

The ability of sulfate-reducing bacteria of various taxonomic groups to synthesize extracellular hydrocarbons

Bagaeva T.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

Sulfate-reducing bacteria of various taxonomic groups were found to synthesize extracellular hydrocarbons during growth on lactate in an atmosphere of H₂ + CO₂. The most active producers of hydrocarbons were sulfate-reducing bacteria bringing about incomplete oxidation of lactate. Hydrocarbons produced were normal or isomeric alkanes with a chain length from C₁₁ to C₂₄.

Keywords

Hydrocarbons, Sulfate-reducing bacteria