# Species Rhodoferax bjergmarkensis

# Etymology

[bjerg.mar.ken'sis] **N.L. masc. adj.** *bjergmarkensis*, of the city of Bjergmarken, from where the MAG was obtained

# Nomenclatural type

NCBI Assembly: GCA 016708345.1 Ts

#### **Description**

Bacterium found in activated sludge.

Genome-wide gene annotation suggested the potential for full glycolysis, pentose phosphate pathway, citric acid cycle and glyoxylate pathway.

Can utilize branched chain amino acids (livFGHKM).

Predicted to convert acetate to acetyl-CoA via acetyl-CoA synthetase, *acs*, and acetate kinase, *ackA* 

Potential to reduce nitrate with narGHI along with the reduction of nitrate to nitric oxide with *nirS*. Lastly it also had nitrous oxide reductase, nosZ predicted.

#### Classification

Bacteria » Pseudomonadota » Betaproteobacteria » Burkholderiales » Comamonadaceae » Rhodoferax » Rhodoferax bjergmarkensis

## References

Effective publication: Petersen et al., 2025 [1]

# **Registry URL**

https://seqco.de/i:44117

# References

 Petersen et al. (2025). Diversity and physiology of abundant Rhodoferax species in global wastewater treatment systems. Systematic and Applied Microbiology. DOI:10.1016/j.syapm.2024.126574