

logo

|                                             |                                                                                  |    |
|---------------------------------------------|----------------------------------------------------------------------------------|----|
| NTDB id 1410 SGL RS13950 WP 010873519.1     | MSVLTIGDKRLGAALLDAGLLTDEELQRALERHREVGGSLAEVLVDMGLLSERRIAQTIEDRFGIPLVELHRVEIPPKVK | 0  |
| NTDB id 1028 TT RS08215 WP 011173991.1      | MSVLTIGDKRLGAALLDAGLLTDEELQRALERHREVGGSLAEVLVDMGLLSERRIAQTIEDRFGIPLVELHRVEIPPKVK | 80 |
| NTDB id 1168 A1552VC RS11070 WP 000957200.1 | .....                                                                            | 0  |
| NTDB id 1293 VP RS12240 WP 005479695.1      | .....                                                                            | 0  |
| NTDB id 1401 DSB67 RS12665 WP 010643259.1   | .....                                                                            | 0  |
| NTDB id 1110 NGFG RS09235 WP 003689817.1    | .....                                                                            | 0  |
| NTDB id 1251 GC085 RS07725 WP 011946523.1   | .....                                                                            | 0  |
| NTDB id 201174 KAB08 RS01775 WP 001274990.1 | .....                                                                            | 0  |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1    | .....                                                                            | 0  |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1   | .....                                                                            | 0  |
| consensus                                   |                                                                                  |    |

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|                                             |                                                                                  |     |
|---------------------------------------------|----------------------------------------------------------------------------------|-----|
| NTDB id 1410 SGL RS13950 WP 010873519.1     | ALLPAEKAKELKAIPFALDEEAGVVRVAFLNPLDTLSLEEVEDLTGLVVEPYQTTKSAFLYALAKHYPELGLPVPPPPSG | 0   |
| NTDB id 1028 TT RS08215 WP 011173991.1      | ALLPAEKAKELKAIPFALDEEAGVVRVAFLNPLDTLSLEEVEDLTGLVVEPYQTTKSAFLYALAKHYPELGLPVPPPPSG | 160 |
| NTDB id 1168 A1552VC RS11070 WP 000957200.1 | .....                                                                            | 0   |
| NTDB id 1293 VP RS12240 WP 005479695.1      | .....                                                                            | 0   |
| NTDB id 1401 DSB67 RS12665 WP 010643259.1   | .....                                                                            | 0   |
| NTDB id 1110 NGFG RS09235 WP 003689817.1    | .....                                                                            | 0   |
| NTDB id 1251 GC085 RS07725 WP 011946523.1   | .....                                                                            | 0   |
| NTDB id 201174 KAB08 RS01775 WP 001274990.1 | .....                                                                            | 0   |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1    | .....                                                                            | 0   |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1   | .....                                                                            | 0   |
| consensus                                   |                                                                                  |     |

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|                                             |                                                                                  |     |
|---------------------------------------------|----------------------------------------------------------------------------------|-----|
| NTDB id 1410 SGL RS13950 WP 010873519.1     | EGQKDLKLGELLQKGWISREALEEALVEQEKTGDLLGRILVRKGLPEEALYRALAEQKGLEFLESTEGIVDPDPSAALLL | 0   |
| NTDB id 1028 TT RS08215 WP 011173991.1      | EGQKDLKLGELLQKGWISREALEEALVEQEKTGDLLGRILVRKGLPEEALYRALAEQKGLEFLESTEGIVDPDPSAALLL | 240 |
| NTDB id 1168 A1552VC RS11070 WP 000957200.1 | .....                                                                            | 0   |
| NTDB id 1293 VP RS12240 WP 005479695.1      | .....                                                                            | 0   |
| NTDB id 1401 DSB67 RS12665 WP 010643259.1   | .....                                                                            | 0   |
| NTDB id 1110 NGFG RS09235 WP 003689817.1    | .....                                                                            | 0   |
| NTDB id 1251 GC085 RS07725 WP 011946523.1   | .....                                                                            | 0   |
| NTDB id 201174 KAB08 RS01775 WP 001274990.1 | .....                                                                            | 0   |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1    | .....                                                                            | 0   |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1   | .....                                                                            | 0   |
| consensus                                   |                                                                                  |     |

NTDB id 1410 SGL RS13950 WP 010873519.1  
NTDB id 1028 TT RS08215 WP 011173991.1  
NTDB id 1168 A1552VC RS11070 WP 000957200.1  
NTDB id 1293 VP RS12240 WP 005479695.1  
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NTDB id 1058 ABD1 RS01615 WP 001274986.1  
NTDB id 1018 ACIAD RS01685 WP 004920473.1  
consensus

[illegible]

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NTDB id 1410 SGL RS13950 WP 010873519.1
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consensus

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[illegible]

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NTDB id 1018 ACIAD RS01685 WP 004920473.1  
consensus

| Position | Consensus | Sequence    | Score |
|----------|-----------|-------------|-------|
| 1        | D         | SVDPEVAP    | 164   |
| 2        | L         | YVDPEEDPPDP | 463   |
| 3        | V         | ETDLSRYDYAN | 127   |
| 4        | Y         | QPELSQY     | 127   |
| 5        | D         | CTSLNQY     | 127   |
| 6        | A         | IDLRLHYPRHR | 126   |
| 7        | A         | MDINCIDVGT  | 135   |
| 8        | A         | YFDLDVYDTSQ | 135   |
| 9        | A         | YFDLDVYDTSQ | 135   |
| 10       | A         | LDLGVFDPAL  | 135   |
| 11       | A         | FLDKDK      | 135   |
| 12       | A         | DEK         | 135   |
| 13       | A         | L           | 135   |
| 14       | A         | L           | 135   |
| 15       | A         | L           | 135   |
| 16       | A         | L           | 135   |
| 17       | A         | L           | 135   |
| 18       | A         | L           | 135   |
| 19       | A         | L           | 135   |
| 20       | A         | L           | 135   |
| 21       | A         | L           | 135   |
| 22       | A         | L           | 135   |
| 23       | A         | L           | 135   |
| 24       | A         | L           | 135   |
| 25       | A         | L           | 135   |
| 26       | A         | L           | 135   |
| 27       | A         | L           | 135   |
| 28       | A         | L           | 135   |
| 29       | A         | L           | 135   |
| 30       | A         | L           | 135   |
| 31       | A         | L           | 135   |
| 32       | A         | L           | 135   |
| 33       | A         | L           | 135   |
| 34       | A         | L           | 135   |
| 35       | A         | L           | 135   |
| 36       | A         | L           | 135   |
| 37       | A         | L           | 135   |
| 38       | A         | L           | 135   |
| 39       | A         | L           | 135   |
| 40       | A         | L           | 135   |
| 41       | A         | L           | 135   |
| 42       | A         | L           | 135   |
| 43       | A         | L           | 135   |
| 44       | A         | L           | 135   |
| 45       | A         | L           | 135   |
| 46       | A         | L           | 135   |
| 47       | A         | L           | 135   |
| 48       | A         | L           | 135   |
| 49       | A         | L           | 135   |
| 50       | A         | L           | 135   |
| 51       | A         | L           | 135   |
| 52       | A         | L           | 135   |
| 53       | A         | L           | 135   |
| 54       | A         | L           | 135   |
| 55       | A         | L           | 135   |
| 56       | A         | L           | 135   |
| 57       | A         | L           | 135   |
| 58       | A         | L           | 135   |
| 59       | A         | L           | 135   |
| 60       | A         | L           | 135   |
| 61       | A         | L           | 135   |
| 62       | A         | L           | 135   |
| 63       | A         | L           | 135   |
| 64       | A         | L           | 135   |
| 65       | A         | L           | 135   |
| 66       | A         | L           | 135   |
| 67       | A         | L           | 135   |
| 68       | A         | L           | 135   |
| 69       | A         | L           | 135   |
| 70       | A         | L           | 135   |
| 71       | A         | L           | 135   |
| 72       | A         | L           | 135   |
| 73       | A         | L           | 135   |
| 74       | A         | L           | 135   |
| 75       | A         | L           | 135   |
| 76       | A         | L           | 135   |
| 77       | A         | L           | 135   |
| 78       | A         | L           | 135   |
| 79       | A         | L           | 135   |
| 80       | A         | L           | 135   |
| 81       | A         | L           | 135   |
| 82       | A         | L           | 135   |
| 83       | A         | L           | 135   |
| 84       | A         | L           | 135   |
| 85       | A         | L           | 135   |
| 86       | A         | L           | 135   |
| 87       | A         | L           | 135   |
| 88       | A         | L           | 135   |
| 89       | A         | L           | 135   |
| 90       | A         | L           | 135   |
| 91       | A         | L           | 135   |
| 92       | A         | L           | 135   |
| 93       | A         | L           | 135   |
| 94       | A         | L           | 135   |
| 95       | A         | L           | 135   |
| 96       | A         | L           | 135   |
| 97       | A         | L           | 135   |
| 98       | A         | L           | 135   |
| 99       | A         | L           | 135   |
| 100      | A         | L           | 135   |
| 101      | A         | L           | 135   |
| 102      | A         | L           | 135   |
| 103      | A         | L           | 135   |
| 104      | A         | L           | 135   |
| 105      | A         | L           | 135   |
| 106      | A         | L           | 135   |
| 107      | A         | L           | 135   |
| 108      | A         | L           | 135   |
| 109      | A         | L           | 135   |
| 110      | A         | L           | 135   |
| 111      | A         | L           | 135   |
| 112      | A         | L           | 135   |
| 113      | A         | L           | 135   |
| 114      | A         | L           | 135   |
| 115      | A         | L           | 135   |
| 116      | A         | L           | 135   |
| 117      | A         | L           | 135   |
| 118      | A         | L           | 135   |
| 119      | A         | L           | 135   |
| 120      | A         | L           | 135   |
| 121      | A         | L           | 135   |
| 122      | A         | L           | 135   |
| 123      | A         | L           | 135   |
| 124      | A         | L           | 135   |
| 125      | A         | L           | 135   |
| 126      | A         | L           | 135   |
| 127      | A         | L</         |       |

|                |                                |                                                  |                   |                   |                  |     |
|----------------|--------------------------------|--------------------------------------------------|-------------------|-------------------|------------------|-----|
| NTDB id 1410   | SGL RS13950 WP 010873519.1     | QDDFNQLLEQYVAIREEWAAAEKRDQERALDKLNDLTDIVGSIDMNLG | EDKEEDVDNALDSNDA  | NQAPVILNVNKILLAKA | 244              |     |
| NTDB id 1028   | TT RS08215 WP 011173991.1      | EAAITTKLIERFYGAELSIIAKEF.....                    | AKKQAEFEVPSPLEL   | DESAAQKFVKQVIREA  | 518              |     |
| NTDB id 1168   | A1552VC RS11070 WP 000957200.1 | HRAIQAAIRRLYGRSIQAANQGK..EI.SQDELANL.....        | VKVSDDELSQSIEDLSQ | DSPVSRFINQVLLDA   | 193              |     |
| NTDB id 1293   | VP RS12240 WP 005479695.1      | FRELSTAIRRLYGRSLSHEKSGLK..EI.NQEELASL.....       | VDVGADEIDNIEDLSQ  | DESPVSRYINQILLDA  | 193              |     |
| NTDB id 1401   | DSB67 RS12665 WP 010643259.1   | FRELTAAIRRLYGRSLGSEKSGLK..EI.NQDELAGL.....       | VDIGEDEIEINEDLSQ  | DESPVSRYINQILLDA  | 193              |     |
| NTDB id 1110   | NGFG RS09235 WP 003689817.1    | DDQLAGLLDWVGSRSTSL.LQEL.....                     | GEG.....          | QEEESHTLYIDNEEA   | EDGPVPRFIHKTLSDA | 183 |
| NTDB id 1251   | GC085 RS07725 WP 011946523.1   | TDKLSALIDNLLTAKESQGLSEYVEDSG.DLEGLEIS.....       | AD.DEDQDIDTATSVT  | DDAPIVKFVNKILLDA  | 202              |     |
| NTDB id 201174 | KAB08 RS01775 WP 001274990.1   | HHKLEKVLGGHFHFAEESSFDFNDE...EF.D...LDVN.....     | LDGPTTQEDEEEAPQG  | DEAPIVKYINKLLIDA  | 197              |     |
| NTDB id 1058   | ABD1 RS01615 WP 001274986.1    | HHKLEKVLGGHFHFAEESSFDFNDE...EF.D...LDVN.....     | LDGPTAQEDEEEAPQG  | DEAPIVKYINKLLIDA  | 197              |     |
| NTDB id 1018   | ACIAD RS01685 WP 004920473.1   | HDKLERLLSEHFVEETHFNFDTE...EL.D...LDVE.....       | VDPHTTDDDEDKDLK   | DEAPIVKYINKLLIDA  | 197              |     |
| consensus      |                                | * ** **** * *                                    | *                 | * *               |                  |     |

[illegible]

|                |                                |   |   |   |   |   |   |   |   |   |   |     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|--------------------------------|---|---|---|---|---|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NTDB id 1410   | SGL RS13950 WP 010873519.1     | N | T | L | P | S | R | Y | G | E | K | V   | C | L | R | I | L | D | N | S | A | T | Q | L | G | L | D | F | L | I | T | N | P | E | T | L | Q | T | V | R | E | L | A | A | R | P | Y | G | L | M | V | T | G | P | T | G | S | G | K | S | T | T | L | Y | S | V | L | A | E | R | N | S | P | E | V | N | I | N | T | A |   |
| NTDB id 1028   | TT RS08215 WP 011173991.1      | S | T | L | P | T | V | Y | G | E | K | A   | V | M | R | I | L | K | K | A | S | D | I | P | E | I | E | D | L | G | F | A | P | G | V | F | E | R | F | K | E | V | I | S | K | P | Y | G | I | F | L | I | T | G | P | T | G | S | G | K | S | F | T | T | F | S | I | L | K | R | I | A | T | P | D | K | N | T | Q | T | I |
| NTDB id 1168   | A1552VC RS11070 WP 000957200.1 | S | T | L | P | T | L | W | G | E | K | I   | V | L | R | L | D | S | S | A | A | N | L | D | I | D | K | L | G | L | G | N | P | Q | Q | K | Q | L | Y | L | N | A | L | K | R | P | Q | G | M | I | L | M | T | G | P | T | G | S | G | K | T | V | S | L | Y | T | G | L | R | I | L | N | T | S | Q | I | N | I | S | T | A |
| NTDB id 1293   | VP RS12240 WP 005479695.1      | S | T | L | P | T | L | F | G | E | K | I   | V | L | R | L | D | S | S | A | L | D | I | D | K | L | G | Y | S | E | Q | Q | K | Q | L | Y | L | E | A | L | R | R | P | Q | G | M | I | L | M | T | G | P | T | G | S | G | K | T | V | S | L | Y | T | G | L | N | I | L | N | K | P | E | I | N | I | S | T | A |   |   |   |
| NTDB id 1401   | DSB67 RS12665 WP 010643259.1   | S | T | L | P | T | L | F | G | E | K | I   | V | L | R | L | D | S | S | A | L | D | I | D | K | L | G | Y | S | D | S | S | Q | Q | K | Q | L | Y | L | D | A | L | R | R | P | Q | G | M | I | L | M | T | G | P | T | G | S | G | K | T | V | S | L | Y | T | G | L | S | I | L | N | K | P | E | I | N | I | S | T | A |   |
| NTDB id 1110   | NGFG RS09235 WP 003689817.1    | S | T | L | P | T | L | F | G | E | K | V   | M | R | I | L | N | S | D | A | A | S | L | N | I | D | Q | L | G | F | E | P | F | Q | K | K | L | L | E | A | I | H | R | P | Y | G | M | V | L | T | G | P | T | G | S | G | K | T | V | S | L | Y | T | C | L | N | I | L | N | T | E | S | V | N | I | A | T | A |   |   |   |
| NTDB id 1251   | GC085 RS07725 WP 011946523.1   | S | T | C | P | T | S | A | G | E | K | V   | M | R | V | L | D | S | G | A | A | K | L | G | I | E | A | L | G | F | N | P | V | Q | R | T | N | F | L | K | A | I | Q | R | P | Q | G | M | I | L | V | T | G | P | T | G | S | G | K | T | V | T | L | Y | T | A | L | N | I | L | N | T | I | E | V | N | I | S | T | A |   |
| NTDB id 201174 | KAB08 RS01775 WP 001274990.1   | N | S | L | P | T | L | F | G | E | K | I   | V | L | R | I | L | D | P | S | S | A | M | L | G | I | D | A | L | G | Y | E | E | D | Q | K | A | L | F | M | E | A | L | D | K | P | Q | G | M | L | I | T | G | P | T | G | S | G | K | T | V | S | L | Y | T | G | L | N | I | L | N | T | E | S | S | N | I | S | T | A |   |
| NTDB id 1058   | ABD1 RS01615 WP 001274986.1    | N | S | L | P | T | L | F | G | E | K | I   | V | L | R | I | L | D | P | S | S | A | M | L | G | I | D | A | L | G | Y | E | E | D | Q | K | A | L | F | M | E | A | L | D | K | P | Q | G | M | L | I | T | G | P | T | G | S | G | K | T | V | S | L | Y | T | G | L | N | I | L | N | T | E | S | S | N | I | S | T | A |   |
| NTDB id 1018   | ACIAD RS01685 WP 004920473.1   | N | S | L | P | T | L | F | G | E | K | I</ |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

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consensus

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logo

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|---------------------------------------------|---------------------------------|-----|
| NTDB id 1410 SGL RS13950 WP 010873519.1     | KRKSALTCRTCAAELQQEWLDCPYCMTSRFS | 672 |
| NTDB id 1028 TT RS08215 WP 011173991.1      | .....                           | 889 |
| NTDB id 1168 A1552VC RS11070 WP 000957200.1 | .....                           | 562 |
| NTDB id 1293 VP RS12240 WP 005479695.1      | .....                           | 561 |
| NTDB id 1401 DSB67 RS12665 WP 010643259.1   | .....                           | 561 |
| NTDB id 1110 NGFG RS09235 WP 003689817.1    | .....                           | 558 |
| NTDB id 1251 GC085 RS07725 WP 011946523.1   | .....                           | 574 |
| NTDB id 201174 KAB08 RS01775 WP 001274990.1 | .....                           | 570 |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1    | .....                           | 570 |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1   | .....                           | 570 |
| consensus                                   |                                 |     |

-  non conserved
-  similar
-  ≥ 50% conserved