

logo

|                                             |                                                                                   |    |
|---------------------------------------------|-----------------------------------------------------------------------------------|----|
| NTDB id 1410 SGL RS13950 WP 010873519.1     | MSXLTIGDRRLGAALLDGYLDLQRALERHhEVGGhLAhVLYDhGhEhRRIAhIhEhGIPLVhLhVhP               | 0  |
| NTDB id 1028 TT RS08215 WP 011173991.1      | MSVLTIGDKRLGAALLDAGLLTDEELQRALERHhREVGGSLAEVLVDMGLLSERRIAQTIEDRFGIPLVELHRVEIPPVKV | 80 |
| NTDB id 1306 DR RS10060 WP 027479822.1      | .MALSIGDRRLGAILLDQGYLGDNLDLQRALERHSEVGGRLADVLIDSGMVGEKRIARAIEEALGIPLVNLAVQPDPAAL  | 79 |
| NTDB id 1366 NTHI RS01950 WP 011271972.1    | .....                                                                             | 0  |
| NTDB id 1355 HI 0298 AAC21962.1             | .....                                                                             | 0  |
| NTDB id 1384 A4U84 RS08525 WP 010787006.1   | .....                                                                             | 0  |
| NTDB id 1468 ASU2 RS05090 WP 014991734.1    | .....                                                                             | 0  |
| NTDB id 78577 IY69 RS00745 WP 000650595.1   | .....                                                                             | 0  |
| NTDB id 1436 BW25113 RS00530 WP 001025145.1 | .....                                                                             | 0  |
| 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 1251 GC085 RS07725 WP 011946523.1   | .....                                                                             | 0  |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1   | .....                                                                             | 0  |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1    | .....                                                                             | 0  |
| consensus                                   |                                                                                   |    |

logo

|                                             |                                                                                  |     |
|---------------------------------------------|----------------------------------------------------------------------------------|-----|
| NTDB id 1410 SGL RS13950 WP 010873519.1     | hEhIhEhAKhLRAhPFALhEhEhRVAhYhPLhEhStEhEDhGhYhEPYQhRERhYhAhAhHYPELGLEhYhPsh       | 0   |
| NTDB id 1028 TT RS08215 WP 011173991.1      | ALLPAEKAKELKAIPFALDEEAGVVRVAFLNPLDTLSLEEVEDLTGLVVEPYQTTKSAFLYALAKHYPELGLPVPPP..P | 158 |
| NTDB id 1306 DR RS10060 WP 027479822.1      | RSIRPQTALNLQAFPFALE..GDRLRVALVDPLSSFSIETLEDDSGFDIEPYQALREEVMWAIATHYPELGLEIVVPSGA | 157 |
| NTDB id 1366 NTHI RS01950 WP 011271972.1    | .....                                                                            | 0   |
| NTDB id 1355 HI 0298 AAC21962.1             | .....                                                                            | 0   |
| NTDB id 1384 A4U84 RS08525 WP 010787006.1   | .....                                                                            | 0   |
| NTDB id 1468 ASU2 RS05090 WP 014991734.1    | .....                                                                            | 0   |
| NTDB id 78577 IY69 RS00745 WP 000650595.1   | .....                                                                            | 0   |
| NTDB id 1436 BW25113 RS00530 WP 001025145.1 | .....                                                                            | 0   |
| 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 1251 GC085 RS07725 WP 011946523.1   | .....                                                                            | 0   |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1   | .....                                                                            | 0   |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1    | .....                                                                            | 0   |
| consensus                                   |                                                                                  |     |

logo

|               |                                |                                                                                 |     |
|---------------|--------------------------------|---------------------------------------------------------------------------------|-----|
| NTDB id 1410  | SGL RS13950 WP 010873519.1     | .....                                                                           | 0   |
| NTDB id 1028  | TT RS08215 WP 011173991.1      | SGEGQKDLKLGELLQKGWISREALEEALVEQEKTGDLLGRILV.RKGLPEEALYRALAEQKGFLESTEGIVPDPSAA   | 237 |
| NTDB id 1306  | DR RS10060 WP 027479822.1      | SDAGRTGGKLGRLITHGYITDAQLQVALDAQQTGEALGATLISQRAITEDQLYEVLAEQEGTTFLPNPSGFGHPGEEVL | 237 |
| NTDB id 1366  | NTHI RS01950 WP 011271972.1    | .....                                                                           | 0   |
| NTDB id 1355  | HI 0298 AAC21962.1             | .....                                                                           | 0   |
| NTDB id 1384  | A4U84 RS08525 WP 010787006.1   | .....                                                                           | 0   |
| NTDB id 1468  | ASU2 RS05090 WP 014991734.1    | .....                                                                           | 0   |
| NTDB id 78577 | IY69 RS00745 WP 000650595.1    | .....                                                                           | 0   |
| NTDB id 1436  | BW25113 RS00530 WP 001025145.1 | .....                                                                           | 0   |
| 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 1251  | GC085 RS07725 WP 011946523.1   | .....                                                                           | 0   |
| NTDB id 1018  | ACIAD RS01685 WP 004920473.1   | .....                                                                           | 0   |
| NTDB id 1058  | ABD1 RS01615 WP 001274986.1    | .....                                                                           | 0   |
| consensus     |                                | .....                                                                           | 0   |

logo

| NTDB id       | Accession                      | Sequence                           | Length |
|---------------|--------------------------------|------------------------------------|--------|
| NTDB id 1410  | SGL RS13950 WP 010873519.1     | .....MTS                           | 3      |
| NTDB id 1028  | TT RS08215 WP 011173991.1      | LLLLRSDALRYGAVPIGFQNGEVEVVLS       | 317    |
| NTDB id 1306  | DR RS10060 WP 027479822.1      | GSMRLRADALRLLAVPVDETEQGVTVLTSDPRKR | 317    |
| NTDB id 1366  | NTHI RS01950 WP 011271972.1    | .....                              | 0      |
| NTDB id 1355  | HI 0298 AAC21962.1             | .....                              | 0      |
| NTDB id 1384  | A4U84 RS08525 WP 010787006.1   | .....                              | 0      |
| NTDB id 1468  | ASU2 RS05090 WP 014991734.1    | .....                              | 0      |
| NTDB id 78577 | IY69 RS00745 WP 000650595.1    | .....                              | 0      |
| NTDB id 1436  | BW25113 RS00530 WP 001025145.1 | .....                              | 0      |
| 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 1251  | GC085 RS07725 WP 011946523.1   | .....                              | 0      |
| NTDB id 1018  | ACIAD RS01685 WP 004920473.1   | .....                              | 0      |
| NTDB id 1058  | ABD1 RS01615 WP 001274986.1    | .....                              | 0      |
| consensus     |                                | .....                              | 0      |

logo

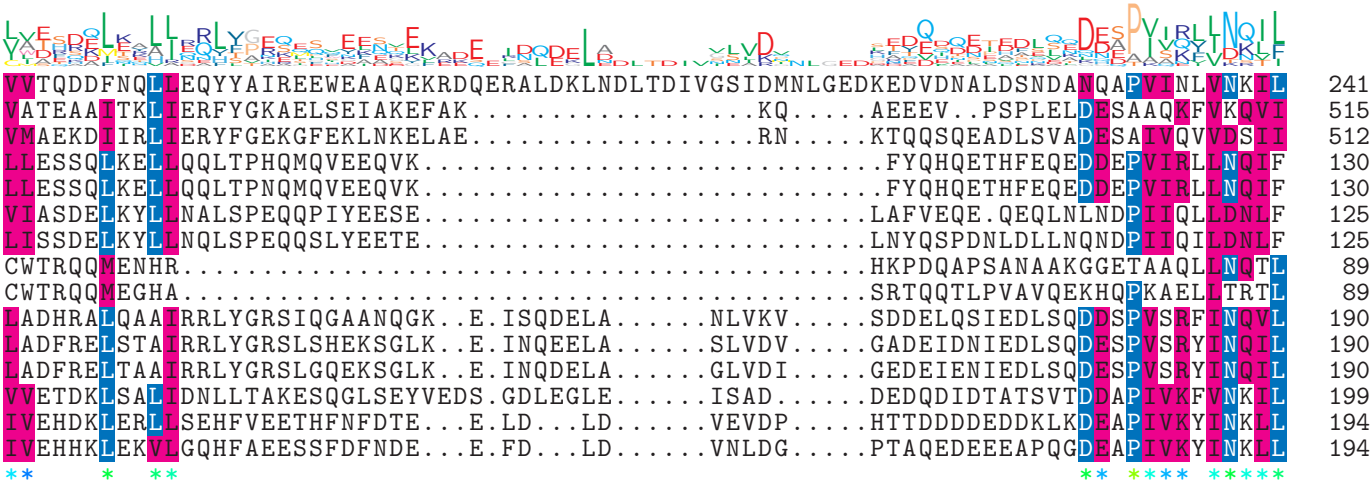
|           |    |       |                                |                                                                                      |     |
|-----------|----|-------|--------------------------------|--------------------------------------------------------------------------------------|-----|
| NTDB      | id | 1410  | SGL RS13950 WP 010873519.1     | SSSSKKSRVAALRNYFSPFGNKLVAGGHVDAEQLRQALVQVKKTGRSLPEELKAVTGRELSPELIRQYKKNQLFELKVLY     | 83  |
| NTDB      | id | 1028  | TT RS08215 WP 011173991.1      | EALKEALEVQKGLPRAKPLGEILVELGLARPEDVEEALQKQRRGGGRLLEDTLV..QSGKLRPEALAQA.....VATQL      | 388 |
| NTDB      | id | 1306  | DR RS10060 WP 027479822.1      | DQLREALQVQAREGKVKPLGEVITELGFASPDEVDLSALQKQNVGGGRLLEDTLV..QSGKLSPEMLARS.....LAAQL     | 388 |
| NTDB      | id | 1366  | NTHI RS01950 WP 011271972.1    | .....MTSYA.....LLHTQRVTAQ.....NGEIF                                                  | 20  |
| NTDB      | id | 1355  | HI 0298 AAC21962.1             | .....MTSYA.....LLHTQRVTAK.....NGEVF                                                  | 20  |
| NTDB      | id | 1384  | A4U84 RS08525 WP 010787006.1   | .....MSQYT.....ICEQQ.....TERIF                                                       | 15  |
| NTDB      | id | 1468  | ASU2 RS05090 WP 014991734.1    | .....MQYS.....VCDMN.....SQQVF                                                        | 14  |
| NTDB      | id | 78577 | IY69 RS00745 WP 000650595.1    | .....                                                                                | 0   |
| NTDB      | id | 1436  | BW25113 RS00530 WP 001025145.1 | .....                                                                                | 0   |
| NTDB      | id | 1168  | A1552VC RS11070 WP 000957200.1 | .....MLTNLVAIVLRQAE LISATQE QAVVTQVSASGTSVPEALL..ELSIFHAQEITEQ.....LSHIF             | 57  |
| NTDB      | id | 1293  | VP RS12240 WP 005479695.1      | .....MHSNLSTILRQKG LLTFSQEESLIEQVKASGISMP EALL..SSGFFTSSEL AEH.....LSSI F            | 57  |
| NTDB      | id | 1401  | DSB67 RS12665 WP 010643259.1   | .....MLTNLSTVL RQAGILTFSQEESLLEQVKASGISMP EALL..SSGFFQSHEL TEH.....LSSV F            | 57  |
| NTDB      | id | 1251  | GCO85 RS07725 WP 011946523.1   | .....MALATEEYRLQGIGQLLVLEKLLDKTKAI ELHLK LAAA EKISILLQYIV..KNKILSAEQIAL T.....AAQN F | 65  |
| NTDB      | id | 1018  | ACIAD RS01685 WP 004920473.1   | .....MSAFTTPPKFSGFIRRLVEEGYVNAQNM MQALEKAKKF KQDIPYLI..DNFSISPLTIAEI.....ISLE F      | 65  |
| NTDB      | id | 1058  | ABD1 RS01615 WP 001274986.1    | .....MSALHTSPKFTGFRRRLVEEKHVSAATMQ TALDAAKR AKQDTVAYLI..EEVHLSPSLIAET.....ISAE F     | 65  |
| consensus |    |       |                                | *                    *                    *                                          | *   |

logo

|           |          |                                |                                                                                   |     |
|-----------|----------|--------------------------------|-----------------------------------------------------------------------------------|-----|
| NTDB      | id 1410  | SGL RS13950 WP 010873519.1     | VDSVDPEVAPIATQQAELIGRFFPLDTCRRFKFLPLAQEQGEDPPSVLVAMVDPDNLAAQDELNRILRVKGF...ELRRLL | 161 |
| NTDB      | id 1028  | TT RS08215 WP 011173991.1      | GYPYVDPEEDPPD....PGAPLLLPEDLCRRYGVFPHRLEG...NRLVLLMKDPRNILALDDVRLALKRKGLNYEVAPA   | 460 |
| NTDB      | id 1306  | DR RS10060 WP 027479822.1      | GYEFLDPIQMPPD....PKVALMIPEATARRVVVVPVRLQG...NSLVVAMKDPRNVFALDDKLITG....KEILPA     | 455 |
| NTDB      | id 1366  | NTHI RS01950 WP 011271972.1    | .....TISPD....LWERNQQQSSLLRLRYFALPLKEEN...NRLWLGVDSLSNLSACETIAFITG....KPVETI      | 79  |
| NTDB      | id 1355  | HI 0298 AAC21962.1             | .....TISPD....LWERNQQQSSLLRLRYFALPLKEEN...NRLWLGVDSLSNLSACETIAFITG....KPVETI      | 79  |
| NTDB      | id 1384  | A4U84 RS08525 WP 010787006.1   | .....DISPS....RWQKNCEEKQLLLRLYLAVPVQETE...HKLWLAVDDENNLTACEIFAFTMTH....KQIEPV     | 74  |
| NTDB      | id 1468  | ASU2 RS05090 WP 014991734.1    | .....DISES....LWQKNCDEKHTLLRLYLAIPIQEND...DTLWLAIIDDMNLSACEIFAFAIAH....KTIEPV     | 73  |
| NTDB      | id 78577 | IY69 RS00745 WP 000650595.1    | .....MKDAQLNTLCQRHQAVLINSAS...NSITVAVVDAPSHALLDALHFATQ....KQIDIV                  | 52  |
| NTDB      | id 1436  | BW25113 RS00530 WP 001025145.1 | .....MNIPQLTALCLRYHGVLLDASE...EVVHVAVVDAPSHALLDALHFATT....KRIEIT                  | 52  |
| NTDB      | id 1168  | A1552VC RS11070 WP 000957200.1 | GLPETDLTRYDYA....NLCQQQLGLRELITRYDALPIAKQG...NLLLLAVSDPTLLQAEEFFRFATG....LQVELV   | 124 |
| NTDB      | id 1293  | VP RS12240 WP 005479695.1      | GLSQPELSQYEYA....SLCQQLGLRELITRHNALPLHRT...STLLLAVADPTNQQAEEDFRFATG....LQVELV     | 124 |
| NTDB      | id 1401  | DSB67 RS12665 WP 010643259.1   | GLSCTSLNQYEYA....SLCQTLGLRDLITRHNALPLNRTS...STLLLAVADPTNLLQAEDDFRFATG....LQVELV   | 124 |
| NTDB      | id 1251  | GC085 RS07725 WP 011946523.1   | GVPMLDINCIDVG....TIPVNLVNEKLIKRRHAMVPLFSRG...TNLYLATDPSKQASLKEIQFHTG....LNTHAI    | 132 |
| NTDB      | id 1018  | ACIAD RS01685 WP 004920473.1   | GEPLLDLGVFDPA....LFLKDKIDEKLIQKRYRIMPLVHRG...HVLVYVATSNPTNTEAMDAIRFNSK....LKVEPI  | 132 |
| NTDB      | id 1058  | ABD1 RS01615 WP 001274986.1    | AEPYFDLDVYDTS....QIPKDLVDQKLLKLRILPLIQRG...QILYVATSNPTNIEAIDAIRFNSK....LLVEPV     | 132 |
| consensus |          |                                | * * * * *                                                                         |     |

logo

|           |       |                                |
|-----------|-------|--------------------------------|
| NTDB id   | 1410  | SGL RS13950 WP 010873519.1     |
| NTDB id   | 1028  | TT RS08215 WP 011173991.1      |
| NTDB id   | 1306  | DR RS10060 WP 027479822.1      |
| NTDB id   | 1366  | NTHI RS01950 WP 011271972.1    |
| NTDB id   | 1355  | HI 0298 AAC21962.1             |
| NTDB id   | 1384  | A4U84 RS08525 WP 010787006.1   |
| NTDB id   | 1468  | ASU2 RS05090 WP 014991734.1    |
| NTDB id   | 78577 | IY69 RS00745 WP 000650595.1    |
| NTDB id   | 1436  | BW25113 RS00530 WP 001025145.1 |
| NTDB id   | 1168  | A1552VC RS11070 WP 000957200.1 |
| NTDB id   | 1293  | VP RS12240 WP 005479695.1      |
| NTDB id   | 1401  | DSB67 RS12665 WP 010643259.1   |
| NTDB id   | 1251  | GCO85 RS07725 WP 011946523.1   |
| NTDB id   | 1018  | ACIAD RS01685 WP 004920473.1   |
| NTDB id   | 1058  | ABD1 RS01615 WP 001274986.1    |
| consensus |       |                                |



logo

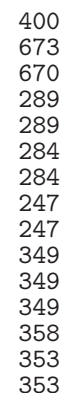
|           |       |                                |
|-----------|-------|--------------------------------|
| NTDB id   | 1410  | SGL RS13950 WP 010873519.1     |
| NTDB id   | 1028  | TT RS08215 WP 011173991.1      |
| NTDB id   | 1306  | DR RS10060 WP 027479822.1      |
| NTDB id   | 1366  | NTHI RS01950 WP 011271972.1    |
| NTDB id   | 1355  | HI 0298 AAC21962.1             |
| NTDB id   | 1384  | A4U84 RS08525 WP 010787006.1   |
| NTDB id   | 1468  | ASU2 RS05090 WP 014991734.1    |
| NTDB id   | 78577 | IY69 RS00745 WP 000650595.1    |
| NTDB id   | 1436  | BW25113 RS00530 WP 001025145.1 |
| NTDB id   | 1168  | A1552VC RS11070 WP 000957200.1 |
| NTDB id   | 1293  | VP RS12240 WP 005479695.1      |
| NTDB id   | 1401  | DSB67 RS12665 WP 010643259.1   |
| NTDB id   | 1251  | GCO85 RS07725 WP 011946523.1   |
| NTDB id   | 1018  | ACIAD RS01685 WP 004920473.1   |
| NTDB id   | 1058  | ABD1 RS01615 WP 001274986.1    |
| consensus |       |                                |



```

NTDB id 1410 SGL RS13950 WP 010873519.1
NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1306 DR RS10060 WP 027479822.1
NTDB id 1366 NTHI RS01950 WP 011271972.1
NTDB id 1355 HI 0298 AAC21962.1
NTDB id 1384 A4U84 RS08525 WP 010787006.1
NTDB id 1468 ASU2 RS05090 WP 014991734.1
NTDB id 78577 IY69 RS00745 WP 000650595.1
NTDB id 1436 BW25113 RS00530 WP 001025145.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1293 VP RS12240 WP 005479695.1
NTDB id 1401 DSB67 RS12665 WP 010643259.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
consensus

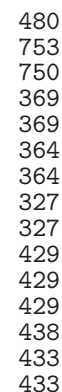
```



```

NTDB id 1410 SGL RS13950 WP 010873519.1
NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1306 DR RS10060 WP 027479822.1
NTDB id 1366 NTHI RS01950 WP 011271972.1
NTDB id 1355 HI 0298 AAC21962.1
NTDB id 1384 A4U84 RS08525 WP 010787006.1
NTDB id 1468 ASU2 RS05090 WP 014991734.1
NTDB id 78577 IY69 RS00745 WP 000650595.1
NTDB id 1436 BW25113 RS00530 WP 001025145.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1293 VP RS12240 WP 005479695.1
NTDB id 1401 DSB67 RS12665 WP 010643259.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
consensus

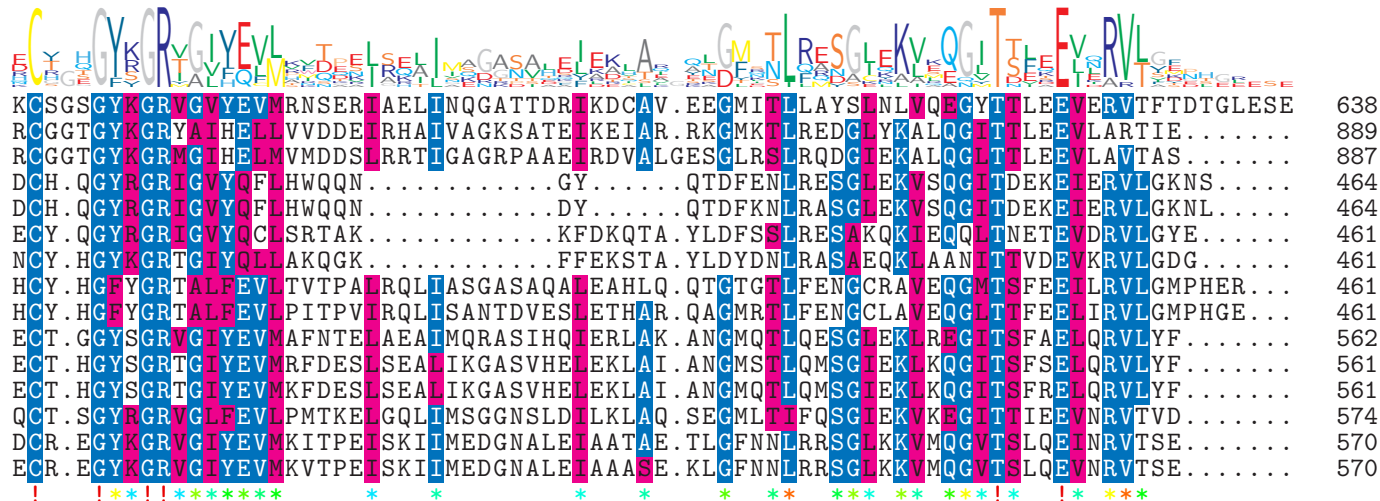
```



```

NTDB id 1410 SGL RS13950 WP 010873519.1
NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1306 DR RS10060 WP 027479822.1
NTDB id 1366 NTHI RS01950 WP 011271972.1
NTDB id 1355 HI 0298 AAC21962.1
NTDB id 1384 A4U84 RS08525 WP 010787006.1
NTDB id 1468 ASU2 RS05090 WP 014991734.1
NTDB id 78577 IY69 RS00745 WP 000650595.1
NTDB id 1436 BW25113 RS00530 WP 001025145.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1293 VP RS12240 WP 005479695.1
NTDB id 1401 DSB67 RS12665 WP 010643259.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
consensus

```



logo

|                                             |                                                                                                       |     |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------|-----|
| NTDB id 1410 SGL RS13950 WP 010873519.1     | MR <span style="color:blue">A</span> KRKSALTCRTCAAEL <span style="color:red">Q</span> QEWLDCPYCMTSRFS | 672 |
| NTDB id 1028 TT RS08215 WP 011173991.1      | .....                                                                                                 | 889 |
| NTDB id 1306 DR RS10060 WP 027479822.1      | .....                                                                                                 | 887 |
| NTDB id 1366 NTHI RS01950 WP 011271972.1    | .....                                                                                                 | 464 |
| NTDB id 1355 HI 0298 AAC21962.1             | .....                                                                                                 | 464 |
| NTDB id 1384 A4U84 RS08525 WP 010787006.1   | .....                                                                                                 | 461 |
| NTDB id 1468 ASU2 RS05090 WP 014991734.1    | .....                                                                                                 | 461 |
| NTDB id 78577 IY69 RS00745 WP 000650595.1   | .....                                                                                                 | 461 |
| NTDB id 1436 BW25113 RS00530 WP 001025145.1 | .....                                                                                                 | 461 |
| NTDB id 1168 A1552VC RS11070 WP 000957200.1 | .....                                                                                                 | 562 |
| NTDB id 1293 VP RS12240 WP 005479695.1      | .....                                                                                                 | 561 |
| NTDB id 1401 DSB67 RS12665 WP 010643259.1   | .....                                                                                                 | 561 |
| NTDB id 1251 GC085 RS07725 WP 011946523.1   | .....                                                                                                 | 574 |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1   | .....                                                                                                 | 570 |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1    | .....                                                                                                 | 570 |
| consensus                                   |                                                                                                       |     |

- X non conserved
- X similar
- X ≥ 50% conserved