

logo

|                                              |                                                                                  |    |
|----------------------------------------------|----------------------------------------------------------------------------------|----|
| NTDB id 1410 SGL RS13950 WP 010873519.1      | MSXLSIGDRRLGAALLDQGYLDLQLRALERHREVGGRLAELVLYDSQYERRIASXIEERFGIPLVQLHREVERSPXX    | 0  |
| NTDB id 1028 TT RS08215 WP 011173991.1       | MSVLTIGDKRLGAALLDAGLLTDEELQRALERHREVGGS�AEVLVDMGLLSERRIAQTIEDRFGIPLVELHRVEIPPVKV | 80 |
| NTDB id 1306 DR RS10060 WP 027479822.1       | .MALSIGDRRLGAILLDQGYLGDNDLQRALERHSEVGGRLADVLIDSGMVGEKRIARAIEEALGIPLVNLLAVQPDPAAL | 79 |
| NTDB id 1110 NGFG RS09235 WP 003689817.1     | .....                                                                            | 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 119145 F22031 RS06085 WP 003107297.1 | .....                                                                            | 0  |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1     | .....                                                                            | 0  |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1    | .....                                                                            | 0  |
| consensus                                    |                                                                                  |    |

logo

|                                              |                                                                                  |     |
|----------------------------------------------|----------------------------------------------------------------------------------|-----|
| NTDB id 1410 SGL RS13950 WP 010873519.1      | RELRKAKELRAIPFALDEEAGVVRVAFNLNPLDLSLEEVEDLTGLVVEPYQTTKSAFLYALAKHYPELGLPVPPP..P   | 0   |
| NTDB id 1028 TT RS08215 WP 011173991.1       | ALLPAEKAKELKAIPFALDEEAGVVRVAFNLNPLDLSLEEVEDLTGLVVEPYQTTKSAFLYALAKHYPELGLPVPPP..P | 158 |
| NTDB id 1306 DR RS10060 WP 027479822.1       | RSIRPQTALNLQAFPFALE..GDRLRVALVDPLSSFSIETLEDDSGFDIEPYQALREEVMWAIATHYPELGLPIVPPSGA | 157 |
| NTDB id 1110 NGFG RS09235 WP 003689817.1     | .....                                                                            | 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 119145 F22031 RS06085 WP 003107297.1 | .....                                                                            | 0   |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1     | .....                                                                            | 0   |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1    | .....                                                                            | 0   |
| consensus                                    |                                                                                  |     |

logo

|                                              |                                                                                 |     |
|----------------------------------------------|---------------------------------------------------------------------------------|-----|
| NTDB id 1410 SGL RS13950 WP 010873519.1      | SGEGQKDLKLGELLQKQWISREALEEALVEQEKTGDLLGRILV.RKGLPEEALYRALAEQKGLEFLESTEGIVPDPSAA | 0   |
| NTDB id 1028 TT RS08215 WP 011173991.1       | SDAGRTGGKLGRLITHGYITDAQLQVALDAQQTGEALGATLISQRAITEDQLYEVLAEQEGTTFLPNPSGFHPGEEVL  | 237 |
| NTDB id 1306 DR RS10060 WP 027479822.1       | .....                                                                           | 237 |
| NTDB id 1110 NGFG RS09235 WP 003689817.1     | .....                                                                           | 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 119145 F22031 RS06085 WP 003107297.1 | .....                                                                           | 0   |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1     | .....                                                                           | 0   |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1    | .....                                                                           | 0   |
| consensus                                    |                                                                                 |     |

logo

|                                              |                                                                                    |     |
|----------------------------------------------|------------------------------------------------------------------------------------|-----|
| NTDB id 1410 SGL RS13950 WP 010873519.1      | .....MTS                                                                           | 3   |
| NTDB id 1028 TT RS08215 WP 011173991.1       | LLLLRSDALRYGAVPIGFQNGEVEVVLSDPRHKEAVAQLLNRPARFYALALPQAWHEELFRRAYPQKNRLGEVLVQEGKLSR | 317 |
| NTDB id 1306 DR RS10060 WP 027479822.1       | GSMLRADALRLLLAVPVDETEQGVTVLTS DPRKRPDIDALIGRPVQLMLTRPRDIERLIEQFYPPQRGLGEQLVQEGTLRS | 317 |
| NTDB id 1110 NGFG RS09235 WP 003689817.1     | .....                                                                              | 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 119145 F22031 RS06085 WP 003107297.1 | .....                                                                              | 0   |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1     | .....                                                                              | 0   |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1    | .....                                                                              | 0   |
| consensus                                    |                                                                                    |     |

logo

|                                              |                                                                                   |     |
|----------------------------------------------|-----------------------------------------------------------------------------------|-----|
| NTDB id 1410 SGL RS13950 WP 010873519.1      | SSSSKKSRAVALRNYFSPFGNKL VAGCHDAEQLRQALVQVAKTGRSLPEELKAVTGREL SPELLRKYKKNQLFEIKVLV | 83  |
| NTDB id 1028 TT RS08215 WP 011173991.1       | EALKEALEVQKGLPRAKPIGETLVELCTARPEDVEEBALQKQIRGGRIEDTLVQ..SGKLRPEALAQ.....VATQL     | 388 |
| NTDB id 1306 DR RS10060 WP 027479822.1       | DQLREALQVQAREGKVKPLGEVITELGFASPDVEVDSALQKQNVGCGRIEDTLVQ..SGKLSPEMLARS.....LAAQL   | 388 |
| NTDB id 1110 NGFG RS09235 WP 003689817.1     | .....MSVGLLRILVQNQVVIVEQAEHYNE.SQACKEVLPLMLFS..DGVLSPKSLAAL.....IARVF             | 56  |
| NTDB id 1168 A1552VC RS11070 WP 000957200.1  | .....MLTNLVALLRQAELISATGEQAVVTQVSASCTSVPEALIE..LSIFHAQELTEQ.....LSHIF             | 57  |
| NTDB id 1293 VP RS12240 WP 005479695.1       | .....MHSNLSLTLRQKGLLTFSQEESLIEQVKASGISMPREALS..SGFFTSSSLAEH.....LSSIF             | 57  |
| NTDB id 1401 DSB67 RS12665 WP 010643259.1    | .....MLTNLSTVLRQACILTFSGEESLIEQVKASGISMPREALS..SGFFTSSHELTET.....LSSVF            | 57  |
| NTDB id 1251 GC085 RS07725 WP 011946523.1    | .....MALATEEYRLQGIGQLLVLEKLLDKTKAIELHKLAAAEEKISLQLQYIVK..NKILSAEQIALT.....AAQNF   | 65  |
| NTDB id 119145 F22031 RS06085 WP 003107297.1 | .....MNDSTPLSGLAKQLVLNELLDEKTARQAQVQAARNKQSLVSHLVQ..AKLVQSRALVEV.....AAEQF        | 62  |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1     | .....MSALHTSPKFTIGFFRRLVEEKHVSAAATMQTALDAAAKRAKQD TVAYLIE..EVHLSPSILAEI.....TSAEF | 65  |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1    | .....MSAFTTPPKFSGFIRRLVEEGYVNAQIMMQQALEKAKKFKQDVPYLLD..NFSLSPLTAEI.....LSLEF      | 65  |
| consensus                                    | *****                                                                             |     |

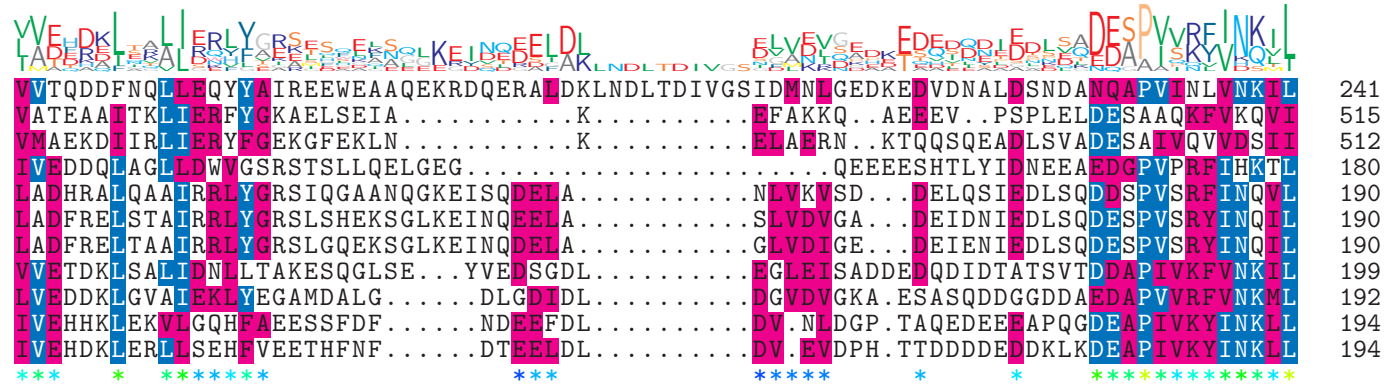
logo

|                                              |                                                                                   |     |
|----------------------------------------------|-----------------------------------------------------------------------------------|-----|
| NTDB id 1410 SGL RS13950 WP 010873519.1      | GVDSVDPEVAPIATQQMAELIGRFFPLDTCRRFKFLPLAQQEGDPPSVLVAMVDPDNIAAQDEINRILRVKG..FEI RRL | 161 |
| NTDB id 1028 TT RS08215 WP 011173991.1       | GYPYVDPEEDPPD.....PGAPLLIPEDLCRRYGVFPHRLEG...NRLVLLMKDPRNIALDDVRLALKRKGLNVEVAPA   | 460 |
| NTDB id 1306 DR RS10060 WP 027479822.1       | GYEFLDPIQNPPD.....PKVALMIPEATARRVVVVPVRLQG...NSLVVAMKDPRNVFALDDLKLTG.....KETLPA   | 455 |
| NTDB id 1110 NGFG RS09235 WP 003689817.1     | SYSILDLRHYPRH.....RVLMGVLTETEQMVEFHCVVFRRG...DKVFFAVSDPTQMPQIQKT VSAAG.....IAVELV | 123 |
| NTDB id 1168 A1552VC RS11070 WP 000957200.1  | GLPETDL SRYDYA.....NLCCQLGLRELITRYDALPLAKQG...NLLLA VSDPTLLQAEHFRFATG.....LQVELA  | 124 |
| NTDB id 1293 VP RS12240 WP 005479695.1       | GLSQPELSQY EYA.....SLCQQLGLRELITRHNALPLHRT...STLLAVADPTNQQAEDDFRFATG.....LQVELV   | 124 |
| NTDB id 1401 DSB67 RS12665 WP 010643259.1    | GLSCTSLNQYEYA.....SLCQTLGLRDLITRHNALPLNRTS...STLLAVADPTNLQAEHDFRFATG.....LQVELV   | 124 |
| NTDB id 1251 GC085 RS07725 WP 011946523.1    | GVPMIDINCIDVG.....TIPVNLVNEKLIKRRHAMVPLFSRG...TNLYLATDDPSKQASIKEIQFHTG.....LNTHAI | 132 |
| NTDB id 119145 F22031 RS06085 WP 003107297.1 | GIAYCDLNSLDRE.....SIPKDVISERLVRQHRVLP LWKRG...NKLFIGLSDPTNHQAVTDIQFSTG.....LTTEAL | 129 |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1     | AEPYFDLDVYDTS.....QIPKDLVDQKLILKRRILPLIQRG...QILYVATSNPSTNTEADAI RFSK.....LLVEPV  | 132 |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1    | GEPLIDLGVEDPA.....LFLDKDIDEKLIQKYRIMPLVHRG...HVLVYATSNPTNTEADAI RFSK.....LKVEPT   | 132 |
| 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 1110 NGFG RS09235 WP 003689817.1
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 119145 F22031 RS06085 WP 003107297.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
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 1110 NGFG RS09235 WP 003689817.1
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 119145 F22031 RS06085 WP 003107297.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RSO1685 WP 004920473.1
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 1110 NGFG RS09235 WP 003689817.1
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 119145 F22031 RS06085 WP 003107297.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus

```



logo

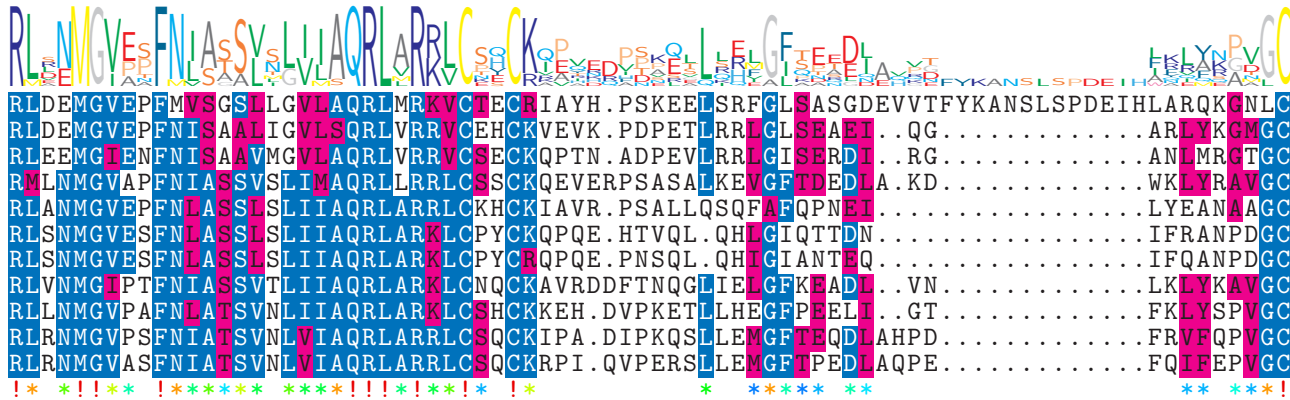
|           |    |        |         |         |    |             |
|-----------|----|--------|---------|---------|----|-------------|
| NTDB      | id | 1410   | SGL     | RS13950 | WP | 010873519.1 |
| NTDB      | id | 1028   | TT      | RS08215 | WP | 011173991.1 |
| NTDB      | id | 1306   | DR      | RS10060 | WP | 027479822.1 |
| NTDB      | id | 1110   | NGFG    | RS09235 | WP | 003689817.1 |
| 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 | 119145 | F22031  | RS06085 | WP | 003107297.1 |
| NTDB      | id | 1058   | ABD1    | RS01615 | WP | 001274986.1 |
| NTDB      | id | 1018   | ACIAD   | RS01685 | WP | 004920473.1 |
| consensus |    |        |         |         |    |             |



479  
752  
749  
419  
428  
428  
428  
437  
430  
432  
432

logo

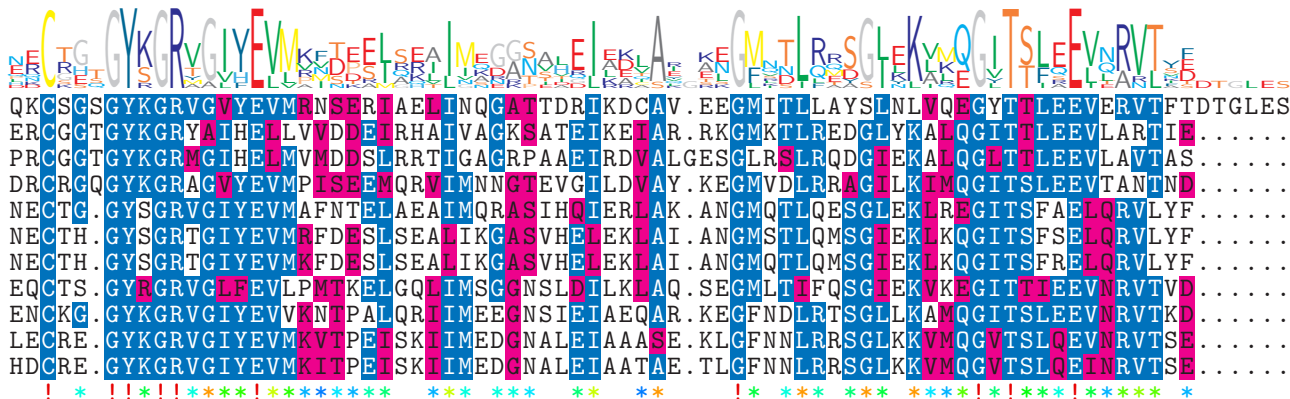
|           |    |        |         |         |    |             |
|-----------|----|--------|---------|---------|----|-------------|
| NTDB      | id | 1410   | SGL     | RS13950 | WP | 010873519.1 |
| NTDB      | id | 1028   | TT      | RS08215 | WP | 011173991.1 |
| NTDB      | id | 1306   | DR      | RS10060 | WP | 027479822.1 |
| NTDB      | id | 1110   | NGFG    | RS09235 | WP | 003689817.1 |
| 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 | 119145 | F22031  | RS06085 | WP | 003107297.1 |
| NTDB      | id | 1058   | ABD1    | RS01615 | WP | 001274986.1 |
| NTDB      | id | 1018   | ACIAD   | RS01685 | WP | 004920473.1 |
| consensus |    |        |         |         |    |             |



558  
816  
813  
485  
490  
489  
489  
502  
494  
498  
498

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 | 1110   | NGFG    | RS09235 | WP | 003689817.1 |
| 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 | 119145 | F22031  | RS06085 | WP | 003107297.1 |
| NTDB      | id | 1058   | ABD1    | RS01615 | WP | 001274986.1 |
| NTDB      | id | 1018   | ACIAD   | RS01685 | WP | 004920473.1 |
| consensus |    |        |         |         |    |             |



637  
889  
887  
558  
562  
561  
561  
574  
566  
570  
570

logo

|                                              |                                       |     |
|----------------------------------------------|---------------------------------------|-----|
| NTDB id 1410 SGL RS13950 WP 010873519.1      | EMRAKRKSALTCTCCTCAAELQQEWLDCPYCMTSRFS | 672 |
| NTDB id 1028 TT RS08215 WP 011173991.1       | .....                                 | 889 |
| NTDB id 1306 DR RS10060 WP 027479822.1       | .....                                 | 887 |
| NTDB id 1110 NGFG RS09235 WP 003689817.1     | .....                                 | 558 |
| 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 119145 F22031 RS06085 WP 003107297.1 | .....                                 | 566 |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1     | .....                                 | 570 |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1    | .....                                 | 570 |
| consensus                                    |                                       |     |

- ⓧ non conserved
- ⓧ similar
- ⓧ ≥ 50% conserved