

BROAD-SPECTRUM ANTI-INFECTIVE PEPTIDES

Abstract

Provided herein are anti-infective peptides and uses thereof, in one embodiment, provided herein is a peptide that is 16 to 26 amino acid residues in length and comprises the following amino acid sequence: $X_1X_2SWLRDX_3X_4TX_5LQSX_6L$, wherein X_1 is S or G or A; X_2 is S or G, X_3 is V or I, X_4 is W or L, X_5 is W, K, A or L and X_6 is W, K, L or A. The anti-infective peptides may comprise D amino acids, L amino acids or a combination thereof. In certain embodiments, the anti-infective peptides are peglyated, modified to include a hydrophilic polymer, stapled or lipidated. Also provided herein are compositions comprising the anti-infective peptides, and methods of treatment and disinfecting using the anti-infective peptides. The anti-infective peptides provided herein are useful against a broad spectrum of bacteria and viruses.

[FIG.3A & FIG.3B]