

Magnetomonas plexicatena sp. nov. gen. 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 <i>Magnetomonas</i>	[Mag.ne.to.mo'nas] Gr. masc. n. <i>magnes</i> , pertaining to a magnet; L. fem. n. <i>monas</i> , a unit, monad; N.L. fem. n. <i>Magnetomonas</i> , a magnetic monad	Vibrioid-shaped, cell size $2.0 \pm 0.4 \mu\text{m}$ long and $0.5 \pm 0.1 \mu\text{m}$ wide, form magnetite magnetosomes organized in chains along the long axis of the bacterial cell body. Magnetosomes present a mean length of $108 \pm 21.1 \text{ nm}$ and a mean width of $45 \pm 8.1 \text{ nm}$. Potentially capable of chemolithoautotrophy with the oxidation of sulfur compounds and carbon assimilation by Wood-Ljungdahl pathway. Potentially capable of heterotrophy by glycolysis. Not capable of nitrogen fixation.	<i>Magnetobacteriaceae</i>	<i>Magnetomonas plexicatena</i> ^{Ts}	seqco.de/i:51020
Species <i>Magnetomonas plexicatena</i> ^{Ts}	[ple.xi.ca.te'na] L. masc. adj. <i>plexus</i> , interwoven; L. fem. n. <i>catena</i> , chain; N.L. fem. n. <i>plexicatena</i> , an interwoven chain	Vibrioid-shaped, cell size $2.0 \pm 0.4 \mu\text{m}$ long and $0.5 \pm 0.1 \mu\text{m}$ wide, form magnetite magnetosomes organized in chains along the long axis of the bacterial cell body. Magnetosomes present a mean length of $108 \pm 21.1 \text{ nm}$ and a mean width of $45 \pm 8.1 \text{ nm}$. Potentially capable of chemolithoautotrophy with the oxidation of sulfur compounds and carbon assimilation by Wood-Ljungdahl pathway. Potentially capable of heterotrophy by glycolysis. Not capable of nitrogen fixation. The reference strain is LBB01. The genome reference sequence of LBB01 is CP049016. G + C content 42.0%.	<i>Magnetomonas</i>	NCBI Assembly: GCA_004376055.2 ^{Ts}	seqco.de/i:51019