

Smith, B.J. (ed.): **Protein Sequencing Protocols.** - Humana Press, Totowa 1997. 375 pp. ISBN 0-89603-353-8.

The book consists of 30 chapters and two appendices written by prominent authorities in the field. Topics cover all aspects of sequencing proteins. The first part (chapters 1 - 3) is devoted to handling of proteins in microscale and submicroscale level and their separation in one- and two-dimensional electrophoresis. In the second part (chapters 4 - 15) authors discuss enzymatic and chemical cleavage of polypeptides and isolation of fragments using chromatographic methods, predominantly HPLC. In the next part (chapters 16 - 27) the reader can find information on using mass spectrometry to analyse peptides and also principles and necessary methods for automated protein sequencing from both N- and C-termini. The last part (chapters 28 - 30) provides an overview of techniques used to study natural modifications of proteins such as phosphorylation and glycosylation.

Each chapter starts with a theoretical introduction to the studied problematic which is followed by a detailed list of necessary materials and equipment. The next part describes at least one but usually several examples of step-by-step recipes that ensure easily reproducible results. From my point of view the biggest asset of each chapter is the part, which is devoted to troubleshooting and practical hints and recommendations. Even though each chapter was written by different author or authors and the topics are narrowly specialised, the text is readable and simple to understand. Each chapter contains a list of references cited.

This methodological guide can be recommended to all who are concerned with protein characterisation or peptide mapping. It is also useful for those who are already familiar with one of the covered fields and wish to learn associated techniques and to extend their specialization.

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