The Journal of Immunology
Contents
Volume 152 • Number 5 • March 1, 1994

Cellular Immunology and Immune Regulation

2087 Development and Antigen Specificity of CD8+ Cytotoxic T Lymphocytes in β2-Microglobulin-Negative, MHC Class I-Deficient Mice in Response to Immunization with Tumor Cells
Sergey G. Apasov and Michail V. Sitkovsky

2098 Cytokine-Enhanced NK Cell-Mediated Cytotoxicity: Positive Modulatory Effects of IL-2 and IL-12 on Stimulus-Dependent Granule Exocytosis
Joy D. Bonnema, Kenneth A. Rivlin, Adrian T. Ting, Renee A. Schoon, Robert T. Abraham, and Paul J. Leibson

2105 Monoclonal Antibody 2D10 Recognizes a Novel T Cell Costimulatory Molecule on Activated Murine B Lymphocytes

2115 FcγRII Cross-Linking Inhibits Anti-lg-Induced egr-1 and egr-2 Expression in BCL1
Alexander R. Gottschalk, Loren J. Joseph, and José Quintáns

2123 Tyrosine Phosphorylation and Activation of Vav GTP/GDP Exchange Activity in Antigen Receptor-Triggered B Cells
Erich Gulbins, Claire Langlet, Gottfried Baier, Nathalie Bonnefoy-Berard, Elizabeth Herbert, Amnon Altman, and K. Mark Coggshall

2130 Mechanisms of T Cell Contact-Dependent B Cell Activation
Takuma Kato, Takehiro Kokudo, Toshiki Tamura, and Hideo Nariuchi

2139 Regulation of CD23 Expression by IL-4 and Corticosteroid in Human B Lymphocytes: Altered Response After EBV Infection

2148 Transition from TCR-β Dimer to TCR-αβ-Expressing Cells by Introduction of an α-Chain in an Immature Thymocyte Cell Line
Ichiro Kawabara, Hiroshi Ohno, Jennifer A. Punt, Yasuhiro Hashimoto, and Takashi Sato

2157 Evidence for a Direct Physical Interaction of Membrane IgM, IgD, and IgG with the B29 Gene Product
Arjan C. Lankester, Gijs M. W. van Schijndel, Jan Frommè, Jacqueline L. Cordell, René A. W. van Lier, and Carol J. M. van Noesel

2163 T-BAM/CD40-L on Helper T Lymphocytes Augments Lymphokine-Induced B Cell lg Isotype Switch Recombination and Rescues B Cells from Programmed Cell Death
Seth Lederman, Michael J. Yellin, Aileen M. Cleary, Alessandra Pernis, Giorgio Inghirami, Lauren E. Cohn, Lori R. Covey, Julie J. Lee, Paul Rothman, and Leonard Chess

2172 Effects of IL-12 on Helper T Cell-Dependent Immune Responses In Vivo
Andrew J. McKnight, Gregory J. Zimmer, Ilana Fogelman, Stanley F. Wolf, and Abul K. Abbas

2180 Development and Characterization of Channel Catfish Long Term B Cell Lines
Norman W. Miller, Michael A. Ryczyn, Melanie R. Wilson, Gregory W. Warr, John P. Naftel, and L. William Clem

The Journal of Immunology (ISSN 0022-1767) is published twice each month by The American Association of Immunologists, 428 East Preston Street, Baltimore, MD 21202. Subscription rates $170 ($260 foreign); institutions $300 ($390 foreign); single copy $10 ($15 foreign). Air Printed Matter rates are available on request from Customer Service, 428 E. Preston St., Baltimore, MD 21202-3993. Indexed by Current Contents and Index Medicus. Second class postage paid at Baltimore, MD 21202 and at additional mailing offices. Country of origin USA. Printed on acid-free paper which can be recycled. Postmaster: Send address changes to The Journal of Immunology, 428 East Preston Street, Baltimore, MD 21202. Copyright © 1994 by The American Association of Immunologists.
CD40 Ligand Acts as a Costimulatory Signal for Neonatal Thymic γδ T Cells
Fred Ramsdell, Michael S. Seaman, Ky N. Clifford, and William C. Fanslow

IL-2 Reverses Human T Cell Unresponsiveness Induced by Thymic Epithelium in SCID-hu Mice
Dominique Schols, Bart Vandekerckhove, Deborah Jones, and Maria-Grazia Roncarolo

MTS-32 Monoclonal Antibody Defines CD4+8− Thymocyte Subsets that Differ in Their Maturation Level, Lymphokine Secretion, and Selection Patterns
Alain Vicari, Orly Abehsira-Amar, Martine Papiernik, Richard L. Boyd, and Carolyn L. Tuveck

Repertoire Diversity of Antibody Response to Bacterial Antigens in Aged Mice: IV. Study of Vλ and VL Gene Utilization in Splenic Antibody Foci by In Situ Hybridization
XuHao Yang, Jaroslav Sedra, and Jan Cerny

Role of Infused CD8+ Cells in the Induction of Peripheral Tolerance
Li Zhang, John Shannon, Juliet Sheldon, Hung-Sia Teh, Tak W. Mak, and Richard G. Miller

Molecular and Structural Immunology

Properties of a Novel Gene Isolated from a Hodgkin’s Disease Cell Line that is Expressed Early During Lymphoid Cell Activation
John S. Bennett, Trent L. Tredway, George J. Dizikes, and John F. Nawrocki

A Molecular Biologic Approach to Study the Fine Specificity of Antibodies Directed to the MN Human Blood Group Antigens
Douglas P. Blackall, Maciej Ugorski, Peter Pålsson, Susan H. Shakim-Eshleman, and Steven L. Spitalnik

Mechanistic and Selective Constraints Act on the Establishment of Vδ1,3 junctions in the B Cell Repertoire
Pierre Boudinot, Anne-Marie Drapier, Pierre-Andre Cazenave, and Pierre Sanchez

Genomic Organization and Chromosomal Localization of the T-Cell Antigen 4-1BB
Byoung S. Kwon, Christine A. Kozak, Kack K. Kim, and Richard T. Pickard

Molecular Cloning of a Lamprey Homologue of the Mammalian MHC Class III Gene, Complement Factor B
Masaru Nonaka, Morinobu Takahashi, and Makoto Sasaki

Regulation of IFN-γ-Induced Nuclear Expression of IFN Consensus Sequence Binding Protein in Murine Peritoneal Macrophages
Alexander D. Politis, Keiko Ozato, John E. Coligan, and Stefanie N. Vogel

Self Peptides Isolated from MHC Glycoproteins of Non-Obese Diabetic Mice
Eva-Pia Reich, Hermann von Graevenitz, Avlin Barlow, Karl E. Swenson, Kenneth Williams, and Charles A. Janeway, Jr.

Purification and Cloning of a Novel Serine Protease, RNK-Tryp-2, from the Granules of a Rat NK Cell Leukemia
Thomas J. Sayers, Theresa A. Wittrout, Mark J. Smyth, Kimberley S. Ottaway, Anne M. Pilaro, Raymond Sowder, Louis E. Henderson, Hans Sprenger, and Andrew R. Lloyd

Expansion and Contraction of Rhesus Macaque DRB Regions by Duplication and Deletion
Bastiaan L. Slierendregt, Nel Otting, Nicole van Besouw, Margreit Jonker, and Ronald E. Bontrop

A 100-kDa Protein in the C4-Activating Component of Ra-Reactive Factor Is a New Serine Protease Having Module Organization Similar to C1r and C1s
Yoshinaga Takayama, Fumio Takada, Akiyoshi Takahashi, and Masaya Kawakami

Host Defense

Unusual Topology of an HLA-B27 Allospecific T Cell Epitope Lacking Peptide Specificity
José A. Villadangos, Begoña Galocha, and José A. López de Castro
The Role of IL-2 Secreted from Genetically Modified Tumor Cells in the Establishment of Antitumor Immunity
Rajat Bannerji, Crispinita D. Arroyo, Carlos Cordon-Cardo, and Eli Gilboa

Sensitivity of Human Leukemia Cells in Exponential or Stationary Growth Phase to Anti-CD5 Immunotoxins: Role of Intracellular Processing Events
Roberto Chignola, Cristina Anselmi, Antonia Franceschi, Marcella Pasti, Carola Candiani, Giuseppe Tridente, and Marco Colombatti

CD4+ T Cell-Dependent Acquired State of Immunity That Protects the Brain Against Cryptococcus neoformans
Joseph O. Hill and Karen M. Aguirre

Regulation of Expression of the IL-1 Receptor Antagonist (IL-1ra) Gene By Products of the Human Cytomegalovirus Immediate Early Genes
Joel N. Kline, Lois J. Geist, Martha M. Monick, Mark F. Stinski, and Gary W. Hunninghake

Characterization of Influenza A Virus Binding Sites on Human Neutrophils
Stephen W. Rothwell and Daniel G. Wright

Bispecific Anti-CD22/Anti-CD3-Ricin A Chain Immunotoxin Is Cytotoxic to Daudi Lymphoma Cells but Not T Cells In Vitro and Shows Both A-Chain-Mediated and LAK-T-Mediated Killing
Guo-Liang Shen, Jia-Ling Li, and Ellen S. Vitetta

In Vitro and In Vivo Characterization of BR96 sFv-PE40: A Single-Chain Immunotoxin Fusion Protein that Cures Human Breast Carcinoma Xenografts in Athymic Mice and Rats
Clay B. Siegall, Dana Chace, Bruce Mixan, Ursula Garrigues, Helen Wan, Leland Paul, Edith Wolff, Ingegerd Hellstrom, and Karl Erik Hellstrom

The Role of T Cell Activation in Anti-CD3 × Antitumor Bispecific Antibody Therapy
George J. Weiner, Sheri A. Kostelny, James R. Hillstrom, Michael S. Cole, Brian K. Link, Susan L. Wang, and J. Yun Tso

Association of HER2/neu Expression with Sensitivity to Tumor-Specific CTL in Human Ovarian Cancer
Ichiro Yoshino, George E. Peoples, Peter S. Goedegebuure, Richard Maziarz, and Timothy J. Eberlein

Inflammation

Isolation and Characterization of Dendritic Cells from Mouse Heart and Kidney
Jonathan M. Austyn, Deborah F. Hankins, Christian P. Larsen, Peter J. Morris, Abdul S. Rao, and Justin A. Roake

Differential Cytokine Expression in Maternal Blood and Placenta During Murine Gestation
Sylvie Delassus, Graça C. Coutinho, Céleste Sauzier, Sylvie Darche, and Philippe Kourilsky

IL-1 and Transforming Growth Factor-β Regulation of Fibroblast-Derived IL-11

Interaction Between Serum Amyloid P Component and C4b-Binding Protein Associated with Inhibition of Factor I-Mediated C4b Degradation
Pablo Garcia de Frutos and Björn Dahlbäck

Platelet-Activating Factor Antagonist TCV-309 Attenuates the Induction of the Cytokine Network in Experimental Endotoxemia in Chimpanzees
Bart Kuipers, Tom van der Poll, Marcel Levi, Sander J. H. van Deventer, Hugo ten Cate, Yoshio Imai, C. Erik Hack, and Jan W. ten Cate

Cefdinir (CI-983), a New Oral Amino-2-Thiazolyl Cephalosporin, Inhibits Human Neutrophil Myeloperoxidase in the Extracellular Medium but Not the Phagolysosome
M. Thérèse Labro, Jamel El Benna, Natacha Charlier, Houria Abdelghaffar, and Jacques Hakim
Neutrophil Chemotaxis in Response to TGF-β isoforms (TGF-β1, TGF-β2, TGF-β3) Is Mediated by Fibronectin
Trilok Parekh, Babita Saxena, Joan Reibman, Bruce N. Cronstein, and Leslie I. Gold

Neutrophil-Activating Peptides NAP-2 and IL-8 Bind to the Same Sites on Neutrophils but Interact in Different Ways: Discrepancies in Binding Affinities, Receptor Densities, and Biologic Effects
Frank Petersen, Hans-Dieter Flad, and Ernst Brandt

C5α As a Model for Chemotactic Factor-Stimulated Tyrosine Phosphorylation in the Human Neutrophil
Stephane Richard, Cathy A. Farrell, Andrea S. Shaw, Henry J. Showell, and Patricia A. Connelly

Cross-Linking of ICAM-1 Induces Co-Signaling of an Oxidative Burst from Mononuclear Leukocytes
Robert Rohlet, Takashi Kei Kishimoto, and Elizabeth Mainolfi

Functional and Ligand Binding Specificity of the Rabbit Neutrophil IL-8 Receptor
Kathleen M. Thomas, Linda Taylor, Gregory Prado, Jose Romero, Bernhard Moser, Bruce Car, Alfred Walz, Marco Baggiolini, and Javier Navarro

Characterization of Rabbit Complement Component C8: Functional Evidence for the Species-Selective Recognition of C8α by Homologous Restriction Factor (CD59)
Robert V. White, Kenneth M. Kaufman, Carole S. Letson, Peter L. Planeborze, and James M. Sodetz

Clinical Immunology

Immunity to TCR Peptides in Multiple Sclerosis: I. Successful Immunization of Patients with Synthetic Vβ5.2 and Vβ6.1 CDR2 Peptides
Dennis N. Bourdette, Ruth H. Whitham, Yuan K. Chou, William J. Morrison, Jeanette Atherton, Christopher Kenny, Diane Liefeld, George A. Hashim, Halina Offner, and Arthur A. Vandenberg

Immunity to TCR Peptides in Multiple Sclerosis: II. T Cell Recognition of Vβ5.2 and Vβ6.1 CDR2 Peptides

Simian Immunodeficiency Virus as a Model for Vaccination Against HIV: Induction in Rhesus Macaques of GAG- or NEF-Specific Cytotoxic T Lymphocytes by Lipopeptides
Isabelle Bourgault, Frédéric Chirat, André Tartar, Jean Paul Lévy, Jean Gérard Guillet, and Alain Venet

Effect of Antibody Valency on Interaction with Cell-Surface Expressed HIV-1 and Viral Neutralization
Lisa A. Cavacini, Charlotte L. Ems, Jennifer Power, Mark Duval, and Marshall R. Posner

Nebulized but Not Parenteral IFN-γ Decreases IgE Production and Normalizes Airways Function in a Murine Model of Allergen Sensitization
Gideon Lack, Harald Renz, Joachim Saloga, Katherine L. Bradley, Joan Loader, Donald Y. M. Leung, Gary Larsen, and Erwin W. Geldard

Purification and Characterization of Yersinia enterocolitica Envelope Proteins Which Induce Antibodies That React with Human Thyrotropin Receptor
Guoyang Luo, Gattadahalli S. Seetharamaiah, David W. Niesel, Hongwei Zhang, Johnny W. Peterson, Bellur S. Prabhakar, and Gary R. Klimpel

Thyroglobulin-Induced Murine Thyroiditis Assessed by Intrathyroidal T Cell Receptor Sequencing
Naoki Matsuoka, Pamela Unger, Avraham Ben-Nun, Peter Graves, and Terry F. Davies

Predominant TCR-αβ Variable and Joining Gene Expression by Muscle-Infiltrating Lymphocytes in the Idiopathic Inflammatory Myopathies
Terrance P. O’Hanlon, Marinos C. Dalakas, Paul H. Plotz, and Frederick W. Miller

Nucleotide Sequence Analysis of Natural and Combinatorial Anti-PDC-E2 Antibodies in Patients with Primary Biliary Cirrhosis: Recapitulating Immune Selection with Molecular Biology
Virginia Pascual, Sanghoon Cha, M. Eric Gershwin, J. Donald Capra, and Patrick S. C. Leung
Ionizing Radiation and Autoimmunity: Induction of Autoimmune Disease in Mice by High Dose Fractionated Total Lymphoid Irradiation and Its Prevention by Inoculating Normal T Cells
Noriko Sakaguchi, Katsumi Miyai, and Shimon Sakaguchi

T Cell Receptor Vβ15 Dominates the Antiacetylcholine Receptor Response in Lewis Rat T Cell Lines
Lawrence R. Smith, Dwight H. Kono, Deshratn Asthana, Robert S. Balderas, Yoshitaka Fujii, Jon Lindstrom, and Argyrios N. Theofilopoulos

High Resolution Epitope Mapping of an Anti-DNA Autoantibody Using Model DNA Ligands
Patrick C. Swanson, Brian C. Cooper, and Gary D. Glick

Rheumatoid Synovium Is Enriched in Mature Antigen-Presenting Dendritic Cells
Ranjeny Thomas, Laurie S. Davis, and Peter E. Lipsky

Isolation and Characterization of a Human Nonspecific Suppressor Factor from Ascitic Fluid of Systemic Lupus Erythematosus: Evidence for a Human Counterpart of the Monoclonal Nonspecific Suppressor Factor and Relationship to the T Cell Receptor α-Chain
Ricardo M. Xavier, Morihiko Nakamura, and Tokugoro Tsunematsu

Author Index

Errata

Information for Contributors

Submission Form

Membership Form