

# Australlarchaeum erebusii 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 <i>Australarchaeum</i>	[Aus.tral.ar.chae'um] L. <b>masc. adj. australis</b> , Southern; <b>N.L. neut. n. archaeum</b> , archaeum, ancient one, archaeon; <b>N.L. neut. n. Australarchaeum</b> , an archaeon from the south	The type of the genus is an Archaeon found only in soils heated by volcanic activity (65 degree C) on Mt. Erebus in Antarctica. Analysis of metabolic pathways indicates the presence of fatty acid oxidation, amino acid degradation and an aerobic lifestyle. There are indications that either the same species or another species of the same genus can be found on Mt. Melbourne and Mt. Rittmann, both also in Antarctica. GTDB-Tk indicates that this genome represented a novel Order of Nitrososphaeria.	<i>Incertae sedis</i> <b>(Archaea):</b> This lineage appears to represent a novel order of Nitrososphaeria, according to GTDB-Tk.	<i>Australarchaeum erebusense</i> <sup>Ts</sup>	<a href="https://seqco.de/i:49006">seqco.de/i:49006</a>
Species <i>Australarchaeum erebusense</i> <sup>Ts</sup>	[e.re.bu.sen'se] <b>N.L. neut. adj. erebusense</b> , of Erebus, referring to Mt. Erebus, Antarctica	Archaeon found only in soils heated by volcanic activity (65 degree C) on Mt. Erebus in Antarctica. Very deep branching and novel lineage of Nitrososphaeria. Encodes <i>aa3</i> -type (low-affinity) cytochrome C-oxidases.	<i>Australarchaeum</i>	NCBI Assembly: GCA_040290255.1 <sub>Ts</sub>	<a href="https://seqco.de/i:24045">seqco.de/i:24045</a>