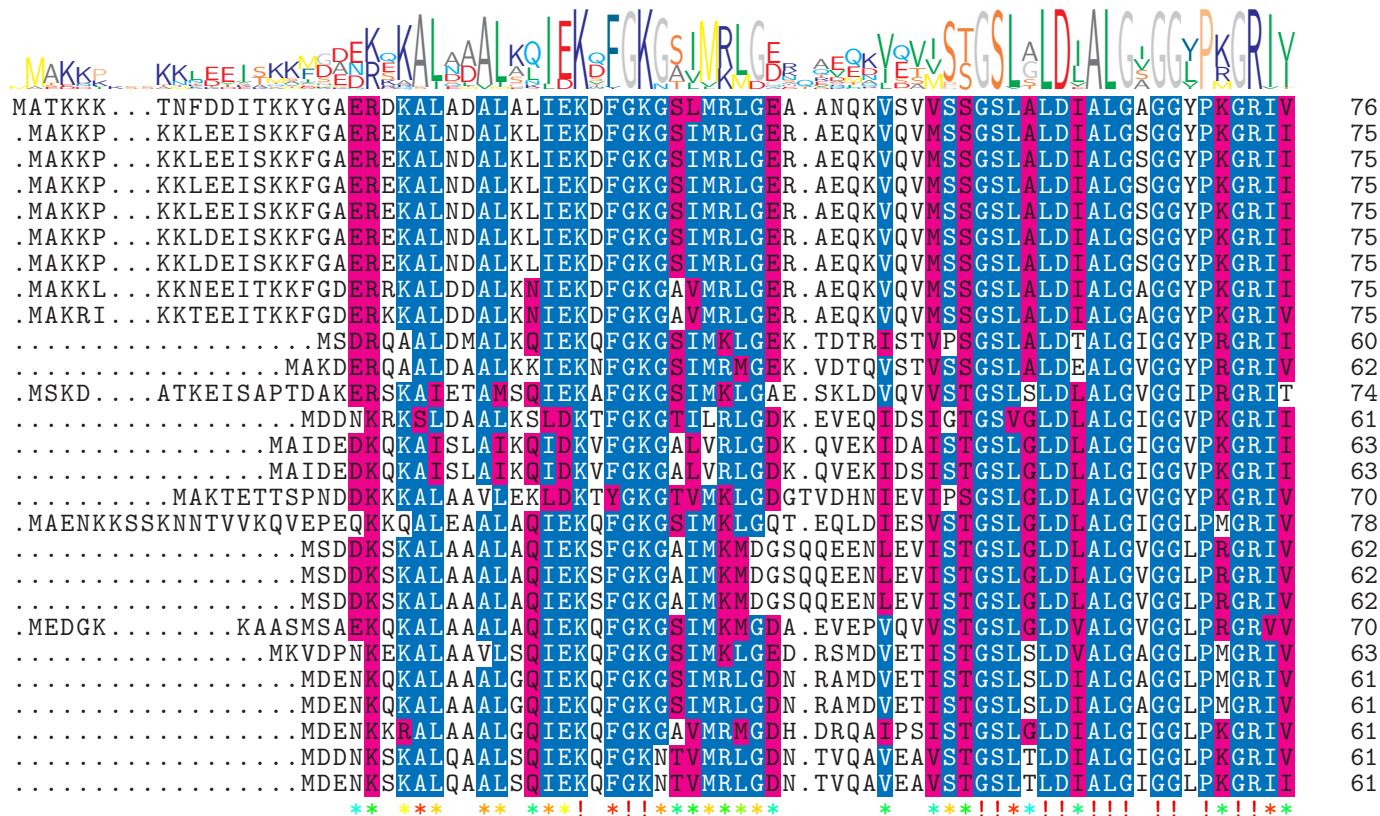


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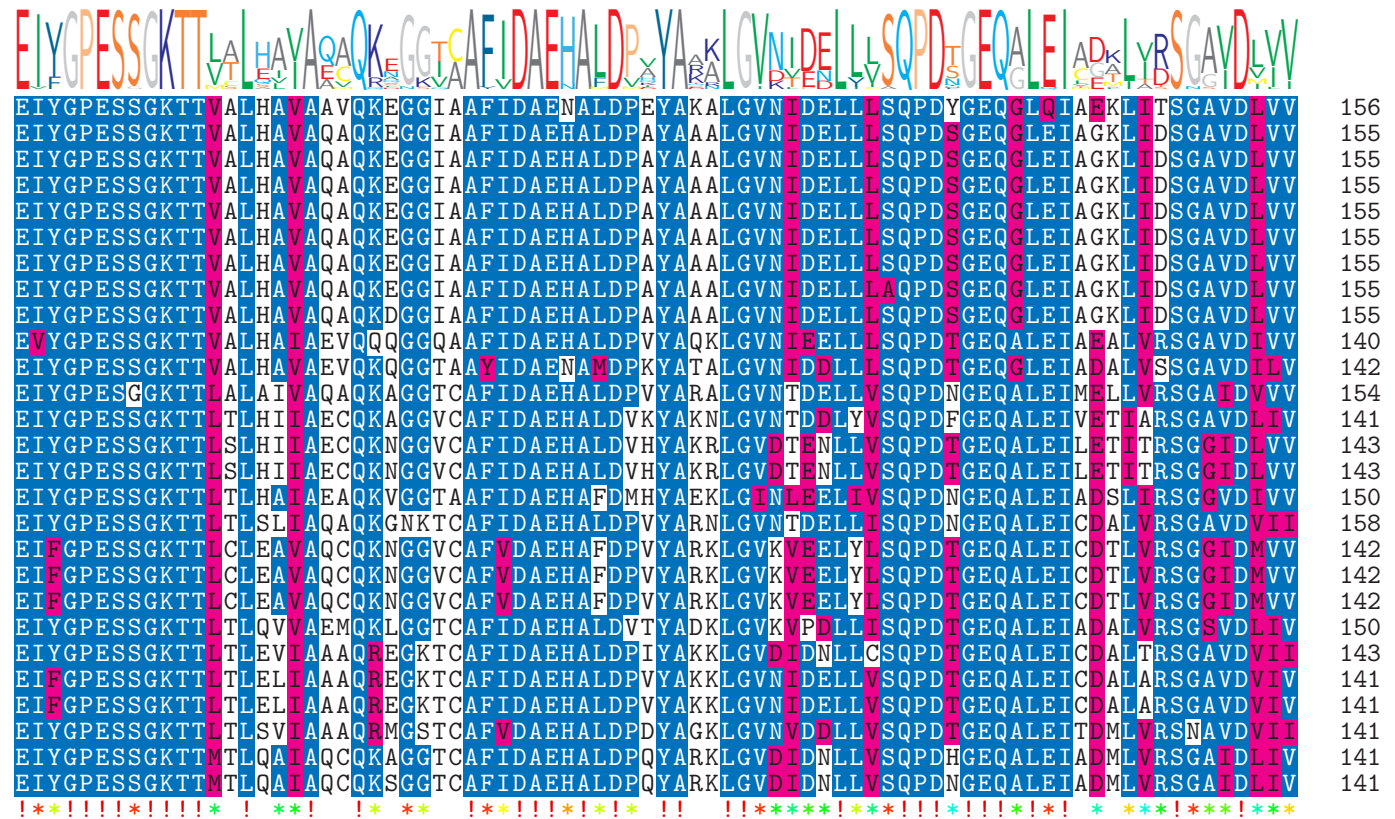
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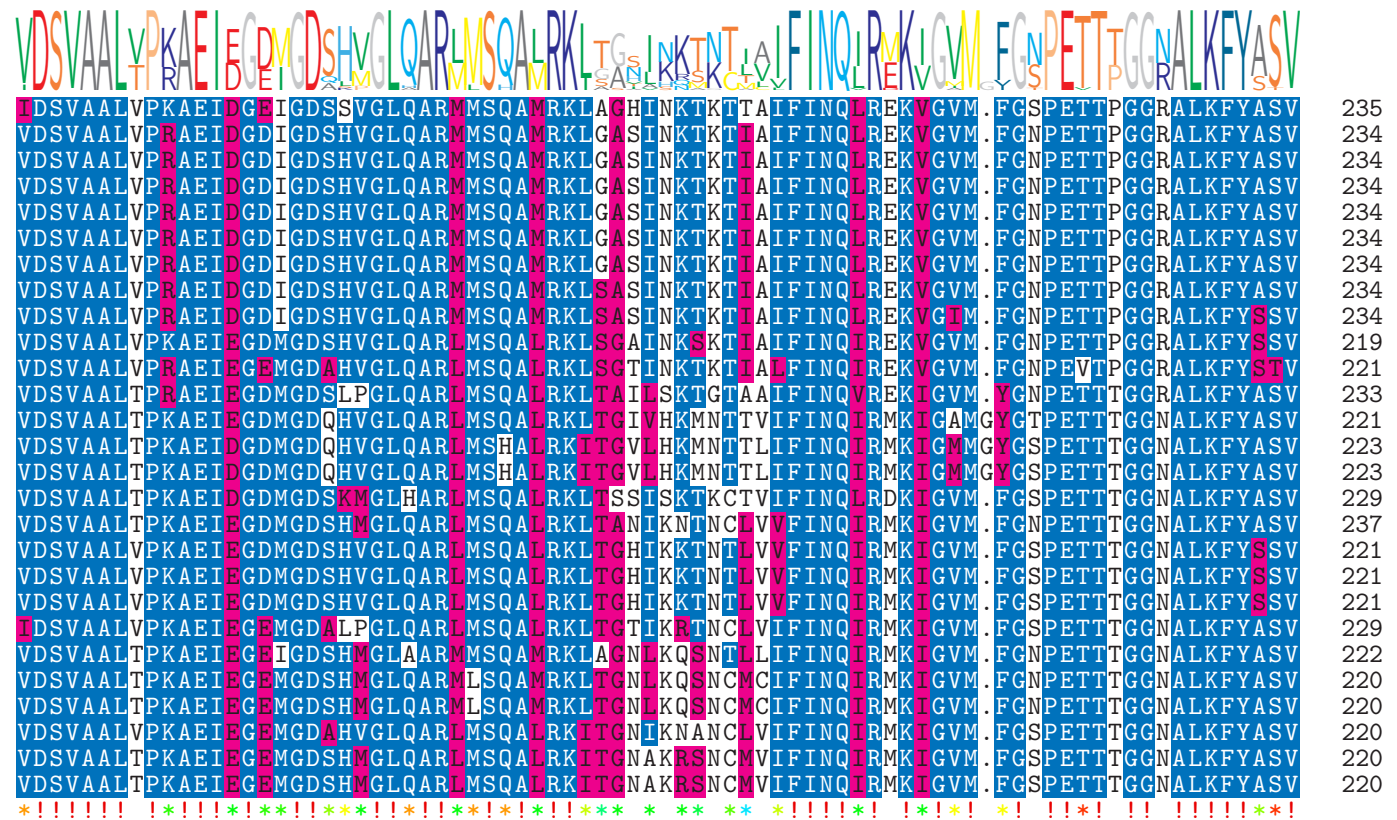
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consensus

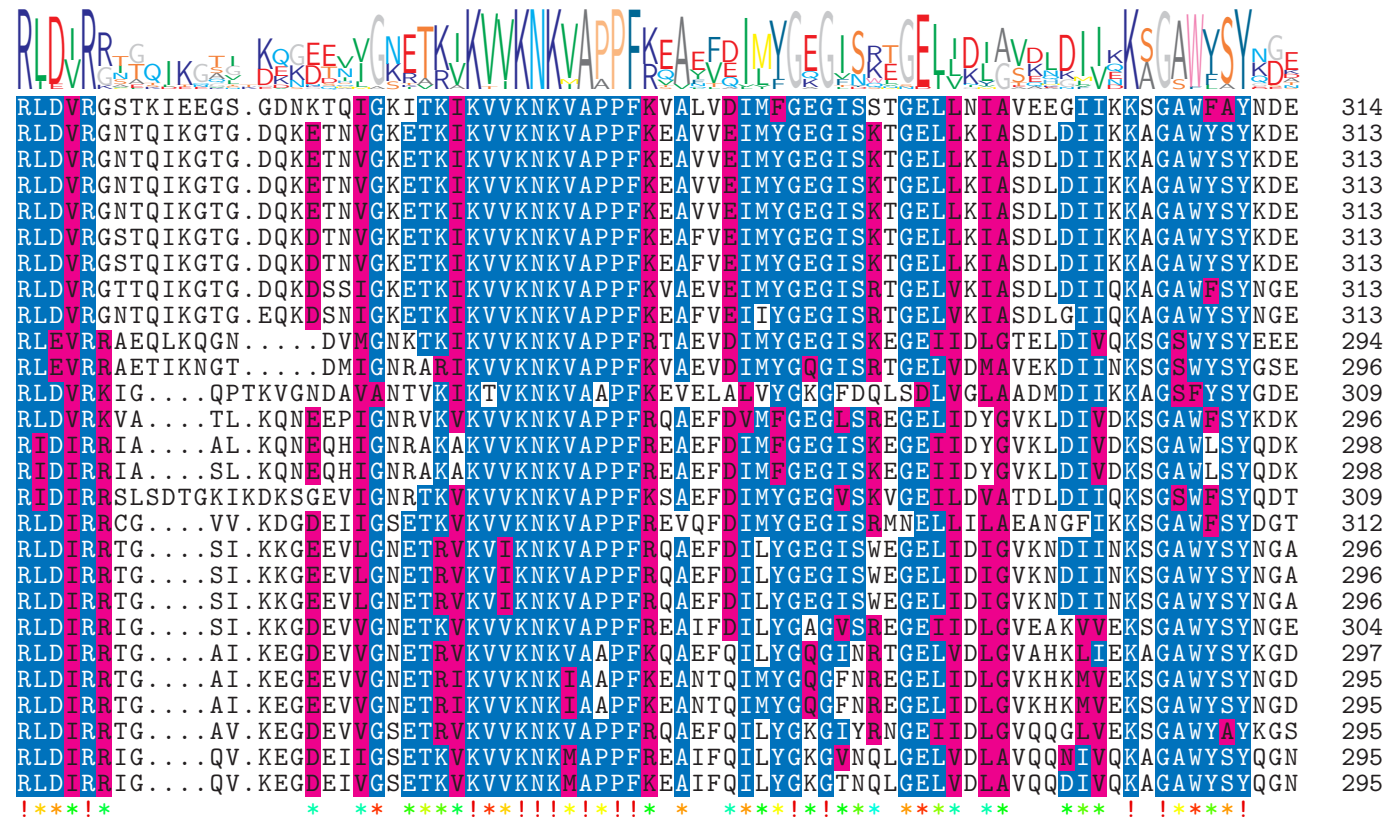
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|                                             |        |                 |                |                  |                   |                 |               |     |
|---------------------------------------------|--------|-----------------|----------------|------------------|-------------------|-----------------|---------------|-----|
| NTDB id 600 KW2 RS01765 WP 011675413.1      | KIGQGA | EKAKNYLKEHQDV   | DEIDHKVRAAHG   | LDDSEVAETEEETTAS | KTAKAKKEEKAVETE   | EIELELED        | .....         | 387 |
| NTDB id 269 KZH43 RS08665 WP 001085462.1    | KIGQGS | ENAKKYLAEHPEIF  | DEIDKQVRSKFGL  | IDGEEVSEQDTENKK  | DE....PKKEEA..    | VNEEVPLDLGDELE  | EIEIE         | 387 |
| NTDB id 228 SPD RS09265 WP 001085462.1      | KIGQGS | ENAKKYLAEHPEIF  | DEIDKQVRSKFGL  | IDGEEVSEQDTENKK  | DE....PKKEEA..    | VNEEVPLDLGDELE  | EIEIE         | 387 |
| NTDB id 194 SPR RS08825 WP 001085462.1      | KIGQGS | ENAKKYLAEHPEIF  | DEIDKQVRSKFGL  | IDGEEVSEQDTENKK  | DE....PKKEEA..    | VNEEVPLDLGDELE  | EIEIE         | 387 |
| NTDB id 159 SP RS09750 WP 001085462.1       | KIGQGS | ENAKKYLAEHPEIF  | DEIDKQVRSKFGL  | IDGEEVSEQDTENKK  | DE....PKKEEA..    | VNEEVPLDLGDELE  | EIEIE         | 387 |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | KIGQGS | ENAKKYLAADNPEV  | FAEIDHQVRVQFGL | IDGEEAAE....     | SKKDE....VAQVDS.. | VNEEVTLDLGDELE  | EIEIE         | 383 |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | KIGQGS | ENAKKYLAADNPEIF | DEIDHQVRVQFGL  | IDGEEIAE....     | SKKDE....AAQVDS.. | VNEEVTLDLGDELE  | EIEIE         | 383 |
| NTDB id 453 Spy49 1753c ACI62003.1          | KIGQGS | ENAKRYLADHPQLF  | DEIDRKVRVKFGL  | LEESEEEESAMAVASE | .....E.....       | TDDLALDLNNGIE   | IED.          | 378 |
| NTDB id 408 SMU RS09530 WP 002262392.1      | KIGQGS | ENAKKFLADNPEIF  | DDIDHKVRVQYGL  | IEEDNTEEEKQSSKEK | .....ETDEK..      | ADKNLVLELDDT    | IELED.        | 383 |
| NTDB id 115 BSU 16940 NP 389576.2           | RLGQGR | ENAKQFLKENKDIM  | LMIQEQIREHYGL  | DNNGVVQQAEETQEEL | EFEE.....         | .....           | .....         | 348 |
| NTDB id 625 LCA RS02525 WP 011374196.1      | RIGQGR | ENAKNYLADHEDVE  | DEVRLKVRAAYG   | ISDVPEEDLPTTEDE  | .QI.NILPDDST      | .....EE         | .....         | 355 |
| NTDB id 1313 DR RS12030 WP 010888966.1      | RIGQGK | EKTIAIYAERP     | EMEQEIRDRVMAA  | IRAGNAGEAPALAP   | APAPAPAPAP        | .....EAAEA      | .....         | 363 |
| NTDB id 1245 Cj1673c YP 002345041.1         | KLGGGR | ENSKAFLKENPEI   | ADEITKAIQNSMG  | IEGMIS.....      | GSEDDE.....       | GEE.....        | .....         | 343 |
| NTDB id 1214 NCTC11637 00359 SQJ03206.1     | KLGGGR | ENAKALLKEDKAL   | ADEITLKI       | KESIGSNEEIM      | .....PLPDEP       | .....LEE        | .....ME       | 347 |
| NTDB id 1211 C694 RS00795 WP 000963128.1    | KLGGGR | ENAKALLKEDKAL   | ADEITLKI       | KESIGSNEEIM      | .....PLPDEP       | .....LEE        | .....ME       | 347 |
| NTDB id 1334 RAOC RS04870 WP 004918236.1    | KLGGGR | DTVVKELIKDN     | PELAEELEAKI    | REKLQAK          | .....             | .....           | .....         | 343 |
| NTDB id 1389 A4U84 RS07560 WP 021112712.1   | KIGQGG | KNNAVKWLKENPEI  | ADKLEQEIRNTL   | ASNPN            | SV....LKATAS      | .....DSNDE      | ...SDVEEFSEEL | 372 |
| NTDB id 1130 NGFG RS03960 WP 003688695.1    | KIGQGG | KDNVRVWLKENPEI  | SDEIDAKIRALNG  | VEMHIT....       | EGTQD.....        | ETDGERPEE       | .....         | 348 |
| NTDB id 1124 NGFG RS03960 WP 003688695.1    | KIGQGG | KDNVRVWLKENPEI  | SDEIDAKIRALNG  | VEMHIT....       | EGTQD.....        | ETDGERPEE       | .....         | 348 |
| NTDB id 1123 OK783 RS03845 WP 003688695.1   | KIGQGG | KDNVRVWLKENPEI  | SDEIDAKIRALNG  | VEMHIT....       | EGTQD.....        | ETDGERPEE       | .....         | 348 |
| NTDB id 1427 RS RS02760 WP 011000510.1      | RIGQGR | DNCREFLRENAEL   | AREIENKVREHL   | GVTPMGA....      | VTLAEE.....       | VEED.....       | .....         | 352 |
| NTDB id 386404 FJD32 RS06060 WP 037420979.1 | KIGQGR | ANAGKYL         | TENPAIAAEIDKT  | LRELLSNPSAL      | ....AS..SA        | .....SDDDN      | IEGNIDLETGEVF | 357 |
| NTDB id 1165 A1552VC RS01565 WP 000344154.1 | KIGQGG | KANACKY         | LKENPEIAKTLD   | KKLREMLLN        | PENMQ....LIAETS   | .....SAADDVEFG  | AVPE....EF    | 354 |
| NTDB id 1142 GTF74 RS11550 WP 000344154.1   | KIGQGG | KANACKY         | LKENPEIAKTLD   | KKLREMLLN        | PENMQ....LIAETS   | .....SAADDVEFG  | AVPE....EF    | 354 |
| NTDB id 1205 PSJM300 05545 AFN77183.1       | KIGQGG | KANAAYLEENPEI   | GQIEEQ         | IRAKLLVTSANT     | ....KATPVA        | .....ED...LADAD | I.....        | 347 |
| NTDB id 1022 ACIAD RS06390 WP 004925639.1   | KIGQGG | KNNVIRY         | LEENPQISTEIE   | AVIREQLLT        | KASDQ....TAA.HD   | .....ET...EEEP  | DLLES         | 349 |
| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | KIGQGG | KNNVIRY         | FEENNQIAEEI    | ERNIREQLLT       | TGTNG....AVQ.I    | .....ED...EEEP  | DLLES         | 349 |
| consensus                                   | **!!!  | *****           | **             | *****            | *****             | **              | **            | *   |

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

consensus

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 ≥ 50% conserved