



Two data sets, one step, zero doubt

New Attune™ CytPix™ Flow Cytometer

[See it now >](#)

invitrogen
by Thermo Fisher Scientific



155 (4)

J Immunol 1995; 155:1647-2291; ;
<http://www.jimmunol.org/content/155/4.citation>

This information is current as
of October 28, 2021.

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.





TABLE OF CONTENTS

CURRENT CONTENTS

- 1647 **Commentary: Regulation of Antibody Production and Class Switching by TGF- β**
Janet Stavnezer
- 1652 **Commentary: The Novelty of Antigen-Processing Compartments**
Xiaoxing Xu and Susan K. Pierce
- 1655 **Induction of Tolerance to Heart Allografts in High Responder Rats by Combining Anti-CD4 with CTLA4Ig**
Dengping Yin and C. Garrison Fathman

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

- 1660 **Activation of *src*-Related Tyrosine Kinases by IL-3**
Steven M. Anderson and Brenda Jorgensen
- 1671 **TABS, a T Cell Activation Antigen That Induces LFA-1-Dependent Aggregation**
*David P. Andrew, Tadashi Yoshino, Lucia Guh,
Marie-Thérèse G. Martin-Simonet, and Eugene C. Butcher*
- 1685 **Lymphotoxin- α -Deficient Mice: Effects on Secondary Lymphoid Organ Development and Humoral Immune Responsiveness**
*Theresa A. Banks, Barry T. Rouse, Marilyn K. Kerley, Patrick J. Blair,
Virginia L. Godfrey, Nelly A. Kuklin, Donna M. Bouley, Johnson Thomas,
Sivadasan Kanangat, and Michael L. Mucenski*
- 1694 **Characterization of Intercellular Adhesion Molecule-1 (ICAM-1)-Augmented Degranulation by Cytotoxic T Cells: ICAM-1 and Anti-CD3 Must Be Co-Localized for Optimal Adhesion and Stimulation**
Nancy N. Berg and Hanne L. Ostergaard
- 1703 **Analysis of the CD4 Coreceptor and Activation-Induced Costimulatory Molecules in Antigen-Mediated Mature T Lymphocyte Death**
Stefen A. Boehme, Lixin Zheng, and Michael J. Lenardo

- 1713 The Cytokines IL-4, IFN- γ , and IL-12 Regulate the Development of Subsets of Memory Effector Helper T Cells In Vitro
Linda M. Bradley, Keiko Yoshimoto, and Susan L. Swain
- 1725 Membrane and Soluble Fc γ RII/III Modulate the Antigen-Presenting Capacity of Murine Dendritic Epidermal Langerhans Cells for IgG-Complexed Antigens
Marie-Emmanuelle Esposito-Farese, Catherine Sautès, Henri de la Salle, Sylvain Latour, Thomas Bieber, Corinne de la Salle, Philippe Ohlmann, Wolf Herman Fridman, Jean-Pierre Cazenave, Jean-Luc Teillaud, Marc Daëron, Christian Bonnerot, and Daniel Hanau
- 1737 Cross-Linking Cell Surface Class II Molecules Stimulates Ig-Mediated B Cell Antigen Processing
Anne E. Faassen and Susan K. Pierce
- 1746 Neuropeptides Modulate Immune Deviation Induced Via the Anterior Chamber of the Eye
Thomas A. Ferguson, Sharon Fletcher, John Herndon, and Thomas S. Griffith
- 1757 Acute Graft-Versus-Host Reaction Can Be Aborted by Blockade of Costimulatory Molecules
Frances T. Hakim, Rosemarie Cepeda, Gary S. Gray, Carl H. June, and Ryo Abe
- 1767 Novel Dipeptide Aldehydes Are Proteasome Inhibitors and Block the MHC-I Antigen-Processing Pathway
Clifford V. Harding, John France, Rui Song, John M. Farah, Sankar Chatterjee, Mohamed Iqbal, and Robert Siman
- 1776 Activated T Cells Can Induce High Levels of CTLA-4 Expression on B Cells
Heleen M. Kuiper, Miranda Brouwer, Peter S. Linsley, and René A. W. van Lier
- 1784 Protection from T Helper Cell-Mediated Graft-Versus-Host Disease by the Presence of an MHC Class I Alloantigen Is Associated with Perturbation of MHC Class II-Restricted Responses by Class I-Derived Peptides
Ramona R. Leibnitz, Peter E. Lipsky, and Dwain L. Thiele
- 1796 IgE-Dependent Expression of mRNA for IL-4 and IL-5 in Human Lung Mast Cells
Yoshimichi Okayama, Corinne Petit-Frère, Olivier Kassel, Amanda Semper, Diana Quint, Manuel J. Tunon-de-Lara, Peter Bradding, Stephen T. Holgate, and Martin K. Church
- 1809 Glucocorticoid-Mediated Regulation of Protein Phosphorylation in Primary Human T Cells: Evidence for Induction of Phosphatase Activity
Fotini Paliogianni, Nobuaki Hama, James E. Balow, Mary A. Valentine, and Dimitrios T. Boumpas
- 1818 Lysosome-Associated Membrane Protein-1-Mediated Targeting of the HIV-1 Envelope Protein to an Endosomal/Lysosomal Compartment Enhances Its Presentation to MHC Class II-Restricted T Cells
Jennifer F. Rowell, Albert L. Ruff, Frank G. Guarnieri, Kevin Staveley-O'Carroll, Xinli Lin, Jordan Tang, J. Thomas August, and Robert F. Siliciano
- 1829 CD28-Mediated Signaling In Vivo Prevents Activation-Induced Apoptosis in the Thymus and Alters Peripheral Lymphocyte Homeostasis
Yufang Shi, Laszlo G. Radvanyi, Ajay Sharma, Patricia Shaw, Douglas R. Green, Richard G. Miller, and Gordon B. Mills

- 1838 Differential Human T Cell-Dependent B Cell Differentiation Induced by Staphylococcal Superantigens (SAg): Regulatory Role for SAg-Dependent B Cell Cytolysis
William Stohl and Julie E. Elliott
- 1851 Invariant Chain-Independent Antigen Presentation Depends Primarily Upon the Pool of Newly Synthesized MHC Class II Molecules
Kevin Swier and Jim Miller
- 1862 Characterization of Distinct Stages During the Differentiation of Human CD69⁺CD3⁺ Thymocytes and Identification of Thymic Emigrants
Dominique Vanhecke, Georges Leclercq, Jean Plum, and Bart Vandekerckhove
- 1873 Ly-6C Is a Marker of Memory CD8⁺ T Cells
Theresa L. Walunas, David S. Bruce, Lynn Dustin, Dennis Y. Loh, and Jeffrey A. Bluestone
- 1884 Variable Influence of MHC Polymorphism on the Recognition of Bacterial Superantigens by T Cells
Renren Wen, Marcia A. Blackman, and David L Woodland
- 1893 Glucocorticoids Accelerate Anti-T Cell Receptor-Induced T Cell Growth
G. Jan Wieggers, Marta S. Labeur, Ilona E. M. Stec, Wolfgang E. F. Klinkert, Florian Holsboer, and Johannes M. H. M. Reul
- 1903 Identification of Heavy Chain Residues in a Humanized Anti-CD3 Antibody Important for Efficient Antigen Binding and T Cell Activation
Zhenping Zhu and Paul Carter

MOLECULAR AND STRUCTURAL IMMUNOLOGY

- 1911 The Ig Heavy Chain Switch Region Is a Hotspot for Insertion of Transfected DNA
Joseph Baar and Marc J. Shulman
- 1921 Differential Stability of HLA-DR Alleles Independent of Endogenous Peptides
Brigitte Devaux, K. Jeff Wilson, Barbara Aguilar, Brett Jorgensen, and Jonathan B. Rothbard
- 1930 Differential Regulation of Alternative 3' Splicing of ϵ Messenger RNA Variants
David Diaz-Sanchez, Ke Zhang, Thomas B. Nutman, and Andrew Saxon
- 1942 Expression Cloning and Chromosomal Mapping of the Leukocyte Activation Antigen CD97, a New Seven-Span Transmembrane Molecule of the Secretin Receptor Superfamily with an Unusual Extracellular Domain
Jörg Hamann, Wolfram Eichler, Dörte Hamann, Harold M. J. Kerstens, Pino J. Poddighe, Jan M. N. Hoovers, Enno Hartmann, Michael Strauss, and René A. W. van Lier
- 1951 Structural Requirements of Peptide and MHC for DR(α , β 10401)-Restricted T Cell Antigen Recognition
Janet M. McNicholl, William C. Whitworth, Fredrik Oftung, Xinting Fu, Thomas Shinnick, Peter E. Jensen, Marianne Simon, Robert M. Wohlhueter, and Robert W. Karr

- 1964 Isolation of *Xenopus* LMP-7 Homologues: Striking Allelic Diversity and Linkage to MHC
Chisato Namikawa, Luisa Salter-Cid, Martin F. Flajnik, Yoichi Kato, Masaru Nonaka, and Makoto Sasaki
- 1972 Activation of IL-2 Receptor α -Chain Gene by Individual Members of the *rel* Oncogene Family in Association with Serum Response Factor
Jacqueline W. Pierce, Christina A. Jamieson, Jodie L. Ross, and Ranjan Sen
- 1981 Diversity of T Cell Receptor δ -Chain cDNA in the Thymus of a One-Month-Old Pig
Yong-Guang Yang, Sachiko Ohta, Shunji Yamada, Mitsugu Shimizu, and Yohtaroh Takagaki
- 1994 Affinity Maturation of the BR96 Anti-Carcinoma Antibody by Codon-Based Mutagenesis
Dale E. Yelton, Mae Joanne Rosok, Gina Cruz, Wesley L. Cosand, Jürgen Bajorath, Ingegerd Hellström, Karl Erik Hellström, William D. Huse, and Scott M. Glaser

HOST DEFENSE

- 2005 Differences in the Shedding of Soluble TNF Receptors Between Endotoxin-Sensitive and Endotoxin-Resistant Mice in Response to Lipopolysaccharide or Live Bacterial Challenge
Adam Carpenter, Thomas J. Evans, Wim A. Burman, Mark H. Bemelmans, David Moyes, and Jonathan Cohen
- 2013 Endogenously Produced IL-12 Is Required for the Induction of Protective T Cells During *Mycobacterium avium* Infections in Mice
Antônio Gil Castro, Regina A. Silva, and Rui Appelberg
- 2020 Role of IL-4 and IFN- γ in Modulation of Immunity to *Borrelia burgdorferi* in Mice
Andrea Keane-Myers and Steven P. Nickell
- 2029 Mucoïd *Pseudomonas aeruginosa* Growing in a Biofilm In Vitro Are Killed by Opsonic Antibodies to the Mucoïd Exopolysaccharide Capsule but Not by Antibodies Produced During Chronic Lung Infection in Cystic Fibrosis Patients
Gloria J. Meluleni, Martha Grout, David J. Evans, and Gerald B. Pier
- 2039 Complexity of the Cytokine and Antibody Response Elicited by Immunizing Mice with *Plasmodium yoelii* Circumsporozoite Protein Plasmid DNA
Gil Mor, Dennis M. Klinman, Stuart Shapiro, Eri Hagiwara, Martha Sedegah, Jon A. Norman, Stephen L. Hoffman, and Alfred D. Steinberg
- 2047 Bacterial Infection of the Testis Leading to Autoaggressive Immunity Triggers Apparently Opposed Responses of $\alpha\beta$ and $\gamma\delta$ T Cells
Akiko Mukasa, Kenji Hiromatsu, Goro Matsuzaki, Rebecca O'Brien, Willi Born, and Kikuo Nomoto
- 2057 Dissection of Strain Difference in Acquired Protective Immunity Against *Mycobacterium bovis* Calmette-Guérin Bacillus (BCG): Macrophages Regulate the Susceptibility Through Cytokine Network and the Induction of Nitric Oxide Synthase
Atsushi Yoshida, Yukio Koide, Masato Uchijima, and Takato O. Yoshida

- 2067 Mice with the Xid B Cell Defect Are Less Susceptible to Developing *Staphylococcus aureus*-Induced Arthritis
Yi-Xue Zhao, Arturo Abdelnour, Rikard Holmdahl, and Andrzej Tarkowski

INFLAMMATION

- 2077 Transforming Growth Factor- β Stimulates Arginase Activity in Macrophages: Implications for the Regulation of Macrophage Cytotoxicity
Valérie Boutard, René Havouis, Bruno Fouqueray, Carole Philippe, Jacques-Philippe Moulinoux, and Laurent Baud
- 2085 Endotoxin Receptors (CD14) Are Found with CD16 (Fc γ RIII) in an Intracellular Compartment of Neutrophils That Contains Alkaline Phosphatase
Patricia A. Detmers, Dahua Zhou, Darius Powell, Henri Lichenstein, Michael Kelley, and Rossitza Pironkova
- 2096 Differential Up-Regulation of HLA Class I Molecules on Neuronal and Glial Cell Lines by Virus Infection Correlates with Differential Induction of IFN- β
Suhayl S. Dhib-Jalbut, Qian Xia, Paul D. Drew, and Peggy T. Swoveland
- 2109 P-Selectin Regulates Platelet-Activating Factor Synthesis and Phagocytosis by Monocytes
Mark R. Elstad, Timothy R. La Pine, F. Susan Cowley, Rodger P. McEver, Thomas M. McIntyre, Stephen M. Prescott, and Guy A. Zimmerman
- 2123 Divergence in Macrophage Insulin-Like Growth Factor-I (IGF-I) Synthesis Induced by TNF- α and Prostaglandin E₂
Thierry Fournier, David W. H. Riches, Brent W. Winston, David M. Rose, Scott K. Young, Paul W. Noble, Fiona R. Lake, and Peter M. Henson
- 2134 An Essential Role of Prostaglandin E on Mouse Mast Cell Induction
Zhi-Qing Hu, Kazuhito Asano, Hirotaka Seki, and Tadakatsu Shimamura
- 2143 Cell Surface Molecules Related to Factor J in Human Lymphoid Cells and Cell Lines
Miguel Angel Jiménez-Clavero, Carolina González-Rubio, Susana Larrucea, Carlos Gamallo, Gumersindo Fontán, and Margarita López-Trascasa
- 2151 The Delayed-Type Hypersensitivity Reaction Is Dependent on IL-8: Inhibition of a Tuberculin Skin Reaction by an Anti-IL-8 Monoclonal Antibody
Christian Grønhoj Larsen, Mads K. Thomsen, Borbala Gesser, Preben D. Thomsen, Bent W. Deleuran, Jette Nowak, Vera Skødt, Henrik K. Thomsen, Mette Deleuran, Kristian Thestrup-Pedersen, Akihisa Harada, Kouji Matsushima, and Torkil Menné
- 2158 Chemokine Binding and Activities Mediated by the Mouse IL-8 Receptor
James Lee, Grace Cacalano, Tom Camerato, Karen Toy, Mark W. Moore, and William I. Wood
- 2165 Association Between Lyn Protein Tyrosine Kinase (p53/56^{lyn}) and the β subunit of the Granulocyte-Macrophage Colony-Stimulating Factor (GM-CSF) Receptors in a GM-CSF-Dependent Human Megakaryocytic Leukemia Cell Line (M-07e)
Yan Li, Bei-fen Shen, Chatchada Karanes, Lyle Sensenbrenner, and Ben Chen

- 2175 Cross-Linking of CD45 Enhances Activation of the Respiratory Burst in Response to Specific Stimuli in Human Phagocytes
W. Conrad Liles, Jeffrey A. Ledbetter, Ann W. Waltersdorff, and Seymour J Klebanoff
- 2185 C-Reactive Protein Binds to Fc γ RI in Transfected COS Cells
Lorraine L. Marnell, Carolyn Mold, Michael A. Volzer, Rufus W. Burlingame, and Terry W. Du Clos
- 2194 Eosinophil Adhesion to Vascular Cell Adhesion Molecule-1 Activates Superoxide Anion Generation
Makoto Nagata, Julie B. Sedgwick, Mary Ellen Bates, Hirohito Kita, and William W. Busse
- 2203 Complement Membrane Attack Complex, Perforin, and Bacterial Exotoxins Induce in K562 Cells Calcium-Dependent Cross-Protection From Lysis
Yoram Reiter, Adina Ciobotariu, Jane Jones, B. Paul Morgan, and Zvi Fishelson
- 2211 IL-3, IL-5, and Granulocyte-Macrophage Colony-Stimulating Factor Potentiate Basophil Mediator Release Stimulated by Eosinophil Granule Major Basic Protein
Emmanuel U. Sarmiento, Baltazar R. Espiritu, Gerald J. Gleich, and Larry L. Thomas
- 2222 Neutralization of IL-10 Increases Lethality in Endotoxemia: Cooperative Effects of Macrophage Inflammatory Protein-2 and Tumor Necrosis Factor
Theodore J. Standiford, Robert M. Strieter, Nickolas W. Lukacs, and Steven L. Kunkel

CLINICAL IMMUNOLOGY

- 2230 Clinical Immunology Society Membership Application
- 2232 Characterization of *HLA-A0201*-Restricted Cytotoxic T Cell Epitopes in Conserved Regions of the HIV Type 1 gp160 Protein
Marc Dupuis, Smriti K. Kundu, and Thomas C. Merigan
- 2240 IL-10 Production in Cutaneous Basal and Squamous Cell Carcinomas: A Mechanism For Evading The Local T Cell Immune Response
Jenny Kim, Robert L. Modlin, Ronald L. Moy, Steven M. Dubinett, Teresa McHugh, Brian J. Nickoloff, and Koichi Ujemura
- 2248 Sm and DNA Binding by Dual Reactive B Cells Requires Distinct V_H, V_K, and V_H CDR3 Structures
Marc W. Retter, Robert A. Eisenberg, Philip L. Cohen, and Stephen H. Clarke
- 2258 Murine Lupus Glomerulotropic Monoclonal Antibodies Exhibit Differing Specificities but Bind Via a Common Mechanism
R. Di Valerio, K. A. Bernstein, E. Varghese, and J. B. Lefkowitz
- 2269 TCR/CD3 Complex-Mediated Signal Transduction Pathway in T Cells and T Cell Lines from Patients with Systemic Lupus Erythematosus
Dimitrios Vassilopoulos, Birgit Kovacs, and George C. Tsokos

- 2282 T Cell Receptor V β Complementarity-Determining Region 1 Peptide Administration Moderates Immune Dysfunction and Cytokine Dysregulation Induced by Murine Retrovirus Infection
Ronald R. Watson, James Y. Wang, Keivan Dehghanpisheh, Dennis S. Huang, Steve Wood, Sussana K. Ardestani, Bailin Liang, and John J. Marchalonis
- 2292 Author Index
- 2294 Information for Authors
- 2296 Cutting Edge Information for Authors
- 2297 Submission Form: Full Length Articles
- 2298 Membership Application
- 2299 Submission Form: Cutting Edge
- 2300 Trainee Membership Application