

logo

NTDB id 615 LCA RS02545 WP 011374200.1	..MGQQVVIACGRQFTAAQLADTQNN...NYSLPQIKRPAFLRVKHLRIVCQRCQVVP.PQTCLPDGRHYCAQCCLLFGR	74
NTDB id 593 KW2 RS05130 WP 021037147.1	MNLILENLLCHLLEKDISAFNFTDQVNNENKLIKIGAMTSVNANKVRCNRCGIIHKTNVKLPIGAFFCPTCLELGRV	80
NTDB id 41359 HMPREF0833 RS00015 WP 013903170.1	..MKI..EDSYGRLLTESQMT.....NDLKKIALELPAIEKQNGRYQCFCRCGLTDQKLWKLSEEVLVCRACIQLGRI	69
NTDB id 277 KZH43 RS10090 WP 000867601.1	..MKVNLDYLGRFLTENELT.....EEERQLAEKLPAMRKEKGKLFQCRCNSTIL..EEWYLPIGAYYCRECLLMKRV	69
NTDB id 236 SPD RS10765 WP 000867601.1	..MKVNLDYLGRFLTENELT.....EEERQLAEKLPAMRKEKGKLFQCRCNSTIL..EEWYLPIGAYYCRECLLMKRV	69
NTDB id 202 SPR RS10250 WP 000867601.1	..MKVNLDYLGRFLTENELT.....EEERQLAEKLPAMRKEKGKLFQCRCNSTIL..EEWYLPIGAYYCRECLLMKRV	69
NTDB id 167 SP RS11275 WP 000867616.1	..MKVNLDYLGRFLTENELT.....EEERQLAEKLPAMRKEKGKLFQCRCNSTIL..EEWYLPIGAYYCRECLLMKRV	69
NTDB id 507 SM12261 RS09240 WP 000867722.1	..MKVNPVYLGRFLTENELT.....EEERQLAEKLPAMRKEKGKLFQCRCNSTIL..EEWYLPIGAYYCRECLLMKRV	69
NTDB id 535 SMSK321 RS10515 WP 000867726.1	..MKVNPVYLGRFLTENELT.....KEERQLAEKLPAMRKEKGKLFQCRCDSAIL..DEWYLPIGAYYCRECLLMKRV	69
consensus	*****!*****	

logo

NTDB id 615 LCA RS02545 WP 011374200.1	VEGDWLYTVPECHLFENNIPKLTWEGQLTPHQEKAAQAVVEVVTQTKRHVLTAVTGAGKTEMLEFQGLVALQKQQRVCLA	154
NTDB id 593 KW2 RS05130 WP 021037147.1	RSDYFYHLPPQDFPEK..TYLRWTGKLTENQEKISDALCQQTITNNQKLLVQAVTGAGKTEMIYQLIEQILSHGGSVGLA	158
NTDB id 41359 HMPREF0833 RS00015 WP 013903170.1	RSDQKLYTIAQQDFEGQ..EVLNWKGTILTSYQQEVSDGLIQAQVKEGNAVLHAVTGAGKTEMIYQVVATAIKSGQAVCI	147
NTDB id 277 KZH43 RS10090 WP 000867601.1	RSDQTLYYFPQEDFPKQ..DVLKWRGQLTPFQEKVSEGLLQAVDKQKPTLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA	147
NTDB id 236 SPD RS10765 WP 000867601.1	RSDQTLYYFPQEDFPKQ..DVLKWRGQLTPFQEKVSEGLLQAVDKQKPTLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA	147
NTDB id 202 SPR RS10250 WP 000867601.1	RSDQTLYYFPQEDFPKQ..DVLKWRGQLTPFQEKVSEGLLQAVDKQKPTLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA	147
NTDB id 167 SP RS11275 WP 000867616.1	RSDQTLYYFPQEDFPKQ..DVLKWRGQLTPFQEKVSEGLLQAVDKQKPTLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA	147
NTDB id 507 SM12261 RS09240 WP 000867722.1	RSDQSLYYFPQEDFPKQ..DVLKWRGQLTPFQDKVSGLLQAVDKQEPSLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA	147
NTDB id 535 SMSK321 RS10515 WP 000867726.1	RSDQVLYYFPQEDFAKQ..DILKWRGQLTPFQEKVSEGLIQAQVDKQEPILVHAVTGAGKTEMIYQVVAKVINAGGAVCLA	147
consensus	*****	

logo

NTDB id 615 LCA RS02545 WP 011374200.1	APRVAVCLELYPRLQAFAFATTSIMLMHGEQTEPYRYTQLVICTTHQLLKFYHAFDITVIVDEVDADFPEVDNPVLATAVEQA	234
NTDB id 593 KW2 RS05130 WP 021037147.1	SPRIDVCIELHQRLSRDFICQ..IPLLYHE.GDSYFRSPLVMTSHQLIRFKEAFDILLIDEVDADFPERDNDMLYFALENA	236
NTDB id 41359 HMPREF0833 RS00015 WP 013903170.1	TPRIDVCLELYGRMKDQDFSCG..ISLLHGK..SEPYFRTPLVATTHQLLKFFQAFDILLIDEVDADFVVDNPILYKAAQNA	225
NTDB id 277 KZH43 RS10090 WP 000867601.1	SPRIDVCLELYKRLQQDFSCG..IALLHGE..SEPYFRTPLVVATTHQLLKFFQAFDILLIDEVDADFVVDNPMLYHAVKNS	225
NTDB id 236 SPD RS10765 WP 000867601.1	SPRIDVCLELYKRLQQDFSCG..IALLHGE..SEPYFRTPLVVATTHQLLKFFQAFDILLIDEVDADFVVDNPMLYHAVKNS	225
NTDB id 202 SPR RS10250 WP 000867601.1	SPRIDVCLELYKRLQQDFSCG..IALLHGE..SEPYFRTPLVVATTHQLLKFFQAFDILLIDEVDADFVVDNPMLYHAVKNS	225
NTDB id 167 SP RS11275 WP 000867616.1	SPRIDVCLELYKRLQQDFSCG..IALLHGE..SEPYFRTPLVVATTHQLLKFFQAFDILLIDEVDADFVVDNPMLYHAVKNS	225
NTDB id 507 SM12261 RS09240 WP 000867722.1	SPRIDVCLELYKRLQKDFACE..IALLHGE..SEPYFRTPLVVATTHQLLKFFQAFDILLIDEVDADFVVDNPMLYHAVKNS	225
NTDB id 535 SMSK321 RS10515 WP 000867726.1	SPRIDVCLELYKRLQKDFACE..ISLLYGE..SEPYFRTPLVVSTTHQLLKFFQAFDILLIDEVDADFVVDNPMLYHAVKNS	225
consensus	*!!!!!!*	

logo

NTDB id 615 LCA RS02545 WP 011374200.1	CKPICALLYLTATPTPAIKRAIAAKQMTVSELPFRFHGHLPEPQRHVAFNWARAQLKKGRLPKRLERDCQTYLK.TQQIL	313
NTDB id 593 KW2 RS05130 WP 021037147.1	KKINGTILLYLTATSTDKLDKQIKKHEIKRIFLPRRFHGHPLVIPMFFWKKTFYKK.....FIEQRKTCFPLL	303
NTDB id 41359 HMPREF0833 RS00015 WP 013903170.1	IKKGGNTLYLTATSTDDELDDKKVKKEIIRYSLPRRFHGNPLVVPKIREKIEKGRIPYELLQLIKKQRQTHYPLL	305
NTDB id 277 KZH43 RS10090 WP 000867601.1	VKENGLRIFLTATSTNELDKKVRGELKRLNLPFRFHGNPLIIPKPIWLSDFNRYLDKNRLSPKLKSYIEKQRKTAAYPLL	305
NTDB id 236 SPD RS10765 WP 000867601.1	VKENGLRIFLTATSTNELDKKVRGELKRLNLPFRFHGNPLIIPKPIWLSDFNRYLDKNRLSPKLKSYIEKQRKTAAYPLL	305
NTDB id 202 SPR RS10250 WP 000867601.1	VKENGLRIFLTATSTNELDKKVRGELKRLNLPFRFHGNPLIIPKPIWLSDFNRYLDKNRLSPKLKSYIEKQRKTAAYPLL	305
NTDB id 167 SP RS11275 WP 000867616.1	VKENGLRIFLTATSTNELDKKVRGELKRLNLPFRFHGNPLIIPKPIWLSDFNRYLDKNRLSPKLKSYIEKQRKTAAYPLL	305
NTDB id 507 SM12261 RS09240 WP 000867722.1	VKENGLRIFLTATSTDELDRKVRIGELKRLSLPRRFHGNPLIIPKPIWLSDFNRYLDKNRLSPKLKSYIEKQRKTAAYPLL	305
NTDB id 535 SMSK321 RS10515 WP 000867726.1	VKENGLRIFLTATSTDELDRKVRIGELKRLSLPRRFHGNPLIIPKPIWLSDFNRYLDKNRLSPKLKSYIEKQRKTAAYPLL	305
consensus	*!!!!!!*	

```
NTDB id 615 LCA RS02545 WP 011374200.1
NTDB id 593 KW2 RS05130 WP 021037147.1
NTDB id 41359 HMPREF0833 RS00015 WP 013903170.1
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 41359 HMPREF0833 RS00015 WP 013903170.1
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
```

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