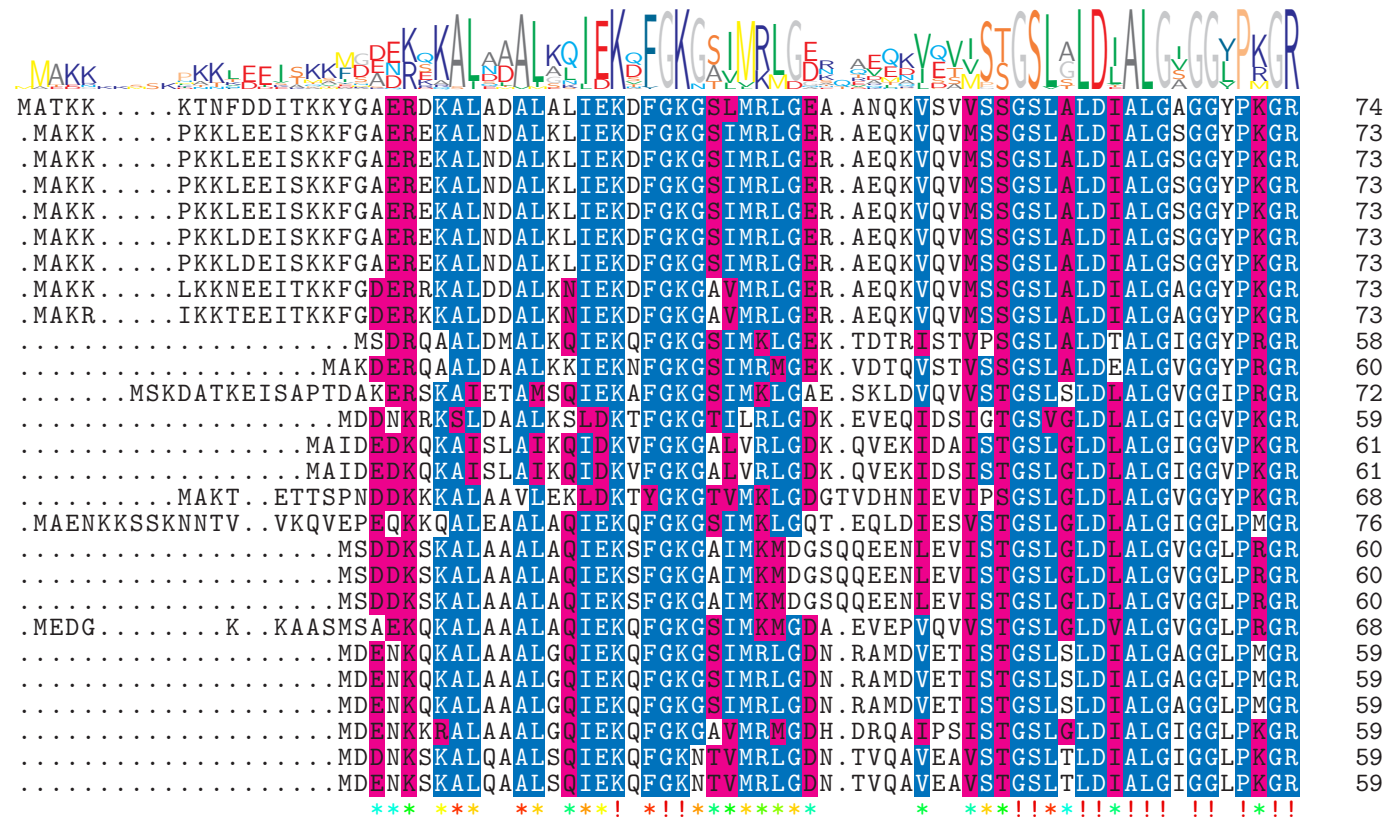


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NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus

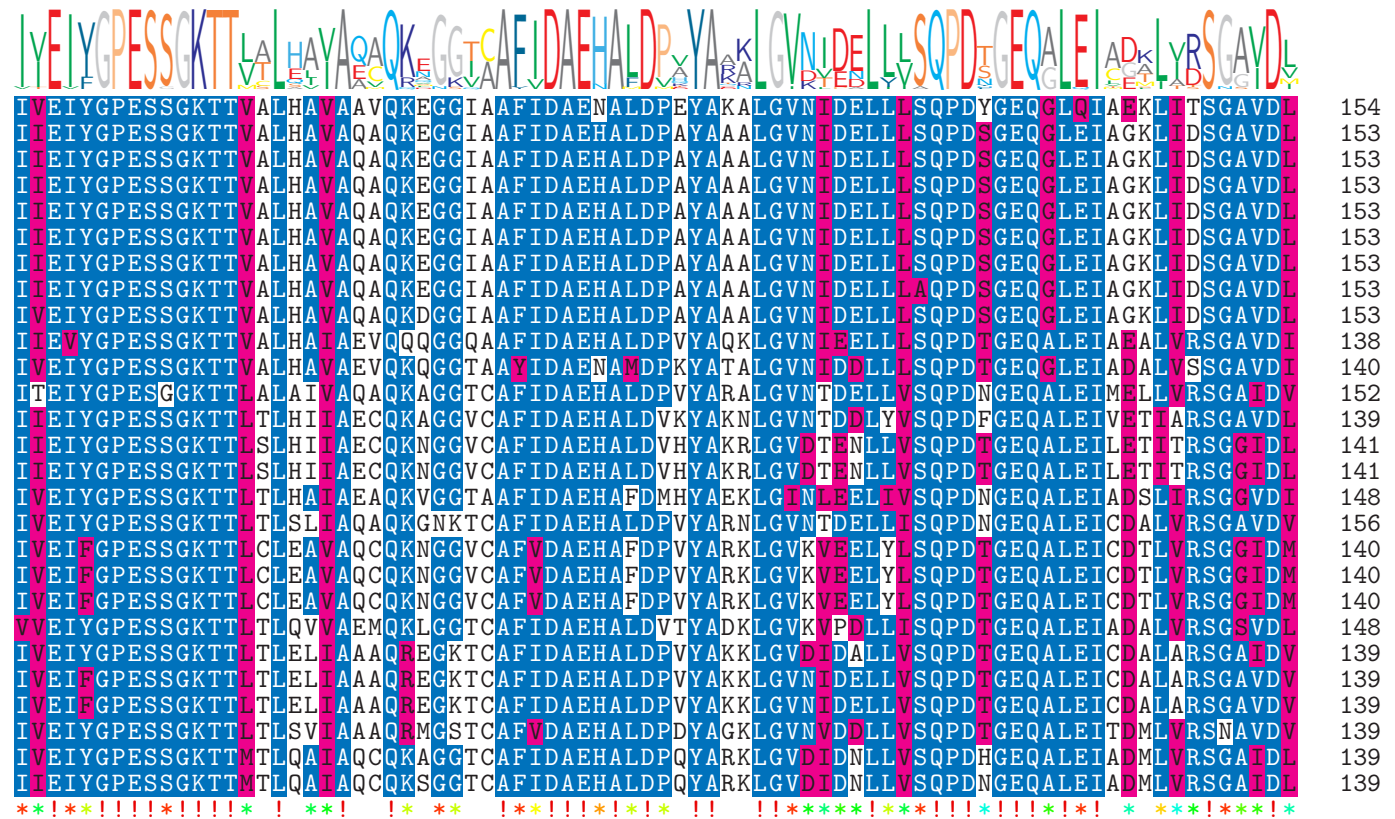
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consensus

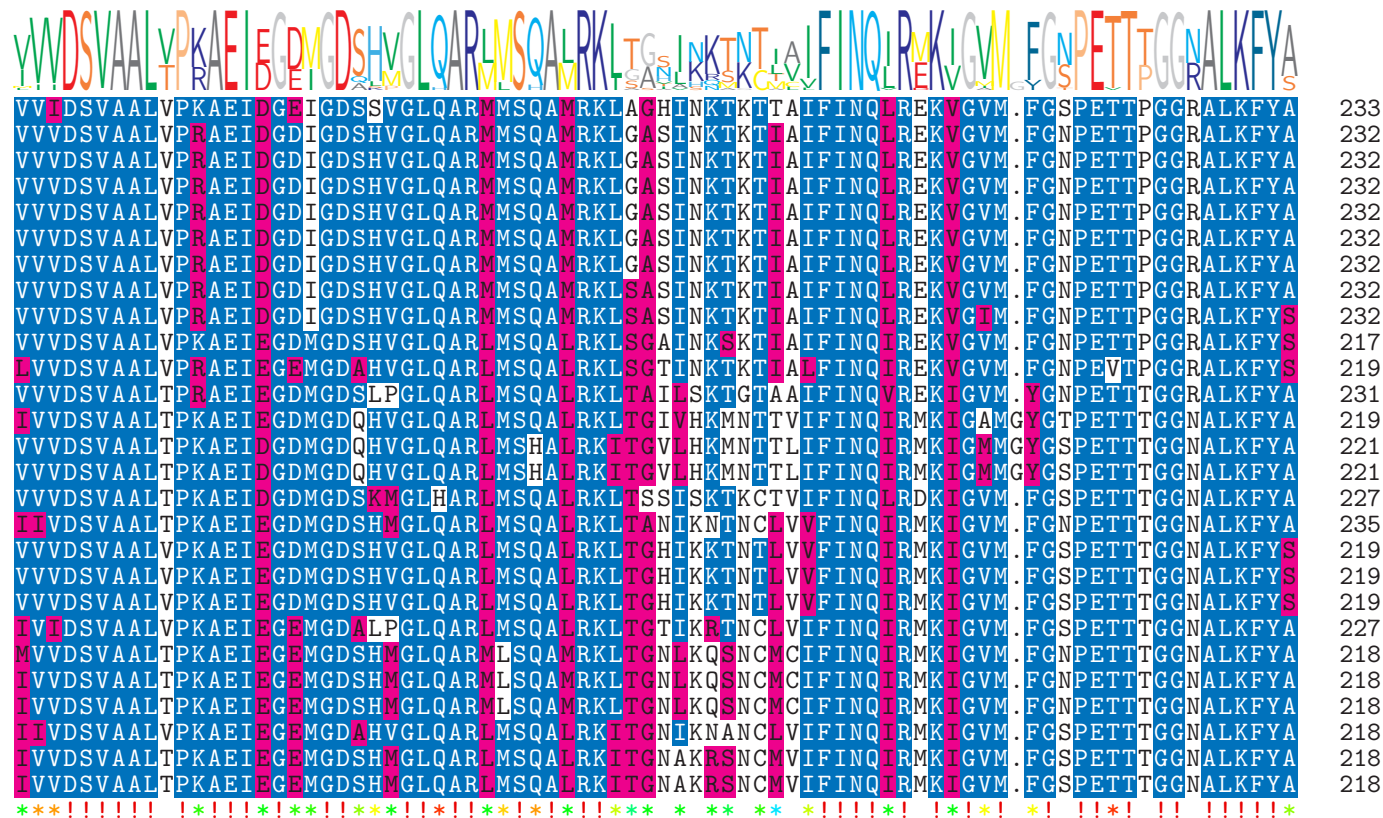
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus

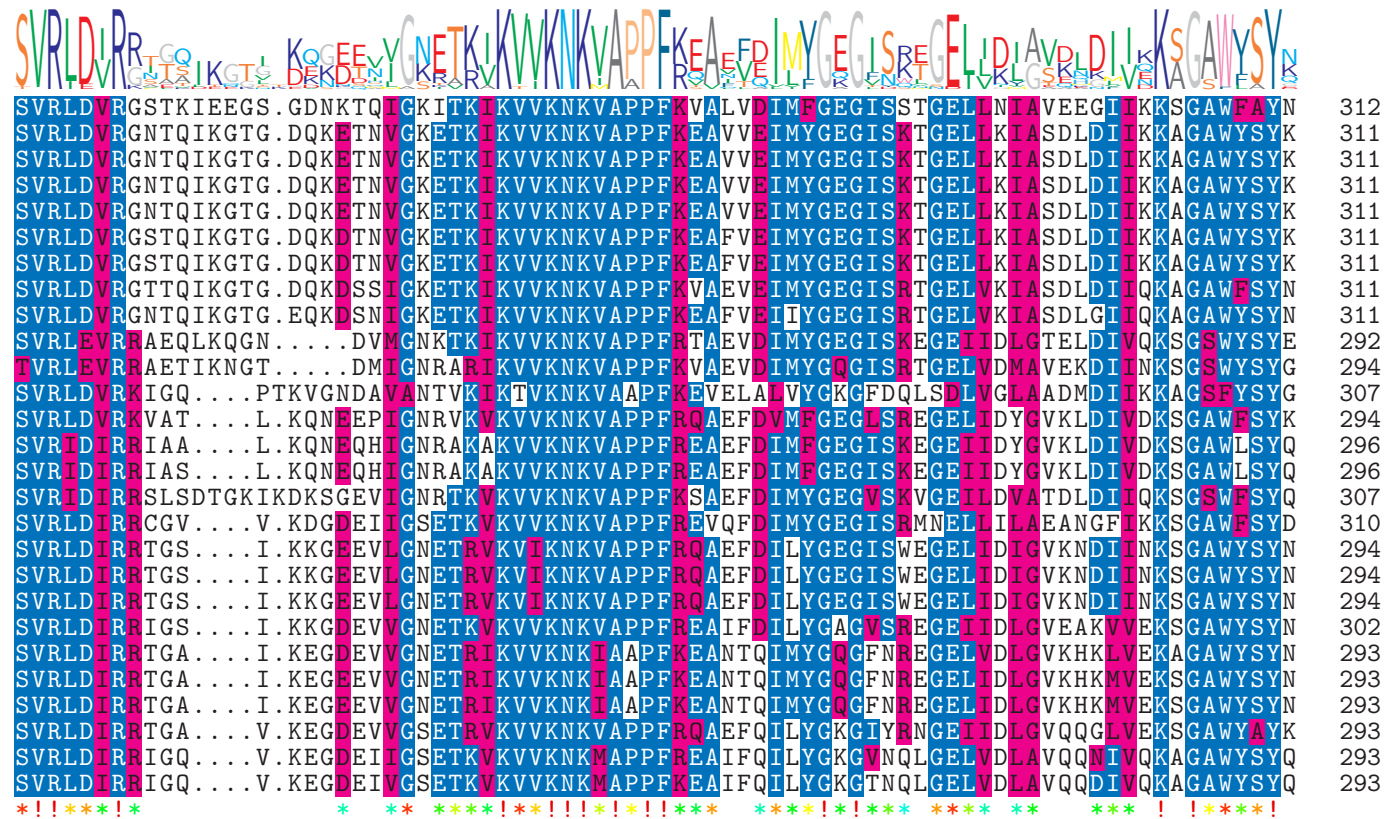
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NTDB id 1022 ACIAD RS06390 WP 0004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus

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|           |    |       |           |         |             |              |                                                                                   |     |
|-----------|----|-------|-----------|---------|-------------|--------------|-----------------------------------------------------------------------------------|-----|
| NTDB      | id | 600   | KW2       | RS01765 | WP          | 011675413.1  | DEKIGQGAETAKNYLKEHQDVFEIDHKVRAAHGLDDSEVAETEETTASKTKAKAKKEEKAVETEEIELELED....      | 387 |
| NTDB      | id | 269   | KZH43     | RS08665 | WP          | 001085462.1  | DEKIGQGSENAAKKYLAEBPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLDLGDELEIE  | 385 |
| NTDB      | id | 228   | SPD       | RS09265 | WP          | 001085462.1  | DEKIGQGSENAAKKYLAEBPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLDLGDELEIE  | 385 |
| NTDB      | id | 194   | SPR       | RS08825 | WP          | 001085462.1  | DEKIGQGSENAAKKYLAEBPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLDLGDELEIE  | 385 |
| NTDB      | id | 159   | SP        | RS09750 | WP          | 001085462.1  | DEKIGQGSENAAKKYLAEBPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLDLGDELEIE  | 385 |
| NTDB      | id | 527   | SMSK321   | RS11065 | WP          | 001085454.1  | DEKIGQGSENAAKKYLADNPEVFAEIDHKQVRVQFGCLIDGEEAAE...SKKDE...PQAVDS..VNEEVTLDLGDELEIE | 381 |
| NTDB      | id | 499   | SM12261   | RS08315 | WP          | 078228268.1  | DEKIGQGSENAAKKYLADNPEIFDEIDHKQVRVQFGCLIDGEEIAE...SKKDE...AAQVDS..VNEEVTLDLGDELEIE | 381 |
| NTDB      | id | 453   | Spy49     | 1753c   | ACI62003.1  |              | GEEKIGQGSENAAKRYLADHPQLFDEIDRKVRVKFGLLEESEEESAMAVASE.....E.....TDDLALDLNGIEIE     | 377 |
| NTDB      | id | 408   | SMU       | RS09530 | WP          | 002262392.1  | GBKIGQGSENAAKFLLADNPEIFFDDIDHKVRVQYGLIEDNTTEEQSSKEK.....ETDEK..ADKNLVLELDDTIEIE   | 382 |
| NTDB      | id | 115   | BSU       | 16940   | NP          | 389576.2     | EERLGGCRENAKQFLKENKDIMLMIQEIREEHYGLDNNGVVQQAEETQEEL.EFE.E.....                    | 348 |
| NTDB      | id | 625   | LCA       | RS02525 | WP          | 0011374196.1 | SERIGQGRENAAKNYLADHEDVEFVLKVRAAYGISDPVEEDLPETTE.QI.NILPDST.....EE.....            | 355 |
| NTDB      | id | 1313  | DR        | RS12030 | WP          | 010888966.1  | DERIGQCKEKTIAFYAERPMEQEIRDRVMAAIRAGNAGEAPALAPAPAAPAEAAE..A.....                   | 363 |
| NTDB      | id | 1245  | Cj1673c   | YP      | 002345041.1 |              | DKKLGGCRENSKAFLKENPEIADEITKATQNSMGIEGMI....SGSEDD..EGE..E.....                    | 343 |
| NTDB      | id | 1214  | NCTC11637 | 00359   | SQJ03206.1  |              | DKKLGGCRENAKALLKEDKALADEITLKIKESIGSNEEI....MPLPDE..PLE..EME.....                  | 347 |
| NTDB      | id | 1211  | C694      | RS00795 | WP          | 000963128.1  | DKKLGGCRENAKALLKEDKALADEITLKIKESIGSNEEI....MPLPDE..PLE..EME.....                  | 347 |
| NTDB      | id | 1334  | RAOC      | RS04870 | WP          | 004918236.1  | DTKLGGCRDTPVELIKDNPELAEELEAKIREKLQAK.....                                         | 343 |
| NTDB      | id | 1389  | A4U84     | RS07560 | WP          | 021112712.1  | GTKIGQCKNNAVKWLENPEIADKLEGEIRNTLASNPNS....VLKATASDSND..ESDVEEFSEEL.....           | 372 |
| NTDB      | id | 1130  | NGFG      | RS03960 | WP          | 003688695.1  | GAKIGQCKDNVRVWLKENPEISDEIDAKIRALNCVEMHI....TE.....GTQ..DETGERPEE.....             | 348 |
| NTDB      | id | 1124  | NGFG      | RS03960 | WP          | 003688695.1  | GAKIGQCKDNVRVWLKENPEISDEIDAKIRALNCVEMHI....TE.....GTQ..DETGERPEE.....             | 348 |
| NTDB      | id | 1123  | OK783     | RS03845 | WP          | 003688695.1  | GAKIGQCKDNVRVWLKENPEISDEIDAKIRALNCVEMHI....TE.....GTQ..DETGERPEE.....             | 348 |
| NTDB      | id | 1427  | RS        | RS02760 | WP          | 011000510.1  | GERIGQGRDNCREFLRNAREIENKRVREHLGVTPMG....AVTLAE.EVEE..D.....                       | 352 |
| NTDB      | id | 50373 | YZOS03    | RS02670 | WP          | 005380874.1  | GDKIGQCKANACNYLREHPEVAKTIDTKLERMLLANPA....EAPAEAGEAQ..AEFF.....                   | 347 |
| NTDB      | id | 1165  | A1552VC   | RS01565 | WP          | 000344154.1  | GDKIGQCKANACKYLENPEIAKTLDDKKLREMLLNPENM....QLIAETSSAAD..DVEFGAVPEEF.....          | 354 |
| NTDB      | id | 1142  | GTF74     | RS11550 | WP          | 000344154.1  | GDKIGQCKANACKYLENPEIAKTLDDKKLREMLLNPENM....QLIAETSSAAD..DVEFGAVPEEF.....          | 354 |
| NTDB      | id | 1205  | PSJM300   | 05545   | AFN77183.1  |              | GSKIGQCKANAACKYLEENPEIGQEIEQQIRAKLLVTSAN....TKATPVAEDLA..DAD..I.....              | 347 |
| NTDB      | id | 1022  | ACIAD     | RS06390 | WP          | 004925639.1  | GNKIGQCKNNVIRYLEENPQISTEIEAVIREQLLTKASD....QTAA.HDETEE..EPD..LLES.....            | 349 |
| NTDB      | id | 1074  | ABD1      | RS10195 | WP          | 000344167.1  | GNKIGQCKNNVIRYLEENPQISTEIEAVIREQLLTGTN....GAVQ.I.EDEE..EPD..LLES.....             | 349 |
| consensus |    |       |           |         |             |              | * * ! ! ! * * * * * * * * * * * * * * * * *                                       |     |

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|---------------------------------------------|-----|-----|-----|
|                                             |     | IEE |     |
| NTDB id 600 KW2 RS01765 WP 011675413.1      | ... |     | 387 |
| 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 |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | IEE |     | 384 |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | IEE |     | 384 |
| NTDB id 453 Spy49 1753c ACI62003.1          | D.. |     | 378 |
| NTDB id 408 SMU RS09530 WP 002262392.1      | D.. |     | 383 |
| NTDB id 115 BSU 16940 NP 389576.2           | ... |     | 348 |
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| NTDB id 1022 ACIAD RS06390 WP 004925639.1   | ... |     | 349 |
| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | ... |     | 349 |
| consensus                                   |     |     |     |

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