



Characterization of four peptides from milk fermented with kombucha cultures and their metal complexes—in search of new biotherapeutics

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Rok wydania

2024

Czasopismo

Frontiers in Molecular
Biosciences

Numer woluminu

11

Strony

1366588/1-1366588/14

DOI

10.3389/fmolb.2024.1366588

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The most common skin diseases include eczema, psoriasis, acne, and fungal infections. There is often no effective cure for them. Increasing antimicrobial drug resistance prompts us to search for new, safe, and effective therapeutics. Among such interesting candidates are peptides derived from milk fermented with specific lactic acid bacteria or with kombucha cultures, which are a potential treasure trove of bioactive peptides. Four of them are discussed in this article. Their interactions with zinc and copper ions, which are known to improve the well-being of the skin, were characterized by potentiometry, MS, ITC, and spectroscopic methods, and their cytostatic potential was analyzed. The results suggest that they are safe for human cells and can be used alone or in complexes with copper for further testing as potential therapeutics for skin diseases.

Słowa kluczowe

peptides, bioactivity, copper (II) ions, zinc (II) ions,
spectroscopic techniques

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<http://dx.doi.org/10.3389/fmolb.2024.1366588>

