

BULK ANTIBODIES

for *in vivo*

RESEARCH

$\alpha$ -CD4

$\alpha$ -CD8

$\alpha$ -CD25

$\alpha$ -NK1.1

$\alpha$ -Ly6G

Discover More

BioCell



The Journal of  
**Immunology**

**138 (2)**

*J Immunol* 1987; 138:333-656; ;

<http://www.jimmunol.org/content/138/2.citation>

This information is current as  
of November 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

- |   |     |  |
|---|-----|--|
| C. Taswell  | 333 | A Solution to the Problems of Cytolysis Assays with Additional Applications to Other Immunological and Biochemical Assays  |
| K. Shortman, A. Wilson, W. Van Ewijk, and R. Scollay                                  | 342 | Phenotype and Localization of Thymocytes Expressing the Homing Receptor-Associated Antigen MEL-14: Arguments for the View that Most Mature Thymocytes Are Located in the Medulla   |
| A. Wilson, R. Scollay, R. A. Reichert, E. C. Butcher, I. L. Weissman, and K. Shortman | 352 | The Correlation of Lectin-Stimulated Proliferation and Cytotoxicity in Murine Thymocytes with Expression of the MEL-14-Defined Homing Receptor   |
| L. W. Vollger, D. T. Tuck, T. A. Springer, B. F. Haynes, and K. H. Singer             | 358 | Thymocyte Binding to Human Thymic Epithelial Cells Is Inhibited by Monoclonal Antibodies to CD-2 and LFA-3 Antigens  |
| J. Suttles, G. A. Schwarting, M. W. Houglund, and R. D. Stout                         | 364 | Expression of Asialo G <sub>M1</sub> on a Subset of Adult Murine Thymocytes: Histological Localization and Demonstration that the Asialo G <sub>M1</sub> -Positive Subset Contains Both the Functionally Mature and the Proliferating Thymocyte Subpopulations |
| R. Abe, J. J. Ryan, F. D. Finkelstein, and R. J. Hodes                                | 373 | T Cell Recognition of Mls: T Cell Clones Demonstrate Polymorphism between Mls <sup>a</sup> , Mls <sup>c</sup> , and Mls <sup>d</sup>   |
| H. Yamamoto, S. Bitoh, and S. Fujimoto  | 380 | Adaptive Differentiation of H-2 and IgH-Restricted B Lymphocyte in Tetraparental Bone Marrow Chimera   |
| T. D. Geppert and P. E. Lipsky  | 385 | Dissection of Defective Antigen Presentation by Interferon- $\gamma$ -Treated Fibroblasts  |
| M. Minami, S. A. Ebner, M. J. Stadecker, and M. E. Dorf                               | 393 | The Effects of Phorbol Ester on Alloantigen Presentation   |
| J. N. Lowder, R. A. Miller, R. Hoppe, and R. Levy                                     | 401 | Suppression of Anti-Mouse Immunoglobulin Antibodies in Subhuman Primates Receiving Murine Monoclonal Antibodies against T Cell Antigens  |

*Continued on page 4*

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 \$150 (\$205 foreign); institutions \$170 (\$225 foreign); students \$41 (\$96 foreign); single copy \$8 (\$11 foreign). Indexed by *Current Contents* and *Index Medicus*. Second class postage paid at Baltimore, MD 21202 and at additional mailing offices. POSTMASTER: Send address changes to The Journal of Immunology at 428 East Preston Street, Baltimore, MD 21202. Copyright © 1987 by The American Association of Immunologists.

### EDITORIAL OFFICE CHANGE

*Beginning April 13, 1987*, all new manuscripts will be sent to the new Editor-in-Chief:

Dr. Ethan Shevach

The American Association of Immunologists

9650 Rockville Pike

Bethesda, MD 20814

Manuscripts, correspondence, and matters relating to manuscripts submitted to The Journal of Immunology *prior to April 13, 1987* will continue to be processed in the San Diego editorial office:

Dr. Joseph Feldman

The Journal of Immunology

3770 Tansy Street

San Diego, CA 92121

---

**CLINICAL IMMUNOLOGY • IMMUNOPATHOLOGY**


---

- R. D. Inman, B. Chiu, N. C. Hamilton 407 Analysis of Immune Complexes in Rheumatoid Arthritis for Epstein-Barr Virus Antigens Reveals Cross-Reactivity of Viral Capsid Antigen and Human IgG
- C. A. Leslie, W. A. Gonnerman, and E. S. Cathcart 413 Gender Differences in Eicosanoid Production from Macrophages of Arthritis-Susceptible Mice
- G. de Saint Basile, A. Durandy, G. Somme, and C. Griscelli 417 Idiotype of Human Anti-*Candida albicans* Antibodies: Recurrence, Presence of a Cross-Reactive Autoanti-Idiotypic-Like Activity, and Role in the Induction of Specific in Vitro Antibody Response
- F. Le Deist, C. Raffoux, C. Griscelli, and A. Fischer 423 Graft vs Graft Reaction Resulting in the Elimination of Maternal Cells in a SCID Patient with Maternofetal GVHD after an HLA Identical Bone Marrow Transplantation
- D. Proud, C. R. Baumgarten, R. M. Naclerio, and P. E. Ward 428 Kinin Metabolism in Human Nasal Secretions during Experimentally Induced Allergic Rhinitis
- H. Kubagawa, L. F. Bertoli, J. C. Barton, W. J. Koopman, J. Mestecky, and M. D. Cooper 435 Analysis of Paraprotein Transport into the Saliva by Using Anti-Idiotypic Antibodies
- F. O. Ranelletti, N. Maggiano, F. B. Aiello, A. Carbone, L. M. Larocca, P. Musiani, and M. Piantelli 440 Glucocorticoid Receptors and Corticoid Sensitivity of Human Thymocytes at Discrete Stages of Intrathymic Differentiation
- J. P. Portanova, R. E. Arndt, E. M. Tan, and B. L. Kotzin 446 Anti-Histone Antibodies in Idiopathic and Drug-Induced Lupus Recognize Distinct Intrahistone Regions
- A. A. Vandembark, P. Teal, and H. Offner 452 Activation of an Encephalitogenic T Lymphocyte Line with a Cellfree Supernatant Containing Basic Protein and I Region Gene Products
- E. Schwartz, T. Lapidot, D. Gozes, T. S. Singer, and Y. Reisner 460 Abrogation of Bone Marrow Allograft Resistance in Mice by Increased Total Body Irradiation Correlates with Eradication of Host Clonable T Cells and Alloreactive Cytotoxic Precursors
- D. L. Perkins, J. Michaelson, and A. Marshak-Rothstein 466 The *lpr* Gene Is Associated with Resistance to Engraftment by Lymphoid But Not Erythroid Stem Cells from Normal Mice

---

**CYTOKINES • MEDIATORS • REGULATORY MOLECULES**


---

- L. D. Butler, P. E. DeRiso, P. Marder, and M. E. Scheetz 470 In Vivo Expression and Regulation of Murine IL 2 Receptors after Antigen Sensitization
- G. S. Le Gros, P. S. Shackell, J. E. Le Gros, and J. D. Watson 478 Interleukin 2 Regulates the Expression of IL 2 Receptors on Interleukin 3-Dependent Bone Marrow-Derived Cell Lines
- M. Cebrián, E. Yagüe, M. O. de Landázuri, M. Rodríguez-Moya, M. Fresno, N. Pezzi, S. Llamazares, and F. Sánchez-Madrid 484 Different Functional Sites on rIFN- $\alpha$ 2 and Their Relation to the Cellular Receptor Binding Site
- C. M. Black, J. R. Catterall, and J. S. Remington 491 In Vivo and in Vitro Activation of Alveolar Macrophages by Recombinant Interferon- $\gamma$
- J. Schnyder, T. Payne, and C. A. Dinarello 496 Human Monocyte or Recombinant Interleukin 1's Are Specific for the Secretion of a Metalloproteinase from Chondrocytes
- W.-S. Chu and S. Rich 504 Suppressor T Cell Growth and Differentiation: Evidence for Induced Receptors on Suppressor T Cells that Bind a Suppressor T Cell Differentiation Factor

---

**IMMUNOCHEMISTRY**


---

- D. D. Hickstein, A. Smith, W. Fisher, P. G. Beatty, B. R. Schwartz, J. M. Harlan, R. K. Root, and R. M. Locksley 513 Expression of Leukocyte Adherence-Related Glycoproteins during Differentiation of HL-60 Promyelocytic Leukemia Cells
- M. A. Davitz, A. M. Gurnett, M. G. Low, M. J. Turner, and V. Nussenzweig 520 Decay-Accelerating Factor (DAF) Shares a Common Carbohydrate Determinant with the Variant Surface Glycoprotein (VSG) of the African *Trypanosoma brucei*

Continued on page 5

---

**IMMUNOPHARMACOLOGY**


---

- |  |     |   |
|--|-----|---|
| S. Marullo, J. Hoebeke, J. G. Guillet, C. Andre, and A. D. Strosberg                         | 524 | Immunologic Mimicry by a Monoclonal Antibody of the Tricyclic Antidepressants' Binding Site on Muscarinic Acetylcholine Receptors   |
| E. W. Gelfand, R. K. Cheung, G. B. Mills, and S. Grinstein                                   | 527 | Role of Membrane Potential in the Response of Human T Lymphocytes to Phytohemagglutinin   |
| W. F. Owen, Jr., R. J. Soberman, T. Yoshimoto, A. L. Sheffer, R. A. Lewis, and K. F. Austen  | 532 | Synthesis and Release of Leukotriene C <sub>4</sub> by Human Eosinophils  |
| T. Ruzicka and J. Auböck   | 539 | Arachidonic Acid Metabolism in Guinea Pig Langerhans Cells: Studies on Cyclooxygenase and Lipoxygenase Pathways   |
| T. Nakano, Y. Kanakura, H. Asai, and Y. Kitamura   | 544 | Changing Processes from Bone Marrow-Derived Cultured Mast Cells to Connective Tissue-Type Mast Cells in the Peritoneal Cavity of Mast Cell-Deficient W/W <sup>v</sup> Mice: Association of Proliferation Arrest and Differentiation |
| J. B. Hibbs, Jr., Z. Vavrin, and R. R. Taintor   | 550 | L-Arginine Is Required for Expression of the Activated Macrophage Effector Mechanism Causing Selective Metabolic Inhibition in Target Cells   |
| H. Takayama, G. Trenn, W. Humphrey, Jr., J. A. Bluestone, P. A. Henkart, and M. V. Sitkovsky | 566 | Antigen Receptor-Triggered Secretion of a Trypsin-Type Esterase from Cytotoxic T Lymphocytes  |

---

**MICROBIAL IMMUNOLOGY**


---

- |  |     |   |
|--|-----|---|
| N. Mohagheghpour, R. R. Gelber, and E. G. Engleman                                       | 570 | T Cell Defect in Lepromatous Leprosy Is Reversible In Vitro in the Absence of Exogenous Growth Factors                    |
| Y.-X. Zhang, S. Stewart, T. Joseph, H. R. Taylor, and H. D. Caldwell                     | 575 | Protective Monoclonal Antibodies Recognize Epitopes Located on the Outer Membrane Protein of <i>Chlamydia trachomatis</i> |
| J. E. Wolf, V. Kerchberger, G. S. Kobayashi, and J. R. Little                            | 582 | Modulation of the Macrophage Oxidative Burst by <i>Histoplasma capsulatum</i>   |
| P. G. Shackelford, D. M. Granoff, S. J. Nelson, M. G. Scott, D. S. Smith, and M. H. Nahm | 587 | Subclass Distribution of Human Antibodies to <i>Haemophilus influenzae</i> Type b Capsular Polysaccharide                 |
| H. Rumpold, G. H. Rhodes, P.L. Bloch, D. A. Carson, and J. H. Vaughan                    | 593 | The Glycine-Alanine Repeating Region Is the Major Epitope of the Epstein-Barr Nuclear Antigen-1 (EBNA-1)                  |

---

**MOLECULAR BIOLOGY • MOLECULAR GENETICS**


---

- |  |     |  |
|--|-----|--|
| D. T. Harris, W. J. Kozumbo, P. Cerutti, and J.-C. Cerottini                             | 600 | Molecular Mechanisms Involved in T Cell Activation. I. Evidence for Independent Signal-Transducing Pathways in Lymphokine Production vs Proliferation in Cloned Cytotoxic T Lymphocytes  |
| W. J. Kozumbo, D. T. Harris, S. Gromkowski, J.-C. Cerottini, and P. A. Cerutti           | 606 | Molecular Mechanisms Involved in T Cell Activation. II. The Phosphatidylinositol Signal-Transducing Mediates Antigen-Induced Lymphokine Production But Not Interleukin 2-Induced Proliferation in Cloned Cytotoxic T Lymphocytes |
| D. A. Shackelford, A. V. Smith, and I. S. Trowbridge                                     | 613 | Changes in Gene Expression Induced by a Phorbol Diester: Expression of IL 2 Receptor, T3, and T Cell Antigen Receptor  |
| K. Nakayama, M. Nonaka, S. Yokoyama, Y. D. Yeul, S.-N. Pattanakitsakui, and M. Takahashi | 620 | Recombination of Two Homologous MHC Class III Genes of the Mouse ( <i>C4</i> and <i>Slp</i> ) that Accounts for the Loss of Testosterone Dependence of Sex-Limited Protein Expression  |

Continued on page 6

---

TUMOR IMMUNOLOGY

---

A. J. T. George, A. L. Tutt, and F. K. Stevenson	628	Anti-Idiotypic Mechanisms Involved in Suppression of a Mouse B Cell Lymphoma, BCL <sub>1</sub>
R. Feinman, D. Henriksen-DeStefano, M. Tsujimoto, and J. Vilček	635	Tumor Necrosis Factor Is an Important Mediator of Tumor Cell Killing by Human Monocytes
R. R. Salup, T. C. Back, and R. H. Wiltout	641	Successful Treatment of Advanced Murine Renal Cell Cancer by Bicompartamental Adoptive Chemoimmunotherapy
D. Campana, J. S. Thompson, P. Amlot, S. Brown, and G. Janossy	648	The Cytoplasmic Expression of CD3 Antigens in Normal and Malignant Cells of the T Lymphoid Lineage
Letter to the Editor	656	
Announcements	657	
Author Index	659	

**EDITORIAL OFFICE CHANGE**

*Beginning April 13, 1987, all new manuscripts will be sent to the new Editor-in-Chief:*

Dr. Ethan Shevach

The American Association of Immunologists

9650 Rockville Pike

Bethesda, MD 20814

Manuscripts, correspondence, and matters relating to manuscripts submitted to The Journal of Immunology *prior to April 13, 1987* will continue to be processed in the San Diego editorial office:

Dr. Joseph Feldman

The Journal of Immunology

3770 Tansy Street

San Diego, CA 92121