CD28-B7 Costimulatory Blockade by CTLA4Ig Prevents Actively Induced Experimental Autoimmune Encephalomyelitis and Inhibits Th1 but Spares Th2 Cytokines in the Central Nervous System
Samia J. Khoury, Enver Akalin, Anil Chandraker, Laurence A. Turka, Peter S. Linsley, Mohamed H. Sayegh, and Wayne W. Hancock

Functional Glucocorticoid Receptor Expression Is Required for cAMP-Mediated Apoptosis in a Human Leukemic T Cell Line
Jeff Kiefer, Sam Okret, Mikael Jondal, and David J. McConkey

Human DNA-Activated Protein Kinase (DNA-PK) Is Homologous to Phosphatidylinositol Kinases

Cyclic AMP Signaling Pathways Are Important in IL-1β Transcriptional Regulation
Gyan Chandra, John P. Cogswell, Larry R. Miller, Michele M. Godlewski, Sandra W. Stinnett, Staton L. Noel, Sue H. Kadwell, Thomas A. Kost, and John G. Gray

MHC Class I-Selected CD4⁺CD8⁻TCR-αβ⁺ T Cells Are a Potential Source of IL-4 During Primary Immune Response
Maria do Carmo Leite-de-Moraes, André Herbelin, François Machavoine, Alain Vicari, Jean-Marc Gombert, Martine Papiernik, and Michel Dy

Role of Environmental Antigen in the Development of IgG⁺ Cells in the Bursa of Fabricius
Shigeo Ekino, Brigitte Riwar, Frans G. M. Kroese, Edwin H. Schwander, Guus Koch, and Paul Nieuwenhuis

Disturbed MHC Regulation in the IFN-γ Knockout Mouse: Evidence for Three States of MHC Expression with Distinct Roles for IFN-γ
Nelson Goes, Tasha Sims, Joan Urmson, Dianne Vincent, Vidyanand Ramassar, and Philip F. Halloran
Enhancement of VLA Integrin Receptor Function on Thymocytes by cAMP Is Dependent on the Maturation Stage of the Thymocytes
Mark J. Halvorson and John E. Coligan

Analysis of Thymic Subpopulations Expressing the Activation Antigen GL7: Expression, Genetics, and Function
Karen S. Hatcock, Carlo E. M. Pucillo, Gloria Laszlo, Lilly Lai, and Richard J. Hodes

Activation of the Signal Transducer and Transcription (STAT) Signaling Pathway in a Primary T Cell Response: Critical Role for IL-6
Tiina Henttin, David E. Levy, Olli Silvennoinen, and Mikko Hurme

CD40 Function in Nonhematopoietic Cells: Nuclear Factor κB Mobilization and Induction of IL-6 Production
Sigrun Hess, Anne Rensing-Ehl, Robert Schwabe, Philip Butler, and Hartmut Engelmann

Phosphorylated Immunoreceptor Signaling Motifs (ITAMs) Exhibit Unique Abilities to Bind and Activate Lyn and Syk Tyrosine Kinases
Sara A. Johnson, Christopher M. Pleiman, Lily Pao, Jeff Schneringer, Keli Hippen, and John C. Cambier

Prostaglandin E2 at Priming of Naive CD4+ T Cells Inhibits Acquisition of Ability to Produce IFN-γ and IL-2, but Not IL-4 and IL-5
Kenji Katamura, Noriaki Shintaku, Yoriko Yamauchi, Tetsuya Fukui, Yusei Ohshima, Mitsufumi Mayumi, and Kensi Furusho

Alterations in Cytokine and Antibody Production Following Chemical Sympathectomy in Two Strains of Mice
Barbara Kruszewska, Suzanne Y. Felten, and Jan A. Moynihan

Mucosal Adjuvant Effect of Cholera Toxin in Mice Results from Induction of T Helper 2 (Th2) Cells and IL-4
Mariarosaria Marinaro, Herman F. Staats, Takachika Hiroi, Raymond J. Jackson, Michel Coste, Prosper N. Boyaka, Nobuo Okahashi, Masafumi Yamamoto, Hiroshi Kiyono, Horst Bluethmann, Kohtaro Fujihashi, and Jerry R. McGhee

Expression of Ecto-Adenosine Deaminase and CD26 in Human T Cells Triggered by the TCR-CD3 Complex: Possible Role of Adenosine Deaminase as Costimulatory Molecule
Margarita Martin, Joan Huguet, Josep Joan Centelles, and Rafael Franco

Bcl-2 Blocks Glucocorticoid- but not Fas- or Activation-Induced Apoptosis in a T Cell Hybridoma
Sarfraz A. Memon, M. Belen Moreno, Daniel Petrak, and Charles M. Zacharchuk

Stimulation of Thymocytes Before and After Positive Selection Results in the Induction of Different NF-κB/Rel Protein Complexes
Nel C. Moore, John Girdlestone, Graham Anderson, John J. T. Owen, and Eric J. Jenkinson

IL-12 as Mediator and Adjuvant for the Induction of Contact Sensitivity In Vivo
Gabriele Müller, Joachim Saloga, Tieno Germann, Gerold Schuler, Jürgen Knop, and Alexander H. Enk
Induction of Tolerance in Freshly Isolated Alloreactive T Cells by Activated T Cell Stimulators Is Not Due to the Absence of CD28-B7 Interaction
Ebenezer Satyaraj, Satyajit Rath, and Vineeta Bal

Processing of Exogenous Heat-Aggregated (Denatured) and Particulate (Native) Hepatitis B Surface Antigen for Class I-Restricted Epitope Presentation
Reinhold Schirmbeck, Waltraud Böhm, Karl Melber, and Jörg Reimann

Regulation of IkBa Phosphorylation by PKC- and Ca2+-Dependent Signal Transduction Pathways
Nora M. Stefan, Gary D. Bren, Betsy Frantz, Michael J. Tocci, Edward A. O'Neill, and Carlos V. Paya

Early Activation Signal Transduction Pathways of Th1 and Th2 Cell Clones Stimulated with Anti-CD3: Roles of Protein Tyrosine Kinases in the Signal for IL-2 and IL-4 Production
Toshiki Tamura, Hideki Nakano, Hisashi Nagase, Tatsuaki Morokata, Osamu Igarashi, Yoko Oshimi, Shun-ichi Miyazaki, and Hideo Nariuchi

CD28 Delivers Costimulatory Signals Independently of Its Association with Phosphatidylinositol 3-Kinase
Kenneth E. Truitt, Jia Shi, Spencer Gibson, Leigh G. Segal, Gordon B. Mills, and John B. Imboden

Differentiation to T Helper Cells in the Thymus: Gradual Acquisition of T Helper Cell Function by CD3+CD4+ Cells
Dominique Vanhecke, Bruno Verhasselt, Veronique Debacker, Georges Leclercq, Jean Plum, and Bart Vandekerckhove

Molecular and Structural Immunology

Mapping of Receptor Binding Sites on IL-1β By Reconstruction of IL-1ra-Like Domains
Diana Boraschi, Paola Bossù, Paolo Ruggiero, Aldo Tagliaabue, Riccardo Bertini, Giovanni Macchia, Cinzia Gasbarro, Luigi Pellegrini, Gabriella Melillo, Edy Ulisse, Ugo Visconti, Cinzia Bizzarri, Egidio Del Grosso, Andrew R. Mackay, Gianni Frascotti, Francesco Frigerio, Renata Grifantini, and Guido Grandi

TAP Associates with a Unique Class I Conformation, Whereas Calnexin Associates with Multiple Class I Forms in Mouse and Man
Beatriz M. Carreno, Joyce C. Solheim, Michael Harris, Iwona Stroynowska, Janet M. Connolly, and Ted H. Hansen

Non-Sense and Missense Mutations in the Structural Genes of Complement Component Clq A and C Chains Are Linked with Two Different Types of Complete Selective Clq Deficiencies
Franz Petry, Duc Toan Le, Michael Kirschfink, and Michael Loos

Identification of a Mouse Protein Homologous to the Human CD6 T Cell Surface Protein and Sequence of the Corresponding cDNA
William H. Robinson, Susan S. Prohaska, Joseph C. Santoro, Harriet L. Robinson, and Jane R. Parnes
Differences in MHC Class I Self Peptide Repertoires Among HLA-A2 Subtypes
Tohru Sudo, Nobuhiro Kamikawaji, Akinori Kimura, Yukiji Date, Christopher J. Savoie, Hisashi Nakashima, Emiko Furuichi, Satoru Kuhara, and Takehiko Sasazuki

Interference of Distinct Invariant Chain Regions with Superantigen Contact Area and Antigenic Peptide Binding Groove of HLA-DR
Anne B. Vogt, Lawrence J. Stern, Christine Amshoff, Bernhard Dobberstein, Günter J. Hämmerling, and Harald Kropshofer

HOST DEFENSE

Identification of an HLA-A11-Restricted Epitope from the Tandem Repeat Domain of the Epithelial Tumor Antigen Mucin
Nieves Doménech, Robert A. Henderson, and Olivera J. Finn

Induction of Cell-Mediated Immune Responses to Human Immunodeficiency Virus Type 1 Gag Protein by Using Listeria monocytogenes as a Live Vaccine Vector
Fred R. Frankel, Sushma Hegde, Judy Lieberman, and Yvonne Paterson

Expression of Activated H-ras<sup>val12</sup> in Nontumorigenic and Non-Cross-Reactive Syngeneic Cells Induces Tumor Antigens Cross-Reactive with Rat Mammary Adenocarcinoma 13762
Alan B. Frey and Stephen Cestari

The Role of Monocyte Chemotactic Protein-1 (MCP-1) in the Recruitment of Monocytes and CD4<sup>+</sup> T Cells During a Pulmonary Cryptococcus neoformans Infection
Gary B. Huffnagle, Robert M. Strieter, Theodore J. Standiford, Roderick A. McDonald, Marie D. Burdick, Steven L. Kunkel, and Galen B. Toews

IL-7 Stimulates Protective Immunity in Mice Against the Intracellular Pathogen, Toxoplasma gondii
Lloyd H. Kasper, Tadashi Matsuura, and Imtiaz A. Khan

Constitutive Production of IL-2 by Human Carcinoma Cells, Expression of IL-2 Receptor, and Tumor Cell Growth
Wen-Chang Lin, Satoshi Yasumura, Yoshinori Suminami, Myung-Whun Sung, Shigeki Nagashima, Joanna Stanson, and Theresa L. Whiteside

Nonviable Bacterial Antigens Administered with IL-12 Generate Antigen-Specific T Cell Responses and Protective Immunity Against Listeria monocytogenes
Mark A. Miller, Marianne J. Skeen, and H. Kirk Ziegler

Increased Susceptibility of fas Mutant MRL-lpr/lpr Mice to Staphylococcal Enterotoxin B-Induced Septic Shock

High Level Monocyte Chemoattractant Protein-1 Expression in Transgenic Mice Increases Their Susceptibility to Intracellular Pathogens
Barbara J. Rutledge, Helen Rayburn, Robert Rosenberg, Robert J. North, Ronald P. Gladue, Christopher L. Corless, and Barrett J. Rollins
Early IL-4 Production by Non-CD4+ Cells at the Site of Antigen Deposition Predicts the Development of a T Helper 2 Cell Response to Schistosoma mansoni Eggs
Elizabeth A. Sabin and Edward J. Pearce

Parasite Strain Specificity of Bovine Cytotoxic T Cell Responses to Theileria parva Is Determined Primarily by Immunodominance
Evans L. N. Taracha, Bruno M. Goddeeris, Alan J. Teale, Stephen J. Kemp, and W. Ivan Morrison

Triggering of Complement Receptors CR1 (CD35) and CR3 (CD11b/CD18) Induces Nuclear Translocation of NF-κB (p50/p65) in Human Monocytes and Enhances Viral Replication in HIV-Infected Monocytic Cells
Nathalie Thieblemont, Nicole Haefner-Cavaillon, Astrid Haefner, Béatrice Cholley, Laurence Weiss, and Michel D. Kazatchkine

Soluble CD23 Directly Activates Monocytes to Contribute to the Antigen-Independent Stimulation of Resting T Cells
Myriam Armant, Manuel Rubio, Guy Delespesse, and Marika Sarfati

Neutrophil Inhibitory Factor Prevents Neutrophil-Dependent Lung Injury
Joseph W. Barnard, Michael G. Biro, Siu K. Lo, Shoji Ohno, Marc A. Carozza, Matthew Moyle, Howard R. Soule, and Asrar B. Malik

Identification and Characterization of the Complement C5a Anaphylatoxin Receptor on Human Astrocytes
Philippe Gasque, Philippe Chan, Marc Fontaine, Alexander Ischenko, Marek Lamacz, Otto Götte, and B. Paul Morgan

A Central Role for IL-1β in the In Vitro and In Vivo Regulation of Hepatic Inducible Nitric Oxide Synthase: IL-1β Induces Hepatic Nitric Oxide Synthesis
David A. Geller, Michael E. de Vera, Deborah A. Russell, Richard A. Shapiro, Andreas K. Nussler, Richard L. Simmons, and Timothy R. Billiar

Lipopolysaccharide-Induced Change of Phosphorylation of Two Cytosolic Proteins in Human Monocytes Is Prevented by Inhibitors of ADP-Ribosylation
Holger Heine, Artur J. Ulmer, Hans-Dieter Flad, and Sunna Hauschildt

Cyclic Nucleotide Phosphodiesterase Type IV Participates in the Regulation of IL-10 and in the Subsequent Inhibition of TNF-α and IL-6 Release by Endotoxin-Stimulated Macrophages
Taku Kambayashi, Chaim O. Jacob, David Zhou, Nachman Mazurek, Miranda Fong, and Gideon Strassmann

Stimulation of CD40 with Purified Soluble gp39 Induces Proinflammatory Responses in Human Monocytes
Peter A. Kiener, Patricia Moran-Davis, Bruce M. Rankin, Alan F. Wahl, Alejandro Aruffo, and Diane Hollenbaugh

TGF-β Enhances Macrophage Ability to Produce IL-10 in Normal and Tumor-Bearing Mice
Hiroaki Maeda, Harumi Kuwahara, Yukie Ichimura, Masahiko Ohtsuki, Shinichi Karakata, and Akio Shiraishi
Differential Utilization of IFN-γ-Responsive Elements in Two Maturationally Distinct Macrophage Cell Lines
Mary Ann McDowell, David M. Lucas, Charles M. Nicolet, and Donna M. Paulnock

Identification of Messenger RNA for IL-4 in Human Eosinophils with Granule Localization and Release of the Translated Product
Redwan Moqbel, Sun Ying, Julia Barkans, Terence M. Newman, Patrick Kimmitt, Matthew Wakelin, Luis Taborda-Barata, Qiu Meng, Christopher J. Corrigan, Stephen R. Durham, and A. Barry Kay

Differential Effects of Granulocyte-Macrophage Colony-Stimulating Factor on Eosinophil and Neutrophil Superoxide Anion Generation
Makoto Nagata, Julie B. Sedgwick, and William W. Busse

Classical Complement Pathway Activation on Nucleated Cells: Role of Factor H in the Control of Deposited C3b
Markus W. Ollert, Kerstin David, Reinhard Bredehorst, and Carl-Wilhelm Vogel

p21ras Links FceRI to NF-AT Family Member in Mast Cells: The AP3-Like Factor in This Cell Type Is an NF-AT Family Member
Eva E. Priesch, Gunther G. Pendl, Nathalie E. Harrer, and Thomas Baumruker

Follicular Dendritic Cells, Interdigitating Cells, and Cells of the Monocyte-Macrophage Lineage Are the C1q-Producing Sources in the Spleen: Identification of Specific Cell Types by In Situ Hybridization and Immunohistochemical Analysis
Wilhelm Schwaeble, Martin K.-H. Schäfer, Franz Petry, Thorsten Fink, Dennis Knebel, Eberhard Wehle, and Michael Loos

Regulation of Polymorphonuclear Neutrophil CD16 and CD11b/CD18 Expression by Matrix Proteins During Hypoxia Is VLA-5, VLA-6 Dependent
H. Simms and R. D'Amico

Clinical Immunology

Whither Clinical Immunology?
Robert R. Rich

Construction and Characterization of a Humanized Anti-γ-Ig Receptor Type I (FcγRI) Monoclonal Antibody
Robert F. Graziano, Philip R. Tempest, Patricia White, Tibor Keler, Yashwant Deo, Haile Ghebremariam, Kimberly Coleman, Lorraine C. Pfefferkorn, Michael W. Fanger, and Paul M. Guyre

An Important Role for the Chemokine Macrophage Inflammatory Protein-1α in the Pathogenesis of the T Cell-Mediated Autoimmune Disease, Experimental Autoimmune Encephalomyelitis
William J. Karpus, Nicholas W. Lukacs, Bradford L. McRae, Robert M. Strieter, Steven L. Kunkel, and Stephen D. Miller

Neuroantigen-Specific Th2 Cells Are Inefficient Suppressors of Experimental Autoimmune Encephalomyelitis Induced by Effector Th1 Cells
Alexander Khoruts, Stephen D. Miller, and Marc K. Jenkins
Evidence for Superantigen Involvement in Cardiovascular Injury Due to Kawasaki Syndrome
Donald Y. M. Leung, Ralph C. Giorno, Leslie V. Kazemi, Patrick A. Flynn, and James B. Busse

Delineation of Additional Genetic Bases for C8β Deficiency: Prevalence of Null Alleles and Predominance of C→T Transition in Their Genesis
Leslie Saucedo, Laynez Ackermann, Alexander E. Platonov, Anita Gewurz, Robert M. Rakita, and Peter Densen

Elevated Th1- or Th0-Like Cytokine mRNA in Peripheral Circulation of Patients with Rheumatoid Arthritis: Modulation by Treatment with Anti-ICAM-1 Correlates with Clinical Benefit
Hendrik Schulze-Koops, Peter E. Lipsky, Arthur F. Kavanaugh, and Laurie S. Davis

Effects of Recombinant Dimeric TNF Receptor on Human Inflammatory Responses Following Intravenous Endotoxin Administration
Anthony F. Sulfredini, Debra Reda, Steven M. Banks, Margaret Tropea, Jan M. Agosti, and Reneé Miller

CD8^{high}CD57^{+} T Lymphocytes in Normal, Healthy Individuals Are Oligoclonal and Respond to Human Cytomegalovirus
Eddie C. Y. Wang, Paul A. H. Moss, Penny Frodsham, Paul J. Lehner, John I. Bell, and Leszek K. Borysiewicz

Localization of an Fc-Binding Reactivity to the Constant Region of Human IgG4: Implications for the Pathogenesis of Rheumatoid Arthritis
Debra Jeske Zack, Maruisz Stempniak, Andrew L. Wong, and Richard H. Weisbart

T Cell Epitope Mapping of Ragweed Pollen Allergen Ambrosia artemisiifolia (Amb a 5) and Ambrosia trifida (Amb t 5) and the Role of Free Sulfhydryl Groups in T Cell Recognition
Xiaojiu Zhu, Julia L. Greenstein, Bruce L. Rogers, and Mei-chang Kuo

Author Index

Information for Authors
Cutting Edge Information for Authors
Submission Form: Full Length Articles
AAI Membership Application
Submission Form: Cutting Edge