

logo

NTDB id 615 LCA RS02545 WP 011374200.1	..MGQQVIACGRQFTAAQLADTQN...NNYSLPQIKRRPAFLRVKHLRLVCQRCCQV.VPPQTCLPDGRHYCAQCLLFGRL	74
NTDB id 593 KW2 RS05130 WP 021037147.1	MNLILENLGLHLLLEKDISAFNNFTDQVNNENKLIKIGAMTSVNANKVRCNRCGTIHIKTNVKLPIGAFFCPTCLELGRV	80
NTDB id 223231 A6J87 RS03000 WP 080611551.1	..MVPKEEYVYGRFLTKEQLPV.....DYHSEAFITLESMI.KVDKKLRCRCYSQ.IEEDWQLPEGQYYCRACIVFGRN	68
NTDB id 277 KZH43 RS10090 WP 000867601.1	..MKVNLDYLGRLFTENELTE.....EERQLAEKLPAMR.KEKGKLFQCRCNST.ILEEWYLPIGAYYCRECLLMKRV	69
NTDB id 236 SPD RS10765 WP 000867601.1	..MKVNLDYLGRLFTENELTE.....EERQLAEKLPAMR.KEKGKLFQCRCNST.ILEEWYLPIGAYYCRECLLMKRV	69
NTDB id 202 SPR RS10250 WP 000867601.1	..MKVNLDYLGRLFTENELTE.....EERQLAEKLPAMR.KEKGKLFQCRCNST.ILEEWYLPIGAYYCRECLLMKRV	69
NTDB id 167 SP RS11275 WP 000867616.1	..MKVNLDYLGRLFTENELTE.....EERQLAEKLPAMR.KEKGKLFQCRCNST.ILEEWYLPIGAYYCRECLLMKRV	69
NTDB id 507 SM12261 RS09240 WP 000867722.1	..MKVNPNYLGRFLTENELTE.....EERQLAEKLPAMR.KEKGKLFQCRCNST.ILEEWYLPIGAYYCRECLLMKRV	69
NTDB id 535 SMSK321 RS10515 WP 000867726.1	..MKVNPNYLGRFLTENELTK.....EERQLAEKLPAMR.KEKGKLFQCRCNSA.ILEEWYLPIGAYYCRECLLMKRV	69
consensus	*****!***** ********** *****!!!!*! *****!*****!*****!*	

logo

NTDB id 615 LCA RS02545 WP 011374200.1	VEGDWLYTVPECHLFENNIPKLTWEGQLTPHQEKAQAVVEVVQTQKRHVLTAVTGAGKTEMLFQGGILVALQKQGRVCLA	154
NTDB id 593 KW2 RS05130 WP 021037147.1	RSDEYFYHLPQQD.FP.EKTYLRWTGKLTENQEKISDALCQQITINNQKLLVQAVTGAGKTEMIYQLIEQILSHGGSVGLA	158
NTDB id 223231 A6J87 RS03000 WP 080611551.1	QEGKELYFFPSKT.SEIFPVLKWLGETLPYQAEVSEKLLITYQKQKDSLHVAVTGAGKTEMIYKIVAYVLESKGNVAIA	147
NTDB id 277 KZH43 RS10090 WP 000867601.1	RSDQTLYYFPQED.FP.KQDVLKWRGQLTPFQEKVSEGLLQAVDKQKPTLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA	147
NTDB id 236 SPD RS10765 WP 000867601.1	RSDQTLYYFPQED.FP.KQDVLKWRGQLTPFQEKVSEGLLQAVDKQKPTLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA	147
NTDB id 202 SPR RS10250 WP 000867601.1	RSDQTLYYFPQED.FP.KQDVLKWRGQLTPFQEKVSEGLLQAVDKQKPTLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA	147
NTDB id 167 SP RS11275 WP 000867616.1	RSDQTLYYFPQED.FP.KQDVLKWRGQLTPFQEKVSEGLLQAVDKQKPTLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA	147
NTDB id 507 SM12261 RS09240 WP 000867722.1	RSDQSLYYFPQED.FP.KQDVLKWRGQLTPFQDKVSGLLQAVDKQEPESLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA	147
NTDB id 535 SMSK321 RS10515 WP 000867726.1	RSDQVLYYFPQED.FA.KQDILKWRGQLTPFQEKVSEGLLQAVDKQEPILVHAVTGAGKTEMIYQVVAKVINAGGAVCLA	147
consensus	*****!***** ** *****!*****!***** ********** *****!!!!*****!*****!*****!	

logo

NTDB id 615 LCA RS02545 WP 011374200.1	APRVAVCLELYPRLQAAFAITTSIMLMHGEQTEPYRYTQLVICTTHQLLKFYHAFDVIIVDEVDADFPPVDNPVLATAVEQA	234
NTDB id 593 KW2 RS05130 WP 021037147.1	SPRIDVCIELHQLRSLRDFTCQ.IPLLYHE.GDSYFRSPLVVMTSHQLLRFKFAFDLLIDEVDADFPPRDNDMLYFALENA	236
NTDB id 223231 A6J87 RS03000 WP 080611551.1	SPRIDVCRELFLRMQRDFTC.SISLLHAE.SEPYDGSPLVATTHQLLKFYQNFDLVIVDEVDADFPPVGNVMLNHAVEQA	225
NTDB id 277 KZH43 RS10090 WP 000867601.1	SPRIDVCLELYKRLQQDFSCG.IALLHGE.SEPYFRTPLVVATTHQLLKFYQAFDILLIVDEVDADFPPVDNPMLYHAVKNS	225
NTDB id 236 SPD RS10765 WP 000867601.1	SPRIDVCLELYKRLQQDFSCG.IALLHGE.SEPYFRTPLVVATTHQLLKFYQAFDILLIVDEVDADFPPVDNPMLYHAVKNS	225
NTDB id 202 SPR RS10250 WP 000867601.1	SPRIDVCLELYKRLQQDFSCG.IALLHGE.SEPYFRTPLVVATTHQLLKFYQAFDILLIVDEVDADFPPVDNPMLYHAVKNS	225
NTDB id 167 SP RS11275 WP 000867616.1	SPRIDVCLELYKRLQQDFSCG.IALLHGE.SEPYFRTPLVVATTHQLLKFYQAFDILLIVDEVDADFPPVDNPMLYHAVKNS	225
NTDB id 507 SM12261 RS09240 WP 000867722.1	SPRIDVCLELYKRLQKDFACE.IALLHGE.SEPYFRTPLVVATTHQLLKFYQAFDILLIVDEVDADFPPVDNPMLYHAVKNS	225
NTDB id 535 SMSK321 RS10515 WP 000867726.1	SPRIDVCLELYKRLQDFAE.IALLHGE.SEPYFRTPLVVSTTHQLLKFYQAFDILLIVDEVDADFPPVDNPMLYHAVKNS	225
consensus	*****!***** *****!***** ********** *****!!!!*****!*****!*****!*****!	

logo

NTDB id 615 LCA RS02545 WP 011374200.1	CKPQCALLYLTATPTPAIKRAIAAKQMTVSELPLRFHGHLLPEPQRHVAFNWRACLKKGRLPKRLERDCQTYLK.TQQIL	313
NTDB id 593 KW2 RS05130 WP 021037147.1	KKINGTLLYLTATSTDKLDKQIKKHEIKRFLPRRFHGHPLVIPMFFWKKTFYKK.....FIEQRKTCFPLL	303
NTDB id 223231 A6J87 RS03000 WP 080611551.1	KKETGRYIYLTATSTLSLEEQVRLGSLEKHHLARFRFHGNPLVLPKFCWQGRLLQKSLMRGKLPRLPLYQIKKQRKSKFPLL	305
NTDB id 277 KZH43 RS10090 WP 000867601.1	VKENGLRIFLTATSTNELDKKVRIGELKRLNLPRRFHGNPLIIPKPIWLSDFNRYLDKNRLSPKLKSYIEKQRKTAAYPLL	305
NTDB id 236 SPD RS10765 WP 000867601.1	VKENGLRIFLTATSTNELDKKVRIGELKRLNLPRRFHGNPLIIPKPIWLSDFNRYLDKNRLSPKLKSYIEKQRKTAAYPLL	305
NTDB id 202 SPR RS10250 WP 000867601.1	VKENGLRIFLTATSTNELDKKVRIGELKRLNLPRRFHGNPLIIPKPIWLSDFNRYLDKNRLSPKLKSYIEKQRKTAAYPLL	305
NTDB id 167 SP RS11275 WP 000867616.1	VKENGLRIFLTATSTNELDKKVRIGELKRLNLPRRFHGNPLIIPKPIWLSDFNRYLDKNRLSPKLKSYIEKQRKTAAYPLL	305
NTDB id 507 SM12261 RS09240 WP 000867722.1	VKENGLRIFLTATSTDDELDRKVRIGELKRLSLPRRFHGNPLIIPKPVWLSDFNHCLEKSRLSPKLKSYIEKQRKTCYPLL	305
NTDB id 535 SMSK321 RS10515 WP 000867726.1	VKENGLRIFLTATSTDDELDRKVRIGELKRLSLPRRFHGNPLIIPKPVWLSDFNRYLEKKCLSPKLKSYIEKQRKTCYPLL	305
consensus	*****!***** ********** *****!!!!*****!***** **********!*****!	

```
NTDB id 615 LCA RS02545 WP 011374200.1
NTDB id 593 KW2 RS05130 WP 021037147.1
NTDB id 223231 A6J87 RS03000 WP 080611551.1
NTDB id 277 KZH43 RS10090 WP 000867601.1
NTDB id 236 SPD RS10765 WP 000867601.1
NTDB id 202 SPR RS10250 WP 000867601.1
NTDB id 167 SP RS11275 WP 000867616.1
NTDB id 507 SM12261 RS09240 WP 000867722.1
NTDB id 535 SMSK321 RS10515 WP 000867726.1
consensus
```



```
NTDB id 615 LCA RS02545 WP 011374200.1
NTDB id 593 KW2 RS05130 WP 021037147.1
NTDB id 223231 A6J87 RS03000 WP 080611551.1
NTDB id 277 KZH43 RS10090 WP 000867601.1
NTDB id 236 SPD RS10765 WP 000867601.1
NTDB id 202 SPR RS10250 WP 000867601.1
NTDB id 167 SP RS11275 WP 000867616.1
NTDB id 507 SM12261 RS09240 WP 000867722.1
NTDB id 535 SMSK321 RS10515 WP 000867726.1
consensus
```



-  non conserved
-  similar
-  $\geq 50\%$ conserved