



This information is current as  
of July 3, 2022.

**Why *The JI*? [Submit online.](#)**

- **Rapid Reviews! 30 days\*** from submission to initial decision
- **No Triage!** Every submission reviewed by practicing scientists
- **Fast Publication!** 4 weeks from acceptance to publication

*\*average*

- Subscription** Information about subscribing to *The Journal of Immunology* is online at:  
<http://jimmunol.org/subscription>
- Permissions** Submit copyright permission requests at:  
<http://www.aai.org/About/Publications/JI/copyright.html>
- Email Alerts** Receive free email-alerts when new articles cite this article. Sign up at:  
<http://jimmunol.org/alerts>

# The Journal of Immunology

## Contents

Volume 152 • Number 5 • March 1, 1994

### Cellular Immunology and Immune Regulation

- 2087 Development and Antigen Specificity of CD8<sup>+</sup> Cytotoxic T Lymphocytes in  $\beta_2$ -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  
*Chaoyuan Chen, Denise A. Faherty, Andrea Gault, Suzanne E. Connaughton, Gordon D. Powers, Dale I. Godfrey, and Nasrin Nabavi*
- 2115 Fc $\gamma$ RII Cross-Linking Inhibits Anti-Ig-Induced egr-1 and egr-2 Expression in BCL<sub>1</sub>  
*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 Coggeshall*
- 2130 Mechanisms of T Cell Contact-Dependent B Cell Activation  
*Takuma Kato, Takehiro Kokuho, Toshiki Tamura, and Hideo Nariuchi*
- 2139 Regulation of CD23 Expression by IL-4 and Corticosteroid in Human B Lymphocytes: Altered Response After EBV Infection  
*R. L. Kaufman Paterson, R. Or, J. M. Domenico, G. Delespesse, and E. W. Gelfand*
- 2148 Transition from TCR- $\beta$  Dimer to TCR- $\alpha\beta$ -Expressing Cells by Introduction of an  $\alpha$ -Chain in an Immature Thymocyte Cell Line  
*Ichiro Kuwabara, Hiroshi Ohno, Jennifer A. Punt, Yasuhiro Hashimoto, and Takashi Saito*
- 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 Frommé, Jacqueline L. Cordell, René A. W. van Lier, and Carel J. M. van Noesel*
- 2163 T-BAM/CD40-L on Helper T Lymphocytes Augments Lymphokine-Induced B Cell Ig 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.

- 2190 CD40 Ligand Acts As a Costimulatory Signal for Neonatal Thymic  $\gamma\delta$  T Cells  
*Fred Ramsdell, Michael S. Seaman, Ky N. Clifford, and William C. Fanslow*
- 2198 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*
- 2207 MTS-32 Monoclonal Antibody Defines CD4<sup>+</sup>8<sup>-</sup> 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. Tucek*
- 2214 Repertoire Diversity of Antibody Response to Bacterial Antigens in Aged Mice: IV. Study of V<sub>H</sub> and V<sub>L</sub> Gene Utilization in Splenic Antibody Foci by In Situ Hybridization  
*Xuhao Yang, Jaroslav Stedra, and Jan Cerny*
- 2222 Role of Infused CD8<sup>+</sup> 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**

- 2229 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*
- 2241 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. Shakin-Eshleman, and Steven L. Spitalnik*
- 2248 Mechanistic and Selective Constraints Act on the Establishment of V<sub>λ</sub>J<sub>λ</sub> Junctions in the B Cell Repertoire  
*Pierre Boudinot, Anne-Marie Drapier, Pierre-Andre Cazenave, and Pierre Sanchez*
- 2256 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*
- 2263 Molecular Cloning of a Lamprey Homologue of the Mammalian MHC Class III Gene, Complement Factor B  
*Masaru Nonaka, Morinobu Takahashi, and Makoto Sasaki*
- 2270 Regulation of IFN- $\gamma$ -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*
- 2279 Self Peptides Isolated from MHC Glycoproteins of Non-Obese Diabetic Mice  
*Eva-Pia Reich, Hermann von Grafenstein, Avlin Barlow, Karl E. Swenson, Kenneth Williams, and Charles A. Janeway, Jr.*
- 2289 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. Wiltrout, Mark J. Smyth, Kimberley S. Ottaway, Anne M. Pilaro, Raymond Sowder, Louis E. Henderson, Hans Sprenger, and Andrew R. Lloyd*
- 2298 Expansion and Contraction of Rhesus Macaque *DRB* Regions by Duplication and Deletion  
*Bastiaan L. Slierendregt, Nel Otting, Nicole van Besouw, Margreet Jonker, and Ronald E. Bontrop*
- 2308 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**

- 2317 Unusual Topology of an HLA-B27 Allospecific T Cell Epitope Lacking Peptide Specificity  
*José A. Villadangos, Begoña Galocha, and José A. López de Castro*

- 2324 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*
- 2333 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*
- 2344 CD4<sup>+</sup> T Cell-Dependent Acquired State of Immunity That Protects the Brain Against *Cryptococcus neoformans*  
*Joseph O. Hill and Karen M. Aguirre*
- 2351 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*
- 2358 Characterization of Influenza A Virus Binding Sites on Human Neutrophils  
*Stephen W. Rothwell and Daniel G. Wright*
- 2368 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*
- 2377 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 Hellström, and Karl Erik Hellström*
- 2385 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*
- 2393 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

- 2401 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*
- 2411 Differential Cytokine Expression in Maternal Blood and Placenta During Murine Gestation  
*Sylvie Delassus, Graça C. Coutinho, Cécile Saucier, Sylvie Darche, and Philippe Kourilsky*
- 2421 IL-1 and Transforming Growth Factor- $\beta$  Regulation of Fibroblast-Derived IL-11  
*Jack A. Elias, Tao Zheng, Narda L. Whiting, Terence K. Trow, William W. Merrill, Ralph Zitnik, Prabir Ray, and Edward M. Alderman*
- 2430 Interaction Between Serum Amyloid P Component and C4b-Binding Protein Associated with Inhibition of Factor I-Mediated C4b Degradation  
*Pablo García de Frutos and Björn Dahlbäck*
- 2438 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*
- 2447 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*

- 2456 Neutrophil Chemotaxis in Response to TGF- $\beta$  Isoforms (TGF- $\beta$ 1, TGF- $\beta$ 2, TGF- $\beta$ 3) Is Mediated by Fibronectin  
*Trilok Parekh, Babita Saxena, Joan Reibman, Bruce N. Cronstein, and Leslie I. Gold*
- 2467 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*
- 2479 C5a As a Model for Chemotactic Factor-Stimulated Tyrosine Phosphorylation in the Human Neutrophil  
*Stéphane Richard, Cathy A. Farrell, Andrey S. Shaw, Henry J. Showell, and Patricia A. Connelly*
- 2488 Cross-Linking of ICAM-1 Induces Co-Signaling of an Oxidative Burst from Mononuclear Leukocytes  
*Robert Rothlein, Takashi Kei Kishimoto, and Elizabeth Mainolfi*
- 2496 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*
- 2501 Characterization of Rabbit Complement Component C8: Functional Evidence for the Species-Selective Recognition of C8 $\alpha$  by Homologous Restriction Factor (CD59)  
*Robert V. White, Kenneth M. Kaufman, Carole S. Letson, Peter L. Platteborze, and James M. Sodetz*

### Clinical Immunology

- 2510 Immunity to TCR Peptides in Multiple Sclerosis: I. Successful Immunization of Patients with Synthetic V $\beta$ 5.2 and V $\beta$ 6.1 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. Vandenbark*
- 2520 Immunity to TCR Peptides in Multiple Sclerosis: II. T Cell Recognition of V $\beta$ 5.2 and V $\beta$ 6.1 CDR2 Peptides  
*Y. K. Chou, W. J. Morrison, A. D. Weinberg, R. Dedrick, R. Whitham, D. N. Bourdette, G. Hashim, H. Offner, and A. A. Vandenbark*
- 2530 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*
- 2538 Effect of Antibody Valency on Interaction with Cell-Surface Expressed HIV-1 and Viral Neutralization  
*Lisa A. Cavacini, Charlotte L. Emes, Jennifer Power, Mark Duval, and Marshall R. Posner*
- 2546 Nebulized but Not Parenteral IFN- $\gamma$  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. Gelfand*
- 2555 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*
- 2562 Thyroglobulin-Induced Murine Thyroiditis Assessed by Intrathyroidal T Cell Receptor Sequencing  
*Naoki Matsuoka, Pamela Unger, Avraham Ben-Nun, Peter Graves, and Terry F. Davies*
- 2569 Predominant TCR- $\alpha\beta$  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*
- 2577 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*

- 2586 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*
- 2596 T Cell Receptor V $\beta$ 15 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*
- 2601 High Resolution Epitope Mapping of an Anti-DNA Autoantibody Using Model DNA Ligands  
*Patrick C. Swanson, Brian C. Cooper, and Gary D. Glick*
- 2613 Rheumatoid Synovium Is Enriched in Mature Antigen-Presenting Dendritic Cells  
*Ranjeny Thomas, Laurie S. Davis, and Peter E. Lipsky*
- 2624 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  $\alpha$ -Chain  
*Ricardo M. Xavier, Morihiko Nakamura, and Tokugoro Tsunematsu*
- 2633 Author Index
- 2635 Errata
- 2636 Information for Contributors
- 2638 Submission Form
- 2639 Membership Form