

Nanoparticles synthesized by antarctic bacteria and their possible mechanisms of synthesis [Nanopartículas Sintetizadas por Bacterias Antárticas y sus Posibles Mecanismos de Síntesis]

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In recent years microorganisms as fungi, yeasts and especially bacteria have been used to produce nanoparticles biosynthesis. Several types of bacteria are described as nanoparticles producers, however, psychrophilic and psychrotolerant bacterias have not been studied widely, although its use in the production of nanoparticles could provide advantages related to the stability of nanoparticles, energy expenditure on its production, while being an environmentally friendly alternative. This article provides a brief overview of Antarctic bacterias, both psychrophilic and psychrotolerant that synthesis nanoparticles, possible mechanisms associated to this synthesis and future perspectives related to bacterial biosynthesis of nanoparticles. © 2017, Universidad de la Frontera. All rights reserved.

Antarctic bacteria

Biosynthesis

Nanoparticle