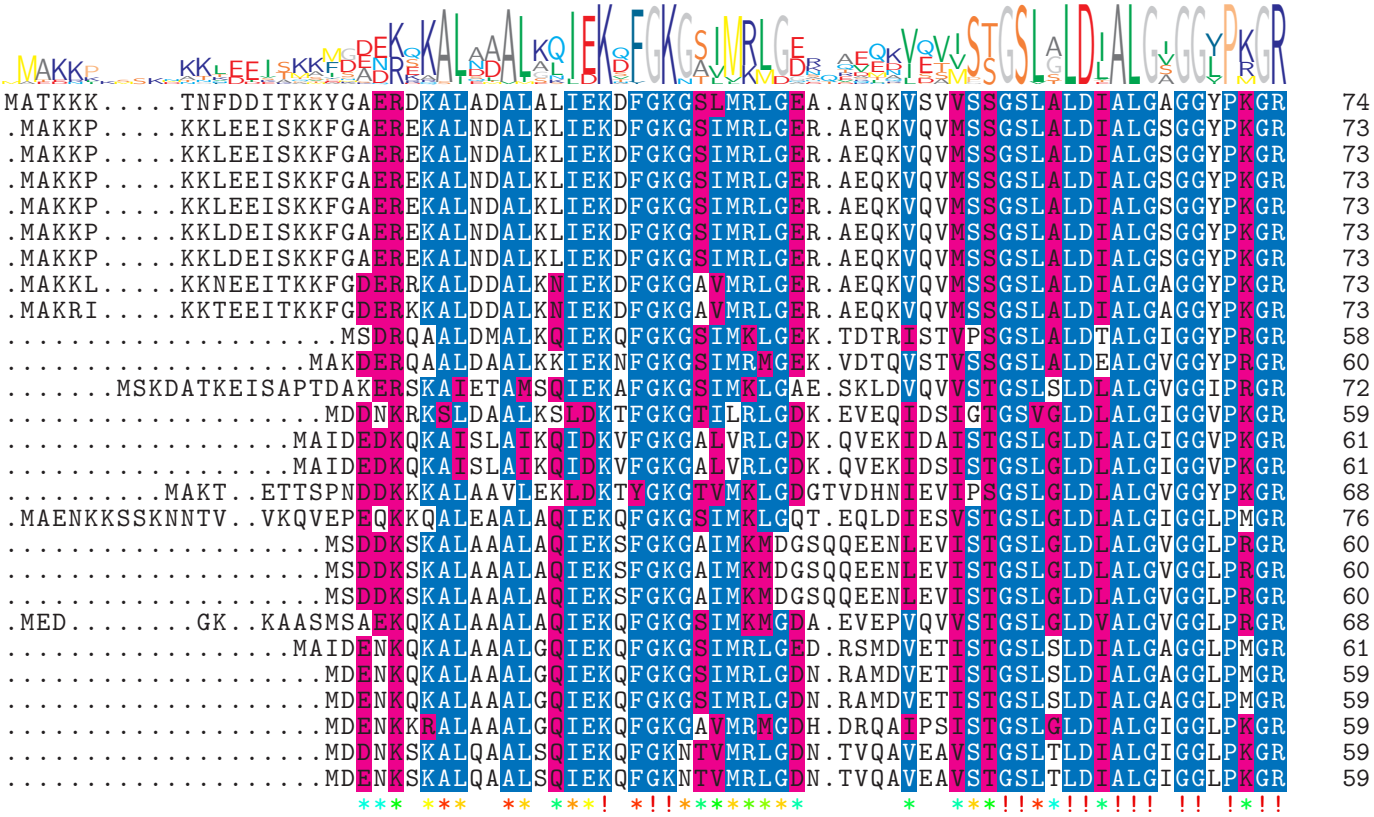


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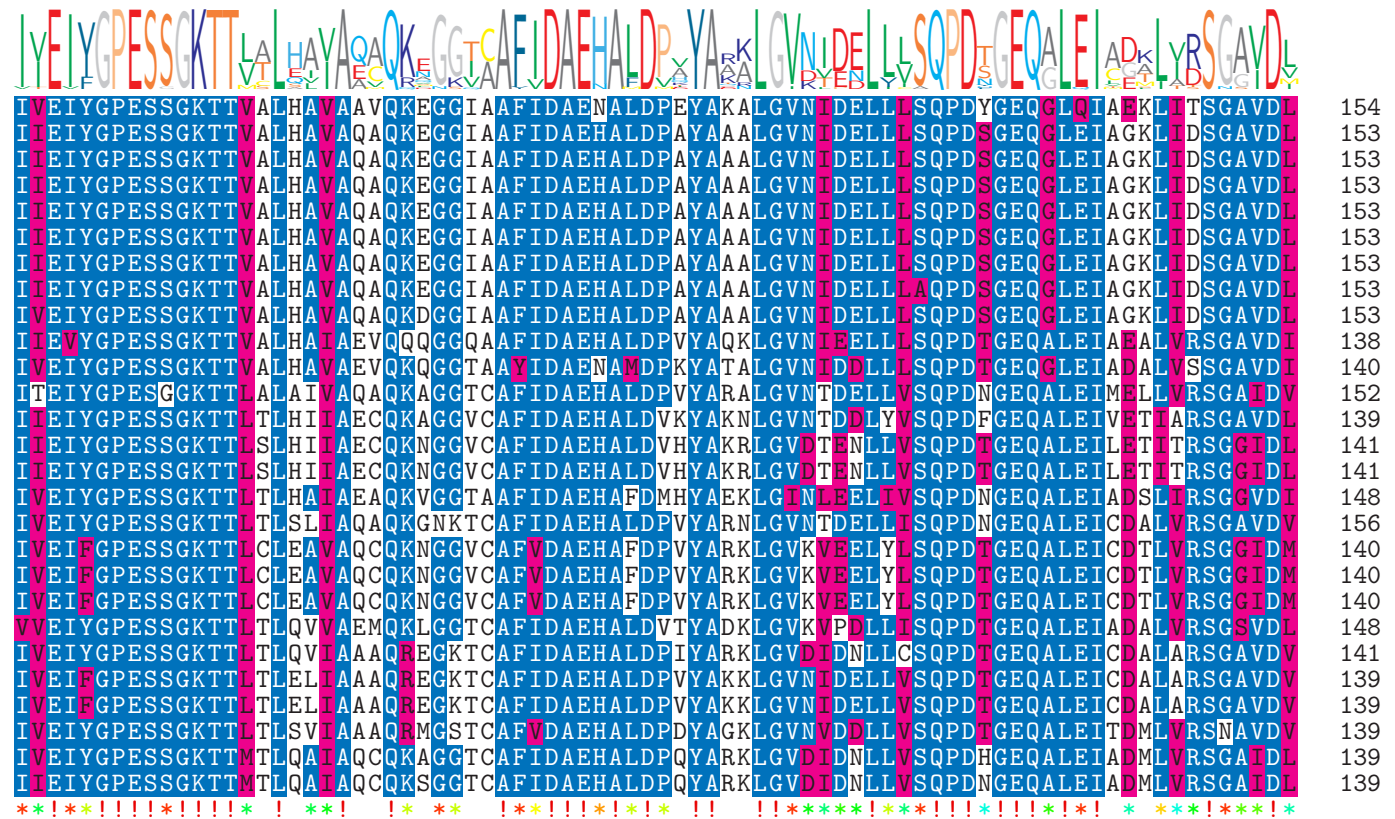
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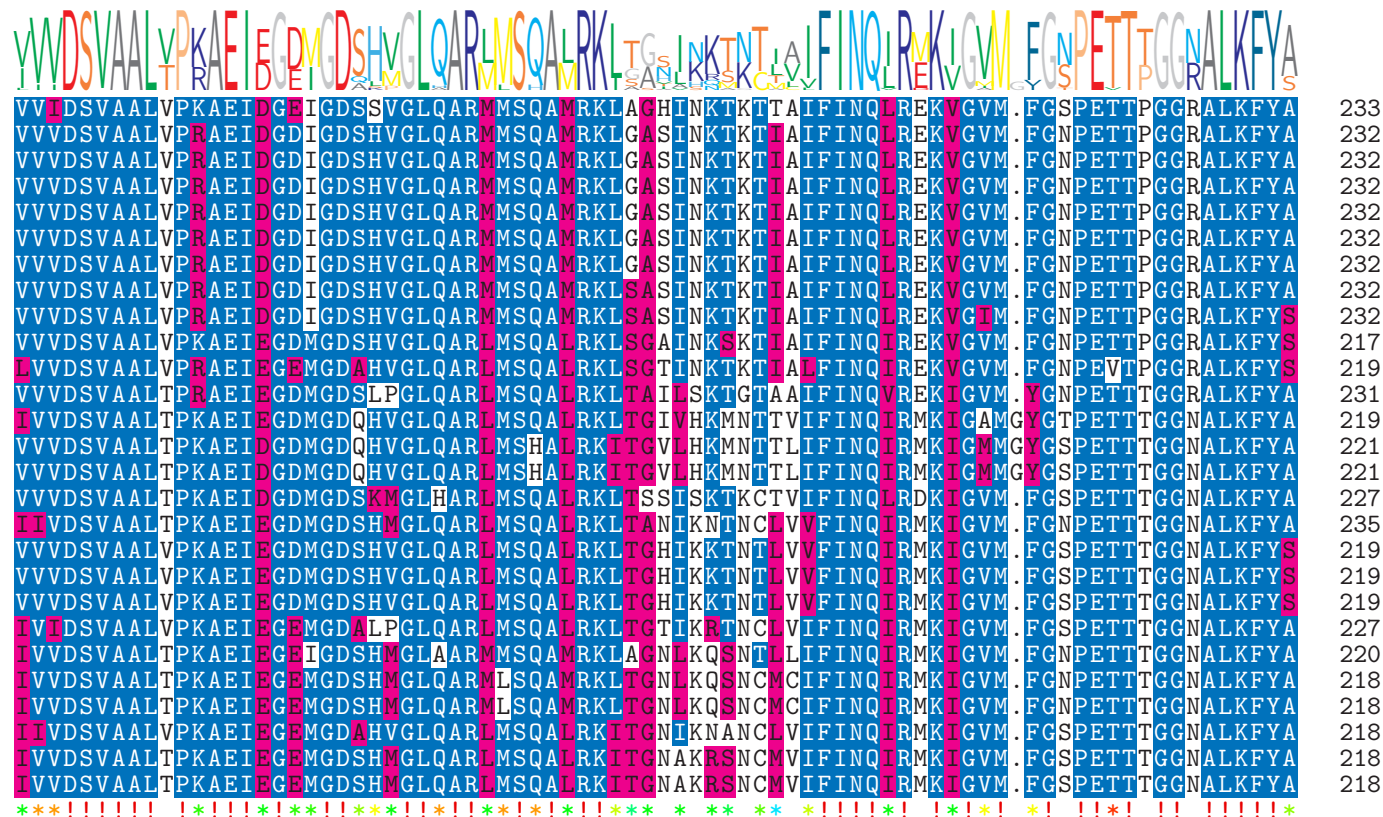
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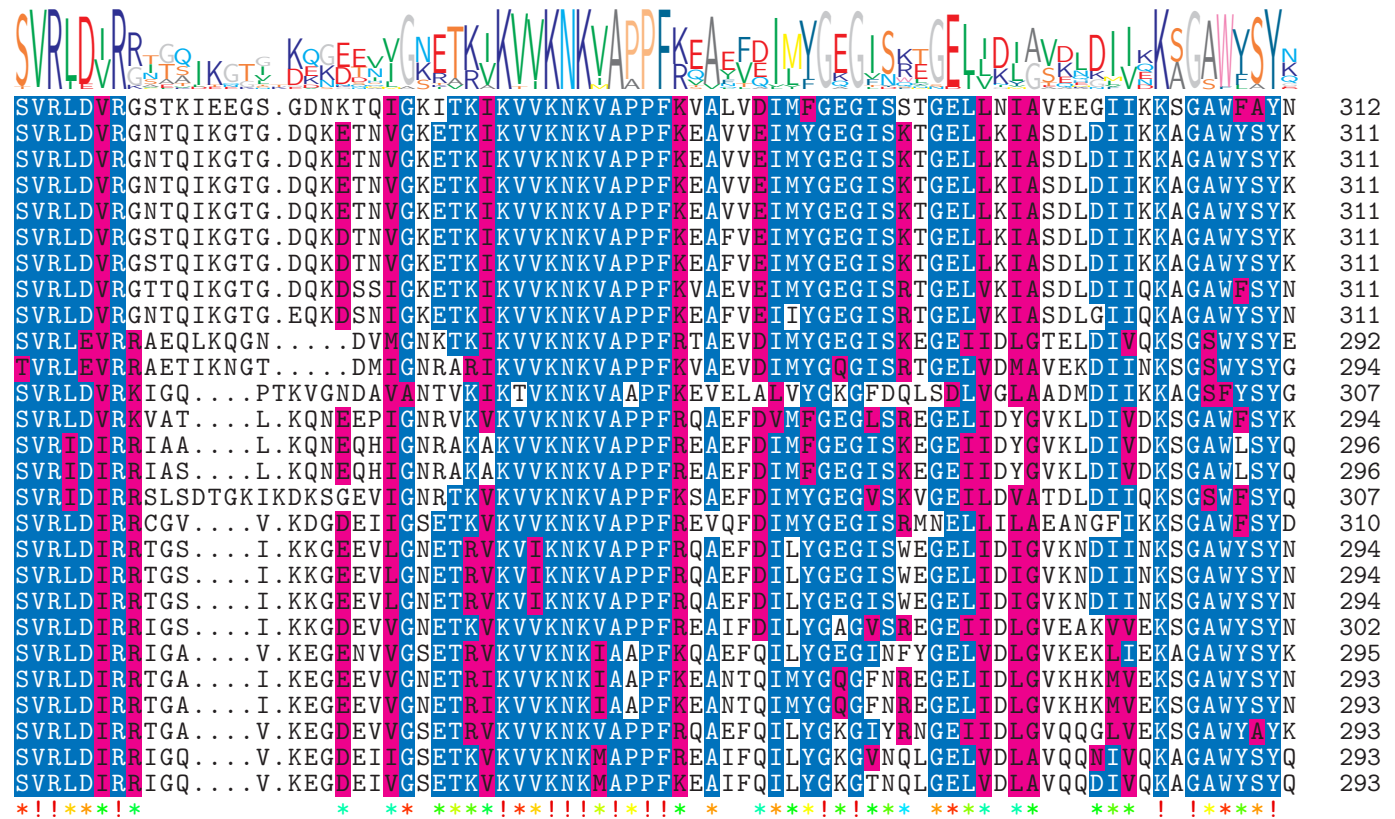
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consensus

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| NTDB id 600 KW2 RS01765 WP 011675413.1      | DEKIGQGA   | EKAKNYLKEHQDV         | DEIDHKVRAAHG     | LDDSEVAETEEETT               | ASKTKAKAKKEE    | EKAVETEEIELELED   | ....              | 387   |     |
| NTDB id 269 KZH43 RS08665 WP 001085462.1    | DEKIGQGS   | ENAKKYLAEHPEIF        | DEIDKQVRSKFGL    | IDGEEVSEQDTENKKDE            | ....PKKEEA      | .VNEEVPLDLGDELEIE |                   | 385   |     |
| NTDB id 228 SPD RS09265 WP 001085462.1      | DEKIGQGS   | ENAKKYLAEHPEIF        | DEIDKQVRSKFGL    | IDGEEVSEQDTENKKDE            | ....PKKEEA      | .VNEEVPLDLGDELEIE |                   | 385   |     |
| NTDB id 194 SPR RS08825 WP 001085462.1      | DEKIGQGS   | ENAKKYLAEHPEIF        | DEIDKQVRSKFGL    | IDGEEVSEQDTENKKDE            | ....PKKEEA      | .VNEEVPLDLGDELEIE |                   | 385   |     |
| NTDB id 159 SP RS09750 WP 001085462.1       | DEKIGQGS   | ENAKKYLAEHPEIF        | DEIDKQVRSKFGL    | IDGEEVSEQDTENKKDE            | ....PKKEEA      | .VNEEVPLDLGDELEIE |                   | 385   |     |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | DEKIGQGS   | ENAKKYLADNPEIF        | DEIDHQVRVQFGL    | IDGEEIAES                    | ....KKDE        | ....AAQVDS        | .VNEEVTLDLGDELEIE | 381   |     |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | DEKIGQGS   | ENAKKYLADNPEVFAE      | IDHQVRVQFGL      | IDGEEAAES                    | ....KKDE        | ....VAQVDS        | .VNEEVTLDLGDELEIE | 381   |     |
| NTDB id 453 Spy49 1753c ACI62003.1          | GEKIGQGS   | ENAKRYLADHPQLF        | DEIDRKVRVKFGL    | LEESEEEESAMAVASE             | .....E          | .....TDDLALDLN    | GIEIE             | 377   |     |
| NTDB id 408 SMU RS09530 WP 002262392.1      | GEKIGQGS   | ENAKKFLADNPEIF        | DDIDHKVRVQYGL    | IEEDNTEEEKQSSKEK             | .....ETDE       | K..ADKNLVLEL      | DDTIELE           | 382   |     |
| NTDB id 115 BSU 16940 NP 389576.2           | EERLGGQREN | AKQFLKENKDIMLMIQEQ    | IREHYGL          | DNNGVVQQAEETQEEL             | EFE             | E                 | .....             | 348   |     |
| NTDB id 625 LCA RS02525 WP 011374196.1      | SERIGQGS   | ENAKNYLADHEDVE        | DEVRLKVRVAA      | YGISDVPEEDLPTTEDE            | .QI.NILPDDST    | .....EE           | .....             | 355   |     |
| NTDB id 1313 DR RS12030 WP 010888966.1      | DERIGQGS   | KEKTIA                | YIAERPEMEQEIR    | DRVMAAIRAGNAGEAPALAPAPAAPEAA | ....EA          | .....             | .....             | 363   |     |
| NTDB id 1245 Cj1673c YP 002345041.1         | DKKLGGQGS  | ENAKFLKENPEIA         | DEITKAIQNSMG     | TEGM                         | ....ISGSEDDEG   | .....EE           | .....             | 343   |     |
| NTDB id 1214 NCTC11637 00359 SQJ03206.1     | DKKLGGQGS  | ENAKALLKEDKALADEITLK  | IKESIGSNEE       | ....IMPLPDEPL                | .....EEME       | .....             | .....             | 347   |     |
| NTDB id 1211 C694 RS00795 WP 000963128.1    | DKKLGGQGS  | ENAKALLKEDKALADEITLK  | IKESIGSNEE       | ....IMPLPDEPL                | .....EEME       | .....             | .....             | 347   |     |
| NTDB id 1334 RAOC RS04870 WP 004918236.1    | DTKLGGQR   | DTVKELIKDNPELA        | ELEAKIREKLQAK    | .....                        | .....           | .....             | .....             | 343   |     |
| NTDB id 1389 A4U84 RS07560 WP 021112712.1   | GTKIGQGS   | KNNAVKWLKENPEIA       | DKLEQEIRNTLASNPN | ....SVLKATASDSN              | ...DES          | DVEEFSEEEL        | .....             | 372   |     |
| NTDB id 1130 NGFG RS03960 WP 003688695.1    | GAKIGQGS   | KDNVRVWLKENPEIS       | DEIDAKIRALNGVEMH | ....ITEG                     | ....T           | ...QDET           | DGERPEE           | 348   |     |
| NTDB id 1124 NGFG RS03960 WP 003688695.1    | GAKIGQGS   | KDNVRVWLKENPEIS       | DEIDAKIRALNGVEMH | ....ITEG                     | ....T           | ...QDET           | DGERPEE           | 348   |     |
| NTDB id 1123 OK783 RS03845 WP 003688695.1   | GAKIGQGS   | KDNVRVWLKENPEIS       | DEIDAKIRALNGVEMH | ....ITEG                     | ....T           | ...QDET           | DGERPEE           | 348   |     |
| NTDB id 1427 RS RS02760 WP 011000510.1      | GERIGQGR   | DNCREFLRENAELAREIENK  | VREHLGVTPM       | ....GAVTLAEE                 | .VE...ED        | .....             | .....             | 352   |     |
| NTDB id 93974 QUE34 RS16515 WP 000963143.1  | GEKIGQGS   | KANATAWLKDNPETAKE     | EIEKKVRELLLSNP   | N....STPDFSV                 | ...D...DSEG     | VAETNEDF          | .....             | 353   |     |
| NTDB id 1165 A1552VC RS01565 WP 000344154.1 | GDKIGQGS   | KANACKYLLKENPEIAKTLD  | DKKLREMLLNPN     | ....MQLIAETSSAA              | ...DDV          | EF                | GAVPEEF           | 354   |     |
| NTDB id 1142 GTF74 RS11550 WP 000344154.1   | GDKIGQGS   | KANACKYLLKENPEIAKTLD  | DKKLREMLLNPN     | ....MQLIAETSSAA              | ...DDV          | EF                | GAVPEEF           | 354   |     |
| NTDB id 1205 PSJM300 05545 AFN77183.1       | GSKIGQGS   | KANAACKYLEENPEIG      | QIEEQIRAKLL      | VTSA                         | ....NTKATPVAEDL | ...ADAD           | I                 | 347   |     |
| NTDB id 1022 ACIAD RS06390 WP 004925639.1   | GNKIGQGS   | KNNVIRYLEENPQISTEIEAV | IREQLLT          | TKAS                         | ....DQTAA       | .HDETE            | ...EED            | LLLES | 349 |
| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | GNKIGQGS   | KNNVIRYFEENNQIAEEIERN | IREQLLT          | TGT                          | ....NGAVQ       | .I.EDE            | ...EED            | LLLES | 349 |
| consensus                                   |            | ***!!!*****           | **               | *****                        | *****           | **                | *                 | *     |     |

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 ≥ 50% conserved