logo

```
NTDB id 615 LCA RS02545 WP 011374200.1          .MGQQVIACGRQFTAAQLADTQNNNY....SLPQIKRRPAFLRVKHRLVCQRCQQ.VVPPQTCLPDGRHYCAQCLLFGRL   74
NTDB id 593 KW2 RS05130 WP 021037147.1          MNLILENLLGHLLLEKDISAFNNFTDQVNNENKLIKIGAMTSVNANKVRCNRCGTIHIKTNVKLPIGAFFCPTCLELGRV   80
NTDB id 978921 MGAS37824 RS06725 WP 010922534.1 .MESIENSYGRLLLESQLPDSA.........KQLAQPLKSVVILRGKMICQRCHY.QLDEEARLPSGAYYCRFCLVFGRN   69
NTDB id 277 KZH43 RS10090 WP 000867601.1        .MKVNLDYLGRLFTENELTEEE.........RQLAEKLPAMRKEKGKLFCQRCNS.TILEEWYLPIGAYYCRECLLMKRV   69
NTDB id 236 SPD RS10765 WP 000867601.1          .MKVNLDYLGRLFTENELTEEE.........RQLAEKLPAMRKEKGKLFCQRCNS.TILEEWYLPIGAYYCRECLLMKRV   69
NTDB id 202 SPR RS10250 WP 000867601.1          .MKVNLDYLGRLFTENELTEEE.........RQLAEKLPAMRKEKGKLFCQRCNS.TILEEWYLPIGAYYCRECLLMKRV   69
NTDB id 167 SP RS11275 WP 000867616.1           .MKVNLDYLGRLFTENELTEEE.........RQLAEKLPAMRKEKGKLFCQRCNS.TILEEWYLPIGAYYCRECLLMKRV   69
NTDB id 507 SM12261 RS09240 WP 000867722.1      .MKVNPNYLGRLFTENELTEEE.........RQLAEKLPAMRKEKGKLFCQRCNS.TILEEWYLPIGTYYCRECLLMKRV   69
NTDB id 535 SMSK321 RS10515 WP 000867726.1      .MKVNPNYLGRLFTENELTKEE.........RQLAEKLPAMRKEKGKLFCQRCDS.AILDEWYLPIGAYYCRECLLMKRV   69
consensus                                        *****  **!**********          ******************!*!!** *******!!*!***!**!!***!*
```

logo

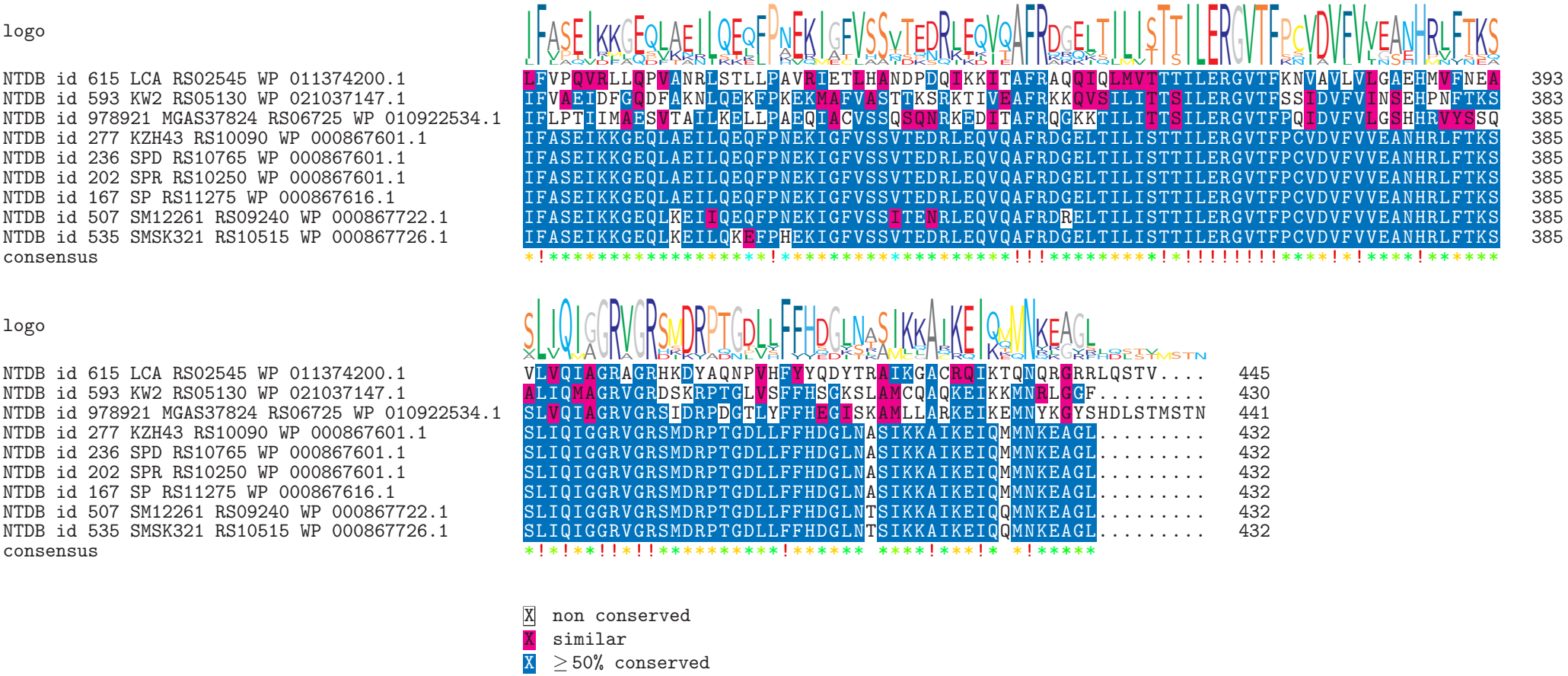
```
NTDB id 615 LCA RS02545 WP 011374200.1          VEGDWLYTVPECHLFENNIPKLTWEGQLTPHQEKAAQAVVEVVQTQKRHVLTAVTGAGKTEMLFQGILVALQKGQRVCLA  154
NTDB id 593 KW2 RS05130 WP 021037147.1          RSDEYFYHLPQQDFPEKT..YLRWTGKLTENQEKISDALCQQITNNQKLLVQAVTGAGKTEMIYQLIEQILSHGGSVGLA  158
NTDB id 978921 MGAS37824 RS06725 WP 010922534.1 QSDKLLYAIPPMHFPKGN..YLVWGGQLTAYQEMISQQLLINMQNQKTTLVHAVTGAGKTEMIYAAIEAVINTGGWVCIA  147
NTDB id 277 KZH43 RS10090 WP 000867601.1        RSDQTLYYFPQEDFPKQD..VLKWRGQLTPFQEKVSEGLLQAVDKQKPTLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA  147
NTDB id 236 SPD RS10765 WP 000867601.1          RSDQTLYYFPQEDFPKQD..VLKWRGQLTPFQEKVSEGLLQAVDKQKPTLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA  147
NTDB id 202 SPR RS10250 WP 000867601.1          RSDQTLYYFPQEDFPKQD..VLKWRGQLTPFQEKVSEGLLQAVDKQKPTLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA  147
NTDB id 167 SP RS11275 WP 000867616.1           RSDQTLYYFPQEDFPKQD..VLKWRGQLTPFQEKVSEGLLQVVDKQKPTLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA  147
NTDB id 507 SM12261 RS09240 WP 000867722.1      RSDQSLYYFPQEDFPKQD..VLKWRGQLTPFQDKVSQGLLQAVDKQEPSLVHAVTGAGKTEMIYQVVAKVINAGGAVCLA  147
NTDB id 535 SMSK321 RS10515 WP 000867726.1      RSDQVLYYFPQEDFAKQD..ILKWRGQLTPFQEKVSEGLIQAVDKQEPILVHAVTGAGKTEMIYQVVAKVINAGGAVCLA  147
consensus                                       ******!**!********  *!*!*!*!!**!**********************!!!!!!!!!!**********!**!**!
```

logo

```
NTDB id 615 LCA RS02545 WP 011374200.1          APRVAVCLELYPRLQAAFATTSIMLMHGEQTEPYRYTQLVICTTHQLLKFYHAFDTVIVDEVDAFPFVDNPVLATAVEQA  234
NTDB id 593 KW2 RS05130 WP 021037147.1          SPRIDVCIELHQRLSRDFTC.QIPLLYHE.GDSYFRSPLVVMTSHQLLRFKEAFDLLIIDEVDAFPFRDNDMLYFALENA  236
NTDB id 978921 MGAS37824 RS06725 WP 010922534.1 SPRVDVCVEVATRLSQAFSC.SICLMHAE.SLPYQRAPIIVATTHQLLKFHKAFDLLIIDEVDAFPFVNNIQLHYAASQA  225
NTDB id 277 KZH43 RS10090 WP 000867601.1        SPRIDVCLELYKRLQQDFSC.GIALLHGE.SEPYFRTPLVVATTHQLLKFYQAFDLLIVDEVDAFPYVDNPMLYHAVKNS  225
NTDB id 236 SPD RS10765 WP 000867601.1          SPRIDVCLELYKRLQQDFSC.GIALLHGE.SEPYFRTPLVVATTHQLLKFYQAFDLLIVDEVDAFPYVDNPMLYHAVKNS  225
NTDB id 202 SPR RS10250 WP 000867601.1          SPRIDVCLELYKRLQQDFSC.GIALLHGE.SEPYFRTPLVVATTHQLLKFYQAFDLLIVDEVDAFPYVDNPMLYHAVKNS  225
NTDB id 167 SP RS11275 WP 000867616.1           SPRIDVCLELYKRLQQDFSC.GIALLHGE.SEPYFRTPLVVATTHQLLKFYQAFDLLIVDEVDAFPYVDNPMLYHAVKNS  225
NTDB id 507 SM12261 RS09240 WP 000867722.1      SPRIDVCLELYKRLQKDFAC.EIALLHGE.SEPYFRTPLVVATTHQLLKFYQAFDLLIVDEVDAFPYVDNPMLYHAVKNS  225
NTDB id 535 SMSK321 RS10515 WP 000867726.1      SPRIDVCLELYKRLQDDFAC.EISLLYGE.SEPYFRTPLVVSTTHQLLKFYQAFDLLIVDEVDAFPYVDNPMLYHAVKNS  225
consensus                                       *!!**!!*!***!!***!**  !*!***! ***!********!*!!!!*!**!!!**!*!!!!!!!***!**!**!****
```

logo

```
NTDB id 615 LCA RS02545 WP 011374200.1          CKPQCALLYLTATPTPAIKRAIAAKQMTVSELPLRFHGHLLPEPQRHVAFNWRAQLKKGRLPKRLERDCQTYLK.TQQIL  313
NTDB id 593 KW2 RS05130 WP 021037147.1          KKINGTLLYLTATSTDKLDKQIKKHEIKRLFLPRRFHGHPLVIPMFFWKKTFYKK..............FIEQRKTGFPLL  303
NTDB id 978921 MGAS37824 RS06725 WP 010922534.1 LKEGGAKILLTATSTRTLERKVNKGEVVKLTLARRFHNRPLVIPKFIRSFNLFKMIHRQKLPLKILKYLKKQRKTGYPLL  305
NTDB id 277 KZH43 RS10090 WP 000867601.1        VKENGLRIFLTATSTNELDKKVRLGELKRLNLPRRFHGNPLIIPKPIWLSDFNRYLDKNRLSPKLKSYIEKQRKTAYPLL  305
NTDB id 236 SPD RS10765 WP 000867601.1          VKENGLRIFLTATSTNELDKKVRLGELKRLNLPRRFHGNPLIIPKPIWLSDFNRYLDKNRLSPKLKSYIEKQRKTAYPLL  305
NTDB id 202 SPR RS10250 WP 000867601.1          VKENGLRIFLTATSTNELDKKVRLGELKRLNLPRRFHGNPLIIPKPIWLSDFNRYLDKNRLSPKLKSYIEKQRKTAYPLL  305
NTDB id 167 SP RS11275 WP 000867616.1           VKENGLRIFLTATSTNELDKKVRLGELKRLNLPRRFHGNPLIIPKPIWLSDFNRYLDKNRLSPKLKSYIEKQRKTAYPLL  305
NTDB id 507 SM12261 RS09240 WP 000867722.1      VKENGLRIFLTATSTDELDRKVRIGELKRLSLPRRFHGNPLIIPKPVWLSDFNHCLEKSRLSPKLKSYIEKQRKTGYPLL  305
NTDB id 535 SMSK321 RS10515 WP 000867726.1      VKENGLRIFLTATSTDELDRKVRIGELKRLSLPRRFHGNPLIIPKPVWLSDFNRYLEKKCLSPKLKSYIEKQRKTGYPLL  305
consensus                                       *!*******!!!!*!  ********************  !**!!!***!**!**********************!*****!
```


logo
NTDB id 615 LCA RS02545 WP 011374200.1 LFVPQVRLLQPVANRLSTLLPAVRIETLHANDPDQIKKITAFRAQQIQLMVTTTILERGVTFKNVAVLVLGAEHMVFNEA 393
NTDB id 593 KW2 RS05130 WP 021037147.1 IFVAEIDFGQDFAKNLQEKFPKEKMAFVASTTKSRKTIVEAFRKKQVSILITTSILERGVTFSSIDVFVINSEHPNFTKS 383
NTDB id 978921 MGAS37824 RS06725 WP 010922534.1 IFLPTIIMAESVTAILKELLPAEQIACVSSQSQNRKEDITAFRQGKKTILITTSILERGVTFPQIDVFVLGSHHRVYSSQ 385
NTDB id 277 KZH43 RS10090 WP 000867601.1 IFASEIKKGEQLAEILQEQFPNEKIGFVSSVTEDRLEQVQAFRDGELTILISTTILERGVTFPCVDVFVVEANHRLFTKS 385
NTDB id 236 SPD RS10765 WP 000867601.1 IFASEIKKGEQLAEILQEQFPNEKIGFVSSVTEDRLEQVQAFRDGELTILISTTILERGVTFPCVDVFVVEANHRLFTKS 385
NTDB id 202 SPR RS10250 WP 000867601.1 IFASEIKKGEQLAEILQEQFPNEKIGFVSSVTEDRLEQVQAFRDGELTILISTTILERGVTFPCVDVFVVEANHRLFTKS 385
NTDB id 167 SP RS11275 WP 000867616.1 IFASEIKKGEQLAEILQEQFPNEKIGFVSSVTEDRLEQVQAFRDGELTILISTTILERGVTFPCVDVFVVEANHRLFTKS 385
NTDB id 507 SM12261 RS09240 WP 000867722.1 IFASEIKKGEQLKEIIQEQFPNEKIGFVSSITENRLEQVQAFRDRELTILISTTILERGVTFPCVDVFVVEANHRLFTKS 385
NTDB id 535 SMSK321 RS10515 WP 000867726.1 IFASEIKKGEQLKEILQKEFPHEKIGFVSSVTEDRLEQVQAFRDGELTILISTTILERGVTFPCVDVFVVEANHRLFTKS 385
consensus
logo
NTDB id 615 LCA RS02545 WP 011374200.1 VLVQIAGRAGRHKDYAQNPVHFYYQDYTRAIKGACRQIKTQNQRGRRLQSTV.... 445
NTDB id 593 KW2 RS05130 WP 021037147.1 ALIQMAGRVGRDSKRPTGLVSFFHSGKSLAMCQAQKEIKKMNRLGGF..... 430
NTDB id 978921 MGAS37824 RS06725 WP 010922534.1 SLVQIAGRVGRSIDRPDGTLYFFHEGISKAMLLARKEIKEMNYKGYSHDLSTMSTN 441
NTDB id 277 KZH43 RS10090 WP 000867601.1 SLIQIGGRVGRSMDRPTGDLLFFHDGLNASIKKAIKEIQMMNKEAGL..... 432
NTDB id 236 SPD RS10765 WP 000867601.1 SLIQIGGRVGRSMDRPTGDLLFFHDGLNASIKKAIKEIQMMNKEAGL..... 432
NTDB id 202 SPR RS10250 WP 000867601.1 SLIQIGGRVGRSMDRPTGDLLFFHDGLNASIKKAIKEIQMMNKEAGL..... 432
NTDB id 167 SP RS11275 WP 000867616.1 SLIQIGGRVGRSMDRPTGDLLFFHDGLNASIKKAIKEIQMMNKEAGL..... 432
NTDB id 507 SM12261 RS09240 WP 000867722.1 SLIQIGGRVGRSMDRPTGDLLFFHDGLNTSIKKAIKEIQQMNKEAGL..... 432
NTDB id 535 SMSK321 RS10515 WP 000867726.1 SLIQIGGRVGRSMDRPTGDLLFFHDGLNTSIKKAIKEIQQMNKEAGL..... 432
consensus
X non conserved
X similar
X ≥ 50% conserved