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(54) Title: SHORT BIO-ACTIVE PEPTIDES FOR PROMOTING WOUND HEALING

(57) Abstract: Peptides having four to six amino acid residues are disclosed that possess biological activity. These peptides constitute short fragments of the peptide HB-107 (MPKEKVFLKIEKMGRNIRN), which itself is a fragment of the antimicrobial protein cecropin B, and exhibit cell stimulatory and migratory properties. The inventive peptides comprise four to six contiguous amino acid residues located between position 11 and 16 of HB107 (MPKEKVFLKIEKMGRNIRN), namely EKMGRN. The disclosed peptides comprise a useful agent for the medical treatment of injury to the skin, such as from diabetic ulcers. The peptides also are effective in preventing and reversing skin surface damage resulting from various environmental insults. Importantly, the therapeutic effects of the peptides manifest at concentrations equal to or greater than those of peptide HB-107, and thus represent a less expensive, more versatile means for developing effective therapies. Methods for the production and use of these peptides are also disclosed.