G0RJH8 A G L S I S M F S G R A M E T F L A R K A P P T S Y F A S M K N W S Y F A T P S

UniRef90\_W4D3J9 S G M A P I T Y N D R A E A K R S N Y F D L G M L Q D Y W S P Q R L N H H T E M

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UniRef90\_UPI0004686ACA P G M S F V F F N D R A E E A R A K M E R V S W Y W D W T P R A H A T E F T A P

UniRef90\_R6GHV9 A G L T M V T L S A D A A A M E K R K T P L A S F Y K G Y E A K W F P Y T M P S

UniRef90\_M7T724 P G L S I S M F S G K A I D T F K A R K S P P A S Y F A S L K N W S Y F A T P S

UniRef90\_UPI000470D813 P G V S L T I A F S D E A W A R V K G R T A A N A H W E N F W H N A G Y H Y T A P

UniRef90\_F6KMG1 P G T A P I S F N E R A C H K M F Y R K T K P V S Y L F D M T H L S N Y W

UniRef90\_S2JKB4 P G L S I S V V A S Q Q A I G V Y K S R T T P I V S Y Y S N W N K W A Y F A T P A

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UniRef90\_C4YBE5 A G L S I S M F S S R A V A K A E A F F A S M K R W T P I M R A Y E Y F A T P A

UniRef90\_R6XHL1 P G L S I S L F I S K R L E G Y E A H F R G Y W D F E D N L G N K R G Q T P F

UniRef90\_C7Z0S0 A G L S I S F F S G R A V A A A L E N N W T P I M R N Y E A K K P S Y F A T P S

UniRef90\_K0B3J3 S G L T F I S T S E K A A M D T M A A F Y C N L T I W K G W Y E E K W F P Y T Q P A

UniRef90\_F1Z614 S G S A P I T I S D A A A D L I F T R R H D E M I M D Y W S E K R L N H H T E A

UniRef90\_G7FNQ8 S G S A P L T L S D K C A N V R S N Y F D L G M I M N Y W G E E R L N H H T E A

UniRef90\_F8KP21 V G L G I L G L S P L A I E Q K L T P K G Y Y F N L H A E L A Q K N T T A F T A G N

UniRef90\_X1SXQ6 P G L A V A A V S K R A L E K G K P G R G Y Y F D F Q L F A K K N Q T P T P N

UniRef90\_B2BJC7 P G I T P I S I S P R A L V I K N R R T K S K V F Y W

UniRef90\_M7ADS4 D G G L W L A L M S P A A L E R I D Q I A H T D R W C P E F R K N Q T Y N T P A

UniRef90\_U2SST1 P G L S I S P S D R A L A L C R Q R P C T S Y Y V E D Y Q R N G S T P Y T P P

UniRef90\_E0TCW6 A G S A P I T I S D R A A E P A P R I Q S N Y F D L A M I M D Y W S N H H T E A

UniRef90\_E0URC9 P G L A I I G L S N A A I D K I G D G V G Y Y F N L A S E K K Q A T T A Y T A A

UniRef90\_UPI0004408BE0 P G L S V L C A S K Q A I Q Y A S W K R W L P I M R A Y E A Q G A A Y F A T P P

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UniRef90\_B7IHL6 P G L S F M L F S N A R Y T K V L E M Y F D L K D Y F Q N M E R G Q T P F T P A

UniRef90\_W0ZEC4 S G S A P I T I S E R A V E I R S N Y F D L G M I L D Y W G P R R L N H H T E A

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UniRef90\_F4A8W9 P G L T I V C S G K R A M E N R N K Q I A S F Y C W K D Y K N K W F P Y T M P

UniRef90\_A4EXN0 A G L S F V F F N D K A A R A R L P R I S Q Y W D W S P R A N P E V F Y Q T A P

UniRef90\_F5XEK1 S G S A P I S S E R A V A I R S N Y F D L G Q I L D Y W G P R R L N H H T E A

UniRef90\_H6VSM6 P G T A L I S F S D K A Y S F Y L D M K W L A N F W G C D D K P R M Y H H T P

UniRef90\_H2IBF7 S G S S P I T L S D Q C A E L I N R R K H V E M I M D Y W G P E R L N H H T E A

UniRef90\_K6BXJ1 T G I G V L Y G K H L L E N M E P M I D F V H L Y E S T W K E L P W K F T P L

UniRef90\_A0A031JBU1 S G S A P I T I S D R A A A L I N R R K H I E M I M D Y W S E K R L N H H T E A

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UniRef90\_A0A015LL11 S G M A P V T Y N E R A M H D G P A I R S N Y L D S Y S Q L Q D Y W S P H H T E M

UniRef90\_N1J9L2 A G L S I S M F S G R A M K V G P A I R S N Y L D S Y S Q L Q D Y W S P Y F A T P S

UniRef90\_F0GAC2 P G M G F V I A K R S T L E R C E G N S H S Y D Q W I Y M Q R T T Q W R F T P P

UniRef90\_X6PE03 P G L C V M M L S E R T C K Y V R S W Y C N L Q Q W L P I M Q G Y E Y F S T E A

UniRef90\_X0QNY7 A G I T P I T F N D R F A E E I N Q R K R V E Q G V R T S Q D H L S A H H T P N

UniRef90\_A0A014M5U2 P S G T S P I T L S P E M E A I R Y F D L G M I M D Y W G P E R L N H H T E A

UniRef90\_U4W112 T G I G V L Y G K R A L L E K M E P V E F G G E M I D F V Y E Q D S T W G T P I

UniRef90\_I3DUH0 T G I G V L Y G R K E F L E N M E P V E F G G E M Y E S T W K E L P W K F T P L

UniRef90\_R9K986 M G N T E L I K K S A A Y P K R S Y Y C N L Y M Q Y H F F E T T G Q M H F T P P

UniRef90\_R9C1S1 P S G N A P I T Y N E R I E M H A P I R S N Y L D L A Q L Q D Y W S P H H T E A

UniRef90\_C2W875 A Y T G L S F V F Y N E R I L V N A N E V L P T Y M D I G M Y A E N G S V H C S Q S

UniRef90\_I9LPM7 S G S S P I T V S A A A E R I S N Y F D L A M I M D Y W S E K R L N H H T E A

UniRef90\_UPI0003AF4215 P G T S L I S F S D K A Y A R K T K P V S F Y L D L Q W L A E A Q P L G R V R V

UniRef90\_G7LPL4 P S G S S P V T L S L Q M E E T I R R R K C V E Q M D Y W G P E R L N H H T E A

UniRef90\_D5RLB4 P G I G F A I C P I E R V E A S R G Q A G S W Y D T S L R A G W G S F R F T P A

UniRef90\_X0WKG1 P G L A M V S V S Q Q A W Q A H A N A R M P R F Y W R N Y L E R A Q Q T P W T P A

UniRef90\_UPI00023787A8 A G T C F V F F N D K A Q A R A T M P R V S Q Y W D W L P R A G Y F N G T A P

UniRef90\_UPI00047C3528 P G L A M I G L S A K A V T K I E E K P T G Y Y F N L A S E I K N Q K K N T A A

UniRef90\_A8FH62 T G I G V L Y G K K D L L E F G G E M I D F V D L Y D S T W K E L P W K F T P L

UniRef90\_X1LW77 P G L A N A I L F N

UniRef90\_I2FDL4 P G L S I T I G L S S Q A I Q K I E E R D V G F Y F N L K T E L K N Q V K N T T A

UniRef90\_R3P9A4 T G I G A L Y G K R H L L E Q M E P V E F G G E M I D F V H L Q E S T W G T P N

UniRef90\_R5JUJ9 V G L T F V T V S P D A R K A M D E F Y A N L T F E H Y Y E D K W F P Y T M P

UniRef90\_UPI000288A89A T G I G V L Y G K K E H L E K M E P A E F G G E M I N F V G L Q D S T W G T P L

UniRef90\_F6A956 P S G T A P I T L S A A M V I D V V R Y F D L G M L L D Y W G P E R L N H H T E A

UniRef90\_R2QEE5 S G I T P I T F N D R F A E E I N K R K R V E S G I R Y W S E R R L N H H T E A

UniRef90\_C0WRU6 S G I T P I T F N D R F A E E I N Q R K R N Y L D L T Q L Q D Y W S P H H T E A

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UniRef90\_L0AFP1 T G I G V L Y G K Q E L L E A M E P Y L Y G G G M I R K V Y T F E E S T W G T P P

UniRef90\_G7MYN1 A G L T M V S I S E R A K A M K N F Y C N L N I W E N Y T K D K W F P Y T M P

UniRef90\_G8NZV3 P G L S Y L A V S Q R A W D R M E A T Y N P R Y Y F R K N A K N G E S A Y T P A

UniRef90\_UPI0003B42AEF S G V G V L Y G K G E H L K Q L P P F L T G G S M I E I V K M E K T F G T Q M

UniRef90\_UPI0003B3B881 P G L G F V L F S P E V Q A R M I R D T P R G F Y L D L T Q K A G N T P Q T P A

UniRef90\_T5A6P7 A T Y F A S M R R W L P I M Q N Y E A K K P S Y F A T P S

UniRef90\_UPI00046696D8 P G L T L L H V S E A A W E K M A A N P D S I V D W K E H R A D R P F P F T P S

UniRef90\_UPI0003653693 T G I G V L Y G K K R L L E A M E P I E Y G G E M Y E S T W K E L P Y K F T P L

UniRef90\_L0SW08 S G S A P I T V I S A R A E



UniRef90\_UPI00029B25EC T H V V A A L H E A L L Q Y T E E G G L P A R H Q R Y A S N C K T L L D G M A 250 260 270 280

UniRef90\_K2QUJ3 I F D V W V A G Q V M Q G L V Q T Y G I A G Q E G V A N R K A E L L Y A A L D K

UniRef90\_UPI0003198E29 T S M V Y A L R E G L R L V L E E G L E E R F K R H Q F H E Q A L L K G L E A G

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UniRef90\_W9Y0K2 T Q L V N A L N T A L K Q L L S Q E P I E A R I A Q H H K I S Q Y V K S E I T K

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UniRef90\_V7ES16 H A V E D I H S A L R W A E A C G G L L P A L L K R V A N N Y A V M D D W V N S G

UniRef90\_F4RY19 T N L I T A L L T S L D S T K S S P S L E E R F E L H K K S S D R I T K K A V D G

UniRef90\_UPI0003628E45 P V H T V L M L A K S L E L I L E E G L E G L E N R A R H E K V A R A L R A G V E

UniRef90\_F9Z619 W Q G T A Q L N K A C E L I L E E G L G K V I A R H K V A G Y C R E R I V

UniRef90\_Q45278 T H I V Q A T T K A L E L L E G E G I D A R R R R Y E K V R D D L V Q E

UniRef90\_J3NZU9 P Q L I H A L H T A L T Q I L S R E P L A E R F A Q H R E A S D R I T K K A V A D

UniRef90\_A1VA20 V N L L Y A L H M A L E G V L N E G L E P N V F A R H R A A H E Q L V T G L A A

UniRef90\_B5ZKQ4 T S M L Y A A R E A A R I M V E E G L E A R F A R H R A A S E A M A A G L R A

UniRef90\_T0Z9L7 T P A V P L F L A L K E A L L L K E E T P E R F R R A R N H Q Q A E A L R A A V

UniRef90\_G0RJH8 P Q L V R A L N T A L K Q L L A R P L S E R F R R H K E V H S D K I K T I S D

UniRef90\_W4D3J9 T S M L Y A L R E G L R L T L E E G L D A R F A R H L L H E K A L V A G L T A

UniRef90\_A8N9Z2 V N L I Y A Y H A T G K R N A S A A G L D A E R F A L H K A A S Q R V K A A A A E

UniRef90\_M0NL63 T T E V V A L D A A L G L W L D E G L D A V R Q R H R T A A A R C R E R G A E

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I | A | G | A | I | A | L | G | A | A | I | E | Y | L | S | A | L | G | L | D | N | V | H | A | H | E | Q | E | L | V | D | Y | V | L | P | K | L | Q | A | I |   |   |   |   |
| I | A | G | G | I | G | L | G | A | A | I | E | Y | L | S | A | L | G | L | D | N | V | H | A | H | E | Q | E | L | V | D | Y | V | L | P | K | L | Q | A | I |   |   |   |   |
| T | T | M | L | Y | A | L | R | E | G | L | R | I | V | L | E | E | G | L | E | Y | R | F | E | R | H | K | H | H | E | S | A | L | I | K | G | L | E | A |   |   |   |   |   |
| I | A | G | A | I | A | L | G | A | A | I | D | F | L | E | E | L | E | L | E | L | G | M | D | N | V | H | A | H | E | Q | E | L | V | D | Y | V | L | P | K | L | Q | A | I |
| I | A | G | A | V | A | L | G | A | A | I | D | F | L | E | E | L | E | L | E | L | G | M | D | N | V | H | A | H | E | Q | E | L | V | D | Y | V | L | P | K | L | Q | A | I |
| I | A | Q | G | I | A | L | A | A | A | V | D | Y | L | E | D | I | E | L | E | L | G | M | E | R | V | Q | R | H | E | Q | L | A | E | Y | A | Y | D | R | L | T | E |   |   |
| I | A | G | A | I | A | L | G | A | A | I | D | D | L | N | T | E | I | G | M | A | T | V | A | A | H | G | T | E | L | V | A | A | L | E | R | L | R | T | E | V |   |   |   |
| T | S | Q | V | V | G | L | G | A | A | V | K | Y | L | N | D | L | G | M | D | N | V | K | A | H | E | N | E | L | T | A | Y | A | L | D | Q | L | S | E | I |   |   |   |   |
| T | V | M | I | Y | G | L | H | E | G | L | R | L | M | I | N | E | G | M | E | N | V | I | A | R | H | K | Y | N | E | V | L | R | E | S | F | A | K | A |   |   |   |   |   |
| M | L | C | V | E | D | I | D | A | L | L | W | A | K | E | L | G | G | L | K | A | L | I | A | R | A | D | A | N | K | V | I | H | D | F | V | A | A |   |   |   |   |   |   |
| I | G | E | A | I | G | L | G | A | A | I | D | Y | L | Q | E | I | G | M | Q | K | I | H | E | Y | E | M | E | L | A | N | Y | L | Y | E | N | L | S | T | V |   |   |   |   |
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| I | A | G | A | I | G | L | G | A | A | I | D | F | L | E | D | I | E | L | E | L | G | M | E | R | I | E | K | H | E | L | A | Q | Y | A | L | D | R | L | S | A | V |   |   |
| T | S | Q | V | V | G | L | G | A | A | V | D | F | L | E | T | E | I | G | M | E | R | I | A | Q | H | E | H | M | L | T | Q | Y | G | L | E | Q | L | Q | T | V |   |   |   |
| I | N | L | V | G | A | V | A | A | V | E | E | V | L | P | R | L | E | A | H | L | E | L | K | A | W | Q | N | E | L | L | E | R | L | G | V | G | E | A |   |   |   |   |   |
| T | S | Q | V | V | G | L | G | A | A | V | L | Q | K | I | G | M | D | N | V | A | A | H | E | H | G | L | T | G | E | A | L | L | E | R | L | S | A | V |   |   |   |   |   |
| S | I | L | M | E | A | L | N | T | A | L | D | A | F | K | T | E | G | M | D | R | V | A | A | H | D | R | V | A | J | A | T | L | E | E | S | F | A | K | R | A |   |   |   |
| V | N | V | F | Q | G | L | G | A | A | V | S | L | I | F | A | E | G | L | P | A | R | Y | R | H | Q | D | A | S | I | R | C | R | A | F | F | A | A |   |   |   |   |   |   |
| I | A | G | V | I | G | L | G | A | A | V | D | Y | L | T | K | L | G | M | D | N | V | R | K | H | E | E | E | L | V | S | Y | A | I | K | K | F | K | E | V |   |   |   |   |
| A | P | Q | A | V | G | L | L | A | A | C | D | N | S | K | V | G | M | D | L | V | A | D | H | E | R | A | L | T | E | Y | A | L | K | Q | I | G | A | I |   |   |   |   |   |
| T | S | Q | V | V | G | L | G | A | A | A | R | Y | L | S | A | I | G | M | D | A | V | A | Q | H | E | A | E | L | V | A | A | L | E | G | L | S | G | I |   |   |   |   |   |
| W | H | A | V | R | A | T | M | A | A | C | D | N | I | I | N | E | G | G | I | D | A | V | L | A | R | H | R | E | V | S | A | F | C | R | E | E | S | A | K |   |   |   |   |
| A | S | L | V | H | A | L | K | Q | A | L | T | E | I | D | D | F | G | I | E | N | W | W | G | Y | H | H | Q | I | A | S | R | L | R | Q | A | G | F | Q | I |   |   |   |   |
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| T | S | Q | V | V | G | L | G | A | A | V | D | F | L | T | E | V | G | M | E | A | V | A | R | H | E | H | E | L | T | A | Y | A | L | K | K | M | Q | A | I |   |   |   |   |
| I | A | G | A | I | G | L | G | A | A | I | D | F | L | N | E | I | G | M | D | Q | I | T | A | H | E | Q | Q | L | A | K | Y | A | M | K | Q | M | R | T | V |   |   |   |   |
| V | S | D | M | N | G | L | E | A | A | L | D | Q | A | L | E | E | G | I | D | A | V | I | A | R | H | E | A | A | A | V | T | R | A | G | A | V | A | V |   |   |   |   |   |
| I | L | A | Q | A | V | G | L | G | A | A | V | D | Y | L | T | A | I | G | M | D | K | I | A | A | H | E | H | A | I | T | E | Y | A | V | R | L | E | V | K |   |   |   |   |
| A | A | G | A | W | G | L | K | A | A | I | E | Y | L | Q | S | I | G | F | D | E | I | K | R | R | E | E | A | L | T | S | R | A | L | E | G | L | K | E | I |   |   |   |   |
| I | A | Q | A | V | A | F | D | A | A | I | D | Y | L | E | D | I | E | L | E | D | I | K | R | R | E | E | E | L | L | A | E | Y | A | Y | D | Q | L | T | R |   |   |   |   |
| I | G | E | A | I | A | L | G | A | A | V | D | Y | L | S | L | G | M | E | R | I | H | A | Y | E | E | E | L | L | A | T | A | Y | F | Q | R | L | Q | E | I |   |   |   |   |
| V | G | G | A | V | G | L | T | A | A | I | E | Y | L | N | K | V | G | L | D | K | V | Y | A | I | E | K | E | L | T | A | Y | A | L | E | R | L | S | E | L |   |   |   |   |
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UniRef90\_B5H3S7

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

UniRef90\_F0GVA9  
UniRef90\_Z9JIF7  
UniRef90\_J2JU24  
UniRef90\_I4WNT3  
UniRef90\_U2UXQ1  
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UniRef90\_E8JER7  
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UniRef90\_R5JS30  
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UniRef90\_B4FA19  
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UniRef90\_A6DHM2  
UniRef90\_K1SSG7  
UniRef90\_L0E243  
UniRef90\_L8F1S5  
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UniRef90\_F0TFB4  
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UniRef90\_C4SJL2  
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UniRef90\_B3PDL0  
UniRef90\_A0A021W128

WQLIAERTGARIRVA  
GDEIVVTEMEH HANLV P WQELCRRTGATLRWL  
NLVA S S L L G P G D E V V I S I M E H H S N L P W Q Q V C A A T G A R L V Y  
KATAEAYASKGKH IITSKIEH HALL HCEWLA KYGI E V T Y L  
NLVATCF AEKFI K D I I L T E L E H H A N Y V P W H F L R K R K N V V I  
L A F G Y G M T G D E I L L T V A E H A S N T L P W F E V C D S V G S V I K Y I  
N L L V S S F G E E F M Q V S V M E H H S N I V P W Q L L A A R K G I T I K V I  
L V A L T N L K G D E T I I S V M E H H S N I V P W Q M I A Q K T G A V I K Y V  
N L V A H S W A G T Q L K A G D R I H H S N I V P W Q M V A E R V G A Q I D V L  
N M A I Q G V L S S G D H V I A T S I E H H S N V R R P L E Y L R R T E V T Y I E  
A S A L A G T I Q P G D E I V L S V M E H H S N P W H F L R E R H G A V R W V G  
L A L K G L L N P N D H V V T T S S M E H N A V M R P L V Q L E K K G V T F E R V  
G M Y K L N Q G D E I V L T I M E H H S N I P W H F I R E Q K G I K L V F V  
N M I L R S A V R D T S K I E H H A V L H T A D A L V K E F G I Q I K F V D I D  
N M A A Q L G K G K A I V V T Q A E H H S N F L P W R R A A Q E L G V P F I I P  
A A I N T V A R S W G D A N V S S G H A N I V P W H Q L A A R T G C R V E F I  
N I G L K G I L E K G D H V I S T V I E H H S N V R P L H S L S E K G V D V T I L  
N I L A A S F L L G P G D E V C I T I M E H H S N L P W Q E V C R A T G A K L V F  
N L V A Q S F L R H V V L S T E L E H H A N F V V W Q Q V C Q E C G A D F R M I  
L V A L A N L A G D E I V V S A M E H H S N M V P W H M L A Q R T K A V V K I L  
P W Q Q V C A A T G A K L V Y  
T A I T Q T A I A R K S L G N H I I T H E A V I R P C E A L E K M G F R V T Y L  
D A V A P R L E G H G V I L N A G E F G E R L I E H A R R V D R S F D V I  
L V A G L T F I N E G D E I V V S I T E H H S N L P W Q Q V A K V K A T L K Y  
L V A L T N I S A G D E I V V S I M E H H S N L L P W Q M V S R Q T G A A L K F  
W H M L A Q R T G A V L K V V  
L A I K G I F K N G D N V I T T M L E H H S N V L R P L Y E M E K G V Q S F V K  
A L N L I A Q T Y R N I L L Q P G D E I V L S E M E H H A N I V P W Q I V A  
V V P  
E A C I R S A V G P G S T A L N I V T G P Y G E T F G G W L R S C G A E V V T I  
T V A F G L G L R R G D A V V T T D S E H H S N Y W L T L R D S A G I E M R M S  
Y S I G L N Y L Q P G D E I V I S I A E H H S N M W M R I A E L R N A S I R I V  
N L A I K G A A R K Y H L I T S A V E H A S V Y E T F Q Q L E K E G F R V T Y L  
S R A I S R D W Q A G D E V I V T A L D H Y S N S W Q Q A A D D K G A I V H Q A  
E S V A R Q F A N G A K T L V L R N G F F S Y R W T Q I V L K A K Q V S T E A  
R L A E Q G V I E V  
A F A P T V L E P G D E V C I T I M E H H S N L I P W Q Q A C R A A G A R L V Y  
A A A E A Y A S K G K H I I T T Q I E H H A V L H T G Q Y L E K L G Y E V T Y L  
D E I V L S I M E H H S N I V P W H F L R E R K G A K L V W A P V T D  
L A I A A N F Y Q K K G K H I I T S E H K A V L D T C R Q L E R E G F E V T Y L  
L V A L S N V N E G D E I V T T I M E H H S N M L P W Q M V A K E K K A K L I Y  
W F Q L T K K T G A K L R V I  
W Q I Q A E K I G A K V R E I P I T D  
L V A A S N L N P G D E V I I T E M E H H W Q L L R D E L G I R L T V L R I N Q  
L V A R M N I G E G D E I L L S I M E H H S N I V P W H F L R E R K G A V I K W  
L V A S Y G M S Q I Q A G D E I V H H S N L I P W Q Q L A I Q K G A I L K Y I  
N I V A H G L L S K Q D I G D E V I N E D A H H S N P W R Q T A D V R F I R  
W Q Q L C A A T G T E L R W L  
N L A I L G L A R R N K I V T T P I E H K S V L K S C E Y L E K H G L V I D Y L  
M A I K G L L Q P G D H V V A T A V E H N A V R R P L E Y L K R T I G V K V V E  
G I V E A A G V S G K H V I T S A V E H H A V L H A C Q E L E K T G C E V T Y I  
Q V A L R N R K L G K R V I T T K I E H P S V L K P M A H L I E E M G F D V V Y L  
A Y A L K N I T K K G D E L I T S E I D H H S N P W Q M L A E W T G A T T R Y I  
S L A R P G L S A L N I V T S L Y G G W F G Q W L R R S G A A V K D L  
L V A N G L L P S L H A D D E I H H A N F V T W H E T A K K C G K I K V L P  
N L V A F S L L E N Y F N E G D E I I T E M E H H A N I V P W Q L I A  
N L V A Y S W A S K E I L L T A M E H H S N I V P W Q Y V A Q R T G A V R Y I P  
L A I K G A A H F Y N K K G K H I I T C K T E H K P C R Q L E R E G Y E V T Y L  
L A I S A N F P E R G V V L V S E A E H H A N S W E L A C R R R G S F V K K L  
N L V A S S F G A P M I K E G D E I V L S I M E H H S N I V P W H G A V L K W A  
I G D I C H K H D C L L L V D S V A S L G G T P L Y M D E Q G A E V R T M  
N I I A H G L L S S D D E V I V T E M E H H A N I T W Q E A C R F A G A T L K V  
W Q L V A Q R T G A V I K V A

|                        | 130   | 140 | 150 | 160                 |
|------------------------|---|-----|-----|---------------------|
| UniRef90_F0GVA9        |   |     |     | I T K               |
| UniRef90_Z9JIF7        | D I L P N G T L D L D A L P T L M T P D K L L A I T H V S N V L G T V N P V H D   |     |     | K                   |
| UniRef90_J2JU24        | G V T D E G R L D L S R L D E I T P R T R L V A F A H Q S N V L G T I N P V I R Q |     |     | R                   |
| UniRef90_I4WNT3        |   |     |     | I A R               |
| UniRef90_U2UXQ1        | L R L D D D Y R I T P E E L G A K I G P R T K I V S V T Q I S N V L G I E N D V   |     |     | V                   |
| UniRef90_A5N6F3        |   |     |     | I A K               |
| UniRef90_UPI000249089B |   |     |     | F A R               |
| UniRef90_E8JER7        | D L L E D G R V D L G T L D A I T P N T R L V A L T H V S N V T G A V S P V D A   |     |     | A                   |
| UniRef90_R6QT95        | D V D E N G L V S P E A L K A A I R P D T I L V S I M T A N N E I P I A E L G R   |     |     | R                   |
| UniRef90_F21T6         | K F L P I N E Q G D L K V E E L E P K T K I S V T H M S N V T G S I T P L E E     |     |     | E                   |
| UniRef90_UPI0004639F4F | D L D D N G R L T V E N V M K A I T D K T K I I S I A Q V T N D S P I K E I C K   |     |     | K                   |
| UniRef90_UPI000249089B |   |     |     | L A K               |
| UniRef90_R5JS30        | P M N D K G E L L L D E Y E K L F S E R T K I V S V T Q V S N V L G T V N M I A   |     |     | A                   |
| UniRef90_B7JUD5        | P L T E T E E F D L E Q F K A L L S N K T K L V A V V H V S N T L G C I N I N     |     |     | N                   |
| UniRef90_UPI000288C07E | P L T P D H R I D L D A M A A I T P Q H K L V A L A H V S N V L G S V L R A A E   |     |     | E                   |
| UniRef90_UPI00037B2FD7 | T D T A G N L D M A K F R E S F Q L H T K L V I C S H S S N L L G S T I P I E E   |     |     | E                   |
| UniRef90_A0A059G4H4    | L H E D G S L D M D A L R G A V G P K T R M V A I S H M S N V L G T V N D V A E E |     |     | E                   |
| UniRef90_B6AW47        |   |     |     | I T E               |
| UniRef90_F8KW40        |   |     |     | Q I V D             |
| UniRef90_B9CJZ8        | S S P D G T L D P H K V E A A I T P N T R A V V M T H A S N V S G T I T E V G K   |     |     | K                   |
| UniRef90_B4FA19        |   |     |     | I E E               |
| UniRef90_J1IW72        | P V D E N G I L H I V D I E Q L K G F T K I V V V H H V S N V L G S M L P I E E   |     |     | E                   |
| UniRef90_UPI000369B5E3 | S Y G N I D L L H L E K L L T A D N S K K L V S L M H V N N E I G N I L D L Q K   |     |     | K                   |
| UniRef90_E1R513        | V T E E G G I D Y S K L E E I T D A D C G L V A V T A L S N V S G E V V D M E S   |     |     | S                   |
| UniRef90_G8PAC5        |   |     |     | Q                   |
| UniRef90_M5T589        | P I D E N F E I S D E T V A E Y L D R L Q P K M F A F T L G S E Y P V Q R W T S   |     |     | S                   |
| UniRef90_U5MZP0        | S S D K A G Y V S I K D I D E L K K N T K M I I S H I S N V L G S I Q D I K N     |     |     | N                   |
| UniRef90_R7ML20        | M R P D S E C V I T P E E I E A K I T P R T K I V S V V Q V S N V L G V E I A Q   |     |     | Q                   |
| UniRef90_C5TI34        | P T V D G E L D M N A A H K M L S D K V K L L A V T A V S N V T G T V D I E T     |     |     | T                   |
| UniRef90_Q11WG4        | P M N D A G E L L V E A F D T L I T K T K M L A C H V S N T L G S I N P I K E     |     |     | E                   |
| UniRef90_E1QZ17        | L R L D D D F R I T P K E I E G K I G P R A K I V S V T Q V S N V L G V E I A R   |     |     | R                   |
| UniRef90_F4FSY2        | P V D E Y G N I S L D D F K A A L D D Q T I L V S I M T G N N E V G S I M I G E   |     |     | E                   |
| UniRef90_UPI00047E9891 | R V D Q D G K Y D V S Q E L D R I A P D W V W T V H C E T S L G L L I D L         |     |     | L                   |
| UniRef90_U2Q3C1        | L Y I N D N Y E I T Q E E I D E K I T S K T K L I A V G Q A S N V L G T I I K     |     |     | K                   |
| UniRef90_B7AR78        | I E C E Q D G S V D L D K V A A L I T D K T K L V A M T H V S N V P I A E V A A   |     |     | A                   |
| UniRef90_E8RSD3        | P L L E D G S L D M A A F D Q L L T N R K L V A V A H M S N V L G T I N P V E A   |     |     | A                   |
| UniRef90_C3WE17        | A D K L G N I S Y E M E S L I K N N T K A L I C T H G S N L T G N L D I K E       |     |     | E                   |
| UniRef90_E8LQ76        | Q Q T G A K V V K I P M T D Q C Q F D L N A F A L A H I T N V T G T R Q P I E E   |     |     | E                   |
| UniRef90_A6DHM2        | V F E D G S L D M E A Y Y S L I S D K T K F I S I M Y V S N V L G T I N P M Q E   |     |     | E                   |
| UniRef90_K1SSG7        |   |     |     | M I K               |
| UniRef90_L0E243        |   |     |     |                     |
| UniRef90_L8F1S5        | S A P F T G A V R P E Q V A E A L R E H P A I D F V S L V H N T N P V A E I G A   |     |     | A                   |
| UniRef90_M9SAX2        | H S G P D G L F D I E S F K E A D G N V R L V S M C Q C S N V T G C T V P I K E   |     |     | E                   |
| UniRef90_F0TFB4        |   |     |     | I K                 |
| UniRef90_B1C1M1        |   |     |     | V I K               |
| UniRef90_E0SSJ3        | R V D E N G E M D Y R E L E N I V N E K T K V V S I T H V S N V L G V I N D V     |     |     | V                   |
| UniRef90_C4SJL2        |   |     |     | F D S P I K E I C K |
| UniRef90_E013C5        | P V D A Q G V V S I E A V A A A L T D E T T L V S I M H V N N E V G A I Q P I A   |     |     | A                   |
| UniRef90_A0A059FVB8    |   |     |     | T E V A R           |
| UniRef90_Q5K290        |   |     |     | I V A               |
| UniRef90_E8LSA7        | R V D E S D C S L D V E H L I S L I N D K T T L V A L T F N T T G S V V D V K R   |     |     | R                   |
| UniRef90_B1VE17        | G A P T F E P M D I K D A T A A I A E Y E P D V V F A P H V E T I S D D Y I T Q   |     |     | Q                   |
| UniRef90_M1XMW4        | T T L S C P E G R L P M D A Y R E A V A D A K L V C W V H G T R L A V E R A V E   |     |     | E                   |
| UniRef90_C8VK76        | L F P D E D G V I G E E L D A K I G P R T K I V A A A H V S N V L G I E N P E     |     |     | E                   |
| UniRef90_R6RG55        | P V D E N G V V S V D A L K K A V R P D T L I I S V M F A N N E I G T I E I G E   |     |     | E                   |
| UniRef90_M1X6T6        |   |     |     | I S R               |
| UniRef90_K2PX11        | D G A F D M E A F V A C L T E R T K L I A I T H M S N A L G T V V P I K E V C     |     |     | C                   |
| UniRef90_C4UJ43        |   |     |     | R E                 |
| UniRef90_B5F1C0        | A P Q R N G I T D L N E L E A A M R D D T I L V S I M H V N N E I G V V Q I G E   |     |     | E                   |
| UniRef90_UPI0003B325ED | L E P N K E G V I E K S E Y E S K I T P K T K I V A I A H V S N V L G V T I A E   |     |     | E                   |
| UniRef90_N8Y9J2        | P V D D T G Q I I L E E V P K L I N E R T K L V S I T Q V S N T V T P V E V I Q   |     |     | Q                   |
| UniRef90_S2IG38        |   |     |     | R                   |
| UniRef90_Q3J0S6        |   |     |     | V D V A A I C A     |
| UniRef90_T0C1D6        | E G D I N E E A Y I K L L E E G N V K L V S M A H I S N S L G T V N N I K Y I K   |     |     | K                   |
| UniRef90_UPI00046448F9 | N G E V C L N A L E S L L S E R T K L L S I T H M S N A L G S I N P V K E M T A   |     |     | A                   |
| UniRef90_I4Y2U1        | A P V D D E G N F L L D E F E K L T S P R T K I V A I T H M S N V L G T E I T R   |     |     | R                   |
| UniRef90_H4GJ14        | D L T D E G E I D L T D Q E K I T D Q T K L V A I N H A S N V M G T I T P L K E   |     |     | E                   |
| UniRef90_A0A023UZW8    | T T A E G R I D L D H F R E L L S L K P S V V A L T H C S N V T G A V H M V K L   |     |     | L                   |
| UniRef90_L1M631        |   |     |     |                     |
| UniRef90_L1PFW1        | D L H E D G R I D C E T L G V I D E H T R L V A F T H V S N V T G A V S P V E P   |     |     | P                   |
| UniRef90_B7KR16        |   |     |     | I I A               |
| UniRef90_UPI00037CF0CC |   |     |     |                     |
| UniRef90_C0GD43        | D V D H T G A V I L J E S A K D I T D E T T L L V S I Q A C N N E I P L V E I S N |     |     | N                   |
| UniRef90_L0EJ86        | T D E R G G L D P G R V R E A L L P N T K L V I V N H S S N L L G S I L L P V A E |     |     | E                   |
| UniRef90_X0VYB0        |   |     |     | I C H               |
| UniRef90_G4HDL8        | P V D H T G R V S V E D I A G A I K E N T V L V T I M Y G N N E V P I A E I G E   |     |     | E                   |
| UniRef90_R0EQE5        | D V N E D G V I S L D Q F K E A L N D Q T I L V S I M T G N N E V P I H E I G E   |     |     | E                   |
| UniRef90_I4A2T6        | P L L E N G S L D L E E Y E K L L N T K T K L V A F N H V S N A L G T V N M I E   |     |     | E                   |
| UniRef90_B6A4H9        | V A E P G L P I E V E A V A R A L D A G P H I D V L A V V H A E S A S G I L N P   |     |     | P                   |
| UniRef90_M0C7U7        |   |     |     | V I D               |
| UniRef90_UPI0003780E6B |   |     |     | M T A               |
| UniRef90_E1W5N7        | I S D N W L I D E N A L I K D L N E K T K L V A L N F V S N V T G T E Q H I Q H   |     |     | H                   |
| UniRef90_UPI0003711161 | K Q K K L T L K Y I P V T D D G D L R T K M L A L T H C S N V L G T I N P V K E   |     |     | E                   |
| UniRef90_L0HD54        |   |     |     | V A D               |
| UniRef90_UPI000475B86D | M T P E G A L T D E A I S D S L G P R V R L V A I T A M S N V T G Y M P D L A A   |     |     | A                   |
| UniRef90_B5FAW0        | E P E S N G L I D L A K L E A A M R D D T V L V S I M H V N N E I G V I Q I G E   |     |     | E                   |
| UniRef90_Q252R5        | R V D D S G F I D L E H L E T L L K A G A S E V I A H V G N A V T G C I Q P V K E |     |     | E                   |
| UniRef90_W3RFK3        | P V D E D G N F L E E F E K L L G P R T K L V A M T Q M N A L G T I V P I K E     |     |     | E                   |
| UniRef90_C3XPW2        | N K P I G Q N F T L E D I Q K G I E Y H K P C M F F I C H G E S S A G V G I G D   |     |     | D                   |
| UniRef90_F2JUS1        | V P V S D Q G E L D L D V F E T L L S P K T K L V A F P H V S N V L G T W L T Q   |     |     | Q                   |
| UniRef90_B3PD0         |   |     |     | M G T I N P V R I A |
| UniRef90_A0A021W128    | E I D E R G Q L D L D Q L Y S L L T P E K L L A L T H V S N V L G T V N P V R E   |     |     | E                   |

|                        |                         | 170                           | 180                                     | 190                             | 200 |
|------------------------|-------------------------|-------------------------------|---|---------------------------------|-----|
| UniRef90_F0GVA9        | WA                      | H E V G A I S I V             | D G A Q Q L I P H V K T D V             | S D I I D C D F F S G H K M F S |     |
| UniRef90_Z9JIF7        | I C R Q R G I V T V V   | D G S Q S A V P H R H V D V   | L P A I G C D F Y A S G H K L Y G P     |                                 |     |
| UniRef90_J2JU24        | I V A R A G A L L L L   | D A G C Q S A V P H R A E V D | D F H A Y G V D F A S G H K M L G P     |                                 |     |
| UniRef90_I4WNT3        | E C R K R G I P L T L V | D G S Q A A P H R R P V V D   | V Q G C D F Y A V T G H K M L G P       |                                 |     |
| UniRef90_U2UXQ1        | A A H E V G A Y L V V   | D G A Q S A P H I A V V D V   | V R K C D L F A F F S A H K M M G P     |                                 |     |
| UniRef90_A5N6F3        | Y A H E K G A V L V V   | D G A Q S A P H M K R I D V   | V N D I D V D F F S A H K M L G S       |                                 |     |
| UniRef90_UPI00036CDF8A | F A H D H G A L F C L   | D A A Q S I G H M K R I D V   | V N D I D V D F F S A H K M L G S       |                                 |     |
| UniRef90_E8JER7        | V V A A A R A L V L L   | D T C Q S S A H M P I D V     | V A R L D F A V F S S H K M L G P       |                                 |     |
| UniRef90_R6QT95        | I A H E A G A L F H T   | D A V I Q A F G H L D L N D   | V K N I D M L S A S G H K F N G P       |                                 |     |
| UniRef90_F21T6         | I A K K H N I P V S V   | D G T Q G A A H L L D V V     | I N D I K K I D C Y A S S G H K M Y G P |                                 |     |
| UniRef90_UPI0004639F4F | I A H E R G I T V C V   | D G A Q S A V P H Q K I V D   | V K D L D L D F F S G H K M C G P       |                                 |     |
| UniRef90_UPI000249089B | L A H S H G A Y M I A   | D A A Q Q A A P H M K I D V   | V Q Q E L D V A F S G H K M L A P       |                                 |     |
| UniRef90_R5JS30        | T A H A H G V P F L V   | D A A Q S V P H L K V I D     | V Q Q E L D A D F F S A H K M Y L G P   |                                 |     |
| UniRef90_B7JUD5        | L A H Q A G A K V L I   | D A C Q S V P H L A I V D     | V Q A D D C D W A S A H K M C A P       |                                 |     |
| UniRef90_UPI000288C07E | I A H S V R A K I L L   | D G A C Q S V P R M T V D     | V A D C D F Y V F S A H K L Y G P       |                                 |     |
| UniRef90_UPI00037B2FD7 | I T R T Q G A F L L V   | D A A Q S A G I L L P I D     | V E R M G I A F P G H K L L Y G P       |                                 |     |
| UniRef90_A0A059G4H4    | L A H A A G A R V L L   | D G C Q S A V H M G V I D     | V Q A L D C D W F S G H K L Y G P       |                                 |     |
| UniRef90_B6AW47        | A A H E R G V A V L V   | D G S Q A A V H M P I V N     | V D D I G C D F Y A S G H K L Y G P     |                                 |     |
| UniRef90_F8KW40        | L A H D V G A K V L V   | D G A Q A A P H M A I D V     | V Q A L D V Y V F S G H K A Y G P       |                                 |     |
| UniRef90_B9CJZ8        | I C A S R H V L F I V   | D A A Q T A G V I P L D M     | H A M H I D M T G H K G L Y G P         |                                 |     |
| UniRef90_B4FA19        | I V T W S N A K V L V   | D A C Q S V P H M P V D       | V Q K L D F L V A S S H K M C G P       |                                 |     |
| UniRef90_J1IW72        | I I H Q N A I P V L V   | D G S Q G A V H L T V D       | V D V Q K L D C D W F T G H K L Y G P   |                                 |     |
| UniRef90_UPI000369B5E3 | L C K A G E A L I H S   | D T V I Q S I G H F S W D     | V V Q P I D F M V A A A H K F H G P     |                                 |     |
| UniRef90_E1R513        | V A K A C G A R V E V   | D G A Q A A A R L P L S       | V V Q K L D I D F F S G H K C Y G T     |                                 |     |
| UniRef90_G8PAC5        | L A H K V N A Y L V V   | D G A Q A A V S H M A V I D   | V R Q N L D F Y A F S G H K L Y G P     |                                 |     |
| UniRef90_M5T589        | M A R Q H G A T V L V   | D A A Q A A P H Q Q I D       | V W D A D F V V F S G H K V C G P       |                                 |     |
| UniRef90_U5MZP0        | I S K S N G I L F M V   | D G A Q S A G I L P I D       | V N E H I L D L A F S G H K G L G P     |                                 |     |
| UniRef90_C7ML20        | R A H E M G A L C F V   | D A S Q S A P H M G V I D     | V E C D A F V F S A H K M F G P         |                                 |     |
| UniRef90_R5TI34        | L A K E Y E I P V Y I   | D A A Q A V R H R T F D       | L A Q C D D F L G F S A H K M M G P     |                                 |     |
| UniRef90_Q11WG4        | L A H A V G A T L I     | D G A Q S V S H L R D I       | V D V R E C D F Y A F S A H K L Y G P   |                                 |     |
| UniRef90_E1QZ17        | R A H E M G A Y M V V   | D G A Q S V P H L R V I D     | V V R E C D L L A F S A H K M G G P     |                                 |     |
| UniRef90_F4FSY2        | I L K D H Q A W F H T   | D A V I Q A Y G L L D I D     | V D H I D M L S T S A H K I N G P       |                                 |     |
| UniRef90_UPI00047E9891 | G P H S W N G V I A I   | D A L S T V G T F D Y D       | V S F A D F Y V T F S S G K A L N A     |                                 |     |
| UniRef90_U2Q3C1        | K A K E V N A K V I V   | D G A Q G V P H I K T D       | V L R A L D F F A F S G H K I F G P     |                                 |     |
| UniRef90_B7AR78        | L A H A K A V M V V     | D G A Q S T P H M A I D       | V R A L D F F A F S G H K L M G P       |                                 |     |
| UniRef90_E8RSD3        | I T E K A H A V V L I   | D G C Q G V V H L P I D       | V D V Q G C D F Y A F S A H K L Y G P   |                                 |     |
| UniRef90_C3WE17        | I C K R Y N L L F I V   | D A S Q T A G V F P I D       | V V E N I D V L C F T G H K L L G P     |                                 |     |
| UniRef90_E8LQ76        | V A H Q A G A V V V V   | D G A Q G I V H E S V D       | V V A Q I L D F Y V F S G H K I F A P   |                                 |     |
| UniRef90_A6DHM2        | I C D K A N I P V L V   | D A A Q A L A H M P V D       | V V Q E L M C M V F S A H K M Y G P     |                                 |     |
| UniRef90_K1SSG7        | L A H E H N D V P V M V | D G A Q S T P H F A V I D     | V V Q E L M C D F F S G H K I Y G P     |                                 |     |
| UniRef90_L0E243        | A R E R G V P V L V     | D G A Q A V P H L R V D       | V V Q D C D F Y A F S G H K A F G P     |                                 |     |
| UniRef90_L8F1S5        | V V R E H G A L L M L   | D A V I A A G A E P T D       | V E M G V D L C V I G G Q K A L G P     |                                 |     |
| UniRef90_M9SAX2        | I A H D H G A K V L V   | D G S Q A A P H M K V I D     | V E D L D V Y A M S H K M L G P         |                                 |     |
| UniRef90_F0TFB4        | I A H Q V G A V V V V   | D G A Q A V S H M P V D       | V V Q K M D F Y A F S G H K M L A P     |                                 |     |
| UniRef90_B1C1M1        | I A H E K G I I V C V   | D G A Q S V P H Q R V D       | V V K D L D L D F F S G H K M C G P     |                                 |     |
| UniRef90_E0SSJ3        | L A H R V G A I V V V   | D G A Q S V P H I P I D       | V V K D I D S F L V F S G H K M L G P   |                                 |     |
| UniRef90_C4SJL2        | A K A A G L V V L V     | D G A Q A I M H Q S V D       | V V Q D C D F Y V F S G H K L Y G P     |                                 |     |
| UniRef90_E013C5        | L A S R P K T L F H V   | D A V I Q S I L G K L S I     | V A I W G I D L L T G S A H K V R G P   |                                 |     |
| UniRef90_A0A059FVB8    | L A H A A G A R V L V   | D G C Q A A V H L S V I D     | V V Q A I G C D W F S G H K L Y G P     |                                 |     |
| UniRef90_Q5K290        | A A H A V G A K I L L   | D A C Q S A P H M P L D       | V V R D C D F L V A S G H K L C G P     |                                 |     |
| UniRef90_E8LSA7        | V T E A A H A L V Y V   | D A V H Y A P H H L I D       | V V Q C D F L A C A Y K F F G P         |                                 |     |
| UniRef90_B1VE17        | L A E A T H K V F V L   | D C V S G T L H W V D M K     | K T G V D V L I S A P Q K F W G S       |                                 |     |
| UniRef90_M1XMW4        | V A H D A G A L V V V   | D S V Q T V G Q H P I D       | V V W G A D V V C A S G H K L L G P     |                                 |     |
| UniRef90_C8VK76        | R V H A H D G F M V V   | D G A Q S V P H L P I D       | V V R K C D F F A F S A H K A L G P     |                                 |     |
| UniRef90_R6RG55        | V A K E H G L L F H T   | D A V I Q A Y C H E P I D     | V N V H I D M L S A S A H K F N G P     |                                 |     |
| UniRef90_M1X6T6        | L A H S Y G A K V L I   | D A C Q S T S H M F I D       | V V Q Q I D C D W S S G H K M S A P     |                                 |     |
| UniRef90_K2PX11        | I A H E R N G I A V M V | D G S Q G A V H M P V D       | V D R D L G C D W Y A G H K L Y G P     |                                 |     |
| UniRef90_C4UJ43        | V A H R N G I C V V V I | D G A Q G V A H C P A D       | V V Q D I D F Y A F S A H K L Y G P     |                                 |     |
| UniRef90_B5F1C0        | M C R A R G I I Y H V   | D A T Q S V G K L P I D       | V L S Q V D L M S F S G H K I Y G P     |                                 |     |
| UniRef90_UPI0003B325ED | Y A H K M G A L V V V   | D G A Q S T P H M P I D       | V N E A I D F F A F S G H K M L A P     |                                 |     |
| UniRef90_N8Y9J2        | L A H A K G V K V L V   | D G A Q S V S H M P T D       | V D V Q A I D A D F F S G H K V F G P   |                                 |     |
| UniRef90_S2IG38        | L A H A A G M V V M V   | D G A Q G A V H F P A D       | V V Q A I D F Y A F S G H K L Y G P     |                                 |     |
| UniRef90_Q3J0S6        | G A R D K G V P V L V   | D G S Q A A V H M P I D       | V V A I G C D F Y A S G H K L Y G P     |                                 |     |
| UniRef90_T0C1D6        | L A H D K G A Y F C V   | D A A Q S I A H M E K I D     | V V Q N C D F L A F S A H K M F G P     |                                 |     |
| UniRef90_UPI00046448F9 | L A H K V G A K V L V   | D G A Q A V P H M K I V D     | V V Q D I D F Y A F S A H K M Y G P     |                                 |     |
| UniRef90_I4YZU1        | I A H S H G V P V L V   | D G A Q G A V H L Q V D       | V V R D L D F Y V F T G H K V Y G P     |                                 |     |
| UniRef90_H4GJ14        | L A H Q K G A V V V A   | D G A Q A V H H E S V N       | V R D L D V Y A F S G H K M L A P       |                                 |     |
| UniRef90_A0A023UZW8    | L R A S S D A V I V L   | D A A Q S L P H E R I D       | V F H Q L D V D F A S A H K M Y G P     |                                 |     |
| UniRef90_L1M631        | A R A Q G A I T V V I   | D G A Q G I V H G R H D       | V V S R E L G D F Y V F S S H K L Y G P |                                 |     |
| UniRef90_L1PFW1        | I A R Q C G S L V L L   | D T C Q S A H M P V I D       | V V R E L G V D F A S S H K M L G P     |                                 |     |
| UniRef90_B7KR16        | L A H A Y G V P V L V   | D A A Q S T P H I P I D       | V V Q A L D A D F F S G H K V F G P     |                                 |     |
| UniRef90_UPI00037CF0CC | I A K E S G A L V H C   | D A A Q A V G K I P V D       | V A H F D V D F L S S H K L Y G P       |                                 |     |
| UniRef90_C0GD43        | I T R K R G I R L L V   | D A A Q S A G I L P I D       | V V E A M G I A F P G H K G L L G P     |                                 |     |
| UniRef90_L0EJ86        | L A H A R G A Y L L L   | D A A Q S V G Q M P V V       | D V R Q C D F C A F S G H K L L G P     |                                 |     |
| UniRef90_X0VYB0        | L C A R R G V V F H T   | D A V I Q L L G S I S C       | V R D L P V D M W S F S A H K I N G P   |                                 |     |
| UniRef90_G4HDL8        | I L K D H Q A A F H T   | D A V I Q A Y G L L D I D     | V D H I D L L S T S A H K L N G P       |                                 |     |
| UniRef90_R0EQE5        | K A H A V G A V V L V   | D G A Q S A P H L K I D       | V D Q N A D F Y A F S G H K M Y A P     |                                 |     |
| UniRef90_I4A2T6        | L P E A R G I V T V V   | D A V A S V G G H R L D       | V V D H L G I D I A G P Q K A L G P     |                                 |     |
| UniRef90_B6A4H9        | I A H D A G A L V L I   | D A V I Q A P G Q S P V D     | V V R E W G V V A A G H K W L V S P     |                                 |     |
| UniRef90_M0C7U7        | L A H R S N A K V L V   | D G A Q A V A H F P V V       | D V K D A D F Y V F S G H K L F A P     |                                 |     |
| UniRef90_UPI0003780E6B | I R Q H S N A L V L V   | D A A Q A V S H I Q I D       | V L Q D A D F I A F S A H K I Y G P     |                                 |     |
| UniRef90_E1W5N7        | I I D Q Y N L A V L I   | D G A Q T S V H Q R I D       | V A N C D F Y V F S S H K L Y G P       |                                 |     |
| UniRef90_UPI0003711161 | L C A D N D I F L V V   | D G A Q T A G Q H P I N       | V L S A I A F V F T G H K A L F G P     |                                 |     |
| UniRef90_L0HD54        | L A R Q G G A R V L V   | D G A Q Y A G Q V A V N       | V T D L C D F F S G H K M C G P         |                                 |     |
| UniRef90_UPI000475B86D | L C R S R K I I F H V   | D A A Q S A G K I P L D       | V V Q K V D L I S L S A H K I Y G P     |                                 |     |
| UniRef90_B5FAW0        | I A H Q Y G A Y I A I   | D G A Q G V A H T P V V       | D V W D I D F Y A F S A H K M Y A P     |                                 |     |
| UniRef90_Q252R5        | L A H A R G I P V L V   | D G S Q A A V H L A V D       | V V Q D I D C Y V F T G H K L Y G P     |                                 |     |
| UniRef90_W3RFX3        | I C H K H D C L L V     | D S V A S L G G T P M D       | E Q Q G I D I L Y S G A Q K V L G P     |                                 |     |
| UniRef90_C3XPW2        | K A K E V G A L V S I   | D G A Q G A V H G G V D       | V V Q D I D F Y S F S G H K I Y A P     |                                 |     |
| UniRef90_F2JUS1        | L A H A V G A R V L V   | D G A Q A V S H W P V D       | V N M Q N C D F Y V F S A H K L F G P   |                                 |     |
| UniRef90_B3PDL0        | I C R K R G I V T L I   | D G S Q A A P H R P L D       | I A A I G C D F Y A G H K M S G P       |                                 |     |
| UniRef90_A0A021W128    |                         |                               |   |                                 |     |

UniRef90\_F0GVA9 MGI G V L Y G K Y E L L K E L E P F N L G G D M I E Y V Y E Q E S T Y Q T P N  
UniRef90\_Z9JIF7 T G T G A L W A R R E H L Q A M P P F L G G G E M I K E V V S F D G E T L F N T P P  
UniRef90\_J2JU24 S G V G V L Y G R R E L L E E V M P P F L T G G G E M I R E V V R M T S G T F F G V P M  
UniRef90\_I4WNT3 T G T G A L W A K R E H L E A M P P F F L G G G E M I R E V V K F S G T F F G T P N  
UniRef90\_U2UXQ1 MGI G A L W G T A E E V L D R M P P F L T G G G E M I D A V T E T E D A V W G T Q D  
UniRef90\_A5N6F3 T G I G V L Y G K E E L L L K M P P F L R G G D M L E Y V T E Q E A T F G P T Q N  
UniRef90\_UPI00036CDF8A T G I G V L Y A K P E I L L K M N P I A H G R F D A C G M V E L K S G P G T P N  
UniRef90\_E8JER7 T G A G A L W G R G E L L E A M P P V L T G G S M I E W V S M E G S T F M A T P Q  
UniRef90\_R6QT95 K G I G F M Y I R K G V K L R S F D H G G S Q E R S R R A G  
UniRef90\_F21T6 T G V G L L A I K Y K W L N D F D P F I G G G G M I D Y V S K K D I A Y A R G V  
UniRef90\_UPI0004639F4F T G V G L L Y G K Y N L L E E T K P T R W S N A R Y K S C G N A K F E S G T P N  
UniRef90\_UPI000249089B T G I G A L Y G K E D L L N Q M P P Y A Q F G G G E M I D F V H H Q T A S W G T Q N  
UniRef90\_R5JS30 T G V G V L Y G K E E W L D R L P P Y Q G G G E M I Q H V S F E K T T F N T P D  
UniRef90\_B7JUD5 T G I G F L Y G K A T L E E M P P F L G G G E M I G E V F F D G F T Y G T P A  
UniRef90\_UPI000288C07E T G I G V L W A R P E L L E A M P P Y Q G G G E M I D S V S F E R T T Y G T P H  
UniRef90\_UPI00037B2FD7 Q G T G G Y I A S H V D L E P L M R G G T G S R D M E Q P L V R P D R Y G T P N  
UniRef90\_A0A059G4H4 T G I G I L Y G K A D A L A E A R P Y Q G G G E M I E T V S M D R I T Y N T P P  
UniRef90\_B6AW47 S G S G A I F M K R E R M A E M R P F I G G G D M I R E V S K D A V S Y N D P G  
UniRef90\_F8KW40 T G I G I L Y G K E V L L E K M P P Y Q G G G D M I D T V T F T K T Y N T A G  
UniRef90\_B9CJZ8 Q G I G A L L L T D E A A A Q L D P I M S D S E E I P A T L P D R F E A G T P N  
UniRef90\_B4FA19 T G V G F L H G K F E L L S S M E P F L G G G E M I A D V F E D K S T Y G T P A  
UniRef90\_J1IW72 T G I G V L Y G K E Y R L E Q M R P F Q G G G E M I E D V T V D N V Y N T P P  
UniRef90\_UPI000369B5E3 K G V G F A F I R K N N L E P L I I G G S Q E R G Y R A G T E P F H N I V G L R  
UniRef90\_E1R513 T G G C G I L Y G K R K L L E K L P F R L G G G M I V Q V D E K K A E Y G T P D  
UniRef90\_G8PAC5 T G I G V L F G K S N L L A K M N P V F Q G G G E M I S K V T R D D V A T W G T P N  
UniRef90\_M5T589 T G I G V L Y G K E A M L D A M P A F L G G G G M I L N V T T E G F T T H T P P  
UniRef90\_U5MZP0 Q G T G G L F I R E G I K L K S N S F H F M I Q P D F L P D K F E E S G T L N T P  
UniRef90\_R7ML20 MGI G V L W A K R S L L E K M P P F L T G G G E M I D W V T E E S Y G C L G T Q D  
UniRef90\_C5TI34 T G V G C L F V R E K W L N E M Q P Y R Y G G G M I D I V T E E K T T F G T P N  
UniRef90\_Q11WG4 T G V G I L Y G K R A L L E A M P P Y Q G G G E M I S E V T Y E S C T Y N T P D  
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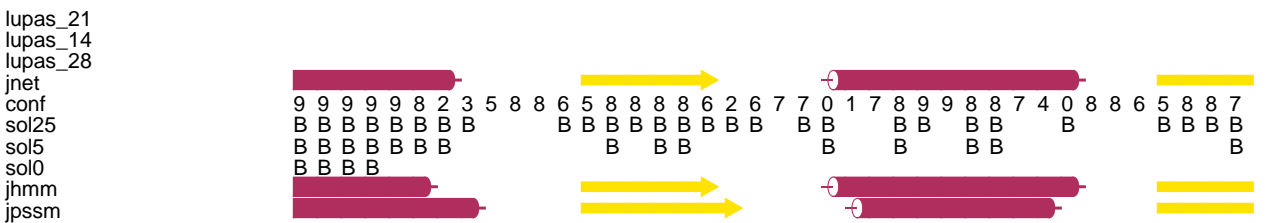
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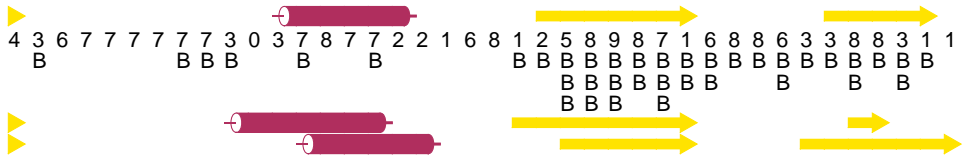


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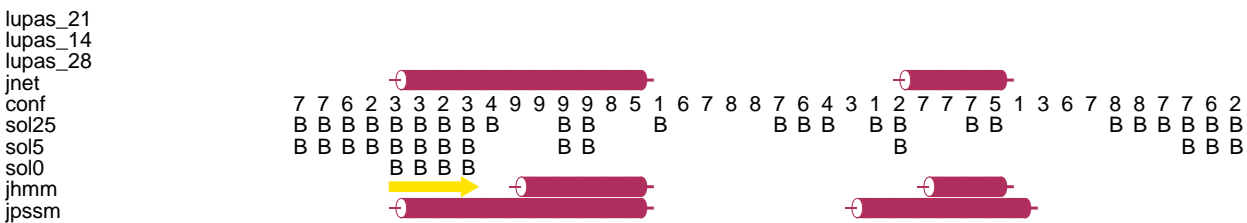
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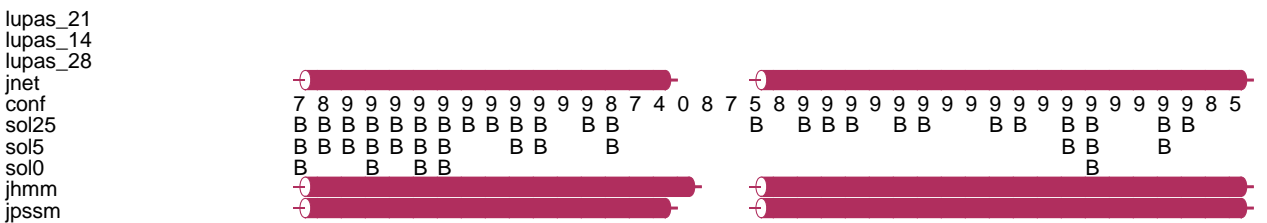




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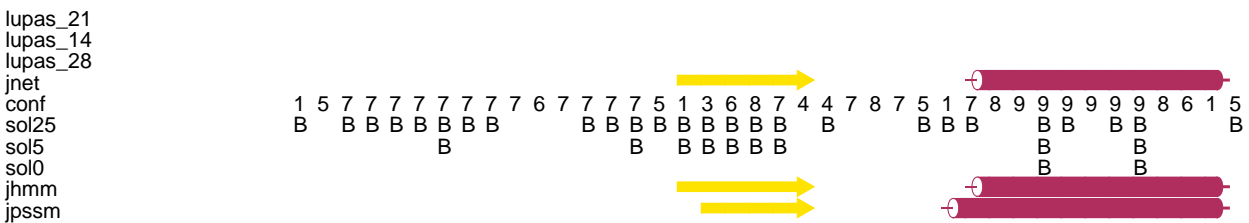
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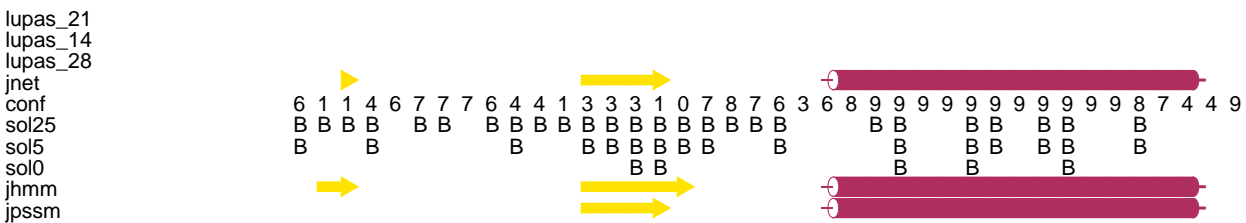
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