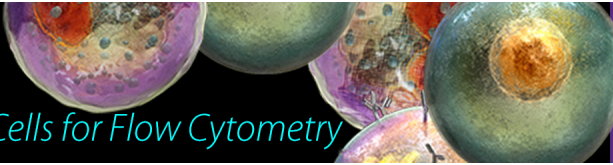


Veri-Cells™

Verified Lyophilized Control Cells for Flow Cytometry



The Journal of
Immunology

123 (3)

J Immunol 1979; 123:961-1428; ;
<http://www.jimmunol.org/content/123/3.citation>

This information is current as
of January 16, 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

- | | | |
|--|------|---|
| B. A. Araneo, R. L. Yowell, and E. E. Sercarz | 961 | <i>Ir</i> Gene Defects May Reflect a Regulatory Imbalance. I. Helper T Cell Activity Revealed in a Strain Whose Lack of Response is Controlled by Suppression |
| P. S. Hochman and G. Cudkowicz | 968 | Suppression of Natural Cytotoxicity by Spleen Cells of Hydrocortisone-Treated Mice |
| J. M. Alvarez, A. Silva, and M. O. de Landazuri | 977 | Human T Cell Growth Factor. I. Optimal Conditions for Its Production |
| A. M. Kruisbeek and G. C. B. Astaldi | 984 | Distinct Effects of Thymic Epithelial Culture Supernatants on T Cell Properties of Mouse Thymocytes Separated by the Use of Peanut Agglutinin |
| S. H. Ohanian, S. I. Schlager, M. Yamazaki, and B. Ishida | 1014 | Effect of Specific Phospholipids on the Antibody-Complement-Mediated Killing of Nucleated Cells |
| T. Kishimoto, S. Shigemoto, T. Watanabe, and Y. Yamamura | 1039 | Demonstration of Phosphorylcholine-Specific IgE B Cells in CBA/N Mice |
| P. J. Jensen, D. B. Amos, and H. S. Koren | 1127 | Depletion of NK by Cellular Immunoabsorption |
| R. Finberg, M. I. Green, B. Benacerraf, and S. J. Burakoff | 1205 | The Cytolytic T Lymphocyte Response to Trinitrophenyl-Modified Syngeneic Cells. I. Evidence for Antigen-Specific Helper T Cells |
| R. Finberg, S. J. Burakoff, B. Benacerraf, and M. I. Green | 1210 | The Cytolytic T Lymphocyte Response to Trinitrophenyl-Modified Syngeneic Cells. II. Evidence for Antigen-Specific Suppressor T Cells |
| B. Ghebrehiwet, R. G. Medicus, and H. J. Müller-Eberhard | 1285 | Potential of Antibody-Dependent Cell-Mediated Cytotoxicity by Target Cell-Bound C3b |
| D. W. Thomas, S. K. Meltz, and G. D. Wilner | 1299 | Nature of T Lymphocyte Recognition of Macrophage-Associated Antigens. II. Macrophage Determination of Guinea Pig T Cell Responses to Human Fibrinopeptide B |
| K. E. Gregoire, I. Goldschneider, R. W. Barton, and F. J. Bollum | 1347 | Ontogeny of Terminal Deoxynucleotidyl Transferase-Positive Cells in Lymphohemopoietic Tissues of Rat and Mouse |
| T. Hamano, S. Kai, S. Fujita, and K. Nagai | 1371 | Studies on the Kinetics of Hemopoietic Stem Cells and Immune Responses to the Hapten-Carrier Conjugate |
| S. T. Hoffstein | 1395 | Ultrastructural Demonstration of Calcium Loss from Local Regions of the Plasma Membrane of Surface-Stimulated Human Granulocytes |

CLINICAL IMMUNOLOGY

- | | | |
|---|------|--|
| T. Miyawaki, H. Seki, M. Kubo, and N. Taniguchi | 1092 | Suppressor Activity of T Lymphocytes from Infants Assessed by Co-culture with Unfractionated Adult Lymphocytes in the Pokeweed Mitogen System |
| S.-i. Nishikawa, T. Hirata, and T. Izumi | 1106 | PPD-Induced Immunoglobulin Production in Human Peripheral Blood Lymphocytes. II. Separation of PPD-Reactive Helper T Cells from PWM-Reactive Helper T Cells in Polyclonal Immunoglobulin in Production of Human Peripheral Blood Lymphocytes |
| G. B. Ferrara, A. J. Strelkauskas, A. Longo, J. McDowell, E. J. Yunis, and S. F. Schlossman | 1272 | Markers of Human T Cell Subsets Identified by Alloantisera |
| B. F. Haynes and A. S. Fauci | 1289 | Activation of Human B Lymphocytes. XIII. Characterization of Multiple Populations of Naturally Occurring Immunoregulatory Cells of Polyclonally Induced <i>in Vitro</i> Human B Cell Function |
| J. K. Seeley, G. Masucci, A. Poros, E. Klein, and S. H. Golub | 1303 | Studies on Cytotoxicity Generated in Human Mixed Lymphocyte Cultures. II. Anti-K562 Effectors are Distinct from Allospecific CTL and Can Be Generated from NK-Depleted T Cells |
| E. L. Reinherz, P. C. Kung, G. Goldstein, and S. F. Schlossman | 1312 | A Monoclonal Antibody with Selective Reactivity with Functionally Mature Human Thymocytes and All Peripheral Human T Cells |
| D. H. Vesole, J.-M. Goust, J. W. Fett, and H. H. Fudenberg | 1322 | Stimulators and Inhibitors of Lymphocyte DNA Synthesis in Supernatants from Human Lymphoid Cell Lines |
| T. J. Lawley, H. M. Moutsopoulos, S. I. Katz, A. N. Theofilopoulos, T. M. Chused, and M. M. Frank | 1382 | Demonstration of Circulating Immune Complexes in Sjögren's Syndrome |

IMMUNOCHEMISTRY

S. P. Hauptman, E. Kansu, and S. Godfrey	1007	Macromolecular Insoluble Cold Globulin (MICG): A Novel Protein from Mouse Lymphocytes. IV. Evidence for the Plasma Membrane Distribution of MICG
S. M. Rose and W. M. Kuehl	1024	The Carboxy-Terminal Peptides of <i>in Vitro</i> Precursor and <i>in Vivo</i> Mature κ Light Chains Are Identical
H. Nagura, P. Brandtzaeg, P. K. Nakane, and W. R. Brown	1044	Ultrastructural Localization of J Chain in Human Intestinal Mucosa
E. R. Podack, W. P. Kolb, Alfred F. Esser, and H. J. Müller-Eberhard	1071	Structural Similarities between C6 and C7 of Human Complement
S. H. Gregory and M. Kern	1078	The Heterogeneous Distribution of 5'-Nucleotidase among Rabbit Lymphocytes
M. F. Mescher and R. R. Pollock	1155	Murine Cell Surface Immunoglobulin: Two Forms of δ -Heavy Chain
S. Sugii, K. Takeo, and E. A. Kabat	1162	Binding Constants of NZB Myeloma Antidextran for Dextran and Isomaltose Oligosaccharides Determined by Affinity Electrophoresis
R. L. Wolf and E. Merler	1169	Role of Lipids in the Immune Response. I. Localization to a Lipid-Containing Fraction of the Active Moiety of an Inhibitor (SIF) of Lymphocyte Proliferation
R. L. Wolf and E. Merler	1175	Role of Lipids in the Immune Response. II. An Enhancer of Antibody Production (APS) That is a Lipid Closely Associated with Lymphocyte Mitogenic Factor (LMF)
T. A. Gaither, C. H. Hammer, and M. M. Frank	1195	Studies of the Molecular Mechanisms of C3b Inactivation and a Simplified Assay of β 1H and the C3b Inactivator (C3bINA)
G. R. Nemerow, K-i. Yamamoto, and T. F. Lint	1245	Restriction of Complement-Mediated Membrane Damage by the Eighth Component of Complement: A Dual Role for C8 in the Complement Attack Sequence
F. D. Finkelman, V. L. Woods, A. Berning, and I. Scher	1253	Demonstration of Mouse Serum IgD
A. S. Fuks and Y. Weinstein	1266	20 α Hydroxysteroid Dehydrogenase (20 α SDH) Activity in New Zealand Mice T Lymphocytes and Bone Marrow Cells: Effect of Age, Sex, and Castration
J. E. Pennington, W. J. Matthews, Jr., J. T. Marino, Jr., and H. R. Colten	1318	Cyclophosphamide and Cortisone Acetate Inhibit Complement Biosynthesis by Guinea Pig Bronchoalveolar Macrophages
A. B. Gorin and J. Gould	1339	Immunoglobulin Synthesis in the Lungs and Caudal Mediastinal Lymph Node of Sheep
S. K. Law, N. A. Lichtenberg, and R. P. Levine	1388	Evidence for an Ester Linkage between the Labile Binding Site of C3b and Receptive Surfaces
J. M. Andrews and R. D. Baillie	1403	The Enzymatic Nature of Human C1r: A Subcomponent of the First Component of Complement

IMMUNOGENETICS AND TRANSPLANTATION

T. G. Wegmann, T. R. Mosmann, G. A. Carlson, O. Olijnyk, and B. Singh	1020	The Ability of the Murine Placenta to Absorb Monoclonal Anti-fetal H-2K Antibody from the Maternal Circulation
J. L. Claffin and S.-P. L. Wei	1051	Control of V κ Expression in the Mouse. I. Unexpected Expression of the V κ Allele, <i>Igk-Pc^b</i> , in a Somatic Cell Hybrid of AKR (<i>Igk-Pc^a</i>) Origin
S. L. Swain, P. R. Panfili, R. W. Dutton, and I. Lefkovits	1062	Frequency of Allogeneic Helper T Cells Responding to Whole H-2 Differences and to an H-2K Difference Alone
L. J. Rosenwasser and A. S. Rosenthal	1141	Adherent Cell Function in Murine T Lymphocyte Antigen Recognition. III. A Macrophage-Mediated Immune Response Gene Function in the Mouse
G. E. Ranges and M. M. Azar	1151	Inheritance of Tolerance Susceptibility to Human γ -Globulin in Congenic Mice
J. G. Woodward and R. A. Daynes	1227	Cell-Mediated Immune Response to Syngeneic UV-Induced Tumors. IV. The Presence of I-A and I-E Subregion-Coded Antigens on the Accessory Cell Required for the <i>in Vitro</i> Differentiation of Cytotoxic T Lymphocytes
D. L. Kastner, R. R. Rich, and F.-W. Shen	1232	<i>Qa-1</i> -Associated Antigens. I. Generation of H-2-Nonrestricted Cytotoxic T Lymphocytes Specific for Determinants of the <i>Qa-1</i> Region
D. L. Kastner, R. R. Rich, and L. Chu	1239	<i>Qa-1</i> -Associated Antigens. II. Evidence for Functional Differentiation from H-2K and H-2D Antigens

Continued on page 4

IMMUNOPATHOLOGY

- K. Miller, Z. Weintraub, and E. Kagan 1029 Manifestations of Cellular Immunity in the Rat after Prolonged Asbestos Inhalation. I. Physical Interactions between Alveolar Macrophages and Splenic Lymphocytes
- J. Wybran, T. Appelboom, J.-P. Famaey, and A. Govaerts 1068 Suggestive Evidence for Receptors for Morphine and Methionine-Enkephalin on Normal Human Blood T Lymphocytes
- A. S. D. Pang, A. Katz, and J. O. Minta 1117 C3 Deposition in Cholesterol-Induced Atherosclerosis in Rabbits: A Possible Etiologic Role for Complement in Atherogenesis
- D. O. Willenborg 1145 Experimental Allergic Encephalomyelitis in the Lewis Rat: Studies on the Mechanism of Recovery from Disease and Acquired Resistance to Reinduction
- J. M. Lynch, G. Z. Lotner, S. J. Betz, and P. M. Henson 1219 The Release of a Platelet-Activating Factor by Stimulated Rabbit Neutrophils
- Y. Ohsugi and M. E. Gershwin 1260 Studies of Congenitally Immunologic Mutant New Zealand Mice. III. Growth of B Lymphocyte Clones in Congenitally Athymic (Nude) and Hereditarily Asplenic (Dh/+) NZB Mice: A Primary B Cell Defect

TUMOR IMMUNOLOGY

- M. R. Knapp, P. P. Jones, S. J. Black, E. S. Vitetta, S. Slavin, and S. Strober 992 Characterization of a Spontaneous Murine B Cell Leukemia (BCL₁). I. Cell Surface Expression of IgM, IgD, Ia, and FcR
- M. R. Knapp, E. Severinson-Gronowicz, J. Schröder, and S. Strober 1000 Characterization of a Spontaneous Murine B Cell Leukemia (BCL₁). II. Tumor Cell Proliferation and IgM Secretion after Stimulation by LPS
- B. S. Wang and J. A. Mannick 1057 Relationship between Lymphocyte Proliferation and Tumor-Specific Cytotoxicity after Immune RNA Treatment
- J. W. Rohrer and R. G. Lynch 1083 Immunoregulation of Localized and Disseminated Murine Myeloma: Antigen-Specific Regulation of MOPC-315 Stem Cell Proliferation and Secretory Cell Differentiation
- M. R. Hall, L. F. Qualtiere, and P. Meyers 1097 Cellular and Humoral Immune Reactivity to Tumor-Associated Antigens in Chickens Infected with Rous Sarcoma Virus
- H. M. Gebel, R. G. Hoover, and R. G. Lynch 1110 Lymphocyte Surface Membrane Immunoglobulin in Myeloma. I. M315-Bearing T Lymphocytes in Mice with MOPC-315
- F. S. Ligler, E. S. Vitetta, R. G. Smith, J. B. Himes, J. W. Uhr, E. P. Frenkel, and J. R. Kettman 1123 An Immunologic Approach for the Detection of Tumor Cells in the Peripheral Blood of Patients with Malignant Lymphoma; Implications for the Diagnosis of Minimal Disease
- T. Hirano, T. Kishimoto, T. Kuritani, A. Muraguchi, Y. Yamamura, P. Ralph, and R. A. Good 1133 *In Vitro* Immune Response of Human Peripheral Lymphocytes. IV. Specific Induction of Human Suppressor T Cells by an Antiserum to the T Leukemia Cell Line HSB
- R. A. Warnke, S. Slavin, R. L. Coffman, E. C. Butcher, M. R. Knapp, S. Strober, and I. L. Weissman 1181 The Pathology and Homing of a Transplantable Murine B Cell Leukemia (BCL₁)
- J. C. Scornik, P. Ruiz, and E. M. Hoffman 1278 Suppression of Cell-Mediated Tumor Cell Lysis and Complement-Induced Cytotoxicity by Trypan Blue
- E. Parthenais and S. Haskill 1329 Immunity to the T1699 Murine Mammary Tumor. I. Thymic Influence and Long-Term Effect of Irradiation on the Humoral Response
- E. Parthenais and S. Haskill 1334 Immunity to the T1699 Murine Mammary Tumor. II. Thymic Influence on the *in Situ* Inflammatory Response, Metastatic Growth, and Invasiveness
- R. M. W. de Waal, I. M. H. A. Cornelissen, P. J. A. Capel, and R. A. P. Koene 1353 Passive Enhancement of Mouse Tumor Allografts by Alloantibodies is Fc-Dependent
- B. J. Rup, J. L. Spence, J. D. Hoelzer, R. B. Lewis, C. R. Carpenter, A. S. Rubin, and H. R. Bose, Jr. 1362 Immunosuppression Induced by Avian Reticuloendotheliosis Virus: Mechanism of Induction of the Suppressor Cell

Continued on page 5

VIRAL AND MICROBIAL IMMUNOLOGY

L. F. Lee	1088	Macrophage Restriction of Marek's Disease Virus Replication and Lymphoma Cell Proliferation
G. Hess, J. W.-K. Shih, W. Arnold, J. L. Gerin, and K.-H. Meyer zum Büschenfelde	1189	Demonstration and Partial Characterization of 22-nm HBsAg and Dane Particles of Subtype HBsAg/ady
R. L. Hirsch and D. E. Griffin	1215	The Pathogenesis of Sindbis Virus Infection in Athymic Nude Mice
R. B. Effros, M. E. Frankel, W. Gerhard, and P. C. Doherty	1343	Inhibition of Influenza-Immune T Cell Effector Function by Virus-Specific Hybridoma Antibody
E. M. Anders, P. M. Peppard, W. H. Burns, and D. O. White	1356	<i>In Vitro</i> Antibody Response to Influenza Virus. I. T Cell Dependence of Secondary Response to Hemagglutinin
H. J. A. Jörbeck, S. B. Svenson, and A. A. Lindberg	1376	Immunochemistry of <i>Salmonella</i> O-Antigens: Specificity of Rabbit Antibodies against the O-Antigen 4 Determinant Elicited by Whole Bacteria and O-Antigen 4 Specific Saccharide-Protein Conjugates
S. W. Chensue and D. L. Boros	1409	Modulation of Granulomatous Hypersensitivity. I. Characterization of T Lymphocytes Involved in the Adoptive Suppression of Granuloma Formation in <i>Schistosoma mansoni</i> -Infected Mice

COMMUNICATIONS

A. Budkowska, B. Kalinowska, and A. Nowosiński	1415	Identification of Two HBeAg Subspecificities Revealed by Chemical Treatment and Enzymatic Digestion of Liver Derived HBcAg
J. S. Nowak, O. Lassila, K. Granfors, and P. Toivanen	1417	Cells with Fc IgG Receptors in 69-Hr-Old Chicken Embryo
C. G. Orosz and F. H. Bach	1419	Alloantigen-Activated CML Suppression Independent of Cytotoxic Activity
B. J. Kuttner and J. J. Woodruff	1421	Adherence of Recirculating T and B Lymphocytes to High Endothelium of Lymph Nodes <i>in Vitro</i>
J. Silver	1423	Trans Gene Complementation of I-E Subregion Antigens
Announcements	1426	
Erratum	1428	
Author Index	1429	