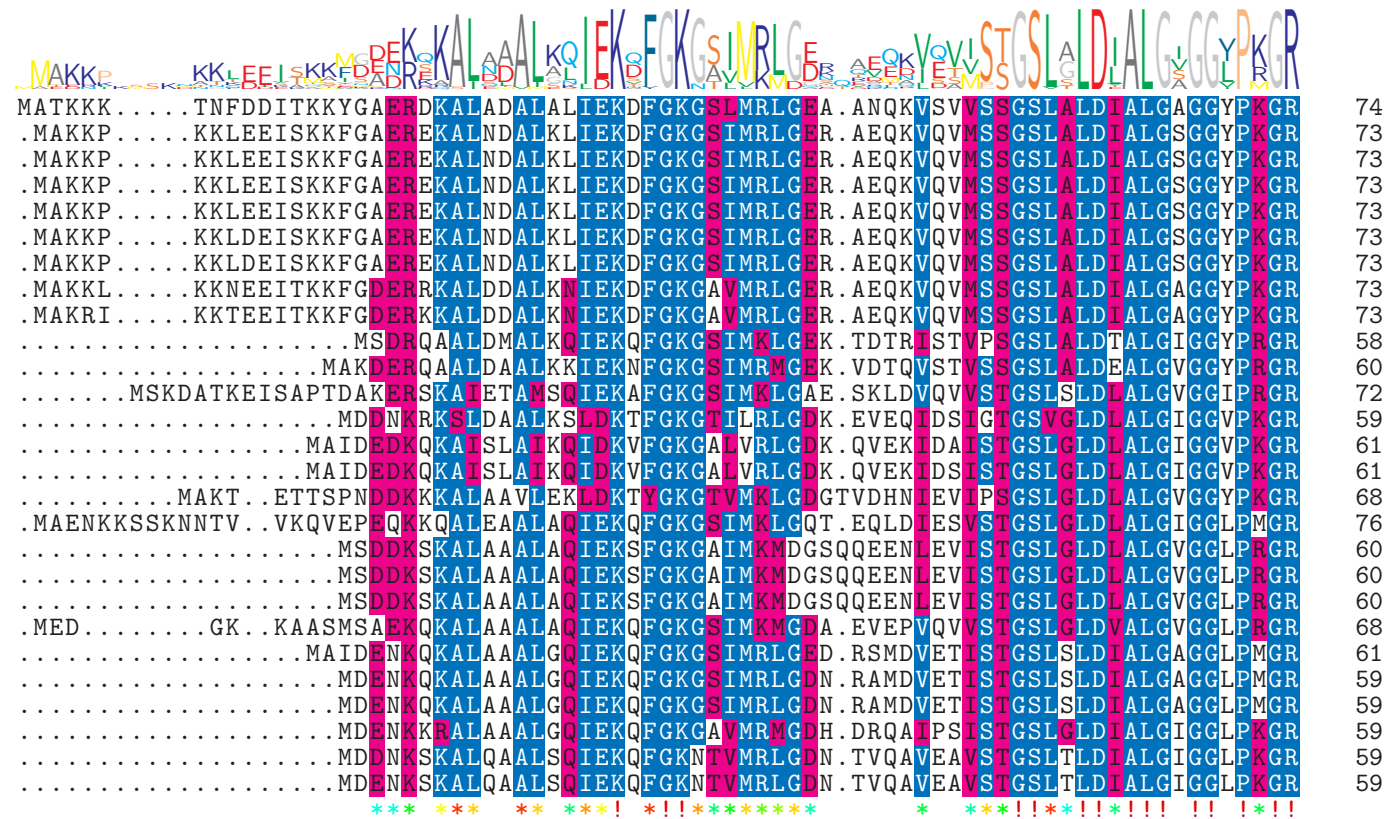


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consensus

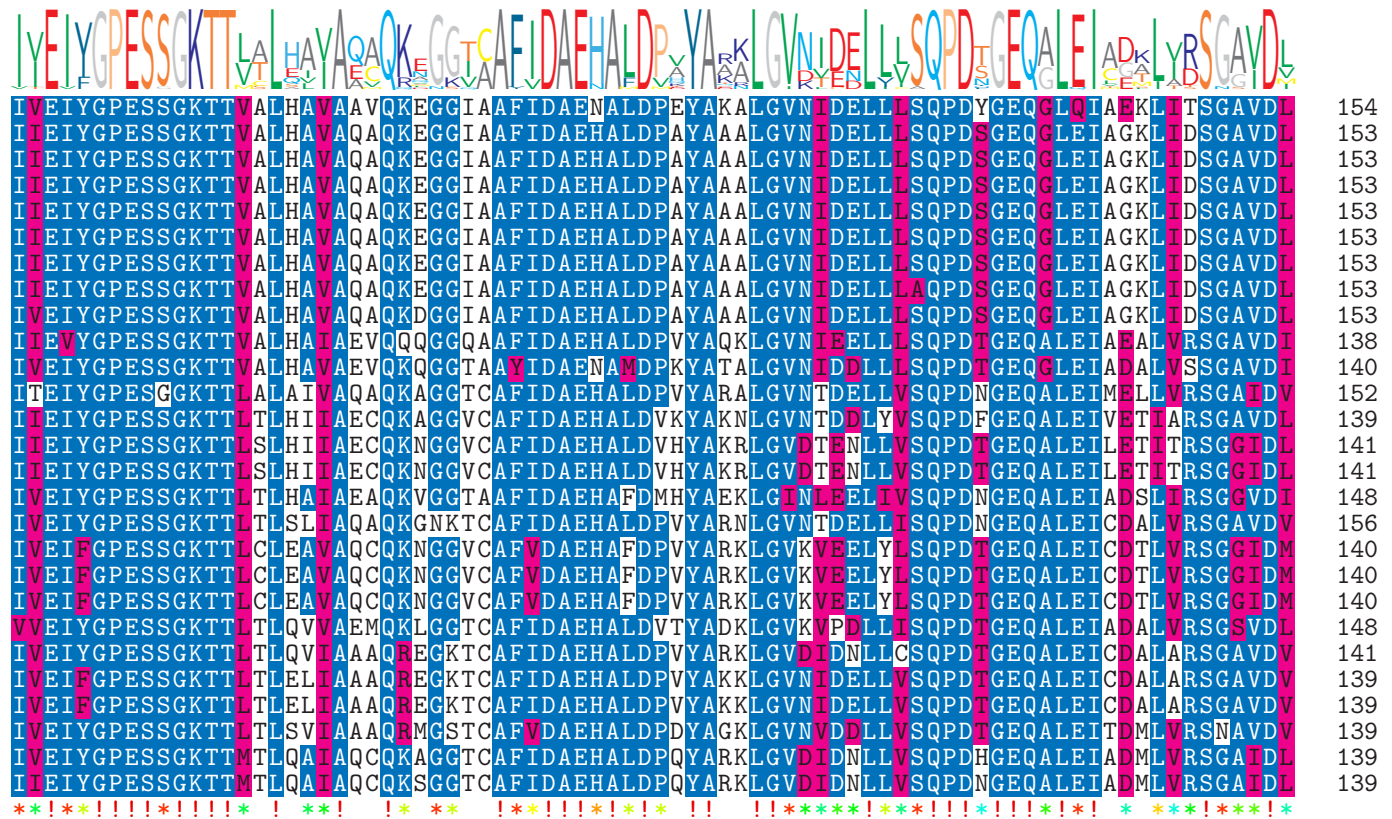
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consensus

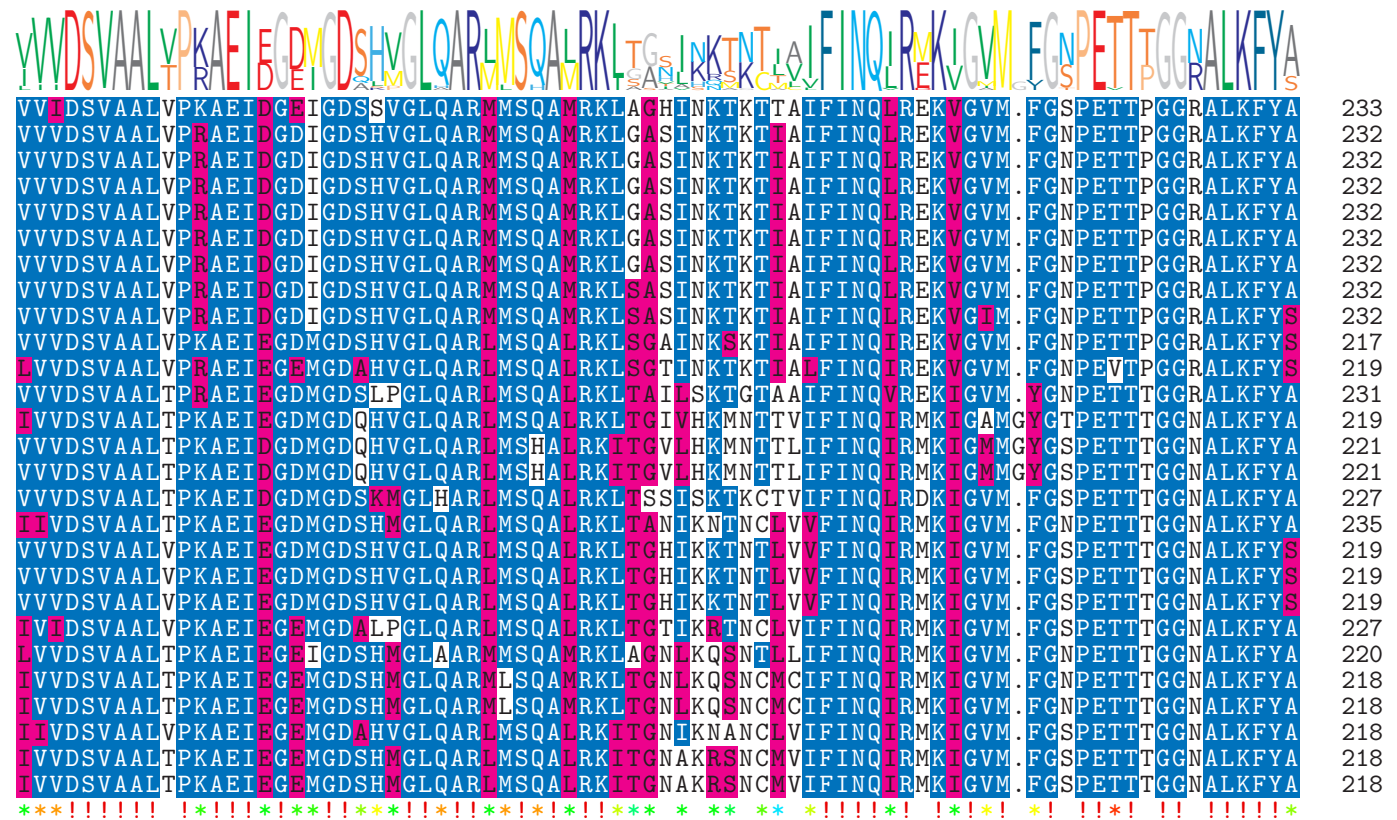
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus

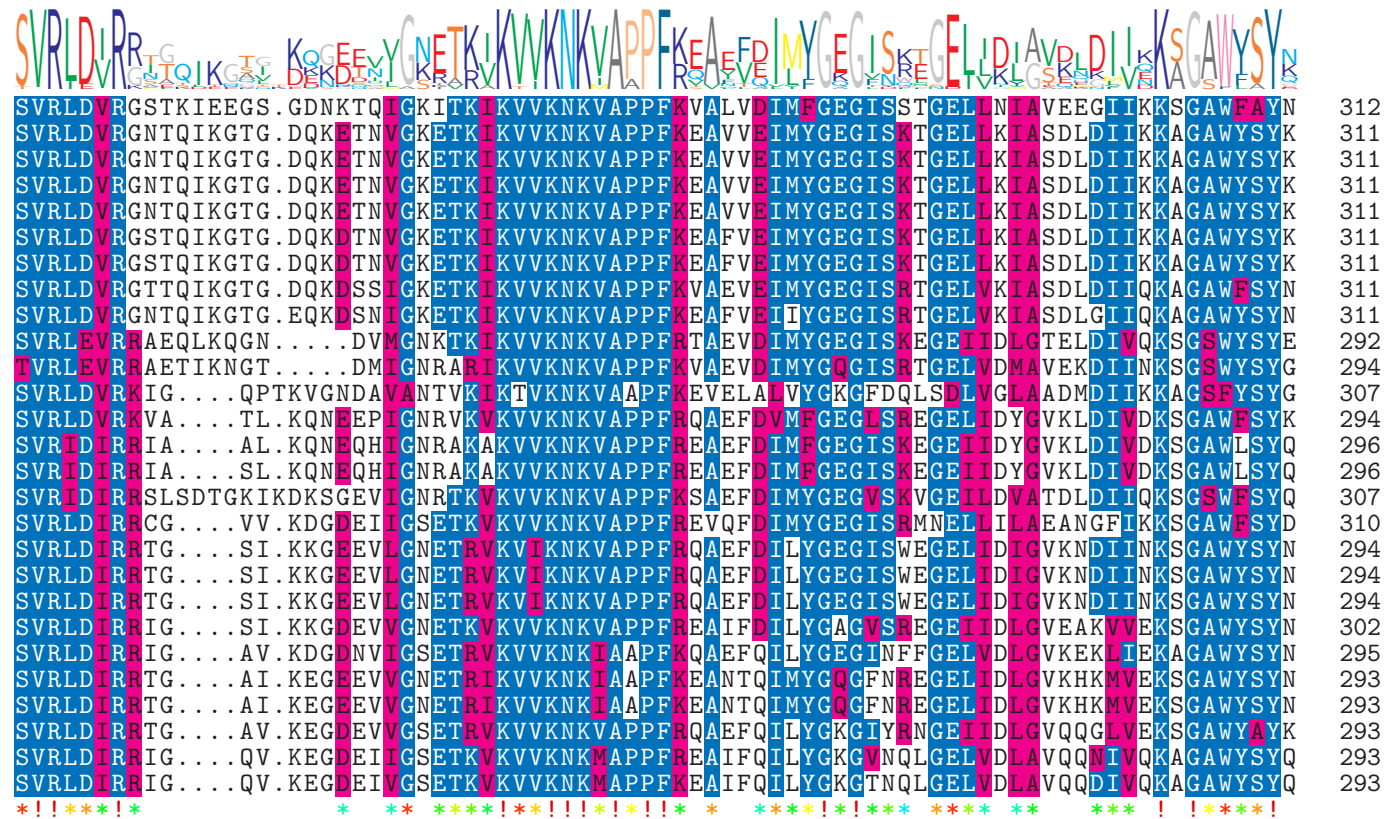
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NTDB id 1205 PSJM300 05545 AFN77183.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus

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|                                             |          |                  |               |                  |                |                  |      |     |
|---------------------------------------------|----------|------------------|---------------|------------------|----------------|------------------|------|-----|
| NTDB id 600 KW2 RS01765 WP 011675413.1      | DEKIGQGA | EKAKNYLKEHQDV    | DEIDHKVRAAHG  | LDDSEVAETEEETT   | ASKTKAKAKKKEEK | AVETEEIELELED    | .... | 387 |
| NTDB id 269 KZH43 RS08665 WP 001085462.1    | DEKIGQGS | ENAKKYLAEHPEIF   | DEIDKQVRSKFGL | IDGEEVSEQDTENKK  | DE....PKKEEA.. | VNEEVPLDLGDELEIE |      | 385 |
| NTDB id 228 SPD RS09265 WP 001085462.1      | DEKIGQGS | ENAKKYLAEHPEIF   | DEIDKQVRSKFGL | IDGEEVSEQDTENKK  | DE....PKKEEA.. | VNEEVPLDLGDELEIE |      | 385 |
| NTDB id 194 SPR RS08825 WP 001085462.1      | DEKIGQGS | ENAKKYLAEHPEIF   | DEIDKQVRSKFGL | IDGEEVSEQDTENKK  | DE....PKKEEA.. | VNEEVPLDLGDELEIE |      | 385 |
| NTDB id 159 SP RS09750 WP 001085462.1       | DEKIGQGS | ENAKKYLAEHPEIF   | DEIDKQVRSKFGL | IDGEEVSEQDTENKK  | DE....PKKEEA.. | VNEEVPLDLGDELEIE |      | 385 |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | DEKIGQGS | ENAKKYLADNPEVFAE | IDHQVRVQFGL   | IDGEEAAE....SKK  | DE....VAQVDS.. | VNEEVTLDLGDELEIE |      | 381 |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | DEKIGQGS | ENAKKYLADNPEIF   | DEIDHQVRVQFGL | IDGEEIAE....SKK  | DE....AAQVDS.. | VNEEVTLDLGDELEIE |      | 381 |
| NTDB id 453 Spy49 1753c ACI62003.1          | GEKIGQGS | ENAKRYLADHPQLF   | DEIDRKVRVKFGL | LEESEEEESAMAVASE | .....E.....    | TDDLALDLNNGIEIE  |      | 377 |
| NTDB id 408 SMU RS09530 WP 002262392.1      | GEKIGQGS | ENAKKFLADNPEIF   | DDIDHKVRVQYGL | IEEDNTEEEKQSSKEK | .....ETDEK..   | ADKNLVLELDDTIELE |      | 382 |
| NTDB id 115 BSU 16940 NP 389576.2           | EERLGGG  | RENAKQFLKENKDIM  | LMIQEQIREHYGL | DNNGVVQQAEETQEEL | 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  | KEKTIAYIAERP     | EMEQEIRDRVMAA | IRAGNAGEAPALAP   | APAAPEAAEA     | .....            |      | 363 |
| NTDB id 1245 Cj1673c YP 002345041.1         | DKKLGGG  | RENSKAFLENPEIA   | DEITKAIQNSMG  | TEGMI....SG      | SEDDEG..EE     | .....            |      | 343 |
| NTDB id 1214 NCTC11637 00359 SQJ03206.1     | DKKLGGG  | RENAKALLKEDKAL   | ADEITLKIKESIG | SNEEI....MPL     | PDEPL..EEME    | .....            |      | 347 |
| NTDB id 1211 C694 RS00795 WP 000963128.1    | DKKLGGG  | RENAKALLKEDKAL   | ADEITLKIKESIG | SNEEI....MPL     | PDEPL..EEME    | .....            |      | 347 |
| NTDB id 1334 RAOC RS04870 WP 004918236.1    | DTKLGGG  | RDITVKELIKDNPE   | LAELEAKIREKLQ | AK.....          | .....          | .....            |      | 343 |
| NTDB id 1389 A4U84 RS07560 WP 021112712.1   | GTKIGQG  | KNNAVKWLKENPEI   | ADKLEQEIRNTL  | ASNPNS....VL     | KATASDSNDES    | DVEE...FSEEEL    |      | 372 |
| NTDB id 1130 NGFG RS03960 WP 003688695.1    | GAKIGQG  | KDNVRVWLKENPEI   | SDEIDAKIRALNG | VEMHI....TEGT    | QDE.....T...   | DGERPEE.....     |      | 348 |
| NTDB id 1124 NGFG RS03960 WP 003688695.1    | GAKIGQG  | KDNVRVWLKENPEI   | SDEIDAKIRALNG | VEMHI....TEGT    | QDE.....T...   | DGERPEE.....     |      | 348 |
| NTDB id 1123 OK783 RS03845 WP 003688695.1   | GAKIGQG  | KDNVRVWLKENPEI   | SDEIDAKIRALNG | VEMHI....TEGT    | QDE.....T...   | DGERPEE.....     |      | 348 |
| NTDB id 1427 RS RS02760 WP 011000510.1      | GERIGQG  | RDNCREFLRENAEL   | AREIENKVRHLGV | TPMG....AVT      | .LAEVEED       | .....            |      | 352 |
| NTDB id 86174 TE10 RS22005 WP 041146866.1   | GDKIGQG  | KANAISWLKENPAA   | AKEIEKKVRELLN | NQDA....TPDF     | VVDGKSEEASEQD  | ...F.....        |      | 352 |
| NTDB id 1165 A1552VC RS01565 WP 000344154.1 | GDKIGQG  | KANACKYLVKENPEI  | AKTLDKKLREML  | LNPNEM....QLI    | ...AETSSAADD   | VE...FGAVPEEF    |      | 354 |
| NTDB id 1142 GTF74 RS11550 WP 000344154.1   | GDKIGQG  | KANACKYLVKENPEI  | AKTLDKKLREML  | LNPNEM....QLI    | ...AETSSAADD   | VE...FGAVPEEF    |      | 354 |
| NTDB id 1205 PSJM300 05545 AFN77183.1       | GSKIGQG  | KANAACKYLEENPEI  | GQIEEQIRAKLL  | VTSAN....TKAT    | PVAEDLADADI    | .....            |      | 347 |
| NTDB id 1022 ACIAD RS06390 WP 004925639.1   | GNKIGQG  | KNNVIRYLEENPQ    | ISTEIEAVIREQL | LTKASD....QTAA   | .HDETEEEPDLLE  | ...S.....        |      | 349 |
| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | GNKIGQG  | KNNVIRYFEENNQ    | IAEEIERNIREQL | LTTGTN....GAVQ   | .I.EDEEEPDL    | LL...ES.....     |      | 349 |
| consensus                                   | ***!!!   | *****            | **            | *****            | *****          | **               | **   |     |

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|                                             |     |     |  |
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|                                             |     | IEE |  |
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| NTDB id 228 SPD RS09265 WP 001085462.1      | IEE | 388 |  |
| NTDB id 194 SPR RS08825 WP 001085462.1      | IEE | 388 |  |
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| consensus                                   |     |     |  |

-  non conserved
-  similar
-  ≥ 50% conserved