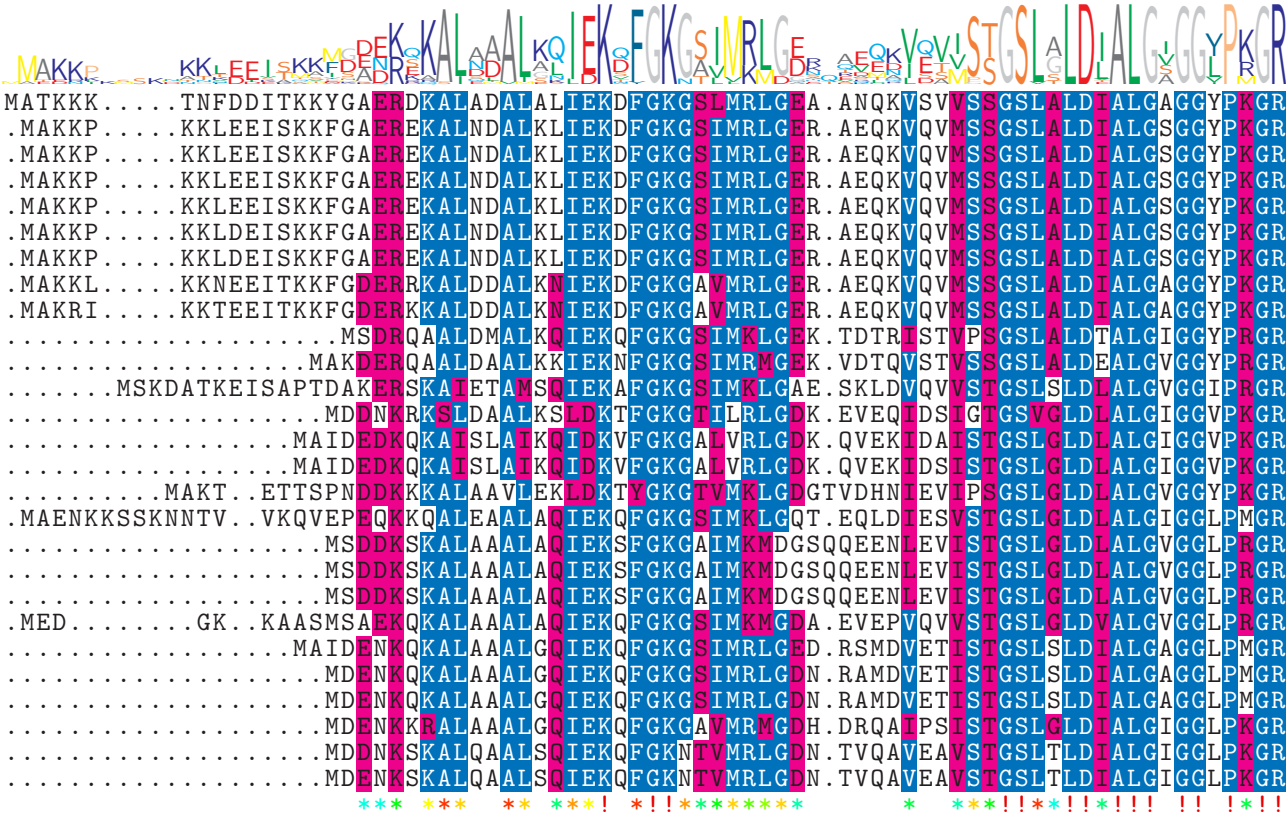


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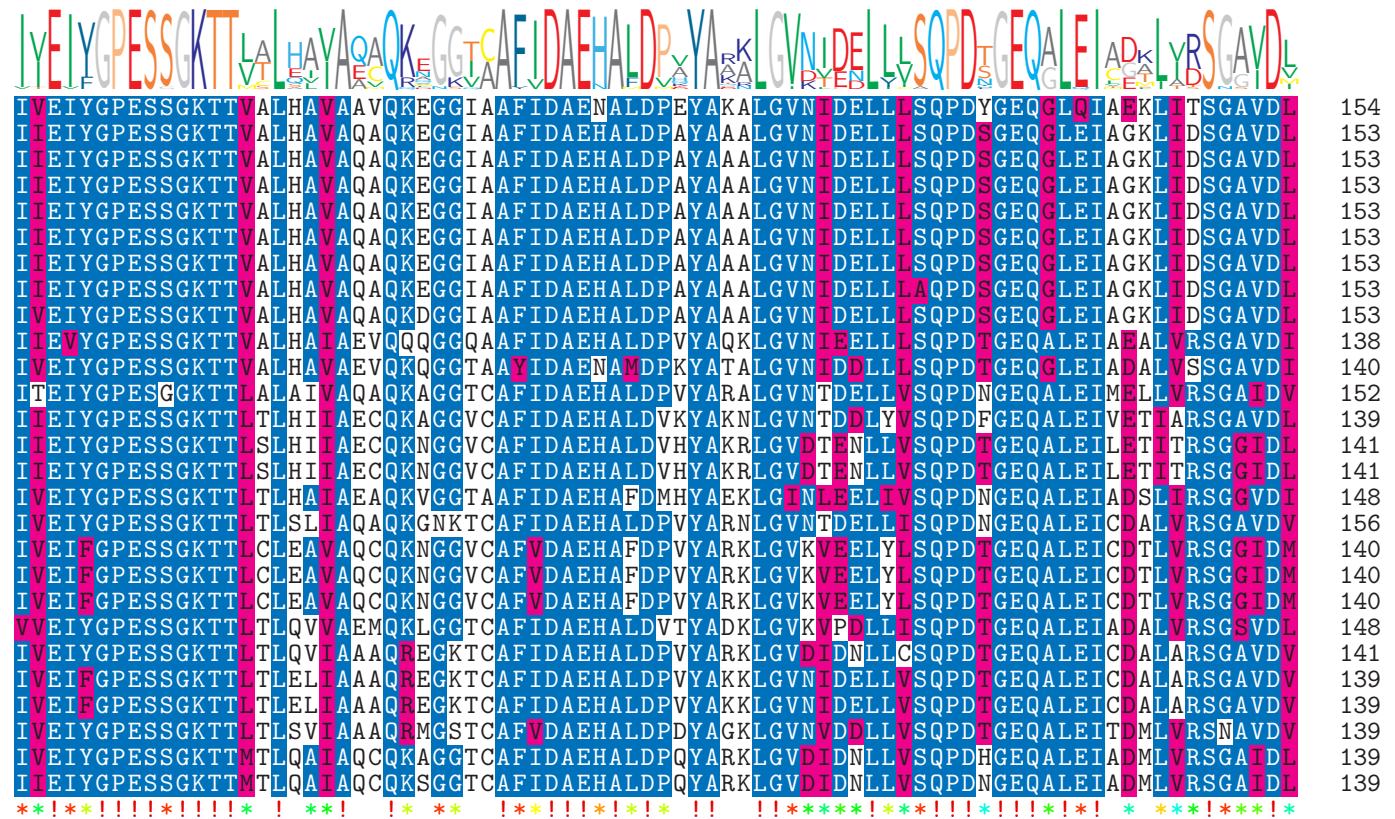


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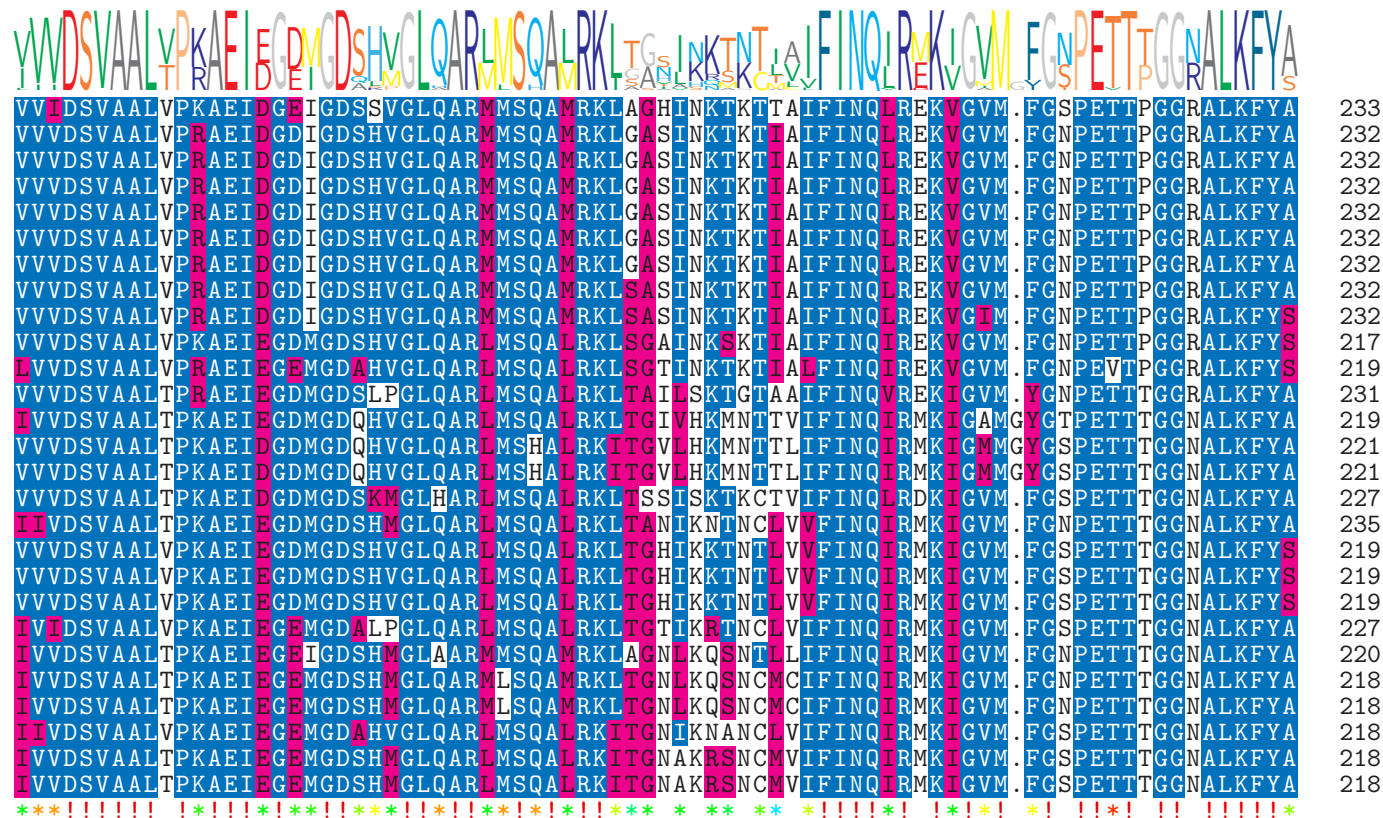
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consensus

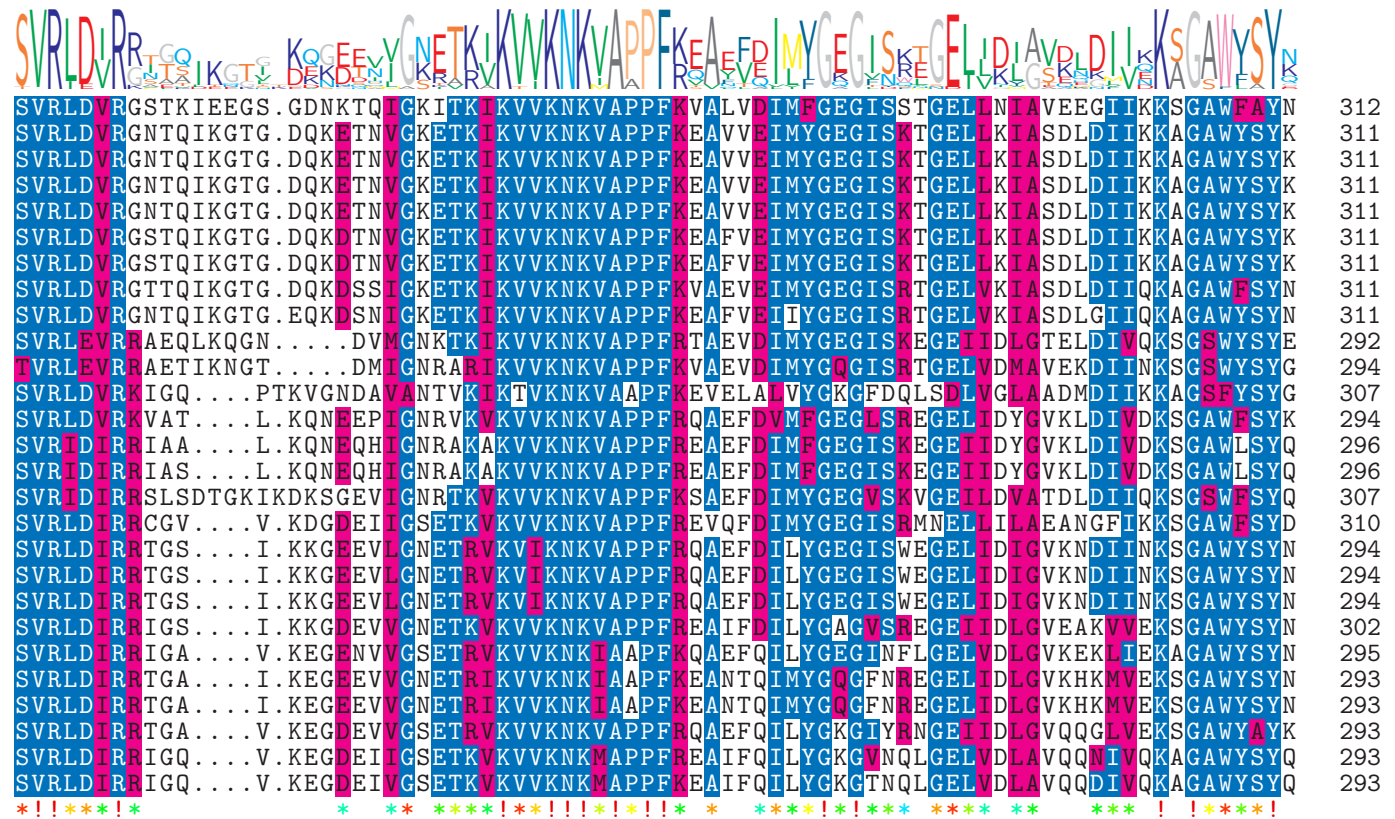
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consensus

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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 527 SMSK321 RS11065 WP 001085454.1  | DEKIGQGS | ENAKKYLADNPEVFAE   | IDHQVRVQFGL          | IDGEEAAE          | ....SKKDE    | ....VAQVDS          | .VNEEVTLDLGDELEIE | 381      |          |     |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | DEKIGQGS | ENAKKYLADNPEIF     | DEIDHQVRVQFGL        | IDGEEIAE          | ....SKKDE    | ....AAQVDS          | .VNEEVTLDLGDELEIE | 381      |          |     |
| NTDB id 453 Spy49 1753c ACI62003.1          | GEKIGQGS | ENAKRYLADHPQLF     | DEIDRKVRVKFGL        | LEESEEEESAMAVASE  | .....E       | .....TDDLALDLNGIEIE |                   | 377      |          |     |
| NTDB id 408 SMU RS09530 WP 002262392.1      | GEKIGQGS | ENAKKFLADNPEIF     | DDIDHKVRVQYGL        | IEEDNTEEKQSSKEK   | .....ETDEK   | ..ADKNLVLELDDTIELE  |                   | 382      |          |     |
| NTDB id 115 BSU 16940 NP 389576.2           | EERLGGQ  | RENAKQFLKENKDIMLMI | QEQIREHYGL           | DNNGVVQQAEETQEEL  | EFEE         | E                   | .....             | 348      |          |     |
| NTDB id 625 LCA RS02525 WP 011374196.1      | SERIGQG  | RENAKNYLADHEDVE    | DEVRLKVRAAYG         | ISDVPPEEDLPTTEDE  | QI           | NILPDDST            | .....EE           | 355      |          |     |
| NTDB id 1313 DR RS12030 WP 010888966.1      | DERIGQG  | KEKTIAYIAERP       | EMEQEIRDRVMAAIR      | AGNAGEAPALAPAPAAP | .....EAAEA   |                     | .....             | 363      |          |     |
| NTDB id 1245 Cj1673c YP 002345041.1         | DKKLGGQ  | RENSKAFLENPEIA     | DEITKAIQNSMG         | TEGMISG           | ..SEDDEG     | .....E              | E                 | 343      |          |     |
| NTDB id 1214 NCTC11637 00359 SQJ03206.1     | DKKLGGQ  | RENAKALLKEDKAL     | ADEITLKIKESIGS       | NEEIMP            | ..LPDEPL     | .....E              | EME               | 347      |          |     |
| NTDB id 1211 C694 RS00795 WP 000963128.1    | DKKLGGQ  | RENAKALLKEDKAL     | ADEITLKIKESIGS       | NEEIMP            | ..LPDEPL     | .....E              | EME               | 347      |          |     |
| NTDB id 1334 RAOC RS04870 WP 004918236.1    | DTKLGGQ  | RDITVKELIKDNPEL    | AEELEAKIREKLQAK      |                   |              |                     |                   | 343      |          |     |
| NTDB id 1389 A4U84 RS07560 WP 021112712.1   | GTKIGQG  | KNNAVKWLKENPEIA    | DKLEQEIRNTLASNPNSVL  | ..KATASDSN        | .....DES     | DVEEFSEEEL          | .....             | 372      |          |     |
| NTDB id 1130 NGFG RS03960 WP 003688695.1    | GAKIGQG  | KDNVRVWLKENPEIS    | DEIDAKIRALNGVEMHITE  | .....GT           | .....QDET    | DGERPEE             | .....             | 348      |          |     |
| NTDB id 1124 NGFG RS03960 WP 003688695.1    | GAKIGQG  | KDNVRVWLKENPEIS    | DEIDAKIRALNGVEMHITE  | .....GT           | .....QDET    | DGERPEE             | .....             | 348      |          |     |
| NTDB id 1123 OK783 RS03845 WP 003688695.1   | GAKIGQG  | KDNVRVWLKENPEIS    | DEIDAKIRALNGVEMHITE  | .....GT           | .....QDET    | DGERPEE             | .....             | 348      |          |     |
| NTDB id 1427 RS RS02760 WP 011000510.1      | GERIGQG  | RDNCREFLRENAEL     | AREIENKVRREHLGV      | TPMGAV            | ..TL         | AAEVE               | .....ED           | 352      |          |     |
| NTDB id 120754 DI57 RS01765 WP 023308943.1  | GDKIGQG  | KANAISWLKENPAAAK   | EIEKKVRELLLNNQDSKP   | ..DFVVD           | .....AD      | AEETNEDF            | .....             | 352      |          |     |
| NTDB id 1165 A1552VC RS01565 WP 000344154.1 | GDKIGQG  | KANACKYLVKENPEIA   | KTLDKKLREMLLNPNENMQL | ..IAETSSAA        | .....DDV     | EF                  | GAVPEEF           | 354      |          |     |
| NTDB id 1142 GTF74 RS11550 WP 000344154.1   | GDKIGQG  | KANACKYLVKENPEIA   | KTLDKKLREMLLNPNENMQL | ..IAETSSAA        | .....DDV     | EF                  | GAVPEEF           | 354      |          |     |
| NTDB id 1205 PSJM300 05545 AFN77183.1       | GSKIGQG  | KANAACKYLEENPEI    | GIEEQIRAKLLV         | TSANTK            | ..ATPVAEDL   | .....ADADI          | .....             | 347      |          |     |
| NTDB id 1022 ACIAD RS06390 WP 004925639.1   | GNKIGQG  | KNNVIRYLEENPQ      | ISTEIEAVIREQL        | LT                | TKASDQT      | ..AA                | HDETE             | .....EED | 349      |     |
| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | GNKIGQG  | KNNVIRYFEENN       | QIAEEIERNIREQL       | LT                | TGTNGA       | ..VQ                | I                 | EDE      | .....EED | 349 |
| consensus                                   | ***!!!   | *****              | **                   | *****             | *****        | **                  | *                 | *        | *        | *   |

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|                                             |     | IEE |  |
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| NTDB id 194 SPR RS08825 WP 001085462.1      | IEE | 388 |  |
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| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | ... | 349 |  |
| consensus                                   |     |     |  |

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