

logo

|                                             |                                                                                  |    |
|---------------------------------------------|----------------------------------------------------------------------------------|----|
| NTDB id 1251 GC085 RS07725 WP 011946523.1   | MALATEEYRLQGIGQLLVLEKLLDKTKAIELHKLAAAEEKISLLQYIVKNKILSAEQIALTAQNFQVPMLDINCLDVGTI | 80 |
| NTDB id 1177 A1552VC RS01165 WP 000422572.1 | .....                                                                            | 0  |
| NTDB id 1203 PSJM300 01605 AFN76401.1       | .....                                                                            | 0  |
| NTDB id 53119 FLY91 RS08815 WP 001324408.1  | .....                                                                            | 0  |
| NTDB id 1448 BW25113 RS15320 WP 001326494.1 | .....                                                                            | 0  |
| NTDB id 1307 DR RS10055 WP 010888596.1      | .....                                                                            | 0  |
| NTDB id 1086 NMV RS00245 WP 002218487.1     | .....                                                                            | 0  |
| NTDB id 1116 NGFG RS10615 WP 003690200.1    | .....                                                                            | 0  |
| NTDB id 1185 GTF74 RS11940 WP 000350195.1   | .....                                                                            | 0  |
| NTDB id 1176 A1552VC RS01160 WP 000350195.1 | .....                                                                            | 0  |
| NTDB id 1283 ACE17W RS02630 WP 010947729.1  | .....                                                                            | 0  |
| NTDB id 1259 GC085 RS10305 WP 010947729.1   | .....                                                                            | 0  |
| NTDB id 1202 PSJM300 01600 AFN76400.1       | .....                                                                            | 0  |
| NTDB id 1194 PA0395 NP 249086.1             | .....                                                                            | 0  |
| NTDB id 1020 ACIAD RS04210 WP 011182164.1   | .....                                                                            | 0  |
| NTDB id 1081 FDQ49 RS05335 WP 006581387.1   | .....                                                                            | 0  |
| NTDB id 1060 ABD1 RS04380 WP 000355489.1    | .....                                                                            | 0  |
| NTDB id 1040 HON27 RS13360 WP 000355489.1   | .....                                                                            | 0  |
| consensus                                   |                                                                                  |    |

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|                                             |                                                                                   |     |
|---------------------------------------------|-----------------------------------------------------------------------------------|-----|
| NTDB id 1251 GC085 RS07725 WP 011946523.1   | PVNLVNEKLIKRIHAMVPLFSRGTNLYLATDDPSKQASLKEIQFHTGLNTHAIVVETDKLSALIDNLLTAKESQGLSEYVE | 160 |
| NTDB id 1177 A1552VC RS01165 WP 000422572.1 | .....                                                                             | 0   |
| NTDB id 1203 PSJM300 01605 AFN76401.1       | .....                                                                             | 0   |
| NTDB id 53119 FLY91 RS08815 WP 001324408.1  | .....                                                                             | 0   |
| NTDB id 1448 BW25113 RS15320 WP 001326494.1 | .....                                                                             | 0   |
| NTDB id 1307 DR RS10055 WP 010888596.1      | .....                                                                             | 0   |
| NTDB id 1086 NMV RS00245 WP 002218487.1     | .....                                                                             | 0   |
| NTDB id 1116 NGFG RS10615 WP 003690200.1    | .....                                                                             | 0   |
| NTDB id 1185 GTF74 RS11940 WP 000350195.1   | .....                                                                             | 0   |
| NTDB id 1176 A1552VC RS01160 WP 000350195.1 | .....                                                                             | 0   |
| NTDB id 1283 ACE17W RS02630 WP 010947729.1  | .....                                                                             | 0   |
| NTDB id 1259 GC085 RS10305 WP 010947729.1   | .....                                                                             | 0   |
| NTDB id 1202 PSJM300 01600 AFN76400.1       | .....                                                                             | 0   |
| NTDB id 1194 PA0395 NP 249086.1             | .....                                                                             | 0   |
| NTDB id 1020 ACIAD RS04210 WP 011182164.1   | .....                                                                             | 0   |
| NTDB id 1081 FDQ49 RS05335 WP 006581387.1   | .....                                                                             | 0   |
| NTDB id 1060 ABD1 RS04380 WP 000355489.1    | .....                                                                             | 0   |
| NTDB id 1040 HON27 RS13360 WP 000355489.1   | .....                                                                             | 0   |
| consensus                                   |                                                                                   |     |

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| NTDB id   | 1177  | A1552VC | RS01165 | WP         | 000422572.1 |
| NTDB id   | 1203  | PSJM300 | 01605   | AFN76401.1 |             |
| NTDB id   | 53119 | FLY91   | RS08815 | WP         | 001324408.1 |
| NTDB id   | 1448  | BW25113 | RS15320 | WP         | 001326494.1 |
| NTDB id   | 1307  | DR      | RS10055 | WP         | 010888596.1 |
| NTDB id   | 1086  | NMV     | RS00245 | WP         | 002218487.1 |
| NTDB id   | 1116  | NGFG    | RS10615 | WP         | 003690200.1 |
| NTDB id   | 1185  | GTF74   | RS11940 | WP         | 000350195.1 |
| NTDB id   | 1176  | A1552VC | RS01160 | WP         | 000350195.1 |
| NTDB id   | 1283  | ACE17W  | RS02630 | WP         | 010947729.1 |
| NTDB id   | 1259  | GC085   | RS10305 | WP         | 010947729.1 |
| NTDB id   | 1202  | PSJM300 | 01600   | AFN76400.1 |             |
| NTDB id   | 1194  | PA0395  | NP      | 249086.1   |             |
| NTDB id   | 1020  | ACIAD   | RS04210 | WP         | 011182164.1 |
| NTDB id   | 1081  | FDQ49   | RS05335 | WP         | 006581387.1 |
| NTDB id   | 1060  | ABD1    | RS04380 | WP         | 000355489.1 |
| NTDB id   | 1040  | HON27   | RS13360 | WP         | 000355489.1 |
| consensus |       |         |         |            |             |

|                                          |                                           |                    |              |     |
|------------------------------------------|-------------------------------------------|--------------------|--------------|-----|
| AVRDDFTNQGLIELGFKEADLVNLKLYKAVGCEQCTSGYR | GRVGLFEVLPMTKELGQLIMSGGNS                 | LDILKL             | AQSEGML      | 548 |
| .....DKN                                 | GKGRHGVFEVL                               | NSPRIADLIRRGELHELK | ATMARSQEVGMQ | 313 |
| .....TPDG                                | KRRRAVIEVLINTPLAADLIRKGEVHELKGLMKRSTDLGMQ |                    |              | 315 |
| .....D.KQEG                              | CVALLFELLINTPAVGNLIREGKTHQLPHVI           | IQTGGQVGM          |              | 311 |
| .....D.KQEG                              | RVALLFELLINTPAVGNLIREGKTHQLPHVI           | IQTGGQVGM          |              | 311 |
| .....RADG                                | QGRVLAYEILLANPAVRALIREGKTFQITSVM          | QTGAREGMV          |              | 319 |
| .....THDG                                | NGRVASHEILIANPAVRNLIRENKITQINSVL          | QTGQASGMQ          |              | 315 |
| .....THDG                                | NGRVASHEILIANPAVRNLIRENKITQINSVL          | QTGQASGMQ          |              | 315 |
| .....R.VGGGR                             | VACHEIMLATPAIRNLIREDKVAQMYSII             | IQTGAAHGMQ         |              | 314 |
| .....R.VGGGR                             | VACHEIMLATPAIRNLIREDKVAQMYSII             | IQTGAAHGMQ         |              | 314 |
| .....K.NKGGR                             | VAALEIMMCTGAIRNLIREDKIAQMYSII             | IQTGQAKGMQ         |              | 314 |
| .....K.NKGGR                             | VAALEIMMCTGAIRNLIREDKIAQMYSII             | IQTGQAKGMQ         |              | 314 |
| .....K.VGGGR                             | VAAHEIMIGTPAIRNLIREDKVAQMYSII             | IQTGGSLSGMQ        |              | 314 |
| .....K.IGGGR                             | VAAHEIMIGTPAIRNLIREDKVAQMYSII             | IQTGGSLSGMQ        |              | 314 |
| .....K.EGGGR                             | VAAHEIMIGTPAIRNLIREGKVAQMYSII             | IQTGATHGMT         |              | 314 |
| .....K.NGGGR                             | VAAHEIMIGIPAIRNLIRENKVAQMYSII             | IQTGANHGMT         |              | 314 |
| .....K.NGGGR                             | VAAHEIMIGIPAIRNLIRENKVAQMYSII             | IQTGANHGMT         |              | 314 |
| .....K.NGGGR                             | VAAHEIMIGIPAIRNLIRENKVAQMYSII             | IQTGANHGMT         |              | 314 |
| * **!* **!******!!** ***** **** !!*      |                                           |                    |              |     |

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|-----------|-------|---------|---------|------------|-------------|
| NTDB id   | 1251  | GC085   | RS07725 | WP         | 011946523.1 |
| NTDB id   | 1177  | A1552VC | RS01165 | WP         | 000422572.1 |
| NTDB id   | 1203  | PSJM300 | 01605   | AFN76401.1 |             |
| NTDB id   | 53119 | FLY91   | RS08815 | WP         | 001324408.1 |
| NTDB id   | 1448  | BW25113 | RS15320 | WP         | 001326494.1 |
| NTDB id   | 1307  | DR      | RS10055 | WP         | 010888596.1 |
| NTDB id   | 1086  | NMV     | RS00245 | WP         | 002218487.1 |
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| NTDB id   | 1176  | A1552VC | RS01160 | WP         | 000350195.1 |
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| NTDB id   | 1081  | FDQ49   | RS05335 | WP         | 006581387.1 |
| NTDB id   | 1060  | ABD1    | RS04380 | WP         | 000355489.1 |
| NTDB id   | 1040  | HON27   | RS13360 | WP         | 000355489.1 |
| consensus |       |         |         |            |             |

|                                        |                                                               |                                                           |  |     |
|----------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------|--|-----|
| TIFQSGIEKVKEGIT                        | TIEEVNRVTVD                                                   | .....                                                     |  | 574 |
| TFDQALYQLVVD                           | DKISEQDALHS                                                   | ADSANDLRLMLKTKRGDDY.GSG..SLQNVKI....DME.....              |  | 368 |
| TFDQALYNLYVQGEI                        | TYEDALLHADSSNDLRLMIKLGSETDG.EHLTSVSQGLTL....EMSDDDPGRSFR..... |                                                           |  | 381 |
| TFQQSFQQRVGEGR                         | L.....                                                        |                                                           |  | 326 |
| TFQQSYQHRVGEGR                         | L.....                                                        |                                                           |  | 326 |
| TMDAYLAGLFR                            | RHLITYDKGLERA                                                 | AIDPKEFARLANDASAGLGGASMTPAAPPVPAYNSASSSSTGRGGDFGRGAAAPATP |  | 399 |
| TMDQSLQSLVRQGLIAPEVARRRAQNS            | ESMSF.....                                                    |                                                           |  | 347 |
| TMDQSLQSLVRQGLIAPEAAARRRAQNS           | ESMSF.....                                                    |                                                           |  | 347 |
| TMEQNAKQLIARGVVDAQEVQSKI               | ELDLKAF.....                                                  |                                                           |  | 345 |
| TMEQNAKQLIARGVVDAQEVQSKI               | ELDLKAF.....                                                  |                                                           |  | 345 |
| TLDQHLTELVNKNIISKHTAHEAALNK.SLF.....   |                                                               |                                                           |  | 344 |
| TLDQHLTELVNKNIISKHTAHEAALNK.SLF.....   |                                                               |                                                           |  | 344 |
| TLDSCLKGLLAKGLISRDSAKEKAKQP.ENF.....   |                                                               |                                                           |  | 344 |
| TLDMCLKGLVAKGLISRAREKAKIP.ENF.....     |                                                               |                                                           |  | 344 |
| TLDQSLKQLLAKGIINLPTARAVAKSP.ESF.....   |                                                               |                                                           |  | 344 |
| TLDDQSLKGLVSRGVISPQTARTAAKQP.ESFL..... |                                                               |                                                           |  | 345 |
| TLDDQSLKGLVARGVISPQTARTAAKQP.ESFL..... |                                                               |                                                           |  | 345 |
| TLDDQSLKGLVARGVISPQTARTAAKQP.ESFL..... |                                                               |                                                           |  | 345 |
| !*** * ** ***** * *                    |                                                               |                                                           |  |     |

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| NTDB id 1251 GC085 RS07725 WP 011946523.1   | .....              | 574 |
| NTDB id 1177 A1552VC RS01165 WP 000422572.1 | .....              | 368 |
| NTDB id 1203 PSJM300 01605 AFN76401.1       | .....              | 381 |
| NTDB id 53119 FLY91 RS08815 WP 001324408.1  | .....              | 326 |
| NTDB id 1448 BW25113 RS15320 WP 001326494.1 | .....              | 326 |
| NTDB id 1307 DR RS10055 WP 010888596.1      | AAPAAGRSEPGRAGGFGR | 418 |
| NTDB id 1086 NMV RS00245 WP 002218487.1     | .....              | 347 |
| NTDB id 1116 NGFG RS10615 WP 003690200.1    | .....              | 347 |
| NTDB id 1185 GTF74 RS11940 WP 000350195.1   | .....              | 345 |
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| consensus                                   |                    |     |

-  non conserved
-  similar
-  ≥ 50% conserved