Contents

CELLULAR IMMUNOLOGY

J. A. Augustine, J. P. Secrist, J. K. Daniels, P. J. Leibson, and R. T. Abraham
2889 Signal Transduction through the T Cell Antigen Receptor: Activation of Phospholipase C through a G Protein-Independent Coupling Mechanism

R. Bissonnette, H. Zheng, R. Kudo, B. Singh, and D. R. Green
2898 A T Helper Cell Hybridoma Produces an Antigen-Specific Regulatory Activity: Relationship to the T Cell Receptor by Serology and Antigenic Fine Specificity

A. Bromander, J. Holmgren, and N. Lycke
2908 Cholera Toxin Stimulates IL-1 Production and Enhances Antigen Presentation by Macrophages in Vitro

R. Casmo, P. Lauzurica, N. Domenech, and J. A. L. de Castro
2915 Structural identity between HLA-A2 Antigens Differentially Recognized by Allotype-reactive Cytotoxic T Lymphocytes

D. P. Cohen and T. L. Rothstein
2921 Elevated Levels of Protein Kinase C Activity and α-Isoenzyme Expression in Murine Peritoneal B Cells

W. W. Cruikshank, J. L. Greenstein, A. C. Theodore, and D. M. Center
2928 Lymphocyte Chemoattractant Factor Induces CD4-Dependent Intracytoplasmic Signaling in Lymphocytes

M. Graber, L. K. Bockenstedt, and A. Weiss
2935 Signaling via the Inositol Phospholipid Pathway by T Cell Antigen Receptor Is Limited by Receptor Number

C. J. Hackett, J. W. Yewdell, J. R. Bennink, and M. Wysocka
2944 Class II MHC-Restricted T Cell Determinants Processed from Either Endosomes or the Cytosol Show Similar Requirements for Host Protein Transport but Different Kinetics of Presentation

J. M. Lee, D. J. McKeon, and T. H. Watts
2952 Functional Mapping of MHC Class II Polymorphic Residues: The α-Chain Controls the Specificity for Binding an Aα versus an Aβ-Restricted Peptide and the β-Chain Region 65-67 Controls T Cell Recognition but Not Peptide Binding

D. L. Perkins, Y. Wang, D. Fruman, J. G. Seidman, and I. J. Rimm
2960 Immunodominance Is Altered in T Cell Receptor (β-Chain) Transgenic Mice Without the Generation of a Hole in the Repertoire

C. M. Roifman, K. Chin, A. Gazit, G. B. Mills, C. Gilon, and A. Levitzki
2965 Tyrosine Phosphorylation Is an Essential Event in the Stimulation of B Lymphocytes by Staphylococcus aureus Cowan I

CLINICAL IMMUNOLOGY • IMMUNOPATHOLOGY

J. Corbell, L. A. Evans, E. Vassak, D. A. Cooper, and R. Penny
2972 Culture and Properties of Cells Derived from Kaposi Sarcoma

A. J. Infante, P. A. Thompson, K. A. Krollick, and K. A. Wall
2977 Determinant Selection in Murine Experimental Autoimmune Myasthenia Gravis: Effect of the bm12 Mutation on T Cell Recognition of Acetylcholine Receptor Epitopes

2983 Experimental autoimmune encephalomyelitis Is Exacerbated by IL-1α and Suppressed by Soluble IL-1 Receptor

Z. Jiang and B. A. Woda
2990 Cytokine Gene Expression in the Islets of the Diabetic Biobreeding/Worcester Rat

S. Kotake, M. D. De Smet, B. Wiggert, T. M. Redmond, G. J. Chader, and I. Gery
2995 Analysis of the Pivotal Residues of the Immunodominant and Highly Uveitogenic Determinant of Interphotoreceptor Retinoid-Binding Protein

A. M. Krieg, M. F. Gourley, and A. D. Steinberg
3002 Association of Murine Lupus and Thymic Full-Length Endogenous Retroviral Expression Maps to a Bone Marrow Stem Cell

Continued on page 4
M. Ochel, H.-W. Vohr, C. Pfieffer, and E. Gleichmann


G. A. Wilbanks, M. Mammolenti, and J. W. Streilein

Continued from page 3

1006 IL-4 Is Required for the IgE and IgG1 increase and IgG1 Autoantibody Formation in Mice Treated with Mercuric Chloride

1012 Prevention and Treatment of Chronic Relapsing Experimental Allergic Encephalomyelitis by Transforming Growth Factor-β1

1018 Studies on the Induction of Anterior Chamber-Associated Immune Deviation (ACAID). II. Eye-Derived Cells Participate in Generating Blood-Borne Signals that Induce ACAID

**CYTOKINES • MEDIATORS • REGULATORY MOLECULES**

C. Günther, M. Röllinghoff, and H. U. Beuscher

A. Mackiewicz, T. Speroff, M. K. Ganapathi, and I. Kushner

S. Narumi and T. A. Hamilton

B. Naume, R. Shalaby, W. Lesslauer, and T. Espevik

H. Renz, J. Domenico, and E. W. Gelfand

A. J. Ritchie, D. R. Johnson, B. M. Ewenstein, and J. S. Pober

C. Siepl, U. V. Malipiero, and A. Fontana

T. Suda and A. Zlotnik


**IMMUNOCHEMISTRY**


M. Eulitz, C. Murphy, D. T. Weiss, and A. Solomon


**IMMUNOPHARMACOLOGY**

S. C. Dreskin and H. Metzger

306 IL-4-Dependent Up-Regulation of IL-4 Receptor Expression in Murine T and B Cells

306 IL-7 Maintains the T Cell Precursor Potential of CD3-CD4-CD8- Thymocytes

307 Cloning of cDNA for Natural Killer Cell Stimulatory Factor, a Heterodimeric Cytokine with Multiple Biologic Effects on T and Natural Killer Cells

308 Formation of Intrachain Disulfide Bonds gives Rise to Two Different Forms of the Murine IL-1β Precursor

309 Effects of Cytokine Combinations on Acute Phase Protein Production in Two Human Hepatoma Cell Lines

309 Inducible Expression of Murine IP-10 mRNA Varies with the State of Macrophage Inflammatory Activity

309 Involvement of the 55- and 75-kDa Tumor Necrosis Factor Receptors in the Generation of Lympokine-Activated Killer Cell Activity and Proliferation of Natural Killer Cells

309 IL-4-Dependent Up-Regulation of IL-4 Receptor Expression in Murine T and B Cells

309 Transforming Growth Factor-β (TGF-β)-Resistant Helper T Lymphocyte Clones Show a Concomitant loss of All Three Types of TGF-β Receptors

309 IL-7 Maintains the T Cell Precursor Potential of CD3+CD4'+CD8' T Lymphocytes

309 Cloning of cDNA for Natural Killer Cell Stimulatory Factor, a Heterodimeric Cytokine with Multiple Biologic Effects on T and Natural Killer Cells

309 The Q7 a3 Domain Alters T Cell Recognition of Class I Antigens

309 Serologic and Chemical Differentiation of Human MIII Light Chain Variable Regions

309 Conformational Structure of a Monoclonal Anti-Idiotype Antibody to the Monoclonal Anti-Adenocarcinoma-Associated Carbohydrate Antibody YH206

309 Fc,RI-Mediated Hydrolysis of Phosphoinositides in Ghosts Derived from Rat Basophilic Leukemia Cells

Continued on page 5
J. D. Ernst  
C. H. King, A. Hull, P. J. Kleinhenz, N. F. B. Phillips, and J. A. Marino  
B. A. M. Walker, B. E. Hagenlocker, and P. A. Ward

Annexin III Translocates to the Periphagosomal Region when Neutrophils Ingest Opsonized Yeast

 Structural and Functional Analysis of the Human Neutrophil 1-15 Antigen. An M, 65,000 to 70,000 Activation-Associated Membrane Proteinase

Superoxide Responses to Formyl-Methionyl-Leucyl-Phenylalanine in Primed Neutrophils: Role of Intracellular and Extracellular Calcium

MICROBIAL IMMUNOLOGY

R. W. Baird, M. S. Bronze, W. Kraus, R. R. Hill, L. G. Veasey, and J. B. Dale  
D. V. Erbe, E. R. Pfefferkorn, and M. W. Fanger  
L. Lamontagne and P. Jolicoeur  
H. Shiratsuchi, J. L. Johnson, and J. J. Ellner  
M. A. Tomai and T. J. Fitzgerald  
D. J. Volkman, B. J. Luft, P. D. Gorevic, J. Schultz, and L. Padovano

Epitopes of Group A Streptococcal M Protein Shared with Antigens of Articular Cartilage and Synovium

Cyclosporin A Modulates the Course of Woodchuck Hepatitis Virus Infection and Induces Chronicity

Functions of the Various Human IgG Fc Receptors in Mediating Killing of Toxoplasma gondii

Mouse Hepatitis Virus 3-Thymic Cell Interactions Correlating with Viral Pathogenicity

Human Monoclonal Antibodies Specific for Capsular Polysaccharides of Klebsiella Recognize Clusters of Multiple Serotypes

Bidirectional Effects of Cytokines on the Growth of Mycobacterium avium within Human Monocytes

Splenic Macrophage Function in Early Syphilitic Infection Is Complex: Stimulation versus Down-Regulation

Characterization of an Immunoreactive 93-kDa Core Protein of Borrelia burgdorferi with a Human IgG Monoclonal Antibody

MOLECULAR BIOLOGY • MOLECULAR GENETICS

A. M. Brown, C. L. Barr, and J. P.-Y. Ting  
C. Estaller, V. Koistinen, W. Schwaebie, M. P. Dierich, and E. H. Weiss  
V. Kouskoff, R. M. Mantovani, S. M. Candéias, A. Dorn, A. Staub, B. Lisowski-Groszpierre, C. Griscelli, C. O. Benoist, and D. J. Mathis  
C. M. Rudin, J. Hackett, Jr., and U. Storb  
S. Viville, V. Jongeneel, W. Koch, R. Mantovani, C. Benoist, and D. Mathis  
J. S. Weber, J. Berry, S. Litwin, and J. L. Clafin

Sequences Homologous to Class II MHC W, X, and Y Elements Mediate Constitutive and IFN-γ-Induced Expression of Human Class II-Associated Invariant Chain Gene

Cloning of the 1.4-kb mRNA Species of Human Complement Factor H Reveals a Novel Member of the Short Consensus Repeat Family Related to the Carboxy Terminal of the Classical 150-kDa Molecule

NF-X, a Transcription Factor Implicated in MHC Class II Gene Regulation

Precursors of Both Conventional and Ly-1 B Cells Can Escape Feedback Inhibition of Ig Gene Rearrangement

The Ea Promoter: A Linker-Scanning Analysis

Somatic Hypermutation of the JC Intron Is Markedly Reduced in Unrearranged ε and H Alleles and Is Unevenly Distributed in Rearranged Alleles

Continued on page 6
TUMOR IMMUNOLOGY


D. W. Lancki, C.-S. Hsieh, and F. W. Fitch

J.-H. Qian, J. A. Titus, S. M. Andrew, D. Mezzanzanica, M. A. Garrido, J. R. Wunderlich, and D. M. Segal

Letter to the Editor 3257

Errata 3260

Announcements 3262

Author Index 1

Murine Tumor Cells Transduced with the Gene for Tumor Necrosis Factor-α: Evidence for Paracrine Immune Effects of Tumor Necrosis Factor against Tumors

CD4+ T Cell Clones Specific for the Human p97 Melanoma-Associated Antigen Can Eradicate Pulmonary Metastases from a Murine Tumor Expressing the p97 Antigen

Mechanisms of Lysis by Cytotoxic T Lymphocyte Clones: Lytic Activity and Gene Expression in Cloned Antigen-Specific CD4+ and CD8+ T Lymphocytes

Human Peripheral Blood Lymphocytes Targeted with Bispecific Antibodies Release Cytokines that Are Essential for inhibiting Tumor Growth