CONTENTS

NUMBER 1, JANUARY 1968

IMMUINOCHEMISTRY

Properties of 19S Antibodies in Complement Fixation. I. Temperature Dependence and Role of Antigen Structure. Ruth V. Cunniff and B. David Stollar ................................... 7

A New Serum Factor in Normal Rabbits. IV. Occurrence in Neonatal Rabbit Sera. William J. Mandy, Marion E. Woolsey and F. B. Lewis ................................. 15

Immune Lytic Transformation: A State of Irreversible Damage Generated as a Result of the Reaction of the Eighth Component in the Guinea Pig Complement System. Robert L. Stolfi ...... 46

The Inhibition by Normal γG-Globulins of Antibodies Specific for Individual γG Myeloma Proteins. Daniel Hurez, Gilbert Meshaka, Constantin Mihaesco and Maxime Seligmann ............ 69


A Cellulose Mercurial: Preparation, Properties and Use in Antibody Purification. John R. Shainoff .................................................................................. 187

The Antigenic Determinants of the Variable Half of a Bence-Jones Protein of Type L. A. Ruffilli... 201

Reactivity of Human Immunoglobulins in Amebiasis. Shirley E. Maddison, Irving G. Kagan and Lois Norman............................................................. 217

IMMUNOGENETICS

Blood Group Specific Agglutinins in Invertebrates. Rebecca Brown, Luis R. Almodovar, H. M. Bhatia and William C. Boyd ................................................................. 214

CELLULAR IMMUNOLOGY

Differentiation of Antibody-Forming Cells. I. Ratio of Precursor Cells to Antibody-Forming Cells in the Mouse Spleen. Phyllis Kind and Priscilla A. Campbell ............................. 55


IMMUNOPATHOLOGY

Immunologic Specificity of the Localized Shwartzman Phenomenon Induced in Guinea Pigs by Simple Chemical Haptens. A. L. DeWeck, J. R. Frey and H. Geleick. ................................................................. 1

Nephrotoxic Serum Nephritis in Mice with a Genetic Deficiency in Complement. Lois H. Lindberg and Leon T. Rosenberg ......................................................... 34

The Pathogenicity in Mice of Aerosols of Encephalomyocarditis Group Viruses or Their Infectious Nucleic Acids. T. G. Akers, S. H. Madin and F. L. Shaffer .............................................. 120

Histology of PCA Reactions in Guinea Pigs. A Comparison of Reactions Produced by Guinea Pig γGI and Rabbit Antibodies. Moses K. Lieberman and Zoltan Ovary ........................................... 159

Passive Anaphylaxis in Mice with γG Antibodies. I. PCA and RPCA Reactions with Homologous and Heterologous Antibodies. Nelson M. Vaz and Zoltan Ovary ................................................ 169

γG-Antibody to Human Anti-Hemophilic Globulin (Factor VIII). Burton R. Anderson and Stanley B. Troup ............................................................. 175

MICROBIAL AND VIRAL IMMUNOLOGY


Hemagglutinin of Type 4 Adeno-Associated Satellite Virus. Michio Ito and Heather D. Mayor ......................................................... 61

Influenza Virus Neutralizing Antibody in Human Respiratory Secretions. Robert H. Waldman, John J. Mann and Julius A. Kael ......................................................... 80

CONTENTS

Application of Immunodiffusion Methods to the Antigenic Analysis of Dengue Viruses. II. Immunoelectrophoresis. Adly N. Ibrahim and W. McD. Hammon .............................. 93


Rhinoviruses: Basis for a Numbering System. I. HeLa Cells for Propagation and Serologic Procedures. Robert M. Conant and Vincent V. Hamparian ..................................... 107

Rhinoviruses: Basis for a Numbering System. II. Serologic Characterization of Prototype Strains. Robert M. Conant and Vincent V. Hamparian ............................................. 114

Evidence for the IgG Nature of Complement-Fixing (CF) Antibodies to Adenovirus Type 12 Hamster Tumor Neoantigens. G. L. Van Hoosier, Jr., Carolyn Cupp, Dee Boren and J. J. Trentin 128

Studies on Live Attenuated Japanese Encephalitis Vaccine to the Swine. K. Kodama, N. Sasaki and Y. Kanda Inoue .............................. 194

A Sandwich Technique for the Detection of Myxovirus-Infected Cells Using a Fluorescein-Conjugated Antibody Directed against a Glycoprotein Substrate (Fetuin). Herbert A. Blough, Mark Ballow and John W. Kreider .............................. 209

COMMUNICATIONS

Interactions of the Complement System with Endotoxins from a Salmonella minnesota Mutant Deficient in 0-Polysaccharide and Heptose .............................. 227

NUMBER 2, FEBRUARY 1968

IMMUNOCHEMISTRY

Fc-Like Fragments in Peptic Digests of Human Immunoglobulin G. Ralph Heimer and Sidney H. Schnoll ................................................................................... 231

Structure of Human Immunoglobulin M. II. Isolation of a High Molecular Weight Fc Fragment of IgM Composed of Several Fc Subunits. Kaoru Onoue, Tadamitsu Kishimoto and Yuichi Yamamura ................. 238

A New Basic Protein in Rabbit Serum Unrelated to Immunoglobulin. Donald R. Nash and John H. Schwab ................................................................. 252

Cold-Reacting Antibodies: The Enhancement of Antibody Fixation by the First Component of Complement (C’1a). Wendell F. Rosse, Tibor Borsos and Herbert J. Rapp 259

Urinary Fc and Fc’ Fragments. John Bienenstock ........................................................ 280


Immunoochemical Comparison of B-Lactoglobulins. Nancy I. Phillips, Robert Jenness and Edwin B. Kalan ................................................................................. 307


The Effect of Carbamylation and Amidination of Rabbit γG-Antibody on Its Ability to Fix Complement. Stanley Cohen and Elmer L. Becker ................................. 395

The Effect of Benzylation or Sequential Amidination and Benzylation on the Ability of Rabbit γG-Antibody to Fix Complement. Stanley Cohen and Elmer L. Becker 403

The Requirement for the Association of Two Adjacent Rabbit γG-Antibody Molecules in the Fixation of Complement by Immune Complexes. Stanley Cohen 407

IMMUNOGENETICS


CELLULAR IMMUNOLOGY

Antigenic Properties of Mouse Lymphoma Cells. Esther Fincher Hays ........................................................ 245

Detection of Immune Response against Synthetic Polymers of Amino Acids Employing the Plaque-Forming Cell System. II. Cross-Reactions of Normal Sheep Erythrocytes with Antibody against Glutamic Acid, Lysine, Alanine and Tyrosine Terpolymers. Patricia Walsh, Paul H. Maurer and Marianne Egan ........................................................ 266
Delayed Hypersensitivity. II. Persistence and Conjugate Specificity of the Transfer Reaction. John P. Phair and Fred S. Kantor .................. 302
Fine Structure of Lymphocytes Sensitized to Trichinella spiralis. Mahendra P. Janamur, Charles W. Kim and L. D. Hamilton .................. 329
The in Vitro Induction of Mouse Lymphocyte Transformation by Phytohemagglutinin. Lois B. Epstein and Charles W. Smith .................. 421
Susceptibility of Different Mouse Strains to Lymphocytic Choriomeningitis Virus. Michael B. A. Oldstone and Frank J. Dixon ........ 355

IMMUNOPATHOLOGY
A Proposed Mechanism for Natural Immunity to Enterobacterial Pathogens. Louis Chedid, Monique Parant, Francine Parant and Fernand Boyer ................. 292
Skin-Fixing Antibody in Experimental Allergic Encephalomyelitis. George A. Falk, Robert G. Heinze, Marian W. Kies and Elsworth C. Alvord, Jr ................. 321
Susceptibility of Different Mouse Strains to Lymphocytic Choriomeningitis Virus. Michael B. A. Oldstone and Frank J. Dixon ........ 355

MICROBIAL AND VIRAL IMMUNOLOGY
Neutralization of Sensitized Lactic Dehydrogenase Virus by Anti-γ-Globulin. Abner Louis Notkins, Michael Mage, Warren K. Ashe and Suellen Mahar ................. 314
Distribution of Antibodies within 19 S and 7 S Immunoglobulins following Infection with Mycoplasma pneumoniae. Gunnel Biberfeld .................. 338
Development in Hamsters of Antibodies against Surface Antigens Present in Cells Transformed by Papovavirus SV40. Satvir S. Tevethia, Lynda A. Couvillion and Fred Rapp ................. 358
The Growth of Mumps Virus in Organ Cultures of Rhesus Thyroid Gland. Thomas D. Planagan, Almen L. Barron and Ernest Witteisky ................. 414
Reaction of Endotoxin and Surfactants. II. Immunologic Properties of Endotoxins Treated with Sodium Deoxycholate. David F. Tarmina, Kelsey C. Milner, Edgar Ribi and Jon A. Rudbach ................. 444

IMMUNOCHEMISTRY
Serum Complement and the Enzymatic Degradation of Erythrocyte Phospholipid. J. Kelly Smith and Elmer L. Becker .................. 459
Isolation of a Protein Antigen following Extraction of Lipids from Sheep Red Blood Cell Stroma. I. Hemolytic IgM Primary Response and Hemolytic IgG Secondary Response in Rabbits. Charles A. Santos-Buch and J. René Guzmán-Rivero ................. 475
The Immune Response in the Hamster. I. Definition of Two 7 S Globulin Classes: 7 Sα and 7 Sβ. John E. Coe .................. 507
Production of Fc Fragments of IgM. Vincent Yakulis, John Schmale, Nicolas Costea and Paul Heller .................. 525
Reversed Type Allergic Skin Reactions by Anti-γE Globulin Antibodies in Humans and Monkeys. Kimishige Ishizaka and Teruko Ishizaka ................. 554
Specificity of Antiglobulin Factors in Normal Human Serum Reacting with Enzyme Digested γG-Globulin. Lucy C. Kormeier, Judy T. Ing and William J. Mandy ................. 612
The Effect of Salt-Induced Aggregation on the Gel Filtration of Chicken 7 S Antibodies. Dianna E. Van Orden and Henry P. Treffers ............................. 659
A Demonstration of the Coprecipitation of β-Lipoproteins with Specific Precipitates of Chicken Antibodies and Human Serum Albumin. Dianna E. Van Orden and Henry P. Treffers ............................. 664
Studies on Organ Specificity. XIX. Antigenic Specificity of Seminal Plasma and the Formation of Autoantibodies. Sidney Shulman, Clelia Riera and Carlos Yantorno ........................ 682

IMMUNOGENETICS

Genetic Control of the Antibody Response. III. Qualitative and Quantitative Characterization of the Antibody Response to (T, G)-A—L in CBA and C57 Mice. Hugh O. McDevitt .............................................................................. 485
Direct Demonstration and Quantitation of Aal, Aa2 and Aa3 Allotypic Specificities on Fd-Fragments of Rabbit Immunoglobulin G. Antoine Micheli, Rose G. Mage and Ralph A. Reisfeld... 604

CELLULAR IMMUNOLOGY

The Detection of Antibody-Containing Cells in the Blood Stream during the IgM Cellular Antibody Response. Raymond N. Hiramoto, N. Marlene Hamlin and Holland L. Harris .......... 637

IMMUNOPATHOLOGY

Serum Complement in the Rejection of Sarcoma I Ascites Tumor Grafts. Mildred E. Phillips, Ursula Rother and Klaus Rother ........................................................... 493
"Protein A" from Staphylococcus aureus. IV. Production of Anaphylaxis-Like Cutaneous and Systemic Reactions in Non-Immunized Guinea-Pigs. G. T. Gustafson, G. Stålenheim, A. Forsgren and J. Sjöquist ........................................... 530
Isolation of Cx-Reactive Protein by Gel Filtration and Characterization by Electrophoresis and Immunodiffusion. Hector D. Crozatto, E. T. Nishimura, K. Yamada and Y. Hokama ........ 563
Homocytotropic Antibody Response in the Rat Infected with the Nematode, Nippostrongylus brasiliensis. II. Characteristics of the Immune Response. R. J. M. Wilson and K. J. Bloch .............................. 622
In Vitro Effects of Phytohemagglutinin and Brain Antigen on Cell Transfer of Experimental Autoimmune Encephalomyelitis in Lewis Rats. H. D. Flad, P. Y. Paterson and P. A. Miescher ..... 647
Wasting Disease Induced with Cortisol Acetate. II. Bacteriologic Studies. John W. Jutila and Norman D. Reed ................................................ 675

MICROBIAL AND VIAL IMMUNOLOGY

Inhibition by Cardiolipin of the Antibody Response to Bacterial Antigens. H. Y. Whang and E. Neter ............................................................... 501
Antigens of Rickettsia prowazekii. I. Activity in Complement Fixation and Mouse Protection Tests. Lewellys F. Barker and Judith K. Patt ................................. 543
Antigens of Rickettsia prowazekii. II. Activity in Guinea Pigs and Experimental Vaccine Production. Lewellys F. Barker and Judith K. Patt ........................................... 548
Antibody Responses in Rabbis to the Group B Arbovirus Kunjin: Serologic Activity of the Fractionated Immunoglobulins in Homologous and Heterologous Reactions. E. G. Westaway ........... 569
The Age Distribution in Humans of Hemagglutinating-Inhibiting Antibodies Reacting with Avian Strains of Influenza A Virus. Fred M. Davenport, Albert V. Hennessy and Elva Minuse .... 581
Announcement ................................................................................ 689
The Demonstration in Human Serum of “Conglutinogen-Activating Factor” and Its Effect on the
Third Component of Complement. Peter J. Lachmann and Hans J. Müller-Eberhard .......... 691
Localization of 11S External Secretory IgA by Immunofluorescence in Tissues Lining the Oral and
Respiratory Passages in Man. Roger D. Rosess, Councilman Morgan, Konrad C.
Hau, William T. Butler and Harry M. Rose ....................................................... 706
Antigenic Determinants Specific for Aggregated γG-globulins. Christopher S. Henney and Kimi-
shige Ishizaka ............................................................................ 718
The Isolation of Immunoglobulins of the Adult Opossum (Didelphys virginiana). David T. Row-
lands, Jr. and Mary A. Dudley ............................................................ 736
Mouse Macroglobulin Antibody to Sheep Erythrocytes: A Non-Complement-Fixing Type. Paul
H. Plotz, Harvey Colten and Norman Talal .................................................. 752
Complementarity of Heavy and Light Chains from Antibodies of the Same Specificity Derived from
Different Rabbits. Serafino Zappacosta and Alfred Nisonoff ................................ 781
Reversible Loss of Activity of the First Component of Complement (C1) as a Function of Ionic
Strength. Harvey R. Colten, Tibor Borsos and Herbert J. Rapp ......................... 799
Ultracentrifugation of the First Component of Complement: Effects of Ionic Strength. Harvey
R. Colten, Tibor Borsos and Herbert J. Rapp ............................................ 808
Immune Cryoglobulins in Rabbit Streptococcal Antiserum. Joseph M. Davie, C. Kirk Osterland,
Edward J. Miller and Richard M. Krause ................................................. 814
The Role of Monobasic Aliphatic Fatty Acids in Immune Agglutination of Sheep Erythrocytes. J.
Kelly Smith .............................................................................. 863
Carbodiimide-Induced Bentonite-Antigen Complexes: Readily Prepared Immunoadsorbents.
Robert R. Carpenter and Margaret A. Reisberg ........................................... 873
An Aggregating Immunoglobulin in Hyperimmune Equine Anti-Pneumococcal Sera. Susan Zolla
and Joel W. Goodman ..................................................................... 880
Separation of New Skin Reactive Antigens from Dwarf Ragweed Pollens. A. R. Goldfarb .... 902

CELLULAR IMMUNOLOGY
An Effect of Maintenance in Tissue Culture on Spleen Cells Transferred from Antigen-Injected
Donors to Syngeneic Mice. Stephanie E. Sher and T. N. Harris .............................. 699
Assignment of Direct and Facilitated Hemolytic Plaques in Mice to Specific Immunoglobulin
Classes. Paul H. Plotz, Norman Talal and Richard Asofsky ................................. 744
The Enhancing Effect of Bone Marrow Cells on the Immune Response of Irradiated Mice Recon-
stituted with Spleen Cells from Normal and Immunized Donors. Jevrosima Radovich, Helen
Hemingsen and David W. Talmage ........................................................ 756
Regenerative Potential of Immunocompetent Cells. II. Factors Influencing Recovery of Second-
ary Antibody-Forming Potential from X-Irradiation. P. Nettesheim and M. L. Williams .... 760
Synthesis of the First Component of Guinea Pig Complement by Columnar Epithelial Cells of the
Small Intestine. Harvey R. Colten, James M. Gordon, Herbert J. Rapp and Tibor Borsos ..... 788
Sequence of Events in Mice Early in Immunologic Paralysis by Pneumococcal Polysaccharide.
Pornchai Matangkasombut and C. V. Seastone ............................................ 845
Transfer of Cutaneous Hypersensitivity to Tuberculin in the Guinea Pig by γG, from Immunized
Donors. Edgar Pick and Joseph D. Feldman .............................................. 858

MICROBIAL AND VIRAL IMMUNOLOGY
Antibody Response in Respiratory Secretions of Volunteers Given Live and Dead Influenza Virus.
Sex-Related Resistance in Hamsters to Adenovirus-12 Oncogenesis. III. Influence of Immunologic
Impairment by Thymectomy or Cortisone. David S. Yohn, Clare A. Funk and James I.
Grace, Jr. .......................................................................................... 771
Antigenic Characterization of Infectious Bronchitis Virus. Satvir S. Tevethia and Charles H.
Cunningham .............................................................................. 793
Production of Rickettsial Complement-Fixing Antigens in Tissue Culture. Lewellys F. Barker
and Judith K. Patt ................................................................. 821
Titrination and Neutralization of Rickettsia tsutsugamushi in Tissue Culture. Lewellys F. Barker, Judith K. Patt and Hope E. Hopps ......................................................... 825

A New Serologic Test for Adenovirus Infection. Malcolm S. Artenstein and Oliver W. Danbridge .......................................................... 831

Immunosuppression during Acute Murine Cytomegalovirus Infection. June E. Osborn, Andrew A. Blakovec and Duard L. Walker ....................................................... 835

Physical and Immunologic Properties of Rubella Antigens. N. J. Schmidt, E. H. Lennette, P. S. Gee and J. Dennis .......................................................... 851

Enhancement of Phagocytosis of Group A Streptococci by Antibody Fragments Derived from Rabbit Immunoglobulin by Pepsin Digestion. John C. Perkins and Jerome J. Hahn .......................................................... 898

COMMUNICATIONS

Tolerance in Vitro: Suppression of Immune Responsiveness to Bovine \( \gamma \)-Globulin after Injection of Antigen into Intact Lymphoid Organs. David W. Scott and Byron H. Waksman .......................................................... 912

NUMBER 5, MAY 1968

IMMUNOCHEMISTRY

Passive Sensitization of Monkey Lung Fragments with Sera of Timothy-Sensitive Patients. I. Spectrofluorometric Analysis of Histamine Release. Arthur Malley and Raymond L. Harris, Jr .......................................................... 915

Protein A from Staphylococcus aureus. V. Reaction with Guinea Pig \( \gamma \)-Globulins. Arne Forsgren ...................................................................................... 921

Protein A from Staphylococcus aureus. VI. Reaction with Subunits from Guinea Pig \( \gamma_1 \) and \( \gamma_2 \)-Globulin. Arne Forsgren ........................................................................... 927

Equine Antibodies to Human \( \gamma \)-Globulin. II. Isolation and Antigenic Analysis of \( \gamma_1 \) and \( \gamma_1 \)-Antibody Fractions from Equine Antisera to Human \( \gamma \)-Globulin. Sarah L. Johnston and Peter Z. Allen .......................................................... 942

Equine Antibodies to Human \( \gamma \)-Globulin. III. Immunochemical Behavior and Specificity of \( \gamma_2 \) and \( \gamma_1 \)-Antibody Fractions Isolated from Equine Antiserum to Human \( \gamma \)-Globulin. Sarah L. Johnston and Peter Z. Allen .......................................................... 951

Inhibition of Guinea Pig Complement by Maleopimaric Acid and Other Derivatives of Levopimaric Acid. M. Michael Globsky, Elmer L. Becker and Noah J. Holbrook .......................................................... 979

Ultracentrifugal Studies of the Reaction of IgM Anti-\( \gamma \)-Globulin Subunits with Human IgG. Ralph E. Schroenloher and Carolyn B. Barry .......................................................... 1006

Antigenic Analysis of Human Heart Tissue. Identification of Antigens with Specificity Restricted to Heart and Skeletal Muscle in Acid Extracts of Myocardium. Enrique Espinosa and Melvin H. Kaplan .......................................................... 1020

Structure of Human Immunoglobulin M. III. Pepsin Fragmentation of IgM. Tadamitsu Kishimoto, Kaoru Onoue and Yuichi Yamamura .......................................................... 1032

Modification of the Amino Groups of Rabbit \( \gamma \)-Globulin. I. The Effect of Skin Sensitizing Activity in Guinea Pig Skin. M. Ljajevic, J. Ljajevic and C. W. Parker .......................................................... 1041

Modification of the Amino Groups of Rabbit \( \gamma \)-Globulin. II. Selective Effects on Fe Function. M. Ljajevic, J. Ljajevic and C. W. Parker .......................................................... 1051

Studies of the Proteins of Lacrimal Secretions. Alan S. Josephson and Roy S. Weiner .......................................................... 1080

Quantitation of Immunoglobulins and L-Chains by Complement Fixation Tests. Eugene V. Barnett .......................................................... 1093


IMMUNOGENETICS

The Immune Response of Random-Bred Hartley Strain Guinea Pigs to 2,4-Dinitrophenyl Conjugates of a Copolymer of L-Glutamic Acid and L-Lysine. Jean Pierre Lamelin, William E. Paul and Baruj Benacerraf .......................................................... 1058

CELLULAR IMMUNOLOGY

In Vivo and In Vitro Properties of Intact and Pepsin-Digested Heterologous Antimouse Thymus Antibodies. Gert Riemthüller, Doris Riemthüller, Hans Stein and Peter Hansen .......................................................... 969

Role of the Thymus in Tolerance. VI. Tolerance to Bovine \( \gamma \)-Globulin in Rats Given a Low Dose
of Irradiation and Injection of Nonaggregated or Aggregated Antigen into the Shielded Thy-
mus. Atsushi Horiuchi and Byron H. Waksman ........................................... 974
Mediation of Delayed Hypersensitivity by Peripheral Blood Lymphocytes in Vitro and by Their
Harry Bartfeld and Robert Kelly ......................................................... 1000
A New Method for the Enumeration of Single Antibody-Producing Cells. E. Diener .......... 1062
Kinetics of Erythrocyte and Lymphocyte Agglutination by PHA. C. C. Stewart, A. Nakeff and
M. Ingram ................................................................................ 1121
The Response of Cultured Human Thymus Cells to Phytohemagglutinin. Henry N. Claman and
Capt. Frank H. Brunstetter ............................................................... 1127
IMMUNOPATHOLOGY
Passive Anaphylaxis in Mice with γG Antibodies. III. Release of Histamine from Mast Cells by
Homologous Antibodies. Nelson M. Vaz and Zoltan Ovary ................................ 1014
MICROBIAL AND VIRAL IMMUNOLOGY
The Local Nature of Immunity in Tuberculosis, Illustrated Histochemically in Dermal BCG Le-
sions. Arthur M. Dannenberg, Jr., Olivia T. Meyer, John R. Esterly and Takeshi Kambara... 931
Relative Stabilities of Complexes of Measles Soluble and Viral Hemagglutinins with 19 S and 7 S
Immunoglobulins. Ann Schluederberg .................................................... 964
The Immunoglobulin Response in Intact and Splenectomized Calves Infected with Anaplasma mar-
ginale. G. G. B. Klaus and E. W. Jones ........................................... 991
Studies on the Mechanism of the Enzymatic Reactivation of Antibody-Neutralized Poliovirus.
Robert Keller ............................................................................. 1071
The Agglutinating and Bactericidal Activity of IgM and IgG Antibodies to the 9 and 12 factors of
Salmonella typhi O 901. Fritz Daguillard and Geoffrey Edsall ................................ 1112
Direct Immunofluorescent Tissue Culture Assay for Lymphocytic Choriomeningitis Virus.
Michael B. A. Oldstone and Frank J. Dixon ............................................... 1135
COMMUNICATIONS
Lack of Adjuvant Effect of AlPO₄ on Purified Influenza Virus Hemagglutinins in Man. Fred M.
Davenport, Albert V. Hennessy and Frederic B. Askin ..................................... 1139
Immune Response of Strain 13 Guinea Pigs to Lysine-Containing Polymers of Amino Acids. Paul
H. Maurer and Paul Pinchuck ..................................................................... 1141
Notice. Immunoglobulin E. A New Class of Human Immunoglobulin ........................... 1143
NUMBER 6, JUNE 1968
IMMUNOCHEMISTRY
Fixation of C' and C'1a by Rabbit γG- and γM-antibodies with Particulate and Soluble Antigens.
Teruko Ishizaka, Tomio Tada and Kimishige Ishizaka ..................................... 1145
The Stoichiometric Measurement of the Serum Inhibitor of the First Component of Complement by
the Inhibition of Immune Hemolysis. Irma Gigli, Shaun Ruddy and K. Frank Austen ........ 1154
Quantitative Studies of the Specificity of Anti-pneumococcal Polysaccharide Antibodies, Types III
and VIII. III. Binding of a Labeled Oligosaccharide Derived from S8 by Anti-S8 Antibodies.
A. M. Pappenheimer, Jr., William P. Reed and Robin Brown .............................. 1237
Skin-Sensitizing Properties of Guinea Pig Antibodies to Keyhole Limpet Hemocyanin. Gill
Strejan and Dan H. Campbell ..................................................................... 1245
Mechanism of Cleavage of Rabbit IgG in Two Stages by Soluble Papain and Reducing Agent.
Serafino Zappacosta, Alfred Nisonoff and William J. Mandy .............................. 1268
Comparison of Certain Properties of Naturally Occurring Low Molecular Weight γM and the γM
Monomer Derived by Reduction and Alkylation of 19 SγM. Harry A. Swedlund, Gerald J.
Gleich and William B. Chodirker ................................................................... 1296
CELLULAR IMMUNOLOGY
Stability of Human Leukocyte Granules which Contain Histamine. Jacob J. Pruzansky and Roy
Patterson .................................................................................. 1165
CONTENTS

**PREPARATION OF FLUORESCENT ANTIBODY REAGENTS MONOSPÉCIFIE TO HEAVY CHAINS OF HUMAN IMMUNOGLOBULIN.** M. Takahashi, Y. Yagi and D. Pressman ................................................................. 1169

**PRESENCE OF TWO DIFFERENT IMMUNOGLOBULIN HEAVY CHAINS IN INDIVIDUAL CELLS OF ESTABLISHED HUMAN HEMATOPOIETIC CELL LINES.** M. Takahashi, N. Tanigaki, Y. Yagi, G. E. Moore and D. Pressman ................................................................................. 1176

**MACROPHAGE-LYMPHOCYTE INTERACTION IN THE ANTIGEN-INDUCED BLASTOGENIC RESPONSE OF HUMAN PERIPHERAL BLOOD LEUKOCYTES.** Evan M. Herah and Jules E. Harris ................................................................. 1184

**STUDIES OF THE CHICKEN IMMUNE RESPONSE. I. CORRELATION OF THE CELLULAR AND HUMORAL IMMUNE RESPONSE.** Peter Abramoff and Nancy B. Brien ................................................................................. 1204

**STUDIES OF THE CHICKEN IMMUNE RESPONSE. II. BIOLOGIC ACTIVITY OF SPLEEN “IMMUNOGENIC RNA.”** Peter Abramoff and Nancy B. Brien ................................................................................. 1210

**IMMUNOLOGIC INCOMPETENCE OF MOUSE PERINATAL LIVER HEMATOPOIETIC CELLS AGAINST TRANSPLANTATION ANTIGENS.** Mortimer M. Bortin and Edward C. Saltzstein ................................................................................. 1215

**AN IN VITRO ASSAY FOR ENCEPHALITOGENIC COMPONENTS OF CENTRAL NERVOUS TISSUE.** J. A. Brockman, A. V. Stiefey and W. C. Tesser ................................................................................. 1230

**ROLE OF THYMUS IN ADOPTIVE TOLERANCE.** Bertie F. Argyris ................................................................................. 1255

**THE EFFECTS OF HETEROLOGOUS ANTI-THYMOCYTE SERA IN MICE. II. QUANTITATIVE EVALUATION OF IgM, IgG, AND THEIR SUBUNITS IN SUPPRESSING HOMOGRAGT REACTIONS.** Mark A. Mandel and Richard Asofsky ................................................................................. 1259

**AMPHIBIAN PLASMA CELLS.** Ronald C. Cowden, Robert F. Dyer, Bryan M. Gebhardt and E. Peter Volpe ................................................................................. 1293

**THE EFFECTS OF HETEROLOGOUS ANTI-THYMOCYTE SERA IN MICE. I. THE USE OF A GRAFT-VS.-HOST ASSAY AS A MEASURE OF HOMOGRAGT REACTIVITY.** Mark A. Mandel and Richard Asofsky ................................................................................. 1319

**(IMMUNOPATHOLOGY)**

**THERMOSTABLE KIDNEY ANTIGEN AND ITS EXCRETION INTO URINE.** Hans W. Intorp and Felix Milgrom ................................................................................. 1195

**SEDIMENTATION PROPERTIES OF ANTIBODY CYTOPHILIC FOR MACROPHAGES.** Arthur Berken and Baruj Benacerraf ................................................................................. 1219

**THE INDUCTION OF ACUTE GLOMERULONEPHRITIS IN RABBITS WITH SOLUBLE ANTIGENS ISOLATED FROM NORMAL HOMOLOGOUS AND AUTologous URINE.** R. A. Lerner and F. J. Dixon ................................................................................. 1277

**INDUCED LOCALIZATION OF ALLERgIC ADRENALITIS AND ENCEPHALOMYELITIS AT SITES OF THERMAL INJURY.** Seymour Levine and Eugene M. Hoenig ................................................................................. 1310

**MYCOBACTERIAL SUBSTITUTES IN “COMPLETE” FREUND’S ADJUVANT. EFFECT ON ANTIBODY PRODUCTION AND DELAYED HYPERSENSITIVITY TO Bovine Serum Albumin.** John E. Salvaggio and E. Castro-Murillo ................................................................................. 1340

**(MICROBIAL AND VIRAL IMMUNOLOGY)**

**ENTEROVIRUS IMMUNODIFFUSION REACTIONS: A COMPARISON OF RESULTS OBTAINED IN AGAROSE AND AGAR USING TWO DIFFERENT MICRODIFFUSION SYSTEMS.** Bohumil Styk and Nathalie J. Schmidt ................................................................................. 1223

**EVALUATION OF AN AGAR GEL PRECIPITIN TEST FOR THE SERODIAGNOSIS OF ACINOMYCOSIS.** Lucille K. Georg, R. Marie Coleman and June M. Brown ................................................................................. 1288

**INTERFERON RESPONSE OF HUMAN LEUKOCYTES DURING INTRAUTERINE AND POSTNATAL LIFE.** K. Cantell, H. Strander, L. Saxén and B. Meyer ................................................................................. 1304

**VACCINATION RESPONSE IN RABBITS RELATED TO QUANTITY OF VACCINIA VIRUS PARTICLES AND PASSAGE LEVEL.** Ruth C. Dunlap, G. J. Galasso and D. G. Sharp ................................................................................. 1335

**(COMMUNICATIONS)**

**HEPARIN-MnCl2 REMOVAL OF NONSPECIFIC SERUM INHIBITOR FOR MEASLES VIRUS HEMAGGLUTININ.** Harry A. Feldman ................................................................................. 1353