Contents

COMMUNICATION

R. N. Moore, F. J. Pitruzzelo, H. S. Larsen, and B. T. Rouse

541 Feedback Regulation of Colony-Stimulating Factor (CSF-1)-Induced Macrophage Proliferation by Endogenous E Prostaglandins and Interferon-α/β

CELLULAR IMMUNOLOGY

L. T. Bich-Thuy and J. P. Revillard

544 Modulation of Polyclonally Activated Human Peripheral B Cells by Aggregated IgG and by IgG-Binding Factors: Differential Effect on IgG Subclass Synthesis

F. D. Finkelman, J. Smith, N. Villacreses, and E. S. Metcalf

550 Polyclonal Activation of the Murine Immune System by an Antibody to IgD. VII. Demonstration of the Role of Nonantigen-Specific T Help in In Vivo B Cell Activation

J. A. Titus, F. D. Finkelman, D. A. Stephany, J. F. Jones, and D. M. Segal

556 Quantitative Analysis of Fc, Receptors on Murine Spleen Cell Populations by Using Dual Parameter Flow Cytometry

A. J. Manheimer, C. Victor-Kobrin, K. E. Stein, and C. A. Ronis

562 Anti-IgM Antibodies. V. Age-Dependent Variation of Clones Stimulated by Polysaccharide TI-2 Antigens in 129 and MRL Mice Spontaneously Producing Anti-γ-Globulin Antibodies

R. A. Winchurch, D. J. Thomas, W. H. Adler, and T. J. Lindsay

569 Supplemental Zinc Restores Antibody Formation in Cultures of Aged Spleen Cells

A. del Rey, H. Besedovsky, and E. Sorkin

572 Endogenous Blood Levels of Corticosterone Control the Immunologic Cell Mass and B Cell Activity in Mice

J. C. Cambier and J. G. Monroe

576 B Cell Activation. V. Differential Signaling of B Cell Membrane Depolarization, Increased I-A Expression, G0 to G1 Transition, and Thymidine Uptake by Anti-IgM and Anti-IgD Antibodies


582 Interactions between T Lymphocyte Subsets Supported by Interleukin 2-Rich Lymphokines Produce Acute Rejection of Vascularized Cardiac Allografts in T Cell Deprived Rats

B. W. Needleman, M. Pierres, C. A. Devaus, P. N. Dwyer, A. Finnegan, D. H. Sach, and R. J. Hodes

589 An Analysis of Functional T Cell Recognition Sites on I-E Molecules

H. Golding and A. Singer

597 Role of Accessory Cell Processing and Presentation of Shed H-2 Allantogens in Allospecific Cytotoxic T Lymphocyte Responses


606 Recognition and Response to Alloantigens In Vivo. I. Negative and Positive Selection of MLR Reactivity in Murine Peripheral Blood Lymphocytes to Major Histocompatibility Complex and Mls Antigens

M. K. Jenkins, R. W. Melvold, and S. D. Miller

616 Isolation and Characterization of an I-A-Restricted T Cell Clone with Dual Specificity for Poly(Glu9Ala5Tyr10) (GAT) and Mlsαd

W. Ptak, M. Bereta, J. Marcinkiewicz, R. K. Gershon, and D. R. Green

623 Production of Antigen-Specific Contrasuppressor Cells and Factor. and Their Use in Augmentation of Cell-Mediated Immunity

Y. Sano, G. Yamada, K. Dobashi, T. Mizuochi, T. Hamaoka, and K. Takatsu

629 Establishment of Three PPD-Reactive Helper T Cell Clones with Distinct Functions in B Cell Activation

Continued on page 4
Continued from page 3


S. Jonić and U. H. Koszinowski

P. C. Kwong, D. G. Kilburn, and H-S Teh

C-C Ting and M. E. Hargrove

R. D. Hunziker, P. Gambel, and A. Velardi

M. D. Cooper

T. F. Tedder, L. T. Clement, and M. D. Cooper

C. Y. Wang, W. Azzo, A. Alkatib, N. Chiorazzi, and D. M. Knowles II

R. J. M. Falkoff, J. L. Butler, C. A. Dinarello, and A. S. Fauci


P. Nieminen and E. Saksela

B. Combe, R. Pope, B. Darnell, W. Kincaid, and N. Talal

L. P. Svedersky, H. M. Shepard, S. A. Spencer, M. R. Shalaby, and M. A. Palladino

A. R. Hayward and M. Mori

Y. Thomas, E. Glickman, J. DeMartino, J. Wang, G. Goldstein, and L. Chess

S. Antonaci, E. Jirillo, M. T. Ventura, S. M. Michalek, L. Bonomo, and J. R. McGhee

G. B. Pier and M. E. Elcock

M. Dardenne, W. Savino, and J-F Bach

W. F. Davidson, T. N. Fredricksen, E. K. Rudikoff, R. L. Coffman, J. W. Hartley, and H. C. Morse III


Antigen-Reactive Cloned Helper T Cells. II. Exposure of Murine Cloned Helper T Cells to IL-2-Containing Supernatant Induces Unresponsiveness to Antigenic Restimulation and Inhibits Lymphokine Production after Antigenic Stimulation

Expression of IgE Receptors and Histamine in Cloned Natural Killer Cell Lines

Monoclonal Antibodies Reactive with Swine Lymphocytes. I. Antibodies to Membrane Structures that Define the Cytolytic T Lymphocyte Subset in the Swine

Induction of CTL Responses to Alloantigens by a DP-Specific T Helper Clone

Regulation of the Activation of Cytotoxic T Lymphocytes by Prostaglandins and Antigens

Placenta as a Selective Barrier to Cellular Traffic

An Immunofluorescence Analysis of the Ontogeny of Myeloid, T and B Lineage Cells in Mouse Hemopoietic Tissues

Expression of C3d Receptors during Human B Cell Differentiation: Immunofluorescence Analysis with the HB-5 Monoclonal Antibody

Preparation and Characterization of Monoclonal Antibodies Recognizing Three Distinct Differentiation Antigens (BL1, BL2, BL3) on Human B Lymphocytes

Direct Effects of a Monoclonal B Cell Differentiation Factor and of Purified Interleukin 1 on B Cell Differentiation

Immune Function in Severe, Active Rheumatoid Arthritis: A Relationship between Peripheral Blood Mononuclear Cell Proliferation to Soluble Antigens and Monoclonal Cell Subset Profiles

A Shared Antigenic Specificity of Human Large Granular Lymphocytes and Precursors of NK-like and Allospecific Cytotoxic Effector Cells

Regulation of Natural Killer Cell Activity by Macrophages in the Rheumatoid Joint and Peripheral Blood

Augmentation of Human Natural Cell-Mediated Cytotoxicity by Recombinant Human Interleukin 2

Human Newborn Autologous Mixed Lymphocyte Response: Frequency and Phenotype of Responders and Xenoantigen Specificity

Biologic Functions of the ORT1 T Cell Surface Antigen. I. The T1 Molecule Is Involved in Helper Function

Relationship between Immune System and Gram-Negative Bacteria. II. Natural Killer Cytotoxicity of Salmonella minnesota Rb 345-Unbound Human Peripheral Blood Lymphocytes

Nonspecific Immunoglobulin Synthesis and Elevated IgG Levels in Rabbits Immunized with Mucoid Exopolysaccharide from Cystic Fibrosis Isolates of Pseudomonas aeruginosa

Autoimmune Mice Develop Antibodies to Thymic Hormone: Production of Anti-Thymulin Monoclonal Autoantibodies from Diabetic (db/db) and B/W Mice

A Unique Series of Lymphomas Related to the Ly-1+ Lineage of B Lymphocyte Differentiation

Measles Virus-Specific T4+ Human Cytotoxic T Cell Clones Are Restricted by Class II HLA Antigens

Continued on page 5
Continued from page 4

**CYTOKINES • MEDIATORS • REGULATORY MOLECULES**

R. van Reis, A. Lubiniecki, R. A. Olson, R. R. Stromberg, J. A. Madsen, and L. I. Friedman
D. Boraschi, S. Censini, and A. Tagliabue
N. C. Zoumbos, J. Y. Djeu, and N. S. Young
J. De Maeyer-Guignard, A. Cauchard-Thomas, and E. De Maeyer
A. Kelso and A. Munck
W. Aberer, L. Stingl, S. Pogatsch, and G. Stingl
T. Hirano, T. Teranishi, B.H. Lin, and K. Onoue
T. Uede, T. F. Huff, and K. Ishizaka

758 Enhanced Production of Human γ-Interferon in Nylon Column-Fractionated Cell Cultures
764 Interferon-γ Reduces Macrophage-Suppressive Activity by Inhibiting Prostaglandin E2 Release and Inducing Interleukin 1 Production
769 Interferon Is the Suppressor of Hematopoiesis Generated by Stimulated Lymphocytes In Vitro
775 Naturally Occurring Anti-Interferon Antibodies in Lou/c Rats
779 Effects of Natural and Recombinant IL 2 on Regulation of IFN, Production and Natural Killer Activity: Lack of Involvement of the TAC Antigen for these Immunoregulatory Effects

784 Glucocorticoid Inhibition of Lymphokine Secretion by Alloreactive T Lymphocyte Clones
792 Effect of Glucocorticosteroids on Epidermal Cell-Induced Immune Responses
798 Human Helper T Cell Factor(s). IV. Demonstration of a Human Late-Acting B Cell Differentiation Factor Acting on Staphylococcus aureus Cowan I-Stimulated B Cells
803 Suppression of IgE Synthesis in Mouse Plasma Cells and B Cells by Rat IgE-Suppressive Factor

**IMMUNOCHEMISTRY**

F. J. Dumont, R. C. Habbersett, and E. A. Nichols
S. Taketani, M. S. Krangel, H. Spits, J. de Vries, and J. L. Strominger
P. S. Cronin, A. P. Sing, L. H. Gilmcher, V. E. Kelley, and C. L. Reinisch
S. Natsuume-Sakai, T. Kaidoh, K. Sudo, and M. Takahashi
Y. Okada, R. Kannagi, S. B. Levery, and S. i Hakomori
D. S. Gregerson and G. J. Puttermann
A. Kulczycki, Jr.
R. J. Kurlander, D. Ellison, and J. Hall
J. Rivera, B. Rivnay, K. Furuchi, and C. Isersky
P. J. Baker, S. Adler, Y. Yang, and W. G. Cousar
C. Mold, M. Kingzette, and H. Gewurz
A. J. Tenner, R. J. Zippari, and N. R. Cooper

809 A New Lymphocyte Surface Antigen Defined by a Monoclonal Antibody (9F3) to the T Cell Population Expanding in MRL/Mp-Ipr/Ipr Mice
816 Structural Analysis of an HLA-B7 Antigen Variant Detected by Cytotoxic T Lymphocytes
822 The Isolation and Functional Characterization of Autoimmune Clones Expressing Inappropriate Ia
830 Allotypes of Murine Factor B Controlled by a Locus within the S Region of the H-2 Complex
835 Glycolipid Antigens with Blood Group I and i Specificities from Human Adult and Umbilical Cord Erythrocytes
843 Preparations, Isolation, and Immunochemical Studies of the Cyanogen Bromide Peptides from a Retinal Photoreceptor Cell Autoantigen, S-Antigen
849 Human Neutrophils and Eosinophils Have Structurally Distinct Fc, Receptors
855 The Blockade of Fc Receptor-Mediated Clearance of Immune Complexes In Vivo by a Monoclonal Antibody (2.4G2) Directed against Fc Receptors on Murine Leukocytes
863 The Behavior of the Solubilized Receptor for Immunoglobulin E in Polyethylene Glycol-Detergent Solutions: Characterization and Potential Applications
872 Immunochemical Studies of the Purified Human Platelet Receptor for the α1(I)-chain of Chick Skin Collagen
877 Complement Activation by Heat-Killed Human Kidney Cells: Formation, Activity, and Stabilization of Cell-Bound C3 Convertases
882 C-Reactive Protein Inhibits Pneumococcal Activation of the Alternative Pathway by Increasing the Interaction between Factor H and C3b
886 Antibody-Independent C1 Activation by E. Coli

Continued on page 6
IMMUNOPHARMACOLOGY

E. Jouvin-Marche, E. Ninio, G. Beaurain, M. Tence, P. Niaudet, and J. Benveniste
T. M. Aune

J. H. Russell
P. H. Cooper, P. Mayer, and M. Baggioiini
C. Kiyotaki and B. R. Bloom
D. L. Marquardt, L. L. Walker, and S. I. Wasserman
J. L. Medzihradsky

892 Biosynthesis of PAF-Acether (Platelet-Activating Factor). VII. Precursors of PAF-Acether and Acetyl-Transf erase Activity in Human Leukocytes
899 Modification of Cellular Protein Sulphydryl Groups by Activated Soluble Immune Response Suppressor
907 Phorbol Esters Inactivate the Lytic Apparatus of Cytotoxic T Lymphocytes
913 Stimulation of Phagocytosis in Bone Marrow-Derived Mouse Macrophages by Bacterial Lipopolysaccharide: Correlation with Biochemical and Functional Parameters
923 Activation of Murine Macrophage Cell Lines: Possible Involvement of Protein Kinases in Stimulation of Superoxide Production
932 Adenosine Receptors on Mouse Bone Marrow-Derived Mast Cells: Functional Significance and Regulation by Aminophylline
938 An Analysis of the Relationship between 5-Lipoxygenase Product Generation and the Secretion of Preformed Mediators from Mouse Bone Marrow-Derived Mast Cells
946 Regulatory Role for the Immune Complex in Modulation of Phagocytosis by 3-Deazaadenosine

MICROBIAL IMMUNOLOGY

D. E. Colwell, S. M. Michalek, D. E. Briles, E. Jirillo, and J. R. McGhee
T. K. Eisenstein, L. M. Killar, B. A. D. Stocker, and B. M. Sultzer
R. B. Markham, J. Goellner, and G. B. Pier
L. Björck and G. Kronvall
W. M. O. Boto, K. G. Powers, and D. A. Levy
W. M. O. Boto, R. D’Antonio, and D. A. Levy
B. L. Doughty, E. A. Ottesen, T. E. Nash, and S. M. Phillips
J.-M. Grzych, M. Capron, C. Dissous, and A. Capron
E. A. Ojo-Amaize, J. Vilcek, A. H. Cochran, and R. S. Nussenweig
G. H. Palmer and T. C. McGuire

950 Monoclonal Antibodies to Salmonella Lipopolysaccharide: Anti-O-Polysaccharide Antibodies Protect C3H Mice against Challenge with Virulent Salmonella typhimurium
958 Cellular Immunity Induced by Avirulent Salmonella in LPS-Defective C3H/HeJ Mice
962 In Vitro T Cell-Mediated Killing of Pseudomonas aeruginosa. I. Evidence that a Lymphokine Mediates Killing
969 Purification and Some Properties of Streptococcal Protein G, a Novel IgG-Binding Reagent
975 Antigens of Dirofilaria immitis which Are Immunogenic in the Canine Host: Detection by Immuno-Staining of Protein Blots with the Antibodies of Occult Dogs
981 Homologous and Distinctive Antigens of Onchocerca volvulus and Dirofilaria immitis: Detection by an Enzyme-Linked Immunoabsorbent Assay
988 IgG-Dependent Cell-Mediated Activity against Enteropathogenic Bacteria: Distribution, Specificity, and Characterization of the Effector Cells
993 Delayed Hypersensitivity Granuloma Formation around Schistosoma mansoni Eggs In Vitro. III. Granuloma Formation and Modulation in Human Schistosomiasis Mansoni
996 Blocking Activity of Rat Monoclonal Antibodies in Experimental Schistosomiasis
1005 Plasmodium berghei Sporozoites Are Mitogenic for Murine T Cells. Induce Interferon, and Activate Natural Killer Cells
1010 Immune Serum against Anaplasma marginale Initial Bodies Neutralizes Infectivity for Cattle
1016 Production and Characterization of T Cell Clones Specific for Mouse Hepatitis Virus, Strain JHM: In Vivo and In Vitro Analysis

Continued on page 7
Continued from page 6

MOLECULAR BIOLOGY • MOLECULAR GENETICS

C. L. Martens, S. J. Currier, and K. L. Knight 1022 Molecular Genetic Analysis of Genes Encoding the Heavy Chains of Rabbit IgG

TUMOR IMMUNOLOGY

A. L. Epstein, R. J. Marder, J. N. Winter, and R. I. Fox 1028 Two New Monoclonal Antibodies (LN-1, LN-2) Reactive in B5 Formalin-Fixed, Paraffin-Embedded Tissues with Follicular Center and Mantle Zone Human B Lymphocytes and Derived Tumors

M. Kannagi, K. Sugamura, K-I Kinoshita, H. Uchino, and Y. Hinuma 1037 Specific Cytolysis of Fresh Tumor Cells by an Autologous Killer T Cell Line Derived from an Adult T Cell Leukemia/Lymphoma Patient


W. F. Davidson, J. B. Roths, K. L. Holmes, E. Rudikoff, and H. C. Morse 1048 Dissociation of Severe Lupus-Like Disease from Polyclonal B Cell Activation and IL 2 Deficiency in C3H-lpr/lpr Mice

J. J. Langone, C. Das, D. Bennett, and D. S. Terman 1057 Generation of Human C3a, C4a, and C5a Anaphylatoxins by Protein A of Staphylococcus aureus and Immobilized Protein A Reagents Used in Serotherapy of Cancer

S. Schatten, J. A. Drebik, L. I. Perry, W. Chung, and M. I. Greene 1064 Regulation of the Immune Response to Tumor Antigens. X. Activation of Third-Order Suppressor T Cells that Abrogate Anti-Tumor Immune Responses

S. Koch, J. R. Zalcberg, and I. F. C. McKenzie 1070 Description of a Murine B Lymphoma Tumor-Specific Antigen

Announcements 1078
Erratum 1080
Author Index 1081