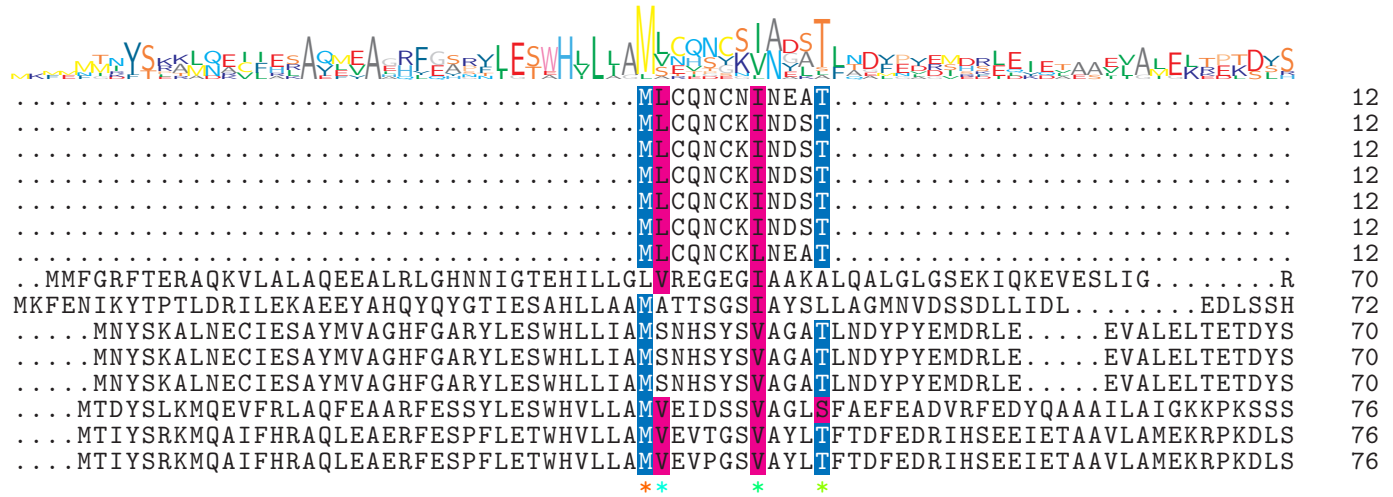


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NTDB id 287 SP RS11210 WP 001109712.1
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NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1
consensus

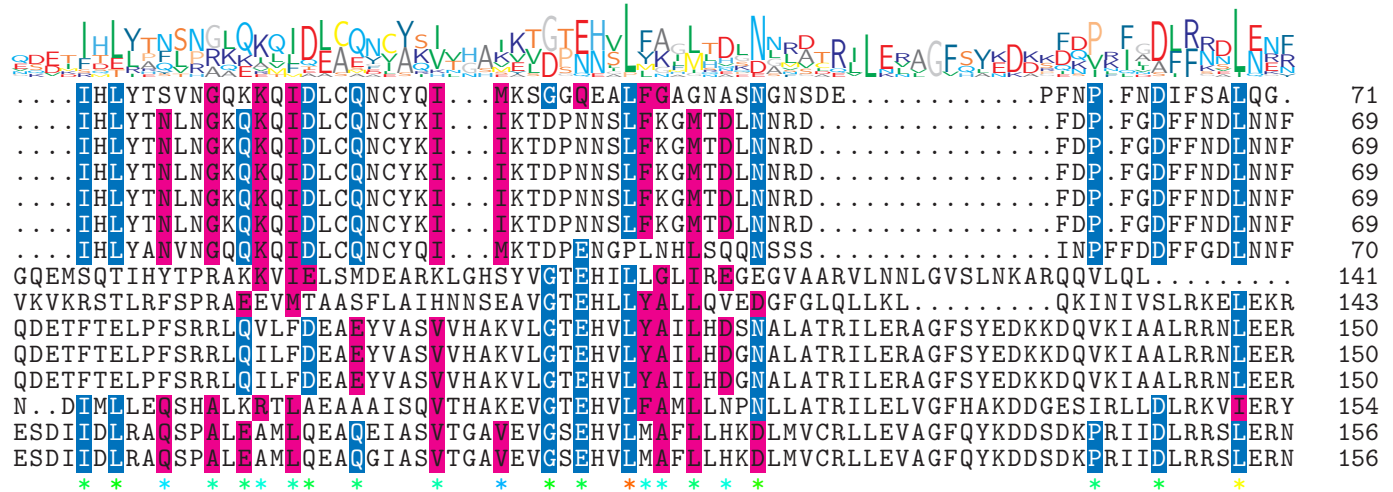
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NTDB id 329 STU RS10020 WP 011225298.1
consensus

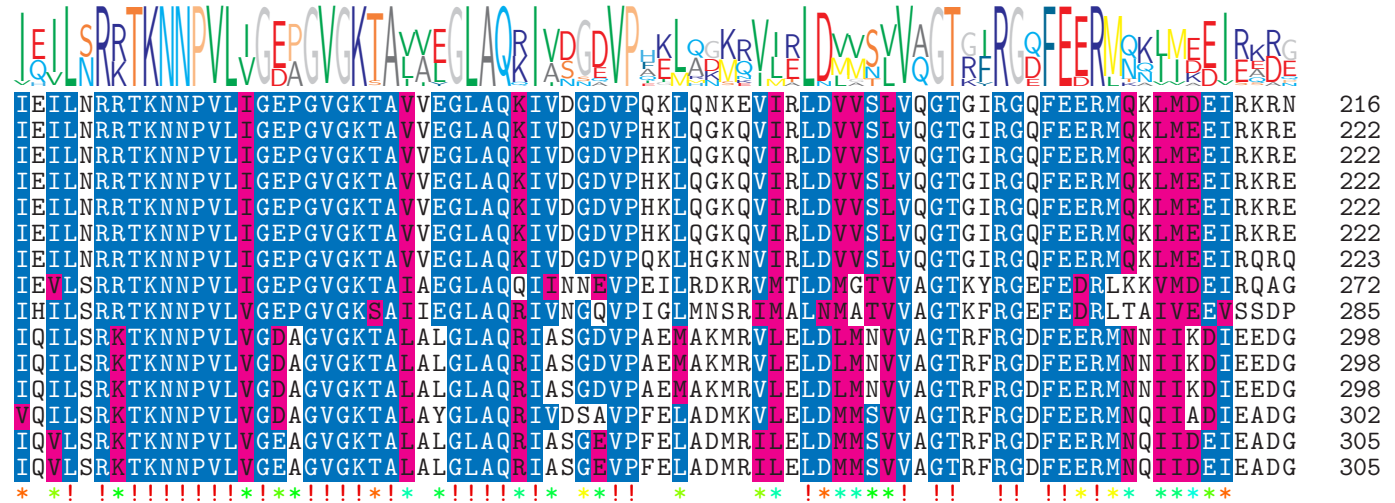
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NTDB id 241 SP RS04015 WP 000882523.1
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NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1
consensus

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logo

|                                              |                                       |                     |                         |                                 |                |             |
|----------------------------------------------|---------------------------------------|---------------------|-------------------------|---------------------------------|----------------|-------------|
| NTDB id 601 KW2 RS02615 WP 021036805.1       | DVIMFIDEIHEIVGAGSAGDGNMDAGNILKPALARGE | LQIVGATTLNEYR       | IEKDAALERRMQPVK         | VDEPSVDEITITIL                  | 295            |             |
| NTDB id 106117 AAA990 RS03795 WP 000882517.1 | DIILFIDEIHEIVGAGSASDGNMDAGNILKPALARGE | LQIVGATTLNEYR       | IEKDAALERRMQPVK         | VDEPTVDEITITIL                  | 301            |             |
| NTDB id 281 KZH43 RS03550 WP 000882517.1     | DIILFIDEIHEIVGAGSASDGNMDAGNILKPALARGE | LQIVGATTLNEYR       | IEKDAALERRMQPVK         | VDEPTVDEITITIL                  | 301            |             |
| NTDB id 245 SPD RS03860 WP 000882517.1       | DIILFIDEIHEIVGAGSASDGNMDAGNILKPALARGE | LQIVGATTLNEYR       | IEKDAALERRMQPVK         | VDEPTVDEITITIL                  | 301            |             |
| NTDB id 243 SPR RS03635 WP 000882517.1       | DIILFIDEIHEIVGAGSASDGNMDAGNILKPALARGE | LQIVGATTLNEYR       | IEKDAALERRMQPVK         | VDEPTVDEITITIL                  | 301            |             |
| NTDB id 241 SP RS04015 WP 000882523.1        | DIILFIDEIHEIVGAGSASDGNMDAGNILKPALARGE | LQIVGATTLNEYR       | IEKDAALERRMQPVK         | VDEPTVDEITITIL                  | 301            |             |
| NTDB id 378 SMU RS02690 WP 002263569.1       | DVILFIDEIHEIVGAGSAGDGNMDAGNILKPALARGE | LQIVGATTLNEYR       | IEKDAALERRMQPVK         | VDEPSVAETITIL                   | 302            |             |
| NTDB id 85 BSU 00860 NP 387967.1             | NIILFIDELHTLIGAGG                     | AFGATDASNILKPS      | LARGE                   | LQIVGATTLDEYRKYIEKDAALERRFQPIQV | QPSVDESIIQIL   | 351         |
| NTDB id 610 V4T04 RS10165 WP 012897346.1     | DVILFIDELHTLIGAGG                     | MDSVMDAANILKPALARGE | FGQIVGATTYHEYQKYIEKD    | HALERRLARIN                     | VDEPSVDEIAITIL | 365         |
| NTDB id 287 SP RS11210 WP 001109712.1        | QVILFIDELHTIMSGSG                     | IDSTLDAANILKPALARGE | TLRTVGATTQEYQKHIEKDAAL  | SRRFAKVTIEEPSVADSMITIL          | 378            |             |
| NTDB id 290 KZH43 RS10025 WP 001109677.1     | QVILFIDELHTIMSGSG                     | IDSTLDAANILKPALARGE | TLRTVGATTQEYQKHIEKDAAL  | SRRFAKVTIEEPSVADSMITIL          | 378            |             |
| NTDB id 289 SPD RS10700 WP 001109677.1       | QVILFIDELHTIMSGSG                     | IDSTLDAANILKPALARGE | TLRTVGATTQEYQKHIEKDAAL  | SRRFAKVTIEEPSVADSMITIL          | 378            |             |
| NTDB id 377 SMU RS09275 WP 002262344.1       | HIVLFIDELHTIMSGSG                     | IDSTLDAANILKPALARGE | SLRTIGATTQEYQKHIEKDAAL  | SRRFAKVTIEEPSEEEAYQIL           | 382            |             |
| NTDB id 297 STER RS00545 WP 011680614.1      | KIILFIDELHTIIGSGSG                    | IDSTLDAANILKPALARGE | TLHMVGATTQAEYQKHIEKDAAL | SRRFAKVTIEEPSVSEATDIL           | 385            |             |
| NTDB id 329 STU RS10020 WP 011225298.1       | KIILFIDELHTIIGSGSG                    | IDSTLDAANILKPALARGE | TLHMVGATTQAEYQKHIEKDAAL | SRRFAKVTIEEPSVSEATDIL           | 385            |             |
| consensus                                    | ***!!!!*! **!*!*** *                  | *!***!!!!*!!!!*     | *****!!!!               | !!                              | !!!!*!*!! *    | ***!*****!! |

logo

|                                              |         |                          |                                 |                      |                   |              |     |
|----------------------------------------------|---------|--------------------------|---------------------------------|----------------------|-------------------|--------------|-----|
| NTDB id 601 KW2 RS02615 WP 021036805.1       | RGIQAR  | YEDYHHVQYTDAAIEAAAHLSNRY | IQDRFLPDKAIDLLDE                | SGSKKNITIKF          | ..VDPEDINRRITAD   | ENKKNEAT     | 373 |
| NTDB id 106117 AAA990 RS03795 WP 000882517.1 | KGIQKKY | YEDYHHVQYTDAAIEAAATLSNRY | IQDRFLPDKAIDLLDE                | AGSKMNLITLNF         | ..VDPKVIDQRLIE    | ENLKSQAT     | 379 |
| NTDB id 281 KZH43 RS03550 WP 000882517.1     | KGIQKKY | YEDYHHVQYTDAAIEAAATLSNRY | IQDRFLPDKAIDLLDE                | AGSKMNLITLNF         | ..VDPKVIDQRLIE    | ENLKSQAT     | 379 |
| NTDB id 245 SPD RS03860 WP 000882517.1       | KGIQKKY | YEDYHHVQYTDAAIEAAATLSNRY | IQDRFLPDKAIDLLDE                | AGSKMNLITLNF         | ..VDPKVIDQRLIE    | ENLKSQAT     | 379 |
| NTDB id 243 SPR RS03635 WP 000882517.1       | KGIQKKY | YEDYHHVQYTDAAIEAAATLSNRY | IQDRFLPDKAIDLLDE                | AGSKMNLITLNF         | ..VDPKVIDQRLIE    | ENLKSQAT     | 379 |
| NTDB id 241 SP RS04015 WP 000882523.1        | KGIQKKY | YEDYHHVQYTDAAIEAAATLSNRY | IQDRFLPDKAIDLLDE                | AGSKMNLITLNF         | ..VDPKVIDQRLIE    | ENLKSQAT     | 379 |
| NTDB id 378 SMU RS02690 WP 002263569.1       | KGIQPKY | YEDYHHVQYTDAAIEAAANLSNRY | IQDRFLPDKAIDLLDE                | AGSKMNLITLNF         | ..VDPKETDHR       | IEAENLKAQAT  | 380 |
| NTDB id 85 BSU 00860 NP 387967.1             | QCLRD   | RYEAHHRVSI               | TDAAIEAAVKLSDRYISDRFLPDKAIDLLDE | AGSKVRLRSFTTPPNLKE   | LEQKLD            | VRKEKDAAV    | 431 |
| NTDB id 610 V4T04 RS10165 WP 012897346.1     | QCLREK  | FEDYHQVKFTDQA            | IKSAVMLSVRYMTSRKLPDKAIDLLDE     | AAAVKISVKNQQT        | KRLDIEKE          | AAEAQEELSEAV | 445 |
| NTDB id 287 SP RS11210 WP 001109712.1        | QCLKATY | EKHHRVQITDEAVETAVKMAHRYL | TSRHLPD                         | SAIDLLDEAAATVQNKAKHV | KADDSDL....S....  | PADKAL       | 450 |
| NTDB id 290 KZH43 RS10025 WP 001109677.1     | QCLKATY | EKHHRVQITDEAVETAVKMAHRYL | TSRHLPD                         | SAIDLLDEAAATVQNKAKHV | KADDSDL....S....  | PADKAL       | 450 |
| NTDB id 289 SPD RS10700 WP 001109677.1       | QCLKATY | EKHHRVQITDEAVETAVKMAHRYL | TSRHLPD                         | SAIDLLDEAAATVQNKAKHV | KADDSDL....S....  | PADKAL       | 450 |
| NTDB id 377 SMU RS09275 WP 002262344.1       | LGLKKS  | YETYHHVVISDA             | AVMAAVKGAHRYLSGNLPD             | SAIDLLDEASATVQGLVKK  | ..KAPAYL....T.... | DLDEAL       | 452 |
| NTDB id 297 STER RS00545 WP 011680614.1      | NGLRSSY | EDYHRVTITDA              | AVETAVKAAHRYLTSKNLPD            | SAIDLLDEASATVQVRIKK  | ..EDKREI....T.... | PLDEAL       | 455 |
| NTDB id 329 STU RS10020 WP 011225298.1       | NGLRSSY | EDYHRVTITDA              | AVETAVKAAHRYLTSKNLPD            | SAIDLLDEASATVQVRIKK  | ..EAKREI....T.... | PLDEAL       | 455 |
| consensus                                    | !* *    | *!*!!!! ! *              | *! !***! ** !!* *               | !!!!*!!!!*!!!!*      | *** *             | * *** *      | !   |

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NTDB id 329 STU RS10020 WP 011225298.1
consensus

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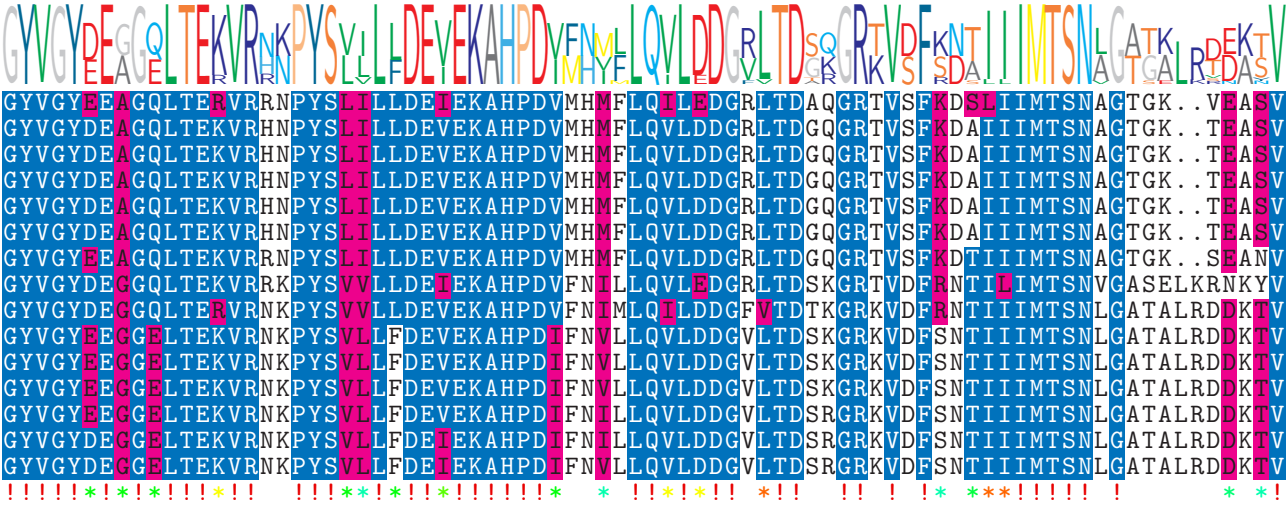
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NTDB id 329 STU RS10020 WP 011225298.1
consensus

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logo

NTDB id 601 KW2 RS02615 WP 021036805.1  
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consensus



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logo

NTDB id 601 KW2 RS02615 WP 021036805.1  
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consensus



680  
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751  
760  
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761  
761

logo

|                                              |                                                                       |     |
|----------------------------------------------|-----------------------------------------------------------------------|-----|
| NTDB id 601 KW2 RS02615 WP 021036805.1       | VDLGYNPAMGARPLRRTIQENTEDSADFYEHPEYKQ.LVADLIDDKIVISNQTQETAETTDDEEVPÆ   | 748 |
| NTDB id 106117 AAA990 RS03795 WP 000882517.1 | VDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKD.LKAVMTSKGNIQIKSAKKA.EVKSSEKEK. | 752 |
| NTDB id 281 KZH43 RS03550 WP 000882517.1     | VDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKD.LKAVMTSKGNIQIKSAKKA.EVKSSEKEK. | 752 |
| NTDB id 245 SPD RS03860 WP 000882517.1       | VDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKD.LKAVMTSKGNIQIKSAKKA.EVKSSEKEK. | 752 |
| NTDB id 243 SPR RS03635 WP 000882517.1       | VDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKD.LKAVMTSKGNIQIKSAKKA.EVKSSEKEK. | 752 |
| NTDB id 241 SP RS04015 WP 000882523.1        | VDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKD.LKAVMTSKGNIQIKSAKKA.EVKSSEKEK. | 752 |
| NTDB id 378 SMU RS02690 WP 002263569.1       | VDLGYDPKMGARPLRRTIQEHTEDAITDFYLEHPEQKE.LKAIMTSNCKIVIKASNKV.ETVTKATSD. | 753 |
| NTDB id 85 BSU 00860 NP 387967.1             | AEEGVLDLEYGARPLRRRIQKHVEDRLSEELLRGNIHKGQHVLVDVEDGEFVVKTTAKTN.....     | 810 |
| NTDB id 610 V4T04 RS10165 WP 012897346.1     | AEVCFDPEYGARPLRKALQKEVEDLLSEQLLSGEIKAGNHVSTIGASNNKKIKIAQIV.....       | 816 |
| NTDB id 287 SP RS11210 WP 001109712.1        | ANQGYDPEMGARPLRRTIQTEVEDKLAELLKGD LVAGSTLKI GVKACQLKFDIA.....         | 810 |
| NTDB id 290 KZH43 RS10025 WP 001109677.1     | ANQGYDPEMGARPLRRTIQTEVEDKLAELLKGD LVAGSTLKI GVKACQLKFDIA.....         | 810 |
| NTDB id 289 SPD RS10700 WP 001109677.1       | ANQGYDPEMGARPLRRTIQTEVEDKLAELLKGD LVAGSTLKI GVKACQLKFDIA.....         | 810 |
| NTDB id 377 SMU RS09275 WP 002262344.1       | ALAGYDAEMGARPLRRTIQTEVEDKLAELL SGKLASGQTLKIGIQKEKLKFDIV.....          | 813 |
| NTDB id 297 STER RS00545 WP 011680614.1      | AKDGYDIEMGARPLRRTIQTQVEDKLSELLLGGQVVSGQTLKIGCSKDKLTFTVV.....          | 816 |
| NTDB id 329 STU RS10020 WP 011225298.1       | AKDGYDIEMGARPLRRTIQTQVEDKLSELLLGGQVVSGQTLKIGCSKDKLTFTVV.....          | 816 |
| consensus                                    | * !*** *!!!!!!***! *!! *** *                                          |     |

- non conserved
- similar
- ≥ 50% conserved