

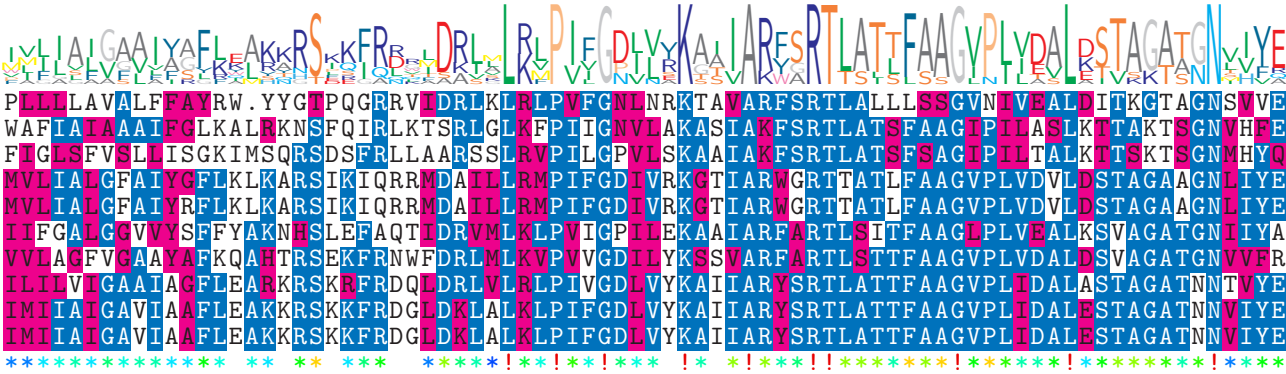
|                |                                |                                 |                                                     |       |
|----------------|--------------------------------|---------------------------------|-----------------------------------------------------|-------|
| NTDB id 1029   | TT RS02230 WP 011228203.1      | .....MPVYQYKARDRQGR.L           | VEATIEAEDLRTAARLRDRGLFVAETKEPGKGLQAEVRIPALERGPGLK   | 65    |
| NTDB id 1169   | A1552VC RS11075 WP 000648511.1 | MKAT.....QTLPLKKNYRWKGINSSGKK   | VSGQMLAISEIEVRDKLKDQHIQIKKLKKGVSLSLAR.....LTHRVKSK  | 68    |
| NTDB id 1402   | DSB67 RS12670 WP 010643257.1   | .MKT.....IAPQLKKNYRWKGINSSGKK   | TSGNVLAMTEIEVRERLDAQHIKIKKLKKGSSISFITK.....ISHRVKKG | 67    |
| NTDB id 1112   | NGFG RS09215 WP 003689811.1    | .MAKNGGFSLF AKKEKRFIFEGRHSASDKL | VNGEVS AFTEEEARKKLAKRGIRPLQITRV.....KT....SSKRKITQE | 70    |
| NTDB id 1113   | ACA85695.1 219..1451( )        | .MAKNGGFSLF AKKEKRFIFEGRHSASDKL | VNGEVS AFTEEEARKKLAKRGIRPLQITRV.....KT....SSKRKITQE | 70    |
| NTDB id 1252   | GC085 RS07730 WP 011213805.1   | .MDKN.....SPPILTFFHYQGINKAGQK   | MEGDIQARSLATAKADLRKQGVITNKKVKKRKLFLDR.....KNKKITQA  | 67    |
| NTDB id 1198   | PSJM300 03950 AFN76868.1       | .MAQK.....AIKNSVFTTEGLDRQGAK    | IKGELSGVSPALVKAQLRKQGINPQKVRKKSSISLFS.....AGKKIKPM  | 66    |
| NTDB id 1016   | ACIAD RS01680 WP 004920476.1   | MAAKK.....TQVMPVFAYEGVDRKGIK    | LKGELPARNMALAKVTLRKQGITIRTIREKRKNIFEG....LLKKVKPL   | 69    |
| NTDB id 383870 | FZN68 RS17245 WP 000279216.1   | MAVKK.....AQMMPTFAYEGVDRKGIVK   | IKGELPAKNMALAKVTLRKQGVTVRNIREKRKNILEG....LFKKKVTTL  | 69    |
| NTDB id 1059   | ABD1 RS01610 WP 000279215.1    | MAVKK.....AQMMPTFAYEGVDRKGIVK   | IKGELPAKNMALAKVTLRKQGVTVRNIREKRKNILEG....LFKKKVTTL  | 69    |
| consensus      |                                | *****                           | * * * * *                                           | ***** |

|      |    |        |            |         |    |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |     |     |
|------|----|--------|------------|---------|----|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|-----|-----|
| NTDB | id | 1029   | TT         | RS02230 | WP | 011228203.1      | D | L | A | I | F | S | R | Q | L | A | T | M | L | G | A | C | L | T | L   | L | Q | A | L | A | I | L | E | R | Q | T | E | N | R | K | F | R | E | I | L | K | Q | V | R | T | D | V | E | G | G | M | A | F | S | E | A | L | S | K | H | . | K | I | F | S | R | L | Y | V | N | L | V | R | A | G | E | T | S | G | G | L   | 144 |     |
| NTDB | id | 1169   | A1552VC    | RS11075 | WP | 000648511.1      | D | I | T | I | L | T | R | Q | L | A | T | M | L | T | T | G | V | P | I   | V | Q | A | L | K | L | V | G | D | N | H | R | K | A | E | M | K | S | I | L | A | Q | I | T | K | S | V | E | A | G | T | P | L | S | K | A | M | R | T | A | S | A | H | F | D | T | L | Y | V | D | L | V | E | T | G | E | M | S | G | N | L   | 148 |     |
| NTDB | id | 1402   | DSB67      | RS12670 | WP | 010643257.1      | D | I | T | I | F | T | R | Q | L | A | T | M | L | M | T | G | V | P | I   | V | Q | A | L | K | L | V | S | E | N | H | K | K | A | E | M | K | S | I | L | M | S | V | T | R | A | V | E | A | G | T | P | M | S | K | A | M | R | T | A | S | T | H | F | D | P | L | Y | T | D | L | I | A | T | I | G | E | Q | S | G | N   | L   | 147 |
| NTDB | id | 1112   | NGFG       | RS09215 | WP | 003689811.1      | D | I | T | V | F | T | R | Q | L | S | T | M | I | K | A | G | L | P | L   | M | Q | A | F | E | I | V | A | R | G | H | G | N | P | S | M | T | E | M | L | M | E | I | R | G | Q | V | E | Q | G | S | S | L | S | R | A | F | S | N | H | P | K | Y | F | D | R | F | Y | C | N | L | V | A | A | G | E | T | G | G | V | L   | 150 |     |
| NTDB | id | 1113   | AAA85695.1 |         |    | 219..1451( )     | D | I | T | V | F | R | Q | L | S | T | M | I | N | A | C | L | P | L | M   | Q | A | F | E | I | V | A | R | G | H | G | N | P | S | M | T | E | M | L | M | E | I | R | G | Q | V | E | Q | G | S | S | L | S | R | A | F | S | N | H | P | K | Y | F | D | R | F | Y | C | N | L | V | A | A | G | E | T | G | G | V | L | 150 |     |     |
| NTDB | id | 1252   | G0C85      | RS07730 | WP | 011213805.1      | D | I | T | V | F | S | R | Q | L | A | T | M | L | E | S | C | L | P | L   | V | Q | A | F | D | I | V | A | K | Q | S | N | K | R | L | K | D | L | I | E | T | I | K | H | D | I | E | T | G | L | T | L | A | E | S | L | I | K | H | P | L | Y | F | N | E | L | F | C | N | L | V | D | A | G | E | K | S | G | S | L | 147 |     |     |
| NTDB | id | 1198   | PSJM300    |         |    | 03950 AFN76868.1 | D | I | A | L | F | T | R | Q | L | A | T | M | M | K | A | G | V | P | L   | L | S | F | D | I | T | G | E | G | F | D | N | P | N | M | R | K | L | V | D | D | L | K | Q | E | V | A | A | G | N | S | F | A | S | S | L | R | K | K | P | Q | Y | F | D | D | L | Y | C | N | L | V | D | S | G | E | Q | S | G | S | L | 146 |     |     |
| NTDB | id | 1016   | ACIAD      | RS01680 | WP | 004920476.1      | D | I | A | I | F | T | R | Q | L | A | T | M | M | K | A | G | V | P | L   | V | Q | A | F | E | I | V | A | E | G | L | E | N | P | A | M | R | D | V | V | L | G | L | K | N | E | V | E | G | G | N | T | F | A | G | A | L | R | K | Y | P | Q | Y | F | D | N | L | F | C | S | L | I | E | S | G | E | Q | S | G | S | L   | 149 |     |
| NTDB | id | 383870 | FZN68      | RS17245 | WP | 000279216.1      | D | I | T | I | F | T | R | Q | L | A | T | M | M | K | A | G | V | P | L</ |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |     |     |

|           |    |        |            |         |     |              |                                                                                              |     |
|-----------|----|--------|------------|---------|-----|--------------|----------------------------------------------------------------------------------------------|-----|
| NTDB      | id | 1029   | TT         | RS02230 | WP  | 011228203.1  | DLILDRLASFLKELELRGKIRSAMTYPVIVFVFAVGVAIFLLTGIVPQFAQILTDLGSELP LLTRFLIAVSDLLRAATL             | 224 |
| NTDB      | id | 1169   | A1552VC    | RS11075 | WP  | 000648511.1  | PEVFERLATYREKSEQLRAKVIKALIYPSMVVLVALGVSYLMLTMVPIEFESMFKGFGAELPWFTQQVLKLSHWVQAYSL             | 228 |
| NTDB      | id | 1402   | DSB67      | RS12670 | WP  | 010643257.1  | SQVFERLATYREKSEQLRAKVIKALIYPAMVVLVALGVSYLMLTRVPIEFEKMFITGFGADLPAFTQMVLNLSAWTQNGP             | 227 |
| NTDB      | id | 1112   | NGFG       | RS09215 | WP  | 003689811.1  | ESLDDKLATYKEKTAIRKKVKLTALTYPSVIAVAIGLVFVMMIFVLPAPAFKEVYANMGAELPLTQTVMDSDFVSYGW               | 230 |
| NTDB      | id | 1113   | AAA85695.1 |         |     | 219..1451( ) | ESLDDKLATYKEKTAIRKKVKLTALTYPSVIAVAIGLVFVMMIFVLPAPAFKEVYANMGAELPALQTVMDSDFVSYGW               | 230 |
| NTDB      | id | 1252   | G0C85      | RS07730 | WP  | 011213805.1  | DLMLDKLATYKEKTEILKKKKIKKALTYP IAVMVALLVTAGLLIYVVPQFESLFKGFAGADLPAMTRAVITMSEFMQAYWY           | 227 |
| NTDB      | id | 1198   | PSJM300    | 03950   | AFN | 76868.1      | ETLLDRVATYKEKTEALAKIKKAMNYP IAVVVLVAVIVTATILLIKVVPQFQDVFANFGAELPAFTLMVIGLSEALQAWWY           | 226 |
| NTDB      | id | 1016   | ACIAD      | RS01680 | WP  | 004920476.1  | ETMLDRVAVYKEKSEVLKKIKKAMKYPATVIVVAIVVTIILMVKVVPVFKDLFTSFGADLPAFTQLVNNMSNWMQDYWF              | 229 |
| NTDB      | id | 383870 | FZN68      | RS17245 | WP  | 000279216.1  | ETMLDRVATYKEKSELKKIKKAMKYPATVIVVAIVVTIILMVKVVPVFKDLFASFGADLPAFTQMVVNMSKWMQEYWF               | 229 |
| NTDB      | id | 1059   | ABD1       | RS01610 | WP  | 000279215.1  | ETMLDRVATYKEKSELKKIKKAMKYPATVIVVAIVVTIILMVKVVPVFKDLFASFGADLPAFTQMVVNMSKWMQEYWF               | 229 |
| consensus |    |        |            |         |     |              | *****! * * ! * * * * * ! * * * * ! * ! * ! * ! * ! * * * * * ! * ! * * * * * ! * ! * * * * * |     |

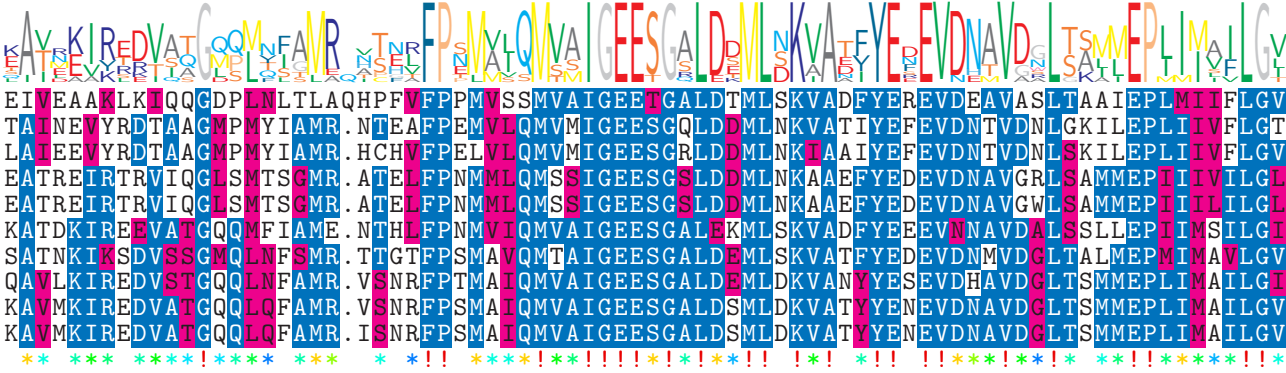
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NTDB id 1029 TT RS02230 WP 011228203.1  
NTDB id 1169 A1552VC RS11075 WP 000648511.1  
NTDB id 1402 DSB67 RS12670 WP 010643257.1  
NTDB id 1112 NGFG RS09215 WP 003689811.1  
NTDB id 1113 AAA85695.1 219..1451( )  
NTDB id 1252 GC085 RS07730 WP 011213805.1  
NTDB id 1198 PSJM300 03950 AFN76868.1  
NTDB id 1016 ACIAD RS01680 WP 004920476.1  
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consensus



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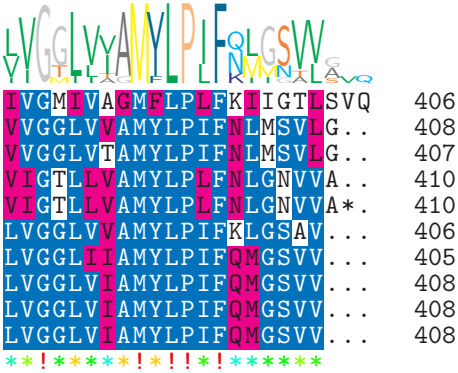
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NTDB id 1169 A1552VC RS11075 WP 000648511.1  
NTDB id 1402 DSB67 RS12670 WP 010643257.1  
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NTDB id 1252 GC085 RS07730 WP 011213805.1  
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NTDB id 383870 FZN68 RS17245 WP 000279216.1  
NTDB id 1059 ABD1 RS01610 WP 000279215.1  
consensus



 non conserved  
 similar  
 ≥ 50% conserved