

# Contents

---

## CELLULAR IMMUNOLOGY

---

- |   |      |   |
|---|------|---|
| M. A. Aldo-Benson and M. D. Benson  | 2390 | SSA Suppression of Immune Response <i>in Vitro</i> : Evidence for an Effect on T Cell-Macrophage Interaction  |
| J. C. Lee, A. J. Hapel, and J. N. Ihle  | 2393 | Constitutive Production of a Unique Lymphokine (IL 3) by the WEHI-3 Cell Line   |
| P. K. A. Mongini and W. E. Paul   | 2405 | T Cell Regulation of the IgG2a Response to TNP-Ficoll: Evidence That Allotype Congenic Mice Contain Both Helper Cells That Preferentially Enhance IgG2a Synthesis and Suppressor Cells That Specifically Suppress IgG2a Synthesis |
| J. Y. Niederkorn and J. W. Streilein  | 2470 | Induction of Anterior Chamber-Associated Immune Deviation (ACAID) by Allogeneic Intraocular Tumors Does Not Require Splenic Metastases  |
| K-C. Lee and M. Wong  | 2487 | Functional Heterogeneity of Culture-Grown Bone Marrow-Derived Macrophages. II. Lymphokine Stimulation of Antigen-Presenting Function  |
| J. A. O'Malley, A. Nussbaum-Blumenson, D. Sheedy, B. J. Grossmayer, and H. Ozer | 2522 | Identification of the T Cell Subset That Produces Human $\gamma$ Interferon   |
| J. W. Moorhead and M-S. Sy  | 2533 | Antigen Receptors on Murine T Lymphocytes in Contact Sensitivity. II. Preparation and Characterization of Syngeneic Anti-Idiotypic Serum against DNFB-Sensitized T Cells  |
| K. Takatsu, Y. Sano, N. Hashimoto, S. Tomita, and T. Hamaoka                    | 2575 | Acceptor Site(s) for T Cell-Replacing Factor (TRF) on B Lymphocytes. I. TRF-Substituting Activity of Anti-TRF Acceptor Site(s) Antibody in the Triggering of B Cells  |
| A. Tominaga, K. Takatsu, and T. Hamaoka   | 2581 | Acceptor Site(s) for T Cell-Replacing Factor (TRF) on B Lymphocytes. II. Activation of B Cells by Cross-Linkage or Aggregation of the TRF Acceptor Molecule   |
| S. Kyoizumi, N. Noro, K. Teshigawara, S. Sakaguchi, and T. Masuda               | 2586 | A Cloned Cell Line, Mk <sub>1</sub> , Possessing Ia Antigens and Accessory Cell Activity  |
| E. Eerola, O. Lassila, D. G. Gilmore, and A. Toivanen                           | 2652 | Induction of B Cell Differentiation <i>in Vitro</i> by Bursal Epithelium  |
| J. M. Williams, H. M. Shapiro, E. L. Milford, and T. B. Strom                   | 2676 | Multiparameter Flow Cytometric Analysis of Lymphocyte Subpopulation Activation in Lectin-Stimulated Cultures  |
| M. J. Stadecker, D. J. Wyler, and J. A. Wright                                  | 2739 | Ia Antigen Expression and Antigen-Presenting Function by Macrophages Isolated from Hypersensitivity Granulomas  |
| S. Landolfo, B. Arnold, and M. Suzan  | 2807 | Immune ( $\gamma$ ) Interferon Production by Murine T Cell Lymphomas  |

---

## CLINICAL IMMUNOLOGY

---

- |  |      |  |
|--|------|--|
| M. A. Rodriguez, J. L. Ceuppens, and J. S. Goodwin | 2422 | Regulation of IgM Rheumatoid Factor Production in Lymphocyte Cultures from Young and Old Subjects  |
| J. L. Ceuppens and J. S. Goodwin                   | 2429 | Regulation of Immunoglobulin Production in Pokeweed Mitogen-Stimulated Cultures of Lymphocytes from Young and Old Adults   |
| T. R. Cupps, L. C. Edgar, and A. S. Fauci          | 2453 | Suppression of Human B Lymphocyte Function by Cyclophosphamide   |
| T. Timonen, J. R. Ortaldo, and R. B. Herberman     | 2514 | Analysis by a Single Cell Cytotoxicity Assay of Natural Killer (NK) Cell Frequencies among Human Large Granular Lymphocytes and of the Effects of Interferon on Their Activity |

Continued on page 4

G. C. B. Astaldi, E. P. Wright, Ch. Willems, W. P. Zeijlemaker, and M. C. Janssen	2539	Increase of Hybridoma Formation by Human Lymphocytes after Stimulation <i>in Vitro</i> ; Effect of Antigen, Endothelial Cells, and PWM
C. D. Alley, G. S. Nash, and R. P. MacDermott	2604	Marked <i>in Vitro</i> Spontaneous Secretion of IgA by Human Rib Bone Marrow Mononuclear Cells
O. Carpen, I. Virtanen, and E. Saksela	2691	Ultrastructure of Human Natural Killer Cells: Nature of the Cytolytic Contacts in Relation to Cellular Secretion
C. Fournier and J. Charreire	2698	Autologous Mixed Lymphocyte Reaction in Man. II. Autoreactive and Alloreactive Cells Belong to Two Different T Cell Subsets
Y. Kobayashi, M. Asada, M. Higuchi, and T. Osawa	2714	Human T Cell Hybridomas Producing Lymphokines. I. Establishment and Characterization of Human T Cell Hybridomas Producing Lymphotoxin and Migration Inhibitory Factor
J. A. Hank and P. M. Sondel	2734	Soluble Bacterial Antigen Induces Specific Helper and Cytotoxic Responses by Human Lymphocytes <i>in Vitro</i>

---

**IMMUNOCHEMISTRY**

---

J. W. Goding	2416	Asymmetrical Surface IgG on MOPC-21 Plasmacytoma Cells Contains One Membrane Heavy Chain and One Secretory Heavy Chain
S. Nakayama, C. Mold, H. Gewurz, and T. W. Du Clos	2435	Opsonic Properties of C-reactive Protein <i>in Vivo</i>
H. Lemke and G. J. Hämmerling	2465	Clustering of Antigenic Determinants on H-2 Molecules
K. M. Edwards, H. Gewurz, T. F. Lint, and C. Mold	2493	A Role for C-Reactive Protein in the Complement-Mediated Stimulation of Human Neutrophils by Type 27 <i>Streptococcus pneumoniae</i>
R. J. Ziccardi	2500	Spontaneous Activation of the First Component of Human Complement (C1) by an Intramolecular Autocatalytic Mechanism
R. J. Ziccardi	2505	A New Role for C1-Inhibitor in Homeostasis: Control of Activation of the First Component of Human Complement
T. Nitta and T. Suzuki	2527	FC $\gamma$ <sub>2b</sub> Receptor-Mediated Prostaglandin Synthesis by a Murine Macrophage Cell Line (P388D <sub>1</sub> )
A. J. Tenner and N. R. Cooper	2547	Stimulation of a Human Polymorphonuclear Leukocyte Oxidative Response by the C1q Subunit of the First Complement Component
P. Leist-Welsh and A. B. Bjornson	2643	Immunoglobulin-Independent Utilization of the Classical Complement Pathway in Opsonophagocytosis of <i>Escherichia coli</i> by Human Peripheral Leukocytes
G. Moldenhauer, D. Haustein, T. Hüppe, A. Wagner, and K-U. Hartmann	2664	A New Murine Cell Surface Differentiation Antigen (Leugp90) Defined by a Rat Monoclonal Antibody: Cellular Distribution and Biochemical Characterization
P. H. Ehrlich, W. R. Moyle, Z. A. Moustafa, and R. E. Canfield	2709	Mixing Two Monoclonal Antibodies Yields Enhanced Affinity for Antigen
J. Tseng	2719	Expression of Immunoglobulin Heavy Chain Isotypes by Peyer's Patch Lymphocytes Stimulated with Mitogens in Culture
R. B. Markham, A. Nicholson-Weller, G. Schiffman, and D. L. Kasper	2731	The Presence of Sialic Acid on Two Related Bacterial Polysaccharides Determines the Site of the Primary Immune Response and the Effect of Complement Depletion on the Response in Mice
J. E. Volanakis	2745	Complement-Induced Solubilization of C-reactive Protein-Pneumococcal C-Polysaccharide Precipitates: Evidence for Covalent Binding of Complement Proteins to C-Reactive Protein and to Pneumococcal C-Polysaccharide
P. J. White, P. B. Billings, and S. O. Hoch	2751	Assays for the SM and RNP Autoantigens: The Requirement for RNA and Influence of the Tissue Source
B. Guilbert, G. Dighiero, and S. Avrameas	2779	Naturally Occurring Antibodies against Nine Common Antigens in Human Sera. I. Detection, Isolation, and Characterization
G. Dighiero, B. Guilbert, and S. Avrameas	2788	Naturally Occurring Antibodies against Nine Common Antigens in Humans Sera. II. High Incidence of Monoclonal Ig Exhibiting Antibody Activity against Actin and Tubulin and Sharing Antibody Specificities with Natural Antibodies
B. M. S. Pulleyblank, J. A. Falk, M. Letarte, K. J. Dorrington, and R. E. Falk	2810	A Reevaluation of the Putative Association between the FC $\gamma$ Receptor and Histocompatibility Antigens on Human Mononuclear Leukocytes

---

**IMMUNOGENETICS AND TRANSPLANTATION**


---

- L. A. Matis, S. M. Hedrick, C. Han- 2439 The T Lymphocyte Response to Cytochrome C. III. Relationship of the Fine Specificity of Antigen Recognition to Major Histocompatibility Complex Genotype  
num, M. E. Ultee, D. Lebwohl, E. Margoliash, A. M. Solinger, E. A. Lerner, and R. H. Schwartz
- J. A. Kapp and B. A. Araneo 2447 Antigen-Specific Suppressor T Cell Interactions. I. Induction of an MHC-Restricted Suppressor Factor Specific for L-Glutamic Acid<sup>50</sup>-L-Tyrosine<sup>50</sup>
- Y. Kohno and J. A. Berzofsky 2458 Genetic Control of the Immune Response to Myoglobin. V. Antibody Production *in Vitro* Is Macrophage and T Cell-Dependent and Is under Control of Two Determinant-Specific Ir Genes
- G. S. Hansen, A. Sveigaars, and 2497 T Cell Clones Restricted to "Hybrid" HLA-D Antigens?  
M. H. Claesson
- R. M. Gorczyński and S. MacRae 2543 Role of Genes in Murine Major Histocompatibility Complex (MHC) in the Ontogeny of B Cells with Restricted Capacity for Cooperation with Adherent Cells in the Production of Antibody to Thymus-Dependent (TD) and Thymus-Independent Type 2 (TI-II) Antigens
- H. C. Passmore 2559 An Erythrocyte and Serum Antigen with a Specificity Antithetical to the Mouse C4 Associated H-2.7 Antigen
- D. Wernet, H. Heinrichs, and P. 2595 Genetic Regulation of the Antibody Response to H-2D<sup>b</sup> Alloantigens in Mice. IV. Wernet  
Antigens That Activate Helper T Cells for IgG, Coded for by the Non-*H-2* Genome
- M. G. Scott and J. B. Fleischman 2622 Preferential Idiotype-Isotype Associations in Antibodies to Dinitrophenyl Antigens  
P. J. Wettstein 2629 H-2 Effects on Cell-Cell Interactions in the Response to Single Non-H-2 Alloantigens. V. Effects of *H-2K<sup>b</sup>* Mutations on Presentation of H-4 and H-3 Alloantigens
- L. N. K. Fuge Abruzzini and B. D. 2682 Tentative Assignment of Alleles for Guinea Pig Ia Antigens. I. Ia.3,5 and Ia.4,5  
Schwartz  
Share Structural Homology Expected for Alleles
- S. W. Hill and J. A. Frelinger 2704 Genetic Control of the Immune Response in Chimeric Mice
- M. J. Nelles and A. Nisonoff 2773 Heterogeneity of A/J Anti-AR Antibodies That Express a Minor Cross-Reactive Idiotype
- H. Sugiyama, S. Akira, N. Yoshida, 2793 Relationship between the Rearrangement of Immunoglobulin Genes, the Appearance of a B Lymphocyte Antigen, and Immunoglobulin Synthesis in Murine Pre-B Cell Lines  
S. Kishimoto, Y. Yamamura, P. Kincade, T. Honjo, and T. Kishimoto
- M. I. Lorber, M. R. Loken, A. M. 2798 I-A Antigens on Cloned Alloreactive Murine T Lymphocytes Are Acquired Passively  
Stall, and F. W. Fitch
- S. F. Radka, D. D. Kostyu, and D. 2804 A Monoclonal Antibody Directed against the HLA-Bw6 Epitope  
B. Amos

---

**IMMUNOPATHOLOGY**


---

- M. G. Goodman and W. O. Weigle 2399 Induction of Immunoglobulin Secretion by a Simple Nucleoside Derivative
- H. W. Kreth, L. Kress, H. G. Kress, 2411 Demonstration of Primary Cytotoxic T Cells in Venous Blood and Cerebrospinal  
H. F. Ott, and G. Eckert  
Fluid of Children with Mumps Meningitis
- A. D. Befus, F. L. Pearce, J. Gaul- 2475 Mucosal Mast Cells. I. Isolation and Functional Characteristics of Rat Intestinal  
die, P. Horsewood, and J. Bi-  
enenstock  
Mast Cells
- F. L. Pearce, A. D. Befus, J. Gaul- 2481 Mucosal Mast Cells. II. Effects of Anti-allergic Compounds on Histamine Secretion  
die, and J. Bienenstock  
by Isolated Intestinal Mast Cells
- D. M. Center and W. Cruikshank 2563 Modulation of Lymphocyte Migration by Human Lymphokines. I. Identification and  
Characterization of Chemoattractant Activity for Lymphocytes from Mitogen-  
Stimulated Mononuclear Cells
- W. Cruikshank and D. M. Center 2569 Modulation of Lymphocyte Migration by Human Lymphokines. II. Purification of a  
Lymphotactic Factor (LCF)
- W. R. Henderson, A. Jörg, and S. 2609 Eosinophil Peroxidase-Mediated Inactivation of Leukotrienes B<sub>4</sub>, C<sub>4</sub>, and D<sub>4</sub>  
J. Klebanoff
- S. Nakamura, F. Goto, K. Goto, 2614 Physicochemical Characterization of a PMN-Derived Soluble Factor That Enhances  
and M. Yoshinaga  
Lymphocyte DNA Synthesis

A. R. Mayrer, M. Kashgarian, N. H. Ruddle, R. Marier, C. J. Hodson, F. F. Richards, and V. T. Andriole	2634	Tubulointerstitial Nephritis and Immunologic Responses to Tamm-Horsfall Protein in Rabbits Challenged with Homologous Urine or Tamm-Horsfall Protein
H. W. Snyder, Jr., F. R. Jones, N. K. Day, and W. D. Hardy, Jr.	2726	Isolation and Characterization of Circulating Feline Leukemia Virus-Immune Complexes from Plasma of Persistently Infected Pet Cats Removed by <i>ex Vivo</i> Immunosorption
S. A. Weitzman and T. P. Stossel	2770	Effects of Oxygen Radical Scavengers and Antioxidants on Phagocyte-Induced Mutagenesis

---

### TUMOR IMMUNOLOGY

---

R. T. Hoppe and M. J. Dorie	2387	Successful Murine Tumor Allograft Transplantation after Total Lymphoid Irradiation
P. Rubin, H. F. Pross, and J. C. Roder	2553	Studies of Human Natural Killer Cells. II. Analysis at the Single Cell Level
A. J. Malcolm, R. C. Shipman, and J. G. Levy	2599	Detection of a Tumor-Associated Antigen on the Surface of Human Myelogenous Leukemia Cells
M. I. Colnaghi, S. Menard, E. Tagliabue, and G. D. Torre	2757	Heterogeneity of the Natural Humoral Anti-tumor Immune Response in Mice as Shown by Monoclonal Antibodies
J. Gordon, V. A. Anderson, and G. T. Stevenson	2763	Loss of Surface-Bound Antibody Accompanying the Anti-complementary Modulation of Leukemic B Cell Immunoglobulin: Contrasting Effects of Antibodies Directed against Idiotypic and Constant Regions
P. A. Marino and D. O. Adams	2816	The Capacity of Activated Murine Macrophages for Augmented Binding of Neoplastic Cells: Analysis of Induction by Lymphokine Containing MAF and Kinetics of the Reaction

---

### VIRAL AND MICROBIAL IMMUNOLOGY

---

T. W. Pearson, R. S. Hewett, G. E. Roelants, D. A. Stagg, and T. T. Dolan	2509	Studies on the Induction and Specificity of Cytotoxicity to <i>Theileria</i> -Transformed Cell Lines
J. McLaughlin	2656	Subcellular Distribution of Particle-Associated Antigens in <i>Trypanosoma rhodesiense</i>
J. Yewdell and W. Gerhard	2670	Delineation of Four Antigenic Sites on a Paramyxovirus Glycoprotein via Which Monoclonal Antibodies Mediate Distinct Antiviral Activities

---

### COMMUNICATIONS

---

M. Imai, T. Sano, Y. Yanase, K. Miyamoto, S. Yonehara, H. Mori, T. Honda, S. Fukuda, T. Nakamura, Y. Miyakawa, and M. Mayumi	2824	Demonstration of Two Subtypes of Human Leukocyte Interferon (IFN- $\alpha$ ) by Monoclonal Antibodies
I. G. Barr, B. A. Khalid, P. Pearce, B-H Toh, P. F. Bartlett, R. G. Scollay, and J. W. Funder	2825	Dihydrotestosterone and Estradiol Deplete Corticosterone-Sensitive Thymocytes Lacking in Receptors for These Hormones
Announcements	2829	
Errata	2831	
Author Index	2832	
Ad Hoc Reviewers	2834	
Author Index to Volume 128	2836	
Subject Index to Volume 128	2842	