Contents

COMMUNICATIONS

K. Behbehani, D. I. Beller, and E. R. Unanue 2047 The Effects of Beryllium and Other Adjuvants on Ia Expression by Macrophages
P. Lang, M. W. Miller, and G. M. Shearer 2050 Failure of Bone Marrow Cells to Reconstitute T Cell Immunity in Graft-vs-Host Mice
K. Mehta, G. Lopez-Berestein, W. T. Moore, and P. J. A. Davies 2053 Interferon-γ Requires Serum Retinoids to Promote the Expression of Tissue Transglutaminase in Cultured Human Blood Monocytes

CELLULAR IMMUNOLOGY

C. A. Janeway, Jr., and M. E. Katz 2057 The Immunobiology of the T Cell Response to Mls-Locus-Disparate Stimulator Cells. I. Unidirectionality, New Strain Combinations, and the Role of Ia Antigens
M. E. Katz and C. A. Janeway, Jr. 2064 The Immunobiology of T Cell Responses to Mls-Locus-Disparate Stimulator Cells. II. Effects of Mls-Locus-Disparate Stimulator Cells on Cloned, Protein Antigen-Specific, Ia-Restricted T Cell Lines
D. H. Lynch, R. E. Gress, B. W. Needleman, S. A. Rosenberg, and R. J. Hodes 2071 T Cell Responses to Mls Determinants Are Restricted by Cross- Reactive MHC Determinants
T. J. Gorzynski, V. A. Lennon, R. M. Nathanson, and C. S. David 2079 AKR/J Gene(s) Unlinked to H-2 Determines Dominant Inheritance of Lymphocyte Hyporesponsiveness to Acetylcholine Receptor
D. H. Sherr and M. E. Dorf 2084 H-2-Restricted Helper Activity Mediated by Immunoglobulin-Bearing Lymphocytes
V. Vöhringer, A. Schimpl, and T. Hunig 2090 Analysis of the Negative Allogeneic Effect using B Cells and Helper T Cell Lines as an Indicator System: B Cells Identified as Target Cells for Suppression
D. H. Irvine and M. A. Savageau 2100 Network Regulation of the Immune Response: Alternative Control Points for Suppressor Modulation of Effector Lymphocytes
D. H. Irvine and M. A. Savageau 2117 Network Regulation of the Immune Response: Modulation of Suppressor Lymphocytes by Alternative Signals Including Contrasuppression
J. R. Battisto, K. Beckman, and B. Yen-Lieberman 2131 Dextran Augments Delayed-Type Hypersensitivity by Interrupting One Limb of the Suppressor Cascade
R. Suzuki, S. Suzuki, N. Ebina, and K. Kumagai 2139 Suppression of Alloimmune Cytotoxic T Lymphocyte (CTL) Generation by Depletion of NK Cells and Restoration by Interferon and/or Interleukin 2
C. Penit, F. Jotereau, and M. J. Gelabert 2149 Relationships between Terminal Transferase Expression, Stem Cell Colonization, and Thymic Maturation in the Avian Embryo: Studies in Thymic Chimeras Resulting from Homospecific and Heterospecific Grafts
R. Huiskamp and W. van Ewijk 2161 Repopulation of the Mouse Thymus after Sublethal Fission Neutron Irradiation. I. Sequential Appearance of Thymocyte Subpopulations
R. Huiskamp, E. van Vliet, and W. van Ewijk 2170 Repopulation of the Mouse Thymus after Sublethal Fission Neutron Irradiation. II. Sequential Changes in the Thymic Microenvironment
M. L. Toribio, A. de la Hera, P. Pereira, and M. O. de Landazuri 2179 Modulation by Lectins of Cytolytic T Cell Function

Continued on page 4
Continued from page 3

B. S. Conta, M. B. Powell, and N. H. Ruddle
R. Smith III and R. R. Rich
D. P. Huston, R. N. Jenkins, S. E. Gresens, R. Smith, III and R. R. Rich
N. Hollander
R. C. Roozemond and B. Bonavida
S. Argev, M. Hebdon, P. Cuatrechasas, and H. S. Koren
H. Hooijkaas, A. A. van der Linde-Presman, W. M. Bitter, R. Benner, J. R. Pleasant, and B. S. Wostmann
E. L. Morgan, M. V. Hobbs, and W. O. Weigle
S. Smyk and H. Kohler
M. Kern
E. A. Gold and G. A. Theis
M. Frohman and C. Cowing

2185 Activation of Lyt-1* and Lyt-2* T Cell Cloned Lines: Stimulation of Proliferation, Lymphokine Production, and Self-Destruction
2191 Polymorphism and Tissue Distribution of Maternally Transmitted Antigen Defined by Cytotoxic T Lymphocyte Lines
2198 Cellular Requirements for the Generation of Primary Cell-Mediated Lympholysis Responses to Qa-1 Antigens
2205 Lyt-2+ Suppressor T Cells are Resistant to Anti-Lyt-2 Antibody Blocking
2209 Effect of Altered Membrane Fluidity on NK Cell-Mediated Cytotoxicity. I. Selective Inhibition of the Recognition or Post Recognition Events in the Cytolytic Pathway of NK Cells
2215 Phorbol Ester-Induced Lymphocyte Adherence: Selective Action on NK Cells
2223 Frequency Analysis of Functional Immunoglobulin C- and V-Gene Expression by Mitogen-reactive V Cells in Germfree Mice Fed Chemically Defined Ultra-Filtered 'Antigen-Free' Diet
2228 B5, A New B Cell-Restricted Activation Antigen
2236 Immunoregulation in the Rat: Cellular and Molecular Requirements for B Cell Responses to Types 1, 2, and T-Dependent Antigens
2247 Lymphocyte Activation by the Fc Region of Immunoglobulin. I. Role of Prostaglandins in the Down Regulation of Fc Fragment-Induced Polyclonal Antibody Production
2249 Maturation of B Cell Subpopulations Responding to Phosphorylcholine
2250 Pronase Treatment of Lymphocytes Reduces the Time Required for Onset of S Phase in Response to Anti-Immunoglobulin
2265 Delayed Maturation of the Antibody Response to Type 2 Thymus-Independent Antigens in a Partially Inbred Strain of Chicken
2269 Presentation of Antigen by B Cells: Functional Dependence on Radiation Dose, Interleukins, Cellular Activation, and Differential Glycosylation
2276 The Function of Antigen-Presenting Cells in Mice with Severe Combined Immunodeficiency

CLINICAL IMMUNOLOGY • IMMUNOPATHOLOGY

M.-L. Blue, J. F. Delay, H. Levine, and S. F. Schlossman
Y. T. Konttinen, H. G. Bluestein, and N. J. Avaissler
H. Spits, H. Yssel, A. Voor-douw, and J. E. de Vries
M. Lopez-Botet and L. Moretta
K. S. Landreth, D. Engelhard, M. H. Beare, P. W. Kincade, N. Kapoor, and R. A. Good
P. J. Buckley, S. A. Dickson, and W. S. Walker
B. Bottazzi, M. Introna, P. Allavena, A. Villa, and A. Man-tovani

2281 Coexpression of T4 and T8 on Peripheral Blood T Cells Demonstrated by Two-Color Fluorescence Flow Cytometry
2287 Regulation of the Growth of Epstein-Barr Virus-Infected B Cells. I. Growth Regression by E Rosetting Cells from VCA-Positive Donors is a Combined Effect of Autologous Mixed Leukocyte Reaction and Activation of T8+ Memory Cells
2294 The Role of T8 in the Cytotoxic Activity of Cloned Cytotoxic T Lymphocyte Lines Specific for Class II and Class I Major Histocompatibility Complex Antigens
2299 Functional Characterization of Human Thymocytes: A Limiting Dilution Analysis of Precursors with Proliferative and Cytolytic Activities
2305 Regulation of Human B Lymphopoiesis: Effect of a Urinary Activity Associated with Cyclic Neutropenia
2310 Human Splenic Sinusoidal Lining Cells Express Antigens Associated with Monocytes, Macrophages, Endothelial Cells, and T Lymphocytes
2316 In Vitro Migration of Human Large Granular Lymphocytes
2322 Characterization of T Cell Lines and Clones from SJL/J and (BALB/cxSJL/ J)F1 Mice Specific for Myelin Basic Protein

Continued on page 5
Continued from page 4


R. A. Sobel and R. B. Colvin

P. D. Mehta, B. A. Patrick, and H. M. Wisniewski

S. J. Tzartos, D. Sophianos, and Antoine Efthimiadis

R. B. Lal, D. S. Monos, T. M. Chused, and H. L. Cooper

F. J. Dumont, L. Z. Goker, R. C. Habbersett, and J. A. Treffinger


E. G. Neilson, E. McCafferty, R. Mann, L. Michaud, and M. Clayman

E. J. Weringer and A. A. Like

2328 Major Histocompatibility Complex-Linked Control of the Murine Immune Response to Myelin Basic Protein

2333 The Immunopathology of Experimental Allergic Encephalomyelitis (EAE). III. Differential In Situ Expression of Strain 13 Ia on Endothelial and Inflammatory Cells of (Strain 2 × Strain 13) F1 Guinea Pigs with EAE

2338 Specificity of Oligoclonal IgG Bands in Sera from Chronic Relapsing Experimental Allergic Encephalomyelitis Guinea Pigs

2343 Role of the Main Immunogenic Region of Acetylcholine Receptor in Myasthenia Gravis. An Fab Monoclonal Antibody Protects against Antigenic Modulation by Human Sera

2350 Analysis of Lymphocyte Proteins from New Zealand Black Mice by Two-Dimensional Gel Electrophoresis

2357 Xenogeneic Monoclonal Antibody to LY-6-Linked Murine Cell Surface Antigen: Differential Reactivity with T Cell Subpopulations and Bone Marrow Cells

2366 Type II Collagen-Induced Arthritis in Mice. III. Suppression of Arthritis by Using Monoclonal and Polyclonal Anti-Ia Antiserum

2375 Murine Interstitial Nephritis. III. The Selection of Phenotypic (Lyt and L3T4) and Idiotypic (RE-Id) T Cell Preferences by Genes in Igh-1 and H-2K Characterizes the Cell-Mediated Potential for Disease Expression: Susceptible Mice Provide a Unique Effector T Cell Repertoire in Response to Tubular Antigen

2383 Immune Attack on Pancreatic Islet Transplants in the Spontaneously Diabetic BioBreeding/Worcester (BB/W) Rat is Not MHC Restricted

---

**CYTOKINES • MEDIATORS • REGULATORY MOLECULES**

A. W. Boyd, D. C. Fisher, D. A. Fox, S. F. Schlossman, and L. M. Nadler


M. D. Mossalayi, P. G. de Lafort, F. Guilhot, G. Kallil, E. Ntyame, V. Larroque, M. Fellos, and J. Tanzer

T. R. Malek, J. A. Schmidt, and E. M. Shevach

R. C. Howe, D. S. Milstone, T. L. Ratliff, and J. H. Russell

V. C. Maino and D. D. Pace


G. B. Mills, R. K. Cheung, S. Grinstein, and E. Gelfand

E. Atkins and L. Francis

F. Arenzana-Seisdedos, J. L. Vireliizier, and W. Fiers


J. R. Klein, M. S. Pasternack, and M. J. Bevan

2387 Structural and Functional Characterization of IL-2 Receptors on Activated Human B Cells

2393 Activated Human B Cells Display A Functional IL-2 Receptor

2400 Agar Human T Cell Colony Growth Promoted by A B + Null Cell Derived Lymphokine Distinct from IL-2

2405 The Murine IL-2 Receptor. III. Cellular Requirements for the Induction of IL-2 Receptor Expression on T Cell Subpopulations

2414 Interleukin 2-Mediated Induction of Lytic Activity in a Cloned Murine CTL Line

2419 Induction of Interleukin 2 from a Murine B Cell Tumor by a Factor Found in Immune Serum

2426 Production and Response to Interleukin 2 In Vitro and In Vivo After Bone Marrow Transplantation in Mice

2431 Interleukin 2-Induced Lymphocyte Proliferation is Independent of increases in Cytosolic-Free Calcium Concentrations

2436 Suppression of AG-Induced Release of EP (IL-1) by Spleen Cells of Specifically Desensitized Donors: Evidence for the Role of a Suppressor Cell Interferon As Macrophage-Activating Factors. III. Preferential Effects of Interferon-γ on the Interleukin 1 Secretory Potential of Fresh or Aged Human Monocytes

2444 Induction of Interferon γ Production by Human Natural Killer Cells Stimulated by Hydrogen Peroxide

2449 Activation Requirements for Antigen- and Mitogen-Induced Interferon-γ Release from Cytotoxic T Lymphocytes 1

---

Continued on page 6
IMMUNOCHEMISTRY


2498 Glycolipid Antigens of Human Polymorphonuclear Neutrophils and the Inducible HL-60 Leukemia Line

W. van de Meughevel, G. van Seventer, and P. Demant

2507 A New Tla Region Antigen Qa-11, Similar to Qa-2 and Associated with B-Type β2-Microglobulin

S. J. Ewald and P. H. Refling

2513 Co-immunoprecipitation of the Ly-5 Molecule and an Endogenous Protease: A Proteolytic System Requiring a Reducing Agent and Ca2+

D. N. Misra, H. W. Kunz, and T. J. Samill

2520 Analysis of Class I MHC Antigens in the Rat by Monoclonal Antibodies

E. L. Samelson

2529 An Analysis of the Structure of the Antigen Receptor on a Pigeon Cytochrome c-Specific T Cell Hybrid

J. L. Claflin, S. Hudak, A. Madalena, and T. Bender

2536 Antigen-Specific Anti-Phosphocholine Antibodies: Binding Site Studies

S. Nishinariita, J. L. Claflin, and R. Lieberman

2544 IgA Isotype Restricted Idiotypes Associated with T15 Id+ PC Antibodies

R. P. Taylor, G. Kujala, K. Wilson, E. Wright, and A. Harbin

2550 In Vivo and In Vitro Studies of the Binding of Antibody/dsDNA Immune Complexes to Rabbit and Guinea Pig Platelets

R. J. Ziccardi

2559 Demonstration of the Interaction of Native C1 with Monomeric Immunoglobulins and C1 Inhibitor

T. Kinoshita, S. Lavoie, and V. Nussenzweig

2564 Regulatory Proteins for the Activated Third and Fourth Components of Complement (C3b and C4b) in Mice

D. P. Vik and D. T. Fearon

2571 Neutrophils Express a Receptor for iC3b, C3dg, and C3d that Is Distinct from CR1, CR2, and CR3


2580 Evidence for Distinct Intracellular Pools of Receptors for C3b and C3bi in Human Neutrophils

J. K. Czop and K. F. Austen

2588 A β-Glucan Inhibitable Receptor on Human Monocytes: Its Identity with the Phagocytic Receptor for Particulate Activators of the Alternative Complement Pathway

L. E. Ramm, M. B. Whitlow, and M. M. Mayer

2594 The Relationship Between Channel Size and the Number of C9 Molecules in the C5b-9 Molecules in the C5b Complex

S. Natsuume-Sakai, K. Sudoh, T. Kaidoh, J-I Hayakawa, and M. Takahashi

2600 Structural Polymorphism of Murine Complement Factor H Controlled by a Locus Located Between the Hc and the β 2M Locus on the Second Chromosome of the Mouse

M. Komatsu, K-I Yamamoto, T. Kawashima, and S. Michta

2607 Genetic Deficiency of the α-γ Subunit of the Eighth Complement in the Rabbit

F. S. Cole, H. S. Auerbach, G. Goldberger, and H. R. Colten

2610 Tissue-Specific Pretranslational Regulation of Complement Production in Human Mononuclear Phagocytes

IMMUNOPHARMACOLOGY


2617 Identification of the Neutral Glycosphingolipids of Murine Mast Cells: Expression of Forssman Glycolipid by the Serosal but not the Bone Marrow-Derived Subclass

J. D. Williams, T. H. Lee, R. A. Lewis, and K. F. Austen

2624 Intracellular Retention of the 5-Lipoxygenase Pathway Product, Leukotriene B4, by Human Neutrophils Activated with Unopsonized Zymosan

T. A. Hamilton, J. E. Ribsbee, W. A. Scott, and D. O. Adams

2631 γ-Interferon Enhances the Secretion of Arachidonic Acid Metabolites from Murine Peritoneal Macrophages Stimulated with Phorbol Diesters

Continued on page 7
Natural Killer Cell-Mediated Lysis Involves an Hydroxyl Radical-Dependent Step

Prostaglandin E2 Inhibits the Activation of Cloned T Cell Hybridomas

MICROBLAL IMMUNOLOGY

H. J. Jennings, R. Roy, and F. Michon 2651
Determinant Specificities of the Groups B and C Polysaccharides of Neisseria meningitidis

M. Baccarini, F. Bistoni, M.-L. Lohmann-Matthes 2658
In Vitro Natural Cell-Mediated Cytotoxicity against Candida albicans: Macrophage Precursors as Effector Cells

P. A. Fitzgerald, M. Mendelsohn, and C. Lopez 2666
Human Natural Killer Cells Limit Replication of Herpes Simplex Virus Type 1 In Vitro

M. L. Smiley, J. A. Hoxie, and H. M. Friedman 2673
Herpes Simplex Virus Type 1 Infection of Endothelial, Epithelial, and Fibroblast Cells Induces a Receptor for C3b

M. Yasukawa and J. M. Zarling 2679
Human Cytotoxic T Cell Clones Directed against Herpes Simplex Virus-Infected Cells. III. Analysis of Viral Glycoproteins Recognized by CTL Clones by Using Recombinant Herpes Simplex Viruses

D. Prymowicz, R. N. Moore, and B. T. Rouse 2683
Frequency of Herpes Simplex Virus-Specific Helper T Lymphocyte Precursors in Lymph Node Cells of Infected Mice

J. Misiti and G. A. Dasch 2689
In Vitro Antigen-Specific Antibody Response to the Species-Specific Surface Protein Antigens of Typhus Group Rickettsiae by Human Peripheral Blood Mononuclear Cells: Generation of an Antigen-Dependent Suppressor T Cell

L. K. Borysiewicz, B. Rodgers, S. Morris, S. Graham, and J. G. P. Sissons 2695
Lysis of Human Cytomegalovirus Infected Fibroblasts by Natural Killer Cells: Demonstration of an Interferon-Independent Component Requiring Expression of Early Viral Proteins and Characterization of Effector Cells

Cell Receptors for the Mammalian Reovirus. IV. Reovirus-Specific Cytolytic T Cells that Have Idiotypic Receptors Recognize Anti-Idiotype B Cell Hybridomas

E. A. Ottesen, F. Skvaril, S. P. Tripathy, R. W. Poindexter, and R. Hussain 2707
Prominence of IgG4 in the IgG Antibody Response to Human Filariasis

E. D. Franke, P. B. McGreavy, S. P. Katz, and D. L. Sacks 2713
Growth Cycle-Dependent Generation of Complement-Resistant Leishmania Promastigotes

S. Kojima, N. Yamamoto, T. Kanazawa, and Z. Ovary 2719
Monoclonal IgE-Dependent Eosinophil Cytotoxicity to Haptenated Schistosomula of Schistosoma Japonicum: Enhancement of the Cytotoxicity and Expression of Fc Receptors for IgE by Nip-postrongylus brasiliensis Infection

A. L. W. deGee, G. Sonnenfeld, and J. M. Mansfield 2723
Genetics of Resistance to the African Trypanosomes. V. Qualitative and Quantitative Differences in Interferon Production Among Susceptible and Resistant Mouse Strains

MOLECULAR GENETICS • MOLECULAR BIOLOGY

B. H. Koller and H. T. Orr 2727
Cloning and Complete Sequence of an HLA-A2 Gene: Analysis of Two HLA-A Alleles at the Nucleotide Level

W. Trepicchio, Jr., and K. J. Barrett 2734
The Igh-V Locus of MRL Mice: Restriction Fragment Length Polymorphism in 11 Strains of Mice as Determined with VH and D Gene Probes

Combinational Diversity within Variable Regions Bearing the Predominant Anti-p-Azophenylarsonate Idiotype of Strain A Mice

Continued on page 8
L. G. Simpson and P. C. Isaksen
J. K. Steele, A. T. Stammers, and J. G. Levy
A.-F. Tilkin, B. Begune, E. Gomard, and J.-P. Levy
T. Barlozzari, J. Leonardt, R. Wiltrout, R. B. Herberman, and C. W. Reynolds
D. W. Bahler and E. M. Lord
A. Santoni, M. Piccoli, J. R. Ortaldo, L. Mason, R. H. Wiltrout, and R. B. Herberman

Letters to the Editor 2748
Announcements 2759
Erratum 2767
Author Index 2779

Macrophage T-lymphocyte Interactions in the Anti-tumor Immune Response: A Mathematical Model
Phorbol Esters Specifically Inhibit Induction of Immunoglobulin Secretion in a Murine B Cell Leukemia
Isolation and Characterization of a Tumor-Specific T Suppressor Factor from a T Cell Hybridoma
Natural Suppressor Cell Inhibiting T Killer Responses against Retroviruses: A Model for Self Tolerance
Direct Evidence for the Role of LGL in the Inhibition of Experimental Tumor Metastases
Dimethyl Sulfoxide Induces Expression of H-2 Antigens on Mouse Lung Carcinoma Cells
Changes in Number and Density of Large Granular Lymphocytes upon In Vivo Augmentation of Mouse Natural Killer Activity