

Species *Aquiluna borgnonia*^T

Etymology

[borg.no'ni.a] N.L. fem. adj. *borgnonia*, named after the Bundesoberstufenrealgymnasium (BORG) Nonntal

Nomenclatural type

Strain: 15G-AUS-rot = DSM 107803 = JCM 32974

Description

Cells form short rods, approximately 0.6 µm long and 0.5 µm wide, and grow chemoorganotrophically and aerobically. Cells show a light red pigmentation on NSY agar plates and in NSY liquid medium and form small and circular colonies. Growth occurs up to 36 °C and 0.6 % (w/v) NaCl. Cells metabolize pectin, d-fructose-6-PO₄, d-fructose, glucuronamide, α-d-glucose, inosine, sucrose, d-arabitol, d-mannose, turanose, acetoacetic acid, dextrin, mucic acid, l-fucose, l-alanine, 3-methyl glucose, d-glucose-6-PO₄, maltose, l-aspartic acid, d-galactose, myo-inositol, raffinose, melibiose, lactose, trehalose, cellobiose, gentiobiose, d-salicin, methyl β-d-glucoside, d-glucuronic acid, d-galacturonic acid and l-arginine, but do not assimilate l-histidine, d-lactic acid methyl ester, l-rhamnose, d-malic acid, l-glutamic acid, l-galactonic acid lactone, quinic acid, *p*-hydroxy-phenylacetic acid, formic acid, glycyl-l-proline, l-lactic acid, l-pyroglutamic acid, α-keto-butyric acid, *N*-acetyl-d-glucosamine, *N*-acetyl-d-galactosamine, d-saccharic acid, *N*-acetyl-β-d-mannosamine, *N*-acetyl neuraminic acid, bromo-succinic acid, gelatin, methyl pyruvate, α-hydroxy-butyric acid, d-serine, l-serine, β-hydroxy-d,l-butyric acid, d-sorbitol, glycerol, α-keto-glutamic acid, d-aspartic acid, d-mannitol, acetic acid, d-fucose, propionic acid, γ-amino-butyric acid, citric acid, Tween 40, d-gluconic acid, l-malic acid or stachyose. Major fatty acids (>10%) are iso-C16 : 0, anteiso-C15 : 0 and iso-C14 : 0. The major respiratory quinone is MK-11 and the minor one is MK-10. The peptidoglycan structure belongs to B type, with glycine at first position, l-2,4-diaminobutyric acid at third position and a d-glutamic acid–l-2,4-diaminobutyric acid structure. The G+C content of the genomic DNA is 54.8 mol% and the genome size 1.4 Mbp.

The type strain is 15G-AUS-rotT (=DSM 107803T=JCM 32974T), which was isolated from surface water of the Autobahnsee Wals-Siezenheim pond, located near the city of Salzburg, Austria.

Classification

Bacteria » *Actinomycetota* » *Actinomycetes* » *Micrococcales* » *Microbacteriaceae* » *Aquiluna* » *Aquiluna borgnonia*^T

References

Effective publication: Pitt et al., 2021 [1]

Assigned taxonomically: Pitt et al., 2021 [1]

Registry URL

<https://seqco.de/i:23228>

References

1. Pitt et al. (2021). *Aquiluna borgnonia* gen. nov., sp. nov., a member of a Microbacteriaceae lineage of freshwater bacteria with small genome sizes. *International Journal of Systematic and Evolutionary Microbiology*. DOI:10.1099/ijsem.0.004825