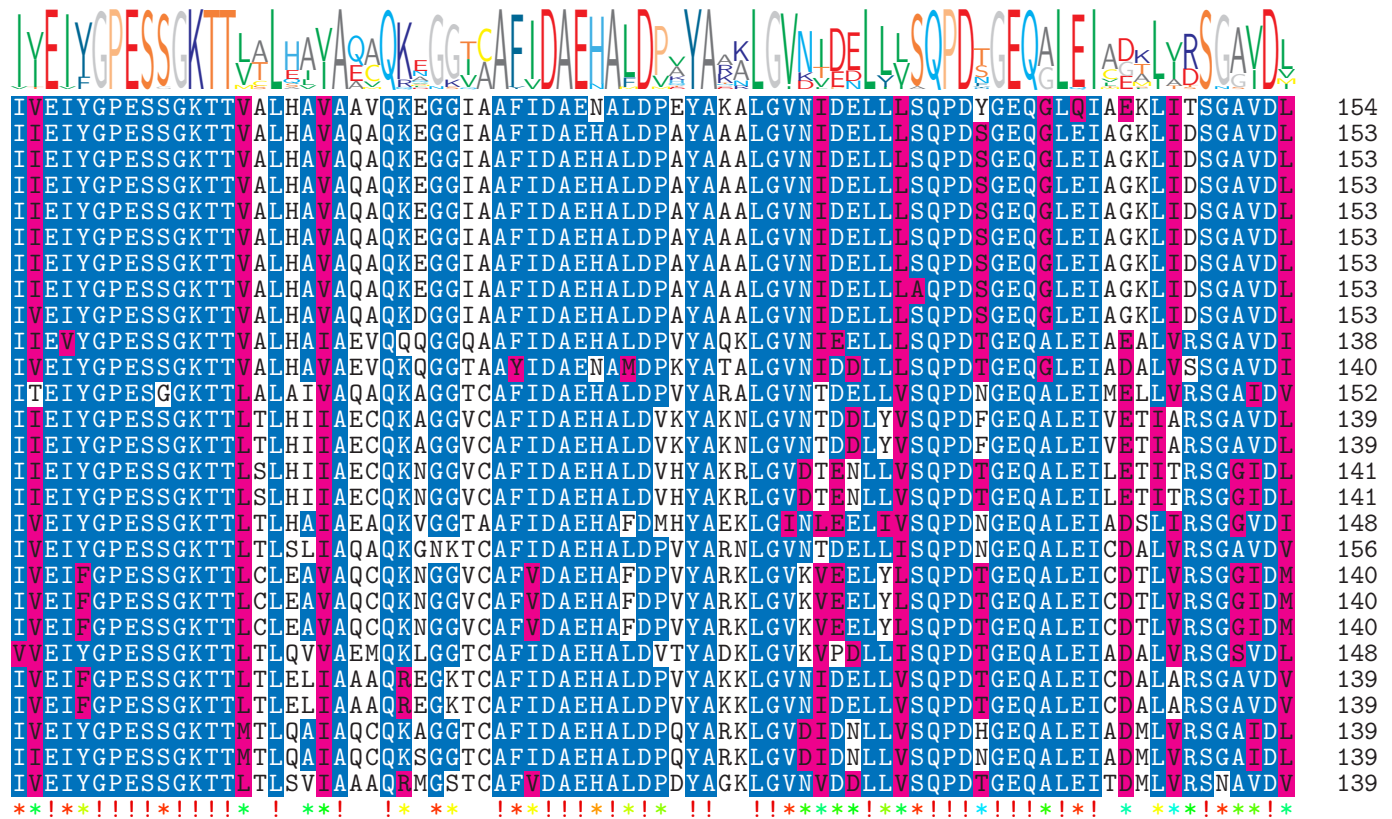


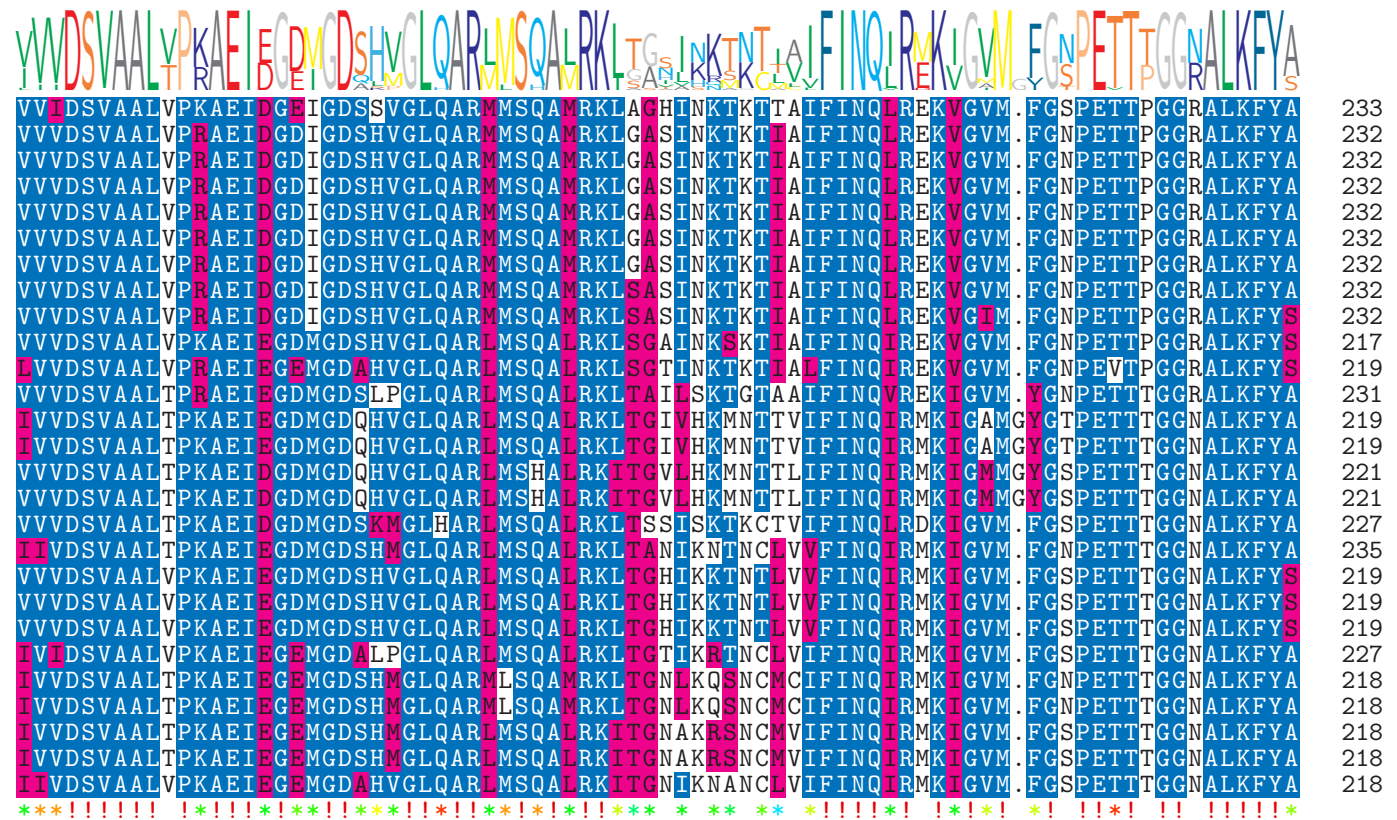
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| NTDB id 600 KW2 RS01765 WP 011675413.1      | MATKK.....KTNFDDITKKYGA          | ERDKALADALALIEKD  | FGKGSIMRLGEA       | .ANQKVSVVSSGSLALD  | I              | ALGAGGYPKGR | 74 |
| NTDB id 269 KZH43 RS08665 WP 001085462.1    | .MAKK.....PKKLEEISKKFGA          | EREKALNDALKLIEKD  | FGKGSIMRLGER       | .AEQKVQVMSSGSLALD  | I              | ALGSGGYPKGR | 73 |
| NTDB id 228 SPD RS09265 WP 001085462.1      | .MAKK.....PKKLEEISKKFGA          | EREKALNDALKLIEKD  | FGKGSIMRLGER       | .AEQKVQVMSSGSLALD  | I              | ALGSGGYPKGR | 73 |
| NTDB id 194 SPR RS08825 WP 001085462.1      | .MAKK.....PKKLEEISKKFGA          | EREKALNDALKLIEKD  | FGKGSIMRLGER       | .AEQKVQVMSSGSLALD  | I              | ALGSGGYPKGR | 73 |
| NTDB id 159 SP RS09750 WP 001085462.1       | .MAKK.....PKKLEEISKKFGA          | EREKALNDALKLIEKD  | FGKGSIMRLGER       | .AEQKVQVMSSGSLALD  | I              | ALGSGGYPKGR | 73 |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | .MAKK.....PKKLDEISKKFGA          | EREKALNDALKLIEKD  | FGKGSIMRLGER       | .AEQKVQVMSSGSLALD  | I              | ALGSGGYPKGR | 73 |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | .MAKK.....PKKLDEISKKFGA          | EREKALNDALKLIEKD  | FGKGSIMRLGER       | .AEQKVQVMSSGSLALD  | I              | ALGSGGYPKGR | 73 |
| NTDB id 453 Spy49 1753c ACI62003.1          | .MAKK.....LKKNEEITKKFG           | DERRKALDDALKNIEKD | FGKGAVMRLGER       | .AEQKVQVMSSGSLALD  | I              | ALGAGGYPKGR | 73 |
| NTDB id 408 SMU RS09530 WP 002262392.1      | .MAKR.....IKKTEEITKKFG           | DERKKALDDALKNIEKD | FGKGAVMRLGER       | .AEQKVQVMSSGSLALD  | I              | ALGAGGYPKGR | 73 |
| NTDB id 115 BSU 16940 NP 389576.2           | .....MSDRQAALDMALKQ              | IEKQFGKGSIMKLGEK  | .TDTRISTVPSGSLALD  | TALGIGGYPRGR       |                |             | 58 |
| NTDB id 625 LCA RS02525 WP 011374196.1      | .....MAKDERQAALDAALKK            | IEKNFGKGSIMRMGEK  | .VDTQVSTVSSGSLALD  | EALGVGGYPRGR       |                |             | 60 |
| NTDB id 1313 DR RS12030 WP 010888966.1      | .....MSKDATKEISAPTDAK            | ERSKATETAM        | SQIEKAFGKGSIMKLGAE | .SKLDVQVVSTGSLSLDL | ALGVGGIPRGR    |             | 72 |
| NTDB id 289730 DC055 RS08495 WP 052817457.1 | .....MDDNKRKSLDAALKS             | LDKTFGKGTILRLGDK  | .EVEQIDSIGTGSVGLDL | ALGIGGVPKGR        |                |             | 59 |
| NTDB id 1245 Cj1673c YP 002345041.1         | .....MDDNKRKSLDAALKS             | LDKTFGKGTILRLGDK  | .EVEQIDSIGTGSVGLDL | ALGIGGVPKGR        |                |             | 59 |
| NTDB id 1211 C694 RS00795 WP 000963128.1    | .....MAIDEDKQKATISLAIKQ          | IDKVFVGKGALVRLGDK | .QVEKIDSISTGSLGLDL | ALGIGGVPKGR        |                |             | 61 |
| NTDB id 1214 NCTC11637 00359 SQJ03206.1     | .....MAIDEDKQKATISLAIKQ          | IDKVFVGKGALVRLGDK | .QVEKIDAISTGSLGLDL | ALGIGGVPKGR        |                |             | 61 |
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| NTDB id 1389 A4U84 RS07560 WP 021112712.1   | .MAENKKSSKNNTV..VKQVEP           | EQKKQALEAALAQ     | IEKQFGKGSIMKLGQT   | .EQLDIESVSTGSLGLDL | ALGIGGLPMGR    |             | 76 |
| NTDB id 1130 NGFG RS03960 WP 003688695.1    | .....MSDDKSKALAAALAQ             | IEKSFGKGAIMKMDGSQ | QEENLEVISTGSLGLDL  | ALGVGGLPRGR        |                |             | 60 |
| NTDB id 1124 NGFG RS03960 WP 003688695.1    | .....MSDDKSKALAAALAQ             | IEKSFGKGAIMKMDGSQ | QEENLEVISTGSLGLDL  | ALGVGGLPRGR        |                |             | 60 |
| NTDB id 1123 OK783 RS03845 WP 003688695.1   | .....MSDDKSKALAAALAQ             | IEKSFGKGAIMKMDGSQ | QEENLEVISTGSLGLDL  | ALGVGGLPRGR        |                |             | 60 |
| NTDB id 1427 RS RS02760 WP 011000510.1      | .MEDG.....K..KAASMSAEKQKALAAALAQ | IEKQFGKGSIMKMGDA  | .EVEPVQVVSTGSLGLD  | VALGVGGLPRGR       |                |             | 68 |
| NTDB id 1165 A1552VC RS01565 WP 000344154.1 | .....MDENKQKALAAALGQ             | IEKQFGKGSIMRLGDN  | .RAMDVETISTGSLSLD  | I                  | ALGAGGLPMGR    |             | 59 |
| NTDB id 1142 GTF74 RS11550 WP 000344154.1   | .....MDENKQKALAAALGQ             | IEKQFGKGSIMRLGDN  | .RAMDVETISTGSLSLD  | I                  | ALGAGGLPMGR    |             | 59 |
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| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | .....MDENKSKALQAALSQ             | IEKQFGKNTVMRLGDN  | .TVQAVEAVSTGSLTLD  | I                  | ALGIGGLPKGR    |             | 59 |
| NTDB id 1205 PSJM300 05545 AFN77183.1       | .....MDENKKRALAAALGQ             | IEKQFGKGAVMRMGDH  | .DRQAIPSISTGSLGLD  | I                  | ALGIGGLPKGR    |             | 59 |
| consensus                                   | *** ** *                         | *** **!           | ***!*****          | *                  | *****!*****!!! | !!!*!!!     |    |

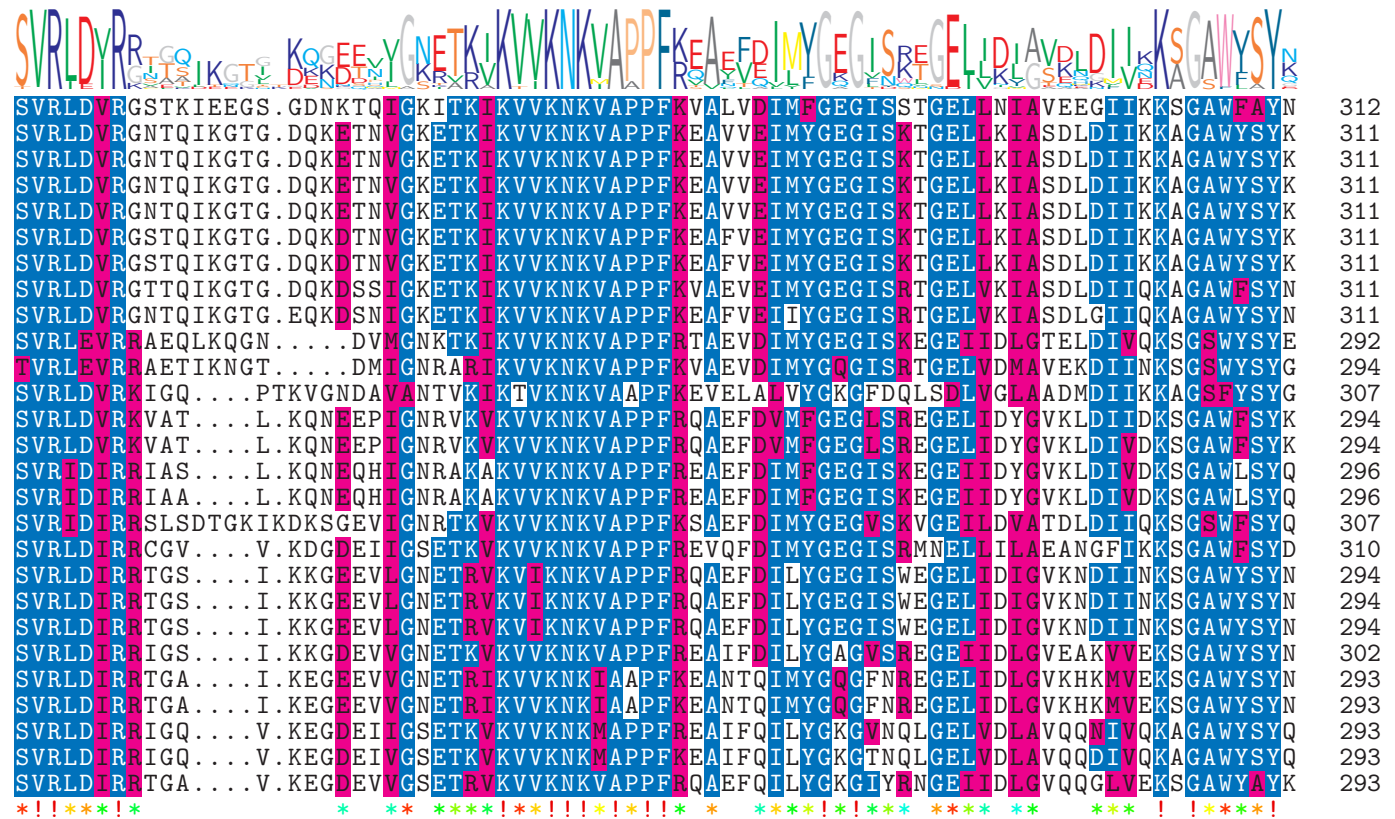
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consensus



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| consensus                                   |     |     |     |

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