

|           |                                      |           |                                                                                      |    |
|-----------|--------------------------------------|-----------|--------------------------------------------------------------------------------------|----|
| NTDB id   | 602 KW2 RS03060 WP 011834647.1       | .....MGYL | VPTVIEQSSRGERAYDIYSRLKDRIIMLTGPVEDGMANSIIAQLFLDQAQDNTKDIYLYVNTPGGSVSAG               | 75 |
| NTDB id   | 611 V4T04 RS07970 WP 003129593.1     | .....MGYL | VPTVIEQSSRGERAYDIYSRLKDRIIMLTGPVEDGMANSIIAQLFLDQAQDNTKDIYLYVNTPGGSVSAG               | 75 |
| NTDB id   | 330 STU RS11365 WP 002949732.1       | .....MIP  | VVIEQTSGRSYDIYSRLKDRIIMLTGPIEDNMANSIIAQLFLDQAQDNTKDIYLYVNTPGGSVSAG                   | 72 |
| NTDB id   | 298 STER RS01925 WP 002949732.1      | .....MIP  | VVIEQTSGRSYDIYSRLKDRIIMLTGPIEDNMANSIIAQLFLDQAQDNTKDIYLYVNTPGGSVSAG                   | 72 |
| NTDB id   | 282 KZH43 RS03215 WP 000613477.1     | .....MIP  | VVIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSVIAQLFLDQAQDS TKDIYLYVNTPGGSVSAG                  | 72 |
| NTDB id   | 246 SPD RS03495 WP 000613477.1       | .....MIP  | VVIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSVIAQLFLDQAQDS TKDIYLYVNTPGGSVSAG                  | 72 |
| NTDB id   | 244 SPR RS03300 WP 000613477.1       | .....MIP  | VVIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSVIAQLFLDQAQDS TKDIYLYVNTPGGSVSAG                  | 72 |
| NTDB id   | 242 SP RS03655 WP 000613477.1        | .....MIP  | VVIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSVIAQLFLDQAQDS TKDIYLYVNTPGGSVSAG                  | 72 |
| NTDB id   | 446 SpyM6JRS4 RS01695 WP 002985850.1 | .....MIP  | VVIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSVIAQLFLDQAQDN TKDIYLYVNTPGGSVSAG                  | 72 |
| NTDB id   | 445 SPYM3 RS01720 WP 002985850.1     | .....MIP  | VVIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSVIAQLFLDQAQDN TKDIYLYVNTPGGSVSAG                  | 72 |
| NTDB id   | 376 SMU RS07595 WP 255262720.1       | MELKEKYS  | MIPVVIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDQAQDN TKDIYLYINS PGGSVSAG              | 80 |
| NTDB id   | 1223 Cj0192c YP 002343650.1          | .....MFIP | VYVEIKSSRGERSYDIYSRLKDRIIMLSGETIHDELAASIV AQLLFLAEADPTKD IYLYINSPGGVITSG             | 73 |
| NTDB id   | 44642 BANAU RS17615 WP 003151513.1   | .....MNL  | IPTVIEQTNRGERAYDIYSRLKDRIIMLGSAIDNVANSI VSQLLFLEAEDPEKDISI TYINSPGGSITAG             | 74 |
| NTDB id   | 86 BSU 34540 NP 391334.1             | .....MNL  | IPTVIEQTNRGERAYDIYSRLKDRIIMLGSAIDNVANSI VSQLLFLAEADEPK EISLYINSPGGSITAG              | 74 |
| consensus |                                      | **!*      | *!*!!**!!*!!!!!!*!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!*!*****!***!!****!!*!!*!!!*!!*!!*!!*! |    |

[illegible]

|                                              |             |                      |            |            |        |     |
|----------------------------------------------|-------------|----------------------|------------|------------|--------|-----|
| NTDB id 602 KW2 RS03060 WP 011834647.1       | ILADNSNRSL  | EQIHKDAERDHWMDAK     | ETLEYGFI   | DEIMENNS   | SLK..  | 199 |
| NTDB id 611 V4T04 RS07970 WP 003129593.1     | ILADNSNRSL  | EQIHKDAERDHWMDAK     | ETLEYGFI   | DEIMENNS   | SLK..  | 199 |
| NTDB id 330 STU RS11365 WP 002949732.1       | ILADNSGQPI  | EKVHVDAERDNWMSAQ     | ETLEYGFI   | DEIMTNNQ   | LK..   | 196 |
| NTDB id 298 STER RS01925 WP 002949732.1      | ILADNSGQPI  | EKVHVDAERDNWMSAQ     | ETLEYGFI   | DEIMTNNQ   | LK..   | 196 |
| NTDB id 282 KZH43 RS03215 WP 000613477.1     | ILAE NSGQSM | EKVHADAERDNWMSAQ     | ETLEYGFI   | DEIMANNS   | SLN..  | 196 |
| NTDB id 246 SPD RS03495 WP 000613477.1       | ILAE NSGQSM | EKVHADAERDNWMSAQ     | ETLEYGFI   | DEIMANNS   | SLN..  | 196 |
| NTDB id 244 SPR RS03300 WP 000613477.1       | ILAE NSGQSM | EKVHADAERDNWMSAQ     | ETLEYGFI   | DEIMANNS   | SLN..  | 196 |
| NTDB id 242 SP RS03655 WP 000613477.1        | ILAE NSGQSM | EKVHADAERDNWMSAQ     | ETLEYGFI   | DEIMANNS   | SLN..  | 196 |
| NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1 | ILAQNA      | GKTIKQIHKDAERDYWMSAE | ETLAYGFI   | DEIMENNEL  | LK..   | 196 |
| NTDB id 445 SPYM3 RS01720 WP 002985850.1     | ILAQNA      | GKTIKQIHKDAERDYWMSAE | ETLAYGFI   | DEIMENNEL  | LK..   | 196 |
| NTDB id 376 SMU RS07595 WP 255262720.1       | ILSDNSGKTI  | KQIHKDAERDYWMDAK     | ETLKYGFI   | DEIMENNEL  | LK..   | 204 |
| NTDB id 1223 Cj0192c YP 002343650.1          | ILAKNTIKQKV | AKIAKDTDRDFFMSAQ     | EAKLEYGLID | KVLEKSFK.. | 194    |     |
| NTDB id 44642 BANAU RS17615 WP 003151513.1   | VLAERTGQPLE | VIERDTRDRDNFKSAD     | EALYGLID   | KVLTRNT    | EDQK   | 198 |
| NTDB id 86 BSU 34540 NP 391334.1             | VLAERTGQPLE | VIERDTRDRDNFKSAD     | EALYGLID   | KILTH      | TEDKK. | 197 |
| consensus                                    | *****       | *****                | *****      | *****      | *****  |     |

 non conserved  
 similar  
  $\geq 50\%$  conserved