CONTENTS FOR NOVEMBER

CELLULAR IMMUNOLOGY

The Role of Humoral Factors in the Initiation of In Vitro Primary Immune Responses. III. Characterization of Factors that Replace Thymus-derived Cells. JAMES WATSON .............................. 1301

Specific Heterologous Enhancement of Immune Responses. V. Isolation of a Soluble Enhancing Factor from Supernatants of Specifically Stimulated and Allogeneically Induced Lymphoid Cells. ARNOLD S. RUBIN, A. BRUCE MACDONALD, AND ALBERT H. COONS .......................... 1314

Differentiation of Lymphoid Cells: Effect of Serum and Other Mitogenic Agents on the Selective Induction of Immunoglobulin M Secreting Lymph Node Cells in Tissue Culture. DANIEL H. ZIMMERMAN AND MILTON KERN ........................ 1326

Immunoglobulin (Ig) Allotype Markers on Rabbit Lymphocytes: Separation of Cells Bearing Different Allotypes and Demonstration of the Binding of Ig to Lymphoid Cell Membranes. PATRICIA P. JONES, JOHN J. CEBRA, AND LEONARD A. HERZENBERG ............................. 1334

Vitamin A: Adjuvant and Steroid Antagonist in the Immune Response. BENJAMIN E. COHEN AND I. KVLMAN COHEN ............................... 1376

Induction of Cell-Mediated Immunity and Tolerance to Homologous Collagen in Guinea Pigs: Immunization of Antigen-Reactive Cells for a Self-Antigen. GEORGE SHYK AND DOV MICHAELI ............................. 1381

Reaginic Antibody Formation in the Mouse. III. Collaboration Between Hapten-Specific Memory Cells and Carrier-Specific Helpers Cells for Secondary Anti-Hapten Antibody Formation. HIROKAZU OKUDAIRA AND KIMISHIGE ISHIKAWA ... 1420

Long-term Survival of Mouse Thymic Lymphoid Cells In Vitro: Effect of Human Serum. KEIKO OZATO ......................................................... 1459

Studies of Thoracic Duct Lymphocytes of Mice. III. Cell Surface Antigen Characteristics. MARK A. MANDEL, TOSHITADO TAKAHASHI, AND LLOYD J. OLD ........................ 1474

Presence of Impairment of Humoral Immunity in Nonadherent Spleen Cells of Old Mice. MARGARET L. HEIDRICK AND T. MAKINODAN ................................. 1502

Lymphocytes in Peyer's Patches of the Mouse: Analysis of the Constituent Cells in Terms of Their Capacities to Mediate Functions of Mature T and B Lymphocytes. DAVID H. KATZ AND DANIEL Y. E. PERRY .............................. 1507

Immune Responses In Vitro. IX. Role of Cell Clusters. JOHN A. MCINTYRE AND M. W. PIERCE .............................. 1526

A Mathematical Model for the Quantitation of Tumor and Antibody-Forming Cell Populations within an Animal's Body. RAYMOND N. HIRAMOTO, VITALI K. GHANTA, JERRY R. MCGHEE, AND N. MARLENE HAMIL ............................. 1546

IMMUNOCHEMISTRY

A Light Chain Tyrosyl Sequence in the Antibody Site of a Rabbit Anti-p-Azobenzoate Antibody. O. A. ROHOLT, B. FRIEDENSON, G. RADZIMSKI, AND D. PRESSMAN ............................ 1367

The Reaction of Zymosan with the Properdin System in Normal and C4-Deficient Guinea Pig Serum: Demonstration of C3- and C5-Cleaving Multi-unit Enzymes, Both Containing Factor B, and Acceleration of Their Formation by the Classical Complement Pathway. VOLKER BRADE, GERALD D. LEE, AMNE NICHOLSON, HYUN S. SHIN, AND MANFRED M. MAYER ............................... 1389

Analysis of Antibody Populations to Oligo-Alanine Determinants. III. The Participation of Subclasses IgG1 and IgG2 in the Antibody Response in Inbred Mice. HUBERT KOLB AND EBERTHARD WEILER .............................. 1479

Analysis of Antibody Populations to Oligo-Alanine Determinants. IV. Functional Similarity of IgG1 and IgG2 Antibodies. HUBERT KOLB AND EBERTHARD WEILER .............................. 1487

Continued
Identification of J-Chain in Polymeric Immunoglobulins from a Variety of Species by Cross-Reaction with Rabbit Antisera to Human J-Chain. KUNIHIKO KOBAYASHI, JEAN-PIERRE VAERMAN, HERVÉ BAZIN, ANNE-MARIE LEBACQ-VERHEYDEN, AND JOSEPH F. HEREMANS ....................................... 1590

IMMUNOGENETICS AND TRANSPLANTATION

Cellular Studies of the Genetic Control of Immune Response toward the Loop Region of Lysosome. EDNA MOZES, G. M. SHEARER, ELCHANAN MARON, RUTH ARNON, AND MICHAEL SELA .................................................................................. 1429

Genetic Control of Thymus-Derived Cell Function. III. DNA Synthetic Responses of Rat Lymph Node Cells Stimulated in Culture with Concanavalin A and Phytohemagglutinin. R. MICHAEL WILLIAMS, MICHAEL J. MOORE, AND BARUJ BENACERRAF ..................................................... 1571

Genetic Control of Thymus-Derived Cell Function. IV. Mitogen Responsiveness and Mixed Lymphocyte Reactivity of Thymus Cells and Lymph Node Cells from Lewis and Brown Norway Rats. R. MICHAEL WILLIAMS, MICHAEL J. MOORE, AND BARUJ BENACERRAF ..................................................... 1579

IMMUNOPATHOLOGY

Mechanisms of Endotoxin Tolerance. VIII. Specificity of Serum Transfer. SHELDON E. GREISMAN, EDWARD J. YOUNG, AND BERNARD DUBUY ...................... 1349

Role of Ca++ in Mast Cell Activation, Desensitization, and Histamine Release by Dextran. JAMES H. BAXTER .......................... 1470

Detection of Slow Reacting Substance of Anaphylaxis (SRS-A) in Plasma of Guinea Pigs During Anaphylaxis. DANIEL J. STECHSHULTE, ROBERT P. ORANGE, AND K. FRANK AUSTEN ................................................... 1585

TUMOR IMMUNOLOGY

Lymphocyte Populations of AKR/J Mice. I. Effect of Aging on Migration Patterns, Response to PHA and Expression of Theta Antigen. MARION M. ZATZ, ALLAN L. GOLDSTEIN, AND ABRAHAM WHITE .......................................................... 1514

Lymphocyte Populations of AKR/J Mice. II. Effect of Leukemogenesis on Migration Patterns, Response to PHA, and Expression of Theta Antigen. MARION M. ZATZ, ABRAHAM WHITE, AND ALLAN L. GOLDSTEIN .......................................................... 1519

VIRAL AND MICROBIAL IMMUNOLOGY

Studies of Antibodies to Non-Type-Specific Antigens Associated with Streptococcal M Protein in the Sera of Patients with Rheumatic Fever. EDWIN H. BEACHEY, ITZHAK OFEK, AND ALAN L. BISNO .......................... 1361

A Surface Component in Group A, C, and G Streptococci with Non-Immune Reactivity for Immunoglobulin G. GÖRAN KRONVALL .......................... 1401

Failure to Demonstrate a Humoral Immune Response to Serapic Infection in Mice. DAVID D. PORTER, HELEN G. PORTER, AND NANCY A. COX .......................... 1407

Evidence for a Macrophage-Mediated Effect of Poliovirus on the Lymphocyte Response to Phytohemagglutinin. F. J. C. J. SOONTIENS AND J. VAN DER VEEN .......................... 1411

Role of Humoral and Cell-Mediated Immunity on the Recovery of Chickens from Fowlpox Virus Infection. CHIHARU MORITA ........................................ 1495

An Agglutination-Flocculation Test for Rapid Detection of Hepatitis B Antigen. ZARAH F. KACHANI AND DAVID J. GOCKE .................................................. 1564

COMMUNICATIONS

Endogenous Synthesis of Membrane b5 by Lymphocytes from Rabbits Recovering from b5 Allotype Suppression. MICHAEL R. HARRISON, PATRICIA P. JONES, AND ROSE G. MAGE .......................................................... 1505

Alternate Complement Pathway: Elevation of Cobra Venom-Induced Hemolytic Activity in Sera of Tumor-Bearing Mice. MELCHIORRE BRAI AND ABRAHAM G. OSLER ......................................................... 1508

Thymus Dependence of Reaginic Antibody Formation in Mice. J. GABRIEL MICHAEL AND I. LEONARD BERNSTEIN .................................................. 1600

Selective Activation of Chicken T Lymphocytes by Concanavalin A. PAAVO TOIVANEN AND AULI TOIVANEN .................................................. 1602

Relationship between Graft-vers-Host Reactivity and Possession of the High Leukemia Genotype hr/hr. VALERIE A. I'ANSON AND DAVID L. GASKER .................................................. 1604

Tissue Typing: An Experimental Solution in the Chicken. MORTEN SIMONSEN .................................................. 1607

Characterization of Glass-Adherent Human Mononuclear Cells. CHARLES A. KOLLER, GERALD W. HUBERTHE, ARTHUR L. SAGONE, AND ALBERT F. LOBUGLIO .......................... 1610

Change in Susceptibility of C3H/HeJ Mice to LCM Virus Infection. MICHAEL B. A. OLDESTRE AND FRANK J. DIXON .................................................. 1613

Intercellular Communication in Stimulated Human Lymphocytes. GILBERTO M. OLIVEIRA-CASTRO, MARCELLO A. BARCINSKI AND SAMUEL CUKIERMAN .................... 1616