

|                                            |                |   |     |   |   |      |   |     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |     |    |    |     |    |
|--------------------------------------------|----------------|---|-----|---|---|------|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|---|-----|----|----|-----|----|
| NTDB id 588 KW2 RS10845 WP 051303741.1     | MSKALSLVKIHGRK | L | CQK | Q | K | AFTL | I | EML | I | V | L | A | I | T | S | I | L | I | L | L | F | V | P | N | L | I | K | E | K | A | Q | V | Q | T | G | E | A | A | V | K | V | V | E | S | Q | A | L | Y | L | D | H | N | D | K | 80 |   |   |   |   |   |   |   |   |   |     |    |    |     |    |
| NTDB id 502 SM12261 RS00955 WP 000738641.1 | .....          | M | K   | K | M | T    | F | L   | K | K | A | K | V | A | F | T | L | V | E | M | L | V | V | L | L | I | S | V | L | L | L | L | F | V | P | N | L | T | K | Q | K | E | A | V | N | D | K | G | K | A | A | V | K | V | V  | E | S | Q | A | E | L | Y | S | L | D   | K  | N  | .ED | 72 |
| NTDB id 162 SP RS10370 WP 000738627.1      | .....          | M | K   | K | M | T    | F | L   | K | K | A | K | V | A | F | T | L | V | E | M | L | V | V | L | L | I | S | V | L | F | L | L | F | V | P | N | L | T | K | Q | K | E | A | V | N | D | K | G | K | A | A | V | K | V | V  | E | S | Q | A | E | L | Y | S | L | E   | K  | N  | .ED | 72 |
| NTDB id 272 KZH43 RS09255 WP 000738626.1   | .....          | M | K   | K | M | T    | F | L   | K | K | A | K | V | A | F | T | L | V | E | M | L | V | V | L | L | I | S | V | L | F | L | L | F | V | P | N | L | T | K | Q | K | E | A | V | N | D | K | G | K | A | A | 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 | A | F | T | L | V | E | M | L | V | V | L | L | I | S | V | L | F | L | L | F | V | P | N | L | T | K | Q | K | E | A | V | N | D | K | G | K | A | A | 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 | A | F | T | L | V | E | M | L | V | V | L | L | I | S | V | L | F | L | L | F | V | P | N | L | T | K | Q | K | E | A | V | N | D | K | G | K | A | A | V | K | V | V  | E | S | Q | A | E | L | Y | S | L | E   | K  | N  | .ED | 72 |
| NTDB id 530 SMSK321 RS09230 WP 000738643.1 | .....          | M | K   | K | M | T    | F | L   | K | K | A | K | V | A | F | T | L | V | E | M | L | V | V | L | L | I | S | V | L | F | L | L | F | V | P | N | L | T | K | Q | K | E | A | V | N | D | K | G | K | A | A | V | K | V | V  | E | S | Q | A | E | L | Y | S | L | D   | K  | N  | .ED | 72 |
| NTDB id 431 SGO RS09410 WP 012130940.1     | .....          | M | N   | K | L | K    | L | R   | V | K | A | F | T | L | V | E | M | L | V | V | L | L | I | S | V | L | M | L | L | F | V | P | N | L | T | K | Q | K | E | A | V | S | D | T | G | N | A | A | V | K | V | V | E | S | Q  | A | E | L | Y | E | L | K | N | T | G   | Q  | 69 |     |    |
| NTDB id 396 FSA28 RS09395 WP 002263437.1   | .....          | M | K   | K | I | K    | R | V   | S | V | R | A | F | T | L | E | M | L | V | V | L | L | I | S | I | L | L | L | L | F | V | P | N | L | T | K | Q | K | D | K | V | K | D | T | G | S | A | V | V | K | V | V | E | S | Q  | A | E | L | Y | E | L | N | K | T | .DS | 68 |    |     |    |
| NTDB id 387 SMU RS09025 WP                 |                |   |     |   |   |      |   |     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |     |    |    |     |    |

|                                             |        |               |            |         |             |            |
|---------------------------------------------|--------|---------------|------------|---------|-------------|------------|
| NTDB id 588 KW2 RS10845 WP 051303741.1      | PNLSEL | LSAGMITQKQVTA | YDDYDQ     | NKNEQ   | RNFDD       | 116        |
| NTDB id 502 SM12261 RS00955 WP 000738641.1  | ASLSKL | QADGRIT       | EEQAKAYKEY | HAKQNTS | QTVAD       | 107        |
| NTDB id 162 SP RS10370 WP 000738627.1       | ASLRKL | QADGRIT       | EEQAKAYKEY | NDKNGG  | ANRKVND     | 108        |
| NTDB id 272 KZH43 RS09255 WP 000738626.1    | ASLRKL | QADGRIT       | EEQAKAYKEY | HDKKNGG | ANRKVND     | 108        |
| NTDB id 231 SPD RS09885 WP 000738626.1      | ASLRKL | QADGRIT       | EEQAKAYKEY | HDKKNGG | ANRKVND     | 108        |
| NTDB id 197 SPR RS09420 WP 000738626.1      | ASLRKL | QADGRIT       | EEQAKAYKEY | HDKKNGG | ANRKVND     | 108        |
| NTDB id 530 SMSK321 RS09230 WP 000738643.1  | ASLSKL | QADGRIT       | EEQAKAYNEY | YAKKNGG | ANRKVND     | 108        |
| NTDB id 431 SGO RS09410 WP 012130940.1      | ATLSKL | VAGNIS        | QKQADS     | YKAYYGK | NNSETQAVAN  | 105        |
| NTDB id 396 FSA28 RS09395 WP 002263437.1    | ATLSKL | VASGDI        | TQEANSYK   | DYAYKH  | PSKTRHVAN   | 104        |
| NTDB id 387 SMU RS09025 WP 002263437.1      | ATLSKL | VASGDI        | TQEANSYK   | DYAYKH  | PSKTRHVAN   | 104        |
| NTDB id 98 BSU 24710 NP 390351.1            | PSLADL | QSEGYV        | KKD        | AVCPNG  | KRIITITGCEV | KVEH 98    |
| NTDB id 373396 F0454 RS08035 WP 002459016.1 | KSTDDL | ISEGFI        | KDGGQ      | KCKSGE  | TISISN      | CEAVAN 104 |
| NTDB id 32 MW RS07995 WP 000472256.1        | SSIEDL | LIADGFI       | KEAQK      | TCKSGE  | TITISN      | CEAVAN 103 |
| NTDB id 16 SA RS07765 WP 000472256.1        | SSIEDL | LIADGFI       | KEAQK      | TCKSGE  | TITISN      | CEAVAN 103 |
| consensus                                   | *****  | *****         | *****      | *****   | *****       |            |

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