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BOOK REVIEW

Protein–Protein Interactions. A Molecular Cloning Manual

**(2nd Edition, Golemis, E. A., and Adams, P. D. (eds.)
Cold Spring Harbor Laboratory Press, New York, 938 p., 2005, $165)**

DOI: 10.1134/S0006297906060162

This book contains eight sections, which include 46 chapters.

Section 1 provides an introduction to a very wide field of studies of protein–protein interactions. It gives major concepts, principles, and definitions of protein–protein interactions in living systems and also historical aspects of the main periods in studies of protein–protein interactions.

Section 2 considers methods used for studies of protein–protein interactions; these include column chromatography, immunoprecipitation, chemical approaches, use of hybrid systems, and various genetic approaches.

Section 3 is focused on the following biophysical methods used in studies of protein–protein interactions: calorimetry, analytical ultracentrifugation, X-ray analysis, crystallization, mass-spectrometry, spectroscopy; methods for studies of ligand–receptor interactions and various microscopy methods.

Section 4 deals with methods of screening of genetically constructed protein kinases, ubiquitinylated membranes, and reporter proteins.

Section 5 considers screening methods using libraries of peptides and membrane-immobilized peptides.

Section 6 deals with imaging of protein–protein interactions by means of electron microscopy, fluorescent methods, and complementation analysis.

Section 7 considers genomic and computational analysis of protein–protein interactions.

Section 8 discusses protein-based design of drug and target inhibitors.

Each chapter of this book contains a large bibliography; some chapters contain addresses of Web sites related to protein–protein interactions.

Protocols given in the text of this book will help readers to rapidly master the methods described for their experimental work.

The book is well illustrated with colored schemes, figures, and high quality photos, which provide better understanding of the material of the book.

The appendix of this book contains a short glossary of terms used in the text, and an alphabetic index helps better orientation in the large book.

This book will be very useful for students and teachers of biological and chemical faculties of universities, specialists in proteomics, biotechnology, and gene engineering, molecular and cell biologists, and pharmacologists.

G. Ya. Wiederschain,
Doctor of Biological Sciences