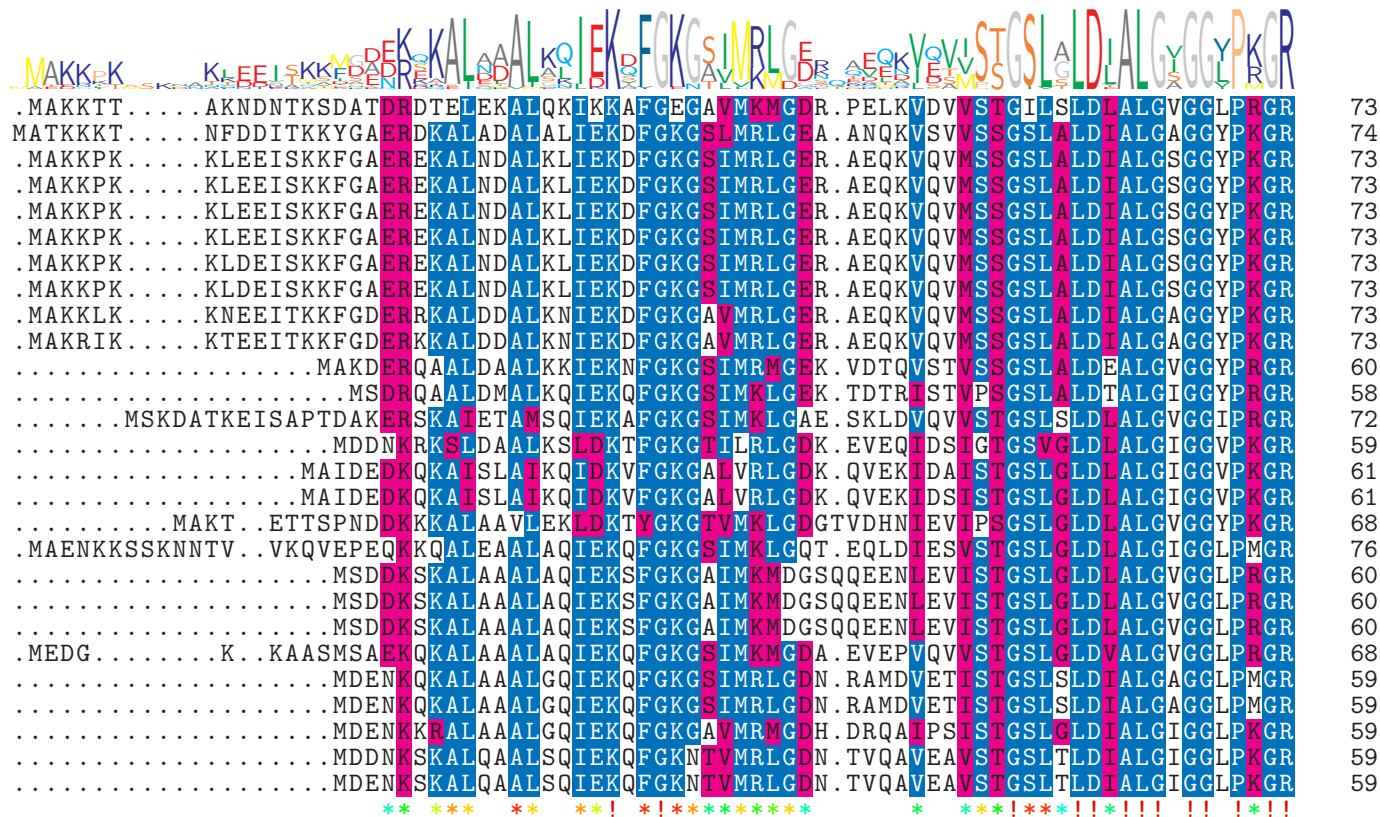


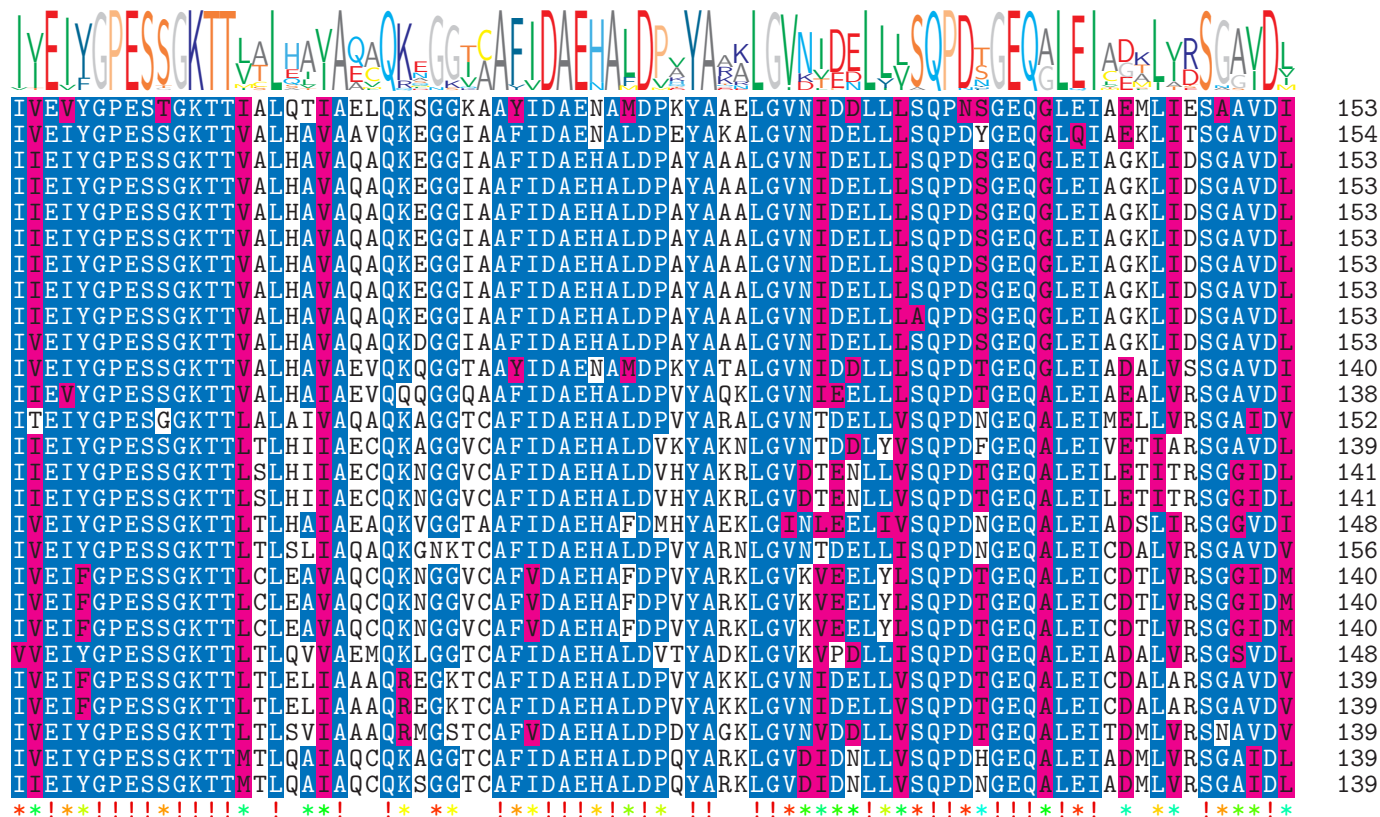
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consensus



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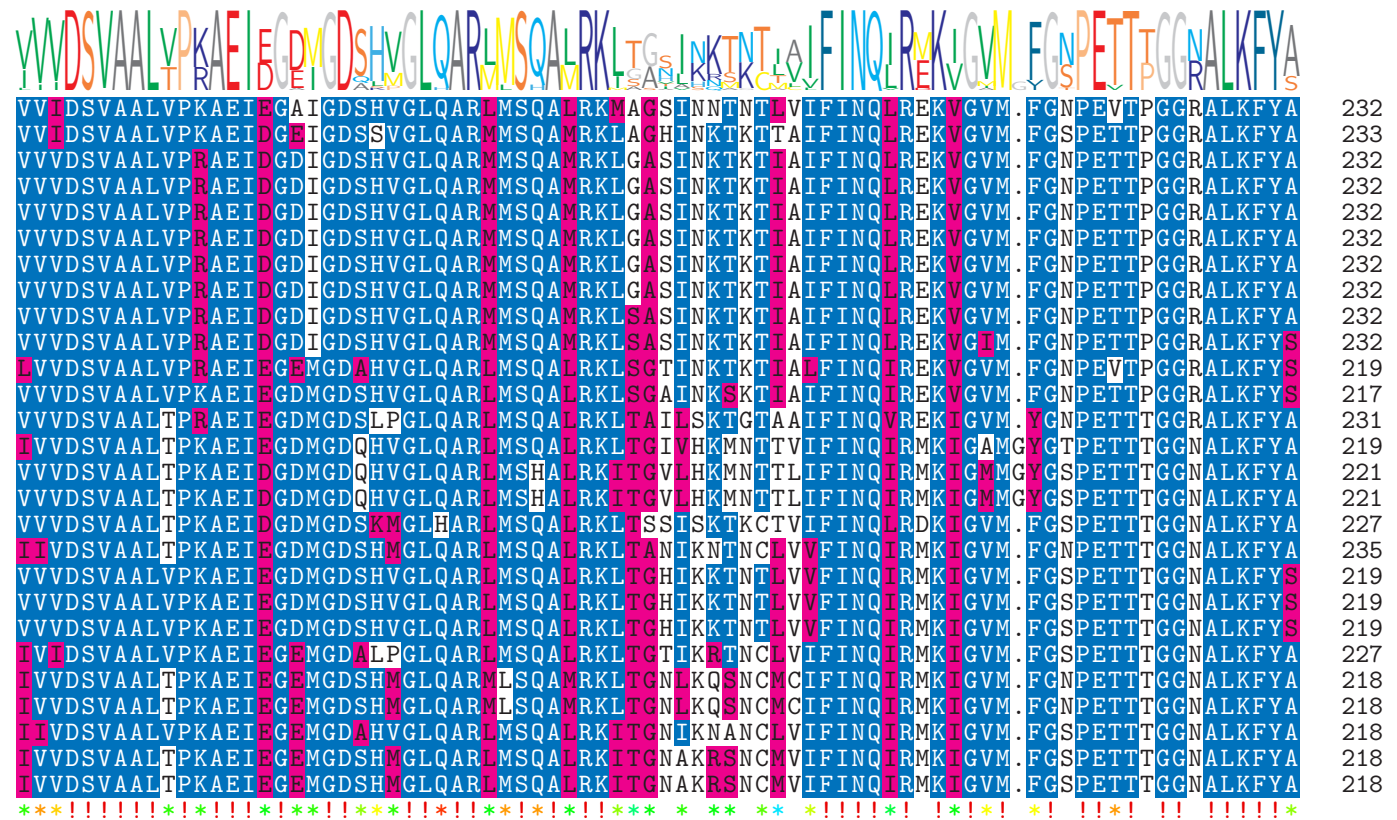
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consensus

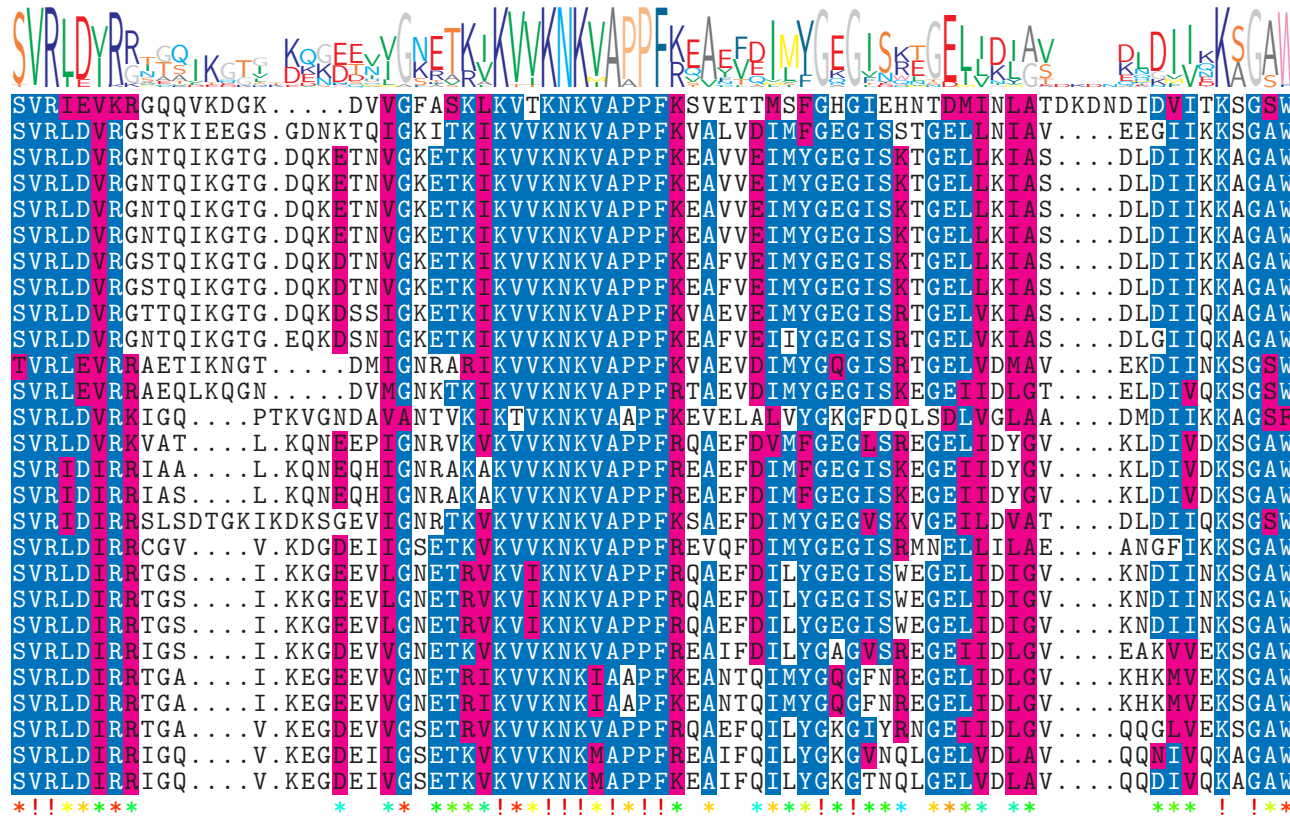
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus

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|                                             |                       |             |              |               |                                              |                                           |     |
|---------------------------------------------|-----------------------|-------------|--------------|---------------|----------------------------------------------|-------------------------------------------|-----|
| NTDB id 419279 GWC93 RS06240 WP 003567844.1 | YNYGKERLIGQGLVNASHYLD | EHPEISK     | EIEEK        | IREQV         | APKKPEETDEKQDDKKDDQASADKKTEKTTTTDTEKKADKKDD  | 387                                       |     |
| NTDB id 600 KW2 RS01765 WP 011675413.1      | FAYNDEKIGQGA          | EKA         | KNYLKEHQDV   | FEIDH         | KVRAAHGLDDSEVAETEEETTAS                      | 387                                       |     |
| NTDB id 269 KZH43 RS08665 WP 001085462.1    | YSYKDEKIGQGS          | ENAKKYLA    | EHPEIF       | DEIDKQVRSKFGL | LIDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLD.LGD    | 380                                       |     |
| NTDB id 228 SPD RS09265 WP 001085462.1      | YSYKDEKIGQGS          | ENAKKYLA    | EHPEIF       | DEIDKQVRSKFGL | LIDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLD.LGD    | 380                                       |     |
| NTDB id 194 SPR RS08825 WP 001085462.1      | YSYKDEKIGQGS          | ENAKKYLA    | EHPEIF       | DEIDKQVRSKFGL | LIDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLD.LGD    | 380                                       |     |
| NTDB id 159 SP RS09750 WP 001085462.1       | YSYKDEKIGQGS          | ENAKKYLA    | EHPEIF       | DEIDKQVRSKFGL | LIDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLD.LGD    | 380                                       |     |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | YSYKDEKIGQGS          | ENAKKYLA    | DNPEIF       | DEIDHQRV      | VQFGLIDGEEIAES...KKDE...AAQVDS..VNEEVTLD.LGD | 376                                       |     |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | YSYKDEKIGQGS          | ENAKKYLA    | DNPEVFA      | DEIDHQRV      | VQFGLIDGEEAAES...KKDE...VAQVDS..VNEEVTLD.LGD | 376                                       |     |
| NTDB id 453 Spy49 1753c ACI62003.1          | FSYNGEKIGQGS          | ENAKRYLA    | DHPQLF       | DEIDR         | KVRVKFGLLEESEESAMAVASE.....E.....TDDLALD.LDN | 372                                       |     |
| NTDB id 408 SMU RS09530 WP 002262392.1      | YSYNGEKIGQGS          | ENAKKFLA    | DNPEIF       | DDIDHQRV      | VQYGLIEEDNTEEKQSSKEK.....ETDEK..ADKNLVLE.LDD | 377                                       |     |
| NTDB id 625 LCA RS02525 WP 011374196.1      | YSYGSE                | RIGQGRE     | NAKNYLADHED  | VEDEVRLK      | VRAAYGISDVPEEDLPTTEDE.QI.NILPDDST....EE..... | 355                                       |     |
| NTDB id 115 BSU 16940 NP 389576.2           | YSYEEER               | LIGQGRE     | NAKQFLKENK   | DI            | MLMIQE                                       | QIREHYGLDNNGVVQQAEETQEEL.EFE.E.....       | 348 |
| NTDB id 1313 DR RS12030 WP 010888966.1      | YSYGDER               | RIGQGRE     | KTIA         | YIA           | ERP                                          | MEQEIRDRVMAAIRAGNAGEAPALAPAPAAPEAAEA..... | 363 |
| NTDB id 1245 Cj1673c YP 002345041.1         | FSYKDKK               | LIGQGRE     | NSKAFLKEN    | PEI           | ADEITKAIQNSMG                                | IEGMI....SGSEDDE..GEE.....                | 343 |
| NTDB id 1214 NCTC11637 00359 SQJ03206.1     | LSYQDKK               | LIGQGRE     | NAKALLKEDKAL | ADEITL        | KIKESIGS                                     | NEEI....MPLPDEP..LEEME.....               | 347 |
| NTDB id 1211 C694 RS00795 WP 000963128.1    | LSYQDKK               | LIGQGRE     | NAKALLKEDKAL | ADEITL        | KIKESIGS                                     | NEEI....MPLPDEP..LEEME.....               | 347 |
| NTDB id 1334 RAOC RS04870 WP 004918236.1    | FSYQDT                | KLIGQGR     | DTV          | KELIK         | DNPELA                                       | EELAKIREKLQAK.....                        | 343 |
| NTDB id 1389 A4U84 RS07560 WP 021112712.1   | FSYDGT                | KIGQGN      | NAVVKWLKEN   | PEI           | ADKLEQEIR                                    | NTLASNPN....VLKATASDSNDES                 | 372 |
| NTDB id 1130 NGFG RS03960 WP 003688695.1    | YSYNGAK               | IIGQKDN     | VRVWLKEN     | PEIS          | DEIDAKIRAL                                   | NGVEMHI....TEGT....QDET                   | 348 |
| NTDB id 1124 NGFG RS03960 WP 003688695.1    | YSYNGAK               | IIGQKDN     | VRVWLKEN     | PEIS          | DEIDAKIRAL                                   | NGVEMHI....TEGT....QDET                   | 348 |
| NTDB id 1123 OK783 RS03845 WP 003688695.1   | YSYNGAK               | IIGQKDN     | VRVWLKEN     | PEIS          | DEIDAKIRAL                                   | NGVEMHI....TEGT....QDET                   | 348 |
| NTDB id 1427 RS RS02760 WP 011000510.1      | YSYNGER               | RIGQGR      | DNCREFL      | RENAELARE     | EIENK                                        | VREHLGVTPMG....AV.TLAE                    | 352 |
| NTDB id 1165 A1552VC RS01565 WP 000344154.1 | YSYNGD                | KIGQGN      | KANACKYLKEN  | PEI           | AKTLDK                                       | KLREMLLN                                  | 354 |
| NTDB id 1142 GTF74 RS11550 WP 000344154.1   | YSYNGD                | KIGQGN      | KANACKYLKEN  | PEI           | AKTLDK                                       | KLREMLLN                                  | 354 |
| NTDB id 1205 PSJM300 05545 AFN77183.1       | YAYKGS                | KIGQGN      | KANA         | AKYLEEN       | PEIGQ                                        | EIEQQIRAKLL                               | 347 |
| NTDB id 1022 ACIAD RS06390 WP 004925639.1   | YSYQGN                | KIGQGN      | KNNVIR       | YLEEN         | PQISTE                                       | IEAVIREQLL                                | 349 |
| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | YSYQGN                | KIGQGN      | KNNVIR       | YFEEN         | QIAE                                         | EIERNIREQLL                               | 349 |
| consensus                                   | ***!                  | ***!!!***** | *** *        | ***           | *****                                        | ***                                       | *** |

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|                                             |            |     |
|---------------------------------------------|------------|-----|
| NTDB id 419279 GWC93 RS06240 WP 003567844.1 | PASFGVDRLV | 397 |
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| NTDB id 228 SPD RS09265 WP 001085462.1      | ELEIEIEE.. | 388 |
| NTDB id 194 SPR RS08825 WP 001085462.1      | ELEIEIEE.. | 388 |
| NTDB id 159 SP RS09750 WP 001085462.1       | ELEIEIEE.. | 388 |
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| consensus                                   |            |     |

-  non conserved
-  similar
-  ≥ 50% conserved