



A single guide about Immunology



Download
Guide



The Journal of
Immunology

159 (10)

J Immunol 1997; 159:4645-5173; ;
<http://www.jimmunol.org/content/159/10.citation>

This information is current as
of October 20, 2019.

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 is published twice each month by
The American Association of Immunologists, Inc.,
1451 Rockville Pike, Suite 650, Rockville, MD 20852
All rights reserved.
Print ISSN: 0022-1767 Online ISSN: 1550-6606.





PRESIDENTIAL ADDRESS

- 4645 American Association of Immunologists Presidential Address: Doing it Together: A Perspective on the Process of Experimental Science
Katherine L. Knight

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

- 4653 New Evidence for Two MHC Class II-Restricted Antigen Presentation Pathways by Overexpression of a Small G Protein
Volker Briken, Danielle Lankar, and Christian Bonnerot
- 4659 Induction of Procoagulant Function in Porcine Endothelial Cells by Human Natural Killer Cells
Anatoli M. Malyguine, Soheyla Saadi, Robert A. Holzknacht, Christian P. Patte, Nitin Sud, Jeffrey L. Platt, and Jeffrey R. Dawson
- 4665 Antigen Recognition and Allogeneic Tumor Rejection in CD8⁺ TCR Transgenic/RAG^{-/-} Mice
Thomas C. Manning, Laurie A. Rund, Meegan M. Gruber, Francesca Fallarino, Thomas F. Gajewski, and David M. Kranz
- 4676 Transcriptional Regulation of the *junB* Gene in B Lymphocytes: Role of Protein Kinase A and a Membrane Ig-Regulated Protein Phosphatase
Stephen F. Amato, Koichi Nakajima, Toshio Hirano, and Thomas C. Chiles
- 4686 IL-4 Prevents Insulinitis and Insulin-Dependent Diabetes Mellitus in Nonobese Diabetic Mice by Potentiation of Regulatory T Helper-2 Cell Function
Mark J. Cameron, Guillermo A. Arreaza, Peter Zucker, Stephen W. Chensue, Robert M. Strieter, Subrata Chakrabarti, and Terry L. Delovitch

On the cover: Graphical representations of MHC class I molecules H-2D^b and HLA-A2.1. Identical residues are shown in green. A murine CTL clone (AHIII12.2) displays peptide-specific recognition of both of these molecules, and cytolytic assays suggest that these are functionally equivalent epitopes. This TCR appears to make a different, but overlapping, set of contacts with each class I/peptide complex. In this instance, cross-recognition appears to be the result of both shared and complex-specific contacts. (Figure 8 from Loftus, D. J., Y. Chen, D. G. Covell, V. H. Engelhard, and E. Appella. 1997. Differential contact of disparate class I/peptide complexes as the basis for epitope cross-recognition by a single T cell receptor. *J. Immunol.* 158:3651.)

- 4693 Natural Processing Sites for Human Cathepsin E and Cathepsin D in Tetanus Toxin: Implications for T Cell Epitope Generation
Eric W. Hewitt, Achim Treumann, Nick Morrice, Peter J. Tatnell, John Kay, and Colin Watts
- 4700 Inhibition of CTL Induction by Rapamycin: IL-2 Rescues Granzyme B and Perforin Expression but Only Partially Restores Cytotoxic Activity
Andrew P. Makrigiannis and David W. Hoskin
- 4708 T Cells from Jak3-Deficient Mice Have Intact TCR Signaling, but Increased Apoptosis
Daniel C. Thomis, William Lee, and Leslie J. Berg
- 4720 Constitutive Activation of JAKs and STATs in BCR-Abl-Expressing Cell Lines and Peripheral Blood Cells Derived from Leukemic Patients
Sylvia K. Chai, Gwen L. Nichols, and Paul Rothman
- 4729 Proline-Rich Tyrosine Kinase-2 Activation by β_1 Integrin Fibronectin Receptor Cross-Linking and Association with Paxillin in Human Natural Killer Cells
Angela Gismondi, Lorenzo Bisogno, Fabrizio Mainiero, Gabriella Palmieri, Mario Piccoli, Luigi Frati, and Angela Santoni
- 4737 Impaired Peripheral Deletion of Activated T cells in Mice Lacking the Common Cytokine Receptor γ -Chain: Defective Fas Ligand Expression in γ -Chain-Deficient Mice
Hiroshi Nakajima and Warren J. Leonard
- 4745 The Effect of NK Cell Activation by Tumor Cells on Antigen-Specific Antibody Responses
Crystal Y. Koh and Dorothy Yuan
- 4753 Derivation of HLA-A11/K^b Transgenic Mice: Functional CTL Repertoire and Recognition of Human A11-Restricted CTL Epitopes
Jeff Alexander, Carla Oseroff, John Sidney, Peggy Wentworth, Elissa Keogh, Gary Hermanson, Francis V. Chisari, Ralph T. Kubo, Howard M. Grey, and Alessandro Sette
- 4762 CD4⁺CD8⁺ Thymocytes Are Preferentially Induced to Die Following CD45 Cross-linking, Through a Novel Apoptotic Pathway
Sylvie Lesage, Ann-Muriel Steff, Fabianne Philippoussis, Martin Pagé, Sébastien Trop, Véronique Mateo, and Patrice Hugo
- 4772 Induction of Tolerance by IL-10-Treated Dendritic Cells
Kerstin Steinbrink, Matthias Wölfl, Helmut Jonuleit, Jürgen Knop, and Alexander H. Enk
- 4781 β_2 -Microglobulin-Deficient Mice Are Protected from Hypergammaglobulinemia and Have Defective Antibody Responses Because of Increased IgG Catabolism
Gregory J. Christianson, Warren Brooks, Sarah Vekasi, Elizabeth A. Manolfi, Jessica Niles, Shari L. Roopenian, John B. Roths, Robert Rothlein, and Derry C. Roopenian
- 4793 Induction of Parasite Antigen-Specific Antibody Responses in Unsensitized Human B Cells Is Dependent on the Presence of Cytokines After T Cell Priming
Olivier Garraud, Francine B. Perler, Jannette E. Bradley, and Thomas B. Nutman

- 4799 Expression of a Hypoglycosylated Form of CD86 (B7-2) on Human T Cells with Altered Binding Properties to CD28 and CTLA-4
Per Höllsberg, Christian Scholz, David E. Anderson, Edward A. Greenfield, Vijay K. Kuchroo, Gordon J. Freeman, and David A. Hafler
- 4806 $\alpha_4\beta_1$ Integrin-Mediated Tyrosine Phosphorylation in Human T Cells: Characterization of Crk- and Fyn-Associated Substrates (pp105, pp115, and Human Enhancer of Filamentation-1) and Integrin-Dependent Activation of p59^{fyn}
Anne J. Hunter and Yoji Shimizu
- 4815 Pivotal Role of Endogenous TNF- α in the Induction of Functional Inactivation and Apoptosis in NK Cells
Anahid Jewett, Marta Cavalcanti, and Benjamin Bonavida
- 4823 Kinase-Independent Potentiation of B Cell Antigen Receptor-Mediated Signal Transduction by the Protein Tyrosine Kinase Src
Jiejian Lin, Jiaxian Tao, Roy B. Dyer, Norbert K. Herzog, and Louis B. Justement
- 4834 Bcl-x Protects Primary B Cells Against Fas-Mediated Apoptosis
Thomas J. Schneider, Didier Grillot, Linda C. Foote, Gabriel E. Núñez, and Thomas L. Rothstein
- 4840 TNF- α Bifunctionally Induces Proliferation in Primary Hepatocytes: Role of Cell Anchorage and Spreading
Yoshifumi Watanabe, Hironori Osaki, and Toshihiro Akaike
- 4848 Expansion of Mature Thymocyte Subsets Before Emigration to the Periphery
Claude Pénit and Florence Vasseur
- 4857 Activated T Helper 1 and T Helper 2 Cells Differentially Express the β -2-Adrenergic Receptor: A Mechanism for Selective Modulation of T Helper 1 Cell Cytokine Production
D. Susanne Ramer-Quinn, Raymond A. Baker, and Virginia M. Sanders

MOLECULAR AND STRUCTURAL IMMUNOLOGY

- 4868 Bacterial Lipoprotein and Lipopolysaccharide Act Synergistically to Induce Lethal Shock and Proinflammatory Cytokine Production
Hongwei Zhang, Johnny W. Peterson, David W. Niesel, and Gary R. Klimpel
- 4879 A Gain of Novel Tissue Specificity in the Human Ly-6 Gene E48
Ruud H. Brakenhoff, Mirjam van Dijk, Ellen M. C. Rood-Knippels, and Gordon B. Snow
- 4887 Naturally Occurring A Pocket Polymorphism in HLA-B*2703 Increases the Dependence on an Accessory Anchor Residue at P1 for Optimal Binding of Nonamer Peptides
Thomas A. Griffin, Jie Yuan, Thomas Friede, Stefan Stevanovic, Koya Ariyoshi, Sarah L. Rowland-Jones, Hans-Georg Rammensee, and Robert A. Colbert
- 4898 Characterization of CD40 Signaling Determinants Regulating Nuclear Factor- κ B Activation in B Lymphocytes
Yina Hsing, Bruce S. Hostager, and Gail A. Bishop

- 4907 Appropriate Developmental Expression of Human CD8 β in Transgenic Mice
Lynda J. Kieffer, Lei Yan, Jeffrey H. Hanke, and Paula B. Kavathas
- 4913 A 150-Base Pair 5' Region of the MHC Class I *HLA-B7* Gene Is Sufficient to Direct Tissue-Specific Expression and Locus Control Region Activity: The α Site Determines Efficient Expression and In Vivo Occupancy at Multiple *cis*-Active Sites Throughout This Region
Michelle M. Kushida, Anup Dey, Xiao-Li Zhang, Jodie Campbell, Matthew Heeney, James Carlyle, Subinay Ganguly, Keiko Ozato, Haren Vasavada, and John W. Chamberlain
- 4930 Evidence That *Tmevd2* and *ae3* May Represent Either a Common Locus or Members of a Gene Complex Controlling Susceptibility to Immunologically Mediated Demyelination in Mice
Cory Teuscher, Dominic M. Rhein, Kevin D. Livingstone, Randi A. Paynter, R. W. Doerge, Simone M. Nicholson, and Roger W. Melvold
- 4935 HLA-DP2: Self Peptide Sequences and Binding Properties
Roman M. Chicz, Daniel F. Graziano, Massimo Trucco, Jack L. Strominger, and Joan C. Gorga
- 4943 Autoantigen Recognition by Human CD8 T Cell Clones: Enhanced Agonist Response Induced by Altered Peptide Ligands
Alexander Dressel, Jonathan L. Chin, Alessandro Sette, Rudolf Gausling, Per Höllsberg, and David A. Hafler
- 4952 The Neuropeptide Substance P Activates Transcription Factor NF- κ B and κ B-Dependent Gene Expression in Human Astrocytoma Cells
Klaus Lieb, Bernd L. Fiebich, Mathias Berger, Joachim Bauer, and Klaus Schulze-Osthoff
- 4959 Characterization of Murine CD70, the Ligand of the TNF Receptor Family Member CD27
Kiki Tesselaar, Loes A. Gravesteyn, Gijs M. W. van Schijndel, Jannie Borst, and René A. W. van Lier

HOST DEFENSE

- 4966 Enhancement of Natural Killer Cell Cytotoxicity by the Human Herpesvirus-7 Via IL-15 Induction
Blanche Ngola Atedzoe, Ali Ahmad, and José Menezes
- 4973 Cultured Blood Dendritic Cells Retain HIV-1 Antigen-Presenting Capacity for Memory CTL During Progressive HIV-1 Infection
Zheng Fan, Xiao-Li Huang, Lian Zheng, Cara Wilson, LuAnn Borowski, James Liebmann, Phalguni Gupta, Joseph Margolick, and Charles Rinaldo
- 4983 Alteration of Macrophage Function by a *Trypanosoma cruzi* Membrane Mucin
Juana de Diego, Carmen Punzón, Marina Duarte, and Manuel Fresno
- 4990 Natural Killer Cell Cytokine Production, Not Cytotoxicity, Contributes to Resistance Against Blood-Stage *Plasmodium chabaudi* AS Infection
Karkada Mohan, Pierre Moulin, and Mary M. Stevenson
- 4999 Costimulation Provided by DNA Immunization Enhances Antitumor Immunity
Maripat Corr, Helen Tighe, Delphine Lee, Jean Dudler, May Trieu, Diana C. Brinson, and Dennis A. Carson

- 5005 SCID Mice Reconstituted with IL-4-Deficient Lymphocytes, but Not Immunocompetent Lymphocytes, Are Resistant to Cutaneous Leishmaniasis
Abhay Satoskar, Frank Brombacher, Wen J. Dai, Ian McInnes, Foo Y. Liew, James Alexander, and William Walker
- 5014 Analysis of Granuloma Formation in Double Cytokine-Deficient Mice Reveals a Central Role for IL-10 in Polarizing Both T Helper Cell 1- and T Helper Cell 2-Type Cytokine Responses In Vivo
Thomas A. Wynn, Renate Morawetz, Tanya Scharton-Kersten, Sara Hieny, Herbert C. Morse III, Ralf Kühn, Werner Müller, Allen W. Cheever, and Alan Sher
- 5024 *Leishmania major*-Infected C3H Mice Treated with Anti-IL-12 mAb Develop but Do Not Maintain a Th2 Response
Brian D. Hondowicz, Tanya M. Scharton-Kersten, Douglas E. Jones, and Phillip Scott

INFLAMMATION

- 5032 Treatment of a Newly Established Transgenic Model of Chronic Arthritis with Nondepleting Anti-CD4 Monoclonal Antibody
Claudia Mauri, Cong-Qui Q. Chu, David Woodrow, Lucia Mori, and Marco Londei
- 5042 Hamycin Inhibits IL-8-Induced Biologic Response by Modulating Its Receptor in Human Polymorphonuclear Neutrophils
Sunil K. Manna, Susmita Samanta, and Ajoy K. Samanta
- 5053 Lymphocytes Mediate TNF- α -Induced Endothelial Cell Adhesion Molecule Expression: Studies on SCID and RAG-1 Mutant Mice
Yoshinori Horie, Robert P. Chervenak, Robert Wolf, Mary E. Gerritsen, Donald C. Anderson, Shunichiro Komatsu, and D. Neil Granger
- 5063 Macrophage Inflammatory Protein-1 α Production in Lipopolysaccharide-Stimulated Human Adherent Blood Mononuclear Cells Is Inhibited by the Nitric Oxide Synthase Inhibitor N^G-Monomethyl-L-Arginine
Heiko Mühl and Charles A. Dinarello
- 5070 Formyl Peptide Receptors Are Coupled to Multiple Mitogen-Activated Protein Kinase Cascades by Distinct Signal Transduction Pathways: Role in Activation of Reduced Nicotinamide Adenine Dinucleotide Oxidase
Madhavi J. Rane, Stephen L. Carrithers, John M. Arthur, Jon B. Klein, and Kenneth R. McLeish
- 5079 Two Functionally Independent Pathways for Lipopolysaccharide-Dependent Activation of Mouse Peritoneal Macrophages
Claudia R. Amura, Li-Chun Chen, Nobuyuki Hirohashi, Mei-Guey Lei, and David C. Morrison
- 5084 Mechanical Deformation Promotes Secretion of IL-1 α and IL-1 Receptor Antagonist
Richard T. Lee, William H. Briggs, George C. Cheng, Heidi B. Rossiter, Peter Libby, and Thomas Kupper
- 5089 Lipocortin 1 Protects Against Splanchnic Artery Occlusion and Reperfusion Injury by Affecting Neutrophil Migration
Salvatore Cuzzocrea, Anitaben Tailor, Basilia Zingarelli, Andrew L. Salzman, Roderick J. Flower, Csaba Szabó, and Mauro Perretti

CLINICAL IMMUNOLOGY

- 5100 Mercuric Chloride-Induced Vasculitis in the Brown Norway Rat: $\alpha\beta$ T Cell-Dependent and -Independent Phases: Role of the Mast Cell
Patrick D. W. Kiely, Israel Pecht, and David B. G. Oliveira
- 5107 Inhibitory Effects of Chronic Ethanol Consumption on Cellular Immune Responses to Hepatitis C Virus Core Protein Are Reversed by Genetic Immunizations Augmented with Cytokine-Expressing Plasmids
Michael Geissler, Annett Gesien, and Jack R. Wands
- 5114 Human Monoclonal Antibodies to the V3 Loop of HIV-1 With Intra- and Interclade Cross-Reactivity
Miroslaw K. Gorny, Thomas C. VanCott, Catarina Hioe, Zimra R. Israel, Nelson L. Michael, Anthony J. Conley, Constance Williams, Joseph A. Kessler II, Padmasree Chigurupati, Sherri Burda, and Susan Zolla-Pazner
- 5123 CD28 Costimulation Increases CD8⁺ Cell Suppression of HIV Replication
Edward Barker, Katharine N. Bossart, Sue H. Fujimura, and Jay A. Levy
- 5132 Nitric Oxide Accelerates the Onset and Increases the Severity of Experimental Autoimmune Uveoretinitis Through an IFN- γ -Dependent Mechanism
Sharon Hoey, Peter S. Grabowski, Stuart H. Ralston, John V. Forrester, and Janet Liversidge
- 5143 T Cell Clonality in Synovial Fluid of a Patient With Rheumatoid Arthritis: Persistent but Fluctuant Oligoclonal T Cell Expansions
Tomohiro Kato, Manae Kurokawa, Kayo Masuko-Hongo, Hiroko Sasakawa, Taichi Sekine, Shinichiro Ueda, Kazuhiko Yamamoto, and Kusuki Nishioka
- 5150 Recombinant T Cell Receptor Molecules Can Prevent and Reverse Experimental Autoimmune Encephalomyelitis: Dose Effects and Involvement of Both CD4 and CD8 T Cells
Vipin Kumar, Eric Coulsell, Bertram Ober, Greg Hubbard, Eli Sercarz, and E. Sally Ward
- 5157 Inhibition of IL-12 Production by Thalidomide
David R. Moller, Maria Wysocka, Brian M. Greenlee, Xiaojing Ma, Larry Wahl, David A. Flockhart, Giorgio Trinchieri, and Christopher L. Karp
- 5162 Comparison of HIV-1 Envelope-Specific CD4⁺ T Cell Lines Simultaneously Established from Peripheral Blood Mononuclear Cells and Lymph Node Biopsy in HIV-1-Infected Individuals
Silvia Ratto-Kim, Karl V. Sitz, Aimée M. Scherer, Jerome H. Kim, David W. Anderson, Martin E. Nau, Dean L. Mann, Pradip N. Akolkar, Beena Gulwani-Akolkar, Jack Silver, and Deborah L. Birx
- 5168 Prevention of Immunotoxin-Induced Immunogenicity by Coadministration with CTLA4Ig Enhances Antitumor Efficacy
Clay B. Siegall, Helen G. Haggerty, Garvin L. Warner, Dana Chace, Bruce Mixan, Peter S. Linsley, and Thomas Davidson
- 5174 Author Index