Species *Regnicoccus antarcticus*[Ts]

Etymology
[ant.arc'ti.cus] **L. masc. adj.** *antarcticus*, referring to the increased abundance of this organism at the Antarctic province

Nomenclatural type
NCBI Assembly: GCA_049578805.1 [Ts]

Reference Strain
Strain sc|0038565: WH 5701 = SYN = CCMP 1333 = NEPCC 539

Description
Ernster, Rodriguez-R, 2025: The genome assembly is established as type material, and the reference strain is WH 5701.

Coutinho et al., 2016: The phycobilisome pigmentation of this strain belongs to class 1. Bacteriocin gene clusters detected in this genome belong to class I. Type strain is WH5701(T), which has a genome of 3.28 Mbp with a GC content of 65.4% that encodes 3185 genes that include 593 diagnostic orthologous groups. Taxonomic affiliation to *Parasynechococcus antarcticus* WH5701 can be defined by the presence of Ammonium transporter, Ferric iron ABC transporter: ATP-binding protein, Ferric iron ABC transporter: iron-binding protein, Ferric iron ABC transporter: permease protein, Ferrous iron transport protein B, *GlnN, NifS, NifU,* Nitrate ABC transporter, PiuC, Protein PII, *UreD, UreE, UreF, UreG, UrtA, UrtB, UrtC, UrtD, UrtE, phnE, phoB, phoH, phoR, pstA, pstB, pstC, pstS.*

Walter et al., 2017: This species is characterized by α-carboxysome. Type strain is WH 5701, isolated from marine habitat in Long Island Sound, Connecticut, USA. The genome of this strain contains 3.28 Mbp (GC = 65.4%) harboring 2,917 coding DNA sequences.

Classification
Bacteria » *Cyanobacteriota* » *Cyanophyceae* » “Synechococcales” » *Synechococcaceae* » *Regnicoccus* » *Regnicoccus antarcticus*[Ts]

References
Effective publication: Ernster, Rodriguez-R, 2025 [1]
Original (not valid) publication: Coutinho et al., 2016 [2] and Walter et al., 2017 [3]
Assigned taxonomically: Walter et al., 2017 [3]

Registry URL
https://seqco.de/i:23582

References

1. Ernster, Rodriguez-R (2025). A practical guide on environmental genomics for prokaryotic systematics. *Systematic and Applied Microbiology*. DOI:10.1016/j.syapm.2025.126643
2. Coutinho et al. (2016). Proposal of fifteen new species of Parasynechococcus based on genomic, physiological and ecological features. *Archives of Microbiology*. DOI:10.1007/s00203-016-1256-y
3. Walter et al. (2017). Ecogenomics and Taxonomy of Cyanobacteria Phylum. *Frontiers in Microbiology*. DOI:10.3389/fmicb.2017.02132