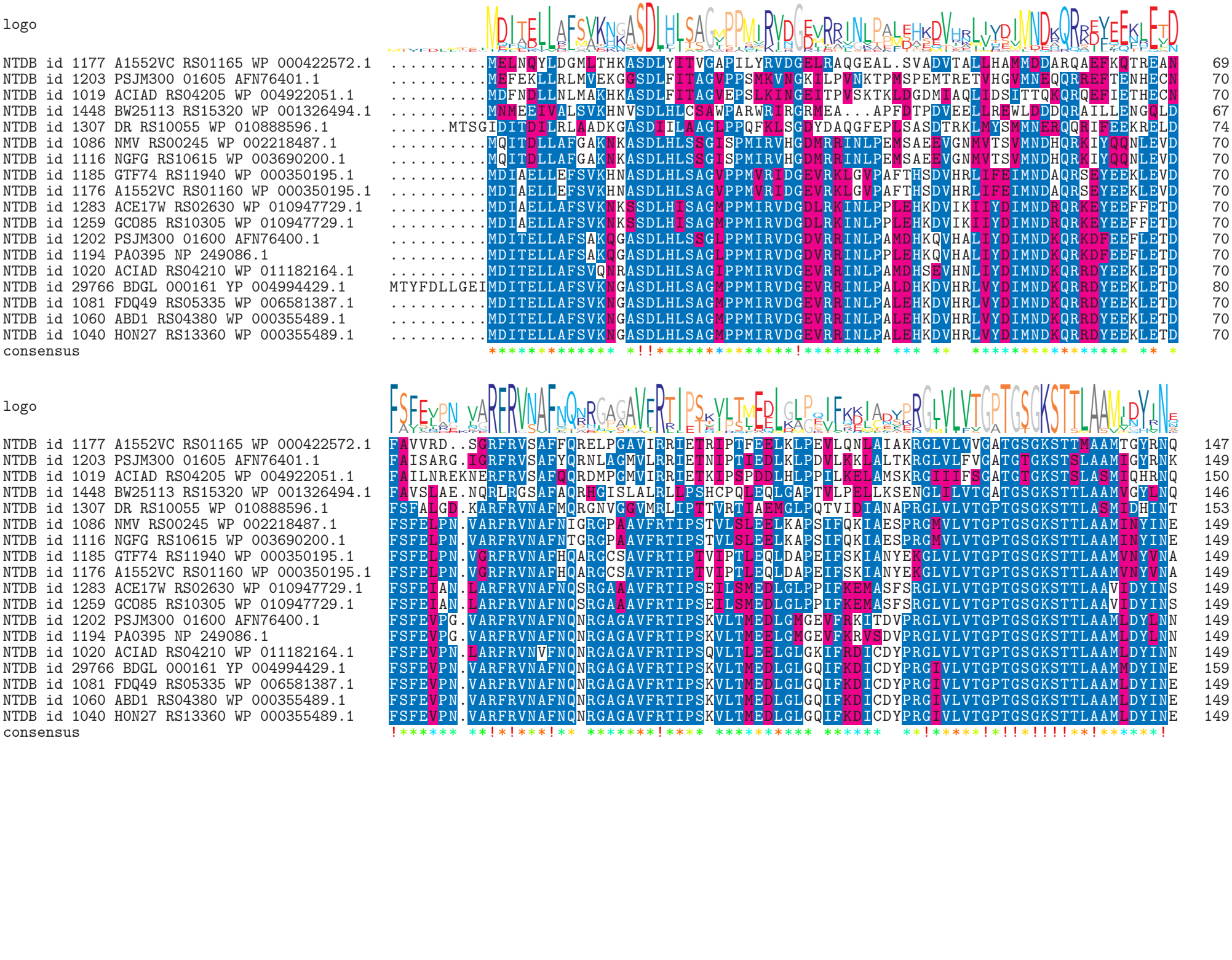

logo
NTDB id 1177 A1552VC RS01165 WP 000422572.1 .....MELNQYLDGMLTHKASDLYITVGAPILYRVDGELRAQGEAL.SVADVTALLHAMMDDARQAEFKQTREAN 69
NTDB id 1203 PSJM300 01605 AFN76401.1 .....MEFEKLLRLMVEKGGSDLFITAGVPPSMKVNGKILPVNKTPMSPEMTRETVHGVMNEQQRREFTENHECN 70
NTDB id 1019 ACIAD RS04205 WP 004922051.1 .....MDFNDLLNLMAKHKASDLFITAGVEPSLKINGEITPVSKTKLDGDMIAQLIDSITTQKQRQEFIETHECN 70
NTDB id 1448 BW25113 RS15320 WP 001326494.1 .....MNMEEIVALSVKHNVSDLHLCSAWPARWRIRGRMEA...APFDTPDVEELLREWLDDDQRAILLENGQLD 67
NTDB id 1307 DR RS10055 WP 010888596.1 ......MTSGIDITDILRLAADKGASDIILAAGLPPQFKLSGDYDAQGFEPLSASDTRKLMYSMMNERQQRIFEEKRELD 74
NTDB id 1086 NMV RS00245 WP 002218487.1 .....MQITDLLAFGAKNKASDLHLSSGISPMIRVHGDMRRINLPEMSAEEVGNMVTSVMNDHQRKIYQQNLEVD 70
NTDB id 1116 NGFG RS10615 WP 003690200.1 .....MQITDLLAFGAKNKASDLHLSSGISPMIRVHGDMRRINLPEMSAEEVGNMVTSVMNDHQRKIYQQNLEVD 70
NTDB id 1185 GTF74 RS11940 WP 000350195.1 .....MDIAELLEFSVKHNASDLHLSAGVPPMVRIDGEVRKLGVPAFTHSDVHRLIFEIMNDAQRSEYEEKLEVD 70
NTDB id 1176 A1552VC RS01160 WP 000350195.1 .....MDIAELLEFSVKHNASDLHLSAGVPPMVRIDGEVRKLGVPAFTHSDVHRLIFEIMNDAQRSEYEEKLEVD 70
NTDB id 1283 ACE17W RS02630 WP 010947729.1 .....MDIAELLAFSVKNKSSDLHISAGMPPMIRVDGDLRKINLPPLEHKDVIKIIYDIMNDRQRKEYEEFFETD 70
NTDB id 1259 GCO85 RS10305 WP 010947729.1 .....MDIAELLAFSVKNKSSDLHISAGMPPMIRVDGDLRKINLPPLEHKDVIKIIYDIMNDRQRKEYEEFFETD 70
NTDB id 1202 PSJM300 01600 AFN76400.1 .....MDITELLAFSAKQGASDLHLSSGLPPMIRVDGDVRRINLPAMDHKQVHALIYDIMNDKQRKDFEEFLETD 70
NTDB id 1194 PA0395 NP 249086.1 .....MDITELLAFSAKQGASDLHLSAGLPPMIRVDGDVRRINLPPLEHKQVHALIYDIMNDKQRKDFEEFLETD 70
NTDB id 1020 ACIAD RS04210 WP 011182164.1 .....MDITELLAFSVQNRASDLHLSAGIPPMIRVDGEVRRINLPAMDHSEVHNLIYDIMNDKQRRDYEEKLETD 70
NTDB id 29766 BDGL 000161 YP 004994429.1 MTYFDLLGEIMDITELLAFSVKNGASDLHLSAGMPPMIRVDGEVRRINLPALDHKDVHRLVYDIMNDKQRRDYEEKLETD 80
NTDB id 1081 FDQ49 RS05335 WP 006581387.1 .....MDITELLAFSVKNGASDLHLSAGMPPMIRVDGEVRRINLPALEHKDVHRLVYDIMNDKQRRDYEEKLETD 70
NTDB id 1060 ABD1 RS04380 WP 000355489.1 .....MDITELLAFSVKNGASDLHLSAGMPPMIRVDGEVRRINLPALEHKDVHRLVYDIMNDKQRRDYEEKLETD 70
NTDB id 1040 HON27 RS13360 WP 000355489.1 .....MDITELLAFSVKNGASDLHLSAGMPPMIRVDGEVRRINLPALEHKDVHRLVYDIMNDKQRRDYEEKLETD 70
consensus
logo
NTDB id 1177 A1552VC RS01165 WP 000422572.1 FAVVRD..SGRFRVSAFFQRELPGAVIRRIETRIPTFEELKLPEVLQNLAIAKRGLVLVVGATGSGKSTTMAAMTGYRNQ 147
NTDB id 1203 PSJM300 01605 AFN76401.1 FAISARG.IGRFRVSAFYQRNLAGMVLRRIETNIPTIEDLKLPDVLKKLALTKRGLVLFVGATGTGKSTSLAAMIGYRNK 149
NTDB id 1019 ACIAD RS04205 WP 004922051.1 FAILNREKNERFRVSAFQQRDMPGMVIRRIETKIPSPDDLHLPPILKELAMSKRGIIIFSGATGTGKSTSLASMIQHRNQ 150
NTDB id 1448 BW25113 RS15320 WP 001326494.1 FAVSLAE.NQRLRGSAFAQRHGISLALRLLPSHCPQLEQLGAPTVLPELLKSENGLILVTGATGSGKSTTLAAMVGYLNQ 146
NTDB id 1307 DR RS10055 WP 010888596.1 FSFALGD.KARFRVNAFMQRGNVGGVMRLIPTTVRTIAEMGLPQTVIDIANAPRGLVLVTGPTGSGKSTTLASMIDHINT 153
NTDB id 1086 NMV RS00245 WP 002218487.1 FSFELPN.VARFRVNAFNIGRGPAAVFRTIPSTVLSLEELKAPSIFQKIAESPRGMVLVTGPTGSGKSTTLAAMINYINE 149
NTDB id 1116 NGFG RS10615 WP 003690200.1 FSFELPN.VARFRVNAFNTGRGPAAVFRTIPSTVLSLEELKAPSIFQKIAESPRGMVLVTGPTGSGKSTTLAAMINYINE 149
NTDB id 1185 GTF74 RS11940 WP 000350195.1 FSFELPN.VGRFRVNAFHQARGCSAVFRTIPTVIPTLEQLDAPEIFSKIANYEKGLVLVTGPTGSGKSTTLAAMVNYVNA 149
NTDB id 1176 A1552VC RS01160 WP 000350195.1 FSFELPN.VGRFRVNAFHQARGCSAVFRTIPTVIPTLEQLDAPEIFSKIANYEKGLVLVTGPTGSGKSTTLAAMVNYVNA 149
NTDB id 1283 ACE17W RS02630 WP 010947729.1 FSFEIAN.LARFRVNAFNQSRGAAAVFRTIPSEILSMEDLGLPPIFKEMASFSRGLVLVTGPTGSGKSTTLAAVIDYINS 149
NTDB id 1259 GCO85 RS10305 WP 010947729.1 FSFEIAN.LARFRVNAFNQSRGAAAVFRTIPSEILSMEDLGLPPIFKEMASFSRGLVLVTGPTGSGKSTTLAAVIDYINS 149
NTDB id 1202 PSJM300 01600 AFN76400.1 FSFEVPG.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGMGEVFRKITDVPRGLVLVTGPTGSGKSTTLAAMLDYLNN 149
NTDB id 1194 PA0395 NP 249086.1 FSFEVPG.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEELGMGEVFKRVSDVPRGLVLVTGPTGSGKSTTLAAMLDYLNN 149
NTDB id 1020 ACIAD RS04210 WP 011182164.1 FSFEVPN.LARFRVNVFNQNRGAGAVFRTIPSQVLTLEELGLGKIFRDICDYPRGLVLVTGPTGSGKSTTLAAMLDYINN 149
NTDB id 29766 BDGL 000161 YP 004994429.1 FSFEVPN.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMMDYINE 159
NTDB id 1081 FDQ49 RS05335 WP 006581387.1 FSFEVPN.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMLDYINE 149
NTDB id 1060 ABD1 RS04380 WP 000355489.1 FSFEVPN.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMLDYINE 149
NTDB id 1040 HON27 RS13360 WP 000355489.1 FSFEVPN.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMLDYINE 149
consensus

logo

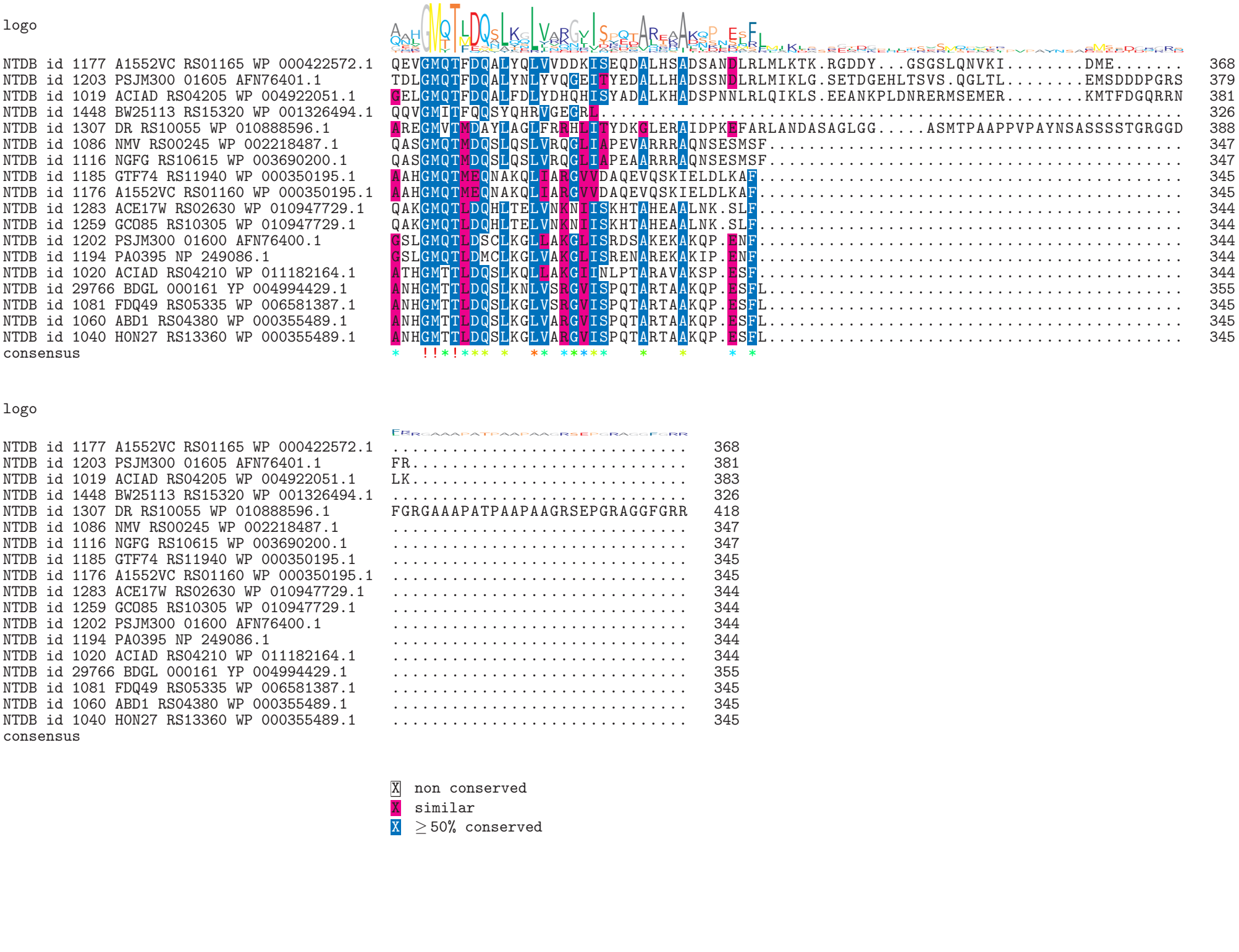


```
NTDB id 1177 A1552VC RS01165 WP 000422572.1  HRTGHILTVEDPIEFVHEHKRCIVTQREVGLDTESYEVALKNSLRQAPDMILIGEIRSRETMEYAMTFAETGHLCMATLH  227
NTDB id 1203 PSJM300 01605 AFN76401.1        NSSGHIISIEDPIEFIHQHQNCIVTQREVGIDTDSFEVALKNTLRQAPDVILIGEVRTRETMDHAVAFAETGHLCLATLH  229
NTDB id 1019 ACIAD RS04205 WP 004922051.1    HSKGHITTIEDPIEFIHEHAGCIITQREVGIDTDSFEIALKNTLRQAPDVILIGEIRSREVMDYALAFAETGHLVFATLH  230
NTDB id 1448 BW25113 RS15320 WP 001326494.1  HADAHILTLEDPVEYLYASQRCLIQQREIGLHCMTFASGLRAALREDPDVILLGELRDSETIRLALTAAETGHLVLATLH  226
NTDB id 1307 DR RS10055 WP 010888596.1       TKKLHILTIEDPIEFMHPNKASIINQREVGSDTLSFDDALRAALRQAPDVILVGEMRDYETIKAAVTAAETGHLVMGTLH  233
NTDB id 1086 NMV RS00245 WP 002218487.1      TQPAHILTIEDPIEFVHQSKKSLINQRELHQHTLSFANALRSALREDPDVILVGEMRDPETIGLALTAAETGHLVFGTLH  229
NTDB id 1116 NGFG RS10615 WP 003690200.1     TQPAHILTIEDPIEFVHQSKKSLINQRELHQHTLSFANALSSALREDPDVILVGEMRDPETIGLALTAAETGHLVFGTLH  229
NTDB id 1185 GTF74 RS11940 WP 000350195.1    HHNKHILTIEDPIEFVHSNNKCLINQREVHRDTHSFKNALRSALREDPDVILVGELRDQETISLALTAAETGHLVFGTLH  229
NTDB id 1176 A1552VC RS01160 WP 000350195.1  HHNKHILTIEDPIEFVHSNNKCLINQREVHRDTHSFKNALRSALREDPDVILVGELRDQETISLALTAAETGHLVFGTLH  229
NTDB id 1283 ACE17W RS02630 WP 010947729.1   SRYEHILTVEDPIEFVHQSKKCLVNQREVHKDTLSFNAALRSALREDPDIILVGELRDLETIRLAMTAAETGHLVFGTLH  229
NTDB id 1259 GCO85 RS10305 WP 010947729.1    SRYEHILTVEDPIEFVHQSKKCLVNQREVHKDTLSFNAALRSALREDPDIILVGELRDLETIRLAMTAAETGHLVFGTLH  229
NTDB id 1202 PSJM300 01600 AFN76400.1        TKYHHILTIEDPIEFVHESKKCLVNQREVHRDTLGFSEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLH  229
NTDB id 1194 PA0395 NP 249086.1              TKYHHILTIEDPIEFVHESKKCLVNQREVHRDTLGFSEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLH  229
NTDB id 1020 ACIAD RS04210 WP 011182164.1    HRYDHILTVEDPIEFVHEPKKCLINQREVHRDTLGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLH  229
NTDB id 29766 BDGL 000161 YP 004994429.1     NRYDHILTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLH  239
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    NRYDHILTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLH  229
NTDB id 1060 ABD1 RS04380 WP 000355489.1     NRYDHILTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLH  229
NTDB id 1040 HON27 RS13360 WP 000355489.1    NRYDHILTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLH  229
consensus                                     *  !!***!!!*!*** ******!!!!***** **  *!***!!**!!*!!*!!*!* !****!***!!!!!!***!!!
```

logo



```
NTDB id 1177 A1552VC RS01165 WP 000422572.1  ANNANQALERILHLVPKEQREQFLLDLSLNLKGVIAQQLLRDKNGKGRHGVFEVLLNSPRIADLIRRGELHELKATMARS  307
NTDB id 1203 PSJM300 01605 AFN76401.1        ANNANQALDRIINFFPADRQNQVWMDLSLNLKAIVAQQLVPTPDGKGRRAVIEVLINTPLAADLIRKGEVHELKGLMKRS  309
NTDB id 1019 ACIAD RS04205 WP 004922051.1    ANNANQTLERIIHFFDADRHQQIFMDLSLNLKAVISQQLIPTHDGQSRRAAVEVLINTPLLSDYIRQGEIYKIKELMARS  310
NTDB id 1448 BW25113 RS15320 WP 001326494.1  TRGAAQAVERLVDSFPAQEKDPVRNQLAGSLRAVLSQKLEVD.KQEGRVALFELLINTPAVGNLIREGKTHQLPHVIQTG  305
NTDB id 1307 DR RS10055 WP 010888596.1       TNSAPESIDRIVDVFPEEQQEQIRVQLANNLVAVMTQQLLPRADGQGRVLAYEILLANPAVRALIREGKTFQITSVMQTG  313
NTDB id 1086 NMV RS00245 WP 002218487.1      TTGAAKTVDRIVDVFPAGEKEMVRSMLSESLTAVISQNLLKTHDGNGRVASHEILIANPAVRNLIRENKITQINSVLQTG  309
NTDB id 1116 NGFG RS10615 WP 003690200.1     TTGAAKTVDRIVDVFPAGEKEMVRSMLSESLTAVISQNLLKTHDGNGRVASHEILIANPAVRNLIRENKITQINSVLQTG  309
NTDB id 1185 GTF74 RS11940 WP 000350195.1    TSSAAKTIDRIIDVFPGSDKDMVRSMLSESLRAVIAQKLLKR.VGGGRVACHEIMLATPAIRNLIREDKVAQMYSIIQTG  308
NTDB id 1176 A1552VC RS01160 WP 000350195.1  TSSAAKTIDRIIDVFPGSDKDMVRSMLSESLRAVIAQKLLKR.VGGGRVACHEIMLATPAIRNLIREDKVAQMYSIIQTG  308
NTDB id 1283 ACE17W RS02630 WP 010947729.1   TNSATKTINRIIDVFPAEEKSMVRSMLSESLQAVVAQSLLKK.NKGGRVAALEIMMCTGAIRNLIREDKIAQMYSSIQTG  308
NTDB id 1259 GCO85 RS10305 WP 010947729.1    TNSATKTINRIIDVFPAEEKSMVRSMLSESLQAVVAQSLLKK.NKGGRVAALEIMMCTGAIRNLIREDKIAQMYSSIQTG  308
NTDB id 1202 PSJM300 01600 AFN76400.1        TTSAAKTIDRVVDVFPAEEKSMVRSMLSESLQAVISQTLLKK.VGGGRVAAHEIMIGTPAIRNLIREDKVAQMYSSIQTG  308
NTDB id 1194 PA0395 NP 249086.1              TTSAAKTIDRVVDVFPAEEKAMVRSMLSESLQSVISQTLIKK.IGGGRVAAHEIMIGTPAIRNLIREDKVAQMYSAIQTG  308
NTDB id 1020 ACIAD RS04210 WP 011182164.1    TTSAAKTIDRIIDVFPAEEKDMVRTMLSESLQAVISQTLLKK.EGGGRVAAHEIMIGIPAIRNLIREGKVAQMYSSIQTG  308
NTDB id 29766 BDGL 000161 YP 004994429.1     TTSAAKTIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.NGGGRVAAHEIMIGIPAIRNLIRENKVAQMYSAIQTG  318
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    TTSAAKTIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.NGGGRVAAHEIMIGIPAIRNLIRENKVAQMYSAIQTG  308
NTDB id 1060 ABD1 RS04380 WP 000355489.1     TTSAAKTIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.NGGGRVAAHEIMIGIPAIRNLIRENKVAQMYSAIQTG  308
NTDB id 1040 HON27 RS13360 WP 000355489.1    TTSAAKTIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.NGGGRVAAHEIMIGIPAIRNLIRENKVAQMYSAIQTG  308
consensus                                    ***!*****!*************** *!***! ****! !***  ***!****!*************!!* ******* ****
```


logo
NTDB id 1177 A1552VC RS01165 WP 000422572.1 QEVGMQTFDQALYQLVDDKISEQDALHSADSANDLRLMLKTK.RGDDY...GSGSLQNVKI.....DME..... 368
NTDB id 1203 PSJM300 01605 AFN76401.1 TDLGMQTFDQALYNLYVQGEITYEDALLHADSSNDLRLMIKLG.SETDGEHLTSVS.QGLTL.....EMSDDDPGRS 379
NTDB id 1019 ACIAD RS04205 WP 004922051.1 GELGMQTFDQALFDLYDHQHISYADALKHADSPNNLRLQIKLS.EEANKPLDNRERMSEMER.....KMTFDGQRRN 381
NTDB id 1448 BW25113 RS15320 WP 001326494.1 QQVGMITFQQSYQHRVGEGRL..... 326
NTDB id 1307 DR RS10055 WP 010888596.1 ARGMVTMDAYLAGLFRRHLITYDKGLERAIDPKEFARLANDASAGLGG.....ASMTPAAPPVPAYNSASSSSTGRGGD 388
NTDB id 1086 NMV RS00245 WP 002218487.1 QASGMQTMDQSLQSLVRQGLIAPEVARRRAQNSESMSF..... 347
NTDB id 1116 NGFG RS10615 WP 003690200.1 QASGMQTMDQSLQSLVRQGLIAPEAARRRAQNSESMSF..... 347
NTDB id 1185 GTF74 RS11940 WP 000350195.1 AAHGMQTMEQNAKQLIARGVVDAQEVQSKIELDLKAF..... 345
NTDB id 1176 A1552VC RS01160 WP 000350195.1 AAHGMQTMEQNAKQLIARGVVDAQEVQSKIELDLKAF..... 345
NTDB id 1283 ACE17W RS02630 WP 010947729.1 QAKGMQTLDQHLTELVNKNISKHTAHEAALNK.SLF..... 344
NTDB id 1259 GCO85 RS10305 WP 010947729.1 QAKGMQTLDQHLTELVNKNISKHTAHEAALNK.SLF..... 344
NTDB id 1202 PSJM300 01600 AFN76400.1 GSLGMQTLDSCLKGLLAKGLISRDSAKEKAKQP.ENF..... 344
NTDB id 1194 PA0395 NP 249086.1 GSLGMQTLDMCLKGLVAKGLISRENAREKAKIP.ENF..... 344
NTDB id 1020 ACIAD RS04210 WP 011182164.1 ATHGMTTLDQSLKQLLAKGIINLPTARAVAKSP.ESF..... 344
NTDB id 29766 BDGL 000161 YP 004994429.1 ANHGMTTLDQSLKNLVSRGVISPQTARTAAKQP.ESFL..... 355
NTDB id 1081 FDQ49 RS05335 WP 006581387.1 ANHGMTTLDQSLKGLVSRGVISPQTARTAAKQP.ESFL..... 345
NTDB id 1060 ABD1 RS04380 WP 000355489.1 ANHGMTTLDQSLKGLVARGVISPQTARTAAKQP.ESFL..... 345
NTDB id 1040 HON27 RS13360 WP 000355489.1 ANHGMTTLDQSLKGLVARGVISPQTARTAAKQP.ESFL..... 345
consensus
logo
NTDB id 1177 A1552VC RS01165 WP 000422572.1 368
NTDB id 1203 PSJM300 01605 AFN76401.1 FR..... 381
NTDB id 1019 ACIAD RS04205 WP 004922051.1 LK..... 383
NTDB id 1448 BW25113 RS15320 WP 001326494.1 326
NTDB id 1307 DR RS10055 WP 010888596.1 FGRGAAAPATPAAPAAGRSEPGRAGGFGRR 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
NTDB id 1176 A1552VC RS01160 WP 000350195.1 345
NTDB id 1283 ACE17W RS02630 WP 010947729.1 344
NTDB id 1259 GCO85 RS10305 WP 010947729.1 344
NTDB id 1202 PSJM300 01600 AFN76400.1 344
NTDB id 1194 PA0395 NP 249086.1 344
NTDB id 1020 ACIAD RS04210 WP 011182164.1 344
NTDB id 29766 BDGL 000161 YP 004994429.1 355
NTDB id 1081 FDQ49 RS05335 WP 006581387.1 345
NTDB id 1060 ABD1 RS04380 WP 000355489.1 345
NTDB id 1040 HON27 RS13360 WP 000355489.1 345
consensus
X non conserved
X similar
X ≥ 50% conserved