**Table S11.** NCBI accession numbers of proteins from the biotin biosynthesis pathway used for a concatenated data set for the calculation of a phylogenetic tree with the maximum likelihood algorithm

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **organism** | **BioA** | **BioD** | **BioC** | **BioH** | **BioF** | **BioB** |
| *Cardinium hertigii c*Eper1 | CAHE\_0564 | CAHE\_0563 | CAHE\_0562 | CAHE\_0561 | CAHE\_0560 | CAHE\_0559 |
| *Rickettsia* endosymbiont of *Ixodes scapularis* | ZP\_04698248 | ZP\_04698249 | ZP\_04698250 | ZP\_04698251 | ZP\_04698252 | ZP\_04698253 |
| *Lawsonia intracellularis* str. PHE/MN1-00 | YP\_594802 | YP\_594801 | YP\_594800 | YP\_594799 | YP\_594798 | YP\_594797 |
| *Neorickettsia risticii* str. Illinois | YP\_003081804 | YP\_003081804 | YP\_003081802 | YP\_003081801 | YP\_003081800 | YP\_003081798 |
| *Neorickettsia sennetsu* str. Miyayama | YP\_506498 | YP\_506497 | YP\_506495 | YP\_506494 | YP\_506493 | YP\_506492 |
| *Magnetospirillum magneticum* str. AMB-1 | YP\_422126 | YP\_422125 | YP\_422124 | YP\_422123 | YP\_422122 | YP\_422120 |
| *Achromobacter piechaudii* str. ATCC 43553 | ZP\_06685978 | ZP\_06685981 | ZP\_06685981 | ZP\_06685980 | ZP\_06685979 | ZP\_06689510 |
| *Bordetella pertussis Bordetella pertussis* | NP\_880815 | NP\_880812 | NP\_880812 | NP\_880813 | NP\_880814 | NP\_881326 |
| *Gluconacetobacter diazotrophicus* str. PAl 5 | YP\_001602164 | YP\_001602164 | YP\_001602167 | YP\_001602166 | YP\_001602165 | YP\_001603186 |
| *Crocosphaera watsonii* str. WH 8501 | ZP\_00514990 | ZP\_00515520 | ZP\_00515866 | ZP\_00515865 | ZP\_00515864 | ZP\_00514954 |
| *Nitrococcus mobilis* str. Nb-231 | ZP\_01125956 | ZP\_01125955 | ZP\_01127180 | ZP\_01128606 | ZP\_01128607 | ZP\_01127181 |
| *Cyanothece* sp. ATCC 51142 | YP\_001804508 | YP\_001804930 | YP\_001805563 | YP\_001805564 | YP\_001805565 | YP\_001805764 |
| *Zymomonas mobilis* subsp. mobilis ZM4 | YP\_163653 | YP\_163650 | YP\_163650 | YP\_163651 | YP\_163652 | YP\_161829 |
| *Legionella pneumophila* | YP\_123751 | YP\_123755 | YP\_124590 | YP\_123754 | YP\_123753 | YP\_123752 |
| *Parachlamydia acanthamoebae* str. Hall's coccus | ZP\_06299038 | ZP\_06299039 | ZP\_06299041 | ZP\_06300545 | ZP\_06299042 | ZP\_06300151 |
| *Escherichia coli* str. K-12 substr. MG1655 | NP\_415295 | NP\_415299 | NP\_415298 | NP\_417871 | NP\_415297 | NP\_415296 |
| *Kurthia* sp. 538-KA26 | BAB39453 | BAB39454 | BAB39463 | BAB39462 | BAB39461 | BAB39458 |
| *Neisseria meningitidis* str. MC58 | NP\_273774 | NP\_273775 | NP\_273521 | NP\_273326 | NP\_273519 | NP\_274174 |
| *Pseudomonas aeruginosa* str. PAO1 | NP\_249111 | NP\_249195 | NP\_249194 | NP\_249193 | NP\_249192 | NP\_249191 |
| *Vibrio cholerae* str. B33 | ZP\_04400515 | ZP\_04400519 | ZP\_04400518 | ZP\_04399326 | ZP\_04400517 | ZP\_04400516 |
| *Xylella fastidiosa* str. 9a5c | NP\_297482 | NP\_299755 | NP\_299378 | NP\_298645 | NP\_298646 | NP\_297357 |
| *Anaplasma centrale* str. Israel | YP\_003328623 | YP\_003328228 | YP\_003328117 | - | YP\_003328822 | YP\_003328325 |
| *Ehrlichia ruminantium* str. Gardel | YP\_196321 | YP\_196818 | YP\_195935 | - | YP\_196094 | YP\_196599 |