

|                |                                  |           |                       |                      |                                 |                    |    |
|----------------|----------------------------------|-----------|-----------------------|----------------------|---------------------------------|--------------------|----|
| NTDB id 602    | KW2 RS03060 WP 011834647.1       | .....MGYL | VPTVIEQSSRGERAYDIYSRL | LDRIIMLTG            | PVEDGMANSIIAQLFLDAQDN           | TKDIYLYVNTPGGSVSAG | 75 |
| NTDB id 611    | V4T04 RS07970 WP 003129593.1     | .....MGYL | VPTVIEQSSRGERAYDIYSRL | LDRIIMLTG            | PVEDGMANSIIAQLFLDAQDN           | TKDIYLYVNTPGGSVSAG | 75 |
| NTDB id 330    | STU RS11365 WP 002949732.1       | .....     | MIPVVIEQTSRGR         | SYDIYSRL             | LDRIIMLTGPIEDNMANSIIAQLFLDAQDN  | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 298    | STER RS01925 WP 002949732.1      | .....     | MIPVVIEQTSRGR         | SYDIYSRL             | LDRIIMLTGPIEDNMANSIIAQLFLDAQDN  | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 282    | KZH43 RS03215 WP 000613477.1     | .....     | MIPVVIEQTSRGR         | SYDIYSRL             | LDRIIMLTGPIEDNMANSIIAQLFLDAQDS  | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 246    | SPD RS03495 WP 000613477.1       | .....     | MIPVVIEQTSRGR         | SYDIYSRL             | LDRIIMLTGPIEDNMANSIIAQLFLDAQDS  | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 244    | SPR RS03300 WP 000613477.1       | .....     | MIPVVIEQTSRGR         | SYDIYSRL             | LDRIIMLTGPIEDNMANSIIAQLFLDAQDS  | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 242    | SP RS03655 WP 000613477.1        | .....     | MIPVVIEQTSRGR         | SYDIYSRL             | LDRIIMLTGPIEDNMANSIIAQLFLDAQDS  | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 446    | SpyM6JRS4 RS01695 WP 002985850.1 | .....     | MIPVVIEQTSRGR         | SYDIYSRL             | LDRIIMLTGPIEDNMANSIIAQLFLDAQDN  | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 445    | SPYM3 RS01720 WP 002985850.1     | .....     | MIPVVIEQTSRGR         | SYDIYSRL             | LDRIIMLTGPIEDNMANSIIAQLFLDAQDN  | TKDIYLYVNTPGGSVSAG | 72 |
| NTDB id 376    | SMU RS07595 WP 255262720.1       | MELKEKYS  | MIPVVIEQTSRGR         | SYDIYSRL             | LDRIIMLTGPIEDNMANSIIAQLFLDAQDN  | TKDIYLYINSPGGSVSAG | 80 |
| NTDB id 964095 | NSQ12 RS18315 WP 003228214.1     | .....MNL  | IPTVIEQTNRGERAYDIYSRL | LDRIIMLTGSAIDDNVANSI | VSQLLFLAAEDPEKEISLYINSPGG       | ITAG               | 74 |
| NTDB id 86     | BSU 34540 NP 391334.1            | .....MNL  | IPTVIEQTNRGERAYDIYSRL | LDRIIMLTGSAIDDNVANSI | VSQLLFLAAEDPEKEISLYINSPGG       | ITAG               | 74 |
| NTDB id 1223   | Cj0192c YP 002343650.1           | .....MF   | IPYVIEKSSRGR          | SYDIYSRL             | LDRIIMLTSGEIHDELAASIIAQLFLAEADP | 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       | ILADNSGQPTEKVVHDAERDNWMSAQETLEYGFIDEIMTNQLK.      | 196 |
| NTDB id 298 STER RS01925 WP 002949732.1      | ILADNSGQPTEKVVHDAERDNWMSAQETLEYGFIDEIMTNQLK.      | 196 |
| NTDB id 282 KZH43 RS03215 WP 000613477.1     | ILAENSQGSMSEKVHADAEARNWMSAQETLEYGFIDEIMANNSLN.    | 196 |
| NTDB id 246 SPD RS03495 WP 000613477.1       | ILAENSQGSMSEKVHADAEARNWMSAQETLEYGFIDEIMANNSLN.    | 196 |
| NTDB id 244 SPR RS03300 WP 000613477.1       | ILAENSQGSMSEKVHADAEARNWMSAQETLEYGFIDEIMANNSLN.    | 196 |
| NTDB id 242 SP RS03655 WP 000613477.1        | ILAENSQGSMSEKVHADAEARNWMSAQETLEYGFIDEIMANNSLN.    | 196 |
| NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1 | ILAAQNAGKTIKQIHKAEDRYWMSAEEETLAYGFIDEIMENNELK.    | 196 |
| NTDB id 445 SPYM3 RS01720 WP 002985850.1     | ILAAQNAGKTIKQIHKAEDRYWMSAEEETLAYGFIDEIMENNELK.    | 196 |
| NTDB id 376 SMU RS07595 WP 255262720.1       | ILSDNSGKTIKQIHKAEDRYWMDAKETLKYGFIDEIMENNELK.      | 204 |
| NTDB id 964095 NSQ12 RS18315 WP 003228214.1  | VLAERTTGQPLEVIERDTDRDNFKSAEEALEYGLIDKILTHTEDKK    | 197 |
| NTDB id 86 BSU 34540 NP 391334.1             | VLAERTTGQPLEVIERDTDRDNFKSAEEALEYGLIDKILTHTEDKK    | 197 |
| NTDB id 1223 Cj0192c YP 002343650.1          | ILAKNITIKQKVAKIAKTDTERDFFMSAQEAKKEYGLIDKVLEKSFK.. | 194 |
| consensus                                    | *!*****!!**!*!!!!!!*!!*!!*!!*!!*!!*!!*!!*         |     |

 non conserved  
 similar  
  $\geq 50\%$  conserved