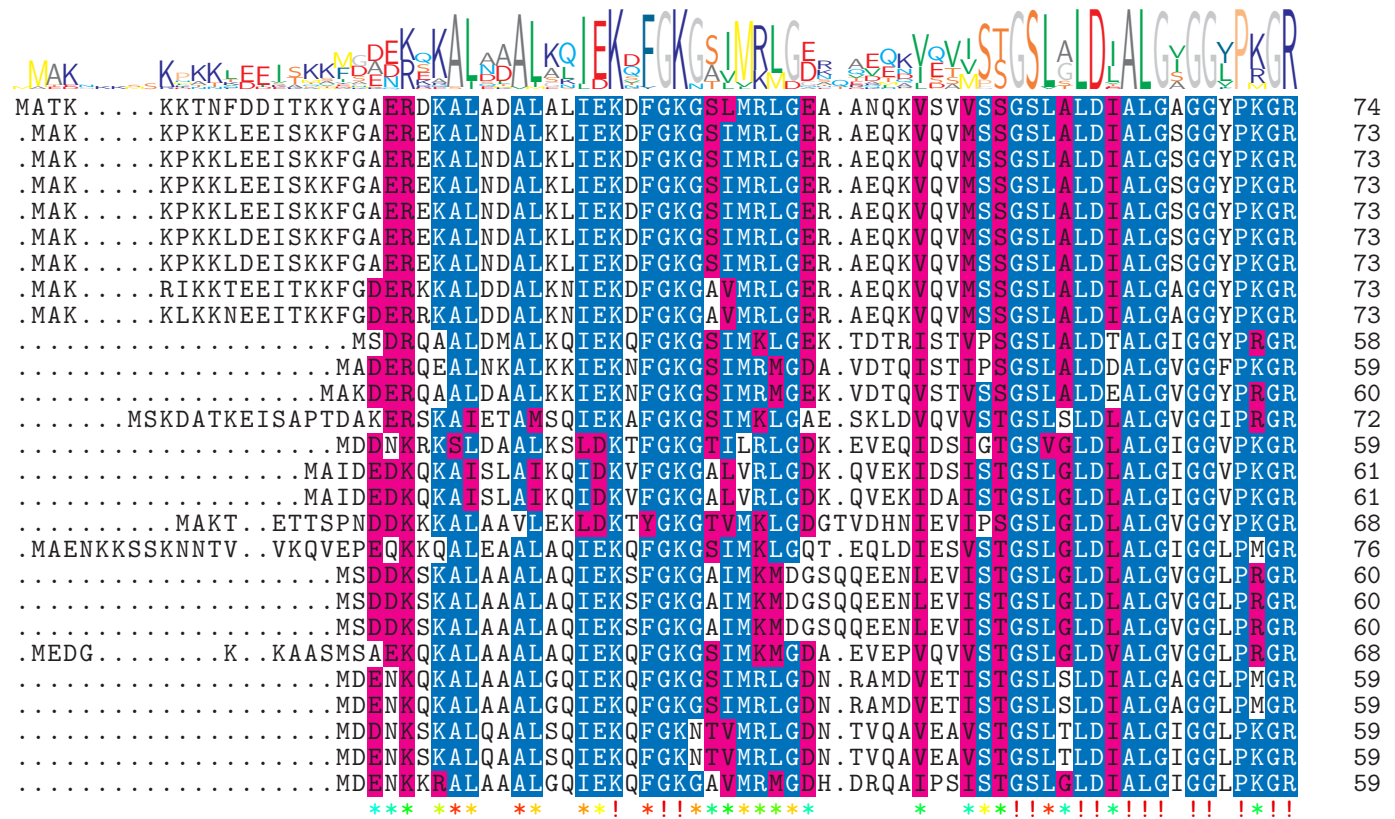


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consensus

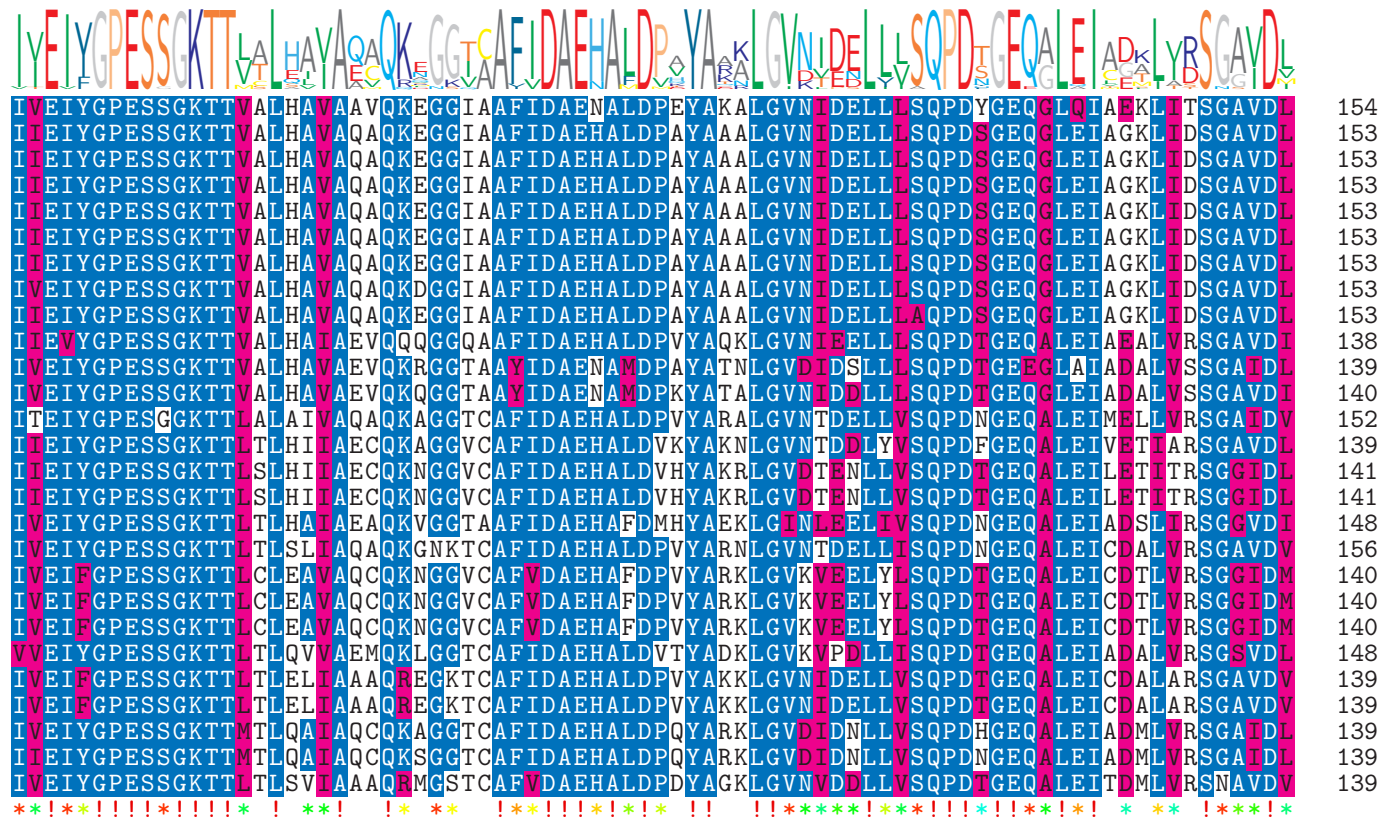
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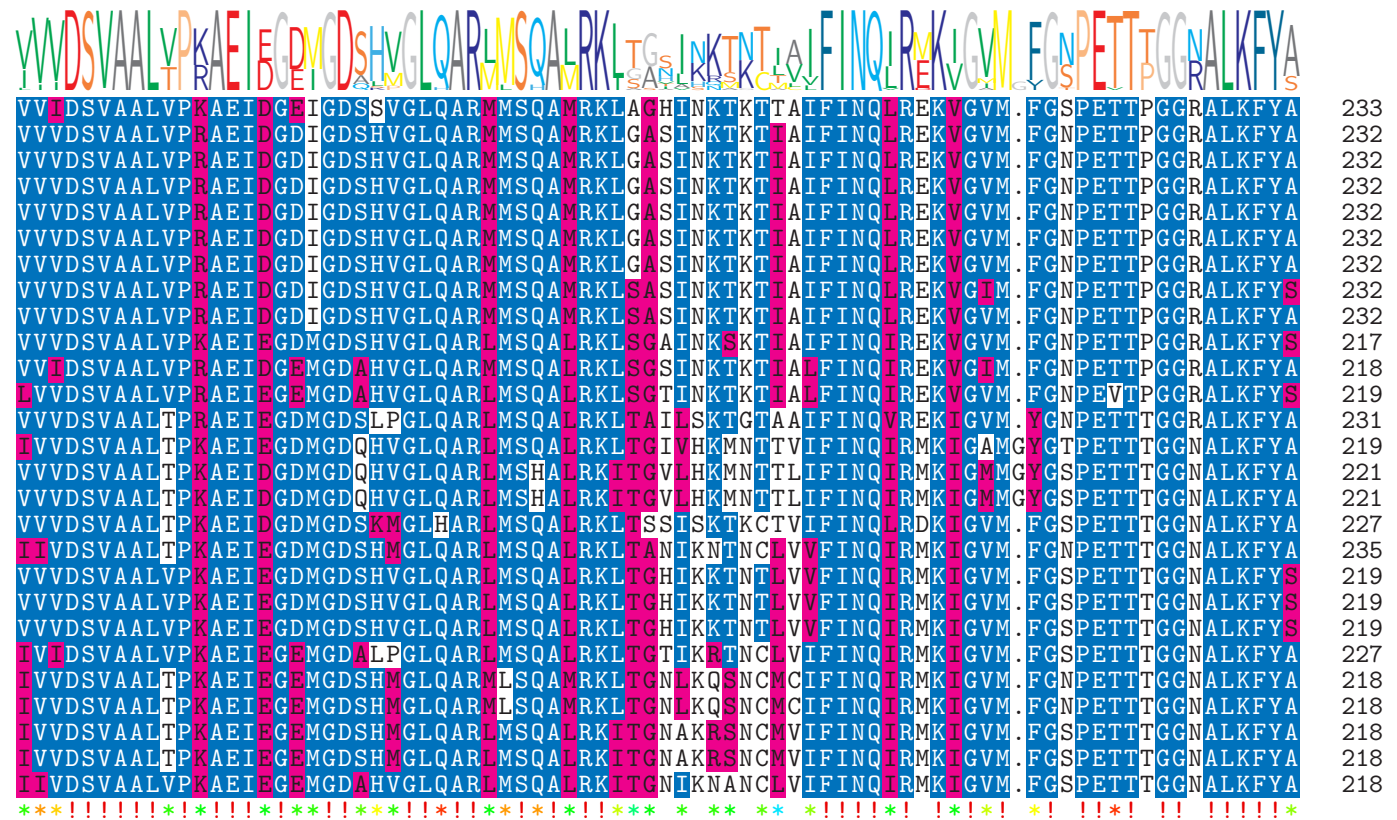
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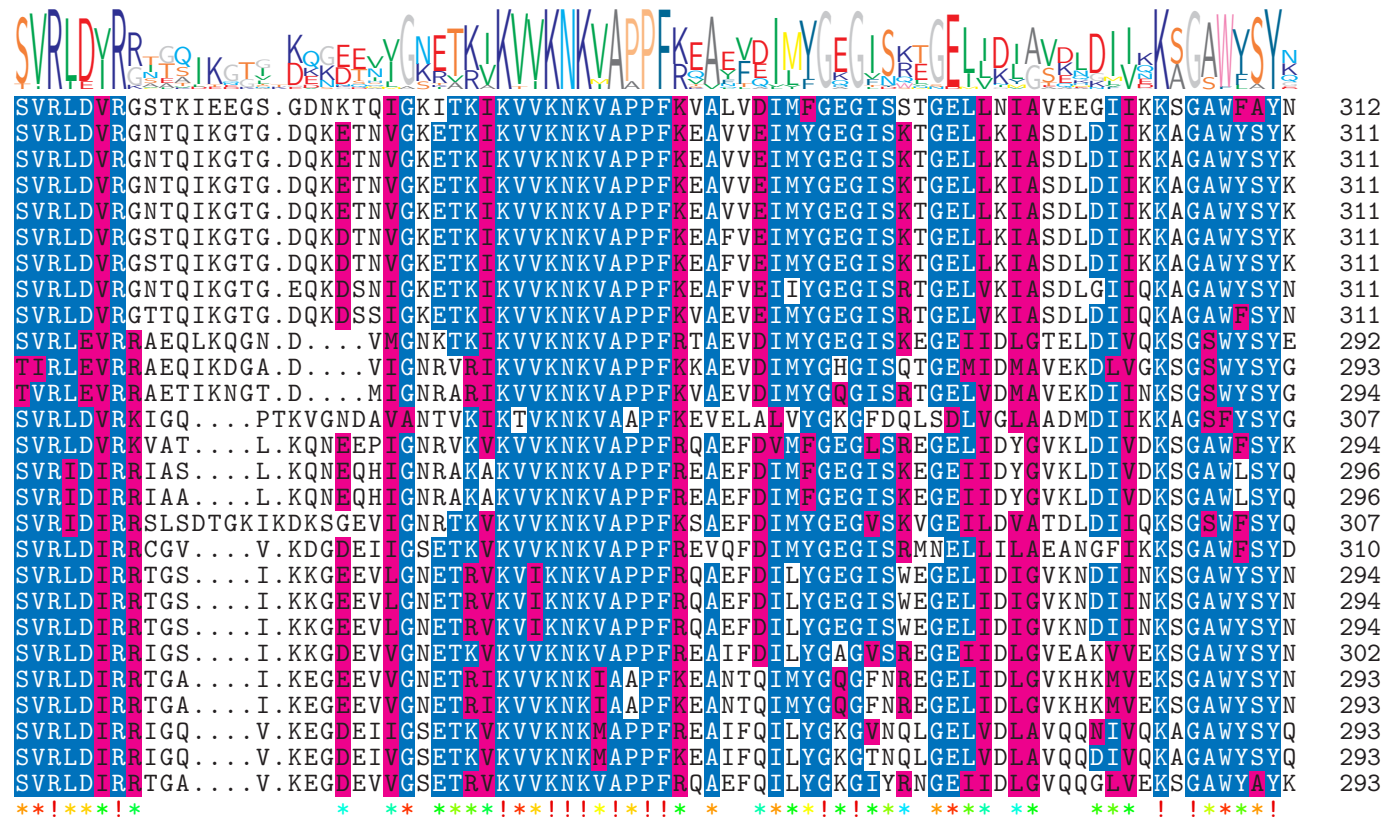
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consensus



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NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

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|                                             |          |                 |                |                   |                   |               |             |       |     |
|---------------------------------------------|----------|-----------------|----------------|-------------------|-------------------|---------------|-------------|-------|-----|
| NTDB id 600 KW2 RS01765 WP 011675413.1      | DEKIGQGA | EKAKNYLKEHQDV   | DEIDHKVRAAHG   | LDDSEVAETEEETT    | ASKTKAKAKKEEK     | AVETEEIELELED | .....       | 387   |     |
| NTDB id 269 KZH43 RS08665 WP 001085462.1    | DEKIGQGS | ENAKKYLAEHPEIF  | DEIDKQVRSKFGL  | IDGEEVSEQDTEN     | KKDE....PKKEEA    | ..VNEEVPLDLG  | DELEIE      | 385   |     |
| NTDB id 228 SPD RS09265 WP 001085462.1      | DEKIGQGS | ENAKKYLAEHPEIF  | DEIDKQVRSKFGL  | IDGEEVSEQDTEN     | KKDE....PKKEEA    | ..VNEEVPLDLG  | DELEIE      | 385   |     |
| NTDB id 194 SPR RS08825 WP 001085462.1      | DEKIGQGS | ENAKKYLAEHPEIF  | DEIDKQVRSKFGL  | IDGEEVSEQDTEN     | KKDE....PKKEEA    | ..VNEEVPLDLG  | DELEIE      | 385   |     |
| NTDB id 159 SP RS09750 WP 001085462.1       | DEKIGQGS | ENAKKYLAEHPEIF  | DEIDKQVRSKFGL  | IDGEEVSEQDTEN     | KKDE....PKKEEA    | ..VNEEVPLDLG  | DELEIE      | 385   |     |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | DEKIGQGS | ENAKKYLAADNPEV  | FAEIDHQVRVQFGL | IDGEEAAE....SKKDE | ....VAQVDS        | ..VNEEVTLDL   | GDELEIE     | 381   |     |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | DEKIGQGS | ENAKKYLAADNPEIF | DEIDHQVRVQFGL  | IDGEEIAE....SKKDE | ....AAQVDS        | ..VNEEVTLDL   | GDELEIE     | 381   |     |
| NTDB id 408 SMU RS09530 WP 002262392.1      | GEKIGQGS | ENAKKFLADNPEIF  | DDIDHKVVRVQYGL | IEEDNTEEKQSSKEK   | .....ETDEK        | ..ADKNLVLELD  | DDTIELE     | 382   |     |
| NTDB id 453 Spy49 1753c ACI62003.1          | GEKIGQGS | ENAKRYLADHPQLF  | DEIDRKVRVKFGL  | LEESEESAMAVASE    | .....E            | .....TDDLALDL | DNGIEIE     | 377   |     |
| NTDB id 115 BSU 16940 NP 389576.2           | EE       | RLGQGR          | ENAKQFLKENKDIM | LMIQEQIREHYGL     | DNNGVVQQAEET      | QEELEFEE      | .....       | 348   |     |
| NTDB id 283793 C7M46 RS01915 WP 002833728.1 | DERIGQGR | ENAKKYIDHDPD    | VRAEILGKVREAY  | GMVADPTSEVKKES    | SKSSTDDSDLA       | .....         | .....       | 352   |     |
| NTDB id 625 LCA RS02525 WP 011374196.1      | SERIGQGR | ENAKNYLADHED    | VEDEVRLKVR     | AAYGTS            | SDVPEEDLPTTE      | DEQINILPDD    | STEE        | ..... | 355 |
| NTDB id 1313 DR RS12030 WP 010888966.1      | DERIGQG  | KEKTIAYIAER     | PEMEQEIRDR     | MAAIRAGNAGEA      | PALAPAPAAPE       | AAAA          | .....       | 363   |     |
| NTDB id 1245 Cj1673c YP 002345041.1         | DKKL     | GQGRENSKAFL     | KENPEIADEIT    | KAIQNSMG          | IEGMI....SG       | SEDD..EGEE    | .....       | 343   |     |
| NTDB id 1211 C694 RS00795 WP 000963128.1    | DKKL     | GQGRENAKALL     | KEDKALADEIT    | LKIKESIGS         | NEEI....MPL       | PDE..PLEEME   | .....       | 347   |     |
| NTDB id 1214 NCTC11637 00359 SQJ03206.1     | DKKL     | GQGRENAKALL     | KEDKALADEIT    | LKIKESIGS         | NEEI....MPL       | PDE..PLEEME   | .....       | 347   |     |
| NTDB id 1334 RAOC RS04870 WP 004918236.1    | DTKL     | GQGRDTV         | KELIKDNPELA    | EELAKIREKL        | QAK               | .....         | .....       | 343   |     |
| NTDB id 1389 A4U84 RS07560 WP 021112712.1   | GTKIGQG  | KNNNAVKWLKEN    | PEIADKLEQEIR   | NTLASNPN          | S....VLKATAS      | DSNDESD       | ..VEEFSEEL  | ..... | 372 |
| NTDB id 1130 NGFG RS03960 WP 003688695.1    | GAKIGQG  | KDNVRVWLKEN     | PEISDEIDAKI    | RALNGVEMHI        | ....TEGTQDET      | DGER          | .....PEE    | ..... | 348 |
| NTDB id 1124 NGFG RS03960 WP 003688695.1    | GAKIGQG  | KDNVRVWLKEN     | PEISDEIDAKI    | RALNGVEMHI        | ....TEGTQDET      | DGER          | .....PEE    | ..... | 348 |
| NTDB id 1123 OK783 RS03845 WP 003688695.1   | GAKIGQG  | KDNVRVWLKEN     | PEISDEIDAKI    | RALNGVEMHI        | ....TEGTQDET      | DGER          | .....PEE    | ..... | 348 |
| NTDB id 1427 RS RS02760 WP 011000510.1      | GERIGQGR | DNCREFLRENA     | ELAREIENKVRE   | HLGVT             | TPMG....AV        | TLA.EEVEED    | .....       | 352   |     |
| NTDB id 1165 A1552VC RS01565 WP 000344154.1 | GDKIGQG  | KANACKYLLKEN    | PEIAKTL        | DKKLREMLLN        | PENM....QLIAETSSA | ADDVE..FGAV   | PEEF        | ..... | 354 |
| NTDB id 1142 GTF74 RS11550 WP 000344154.1   | GDKIGQG  | KANACKYLLKEN    | PEIAKTL        | DKKLREMLLN        | PENM....QLIAETSSA | ADDVE..FGAV   | PEEF        | ..... | 354 |
| NTDB id 1022 ACIAD RS06390 WP 004925639.1   | GNKIGQG  | KNNVIRYLEEN     | PQISTEIEAV     | IREQLLT           | TKASD....QTAA     | .HDETEEE      | PD..LL..ES  | ..... | 349 |
| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | GNKIGQG  | KNNVIRYFEENN    | QIAEEIERN      | IREQLLT           | TGTN....GAVQ      | .I.EDEEE      | PD..LL..LES | ..... | 349 |
| NTDB id 1205 PSJM300 05545 AFN77183.1       | GSKIGQG  | KANAACYLLEEN    | PEIGQIEEQ      | IRAKLLV           | TSAN....TKATP     | VADLADAD      | ..I         | ..... | 347 |
| consensus                                   | ***!!!   | *****           | **             | *                 | ***               | *****         | **          | **    |     |

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|                                             |     |     |     |
|---------------------------------------------|-----|-----|-----|
|                                             |     | IEE |     |
| NTDB id 600 KW2 RS01765 WP 011675413.1      | ... |     | 387 |
| NTDB id 269 KZH43 RS08665 WP 001085462.1    | IEE |     | 388 |
| NTDB id 228 SPD RS09265 WP 001085462.1      | IEE |     | 388 |
| NTDB id 194 SPR RS08825 WP 001085462.1      | IEE |     | 388 |
| NTDB id 159 SP RS09750 WP 001085462.1       | IEE |     | 388 |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | IEE |     | 384 |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | IEE |     | 384 |
| NTDB id 408 SMU RS09530 WP 002262392.1      | D.. |     | 383 |
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| NTDB id 115 BSU 16940 NP 389576.2           | ... |     | 348 |
| NTDB id 283793 C7M46 RS01915 WP 002833728.1 | ... |     | 352 |
| NTDB id 625 LCA RS02525 WP 011374196.1      | ... |     | 355 |
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| consensus                                   |     |     |     |

- X non conserved
- X similar
- X ≥ 50% conserved