Contents

CELLULAR IMMUNOLOGY

T. W. Kay, B. L. Pike, and G. J. V. Nossal
Mechanisms of Clonal Abortion Tolerogenesis. IV. Verification of the Hypothesis in Living Mice
1579

F. Kierszenbaum, D. B. Budzko, and H. C. Miller
Selective Removal of T Cell Function from Mouse Lymphocyte Suspensions by Treatment with Normal Guinea Pig Serum
1599

Lipopolysaccharide (LPS) Regulation of the Immune Response. T Lymphocytes from Normal Mice Suppress Mitogenic and Immunogenic Responses to LPS
1603

E. M. Carvalho and D. A. Horwitz
Characterization of a Non-T, Non-B Human Blood Lymphocyte That Mediates the Enhancing Effects of Immune Complexes on Lymphocyte Blastogenesis
1656

T. N. Kirkland, D. G. Sieckmann, D. L. Longo, and D. E. Mosier
Cellular Requirements for Antigen Presentation in the Induction of a Thymus-Independent Antibody Response in Vitro
1721

T. M. Rogoff and P. E. Lipsky
Antigen Presentation by Isolated Guinea Pig Kupffer Cells
1740

D. H. Katz, L. R. Katz, C. A. Boggowitz, and R. F. Bargatze
The Major Influence on Helper T Cell Cooperative Partner Cell Preferences is Exerted by the Extrathymic Environment
1750

J. London and M. A. Horton
Tolerance Induction by Fusion of Fetal Thymus Lobes in Organ Culture
1821

D. DeLuca, T. E. Mandel, G. A. Luckenbach, and M. M. Kennedy
Functional Effects of Thymopoietin (TPS) on Cytotoxic Lymphocyte Precursor Units (CLP-U). I. Enhancement of Splenic CLP-U in Vitro and in Vivo after Suboptimal Antigenic Stimulation
1861

K. A. Haines and G. W. Siiskind
Ontogeny of T Cell Function. I. Acquisition of Helper Cell Activity by the Thymus
1878

J. M. Connolly and J. R. Wunderlich
The Cellular Nature of Concanavalin A-Stimulated Antibody-Dependent Cell-Mediated Cytotoxicity
1917

M. Tada, S. Hinuma, T. Abo, and K. Kumagai
Murine Antibody-Dependent Cell-Mediated Cytotoxicity. Failure to Detect Effector Cells Equivalent to Human K Cells
1929

J. Puri, M. Shinitzky, and P. Lonai
Concomitant Increase in Antigen Binding and in T Cell Membrane Lipid Viscosity Induced by the Lymphocyte-Activating Factor, LAF
1937

S. Gillis, K. A. Smith, and J. Watson
Biochemical Characterization of Lymphocyte Regulatory Molecules. II. Purification of a Class of Rat and Human Lymphokines
1954

J. P. McKeown and J. Quintans
Idiotype-Specific Tolerance: Preferential Alteration of Idiotype Expression after Neonatal Exposure to Tolerogen
1983

M. M. O'Toole and H. H. Wortis
A B Cell Subpopulation Binds to Macrophages: This Binding Can Be Disrupted by T Cells
2010

Role of Sialic Acid in the Macrophage Glycolipid Receptor for MIF
2042

CLINICAL IMMUNOLOGY

S. Romagnani, M. G. Guidizi, F. Almerigogna, and M. Ricci
Interaction of Staphylococcal Protein A with Membrane Components of IgM- and/or IgD-Bearing Lymphocytes from Human Tonsil
1620

Selective Deficiency of a T Cell Subpopulation in Active Atopic Dermatitis
1662

J.-M. Dayer, J. H. Passwell, E. E. Schneeberger, and S. M. Krane
Interactions among Rheumatoid Synovial Cells and Monocyte-Macrophages: Production of Collagenase-Stimulating Factor by Human Monocytes Exposed to Concanavalin A or Immunoglobulin Fc Fragments
1712

C. H. L. Rieger, S. C. Kraft, and R. M. Rothberg
Lack of Effect of Passive Immunization on the Active Immune Response to an Ingested Soluble Protein
1769

K. Itoh and K. Kumagai
Effect of Tunicamycin and Neuraminidase on the Expression of Fc-IgM and -IgG Receptors on Human Lymphocytes
1830
C. M. Balch, E. W. Ades, M. R. Loken, and S. L. Shore

J. M. Zarling, J. Schlaifl, L. Esksa, J. J. Greene, P. O. P. Ts'o, and W. A. Carter

E. L. Reinherz, P. C. Kung, J. M. Breard, G. Goldstein, and S. F. Schlossman

C. J. Theile and R. H. Stevens

R. K. B. Schuurman, E. W. Gel-fand, D. Matheson, B. Zimmer-man, and H.-M. Dosch

J. Breard, E. L. Reinherz, P. C. Kung, G. Goldstein, and S. F. Schlossman

P. Wijermans, H. J. G. H. Ooster-huis, G.C.B. Astaldi, P. Th. A. Schellekens, and A. Astaldi

S. A. Schwartz

M. R. Silver, O. ole-MoiYoi, K. F. Austen, and J. Spragg

D. D. Tsay, D. Ogden, and M. Schlamowitz

C. S. Cobbs, Jr., A. R. Shaw, K. Hillman, and M. Schlamowitz

R. R. Pollock and M. F. Mescher

G. A. Schwarting and A. Summers

K. Kobayashi and H. Hirai

E. A. Rinnooy Kan and G. W. Sis-kind

E. R. Podack and H. J. Müller-Eberhard

K. E. Stein, C. A. Brennan, J. J. Mond, O. Makela, and W. E. Paul

N. Sakato, H. Fujiio, and T. Amano

A. P. Gee, M. D. P. Boyle, and T. Borsos

M. A. Drewes and D. D. Manning

A. R. Frackelton, Jr., and J. K. Weitman

S. C. Kung, J. Schlais, P. Th. A. Schlossman

W. A. Carter

K. B. Schuurman, E. W. Gel-fand, D. Matheson, B. Zimmer-man, and H.-M. Dosch

J. Breard, E. L. Reinherz, P. C. Kung, G. Goldstein, and S. F. Schlossman

P. Wijermans, H. J. G. H. Ooster-huis, G.C.B. Astaldi, P. Th. A. Schellekens, and A. Astaldi

S. A. Schwartz

1845 Human "Null" Cells Mediating Antibody-Dependent Cellular Cytotoxicity Express T Lymphocyte Differentiation Antigens

1852 Augmentation of Human Natural Killer Cell Activity by Polynosinic Acid-Polyctydyl Acid and Its Nontoxic Mismatched Analouges

1883 T Cell Requirements for Generation of Helper Factor(s) in Man: Analysis of the Subsets Involved

1898 Antibody Potential of Human Peripheral Blood Lymphocytes Differentially Expressing Surface Membrane IgM

1924 Identification of la on a Subpopulation of Human T Lymphocytes That Stimulate in a Mixed Lymphocyte Reaction

1943 A Monoclonal Antibody Reactive with Human Peripheral Blood Monocytes

1977 Influence of Adult Thymectomy on Immunocompetence in Patients with Myasthenia Gravis

2034 Heavy Chain-Specific Suppression of Immunoglobulin Synthesis and Secretion by Lymphocytes from Patients with Selective IgA Deficiency

IMMUNOCHEMISTRY

M. R. Silver, O. ole-MoiYoi, K. F. Austen, and J. Spragg

D. D. Tsay, D. Ogden, and M. Schlamowitz

C. S. Cobbs, Jr., A. R. Shaw, K. Hillman, and M. Schlamowitz

R. R. Pollock and M. F. Mescher

G. A. Schwarting and A. Summers

K. Kobayashi and H. Hirai

E. A. Rinnooy Kan and G. W. Sis-kind

E. R. Podack and H. J. Müller-Eberhard

K. E. Stein, C. A. Brennan, J. J. Mond, O. Makela, and W. E. Paul

N. Sakato, H. Fujiio, and T. Amano

A. P. Gee, M. D. P. Boyle, and T. Borsos

M. A. Drewes and D. D. Manning

A. R. Frackelton, Jr., and J. K. Weitman

1551 Active Site Radioimmunoassay for Human Urokallikrein and Demonstration by Radioimmunoassay of a Latent Form of the Enzyme

1562 Binding of Homologous and Heterologous IgG to Fc Receptors on the Fetal Rabbit Yolk Sac Membrane.

1648 Assay and Partial Characterization of Detergent Solubilized Rabbit Yolk Sac Membrane Fc Receptors

1668 Murine Cell Surface Immunoglobulin: Two Native IgD Structures

1691 Gangliotetraosylceramide Is a T Cell Differentiation Antigen Associated with Natural Cell-Mediated Cytotoxicity

1695 Studies on Subunit Components of Chicken Polymeric Immunoglobulins

1758 The Transient Appearance of Degenerate Antibody Early in the Course of the Immune Response

1779 SC5b-9 Complex of Complement: Formation of the Dimeric Membrane Attack Complex by Removal of S-Protein

1798 Antibody Affinity in Mice with the CBA/N Defect

1866 Idiotypeic Analysis of Antibodies to Hen Egg-White Lysozyme (HEL). I. Occurrence of Species-Specific Cross-Reactive Idiotypes of Antibodies Directed to Distinct Regions of HEL in Guinea Pigs

1905 Distinction between C8-Mediated and C8/C9-Mediated Hemolysis on the Basis of Independent 195Rb and Hemoglobin Release

2016 Effect of Antiserum-Producing Species on Isotype Suppression Efficacy in Mice

2048 Diffusion Control of the Binding of Carcinoembryonic Antigen (CEA) with Insoluble Anti-CEA Antibody

IMMUNOGENETICS AND TRANSPLANTATION

R. G. Cook, E. S. Vitetta, J. W. Uhr, and J. D. Capra

J. J. Mond, S. Kessler, F. D. Finkelman, W. E. Paul, and I. Scher

M. C. Carroll, H. C. Passmore, and J. D. Capra

U. Yamashita and E. M. Shevach

1594 Structural Studies on the Murine Ia Alloantigens. VII. Further Evidence for Two-Gene Control of the E/C Alloantigens

1675 Heterogeneity of Ia Expression on Normal B Cells, Neonatal B Cells, and on Cells from B Cell-Defective CBA/N Mice

1745 Structural Studies on the Murine Fourth Component of Complement (C4). IV. Demonstration That C4 and Slp are Encoded by Separate Loci

1773 The Syngeneic Mixed Leukocyte Reaction: The Genetic Requirements for the Recognition of Self Resemble the Requirements for the Recognition of Antigen in Association with Self

Continued on page 5
Continued from page 4


R. Finberg, H. Cantor, B. Benacerraf, and S. Burakoff 1868 The Origins of Alloreactivity: Differentiation of Prekiller Cells to Viral Infection Results in Alloreactive Cytolytic T Lymphocytes


C. B. Pettinelli, G. B. Ahmann, and G. M. Shearer 1911 Expression of Both I-A and I-E/C Subregion Antigens on Accessory Cells Required for in Vitro Generation of Cytotoxic T Lymphocytes against Alloantigens or TNBS-Modified Syngeneic Cells

IMMUNOPATHOLOGY

Y. Imai, T. Nakano, J.-I. Sawada, and T. Osawa 1556 Specificity of Natural Thymocytotoxic Autoantibody Developed in New Zealand Black Mice

M. P. Fletcher and J. I. Gallin 1585 Degranulating Stimuli Increase the Availability of Receptors on Human Neutrophils for the Chemotactant f-Met-Leu-Phe

D. P. Huston, E. S. Raveche, and A. D. Steinberg 1635 Preferential Lysis of Undifferentiated Thymocytes by Natural Thymocytotoxic Antibodies from New Zealand Black Mice

B. J. Shenker, W. F. Willoughby, M. R. Hollingdale, and T. N. Mann 1763 In Vivo Responses to Inhaled Proteins. III. Inhibition of Experimental Immune Complex Pneumonitis after Suppression of Peripheral Blood Lymphocytes

C. C. Whitacre and P. Y. Paterson 1784 Experimental Allergic Encephalomyelitis Supernatant Transfer Activity (EAE-STA) in Lewis Rats: Immunobiologic and Initial Biochemical Properties

M. J. Moore, D. E. Singer, and R. M. Williams 1815 Linkage of Severity of Experimental Allergic Encephalomyelitis to the Rat Major Histocompatibility Locus

M. C. Pike and R. Synderman 1963 Lipid Requirements for Leukocyte Chemotaxis and Phagocytosis: Effects of Inhibitors of Phospholipid and Cholesterol Synthesis


R. A. Clark, S. Szot, K. Venkatesubramanian, and E. Schifman 2020 Chemotactic Factor Inactivation by Myeloperoxidase-Mediated Oxidation of Methionine

R. J. Ulevitch and A. R. Johnston 2027 In Vitro Studies of Prekallikrein Activation in Rabbit Blood: The Participation of Red Blood Cells

TUMOR IMMUNOLOGY


K. T. Brunner, H. R. MacDonald, and J.-C. Cerottini 1627 Antigenic Specificity of the Cytolytic T Lymphocyte (CTL) Response to Murine Sarcoma Virus-Induced Tumors. II. Analysis of the Clonal Progeny of CTL Precursors Stimulated in Vitro with Syngeneic Tumor Cells


M. Zoller and S. Matzku 1683 Characterization of Natural Cytotoxicity in Vitro in a Spontaneous Rat Tumor Model

A. Tai, R. C. Burton, and N. L. Warner 1705 Differential Natural Killer Cell Reactivity against T Cell Lymphomas by Cells from Normal or Stimulated Mice

I. D. Bernstein, R. C. Nowinski, and J. Stiefel 1727 The Role of Viral and Cell-Associated Antigens in the Cell-Mediated Immune Response of Rats to Virus-Induced Lymphoma Cells

K. Pfizenmaier, S.-H. Pan, and B. B. Knowles 1888 Preferential H-2 Association in Cytotoxic T Cell Responses to SV40 Tumor-Associated Specific Antigens

A. Novogrodsky, A. L. Rubin, and K. H. Stenzel 1892 A New Class of Inhibitors of Lymphocyte Mitogenesis: Agents That Induce Erythroid Differentiation in Friend Leukemia Cells

E. C. Jong and S. J. Klebanoff 1949 Eosinophil-Mediated Mammalian Tumor Cell Cytotoxicity: Role of the Peroxidase System

Continued on page 6
R. M. Jack and P. A. Ward 1566 Babesia rodhaini Interactions with Complement: Relationship to Parasitic Entry into Red Cells
R. M. Jack and P. A. Ward 1574 The Role in Vivo of C3 and the C3b Receptor in Babesial Infection in the Rat
S. Mishiro, M. Imai, K. Takahashi, A. Machida, T. Gotanda, Y. Miyakawa, and M. Mayumi 1589 A 49,000-Dalton Polypeptide Bearing All Antigenic Determinants and Full Immunogenicity of 22-nm Hepatitis B Surface Antigen Particles
S. A. Stohlman, J. A. Frelinger, and L. P. Weiner 1733 Resistance to Fatal Central Nervous System Disease by Mouse Hepatitis Virus, Strain JHM. II. Adherent Cell-Mediated Protection
S. L. James and A. Sher 1837 Immune Mechanisms That Stimulate Mouse Leukocyte Migration in Response to Schistosomula of Schistosoma mansoni
S. Tsuchiya, S. Yokoyama, O. Yoshie, and Y. Ono 1970 Production of Diptheria Antitoxin Antibody in Epstein-Barr Virus-Induced Lymphoblastoid Cell Lines
A. J. Hapel, R. Bablanian, and G. A. Cole 1990 Inductive Requirements for the Generation of Virus-Specific T Lymphocytes. II. Poxvirus and H-2 Antigens Associate without Cellular or Virus-Directed Protein Synthesis, and Remain Immunogenic in Cell Membrane Fragments
A. J. Hapel, R. Bablanian, and G. A. Cole 1997 Inductive Requirements for the Generation of Virus-Specific T Lymphocytes. III. Production of Target Cells Lysable by Poxvirus-Specific and Allospecific Cytotoxic T Lymphocytes with Membrane Fragments Bearing Viral and H-2 Antigens

COMMUNICATION

J. C. Samuelson, A. Sher, and J. P. Caulfield 2055 Newly Transformed Schistosomula Spontaneously Lose Surface Antigens and C3 Acceptor Sites during Culture
Announcements 2058
Author Index 2060