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(54) Title: MAMMALIAN–DERIVED PEPTIDES FOR THE TREATMENT OF MICROBIAL INFECTION

(57) Abstract

The present invention provides compositions useful as antimicrobial agents which include mammalian hemoglobin, the α and β chains of hemoglobin free of heme, fragments of the α and β chains that result from cyanogen bromide cleavage of the α and β chains, and synthetic peptides derived therefrom. The compositions exert antimicrobial activity against both bacteria and fungi that is comparable to known antimicrobial peptides from human neutrophils, cathepsin G and azurocidin. Sensitive organisms include Gram–negative bacteria such as *Escherichia coli* and *Pseudomonas aeruginosa*, Gram–positive bacteria such as *Staphylococcus aureus* and *Streptococcus faecalis*, and the fungus *Candida albicans*. Methods for preparing the compositions also are provided.