

Taurinivorans muris gen. nov. sp. nov.

Submitted by Loy, Alexander

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

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Genus <i>Taurinivorans</i>	[Tau.ri.ni.vo'rans] N.L. neut. n. <i>taurinum</i> , taurine; L. part. adj. <i>vorans</i> , eating; N.L. masc. n. <i>Taurinivorans</i> , a taurine eater	<i>Taurinivorans</i> gen. nov. (Tau.ri.ni.vo'rans. N.L. n. <i>taurinum</i> , taurine; L. part. adj. <i>vorans</i> , eating; N.L. masc. n. <i>Taurinivorans</i> , a taurine eater). Comparative genome analyses suggest the common electron acceptor is taurine, which is degraded and reduced to sulfide via the Tpa-Xsc-DsrAB-DsrC pathway. Type species: <i>Taurinivorans muris</i> sp. nov., family: <i>Desulfovibrionaceae</i> VP, order: <i>Desulfovibrionales</i> VP (T) emend., class: <i>Desulfovibrionia</i> class. nov., phylum: <i>Desulfobacterota</i> phyl. nov.	<i>Desulfovibrionaceae</i>	<i>Taurinivorans muris</i> ^{Ts}	seqco.de/i:32704
Species <i>Taurinivorans muris</i> ^{Ts}	[mu'ris] L. gen. n. <i>muris</i> , of a mouse, referring to its origin from the mouse intestine	<i>Taurinivorans muris</i> sp. nov. (mu'ris. L. gen. n. <i>muris</i> , of a mouse, referring to its origin from the mouse intestine). The type strain is strain LT0009 (= DSM 111569 = JCM 34262), isolated from the mouse gut with taurine as the electron acceptor and lactate/pyruvate as electron donors. Formate was also used as an electron donor for taurine respiration. Cells are Gram-stain-negative, spirilloid in shape, and motile by means of lophotrichous polar flagella. The temperature range is 27-42°C and the optimum pH is 6.5 (range 6-8.5) for strictly anaerobic growth. The optimal taurine concentration for growth is 40 mmol/L, higher taurine concentrations inhibit growth. Sulfolactate and thiosulfate are additional electron acceptors for anaerobic respiration and are also reduced to hydrogen sulfide. Yeast extract and 1,4-naphthoquinone are required as growth supplements for laboratory cultivation of the isolate. Its genome size is 2.2 Mbp with a G+C content of 43.6%. The GenBank accession numbers for the genome and the 16S rRNA gene sequence of strain LT0009T are CP065938 and MW258658, respectively.	<i>Taurinivorans</i>	NCBI Assembly: GCA_025232395.1 ^{Ts}	seqco.de/i:32703