copy and even in these days of depleted library budgets it should be a very high priority purchase. If a paper-back edition could be produced at a reasonable price I would be very tempted to recommend it for advanced undergraduate students as well.

M.C. Scrutton

Immunochemical Techniques for the Identification and Estimation of Macromolecules

Laboratory techniques in biochemistry and molecular biology; volume 1/III, revised edition

by J. Clausen,
Series editors: T.S. Work and R.H. Burdon

Elsevier Biomedical; Amsterdam, New York, 1981
xiv + 388 pages. $29.75

One only has to serve on a grant awarding Committee to become aware of the impact of immunological methods on the whole of medical research especially in biochemistry and molecular biology. This has of course become even more prominent since the development of monoclonal antibodies. In my own field of protein synthesis antisera to specific proteins which are undergoing study have been used for about 25 years. For these reasons a book which sets out to describe the methods available and their rationale is to be welcomed.

This book by Clausen is a second edition, the first having been published in 1969 in a series devoted to laboratory techniques in biochemistry and molecular biology. After a sound and helpful introduction the various methods are described in the following chapters, the details being confined in the main to a series of appendices. The illustrations are excellent and as would be expected the text is carefully edited.

The early chapters are concerned with the preparation of antisera, the migration of antigen and antibodies on gels, covering such techniques as immunoelectrophoresis. Then there is an explanation of radioimmunoassay, immunoenzyme–immunoassays, fluorescence and immunofluorescence techniques.

I have always had some doubts about the place of methods books in research and the present book raised my queries once again. One's first reaction is that it is best to consult an experienced colleague if one wants to apply a new method to a research problem. Only in this way is one likely to get a realistic appraisal of the suitability of the method for the particular problem. My disappointment with the book under review is that nowhere did I find a hint of the snags that are likely to arise in the use of immunological methods.

Perhaps I am biased but from the early days when I used antibodies to detect the synthesis of serum albumin in cell-free systems I learnt to interpret the results with caution. Part of the difficulty arises from the coprecipitation of a radioactive protein with the antibody precipitate to another protein. The chance of this happening can be lessened by various washing procedures, but this is not possible with immunoelectrophoresis and many claims concerning protein synthesis have been erroneously made using that technique.

Another problem arises from the specificity of the antisera. Antisera that are used for radioimmunoassay are often inadequate with respect to their specificity when used for the detection of proteins synthesised in cell free systems. Moreover, an antibody which reacts with a mature secreted protein may not react with its biosynthetic precursor. The lesson, which is too often ignored, is that one cannot be too careful in the interpretation of ones results and whenever possible various methods must be applied.

These observations do not detract from the value of the book. The conclusion is that one still needs friends who are experts in various fields but that a book is a most useful reference source. A valuable feature of the book is the list of some 900 references. I can recommend the book to any laboratory which utilises immunochemical methods.

P.N. Campbell

Molecular biology /mÉ™ËˆlÉ›kjÊŠlÉ™r/ is the branch of biology that concerns the molecular basis of biological activity in and between cells, including molecular synthesis, modification, mechanisms and interactions. The central dogma of molecular biology describes the process in which DNA is transcribed into RNA, then translated into protein. William Astbury described molecular biology in 1961 in Nature, as: Biochemistry, genetics &. Molecular biology. 2017 catalog.Â into one volume and written by leading figures in the field â€¢ Covers the latest advances in many different areas of epigenetics, ranging from basic aspects. to technologies to clinical medicine â€¢ Written at the verbal and technical levels that can be understood by scientists as well as. college students â€¢ Updated to include new epigenetic discoveries, newly approved therapeutics, and clinical trials.Â Pedagogically, the work concentrates on the latest knowledge, laboratory techniques, and experimental approaches used by translational research leaders in this field. Volume 1. Item Preview. remove-circle. Share or Embed This Item. EMBED.Â Introduction to gel chromatography; Clausen, JÃ¸rgen. Immunochemical techniques for the identification and estimation of macromolecules. Boxid. IA1940603. Camera. USB PTP Class Camera. Collection_set. printdisabled. Techniques in Free Radica has been added to your Cart. Add gift options. Buy usedÂ Techniques in Free Radical Research (Volume 22) (Laboratory Techniques in Biochemistry and Molecular Biology, Volume 22) 1st Edition. by A.T. Diplock (Author), M.C.R. Symons (Author), C.A. Rice-Evans (Author) & 0 more. See all formats and editions Hide other formats and editions.Â "...every biological scientist interested in free radicals should find this an affordable book well worth having on the laboratory or office bookshelf." - -FEBS Letters. Product details.