

Book Reviews

Methods in Molecular Biology, Volume 87. Combinatorial Peptide Library Protocols. Edited by Shmuel Cabilly. Humana Press, Totowa, NJ. 1998. xiii + 313 pp. 15.5 × 23.5 cm. ISBN 0-89603-392-9. \$74.50.

This book consists of 26 chapters containing detailed descriptions of methods for the synthesis and screening of peptide libraries. As the title indicates, this book is a useful resource for anyone in need of protocols for the synthesis or screening of combinatorial peptide libraries. Various chapters describe protocols for the construction of peptide libraries on resin, in solution-phase mixtures, on membranes, and by phage display. Other chapters deal with methods for screening these kinds of libraries for novel peptide inhibitors, substrates, and ligands. The chapters are generally well written and thorough, each being a self-contained article including background information and experimental detail. Each chapter is adequately referenced, though most references are from the period of the late 1980s to early 1990s when this field matured.

The organization of the book, however, is essentially an unconnected series of chapters, each describing one particular protocol or use of peptide libraries. One must keep in mind that this is meant to be a collection of protocols but not in any way a review of the field. This means that there is some redundancy to the scope of different chapters. A more useful organization may have been to have separate sections for different topics, with authors collaborating to integrate the different protocols and examples. Though the format of the book is not ideal, the content is still substantially useful. I would recommend this book for experienced peptide library researchers as a diverse collection of protocols in this field. Novices may also find particular protocols useful but should know that the book is not designed to provide a broad review of the field in general.

Bruce A. Beutel

*Abbott Laboratories
Dept. 4PN, Building AP10
100 Abbott Park Road
Abbott Park, Illinois 60064-3500*

JM980291A

S0022-2623(98)00291-X

The P2 Nucleotide Receptors. Edited by John T. Turner, Gary A. Weisman, and Jeffrey S. Fedan. Humana Press, Totowa, NJ. 1997. xi + 440 pp. 16 × 23.5 cm. ISBN 0-89603-425-9. \$139.00.

The editors of this book have made an attempt to cover some of the recent developments in the area of nucleotide receptors. The book has been divided into five parts which include a total of 16 chapters, 2 of which cover historical perspectives and future directions. The three major parts cover the mechanisms of P2 receptor activation and pharmacological and molecular characterization and physiological roles of P2 nucleotide receptors. Attention is drawn to another recent book, *Purinergic Approaches in Experimental Therapeutics*, which covers a variety of aspects of this research area (Book Review: *J. Med. Chem.* **1998**, *41*, 1355–6).

The chapter on historical perspectives of P2 receptors describes the evolution and progress of research on this topic in great detail with exhaustive citation of bibliography. The cloning and expression of P2X₁₋₇, P2Y₁, P2Y₂, P2Y₄, and P2Y₆ receptors is described well with relevant references (Chapters 2 and 3). The agonist pharmacology of these receptors is discussed adequately without any information on antagonist pharmacology (Chapters 5, 7, and 9). The chapters on P2 receptor agonists and antagonists and molecular modeling of P2Y receptors (Chapters 4 and 6) with insight into the possible binding modes and sites is highly useful for a researcher interested in the design of novel P2 receptor modulating agents. The physiological responses to activation of P2 nucleotide receptors is described in detail; however, a discussion on the possible therapeutic uses of agonists/antagonists of each of these receptors is lacking (with the exception of P2Y₂, Chapter 15).

The index has been written satisfactorily. The book is more expensive than the one edited by Jacobson and Jarvis, and it focuses on research on P2 receptors with useful details and bibliography. It could be a useful addition to the collection of vital information for a researcher in the field of P2 nucleotide receptors.

Shripad S. Bhagwat

*Pharmaceuticals Products Division
Abbott Laboratories
Abbott Park, Illinois 60064*

JM9802923

S0022-2623(98)00292-1