

The Protein Protocols Handbook

Third Edition

Edited by

John M. Walker

 Humana Press

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THIRD EDITION

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John M. Walker

University of Hertfordshire, Hatfield, UK

 **Humana Press**

Editor
John M. Walker
University of Hertfordshire
Hatfield, Hertfordshire
UK

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Preface

Since the second edition of this book was published in 2002 there have, of course, been continual methodological developments in the field of protein chemistry. Consequently, for this third edition, I introduced 57 chapters/protocols not present in the second edition, significantly updated a number of chapters remaining from the second edition and increased the overall length of the book from 164 to 208 chapters. The new chapters are generally spread across the various sections of the book, but in particular we have expanded the section on post-translational modifications to reflect the increasing importance of these modifications in understanding of protein function.

As in the earlier editions, *The Protein Protocols Handbook* aims to provide a cross-section of analytical techniques commonly used to study proteins and peptides, thus providing a benchtop manual and guide for both those who are new to the protein chemistry laboratory and for more established workers who wish to use a technique for the first time.

All chapters are written in the same format as that used in the *Methods in Molecular Biology* series. Each chapter opens with a description of the basic theory behind the method being described. The Materials section lists all the chemicals, reagents, buffers, and other materials necessary for carrying out the protocol. Since the principal goal of the book is to provide experimentalists with a full account of the practical steps necessary for carrying out each protocol successfully, the Methods section contains detailed step-by-step descriptions for every protocol that should result in the successful execution of each method. The Notes section complements the Methods material by indicating how best to deal with any problem or difficulty that may arise when using a given technique, by providing useful hints and tips, and by explaining how to go about making appropriate modifications or alterations to the protocol.

John M. Walker

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