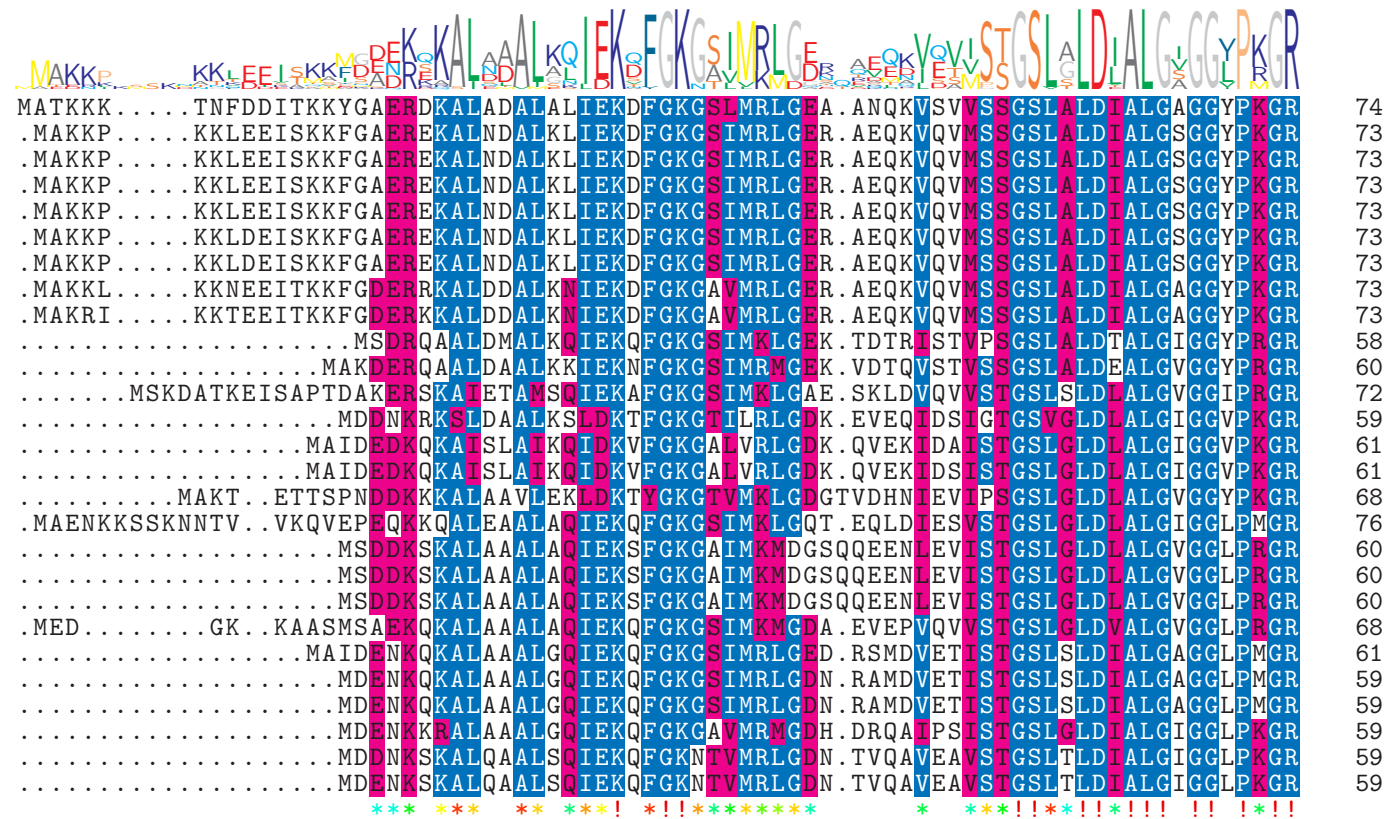


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consensus

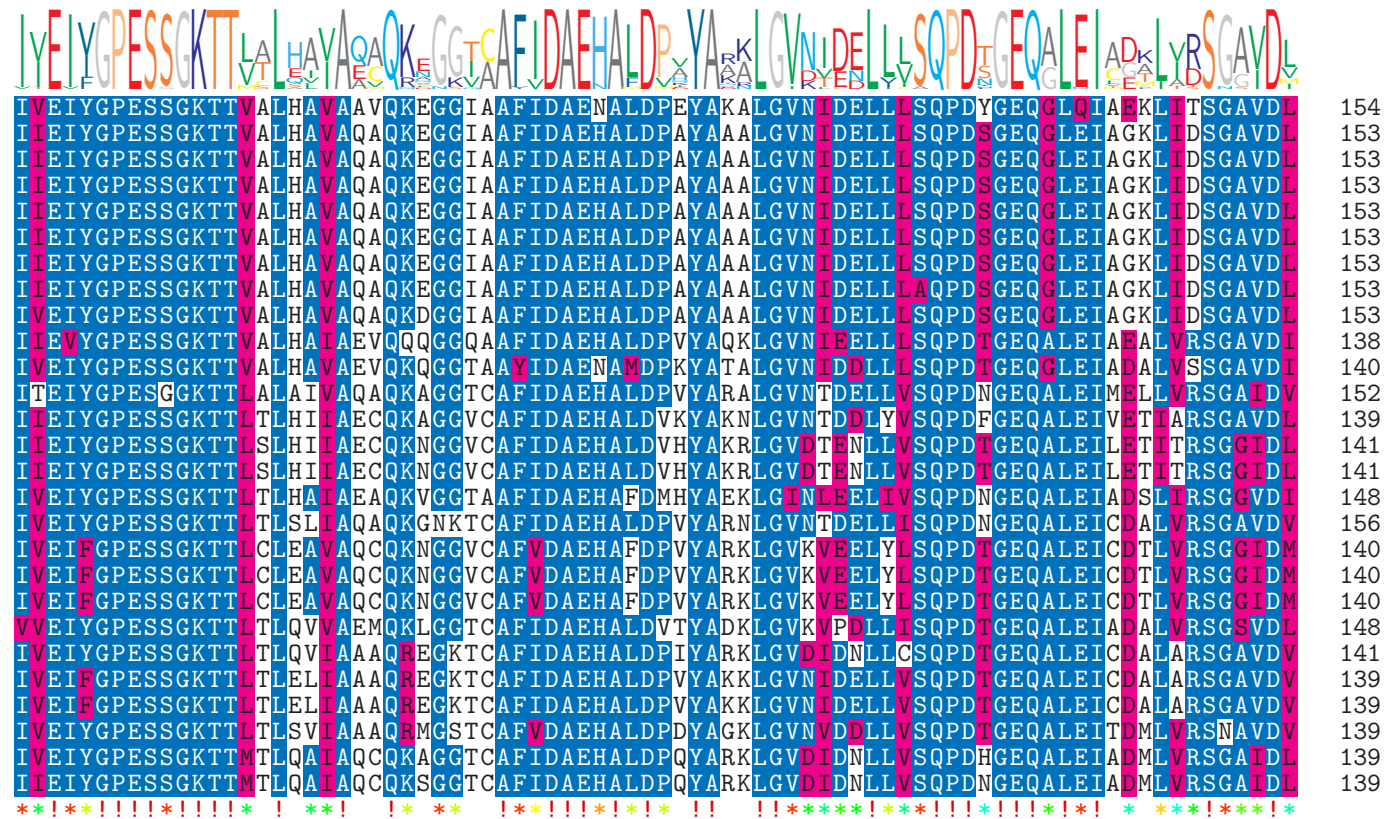
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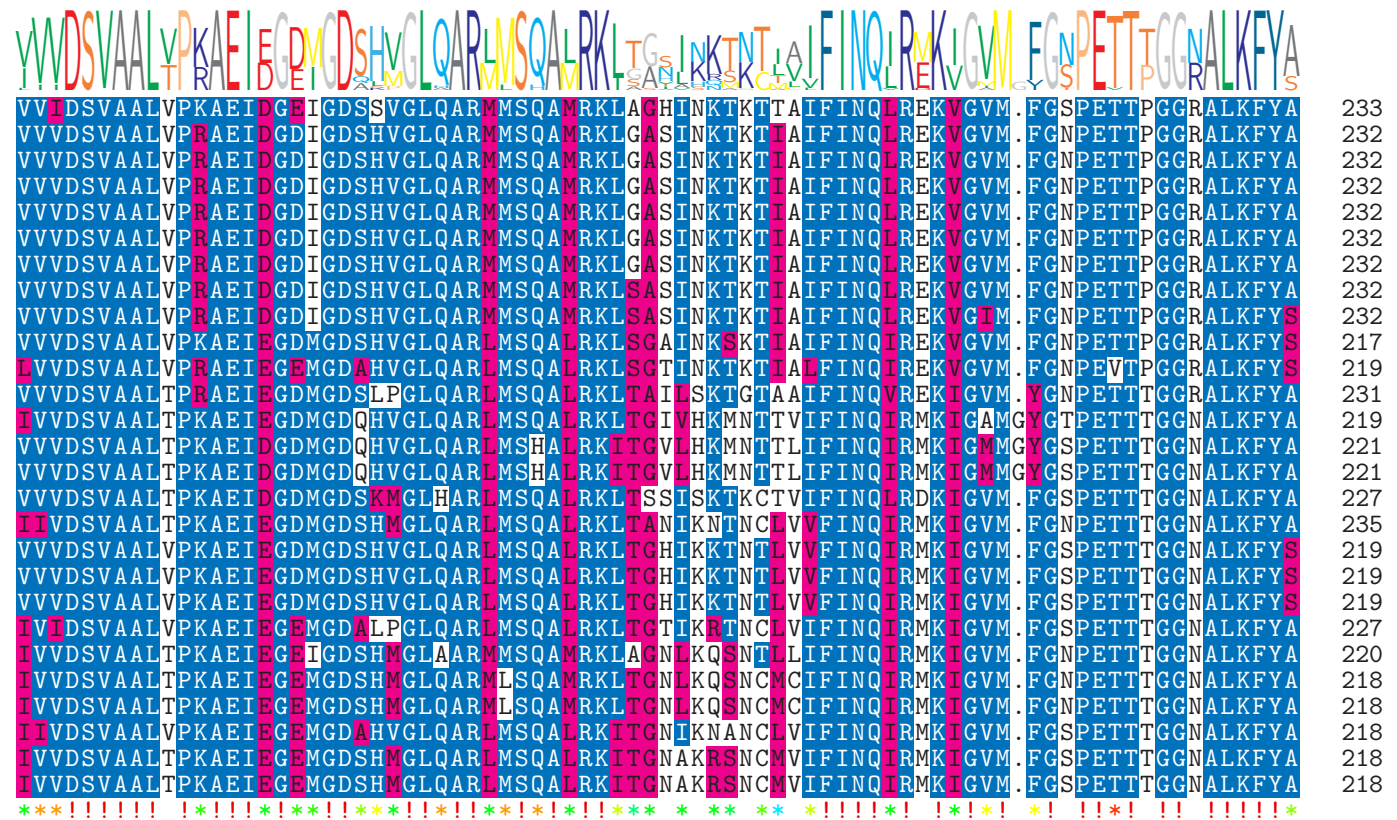
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consensus

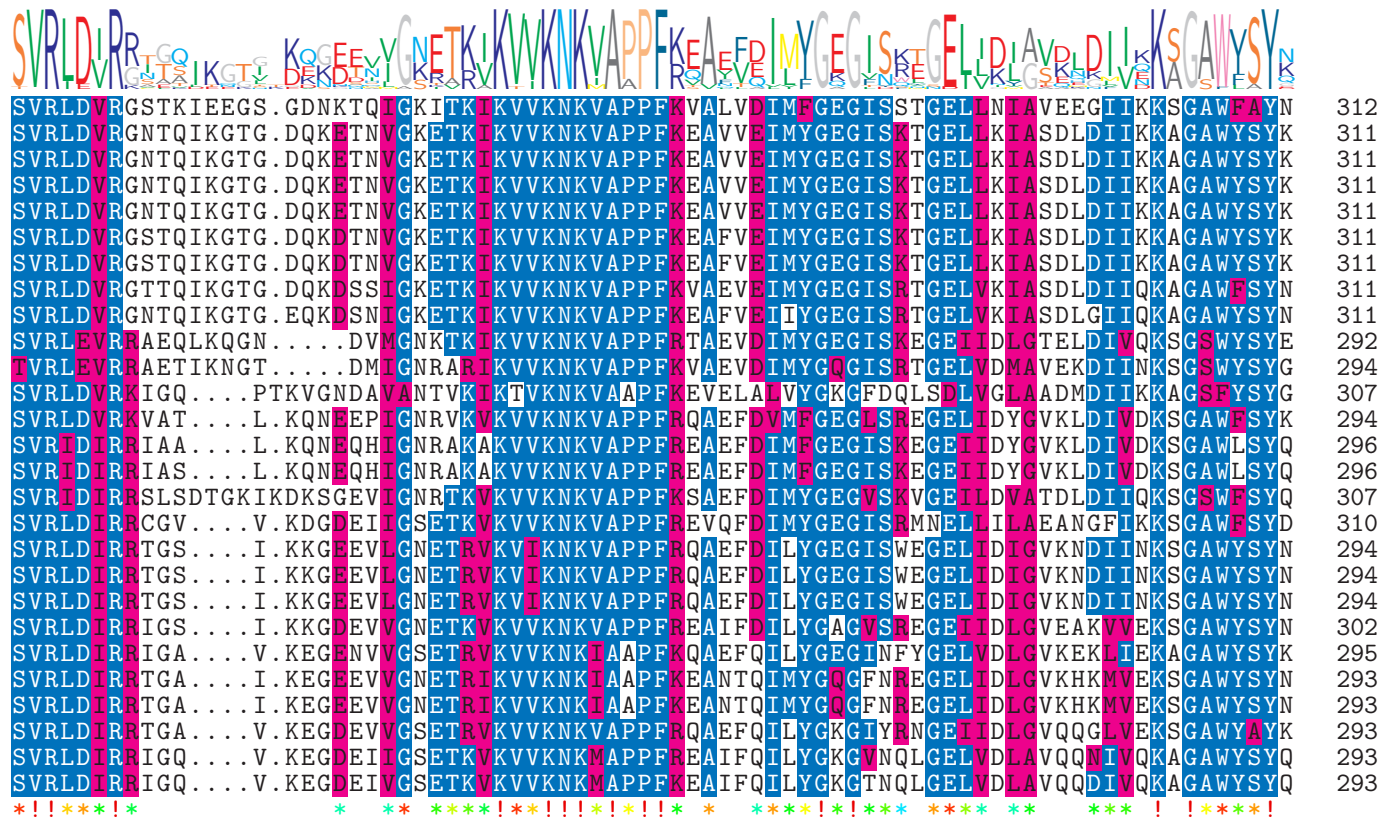
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus

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|                                             |          |                 |                 |                  |                  |                     |                  |     |
|---------------------------------------------|----------|-----------------|-----------------|------------------|------------------|---------------------|------------------|-----|
| NTDB id 600 KW2 RS01765 WP 011675413.1      | DEKIGQGA | EKAKNYLKEHQDV   | DEIDHKVRAAHG    | LDDSEVAETEEETTAS | KTAKAKKEE        | EKAVETEEIELELED     | ....             | 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 499 SM12261 RS08315 WP 078228268.1  | DEKIGQGS | ENAKKYLADNPEIF  | DEIDHQVRVQFGL   | IDGEEIAES....KK  | DE....AAQVDS     | .VNEEVTLDLGDELEIE   |                  | 381 |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | DEKIGQGS | ENAKKYLADNPEVFA | EDHQRVVRVQFGL   | IDGEEAAES....KK  | DE....VAQVDS     | .VNEEVTLDLGDELEIE   |                  | 381 |
| NTDB id 453 Spy49 1753c ACI62003.1          | GEKIGQGS | ENAKRYLADHPQLF  | DEIDRKVRVKFGL   | LEESEEEESAMAVASE | .....E.....      | TDDLALDLDN          | GIEIE            | 377 |
| NTDB id 408 SMU RS09530 WP 002262392.1      | GEKIGQGS | ENAKKFLADNPEIF  | DDIDHKVRVQYGL   | IEEDNTEEEKQSSKEK | .....ETDEK       | .ADKNLVLELDD        | TIELE            | 382 |
| NTDB id 115 BSU 16940 NP 389576.2           | EE       | RLGQGREN        | AKQFLKENKDIMLM  | IQEQIREHYGL      | DNNGVVQQAEETQEEL | EFEE.....           |                  | 348 |
| NTDB id 625 LCA RS02525 WP 011374196.1      | SERIGQGS | ENAKNYLADHEDVE  | DEVRLKVRVQYGL   | ISDVPEEDLPTTEDE  | .QI.NILPDDST     | .....EE.....        |                  | 355 |
| NTDB id 1313 DR RS12030 WP 010888966.1      | DERIGQGS | KEKTIAIYIAERPE  | MEQEIRDRVMAAIR  | AGNAGEAPALAPAPA  | AEAA...EA.....   |                     |                  | 363 |
| NTDB id 1245 Cj1673c YP 002345041.1         | DK       | KLGGGREN        | SKAFLKENPEIA    | DEITKAIQNSMG     | TEGM....ISG      | SEDDEG.....EE       |                  | 343 |
| NTDB id 1214 NCTC11637 00359 SQJ03206.1     | DK       | KLGGGREN        | AKALLKEDKAL     | ADEITLKI         | KESIGSNEE....    | IMPLPDEPL.....      | EEME             | 347 |
| NTDB id 1211 C694 RS00795 WP 000963128.1    | DK       | KLGGGREN        | AKALLKEDKAL     | ADEITLKI         | KESIGSNEE....    | IMPLPDEPL.....      | EEME             | 347 |
| NTDB id 1334 RAOC RS04870 WP 004918236.1    | DT       | KLGGGRD         | TVKELIKDNPEL    | AEELEAKIREKLQ    | AK.....          |                     |                  | 343 |
| NTDB id 1389 A4U84 RS07560 WP 021112712.1   | GT       | KIGQGK          | NNAVKWLKENPEI   | ADKLEQEI         | RNTLASNP         | N....SVLKATASDSN    | ...DESDVVEEFSEEL | 372 |
| NTDB id 1130 NGFG RS03960 WP 003688695.1    | GAKIGQGK | DNVRVWLKENPEI   | SDEIDAKIRALNG   | VEMH....ITEG     | .....T...QDET    | DGERPEE.....        |                  | 348 |
| NTDB id 1124 NGFG RS03960 WP 003688695.1    | GAKIGQGK | DNVRVWLKENPEI   | SDEIDAKIRALNG   | VEMH....ITEG     | .....T...QDET    | DGERPEE.....        |                  | 348 |
| NTDB id 1123 OK783 RS03845 WP 003688695.1   | GAKIGQGK | DNVRVWLKENPEI   | SDEIDAKIRALNG   | VEMH....ITEG     | .....T...QDET    | DGERPEE.....        |                  | 348 |
| NTDB id 1427 RS RS02760 WP 011000510.1      | GE       | RIGQGRD         | NCREFLRENAEL    | AREIENKVR        | REHLGVTPM        | ....GAVTLAEE        | .VE...ED.....    | 352 |
| NTDB id 287659 AOY54 RS17475 WP 000963143.1 | GEKIGQGS | KANATAWLKDN     | PETAKEIEKKV     | RELLLSNP         | N....STPDFSV     | ...D...DSEG         | VAETNEDF.....    | 353 |
| NTDB id 1165 A1552VC RS01565 WP 000344154.1 | GD       | KIGQGS          | KANACKYLLKENPEI | AKTLDKKL         | REMLLN           | PNEN....MQLIAETSSAA | ...DDVEFGAVPEEF  | 354 |
| NTDB id 1142 GTF74 RS11550 WP 000344154.1   | GD       | KIGQGS          | KANACKYLLKENPEI | AKTLDKKL         | REMLLN           | PNEN....MQLIAETSSAA | ...DDVEFGAVPEEF  | 354 |
| NTDB id 1205 PSJM300 05545 AFN77183.1       | GSKIGQGS | KANAACKYLEENPEI | GQIEEQ          | IRAKLLV          | TSA.....NTKATP   | VAEDL...ADADI       | .....            | 347 |
| NTDB id 1022 ACIAD RS06390 WP 004925639.1   | GN       | KIGQGS          | KNNVIRYLEENP    | QISTEIEAV        | IREQLLT          | TKAS....DQTAA       | .HDETE...EEDLLES | 349 |
| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | GN       | KIGQGS          | KNNVIRYFEENN    | QIAEEIERN        | IREQLLT          | TGT....NGAVQ        | .I.EDE...EEDLLES | 349 |
| consensus                                   |          | ***!!**         | *****           | **               | *****            | *****               | **               | *   |

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| NTDB id 194 SPR RS08825 WP 001085462.1      | IEE | 388 |
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consensus

 non conserved  
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 ≥ 50% conserved