SUPPLEMENTARY DATA

Journal: International Journal of Systematic and Evolutionary Microbiology

Title: *Tuwongella immobilis* gen. nov., sp. nov., a novel non-motile bacterium within the phylum *Planctomycetes*

Authors: Christian Seeger¹, Margaret K. Butler², Benjamin Yee¹, Mayank Mahajan¹, John A. Fuerst³ and Siv G.E. Andersson^{1,*}

Affiliations: ¹Department of Cell and Molecular Biology, *Molecular Evolution*, Uppsala University, Box 596, 751 24 Uppsala, Sweden

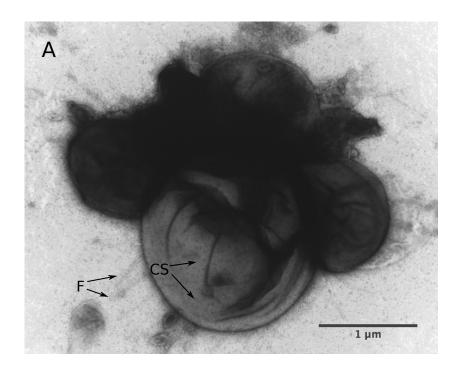
²Australian Center for Ecogenomics, School of Chemistry and Molecular Biosciences, University of Queensland, Brisbane, Queensland 4072, Australia

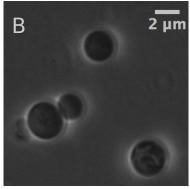
³School of Chemistry and Molecular Biosciences, University of Queensland, Brisbane, Queensland 4072, Australia

Corresponding author: *Email: siv.andersson@icm.uu.se; Phone: +46 (0)18-471 4379

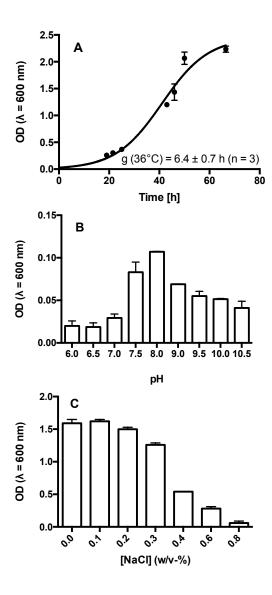
1

Supplementary Figures





Supplementary Fig. 1. A) Transmission electron micrograph of negatively stained MBLW1^T shows crateriform structures (CS) distributed over the cell surface and fimbriae (F). **B**) Phase contrast micrograph of MBLW1^T shows absence of stalks and rosettes.



Supplementary Fig. 2. Biochemical and physiological characterization of MBLW1^T. **A)** Growth of MBLW1^T in M1 medium at 36°C was measured by the increase in optical density (OD) at $\lambda = 600$ nm over time. The generation time of 6.5 h was determined by fitting a logistic growth model to the experimental data using GraphPad Prism 6. **B)** Growth measured as optical density at $\lambda = 600$ nm of MBLW1^T in M1 medium at different pH values after cultivation for 2 days at 32°C. C) Growth measured as optical density at $\lambda = 600$ nm of MBLW1^T as a function of NaCl concentration (w/v-%) after cultivation in M1 medium for 5 days at 30°C.

Supplementary Table

Supplementary Table 1. Fatty acid profile of MBLW1^T and *G. obscuriglobus* based on FAME analysis. Values are percentages of total sum of fatty acids. n.d., not detected.

| Fatty acid | MBLW1 ^T | G. obscuriglobus |
|--------------|--------------------|------------------|
| 13:0 ISO 3OH | 0.1 | n.d. |
| 14:0 | 0.9 | n.d. |
| 15:0 | 0.7 | n.d. |
| 15:0 ISO | n.d. | 0.9 |
| 15:0 ISO 3OH | n.d. | n.d. |
| 15:0 ANTEISO | n.d. | 7.9 |
| 16:0 | 25.0 | 3.6 |
| 16:0 ISO | n.d. | 1.4 |
| 16:0 3OH | 2.3 | n.d. |
| 16:0 ISO 3OH | n.d. | n.d. |
| 16:1 ω5c | 59.0 | 27.5 |
| 17:0 | 2.2 | 0.3 |
| 17:0 ISO | 0.5 | n.d. |
| 17:0 ANTEISO | n.d. | 4.6 |
| 18:0 | 6.7 | 49.2 |
| 18:1 ω5c | 2.5 | 2.5 |
| 18:1 ω7c | n.d. | 1.6 |