

V.147 W1 J0677 1991
C.02 NO.4
TI: JOURNAL OF IMMUNOLOGY
SEQ: J23740000

Volume 147 / Number 4 / August 15, 1991

THE JOURNAL OF IMMUNOLOGY®

Official Journal of The American
Association of Immunologists



75th Anniversary
1916 - 1991



Contents

CELLULAR IMMUNOLOGY

- | | | |
|---|------|--|
| G. A. Bishop | 1107 | Requirements of Class II-Mediated B Cell Differentiation for Class II Cross-Linking and Cyclic AMP |
| H. Hengel, H. Wagner, and K. Heeg | 1115 | Triggering of CD8 ⁺ Cytotoxic T Lymphocytes via CD3- ϵ Differs from Triggering via α/β T Cell Receptor: CD3- ϵ -Induced Cytotoxicity Occurs in the Absence of Protein Kinase C and Does not Result in Exocytosis of Serine Esterases |
| J. P. Lake, C. W. Pierce, and J. D. Kennedy | 1121 | CD8 ⁺ α/β or γ/δ T Cell Receptor-Bearing T Cells from Athymic Nude Mice Are Cytolytically Active in Vivo |
| H.-M. Lee and S. Rich | 1127 | Co-Stimulation of T Cell Proliferation by Transforming Growth Factor- β 1 |
| K.-H. Lue, R. P. Lauener, R. J. Winchester, R. S. Geha, and D. Vercelli | 1134 | Engagement of CD14 on Human Monocytes Terminates T Cell Proliferation by Delivering a Negative Signal to T Cells |
| I. Melamed, G. P. Downey, K. Aktories, and C. M. Roifman | 1139 | Microfilament Assembly Is Required for Antigen-Receptor-Mediated Activation of Human B Lymphocytes |
| J. Nagamine, K. Takeda, Y. Tatsumi, M. Ogata, K. Miyake, T. Hamaoka, and H. Fujiwara | 1147 | Role of a Thymic Stromal Cell Clone in Inducing the Stage-Specific Differentiation of Various Subpopulations of Double Negative Thymocytes |
| I. Nakashima, Y.-H. Zhang, S. M. J. Rahman, T. Yoshida, K.-I. Isobe, L.-N. Ding, T. Iwamoto, M. Hamaguchi, H. Ikezawa, and R. Taguchi | 1153 | Evidence of Synergy between Thy-1 and CD3/TCR Complex in Signal Delivery to Murine Thymocytes for Cell Death |
| C. M. Snapper, L. M. T. Peanha, A. D. Levine, and J. J. Mond | 1163 | IgE Class Switching Is Critically Dependent Upon the Nature of the B Cell Activator, in Addition to the Presence of IL-4 |
| C. M. Snapper, H. Yamada, J. J. Mond, and C. H. June | 1171 | Cross-Linkage of Ly-6A/E Induces Ca ²⁺ Translocation in the Absence of Phosphatidylinositol Turnover and Mediates Proliferation of Normal Murine B Lymphocytes |
| H. Spits, X. Paliard, Y. Vandekerckhove, P. van Vlasselaer, and J. E. de Vries | 1180 | Functional and Phenotypic Differences between CD4 ⁺ and CD4 ⁻ T Cell Receptor- $\gamma\delta$ Clones from Peripheral Blood |

CLINICAL IMMUNOLOGY • IMMUNOPATHOLOGY

- | | | |
|---|------|--|
| G. D. Anderson, S. Banerjee, H. S. Luthra, and C. S. David | 1189 | Role of <i>Mls-1</i> Locus and Clonal Deletion of T Cells in Susceptibility to Collagen-Induced Arthritis in Mice |
| G. C. Koo, C. L. Manyak, J. Dasch, L. Ellingsworth, and L. D. Shultz | 1194 | Suppressive Effects of Monocytic Cells and Transforming Growth Factor- β on Natural Killer Cell Differentiation in Autoimmune Viable Mice |
| J. K. Lazdins, T. Klimkait, K. Woods-Cook, M. Walker, E. Alteri, D. Cox, N. Cerletti, R. Shipman, G. Bilbe, and G. McMaster | 1201 | In Vitro Effect of Transforming Growth Factor- β on Progression of HIV-1 Infection in Primary Mononuclear Phagocytes |
| O. Lider, A. Milleer, S. Miron, R. Hershkoviz, H. L. Weiner, X. Zhang, and E. Heber-Katz | 1208 | Nonencephalitogenic CD4 ⁻ CD8 ⁻ V α 2V β 8.2 ⁺ Anti-Myelin Basic Protein Rat T Lymphocytes Inhibit Disease Induction |

Continued on page 4

THE JOURNAL OF IMMUNOLOGY (ISSN 0022-1767) is published twice each month by The American Association of Immunologists, 428 East Preston Street, Baltimore, MD 21202. Subscription rates \$170 (\$260 foreign); institutions \$300 (\$390 foreign); single copy \$10 (\$15 foreign). Indexed by *Current Contents* and *Index Medicus*. Second class postage paid at Baltimore, MD 21202 and at additional mailing offices. POSTMASTER: Send address changes to The Journal of Immunology at 428 East Preston Street, Baltimore, MD 21202. Copyright © 1991 by The American Association of Immunologists.

Continued from page 3

- S. Seki, T. Abo, T. Ohteki, K. Sugiura, and K. Kumagai 1214 Unusual $\alpha\beta$ -T Cells Expanded in Autoimmune *lpr* Mice Are Probably a Counterpart of Normal T Cells in the Liver
- D. V. Serreze and E. H. Leiter 1222 Development of Diabetogenic T Cells from NOD/Li Marrow Is Blocked When an Allo-H-2 Haplotype Is Expressed on Cells of Hemopoietic Origin, but not on Thymic Epithelium

CYTOKINES • MEDIATORS • REGULATORY MOLECULES

- J. L. Browning, M. J. Androlewicz, and C. F. Ware 1230 Lymphotoxin and an Associated 33-Glycoprotein Are Expressed on the Surface of an Activated Human T Cell Hybridoma
- I. K. Campbell, U. Novak, J. Cebon, J. E. Layton, and J. A. Hamilton 1238 Human Articular Cartilage and Chondrocytes Produce Hemopoietic Colony-Stimulating Factors in Culture in Response to IL-1
- J. A. Carman and C. E. Hayes 1247 Abnormal Regulation of IFN- γ Secretion in Vitamin A Deficiency
- M. R. Fung, R. M. Scearce, J. A. Hoffman, N. J. Pepper, S. R. Hammes, J. B. Hosking, R. Schmandt, W. A. Kuziel, B. F. Haynes, G. B. Mills, and W. C. Greene 1253 A Tyrosine Kinase Physically Associates with the β -Subunit of the Human IL-2 Receptor
- M. K. Ganapathi, D. Rzewnicki, D. Samols, S.-L. Jiang, and I. Kushner 1261 Effect of Combinations of Cytokines and Hormones on Synthesis of Serum Amyloid A and C-Reactive Protein in HEP 3B Cells
- K. Nakata, K. Akagawa, M. Fukayama, Y. Hayashi, M. Kadokura, and T. Tokunaga 1266 Granulocyte-Macrophage Colony-Stimulating Factor Promotes the Proliferation of Human Alveolar Macrophages in Vitro
- J.-H. Shieh, R. H. F. Peterson, and M. A. S. Moore 1273 IL-1 Modulation of Cytokine Receptors on Bone Marrow Cells: In Vitro and in Vivo Studies
- G. Strassmann, D. R. Bertolini, S. B. Kerby, and M. Fong 1279 Regulation of Murine Mononuclear Phagocyte Inflammatory Products by Macrophage Colony-Stimulating Factor: Lack of IL-1 and Prostaglandin E_2 Production and Generation of a Specific IL-1 Inhibitor

IMMUNOCHEMISTRY

- M. Barel, A. Gauffre, F. Lyamani, A. Fiandino, J. Hermann, and R. Frade 1286 Intracellular Interaction of EBV/C3d Receptor (CR2) with p68, a Calcium-Binding Protein Present in Normal but Not in Transformed B Lymphocytes
- R. Busch, C. M. Hill, J. D. Hayball, J. R. Lamb, and J. B. Rothbard 1292 Effect of Natural Polymorphism at Residue 86 of the HLA-DR β -Chain on Peptide Binding
- P. E. Harris, M. C. Gutierrez, E. Reed, D. W. King, and N. Suci-Foca 1299 Biosynthesis and Partial Amino Acid Sequence of the Human NDA 4 Antigen: An Activation Antigen Common to B and T Cell Lineages
- O. Kanagawa, Y. Utsunomiya, J. Bill, E. Palmer, M. W. Moore, and F. R. Carbone 1307 Conformational Difference of T Cell Antigen Receptors Revealed by Monoclonal Antibodies to Mouse V β 5 T Cell Receptor for Antigen Determinants
- R. W. Leu, A. Zhou, J. Rummage, D. J. Fast, and B. J. Shannon 1315 Reconstitution of a Deficiency of AKR Mouse Macrophages for Their Response to Lipid A Activation for Tumor Cytotoxicity by Complement Subcomponent C1q: Role of IFN- γ
- S. M. Mariani, E. A. Armandola, and S. Ferrone 1322 Diversity in the Fine Specificity and Idiotype Profile of Mouse Anti-HLA-DR Monoclonal Antibody Elicited with the Syngeneic Anti-Idiotype Monoclonal Antibody F5-830
- I. F. Mizukami, S. D. Vinjamuri, F. Perini, D. Y. Liu, and R. F. Todd III 1331 Purification, Biochemical Composition, and Biosynthesis of the Mo3 Activation Antigen Expressed on the Plasma Membrane of Human Mononuclear Phagocytes
- P. A. M. Warmerdam, J. G. J. van de Winkel, A. Vlug, N. A. C. Westerdaal, and P. J. A. Capel 1338 A Single Amino Acid in the Second Ig-Like Domain of the Human Fc γ Receptor II Is Critical for Human IgG2 Binding

Continued on page 5

Continued from page 4

- L. Y. Whiteman, D. B. Purkall, and S. Ruddy 1344 Association of Activated Properdin with Complexes of Properdin with C3

IMMUNOPHARMACOLOGY

- J. Hakimi, R. Chizzonite, D. R. Luke, P. C. Familletti, P. Bailon, J. A. Kondas, R. S. Pilon, P. Lin, D. V. Weber, C. Spence, L. J. Mondini, W.-H. Tsien, J. L. Levin, V. H. Galati, L. Korn, T. A. Waldmann, C. Queen, and W. R. Benjamin 1352 Reduced Immunogenicity and Improved Pharmacokinetics of Humanized Anti-Tac in Cynomolgus Monkeys
- D. Hudig, N. J. Allison, T. M. Pickett, U. Winkler, C.-M. Kam, and J. C. Powers 1360 The Function of Lymphocyte Proteases: Inhibition and Restoration of Granule-Mediated Lysis with Isocoumarin Serine Protease Inhibitors
- T. W. Kuijpers, B. C. Hakkert, M. Hoogerwerf, J. F. M. Leeuwenberg, and D. Roos 1369 Role of Endothelial Leukocyte Adhesion Molecule-1 and Platelet-Activating Factor in Neutrophil Adherence to IL-1-Prestimulated Endothelial Cells: Endothelial Leukocyte Adhesion Molecule-1-Mediated CD18 Activation
- S. Schreiber, W. F. Stenson, R. P. MacDermott, J. C. Chapel, S. L. Teitelbaum, and S. L. Perkins 1377 Aggregated Bovine IgG Inhibits Mannose Receptor Expression of Murine Bone Marrow-Derived Macrophages via Activation

MICROBIAL IMMUNOLOGY

- J.-P. Coutelier, J. T. M. Van Der Logt, and F. W. A. Heessen 1383 IgG Subclass Distribution of Primary and Secondary Immune Responses Concomitant with Viral Infection
- K. B. Madden, J. F. Urban, Jr., H. J. Ziltener, J. W. Schrader, F. D. Finkelman, and I. M. Katona 1387 Antibodies to IL-3 and IL-4 Suppress Helminth-Induced Intestinal Mastocytosis
- D. Muller, K. Pederson, R. Murray, and J. A. Frelinger 1392 A Single Amino Acid Substitution in an MHC Class I Molecule Allows Heteroclitic Recognition by Lymphocytic Choriomeningitis Virus-Specific Cytotoxic T Lymphocyte
- J. Yagi, S. Rath, and C. A. Janeway, Jr. 1398 Control of T Cell Responses to Staphylococcal Enterotoxins by Stimulator Cell MHC Class II Polymorphism

MOLECULAR BIOLOGY • MOLECULAR GENETICS

- D. J. Decker, N. E. Boyle, and N. R. Klinman 1406 Predominance of Nonproductive Rearrangements of V_H81X Gene Segments Evidences a Dependence of B Cell Clonal Maturation on the Structure of Nascent H Chains
- R. Kay, P. M. Rosten, and R. K. Humphries 1412 CD24, a Signal Transducer Modulating B Cell Activation Responses, Is a Very Short Peptide with a Glycosyl Phosphatidylinositol Membrane Anchor
- S. Wong, J. D. Freeman, C. Kelleher, D. Mager, and F. Takei 1417 Ly-49 Multigene Family: New Members of a Superfamily of Type II Membrane Proteins with Lectin-Like Domains
- L.-J. Zhou, D. C. Ord, A. L. Hughes, and T. F. Tedder 1424 Structure and Domain Organization of the CD19 Antigen of Human, Mouse, and Guinea Pig B Lymphocytes: Conservation of the Extensive Cytoplasmic Domain

Continued on page 6

Continued from page 5

TUMOR IMMUNOLOGY

T. M. Blieden, A. J. McAdam, J. G. Frelinger, and E. M. Lord	1433	Mechanism of Cytolytic T Lymphocyte Killing of a Low Class I-Expressing Tumor
J. O. Brubaker, K. T. Chong, and R. M. Welsh	1439	Lymphokine-Activated Killer Cells Are Rejected in Vivo by Activated Natural Killer Cells
F. Novelli, M. Giovarelli, R. Re- ber-Liske, G. Virgallita, G. Garotta, and G. Forni	1445	Blockade of Physiologically Secreted IFN- γ Inhibits Human T Lymphocyte and Natural Killer Cell Activation
N. P. Restifo, F. Esquivel, A. L. Asher, H. Stötter, R. J. Barth, J. R. Bennink, J. J. Mulé, J. W. Yewdell, and S. A. Rosenberg	1453	Defective Presentation of Endogenous Antigens by a Murine Sarcoma: Implications for the Failure of an Anti-Tumor Immune Response
Erratum	1460	
Announcement	1461	
Author Index	i	

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.