This information is current as of April 15, 2017.

158 (4)

*J Immunol* 1997; 158:1503-1984; ;
http://www.jimmunol.org/content/158/4.citation

---

**Subscription**  Information about subscribing to *The Journal of Immunology* is online at: [http://jimmunol.org/subscription](http://jimmunol.org/subscription)

**Permissions**  Submit copyright permission requests at: [http://www.aai.org/About/Publications/JI/copyright.html](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](http://jimmunol.org/alerts)
TABLE OF CONTENTS

**CUTTING EDGE**

1503 CD4⁺ T Cells Kill CD8⁺ T Cells via Fas/Fas Ligand-Mediated Apoptosis  
*Cinzia Piazza, Maria Saveria Gilardini Montani, Simona Moretti, Enrico Cundari, and Enza Piccoli*

**CELLULAR IMMUNOLOGY AND IMMUNE REGULATION**

1507 MHC Affinity, Peptide Liberation, T Cell Repertoire, and Immunodominance  
All Contribute to the Paucity of MHC Class I-Restricted Peptides  
Recognized by Antiviral CTL  
*Yuping Deng, Jonathan W. Yewdell, Laurence C. Eisenlohr, and Jack R. Bennink*

1516 IL-2 Signaling Controls Actin Organization Through Rho-Like Protein  
Family, Phosphatidylinositol 3-Kinase, and Protein Kinase C-ζ  
*Javier Gómez, Alphonse García, Luis R.-Borlado, Pedro Bonay,  
Carlos Martinez-A., Augusto Silva, Manolo Fresno, Ana Clara Carrera,  
Car Eicher-Streiber, and Angelita Rebollo*

1523 Early Endosomes and a Late Endocytic Compartment Generate Different  
Peptide-Class II MHC Complexes via Distinct Processing Mechanisms  
*John P. Griffin, Rose Chu, and Clifford V. Harding*

1533 Lymphotactin Is Produced by NK Cells and Attracts Both NK Cells and T  
Cells In Vivo  
*Joseph A. Hedrick, Vicki Saylor, David Figueroa, Laura Mizoue, Yuming Xu,  
Satish Menon, John Abrams, Tracy Handel, and Albert Zlotnik*

1541 IFN-γ-Inducing Factor (IGIF) Is a Costimulatory Factor on the Activation of  
Th1 but not Th2 Cells and Exerts its Effect Independently of IL-12  
*Keizo Kohno, Jun Kataoka, Takashi Ohtsuki, Yasuo Suemoto, Iwao Okamoto,  
Mitsuko Usui, Masao Ikeda, and Masashi Kurimoto*

1551 Regulation of CD28 Costimulation in Human CD8⁺ T Cells  
*Thomas E. Lloyd, Lixia Yang, Derek Ng Tang, Tellen Bennett, Wendy Schober,  
and Dorothy E. Lewis*
The Mechanism of In Vitro T Helper Cell Type 1 to T Helper Cell Type 2 Switching in Highly Polarized Leishmania major-Specific T Cell Populations
Simonetta Mocci and Robert L. Coffman

Surface Expression of Hemopoietic Cell Phosphatase Fails to Complement CD45 Deficiency and Inhibits TCR-Mediated Signal Transduction in a Jurkat T Cell Clone
Michael A. Musci, Stacie L. Beaves, Susan E. Ross, Taolin Yi, and Gary A. Koretzky

Type 2 Helper T Cell-Type Cytokines and the Development of "Infectious" Tolerance in Rat Cardiac Allograft Recipients
Kazuhiko Onodera, Wayne W. Hancock, Elmar Graser, Manfred Lehmann, Mohamed H. Sayegh, Terry B. Strom, Hans-Dieter Volk, and Jerzy W. Kupiec-Weglinski

A Major Role for Matrix Metalloproteinases in T Cell Injury in the Gut
Sylvia L. F. Pender, Simon P. Tickle, Andrew J. P. Docherty, Duncan Howie, Neville C. Wathen, and Thomas T. MacDonald

TGF-β1 Promotes In Vitro Generation of Dendritic Cells by Protecting Progenitor Cells from Apoptosis
Elisabeth Riedl, Herbert Strobl, Otto Majdic, and Walter Knapp

Development of B Cells in Aged Mice: Decline in the Ability of Pro-B Cells to Respond to IL-7 but Not to Other Growth Factors
Robert P. Stephan, Deborah A. Lill-Elghanian, and Pamela L. Witte

Function of Lymphocyte Homing-Associated Adhesion Molecules on Human Natural Killer and Lymphokine-Activated Killer Cells
Jaakko Uksila, Marko Salmi, Eugene C. Butcher, Jussi Tarkkanen, and Sirpa Jalkanen

Integrin-Mediated Intracellular Ca2+ Signaling in Jurkat T Lymphocytes
Monika Weismann, Andreas H. Guse, Lydia Sorokin, Barbara Bröker, Michael Frieser, Rupert Hallmann, and Georg W. Mayr

Class I-Deficient Hemopoietic Cells and Nonhemopoietic Cells Dominantly Induce Unresponsiveness of Natural Killer Cells to Class I-Deficient Bone Marrow Cell Grafts
Ming-Fan Wu and David H. Raulet

A Shift from Negative to Positive Selection of Autoreactive T Cells by the Reduced Level of TCR Signal in TCR-Transgenic CD3ζ-Deficient Mice
Tetsuo Yamazaki, Hisashi Arase, Satoru Ono, Hiroshi Ohno, Hiroyuki Watanabe, and Takashi Saito

Immune Restoration by Fetal Pig Thymus Grafts in T Cell-Depleted, Thyrmectomized Mice
Yong Zhao, Jay A. Fishman, Justin J. Sergio, Jennifer L. Oliveros, Denise A. Pearson, Gregory L. Szot, Robert A. Wilkinson, J. Scott Arn, David H. Sachs, and Megan Sykes

Protein Tyrosine Kinases Syk and ZAP-70 Display Distinct Requirements for Src Family Kinases in Immune Response Receptor Signal Transduction
Karen E. Zoller, Ian A. MacNeil, and Joan S. Brugge
1660 Polymorphism in the \( \alpha_1 \) Helix of the HLA-B Heavy Chain Can Have an Overriding Influence on Peptide-Binding Specificity
Linda D. Barber, Lucy Percival, Kelly L. Arnett, Jenny E. Gumperz, Ling Chen, and Peter Parham

1670 Anti-Human \( \kappa \) Opioid Receptor Antibodies: Characterization of Site-Directed Neutralizing Antibodies Specific for a Peptide \( \kappa R(33–52) \) Derived from the Predicted Amino Terminal Region of the Human \( \kappa \) Receptor
Robert R. Buchner, Shawn M. Vogen, Wolfgang Fischer, Marilyn L. Thoman, Sam D. Sanderson, and Edward L. Morgan

1681 The 14.1 Surrogate Light Chain Promoter Has Lineage- and Stage-Restricted Activity
Mary E. Donohoe and Bonnie B. Blomberg

1692 Molecular Cloning, Chromosomal Localization, Expression, and Functional Characterization of the Mouse Analogue of Human CD59
Martin B. Powell, Kevin J. Marchbank, Neil K. Rushmere, Carmen W. van den Berg, and B. Paul Morgan

1703 Purification and Characterization of the Pig Analogue of Human Membrane Cofactor Protein (CD46/MCP)
Carmen W. van den Berg, José M. Pérez de la Lasra, Diego Llanes, and B. Paul Morgan

1710 A Cyclic Hexapeptide Is a Potent Antagonist of \( \alpha_4 \) Integrins
Peter Vanderslice, Kaijun Ren, Joanna K. Revelle, David C. Kim, Dee Scott, Robert J. Bjercke, Edward T. H. Yeh, Pamela J. Beck, and Timothy P. Kogan

1719 Analysis of IgM Structures Involved in J Chain Incorporation
Erik J. Wiersma, Frieda Chen, Renée Bazin, Cathy Collins, Robert H. Painter, Réal Lemieux, and Marc J. Shulman

1727 Regulation of Class I-Restricted Epitope Processing by Local or Distal Flanking Sequence
Amy J. Yellen-Shaw and Laurence C. Eisenlohr

1734 Non-Killer Cell-Specific Transcription Factors Silence the Perforin Promoter
Yange Zhang and Mathias G. Lichtenheld

**Host Defense**

1742 Differential Responses to Challenge with Live and Dead *Mycobacterium bovis* Bacillus Calmette-Guérin
Mark A. Chambers, Ben G. Marshall, Arun Wangoo, Alison Bune, H. Terry Cook, Rory J. Shaw, and Douglas B. Young

1749 T Cell Priming Against Vesicular Stomatitis Virus Analyzed In Situ: Red Pulp Macrophages, but Neither Marginal Metallophilic nor Marginal Zone Macrophages, Are Required for Priming CD4\(^+\) and CD8\(^+\) T Cells
Richard P. Ciavarra, Katherine Buhrer, Nico Van Rooijen, and Bruce Tedeschi

1756 Activation of the Lymphotoxin \( \beta \) Receptor by Cross-Linking Induces Chemokine Production and Growth Arrest in A375 Melanoma Cells
Mariapia A. Degli-Esposti, Terri Davis-Smith, Wenie S. Din, Pamela J. Smolak, Raymond G. Goodwin, and Craig A. Smith
Mechanism of Complement Inactivation by Glycoprotein C of Herpes Simplex Virus
Ioanna Kostavasili, Arvind Sahu, Harvey M. Friedman, Roselyn J. Eisenberg, Gary H. Cohen, and John D. Lambris

Expression of Lung Inducible Nitric Oxide Synthase Protein Does Not Correlate with Nitric Oxide Production In Vivo in a Pulmonary Immune Response Against Cryptococcus neoformans
Julie Lovchik, Mary Lipscomb, and C. Rick Lyons

Activation of Human Macrophage Fungistatic Activity Against Histoplasma capsulatum Upon Adherence to Type 1 Collagen Matrices
Simon L. Newman, Lisa Goctee, Chris Kidd, Georgianne M. Ciraolo, and Randal Morris

Protective Monoclonal Antibody Defines a Circumsporozoite-Like Glycoprotein Exoantigen of Cryptosporidium parvum Sporozoites and Merozoites
Michael W. Riggs, Alice L. Stone, Phaedra A. Yount, Rebecca C. Langer, Michael J. Arrowood, and David L. Bentley

Identification of Subdominant CTL Epitopes of the GP100 Melanoma-Associated Tumor Antigen by Primary In Vitro Immunization with Peptide-Pulsed Dendritic Cells
Van Tsai, Scott Southwood, John Sidney, Kazuyasu Sakaguchi, Yutaka Kawakami, Ettore Appella, Alessandro Sette, and Esteban Celis

INFLAMMATION

Aggregation of Low Affinity IgG Receptors Induces Mast Cell Adherence to Fibronectin: Requirement for the Common FcR γ-Chain
Jaroslav Dastych, Mary C. Hardison, and Dean D. Metcalfe

Phosphatidyl Serine Is Involved in the Reduced Rate of Transcription of the Inducible Nitric Oxide Synthase Gene in Macrophages from Tumor-Bearing Mice
Michael R. DiNapoli, Cesar L. Calderon, and Diana M. Lopez

Response to Local Inflammation of IL-1β-Converting Enzyme-Deficient Mice
Giamila Fantuzzi, George Ku, Matthew W. Harding, David J. Livingston, Jean D. Sipe, Keisuke Kuida, Richard A. Flavell, and Charles A. Dinarello

Cytokine-Induced VCAM-1 and ICAM-1 Expression in Different Organs of the Mouse
Dwight D. Henninger, Julián Panés, Michael Eppihimer, Janice Russell, Mary Gerritsen, Donald C. Anderson, and D. Neil Granger

A Novel CD8 Molecule Expressed by Alveolar and Peritoneal Macrophages Stimulates Nitric Oxide Production
Nadir Hirji, Tong-Jun Lin, and A. Dean Befus

Human Airway Smooth Muscle Cells Express and Release RANTES in Response to T Helper 1 Cytokines: Regulation by T Helper 2 Cytokines and Corticosteroids
Matthias John, Stuart J. Hirst, Peter J. Jose, Annette Robichaud, Neville Berkman, Christian Witt, Charles H. C. Twort, Peter J. Barnes, and K. Fan Chung
Stimulation of Macrophages by Lipopolysaccharide Alters the Phosphorylation State, Conformation, and Function of PU.1 via Activation of Casein Kinase II
Tracey A. Lodie, Ricardo Savedra, Jr., Douglas T. Golenbock, Charles P. Van Beveren, Richard A. Maki, and Matthew J. Fenton

C5a-Dependent Up-Regulation In Vivo of Lung Vascular P-Selectin
Michael S. Mulligan, Elisabeth Schmid, Gerd O. Till, Tony E. Hugli, Hans P. Friedl, Robert A. Roth, and Peter A. Ward

Induction of Acute Inflammatory Lung Injury by Staphylococcal Enterotoxin B
Brigette Neumann, Britta Engelhardt, Hermann Wagner, and Bernhard Holzmann

Mechanisms of Action of Antimalarials in Inflammation: Induction of Apoptosis in Human Endothelial Cells
Frédéric Potvin, Éric Petitclerc, François Marceau, and Patrice E. Poubelle

Fibrin Induction of ICAM-1 Expression in Human Vascular Endothelial Cells
Jiafan Qi, Donald L. Kreutzer, and Theresa H. Piela-Smith

Inflammatory Cytokines Induce Endothelial Cells to Produce and Release Basic Fibroblast Growth Factor and to Promote Kaposi's Sarcoma-Like Lesions in Nude Mice
Felipe Samaniego, Phillip D. Markham, Rita Gendelman, Robert C. Gallo, and Barbara Ensoli

A Peptide with Unique Receptor Specificity: Stimulation of Phosphoinositide Hydrolysis and Induction of Superoxide Generation in Human Neutrophils
Jeong Kon Seo, Se-Young Choi, Yong Kim, Suk Hwan Baek, Kyong-Tai Kim, Chi-Bom Chae, J. David Lambeth, Pann-Ghill Suh, and Sung Ho Ryu

Clinical Immunology

Characteristic T Helper 2 T Cell Cytokine Abnormalities in Autoimmune Lymphoproliferative Syndrome, a Syndrome Marked by Defective Apoptosis and Humoral Autoimmunity

Human Anti-Nicotinic Acetylcholine Receptor Recombinant Fab Fragments Isolated from Thymus-Derived Phage Display Libraries from Myasthenia Gravis Patients Reflect Predominant Specificities in Serum and Block the Action of Pathogenic Serum Antibodies
Yvo F. Graus, Marc H. de Baets, Paul W. H. I. Parren, Sonia Berrih-Aknin, John Wokke, Peter J. van Breda Vriesman, and Dennis R. Burton

Studies on the Interaction of IL-8 with Human Plasma α2-Macroglobulin: Evidence for the Presence of IL-8 Complexed to α2-Macroglobulin in Lung Fluids of Patients with Adult Respiratory Distress Syndrome
Anna Kurdowska, Ferdicia K. Corr, Michael D. Stevens, Robert P. Baughman, and Thomas R. Martin
1941 Analysis of Human Common Bile Duct-Associated T Cells: Evidence for Oligoclonality, T Cell Clonal Persistence, and Epithelial Cell Recognition
Christopher S. Probert, Andreas D. Christ, Lawrence J. Saubermann, Jerrold R. Turner, Andreas Chott, David Carr-Locke, Steven P. Balk, and Richard S. Blumberg

1949 Human T Cell Responses Induced by Vaccination with *Mycobacterium bovis* Bacillus Calmette-Guérin
Pernille Ravn, Henriette Boesen, Bente Klarlund Pedersen, and Peter Andersen

1956 C-X-C and C-C Chemokines Are Expressed in the Cerebrospinal Fluid in Bacterial Meningitis and Mediate Chemotactic Activity on Peripheral Blood-Derived Polymorphonuclear and Mononuclear Cells In Vitro
Katharina-Susanne Spanaus, David Nadal, Hans-Walter Pfister, Jörg Seebach, Urs Widmer, Karl Frei, Sergio Gloor, and Adriano Fontana

1965 T Cell Receptor of Fas-Sensitive T Cells in Rheumatoid Synovium
Takayuki Sumida, Tran Thi Minh Hoa, Hiroshi Asahara, Tomoko Hasunuma, and Kusuki Nishioka

1971 Effects of IL-10 on Systemic Inflammatory Responses During Sublethal Primate Endotoxemia
Tom van der Poll, Patty M. Jansen, Walton J. Montegut, Carla C. Braxton, Steve E. Calvano, Sarah A. Stackpole, Sidney R. Smith, Steven W. Swanson, C. Erik Hack, Stephen F. Lowry, and Lyle L. Moldawer

1976 Lipoprotein from *Yersinia enterocolitica* Contains Epitopes That Cross-React with the Human Thyrotropin Receptor
Hongwei Zhang, Indreshpal Kaur, David W. Niesel, Gattadahalli S. Seetharamaiah, Johnny W. Peterson, Bellur S. Prabhakar, and Gary R. Klimpel

1984 Addendum

1985 Author Index