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 Secretory Cells in Tissue Culture. DANIEL H. ZIMMERMANN 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 SENYK 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

Reversible Inhibition of Lymphocyte-Mediated Cytolysis by Dimethyl Sulfoxide (DMSO). GERALD WOLBERG, KAY HEMSTRA, JOSEPH J. BURGE, AND ROBERT C. SINGLER .................. 1435

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 Characterization. MARK A. MANDEL, TOSHIKAZU 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. PEREY ............................ 1507

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

An Effector-Cell Independent Step in Target Cell Lysis by Sensitized Mouse Lymphocytes. ERIC MARTZ AND BARUJ BENACERRAF .......................... 1538

A Mathematical Model for the Quantitation of Tumor and Antibody-Forming Cell Populations within an Animal's Body. RAYMOND N. HIRAMOTO, VITHAL K. GHANTA, JERRY R. MCGHEE, AND N. MARLENE HAMLIN ............................................................. 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 BRADB, 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 IgG4 in the Antibody Response in Inbred Mice. HUBERT KOLB AND EBERHARDT WEILER .......................... 1479

Analysis of Antibody Populations to Oligo-Alanine Determinants. IV. Functional Similarity and IgG2a Antibodies. HUBERT KOLB AND EBERHARDT WEILER .......................... 1487

Continued