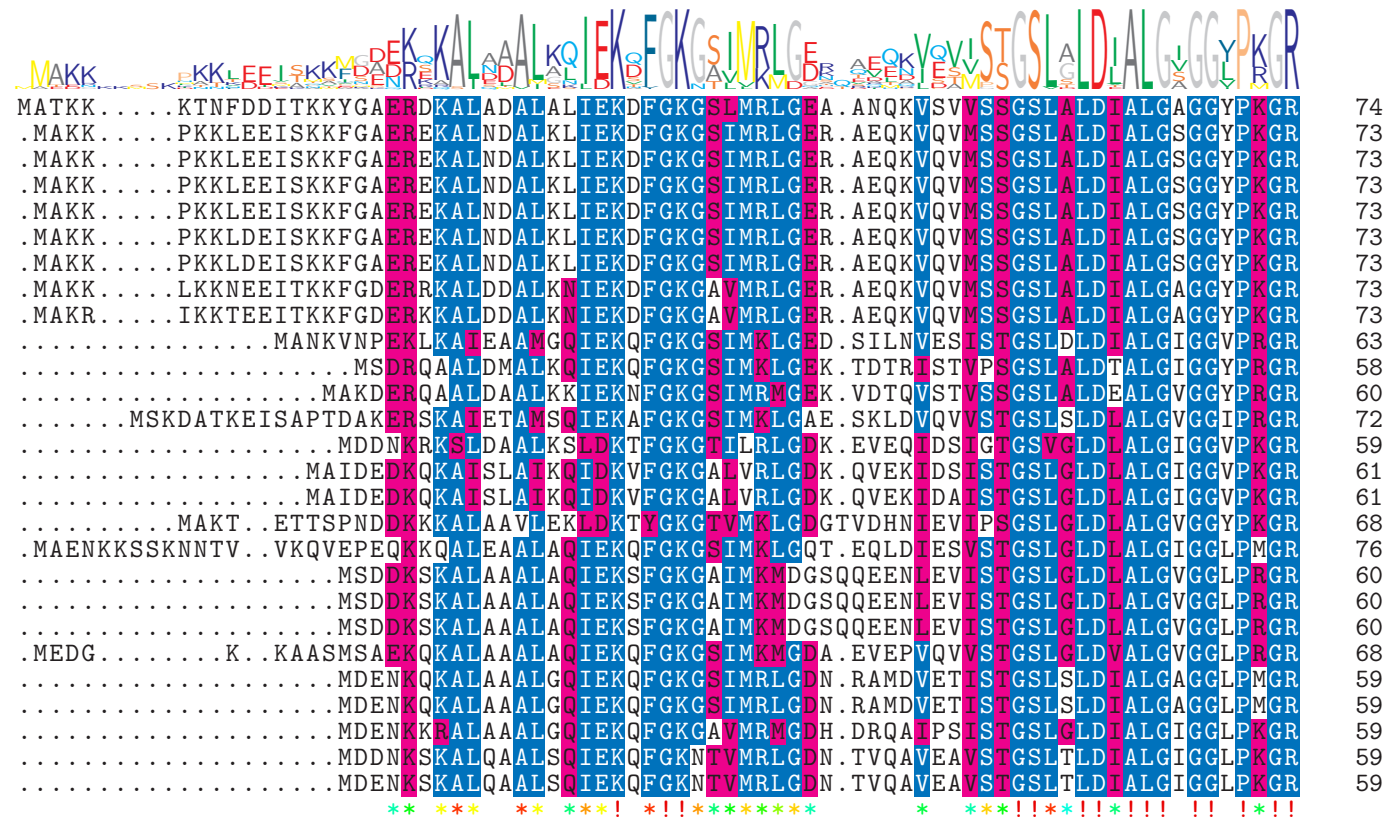
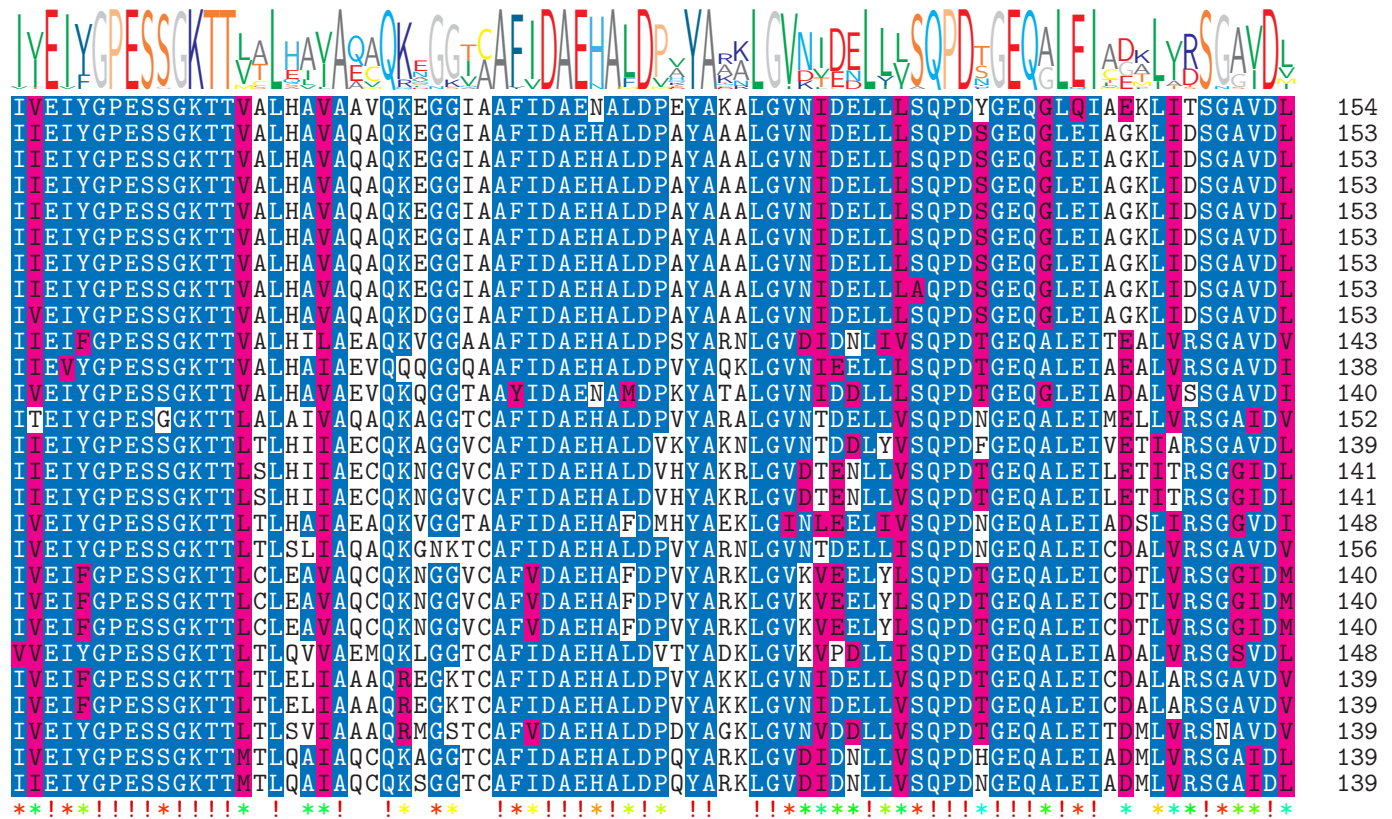


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NTDB id 1205 PSJM300 05545 AFN77183.1  
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NTDB id 1074 ABD1 RS10195 WP 000344167.1  
consensus

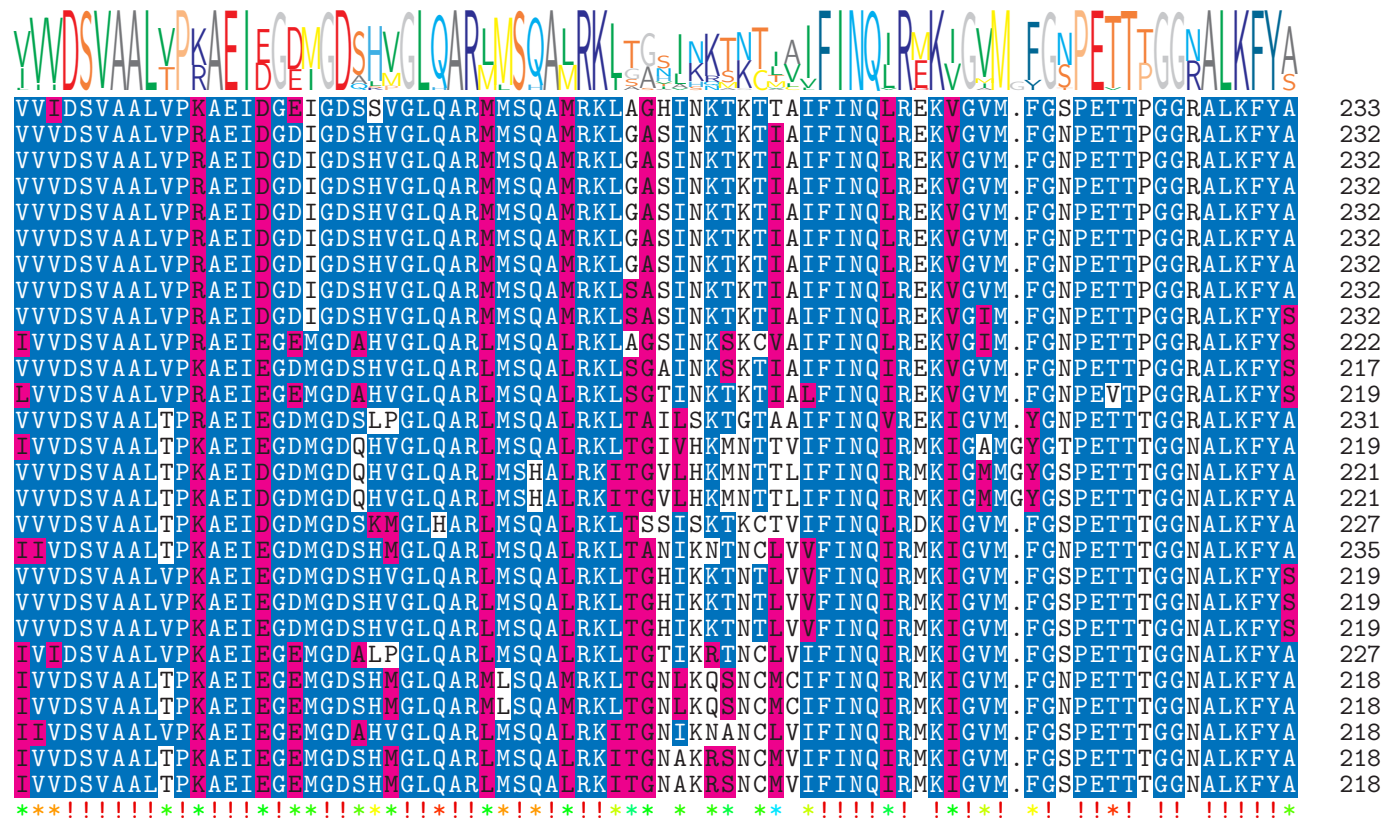


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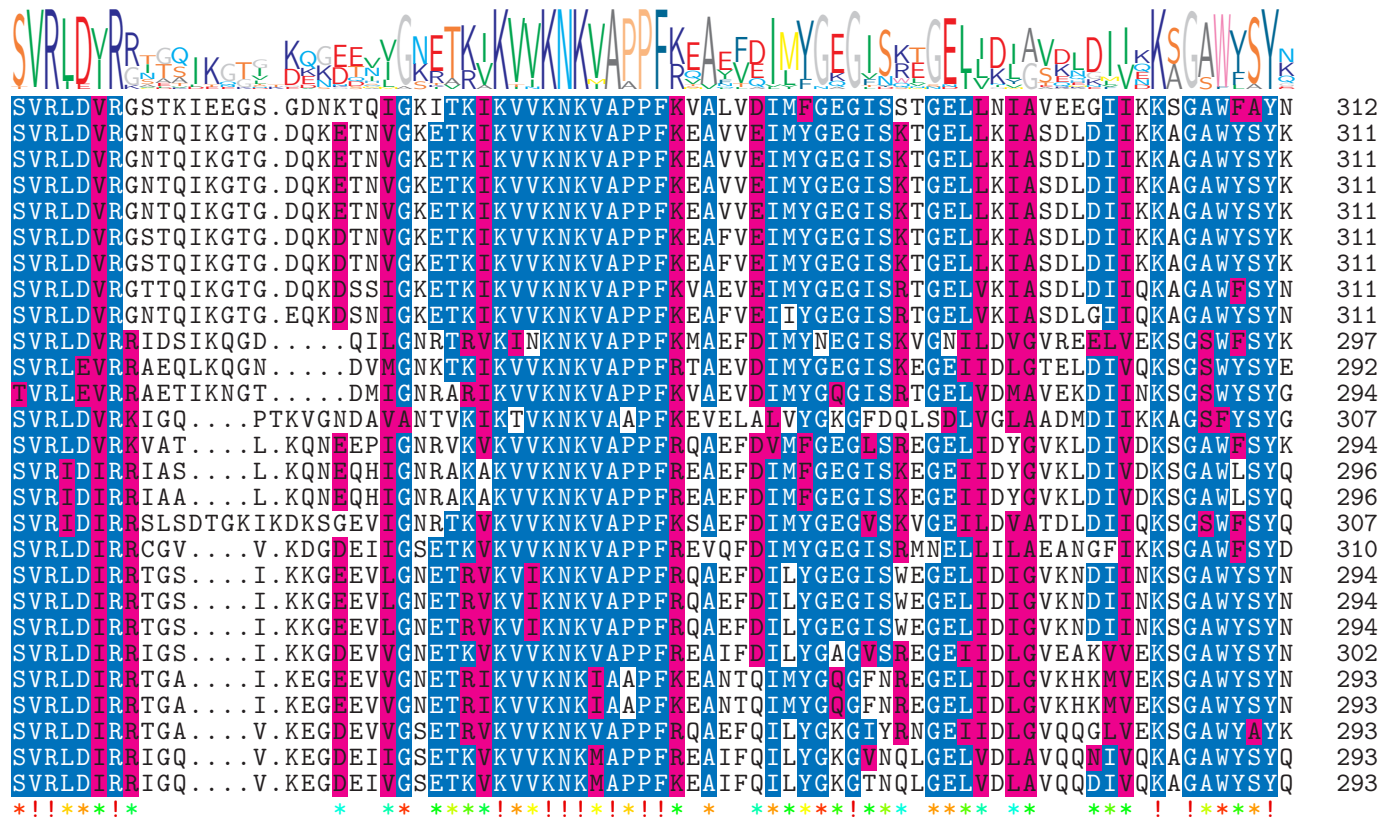
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NTDB id 1074 ABD1 RS10195 WP 000344167.1  
consensus



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|                                             |          |                  |                  |                 |                        |                            |                    |                      |                      |     |  |
|---------------------------------------------|----------|------------------|------------------|-----------------|------------------------|----------------------------|--------------------|----------------------|----------------------|-----|--|
| NTDB id 600 KW2 RS01765 WP 011675413.1      | DEKIGQGA | EKAKNYLKEHQDV    | DEIDHKVRAAHGL    | LDDSEVAETEEETTA | ...                    | SKTKAKAKKEEKAVETEEIELELED  | 387                |                      |                      |     |  |
| NTDB id 269 KZH43 RS08665 WP 001085462.1    | DEKIGQGS | ENAKKYLAEHPEIF   | DEIDKQVRSKFGL    | IDGEEVSEQDTENKK | ...                    | DE....PKKEEA..VNEEVPLDLGDE | 381                |                      |                      |     |  |
| NTDB id 228 SPD RS09265 WP 001085462.1      | DEKIGQGS | ENAKKYLAEHPEIF   | DEIDKQVRSKFGL    | IDGEEVSEQDTENKK | ...                    | DE....PKKEEA..VNEEVPLDLGDE | 381                |                      |                      |     |  |
| NTDB id 194 SPR RS08825 WP 001085462.1      | DEKIGQGS | ENAKKYLAEHPEIF   | DEIDKQVRSKFGL    | IDGEEVSEQDTENKK | ...                    | DE....PKKEEA..VNEEVPLDLGDE | 381                |                      |                      |     |  |
| NTDB id 159 SP RS09750 WP 001085462.1       | DEKIGQGS | ENAKKYLAEHPEIF   | DEIDKQVRSKFGL    | IDGEEVSEQDTENKK | ...                    | DE....PKKEEA..VNEEVPLDLGDE | 381                |                      |                      |     |  |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | DEKIGQGS | ENAKKYLADNPEIF   | DEIDHQVRVQFGL    | IDGEEIAES       | ....KK....             | DE....AAQVDS..VNEEVTLDLGDE | 377                |                      |                      |     |  |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | DEKIGQGS | ENAKKYLADNPEVFAE | IDHQVRVQFGL      | IDGEEAAES       | ....KK....             | DE....VAQVDS..VNEEVTLDLGDE | 377                |                      |                      |     |  |
| NTDB id 453 Spy49 1753c ACI62003.1          | GEKIGQGS | ENAKRYLADHPQLF   | DEIDRKVRVKFGL    | LEESEESAMAVASE  | .....E.....            | TDDLALDLNG                 | 373                |                      |                      |     |  |
| NTDB id 408 SMU RS09530 WP 002262392.1      | GEKIGQGS | ENAKKFLADNPEIF   | DDIDHKVRVQYGL    | IEEDNTEEKQSSKEK | .....ETDEK..           | ADKNLVLELDDT               | 378                |                      |                      |     |  |
| NTDB id 127357 CLSPO RS12490 WP 003491344.1 | DT       | RLGQGR           | ENAKQFLKDNMNIALE | EIENTIRKKHDL    | LPVADVKNVNIANKK        | .....QDNKE.....            | G.....             | 352                  |                      |     |  |
| NTDB id 115 BSU 16940 NP 389576.2           | EERL     | GQGR             | ENAKQFLKENKD     | IMLMIQEQ        | IREHYGL                | DNNGVVQQQAETQE             | ....E..LEFE.E..... | 348                  |                      |     |  |
| NTDB id 625 LCA RS02525 WP 011374196.1      | SERIG    | QGR              | ENAKNYLADHEDVE   | DEVRLKVRAAYG    | ISDVPEEDLPTTEDE        | ....Q.INILPDDSTE           | ....E.....         | 355                  |                      |     |  |
| NTDB id 1313 DR RS12030 WP 010888966.1      | DERIG    | QGGKEK           | TIAYIAERP        | EMEQEIRDRVMAA   | IRAGNAGEAPALAPAPAAPEAA | EA.....                    |                    | 363                  |                      |     |  |
| NTDB id 1245 Cj1673c YP 002345041.1         | DKKL     | GQGR             | ENSKAFLKENPEIA   | DEITKAIQNSMG    | IEGMI                  | ....SGSEDDE                | ..GEE.....         | 343                  |                      |     |  |
| NTDB id 1211 C694 RS00795 WP 000963128.1    | DKKL     | GQGR             | ENAKALLKEDKALADE | ITLKI           | KESIGSNEEI             | ....MPLPDEP                | ..LEEME.....       | 347                  |                      |     |  |
| NTDB id 1214 NCTC11637 00359 SQJ03206.1     | DKKL     | GQGR             | ENAKALLKEDKALADE | ITLKI           | KESIGSNEEI             | ....MPLPDEP                | ..LEEME.....       | 347                  |                      |     |  |
| NTDB id 1334 RAOC RS04870 WP 004918236.1    | DTKL     | GQGR             | DTVKELIKDNPELA   | EEL             | EAKIREKLQAK            | .....                      |                    | 343                  |                      |     |  |
| NTDB id 1389 A4U84 RS07560 WP 021112712.1   | GTKIG    | QGGK             | NNAVKWLKENPEIA   | DKLEQEIRNTLAS   | NPNS                   | ....VLKATASDSN             | DES                | DVEEFSE.....EEL..... | 372                  |     |  |
| NTDB id 1130 NGFG RS03960 WP 003688695.1    | GAKIG    | QGGK             | DNVRVWLKENPEIS   | DEIDAKIRALNG    | VEMHI                  | ....TEGT.....              | QDET               | DGERPE.....E.....    | 348                  |     |  |
| NTDB id 1124 NGFG RS03960 WP 003688695.1    | GAKIG    | QGGK             | DNVRVWLKENPEIS   | DEIDAKIRALNG    | VEMHI                  | ....TEGT.....              | QDET               | DGERPE.....E.....    | 348                  |     |  |
| NTDB id 1123 OK783 RS03845 WP 003688695.1   | GAKIG    | QGGK             | DNVRVWLKENPEIS   | DEIDAKIRALNG    | VEMHI                  | ....TEGT.....              | QDET               | DGERPE.....E.....    | 348                  |     |  |
| NTDB id 1427 RS RS02760 WP 011000510.1      | GERIG    | QGRDNC           | REFLR            | ENAELARE        | EIENKVREHLGV           | TPMG                       | ....AV.TLAE        | VEED.....            | 352                  |     |  |
| NTDB id 1165 A1552VC RS01565 WP 000344154.1 | GDKIG    | QGGK             | ANACKY           | LKENPEIAKTLD    | KKLREMLLN              | PENM                       | ....QLIAETSSAA     | DD                   | VEFGAVPE.....EF..... | 354 |  |
| NTDB id 1142 GTF74 RS11550 WP 000344154.1   | GDKIG    | QGGK             | ANACKY           | LKENPEIAKTLD    | KKLREMLLN              | PENM                       | ....QLIAETSSAA     | DD                   | VEFGAVPE.....EF..... | 354 |  |
| NTDB id 1205 PSJM300 05545 AFN77183.1       | GSKIG    | QGGK             | ANAAY            | LEENPEIG        | EIEQQIRAKLL            | VTSAN                      | ....TKATPVAEDLAD   | ADI                  | .....                | 347 |  |
| NTDB id 1022 ACIAD RS06390 WP 004925639.1   | GNKIG    | QGGK             | NNVIRY           | LEENPQISTE      | IEAVIREQLLT            | KASD                       | ....QTAA.HDETE     | EE                   | PDLL..ES.....        | 349 |  |
| NTDB id 1074 ABD1 RS10195 WP 000344167.1    | GNKIG    | QGGK             | NNVIRY           | FEENNQIAE       | EIERNIREQLLT           | TGTN                       | ....GAVQ.I.EDE     | EE                   | PDLL..LE.....S.....  | 349 |  |
| consensus                                   | ***!!!   | *****            | **               | *****           | *****                  | **                         | **                 |                      |                      | **  |  |

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|---------------------------------------------|---------|---------|-----|
|                                             |         | LEIELEE |     |
| NTDB id 600 KW2 RS01765 WP 011675413.1      | .....   |         | 387 |
| NTDB id 269 KZH43 RS08665 WP 001085462.1    | LEIEIEE |         | 388 |
| NTDB id 228 SPD RS09265 WP 001085462.1      | LEIEIEE |         | 388 |
| NTDB id 194 SPR RS08825 WP 001085462.1      | LEIEIEE |         | 388 |
| NTDB id 159 SP RS09750 WP 001085462.1       | LEIEIEE |         | 388 |
| NTDB id 499 SM12261 RS08315 WP 078228268.1  | LEIEIEE |         | 384 |
| NTDB id 527 SMSK321 RS11065 WP 001085454.1  | LEIEIEE |         | 384 |
| NTDB id 453 Spy49 1753c ACI62003.1          | IEIED.. |         | 378 |
| NTDB id 408 SMU RS09530 WP 002262392.1      | IELED.. |         | 383 |
| NTDB id 127357 CLSP0 RS12490 WP 003491344.1 | .....   |         | 352 |
| NTDB id 115 BSU 16940 NP 389576.2           | .....   |         | 348 |
| NTDB id 625 LCA RS02525 WP 011374196.1      | .....   |         | 355 |
| NTDB id 1313 DR RS12030 WP 010888966.1      | .....   |         | 363 |
| NTDB id 1245 Cj1673c YP 002345041.1         | .....   |         | 343 |
| NTDB id 1211 C694 RS00795 WP 000963128.1    | .....   |         | 347 |
| NTDB id 1214 NCTC11637 00359 SQJ03206.1     | .....   |         | 347 |
| NTDB id 1334 RAOC RS04870 WP 004918236.1    | .....   |         | 343 |
| NTDB id 1389 A4U84 RS07560 WP 021112712.1   | .....   |         | 372 |
| NTDB id 1130 NGFG RS03960 WP 003688695.1    | .....   |         | 348 |
| NTDB id 1124 NGFG RS03960 WP 003688695.1    | .....   |         | 348 |
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| NTDB id 1427 RS RS02760 WP 011000510.1      | .....   |         | 352 |
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| NTDB id 1142 GTF74 RS11550 WP 000344154.1   | .....   |         | 354 |
| NTDB id 1205 PSJM300 05545 AFN77183.1       | .....   |         | 347 |
| 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