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BOOK REVIEW

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## Protein–Protein Interactions. Methods and Applications

(Fu, H. (ed.) in *Methods in Molecular Biology* (Walker, J., ed.),  
Vol. 261, Humana Press, Humana, 2004, 532 p., \$125)

The book consists of five parts including 35 chapters written by an international group of distinguished experts.

The first part contains two chapters, which give description of the structural basis and methods for qualitative analysis of protein–protein interactions.

In the second part comprised of 16 chapters authors consider various technical approaches used for studies of protein–protein interactions *in vitro*. This part also gives description of such techniques as isothermal titration calorimetry, circular dichroism, nuclear magnetic resonance, sedimentation analysis, gel filtration, fluorescent polarization, affinity capillary electrophoresis, and other highly effective methods.

In the third part including seven chapters authors analyze various systems for detection of protein–protein interactions in heterologous systems. This part contains information on analysis of protein–protein interactions in bacteria, yeast, and hybrid mammalian cells.

The fourth part of this book contains six chapters where methods for studies of protein–protein interactions in living cells are described. This part gives analysis of methods of fluorescence-resonant energy transfer, cytometry, and other approaches.

The last part of this book consists of six chapters. They summarize advances in studies of protein–protein interactions using proteomic methods: affinity chromatography, 2D-electrophoresis, mass-spectrometry, and computer analysis. The last chapter of this part contains addresses of Internet sites on protein–protein interactions.

Each chapter contains detailed protocols, which help rapid duplication of the described methods. A bibliography in each chapter and alphabetical index help better orientation in the field of protein–protein interactions.

I do believe that this book will be very useful for researchers working in the fields of proteomics, protein chemistry and biochemistry, biotechnology, and molecular biology.

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