

Supplementary Table S1. Bacterial species with less than 1% of relative abundance observed in the culture sample.

| Classis | Genus | Relative abundance (%) |
|--------------------------|---|------------------------|
| α -Proteobacteria | <i>Roseomonas</i> | 0.69 |
| | <i>Aureimonas</i> | 0.49 |
| | <i>Rubellimicrobium</i> | 0.47 |
| | <i>Mitochondria</i> | 0.45 |
| | <i>Craurococcus/Caldovatus</i> | 0.43 |
| | <i>Belnapia</i> | 0.33 |
| | <i>Allorhizobium/Neorhizobium/Pararhizobium/Rhizobium</i> | 0.30 |
| | <i>Erythrobacter</i> | 0.27 |
| | <i>Reyranella</i> | 0.26 |
| | <i>Novosphingobium</i> | 0.16 |
| | <i>Brevundimonas</i> | 0.13 |
| | <i>Microvirga</i> | 0.09 |
| | <i>Paracoccus</i> | 0.08 |
| | <i>Rubritepida</i> | 0.07 |
| | <i>Maribius</i> | 0.06 |
| | <i>Psychroglaciecola</i> | 0.06 |
| | <i>Skermanella</i> | 0.04 |
| | <i>Devosia</i> | 0.03 |
| γ -Proteobacteria | <i>Pantoea</i> | 0.43 |
| | <i>Noviherbspirillum</i> | 0.35 |
| | <i>Escherichia/Shigella</i> | 0.13 |
| | <i>Duganella</i> | 0.09 |
| | <i>Limnobacter</i> | 0.08 |
| | <i>Aquabacterium</i> | 0.06 |
| | <i>Lysobacter</i> | 0.05 |
| | <i>Legionella</i> | 0.01 |
| | <i>Acidibacter</i> | 0.01 |
| Abditibacteria | <i>Abditibacterium</i> | 0.07 |
| Acidimicrobia | <i>Iamia</i> | 0.01 |
| Acidobacteriae | <i>Bryobacter</i> | 0.02 |
| Actinobacteria | <i>Modestobacter</i> | 0.45 |
| | <i>Klenkia</i> | 0.26 |

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| | <i>Blastococcus</i> | 0.18 |
| | <i>Actinomycetospora</i> | 0.14 |
| | <i>Nocardiooides</i> | 0.04 |
| | <i>Quadrisphaera</i> | 0.02 |
| Armatimonadia | <i>Armatimonadales</i> | 0.67 |
| Bacilli | <i>Bacillus</i> | 0.19 |
| Bacteroidia | <i>Spirosoma</i> | 0.44 |
| | <i>Chryseobacterium</i> | 0.27 |
| | <i>Rhodocytophaga</i> | 0.24 |
| | <i>Asinibacterium</i> | 0.18 |
| | <i>Fibrella</i> | 0.10 |
| | <i>Pontibacter</i> | 0.07 |
| | <i>Adhaeribacter</i> | 0.07 |
| | <i>Flavobacterium</i> | 0.07 |
| | <i>Flavisolibacter</i> | 0.06 |
| | <i>Edaphobaculum</i> | 0.04 |
| | <i>Gramella</i> | 0.02 |
| | <i>Lewinella</i> | 0.02 |
| Bdellovibrionia | <i>Peredibacter</i> | 0.01 |
| Blastocatellia | <i>Blastocatella</i> | 0.42 |
| Clostridia | <i>Sporacetigenium</i> | 0.01 |
| Cyanobacteriia | <i>Chloroplast</i> | 0.98 |
| | <i>Calothrix</i> | 0.59 |
| | <i>Leptolyngbya</i> | 0.11 |
| | <i>Mastigocladopsis</i> | 0.07 |
| | <i>Pleurocapsa</i> | 0.01 |
| Deinococci | <i>Deinococcus</i> | 0.66 |
| | <i>Truepera</i> | 0.35 |
| Fimbrimonadia | <i>Fimbrimonadaceae</i> | 0.54 |
| Gemmatimonadetes | <i>Roseisolibacter</i> | 0.80 |
| | <i>Gemmatimonas</i> | 0.02 |
| Phycisphaerae | <i>Tepidisphaera</i> | 0.15 |
| Planctomycetes | <i>Tundrisphaera</i> | 0.53 |
| | <i>Fimbriiglobus</i> | 0.05 |
| | <i>Gemmata</i> | 0.02 |
| | <i>Pirellula</i> | 0.01 |

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|------------------|---------------------------|------|
| Polyangia | <i>Nannocystis</i> | 0.03 |
| Rhodothermia | <i>Rubrivirga</i> | 0.19 |
| Rubrobacteria | <i>Rubrobacter</i> | 0.47 |
| Thermoleophilia | <i>Solirubrobacter</i> | 0.01 |
| Vampirivibrionia | <i>Obscuribacteraceae</i> | 0.05 |
| Verrucomicrobiae | <i>Luteolibacter</i> | 0.02 |
| | Unclassified bacteria | 12.0 |