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Nota di contenuto	Expression and Analysis of Recombinant Ion Channels; Contents; Preface; List of Contributors; Color Plates; 1 Expression of Ion Channels in Xenopus Oocytes; 1.1 Introduction; 1.2 Advantages and Disadvantages of Xenopus Oocytes; 1.3 Procedures for Using Oocytes; 1.4 Types of Analyses; 1.4.1 Electrophysiological Analysis; 1.4.1.1 Two-electrode Whole Cell Voltage-clamp; 1.4.1.2 Cut-open Oocyte Voltage-clamp; 1.4.1.3 Macropatch Clamp; 1.4.1.4 Single Channel Analysis; 1.4.2 Biochemical Analysis; 1.4.3 Compound Screening; 1.4.3.1 Serial Recording Using the Roboocyte 1.4.3.2 Parallel Recording Using the OpusXpress1.5 Examples of Use; 1.5.1 Characterization of cDNA Clones for a Channel; 1.5.2 Structure-Function Correlations; 1.5.3 Studies of Human Disease Mutations; 1.6 Conclusions; Acknowledgments; References; 2 Molecular Biology Techniques for Structure - Function Studies of Ion Channels; 2.1

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## Sommario/riassunto

Filling the gap created over the past five years, during which many new techniques have entered the market, this book is directed at both the new and the experienced ion channel researcher wishing to learn more about the considerations and methods for studying recombinant ion channels. These latest developments are covered here for the first time, contributed by editors and authors working for major pharmaceutical companies and who routinely apply these techniques in their daily work. The first three chapters cover the use of the Xenopus oocyte expression system for structure-function stud

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