

**Table 2.** Genomic inventory of ε-Proteobacteria

|   | <i>Sulfurovum</i> sp.<br>NBC37-1   | <i>Nitratiruptor</i> sp.<br>SB155-2   | <i>Helicobacter pylori</i><br>26695                | <i>Campylobacter jejuni</i><br>NCTC11168           | <i>Wolinella</i><br><i>succinogenes</i><br>DSM1740      |
|---|--|---|--|--|---|
| Hydrogenase type                                  | H <sub>2</sub> -uptake (2 copies),<br>H <sub>2</sub> -sensing,<br>H <sub>2</sub> -evolving | H <sub>2</sub> -uptake,<br>H <sub>2</sub> -sensing,<br>H <sub>2</sub> -evolving | H <sub>2</sub> -uptake                             | H <sub>2</sub> -uptake                             | H <sub>2</sub> -uptake,<br>H <sub>2</sub> -evolving     |
| Sulphur-compounds oxidation genes                 | <i>sorAB</i> (2 copies), <i>sqr</i><br>(2 copies), <i>soxXYZAB</i> ,<br><i>soxCDYZH</i>    | <i>sqr</i> (2 copies),<br><i>soxXYZAB</i> , <i>soxFLYZ</i>                      | -  | -  | -   |
| Sensory systems                                   |  |   |  |  |   |
| Chemotaxis proteins (Che)                         | -  | 12 genes  | 6 genes  | 6 genes  | 10 genes  |
| Methyl-accepting chemotaxis proteins (MCPs)       | -  | 6 genes   | 3 genes  | 10 genes   | 31 genes  |
| Two-component signal transduction system (TCSTs)* | 16 HKs, 18 RRs   | 26 HKs, 36 RRs  | 4 HKs, 6 RRs                                       | 7 HKs, 12 RRs                                      | 39 HKs, 52 RRs  |
| PAS-GGDEF system                                  | 23 genes   | 36 genes  | -  | 3 genes  | 24 genes  |
| Oxidative stress                                  |  |   |  |  |   |
| Superoxide dismutase                              | -  | -   | +  | +  | +   |
| Catalase  | +  | -   | +  | +  | -   |
| Cytochrome c peroxidase                           | + (4 copies)   | + (5 copies)  | +  | + (2 copies)                                       | +   |
| Thiol peroxidase                                  | +  | +   | +  | +  | +   |
| Alkyl hydroperoxide reductase                     | + (6 copies)   | + (5 copies)  | -  | +  | + (2 copies)  |
| Heavy metal transport                             | 22 genes (for Ni, Fe,<br>Zn, Mn, Co, Cd, Cu,<br>As, Mo, Hg, Ag)                            | 17 genes (for Ni, Fe,<br>Zn, Mn, Co, Cd, Cu,<br>As, Mo, Hg, Ag)                 | 8 genes (for Ni, Fe,<br>Zn, Co, Cd, Cu, Mo,<br>Hg) | 9 genes (for Fe, Zn,<br>Mn, Co, Cd, Mo, Hg,<br>As) | 15 genes (for Ni, Fe,<br>Zn, Mn, Co, Cd, Cu,<br>As, Mo) |
| Virulence factors                                 |  |   |  |  |   |
| Vacuolating cytotoxins                            | -  | -   | +  | +  | +   |
| Cytolytic-distending toxin                        | -  | -   | -  | +  | -   |
| Neutrophil-activating protein                     | +  | +   | +  | +  | +   |
| Virulence factor MviN                             | +  | +   | +  | +  | +   |
| Hemolysin   | +  | +   | +  | +  | +   |
| Fibronectin- and Fibrionogen-binding protein      | +  | +   | +  | +  | +   |
| Polysaccharide biosynthesis                       | +  | +   | +  | +  | +   |
| <i>N</i> -linked glycosylation pathway            | +  | +   | -  | +  | +   |
| Invasion antigen CiaB                             | +  | +   | -  | +  | +   |
| Lytic murein transglycosylase                     | +  | +   | +  | +  | +   |
| Urease gene cluster                               | -  | -   | +  | -  | -   |

\*Gene numbers of histidine kinase (HK) and response regulator (RR) were shown.