

|                |                                |           |      |      |      |      |     |     |      |      |     |    |     |    |    |      |    |      |     |   |     |    |    |    |    |    |    |    |   |   |    |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |    |    |   |    |    |    |   |   |   |   |    |
|----------------|--------------------------------|-----------|------|------|------|------|-----|-----|------|------|-----|----|-----|----|----|------|----|------|-----|---|-----|----|----|----|----|----|----|----|---|---|----|---|---|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|---|---|----|----|---|----|----|----|---|---|---|---|----|
| NTDB id 98     | BSU 24710 NP 390351.1          | .....MNEK | GFTL | VEML | IVLF | IITS | ILL | LIT | IPNV | TKHN | QT  | IQ | KG  | CE | GL | QNMV | KA | QMTA | FEL | D | HEG | QT | 63 |    |    |    |    |    |   |   |    |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |    |    |   |    |    |    |   |   |   |   |    |
| NTDB id 975352 | UXQ47 RS07370 WP 000472256.1   | .....     | MF   | KF   | ..   | LK   | KT  | QA  | FTL  | I    | EML | L  | VLL | I  | I  | S    | L  | L    | L   | I | L   | I  | I  | IP | NI | AK | QT | AH | I | Q | ST | G | C | NA | Q | V | K | M | V | N | S | Q | I | E | A | Y | A | L | K | H | N | R | N | P | 68 |   |   |   |   |   |   |   |   |   |   |    |    |   |    |    |    |   |   |   |   |    |
| NTDB id 32     | MW RS07995 WP 000472256.1      | .....     | MF   | KF   | ..   | LK   | KT  | QA  | FTL  | I    | EML | L  | VLL | I  | I  | S    | L  | L    | L   | I | L   | I  | I  | IP | NI | AK | QT | AH | I | Q | ST | G | C | NA | 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      | .....     | MF   | KF   | ..   | LK   | KT  | QA  | FTL  | I    | EML | L  | VLL | I  | I  | S    | L  | L    | L   | I | L   | I  | I  | IP | NI | AK | QT | AH | I | Q | ST | G | C | NA | 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       | AL   | SL   | V    | K    | I   | H   | G    | R    | K   | L  | C   | Q  | K  | Q    | K  | A    | F   | T | L   | I  | E  | M  | L  | I  | V  | L  | A | I | I  | S | I | L  | I | L | L | F | V | P | N | L | I | K | E | K | A | Q | V | K | Q | T | G | E | A  | A | V | K | V | V | E | S | Q | A | L | Y  | L  | E | H  | D  | H  | D | N | D | K | 80 |
| NTDB id 460    | GPW51 RS00790 WP 011921720.1   | .....     | M    | K    | K    | L    | V   | E   | M    | K    | V   | K  | G   | F  | T  | L    | V  | E    | M   | L | V   | V  | L  | G  | I  | 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 | K | V | V | E | S  | Q | M | E | L | Y | E | L | H | D | E | .E | 68 |   |    |    |    |   |   |   |   |    |
| 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  | I  | 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  | D  | Q | 69 |    |    |   |   |   |   |    |
| NTDB id 502    | SM12261 RS00955 WP 000738641.1 | .....     | M    | K    | K    | M    | T   | F   | L    | K    | K   | A  | K   | V  | K  | A    | F  | T    | L   | V | E   | M  | L  | V  | V  | L  | I  | I  | S | V | 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 | E  | .D | 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  | V  | L  | I  | 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 | K | V  | V | E | S | Q | A | E | L | Y | S | L | E  | K  | N | E  | .D | 72 |   |   |   |   |    |
| 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  | V  | L  | I  | I  | S | V | L  | F | L | F  | V | P | N | L | T | K | Q | K | E | A | V | N |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |    |    |   |    |    |    |   |   |   |   |    |

|           |    |        |                                |                                         |     |
|-----------|----|--------|--------------------------------|-----------------------------------------|-----|
| NTDB      | id | 98     | BSU 24710 NP 390351.1          | PSLADLQSEGYVKKDAV.CPNGKRIIITGCEVKEVEH   | 98  |
| NTDB      | id | 975352 | UXQ47 RS07370 WP 000472256.1   | SSIEDLIADGFIKEAQKTKSGETITISNCEA.VAN     | 103 |
| NTDB      | id | 32     | MW RS07995 WP 000472256.1      | SSIEDLIADGFIKEAQKTKSGETITISNCEA.VAN     | 103 |
| NTDB      | id | 16     | SA RS07765 WP 000472256.1      | SSIEDLIADGFIKEAQKTKSGETITISNCEA.VAN     | 103 |
| NTDB      | id | 588    | KW2 RS10845 WP 051303741.1     | PNLSELLSACMITQKQVTAYYDDYYDQNKNEQRNFDD   | 116 |
| NTDB      | id | 460    | GPW51 RS00790 WP 011921720.1   | ATVADLQAKGYITEKQAKQYATAKK.....          | 93  |
| NTDB      | id | 431    | SGO RS09410 WP 012130940.1     | ATLSKLVAAAGNISQKQADSYPKAYYGKNNSSETQAVAN | 105 |
| NTDB      | id | 502    | SM12261 RS00955 WP 000738641.1 | ASLSKQLQADGRITEEQAKAYKEYYHAKQNTSQTIVAD. | 107 |
| NTDB      | id | 162    | SP RS10370 WP 000738627.1      | ASLRKLQADGRITEEQAKAYKEYNDKNGGANRNVND    | 108 |
| NTDB      | id | 272    | KZH43 RS09255 WP 000738626.1   | ASLRKLQADGRITEEQAKAYKEYYHDKNGGANRNVND   | 108 |
| NTDB      | id | 231    | SPD RS09885 WP 000738626.1     | ASLRKLQADGRITEEQAKAYKEYYHDKNGGANRNVND   | 108 |
| NTDB      | id | 197    | SPR RS09420 WP 000738626.1     | ASLRKLQADGRITEEQAKAYKEYYHDKNGGANRNVND   | 108 |
| NTDB      | id | 530    | SMSK321 RS09230 WP 000738643.1 | ASLSKLVQADGRITEEQAKAYNEYYAKNGGANRNVND   | 108 |
| consensus |    |        |                                | *** !***! *** * * * *                   |     |

- ☐ non conserved
- ☒ similar
- ☒ > 50% conserved