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| Nota di contenuto | PEPTIDOMICS; CONTENTS; Preface; Contributors; PART I STUDIES OF NATURALLY OCCURRING PEPTIDES; 1 Analysis of the Peptidomes of Amphibian Skin Granular Gland Secretions-An Integrated Functional Genomic Strategy; 1.1 Introduction; 1.2 Historical Perspective; 1.3 Contemporary Methods of Sample Acquisition; 1.4 The Integrated Functional Genomic Strategy; 1.5 How then can All Three Approaches be Integrated?; 1.6 Limitations of Each Approach; 1.7 Closing Thoughts<br>2 A Short History of Insect (Neuro)Peptidomics-A Personal Story of the Birth and Youth of an Excellent Model For Studying Peptidome Biology2. 1 Introduction; 2.2 History; 2.3 Present (and Future): Novel Technologies, New Data. . .; 2.3.1 MALDI and (Nano)ESI TOFs and QTOFs; 2.3.2 Peptide Displays; 2.3.3 Ion Traps and FT-ICRs: Greater Variety of Instruments, Greater Variety of Sequences. . .; 2.3.4 Orbitrap; 2.3.5 FT-ICRs; 2.3.6 Combining Peptide Chemical Analysis with Histological Localization: Peptidome Mass Spectrometry Imaging; 2.4 Concluding Remarks<br>3 Peptidomics of Short Linear Cytolytic Peptides from Spider Venom3.1 |

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4.4 PCR-Based Amplification and Cloning Approaches4.5 The Design and Use of Hybrid Primers for the Amplification of cDNAs Coding for Large Toxin-like Peptide Pools; 4.5.1 Multiple Alignment of the Existing Toxins and Toxin-like Sequences; 4.5.2 The Design of Hybrid Partially Degenerate Primers; 4.5.2.1 The Design of the 3  Region; 4.5.2.2 The Design of the 5  Region and the Middle Part of the Primers; 4.5.2.3 The Overall Length and Degeneracy; 4.5.2.4 Annealing Temperature Matching; 4.5.3 Optimization of the Amplification Conditions; 4.5.4 Other Experimental Details
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5.4 Sequence Determination of AMPs from T. kiharae Seeds

Sommario/riassunto

The definitive guide to peptidomics- a hands-on lab referenceThe first truly comprehensive book about peptidomics for protein and peptide analysis, this reference provides a detailed description of the hows and whys of peptidomics and how the techniques have evolved. With chapters contributed by leading experts, it covers naturally occurring peptides, peptidomics methods and new developments, and the peptidomics approach to biomarker discovery. Explaining both the principles and the applications, Peptidomics: Methods and Applications: *Features examples of applications in di