

|                |                                |                                                         |                              |    |
|----------------|--------------------------------|---------------------------------------------------------|------------------------------|----|
| NTDB id 419    | DQL23 RS10745 WP 060553298.1   | .MLTKITIAFFPTTIQVVSYEIFHKKIMQSKKIDIKFIFGLFFSIVFGISIISS  | ILIEIPSFGDVISSIFHYIFLFIQPLI  | 79 |
| NTDB id 416    | SGO RS10505 WP 012131078.1     | .MLFTIILSLFPVITIQVFSYDFFYNNKINRKKKINIKLIILFWGLIMVISFLYS | IFLILLPDYWKIFRDIHYIFLLIQPLI  | 79 |
| NTDB id 169970 | AXE83 RS00200 WP 060954976.1   | MNLFGLVIAIVYVFIISKIHEWVC.....KAT..RKDQYFFSLYIFLIP....   | LVLEIILYFLKLDLSF..SLSKFLFPFL | 67 |
| NTDB id 486    | SM12261 RS09375 WP 020902616.1 | MDFLAVLVILHIFIIISKSYLIC.....KNKINIKELCFGSGYIFLVE....    | SVFLESFYFIYLDGL..GIEKFLFPLV  | 69 |
| NTDB id 514    | SMSK321 RS10615 WP 001048129.1 | MNLFGLVGLIVYVFLIISHSYRLIC.....KGQINRKELYVFSAYILLTE....  | IVLDFPSYLLHLDL..GIVKFLFPLV   | 69 |
| NTDB id 249    | KZH43 RS10250 WP 000362880.1   | MDLFGFGCTVIVVHFLIISHSYHFIC.....KGQINRKELFVFGAYTLLTE.... | IVDFDPLYILYLDGL..GIERFLFPLG  | 69 |
| NTDB id 208    | SPD RS10925 WP 000362880.1     | MDLFGFGCTVIVHFLIISHSYHFIC.....KGQINRKELFVFGAYTLLTE....  | IVDFDPLYILYLDGL..GIERFLFPLG  | 69 |
| NTDB id 174    | SPR RS10405 WP 000362880.1     | MDLFGFGCTVIVHFLIISHSYHFIC.....KGQINRKELFVFGAYTLLTE....  | IVDFDPLYILYLDGL..GIERFLFPLG  | 69 |
| NTDB id 138    | SP RS11430 WP 000364845.1      | MDLLGFGCTVIVHFLIISHSYRLIC.....KGRINRKELYVFGAYTLLTE....  | IVLEFSFYLLYLDGLI..GIERFLFPLG | 69 |
| consensus      |                                | *****!*****!*****                                       | *****!*****                  |    |

[illegible]

|                |                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |
|----------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| NTDB id 419    | DQL23 RS10745 WP 060553298.1   | YKEPIYKNDLYNVNKS <sup>Y</sup> IVIHILLN <sup>T</sup> ISHWFS <sup>E</sup> ENAHLSNFASMIAT <sup>I</sup> GFIMFLSTL <sup>F</sup> LYLK <sup>S</sup> AREQHEKAKE <sup>I</sup> QKKKEEQRQ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 238 |
| NTDB id 416    | SGO RS10505 WP 012131078.1     | YKEPIYKNDLYNVNKS <sup>Y</sup> IVIHILLN <sup>T</sup> ISHWFS <sup>E</sup> ENAHLSNFASMIAT <sup>I</sup> GFIMFLSTL <sup>F</sup> LYLK <sup>S</sup> AREQY <sup>E</sup> EKAKE <sup>I</sup> QKKKEEQRQ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 239 |
| NTDB id 169970 | AXE83 RS00200 WP 060954976.1   | FDKDYLYPFLKKVLF <sup>F</sup> AFIFLHV <sup>V</sup> SFTSD <sup>I</sup> IVSTIR <sup>H</sup> HLNGFGSILSSIVFVGLLLTFFSMNSHKV <sup>I</sup> EKEITELEQKKFEQKH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 226 |
| NTDB id 486    | SM12261 RS09375 WP 020902616.1 | FDKDYLYPFLKKVFFALLLLH <sup>V</sup> SFTSD <sup>I</sup> MDVSTIKHLNSFGSILSSIVFISLLLTFFAMNSHK <sup>E</sup> MEKEIALKQKKFEQKH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 228 |
| NTDB id 514    | SMSK321 RS10615 WP 001048129.1 | FDKDYLYPFLTKVFFALLLLHIVSFVSDMVSTIKHLNSFGSILSSIVFISLLLTFFAMNSHK <sup>D</sup> QMEKEIALKQKKFEQKH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 228 |
| NTDB id 249    | KZH43 RS10250 WP 000362880.1   | FDDEDYLYPFLKKVFFALLLLHIVSFVSDMVSTIKHLNSFGSILSSIVFISLLLTFFAMNSHKVQMEKEIALKQKKFEQKH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 228 |
| NTDB id 208    | SPD RS10925 WP 000362880.1     | FDEDYLYPFLKKVFFALLLLHIVSFVSDMVSTIKHLNSFGSILSSIVFISLLLTFFAMNSHKVQMEKEIALKQKKFEQKH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 228 |
| NTDB id 174    | SPR RS10405 WP 000362880.1     | FDEDYLYPFLKKVFFALLLLHIVSFVSDMVSTIKHLNSFGSILSSIVFISLLLTFFAMNSHKVQMEKEIALKQKKFEQKH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 228 |
| NTDB id 138    | SP RS11430 WP 000364845.1      | FDKDYLYPFLKKVFFALLLLHIVSFVSDMVSTIKHLNSFGSILSSIVFISLLLTFFAMNSHKVQMEKEIALKQKKFEQKH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 228 |
| consensus      |                                | ***** <sup>Y</sup> *** <sup>T</sup> ***** <sup>E</sup> ***** <sup>I</sup> ***** <sup>H</sup> ***** <sup>S</sup> ***** <sup>F</sup> ***** <sup>I</sup> ***** <sup>R</sup> ***** <sup>H</sup> ***** <sup>N</sup> ***** <sup>G</sup> ***** <sup>S</sup> ***** <sup>I</sup> ***** <sup>V</sup> ***** <sup>F</sup> ***** <sup>I</sup> ***** <sup>S</sup> ***** <sup>L</sup> ***** <sup>T</sup> ***** <sup>F</sup> ***** <sup>F</sup> ***** <sup>S</sup> ***** <sup>M</sup> ***** <sup>N</sup> ***** <sup>S</sup> ***** <sup>H</sup> ***** <sup>K</sup> ***** <sup>V</sup> ***** <sup>I</sup> ***** <sup>E</sup> ***** <sup>K</sup> ***** <sup>E</sup> ***** <sup>I</sup> ***** <sup>A</sup> ***** <sup>L</sup> ***** <sup>K</sup> ***** <sup>Q</sup> ***** <sup>K</sup> ***** <sup>K</sup> ***** <sup>F</sup> ***** <sup>E</sup> ***** <sup>Q</sup> ***** <sup>K</sup> ***** <sup>H</sup> |     |

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|----------------|--------------------------------|-------------------------------------------------------------------------------------|-----|
| NTDB id 419    | DQL23 RS10745 WP 060553298.1   | LQLYTDEIVGLYNEIRGFRHDYAGMLTSLQQTGINSGDMKEVERIFHNVLSQLANISLRSDDYTFEFELNNVQDTALRSVLIQ | 318 |
| NTDB id 416    | SGO RS10505 WP 012131078.1     | LQLYTDEIVGLYNEIRGFRHDYAGMLTSLQQTGINSGDMKEVERIFHNVLSQLANISLRSDDYTFEFELNNVQDTALRSVLIQ | 319 |
| NTDB id 169970 | AXE83 RS00200 WP 060954976.1   | LQTYTDEIVGLYNEIRGFRHDYTGMVLVLRMAIESKDLQEIDRVYSEVLVKANQKLRSDDKYTYFDLNNIEDSALRSLIAQ   | 306 |
| NTDB id 486    | SM12261 RS09375 WP 020902616.1 | LQNYTDEIVGLYNEIRGFRHDYAGMLVSMQMAIDSGDLQEIDRIYNEVLVKANHKLRSDKYTYFDLNNIEDSALRSLVAQ    | 308 |
| NTDB id 514    | SMSK321 RS10615 WP 001048129.1 | LQNYTDEIVGLYNEIRGFRHDYAGMLVSMQMAIDSGNLQEIDRIYNEVLVKANHKLRSDKYTYFDLNNIEDSALRSLVAQ    | 308 |
| NTDB id 249    | KZH43 RS10250 WP 000362880.1   | LQNYTDEIVGLYNEIRGFRHDYAGMLVSMQMAIDSGNLQEIDRIYNEVLVKANHKLRSDKYTYFDLNNIEDSALRSLVAQ    | 308 |
| NTDB id 208    | SPD RS10925 WP 000362880.1     | LQNYTDEIVGLYNEIRGFRHDYAGMLVSMQMAIDSGNLQEIDRIYNEVLVKANHKLRSDKYTYFDLNNIEDSALRSLVAQ    | 308 |
| NTDB id 174    | SPR RS10405 WP 000362880.1     | LQNYTDEIVGLYNEIRGFRHDYAGMLVSMQMAIDSGNLQEIDRIYNEVLVKANHKLRSDKYTYFDLNNIEDSALRSLVAQ    | 308 |
| NTDB id 138    | SP RS11430 WP 000364845.1      | LQNYTDEIVGLYNEIRGFRHDYAGMLVSMQMAIDSGNLQEIDRIYNEVLVKANHKLRSDKYTYFDLNNIEDSALRSLVAQ    | 308 |
| consensus      |                                | * * * * *                                                                           |     |

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NTDB id 169970 AXE83 RS00200 WP 060954976.1
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NTDB id 514 SMSK321 RS10615 WP 001048129.1
NTDB id 249 KZH43 RS10250 WP 000362880.1
NTDB id 208 SPD RS10925 WP 000362880.1
NTDB id 174 SPR RS10405 WP 000362880.1
NTDB id 138 SP RS11430 WP 000364845.1
consensus

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NTDB id 208 SPD RS10925 WP 000362880.1
NTDB id 174 SPR RS10405 WP 000362880.1
NTDB id 138 SP RS11430 WP 000364845.1
consensus

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- X non conserved
- X similar
- X  $\geq 50\%$  conserved