This information is current as of May 9, 2017.

Submission 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
## Contents

### CELLULAR IMMUNOLOGY

<table>
<thead>
<tr>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>J. E. Layton, J. Baker, P. F. Bartlett, and K. Shortman</td>
<td>1227</td>
</tr>
<tr>
<td>E. L. Morgan and W. O. Weigle</td>
<td>1302</td>
</tr>
<tr>
<td>E.-L. Larsson</td>
<td>1323</td>
</tr>
<tr>
<td>B. Caplan, C. Gibbs, and V. Paetkau</td>
<td>1351</td>
</tr>
<tr>
<td>C. T. Lutz, A. L. Glasebrook, and F. W. Fitch</td>
<td>1404</td>
</tr>
<tr>
<td>G. Koch, D. G. Osmond, M. H. Julius, and R. Benner</td>
<td>1447</td>
</tr>
<tr>
<td>J. R. Philp, J. G. McCormack, A. L. Moore, and J. E. Johnson</td>
<td>1469</td>
</tr>
<tr>
<td>B. M. Martin, M. A. Gimbrone, Jr., E. R. Unanue, and R. S. Cotran</td>
<td>1510</td>
</tr>
<tr>
<td>Y. Katsuura, N. Minato, and S.-I. Nishikawa</td>
<td>1529</td>
</tr>
<tr>
<td>E. C. Raps, B. P. Giroir, and Y. Borel</td>
<td>1542</td>
</tr>
<tr>
<td>C. Taswell</td>
<td>1614</td>
</tr>
</tbody>
</table>

**Antigen-Initiated B Lymphocyte Differentiation. XVIII. Pre-progenitor B Cells That Give Primary Adaptive Responses Are IgM+IgD—**

**In Vitro Regeneration of Resting Lymphocytes from Stimulated Lymphocytes and Its Inhibition by Insulin**

**Regulation of the Immune Response. III. The Role of Macrophages in the Potentiation of the Immune Response by Fc Fragments**

**Mechanism of T Cell Activation. II. Antigen- and Lectin-Dependent Acquisition of Responsiveness to TCGF Is a Nonspecific, Active Response of Resting T Cells**

**The Fine Specificity of Immune Suppression to Individual Nucleosides**

**Properties of Sodium Dodecyl Sulfate-Denatured Interleukin 2**

**A Lymphokine Resembling Transfer Factor That Stimulates MIF Production by Nonsensitive Lymphocytes**

**Stimulation of Nonlymphoid Mesenchymal Cell Proliferation by a Macrophage-Derived Growth Factor**

**Role of Virus-Replicating T Cells in the Suppression of Delayed-Type Hypersensitivity**

**The Fine Specificity of Immune Suppression to Individual Nucleosides**

**Limiting Dilution Assays for the Determination of Immunocompetent Cell Frequencies. I. Data Analysis**

### CLINICAL IMMUNOLOGY

<table>
<thead>
<tr>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. Santoli, W. Hall, L. Kastrukoff, R. P. Lisak, B. Perussia, G. Trinchieri, and H. Koprowski</td>
<td>1274</td>
</tr>
<tr>
<td>J. T. Kurnick, A. R. Hayward, and P. Altevogt</td>
<td>1307</td>
</tr>
<tr>
<td>S. A. Rosenberg and P. E. Lipsky</td>
<td>1341</td>
</tr>
<tr>
<td>T. Abo, T. Kawate, K. Itoh, and K. Kumagai</td>
<td>1360</td>
</tr>
<tr>
<td>T. Kawate, T. Abo, S. Hinuma, and K. Kumagai</td>
<td>1364</td>
</tr>
<tr>
<td>D. A. Brooks, I. G. R. Beckman, J. Bradley, P. J. McNamara, M. E. Thomas, and H. Zola</td>
<td>1373</td>
</tr>
<tr>
<td>J. W. Singer, C. Ernst, C. K. Whalen, L. Steinmann, and P. J. Fialkow</td>
<td>1390</td>
</tr>
<tr>
<td>T. Uchiyama, S. Broder, and T. A. Waldmann</td>
<td>1393</td>
</tr>
</tbody>
</table>

**Cytotoxic Activity and Interferon Production by Lymphocytes from Patients with Multiple Sclerosis**

**Helper and Suppressor-Inducer Activity of Human T Cells and Their Cloned Progeny Maintained in Long-Term Culture**

**The Role of Monocytes in Pokeweed Mitogen-Stimulated Human B Cell Activation: Separate Requirements for Intact Monocytes and a Soluble Monocyte Factor**


**Studies on the Bioperiodicity of the Immune Response. II. Co-variations of Murine T and B Cells and a Role of Corticosteroid**

**Human Lymphocyte Markers Defined by Antibodies Derived from Somatic Cell Hybrids. IV. A Monoclonal Antibody Reacting Specifically with a Subpopulation of Human B Lymphocytes**

**Single or Multicellular Origin of Human T Lymphocyte Colonies in Vitro: Modification by 12-O-Tetradecanoylphorbol 13-Acetate (TPA)**

**A Monoclonal Antibody (Anti-Tac) Reactive with Activated and Functionally Mature Human T Cells. I. Production of Anti-Tac Monoclonal Antibody and Distribution of Tac (+) Cells**

**A Monoclonal Antibody (Anti-Tac) Reactive with Activated and Functionally Mature Human T Cells. II. Expression of Tac Antigen on Activated Cytotoxic Killer T Cells,Suppressor Cells, and on One of Two Types of Helper T Cells**

*Continued on page 4*
Continued from page 3


R. F. Todd III, L. M. Nadler, and S. F. Schlossman

S. A. Rosenberg, F. S. Ligler, V. Ugolini, and P. E. Lipsky

G. Janossy, N. Tidman, J. B. Dale, W. A. Simpson, C. E. Rudd and J. G. Kaplan

C. W. Distelhorst and B. M. Benutto

C. E. Rudd and J. G. Kaplan

1409 Characterization of a Monoclonal Antibody (4F2) That Binds to Human Monocytes and to a Subset of Activated Lymphocytes

1435 Antigens on Human Monocytes Identified by Monoclonal Antibodies

1473 A Monoclonal Antibody That Identifies Human Peripheral Blood Monocytes Recognizes the Accessory Cells Required for Mitogen-Induced T Lymphocyte Proliferation

1499 Blastogenic Responses of Human Lymphocytes to Structurally Defined Polypeptide Fragments of Streptococcal M Protein

1547 Human T Lymphocyte Cooperation in Proliferative Responses to Specific Antigens, Mitogens, and Alloantigens

1608 Distribution of T Lymphocyte Subsets in the Human Bone Marrow and Thymus: An Analysis with Monoclonal Antibodies

1630 Glucocorticoid Receptor Content of T Lymphocytes: Evidence for Heterogeneity

IMMUNOCHEMISTRY

F. C. Kull, Jr. and P. Cuatrecasas


L. K. Curtiss and T. S. Edgington

L. M. McManus and P. K. Nakane

E. P. Lester, P. Lemkin, L. Lipkin, and H. L. Cooper

Y. Kaufmann, and G. Berke

M. Nonaka, N. Yamaguchi, S. Natsuume-Sakai, and M. Takahashi

M. Nonaka, S. Natsuume-Sakai, and M. Takahashi

S. Meuer, U. Ecker, U. Haddig, and D. Bitter-Suermann

P. L. Simon and W. F. Willoughby

D. R. Schultz and P. I. Arnold

D. P. Beebe and N. R. Cooper

B. W. Needleman, J. M. Weiler, and T. L. Feldbusch


1279 Preliminary Characterization of the Tumor Cell Cytotoxin in Tumor Necrosis Serum

1346 Structural Analysis of the μ-Chains Synthesized by Fetal Liver Hybridomas

1382 The Biologic Activity of the Immunoregulatory Lipoprotein, LDL-In, is Independent of Its Free Fatty Acid Content

1421 Mouse C1q: Light and Electron Microscopic Immunohistochemical Localization

1428 A Two-Dimensional Electrophoretic Analysis of Protein Synthesis in Resting and Growing Lymphocytes in Vitro

1443 Cell Surface Glycoproteins of Cytotoxic T Lymphocytes Induced in Vivo and in Vitro

1489 The Complement System of Rainbow Trout (Salmo gairdneri). I. Identification of the Serum Lytic System Homologous to Mammalian Complement

1495 The Complement System of Rainbow Trout (Salmo gairdneri). II. Purification and Characterization of the Fifth Component (C5)

1506 Platelet-Serotonin Release by C3a and C5a: Two Independent Pathways of Activation

1534 The Role of Subcellular Factors in Pulmonary Immune Function: Physicochemical Characterization of Two Distinct Species of Lymphocyte-Activating Factor Produced by Rabbit Alveolar Macrophages

1558 Activation of First Component of Complement (C1) in Guinea Pig Serum by a Polysaccharide is Prevented by C1 Inhibitor

1562 Neutralization of Vesicular Stomatitis Virus (HSV) by Human Complement Requires a Natural IgM Antibody Present in Human Serum

1586 The Third Component of Complement Inhibits Human Lymphocyte Blastogenesis

1624 Functional and Partial Chemical Characterization of the Carbohydrate Moieties of the IgG Receptor on Rat Basophilic Leukemia Cells and Rat Mast Cells

IMMUNOGENETICS AND TRANSPLANTATION

J. L. Press

C. J. Lucas, R. B. Levy, and G. M. Shearer

A. R. Brown and A. Nisonoff

A. R. Brown, E. Lamoyi, and A. Nisonoff

S. O. Sharrow, B. J. Mathieson, and A. Singer

T. Kohmo, H. Yamamoto, T. Mizuochi, and T. Hamako

1234 The CBA/N Defect Defines Two Classes of T Cell-Dependent Antigens

1255 Cytotoxic T Lymphocyte Responses against Alloantigens Exhibrit Preferential Effector Cell Activity for H-2K or H-2D Region Products Similar to That for H-2 Restricted Responses

1263 An Intrastain Cross-Reactive Idiotype Associated with Anti-α-Azophenylarsionate Antibodies of BALB/c Mice

1266 Relationship of Idiotypes of the Anti-α-Azophenylarsionate Antibodies of A/J and BALB/c Mice

1327 Cell Surface Appearance of Unexpected Host MHC Determinants on Thymocytes from Radiation Bone Marrow Chimeras

1378 Detection of the Dominant Expression of the TEPC-15 Idiotypic Determinant(s) on Phosphorylcholine-Specific Suppressor T Lymphocytes in Vitro

Continued on page 5
Continued from page 4

L. B. Wolosin and A. H. Greenberg 1456 Genetics of Natural Antitumor Antibody Production: Antibodies to MHC-Linked Determinants Detected in the Serum of Unstimulated Mice


H. Fujirawa, R. B. Levy, and G. M. Shearer 1522 Detection of Shared H-2K\(^*\) and H-2D\(^*\) Antigens That Function as Self Determinants for Cell-Mediated Lympholysis to Trinitrophenyl-Self

M. Okada, T. H. Stanton, R. C. Kuppers, and C. S. Henney 1635 The Differentiation of Cytotoxic T Cells in Vitro. IV. Interleukin-2 Production in Primary Mixed Lymphocyte Cultures Involves Cooperation between Qa-1\(^*\) and Qa-1 \(\cdot\) Helper\(^*\) T Cells

IMMUNOPATHOLOGY

L. B. Schwartz, R. A. Lewis, D. Seldin, and K. F. Austen 1290 Acid Hydrolases and Trypsin from Secretory Granules of Dispersed Human Lung Mast Cells


R. Hohlfeld, I. Kalies, F. Heinz, J. R. Kalden, and H. Wekerle 1355 Autoimmune Rat T Lymphocytes Monospecific for Acetylcholine Receptors: Puriﬁcation and Fine Specificity

M.-F. Tsan and R. C. Denison 1387 Oxidation of n-Formyl Methionyl Chemotactic Peptide by Human Neutrophils

S. D. Cohen, E. Israel, B. Spiess-Meier, and M. A. Wainberg 1415 Plasminogen Activator is an Apparent Lymphocyte Mitogen

A. Fischer, A. Durandy, and C. Griscelli 1452 Role of Prostaglandin E\(_2\) in the Induction of Nonspeciﬁc T Lymphocyte Suppressor Activity

Z. Lando, D. Teitelbaum, and R. Arnon 1526 The Immunologic Response in Mice Unresponsive to Experimental Allergic Encephalomyelitis

D. E. Singer, M. J. Moore, and R. M. Williams 1553 EAE in Rat Bone Marrow Chimeras: Analysis of the Cellular Mechanism of BN Resistance

J. C. Mathison and R. J. Ulevitch 1575 In Vivo Interaction of Bacterial Lipopolysaccharide (LPS) with Rabbit Platelets: Modulation by C3 and High Density Lipoproteins

F. M. Melewicz, R. S. Zeiger, M. H. Mellon, R. D. O'Connor, and H. L. Spiegelberg 1592 Increased Peripheral Blood Monocytes with Fc Receptors for IgE in Patients with Severe Allergic Disorders


TUMOR IMMUNOLOGY

N. Haran-Ghara, R. Krauthgamer, and A. Peled 1241 Malignant Cell Arrest in Thymus and Spleen of Mice Bearing Transplanted Tumors

S. Gillis and J. Watson 1245 Interleukin-2 Induction of Hapten-Speciﬁc Cytolytic T Cells in Nude Mice

C. Riccardi, T. Barlozzi, A. Santoni, R. B. Herberman, and C. Cesarini 1284 Transfer to Cyclophosphamide-Treated Mice of Natural Killer (NK) Cells and in Vivo Natural Reactivity against Tumors

M.-Y. Yeh, I. Hellström, and K. E. Hellström 1312 Clonal Variation in Expression of a Human Melanoma Antigen Defined by a Monoclonal Antibody

M. A. Cheever, P. D. Greenberg, and A. Fefer 1318 Speciﬁc Adoptive Therapy of Established Leukemia with Syngeneic Lymphocytes Sequentially Immunized in Vivo and in Vitro and Nonspeciﬁcally Expanded by Culture with Interleukin 2

D. R. Parkinson, R. P. Brightman, and S. D. Waksal 1460 Altered Natural Killer Cell Biology in C57BL/6 Mice after Leukemogenic Split-Dose Irradiation


S. C. Wright and B. Bonavida 1516 Selective Lysis of NK-Sensitive Target Cells by a Soluble Mediator Released from Murine Spleen Cells and Human Peripheral Blood Lymphocytes

D. Hudig, T. Haverty, C. Fulcher, D. Redelman, and J. Mendelsohn 1569 Inhibition of Human Natural Cytotoxicity by Macromolecular Antiproteases

C. W. Reynolds and R. B. Herberman 1581 In Vitro Augmentation of Rat Natural Killer (NK) Cell Activity

S. A. Anderson, P. C. Isakson, E. Puré, M. Multhead, J. W. Uhr, and E. S. Vitetta 1603 Immunosuppression in a Murine B Cell Leukemia (BCL): Role of an Adherent Cell in the Suppression of Primary in Vitro Antibody Responses

Continued on page 6
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell-Mediated Immunity in Herpes Simplex Virus-Infected Mice: H-2 Mapping of the Delayed-Type Hypersensitivity Response and the Antiviral T Cell Response</td>
<td>1260</td>
</tr>
<tr>
<td>Sex-Related Differences in the Rapid Production of Cytotoxic Spleen Cells Active against Uninfected Myotibers during Coxsackievirus B-3 Infection</td>
<td>1336</td>
</tr>
<tr>
<td>Genetically Confirmed Defect in Anti-Salmonella Antibody Formation Renders CBA/N Mice Innately Susceptible to Salmonella typhimurium Infection</td>
<td>1368</td>
</tr>
<tr>
<td>Antibody to Staphylococcal Enterotoxin A-Induced Human Immune Interferon (IFNγ)</td>
<td>1620</td>
</tr>
<tr>
<td>Evidence for Linkage of Murine β2-Microglobulin to H-3 and Ly-4</td>
<td>1644</td>
</tr>
<tr>
<td>Genetic Control of Experimental Autoimmune Myasthenia Gravis in Mice. II. Lymphocyte Proliferative Response to Acetylcholine Receptor is Dependent on Lyt-1^−23^ Cells</td>
<td>1646</td>
</tr>
<tr>
<td>The Threat of Mouse Pox</td>
<td>1648</td>
</tr>
<tr>
<td>Announcements</td>
<td>1649</td>
</tr>
<tr>
<td>Author Index</td>
<td>1652</td>
</tr>
</tbody>
</table>