

logo

|                                              |                                                                                     |    |
|----------------------------------------------|-------------------------------------------------------------------------------------|----|
| NTDB id 601 KW2 RS02615 WP 021036805.1       | .....MTCQNCMINEAT.....                                                              | 12 |
| NTDB id 281 KZH43 RS03550 WP 000882517.1     | .....MTCQNCKINDST.....                                                              | 12 |
| NTDB id 245 SPD RS03860 WP 000882517.1       | .....MTCQNCKINDST.....                                                              | 12 |
| NTDB id 243 SPR RS03635 WP 000882517.1       | .....MTCQNCKINDST.....                                                              | 12 |
| NTDB id 241 SP RS04015 WP 000882523.1        | .....MTCQNCKINDST.....                                                              | 12 |
| NTDB id 1138057 DQL37 RS06525 WP 002983882.1 | .....MTCQNCNINEST.....                                                              | 12 |
| NTDB id 378 SMU RS02690 WP 002263569.1       | .....MTCQNCKINEAT.....                                                              | 12 |
| NTDB id 85 BSU 00860 NP 387967.1             | ..MMFGRFTERAQKVLALAQEEALRLGHNNIGTEHILLGLVREGEGAAKALQALGLGSEKIQKEVESLIG.....R        | 70 |
| NTDB id 610 V4T04 RS10165 WP 012897346.1     | MKFENIKYTPTLDRILEKAEYYAHQYQYGTIESAHLLEAMATTSGSLAYSLLAGMNVDSDDLIDL.....EDLSSH        | 72 |
| NTDB id 290 KZH43 RS10025 WP 001109677.1     | .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYS    | 70 |
| NTDB id 289 SPD RS10700 WP 001109677.1       | .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYS    | 70 |
| NTDB id 287 SP RS11210 WP 001109712.1        | .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYS    | 70 |
| NTDB id 377 SMU RS09275 WP 002262344.1       | ....MTDYSLKMQEVFRLAQFEAARFESSYLESWHVLLAMVEIDSSVAGLSFAEFEADVRFEDYQAAAAILAIGKKPKSSS   | 76 |
| NTDB id 297 STER RS00545 WP 011680614.1      | ...MTIYSRKMQAIFHRAQLEAERFESPFLLETWHVLLAMVEVTGSVAYLTFDTDFEDRIHSEEIETA AVLAMEKRPKDLS  | 76 |
| NTDB id 329 STU RS10020 WP 011225298.1       | ....MTIYSRKMQAIFHRAQLEAERFESPFLLETWHVLLAMVEVPGSVAYLTFDTDFEDRIHSEEIETA AVLAMEKRPKDLS | 76 |
| consensus                                    | .....**.....*                                                                       |    |

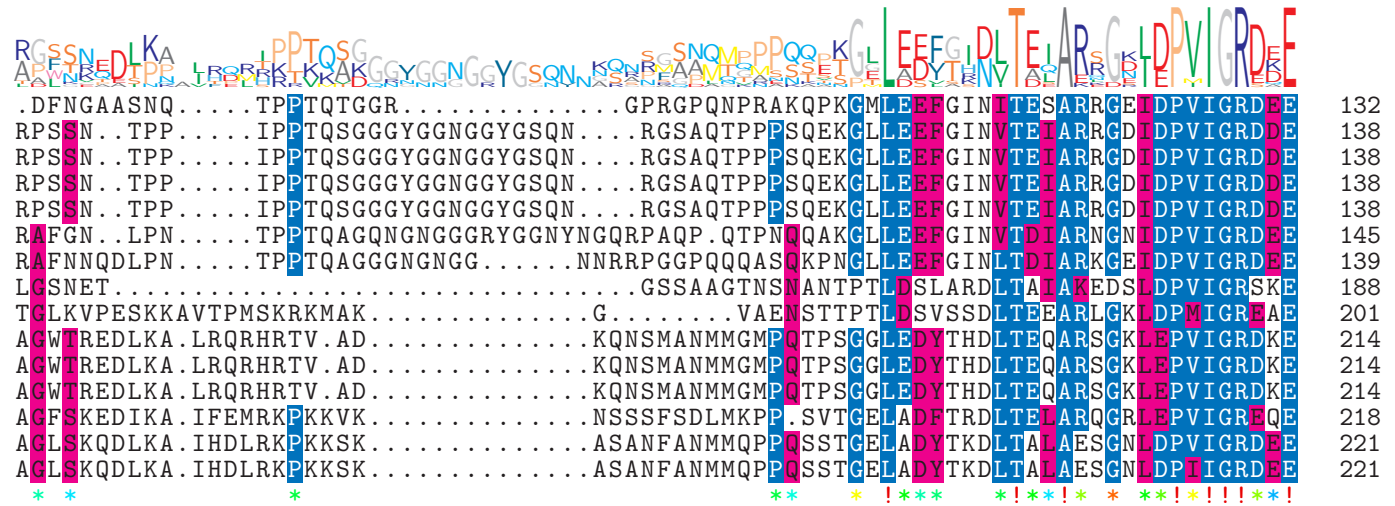
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|----------------------------------------------|------------------------------------------------------------------------------------|-----|
| NTDB id 601 KW2 RS02615 WP 021036805.1       | ....IHL YTSVNGQKQIDLCQNCYQI...MKSQGAEALFGAGNASMGNS.....DEPFN.PFNDIFSALQGGQ         | 72  |
| NTDB id 281 KZH43 RS03550 WP 000882517.1     | ....IHL YTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFGKMTDLN.....NRDF.DPFGDFFNDLNNF            | 69  |
| NTDB id 245 SPD RS03860 WP 000882517.1       | ....IHL YTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFGKMTDLN.....NRDF.DPFGDFFNDLNNF            | 69  |
| NTDB id 243 SPR RS03635 WP 000882517.1       | ....IHL YTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFGKMTDLN.....NRDF.DPFGDFFNDLNNF            | 69  |
| NTDB id 241 SP RS04015 WP 000882523.1        | ....IHL YTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFGKMTDLN.....NRDF.DPFGDFFNDLNNF            | 69  |
| NTDB id 1138057 DQL37 RS06525 WP 002983882.1 | ....IHL YTSVNGKQKQIDLCQNCYQI...MKSDPANSLNGLTPGYRAQ.....DRSTSPFFDDFFGD LNNF         | 73  |
| NTDB id 378 SMU RS02690 WP 002263569.1       | ....IHL YANVNGQKQKQIDLCQNCYQI...MKTDPENGPLNHLSSQQ...N.....SSSINPFFDDFFGD LNNF      | 70  |
| NTDB id 85 BSU 00860 NP 387967.1             | GQEMSQTIHYTPRAKKVIELSMDEARKLGHSYVCTEHLILGLIREGEGVAARVLNNLGVSLNKARQQVLQL.....       | 141 |
| NTDB id 610 V4T04 RS10165 WP 012897346.1     | VKVKRSTLRFSPRAEVMTAASFLAIHNNSEAVCTEHLILYALLQVEDGFGQLQLLKL.....QKINIVSLRKETEKR      | 143 |
| NTDB id 290 KZH43 RS10025 WP 001109677.1     | QDETFTELPFSSRRLQILFDEAEYVASV VHAKVLCTEHLVYAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEER | 150 |
| NTDB id 289 SPD RS10700 WP 001109677.1       | QDETFTELPFSSRRLQILFDEAEYVASV VHAKVLCTEHLVYAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEER | 150 |
| NTDB id 287 SP RS11210 WP 001109712.1        | QDETFTELPFSSRRLQVLFDEAEYVASV VHAKVLCTEHLVYAILHDSNALATRILERAGFSYEDKKDQVKIAALRRNLEER | 150 |
| NTDB id 377 SMU RS09275 WP 002262344.1       | N..DITMLEQSHALKITLAEAAAISQVTHAKEVCTEHLVLFAMLLNPNLLATRILELVGFHAKDDGESIRLLDLRKVTERY  | 154 |
| NTDB id 297 STER RS00545 WP 011680614.1      | ESDIIDLRAQSPALEAMLQEAQEIASVTGAVEVGESEHVLMAFILHKLDMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERN  | 156 |
| NTDB id 329 STU RS10020 WP 011225298.1       | ESDIIDLRAQSPALEAMLQEAQGIASVTGAVEVGESEHVLMAFILHKLDMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERN  | 156 |
| consensus                                    | .....* * * * * * * * * * * * * *                                                   |     |

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NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
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NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1
consensus

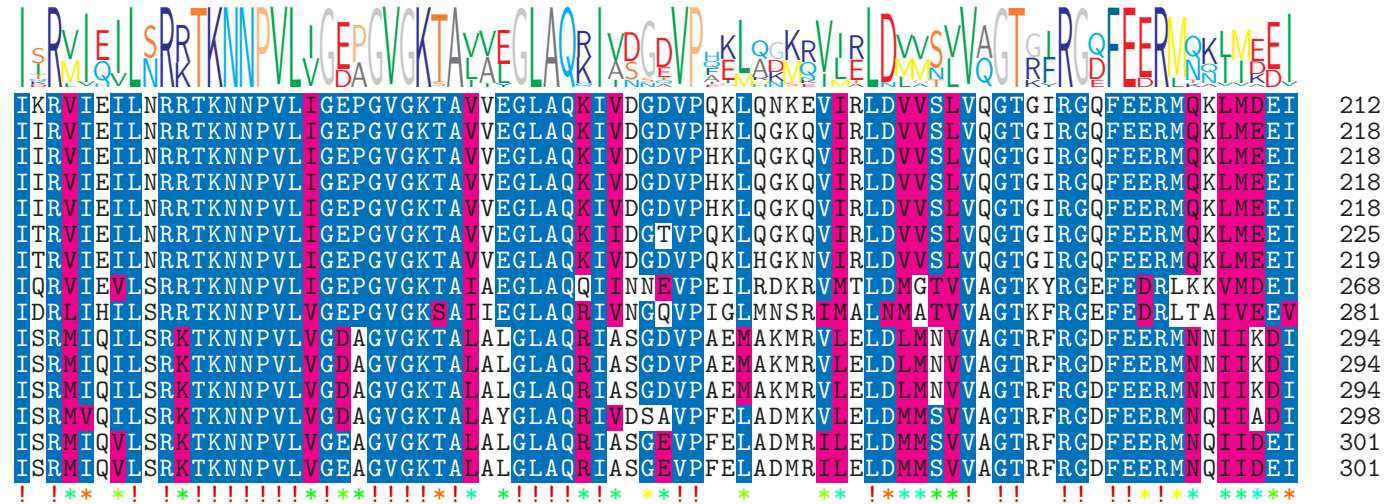
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NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1
consensus

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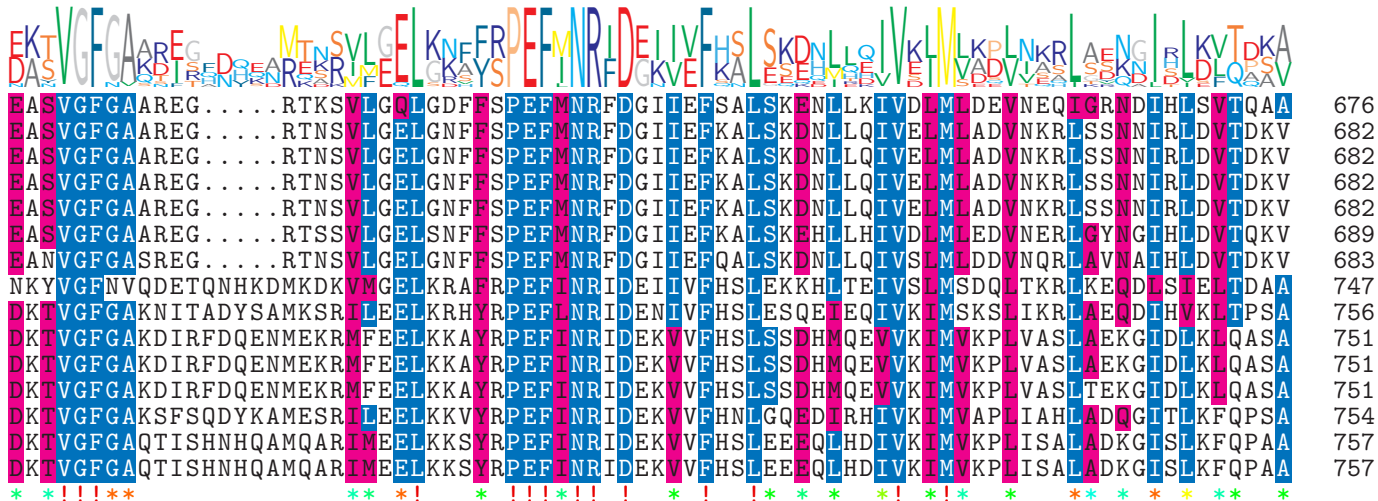
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| NTDB id   | 601     | KW2   | RS02615 | WP | 021036805.1 | NEATKAEDFEKAAHFRDQISKLRELQK.....QEVTDEDMPVITEKDTEQIVEQKTQIPVGDLKEKEQTQLINLADDLK    | 443 |
| NTDB id   | 281     | KZH43 | RS03550 | WP | 000882517.1 | SQATREEDFEKAAAYFRDQIAKYKEMQK.....KKITTDQDTPIISEKTEIHIEEQKTNIIPVGDLKEKEQSQLIHLAEDLK | 449 |
| NTDB id   | 245     | SPD   | RS03860 | WP | 000882517.1 | SQATREEDFEKAAAYFRDQIAKYKEMQK.....KKITTDQDTPIISEKTEIHIEEQKTNIIPVGDLKEKEQSQLIHLAEDLK | 449 |
| NTDB id   | 243     | SPR   | RS03635 | WP | 000882517.1 | SQATREEDFEKAAAYFRDQIAKYKEMQK.....KKITTDQDTPIISEKTEIHIEEQKTNIIPVGDLKEKEQSQLIHLAEDLK | 449 |
| NTDB id   | 241     | SP    | RS04015 | WP | 000882523.1 | SQATREEDFEKAAAYFRDQIAKYKEMQK.....KKITTDQDTPSISEKTEIHIEEQKTNIIPVGDLKEKEQSQLIHLAEDLK | 449 |
| NTDB id   | 1138057 | DQL37 | RS06525 | WP | 002983882.1 | AQATRDEDYERAAAYFRDQITKYKEMQA.....QKVDEQDIPITITEKTEAEIVEQKTNIIPVGDLKEKEQSQLVNLANDLK | 456 |
| NTDB id   | 378     | SMU   | RS02690 | WP | 002263569.1 | AQATRDEDEYKAAAYFRDQIAKYKEMQS.....AKLDKENTPVITEKNIEVEIVEQKTNIIPVGELKEKEQSQLIHLADDLK | 450 |
| NTDB id   | 85      | BSU   | 00860   | NP | 387967.1    | DAAVQSQEFEKAAASLRDTEQRRLREQVEDTKKSWEKGQGENSEVTVDDIAMVVSSWTGVVPVSKIAQETDKLLNMENILH  | 507 |
| NTDB id   | 610     | V4T04 | RS10165 | WP | 012897346.1 | SEAVIKLIDIKASRTKEKAVEKIADKIYKFS.....VKEDKRQEVTDQAVVAFASTLTGVPITQMTKSESDDLINLEKELH  | 516 |
| NTDB id   | 290     | KZH43 | RS10025 | WP | 001109677.1 | DKALMDGKWKKQAAQLIAKEE.....E.....VPV.YKDLVTESDILTTL SRLSGIPVQKLTQTDAKKYL NLEAELH    | 511 |
| NTDB id   | 289     | SPD   | RS10700 | WP | 001109677.1 | DKALMDGKWKKQAAQLIAKEE.....E.....VPV.YKDLVTESDILTTL SRLSGIPVQKLTQTDAKKYL NLEAELH    | 511 |
| NTDB id   | 287     | SP    | RS11210 | WP | 001109712.1 | DKALMDGKWKKQAAQLIAKEE.....E.....VPV.YKDLVTESDILTTL SRLSGIPVQKLTQTDAKKYL NLEAELH    | 511 |
| NTDB id   | 377     | SMU   | RS09275 | WP | 002262344.1 | DHALITNDYQLAKRLLKKEK.....K.....PLLKKRAEVKFEEDILATLSKLSGIPVKKLTQADSKKYLNLERELH      | 514 |
| NTDB id   | 297     | STER  | RS00545 | WP | 011680614.1 | DEALISGDIGA AVKQYKANQ.....K.....AKFPKPALVDADQIMQTL SRLSGIPVEKM TQTDSKRYLNLESSELH   | 517 |
| NTDB id   | 329     | STU   | RS10020 | WP | 011225298.1 | DEALISGDIGA AVKQYKANQ.....K.....AKFPKPALVDADQIMQTL SRLSGIPVEKM TQTDSKRYLNLESSELH   | 517 |
| consensus |         |       |         |    |             | ! * * * * *                                                                        | 517 |

[illegible]

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NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
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NTDB id 610 V4T04 RS10165 WP 012897346.1
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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 601 KW2 RS02615 WP 021036805.1       | KEKLVLDLGYNPAMGARPLRRTIQENTEDSIAIFYEHPEYKQLVADLIDDKIVISNQTQETAETTDDEEVP   | 748 |
| NTDB id 281 KZH43 RS03550 WP 000882517.1     | KEKLVLDLGYDPKMGARPLRRTIQDYIEDTTIDYYLENPSEKDLKAVMTSKCNIIQIKSAKKAIEVKSSEKEK | 752 |
| NTDB id 245 SPD RS03860 WP 000882517.1       | KEKLVLDLGYDPKMGARPLRRTIQDYIEDTTIDYYLENPSEKDLKAVMTSKCNIIQIKSAKKAIEVKSSEKEK | 752 |
| NTDB id 243 SPR RS03635 WP 000882517.1       | KEKLVLDLGYDPKMGARPLRRTIQDYIEDTTIDYYLENPSEKDLKAVMTSKCNIIQIKSAKKAIEVKSSEKEK | 752 |
| NTDB id 241 SP RS04015 WP 000882523.1        | KEKLVLDLGYDPKMGARPLRRTIQDYIEDTTIDYYLENPSEKDLKAVMTSKCNIIQIKSAKKAIEVKSSEKEK | 752 |
| NTDB id 1138057 DQL37 RS06525 WP 002983882.1 | KEKLVLDLGYDPKMGARPLRRTIQDYIEDAITDYYLEHPTEKQLRALMTNSENITIKAVKEGDSFLNEESL   | 760 |
| NTDB id 378 SMU RS02690 WP 002263569.1       | KEKLVLDLGYDPKMGARPLRRTIQEHTIEDAITDFYLEHPEQKELKAIMTSNCKIVIKASNKVETVTKATSD  | 753 |
| NTDB id 85 BSU 00860 NP 387967.1             | KAKVAEEGVLDLEYGARPLRRRIQKHVEDRLSEELLRGNIHKGQHVLVDVEDGEFVVVKTAKTN          | 810 |
| NTDB id 610 V4T04 RS10165 WP 012897346.1     | VKLIAEVCFDPEYGARPLRKALQKEVEDLLSEQLLSGEIKAGNHVSTIGASNKKIKIAQIV             | 816 |
| NTDB id 290 KZH43 RS10025 WP 001109677.1     | LKLLANQGYDPEMGARPLRRTIQTEVEDKLAELLKKGDLVAGSILKIGVKACQLKFDIA               | 810 |
| NTDB id 289 SPD RS10700 WP 001109677.1       | LKLLANQGYDPEMGARPLRRTIQTEVEDKLAELLKKGDLVAGSILKIGVKACQLKFDIA               | 810 |
| NTDB id 287 SP RS11210 WP 001109712.1        | LKLLANQGYDPEMGARPLRRTIQTEVEDKLAELLKKGDLVAGSTLKIGVKACQLKFDIA               | 810 |
| NTDB id 377 SMU RS09275 WP 002262344.1       | LKHLALAGYDAEMGARPLRRTIQTEVEDKLAELLSGKLASGQTIKIGIQKEKIKFDIV                | 813 |
| NTDB id 297 STER RS00545 WP 011680614.1      | LKHLAKDGYDIEMGARPLRRTIQTQVEDKLSELLLGGQVVSGQTIKIGCSKDKITFTVV               | 816 |
| NTDB id 329 STU RS10020 WP 011225298.1       | LKHLAKDGYDIEMGARPLRRTIQTQVEDKLSELLLGGQVVSGQTIKIGCSKDKITFTVV               | 816 |
| consensus                                    | * * !*** *!!!!!!***! *!! *** *                                            |     |

- non conserved
- similar
- ≥ 50% conserved