The Journal of Immunology
Contents
Volume 151 • Number 11 • December 1, 1993

Cellular Immunology and Immune Regulation

5887 Intrathymic Lymphoid Precursor Cells during Fetal Thymus Development
Mariastefania Antica, Li Wu, Ken Shortman, and Roland Scollay

5896 Functional Effects of CD30 on a Large Granular Lymphoma Cell Line, YT: Inhibition of Cytotoxicity, Regulation of CD28 and IL-2R, and Induction of Homotypic Aggregation
Michael A. Bowen, Kristin J. Olsen, Lirong Cheng, David Avila, and Eckhard R. Podack

5907 Production of Soluble IL-4 Receptors by Murine Spleen Cells Is Regulated by T Cell Activation and IL-4
Paula M. Chilton and Rafael Fernandez-Botran

5918 Subsets of Activated CD4 T Lymphocytes Refractory for Secretion of IL-2 Are Distinguished by Expression of Ly-6A/E in BALB/c Mice
Elaine K. Codias and Thomas R. Malek

5930 HLA-A1 and HLA-A3 T Cell Epitopes Derived from Influenza Virus Proteins Predicted from Peptide Binding Motifs
Marianne DiBrino, Tomiko Tsuchida, Richard V. Turner, Kenneth C. Parker, John E. Coligan, and William E. Biddison

5936 Administration of Anti-CD45 mAb Specific for a B Cell-Restricted Epitope Abrogates the B Cell Response to a T-Dependent Antigen in Vivo
Rana Domiati-Saad, Edward W. Ogle, and Louis B. Justement

5948 Reversion of the SCID Phenotype by Human T Cell Grafts: Development of Cross-Species Immunocompetence
Catherine M. Donjon, Hanna Morkowski, Roy K. Cheung, J. Steven Leeder, and Hans-Michael Dosch

5955 Influence of Membrane Ig Receptor Density and Affinity on B Cell Signaling by Antigen: Implications for Affinity Maturation
Julia George, Steven J. Penner, John Weber, Janice Berry, and J. Latham Clajlin

5966 Naturally Processed HLA Class I Bound Peptides from c-myc-Transfected Cells Reveal Allele-Specific Motifs
Paul E. Harris, Adriana Colovai, Zhuoru Liu, Riccardo Dalla Favera, and Nicole Suciu-Foca

5973 Naturally Processed Cytokine-Derived Peptide Bound to HLA-Class II Molecules
Paul E. Harris, Antonella Mafsei, Zhuoru Liu, Ioana Colovai, Elaine F. Reed, Giorgio Inghirami, and Nicole Suciu-Foca

5984 Identification of a Novel Population of CD8a⁺β⁺ Bone Marrow-Derived Dendritic Epidermal Cells: This Unique Population is Subsequently Outnumbered by Thymus-Independent Expansion of the CD8a⁺β⁺ Dendritic Epidermal Cells
Jun Hayakawa, Tetsuo Shichara, Noriko Moriya, Kinoko Arahari, Masaji Nagashima, Hideo Yagita, and Hiromichi Ishikawa
Avidity for Antigen Can Influence the Helper Dependence of CD8+ T Lymphocytes
William R. Heath, Lars Kjer-Nielsen, and Matthias W. Hoffmann

Coexpression of NKR-P1 and αβ-TCR on Lymphoid Cells in Fully Xenogeneic (Rat→Mouse) Chimeras and Syngeneically Reconstituted (∆→A) Rats
Christina L. Kaufman, William H. Chambers, and Suzanne T. Ildstad

Keratinocyte-Derived IL-7 Serves as a Growth Factor for Dendritic Epidermal T Cells in Mice
Hiroyuki Matsue, Paul R. Bergstresser, and Akira Takashima

Dissociation of the Peptide-MHC Class I Complex Limits the Binding Rate of Exogenous Peptide
David M. Ojcius, Jean-Pierre Abastado, Armanda Casrouge, Estelle Mottez, Lucien Cabanie, and Philippe Kourilsky

A Lymphostromal Molecule, Thymic Shared Ag-1, Regulates Early Thymocyte Development in Fetal Thymus Organ Culture

Elevation of Intracellular cAMP in Human T Lymphocytes by an Anti-CD44 mAb
Barbara L. Rothman, Nancy Kennure, Keith A. Kelley, Michael Katz, and Thomas M. Aune

CD28-Mediated Costimulation Is Necessary for the Activation of T Cell Receptor-γδ+ T Lymphocytes
Anne I. Sperling, Peter S. Linsley, Terrance A. Barrett, and Jeffrey A. Bluestone

Difference in Signal Transduction Pathway for IL-2 and IL-4 Production in T Helper 1 and T Helper 2 Cell Clones in Response to Anti-CD3
Toshiki Tamura, Tetsuya Yanagida, and Hideo Nariuchi

Two Separate Mechanisms of T Cell Clonal Anergy to Mls-1
Katsuyuki Yui, Yasuo Ishida, Makoto Katsumata, Shinji Komori, Thomas M. Chused, and Ryo Abe

Mouse MHC Class I-like Fc Receptor Encoded Outside the MHC
Jeremy J. Ahouse, Chanah L. Hagerman, Plavi Mitral, Debra J. Gilbert, Neal G. Copeland, Nancy A. Jenkins, and Neil E. Simister

A cDNA Clone Encoding the Mouse Qa-1 Histocompatibility Antigen and Proposed Structure of the Putative Peptide Binding Site

E-Box Activator of the C4 Promoter Is Related to but Distinct from the Transcription Factor Upstream Stimulating Factor
Marie-Dominique Galibert, Yuko Miyagoe, and Tommaso Meo

Few V Gene Segments Dominate the T Cell Receptor β-Chain Repertoire of the Human Thymus
Rita Jores and Tommaso Meo

Third Component of Trout Complement: cDNA Cloning and Conservation of Functional Sites
John D. Lambris, Zhege Lao, Jian Pang, and Jochem Alsenz

cAMP Activates the IL-5 Promoter Synergistically with Phorbol Ester through the Signaling Pathway Involving Protein Kinase A in Mouse Thymoma Line EL-4
Hyun Jun Lee, Naoko Koyano-Nakagawa, Yoshiyuki Naito, Junji Nishida, Naoko Arai, Ken-ichi Arai, and Takashi Yokota

Role of the B Cell Antigen Receptor in Antigen Processing and Presentation: Involvement of the Transmembrane Region in Intracellular Trafficking of Receptor/Ligand Complexes
Ko-Jiunn Liu, Vandana S. Parikh, Philip W. Tucker, and Byung S. Kim
Analysis of T Cell Receptors Specific for Recognition of Class Ia Antigens  
*Linda C. Lowen, Carla J. Aldrich, and James Forman*

Characterization of the Gene for the Human High Affinity IgE Receptor (FcεRI) α-Chain  
*Jesse Pang, Gareth R. Taylor, Donald G. Munroe, Armana Ishaque, Wai-Ping Fung-Leung, Catherine Y. Lau, Fu-Tong Liu, and Lubing Zhou*

Mapping the Major Human T Helper Epitopes of Tetanus Toxin: The Emerging Picture  
*Jeanette C. Reece, H. Mario Geysen, and Stuart J. Rodda*

Selection for Amino Acid Sequence and Jβ Element Usage in the Beta Chain of DBA/2Vβ- and DBA/2Vβ-Derived Myoglobin-Specific T Cell Clones  
*Giovina Ruberti, Violette Paragas, Dewey Kim, and C. Garrison Fathman*

Met-ase: Cloning and Distinct Chromosomal Location of a Serine Protease Preferentially Expressed in Human Natural Killer Cells  
*Mark J. Smyth, Thomas J. Sayers, Theresa Wiltou, James C. Powers, and Joseph A. Trapani*

Binding Site on the Murine IFN-γ Receptor for IFN-γ Has Been Identified Using the Synthetic Peptide Approach  
*Maria A. VanVolkenburg, Nathan D. Griggs, Michael A. Jarpe, Judith L. Pace, Stephen W. Russell, and Howard M. Johnson*

Structure of the Gene for the F Allele of Complement Receptor Type 1 and Sequence of the Coding Region Unique to the S Allele  
*Dennis P. Vik and Winnie W. Wong*

cDNA Cloning and Expression of Guinea Pig Neutrophil Attractant Protein-1 (NAP-1): NAP-1 Is Highly Conserved in Guinea Pig  
*Teizo Yoshimura and Donald G. Johnson*

Implication of HLA-DR Residues at Positions 67, 71, and 86 in Interaction Between HLA-DR1 and Peptide HA306-320  
*Dominique Zeliszewski, José J. Galvano, Pierre Gaudebout, Isabelle Dorval, Catherine Freidel, Lucette Gebührer, Hervé Betuel, Francisco Borras-Cuesta, and Ghislaine Sterkers*

**Host Defense**

Direct Evidence that Interferon-β Mediates Enhanced HLA-Class I Expression in Measles Virus-Infected Cells  
*Suhayl S. Dhib-Jalbut and Elliot P. Cowan*

CD2-Deficient Mice Generate Virus-Specific Cytotoxic T Lymphocytes upon Infection with Lympocytic Choriomeningitis Virus  
*Claire F. Evans, Glenn F. Rall, Nigel Killeen, Dan Littman, and Michael B. A. Oldstone*

Conglutinin Acts As an Opsonin for Influenza A Viruses  
*Kevan L. Hartshorn, Kedarnath Sastry, Daniel Brown, Mitchell R. White, Thomas B. Okarma, Young-Moo Lee, and Alfred I. Tauber*

Very Late Antigen-5 and Complement Receptor Type 3 Cooperatively Mediate the Interaction between Bordetella pertussis and Human Monocytes  
*Wouter L.W. Hazenbos, Bernard M. van den Berg, and Ralph van Furth*

β2M-/- Knockout Mice Contain Low Levels of CD8+ Cytotoxic T Lymphocyte that Mediate Specific Tumor Rejection  
*Esti Lamoust-Smith, Virginia K. Clements, and Suzanne Ostrand-Rosenberg*

In Vitro Candidastatic Properties of the Human Neutrophil Calprotectin Complex  
*Aruna Rekha K. Murthy, Robert I. Lehrer, Sylvia S. L. Harwig, and Kenneth T. Miyazaki*
Shared T Cell-Defined Antigens on Independently Derived Tumors
Deepak M. Sahasrabudhe, Dvora Burstyn, Janice C. Dulce, Barbara L. Hibner, John Leslie Collins, and Maurice Zauderer

Role of CD4+ T Cells in the Expansion of the CD4-, CD8- γδ T Cell Subset in the Spleens of Mice during Blood-Stage Malaria
Henri C. van der Heyde, Dean D. Manning, and William P. Weidanz

Inflammation

Antigen-Dependent Stimulation by Bone Marrow-Derived Mast Cells of MHC Class II-Restricted T Cell Hybridoma
Pierre Frandji, Carole Oskéritzian, Florina Cacaraci, Josette Lapeyre, Roger Peronet, Bernard David, Jean-Gérard Guillet, and Salaheddine Mècheri

Inducible Nitric Oxide Synthase from a Rat Alveolar Macrophage Cell Line Is Inhibited by Nitric Oxide
Jeanette M. Griscavage, Norma E. Rogers, Michael P. Sherman, and Louis J. Ignarro

Neutrophils Roll on E-Selectin
Michael B. Lawrence and Timothy A. Springer

Intravenous Interleukin-8 Inhibits Granulocyte Emigration from Rabbit Mesenteric Venules Without Altering L-Selectin Expression or Leukocyte Rolling
Klaus Ley, Joffre B. Baker, Myron I. Cybulsky, Michael A. Gimbrone, Jr., and Francis W. Luscinskas

IL-3 Alters Free Arachidonic Acid Generation in C5a-Stimulated Human Basophils
Donald W. MacGlashan, Jr. and Walter C. Hubbard

Effects of IL-13 on Phenotype, Cytokine Production, and Cytotoxic Function of Human Monocytes: Comparison with IL-4 and Modulation by IFN-γ or IL-10
René de Waal Malefyt, Carl G. Figdor, Richard Huijbens, Sheela Mohan-Peterson, Bruce Bennett, Janice Culpepper, Warren Dong, Gerard Zurawski, and Jan E. de Vries

Tyrosine Phosphorylation of a γ-Chain Homodimer Associated with FcyRIII (CD16) in Cultured Human Monocytes
Midori Masuda, Arthur J. Verhoeven, and Dirk Roos

Macrophage Progenitors from Mouse Bone Marrow and Spleen Differ in Their Expression of the Ly-6C Differentiation Antigen
Jeffrey M. McCormack, Pieter J. M. Leenen, and William S. Walker

Induction by Chemokines of Lipid Mediator Synthesis in Granulocyte-Macrophage Colony-Stimulating Factor-Treated Human Neutrophils
Patrick P. McDonald, Marc Pouliot, Pierre Borgeat, and Shaun R. McColl

Protective Effects of Selectin Chimeras in Neutrophil-Mediated Lung Injury
Michael S. Mulligan, Susan R. Watson, Christopher Fennie, and Peter A. Ward

Multiple Sites on IL-8 Responsible for Binding to α and β IL-8 Receptors
Ingrid U. Schraufstätter, Diana S. Barritt, Min Ma, Zenaida G. Oades, and Charles G. Cochrane

Binding of Monomeric Human IgG Defines an Expression Polymorphism of FcyRIII on Large Granular Lymphocyte/Natural Killer Cells
Barbara A. Vance, T. W. J. Huizinga, Kathiwen Wardwell, and Paul M. Guyre
Increased Gene Expression of Acetylcholine Receptor and Myogenic Factors in Passively Transferred Experimental Autoimmune Myasthenia Gravis
*Orna Asher, Wilfried A. Kues, Veit Witzemann, Socrates J. Tsartos, Sara Fucks, and Miriam C. Souroujon*

Interferon-γ Prevents Graft-Versus-Host Disease after Allogeneic Bone Marrow Transplantation in Mice
*Herbert P.M. Brok, Peter J. Heidt, Peter H. van der Meide, Chris Zurcher, and Jaak M. Vossen*

Human T Cell Clones Reactive Against U-Small Nuclear Ribonucleoprotein Autoantigens from Connective Tissue Disease Patients and Healthy Individuals
*Robert W. Hoffman, Yoshihiko Takeda, Gordon C. Sharp, David R. Lee, Don L. Hill, Hidetoshi Kaneoka, and Charles W. Caldwell*

C33 Antigen and M38 Antigen Recognized by Monoclonal Antibodies Inhibitory to Syncytium Formation by Human T Cell Leukemia Virus Type 1 Are Both Members of the Transmembrane 4 Superfamily and Associate with Each Other and with CD4 or CD8 in T Cells
*Toshio Imai and Osamu Yoshiie*

Differential Expression in Rheumatoid Synovium and Synovial Fluid of α4β7 Integrin: A Novel Receptor for Fibronectin and Vascular Cell Adhesion Molecule-1
*Andrew I. Lazarovis and Jacob Karsh*

Regulation of Human CD44H and CD44E Isoform Binding to Hyaluronan by Phorbol Myristate Acetate and Anti-CD44 Monoclonal and Polyclonal Antibodies
*Hua-Xin Liao, Marc C. Levesque, Karen Patton, Bethany Bergamo, Dawn Jones, M. Anthony Moody, Marilyn J. Telen, and Bartion F. Haynes*

Analysis of Glomeruli-Eluted Gp330 Autoantibodies and of Gp330 Antigen of Heymann Nephritis
*Sudesh P. Makker*

Polyclonal B Cell Activation Arises from Different Mechanisms in Lupus-Prone (NZB × NZW)F1 and MRL/Mp-lpr/lpr Mice
*Ramón Merino, Masahiro Iwamoto, Liliane Fossati, and Shozo Izui*

Expression of α-3, α-5, and β-4 Neuronal Acetylcholine Receptor Subunit Transcripts in Normal and Myasthenia Gravis Thymus: Identification of Thymocytes Expressing the α-3 Transcripts
*Mirta Mihovilovic, and Allen D. Roses*

Constitutive Expression of IL-6 Receptors and Their Role in the Excessive B Cell Function in Patients with Systemic Lupus Erythematosus
*Hiroko Nagafuchi, Noboru Suzuki, Yutaka Mizushima, and Tsuyoshi Sakane*

Characterization of Dermal Dendritic Cells Obtained from Normal Human Skin Reveals Phenotypic and Functionally Distinctive Subsets
*Frank O. Nestle, Xiang-Guang Zheng, Craig B. Thompson, Laurence A. Turka, and Brian J. Nickoloff*

Role of γ8 T Cells in Murine Collagen-Induced Arthritis
*Gary M. Peteman, Charles Spencer, Anne I. Sperling, and Jeffrey A. Bluestone*

Preferential Use of a H Chain V Region in Antitumor-Associated Glycoprotein-72 Monoclonal Antibodies
*Mark W. Rixon, Brian B. Gourlie, Donald A. Kaplan, Jeffrey Schlom, and Peter S. Mézes*

VH 4.21-Encoded Natural Autoantibodies with Anti-i Specificity Mirror those Associated with Cold Hemagglutinin Disease
*Mieke E. M. Schutte, Johan H. van Es, Leslie E. Silverstein, and Ton Logtenberg*
Targeting of $T$ Lymphocytes to Neu/HER2-Expressing Cells Using Chimeric Single Chain Fv Receptors
Ilana Stancovski, Daniel G. Schindler, Tova Waks, Yosef Yarden, Michael Sela, and Zelig Eshhar

Further Characterization of the Interaction between the C1q Subcomponent of Human C1 and the Transmembrane Envelope Glycoprotein gp41 of HIV-1
Nicole M. Thielens, Isabelle M. Bally, Christoph F. Ebenbichler, Manfred P. Dierich, and Gérard J. Arlaud

TSG-6: A TNF-, IL-1-, and LPS-Inducible Secreted Glycoprotein Associated with Arthritis
Hans-Georg Wisniewski, Rainer Maier, Martin Lotz, Sicy Lee, Lidija Klampfer, Tae H. Lee, and Jan Vilček

Influence of a Recombinant Human Soluble Tumor Necrosis Factor Receptor FC Fusion Protein on Type II Collagen-Induced Arthritis in Mice
Paul H. Wooley, Julie Dutcher, Michael B. Widmer, and Steven Gillis

Author Index
Information for Contributors
Submission Form
Membership Form
Errata