

clinical actions of the parent compound, coumarin, as well as its main metabolite in humans: 7-hydroxycoumarin and, to a lesser extent, 4-hydroxycoumarin. It describes in detail every facet of these compounds including history, toxicology, chemistry, metabolism, analysis, clinical, veterinary and other applications, their roles as immunomodulatory agents and speculates on their mode of action.

The following chapters are included:

- History of the development and applications of coumarin and coumarin-related compounds.
- The chemistry and occurrence of coumarins.
- The metabolism of coumarin.
- The effects of coumarin and its metabolites on cell growth and development.
- Coumarin as an immunomodulator.
- The mode of entry of coumarin into cells and its effects on cell–cell communication and migration.
- Coumarin in the treatment of lymphoedema and other high-protein oedemas.
- Mode of action of coumarin in the treatment of thermal injuries.
- Renal cell carcinoma: the background, rationale and current development of coumarin (1,2-benzopyrone) as a potential therapeutic agent.
- The potential role of coumarins in the therapy of prostate cancer.
- Clinical and biological observations associated with coumarins.
- Analysis of coumarins.
- Coumarins—multifaceted molecules with many analytical and other applications.
- Suggested modes of action of coumarins and some comments on their significance.

This book will be of interest to those working in biochemistry, chemistry, pharmacology, clinical sciences and toxicology.

The following three books are published in the *Essential Techniques* series, edited by D. Rickwood. This series of handy pocket-sized manuals is designed to provide researchers with immediate access to easy-to-follow step-by-step protocols required every day. Each book in this series is written by experienced laboratory researchers and gives up-to-date, tried and tested practical information for the life scientist. The most commonly used methods for each key technique are provided, with an explanation of their advantages and disadvantages, as well as advice on which procedure to use. Experimental notes and tips are given, plus information on safety and suppliers.

**PII: S0960-0760(98)00015-6**

**Cell biology.** Edited by D. Rickwood and J. R. Harris, *Essential Techniques Series*. D. Rickwood. 1996, John Wiley & Sons, Chichester, UK, 192 pages, ISBN: 0-471-96315-1 Price at May 1997: £16.99; US \$29.95.

As discoveries in the field of molecular biology begin to elucidate how cells function, studies of the whole cell, especially the core techniques of cell biology, have become increasingly important. The methods described in this book include cell culture, the isolation and fractionation of cell components, membrane analysis, light and electron microscopy. It provides the reader with a carefully selected set of protocols covering all the important areas of cell biology.

The following sections are included: Light microscopy; Basic electron microscopy; Cells; Isolation and functional analyses of organelles; Isolation and analysis of cell membranes; Isolation and fractionation of ribosomes and polysomes.

**PII: S0960-0760(98)00016-8**

**Antibody production.** P. J. Delves, *Essential Techniques Series*. D. Rickwood. 1997, John Wiley & Sons, Chichester, UK, 160 pages. ISBN: 0-471-97010-7 Price at July 1997: £17.99; US \$32.50.

Antibody production currently plays a major role in investigations in all areas of biological research, where antibodies are used as analytical, diagnostic and therapeutic reagents. *In vitro* production of antibodies is also proving valuable in antibody structure/function studies. This book presents background information on the principles of antibody biology and production but, more importantly, it also provides direct practical help for researchers in choosing the most effective protocols, as well as providing up-to-date protocols for both the classical methods of antibody production and purification, and more recent recombinant technologies.

The following sections are included: General introduction; Preparing immunogens; Immunization; Monoclonal antibodies; Recombinant antibodies; Purification of antibody; Characterization of antibody.

This book will be invaluable to all researchers, not just in immunology and immunopathology, but also in areas such as cell and molecular biology, microbiology and biochemistry. Antibody production. P. J. Delves, Essential Techniques Series. D. Rickwood. 1997, John Wiley & Sons, Chichester, UK, 160 pages. ISBN: 0-471-97010-7 Price at July 1997: £17.99; US \$32.50.

**PII: S0960-0760(98)00017-X**

**Mammalian cell culture, Edited by A. Doyle and J. B. Griffiths, Essential Techniques Series.** D. Rickwood. 1997, John Wiley & Sons, Chichester, UK, 190 pages. ISBN: 0-471-97057-3 Price at July 1997: £17.99; US \$32.50.

This book provides concise practical instructions for setting up a cell culture facility and operating it effectively and safely. Procedures are described to guide the readers from the initiation of primary cultures, handling established cell lines and quantifying their performance, through to the production of specialist cell types by immortalization. This is a convenient summary of techniques for experienced workers as well as an invaluable aid to tissue culture in nonspecialized environments.

The following sections are included: Introduction; Basic ingredients for media; Primary cultures; Core techniques; Core culture systems; Quality assessment of cultures; Immortalization.