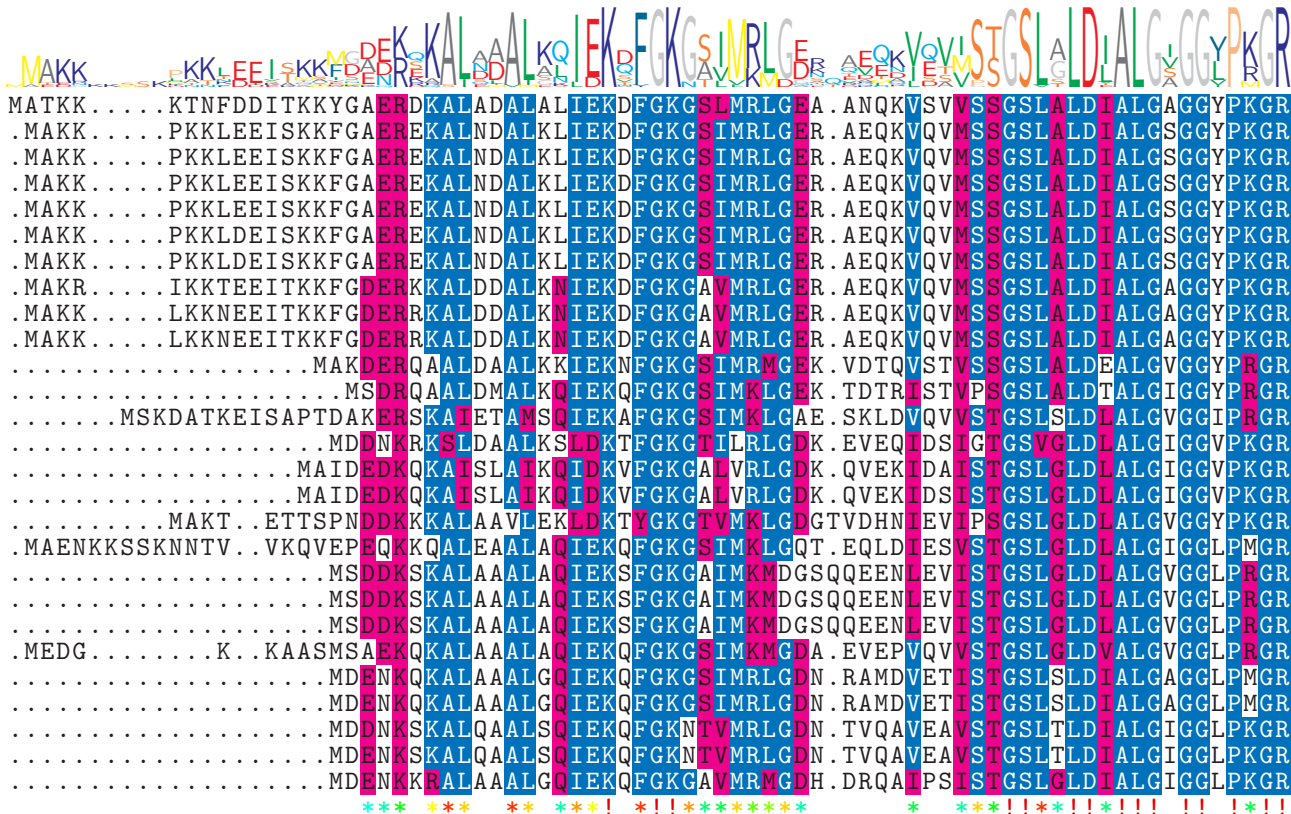


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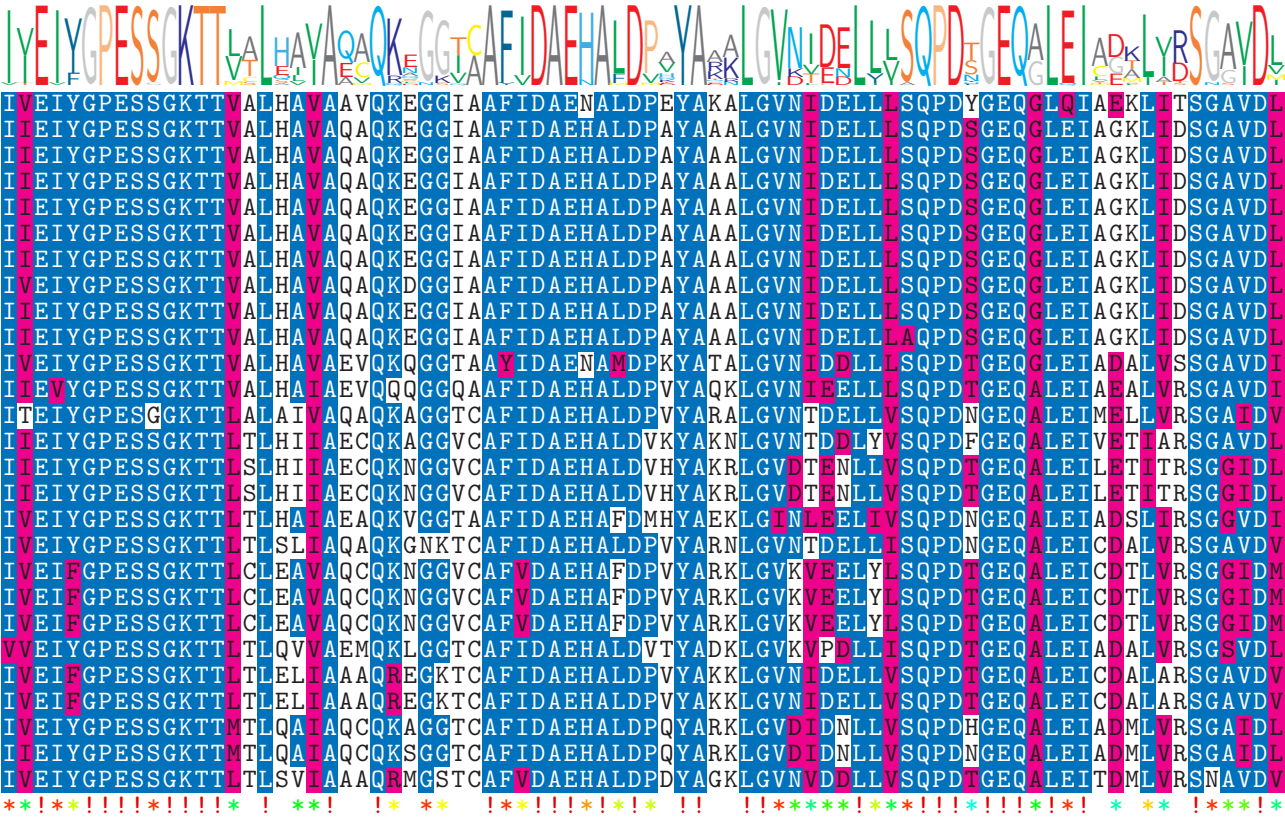
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NTDB id 159 SP RS09750 WP 001085462.1  
NTDB id 499 SM12261 RS08315 WP 078228268.1  
NTDB id 527 SMSK321 RS11065 WP 001085454.1  
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NTDB id 977626 MGAS37842 RS08910 WP 010922753.1  
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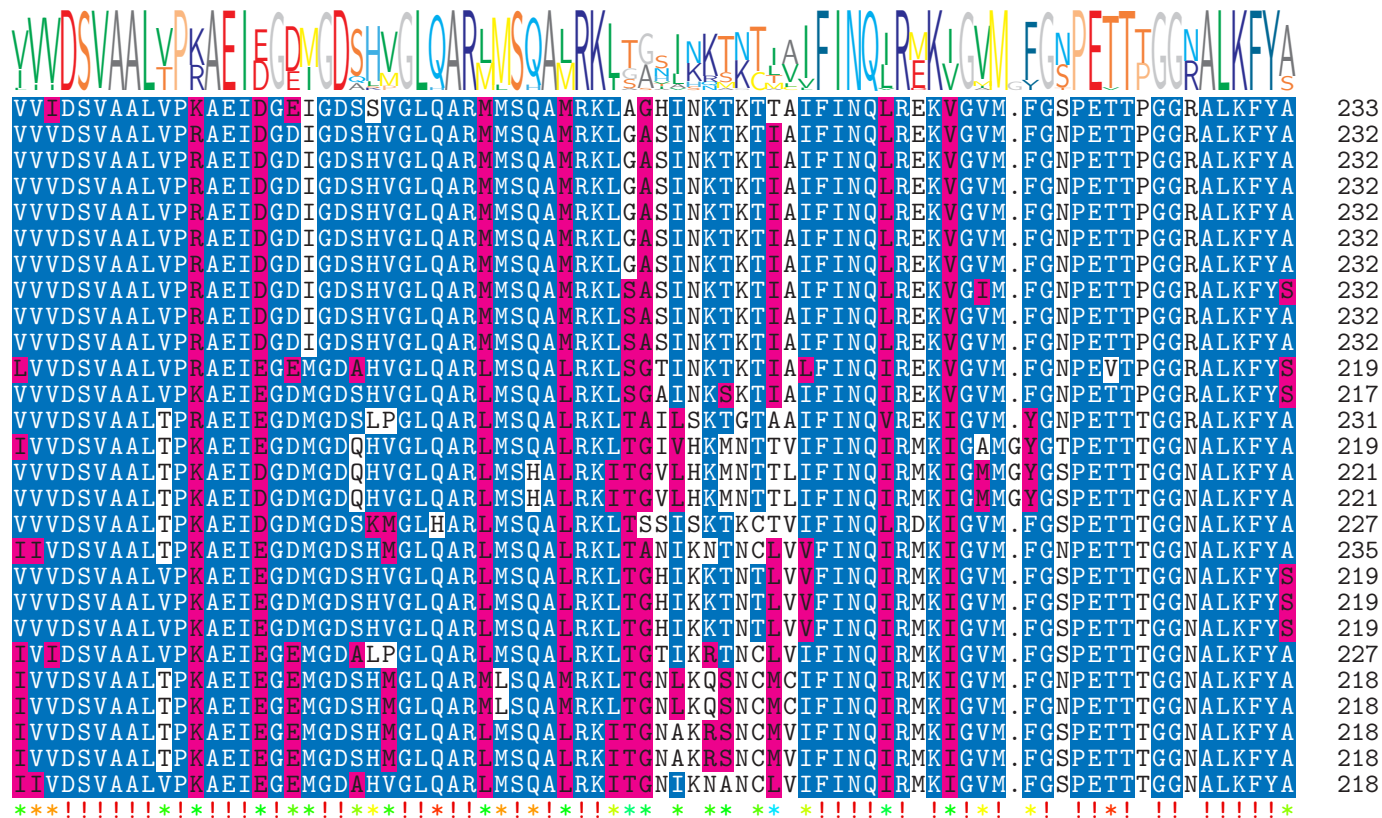
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consensus



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|      |    |        |           |         |             |             |          |           |           |        |         |        |        |        |        |          |        |      |        |        |        |        |        |         |       |        |     |
|------|----|--------|-----------|---------|-------------|-------------|----------|-----------|-----------|--------|---------|--------|--------|--------|--------|----------|--------|------|--------|--------|--------|--------|--------|---------|-------|--------|-----|
| NTDB | id | 600    | KW2       | RS01765 | WP          | 011675413.1 | SVRLDVRG | STKIEEGS  | .GDNKTQ   | IGK    | ITK     | IKVVKN | KVAPPF | KVALV  | DIMF   | GEGIS    | STGEL  | IN   | IAVEEG | TI     | KSGAW  | FAYN   | 312    |         |       |        |     |
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| NTDB | id | 228    | SPD       | RS09265 | WP          | 001085462.1 | SVRLDVRG | NTQIKGTG  | .DQKETN   | VGKETK | IKVVKN  | KVAPPF | KEAVV  | EIMY   | GEGIS  | KTGEL    | LKIAS  | SDL  | DII    | KKAGAW | YSYK   | 311    |        |         |       |        |     |
| NTDB | id | 194    | SPR       | RS08825 | WP          | 001085462.1 | SVRLDVRG | NTQIKGTG  | .DQKETN   | VGKETK | IKVVKN  | KVAPPF | KEAVV  | EIMY   | GEGIS  | KTGEL    | LKIAS  | SDL  | DII    | KKAGAW | YSYK   | 311    |        |         |       |        |     |
| NTDB | id | 159    | SP        | RS09750 | WP          | 001085462.1 | SVRLDVRG | NTQIKGTG  | .DQKETN   | VGKETK | IKVVKN  | KVAPPF | KEAVV  | EIMY   | GEGIS  | KTGEL    | LKIAS  | SDL  | DII    | KKAGAW | YSYK   | 311    |        |         |       |        |     |
| NTDB | id | 499    | SM12261   | RS08315 | WP          | 078228268.1 | SVRLDVRG | STQIKGTG  | .DQKDTN   | VGKETK | IKVVKN  | KVAPPF | KEAFV  | EIMY   | GEGIS  | KTGEL    | LKIAS  | SDL  | DII    | KKAGAW | YSYK   | 311    |        |         |       |        |     |
| NTDB | id | 527    | SMSK321   | RS11065 | WP          | 001085454.1 | SVRLDVRG | STQIKGTG  | .DQKDTN   | VGKETK | IKVVKN  | KVAPPF | KEAFV  | EIMY   | GEGIS  | KTGEL    | LKIAS  | SDL  | DII    | KKAGAW | YSYK   | 311    |        |         |       |        |     |
| NTDB | id | 408    | SMU       | RS09530 | WP          | 002262392.1 | SVRLDVRG | NTQIKGTG  | .EQKDSN   | IGKETK | IKVVKN  | KVAPPF | KEAFV  | EIIY   | GEGIS  | RTGEL    | VKIAS  | DLG  | II     | QKAGAW | YSYN   | 311    |        |         |       |        |     |
| NTDB | id | 977626 | MGAS37842 | RS08910 | WP          | 010922753.1 | SVRLDVRG | TQTQIKGTG | .DQKDSI   | IGKETK | IKVVKN  | KVAPPF | KVAEV  | EIMY   | GEGIS  | RTGEL    | VKIAS  | DLG  | II     | QKAGAW | YSYN   | 311    |        |         |       |        |     |
| NTDB | id | 453    | Spy49     | 1753c   | ACI62003.1  |             | SVRLDVRG | TQTQIKGTG | .DQKDSI   | IGKETK | IKVVKN  | KVAPPF | KVAEV  | EIMY   | GEGIS  | RTGEL    | VKIAS  | DLG  | II     | QKAGAW | YSYN   | 311    |        |         |       |        |     |
| NTDB | id | 625    | LCA       | RS02525 | WP          | 011374196.1 | TVRLEVR  | RAETIKNGT | ....      | DS     | IGNRARI | IKVVKN | KVAPPF | KVAEV  | DIMY   | GQGIS    | RTGEL  | VDMA | VEK    | DI     | INKSGS | WYSYG  | 294    |         |       |        |     |
| NTDB | id | 115    | BSU       | 16940   | NP          | 389576.2    | SVRLEVR  | RAEQLKQGN | ....      | DVM    | GNKTKI  | IKVVKN | KVAPPF | RTAEV  | DIMY   | GEGIS    | KEGE   | IIDL | GT     | ELDI   | VQKSGS | WYSYE  | 292    |         |       |        |     |
| NTDB | id | 1313   | DR        | RS12030 | WP          | 010888966.1 | SVRLDVR  | KIGQ      | ....      | PTKVG  | NDAV    | ANTVKI | KT     | TVKN   | KVA    | APF      | KEVELA | LVY  | GK     | GFD    | QLS    | DLVGL  | LAADM  | DI      | IKKAC | SFYSYG | 307 |
| NTDB | id | 1245   | Cj1673c   | YP      | 002345041.1 |             | SVRLDVR  | KKVAT     | ....      | L      | KQNE    | EPI    | IGNRV  | KV     | IKVVKN | KVAPPF   | RQAEF  | DVM  | F      | GEGIS  | RE     | GELIDY | GVKLDI | VDK     | SGAW  | FSYK   | 294 |
| NTDB | id | 1214   | NCTC11637 | 00359   | SQJ03206.1  |             | SVRTDIR  | RIIAA     | ....      | L      | KQNE    | QHI    | IGNRA  | KA     | IKVVKN | KVAPPF   | REAEF  | DIMF | GEGIS  | KEGE   | IIDY   | GVKLDI | VDK    | SGAW    | LSYQ  | 296    |     |
| NTDB | id | 1211   | C694      | RS00795 | WP          | 000963128.1 | SVRTDIR  | RIIAS     | ....      | L      | KQNE    | QHI    | IGNRA  | KA     | IKVVKN | KVAPPF   | REAEF  | DIMF | GEGIS  | KEGE   | IIDY   | GVKLDI | VDK    | SGAW    | LSYQ  | 296    |     |
| NTDB | id | 1334   | RAOC      | RS04870 | WP          | 004918236.1 | SVRTDIR  | RLSLD     | STGKIKDKS | GEI    | IGNR    | TKV    | IKVVKN | KVAPPF | KA     | AEF      | DIMY   | GEGV | SKV    | GEILD  | VAT    | DL     | DII    | QKSG    | WFSYQ | 307    |     |
| NTDB | id | 1389   | A4U84     | RS07560 | WP          | 021112712.1 | SVRLDIR  | RCGV      | ....      | V      | KDGE    | DEI    | IGSET  | KV     | IKVVKN | KVAPPF   | REVQF  | DIMY | GEGIS  | RMN    | ELLILA | EANG   | FI     | KKSGAW  | FSYD  | 310    |     |
| NTDB | id | 1130   | NGFG      | RS03960 | WP          | 003688695.1 | SVRLDIR  | RTGS      | ....      | I      | KKGE    | EV     | LGNET  | RV     | KVI    | KNKVAPPF | RQAEF  | DILY | GEGIS  | WE     | GELID  | IGVKN  | DI     | INKSGAW | YSYN  | 294    |     |
| NTDB | id | 1124   | NGFG      | RS03960 | WP          | 003688695.1 | SVRLDIR  | RTGS      | ....      | I      | KKGE    | EV     | LGNET  | RV     | KVI    | KNKVAPPF | RQAEF  | DILY | GEGIS  | WE     | GELID  | IGVKN  | DI     | INKSGAW | YSYN  | 294    |     |
| NTDB | id | 1123   | OK783     | RS03845 | WP          | 003         |          |           |           |        |         |        |        |        |        |          |        |      |        |        |        |        |        |         |       |        |     |



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| 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 499 SM12261 RS08315 WP 078228268.1      | IEE | 384 |  |
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| NTDB id 408 SMU RS09530 WP 002262392.1          | D.. | 383 |  |
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| NTDB id 453 Spy49 1753c ACI62003.1              | D.. | 378 |  |
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| NTDB id 1074 ABD1 RS10195 WP 000344167.1        | ... | 349 |  |
| NTDB id 1205 PSJM300 05545 AFN77183.1           | ... | 347 |  |
| consensus                                       |     |     |  |

-  non conserved
-  similar
-  ≥ 50% conserved