TABLE OF CONTENTS

CUTTING EDGE

495 Commentary: Sophisticated Strategies for Information Encounter in the Lymph Node: The Reticular Network as a Conduit of Soluble Information and a Highway for Cell Traffic

500 Defective Rho GTPase Regulation by IL-1β-Converting Enzyme-Mediated Cleavage of D4 GDP Dissociation Inhibitor
Dennis E. Danley, Tsung-Hsien Chuang, and Gary M. Bokoch

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

505 The Weak CD8+ CTL Response to an Influenza Hemagglutinin Epitope Reflects Limited T Cell Availability
Wuxiong Cao, Brenda A. Myers-Powell, and Thomas J. Braciale

512 Sequential Acquisition of Mitochondrial and Plasma Membrane Alterations During Early Lymphocyte Apoptosis
Maria Castedo, Tamara Hirsch, Santos A. Susin, Naoufal Zamzami, Philippe Marchetti, Antonio Macho, and Guido Kroemer

522 IFN-α Induces Autoimmune T Cells Through the Induction of Intracellular Adhesion Molecule-1 and B7.2
Debasis Chakrabarti, Bruce Hultgren, and Timothy A. Stewart

529 T Cell Regulation in Adult Transplantation Tolerance
Joanna D. Davies, Gilly Martin, Jenny Phillips, Sara E. Marshall, Stephen P. Cobbold, and Herman Waldmann

534 Tyrosine Phosphorylation of Shc Is Not Required for Proliferation or Viability Signaling by Granulocyte-Macrophage Colony-Stimulating Factor in Hematopoietic Cell Lines
Melissa Durstin, Roger C. Inhorn, and James D. Griffin

541 Type I (CD64) and Type II (CD32) Fcγ Receptor-Mediated Phagocytosis by Human Blood Dendritic Cells
Neil A. Fanger, Kathleen Wardwell, Lilian Shen, Thomas F. Tedder, and Paul M. Gayre
Regulation of the B Cell Response to T-Dependent Antigens by Classical Pathway Complement
Michael B. Fischer, Minghe Ma, Siegfried Goerg, Xiaoming Zhou, Junrong Xia, Oretta Finco, Shuhua Han, Garnett Kelsoe, Robert G. Howard, Thomas L. Rothstein, Elisabeth Kremmer, Fred S. Rosen, and Michael C. Carroll

Delayed-Type Hypersensitivity in Mast Cell-Deficient Mice: Dependence on Platelets for Expression of Contact Sensitivity

Th1 Development of Naive CD4+ T Cells Is Inhibited by Co-Activation with Anti-CD4 Monoclonal Antibodies
Sigrid Goedert, Tieno Gerrnann, Petra Hoehn, Stephan Koelsch, Norbert Palm, Erwin Rüde, and Edgar Schmitt

γδ TCR+ Hybridomas Derived from Mice Preimmunized via the Portal Vein Adoptively Transfer Increased Skin Allograft Survival In Vivo
R. M. Gorczynski, Z. Cohen, Y. Leung, and Z. Chen

The Role of the B7-1a Molecule, an Alternatively Spliced Form of Murine B7-1 (CD80), on T Cell Activation
Manabu Inobe, Naoko Aoki, Peter S. Linsley, Jeffrey A. Ledbetter, Ryo Abe, Masaaki Murakami, and Toshimitsu Uede

Differential Effect of the Immunomodulator AS101 on B7-1 and B7-2 Costimulatory Molecules: Role in the Antitumoral Effects of AS101
Yona Kalechman and Benjamin Sredni

Bcmd Governs Recruitment of New B Cells into the Stable Peripheral B Cell Pool in the A/WySnJ Mouse
Vicky M. Lentz, Michael P. Cancro, Faye E. Nashold, and Colleen E. Hayes

Peripheral Blood Dendritic Cells Express FceRI as a Complex Composed of FceRIα- and FceRIγ-Chains and Can Use This Receptor For IgE-Mediated Allergen Presentation
Dieter Maurer, Edda Fiebiger, Christof Ebner, Bärbel Reiwinger, Gottfried F. Fischer, Sibylle Wichlas, Marie-Hélène Jouvin, Marcus Schmitt-Egenolf, Dietrich Kraft, Jean-Pierre Kinet, and Georg Stingl

Chemical Denaturation and Modification of Ovalbumin Alters Its Dependence on Ubiquitin Conjugation for Class I Antigen Presentation
Michael T. Michalek, Ethan P. Grant, and Kenneth L. Rock

TCR Triggering of Anergic CD4 T Cells in Murine AIDS Induces Apoptosis Rather Than Cytokine Synthesis and Proliferation
Girija Muralidhar, Susanne Koch, H. Elizabeth Broome, and Susan L. Swain

CD28 Costimulation Prevents Cell Death During Primary T Cell Activation
Patricia J. Noel, Lawrence H. Boise, Jonathan M. Green, and Craig B. Thompson

The Effect of IL-2 Treatment on Transcriptional Attenuation in Proto-oncogenes pim-1 and c-myb in Human Thymic Blast Cells
Forest Rohwer, Scott Todd, and Kathleen L. McGuire
Introduction of Exogenous Antigens into the MHC Class I Processing and Presentation Pathway by *Drosophila* Antennapedia Homeodomain Primes Cytotoxic T Cells In Vivo

*Marie-Paule Schutz-Redelmeier, Hélène Gournier, François Garcia-Pons, Marline Moussa, Alain H. Joliot, Michel Volovitch, Alain Prochiantz, and François A. Lemonnier*

p70 S6 Kinase Sensitivity to Rapamycin Is Eliminated by Amino Acid Substitution of Thr259

*Hirotaka Sugiyama, Philip Papst, Erwin W. Gelfand, and Naohiro Terada*

Characterization of a T Cell Line Specific to an Anti-Id Antibody Related to the Carbohydrate Antigen, Sialyl SSEA-1, and the Immunodominant T Cell Antigenic Site of the Antibody

*Kiyotaka Tsuyuoka, Kazuhiro Yago, Kunimi Hirashima, Shoji Ando, Nobuo Hanai, Hirofumi Soito, Motoo Yamasaki, Katsutoshi Takahashi, Yoshihiro Fukuda, Kazuwa Nakao, and Reiji Kannagi*

Self-MHC-Restricted Peptides Recognized by an Alloreactive T Lymphocyte Clone

*Keiko Udaka, Karl-Heinz Wiesmüller, Stefan Kienle, Günther Jung, and Peter Walden*

A Novel Population of CD4+CD56+ Myelin-Reactive T Cells Lyses Target Cells Expressing CD56/Neural Cell Adhesion Molecule

*Marco Vergelli, Hoang Le, Johannes M. van Noort, Suhayl Dhib-Jalbut, Henry McFarland, and Roland Martin*

IL-12 Is a Central Mediator of Acute Graft-Versus-Host Disease in Mice

*Eilidh Williamson, Paul Garside, J. Andrew Bradley, and Allan McI. Mowat*

Specific Inhibition of T Lymphocyte Coactivation by Triggering Integrin β1 Reveals Convergence of β1, β2, and β7 Signaling Pathways

*Darren G. Woodside, T. Kent Teague, and Bradley W. McIntyre*

Requirement of Fas(CD95), CD45, and CD11a/CD18 in Monocyte-Dependent Apoptosis of Human T Cells

*Mei X. Wu, Zhaohui Ao, Martin Hegen, Chikao Morimoto, and Stuart F. Schlossman*

Non-T Cell-Derived IL-4 Plays an Important Role in IgE Production Induced by Antigen Resensitization and Is Resistant to FK506

*Masakatsu Yamashita, Makiko Yamaoka, Nobuo Seki, and Takashi Fujii*

**MOLECULAR AND STRUCTURAL IMMUNOLOGY**

Molecular Mimicry Between an Immunodominant Amino Acid Motif on the 47-kDa Lipoprotein of *Treponema pallidum* (Tpp47) and Multiple Repeats of Analogous Sequences in Fibronectin

*Robert E. Baughn, Aibo Jiang, Ronny Abraham, Vicky Ottmers, and Daniel M. Musher*

High Affinity Antibodies Against Leα and Sialyl Leα From a Phage Display Library

*Quang Dinh, Nan-Ping Weng, Makoto Kiso, Hideharu Ishida, Akira Hasegawa, and Donald M. Marcus*
Determinants of Polyreactivity in a Large Panel of Recombinant Human Antibodies from HIV-1 Infection
Henrik J. Ditxel, Kunihiko Itoh, and Dennis R. Burton

Lack of Association of Secretory Component with IgA in J Chain-Deficient Mice
Barbara A. Hendrickson, Lorenz Rindisbacher, Blaise Corthesy, Donna Kendall, David A. Waltz, Marian R. Neutra, and J. G. Seidman

A Negatively Charged Anchor Residue Promotes High Affinity Binding to the MHC Class II Molecule I-Ak
Christopher A. Nelson, Nicholas J. Viner, Stephen P. Young, Shirley J. Petzold, and Emil R. Unanue

Somatically Mutated B Cell Pool Provides Precursors for Insulin Antibodies
James W. Thomas and Chrys Hulbert

Isolation of a Neutralizing Human RSV Antibody from a Dominant, Non-Neutralizing Immune Repertoire by Epitope-Blocked Panning
Ping Tsui, Mark A. Tornetta, Robert S. Ames, Brent C. Bankosky, Sandra Griego, Carol Silverman, Terence Porter, Gordon Moore, and Raymond W. Sweet

Enhanced Growth of Murine Melanoma in Ultraviolet-Irradiated Skin Is Associated with Local Inhibition of Immune Effector Mechanisms
Cherrie K. Donawho, H. Konrad Muller, Corazon D. Bucana, and Margaret L. Kripke

Multiple HLA-A Alleles Can Present an Immunodominant Peptide of the Human Melanoma Antigen Melan-A/MART-1 to a Peptide-Specific HLA-A*0201+ Cytotoxic T Cell Line
Katharina Fleischhauer, Silvia Tanzarella, Hans-Joachim Wallny, Claudio Bordignon, and Caia Traversari

In the Absence of Endogenous IL-10, Mice Acutely Infected with Toxoplasma gondii Succumb to a Lethal Immune Response Dependent on CD4+ T Cells and Accompanied by Overproduction of IL-12, IFN-γ, and TNF-α
Ricardo T. Gazxinelli, Maria Wysocka, Sara Hieny, Tanya Scharton-Kersten, Allen Cheever, Ralf Kühn, Werner Müller, Giorgio Trinchieri, and Alan Sher

Calpain Is the Target Antigen of a Th1 Clone That Transfers Protective Immunity Against Schistosoma mansoni
Dragana Jankovic, Lena Åslund, Isabelle P. Oswald, Patricia Caspar, Cheryl Champion, Edward Pearce, John E. Coligan, Mette Strand, Alan Sher, and Stephanie L. James

Exacerbated Viral Hepatitis in IFN-γ Receptor-Deficient Mice Is Not Suppressed by IL-12
Virgil E. C. J. Schijns, Christel M. H. Wierda, Maggy van Hoeij, and Marian C. Horzinek

Recombinant Polyepitope Vaccines for the Delivery of Multiple CD8 Cytotoxic T Cell Epitopes
Scott A. Thomson, Suzanne L. Elliott, Martina A. Sherritt, Kathryn W. Sproat, Barbara E. H. Coupar, Anthony A. Scalzo, Catherine A. Forbes, Andrew M. Ladhams, Xiao Y. Mo, Ralph A. Tripp, Peter C. Doherty, Denis J. Moss, and Andreas Suhrbier
Mice Lacking the TNF Receptor p55 Fail to Resolve Lesions Caused by Infection with *Leishmania major*, but Control Parasite Replication
Leda Q. Vieira, Michael Goldschmidt, Michelle Nashleanas, Klaus Pfeffer, Tak Mak, and Phillip Scott

Single Chain Ig/γ Gene-Redirected Human T Lymphocytes Produce Cytokines, Specifically Lyse Tumor Cells, and Recycle Lytic Capacity
Mo E. M. Weitjens, Ralph A. Willemsen, Dinko Valero, Kees Stam, and Reinder L. H. Bolhuis

**INFLAMMATION**

Counter-Receptors on Human Basophils for Endothelial Cell Adhesion Molecules
Bruce S. Bochner, Sherry A. Sterbinsky, Michael Briskin, Sarbjit S. Saini, and Donald W. MacGlashan, Jr.

Human Fibroblasts Express Functional IL-2 Receptors Formed by the IL-2R α- and β-Chain Subunits: Association of IL-2 Binding with Secretion of the Monocyte Chemoattractant Protein-1
H. J. Gruss, C. Scott, B. J. Rollins, M. A. Brach, and F. Herrmann

Neutrophil Adhesion to 24-Hour IL-1-Stimulated Endothelial Cells Under Flow Conditions
David A. Jones, C. Wayne Smith, Louis J. Picker, and Larry V. McIntire

IFN-γ-Induced MHC Class II Gene Expression Is Suppressed in Endothelial Cells by Dextran Sulfate
Rebecca H. Lian, Girish J. Kotwal, Samuel R. Wellhausen, Lawrence A. Hunt, and David E. Justus

Human Thy-1 Is Cytokine-Inducible on Vascular Endothelial Cells and Is a Signaling Molecule Regulated by Protein Kinase C
Justin C. Mason, Helen Yarwood, Attila Tarnok, Katharine Sugars, Andrew A. Harrison, Peter J. Robinson, and Dorian O. Haskard

Inhibition of Human Complement by a C3-Binding Peptide Isolated from a Phage-Displayed Random Peptide Library
Arvind Sahu, Brian K. Kay, and John D. Lambris

Stimulus-Specific Inhibition of Intercellular Adhesion Molecule-1 Gene Expression by TGF-β
Protul Shrikant, Sung Joong Lee, Indira Kalvakolanu, Richard M. Ransohoff, and Etty N. Benveniste

Accelerated Amyloid Deposition in Mice Treated with the Aspartic Protease Inhibitor, Pepstatin
Toshiyuki Yamada, Juris Liepnieks, Merrill D. Benson, and Barbara Klwe-Beckerman

**CLINICAL IMMUNOLOGY**

Role of IL-15, IL-2, and Their Receptors in the Development of T Cell Alveolitis in Pulmonary Sarcoidosis
Carlo Agostini, Livio Trentin, Monica Facco, Rosaria Sancetta, Andrea Cerutti, Cristina Tassinari, Lorella Cimarosto, Fausto Adami, Angiolo Cipriani, Renato Zambello, and Gianpiero Semenzato
Analysis of the Fine B Cell Specificity During the Chronic/Relapsing Course of a Multiple Sclerosis-Like Disease in Lewis Rats Injected with the Encephalitogenic Myelin Oligodendrocyte Glycoprotein Peptide 35-55
Motoki Ichikawa, Terrance G. Johns, Junliang Liu, and Claude C. A. Bernard

Cloning and Analysis of IgGκ and IgGλ Anti-Thyroglobulin Autoantibodies from a Patient with Hashimoto’s Thyroiditis: Evidence for In Vivo Antigen-Driven Repertoire Selection
Richard S. McIntosh, M. Suhail Asghar, Philip F. Watson, E. Helen Kemp, and Anthony P. Weetman

IL-10 Modulates Formation of Osteoclasts in Murine Hemopoietic Cultures
Jane M. Owens, Andrea C. Gallagher, and Timothy J. Chambers

A Pathogenic Role for γδ T cells in Relapsing-Remitting Experimental Allergic Encephalomyelitis in the SJL Mouse
Alice J. Rajan, Yan-Ling Gao, Cedric S. Raine, and Celia F. Brosnan

Human IgG Production In Vivo: Determination of Synthetic Rate by Nonradioactive Tracer Incorporation
Charles A. Thornton, Stephen Welle, Robert C. Griggs, and George N. Abraham

Human IgG Monoclonal Antibodies That Modulate the Binding of Specific IgE to Birch Pollen Bet v 1
Vincenzo Visco, Christiane Dolecek, Stéphane Denépoux, Joëlle Le Mao, Christiane Guret, Françoise Rousset, Marie-Thérèse Guinnepain, Dietrich Kraft, Rudolf Valenta, Anne Weyer, Jacques Banchereau, and Serge Lebecque

Author Index