TABLE OF CONTENTS

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

2005  Engagement of the Vitronectin Receptor (αVβ3) on Murine T Cells Stimulates Tyrosine Phosphorylation of a 115-kDa Protein
Clara Brando and Ethan M. Shevach

2012  AD2, A Human Molecule Involved in the Interaction of T Cells with Epidermal Keratinocytes and Thymic Epithelial Cells

2023  Bcl-2 Blocks Degranulation but not Fas-based Cell-Mediated Cytotoxicity
Vi K. Chiu, Craig M. Walsh, Chau-Ching Liu, John C. Reed, and William R. Clark

2033  Ligand Binding by the IL-2 Receptor Is Modulated by Intracellular Determinants of the IL-2 Receptor β-Chain
Mark A. Goldsmith, M. Catherine Amaral, and Warner C. Greene

2041  Mitogen Activation of a Nuclear Alkaline Phosphatase in Normal Activated Lymphocytes
Amy L. Kenter and Leslie Morgan

2051  Early Appearance of "Natural" Mucosal IgA Responses and Germinal Centers in Suckling Mice Developing in the Absence of Maternal Antibodies
David R. Kramer and John J. Cebra

2063  Decreased CD4⁺CD8⁻ TCR-αβ⁺ Cells in lpr/lpr Mice Lacking β₂-Microglobulin
Philip F. Mixter, Jennifer Q. Russell, Fiona H. Durie, and Ralph C. Budd

2075  T Cell Receptor α-Chain Defines the Antigen Specificity of Antigen-Specific Suppressor Factor but Does Not Impart Genetic Restriction
Richard M. O'Hara, Jr., Michael C. Byrne, Vijay K. Kuchroo, AnnMarie Nagelin, Matthew J. Whitters, Sundararajan Jayaraman, Sheryl L. Henderson, Martin E. Dorf, and Mary Collins
Perturbation of B Cell Genesis in the Bone Marrow of Pristane-Treated Mice: Implications for Plasmacytoma Induction  
*Sergio A. Rico-Vargas, Michael Potter, and Dennis G. Osmond*

B Cell Superstimulatory Influenza Virus (H2-Subtype) Induces B Cell Proliferation by a PKC-Activating, Ca²⁺-Independent Mechanism 
*Ortwin Rott, Jeanne Charriere, Monique Semichon, Georges Bismuth, and Evelyne Cash*

Antigen-Independent, Integrin-Mediated T Cell Activation 
*Knut Sturmhöfel, Clara Brando, Frédéric Martinon, Ethan M. Shevach, and John E. Coligan*

Regulation of Lymphocyte Pseudopodia Formation by Triggering the Integrin α₄/β₁ 
*Margit C. Szabo, T. Kent Teague, and Bradley W. McIntyre*

Expression of a Novel Integrin β₁ Chain Epitope and Anti-β₁ Antibody-Mediated Enhancement of Fibronectin Binding Are Dependent on the Stage of T Cell Differentiation 
*Scott A. Wadsworth, Andrew C. Chang, Myung-Joo P. Hong, Mark J. Halvorson, Stephanie Otto, and John E. Coligan*

Murine Minor Histocompatibility Antigens Detected by Helper T Cells: Recognition of an Endogenous Peptide 
*Peter J. Wettstein*

Restoring the Apoptosis Suppression Response to IL-5 Confers on Erythroleukemic Cells a Phenotype of IL-5-Dependent Growth 
*Jeffrey J.-Y. Yen, Yueh-Chun Hsieh, Chi-Liang Yen, Chia-Che Chang, Shirley Lin, and Hsin-Fang Yang-Yen*

**MOLECULAR AND STRUCTURAL IMMUNOLOGY**

Transgenic Control of Perforin Gene Expression: Functional Evidence for Two Separate Control Regions 
*Mathias G. Lichtenheld, Eckhard R. Podack, and Robert B. Levy*

Isolation, Primary Structure, and Evolution of the Third Component of Chicken Complement and Evidence for a New Member of the α₂-Macroglobulin Family 
*Manolis Mavroidis, J. Oriol Sunyer, and John D. Lambris*

Recombination Potential of the Human DIR Elements 
*Bethany B. Moore and Katheryn Meek*

Sequence Constraints and Recognition by CTL of an HLA-B27-Restricted HIV-1 gag Epitope 
*Wilfried Nietfeld, Monika Bauer, Michele Fevrier, Reinhard Maier, Birgit Holzworth, Ronald Frank, Bernhard Maier, Yves Riviere, and Andreas Meyerhans*
Domain Interactions and Antigen Binding of Recombinant Anti-Z-DNA Antibody Variable Domains: The Role of Heavy and Light Chains Measured by Surface Plasmon Resonance
Michael Polymenis and B. David Stollar

Binding Analysis of Antibodies Produced by Precursor and Branchpoint Intermediates of an Anti-Influenza Hemagglutinin B Cell Clone: Parallel Replacement Mutations Do Not Confer Increased Avidity for Hemagglutinin
Robert C. Rickert, Mary Kopke Wioch, Robyn L. Hahn, and Stephen H. Clarke

Regulatory Regions 3' of the Immunoglobulin Heavy Chain Intronic Enhancer Differentially Affect Expression of a Heavy Chain Transgene in Resting and Activated B Cells
Dagmar Sigurdardottir, Jeongwon Sohn, Jamie Kass, and Erik Selsing

Addition of a μ-Tailpiece to IgG Results in Polymeric Antibodies with Enhanced Effector Functions Including Complement-Mediated Cytolysis by IgG4
Richard I. F. Smith, M. Josefina Coloma, and Sherie L. Morrison

Secondary Deletional Recombination of Rearranged Switch Region in Ig Isotype-Switched B Cells: A Mechanism for Isotype Stabilization
Ke Zhang, Hai-Kit Cheah, and Andrew Saxon

Resistance of Melanoma Cell Lines to Interferons Correlates with Reduction of IFN-Induced Tyrosine Phosphorylation: Induction of the Anti-Viral State by IFN Is Prevented by Tyrosine Kinase Inhibitors
Stephen J. Ralph, Bruce D. Wines, Michael J. Payne, Darren Grubb, Irene Hatzinisiriou, Anthony W. Linnane, and Rodney J. Devenish

Induction of Tumor-Reactive CTL from Peripheral Blood and Tumor-Infiltrating Lymphocytes of Melanoma Patients by In Vitro Stimulation with an Immunodominant Peptide of the Human Melanoma Antigen MART-1
Licita Rivoltini, Yutaka Kawakami, Kazuyasu Sakaguchi, Scott Southwood, Alessandro Sette, Paul F. Robbins, Francesco M. Marincola, Michael L. Salgaller, John R. Yannelli, Ettore Appella, and Steven A. Rosenberg

Characterization of RFM Mouse T Lymphocyte Anti-Oncofetal Antigen Immunity in Apparent Tumor-Free, Long-Term Survivors of Sublethal X-Irradiation by Limiting Dilution T Lymphocyte Cloning
James W. Rohrer, Craig Culpepper, Adel L. Barsoum, and Joseph H. Coggin, Jr.

Regulatory Mechanisms for Production of IFN-γ and TNF by Antitumor T Cells or Macrophages in the Tumor-Bearing State
Norihiko Yamamoto, Jian-Ping Zou, Xiao-Fei Li, Hiroshi Takenaka, Satoshi Noda, Tetsuya Fujii, Shiro Ono, Yoshiro Kobayashi, Naoshi Mukaida, Kouji Matsushima, Hiromi Fujiwara, and Toshiyuki Hamaoka
Activation of Human Neutrophils Through L-Selectin and Mac-1 Molecules
Elahe Crockett-Torabi, Brent Sulenbarger, C. Wayne Smith, and Joseph C. Fantone

Mutation of Residues in the C3dg Region of Human Complement Component C3 Corresponding to a Proposed Binding Site for Complement Receptor Type 2 (CR2, CD21) Does Not Abolish Binding of iC3b or C3dg to CR2
Russell J. Diefenbach and David E. Isenman

Human IL-1β Processing and Secretion in Recombinant Baculovirus-Infected Sf9 Cells Is Blocked by the Cowpox Virus Serpin crmA
Andrew D. Howard, Oksana C. Palyha, Patrick R. Griffin, Erin P. Peterson, Albert B. Lenny, Gloria J.-F. Ding, David J. Pickup, Nancy A. Thornberry, John A. Schmidt, and Michael J. Tocci

Pyrrolidine Dithiocarbamate Inhibits Intercellular Adhesion Molecule-1 Biosynthesis Induced by Cytokines In Human Fibroblasts
Masahiko Kawai, Ryuta Nishikomori, Eun-Young Jung, Guixiang Tai, Chutaro Yamanaka, Mitsufumi Mayumi, and Toshio Heike

Macrophage Inflammatory Protein-1α Enhances Growth Factor-Stimulated Phosphatidylcholine Metabolism and Increases cAMP Levels in the Human Growth Factor-Dependent Cell Line M07e, Events Associated with Growth Suppression
Charlie Mantel, Susan Aronica, Zaiming Luo, Mark S. Marshall, Young June Kim, Scott Cooper, Nancy Hague, and Hal E. Broxmeyer

Substrate Specificities of the Protease of Mouse Serum Ra-Reactive Factor
Ronald T. Ogata, Pamela J. Low, and Masaya Kawakami

Activation of cAMP-Dependent Pathways in Human Airway Smooth Muscle Cells Inhibits TNF-α-Induced ICAM-1 and VCAM-1 Expression and T Lymphocyte Adhesion
Reynold A. Panettieri, Jr., Aili L. Lazaar, Ellen Puré, and Steven M. Albelda

Proinflammatory Cytokines Potentiate Thrombospondin-Mediated Phagocytosis of Neutrophils Undergoing Apoptosis
Yi Ren and John Savill

IL-8 Specifically Binds to Endothelial but Not to Smooth Muscle Cells
Uwe Schönbeck, Ernst Brandt, Frank Petersen, Hans-Dieter Flad, and Harald Loppnow

Isolation of Nine Gene Sequences Induced by Silica in Murine Macrophages
Fernando Segade, Estefania Claudio, Kazimierz Wrobel, Sofia Ramos, and Pedro S. Lazo
Bone Marrow-Derived Murine Mast Cells Migrate, but Do Not Degranulate, in Response to Chemokines
Dennis Taub, Jaroslaw Dastych, Noriaki Inamura, James Upton, David Kelvin, Dean Metcalfe, and Joost Oppenheim

In Vivo Regulation of Rat Neutrophil Apoptosis Occurring Spontaneously or Induced with TNF-α or Cycloheximide
Hideya Tsuchida, Yuji Takeda, Hiroshi Takei, Haruhide Shinzawa, Tsuneo Takahashi, and Fujirio Sendo

Investigation of Neutrophil Signal Transduction Using a Specific Inhibitor of Phosphatidylinositol 3-Kinase

Clinical Immunology

Glomerular Binding Activity in MRL lpr Serum Consists of Antibodies That Bind to a DNA/Histone/Type IV Collagen Complex
Keith A. Bernstein, Richard Di Valerio, and James B. Lefkowith

Mucosal Imbalance of IL-1 and IL-1 Receptor Antagonist in Inflammatory Bowel Disease: A Novel Mechanism of Chronic Intestinal Inflammation
Vincenzo Casini-Raggi, Lori Kam, Yoo Jin T. Chong, Claudio Fiocchi, Theresa T. Pizarro, and Fabio Cominelli

Analysis of the New Zealand Black Contribution to Lupus-Like Renal Disease: Multiple Genes That Operate in a Threshold Manner
Charles G. Drake, Stephen J. Rozzo, Hayden F. Hirschfeld, N. Pamela Smarnworawong, Ed Palmer, and Brian L. Kotzin

HIV Replication in IL-2-Stimulated Peripheral Blood Mononuclear Cells Is Driven in an Autocrine/Paracrine Manner by Endogenous Cytokines
Audrey L. Kinter, Guido Poli, Lawrence Fox, Elena Hardy, and Anthony S. Fauci

A Monoclonal Autoantibody That Promotes Central Nervous System Remyelination in a Model of Multiple Sclerosis Is a Natural Autoantibody Encoded by Germline Immunoglobulin Genes
David J. Miller and Moses Rodriguez

Intragraft Expression of Cytokine Transcripts During Pig Proislet Xenograft Rejection and Tolerance in Mice
Carolyn F. Morris, Charmaine J. Simeonovic, Ming-Chiu Fung, J. Dennis Wilson, and Andrew J. Hapel

IgG but Not Other Classes of Anti-[H2A-H2B]-DNA Is an Early Sign of Procainamide-Induced Lupus
Robert L. Rubin, Rufus W. Burlingame, Janice E. Arnott, Mark C. Totoritis, Edward M. McNally, and Allen D. Johnson
2494 Beta-Cell-Cytotoxic CD8+ T Cells from Nonobese Diabetic Mice Use Highly Homologous T Cell Receptor α-Chain CDR3 Sequences
Pere Santamaria, Toshihiro Utsugi, Byung-Ju Park, Nuzhat Averill, Shoji Kawazu, and Ji-Won Yoon

2504 Breaking Tolerance Leads to Autoantibody Production but Not Autoimmune Liver Disease in Hepatitis B Virus Envelope Transgenic Mice
Susanne Wirth, Luca G. Guidotti, Kazuki Ando, Hans-Jürgen Schlicht, and Francis V. Chisari

2516 A MHC Class I B Locus Allele-Restricted Simian Immunodeficiency Virus Envelope CTL Epitope in Rhesus Monkeys
Yasuhiro Yasutomi, Stephen N. McAdam, Jonathan E. Boyson, Marian S. Piekarczyk, David I. Watkins, and Norman L. Letvin

2523 Author Index

2525 Information for Authors

2527 Submission Form

2528 Membership Application