The Journal of Immunology
Contents
Volume 151 • Number 9 • November 1, 1993

Cellular Immunology and Immune Regulation

4423  Association of an Activation Inducible Serine Kinase Activity with CD5
Jose Alberola-Ila, Lourdes Places, F. Lozano, and Jordi Vives

4431  Peripheral B Cell Maturation: II. Heat-Stable Antigen Splenic B Cells Are an Immature Developmental Intermediate in the Production of Long-Lived Marrow-Derived B Cells
David M. Allman, Stacy E. Ferguson, Vicky M. Lentz, and Michael P. Cancro

4445  Production of Minor Lymphocyte Stimulatory-I Antigen from Activated CD4+ or CD8+ T Cells
Noriko Arase-Fukushi, Hisashi Arase, Kazumasa Ogasawara, Robert A. Good, and Kazunori Onoé

4455  Human Cytomegalovirus Down-Regulates HLA Class I Expression by Reducing the Stability of Class I H Chains
Matthias F. C. Beersma, Mariejose' J. E. Bijlmakers, and Hidde L. Ploegh

4465  Most γδ T Cells Develop Normally in the Absence of MHC Class II Molecules

4476  Lipopolysaccharide and Tumor Necrosis Factor-α Induce Lipopolysaccharide Receptor Expression on Bone Marrow Cells by Different Mechanisms
Richard Chaby, Thierry Pedron, Peter L. Stütz, and Robert Girard

4486  The Expression of CD4 by T Cell Precursors Resident in Both the Thymus and the Bone Marrow
Robert Chervesak, Deborah Dempsey, Rachel Soloff, R. Michael Wolcott, and Stephen R. Jennings

4494  Association of Tyrosine and Serine Kinases with the B Cell Surface Antigen CD20: Induction via CD20 of Tyrosine Phosphorylation and Activation of Phospholipase C-γ1 and PLC Phospholipase C-γ2
Julie P. Deans, Gary L. Schieven, Geraldine L. Shu, Mary A. Valentine, Lisa A. Gilliland, Alejandro Araujo, Edward A. Clark, and Jeffrey A. Ledbetter

4505  T Cells Within Germinal Centers are Specific for the Immunizing Antigen
Kathleen A. Fuller, Osami Kanagawa, and Moon H. Nahm

4513  B Cell Antigen Receptor Cross-Linking Triggers Rapid Protein Kinase C Independent Activation of p21
Anne E. Harwood and John C. Cambier

4523  Evidence that Murine Vγ5 and Vγ6 γδ-TCR+ Lymphocytes Are Derived from a Common Distinct Lineage
Kent Heyborne, Yang-Xin Fu, Harshan Kalataradi, Christopher Reardon, Christina Roark, Cassandra Eyster, Michaelaunn Vollmer, Willi Born, and Rebecca O'Brien

4528  Sequential Switching from μ to ε Via γ4 in Human B Cells Stimulated with IL-4 and Hydrocortisone
Haifa H. Jabara, Richard Loh, N. Ramesh, Donaia Vercelli, and Raif S. Geha
Molecular and Structural Immunology

4534 TGF-β is a Bidirectional Modulator of Cytokine Receptor Expression on Murine Bone Marrow Cells: Differential Effects of TGF-β1 and TGF-β3
Sten E. W. Jacobsen, Francis W. Ruscetti, Anita B. Roberts, and Jonathan R. Keller

4545 Human IL-10 Is a Chemoattractant for CD8+ T Lymphocytes and an Inhibitor of IL-8-Induced CD4+ T Lymphocyte Migration
Tao Jinquan, Christian Grønhøj Larsen, Borbala Gesser, Kouji Matsushima, and Kristian Th restrup-Pedersen

4552 Cell Adhesion Mediated by CD4 and MHC Class II Proteins Requires Active Cellular Processes
Michael S. Kinch, Jack L. Strominger, and Carolyn Doyle

4562 Synthesis of T Helper 2-Type Cytokines at the Maternal-Fetal Interface
Hui Lin, Tim R. Mosmann, Larry Guilbert, Siriporn Tuntipopipat, and Thomas G. Wegmann

4574 Normal Sequence of Phenotypic Transitions in One Cohort of 5-Bromo-2'-Deoxyuridine-Pulse-Labeled Thymocytes: Correlation with T Cell Receptor Expression
Bruno Lucas, Florence Vasseur, and Claude Penit

4583 Antigen Presentation by B Lymphoma Cells: Requirements for Processing of Exogenous Antigen Internalized Through Transferrin Receptors
Kathleen L. McCoy, David Gainey, John K. Inman, and Robert Stutzman

4595 The Functional Basis of Minor Histocompatibility Loci
Derry C. Roopenian, Allan Peter Davis, Gregory J. Christianson, and Larry E. Mobr aaten

4606 CD48 Is a Low Affinity Ligand for Human CD2
Mauro S. Sandrin, Effie Mouhtouris, Hilary A. Vaughan, Hilary S. Warren, and Christopher R. Parish

4614 Characterization of a Cell Surface Glycoprotein IPO-3, Expressed on Activated Human B and T Lymphocytes
Svetlana F. Sidorenko and Edward A. Clark

4625 Transforming Growth Factor-β1 Is Required for Secretion of IgG of All Subclasses by LPS-Activated Murine B Cells in Vitro
Clifford M. Snapper, Wendy Waegell, Hans Beernink, and James R. Dasch

4637 Stimulation of Human T-Cell Proliferation by Specific Activation of the 75-kDa Tumor Necrosis Factor Receptor

4642 Unexpected Lack of Reactivity of Allogeneic Anti-la Monoclonal Antibodies with MHC Class II Molecules Expressed by Mouse Intestinal Epithelial Cells
Karine Vid a, Christiane Samara, Jean-Pierre Magaud, Jean-Pierre Revillard, and Dominique Kaiserlian

4651 Construction of a Human Ig Combinatorial Library from Genomic V Segments and Synthetic CDR3 Fragments
Yoshiko Ak amatsu, Michael S. Cole, J. Yun Tso, and Naoya Tsurushita

4660 Independently Derived IgG Anti-DNA Autoantibodies from Two Lupus-Prone Mouse Strains Express a VH Gene That Is Not Present in Most Murine Strains
Rosaria M. R. Gangemi, Ajay K. Singh, and Kathleen J. Barrett

4672 Characterization of a (+)-Azidophenazocine-Sensitive Sigma Receptor on Splenic Lymphocytes
Hildegardo H. Garza, Jr., Sylvia Mayo, Wayne D. Bowen, Brian R. DeCosta, and Daniel J. J. Carr
Endogenous Expression of δ on the Surface of WEHI-231: Characterization of its Expression and Signaling Properties
Helen G. Haggerty, Robert J. Wechsler, Vicky M. Lentz, and John G. Monroe

Antioxidant Treatment of Thymic Organ Cultures Decreases NF-κB and TCF1(α) Transcription Factor Activities and Inhibits αβ T Cell Development
Vladimir Ivanov, Matthias Merkenschlager, and Rhodri Ceredig

Structural Analysis of the CD3 ζ/η Locus of the Rat: Expression of ζ but Not η Transcripts by Rat T Cells
Yoshiyuki Itoh, Akhiro Matsaura, Miyuki Kinebuchi, Ryoichi Honda, Shinichi Takayama, Shingo Ichimiya, Shinichiro Kon, and Kokichi Kikuchi

Switch Recombination Breakpoints Occur at Nonrandom Positions in the Sy Tandem Repeat
Amy L. Kenter, Robert Wuerffel, Ranjan Sen, Christina E. Jamieson, and Gennady V. Merkulov

Self-Peptides from Four HLA-DR Alleles Share Hydrophobic Anchor Residues Near the NH2-Terminal Including Proline as a Stop Signal for Trimming
Harald Kropshofer, Heiner Max, Thomas Halder, Matthias Kalbus, Claudia A. Muller, and Hubert Kalbacher

Purification and Characterization of Chimeric Human IgA1 and IgA2 Expressed in COS and Chinese Hamster Ovary Cells
H. Craig Morton, Julie D. Atkin, Ray J. Owens, and Jenny M. Woof

Characterization of a Novel High Affinity Human IL-7 Receptor: Expression on T Cells and Association with IL-7 Driven Proliferation
Theresa H. Page, Joanne L. Willcocks, David A. Taylor-Fishwick, and Brian M. J. Foxwell

Biochemical Identity of the Mouse Ly-19.2 and Ly-32.2 Alloantigens with the B Cell Differentiation Antigen Lyb-2/CD72
William H. Robinson, Michelle M. Tutt Landolfi, Hubert Schäfer, and Jane R. Parnes

cDNA Cloning of a Major Allergen from Timothy Grass (Phleum pratense) Pollen; Characterization of the Recombinant Phl p V Allergen
Susanne Vrtala, Wolfgang R. Sperr, Ingrid Reimitzer, Ronald van Ree, Sylvia Laffer, Wolf-Dieter Müller, Peter Valent, Klaus Lechner, Helmut Rumpold, Dietrich Kraft, Otto Scheiner, and Rudolf Valenta

Host Defense

Protective Immunity in Baboons Vaccinated with a Recombinant Antigen or Radiation-Attenuated Cercariae of Schistosoma mansoni is Antibody-Dependent
Lorraine Amory Soisson, Graham D. F. Reid, Idle O. Farah, Mramba Nyindo, and Mette Strand

Expression of a Protective Intestinal Immune Response Can Be Inhibited at Three Distinct Sites by Treatment with Anti-α4 Integrin
R. G. Bell and T. Issekutz

Spontaneous and IL-2-Induced Anti-Leukemic and Anti-Host Effects against Tumor- and Host-Specific Alloantigens
Paul Cohen, Urania Vourka-Karussis, Lola Weiss, and Shimon Slavin

Profiles of Cytokine Production in Relation with Susceptibility to Cerebral Malaria
Sylvie de Kossodo and Georges E. Grau

Killing of Staphylococcus aureus by Tumor Necrosis Factor-α-Activated Neutrophils: The Role of Serum Opsonins, Integrin Receptors, Respiratory Burst, and Degranulation
Antonio Ferrante, A. James Martin, Edna J. Bates, David H. B. Goh, D. Patricia Harvey, David Parsons, Deborah A. Rathjen, Graham Russ, and Jean-Michel Dayer
Inhibition of Murine B Cell Proliferation and Down-Regulation of Protein Kinase C Levels by a Phosphorylcholine-Containing Filarial Excretory-Secretory Product
William Harnett and Margaret M. Harnett

Involvement of TCR-Vβ8.3* Cells in the Cure of Mice Bearing a Large MOPC-315 Tumor by Low Dose Melphalan
Margalit B. Mokyr, Michael Rubin, Kenneth A. Newell, Anna Prokhorova, and Jeffrey A. Bluestone

An Immune Suppressive Factor Derived from Esophageal Squamous Carcinoma Induces Apoptosis in Normal and Transformed Cells of Lymphoid Lineage
Alison M. O'Mahony, Gerald C. O’Sullivan, Joseph O’Connell, Thomas G. Cotter, and John K. Collins

Modulation of Murine Cytokine Responses to Mycobacterial Antigens by Helminth-Induced T Helper 2 Cell Responses
Eric Pearlman, James W. Kazura, Fred E. Hazlett, Jr., and W. Henry Boom

Inhibition of Human CTL-Mediated Lysis by Fibroblasts Infected with Herpes Simplex Virus
Christine M. Posavad, Jennifer J. Newton, and Kenneth L. Rosenthal

Transforming Growth Factor-β Expression and Natural Killer Cell Responses During Virus Infection of Normal, Nude, and SCID Mice
Helen C. Su, Rika Ishikawa, and Christine A. Biron

Resistance of Mice to Experimental Leishmaniasis Is Associated with More Rapid Appearance of Mature Macrophages in Vitro and in Vivo
Cord Sunderkötter, Manfred Kunz, Kerstin Steinbrink, Georg Meinardus-Hager, Matthias Goebeler, Horst Bildau, and Clemens Sorg

Inflammation

Role of Kinins in the Vascular Extravasation Evoked by Antigen and Mediated by Tachykinins in Guinea Pig Trachea
Claude Bertrand, Jay A. Nadel, Isao Yamawaki, and Pierangelo Geppetti

IL-4 Inhibits Growth Factor-Stimulated Rheumatoid Synoviocyte Proliferation by Blocking the Early Phases of the Cell Cycle
Julie Dechanet, Jérôme Briolay, Marie-Cloïlde Rissoan, Pascale Chomarat, Jean-Pierre Galizzi, Jacques Banchereau, and Pierre Miossec

Phospholipase A2 Activity in Human Neutrophils: Stimulation by Lipopolysaccharide and Possible Involvement in Priming for an Enhanced Respiratory Burst
J. Randolph Forehand, Richard B. Johnston, Jr., and John S. Bomalaski

Stimulation of Human Basophils Results in Homotypic Aggregation: A Response Independent of Degranulation
Edward F. Knol, Taco W. Kuipers, Frederik P. J. Mul, and Dirk Roos

Cross-Linking of the Carcinoembryonic Antigen-Like Glycoproteins CD66 and CD67 Induces Neutrophil Aggregation
Taco W. Kuipers, C. Ellen van der Schoot, Marianne Hoogerwerf, and Dirk Roos

Interactions of Soluble CD59 with the Terminal Complement Complexes: CD59 and C9 Compete for a Nascent Epitope on C8
Timo Lehto and Seppo Meri
4950 The Effects of Stem Cell Factor on the Ultrastructure of FceRI+ Cells Developing in IL-3-Dependent Murine Bone Marrow-Derived Cell Cultures
Menachem Rottem, Julie P. Goff, John P. Albert, and Dean D. Metcalfe

4964 Study of Natural Lipocortin I: A Potent Mediator for Macrophage-Mediated Immunosuppression in Tumor-Bearing Mice
Tsuneaki Sakata, Shoji Iwagami, Yuki Tsuruta, Satsuki Suzuki, and Ryuji Suzuki

4973 Regulation of Mouse Bone Marrow Macrophage Mannose Receptor Expression and Activation by Prostaglandin E and IFN-γ
Stefan Schreiber, Sherrie L. Perkins, Steven L. Teitelbaum, Jean Chappel, Philip D. Stahl, and Janice S. Blum

4982 P-Selectin Blockade Does not Impair Leukocyte Host Defense against Bacterial Peritonitis and Soft Tissue Infection in Rabbits
Sam R. Sharar, Steven S. Sasaki, Lynne C. Flaherty, James C. Paulson, John M. Harlan, and Robert K. Winn

4989 GM-CSF Regulates Human Eosinophil Responses to F-Met Peptide and Platelet Activating Factor
Kenichi Tomioka, Donald W. MacGlashan, Jr., Lawrence M. Lichtenstein, Bruce S. Bochner, and Robert P. Schleimer

Clinical Immunology

5000 Degenerate Recognition of a Dissimilar Antigenic Peptide by Myelin Basic Protein-Reactive T Cells: Implications for Thymic Education and Autoimmunity
Vatsala Bhardwaj, Vinip Kumar, H. M. Geysen, and Eli E. Sercarz

5011 Human Antilipid A Monoclonal Antibodies Bind to Human B Cells and the i Antigen on Cord Red Blood Cells

5022 Immortalization with Herpesvirus Saimiri Modulates the Cytokine Secretion Profile of Established Th1 and Th2 Human T Cell Clones
Marco De Carli, Susanne Berthold, Helmut Fickenscher, Ingrid Muller Fleckenstein, Mario M. D’Eliaos, Qinglin Gao, Roberta Biagiotti, Maria Grazia Giudizi, Joachim R. Kalden, Bernhard Fleckenstein, Sergio Romagnani, and Gianfranco Del Prete

5031 Elevated IFN-γ and Decreased IL-2 Gene Expression Are Associated with HIV Infection
Jiang Fan, Hong Z. Bass, and John L. Fahey

5041 Induction of Peri-Insulitis but Not Diabetes in Islet Transplants Expressing a Single Foreign Antigen: A Multi-Stage Model of Disease
V. Michael Holers, Gregory F. Hollos, Benjamin D. Schwartz, Robert J. Evans, Jena Strauss-Schoenberger, Jean-Claude Carel, Deborah E. Barney, Bin Li, Jeannine Stafford-Holllis, and Paul E. Lacy

5053 CD4 mAb Therapy Modulates Alloantibody Production and Intracardiac Graft Deposition in Association with Selective Inhibition of Th1 Lymphokines
Jerzy W. Kupiec-Weglinska, Barbara Wasowska, Ildiko Papp, Georg Schmiedbauer, Mohamed H. Sayegh, William M. Baldwin Ill, Kenneth J. Wieder, and Wayne W. Hancock

5062 Heterogeneity of Dermal Microvascular Endothelial Cell Antigen Expression and Cytokine Responsiveness in Situ and in Cell Culture
Peter Petzelbauer, Jeffrey R. Bender, Jean Wilson, and Jordan S. Pober

5073 Abnormal Selection of Antibody Repertoires in Retrovirus-Induced Murine AIDS
Denis Portnoi, Anne-Claire Viale, and Jean-Herve Colle

5081 Complete Freund’s Adjuvant Induces an Earlier and More Severe Arthritis in MRL-lpr Mice
Leslie G. Ratkay, Lewei Zhang, Joseph Tonzetich, and J. Douglas Waterfield
Inhibition of Inflammatory Liver Injury by a Monoclonal Antibody against Lymphocyte Function-Associated Antigen-I
Yoshitaka Tanaka, Kiyomi Kobayashi, Akiko Takahashi, Iwao Arai, Shohei Higuchi, Susumu Otomo, Sonoko Habu, and Takashi Nishimura

Synthetic Peptide in Mineral Oil Adjuvant Elicits Simian Immunodeficiency Virus-Specific CD8+ Cytotoxic T Lymphocytes in Rhesus Monkeys
Yasuhiro Yasutomi, Thomas J. Palker, Murray B. Gardner, Barton F. Haynes, and Norman L. Letvin

Author Index

Information for Contributors

Submission Form

Membership Form