



Technology Offer

Amniotic membrane-based antimicrobial agent

Field of use

Health-Medical Science

Current state of technology

Laboratory tested, preclinical

Patent status

PCT approved 06.08.2020

Developed by

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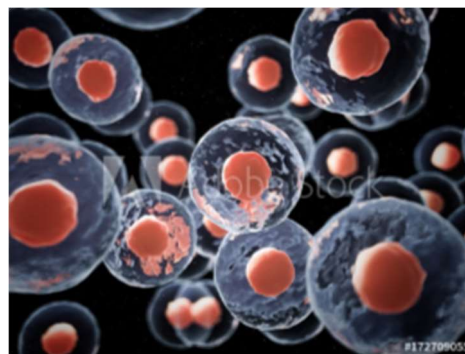
Reference

WO2020/157195

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Background

During the years 2000 and 2015, the use of antibiotics worldwide increased for 65%. Epidemiological studies showed the correlation between the increasing use of antibiotics and the emergence and spreading of bacteria, resistant to antibiotics. Due to emergence and spread of microorganisms, resistant to antibiotics, there is a great need for discovery and development of novel antimicrobials.

Description of the Invention

The mammalian amniotic membrane homogenate can be used as an antimicrobial agent. The preparation of which runs through a well-determined procedure so that its antibacterial characteristics remain intact.

Main Advantages

Antimicrobial activity of amniotic membrane has been proven against several bacteria, namely *Escherichia coli*, *Staphylococcus aureus*, *Enterobacter sp.*, *Klebsiella pneumoniae*, *Staphylococcus saprophyticus* and others. The preparation procedure is simple and cost-effective and the homogenate presents a high efficacy rate.

Main Advantages

A part of the research work has already been published in *Frontiers in Microbiology*, which is one of the leading journals in the field of microbiology and the journal *Infection and drug resistance*. The procedure for the preparation of an amniotic membrane homogenate is protected by international PCT patent: WO2020/157195, 06.08.2020.