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Isolation of antimicrobial peptides from New Zealand spinach Tetragonia tetragonioides T. Neubauerova, M. Mackova, T. Macek, M. Sanda, M. Kralova, I. Dolezilkova and P. N. Holmsgaard1. General remarks; 2. Materials and methods; 2.1 Extraction of peptides and proteins from spinach leaves; 2.2 Purification of crude extract; 2.3 Reverse-phase chromatography purification (RP-HPLC); 2.4 Microorganisms and antimicrobial assay; 2.5 Antimicrobial activity; 3. Results; 3.1 Isolation of antimicrobial peptides from spinach; 3.2 Antimicrobial assay; 3.3 Characterization by MS; 4. Discussion; References
Lysostaphin: molecular changes that preserve staphylolytic activity S. Becker, J. Foster-Frey, A. Powell, H. Mohammadi, D. E. Kerr and D. M. Donovan1. Introduction; 2. Results and Discussion; 2.1 Effect of N- vs. C-terminal 6 x His tag on mLyso lytic activity; 2.2 Activity changes resulting from N125Q and N232Q mLyso mutations; 2.3 N-terminal deletions of mLyso between residue 1 and 31; Conclusions; References; Purification and characterization of antimicrobial peptides from fleshfly larvae haemolymph T. Neubauerova, M. Mackova, T. Macek, M. Sanda and Z. Voburka; 1. General remarks
2. Materials and methods2.1 Isolation of larval haemolymph; 2.2 Purification of antimicrobial peptides; 2.3 Ion-exchange and reversed-phase liquid chromatography (Ionex-FPLC, RP-HPLC); 2.4 Microorganisms and antimicrobial assay; 2.5 Tricine gel electrophoresis and electroblotting; 2.6 Mass spectrometry analysis; 3. Results and discussion; References; Structural and functional diversity of natural antimicrobial oligopeptides Aexander A. Zamyatnin; 1. Introduction; 2. Structure; 3. Functions; 4. Potential applications; References
The role of Gram-negative envelope LPS on the bactericidal properties of proteins and peptides: the case of eosinophil cationic protein D. Pulido, M. Torrent, M. V. Nogues and E. Boix

Sommario/riassunto

The aim of this book is to disseminate the most recent research in science and technology against microbial pathogens presented at the first edition of the ICAR Conference Series (ICAR2010) held in Valladolid, Spain, in November 2010. This volume is a compilation of 86 chapters written by active researchers that offer information and experiences and afford critical insights into anti-microbe strategies in a general context marked by the threat posed by the increasing antimicrobial resistance of pathogenic microorganisms. "Anti" is here taken in a wide sense as "against cell cycle, adhesion, or