

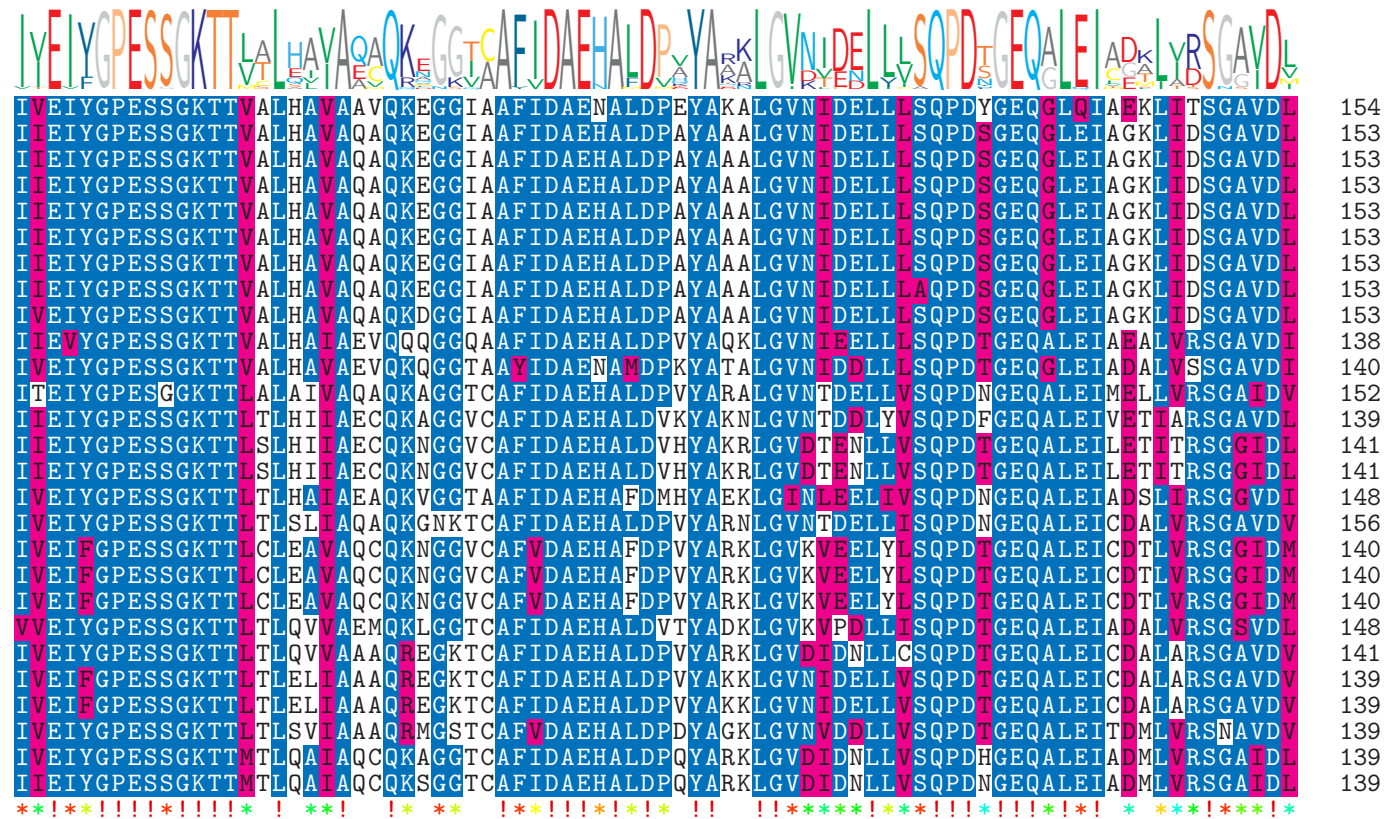
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| NTDB id 600 KW2 RS01765 WP 011675413.1      | MATKKK....TNFDDITKKYGA | ERDKALADALALIEKD     | FGKGSIMRLGEA      | .ANQKVSV              | VSSGSLALD           | I    | ALGAGGY        | PKGR | 74    |
| NTDB id 269 KZH43 RS08665 WP 001085462.1    | .MAKKP....KKLEEISKKFGA | EREKALNDALKLIEKD     | FGKGSIMRLGER      | .AEQKVQV              | MSSGSLALD           | I    | ALGSGGY        | PKGR | 73    |
| NTDB id 228 SPD RS09265 WP 001085462.1      | .MAKKP....KKLEEISKKFGA | EREKALNDALKLIEKD     | FGKGSIMRLGER      | .AEQKVQV              | MSSGSLALD           | I    | ALGSGGY        | PKGR | 73    |
| NTDB id 194 SPR RS08825 WP 001085462.1      | .MAKKP....KKLEEISKKFGA | EREKALNDALKLIEKD     | FGKGSIMRLGER      | .AEQKVQV              | MSSGSLALD           | I    | ALGSGGY        | PKGR | 73    |
| NTDB id 159 SP RS09750 WP 001085462.1       | .MAKKP....KKLEEISKKFGA | EREKALNDALKLIEKD     | FGKGSIMRLGER      | .AEQKVQV              | MSSGSLALD           | I    | ALGSGGY        | PKGR | 73    |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | .MAKKP....KKLDEISKKFGA | EREKALNDALKLIEKD     | FGKGSIMRLGER      | .AEQKVQV              | MSSGSLALD           | I    | ALGSGGY        | PKGR | 73    |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | .MAKKP....KKLDEISKKFGA | EREKALNDALKLIEKD     | FGKGSIMRLGER      | .AEQKVQV              | MSSGSLALD           | I    | ALGSGGY        | PKGR | 73    |
| NTDB id 453 Spy49 1753c ACI62003.1          | .MAKKL....KKNEEITKKFG  | DERRKALDDALKNIEKD    | FGKGAVMRLGER      | .AEQKVQV              | MSSGSLALD           | I    | ALGAGGY        | PKGR | 73    |
| NTDB id 408 SMU RS09530 WP 002262392.1      | .MAKRI....KKTEEITKKFG  | DERKKALDDALKNIEKD    | FGKGAVMRLGER      | .AEQKVQV              | MSSGSLALD           | I    | ALGAGGY        | PKGR | 73    |
| NTDB id 115 BSU 16940 NP 389576.2           | .....MSDRQAALDMALK     | QIEKQFGKGSIMKLGEK    | .TDTRIST          | VPSGSLALD             | TALGIGGY            | PRGR |                |      | 58    |
| NTDB id 625 LCA RS02525 WP 011374196.1      | .....MAKDERQAALDA      | ALKKIEKNFGKGSIMRMGEK | .VDTQVST          | VSSGSLALDEALGVGGY     | PRGR                |      |                |      | 60    |
| NTDB id 1313 DR RS12030 WP 010888966.1      | .....MSKDATKEISAPTD    | AKERSKATETAMSQIEKA   | FGKGSIMKLGAE      | .SKLDVQVV             | STGSLSLDLALGVGGI    | PRGR |                |      | 72    |
| NTDB id 1245 Cj1673c YP 002345041.1         | .....MDDNKRKSLDA       | ALKSLDKTFGKGTILRLGDK | .EVEQIDS          | IGTGSVGLDLALGIGGV     | PKGR                |      |                |      | 59    |
| NTDB id 1214 NCTC11637 00359 SQJ03206.1     | .....MAIDEDKQKAI       | SLAIKQIDKVF          | FGKGALVRLGDK      | .QVEKIDA              | ISTGSLGLDLALGIGGV   | PKGR |                |      | 61    |
| NTDB id 1211 C694 RS00795 WP 000963128.1    | .....MAIDEDKQKAI       | SLAIKQIDKVF          | FGKGALVRLGDK      | .QVEKIDS              | ISTGSLGLDLALGIGGV   | PKGR |                |      | 61    |
| NTDB id 1334 RAOC RS04870 WP 004918236.1    | .....MAKT..ETTS        | PNDDKKKALAAVLEK      | LDKTYGKGTVMKLG    | DGTVDHNI              | EVIPSGSLGLDLALGVGGY | PKGR |                |      | 68    |
| NTDB id 1389 A4U84 RS07560 WP 021112712.1   | .MAENKKSSKNNTV..VKQVE  | PEQKKQALEAALA        | QIEKQFGKGSIMKLGQT | .EQLDIES              | VSTGSLGLDLALGIGGL   | PMGR |                |      | 76    |
| NTDB id 1130 NGFG RS03960 WP 003688695.1    | .....MSDDKSKALAAALA    | QIEKSFGKGAIMKMDGSQ   | QEE               | NLEVISTGSLGLDLALGVGGL | PRGR                |      |                |      | 60    |
| NTDB id 1124 NGFG RS03960 WP 003688695.1    | .....MSDDKSKALAAALA    | QIEKSFGKGAIMKMDGSQ   | QEE               | NLEVISTGSLGLDLALGVGGL | PRGR                |      |                |      | 60    |
| NTDB id 1123 OK783 RS03845 WP 003688695.1   | .....MSDDKSKALAAALA    | QIEKSFGKGAIMKMDGSQ   | QEE               | NLEVISTGSLGLDLALGVGGL | PRGR                |      |                |      | 60    |
| NTDB id 1427 RS RS02760 WP 011000510.1      | .MED.....GK..KAAS      | MSAEKQKALAAALA       | QIEKQFGKGSIMKMDA  | .EVEPVQV              | STGSLGLDVALGVGGL    | PRGR |                |      | 68    |
| NTDB id 415701 GVI63 RS17715 WP 015571667.1 | .....MAIDENKQKALAAAL   | GQIEKQFGKGSIMRLGED   | .RSMDVET          | ISTGSLSLDIALGAGGL     | PMGR                |      |                |      | 61    |
| NTDB id 1165 A1552VC RS01565 WP 000344154.1 | .....MDENKQKALAAAL     | GQIEKQFGKGSIMRLGDN   | .RAMDVET          | ISTGSLSLDIALGAGGL     | PMGR                |      |                |      | 59    |
| NTDB id 1142 GTF74 RS11550 WP 000344154.1   | .....MDENKQKALAAAL     | GQIEKQFGKGSIMRLGDN   | .RAMDVET          | ISTGSLSLDIALGAGGL     | PMGR                |      |                |      | 59    |
| NTDB id 1205 PSJM300 05545 AFN77183.1       | .....MDENKKRALAAAL     | GQIEKQFGKGAVMRMGDH   | .DRQAIPS          | ISTGSLGLDIALGIGGL     | PKGR                |      |                |      | 59    |
| NTDB id 1022 ACIAD RS06390 WP 004925639.1   | .....MDDNKSKALQAALS    | QIEKQFGKNTVMRLGDN    | .TVQAVEA          | VSTGSLTLDIALGIGGL     | PKGR                |      |                |      | 59    |
| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | .....MDENKSKALQAALS    | QIEKQFGKNTVMRLGDN    | .TVQAVEA          | VSTGSLTLDIALGIGGL     | PKGR                |      |                |      | 59    |
| consensus                                   | ***                    | ***                  | **                | ***!                  | *!!*****            | *    | ***!!*!!*!!*!! | !!   | !!*!! |

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NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
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NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
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NTDB id 115 BSU 16940 NP 389576.2
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NTDB id 1313 DR RS12030 WP 010888966.1
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consensus

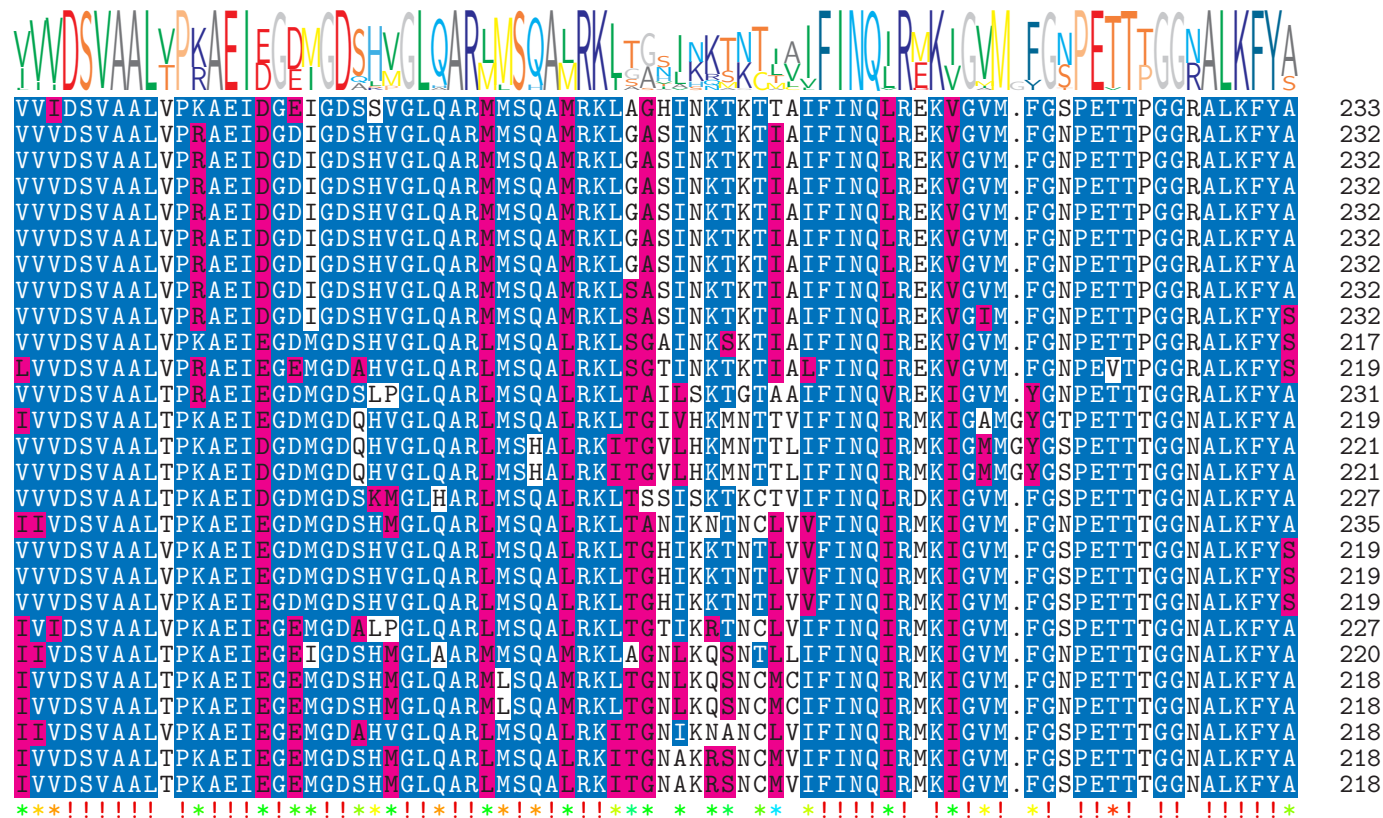
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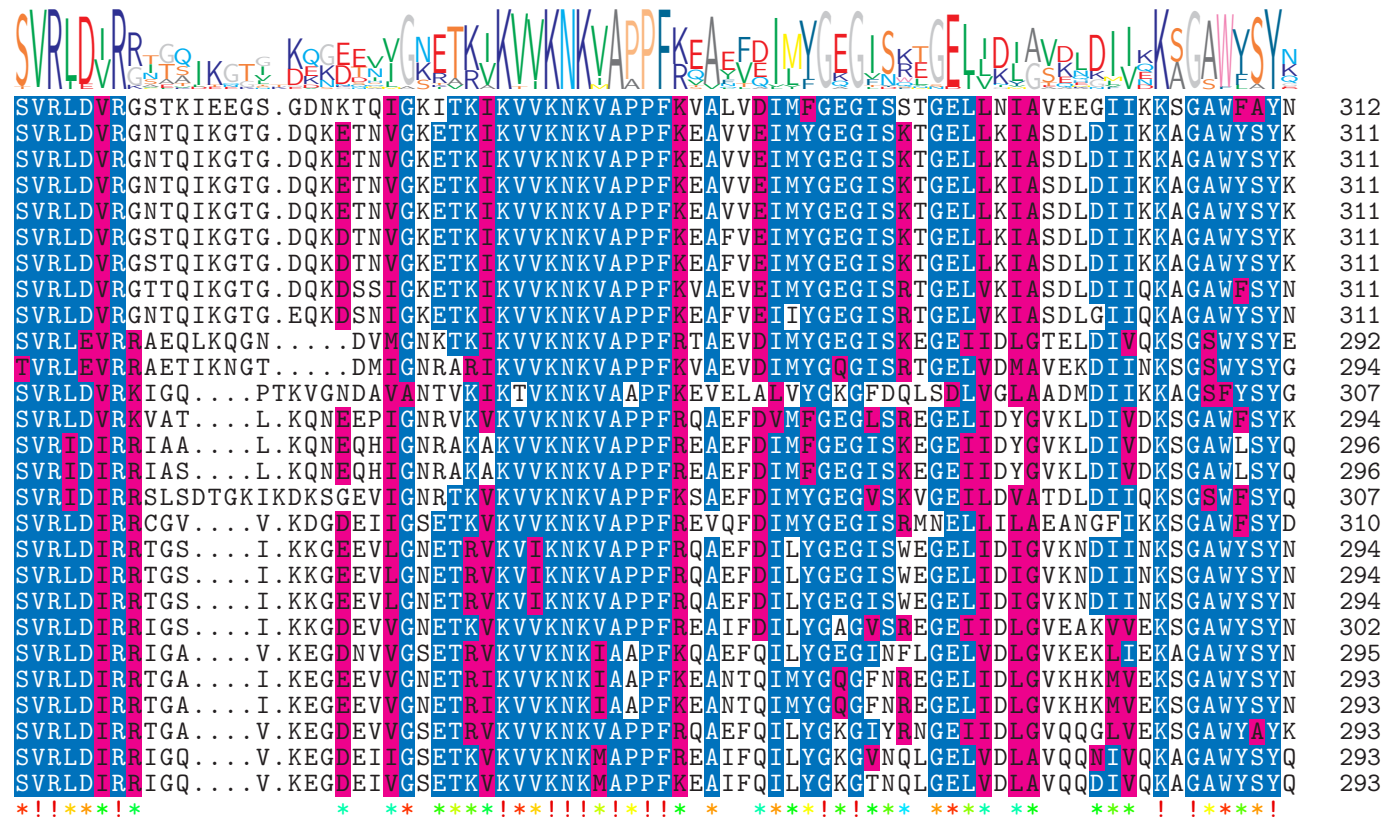
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consensus

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consensus

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