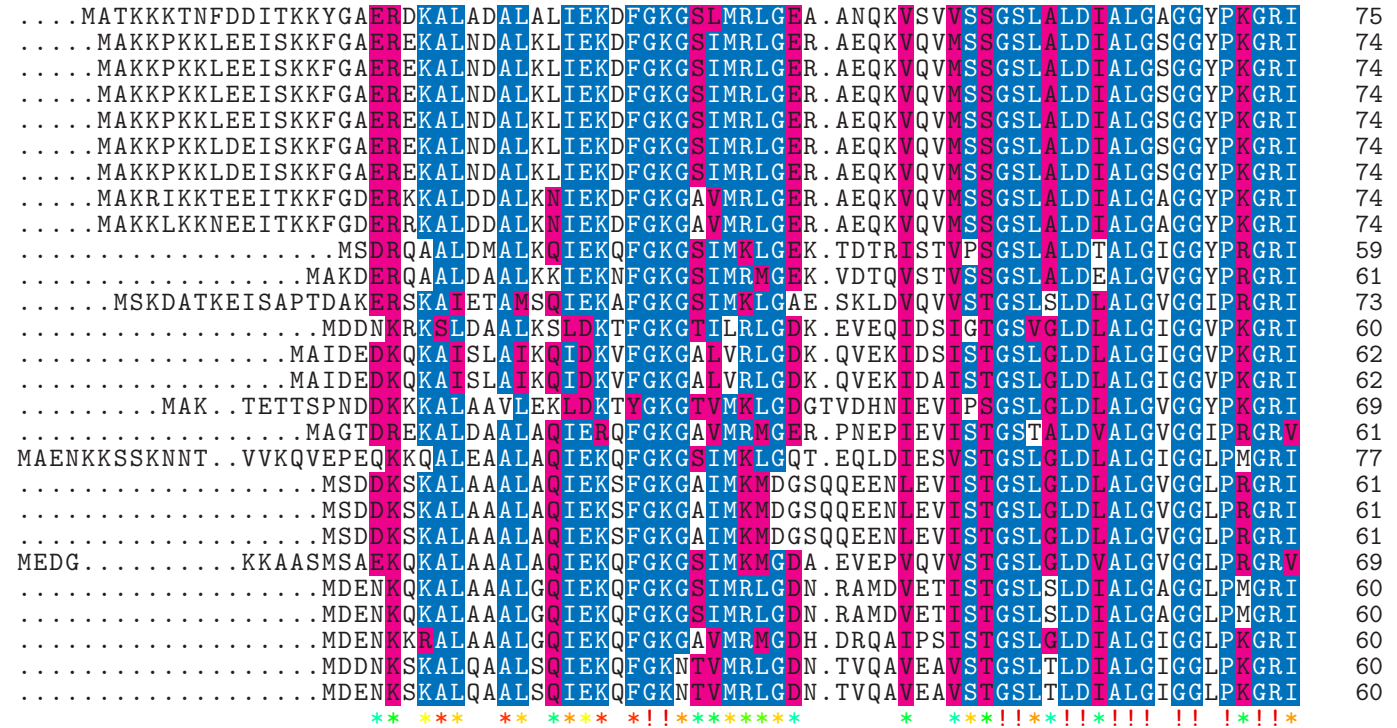


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consensus

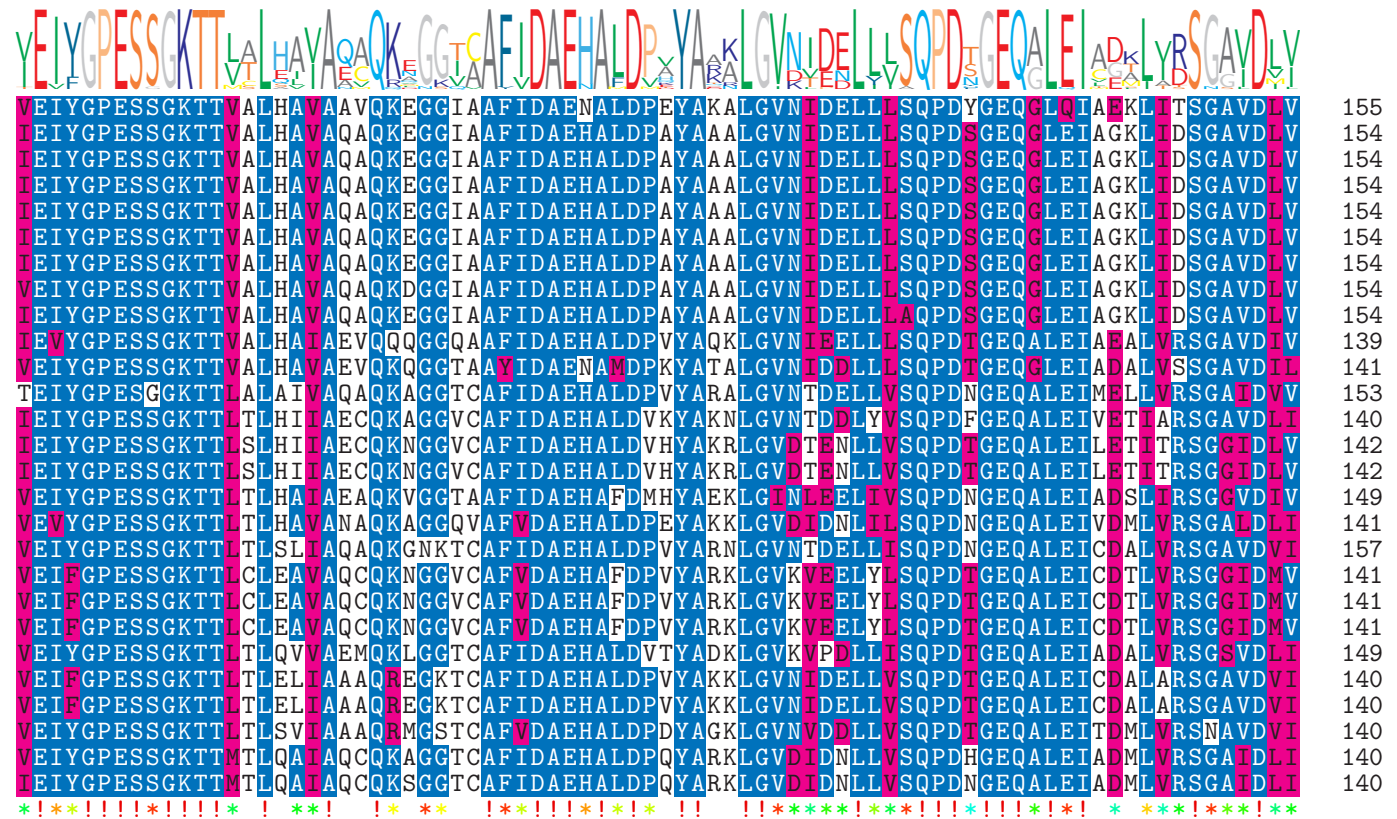
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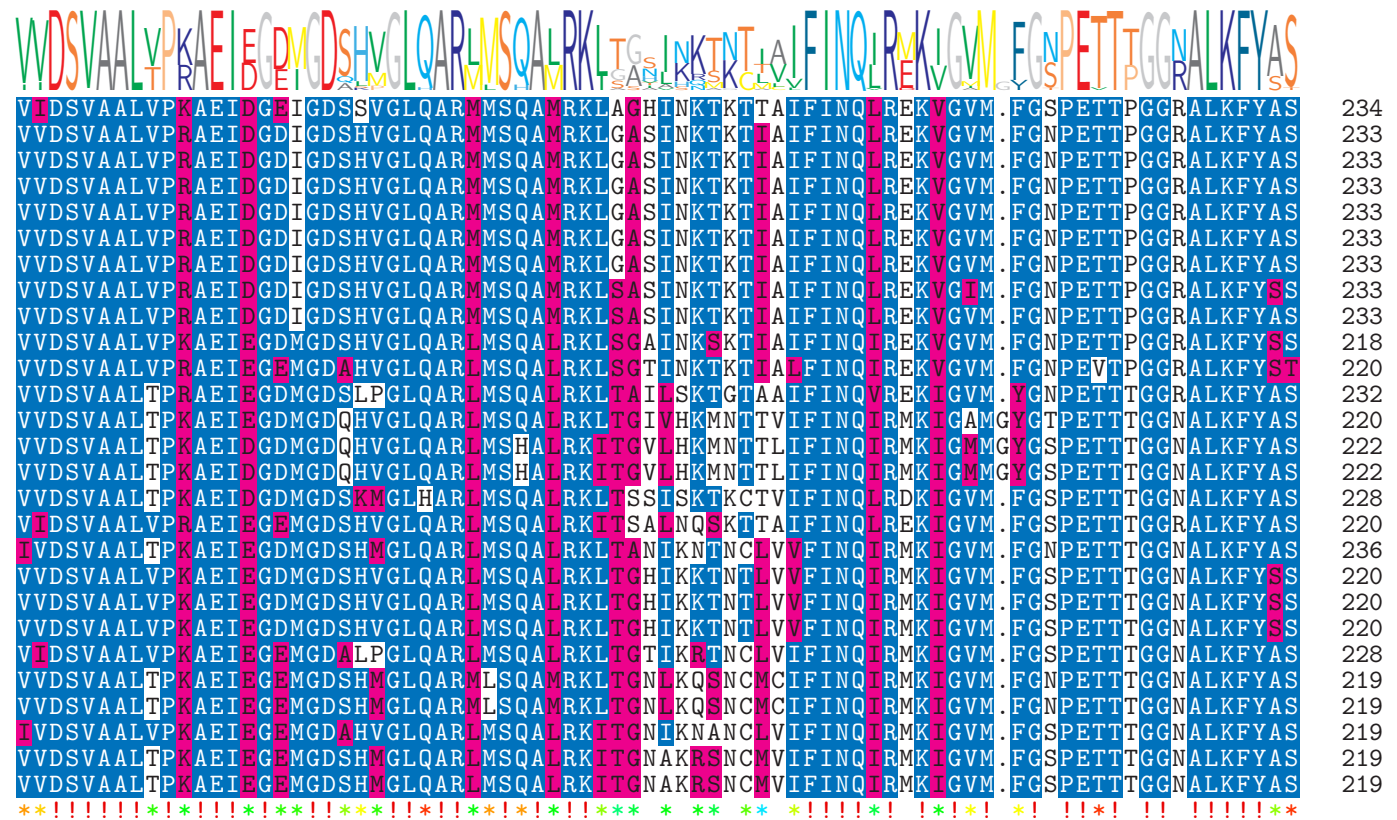
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consensus

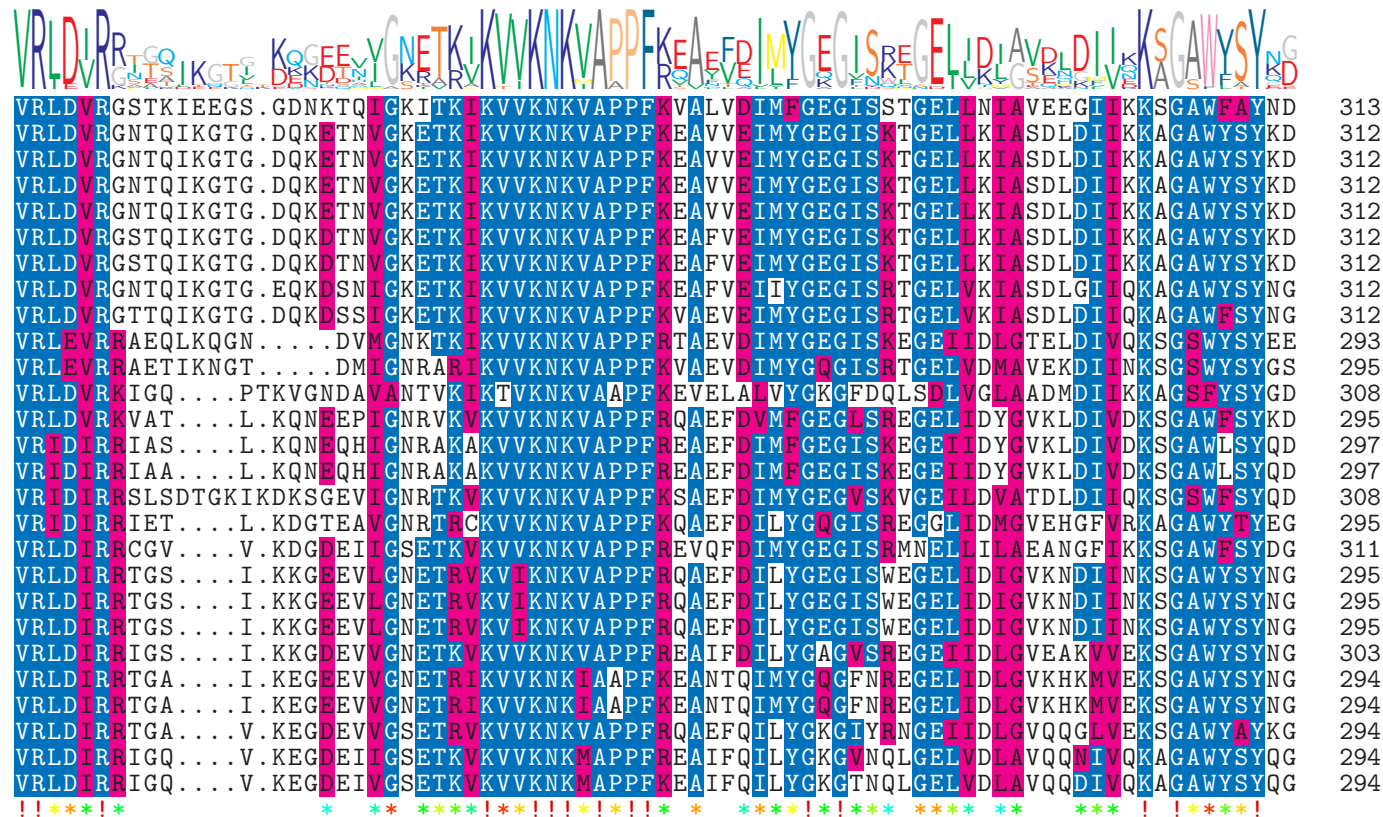
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NTDB id 1022 ACIAD RS06390 WP 004925639.1  
NTDB id 1074 ABD1 RS10195 WP 000344167.1  
consensus



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|                                             |            |                   |                 |                     |                                |      |     |
|---------------------------------------------|------------|-------------------|-----------------|---------------------|--------------------------------|------|-----|
| NTDB id 600 KW2 RS01765 WP 011675413.1      | EKIGQGA    | EKAKNYLKEHQDV     | DEIDHKVRAAHG    | ILDDSEVAETEEETTASKT | .KAKAKKEEKAVETEEIELELED        | .... | 387 |
| NTDB id 269 KZH43 RS08665 WP 001085462.1    | EKIGQGS    | ENAKKYLAEHPEIF    | DEIDKQVRSKFGL   | IDGEEVSEQDTENKKDE   | ....PKKEEA..VNEEVPLDLGDELEIE   |      | 385 |
| NTDB id 228 SPD RS09265 WP 001085462.1      | EKIGQGS    | ENAKKYLAEHPEIF    | DEIDKQVRSKFGL   | IDGEEVSEQDTENKKDE   | ....PKKEEA..VNEEVPLDLGDELEIE   |      | 385 |
| NTDB id 194 SPR RS08825 WP 001085462.1      | EKIGQGS    | ENAKKYLAEHPEIF    | DEIDKQVRSKFGL   | IDGEEVSEQDTENKKDE   | ....PKKEEA..VNEEVPLDLGDELEIE   |      | 385 |
| NTDB id 159 SP RS09750 WP 001085462.1       | EKIGQGS    | ENAKKYLAEHPEIF    | DEIDKQVRSKFGL   | IDGEEVSEQDTENKKDE   | ....PKKEEA..VNEEVPLDLGDELEIE   |      | 385 |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | EKIGQGS    | ENAKKYLADNPEIF    | DEIDHQVRVQFGL   | IDGEEIAES...KKDE    | ....AAQVDS..VNEEVTLDLGDELEIE   |      | 381 |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | EKIGQGS    | ENAKKYLADNPEVFAE  | IDHQVRVQFGL     | IDGEEAAES...KKDE    | ....VAQVDS..VNEEVTLDLGDELEIE   |      | 381 |
| NTDB id 408 SMU RS09530 WP 002262392.1      | EKIGQGS    | ENAKKFLADNPEIF    | DDIDHKVVRVQYGL  | IEEDNTEEKQSSKEK     | .....ETDEK..ADKNLVLELDDTIELE   |      | 382 |
| NTDB id 453 Spy49 1753c ACI62003.1          | EKIGQGS    | ENAKRYLADHPQLF    | DEIDRKVRVKFGL   | LEESEESAMAVASE      | .....E.....TDDLALDLDNIGIEIE    |      | 377 |
| NTDB id 115 BSU 16940 NP 389576.2           | ERLGGG     | RENAKQFLKENKDIMLM | IQEQIREHYGL     | DNNGVVQQAEETQEEL    | ..EFE.E.....                   |      | 348 |
| NTDB id 625 LCA RS02525 WP 011374196.1      | ERIGQG     | RENAKNYLADHEDVE   | DEVRLKVRAAYG    | ISDVPEEDLPTTEDE     | .QI..NILPDDST.....EE.....      |      | 355 |
| NTDB id 1313 DR RS12030 WP 010888966.1      | ERIGQG     | KEKTIAYTAERP      | PEMEQEIRDRVMAA  | IRAGNAGEAPALAPAP    | .....AAP..EAAEA.....           |      | 363 |
| NTDB id 1245 Cj1673c YP 002345041.1         | KKLGGG     | RENSKAFLEKENPEIA  | DEITKAIQNSMG    | TEGMISGSE..DDEGEE   | .....                          |      | 343 |
| NTDB id 1211 C694 RS00795 WP 000963128.1    | KKLGGG     | RENAKALLKEDKAL    | ADEITLKIKESIGS  | NEEIMPLP..DEPLEEME  | .....                          |      | 347 |
| NTDB id 1214 NCTC11637 00359 SQJ03206.1     | KKLGGG     | RENAKALLKEDKAL    | ADEITLKIKESIGS  | NEEIMPLP..DEPLEEME  | .....                          |      | 347 |
| NTDB id 1334 RAOC RS04870 WP 004918236.1    | TKLGGQ     | GRDITVKELIKDNPEL  | AEELEAKIREKLQAK | .....               |                                |      | 343 |
| NTDB id 382818 FYC74 RS10320 WP 031035466.1 | DQLGGG     | KENARNFLKDNPD     | LANEIEKKIKEKLG  | VGRPEEPA..AEPGAD    | AAAASAAPADAAPAVPAPATAKATKSAAAA |      | 373 |
| NTDB id 1389 A4U84 RS07560 WP 021112712.1   | TKIGQG     | KNNAVKWLKENPEIA   | DKLEQEIRNTLAS   | NPNSVLKATASDSNDE    | SDVEEFSEEL.....                |      | 372 |
| NTDB id 1130 NGFG RS03960 WP 003688695.1    | AKIGQG     | KDNVRVWLKENPEIS   | DEIDAKIRALNGV   | EMHITEGT.....QDET   | DGERPEE.....                   |      | 348 |
| NTDB id 1124 NGFG RS03960 WP 003688695.1    | AKIGQG     | KDNVRVWLKENPEIS   | DEIDAKIRALNGV   | EMHITEGT.....QDET   | DGERPEE.....                   |      | 348 |
| NTDB id 1123 OK783 RS03845 WP 003688695.1   | AKIGQG     | KDNVRVWLKENPEIS   | DEIDAKIRALNGV   | EMHITEGT.....QDET   | DGERPEE.....                   |      | 348 |
| NTDB id 1427 RS RS02760 WP 011000510.1      | ERIGQG     | RDNCREFLRENAEL    | AREIENKVREHLG   | VTPMGAV.TLAEVEED    | .....                          |      | 352 |
| NTDB id 1165 A1552VC RS01565 WP 000344154.1 | DKIGQG     | KANACKYLLKENPEIA  | KTLDKKLREMLLN   | PENMQLIAETSSAADD    | VEFGAVPEEF.....                |      | 354 |
| NTDB id 1142 GTF74 RS11550 WP 000344154.1   | DKIGQG     | KANACKYLLKENPEIA  | KTLDKKLREMLLN   | PENMQLIAETSSAADD    | VEFGAVPEEF.....                |      | 354 |
| NTDB id 1205 PSJM300 05545 AFN77183.1       | SKIGQG     | KANAAYLEENPEIG    | QIEEQIRAKLLV    | TSANTKATPVAEDL      | ADADI.....                     |      | 347 |
| NTDB id 1022 ACIAD RS06390 WP 004925639.1   | NKIGQG     | KNNVIRYLEENP      | QISTEIEAVIREQLL | TKASDQTAA.HDETEE    | PDLL..ES.....                  |      | 349 |
| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | NKIGQG     | KNNVIRYFEENN      | QIAEEIERNIREQLL | TTGTNGAVQ.I.EDEE    | PDLL..LES.....                 |      | 349 |
| consensus                                   | **!!!***** | * * *****         | *****           | *****               | * *                            | * *  | *   |

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|                                             |     |     |     |
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| 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 |
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| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | IEE |     | 384 |
| NTDB id 408 SMU RS09530 WP 002262392.1      | D.. |     | 383 |
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| NTDB id 625 LCA RS02525 WP 011374196.1      | ... |     | 355 |
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| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | ... |     | 349 |
| consensus                                   |     |     |     |

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