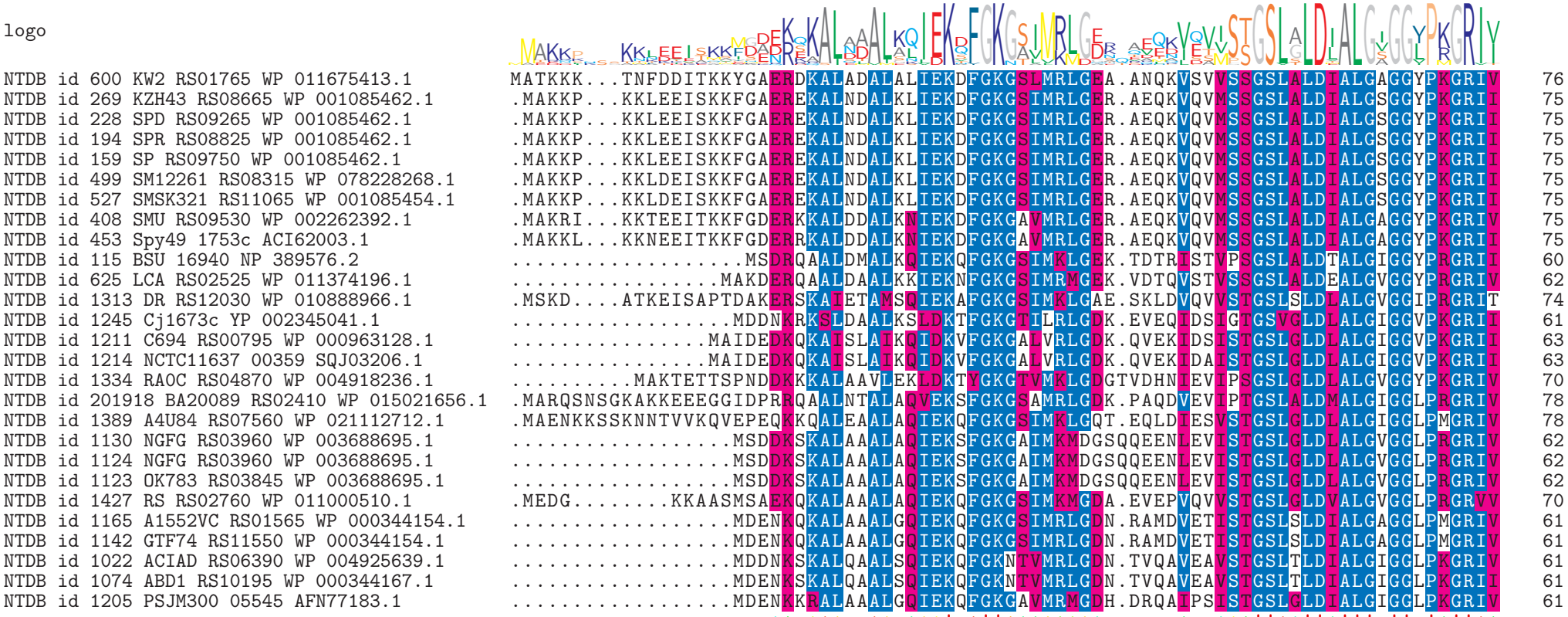
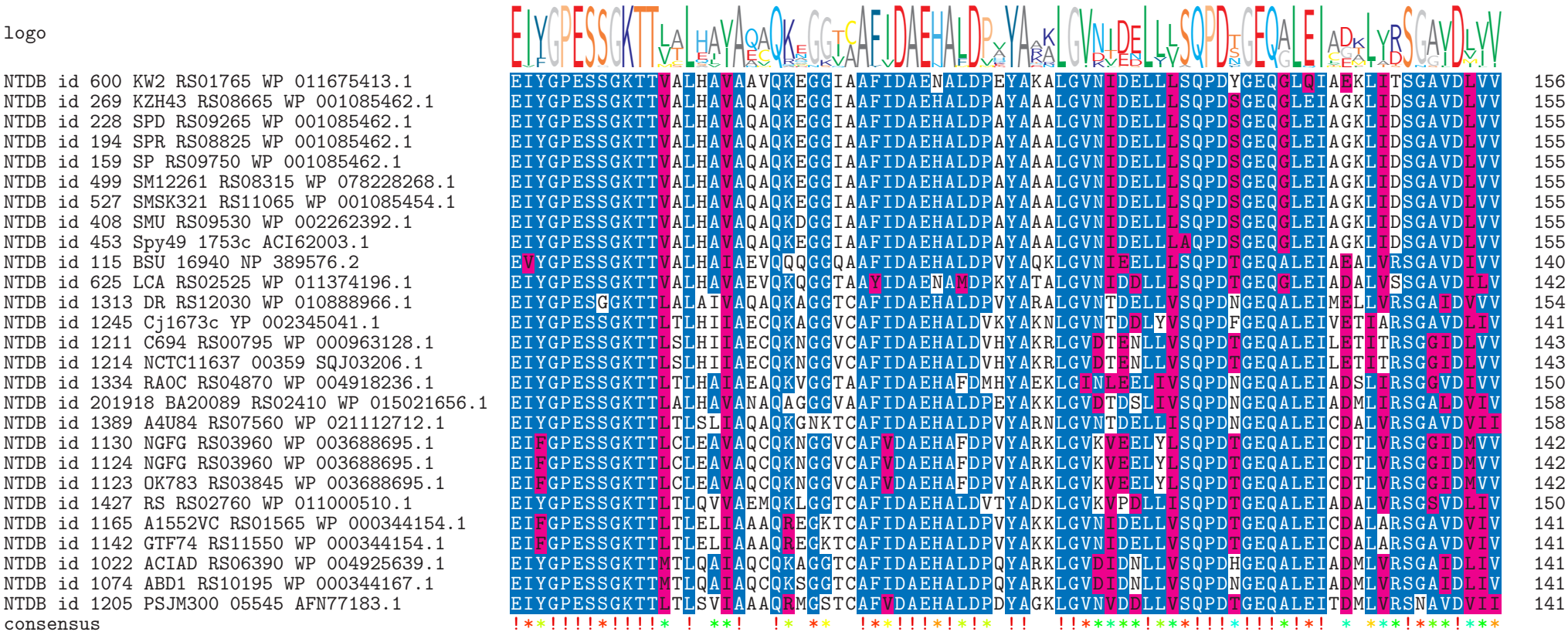
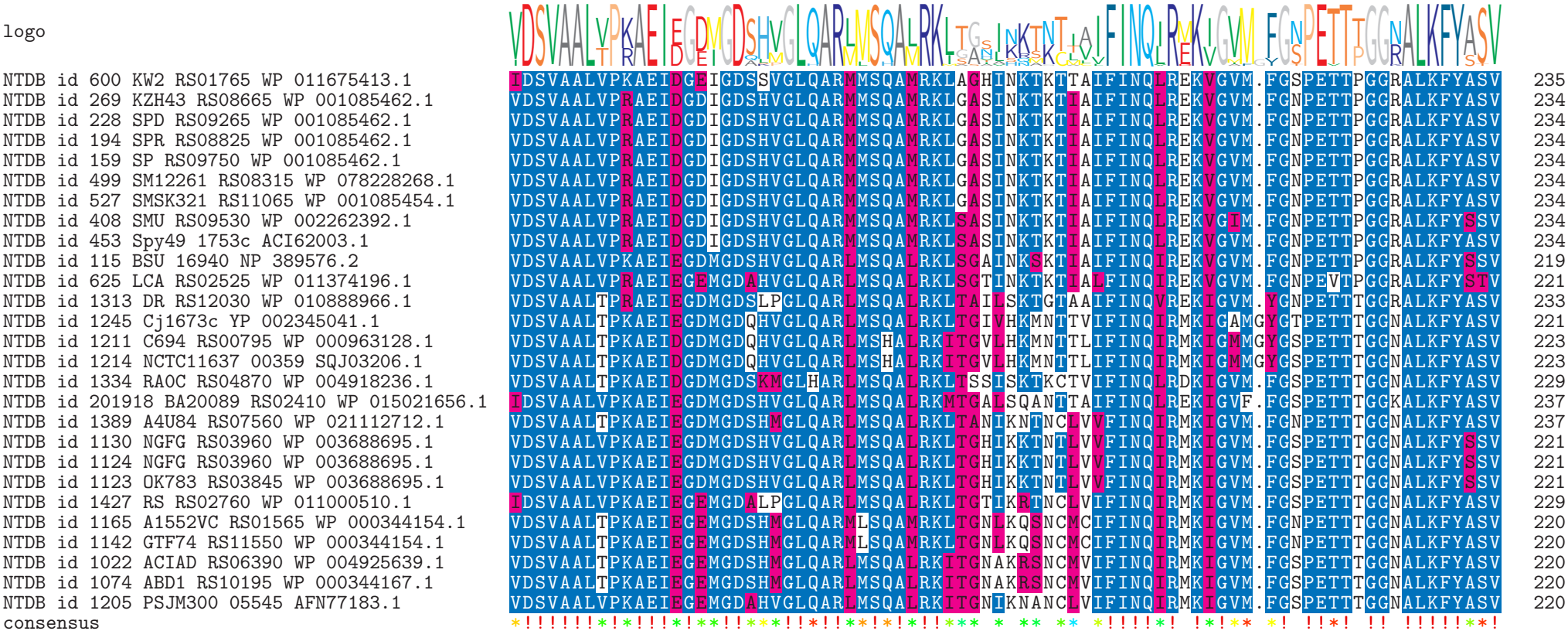
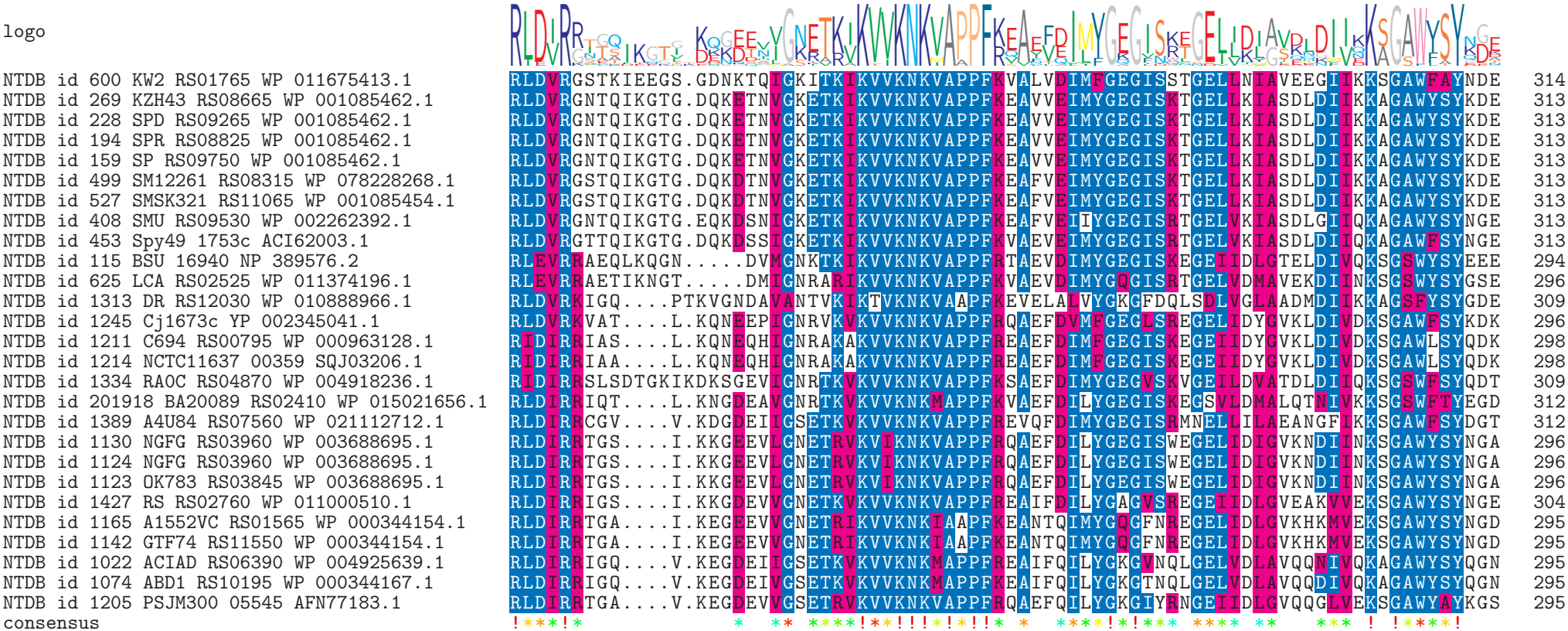
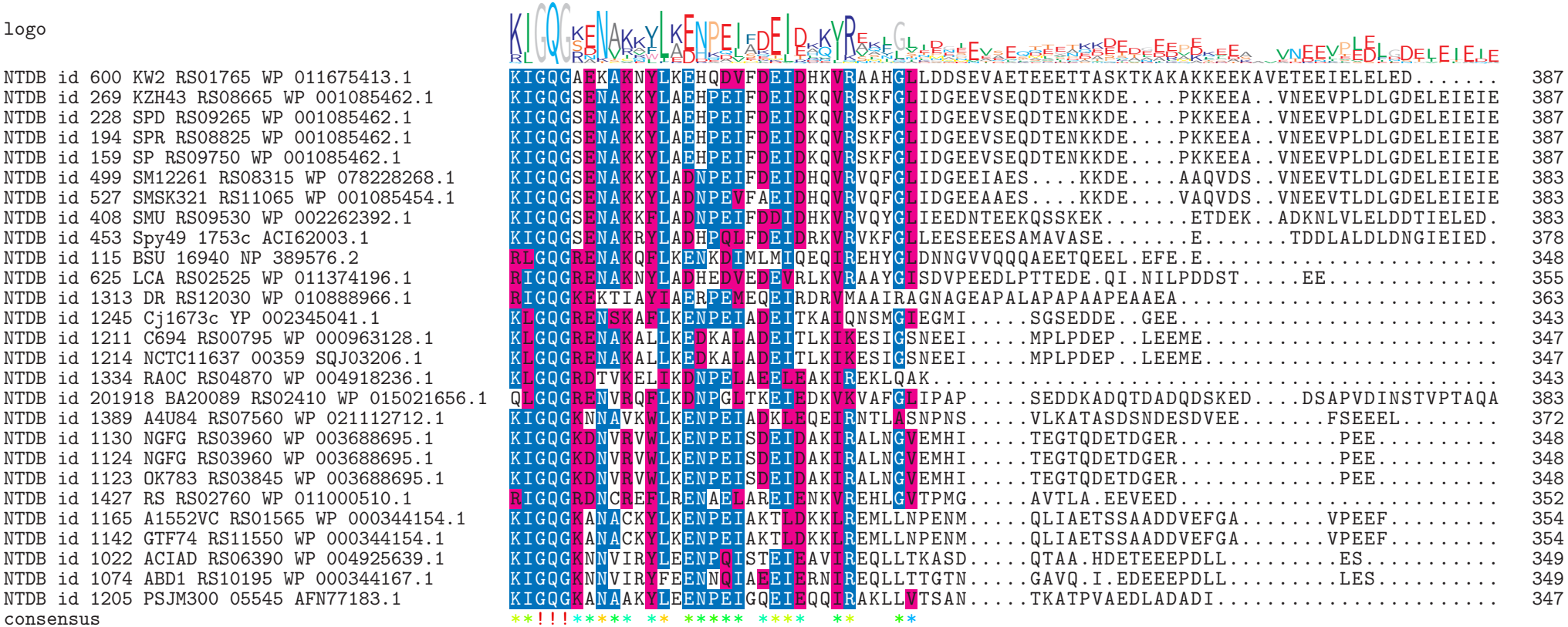

logo
NTDB id 600 KW2 RS01765 WP 011675413.1 MATKKK...TNFDDITKKYGAERDKALADALALIEKDFGKGSLMRLGEA.ANQKVSVVSSGSLALDIALGAGGYPKGRIV 76
NTDB id 269 KZH43 RS08665 WP 001085462.1 .MAKKP...KKLEEISKKFGAEREKALNDALKLIEKDFGKGSIMRLGER.AEQKVQVMSSGSLALDIALGSGGYPKGRII 75
NTDB id 228 SPD RS09265 WP 001085462.1 .MAKKP...KKLEEISKKFGAEREKALNDALKLIEKDFGKGSIMRLGER.AEQKVQVMSSGSLALDIALGSGGYPKGRII 75
NTDB id 194 SPR RS08825 WP 001085462.1 .MAKKP...KKLEEISKKFGAEREKALNDALKLIEKDFGKGSIMRLGER.AEQKVQVMSSGSLALDIALGSGGYPKGRII 75
NTDB id 159 SP RS09750 WP 001085462.1 .MAKKP...KKLEEISKKFGAEREKALNDALKLIEKDFGKGSIMRLGER.AEQKVQVMSSGSLALDIALGSGGYPKGRII 75
NTDB id 499 SM12261 RS08315 WP 078228268.1 .MAKKP...KKLDEISKKFGAEREKALNDALKLIEKDFGKGSIMRLGER.AEQKVQVMSSGSLALDIALGSGGYPKGRII 75
NTDB id 527 SMSK321 RS11065 WP 001085454.1 .MAKKP...KKLDEISKKFGAEREKALNDALKLIEKDFGKGSIMRLGER.AEQKVQVMSSGSLALDIALGSGGYPKGRII 75
NTDB id 408 SMU RS09530 WP 002262392.1 .MAKRI...KKTEEITKKFGDERKALDDALKNIEKDFGKGAVMRLGER.AEQKVQVMSSGSLALDIALGAGGYPKGRIV 75
NTDB id 453 Spy49 1753c ACI62003.1 .MAKKL...KKNEEITKKFGDERRKALDDALKNIEKDFGKGAVMRLGER.AEQKVQVMSSGSLALDIALGAGGYPKGRII 75
NTDB id 115 BSU 16940 NP 389576.2 .....MSDRQAALDMALKQIEKQFGKGSIMKLGEK.TDTRISTVPSGSLALDTALGIGGYPRGRII 60
NTDB id 625 LCA RS02525 WP 011374196.1 .....MAKDERQAALDAALKKIEKNFGKGSIMRMGEK.VDTQVSTVSSGSLALDEALGVGGYPRGRIV 62
NTDB id 1313 DR RS12030 WP 010888966.1 .MSKD....ATKEISAPTDAKERSKAIETAMSQIEKAFGKGSIMKLGAE.SKLDVQVVSTGSLSLDLALGVGGIPRGRIT 74
NTDB id 1245 Cj1673c YP 002345041.1 .....MDDNKRKSLDAALKSLDKTFGKGTILRLGDK.EVEQIDSIGTGSVCLDLALGIGGVPKGRII 61
NTDB id 1211 C694 RS00795 WP 000963128.1 .....MAIDEDKQKAISLAIKQIDKVFGKGALVRLGDK.QVEKIDSISTGSLGLDLALGIGGVPKGRII 63
NTDB id 1214 NCTC11637 00359 SQJ03206.1 .....MAIDEDKQKAISLAIKQIDKVFGKGALVRLGDK.QVEKIDAISTGSLGLDLALGIGGVPKGRII 63
NTDB id 1334 RA0C RS04870 WP 004918236.1 .....MAKTETTSPNDDKKKALAAVLEKLDKTYGKGTVMKLGDGTVDHNIEVIPSGSLGLDLALGVGGYPKGRIV 70
NTDB id 201918 BA20089 RS02410 WP 015021656.1 .MARQSNSGKAKKEEEGGIDPRRQAALNTALAQVEKSFGKGSAMRLGDK.PAQDVEVIPTGSLALDMALGIGGLPRGRIV 78
NTDB id 1389 A4U84 RS07560 WP 021112712.1 .MAENKKSSKNNTVVKQVEPEQKKQALEAALAQIEKQFGKGSIMKLGQT.EQLDIESVSTGSLGLDLALGIGGLPMGRIV 78
NTDB id 1130 NGFG RS03960 WP 003688695.1 .....MSDDKSKALAAALAQIEKSFGKGAIMKMDGSQQEENLEVISTGSLGLDLALGVGGLPRGRIV 62
NTDB id 1124 NGFG RS03960 WP 003688695.1 .....MSDDKSKALAAALAQIEKSFGKGAIMKMDGSQQEENLEVISTGSLGLDLALGVGGLPRGRIV 62
NTDB id 1123 OK783 RS03845 WP 003688695.1 .....MSDDKSKALAAALAQIEKSFGKGAIMKMDGSQQEENLEVISTGSLGLDLALGVGGLPRGRIV 62
NTDB id 1427 RS RS02760 WP 011000510.1 .MEDG.....KKAASMSAEKQKALAAALAQIEKQFGKGSIMKMGDA.EVEPVQVVSTGSLGLDVALGVGGLPRGRVV 70
NTDB id 1165 A1552VC RS01565 WP 000344154.1 .....MDENKQKALAAALGQIEKQFGKGSIMRLGDN.RAMDVETISTGSLSLDIALGAGGLPMGRIV 61
NTDB id 1142 GTF74 RS11550 WP 000344154.1 .....MDENKQKALAAALGQIEKQFGKGSIMRLGDN.RAMDVETISTGSLSLDIALGAGGLPMGRIV 61
NTDB id 1022 ACIAD RS06390 WP 004925639.1 .....MDDNKSKALQAALSQIEKQFGKNTVMRLGDN.TVQAVEAVSTGSLTLDIALGIGGLPKGRIV 61
NTDB id 1074 ABD1 RS10195 WP 000344167.1 .....MDENKSKALQAALSQIEKQFGKNTVMRLGDN.TVQAVEAVSTGSLTLDIALGIGGLPKGRII 61
NTDB id 1205 PSJM300 05545 AFN77183.1 .....MDENKKRALAAALGQIEKQFGKGAVMRMGDH.DRQAIPSISTGSLGLDIALGIGGLPKGRIV 61
consensus


logo
NTDB id 600 KW2 RS01765 WP 011675413.1 EIYGPESSGKTTVALHAVAAVQKEGGIAAFIDAENALDPEYAKALGVNIDELLLSQPDYGEQGLQIAEKLITSGAVDLVV 156
NTDB id 269 KZH43 RS08665 WP 001085462.1 EIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEHALDPAYAAALGVNIDELLLSQPDSGEQGLEIAGKLIDSGAVDLVV 155
NTDB id 228 SPD RS09265 WP 001085462.1 EIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEHALDPAYAAALGVNIDELLLSQPDSGEQGLEIAGKLIDSGAVDLVV 155
NTDB id 194 SPR RS08825 WP 001085462.1 EIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEHALDPAYAAALGVNIDELLLSQPDSGEQGLEIAGKLIDSGAVDLVV 155
NTDB id 159 SP RS09750 WP 001085462.1 EIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEHALDPAYAAALGVNIDELLLSQPDSGEQGLEIAGKLIDSGAVDLVV 155
NTDB id 499 SM12261 RS08315 WP 078228268.1 EIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEHALDPAYAAALGVNIDELLLSQPDSGEQGLEIAGKLIDSGAVDLVV 155
NTDB id 527 SMSK321 RS11065 WP 001085454.1 EIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEHALDPAYAAALGVNIDELLLSQPDSGEQGLEIAGKLIDSGAVDLVV 155
NTDB id 408 SMU RS09530 WP 002262392.1 EIYGPESSGKTTVALHAVAQAQKDGGIAAFIDAEHALDPAYAAALGVNIDELLLSQPDSGEQGLEIAGKLIDSGAVDLVV 155
NTDB id 453 Spy49 1753c ACI62003.1 EIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEHALDPAYAAALGVNIDELLLAQPDSGEQGLEIAGKLIDSGAVDLVV 155
NTDB id 115 BSU 16940 NP 389576.2 EVYGPESSGKTTVALHAIAEVQQQGGQAAFIDAEHALDPVYAQKLGVNIEELLLSQPDTGEQALEIAEALVRSGAVDIVV 140
NTDB id 625 LCA RS02525 WP 011374196.1 EIYGPESSGKTTVALHAVAEVQKQGGTAAYIDAENAMDPKYATALGVNIDDLLLSQPDTGEQGLEIADALVSSGAVDILV 142
NTDB id 1313 DR RS12030 WP 010888966.1 EIYGPESGGKTTLALAIVAQAQKAGGTCAFIDAEHALDPVYARALGVNTDELLVSQPDNGEQALEIMELLVRSGAIDVVV 154
NTDB id 1245 Cj1673c YP 002345041.1 EIYGPESSGKTTLTLHIIAECQKAGGVCAFIDAEHALDVKYAKNLGVNTDDLYVSQPDFGEQALEIVETIARSGAVDLIV 141
NTDB id 1211 C694 RS00795 WP 000963128.1 EIYGPESSGKTTLSLHIIAECQKNGGVCAFIDAEHALDVHYAKRLGVDTENLLVSQPDTGEQALEILETITRSGGIDLVV 143
NTDB id 1214 NCTC11637 00359 SQJ03206.1 EIYGPESSGKTTLSLHIIAECQKNGGVCAFIDAEHALDVHYAKRLGVDTENLLVSQPDTGEQALEILETITRSGGIDLVV 143
NTDB id 1334 RA0C RS04870 WP 004918236.1 EIYGPESSGKTTLTLHAIAEAQKVGGTAAFIDAEHAFDMHYAEKLGINLEELIVSQPDNGEQALEIADSLIRSGGVDIVV 150
NTDB id 201918 BA20089 RS02410 WP 015021656.1 EIYGPESSGKTTLALHAVANAQAGGGVAAFIDAEHALDPEYAKKLGVDTDSLIVSQPDNGEQALEIADMLIRSGALDVIV 158
NTDB id 1389 A4U84 RS07560 WP 021112712.1 EIYGPESSGKTTLTLSLIAQAQKGNKTCAFIDAEHALDPVYARNLGVNTDELLISQPDNGEQALEICDALVRSGAVDVII 158
NTDB id 1130 NGFG RS03960 WP 003688695.1 EIFGPESSGKTTLCLEAVAQCQKNGGVCAFVDAEHAFDPVYARKLGVKVEELYLSQPDTGEQALEICDTLVRSGGIDMVV 142
NTDB id 1124 NGFG RS03960 WP 003688695.1 EIFGPESSGKTTLCLEAVAQCQKNGGVCAFVDAEHAFDPVYARKLGVKVEELYLSQPDTGEQALEICDTLVRSGGIDMVV 142
NTDB id 1123 OK783 RS03845 WP 003688695.1 EIFGPESSGKTTLCLEAVAQCQKNGGVCAFVDAEHAFDPVYARKLGVKVEELYLSQPDTGEQALEICDTLVRSGGIDMVV 142
NTDB id 1427 RS RS02760 WP 011000510.1 EIYGPESSGKTTLTLQVVAEMQKLGGTCAFIDAEHALDVTYADKLGVKVPDLLISQPDTGEQALEIADALVRSGSVDLIV 150
NTDB id 1165 A1552VC RS01565 WP 000344154.1 EIFGPESSGKTTLTLELIAAAQREGKTCAFIDAEHALDPVYAKKLGVNIDELLVSQPDTGEQALEICDALARSGAVDVIV 141
NTDB id 1142 GTF74 RS11550 WP 000344154.1 EIFGPESSGKTTLTLELIAAAQREGKTCAFIDAEHALDPVYAKKLGVNIDELLVSQPDTGEQALEICDALARSGAVDVIV 141
NTDB id 1022 ACIAD RS06390 WP 004925639.1 EIYGPESSGKTTMTLQAIAQCQKAGGTCAFIDAEHALDPQYARKLGVDIDNLLVSQPDHGEQALEIADMLVRSGAIDLIV 141
NTDB id 1074 ABD1 RS10195 WP 000344167.1 EIYGPESSGKTTMTLQAIAQCQKSGGTCAFIDAEHALDPQYARKLGVDIDNLLVSQPDNGEQALEIADMLVRSGAIDLIV 141
NTDB id 1205 PSJM300 05545 AFN77183.1 EIYGPESSGKTTLTLSVIAAAQRMGSTCAFVDAEHALDPDYAGKLGVNVDDLLVSQPDTGEQALEITDMLVRSNAVDVII 141
consensus


logo
NTDB id 600 KW2 RS01765 WP 011675413.1 IDSVAALVPKAEIDGEIGDSSVGLQARMMSQAMRKLAGHINKTKTTAIFINQLREKVGVM.FGSPETTPGGRALKFYASV 235
NTDB id 269 KZH43 RS08665 WP 001085462.1 VDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLGASINKTKTIAIFINQLREKVGVM.FGNPETTPGGRALKFYASV 234
NTDB id 228 SPD RS09265 WP 001085462.1 VDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLGASINKTKTIAIFINQLREKVGVM.FGNPETTPGGRALKFYASV 234
NTDB id 194 SPR RS08825 WP 001085462.1 VDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLGASINKTKTIAIFINQLREKVGVM.FGNPETTPGGRALKFYASV 234
NTDB id 159 SP RS09750 WP 001085462.1 VDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLGASINKTKTIAIFINQLREKVGVM.FGNPETTPGGRALKFYASV 234
NTDB id 499 SM12261 RS08315 WP 078228268.1 VDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLGASINKTKTIAIFINQLREKVGVM.FGNPETTPGGRALKFYASV 234
NTDB id 527 SMSK321 RS11065 WP 001085454.1 VDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLGASINKTKTIAIFINQLREKVGVM.FGNPETTPGGRALKFYASV 234
NTDB id 408 SMU RS09530 WP 002262392.1 VDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLSASINKTKTIAIFINQLREKVGIM.FGNPETTPGGRALKFYSSV 234
NTDB id 453 Spy49 1753c ACI62003.1 VDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLSASINKTKTIAIFINQLREKVGVM.FGNPETTPGGRALKFYASV 234
NTDB id 115 BSU 16940 NP 389576.2 VDSVAALVPKAEIEGDMGDSHVGLQARLMSQALRKLSGAINKSKTIAIFINQIREKVGVM.FGNPETTPGGRALKFYSSV 219
NTDB id 625 LCA RS02525 WP 011374196.1 VDSVAALVPRAEIEGEMGDAHVGLQARLMSQALRKLSGTINKTKTIALFINQIREKVGVM.FGNPEVTPGGRALKFYSTV 221
NTDB id 1313 DR RS12030 WP 010888966.1 VDSVAALTPRAEIEGDMGDSLPGLQARLMSQALRKLTAILSKTGTAAIFINQVREKIGVM.YGNPETTTGGRALKFYASV 233
NTDB id 1245 Cj1673c YP 002345041.1 VDSVAALTPKAEIEGDMGDQHVGLQARLMSQALRKLTGIVHKMNTTVIFINQIRMKIGAMGYGTPETTTGGNALKFYASV 221
NTDB id 1211 C694 RS00795 WP 000963128.1 VDSVAALTPKAEIDGDMGDQHVGLQARLMSHALRKITGVLHKMNTTLIFINQIRMKIGMMGYGSPETTTGGNALKFYASV 223
NTDB id 1214 NCTC11637 00359 SQJ03206.1 VDSVAALTPKAEIDGDMGDQHVGLQARLMSHALRKITGVLHKMNTTLIFINQIRMKIGMMGYGSPETTTGGNALKFYASV 223
NTDB id 1334 RA0C RS04870 WP 004918236.1 VDSVAALTPKAEIDGDMGDSKMGLHARLMSQALRKLTSSISKTKCTVIFINQLRDKIGVM.FGSPETTTGGNALKFYASV 229
NTDB id 201918 BA20089 RS02410 WP 015021656.1 IDSVAALVPKAEIEGDMGDSHVGLQARLMSQALRKMTGALSQANTTAIFINQLREKIGVF.FGSPETTTGGKALKFYASV 237
NTDB id 1389 A4U84 RS07560 WP 021112712.1 VDSVAALTPKAEIEGDMGDSHMGLQARLMSQALRKLTANIKNTNCLVVFINQIRMKIGVM.FGNPETTTGGNALKFYASV 237
NTDB id 1130 NGFG RS03960 WP 003688695.1 VDSVAALVPKAEIEGDMGDSHVGLQARLMSQALRKLTGHIKKTNTLVVFINQIRMKIGVM.FGSPETTTGGNALKFYSSV 221
NTDB id 1124 NGFG RS03960 WP 003688695.1 VDSVAALVPKAEIEGDMGDSHVGLQARLMSQALRKLTGHIKKTNTLVVFINQIRMKIGVM.FGSPETTTGGNALKFYSSV 221
NTDB id 1123 OK783 RS03845 WP 003688695.1 VDSVAALVPKAEIEGDMGDSHVGLQARLMSQALRKLTGHIKKTNTLVVFINQIRMKIGVM.FGSPETTTGGNALKFYSSV 221
NTDB id 1427 RS RS02760 WP 011000510.1 IDSVAALVPKAEIEGEMGDALPGLQARLMSQALRKLTGTIKRTNCLVIFINQIRMKIGVM.FGSPETTTGGNALKFYASV 229
NTDB id 1165 A1552VC RS01565 WP 000344154.1 VDSVAALTPKAEIEGEMGDSHMGLQARMLSQAMRKLTGNLKQSNCMCIFINQIRMKIGVM.FGNPETTTGGNALKFYASV 220
NTDB id 1142 GTF74 RS11550 WP 000344154.1 VDSVAALTPKAEIEGEMGDSHMGLQARMLSQAMRKLTGNLKQSNCMCIFINQIRMKIGVM.FGNPETTTGGNALKFYASV 220
NTDB id 1022 ACIAD RS06390 WP 004925639.1 VDSVAALTPKAEIEGEMGDSHMGLQARLMSQALRKITGNAKRSNCMVIFINQIRMKIGVM.FGSPETTTGGNALKFYASV 220
NTDB id 1074 ABD1 RS10195 WP 000344167.1 VDSVAALTPKAEIEGEMGDSHMGLQARLMSQALRKITGNAKRSNCMVIFINQIRMKIGVM.FGSPETTTGGNALKFYASV 220
NTDB id 1205 PSJM300 05545 AFN77183.1 VDSVAALVPKAEIEGEMGDAHVGLQARLMSQALRKITGNIKNANCLVIFINQIRMKIGVM.FGSPETTTGGNALKFYASV 220
consensus *!!!!!!*!*!!!*!**!!***!!*!!**!*!*!!*** * ** ** *!!!!*! !*!** *! !!*! !! !!!!!**!


logo
NTDB id 600 KW2 RS01765 WP 011675413.1 RLDVRGSTKIEEGS.GDNKTQIGKITKIKVVKNKVAPPFKVALVDIMFGEGISSTGELLNIAVEEGIIKKSGAWFAYNDE 314
NTDB id 269 KZH43 RS08665 WP 001085462.1 RLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSYKDE 313
NTDB id 228 SPD RS09265 WP 001085462.1 RLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSYKDE 313
NTDB id 194 SPR RS08825 WP 001085462.1 RLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSYKDE 313
NTDB id 159 SP RS09750 WP 001085462.1 RLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSYKDE 313
NTDB id 499 SM12261 RS08315 WP 078228268.1 RLDVRGSTQIKGTG.DQKDTNVGKETKIKVVKNKVAPPFKEAFVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSYKDE 313
NTDB id 527 SMSK321 RS11065 WP 001085454.1 RLDVRGSTQIKGTG.DQKDTNVGKETKIKVVKNKVAPPFKEAFVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSYKDE 313
NTDB id 408 SMU RS09530 WP 002262392.1 RLDVRGNTQIKGTG.EQKDSNIGKETKIKVVKNKVAPPFKEAFVEIIYGEGISRTGELVKIASDLGIIQKAGAWYSYNGE 313
NTDB id 453 Spy49 1753c ACI62003.1 RLDVRGTTQIKGTG.DQKDSSIGKETKIKVVKNKVAPPFKVAEVEIMYGEGISRTGELVKIASDLDIIQKAGAWFSYNGE 313
NTDB id 115 BSU 16940 NP 389576.2 RLEVRRAEQLKQGN.....DVMGNKTKIKVVKNKVAPPFRTAEVDIMYGEGISKEGEIIDLGTELDIVQKSGSWYSYEEE 294
NTDB id 625 LCA RS02525 WP 011374196.1 RLEVRRAETIKNGT.....DMIGNRARIKVVKNKVAPPFKVAEVDIMYGQGISRTGELVDMAVEKDIINKSGSWYSYGSE 296
NTDB id 1313 DR RS12030 WP 010888966.1 RLDVRKIGQ....PTKVGNDAVANTVKIKTVKNKVAAPFKEVELALVYGKGFDQLSDLVGLAADMDIIKKAGSFYSYGDE 309
NTDB id 1245 Cj1673c YP 002345041.1 RLDVRKVAT....L.KQNEEPIGNRVKVKVVKNKVAPPFRQAEFDVMFGEGLSREGELIDYGVKLDIVDKSGAWFSYKDK 296
NTDB id 1211 C694 RS00795 WP 000963128.1 RIDIRRIAS....L.KQNEQHIGNRAKAKVVKNKVAPPFREAEFDIMFGEGISKEGEIIDYGVKLDIVDKSGAWLSYQDK 298
NTDB id 1214 NCTC11637 00359 SQJ03206.1 RIDIRRIAA....L.KQNEQHIGNRAKAKVVKNKVAPPFREAEFDIMFGEGISKEGEIIDYGVKLDIVDKSGAWLSYQDK 298
NTDB id 1334 RA0C RS04870 WP 004918236.1 RIDIRRSLSDTGKIKDKSGEVIGNRTKVKVVKNKVAPPFKSAEFDIMYGEGVSKVGEILDVATDLDIIQKSGSWFSYQDT 309
NTDB id 201918 BA20089 RS02410 WP 015021656.1 RLDIRRIQT....L.KNGDEAVGNRTKVKVVKNKMAPPFKVAEFDILYGEGISKEGSVLDMALQTNIVKKSGSWFTYEGD 312
NTDB id 1389 A4U84 RS07560 WP 021112712.1 RLDIRRCGV....V.KDGDEIIGSETKVKVVKNKVAPPFREVQFDIMYGEGISRMNELLILAEANGFIKKSGAWFSYDGT 312
NTDB id 1130 NGFG RS03960 WP 003688695.1 RLDIRRTGS....I.KKGEEVLGNETRVKVIKNKVAPPFRQAEFDILYGEGISWEGELIDIGVKNDIINKSGAWYSYNGA 296
NTDB id 1124 NGFG RS03960 WP 003688695.1 RLDIRRTGS....I.KKGEEVLGNETRVKVIKNKVAPPFRQAEFDILYGEGISWEGELIDIGVKNDIINKSGAWYSYNGA 296
NTDB id 1123 OK783 RS03845 WP 003688695.1 RLDIRRTGS....I.KKGEEVLGNETRVKVIKNKVAPPFRQAEFDILYGEGISWEGELIDIGVKNDIINKSGAWYSYNGA 296
NTDB id 1427 RS RS02760 WP 011000510.1 RLDIRRIGS....I.KKGDEVVGNETKVKVVKNKVAPPFREAIFDILYGAGVSREGEIIDLGVEAKVVEKSGAWYSYNGE 304
NTDB id 1165 A1552VC RS01565 WP 000344154.1 RLDIRRTGA....I.KEGEEVVGNETRIKVVKNKIAAPFKEANTQIMYGQGFNREGELIDLGVKHKMVEKSGAWYSYNGD 295
NTDB id 1142 GTF74 RS11550 WP 000344154.1 RLDIRRTGA....I.KEGEEVVGNETRIKVVKNKIAAPFKEANTQIMYGQGFNREGELIDLGVKHKMVEKSGAWYSYNGD 295
NTDB id 1022 ACIAD RS06390 WP 004925639.1 RLDIRRIGQ....V.KEGDEIIGSETKVKVVKNKMAPPFREAIFQILYGKGVNQLGELVDLAVQQNIVQKAGAWYSYQGN 295
NTDB id 1074 ABD1 RS10195 WP 000344167.1 RLDIRRIGQ....V.KEGDEIVGSETKVKVVKNKMAPPFKEAIFQILYGKGTNQLGELVDLAVQQDIVQKAGAWYSYQGN 295
NTDB id 1205 PSJM300 05545 AFN77183.1 RLDIRRTGA....V.KEGDEVVGSETRVKVVKNKVAPPFRQAEFQILYGKGIYRNGEIIDLGVQQGLVEKSGAWYAYKGS 295
consensus


logo
NTDB id 600 KW2 RS01765 WP 011675413.1 KIGQGAEKAKNYLKEHQDVFDEIDHKVRAAHGLLDDSEVAETEEETTASKTKAKAKKEEKAVETEEIELELED..... 387
NTDB id 269 KZH43 RS08665 WP 001085462.1 KIGQGSENAKKYLAEHPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEIEIE 387
NTDB id 228 SPD RS09265 WP 001085462.1 KIGQGSENAKKYLAEHPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEIEIE 387
NTDB id 194 SPR RS08825 WP 001085462.1 KIGQGSENAKKYLAEHPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEIEIE 387
NTDB id 159 SP RS09750 WP 001085462.1 KIGQGSENAKKYLAEHPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEIEIE 387
NTDB id 499 SM12261 RS08315 WP 078228268.1 KIGQGSENAKKYLADNPEIFDEIDHQVRVQFGLIDGEEIAES....KKDE....AAQVDS..VNEEVTLDLGDELEIEIE 383
NTDB id 527 SMSK321 RS11065 WP 001085454.1 KIGQGSENAKKYLADNPEVFAEIDHQVRVQFGLIDGEEAAES....KKDE....VAQVDS..VNEEVTLDLGDELEIEIE 383
NTDB id 408 SMU RS09530 WP 002262392.1 KIGQGSENAKKFLADNPEIFDDIDHKVRVQYGLIEEDNTEEKQSSKEK.......ETDEK..ADKNLVLELDDTIELED. 383
NTDB id 453 Spy49 1753c ACI62003.1 KIGQGSENAKRYLADHPQLFDEIDRKVRVKFGLLEESEEESAMAVASE.......E.......TDDLALDLDNGIEIED. 378
NTDB id 115 BSU 16940 NP 389576.2 RLGQGRENAKQFLKENKDIMLMIQEQIREHYGLDNNGVVQQQAEETQEEL.EFE.E..... 348
NTDB id 625 LCA RS02525 WP 011374196.1 RIGQGRENAKNYLADHEDVEDEVRLKVRAAYGISDVPEEDLPTTEDE.QI.NILPDDST.....EE..... 355
NTDB id 1313 DR RS12030 WP 010888966.1 RIGQGKEKTIAYIAERPEMEQEIRDRVMAAIRAGNAGEAPALAPAPAAPEAAEA..... 363
NTDB id 1245 Cj1673c YP 002345041.1 KLGQGRENSKAFLKENPEIADEITKAIQNSMGIEGMI.....SGSEDDE..GEE..... 343
NTDB id 1211 C694 RS00795 WP 000963128.1 KLGQGRENAKALLKEDKALADEITLKIKESIGSNEEI.....MPLPDEP..LEEME..... 347
NTDB id 1214 NCTC11637 00359 SQJ03206.1 KLGQGRENAKALLKEDKALADEITLKIKESIGSNEEI.....MPLPDEP..LEEME..... 347
NTDB id 1334 RA0C RS04870 WP 004918236.1 KLGQGRDTVKELIKDNPELAEELEAKIREKLQAK..... 343
NTDB id 201918 BA20089 RS02410 WP 015021656.1 QLGQGRENVRQFLKDNPGLTKEIEDKVKVAFGLIPAP.....SEDDKADQTDADQDSKED....DSAPVDINSTVPTAQA 383
NTDB id 1389 A4U84 RS07560 WP 021112712.1 KIGQGKNNAVKWLKENPEIADKLEQEIRNTLASNPNS.....VLKATASDSNDESDVEE.....FSEEEL..... 372
NTDB id 1130 NGFG RS03960 WP 003688695.1 KIGQGKDNVRVWLKENPEISDEIDAKIRALNGVEMHI.....TEGTQDETDGER.....PEE..... 348
NTDB id 1124 NGFG RS03960 WP 003688695.1 KIGQGKDNVRVWLKENPEISDEIDAKIRALNGVEMHI.....TEGTQDETDGER.....PEE..... 348
NTDB id 1123 OK783 RS03845 WP 003688695.1 KIGQGKDNVRVWLKENPEISDEIDAKIRALNGVEMHI.....TEGTQDETDGER.....PEE..... 348
NTDB id 1427 RS RS02760 WP 011000510.1 RIGQGRDNCREFLRENAELAREIENKVREHLGVTPMG.....AVTLA.EEVEED..... 352
NTDB id 1165 A1552VC RS01565 WP 000344154.1 KIGQGKANACKYLKENPEIAKTLDKKLREMLLNPENM.....QLIAETSSAADDVEFGA.....VPEEF..... 354
NTDB id 1142 GTF74 RS11550 WP 000344154.1 KIGQGKANACKYLKENPEIAKTLDKKLREMLLNPENM.....QLIAETSSAADDVEFGA.....VPEEF..... 354
NTDB id 1022 ACIAD RS06390 WP 004925639.1 KIGQGKNNVIRYLEENPQISTEIEAVIREQLLTKASD.....QTAA.HDETEEEPDLL.....ES..... 349
NTDB id 1074 ABD1 RS10195 WP 000344167.1 KIGQGKNNVIRYFEENNQIAEEIERNIREQLLTTGTN.....GAVQ.I.EDEEEPDLL.....LES..... 349
NTDB id 1205 PSJM300 05545 AFN77183.1 KIGQGKANAAKYLEENPEIGQEIEQQIRAKLLVTSAN.....TKATPVAEDLADADI..... 347
consensus

```
logo
                                                E
NTDB id 600 KW2 RS01765 WP 011675413.1          .   387
NTDB id 269 KZH43 RS08665 WP 001085462.1        E   388
NTDB id 228 SPD RS09265 WP 001085462.1          E   388
NTDB id 194 SPR RS08825 WP 001085462.1          E   388
NTDB id 159 SP RS09750 WP 001085462.1           E   388
NTDB id 499 SM12261 RS08315 WP 078228268.1      E   384
NTDB id 527 SMSK321 RS11065 WP 001085454.1      E   384
NTDB id 408 SMU RS09530 WP 002262392.1          .   383
NTDB id 453 Spy49 1753c ACI62003.1              .   378
NTDB id 115 BSU 16940 NP 389576.2               .   348
NTDB id 625 LCA RS02525 WP 011374196.1          .   355
NTDB id 1313 DR RS12030 WP 010888966.1          .   363
NTDB id 1245 Cj1673c YP 002345041.1             .   343
NTDB id 1211 C694 RS00795 WP 000963128.1        .   347
NTDB id 1214 NCTC11637 00359 SQJ03206.1         .   347
NTDB id 1334 RA0C RS04870 WP 004918236.1        .   343
NTDB id 201918 BA20089 RS02410 WP 015021656.1   A   384
NTDB id 1389 A4U84 RS07560 WP 021112712.1       .   372
NTDB id 1130 NGFG RS03960 WP 003688695.1        .   348
NTDB id 1124 NGFG RS03960 WP 003688695.1        .   348
NTDB id 1123 OK783 RS03845 WP 003688695.1       .   348
NTDB id 1427 RS RS02760 WP 011000510.1          .   352
NTDB id 1165 A1552VC RS01565 WP 000344154.1     .   354
NTDB id 1142 GTF74 RS11550 WP 000344154.1       .   354
NTDB id 1022 ACIAD RS06390 WP 004925639.1       .   349
NTDB id 1074 ABD1 RS10195 WP 000344167.1        .   349
NTDB id 1205 PSJM300 05545 AFN77183.1           .   347
consensus
```

X non conserved
X similar
X $\geq$ 50% conserved