

ABSTRACT

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Title of Diploma Thesis: Cationic antimicrobial peptides as potential drugs

With the rapid rise in the emergence of bacterial strains resistant to multiple classes of antimicrobial agents, there is an urgent need to develop novel antimicrobial therapies to combat these pathogens. Antimicrobial peptides (AMPs) are small, predominantly cationic ribosomally synthesized peptides, which permeabilize biological membranes. The assets of these peptides in clinical application include their potential for broad-spectrum activity, rapid bactericidal activity and low propensity for resistance development. This article is focused on history, mechanism of action and types of peptides that are produced by various organisms. Given the extensive topic only cationic antimicrobial peptides are discussed.