

|                                              |           |                                 |                                           |                    |    |
|----------------------------------------------|-----------|---------------------------------|-------------------------------------------|--------------------|----|
| NTDB id 602 KW2 RS03060 WP 011834647.1       | .....MGYL | VPTVIEQSSRGERAYDIYSRLKDRIIIMLTG | PVEDGMANSIIAQLFLDAQDN                     | TKDIYLYVNTPGGSVSAG | 75 |
| NTDB id 611 V4T04 RS07970 WP 003129593.1     | .....MGYL | VPTVIEQSSRGERAYDIYSRLKDRIIIMLTG | PVEDGMANSIIAQLFLDAQDN                     | TKDIYLYVNTPGGSVSAG | 75 |
| NTDB id 330 STU RS11365 WP 002949732.1       | .....     | MIPVVIEQTSRGRS                  | YDIYSRLKDRIIIMLTGPIEDNMANSIIAQLFLDAQDN    | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 298 STER RS01925 WP 002949732.1      | .....     | MIPVVIEQTSRGRS                  | YDIYSRLKDRIIIMLTGPIEDNMANSIIAQLFLDAQDN    | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 282 KZH43 RS03215 WP 000613477.1     | .....     | MIPVVIEQTSRGRS                  | YDIYSRLKDRIIIMLTGPIEDNMANSIIAQLFLDAQDS    | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 246 SPD RS03495 WP 000613477.1       | .....     | MIPVVIEQTSRGRS                  | YDIYSRLKDRIIIMLTGPIEDNMANSIIAQLFLDAQDS    | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 244 SPR RS03300 WP 000613477.1       | .....     | MIPVVIEQTSRGRS                  | YDIYSRLKDRIIIMLTGPIEDNMANSIIAQLFLDAQDS    | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 242 SP RS03655 WP 000613477.1        | .....     | MIPVVIEQTSRGRS                  | YDIYSRLKDRIIIMLTGPIEDNMANSIIAQLFLDAQDS    | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1 | .....     | MIPVVIEQTSRGRS                  | YDIYSRLKDRIIIMLTGPIEDNMANSIIAQLFLDAQDN    | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 445 SPYM3 RS01720 WP 002985850.1     | .....     | MIPVVIEQTSRGRS                  | YDIYSRLKDRIIIMLTGPIEDNMANSIIAQLFLDAQDN    | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 376 SMU RS07595 WP 255262720.1       | MELKEKYS  | MIPVVIEQTSRGRS                  | YDIYSRLKDRIIIMLTGPIEDNMANSIIAQLFLDAQDN    | TKDIYLYINSPGGSVSAG | 80 |
| NTDB id 265286 C2H91 RS13610 WP 003228214.1  | .....MNL  | IPTVIEQTNRGERAYDIYSRLKDRIIIMLTG | SAIDDNVANSIVSQLLFLAAEDPEKEISLYINSPGG      | ITAG               | 74 |
| NTDB id 86 BSU 34540 NP 391334.1             | .....MNL  | IPTVIEQTNRGERAYDIYSRLKDRIIIMLTG | SAIDDNVANSIVSQLLFLAAEDPEKEISLYINSPGG      | ITAG               | 74 |
| NTDB id 1223 Cj0192c YP 002343650.1          | .....MF   | IPYVIEKSSRGRS                   | YDIYSRLKDRIIIMLTSGEIHDELAASIVAQLLFLEAEDPE | TKDIYLYINSPGGVITSG | 73 |
| consensus                                    |           | *****                           | *****                                     | *****              |    |

[illegible]

|           |        |           |         |             |                                                  |                                                |     |
|-----------|--------|-----------|---------|-------------|--------------------------------------------------|------------------------------------------------|-----|
| NTDB id   | 602    | KW2       | RS03060 | WP          | 011834647.1                                      | ILADNSNRSLQIHKDAERDHWMDAKETLEYGFIDEIMENNSLK.   | 199 |
| NTDB id   | 611    | V4T04     | RS07970 | WP          | 003129593.1                                      | ILADNSNRSLQIHKDAERDHWMDAKETLEYGFIDEIMENNSLK.   | 199 |
| NTDB id   | 330    | STU       | RS11365 | WP          | 002949732.1                                      | ILADNSGQPPIEKVHVDAERDNWMSAQETLEYGFIDEIMTNQLK.  | 196 |
| NTDB id   | 298    | STER      | RS01925 | WP          | 002949732.1                                      | ILADNSGQPPIEKVHVDAERDNWMSAQETLEYGFIDEIMTNQLK.  | 196 |
| NTDB id   | 282    | KZH43     | RS03215 | WP          | 000613477.1                                      | ILAENSQGSMSEKVHADAERDNWMSAQETLEYGFIDEIMANNSLN. | 196 |
| NTDB id   | 246    | SPD       | RS03495 | WP          | 000613477.1                                      | ILAENSQGSMSEKVHADAERDNWMSAQETLEYGFIDEIMANNSLN. | 196 |
| NTDB id   | 244    | SPR       | RS03300 | WP          | 000613477.1                                      | ILAENSQGSMSEKVHADAERDNWMSAQETLEYGFIDEIMANNSLN. | 196 |
| NTDB id   | 242    | SP        | RS03655 | WP          | 000613477.1                                      | ILAENSQGSMSEKVHADAERDNWMSAQETLEYGFIDEIMANNSLN. | 196 |
| NTDB id   | 446    | SpyM6JRS4 | RS01695 | WP          | 002985850.1                                      | ILAAQNAGKTIKQIHKAERDYWMSAEETLAYGFIDEIMENNELK.  | 196 |
| NTDB id   | 445    | SPYM3     | RS01720 | WP          | 002985850.1                                      | ILAAQNAGKTIKQIHKAERDYWMSAEETLAYGFIDEIMENNELK.  | 196 |
| NTDB id   | 376    | SMU       | RS07595 | WP          | 255262720.1                                      | ILSDNSGKTIKQIHKAERDYWMDAKETLKYGFIDEIMENNELK.   | 204 |
| NTDB id   | 265286 | C2H91     | RS13610 | WP          | 003228214.1                                      | VLAERTGGPLEVIERDTDRDNFKSAEEALEYGLIDKILTHTEDKK  | 197 |
| NTDB id   | 86     | BSU       | 34540   | NP          | 391334.1                                         | VLAERTGGPLEVIERDTDRDNFKSAEEALEYGLIDKILTHTEDKK  | 197 |
| NTDB id   | 1223   | Cj0192c   | YP      | 002343650.1 | ILAKNTIKQKVAKIAKTDTERDFFMSAQEAKKEYGLIDKVLEKSFK.. | 194                                            |     |
| consensus |        |           |         |             |                                                  | *!*****!*!!*!!*!!*!!*!!*!!*!!*!!*!!*!!*!!*     |     |

 non conserved  
 similar  
  $\geq 50\%$  conserved