

Thalassovivens spotae sp. nov.

Submitted by Thrash, Cameron

Table 1: Complete list of names proposed in the current register list.

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Genus <i>Thalassovivens</i>	[Tha.las.so.vi'vens] Gr. fem. n. <i>thalassa</i> , the sea; L. pres. part. vivens , living; N.L. fem. n. <i>Thalassovivens</i> , an organism living in the sea, in reference to the marine habitat of these organisms	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, <i>ntrXY</i> , <i>amtB</i> , 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.	<i>Roseobacteraceae</i>	<i>Thalassovivens spotae</i> ^{Ts}	seqco.de/i:50985
Species <i>Thalassovivens spotae</i> ^{Ts}	[spo'tae] N.L. gen. n. <i>spotae</i> , in reference to the San Pedro Ocean Time series (SPOT), from which the strain was isolated	In addition to the characteristics of the genus, it has the following features. Cells are coccobacillus shaped, pleomorphic, with average dimensions of 0.23 µm radius, 1.65 µm length, and 0.44 µm ³ volume. Halophilic, growing in salinities of 15–49 ppt, but not at 10 ppt or below. Mesophilic, growing between 16–25°C, but not at temperatures of 12°C or below, or at 28.5°C or above. Has a maximum growth rate of 1.55 +/- 0.05 divisions day ⁻¹ at 20°C and salinity of 30 ppt. The type strain, US3C007T (= ATCC TSD-433T = NCMA B160T), was isolated from surface water (2 m) collected at the San Pedro Ocean Time series (33°33' N, 118°24' W). The genome sequence is circularized at 3622411 bp with 50.7% GC content. The genome is available on NCBI at BioProject number PRJNA1044073.	<i>Thalassovivens</i>	NCBI Assembly: GCA_034423775.1 ^{Ts}	seqco.de/i:50984

