



**SIMPLE, POWERFUL, ACCESSIBLE.
FULL SPECTRUM FLOW CYTOMETRY**

9+ color assays, together with high throughput or extended warranty, for just \$69.9K

ACT NOW



155 (9)

J Immunol 1995; 155:4135-4511; ;
<http://www.jimmunol.org/content/155/9.citation>

This information is current as of October 22, 2020.

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

CUTTING EDGE

- 4135 A Novel Bifunctional Chimeric Complement Inhibitor That Regulates C3 Convertase and Formation of the Membrane Attack Complex
William L. Fodor, Scott A. Rollins, Edward R. Guilmette, Eva Setter, and Stephen P. Squinto
- 4139 Inhibition of $\gamma\delta$ T Cell Recognition by Receptors for MHC Class I Molecules
Hideo Nakajima, Hiroko Tomiyama, and Masafumi Takiguchi
- 4143 The Ig-Related Killer Cell Inhibitory Receptor Binds Zinc and Requires Zinc for Recognition of HLA-C on Target Cells
Sumati Rajagopalan, Christine C. Winter, Nicolai Wagtmann, and Eric O. Long

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

- 4147 Divergent Induction of Apoptosis and IL-8 Secretion in HT-29 Cells in Response to TNF- α and Ligation of Fas Antigen
Maria T. Abreu-Martin, Alda Vidrich, David H. Lynch, and Stephan R. Targan
- 4155 Fibroblasts Support Outgrowth of Splenocytes Simultaneously Expressing B Lymphocyte and Macrophage Characteristics
Melinda A. Borrello and Richard P. Phipps
- 4162 IL-4 Induces Human B Cell Maturation and IgE Synthesis in SCID-hu Mice: Inhibition of Ongoing IgE Production by In Vivo Treatment with an IL-4/IL-13 Receptor Antagonist
José M. Carballido, Dominique Schols, Reiko Namikawa, Sandra Zurawski, Gerard Zurawski, Maria-Grazia Roncarolo, and Jan E. de Vries
- 4171 Persistence of $V\beta 6^+$ T Cells in Mls-1^a Mice: A Role for the Third Complementarity-Determining Region (CDR3) of the T Cell Receptor β Chain in Superantigen Recognition
José A. B. Chies, Gilles Marodon, Anne-Marie Joret, Armelle Regnault, Marie-Pierre Lembezat, Benedita Rocha, and Antonio A. Freitas

- 4179 A Nonlethal Conditioning Approach to Achieve Durable Multilineage Mixed Chimerism and Tolerance Across Major, Minor, and Hematopoietic Histocompatibility Barriers
Yolonda L. Colson, Sherry M. Wren, Matthew J. Schuchert, Kenneth D. Patrene, Peter C. Johnson, Sallie S. Boggs, and Suzanne T. Ildstad
- 4189 $\gamma\delta$ T Cells in the Pathobiology of Murine Acute Graft-Versus-Host Disease: Evidence That $\gamma\delta$ T Cells Mediate Natural Killer-Like Cytotoxicity in the Host and That Elimination of These Cells from Donors Significantly Reduces Mortality
Cynthia A. Ellison, Glen C. MacDonald, Edward S. Rector, and John G. Gartner
- 4199 Peptide-Induced Anergy in Allergen-Specific Human Th2 Cells Results in Lack of Cytokine Production and B Cell Help for IgE Synthesis: Reversal by IL-2, not by IL-4 or IL-13
Stephan Fasler, Gregorio Aversa, Abba Terr, Kristian Thestrup-Pedersen, Jan E. de Vries, and Hans Yssel
- 4207 Removal of the Majority of Epidermal Langerhans Cells by Topical or Systemic Steroid Application Enhances the Effector Phase of Murine Contact Hypersensitivity
Stephan Grabbe, Kerstin Steinbrink, Meike Steinert, Thomas A. Luger, and Thomas Schwarz
- 4218 Identification of a Candidate CD5 Homologue in the Amphibian *Xenopus laevis*
Jutta B. Jürgens, Lanier A. Gartland, Louis Du Pasquier, John D. Horton, Thomas W. F. Göbel, and Max D. Cooper
- 4224 Development of TCR- $\gamma\delta$ CD4⁻CD8⁺ $\alpha\alpha$ but Not TCR- $\alpha\beta$ CD4⁻CD8⁺ $\alpha\alpha$ i-IEL Is Resistant to Cyclosporin A
Tesu Lin, Goro Matsuzaki, Masayoshi Umesue, Kazuya Omoto, Hiroki Yoshida, Mamoru Harada, Chandar Singaram, Kenji Hiromatsu, and Kikuo Nomoto
- 4231 Administration of Recombinant Human IL-1 by Staphylococcus Enterotoxin B Prevents Tolerance Induction In Vivo
Yukiko Nakata, Kimiko Matsuda, Akiko Uzawa, Masayuki Nomura, Makoto Akashi, and Gen Suzuki
- 4236 Comparison of p56^{lck} and p59^{fyn} Protein Expression in Thymocyte Subsets, Peripheral T Cells, NK Cells, and Lymphoid Cell Lines
Michael W. Olszowy, Peter L. Leuchtman, André Veillette, and Andrey S. Shaw
- 4241 Functional Expression of CD40 Antigen on Human Epidermal Langerhans Cells
Josette Péguet-Navarro, Catherine Dalbiez-Gauthier, Frédérique-Marie Rattis, Cees Van Kooten, Jacques Banchereau, and Daniel Schmitt
- 4248 IL-4 Induces Germ-Line IgE Heavy Chain Gene Transcription in Human Fetal Pre-B Cells: Evidence for Differential Expression of Functional IL-4 and IL-13 Receptors During B Cell Ontogeny
Juha Punnonen, Benjamin G. Cocks, and Jan E. de Vries
- 4255 Entry of B Cell Antigen Receptor and Antigen into Class II Peptide-Loading Compartment Is Independent of Receptor Cross-Linking
Wenxia Song, Han Cho, Paul Cheng, and Susan K. Pierce

MOLECULAR AND STRUCTURAL IMMUNOLOGY

- 4264 Identification of Epitopes Within a Highly Immunogenic Region of Acetylcholine Receptor by a Phage Epitope Library
Dora Barchan, Moshe Balass, Miriam C. Souroujon, Ephraim Katchalski-Katzir, and Sara Fuchs
- 4270 Differential Transcription Efficiency of Two Ig V_H Promoters in Vitro
Kent L. Buchanan, Stuart I. Hodgetts, Jilanne Byrnes, and Carol F. Webb
- 4278 Structure and Expression of a Divergent Canine Class I Gene
Robert C. Burnett and Daniel E. Geraghty
- 4286 Cloning and Characterization of a Mouse IL-12 Receptor- β Component
Anne O. Chua, Victoria L. Wilkinson, David H. Presky, and Ueli Gubler
- 4295 Molecular Analysis of a Heteroclitic T Cell Response to the Immunodominant Epitope of Sperm Whale Myoglobin: Implications for Peptide Partial Agonists
Richard D. England, Marika C. Kullberg, James L. Cornette, and Jay A. Berzofsky
- 4307 Prominent Roles of Secondary Anchor Residues in Peptide Binding to HLA-A24 Human Class I Molecules
Akihiro Kondo, John Sidney, Scott Southwood, Marie-France del Guercio, Ettore Appella, Hiroshi Sakamoto, Esteban Celis, Howard M. Grey, Robert W. Chesnut, Ralph T. Kubo, and Alessandro Sette
- 4313 Purified X2 Binding Protein (X2BP) Cooperatively Binds the Class II MHC X Box Region in the Presence of Purified RFX, the X Box Factor Deficient in the Bare Lymphocyte Syndrome
Carlos S. Moreno, Patrick Emery, Joseph E. West, Bénédicte Durand, Walter Reith, Bernard Mach, and Jeremy M. Boss
- 4322 Influence of Coding-End Sequence on Coding-End Processing in V(D)J Recombination
Bertrand Nadel and Ann J. Feeney
- 4330 Multiple Proteins Physically Interact with PU.1: Transcriptional Synergy with NF-IL6 β (C/EBP δ , CRP3)
Sujatha Nagulapalli, Jagan M. R. Pongubala, and Michael L. Atchison
- 4339 Presentation of Endogenous Peptide/MHC Class I Complexes Is Profoundly Influenced by Specific C-Terminal Flanking Residues
Nilabh Shastri, Thomas Serwold, and Federico Gonzalez

HOST DEFENSE

- 4347 IL-1 β Is Required for IL-12 to Induce Production of IFN- γ by NK Cells: A Role for IL-1 β in the T Cell-Independent Mechanism of Resistance Against Intracellular Pathogens
C. A. Hunter, R. Chizzonite, and J. S. Remington
- 4355 Mechanisms of T Cell Epitope Immunodominance Analyzed in Murine Listeriosis
Susan A. Safley, Peter E. Jensen, Philip A. Reay, and H. Kirk Ziegler

- 4367 Experimental *Listeria* Meningoencephalitis: Macrophage Inflammatory Protein-1 α and -2 Are Produced Intrathecally and Mediate Chemotactic Activity in Cerebrospinal Fluid of Infected Mice
Jörg Seebach, Deborah Bartholdi, Karl Frei, Katharina-Susanne Spanaus, Enza Ferrero, Urs Widmer, Stefan Isenmann, Robert M. Strieter, Martin Schwab, Hans-Walter Pfister, and Adriano Fontana
- 4376 Host Cell-Derived Complement Control Proteins CD55 and CD59 Are Incorporated into the Virions of Two Unrelated Enveloped Viruses: Human T Cell Leukemia/Lymphoma Virus Type I (HTLV-I) and Human Cytomegalovirus (HCMV)
Gregory T. Spear, Nell S. Lurain, Charles J. Parker, Mahmood Ghassemi, Gregory H. Payne, and Mohammed Saifuddin
- 4382 Nitric Oxide Synthesis Contributes to IL-2-Induced Antitumor Responses Against Intraperitoneal Meth A Tumor
Chang-Yeol Yim, John R. McGregor, Oh-Deog Kwon, Neil R. Bastian, Matthew Rees, Motomi Mori, John B. Hibbs, Jr., and Wolfram E. Samlowski

INFLAMMATION

- 4391 Macrophage Activation by Culture in an Anoxic Environment
Jorge E. Albina, William L. Henry, Jr., Balduino Mastrofrancesco, Barbara-Anne Martin, and Jonathan S. Reichner
- 4397 Differential Regulation of Transforming Growth Factor β -1 Gene Expression by Glucocorticoids in Human T and Glial Cells
Olcay A. Batuman, Ann Ferrero, Crystina Cupp, Sergio A. Jimenez, and Kamel Khalili
- 4406 Proteinases of Rat Mast Cells: Peritoneal but Not Intestinal Mucosal Mast Cells Express Mast Cell Proteinase 5 and Carboxypeptidase A
A. Dean Befus, Beth Chin, Jennifer Pick, Simon Evans, Sheri Osborn, and John Forstrom
- 4412 Inhibition of Macrophage Inflammatory Protein-1 α Expression by IL-10: Differential Sensitivities in Human Blood Monocytes and Alveolar Macrophages
Neville Berkman, Matthias John, Goedele Roesems, Peter J. Jose, Peter J. Barnes, and K. Fan Chung
- 4419 IFN- γ Up-Regulates the Human C5a Receptor (CD88) in Myeloblastic U937 Cells and Related Cell Lines
Michael Burg, Ulrich Martin, Claudia Rheinheimer, Jörg Köhl, Wilfried Bautsch, Erik C. Böttger, and Andreas Klos
- 4427 Fc γ II Receptor-Mediated Platelet Activation Induced by Anti-CD9 Monoclonal Antibody Opens Ca²⁺ Channels Which Are Distinct from Those Associated with Ca²⁺ Store Depletion
Kenji Kuroda, Yukio Ozaki, Ruomei Qi, Naoki Asazuma, Yutaka Yatomi, Kaneo Satoh, Shosaku Nomura, Masahiko Suzuki, and Shoji Kume
- 4437 Characterization of a Monoclonal Antibody That Neutralizes the Activity of Prostaglandin E₂
Stephen J. Mnich, Amy W. Veenhuizen, Joseph B. Monahan, Kathleen C. F. Sheehan, Kevin R. Lynch, Peter C. Isakson, and Joseph P. Portanova

- 4445 IgE-Dependent Activation of Cytokine-Primed Mouse Cultured Mast Cells Induces a Delayed Phase of Prostaglandin D₂ Generation Via Prostaglandin Endoperoxide Synthase-2
Makoto Murakami, Clifton O. Bingham III, Ryoji Matsumoto, K. Frank Austen, and Jonathan P. Arm
- 4454 Mechanism of Inhibition of Eosinophil Activation by Transforming Growth Factor- β : Inhibition of Lyn, MAP, Jak2 Kinases and STAT1 Nuclear Factor
Konrad Pazdrak, Louis Justement, and Rafeul Alam
- 4459 Incorporation of a 35-Kilodalton Purified Protein from *Loxosceles intermedia* Spider Venom Transforms Human Erythrocytes into Activators of Autologous Complement Alternative Pathway
Denise V. Tambourgi, Fábio Carlos Magnoli, Vera Regina D. Von Eickstedt, Zuleica Caulada Benedetti, Vera Lucia Petricevich, and W. Dias da Silva
- 4467 The Intracellular IL-1 Receptor Antagonist Alters IL-1-Inducible Gene Expression Without Blocking Exogenous Signaling by IL-1 β
Joanna M. Watson, Alan K. Lofquist, Clifford A. Rinehart, John C. Olsen, Sergei S. Makarov, David G. Kaufman, and J. Stephen Haskill
- 4476 Rat Neutrophil Defensins: Precursor Structures and Expression During Neutrophilic Myelopoiesis
Nannette Y. Yount, Min-Shine C. Wang, Jun Yuan, Niaz Banaiee, Andre J. Ouellette, and Michael E. Selsted

CLINICAL IMMUNOLOGY

- 4486 Tumor-Specific and HLA-A2-Restricted Cytolysis by Tumor-Associated Lymphocytes in Human Metastatic Breast Cancer
David C. Linehan, Peter S. Goedegebuure, George E. Peoples, Selwyn O. Rogers, and Timothy J. Eberlein
- 4492 Ultraviolet B Radiation Up-Regulates the Expression of IL-15 in Human Skin
Mansour Mohamadzadeh, Akira Takashima, Irene Dougherty, Jürgen Knop, Paul R. Bergstresser, and Ponciano D. Cruz, Jr.
- 4497 Treatment with Bacterial LPS Renders Genetically Resistant C57BL/6 Mice Susceptible to Theiler's Virus-Induced Demyelinating Disease
Lara C. Pullen, Seol H. Park, Stephen D. Miller, Mauro C. Dal Canto, and Byung S. Kim
- 4504 Vaccination with a Recombinant V α Domain of a TCR Prevents the Development of Collagen-Induced Arthritis
Edward F. Rosloniec, David D. Brand, Karen B. Whittington, John M. Stuart, Mihai Ciubotaru, and E. Sally Ward
- 4512 Author Index
- 4514 Information for Authors
- 4516 Cutting Edge Information for Authors
- 4417 Submission Form: Full Length Articles
- 4518 AAI Membership Application
- 4519 Submission Form: Cutting Edge
- 4520 AAI Trainee Membership Form