

Sidney P. Colowick and Nathan O. Kaplan

**Methods in
ENZYMOLGY**

Volume 84

Immunochemical Techniques

Part D

Selected Immunoassays

Edited by

John J. Langone

Helen Van Vunakis

Methods in Enzymology

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John J. Langone

LABORATORY OF IMMUNOBIOLOGY
NATIONAL CANCER INSTITUTE
NATIONAL INSTITUTES OF HEALTH
BETHESDA, MARYLAND

Helen Van Vunakis

DEPARTMENT OF BIOCHEMISTRY
BRANDEIS UNIVERSITY
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Contributors to Volume 84

Article numbers are in parentheses following the names of contributors.
Affiliations listed are current.

- M. AKHTAR (20), *Microbiology Research Division, Health Protection Branch, Health and Welfare Canada, Ottawa K1A 0L2, Ontario, Canada*
- PHILLIP W. ALBRO (47), *Laboratory of Environmental Chemistry, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina 27709*
- NAOMI ARIEL (3), *Department of Microbiology, Israel Institute for Biological Research, P.O. Box 19, Ness Ziona, Israel*
- LUC BÉLANGER (2), *Molecular Oncology Laboratory, L'Hôtel-Dieu de Quebec Research Center, Laval University, Quebec G1R 2J6, Canada*
- RITA A. BLANCHARD (5), *Department of Medicine, Tufts-New England Medical Center, Boston, Massachusetts 02111*
- ALAN BROUGHTON (32), *Nichols Institute, San Juan Capistrano, California 92675*
- JOHN C. BROWN (26), *Department of Physiology, Faculty of Medicine, University of British Columbia, Vancouver, British Columbia V6T 1W5, Canada*
- VINCENT P. BUTLER, JR. (8, 42), *Department of Medicine, College of Physicians and Surgeons, Columbia University, New York, New York 10032*
- ROBERT E. CANFIELD (8), *Department of Medicine, College of Physicians and Surgeons, Columbia University, New York, New York 10032*
- ANDRE CASTONGUAY (49), *Division of Chemical Carcinogenesis, American Health Foundation, Valhalla, New York 10595*
- MIROSLAV CESKA (19), *Department of Immunology, Sandoz Forschungsinstitut, A-1235 Wien, Austria*
- KUN CHAE (47), *Laboratory of Environmental Chemistry, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina 27709*
- JAMES G. CHAFOULEAS (10), *Department of Cell Biology, Baylor College of Medicine, Houston, Texas 77030*
- CHIN C. CHANG (9), *Merrell Research Center, Merrell Dow Pharmaceuticals Inc., Cincinnati, Ohio 45215*
- INDER J. CHOPRA (22), *Division of Endocrinology, Department of Medicine, Center for the Health Sciences, University of California School of Medicine, Los Angeles, California 90024*
- GEORGE CLARK (47), *Department of Immunology, University of California, Berkeley, California 94720*
- ROBERT J. CONNOR (46), *Division of Biological Effects, Bureau of Radiological Health, Food and Drug Administration, Washington, D.C. 20201*
- MARIA DA COSTA (31), *Department of Medicine, New York Medical College, New York, New York 10029*
- JOHN R. DEDMAN (10), *Department of Medicine, Division of Endocrinology, University of Texas Health Science Center at Houston, Houston, Texas 77030*
- M. A. DELAAGE (25), *Centre d'Immunologie, INSERM-CNRS, Case 906, 13288 Marseille Cedex 9, France*
- M. L. DE REGGI (25), *Centre d'Immunologie, INSERM-CNRS, Case 906, 13288 Marseille Cedex 9, France*
- N. DICKIE (20), *Microbiology Research Division, Health Protection Branch, Health and Welfare Canada, Ottawa K1A 0L2, Ontario, Canada*
- ROSS DIXON (35), *Research Division, Hoffmann-La Roche Inc., Nutley, New Jersey 07110*
- ROSS C. DONEHOWER (30), *Johns Hopkins Oncology Center, Baltimore, Maryland 21205*

- JILL R. DRYBURGH (26), *Department of Biochemistry, University of Surrey, Guildford, Surrey, England*
- EVA ENGVALL (1), *La Jolla Cancer Research Foundation, La Jolla, California 92037*
- CHARLES ERLICHMAN (30), *Department of Medicine, Ontario Cancer Institute, Toronto, Ontario M4X 1K9, Canada*
- DAVID S. FREEMAN (36), *Department of Pharmaceutical Sciences, College of Pharmacy, North Dakota State University, Fargo, North Dakota 58105*
- BARBARA C. FURIE (5), *Department of Medicine and Department of Biochemistry and Pharmacology, Tufts-New England Medical Center, Boston, Massachusetts 02111*
- BRUCE FURIE (5), *Department of Medicine and Department of Biochemistry and Pharmacology, Tufts-New England Medical Center, Boston, Massachusetts 02111*
- JUSTINE S. GARVEY (9), *Department of Biology, Syracuse University, Syracuse, New York 13210*
- HILDA B. GIJKA (36), *Department of Biochemistry, Brandeis University, Waltham, Massachusetts 02154*
- JAN A. GUTOWSKI (21), *Connaught Research Institute, Willowdale, Ontario M2N 5T8, Canada*
- A. M. HAGENAARS (18), *National Institute of Public Health, Laboratory for Immunology, P. O. Box 1, 3720 BA Bilthoven, The Netherlands*
- JUNE W. HALLIDAY (11), *Department of Medicine, University of Queensland, Royal Brisbane Hospital, Herton 4029, Australia*
- SALLY E. HAYS (38), *Stanford Research Institute, Menlo Park, California 94025*
- R. HENDRIKS (39), *Department of Drug Metabolism and Pharmacokinetics, Janssen Pharmaceutica N.V., B-2340 Beerse, Belgium*
- J. HEYKANTS (39), *Department of Drug Metabolism and Pharmacokinetics, Janssen Pharmaceutica N.V., B-2340 Beerse, Belgium*
- M. H. HIRN (25), *Centre d'Immunologie, INSERM-CNRS, Case 906, 13288 Marseille Cedex 9, France*
- LEON W. HOYER (4), *Department of Medicine, University of Connecticut Health Center, Farmington, Connecticut 06032*
- DIANE M. JACOBS (21), *Department of Microbiology, State University of New York at Buffalo, Buffalo, New York 14214*
- R. S. KAMEL (29), *Department of Chemical Pathology, St. Bartholomew's Hospital, London EC1A 7HL, England*
- KAREN L. KAPLAN (6, 7), *Department of Medicine, College of Physicians and Surgeons, Columbia University, New York, New York 10032*
- JOAN L. KLOTZ (15), *Division of Cytogenetics and Cytology, City of Hope National Medical Center, 1500 East Duarte Road, Duarte, California 91010*
- S. KOZAKI (18), *University of Osaka Prefecture, College of Agriculture, Department of Veterinary Science, Sakai-Shi, Osaka 591, Japan*
- MARK J. KRANTZ (3), *Department of Medicine, Cross Cancer Institute, Edmonton, Alberta T6G 1Z2, Canada*
- SUZANNE LAFERTÉ (3), *McGill Cancer Centre, McGill University, Montreal, Quebec H3G 1Y6, Canada*
- J. LANDON (29), *Department of Chemical Pathology, St. Bartholomew's Hospital, London EC1A 7HL, England*
- JOHN J. LANGONE (28, 48, 51), *Laboratory of Immunobiology, National Cancer Institute, National Institutes of Health, Bethesda, Maryland 20205*
- MICHAEL I. LUSTER (47), *National Toxicology Program, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina 27709*
- RENÉ MASSEYEFF (2), *Laboratoire d'Immunologie, Faculté de Médecine, Université de Nice, 06034 Nice-Cedex, France*
- JAMES D. MCKINNEY (47), *Laboratory of Environmental Chemistry, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina 27709*
- ANTHONY R. MEANS (10), *Department of*

- Cell Biology, Baylor College of Medicine, Houston, Texas 77030*
- A. WAYNE MEIKLE (44), *Department of Internal Medicine, University of Utah College of Medicine, Salt Lake City, Utah 84132*
- M. MICHIELS (39), *Department of Drug Metabolism and Pharmacokinetics, Janssen Pharmaceutica N.V., B-2340 Beerse, Belgium*
- JOHN G. MOFFATT (33), *Institute of Bio-Organic Chemistry, Syntex Research, 3401 Hillview Avenue, Palo Alto, California 94304*
- CHARLES E. MYERS (30), *Clinical Pharmacology Branch, National Cancer Institute, National Institutes of Health, Bethesda, Maryland 20205*
- HIROSHI NAKAZATO (17), *Laboratory of Biotechnology, Suntory Institute for Biomedical Research, Shimamoto-Cho, Osaka 618, Japan*
- HYMIE L. NOSSEL (8), *Department of Medicine, College of Physicians and Surgeons, Columbia University, New York, New York 10032*
- S. NOTERMANS (18), *National Institute of Public Health, Laboratory for Zoonoses and Food Microbiology, P. O. Box 1, 3720 BA Bilthoven, The Netherlands*
- TADASHI OKABAYASHI (33), *Shionogi Research Laboratories, Shionogi and Co. Ltd., Fukushima-ku, Osaka 553, Japan*
- F. ÖTTING (43), *Department of Protein-chemistry, Center of Research, Grünenthal GmbH, D-5100 Aachen, Federal Republic of Germany*
- JOHN OWEN (6, 7), *Department of Medicine, College of Physicians and Surgeons, Columbia University, New York, New York 10032*
- MIRIAM C. POIRIER (46), *In Vitro Pathogenesis Section, National Cancer Institute, National Institutes of Health, Bethesda, Maryland 20205*
- RUSSELL E. POLAND (38), *Division of Biological Psychiatry, Department of Psychiatry, Harbor-UCLA Medical Center, Torrance, California 90509*
- J. J. PRATT (27), *Isotopenlaboratorium, Academisch Ziekenhuis, Oostersingel 59, 9713 EZ Groningen, The Netherlands*
- VIC RASO (34), *Division of Biochemical Pharmacology, Sidney Farber Cancer Institute, and the Department of Pathology, Harvard Medical School, Boston, Massachusetts 02115*
- DAVID J. ROBISON (5), *Department of Biochemistry and Pharmacology, Tufts University School of Medicine, Boston, Massachusetts 02111*
- P. E. ROSS (24), *Department of Medicine, Ninewells Hospital and Medical School, Dundee DD1 9SY, Scotland*
- SHELDON P. ROTHENBERG (31), *Department of Medicine, New York Medical College, New York, New York 10029*
- ROBERT T. RUBIN (38), *Division of Biological Psychiatry, Department of Psychiatry, Harbor-UCLA Medical Center, Torrance, California 90509*
- ERKKI RUOSLAHTI (1), *La Jolla Cancer Research Foundation, La Jolla, California 92037*
- TAKESHI SASAKI (16), *The Second Department of Internal Medicine, Tohoku University School of Medicine, Sendai, Miyagi 980, Japan*
- ROBERT P. SCHLEIMER (37), *Division of Clinical Immunology, Johns Hopkins University School of Medicine, Baltimore, Maryland 21239*
- HARTMUT R. SCHROEDER (23), *Immunochemistry, Ames Division of Miles Laboratories, Inc., P. O. Box 70, Elkhart, Indiana 46515*
- WEI-CHIANG SHEN (50), *Department of Pathology, Boston University School of Medicine, Boston, Massachusetts 02118*
- SYDNEY SPECTOR (40, 41), *Roche Institute of Molecular Biology, Nutley, New Jersey 07110*
- CHARLES R. STEINMAN (13, 14), *Department of Medicine, Mount Sinai School of Medicine, New York, New York 10029*
- MARVIN J. STONE (12), *The Charles A. Sammons Cancer Center, Baylor University Medical Center, Dallas, Texas 75246*

- MINDY M. TAI (5), *Immunology Program, Tufts University School of Medicine, Boston, Massachusetts 02111*
- TAKEHIKO TAKATORI (45), *Department of Legal Medicine, Hokkaido University School of Medicine, Sapporo 060, Japan*
- BARBARA B. TOWER (38), *Equine Research Center, California Polytechnic University, Pomona, California 91768*
- NORMA C. TRABOLD (4), *Department of Medicine, University of Connecticut Health Center, Farmington, Connecticut 06032*
- DORIS TSE-ENG (42), *Department of Medicine, College of Physicians and Surgeons, Columbia University, New York, New York 10032*
- MARJATTA UOTILA (1), *La Jolla Cancer Research Foundation, La Jolla, California 92037*
- RONALD J. VANDER MALLIE (9), *New England Nuclear Corporation, North Billerica, Massachusetts 01862*
- HELEN VAN VUNAKIS (48, 49, 51), *Department of Biochemistry, Brandeis University, Waltham, Massachusetts 02254*
- MICHAEL R. WATERMAN (12), *Department of Biochemistry, The University of Texas Health Science Center at Dallas, Dallas, Texas 75235*
- WILMAR M. WIERSINGA (22), *Klinick Voor Inwendige Ziekten, Academisch Ziekenhuis, Wilhelmina Gasthuis, Amsterdam, The Netherlands*
- JAMES T. WILLERSON (12), *Department of Internal Medicine, The University of Texas Health Science Center at Dallas, Dallas, Texas 75235*
- M. G. WOLDRING (27), *Isotopenlaboratorium, Academisch Ziekenhuis, Oostersingel 59, 9713 EZ Groningen, The Netherlands*

Preface

Previous volumes (70, 73, 74) of *Immunochemical Techniques* deal with the properties of antigen-antibody interactions, procedures for the preparation of immunochemical reagents, and various techniques for the detection and estimation of antigens, antibodies, and circulating immune complexes. This volume contains descriptions of immunoassays for some biologically important molecules, including macromolecules as well as low-molecular-weight nonantigenic compounds that require chemical modification before they can be used in the production of specific antibodies. One major goal is to illustrate the variety of immunological procedures involved in the development of a successful assay for substances of diverse structural and biochemical properties.

Immunoassays for many other molecules of biochemical and clinical interest appear throughout the Series. They are indexed under specific categories in this volume [51], and those articles that contain comprehensive lists of references to original work are noted.

In addition to methodologies, these contributions provide information and examples that can be used to properly assess the suitability of employing immunochemical techniques to answer specific scientific queries. Only a mere fraction of molecules that are of interest to the scientist has been dealt with in the vast literature devoted to immunoassays of proteins, peptides, nucleic acids, carbohydrates, lipids, cell surface antigens, viruses, bacteria, and other low-molecular-weight compounds of endogenous and exogenous origin. Immunochemical procedures will continue to proliferate since highly sensitive and specific analytical methods are of fundamental importance to many areas of research.

We are grateful to the authors for their contributions, advice, and cooperation. A few of our contributors also deserve special thanks for their patience. Publication of their articles was originally scheduled for an earlier volume, but modifications in the format rendered them more suitable for this volume.

JOHN J. LANGONE
HELEN VAN VUNAKIS

METHODS IN ENZYMOLOGY

EDITED BY

Sidney P. Colowick and Nathan O. Kaplan

VANDERBILT UNIVERSITY
SCHOOL OF MEDICINE
NASHVILLE, TENNESSEE

DEPARTMENT OF CHEMISTRY
UNIVERSITY OF CALIFORNIA
AT SAN DIEGO
LA JOLLA, CALIFORNIA

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- III. Preparation and Assay of Substrates
- IV. Special Techniques for the Enzymologist
- V. Preparation and Assay of Enzymes
- VI. Preparation and Assay of Enzymes (*Continued*)
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