Contents

CELLULAR IMMUNOLOGY

J. T. Kung and C. A. Thomas III 3691 Athymic Nude CD4+8-T Cells Produce IL-2 but Fail to Proliferate in Response to Mitogenic Stimuli
G. J. Spangrude, Y. Aihara, I. L. Weissman, and J. Klein 3697 The Stem Cell Antigens Sca-1 and Sca-2 Sub-Divide Thymic and Peripheral T Lymphocytes into Unique Subsets
T. H. Watts 3708 T Cell Activation by Preformed, Long-Lived Ia-Peptide Complexes: Quantitative Aspects
D. C. Diamond, B. P. Sleckman, T. Gregory, L. A. Lasky, J. L. Greenstein, and S. J. Burakoff 3715 Inhibition of CD4+ T Cell Function by the HIV Envelope Protein, gp120
J. Cerny, J. S. Smith, C. Webb, and P. W. Tucker 3718 Properties of Anti-Idiotypic T Cell Lines Propagated with Syngeneic B Lymphocytes I. T Cells Bind Intact Idiotypes and Discriminate between the Somatic Idiotype Variants in a Manner Similar to the Anti-Idiotype Antibodies
S. S. Patel, A. D. Duby, D. L. Thiele, and P. E. Lipsky 3726 Phenotypic and Functional Characterization of Human T Cell Clones
S. A. McCarthy, E. Kaldjian, and A. Singer 3737 Induction of Anti-CD8 Resistant Cytotoxic T Lymphocytes by Anti-CD8 Antibodies: Functional Evidence for T Cell Signaling Induced by Multi-Valent Cross-Linking of CD8 on Precursor Cells
N. Kumagai, S. H. Benedict, G. B. Mills, and E. W. Gelfand 3747 Cyclosporin A Inhibits Initiation but not Progression of Human T Cell Proliferation Triggered by Phorbol Esters and Calcium ionophores
B. A. Houlden, R. Q. Croa, J. E. Coligan, and J. A. Bluestone 3753 Systematic Development of Distinct T Cell Receptor T Cell Subsets During Fetal Ontogeny
B. W. Needleman, D. H. Lynch, and R. J. Hodes 3760 Effect of MISA on Antigen Presentation to Class II-Restricted T Cells
M. Massaia, A. Pileri, M. Boccardo, A. Bianchi, A. Palumbo, and U. Dianzani 3768 The Generation of Alloreactive Cytotoxic T Lymphocytes Requires the Expression of ECTO-5' Nucleotidase Activity
B. F. Haynes, K. H. Singer, S. M. Denning, and M. E. Martin 3776 Analysis of Expression of CD2, CD3, and T Cell Antigen Receptor Molecules During Early Human Fetal Thymic Development
J. Ruthlein, S. P. James, and W. Strober 3791 Role of CD2 in Activation and Cytotoxic Function of CD8/Leu-7-Positive T Cells
V. Calvo, S. Rojo, P. Aparicio, B. Galocha, and J. A. López de Castro 3798 Avidity Dictates the Lytic Capacity of Human Cytolytic T Lymphocyte Clones with Similar Fine Specificity Against Murine Cells Expressing HLA-B27 Antigen
Y. Dohi, K. Yamada, N. Ohno, M. Aoki, Y. Takagaki, A. Nisonoff, and S. Shinku 3804 Naturally Occurring Cytotoxic T Lymphocyte Precursors with Specificity for an Ig-Idiotype
L. Takacs, F. W. Ruscetti, E. J. Kovacs, B. Rocha, S. Brocke, T. Diamantstein, and B. J. Mathieson 3810 Immature, Double Negative (CD4-, CD8-) Rat Thymocytes Do Not Express IL-2 Receptors

Continued on page 4
### CLINICAL IMMUNOLOGY • IMMUNOPATHOLOGY

<table>
<thead>
<tr>
<th>Authors</th>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. J. Punjabi, D. D. Wood, and P. H. Wooley</td>
<td>3819</td>
<td>A Monoclonal Anti-Type II Collagen Antibody with Cross-Reactive Anti-Ig Activity Specific for the F(ab')2 Fragment</td>
</tr>
<tr>
<td>M. G. Cleveland, R. B. Ramirez, and G. R. Klimpel</td>
<td>3823</td>
<td>IFN-β Production by Macrophages Obtained from Mice Undergoing Graft vs Host Disease</td>
</tr>
<tr>
<td>H. Offner, G. A. Hashim, Y. K. Chou, B. Celnik, R. Jones, and A. A. Vandenbark</td>
<td>3828</td>
<td>Encephalitogenic T Cell Clones with Variant Receptor Specificity</td>
</tr>
<tr>
<td>D. A. Clark, M. Falbo, R. B. Rowley, D. Banwatt, J. Stedronska-Clark</td>
<td>3833</td>
<td>Active Suppression of Host-Vs-Graft Reaction in Pregnant Mice. IX. Soluble Suppressor Activity Obtained from Allopregnant Mouse Decidua that Blocks the Cytolytic Effector Response to IL-2 is Related to Transforming Growth Factor-β</td>
</tr>
<tr>
<td>C. Juarez, M. Agusti, C. Gelpi, J. L. Vila, M. J. Amengual, and J. J. Rodriguez</td>
<td>3841</td>
<td>Characterization of the CB Antigen, A DNA-Binding Protein Recognized by Autoantibodies and which has a Differential Expression in Lymphoid Cells</td>
</tr>
</tbody>
</table>

### CYTOKINES • MEDIATORS • REGULATORY MOLECULES

<table>
<thead>
<tr>
<th>Authors</th>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y. Lin, R. J. Robb, J. E. Gray, and P. Simon</td>
<td>3847</td>
<td>The Construction and Characterization of a Biologically Active Recombinant IL-2 Containing a Lysine-Rich C-Terminal Extension</td>
</tr>
<tr>
<td>H. E. Broxmeyer, L. Lu, S. Cooper, R. Tushinski, D. Mochizuki, B. Y. Rubin, S. Gillis, and D. E. Williams</td>
<td>3852</td>
<td>Synergistic Effects of Purified Recombinant Human and Murine B-Cell Growth Factor-1/IL-4 on Colony Formation in Vitro by Hematopoietic Progenitor Cells: Multiple Actions</td>
</tr>
<tr>
<td>J. L. Ceuppens, M. L. Baroja, K. Lorre, J. V. Damme, and A. Bililau</td>
<td>3868</td>
<td>Human T Cell Activation with Phytohemagglutinin: the Function of IL-6 as an Accessory Signal</td>
</tr>
<tr>
<td>H.-G. Fischer, S. Froesch, K. Reske, and A. B. Reske-Kunz</td>
<td>3882</td>
<td>Granulocyte Macrophage Colony-Stimulating Factor Activates Macrophages Derived From Bone Marrow Cultures to Synthesis of MHC Class II Molecules and to Augmented Antigen Presentation Function</td>
</tr>
</tbody>
</table>

### IMMUNOCHEMISTRY

<table>
<thead>
<tr>
<th>Authors</th>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>J.-P. Paccaud, J.-L. Carpentier, and J. A. Schifferli</td>
<td>3889</td>
<td>Direct Evidence for the Clustered Nature of Complement Receptors Type 1 on the Erythrocyte Membrane</td>
</tr>
<tr>
<td>T. Kinoshita, Y. Takata, H. Kozono, J. Takeda, K. Hong, and K. Inoue</td>
<td>3895</td>
<td>C5 Convertase of the Alternative Complement Pathway: Covalent Linkage between Two C3b Molecules within the Trimolecular Complex Enzyme</td>
</tr>
<tr>
<td>P. Densen, C. M. McRill, and S. C. Ross</td>
<td>3902</td>
<td>Assembly of the Membrane Attack Complex Promotes Decay of the Alternative Pathway C3 Convertase on Neisseria gonorrhoeae</td>
</tr>
<tr>
<td>D. L. Albrecht and R. J. Noelle</td>
<td>3915</td>
<td>Membrane Ig-Cytoskeletal Interactions I. Flow Cytfluorometric and Biochemical Analysis of Membrane IgM-Cytoskeletal Interactions</td>
</tr>
<tr>
<td>L. L. Ballard, N. S. Bora, G. H. Yu, and J. P. Atkinson</td>
<td>3923</td>
<td>Biochemical Characterization of Membrane Co-Factor Protein of the Complement System</td>
</tr>
</tbody>
</table>

Continued on page 5
A Mechanism for the Spontaneous Activation of the First Component of Complement, Cl, and its Regulation by Cl-Inhibitor

Characterization of N-Formyl-Methionyl-Leucyl-Phenylalanine Receptors on Human Neutrophils: Effects of Isolation and Temperature on Receptor Expression and Functional Activity

Biphasic Platelet-Activating Factor Synthesis by Human Monocytes Stimulated with IL-1-β, Tumor Necrosis Factor, or IFN-γ

Signal Transduction during Human Natural Killer Cell Activation: Inositol Phosphate Generation and Regulation by Cyclic AMP

Modulation of Human Basophil Histamine Release by Hemopoietic Growth Factors

Cell Damage by Cytolysin: Spontaneous Recovery and Reversible Inhibition by Divalent Cations

Suppressor T Cells Regulating the Cell-Mediated Immune Response to Pseudomonas aeruginosa Can Be Generated by Immunization with Anti-bacterial T Cells

Antiviral Immunity Induced by Recombinant Nucleoprotein of Influenza A Virus I. Characteristics and Cross-Reactivity of T-cell Responses

Pleiotropic Effects of the Bcg Gene II. Genetic Restriction of Responses to Mitogens and Allogeneic Targets

Lack of Detectable Somatic Hypermutation in the V Region of the Ig Chain Gene of a Human Chronic B Lymphocytic Leukemia

A New Lymphocyte-Specific Gene Which Encodes a Putative Binding Ca²⁺-Protein is not Expressed in Transformed T-Lymphocyte Lines

Cytotoxic T Lymphocyte-Defined Epitope Differences Between HLA-A2.1 and HLA-A2.2 Map to Two Distinct Regions of the Molecule

Genetics of the Phosphocholine-Specific Antibody Response to Streptococcus pneumoniae. Germline but not Mutated T15 Antibodies are Dominantly Selected

HLA-B27 in Inbred and Non-Inbred Transgenic Mice. Cell Surface Expression and Recognition as an Alloantigen in the Absence of Human B₂-Microglobulin

4030 Analysis of HLA-DP Allelic Sequence Polymorphism Using the In Vitro Enzymatic NDA Amplification of DP-α and DP-β Loci

**TUMOR IMMUNOLOGY**

G. M. Gersuk, W.-C. Chang, and P. K. Pattengale

4031 Inhibition of Human Natural Killer Cell Activity by Platelet-Derived Growth Factor II. Membrane Binding Studies, Effect of Recombinant IFN-α and IL-2, and Lack of Effect on T Cell and Antibody-Dependent Cellular Cytoxicity

A. A. Maghazachi, R. H. Goldberg, and R. B. Herberman

4039 Influence of T Cells on the Expression of Lymphokine-Activated Killer Cell Activity and in Vivo Tissue Distribution

J. Y. Djeu, D. K. Blanchard, A. L. Richards, and H. Friedman

4047 Tumor Necrosis Factor Induction by Candida albicans from Human Natural Killer Cells and Monocytes


4053 Cloning and High Level Expression of a Chimeric Antibody with Specificity for Human Carcinoembryonic Antigen

T. Taniyama, K. Yoshida, and T. Furuta

4061 Demonstration of a Novel Tumor-Killing Factor Secreted from Human Macrophage-Monocyte Hybridomas

D. K. Blanchard and J. Y. Djeu

4067 Protection of Cultured Human Monocytes from Lymphokine-Activated Killer-Mediated Lysis by IFN-γ


4074 Anti-Idiotypic Antibodies Against UV-Induced Tumor-Specific CTL Clones: Preparation in Syngeneic Combination

Author Index

4081