```
logo

NTDB id 57163 ABD1 RS14175 WP 000658880.1    MKEILKTLTEAMTLPEDSYSEQDAEFLEIFIEEIEEIFVDLQPLINKWMQSDNIATLTEIRRHFHTLKGSGRMIGAKSSAELAWT    85
NTDB id 1046 H0N27 RS03130 WP 168726941.1    MKEILKTLTEAMTLPEDSYSEQDAEFLEIFIEEIEEIFVDLQPLINKWMQSENIATLTEIRRHFHTLKGSGRMIGAKSSAELAWT    85
consensus                                    !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!*!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

```
logo

NTDB id 57163 ABD1 RS14175 WP 000658880.1    VEDTLNRVINQSLQLTPTIQSYVQLVFKFYFLKLVDNFKQKRAHTLDFRPLILLGQQLQQQQSLEPALEELLQLSNTLTAETVTG    170
NTDB id 1046 H0N27 RS03130 WP 168726941.1    VEDTLNRVINQSLQLTPTIQSYVQLVFKFYFLKLVDNFKQKRAHTLDFRPLILLGQQLQQQQSLEPALEELLQLSHTLMAETVTG    170
consensus                                    !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!*!!!!!!!!
```

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logo

NTDB id 57163 ABD1 RS14175 WP 000658880.1    LELGYIEQDSLAEPIIQTTHTEIEINLDETLTLFMEEAEEHLATIHQFLDQELHQYDSYNALIRALHTLRGSSAMAQVETIFEAS    255
NTDB id 1046 H0N27 RS03130 WP 168726941.1    LELDYIEQDSLAEPIIQATHTEIEINLDETLTLFMEEAEEHLATIHQFLDQELHQYDSYNALIRALHTLRGSSAMAQVETIFEAS    255
consensus                                    !!! !!!!!!!!!!!!!! !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

```
logo

NTDB id 57163 ABD1 RS14175 WP 000658880.1    TKVEHLFKILLQEELSSHSEEILLLQEYRKFVRDSLELLSRYSSSEQLEARLQQFNQSWDAYVEQHGDRTDPLMPSHGLVSQLLQ    340
NTDB id 1046 H0N27 RS03130 WP 168726941.1    TKVEHLFKILLQEELSSHSEEILLLQEYREFVRDSLELLSRYSSSEQLEARLLQFNQSWDAYVEQHGDRTDPLMPSHGLVSQLLQ    340
consensus                                    !!!!!!!!!!!!!!!!!!!!!!!!!!!!! !!!!!!!!!!!!!!!!!!!!!!! !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

```
logo

NTDB id 57163 ABD1 RS14175 WP 000658880.1    LDVSELLDAELDFEKGIRNEFPDYLERLSEQADLLLQHTHSQAMLGLHEYTSQLKESYEVLLDKPALLQSDYIFEIYQKAHQQLI    425
NTDB id 1046 H0N27 RS03130 WP 168726941.1    LDVSELLDAELDFEKGIRNEFPDYLERLSEQADLLLQHTHSQAMLGLHEYTSQLKESYEVLLDKPALLQSDYIFEIYQKAHQQLI    425
consensus                                    !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

```
logo

NTDB id 57163 ABD1 RS14175 WP 000658880.1    QLFDALAAGQRVGVVKQHSILEELKLYTQYTPDISNDLPQHDSTSFEPISNIELEPEVVATVENFSDSADWAVLGQSVQQDRQY    510
NTDB id 1046 H0N27 RS03130 WP 168726941.1    QLFDALAAGQRVGVVKQHSILEELKLYTQYTPDISNDLPQQDSTSFEPIYNIEPEPEVVATVENFSDSADWAVLGQSVQQDRQY    510
consensus                                    !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!*!!!!!!!!!!!!!*!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

```
logo

NTDB id 57163 ABD1 RS14175 WP 000658880.1    ISSTQVNRNFDADLLDIFLEEAEELLEGIDTDLNIWIGEQENFAALNNLMRYLHTLKGGANMVQATYLGLIAHELESIYERLIQK    595
NTDB id 1046 H0N27 RS03130 WP 168726941.1    ISSTQVNRNFDADLLDIFLEEAEELLEGIDTDLNIWVGEQENFAALNNLMRYLHTLKGGANMVQATYLGLIAHELESIYERLIQK    595
consensus                                    !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!*!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

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logo            SLGGHVSVESVYGQGTTFTIRVPTTVAVSDALMVKVADQQFAIPLAQIERIIRVSPASLEQYFESPQELFEYENKRYPLRYLSEF

NTDB id 57163 ABD1 RS14175 WP 000658880.1   SLGGHVSVESVYGQGTTFTIRVPTTVAVSDALMVKVADQQFAIPLAQIERIIRVSPASLEQYFESPQELFEYENKRYPLRYLSEF   1275
NTDB id 1046 H0N27 RS03130 WP 168726941.1   SLGGHVSVESVYGQGTTFTIRVPTTVAVSDALMVKVADQQFAIPLAQIDRIIRVSPASLEQYFESPQELFEYENKRYPLRYLSEF   1275
consensus       !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!*!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!c!!!!!

logo            VGNQPIPRLNGVMYSLPVLMIKANNGQTVALLVDQLIGSRAQIVVKPIGQQFSSIGAIAGATILGDGQVCLILDGQNIARQIQST

NTDB id 57163 ABD1 RS14175 WP 000658880.1   VGNQPIPRLNGVMYSLPVLMIKANNGQTVALLVDQLIGSRAQIVVKPIGQQFSSIGAIAGATILGDGQVCLILDGQNIARQIQST   1360
NTDB id 1046 H0N27 RS03130 WP 168726941.1   VGNQPIPRLNGVMYSLPVLMIKANNGQTVALLVDQLIGSRAQIVVKPIGQQFSSIGAIAGATILGDGQVCLILDGQNIARQIQST   1360
consensus       !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!c!!!!!!!

logo            QRHKQLSEAVYRQRESDERRLIMIVDDSVTVRKVTSRLLERQGYDVVTAKDGVDAIEQLENIKPDLMLLDIEMPRMDGFEVLNLV

NTDB id 57163 ABD1 RS14175 WP 000658880.1   QRHKQLSEAVYRQRESDERRLIMIVDDSVTVRKVTSRLLERQGYDVVTAKDGVDAIEQLENIKPDLMLLDIEMPRMDGFEVLNLV   1445
NTDB id 1046 H0N27 RS03130 WP 168726941.1   QRHKQLSEAVYRQRESDERRLIMIVDDSVTVRKVTSRLLERQGYDVVTAKDGVDAIEQLENIKPDLMLLDIEMPRMDGFEVLNLV   1445
consensus       !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!c!!!!!!!

logo            RHHDMHQYMPIIMITSRTGEKHRERAFSLGVSQYMGKPFQEEELLENIDALLVAFESEVKS

NTDB id 57163 ABD1 RS14175 WP 000658880.1   RHHDMHQYMPIIMITSRTGEKHRERAFSLGVSQYMGKPFQEEELLENIDALLVAFESEVKS   1506
NTDB id 1046 H0N27 RS03130 WP 168726941.1   RHHDMHQYMPIIMITSRTGEKHRERAFSLGVSQYMGKPFQEEELLENIDALLVAFESEVKS   1506
consensus       !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

X   non conserved
X   similar
X   ≥ 50% conserved