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|                |                                |                                                                                  |    |
|----------------|--------------------------------|----------------------------------------------------------------------------------|----|
|                |                                | MSXLSIGDRLGAALLDAGLLTDEELQRALERHREVGGSLAEVLVDMGLLSERRIAQTIEDRFGIPLVELHRVEIPPKVK  |    |
| NTDB id 1028   | TT RS08215 WP 011173991.1      | MSVLTIGDKRLGAALLDAGLLTDEELQRALERHREVGGSLAEVLVDMGLLSERRIAQTIEDRFGIPLVELHRVEIPPKVK | 80 |
| NTDB id 1306   | DR RS10060 WP 027479822.1      | .MALSIGDRLGAILLDQGYLEGNDLQRALERHSEVGGRLADVLIDSGMVGEKRIARAIEEALGIPLVNLLAVQPDPAAL  | 79 |
| NTDB id 1168   | A1552VC RS11070 WP 000957200.1 | .....                                                                            | 0  |
| NTDB id 1293   | VP RS12240 WP 005479695.1      | .....                                                                            | 0  |
| NTDB id 1401   | DSB67 RS12665 WP 010643259.1   | .....                                                                            | 0  |
| NTDB id 1110   | NGFG RS09235 WP 003689817.1    | .....                                                                            | 0  |
| NTDB id 108751 | A9E79 RS07545 WP 010947251.1   | .....                                                                            | 0  |
| NTDB id 1251   | GCO85 RS07725 WP 011946523.1   | .....                                                                            | 0  |
| NTDB id 1058   | ABD1 RS01615 WP 001274986.1    | .....                                                                            | 0  |
| NTDB id 1018   | ACIAD RS01685 WP 004920473.1   | .....                                                                            | 0  |
| consensus      |                                |                                                                                  |    |

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|                |                                | RLTPEERKELRPFALDEEAGVVRVAFLNPLDLSLEEVEDLTGLVVEPYQTTKSAFLYALAKHYPELGLLEVPSPGK       |     |
| NTDB id 1028   | TT RS08215 WP 011173991.1      | ALLPAEKAKELKAIPFALDEEAGVVRVAFLNPLDLSLEEVEDLTGLVVEPYQTTKSAFLYALAKHYPELGLLEVPSPGK    | 158 |
| NTDB id 1306   | DR RS10060 WP 027479822.1      | RSIRPQTALNLQAFPPFALE..GDRLRVALVDPLSSFSIETLEDDSGFDIEPYQALREEVMWAIATHYPELGLLEIVVPSGA | 157 |
| NTDB id 1168   | A1552VC RS11070 WP 000957200.1 | .....                                                                              | 0   |
| NTDB id 1293   | VP RS12240 WP 005479695.1      | .....                                                                              | 0   |
| NTDB id 1401   | DSB67 RS12665 WP 010643259.1   | .....                                                                              | 0   |
| NTDB id 1110   | NGFG RS09235 WP 003689817.1    | .....                                                                              | 0   |
| NTDB id 108751 | A9E79 RS07545 WP 010947251.1   | .....                                                                              | 0   |
| NTDB id 1251   | GCO85 RS07725 WP 011946523.1   | .....                                                                              | 0   |
| NTDB id 1058   | ABD1 RS01615 WP 001274986.1    | .....                                                                              | 0   |
| NTDB id 1018   | ACIAD RS01685 WP 004920473.1   | .....                                                                              | 0   |
| consensus      |                                |                                                                                    |     |

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|                |                                | SGEGQKDLKLGELLQKGWISREALEEALVEQEKTGDLLGRILV.RKGLPEEALYRALAEQKGLEFLESTEGIVPDPSAA |     |
| NTDB id 1028   | TT RS08215 WP 011173991.1      | SGEGQKDLKLGELLQKGWISREALEEALVEQEKTGDLLGRILV.RKGLPEEALYRALAEQKGLEFLESTEGIVPDPSAA | 237 |
| NTDB id 1306   | DR RS10060 WP 027479822.1      | SDAGRTGGKLGERLITHGYITDAQLQVALDAQQTGEALGATLISQRAITEDQLYEVLAEQEGTTFLPNPSGFHPGEEVL | 237 |
| NTDB id 1168   | A1552VC RS11070 WP 000957200.1 | .....                                                                           | 0   |
| NTDB id 1293   | VP RS12240 WP 005479695.1      | .....                                                                           | 0   |
| NTDB id 1401   | DSB67 RS12665 WP 010643259.1   | .....                                                                           | 0   |
| NTDB id 1110   | NGFG RS09235 WP 003689817.1    | .....                                                                           | 0   |
| NTDB id 108751 | A9E79 RS07545 WP 010947251.1   | .....                                                                           | 0   |
| NTDB id 1251   | GCO85 RS07725 WP 011946523.1   | .....                                                                           | 0   |
| NTDB id 1058   | ABD1 RS01615 WP 001274986.1    | .....                                                                           | 0   |
| NTDB id 1018   | ACIAD RS01685 WP 004920473.1   | .....                                                                           | 0   |
| consensus      |                                |                                                                                 |     |

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| NTDB id 1028 TT RS08215 WP 011173991.1      | LEMLRSDALRYGAVPIGFQNGEVEVVLSDPRHKEAVAQLLNRPARFYALALPQAWHEELFRRAYPQKNRLGEVLVQEGKLSR | 317 |
| NTDB id 1306 DR RS10060 WP 027479822.1      | LSMLRADALRLLAAPVDETEQGVTVLTSDPRKRDPIDALIGRPVQLMLTRPRDIERLIEQFYPQGRGLGEQLVQEGTLSR   | 317 |
| NTDB id 1168 A1552VC RS11070 WP 000957200.1 | .....                                                                              | 0   |
| NTDB id 1293 VP RS12240 WP 005479695.1      | .....                                                                              | 0   |
| NTDB id 1401 DSB67 RS12665 WP 010643259.1   | .....                                                                              | 0   |
| NTDB id 1110 NGFG RS09235 WP 003689817.1    | .....                                                                              | 0   |
| NTDB id 108751 A9E79 RS07545 WP 010947251.1 | .....                                                                              | 0   |
| NTDB id 1251 GC085 RS07725 WP 011946523.1   | .....                                                                              | 0   |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1    | .....                                                                              | 0   |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1   | .....                                                                              | 0   |
| consensus                                   |                                                                                    |     |

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|---------------------------------------------|---------------------------------------------------------------------------------------------------------|-----|
| NTDB id 1028 TT RS08215 WP 011173991.1      | EALKEALEVQKGLPRAKPLGEILVELGLARPEDVEEALQKQRRGGGRLEDTLVQSGKLRPEALAAQAVATQLGYPYVDPEE                       | 397 |
| NTDB id 1306 DR RS10060 WP 027479822.1      | DQLREALQVQAREGKVKPLGEVITELGFASPDVEDSALQKQNVGGGRLEDTLVQSGKLSPEMLARSLAAQLGYEFLDPIQ                        | 397 |
| NTDB id 1168 A1552VC RS11070 WP 000957200.1 | .....MLTNLVAILRQAEILSATQEQA VVTQVSASGTSVPEALLELSIFHAQELTEQLSHIFGLPETDLSR                                | 66  |
| NTDB id 1293 VP RS12240 WP 005479695.1      | .....MHSNLSTILRQKGLLTFSQEESLIEQVKASGISMPEALLSSGFFTSSELAHLSSIFGLSQPELSQ                                  | 66  |
| NTDB id 1401 DSB67 RS12665 WP 010643259.1   | .....MLTNLSTVLRQAGILTFSQEESSLIEQVKASGISMPEALLSSGFFQSHELTEHLSSVFGLSCTSLNQ                                | 66  |
| NTDB id 1110 NGFG RS09235 WP 003689817.1    | .....MSVGLLRILVQNQVVTVEQAHHY.NESQAGKEVLPMLFSDGVISPKSLAALIARVFSYSILDLRH                                  | 65  |
| NTDB id 108751 A9E79 RS07545 WP 010947251.1 | .....MALATEEYRLQGIGQLLVLEKLLDKTKAIELHKLAAAEKMSLLQYIVKNKILSAEQIALTAAQNFQVPMLDINC                         | 74  |
| NTDB id 1251 GC085 RS07725 WP 011946523.1   | .....MALATEEYRLQGIGQLLVLEKLLDKTKAIELHKLAAAEKISLLQYIVKNKILSAEQIALTAAQNFQVPMLDINC                         | 74  |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1    | .....MSALHTSPKFTGFFRRLVEEKHVSAAATMQTALDAAKRAKQDTVAYLIEEVHLSPSLLAETISAEFAEPYFDLDV                        | 74  |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1   | .....MSAFTTPPKFSGFIRRLVEEGYVNAQNMQQALEKAKKFKQDIVPYLIDNFSISPLTIAEIIISLEFGEPLLDLGV                        | 74  |
| consensus                                   | *          *****  ***  *****  **  *  *  *          **  *  *****  **  *  ***  ***  *          *****  *** |     |

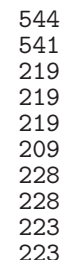
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|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----|
| NTDB id 1028 TT RS08215 WP 011173991.1      | DPPDPGAPLLIPEDLCRRYGVFPHRLEGNRLVLLMKDPRNIALDDVRLALKRKGLNVEVAPAVATEAAITKLIERYFGK                                                 | 477 |
| NTDB id 1306 DR RS10060 WP 027479822.1      | NPPDPKVALMIPAEATARRYVVVPVRLQGNSLVVAMKDPRNVFALDDLKLITG.....KEILPAVMAEKDIIRLIERYFGE                                               | 472 |
| NTDB id 1168 A1552VC RS11070 WP 000957200.1 | YDYANLCQQGLGLRELITRYDALPIAKQGNLLLLAVSDPTLLQAEFEFRFATG.....LQVELALADHRALQAIRRLYGR                                                | 141 |
| NTDB id 1293 VP RS12240 WP 005479695.1      | YEYASLCQQGLGLRELITRHNA LPLHRTPTSTLLAVADPTNQQAEDDFRFATG.....LQVELVLADFRELSTAIRRLYGR                                              | 141 |
| NTDB id 1401 DSB67 RS12665 WP 010643259.1   | YEYASLCQTLGLRLDLITRHNA LPLNRTSSTLILAVADPTNLQAEDDFRFATG.....LQVELVLADFRELTAAIRRLYGR                                              | 141 |
| NTDB id 1110 NGFG RS09235 WP 003689817.1    | YPRHRVLMGVLTEEQMVEFHCVPVFRRGDKVFFAVSDPTQMPQIQKTVSAAG.....IAVELVIVEDDQLAGLLDWVGSR                                                | 140 |
| NTDB id 108751 A9E79 RS07545 WP 010947251.1 | IDVGTIPANLVNEKLIKRRHAMVPLFSRGTNLVYLATDDPSKQASLKEIQFHTG.....LNTHAIVVETDKLSALIDNLLTA                                              | 149 |
| NTDB id 1251 GC085 RS07725 WP 011946523.1   | IDVGTIPVNLVNEKLIKRRHAMVPLFSRGTNLVYLATDDPSKQASLKEIQFHTG.....LNTHAIVVETDKLSALIDNLLTA                                              | 149 |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1    | YDTSQIPKDLVDQKLILKHRILPLIQRGQILYVATSNPSNIEAIDAIRFNSK.....LLVEPVIVEHHKLEKVLGQHFAE                                                | 149 |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1   | FDPALFLKDKIDEKLIQKYRIMPLVHRGHVLYVATSNPTNIEAMDAIRFNSK.....LKVEPIIVEHDKLERLLSEHFVE                                                | 149 |
| consensus                                   | **  *  *          **  *****  **  *!  *          **  *  *****  *!  ***  *****  *****          *****  *****          *****  ***** |     |

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NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1306 DR RS10060 WP 027479822.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1293 VP RS12240 WP 005479695.1
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NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus

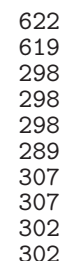
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NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus

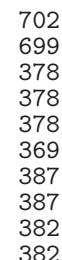
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NTDB id 1306 DR RS10060 WP 027479822.1
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consensus



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NTDB id 1018 ACIAD RS01685 WP 004920473.1  
consensus



[X] non conserved  
[X] similar  
[X] ≥ 50% conserved