Desulfamplus magnetovallimortis gen. nov. sp. nov.

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

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Genus *Desulfamplus*	[De.sul.fam'plus] **N.L. pref.** *desulf-*, desulfuricating; **L. masc. adj.** *amplus*, large; **N.L. masc. n.** *Desulfamplus*, a large sulfate-reducer	Cells are Gram-negative, relatively large rods and motile by mean of a single polar flagellum. They are strict anaerobes, using sulfate as terminal electron acceptor that is reduced to sulfide. The two main cellular fatty acids are C16:1 7c and C16:0 while the major respiratory quinone is the menaquinone MK-7. The genus *Desulfamplus* belongs to the *Desulfobacterota* phylum with its closest relative species belonging to genus *Desulfobacterium*. The type species is *D. magnetovallimortis* BW-1T. The taxonumber is GA00026.	*Desulfobacteraceae*	*Desulfamplus magnetovallimortis*[Ts]	seqco.de/i:37069
Species *Desulfamplus magnetovallimortis*[Ts]	[mag.ne.to.val.li.mor'tis] **Gr. masc. n.** *magnes*, pertaining to a magnet; **L. fem. n.** *vallis*, valley; **L. fem. n.** *mors*, death; **N.L. gen. n.** *magnetovallimortis*, of the magnetic valley of death, referring to the presence of magnetosomes and the organism's association with extreme or anoxic environments, metaphorically described as a "valley of death."	Species description is as for genus, with the following additional characteristics. Cells are, on average, 2 m long and 1 m wide. Capable of chemoorganoheterotrophic growth, using fumarate, lactate, pyruvate, malate and succinate as electron donors and carbon sources. Sulfate and thiosulfate are used as terminal electron acceptors. Addition of at least 10 g NaCl L−1 is necessary for growth; optimum NaCl concentration for growth is 15–25 g L−1. Temperature requirements: Tmin, 10 ◦C; Topt, 28 ◦C; Tmax, 35 ◦C. The pH range for growth is 6.5–7.5; optimum 7. The G–C content of the genome is 41 mol%. The major cellular fatty acids are C16:1 7c, C16:0, C17:1 6c, C15:0, C17:0, C15:1 6c, C18:1 7c, C17:1 8c and C14:0. The	*Desulfamplus*	NCBI Assembly: GCF_900170035.1 [Ts]	seqco.de/i:37070

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
		type strain, BW-1T (= ICM 18010T = DSM 103535T) was isolated from a brackish spring in Death Valley National Park (California, USA). The taxonumber is TA00086.			