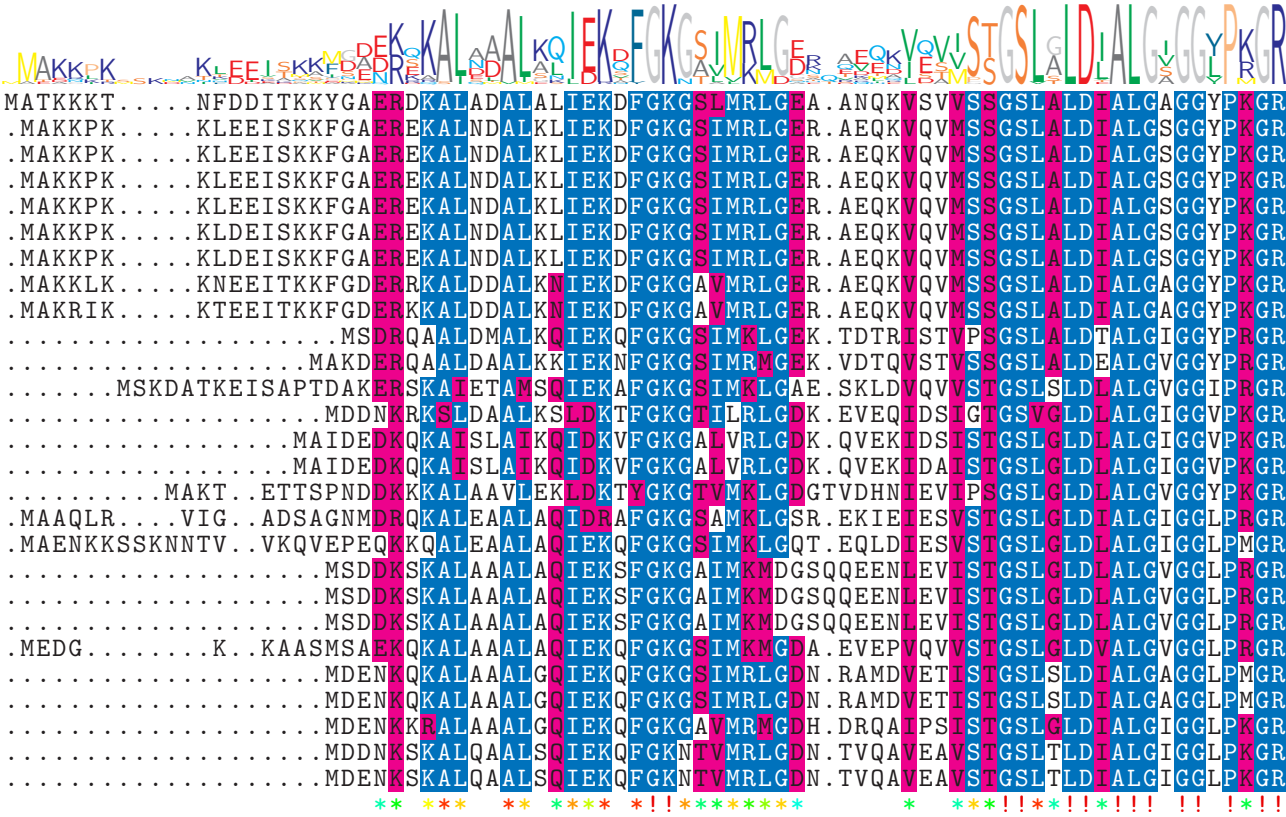


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NTDB id 228 SPD RS09265 WP 001085462.1  
NTDB id 194 SPR RS08825 WP 001085462.1  
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NTDB id 527 SMSK321 RS11065 WP 001085454.1  
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consensus

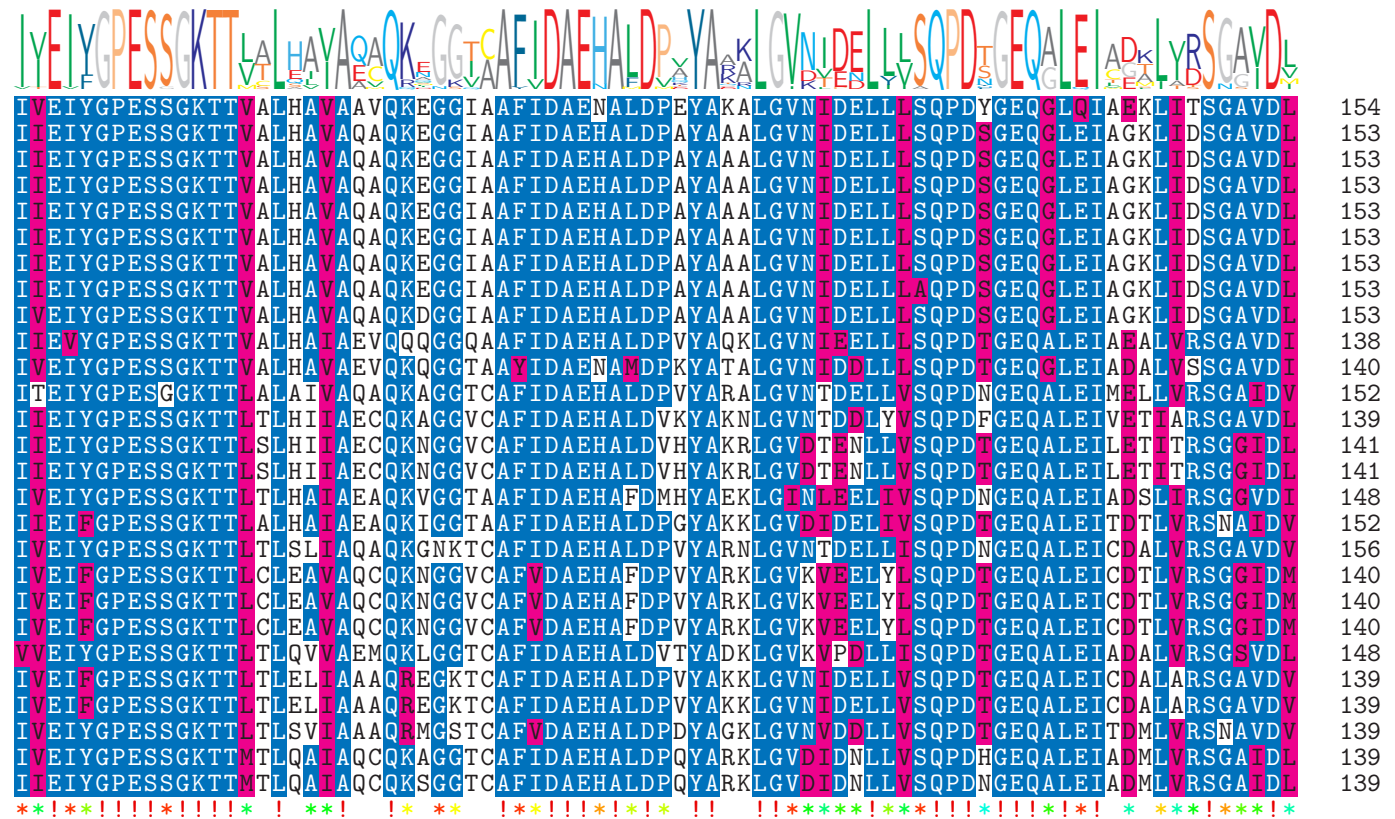


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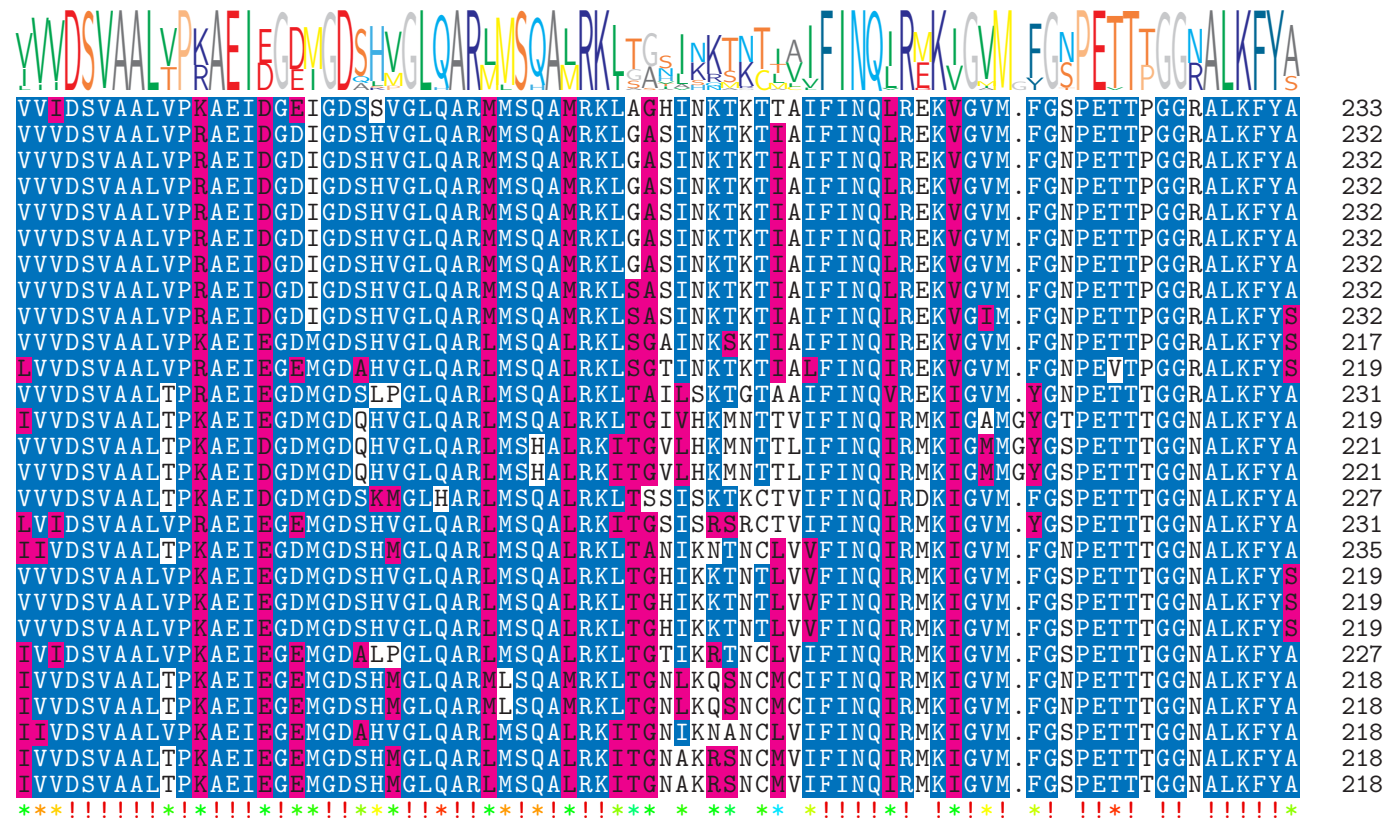
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus

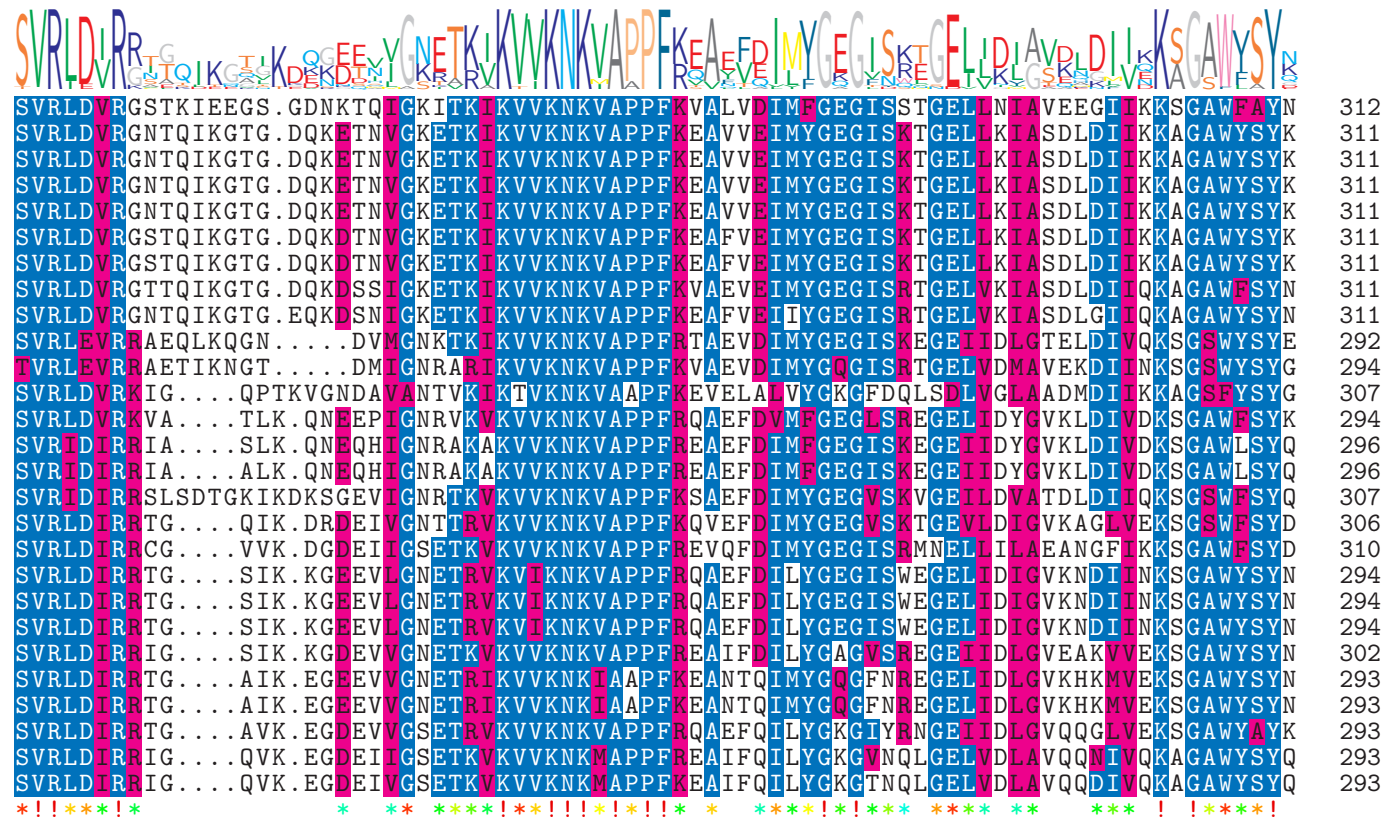
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NTDB id 1205 PSJM300 05545 AFN77183.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus

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|---------------------------------------------|---------------------------------|-----------------|----------------|--------------------|-----------------------------------|-----|
| NTDB id 600 KW2 RS01765 WP 011675413.1      | DEKIGQGA                        | EKAKNYLKEHQDV   | DEIDHKVRAAHG   | LDDSEVAETEEE       | ..TTASKTKAKAKKEEKAVETEEIELELED... | 387 |
| NTDB id 269 KZH43 RS08665 WP 001085462.1    | DEKIGQGS                        | ENAKKYLAEHPEIF  | DEIDKQVRSKFGL  | IDGEEVSEQDTE       | ..NKKDE....PKKEEA..VNEEVPLDLGDELE | 383 |
| NTDB id 228 SPD RS09265 WP 001085462.1      | DEKIGQGS                        | ENAKKYLAEHPEIF  | DEIDKQVRSKFGL  | IDGEEVSEQDTE       | ..NKKDE....PKKEEA..VNEEVPLDLGDELE | 383 |
| NTDB id 194 SPR RS08825 WP 001085462.1      | DEKIGQGS                        | ENAKKYLAEHPEIF  | DEIDKQVRSKFGL  | IDGEEVSEQDTE       | ..NKKDE....PKKEEA..VNEEVPLDLGDELE | 383 |
| NTDB id 159 SP RS09750 WP 001085462.1       | DEKIGQGS                        | ENAKKYLAEHPEIF  | DEIDKQVRSKFGL  | IDGEEVSEQDTE       | ..NKKDE....PKKEEA..VNEEVPLDLGDELE | 383 |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | DEKIGQGS                        | ENAKKYLAADNPEV  | FAEIDHQVRVQFGL | IDGEEAAE.....      | SKKDE....VAQVDS..VNEEVTLDLGDELE   | 379 |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | DEKIGQGS                        | ENAKKYLAADNPEIF | DEIDHQVRVQFGL  | IDGEEIAE.....      | SKKDE....AAQVDS..VNEEVTLDLGDELE   | 379 |
| NTDB id 453 Spy49 1753c ACI62003.1          | GEKIGQGS                        | ENAKRYLADHPQLF  | DEIDRKVRVKFGL  | LEESEEEESAMAV..    | ASE.....E.....TDDLALDLNNGIE       | 375 |
| NTDB id 408 SMU RS09530 WP 002262392.1      | GEKIGQGS                        | ENAKKFLADNPEIF  | DDIDHKVRVQYGL  | IEEDNTEEEKQSS..    | KEK.....ETDEK..ADKNLVLELDDTIE     | 380 |
| NTDB id 115 BSU 16940 NP 389576.2           | EERLGGG                         | RENAKQFLKENK    | DIMLMIQEQIREHY | GLDNNGVVQQAAEE..   | TQEEL.EFE.E.....                  | 348 |
| NTDB id 625 LCA RS02525 WP 011374196.1      | SERIGQG                         | RENAKNYLADHED   | VEDEVRLKVRAAYG | ISDVPEEDLPTE..     | DE.QI.NILPDDST.....EE.....        | 355 |
| NTDB id 1313 DR RS12030 WP 010888966.1      | DERIGQG                         | KEKTIAYIAERPE   | MEQEIRDRVMAAIR | AGNAGEAPALAPAPA    | AP....EAA.....EA.....             | 363 |
| NTDB id 1245 Cj1673c YP 002345041.1         | DKKLGGG                         | RENSKAFLENPEI   | ADEITKAIQNSMG  | IEGMIS..GSEDD..... | EGE.E.....                        | 343 |
| NTDB id 1211 C694 RS00795 WP 000963128.1    | DKKLGGG                         | RENAKALLKEDKA   | LADAITLKIKESIG | SNEEIM..PLPDE..... | PLE.E.....M.E.....                | 347 |
| NTDB id 1214 NCTC11637 00359 SQJ03206.1     | DKKLGGG                         | RENAKALLKEDKA   | LADAITLKIKESIG | SNEEIM..PLPDE..... | PLE.E.....M.E.....                | 347 |
| NTDB id 1334 RAOC RS04870 WP 004918236.1    | DTKLGGG                         | RDITVKELIKDN    | PELAEELEAKIRE  | KLQAK.....         |                                   | 343 |
| NTDB id 70955 NX02 RS06445 WP 025291375.1   | SIRIGQG                         | RENAKTYLRDN     | NPEVMARLEKAI   | RSRTEKVAEEM..      | MVGPEA....DD.DL.....              | 356 |
| NTDB id 1389 A4U84 RS07560 WP 021112712.1   | GTKIGQG                         | KNNAVKWLKENPEI  | ADKLEQEIRNTLA  | SNPNSV..LKATASDS   | NDES.DVE.E....FSEEEL.....         | 372 |
| NTDB id 1130 NGFG RS03960 WP 003688695.1    | GAKIGQG                         | KDNVRVWLKENPEI  | SDIDAIRALNGVEM | HIT..EGT.....QDE   | TDG.E....RPEE.....                | 348 |
| NTDB id 1124 NGFG RS03960 WP 003688695.1    | GAKIGQG                         | KDNVRVWLKENPEI  | SDIDAIRALNGVEM | HIT..EGT.....QDE   | TDG.E....RPEE.....                | 348 |
| NTDB id 1123 OK783 RS03845 WP 003688695.1   | GAKIGQG                         | KDNVRVWLKENPEI  | SDIDAIRALNGVEM | HIT..EGT.....QDE   | TDG.E....RPEE.....                | 348 |
| NTDB id 1427 RS RS02760 WP 011000510.1      | GERIGQG                         | RDNCREFLRENAE   | LAREIENKVREHLG | VTPMGA..V.TLAE     | EEVEED.....                       | 352 |
| NTDB id 1165 A1552VC RS01565 WP 000344154.1 | GDKIGQG                         | KANACKYLLKENPEI | AKTLDKKLREML   | LNPNENMQ..LIAET    | SSAADV.EFG.A....VPEEF.....        | 354 |
| NTDB id 1142 GTF74 RS11550 WP 000344154.1   | GDKIGQG                         | KANACKYLLKENPEI | AKTLDKKLREML   | LNPNENMQ..LIAET    | SSAADV.EFG.A....VPEEF.....        | 354 |
| NTDB id 1205 PSJM300 05545 AFN77183.1       | GSKIGQG                         | KANAAYLEENPEI   | GIEQQIRAKLLV   | TSANT..KATPVAED    | LADA.DI.....                      | 347 |
| NTDB id 1022 ACIAD RS06390 WP 004925639.1   | GNKIGQG                         | KNNVIRYLEENPQ   | ISTEIEAVIREQL  | LTKASDQ..TAA.HD    | ETEEEP.DLL.....ES.....            | 349 |
| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | GNKIGQG                         | KNNVIRYFEENNQ   | IAEEIERNIREQL  | LTGTGNG..AVQ.I     | EDEEEP.DLL.....LES.....           | 349 |
| consensus                                   | **!!!!***** ** ***** ***** ** * |                 |                |                    |                                   | *   |

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|---------------------------------------------|-------|-----|
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| NTDB id 194 SPR RS08825 WP 001085462.1      | IEIEE | 388 |
| NTDB id 159 SP RS09750 WP 001085462.1       | IEIEE | 388 |
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| consensus                                   |       |     |

-  non conserved
-  similar
-  ≥ 50% conserved