This information is current as of April 12, 2017.

**Subscription**  Information about subscribing to *The Journal of Immunology* is online at: [http://jimmunol.org/subscription](http://jimmunol.org/subscription)

**Permissions**  Submit copyright permission requests at: [http://www.aai.org/About/Publications/JI/copyright.html](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](http://jimmunol.org/alerts)
## Contents

### CELLULAR IMMUNOLOGY

<table>
<thead>
<tr>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. N. Ernst, M. V. Hobbs, B. E. Torbett</td>
<td>1295</td>
</tr>
<tr>
<td>A. L. Glasebrook, M. Rehse, K. Bottomly, K. Hayakawa, R. R. Hardy, and W. O. Weigle</td>
<td></td>
</tr>
<tr>
<td>M. Eto, H. Mayumi, Y. Tomita, Y. Yoshikai, Y. Nishimura, and K. Nomoto</td>
<td></td>
</tr>
<tr>
<td>A. Ezquerra, R. G. Cron, T. J. McConnell, R. B. Valas, J. A. Bluestone, and J. E. Coligan</td>
<td></td>
</tr>
<tr>
<td>L. C. Gahring and W. O. Weigle</td>
<td></td>
</tr>
<tr>
<td>S. C. Jameson, J. Kaye, and N. R. J. Gascoigne</td>
<td></td>
</tr>
<tr>
<td>M. Kotb, G. Majumdar, M. Tomai, and E. H. Beachey</td>
<td></td>
</tr>
<tr>
<td>C. Leclerc, M.-P. Schutze, E. Deriaud, and G. Przewlocki</td>
<td></td>
</tr>
<tr>
<td>P. Machy, J.-P. Bizzozero, H. Reggio, and L. Leserman</td>
<td></td>
</tr>
<tr>
<td>J. Martorell, I. Rojo, R. Viellet, E. Martinez-Caceres, and J. Vives</td>
<td></td>
</tr>
<tr>
<td>M. A. Nieto, A. González, A. López-Rivas, F. Diaz-Espada, and F. Gambón</td>
<td></td>
</tr>
<tr>
<td>R. L. Mosley, D. Styre, and J. R. Klein</td>
<td></td>
</tr>
<tr>
<td>P. J. Whiteley, N. J. Poin Dexter, C. Landon, and J. A. Kapp</td>
<td></td>
</tr>
<tr>
<td>P. Yacheleni, I. Falk, and K. Eichmann</td>
<td></td>
</tr>
</tbody>
</table>

#### 1295 Differences in the Expression Profiles of CD45RB, Pgp-1, and 3G11 Membrane Antigens and in the Patterns of Lymphokine Secretion by Splenic CD4⁺ T Cells from Young and Aged Mice

#### 1303 Sequential Mechanisms of Cyclophosphamide-Induced Skin Allograft Tolerance Including the Intrathymic Clonal Deletion Followed by Late Breakdown of the Clonal Deletion

#### 1311 T Cell Receptor δ-Gene Expression and Diversity in the Mouse Spleen

#### 1318 The Regulatory Effects of Cytokines on the Induction of a Peripheral Immunologic Tolerance in Mice

#### 1324 A T Cell ReceptorVa Region Selectively Expressed in CD4⁺ Cells

#### 1332 Accessory Cell-Independent Stimulation of Human T Cells by Streptococcal M Protein Superantigen

#### 1337 Cross-Linking Fc Receptors on Monocyte Triggers IL-6 Production: Role in Anti-CD3-Induced T Cell Activation

#### 1343 The In Vivo Elimination of CD4⁺ T Cells Prevents the Induction but Not the Expression of Carrier-Induced Epitope Suppression

#### 1350 Endocytosis and Recycling of MHC-Encoded Class II Molecules by Mouse B Lymphocytes

#### 1356 CD27 Induction on Thymocytes

#### 1364 IL-2 Protects against Anti-CD3-Induced Cell Death in Human Medullary Thymocytes

#### 1369 Differentiation and Functional Maturation of Bone Marrow-Derived Intestinal Epithelial T Cells Expressing Membrane T Cell Receptor in Athymic Radiation Chimeras

#### 1376 A Peripheral Mechanism Preserves Self-Tolerance to a Secreted Protein in Transgenic Mice

#### 1382 Deviations in Thymocyte Development Induced by Divalent and Monovalent Ligation of the α/β T Cell Receptor and by Its Cross-Linking to CD8

### CLINICAL IMMUNOLOGY • IMMUNOPATHOLOGY

<table>
<thead>
<tr>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. P. Lauener, R. S. Geha, and D. Vercelli</td>
<td>1390</td>
</tr>
</tbody>
</table>

#### 1390 Engagement of the Monocyte Surface Antigen CD14 Induces Lymphocyte Function-Associated Antigen-1/Intercellular Adhesion Molecule-1-Dependent Homotypic Adhesion

#### 1395 Inhibition of Type 1 Diabetes in BB Rats with Recombinant Human Tumor Necrosis Factor-α

---

**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 $170 ($247 foreign): institutions $300 ($377 foreign): single copy $9 ($12 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 © 1990 by The American Association of Immunologists.
Continued from page 3

CYTOKINES • MEDIATORS • REGULATORY MOLECULES

E. A. Clark and G. Shu
C. Lucas, L. N. Bald, B. M. Fendly, M. Mora-Worms, I. S. Figari, E. J. Patzer, and M. A. Palladino

1400 Association between IL-6 and CD40 Signaling: IL-6 Induces Phosphorylation of CD40 Receptors
1407 Down-Regulation of IL-2 Production by Activation of T Cells Through Ly-6A/E
1415 The Autocrine Production of Transforming Growth Factor-β, during Lymphocyte Activation: A Study with a Monoclonal Antibody-Based ELISA
1423 Lymphokine-Regulated Differential Expression of mRNA for p75kDa-IL-2R in a Cloned B Lymphoma Line (BLC,-CL-3 Cells)
1430 Stimulation of α-Adrenergic Receptor Augments the Production of Macrophage-Derived Tumor Necrosis Factor
1435 IL-4 Inhibits the Expression of IL-8 from Stimulated Human Monocytes

IMMUNOCHEMISTRY

M. Budisavljevic, P. M. Ronco, and P. J. Verroust
L. Cardenas, A. C. Carrera, E. Yague, R. Pulido, F. Sanchez-Madrid, and M. O. de Landazuri
H. D. Hunt, J. K. Pullen, R. F. Dick, J. A. Bluestone, and L. R. Pease
M. B. Raizman, K. F. Austen, and H. R. Katz
M. van de Rijn, I. L. Weissman, and M. Siegelman

1440 Angiotensin II (All)-Related Idiotypic Network. III. Comparative Analysis of Idiotopes and Paratopes Borne by Monoclonal Antibodies Raised against All (AB1) and its Internal Image (AB3)
1450 Phosphorylation-Dephosphorylation of the CD6 Glycoprotein Renders Two Isoforms of 130 and 105 Kilodaltons: Effect of Serum and Protein Kinase C Activators
1456 Structural Basis of K^moh Alloreactivity: Amino Acid Substitutions on the β-Pleated Floor of the Antigen Recognition Site
1463 Mast Cell Heterogeneity: Differential Synthesis and Expression of Glycosphingolipids by Mouse Serosal Mast Cells as Compared to IL-3-Dependent Bone Marrow Culture-Derived Mast Cells before or after Coculture with 3T3 Fibroblasts
1469 Peptides Generated from C-Reactive Protein by a Neutrophil Membrane Protease: Amino Acid Sequence and Effects of Peptides on Neutrophil Oxidative Metabolism and Chemotaxis
1477 Biosynthesis Pathway of gp90^Mel-14, the Mouse Lymph Node-Specific Homing Receptor

IMMUNOPHARMACOLOGY

R. I. Connor, L. Shen, and M. W. Fanger
K. J. Einspahr, R. T. Abraham, C. J. Dick, and P. J. Leibson
P. J. Leibson, D. E. Midthun, K. P. Windebank, and R. T. Abraham
L. M. Flebbe, S. K. Chapes, and D. C. Morrison
Y. Kalechman, M. Albeck, M. Oron, D. Sobelman, M. Gurwith, S. N. Seghal, and B. Sredni

1483 Evaluation of the Antibody-Dependent Cytotoxic Capabilities of Individual Human Monocytes: Role of FcγRI and FcγRII and the Effects of Cytokines at the Single Cell Level
1490 Protein Tyrosine Phosphorylation and p56^Lck Modification in IL-2 or Phorbol Ester-Activated Human Natural Killer Cells
1498 Transmembrane Signaling during Natural Killer Cell-Mediated Cytotoxicity: Regulation by Protein Kinase C Activation
1505 Activation of C3H/HeJ Macrophage Tumoricidal Activity and Cytokine Release by R-Chemotype Lipopolysaccharide Preparations: Differential Effects of IFN-γ
1512 Radioprotective Effects of the Immunomodulator AS101

Continued on page 5
J. C. Kirchheimer, B. R. Binder, and H. G. Remold
J. B. Lefkowitz, A. Morrison, V. Lee, and M. Rogers
V. L. Shepherd, R. Abdolrasulnia, M. Garrett, and H. B. Cowan
P. Zanovello, V. Bronte, A. Rosato, P. Pizzo, and F. Di Virgilio
V. L. Shepherd, R. Abdolrasulnia, M. Garrett, and H. B. Cowan

MICROBIAL IMMUNOLOGY

K. F. Colina, F. B. Perler, I. Masumura, M. Meda, and T. B. Nutman
J. A. Londono, H. Gras-Masse, C. Dubieux, A. Tartar, and P. Druline
S. G. Reed, K. H. Grabstein, D. L. Pihi, and P. J. Morrissey
R. Taghi-Kilani, L. Sekla, and K. T. HayGlass

MOLECULAR BIOLOGY • MOLECULAR GENETICS

F. Mauxion, M. G. Pray, and R. Sen
J. D. Mountz, J. F. Mushinski, J. D. Owens, and F. D. Finkelman
T. V. Rajan, L. F. Moffat, and W. N. Frankel
L. Ramakrishnan, Q. Wu, A. Yue, M. D. Cooper, and N. Rosenberg

TUMOR IMMUNOLOGY

R. B. Alexander and S. A. Rosenberg
E. Gorelik, G. Jay, B. Kwiatkowski, and R. B. Herberman

Author Index