Genus *Thalassovivens*

Etymology
[Tha.las.so.vi'vens] **Gr. fem. n.** *thalassa*, the sea; **L. pres. part.** *vivens*, living; **N.L. fem. n.** *Thalassovivens*, an organism living in the sea, in reference to the marine habitat of these organisms

Nomenclatural type
Species *Thalassovivens spotae*[Ts]

Description
Aerobic, with chemoorganoheterotrophic, chemolithotrophic, and anoxygenic phototrophic metabolisms. Encodes genes for glycolysis through the Entner-Doudoroff pathway and the TCA cycle. Genome sizes of ~3.6 Mbp, with GC content ~51% and a coding density ~89%. Prototrophy predicted for lysine, serine, threonine, glutamine, histidine, arginine, cysteine, glycine, valine, methionine, isoleucine, tryptophan, aspartate, and glutamate, with asparagine auxotrophy. Glycine betaine synthesis, glycine betaine/proline transport, and ecotine/hydroxyectoine transport genomically conserved. Genes for the PII nitrogen regulatory system, *ntrXY*, *amtB*, and urease conserved. Most genomes also encode genes for aerobic vitamin B12 synthesis. Genes for synthesis of bacteriochlorophyll a and/or b conserved. Motility via flagella is predicted.

Classification
Bacteria » *Pseudomonadota* » *Alphaproteobacteria* » *Rhodobacterales* » *Roseobacteraceae* » *Thalassovivens*

References
Effective publication: Lanclos et al., 2025 [1]

Registry URL
https://seqco.de/i:50985

References

1. Lanclos et al. (2025). New isolates refine the ecophysiology of the Roseobacter CHAB-I-5 lineage. *ISME Communications*. DOI:10.1093/ismeco/ycaf068