



**SIMPLE, POWERFUL, ACCESSIBLE.  
FULL SPECTRUM FLOW CYTOMETRY**

9+ color assays, together with high throughput or extended warranty, for just \$69.9K

**ACT NOW**



**136 (11)**

*J Immunol* 1986; 136:3933-4333; ;  
<http://www.jimmunol.org/content/136/11.citation>

This information is current as of September 20, 2020.

**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

- |  |      |   |
|--|------|---|
| E. K. Lakey, E. Margoliash, F. W. Fitch, and S. K. Pierce  | 3933 | Role of L3T4 and Ia in the Heteroclitic Response of T Cells to Cytochrome c   |
| R. L. H. Bolhuis, R. C. Roozmond, and R. J. van de Griend  | 3939 | Induction and Blocking of Cytolysis in CD2 <sup>+</sup> , CD3 <sup>-</sup> NK and CD2 <sup>+</sup> , CD3 <sup>+</sup> Cytotoxic T Lymphocytes via CD2 50 KD Sheep Erythrocyte Receptors                             |
| J. A. Ledbetter, C. H. June, P. J. Martin, C. E. Spooner, J. A. Hansen, and K. E. Meier                | 3945 | Valency of CD3 Binding and Internalization of the CD3 Cell-Surface Complex Control T Cell Responses to Second Signals: Distinction between Effects on Protein Kinase C, Cytoplasmic Free Calcium, and Proliferation |
| T. Kurita, H. Kiyono, K. Komiyama, C. E. Grossi, J. Messtecky, and J. R. McGhee                        | 3953 | Isotype-Specific Immunoregulation: Characterization and Function of Fc Receptors on T-T Hybridomas which Produce Murine IgA-Binding Factor  |
| E. Gomard, Y. Hénin, G. Sterkers, M. Masset, R. Fauchet, and J. P. Lévy                                | 3961 | An Influenza A Virus-Specific and HLA-DRw8-Restricted T Cell Clone Cross-Reacting with a Transcomplementation Product of the HLA-DR2 and DR4 Haplotype  |
| T. Uede, H. Kohda, H. Yuasa, H. Osawa, T. Diamantstein, J. Yodoi, Y. Ishii, and K. Kikuchi             | 3968 | 5C6-F4, a Novel 100,100-Dalton Rat Lymphocyte Activation Antigen Defined by Monoclonal Antibody   |
| L. A. Sherman  | 3977 | The Origin of Strain-Specific Differences in the Specificity Repertoires of Murine Cytolytic T Lymphocytes  |
| G. Dennert, C. G. Anderson, and J. Warner  | 3981 | Induction of Bone Marrow Allograft Rejection and Hybrid Resistance in Nonresponder Recipients by Antibody: Is there Evidence for a Dual Receptor Interaction in Acute Marrow Graft Rejection?                       |
| T. Noma, V. E. Kelley, H. Kawasaki, M. Minami, and M. E. Dorf  | 3987 | The Differential Ability of Splenic Adherent Cells from B6. <i>lpr</i> Mice to Induce Suppressor T Cells  |
| P. Hunt and D. D. Eardley  | 3994 | Suppressive Effects of Insulin and Insulin-Like Growth Factor-1 (IGF-1) on Immune Responses   |
| G. Dighiero, P. Poncet, S. Rouyre, and J.-C. Mazie   | 4000 | Newborn Xid Mice Carry the Genetic Information for the Production of Natural Autoantibodies against DNA, Cytoskeletal Proteins, and TNP   |
| L. L. Stunz and T. L. Feldbush   | 4006 | Polyclonal Activation of Rat B Cells. I. A Single Mitogenic Signal Can Stimulate Proliferation, but Three Signals Are Required for Differentiation  |
| D. R. Howard, A. C. Eaves, and F. Takei  | 4013 | Lymphocyte Function-Associated Antigen (LFA-1) Is Involved in B Cell Activation   |
| H. Kikutani, R. Kimura, H. Nakamura, R. Sato, A. Muraguchi, N. Kawamura, R. R. Hardy, and T. Kishimoto | 4019 | Expression and Function of an Early Activation Marker Restricted to Human B Cells   |
| H. Kikutani, H. Nakamura, R. Sato, R. Kimura, K. Yamasaki, R. R. Hardy, and T. Kishimoto               | 4027 | Delineation and Characterization of Human B Cell Subpopulations at Various Stages of Activation by using a B Cell-Specific Monoclonal Antibody  |

Continued on page 4

---

**CLINICAL IMMUNOLOGY • IMMUNOPATHOLOGY**


---

- W. A. Buurman, T. J. M. Ruers, I. A. J. J. M. Daemen, C. J. van der Linden, and G. Groenewegen 4035 Cyclosporine A Inhibits IL 2-Driven Proliferation of Human Alloactivated T Cells
- M. K. Rozans, B. R. Smith, S. J. Burakoff, and R. A. Miller 4040 Long-Lasting Deficit of Functional T Cell Precursors in Human Bone Marrow Transplant Recipients Revealed by Limiting Dilution Methods
- T. Folks, J. Kelly, S. Benn, A. Kinter, J. Justement, J. Gold, R. Redfield, K. W. Sell, and Anthony S. Fauci 4049 Susceptibility of Normal Human Lymphocytes to Infection with HTLV-III/LAV
- L. A. Lampson and W. F. Hickey 4054 Monoclonal Antibody Analysis of the MHC Expression in Human Brain Biopsies: Tissue Ranging from "Histologically Normal" to that Showing Different Levels of Glial Tumor Involvement
- R. N. Smith, A. Amsden, O. Sudilovsky, N. Coleman, and R. Margolies 4063 The Alloantibody Response in the Allogeneically Pregnant Rat. IV. Analysis of the Alloantibody Specificities with Monoclonal Antibodies
- J. S. Cowdery and F. E. McKiernan 4070 Analysis of T Cell and B Cell Function in Peyer's Patch and Lamina Propria of New Zealand Black and DBA/2 Mice
- W. F. Davidson, F. J. Dumont, H. G. Bedigian, B. J. Fowlkes, and H. C. Morse III 4075 Phenotypic, Functional, and Molecular Genetic Comparisons of the Abnormal Lymphoid Cells of C3H-*lpp/lpr* and C3h-*gld/gld* Mice
- K. Phadke, D. G. Carlson, B. D. Gitter, and L. D. Butler 4085 Role of Interleukin 1 and Interleukin 2 in Rat and Mouse Arthritis Models

---

**CYTOKINES • MEDIATORS • REGULATORY MOLECULES**


---

- T. R. Malek and P. E. Kory 4092 The Murine Interleukin 2 Receptor. IV. Biochemical Characterization
- B. F. Treiger, W. J. Leonard, P. Svetlik, L. A. Rubin, D. L. Nelson, and W. C. Greene 4099 A Secreted Form of the Human Interleukin 2 Receptor Encoded by an "Anchor Minus" cDNA
- S. C. Meuer and K.-H. Meyer zum Büschenfelde 4106 T Cell Receptor Triggering Induces Responsiveness to Interleukin 1 and Interleukin 2 but Does Not Lead to T Cell Proliferation
- S. J. Naides 4113 Suppression of Antigen-Specific Interleukin 2 Production in the MRL/MpJ-*lpr/lpr* Mouse
- F. Amano, M. Nishijima, and Y. Akamatsu 4122 A Monosaccharide Precursor of *Escherichia coli* Lipid A Has the Ability to Induce Tumor-Cytotoxic Factor Production by a Murine Macrophage-Like Cell Line, J774.1
- B. Xue, R. M. Dersarkissian, R. L. Baer, G. J. Thorbecke, and D. V. Belsito 4128 Reversal by Lymphokines of the Effect of Cyclosporin A on Contact Sensitivity and Antibody Production in Mice
- C. R. Faltynek, G. L. Princler, and J. R. Ortaldo 4134 Expression of IFN- $\alpha$  and IFN- $\gamma$  Receptors on Normal Human Small Resting T Lymphocytes and Large Granular Lymphocytes

---

**IMMUNOCHEMISTRY**


---

- C. Mold, N. R. Cooper, and G. R. Nemerow 4140 Incorporation of the Purified Epstein Barr Virus/C3d Receptor (CR2) into Liposomes and Demonstration of its Dual Ligand Binding Functions
- M. F. E. Siaw, G. R. Nemerow, and N. R. Cooper 4146 Biochemical and Antigenic Analysis of the Epstein Barr Virus/C3d Receptor (CR2)
- T. Seya, S. Nagasawa, and J. P. Atkinson 4152 Location of the Interchain Disulfide Bonds of the Fourth Component of Human Complement (C4): Evidence Based on the Liberation of Fragments Secondary to Thiol-disulfide Interchange Reactions
- N. J. Levy and D. L. Kasper 4157 Surface-Bound Capsular Polysaccharide of Type Ia group B *Streptococcus* Mediates C1 Binding and Activation of the Classic Complement Pathway
- S. Hirohashi, H. Clausen, E. Nudelmann, H. Inoue, Y. Shimotsato, and S.-i. Hakomori 4163 A Human Monoclonal Antibody Directed to Blood Group i Antigen: Heterohybridoma between Human Lymphocytes from Regional Lymph Nodes of a Patient with Lung Cancer and Mouse Myeloma

Continued on page 5

Continued from page 4

- F. Prelli, D. Tummolo, A. Solomon, and B. Frangione 4169 Novel Human Light Chain  $V_{\kappa}$  Segment: Serologic and Structural Analysis of the  $\kappa$ III-Like Bence Jones Protein and IgG $\kappa$  Light Chain REE
- L. H. Stanker, E. Branscomb, M. Vanderlaan, and R. H. Jensen 4174 Monoclonal Antibodies Recognizing Single Amino Acid Substitutions in Hemoglobin
- M. L. Plunkett and T. A. Springer 4181 Purification and Characterization of the Lymphocyte Function-Associated-2 (LFA-2) Molecule

---

#### IMMUNOPHARMACOLOGY

---

- N. R. Ferreri, W. C. Howland, and H. L. Spiegelberg 4188 Release of Leukotrienes  $C_4$  and  $B_4$  and Prostaglandin  $E_2$  from Human Monocytes Stimulated with Aggregated IgG, IgA, and IgE
- J. Turpin, E. M. Hersh, and G. Lopez-Berestein 4194 Characterization of Small and Large Human Peripheral Blood Monocytes: Effects of In Vitro Maturation on Hydrogen Peroxide Release and on the Response to Macrophage Activators
- S. D. Somers, J. E. Weiel, T. A. Hamilton, and D. O. Adams 4199 Phorbol Esters and Calcium Ionophore Can Prime Murine Peritoneal Macrophages for Tumor Cell Destruction
- K. Mehta, P. Claringbold, and G. Lopez-Berestein 4206 Amphotericin B Inhibits the Serum-Induced Expression of Tissue Transglutaminase in Murine Peritoneal Macrophages
- M. P. Fletcher 4213 Modulation of the Heterogeneous Membrane Potential Response of Neutrophils to N-Formyl-Methionyl-Leucyl-Phenylalanine (FMLP) by Leukotriene  $B_4$ : Evidence for Cell Recruitment
- S. J. Klebanoff, M. A. Vadas, J. M. Harlan, L. H. Sparks, J. R. Gamble, J. M. Agosti, and A. M. Waltersdorff 4220 Stimulation of Neutrophils by Tumor Necrosis Factor
- H. J. Wedner and G. Bass 4226 Tyrosine Phosphorylation of a 66,000 M<sub>r</sub> Solution Protein in Lectin-Activated Human Peripheral Blood T Lymphocytes

---

#### MICROBIAL IMMUNOLOGY

---

- G. A. Weinberg, D. M. Granoff, M. H. Nahm, and P. G. Shackelford 4232 Functional Activity of Different IgG Subclass Antibodies against Type b Capsular Polysaccharide of *Haemophilus influenzae*
- Z.-Z. Cui, L. F. Lee, R. F. Silva, and R. L. Witter 4237 Monoclonal Antibodies against Avian Reticuloendotheliosis Virus: Identification of Strain-Specific and Strain-Common Epitopes
- A.B. Tilden, R. Cauda, C. E. Grossi, C. M. Balch, A. D. Lakeman, and R. J. Whitley 4243 Demonstration of NK Cell-Mediated Lysis of Varicella-Zoster Virus (VZV)-Infected Cells: Characterization of the Effector Cells
- D. Levitt, R. Danen, and J. Bard 4249 Both Species of *Chlamydia* and Two Biovars of *Chlamydia trachomatis* Stimulate Mouse B Lymphocytes
- P. Shankar, F. Agis, D. Wallach, B. Flageul, F. Cottenot, J. Augier, and M.-A. Bach 4255 *M. leprae* and PPD-Triggered T Cell Lines in Tuberculoid and Lepromatous Leprosy
- K. Onoé, R. A. Good, and K.-i. Yamamoto 4264 Anti-Bacterial Immunity to *Listeria monocytogenes* in Allogeneic Bone Marrow Chimera in Mice
- C. A. Grotendorst, R. Carter, R. Rosenberg, and L. C. Koontz 4270 Complement Effects on the Infectivity of *Plasmodium gallinaceum* to *Aedes aegypti* Mosquitoes. I. Resistance of Zygotes to the Alternative Pathway of Complement
- J. B. Weiss, J. L. Magnani, and M. Strand 4275 Identification of *Schistosoma mansoni* Glycolipids that Share Immunogenic Carbohydrate Epitopes with Glycoproteins

Continued on page 6

---

**MOLECULAR BIOLOGY • MOLECULAR GENETICS**


---

- K. W. Moore, P. Jardieu, J. A. Mietz, M. L. Trounstein, E. L. Kuff, K. Ishizaka, and C. L. Martens 4283 Rodent IgE-Binding Factor Genes Are Members of an Endogenous, Retrovirus-Like Gene Family
- D. D. Hiraki, D. Nomura, T. Yokota, K.-i. Arai, and R. L. Coffman 4291 Isolation and Characterization of Expressible cDNA Clones for Mouse Thy-1: A Model System for cDNA Expression of Cell Surface Proteins
- R. M. Duvoisin, O. Heidmann, and J.-C. Jaton 4297 Characterization of Four Constant Region Genes of Rabbit Immunoglobulin- $\lambda$  Chains

---

**TUMOR IMMUNOLOGY**


---

- D. E. Kern, J. P. Klarnet, M. C. V. Jensen, and P. D. Greenberg 4303 Requirement for Recognition of Class II Molecules and Processed Tumor Antigen for Optimal Generation of Syngeneic Tumor-Specific Class I-Restricted CTL
- J. M. Pesando and L. Graf 4311 Differential Expression of HLA-DR, -DQ, and -DP Antigens on Malignant B Cells
- R. J. De Boer, S. Michelson, and P. Hogeweg 4319 Concomitant Immunization by the Fully Antigenic Counterparts Prevents Modulated Tumor Cells from Escaping Cellular Immune Elimination
- G. Strassmann, T. A. Springer, S. D. Somers, and D. O. Adams 4328 Mechanisms of Tumor Cell Capture by Activated Macrophages: Evidence for Involvement of Lymphocyte Function-Associated (LFA)-1 Antigen

---

**ERRATUM**


---

- D. Fox, S. Schlossman, and E. Reinherz 4334 Regulation of the Alternative Pathway of T Cell Activation by Anti-T3 Monoclonal Antibody
- Announcements 4334
- Obituary 4335
- Author Index 4336