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|                                            |                                                                                       |    |
|--------------------------------------------|---------------------------------------------------------------------------------------|----|
| NTDB id 601 KW2 RS02615 WP 021036805.1     | .....MLCQNCNINEAT.....I                                                               | 13 |
| NTDB id 72130 EL334 RS04045 WP 000882517.1 | .....MLCQNCCKINDST.....I                                                              | 13 |
| NTDB id 281 KZH43 RS03550 WP 000882517.1   | .....MLCQNCCKINDST.....I                                                              | 13 |
| NTDB id 245 SPD RS03860 WP 000882517.1     | .....MLCQNCCKINDST.....I                                                              | 13 |
| NTDB id 243 SPR RS03635 WP 000882517.1     | .....MLCQNCCKINDST.....I                                                              | 13 |
| NTDB id 241 SP RS04015 WP 000882523.1      | .....MLCQNCCKINDST.....I                                                              | 13 |
| NTDB id 378 SMU RS02690 WP 002263569.1     | .....MLCQNCCKLNEAT.....I                                                              | 13 |
| NTDB id 85 BSU 00860 NP 387967.1           | ..MMFGRFTEAQQVLALAQEEALRLGHNNIGTEHILLGLVREGEGIAAKALQALGLGSEKIQKEVESLIG.....RGQEMS     | 75 |
| NTDB id 610 V4T04 RS10165 WP 012897346.1   | MKFENIKYTPTLDRILEKAEEYAHQYQYGTIESAHLAAMATTSGSIAYSLLAGMNVDSDDLIDL.....EDLSSHVKVKR      | 77 |
| NTDB id 287 SP RS11210 WP 001109712.1      | .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNSHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET | 75 |
| NTDB id 290 KZH43 RS10025 WP 001109677.1   | .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNSHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET | 75 |
| NTDB id 289 SPD RS10700 WP 001109677.1     | .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNSHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET | 75 |
| NTDB id 377 SMU RS09275 WP 002262344.1     | ....MTDYSLKMQEVFRLAQFEAARFESSYLESWHVLLAMVEIDSSVAGLSFAEFADRVRFEDYQAAAAILAIGKKPKSSSN..D | 79 |
| NTDB id 297 STER RS00545 WP 011680614.1    | ....MTIYSRKMQAIFHRAQLEAERFESPFLWTWHVLLAMVEVPGSVAYLTFTDFEDRIHSEEIETAAVLAMEKRPKDLSESDI  | 81 |
| NTDB id 329 STU RS10020 WP 011225298.1     | ....MTIYSRKMQAIFHRAQLEAERFESPFLWTWHVLLAMVEVPGSVAYLTFTDFEDRIHSEEIETAAVLAMEKRPKDLSESDI  | 81 |
| consensus                                  | .....* * * *                                                                          |    |

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|--------------------------------------------|----------------------------------------------------------------------------------------|-----|
| NTDB id 601 KW2 RS02615 WP 021036805.1     | HLYTSVNGCQKQKIDLCQNCYQI...MKSGGQEAALFGAGNASNGNSDE.....PFNP.FNDIFSALQG.QDFNGAASN.       | 80  |
| NTDB id 72130 EL334 RS04045 WP 000882517.1 | HLYTNLNGKQKQKIDLCQNCYKI...IKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNFRPSSN..TP.          | 76  |
| NTDB id 281 KZH43 RS03550 WP 000882517.1   | HLYTNLNGKQKQKIDLCQNCYKI...IKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNFRPSSN..TP.          | 76  |
| NTDB id 245 SPD RS03860 WP 000882517.1     | HLYTNLNGKQKQKIDLCQNCYKI...IKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNFRPSSN..TP.          | 76  |
| NTDB id 243 SPR RS03635 WP 000882517.1     | HLYTNLNGKQKQKIDLCQNCYKI...IKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNFRPSSN..TP.          | 76  |
| NTDB id 241 SP RS04015 WP 000882523.1      | HLYTNLNGKQKQKIDLCQNCYKI...IKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNFRPSSN..TP.          | 76  |
| NTDB id 378 SMU RS02690 WP 002263569.1     | HLYANVNGCQKQKIDLCQNCYQI...MKTDPENGPLNHLSSQNSSS.....INPFDDFFFGDLNNFRAFNNQDLP.           | 79  |
| NTDB id 85 BSU 00860 NP 387967.1           | QTIHYTPRAKKVIELSMDEARKLGHSYVGTEHILLGLIREGEGVAARVLNNLGVSLNKKARQQVLQL.....LGSNET....     | 147 |
| NTDB id 610 V4T04 RS10165 WP 012897346.1   | STLRFSPRAEEVMTAASFLAIHNNSEAVGTEHLLYALLQVEDGFGLQLLKL.....QKINIVSLRKELEKRTGLKVPESKK      | 153 |
| NTDB id 287 SP RS11210 WP 001109712.1      | TELPFSRRLQVLFDEAEYVASVVHAKVLGTEHVLVYAILHDSNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA | 160 |
| NTDB id 290 KZH43 RS10025 WP 001109677.1   | TELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLVYAILHDSNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA | 160 |
| NTDB id 289 SPD RS10700 WP 001109677.1     | TELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLVYAILHDSNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA | 160 |
| NTDB id 377 SMU RS09275 WP 002262344.1     | MLLEQSHALKRTLAEEAAISQVTHAKEVGTEHVLFAMLLNPNLLATRILELVGFHAKDDGESIRLLDLRKVIERYACFSKEDIKA  | 164 |
| NTDB id 297 STER RS00545 WP 011680614.1    | DLRAQSPALEAMLQEAQEIASVTGAVEVGSEHVLMAFLLHKDLMVCRLLEVAGFYKDDSDKPRIIDLRRSLERNAGLSKQDLKA   | 166 |
| NTDB id 329 STU RS10020 WP 011225298.1     | DLRAQSPALEAMLQEAQGIASVTGAVEVGSEHVLMAFLLHKDLMVCRLLEVAGFYKDDSDKPRIIDLRRSLERNAGLSKQDLKA   | 166 |
| consensus                                  | * * * * * * * * * * * * * * *                                                          |     |

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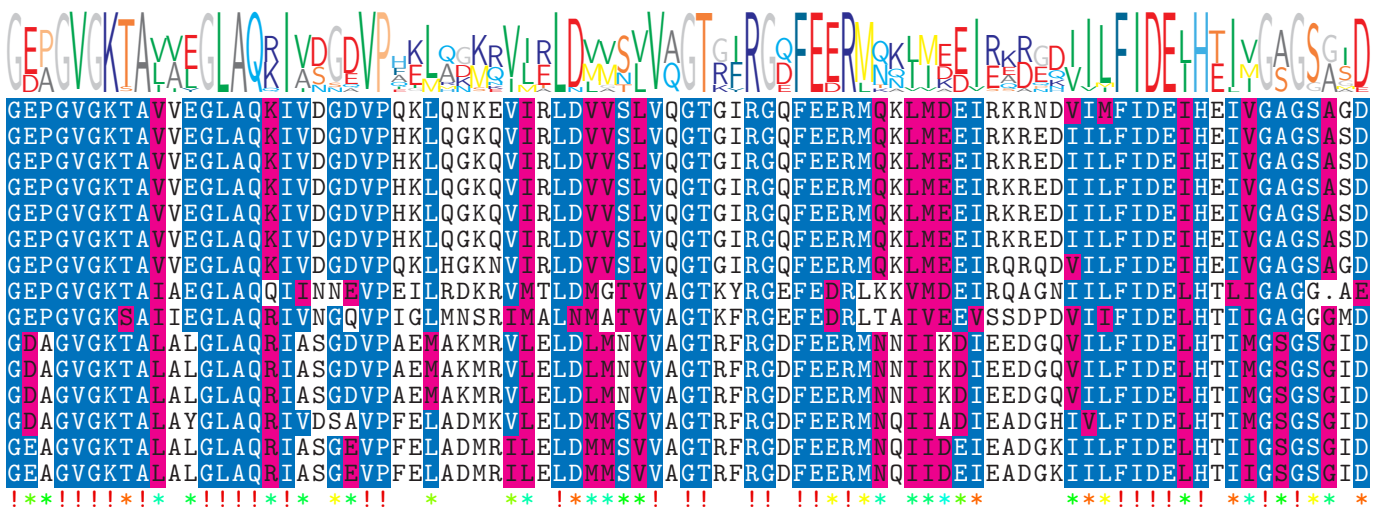
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consensus



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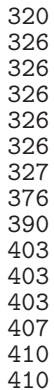


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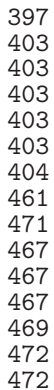
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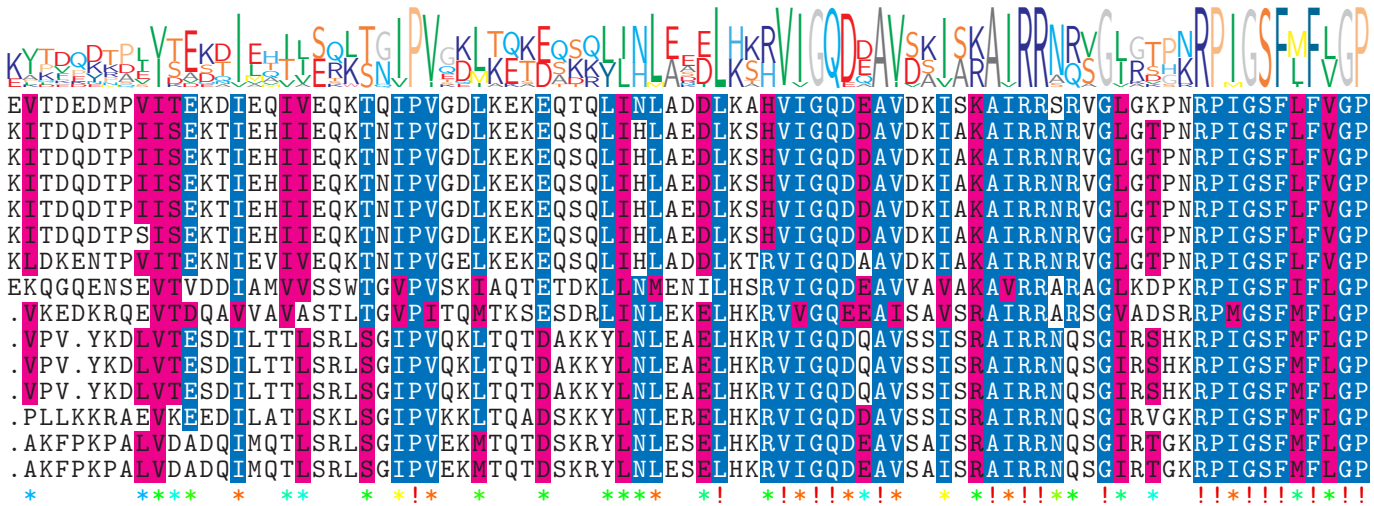
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| NTDB id 601 KW2 RS02615 WP 021036805.1     | ISNQTQETAETTDDEEVPAE | 748 |
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| NTDB id 281 KZH43 RS03550 WP 000882517.1   | QIKSAKKA.EVKSSSEKEK. | 752 |
| NTDB id 245 SPD RS03860 WP 000882517.1     | QIKSAKKA.EVKSSSEKEK. | 752 |
| NTDB id 243 SPR RS03635 WP 000882517.1     | QIKSAKKA.EVKSSSEKEK. | 752 |
| NTDB id 241 SP RS04015 WP 000882523.1      | QIKSAKKA.EVKSSSEKEK. | 752 |
| NTDB id 378 SMU RS02690 WP 002263569.1     | VIKASNKV.ETVTKATSD.  | 753 |
| NTDB id 85 BSU 00860 NP 387967.1           | VVKTTAKTN.....       | 810 |
| NTDB id 610 V4T04 RS10165 WP 012897346.1   | KIAQIV.....          | 816 |
| NTDB id 287 SP RS11210 WP 001109712.1      | KFDIA.....           | 810 |
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| NTDB id 377 SMU RS09275 WP 002262344.1     | KFDIV.....           | 813 |
| NTDB id 297 STER RS00545 WP 011680614.1    | TFTVV.....           | 816 |
| NTDB id 329 STU RS10020 WP 011225298.1     | TFTVV.....           | 816 |
| consensus                                  |                      |     |



-  non conserved
-  similar
-  ≥ 50% conserved