

**Luminex**  
complexity simplified.



**Capabilities for Today.  
Flexibility for Tomorrow.**

Amnis<sup>®</sup> CellStream<sup>™</sup> Flow Cytometry Systems.

LEARN MORE >



**149 (1)**

*J Immunol* 1992; 149:1-366; ;  
<http://www.jimmunol.org/content/149/1.citation>

This information is current as  
of September 17, 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.



# Contents

## CELLULAR IMMUNOLOGY

- |   |    |  |
|---|----|--|
| E. K. Bikoff  | 1  | Formation of Complexes between Self-Peptides and MHC Class II Molecules in Cells Defective for Presentation of Exogenous Protein Antigens  |
| O. Kanagawa, B. A. Nussrallah, M. E. Wiebenga, K. M. Murphy, H. C. Morse III, and F. R. Carbone | 9  | Murine AIDS Superantigen Reactivity of the T Cells Bearing V $\beta$ 5 T Cell Antigen Receptor   |
| Y. H. Kim, J. J. Proust, M. J. Buchholz, F. J. Chrest, and A. A. Nordin                         | 17 | Expression of the Murine Homologue of the Cell Cycle Control Protein p34 <sup>cdc2</sup> in T Lymphocytes  |
| Y. Lu, A. Grannelli-Piperno, J. M. Bjorndahl, C. A. Phillips, and J. M. Trevillyan              | 24 | CD28-Induced T Cell Activation: Evidence for a Protein-Tyrosine Kinase Signal Transduction Pathway   |
| S. Nakamura, J. Imanishi, and J. Minowada   | 30 | R1-20, a Novel Monoclonal Antibody Reacting with a Molecule Distinct from Integrin Family Induces Homotypic Cell Aggregation   |
| N. J. Poindexter, C. Landon, P. J. Whiteley, and J. A. Kapp                                     | 38 | Comparison of the T Cell Receptors on Insulin-Specific Hybridomas from Insulin Transgenic and Nontransgenic Mice: Loss of a Subpopulation of Self-Reactive Clones  |
| L. L. Pritchard, R. Huchet, M. Bruley-Rosset, N. Riché, Z. Mishal, and O. Halle-Panenko         | 45 | Induction and Suppression of Delayed-Type Hypersensitivity to Non-MHC Antigens during Lethal Graft-versus-Host Reaction  |
| R. Schafer, D. A. Portnoy, S. A. Brassell, and Y. Paterson                                      | 53 | Induction of a Cellular Immune Response to a Foreign Antigen by a Recombinant <i>Listeria monocytogenes</i> Vaccine  |
| C. L. Schultz, P. Rothman, R. Kühn, M. Kehry, W. Müller, K. Rajewsky, F. Alt, and R. L. Coffman | 60 | T Helper Cell Membranes Promote IL-4-Independent Expression of Germ-Line C $\gamma$ 1 Transcripts in B Cells   |
| F. Spertini, T. Chatila, and R. S. Geha   | 65 | Signals Delivered via MHC Class II Molecules Synergize with Signals Delivered via TCR/CD3 to Cause Proliferation and Cytokine Gene Expression in T Cells   |
| T. Suda and A. Zlotnik  | 71 | In Vitro Induction of CD8 Expression on Thymic Pre-T Cells. II. Characterization of CD3 <sup>-</sup> CD4 <sup>-</sup> CD8 $\alpha$ <sup>+</sup> Cells Generated in Vitro by Culturing CD25 <sup>+</sup> CD3 <sup>-</sup> CD4 <sup>-</sup> CD8 <sup>-</sup> Thymocytes with T Cell Growth Factor- $\beta$ and Tumor Necrosis Factor- $\alpha$ |
| D. Wegmann, M. Norbury-Glaser, B. Bergman, and K. Haskins                                       | 77 | High Efficiency Presentation of TNP-Conjugated Islet Antigen to Islet-Specific T Cells by a Hybrid B Cell Line Expressing TNP-Specific Surface Ig  |

## CYTOKINES • MEDIATORS • REGULATORY MOLECULES

- |  |     |  |
|--|-----|--|
| N. Arima, W. A. Kuziel, T. A. Grdina, and W. C. Greene                     | 83  | IL-2-Induced Signal Transduction Involves the Activation of Nuclear NF- $\kappa$ B Expression  |
| A. H. Enk and S. I. Katz   | 92  | Identification and Induction of Keratinocyte-Derived IL-10   |
| K. Fan, Q. Ruan, L. Sensenbrenner, and B. D.-M. Chen                       | 96  | Up-Regulation of Granulocyte-Macrophage Colony-Stimulating Factor (GM-CSF) Receptors in Murine Peritoneal Exudate Macrophages by Both GM-CSF and IL-3  |
| S. H. Phan, M. Gharaee-Kermani, B. McGarry, S. L. Kunkel, and F. W. Wolber | 103 | Regulation of Rat Pulmonary Artery Endothelial Cell Transforming Growth Factor- $\beta$ Production by IL-1 $\beta$ and Tumor Necrosis Factor- $\alpha$ |

Continued on page 4

- A. M. Zubiaga, E. Munoz, and B. T. Huber 107 IL-4 and IL-2 Selectively Rescue T Helper Cell Subsets from Glucocorticoid-Induced Apoptosis

---

**IMMUNOCHEMISTRY**


---

- M. P. Colombo, L. Lombardi, A. Stoppacciaro, C. Melani, M. Parenza, B. Bottazzi, and G. Parmiani 113 Granulocyte Colony-Stimulating Factor (G-CSF) Gene Transduction in Murine Adenocarcinoma Drives Neutrophil-Mediated Tumor Inhibition in Vivo: Neutrophils Discriminate between G-CSF-Producing and G-CSF-Nonproducing Tumor Cells
- A. J. Cumber, E. S. Ward, G. Winter, G. D. Parnell, and E. J. Wawrzynczak 120 Comparative Stabilities in Vitro and in Vivo of a Recombinant Mouse Antibody FvCys Fragment and a bisFvCys Conjugate
- C. Horgan, K. Brown, and S. H. Pincus 127 Effect of H Chain V Region on Complement Activation by Immobilized Immune Complexes
- M. H. Newberg, J. P. Ridge, D. R. Vining, R. D. Salter, and V. H. Engelhard 136 Species Specificity in the Interaction of CD8 with the  $\alpha 3$  Domain of MHC Class I Molecules
- T. D. Rao, A. A. Maghazachi, A. V. Gonzalez, and J. M. Phillips-Quagliata 143 A Novel IgA Receptor Expressed on a Murine B Cell Lymphoma

---

**IMMUNOPHARMACOLOGY**


---

- S. C. Erzurum, G. P. Downey, D. E. Doherty, B. Schwarb III, E. L. Elson, and G. S. Worthen 154 Mechanisms of Lipopolysaccharide-Induced Neutrophil Retention: Relative Contributions of Adhesive and Cellular Mechanical Properties
- C.-M. Kam, T. J. Oglesby, M. K. Pangburn, J. E. Volanakis, and J. C. Powers 163 Substituted Isocoumarins as Inhibitors of Complement Serine Proteases
- I. Melamed, G. Wang, and C. M. Roifman 169 Antigen Receptor-Mediated Protein Tyrosine Kinase Activity Is Regulated by a Pertussis Toxin-Sensitive G Protein

---

**MICROBIAL IMMUNOLOGY**


---

- R. Gazzinelli, Y. Xu, S. Hieny, A. Cheever, and A. Sher 175 Simultaneous Depletion of CD4<sup>+</sup> and CD8<sup>+</sup> T Lymphocytes Is Required to Reactivate Chronic Infection with *Toxoplasma gondii*
- J. Gosselin, L. Flamand, M. D'Addario, J. Hiscott, I. Stefanescu, D. V. Ablashi, R. C. Gallo, and J. Menezes 181 Modulatory Effects of Epstein-Barr, Herpes Simplex, and Human Herpes-6 Viral Infections and Coinfections on Cytokine Synthesis: A Comparative Study
- S. H. Gregory, E. J. Wing, D. J. Twardy, R. K. Shadduck, and H.-S. Lin 188 Primary Listerial Infections Are Exacerbated in Mice Administered Neutralizing Antibody to Macrophage Colony-Stimulating Factor
- L. M. Kumaratilake and A. Ferrante 194 IL-4 Inhibits Macrophage-Mediated Killing of *Plasmodium falciparum* in Vitro: A Possible Parasite-Immune Evasion Mechanism
- J. C. Mathison, P. S. Tobias, E. Wolfson, and R. J. Ulevitch 200 Plasma Lipopolysaccharide (LPS)-Binding Protein: A Key Component in Macrophage Recognition of Gram-Negative LPS
- Y. Suzuki, K. Ohsugi, and Y. Ono 207 EBV Increases Phosphoinositide Kinase Activities in Human B Cells
- U. Utz, S. Koenig, J. E. Coligan, and W. E. Biddison 214 Presentation of Three Different Viral Peptides, HTLV-1 TAX, HCMV gB, and Influenza Virus M1, Is Determined by Common Structural Features of the HLA-A2.1 Molecule

---

**MOLECULAR BIOLOGY • MOLECULAR GENETICS**


---

- A. J. Feeney 222 Predominance of V<sub>H</sub>-D-J<sub>H</sub> Junctions Occurring at Sites of Short Sequence Homology Results in Limited Junctional Diversity in Neonatal Antibodies
- R. González-Quintial and A. N. Theofilopoulos 230 V $\beta$  Gene Repertoires in Aging Mice
- J. G. Haas, M. Ströbel, A. Leutz, P. Wendelgaß, C. Müller, E. Sterneck, G. Riethmüller, and H. W. L. Ziegler-Heitbrock 237 Constitutive Monocyte-Restricted Activity of NF-M, a Nuclear Factor that Binds to a C/EBP Motif
- P. Sideras, L. Nilsson, K. B. Islam, I. Z. Quintana, L. Freihof, A. Rosén, G. Juliusson, L. Hammarström, and C. I. E. Smith 244 Transcription of Unrearranged Ig H Chain Genes in Human B Cell Malignancies: Biased Expression of Genes Encoded within the First Duplication Unit of the Ig H Chain Locus
- B. Tjoa and D. M. Kranz 253 Diversity of T Cell Receptor- $\alpha$  Chain Transcripts from Hyperimmune Alloreactive T Cells

---

**TUMOR IMMUNOLOGY**


---

- J. Jääskeläinen, A. Mäenpää, M. Patarroyo, C. G. Gahmberg, K. Somersalo, J. Tarkkanen, M. Kallio, and T. Timonen 260 Migration of Recombinant IL-2-Activated T and Natural Killer Cells in the Intercellular Space of Human H-2 Glioma Spheroids in Vitro: A Study on Adhesion Molecules Involved
- J. Rogers and M. F. Mescher 269 Augmentation of in Vivo Cytotoxic T Lymphocyte Activity and Reduction of Tumor Growth by Large Multivalent Immunogen
- M. Sensi, M. Bergomi, P. Panceri, C. Castelli, R. Lupetti, C. Traversari, G. Carbone, and G. Parmiani 277 Involvement of Somatically Acquired Ecotropic Viruses in the Immunogenicity of Nude-Transplanted NIH/3t3 Transformed Cell Lines

---

**CLINICAL IMMUNOLOGY**


---

- D. Cefai, M. Ferrer, N. Serpente, T. Idziorek, A. Dautry-Varsat, P. Debre, and G. Bismuth 285 Internalization of HIV Glycoprotein gp120 Is Associated with Down-Modulation of Membrane CD4 and p56<sup>lck</sup> Together with Impairment of T Cell Activation
- P. J. Doherty, S. X. Yang, R. M. Laxer, E. D. Silverman, R. Inman, and S. Pan 295 Evidence for Clonal Expansion of T Cell Receptor V $\gamma$ II<sup>+</sup> T Cells in the Synovial Fluid of Patients with Arthritis
- J. Golay, G. Cusmano, and M. Introna 300 Independent Regulation of *c-myc*, *B-myb*, and *c-myb* Gene Expression by Inducers and Inhibitors of Proliferation in Human B Lymphocytes
- M. M. Griffiths, M. A. Cremer, D. S. Harper, S. McCall, and G. W. Cannon 309 Immunogenetics of Collagen-Induced Arthritis in Rats: Both MHC and Non-MHC Gene Products Determine the Epitope Specificity of Immune Response to Bovine and Chick Type II Collagens
- F. Koning and C. Rust 317 Staphylococcal Enterotoxin-Mediated Human T-T Cell Interactions
- F. Mollinedo, C. Burgaleta, G. Velasco, A. G. Arroyo, A. Acevedo, and I. Barasoain 323 Enhancement of Human Neutrophil Functions by a Monoclonal Antibody Directed against a 19-kDa Antigen
- M. S. Mulligan and P. A. Ward 331 Immune Complex-Induced Lung and Dermal Vascular Injury: Differing Requirements for Tumor Necrosis Factor- $\alpha$  and IL-1
- H. Rabinowich, D. Vitolo, S. Altarac, R. B. Herberman, and T. L. Whiteside 340 Role of Cytokines in the Adoptive Immunotherapy of an Experimental Model of Human Head and Neck Cancer by Human IL-2-Activated Natural Killer Cells

Continued on page 6

Continued from page 5

- B. P. Tsao, K. Ohnishi, H. Cher-  
outre, B. Mitchell, M. Teitell,  
P. Mixer, M. Kronenberg,  
and B. H. Hahn 350 Failed Self-Tolerance and Autoimmunity in IgG Anti-DNA Transgenic Mice
- A. L. Van Dervort, M. E. Doer-  
fler, P. Stuetz, and R. L. Dan-  
ner 359 Antagonism of Lipopolysaccharide-Induced Priming of Human Neutrophils  
by Lipid A Analogs

Author Index

**PLEASE NOTE CHANGES IN  
"INFORMATION FOR CONTRIBUTORS"**  
4 Copies of Manuscript and Figures Now Required