

logo

|               |                                 |   |    |
|---------------|---------------------------------|---|----|
|               |                                 | MSXLRIGDRRLGAALLDAGLLTDEELQRALERHREVEGGSLAEVLVDMGLLSERRIAQTIEDRFGIPLVELHRVEIPPVKK | 0  |
| NTDB id 1410  | SGL RS13950 WP 010873519.1      | MSVLTIGDKRLGAALLDAGLLTDEELQRALERHREVEGGSLAEVLVDMGLLSERRIAQTIEDRFGIPLVELHRVEIPPVKK | 80 |
| NTDB id 1028  | TT RS08215 WP 011173991.1       | .MALSIGDRRLGAILLDQGYLGDNDLQRALERHSEVGGRLADVLIDSGMVGEKRIARAIEEALGIPLVNLAVQPDPAAL   | 79 |
| NTDB id 1306  | DR RS10060 WP 027479822.1       | .....   | 0  |
| NTDB id 1110  | NGFG RS09235 WP 003689817.1     | .....   | 0  |
| 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 1251  | GCO85 RS07725 WP 011946523.1    | .....   | 0  |
| NTDB id 66233 | NCGM1900 RS11735 WP 003094647.1 | .....   | 0  |
| NTDB id 1058  | ABD1 RS01615 WP 001274986.1     | .....   | 0  |
| NTDB id 1018  | ACIAD RS01685 WP 004920473.1    | .....   | 0  |
| consensus     |                                 | .....   | 0  |

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|---------------|---------------------------------|---|-----|
|               |                                 | RSLPAEKAKELKAIPFALDEEAGVVRVAFNLPLDLSLEEVEDLTGLVVEPYQTTKSAFLYALAKHYPELGLPVPPP..P   | 0   |
| NTDB id 1410  | SGL RS13950 WP 010873519.1      | ALLPAEKAKELKAIPFALDEEAGVVRVAFNLPLDLSLEEVEDLTGLVVEPYQTTKSAFLYALAKHYPELGLPVPPP..P   | 158 |
| NTDB id 1028  | TT RS08215 WP 011173991.1       | RSIRPQTALNLQAFPFALE..GDRLRVALVDPLSSFSIETLEDDSGFDIEPYQALREEVMWAIATHYPELGLIEIVVPSGA | 157 |
| NTDB id 1306  | DR RS10060 WP 027479822.1       | .....   | 0   |
| NTDB id 1110  | NGFG RS09235 WP 003689817.1     | .....   | 0   |
| 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 1251  | GCO85 RS07725 WP 011946523.1    | .....   | 0   |
| NTDB id 66233 | NCGM1900 RS11735 WP 003094647.1 | .....   | 0   |
| NTDB id 1058  | ABD1 RS01615 WP 001274986.1     | .....   | 0   |
| NTDB id 1018  | ACIAD RS01685 WP 004920473.1    | .....   | 0   |
| consensus     |                                 | .....   | 0   |

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|               |                                 |   |     |
|---------------|---------------------------------|---|-----|
|               |                                 | SGEGQKDLKLGELLQKGWISREALEEALVEQEKTGDLLGRILV.RKGLPEEALYRALAEQKGFLESTEGIVPDPSAA   | 0   |
| NTDB id 1410  | SGL RS13950 WP 010873519.1      | SGEGQKDLKLGELLQKGWISREALEEALVEQEKTGDLLGRILV.RKGLPEEALYRALAEQKGFLESTEGIVPDPSAA   | 237 |
| NTDB id 1028  | TT RS08215 WP 011173991.1       | SDAGRTGGKLGRLITHGYITDAQLQVALDAQQTGEALGATLISQRAITEDQLYEVLAEQEGTTFLPNPSGFFHPGEEVL | 237 |
| NTDB id 1306  | DR RS10060 WP 027479822.1       | .....   | 0   |
| NTDB id 1110  | NGFG RS09235 WP 003689817.1     | .....   | 0   |
| 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 1251  | GCO85 RS07725 WP 011946523.1    | .....   | 0   |
| NTDB id 66233 | NCGM1900 RS11735 WP 003094647.1 | .....   | 0   |
| NTDB id 1058  | ABD1 RS01615 WP 001274986.1     | .....   | 0   |
| NTDB id 1018  | ACIAD RS01685 WP 004920473.1    | .....   | 0   |
| consensus     |                                 | .....   | 0   |

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NTDB id 1410 SGL RS13950 WP 010873519.1  
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 NTDB id 1018 ACIAD RS01685 WP 004920473.1

.....MTS  
 LLLLRSDALRYGAVPIGFQNGEVEVVLSDPRHKEAVAQLLNRPARFYALALPQAWEEFRRAYPQKNRLGEVLVQEGKLSR  
 GSMLRADALRLLAVPVDETEQGVTVLTS DPRKRKPDIDALIGRPVQLMLTRPRDIERLIEQFYPPQRGRLGEQLVQEGTLRSR

3  
317  
317  
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consensus

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NTDB id 1410 SGL RS13950 WP 010873519.1  
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 NTDB id 1018 ACIAD RS01685 WP 004920473.1

SSSSKKSRAVALRNYFSPFGNKLIVAGCHVDAEQLRQALVQVKKTGRSLPEELKAVTGRELSPELIRQYKKNQLFELKVLVY  
 EALKEALEVQKGLPRAKPLGETLVELGLARPEDVEEALQKQRGGRIEDTLVQ..SGKIRPEALQA.....VATQL  
 DQLREALQVQAREGKVKPLGEVITELGFASPEVDSALQKQNVGGRIEDTLVQ..SGKLSPEMLARS.....LAAQL  
 .....MSVGLLRILVQNQVVTVEQAEHYNE.SQAGKEVLPMLFS..DGVISPKSLAAL.....IARVF  
 .....MLTNLVAILRQAE LISATQEAVVTQVSASGTSVPEALIE..LSIFHAQELTEQ.....LSSHIF  
 .....MHSNLSTILRQKGLTFSQEESLIEQVKASGISMPEALLS..SGFFTSSSLAEH.....LSSIF  
 .....MLTNLSTVLRQAGILTFSQEESLIEQVKASGISMPEALLS..SGFFQSHELTEH.....LSSVF  
 .....MALATEEYRLQGITQLLVLEKLLDKTKAIELHKLAAAEKISLLQYIVK..NKILSAEQIALT.....AAQNF  
 .....MNDSTPLSGLAKQLVLNELLDEKTARQAQVQAARNKQSLVSHLVQ..AKLVQSRAIVEV.....AAEQF  
 .....MSALHTSPKFTGFFRRLVVEEKHVSAAATMQTALDAAKRAKQDVTVAYLIE..EVHLSPSLLAET.....TSAEF  
 .....MSAFTTPPKFSGFIRR LVEEGYVNAQNMQQALEKAKKFKQDTPVPLID..NFSISPLTIAEI.....LSLEF

83  
388  
388  
56  
57  
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65

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 NTDB id 1018 ACIAD RS01685 WP 004920473.1

GVDSVDPEVAPIATQMAELIGRFFPLDTCRRFKFLPLAQEGDPPSVLVAMVDPDNLAAQDELNRILRVKG..FELRRL  
 GYPYVDPEEDPPD....PGAPLLLPEDLCRRYGVFPHRLEG...NRLVLLMKDPRNIALDDVRLALKRKLNYEVAPA  
 GYFELDPIQNPPD....PKVALMPEATARRVVPVRLQG...NSLVVAMKDPNRNVFALDDLKLITG.....KETLPA  
 SYSILDLRHYPRH....RVLMLGVLTEEQMVVEFHCVVFRRG...DKVFFAVSDPTQMPQIQKTVSAAG.....TAVELV  
 GIPETDLRSYDYA....NLCCQLGLRELITRYDALPIAKQG...NLLLVAVSDPTLLQAEFFRFATG.....LQVELA  
 GLSQPELSQYEYA....SLCQQLGLRELITRHNAALPLHRT...STLLAVADPTNQAEDDFRFATG.....LQVELV  
 GLSCTSLNQYEYA....SLCQTLGLRDLITRHNAALPLNRTS...STLILAVADPTNLQAEDDFRFATG.....LQVELV  
 GVPMLDINCIDVG....TIPVNLVNEKLIKRRHAMVPLFSRG...TNLYLATDPSKQASIKIIFHTG.....LNTHAI  
 GIAYCDLNSLDRE....SIPKDAISERLVRQHRVLPWKRG...NKLFIGLSDPTNHQAVTDIIFSTG.....LTTEAL  
 AEPYFDLDVYDTS....QIPKDLVDQKLILKHRILPLIQRG...QILYVATSNPSNIEAIDAIRFNSK.....LLVEPV  
 GEPLDLGVFDPA....LFLDKKIDKELIKYRIMPLVHRG...HVLVYVATSNPTNIEAMD AIRFNSK.....LKVEPI

161  
460  
455  
123  
124  
124  
124  
132  
129  
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132

consensus





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|   | EMRAKRKRSALTCRTCAAELQQEWLDCPYCMTSRFS |     |
|---|--------------------------------------|-----|
| NTDB id 1410 SGL RS13950 WP 010873519.1       | EMRAKRKRSALTCRTCAAELQQEWLDCPYCMTSRFS | 672 |
| NTDB id 1028 TT RS08215 WP 011173991.1        | .....                                | 889 |
| NTDB id 1306 DR RS10060 WP 027479822.1        | .....                                | 887 |
| NTDB id 1110 NGFG RS09235 WP 003689817.1      | .....                                | 558 |
| 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 1251 GC085 RS07725 WP 011946523.1     | .....                                | 574 |
| NTDB id 66233 NCGM1900 RS11735 WP 003094647.1 | .....                                | 566 |
| NTDB id 1058 ABD1 RS01615 WP 001274986.1      | .....                                | 570 |
| NTDB id 1018 ACIAD RS01685 WP 004920473.1     | .....                                | 570 |
| consensus                                     |                                      |     |

- non conserved
- similar
- ≥ 50% conserved