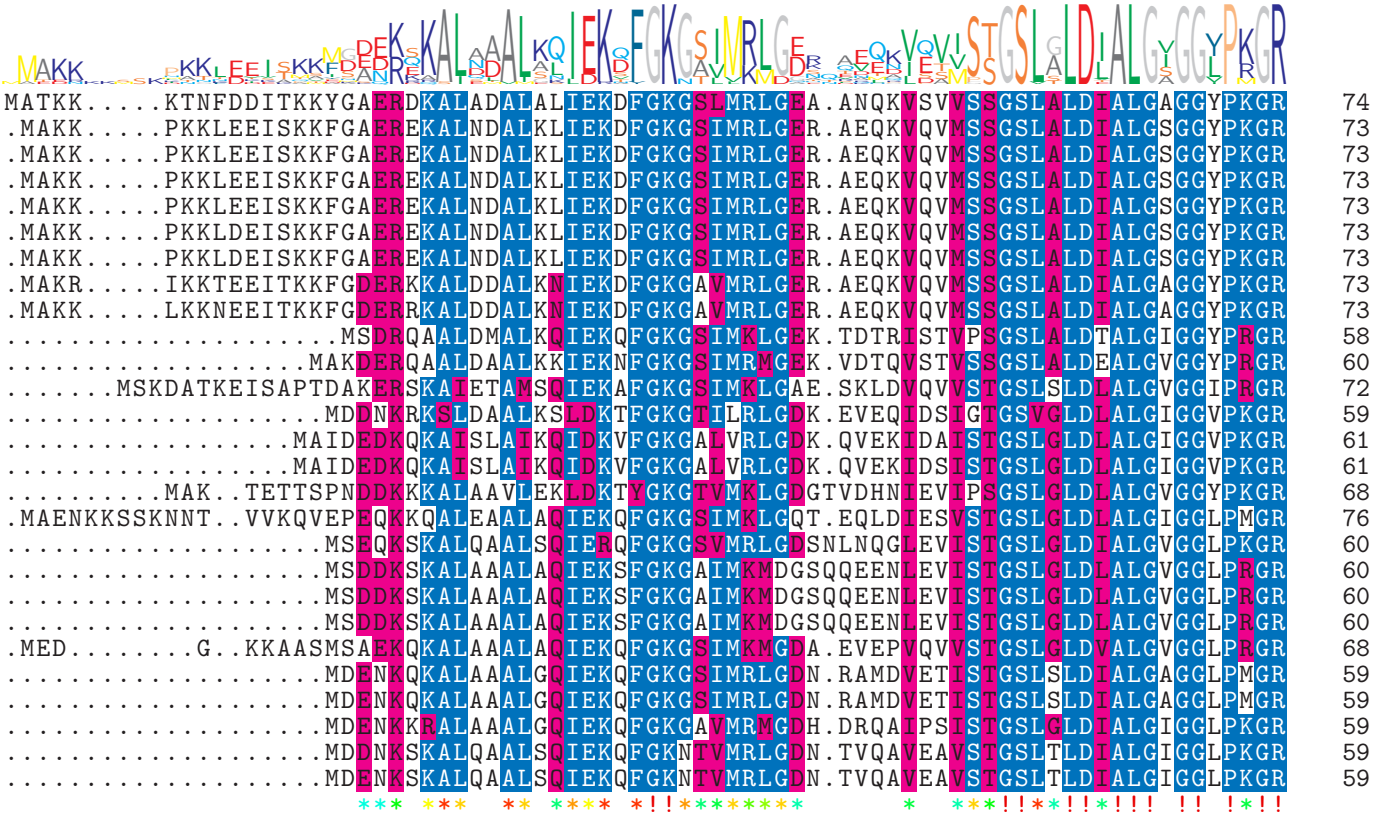


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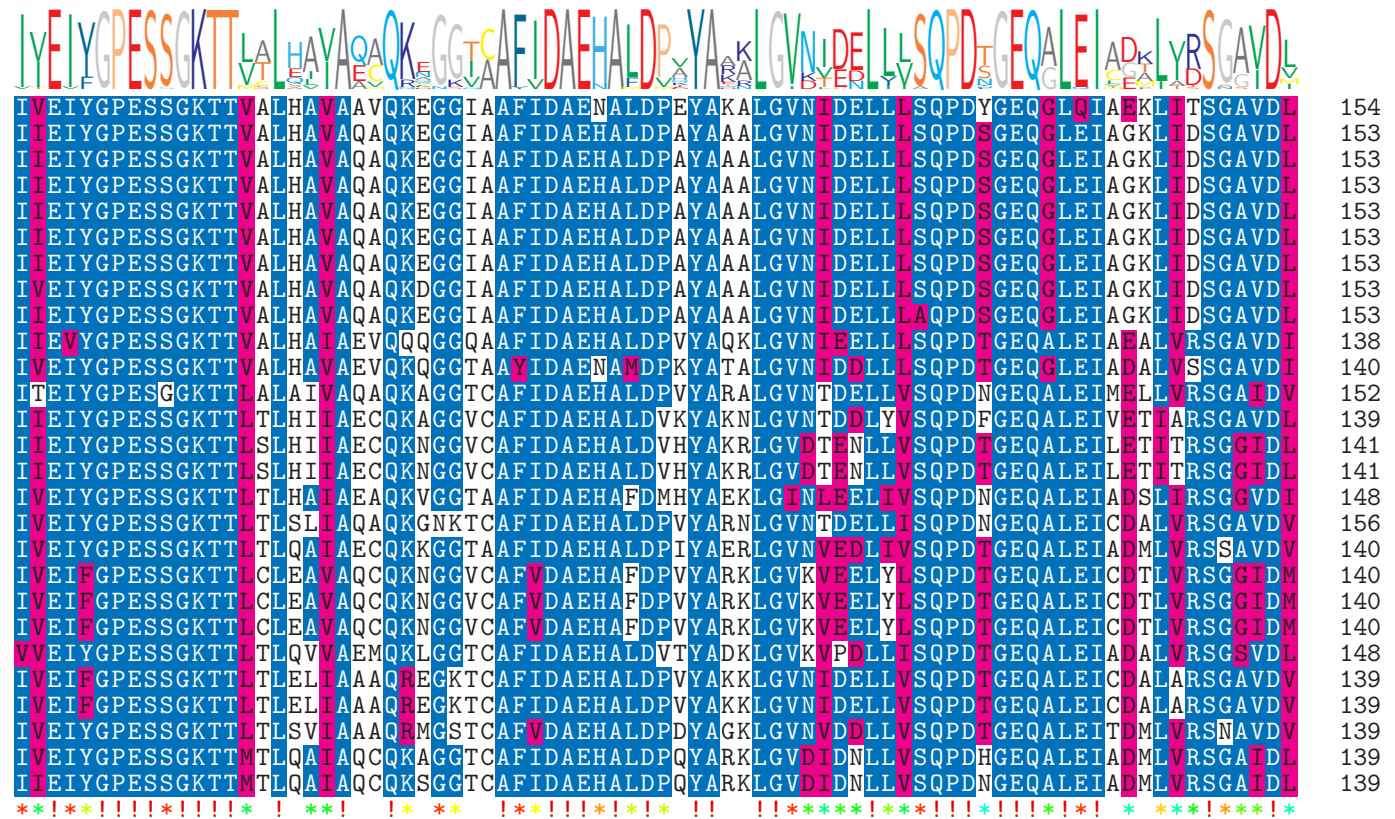
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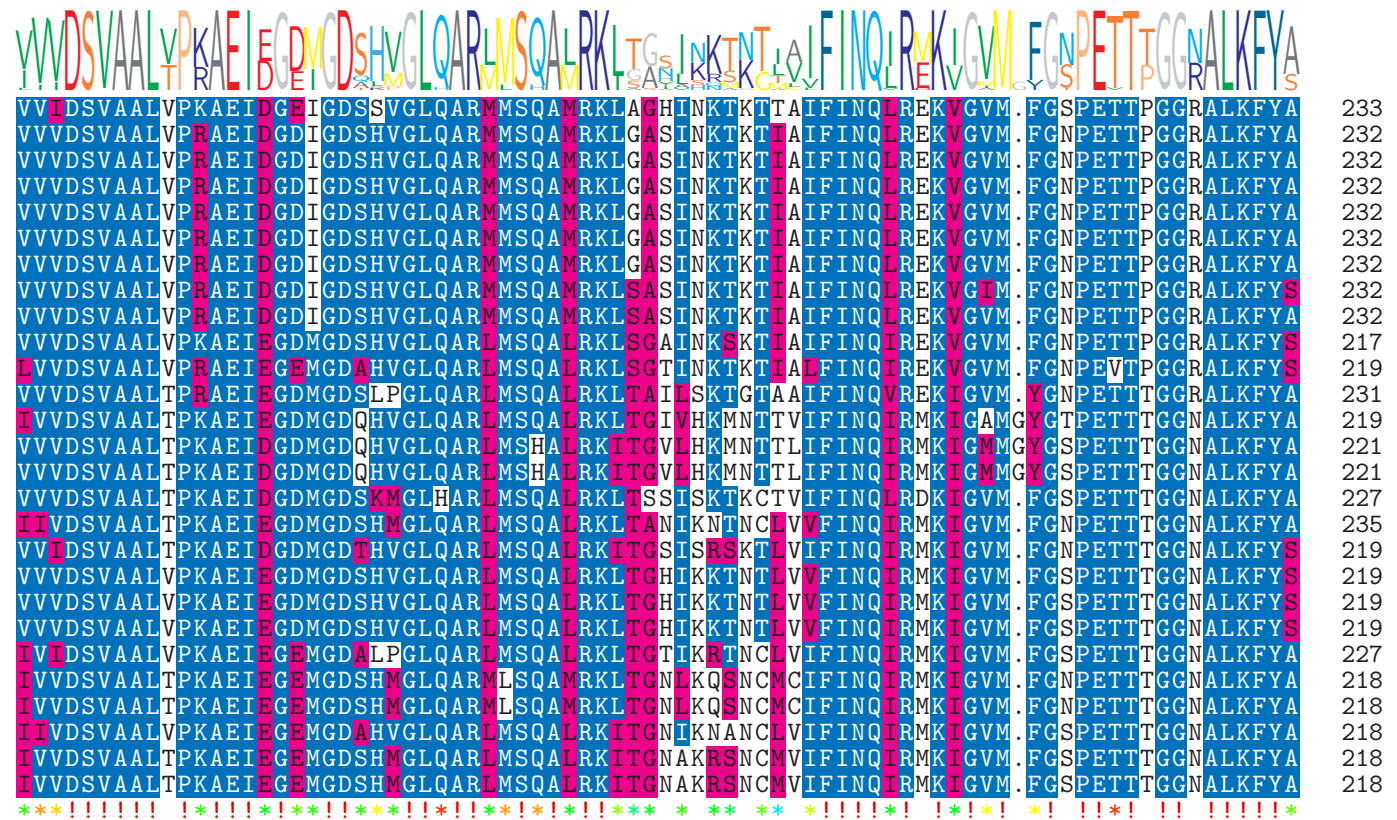
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consensus

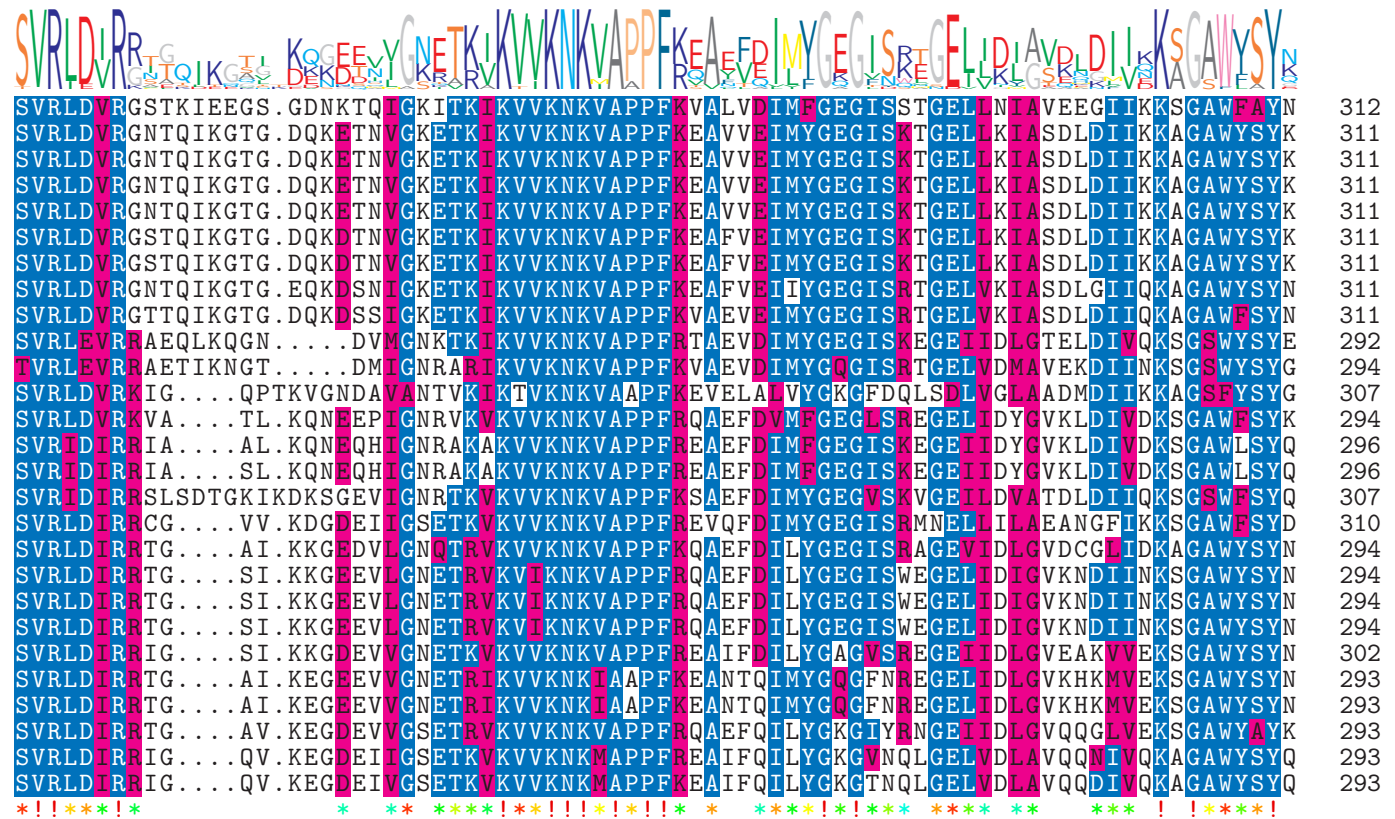
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|                                             |                               |                  |                  |                    |                                |     |
|---------------------------------------------|-------------------------------|------------------|------------------|--------------------|--------------------------------|-----|
| NTDB id 600 KW2 RS01765 WP 011675413.1      | DEKIGQGA                      | EKAKNYLKEHQDV    | DEIDHKVRAAHG     | LDDSEVAETEEETTA    | .SKTKAKAKKEEKAVETEEIELELED.... | 387 |
| NTDB id 269 KZH43 RS08665 WP 001085462.1    | DEKIGQGS                      | ENAKKYLAEHPEIF   | DEIDKQVRSKFGL    | IDGEEVSEQDTENKK    | .DE....PKKEEA..VNEEVPLDLGDELEI | 384 |
| NTDB id 228 SPD RS09265 WP 001085462.1      | DEKIGQGS                      | ENAKKYLAEHPEIF   | DEIDKQVRSKFGL    | IDGEEVSEQDTENKK    | .DE....PKKEEA..VNEEVPLDLGDELEI | 384 |
| NTDB id 194 SPR RS08825 WP 001085462.1      | DEKIGQGS                      | ENAKKYLAEHPEIF   | DEIDKQVRSKFGL    | IDGEEVSEQDTENKK    | .DE....PKKEEA..VNEEVPLDLGDELEI | 384 |
| NTDB id 159 SP RS09750 WP 001085462.1       | DEKIGQGS                      | ENAKKYLAEHPEIF   | DEIDKQVRSKFGL    | IDGEEVSEQDTENKK    | .DE....PKKEEA..VNEEVPLDLGDELEI | 384 |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | DEKIGQGS                      | ENAKKYLADNPEVFAE | IDHQVRVQFGL      | IDGEEAAE....SKK    | .DE....VAQVDS..VNEEVTLDLGDELEI | 380 |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | DEKIGQGS                      | ENAKKYLADNPEIF   | DEIDHQVRVQFGL    | IDGEEIAE....SKK    | .DE....AAQVDS..VNEEVTLDLGDELEI | 380 |
| NTDB id 408 SMU RS09530 WP 002262392.1      | GEKIGQGS                      | ENAKKFLADNPEIF   | DDIDHKVRVQYGL    | IEEDNTEEKQSSKEK    | .....ETDEK..ADKNLVLELDDTIEL    | 381 |
| NTDB id 453 Spy49 1753c ACI62003.1          | GEKIGQGS                      | ENAKRYLADHPQLF   | DEIDRKVRVKFGL    | LEESEEEESAMAVASE   | .....E.....TDDLALDLNGIEI       | 376 |
| NTDB id 115 BSU 16940 NP 389576.2           | EERLGQG                       | RENAKQFLKENKDIM  | LMIQEQIREHYGL    | DNNGVVQQAEETQE     | .EL.EFE.E.....                 | 348 |
| NTDB id 625 LCA RS02525 WP 011374196.1      | SERIGQG                       | RENAKNYLADHEDVE  | DEVRLKVRAAYG     | ISDVPEEDLPTTEDE    | ..QI.NILPDDST.....EE.....      | 355 |
| NTDB id 1313 DR RS12030 WP 010888966.1      | DERIGQG                       | KEKTIAYIAERPEME  | QEIRDRVMAAIRAG   | NAGEAPALAPAPAAP    | EAAEA.....                     | 363 |
| NTDB id 1245 Cj1673c YP 002345041.1         | DKKLGGQ                       | RENSKAFLENPEIA   | DEITKAIQNSMG     | TEGMISGSE..DDEG    | ..EE.....                      | 343 |
| NTDB id 1214 NCTC11637 00359 SQJ03206.1     | DKKLGGQ                       | RENAKALLKEDKALA  | DEITLKI          | KESIGSNEEIMPLP     | ..DEPL..EEME.....              | 347 |
| NTDB id 1211 C694 RS00795 WP 000963128.1    | DKKLGGQ                       | RENAKALLKEDKALA  | DEITLKI          | KESIGSNEEIMPLP     | ..DEPL..EEME.....              | 347 |
| NTDB id 1334 RAOC RS04870 WP 004918236.1    | DTKLGGQ                       | RDITVKELIKDNPE   | LAELEAKIREKLQAK  | .....              | .....                          | 343 |
| NTDB id 1389 A4U84 RS07560 WP 021112712.1   | GTKIGQG                       | KNNAVKWLKENPEI   | ADKLEQEIRNTL     | ASNPNSVLKA..TASDSN | DES                            | 372 |
| NTDB id 164840 AVM74 RS00950 WP 017376458.1 | ETRIGQG                       | KENVRFLLDHPEMMA  | EIEAGVRAQKLDLETT | SAK..EQN...AEHAAG  | .....                          | 346 |
| NTDB id 1130 NGFG RS03960 WP 003688695.1    | GAKIGQG                       | KDNVRVWLKENPEI   | SEIDAKIRALNGVEMH | ITEGT.....QDET     | DGER.....PEE.....              | 348 |
| NTDB id 1124 NGFG RS03960 WP 003688695.1    | GAKIGQG                       | KDNVRVWLKENPEI   | SEIDAKIRALNGVEMH | ITEGT.....QDET     | DGER.....PEE.....              | 348 |
| NTDB id 1123 OK783 RS03845 WP 003688695.1   | GAKIGQG                       | KDNVRVWLKENPEI   | SEIDAKIRALNGVEMH | ITEGT.....QDET     | DGER.....PEE.....              | 348 |
| NTDB id 1427 RS RS02760 WP 011000510.1      | GERIGQG                       | RDNCREFLRENAEL   | AREIENKVREHLG    | VTPMGAV.T..LAE     | EEVEED.....                    | 352 |
| NTDB id 1165 A1552VC RS01565 WP 000344154.1 | GDKIGQG                       | KANACKYLLKENPEI  | AKTLDKKLREMLLN   | PENMQLIA..ETSSA    | AD                             | 354 |
| NTDB id 1142 GTF74 RS11550 WP 000344154.1   | GDKIGQG                       | KANACKYLLKENPEI  | AKTLDKKLREMLLN   | PENMQLIA..ETSSA    | AD                             | 354 |
| NTDB id 1205 PSJM300 05545 AFN77183.1       | GSKIGQG                       | KANAACKYLEENPEI  | GIEQQIRAKLLV     | TSANTKAT..PVAED    | LADADI.....                    | 347 |
| NTDB id 1022 ACIAD RS06390 WP 004925639.1   | GNKIGQG                       | KNNVIRYLEENPQI   | STEIEAVIREQLLT   | KASDQTAA...HDETE   | EE                             | 349 |
| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | GNKIGQG                       | KNNVIRYFEENNQI   | AEEIERNIREQLLT   | TGTNGAVQ...I.EDE   | EE                             | 349 |
| consensus                                   | **!!!***** ** * *** **** ** * |                  |                  |                    |                                | **  |

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consensus

 non conserved  
 similar  
 ≥ 50% conserved