Benthobacter isfjordensis sp. nov.

Submitted by Silva, Sebastian

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

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Order *Benthobacterales*	[Ben.tho.bac.ter.a'les] **N.L. masc. n.** *Benthobacter*, referring to the type genus Benthobacter; *-ales*, ending to denote an order; **N.L. fem. pl. n.** *Benthobacterales*, the Benthobacter order	Order with genus type Benthomarina	*Acidimicrobiia*	*Benthobacter*	seqco.de/i:33358
Family *Benthobacteraceae*	[Ben.tho.bac.ter.a'ce.ae] **N.L. masc. n.** *Benthobacter*, referring to the type genus Benthobacter; *-aceae*, ending to denote a family; **N.L. fem. pl. n.** *Benthobacteraceae*, the Benthobacter family	Family with genus type Benthomarina	*Benthobacterales*	*Benthobacter*	seqco.de/i:33359
Genus *Benthobacter*	[Ben.tho.bac'ter] **Gr. masc. adj.** *benthos*, the deep sea, sea floor; **N. L. masc. n.** *bacter*, rod; **N.L. masc. n.** *Benthobacter*, a rod-shaped bacterium belonging to marine sediment	A bacterium found in marine benthic samples	*Benthobacteraceae*	*Benthobacter isfjordensis*[Ts]	seqco.de/i:33360
Species *Benthobacter*	[is.fjor.den'sis] **N.L. masc. adj.** *isfjordensis*,	Based on KEGG metabolic annotation, *Benthobacter isfjordensis* shows basic carbon metabolism almost complete, no carbon fixation pathways, no flagella or pili, denitrification is incomplete (only import of extracellular nitrate, reduction of nitrate to nitrite, and reduction of nitrite to nitric oxide), and nitrilase present. The	*Benthobacter*	NCBI Assembly: GCA_964014115.1	seqco.de/i:33357

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
isfjordensis^{Ts}	from or belonging to Isfjorden, Svalbard	pathway for F420 biosynthesis is almost complete. Regarding functional annotation based on CAZy and DBCAN, the glycoside hydrolases present in this MAG are: GH3, GH1, GH13 (sub-families 9, 11, 16, 23, and 20), GH77, GH57, GH149, GH32, and GH133.		^{Ts}	