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## Patent Search

Invention Title	A METHOD FOR SYNTHESIS OF ANTIBIOFILM METABOLITE FROM LACTOBACILLUS RHAMNOSUS
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### Abstract:

METHOD FOR SYNTHESIS OF ANTIBIOFILM METABOLITE FROM LACTOBACILLUS RHAMNOSUS ABSTRACT The present invention provides a method to produce and ex antibiofilm metabolite from Lactobacillus rhamnosus which inhibits biofilm of Streptococcus mutans but has no adverse effects. The antibiofilm metabolite is Cyclo (f finds application as an anti-biofilm agent.

### Complete Specification

Description:METHOD FOR SYNTHESIS OF ANTIBIOFILM METABOLITE FROM LACTOBACILLUS RHAMNOSUS

#### FIELD OF INVENTION

The present invention relates to field of antimicrobial agents and more particularly, but not exclusively, to novel agents that are capable of preventing biofilm forma and reducing biofilm mass. The invention further relates to a method of synthesis of a biofilm metabolite and extraction of a metabolite Cyclo (Pro-Leu) and its ison from Lactobacillus rhamnosus which inhibits biofilm of Streptococcus mutans without being bactericidal towards it thus maintaining homeostasis of oral microbiot:

#### BACKGROUND OF INVENTION

Bacteria in oral biofilms has been implicated in diabetes and endocarditis, strengthening the theory of their role in infections spanning over entire body. Oral biofilm held responsible for infectious diseases, including dental caries, gingivitis of chronic periodontitis with systemic inflammatory diseases, such as atherosclerosis, infe endocarditis, diabetes, adverse pregnancy outcome, respiratory diseases, and rheumatoid arthritis. Oral biofilms are poly-microbial biofilms comprising of wide var microorganism including bacteria, archaea, protozoa, fungi, and viruses. The formation of an oral biofilm begins with the attachment of a single planktonic cell to th pellicle and Streptococcus mutans, being the primary colonizers co-aggregate. Previous studies have suggested use of lactobacillus and bifido-bacteria as probiotics preventing the biofilm formation by S. mutans.

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