The Immunoassay Handbook

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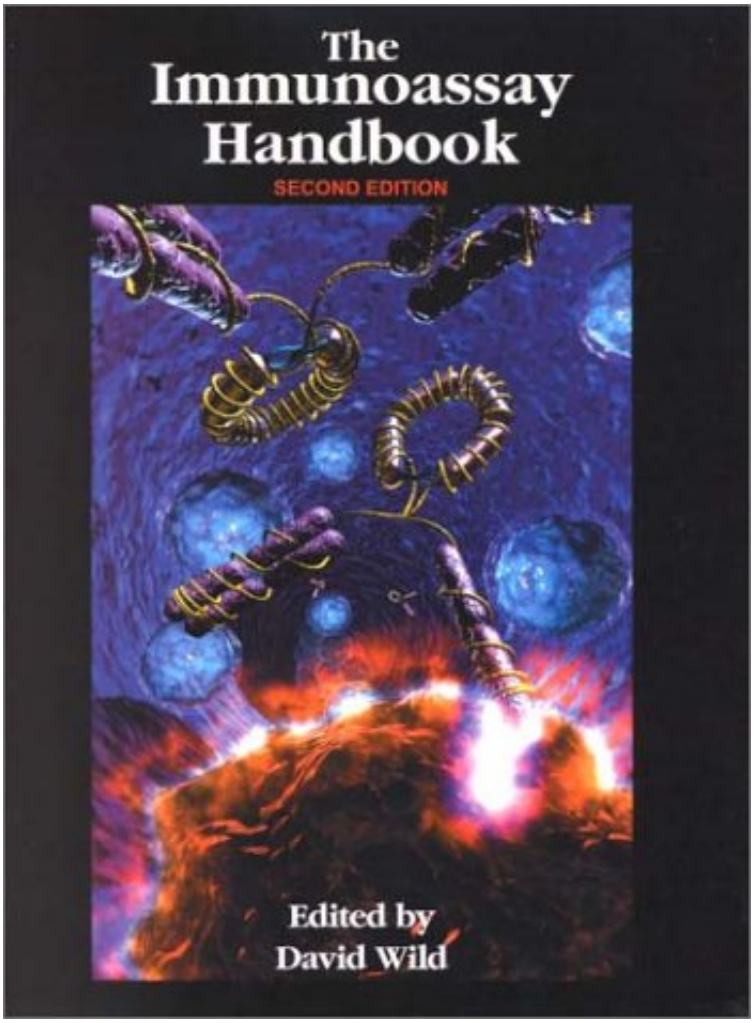

#5230334 in Books Nature Publishing Group 2000-01Original language:EnglishPDF # 1 2.83 x 8.27 x 13.60l, #File Name: 1561592706906 pages | File size: 46.Mb

From Brand: Nature Publishing Group : The Immunoassay Handbook before purchasing it in order to gage whether or not it would be worth my time, and all praised The Immunoassay Handbook:

3 of 3 people found the following review helpful. excellent desk referenceBy Hounddog16This book was obviously written by scientists actually working in the field and allows the reader to gain from the writers' actual experiences in development, application and trouble-shooting of various assays. This book will serve as an excellent teaching tool for lab managers to train their staff in the complexity of developing, optimizing and using immunoassays.3 of 3 people found the following review helpful. Immunoassay ExpertsBy A CustomerIf you need any help with the latest technology of immunoassay, this is teh book for you. It answered all of my questions and even allowed me to finish my project weeks in advance.

In the seven years since the first edition of this much-acclaimed reference work was published, both the technology and applications of immunoassay testing have grown exponentially. Immunoassays have become the single most commercially successful method of clinical testing throughout the world, prevalent in diagnostics in the forms of AIDS testing, therapeutic drug monitoring, and the detection and regulation of growth hormones, just to name a few. The second edition of The Immunoassay Handbook will not only help the clinical physician understand the most up-to-date science behind new, groundbreaking immunoassay systems, but will also prove invaluable to the research scientist, covering practical methodologies on collecting samples and troubleshooting for problems that occur at the point of testing. Also included is a rigorous review of the market, complete with analyses of 32 immunoassay systems and predicted trends for the future. The second edition has been expanded to include seventeen brand new chapters, as well as exhaustive additions and revisions of pre-existing chapters. From the most basic understanding of the principles of immunoassay to exacting specifications on technological calibration, each chapter of The Immunoassay Handbook is presented in a clear, standardized style, with hundreds of tables, illustrations, charts, and photographs. The Handbook is divided into four sections: Part 1: PRINCIPLES An extensive, accessible description of the theory of immunoassay from radioimmunoassays to immunobiosensors. An ideal introduction to immunoassay technology for students, professors, research staff, and professionals who market and sell immunoassay products. Ten entirely new chapters including coverage of: Ambient Analyte Assay (Roger Elkins), Immunoassay Development in the in vitro Diagnostic Industry (Douglas Brandt and Steven Figard), Signal Generation and Detection Systems (Larry Kricka and David Wild) and Homogeneous Immunoassays (Edwin F. Ullman). Part 2: PRODUCT TECHNOLOGY Describes the features, technologies, and chemistry behind 32 diagnostic systems, more than half of which have been developed since publication of the first edition. Significantly expanded coverage of near-patient tests. Objective feedback, evaluation and comparison between systems, beginning with chapters on Choosing an Immunoassay System (Lori J. Sokoll and Daniel W. Chan) and Market Trends (David Huckle and David Wild). Part 3: LABORATORY MANAGEMENT Importance of subject handling, sample collection, quality assurance, and laboratory information systems. Comprehensive troubleshooting guide for manual and automated systems and special chapters on Point-of-Care Testing (James H. Nichols) and the Clinical Laboratory Improvement Amendments of 1988 (Fred D. Lasky). Part 4: APPLICATIONS Describes the main clinical, research, and veterinary applications for immunoassays. Each clinical chapter begins with a condensed guide to normal and disease states, and includes detailed descriptions of more than 300 different analytes. Coverage includes chapters on Cardiac Markers (Alan H.B. Wu), Autoimmune Disease (David F. Keren), and Immunoassay Applications in Life Science Research (Michael J. OSullivan, Steve Capper, Jeffrey K. Horton, John Whateley, and Peter Baxendale). In addition to a list of contributors with their affiliations and a 40-page index, The Immunoassay Handbook, second edition also contains a foreword by Rosalyn Yalow, winner of the Nobel Prize in Medicine (1977) for her groundbreaking work in developing radioimmunoassay. In the ever-changing world of medical diagnostics, The Immunoassay Handbook, second edition will prove an invaluable reference to clinical and research scientists alike, describing the theory and demystifying the science behind this cutting-edge technology.

About the AuthorDavid Wild has worked with immunoassays for over 23 years, and has extensive experience with a wide range of immunoassay formats and analytes. He held management posts in Research Development as well as Customer and Technical Support and Quality Assurance at Ortho-Clinical Diagnostics (now part of Johnson Johnson, previously part of Amersham and then Eastman Kodak). He has overseen the development of the reagent systems for an automated immunoassay product range from initiation to launch. Currently he is developing innovative medical devices at ConvaTec as Director of Research Development. He has lectured on development, marketing and manufacturing strategies globally, and has also pioneered the use of modeling and simulation techniques in medical product development.