

|             |                              |        |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |    |   |   |     |    |    |   |   |    |
|-------------|------------------------------|--------|---|---|---|---|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|----|---|---|-----|----|----|---|---|----|
| NTDB id 619 | LCA RS06470 WP 011374999.1   | .....M | K | K | K | R | K  | A | F | T | L | I | E | M | V | V | L | A | I | T | A | L | L | L | V | A | P | N | L | G | A | Q | K | R | A | E | K | T | D | Q | A | L | V | T | T | L | Q | T | Q | V | E | L | A | S | D | E | I | G | H | Q | I | 65 |   |   |    |   |   |     |    |    |   |   |    |
| NTDB id 32  | MW RS07995 WP 000472256.1    | .....M | F | K | F | L | .. | K | K | T | Q | A | F | T | L | I | E | M | L | V | L | L | I | I | S | L | L | L | L | I | L | I | P | N | I | A | K | Q | T | A | H | I | Q | S | T | G | C | N | A | Q | V | K | M | V | N | S | Q | I | E | A | Y | A  | L | K | H  | N | R | N   | P  | 68 |   |   |    |
| NTDB id 16  | SA RS07765 WP 000472256.1    | .....M | F | K | F | L | .. | K | K | T | Q | A | F | T | L | I | E | M | L | V | L | L | I | I | S | L | L | L | L | I | L | I | P | N | I | A | K | Q | T | A | H | I | Q | S | T | G | C | N | A | Q | V | K | M | V | N | S | Q | I | E | A | Y | A  | L | K | H  | N | R | N   | P  | 68 |   |   |    |
| NTDB id 588 | KW2 RS10845 WP 051303741.1   | MSK    | A | L | S | L | V  | K | I | H | R | K | L | C | Q | K | Q | K | A | F | T | L | I | E | M | L | V | L | A | I | I | S | L | L | L | F | V | P | N | L | I | K | E | K | A | Q | V | Q | K | T | G | E | A | A | V | V | K | V | V | E | S | Q  | A | L | Y  | E | L | D   | H  | N  | D | K | 80 |
| NTDB id 460 | GPW51 RS00790 WP 011921720.1 | .....M | K | K | L | V | E  | M | V | K | G | F | T | L | V | E | M | L | V | V | L | G | I | S | L | L | L | L | F | V | P | N | L | S | Q | Q | K | D | A | I | Q | K | G | D | A | A | V | V | K | V | V | E | S | Q | M | E | L | Y | E | L | H | D  | E | E | 68 |   |   |     |    |    |   |   |    |
| NTDB id 272 | KZH43 RS09255 WP 000738626.1 | .....M | K | K | M | T | F  | L | K | K | A | K | V | K | A | F | T | L | V | E | M | L | V | L | L | I | S | V | L | F | L | F | V | P | N | L | T | K | Q | K | E | A | V | N | D | K | G | K | A | A | V | V | K | V | V | E | S | Q | A | E | L | Y  | S | L | E  | K | N | .ED | 72 |    |   |   |    |
| NTDB id 231 | SPD RS09885 WP 000738626.1   | .....M | K | K | M | T | F  | L | K | K | A | K | V | K | A | F | T | L | V | E | M | L | V | L | L | I | S | V | L | F | L | F | V | P | N | L | T | K | Q | K | E | A | V | N | D | K | G | K | A | A | V | V | K | V | V | E | S | Q | A | E | L | Y  | S | L | E  | K | N | .ED | 72 |    |   |   |    |
| NTDB id 197 | SPR RS09420 WP 000738626.1   | .....M | K | K | M | T | F  | L | K | K | A | K | V | K | A | F | T | L | V | E | M | L | V | L | L | I | S | V | L | F | L | F | V | P | N | L | T | K | Q | K | E | A | V | N | D | K | G | K | A | A | V | V | K | V | V | E | S | Q | A | E | L | Y  | S | L | E  | K | N | .ED | 72 |    |   |   |    |
| NTDB id 162 | SP RS10370 WP 000738627.1    | .....M | K | K | M | T | F  | L | K | K | A | K | V | K | A | F | T | L | V | E | M | L | V | L | L | I | S | V | L | F | L | F | V | P | N | L | T | K | Q | K | E | A | V | N | D | K | G | K | A | A | V | V | K | V | V | E | S | Q | A | E | L |    |   |   |    |   |   |     |    |    |   |   |    |

|           |    |       |         |         |    |             |                                       |     |
|-----------|----|-------|---------|---------|----|-------------|---------------------------------------|-----|
| NTDB      | id | 619   | LCA     | RS06470 | WP | 011374999.1 | KSLDEL.TDKYTSKDQLKHAKKKGITIEGGTVKQK.  | 99  |
| NTDB      | id | 32    | MW      | RS07995 | WP | 000472256.1 | SSIEDLIADGFIKEAQKTKSGETITIS.NGEAVAN   | 103 |
| NTDB      | id | 16    | SA      | RS07765 | WP | 000472256.1 | SSIEDLIADGFIKEAQKTKSGETITIS.NGEAVAN   | 103 |
| NTDB      | id | 588   | KW2     | RS10845 | WP | 051303741.1 | PNLSELLSAGMITQKVQVTAVDYYDQNKNEQRNFDD  | 116 |
| NTDB      | id | 460   | GPW51   | RS00790 | WP | 011921720.1 | ATVADLQAKGYITEKQAKQYATAKK.....        | 93  |
| NTDB      | id | 272   | KZH43   | RS09255 | WP | 000738626.1 | ASLRKLQADGRITEEQAKAYKEYHDKNGGANRKNVD  | 108 |
| NTDB      | id | 231   | SPD     | RS09885 | WP | 000738626.1 | ASLRKLQADGRITEEQAKAYKEYHDKNGGANRKNVD  | 108 |
| NTDB      | id | 197   | SPR     | RS09420 | WP | 000738626.1 | ASLRKLQADGRITEEQAKAYKEYHDKNGGANRKNVD  | 108 |
| NTDB      | id | 162   | SP      | RS10370 | WP | 000738627.1 | ASLRKLQADGRITEEQAKAYKEYNDKNGGANRKNVD  | 108 |
| NTDB      | id | 530   | SMK321  | RS09230 | WP | 000738643.1 | ASLSKLQADGRITEEQAKAYNEYAKNGGANRKNVD   | 108 |
| NTDB      | id | 33342 | SP70585 | RS10625 | WP | 000738628.1 | ASLRKLQDDGRITEEQAKAYKEYHDKQNTSQIVKD.  | 107 |
| NTDB      | id | 502   | SM12261 | RS00955 | WP | 000738641.1 | ASLSKLQADGRITEEQAKAYKEYHAKQNTSQTVAD.  | 107 |
| NTDB      | id | 431   | SGO     | RS09410 | WP | 012130940.1 | ATLSKLVAAGNISQKQADSYPKAYYGKUNSETQAVAN | 105 |
| NTDB      | id | 396   | FSA28   | RS09395 | WP | 002263437.1 | ATLSKLVASGDITQEQANSYKDYAKHPSKTRHVN    | 104 |
| NTDB      | id | 387   | SMU     | RS09025 | WP | 002263437.1 | ATLSKLVASGDITQEQANSYKDYAKHPSKTRHVN    | 104 |
| consensus |    |       |         |         |    |             | *** * ! *** ! *** ! * * * * *         |     |

- X non conserved
- X similar
- X >50% conserved