**Table S4.** Bacterial strains used in this study and their relevant genotypes.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Strain** |  | | **Relevant genotype or characteristics** | **Reference** |
| **NEB10β** | | *E. coli* | *recA1 endA1 rpsL* Φ80(*lacZ*ΔM15) | NEB |
| **CM502** | | *M. extorquens* | *crtI502* | [S2] |
| **CM701** | | *M. extorquens* | Δ*mptG* / pCM410 | [23] |
| **CM1145** | | *M. extorquens* | Δ*mptG crtI502 gshAEVO pntABEVO* *icuABEVO*/ pCM410.1145 [*fghAEVO*] | [23] |
| **CM1175** | | *M. extorquens* | Δ*katA*::[*loxP*-*trrnB*-*PtacA*-*mCherry-tT7*] | [37] |
| **CM1290** | | *M. extorquens* | Δ*mptG crtI502 pntAEVO* | [23] |
| **CM1298** | | *M. extorquens* | Δ*mptG crtI502 gshAEVO* | [23] |
| **CM3137a** | | *M. extorquens* | CM1290 *mptGWT* | This work |
| **CM3138a** | | *M. extorquens* | CM1298 *mptGWT* | This work |
| **CM3277** | | *M. extorquens* | CM502 / pCM410.1145 [*fghAEVO*] | This work |
| **CM3943** | | *M. extorquens* | CM1175 / pCM410 | This work |

a. The wild-type *mptG* allele was restored into the respective strains using pCM436 following the sucrose counter-selection method described by C.J. Marx [S2]