

Species *Amycolatopsis aidingensis*

Etymology

[ai.ding.en'sis] N.L. fem. adj. *aidingensis*, of or belonging to Aiding Lake, a salt lake in China (where the type strain was isolated)

Nomenclatural type

Strain: CCTCC AA 2021025 = CGMCC 4.7734 = KCTC 49720 = NBRC 115328 = YIM 96748

Description

Gram-positive, aerobic, non-motile actinobacterium that formed a septal substrate mycelium that fragmented into rod-like elements, with irregular swelling appearing in the part of the aerial mycelium. It grows well on ISP 2, ISP 3, ISP 4, and ISP 5 agar, Czapek's agar, NA, and PDA media. The color of the aerial mycelium was white on ISP 2, ISP 3, ISP 4, and ISP 5 agar, Czapek's agar, NA, and PDA media. The color of the substrate mycelium was purple on PDA, NA, and ISP 2 media. Growth occurs at pH 5–12 (optimum, pH 8) at 20–45°C (optimum, 37°C) and with 1–15% (w/v) NaCl tolerance (optimum, 5% NaCl). D-Trehalose, mannitol, xylitol, D-cellulose, D-mannitol, D-sorbitol, raffinose, D-xylose, maltose, α -lactose, fructose, sodium citrate, amber acid, and α -D-glucose were utilized as sole carbon and energy sources, but not D-galactose, melezitose, oligofructose, L-arabinose, α -methyl glucoside, D-salicylin, β -cyclodextrin, or maltitol. It utilizes xanthine, L-phenylalanine, glycine, L-threonine, L-lysine, L-tyrosine, glutamine, L-asparagine, alanine but not adenine, L-methionine, aspartic acid, arginine, or hypoxanthine as sole nitrogen sources.

The cell wall contained *meso*-diaminopimelic acid, and the predominant menaquinone was MK-9 (H4). The major phospholipids consisted of diphosphatidylglycerol, unidentified polar lipids, phosphatidylinositol, phosphatidylethanolamine, unidentified phospholipids, an unidentified amino lipid, and phosphatidylmonomethylethanolamine. The major fatty acids (>10.0%) were iso-C16:0 (54.8%) and C17:1 w_6c (15.6%). The DNA G + C content of the type strain is 70.2 mol%.

Classification

Bacteria » *Actinomycetota* » *Actinomycetes* » *Pseudonocardiales* » *Pseudonocardiaceae* » *Amycolatopsis* » *Amycolatopsis aidingensis*

References

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

Registry URL

<https://seqco.de/i:23446>

References

1. Li et al. (2021). *Amycolatopsis aidingensis* sp. nov., a Halotolerant Actinobacterium, Produces New Secondary Metabolites. *Frontiers in Microbiology*. DOI:10.3389/fmicb.2021.743116