

Prauserella muralis sp. nov., from the indoor environment.

Schäfer J, Martin K, Kämpfer P (2010) *Prauserella muralis* sp. nov., from the indoor environment. *Int J Syst Evol Microbiol* 60(Pt 2), 287-290.

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Abstract

A novel Gram-stain-positive, mycelium-forming actinobacterium (05-Be-005(T)) isolated from the wall of an indoor environment was studied for its taxonomic position. The isolated strain formed a substrate mycelium that fragmented into rod-shaped cells and showed an aerial mycelium on medium M79. On the basis of 16S rRNA gene sequence similarity studies, strain 05-Be-005(T) was shown to belong to the genus *Prauserella*, closely related to *Prauserella rugosa* DSM 43194(T) (96.6 % similarity), *Prauserella alba* YIM 90005(T) (95.9 %) and *Prauserella halophila* YIM 90001(T) (95.4 %). The predominant menaquinone was MK-9(H(4)); whole-cell hydrolysates contained meso-diaminopimelic acid as the diagnostic diamino acid of the cell wall and arabinose and galactose as the main sugars. Mycolic acids were absent. The polar lipid profile consisted of the lipids diphosphatidylglycerol, phosphatidylglycerol, phosphatidylethanolamine, phosphatidylmethylethanolamine, phosphatidylinositol, phosphatidylserine and an unknown phospholipid. Major fatty acids C(16 : 0) iso, C(16 : 0), C(17 : 1)omega8c and C(17 : 1)omega6c supported the affiliation of strain 05-Be-005(T) to the genus *Prauserella*. The results of physiological and biochemical tests allowed clear phenotypic differentiation of strain 05-Be-005(T)

from the three known *Prauserella* species. Strain 05-Be-005(T) represents a novel *Prauserella* species, for which we propose the name *Prauserella muralis* sp. nov., with the type strain 05-Be-005(T) (=CCUG 57426(T) =NRRL B-24780(T) =CCM 7635(T)=DSM 45305(T)).

Beteiligte Forschungseinheiten

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