EDITORIAL

1 The Journal of Immunology Is Dead! Long Live The Journal of Immunology!
Frank W. Fitch

CUTTING EDGE

3 Testosterone Therapy Ameliorates Experimental Autoimmune Encephalomyelitis and Induces a T Helper 2 Bias in the Autoantigen-Specific T Lymphocyte Response
Mira Dalal, Sookhyun Kim, and Rhonda R. Voskuhl

7 IL-4 Secretion by CD4+NK1+ T Cells Induces Monocyte Chemoattractant Protein-1 in Early Listeriosis
Inge E. A. Flesch, Alexandra Wandersee, and Stefan H. E. Kaufmann

11 The Dominant Role of Bone Marrow-Derived Cells in CTL Induction Following Plasmid DNA Immunization at Different Sites
Akiko Iwasaki, Celia Aurora T. Torres, Pamela S. Ohashi, Harriet L. Robinson, and Brian H. Barber

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

15 Ca2+-Dependent, Fas- and Perforin-Independent Apoptotic Death of Allografted Tumor Cells by a Type of Activated Macrophage

On the cover: Graphical representations of MHC class I molecules H-2D^b and HLA-A2.1. Identical residues are shown in green. A murine CTL clone (AHIII12.2) displays peptide-specific recognition of both of these molecules, and cytolytic assays suggest that these are functionally equivalent epitopes. This TCR appears to make a different, but overlapping, set of contacts with each class I peptide complex. In this instance, cross-recognition appears to be the result of both shared and complex-specific contacts. (Figure 8 from Lofts, D. J., Y. Chen, D. G. Covell, V. H. Engelhard, and E. Appella. 1997. Differential contact of disparate class I peptide complexes as the basis for epitope cross-recognition by a single T cell receptor. J. Immunol. 158:3651.)
22 The Immunosuppressive Metabolite of Leflunomide, A77 1726, Affects Murine T Cells Through Two Biochemical Mechanisms
Robert T. Elder, Xiulong Xu, James W. Williams, Haithua Gong, Alison Finnegan, and Anita S.-F. Chong

28 IL-12-Deficient Dendritic Cells, Generated in the Presence of Prostaglandin E₂, Promote Type 2 Cytokine Production in Maturing Human Naive T Helper Cells
Paweł Kalinowski, Catharien M. U. Hilkens, Alies Snijders, Frank G. M. Snijdewint, and Martien L. Kapsenberg

36 Differential Expression of Transcription Directed by a Discrete NF-AT Binding Element from the IL-4 Promoter in Naive and Effector CD4 T Cells
Thomas M. Aune and Richard A. Flavell

44 Spontaneously Colitic C3H/HeJ Bir Mice Demonstrate Selective Antibody Reactivity to Antigens of the Enteric Bacterial Flora

53 Defective TCR Stimulation in Anergized Type 2 T Helper Cells Correlates with Abrogated p56^ck and ZAP-70 Tyrosine Kinase Activities
Alexander Faith, Cezmi A. Akdis, Mürseccel Akdis, Hans-Uwe Simon, and Kurt Blaser

61 Inactivation of lck and Loss of TCR-Mediated Signaling Upon Persistent Engagement With Complexes of Peptide:MHC Molecules
James E. Lee, Michael B. Cossoy, Luan A. Chau, Bhagirath Singh, and Joaquín Madrenas

70 Proto-Oncoprotein Vav Interacts with c-Cbl in Activated Thymocytes and Peripheral T Cells
Luc E. M. Marengère, Christine Mirtsos, Ivona Kozieradzki, André Veillette, Tak W. Mak, and Josef M. Penninger

77 Immunodominant CD4^+ T Cell Receptor Vβ Repertoires Involved in Graft-Versus-Host Disease Responses to Minor Histocompatibility Antigens
Marc A. Berger and Robert Korngold

86 Selective Expansion of Vγ2-Vδ7 TCRγδ Cells in C57BL/6 Mice Is Postnatal and Extrathymic
Anne I. Sperling, Donna C. Decker, Richard J. DiPaolo, Darryl A. Stern, Anthony Shum, and Jeffrey A. Bluestone

92 Regulation of Tumor Antigen Presentation by Urocanic Acid
Stefan Beissert, Taj Mohammad, Hideshi Torri, Antonietta Lonati, Zengmin Yan, Harry Morrison, and Richard D. Granstein

97 Propionibacterium acnes Treatment Diminishes CD4^+NK1.1^+ T Cells but Induces Type 1 T Cells in the Liver by Induction of IL-12 and IL-18 Production from Kupffer Cells
Kiyoshi Matsui, Tomohiro Yoshimoto, Hiroko Tsutsui, Yasuko Hyodo, Nobuki Hayashi, Keisai Hiroishi, Norifumi Kawada, Haruki Okamura, Kenji Nakanishi, and Kazuya Higashino
Inhibition of Primary and Recall Allergen-Specific T Helper Cell Type 2-Mediated Responses by a T Helper Cell Type 1 Stimulus
Dorothy E. Scott, Inna Agranovich, John Inman, Michael Gober, and Basil Golding

TGF-β Down-Regulates Stromal IL-7 Secretion and Inhibits Proliferation of Human B Cell Precursors
Jihong Tang, Bonnie L. Nuccie, Ion Ritterman, Jane L. Liesveld, Camille N. Abboud, and Daniel H. Ryan

Bcl-2 Expression in Target Cells Leads to Functional Inhibition of Caspase-3 Protease Family in Human NK and Lymphokine-Activated Killer Cell Granule-Mediated Apoptosis
Claire Renvoizé, Rémi Roger, Nathalie Moulian, Jacques Bertoglio, and Jacqueline Bréard

xid Affects Events Leading to B Cell Cycle Entry
Kurt Brorson, Mark Brunswick, Sergei Ezhevsky, Datsen George Wei, Ryan Berg, David Scott, and Kathryn E. Stein

Interaction of CTLA-4 with the Clathrin-Associated Protein AP50 Results in Ligand-Independent Endocytosis That Limits Cell Surface Expression
Ellen Chuang, Maria-Luisa Alegre, Colin S. Duckett, Patricia J. Noel, Matthew G. Vander Heiden, and Craig B. Thompson

Direct MHC Class I Complementary DNA Transfer to Thymus Induces Donor-Specific Unresponsiveness, Which Involves Multiple Immunologic Mechanisms
Stuart J. Knechtle, Jue Wang, Christian Graeb, Yuan Zhai, Xuening Hong, John H. Fechner, Jr., and Edward K. Geissler

Requirement of CD4 T Cells for Skin Graft Rejection Against Thymus Leukemia (TL) Antigen and Multiple Epitopes on the TL Molecule Recognized by CD4 T Cells
Kazuhide Tsuji, Yuichi Obata, Toshitada Takahashi, Jiro Arata, and Eiichi Nakayama

In Vivo Mechanism by Which Leflunomide Controls Lymphoproliferative and Autoimmune Disease in MRL/MpJ-lpr/lpr Mice
Xiulong Xu, Leonard Blinder, Jikun Shen, Hatha Gong, Alison Finnegan, James W. Williams, and Anita S.-F. Chong

TGF-β Inhibits IL-2-Induced Tyrosine Phosphorylation and Activation of Jak-1 and Stat 5 in T Lymphocytes
John J. Bright, Lawrence D. Kerr, and Subramaniam Sriram

CD38 Ligation in Human B Cell Progenitors Triggers Tyrosine Phosphorylation of CD19 and Association of CD19 with Lyn and Phosphatidylinositol 3-Kinase
Akira Kitamura, Chikako Ito, Elaine Coustan-Smith, and Dario Campana

CD38 Ligation Results in Activation of the Raf-1/Mitogen-Activated Protein Kinase and the CD3-ζ-ζ-Associated Protein-70 Signaling Pathways in Jurkat T Lymphocytes
Mercedes Zubiaur, Manolo Izquierdo, Cox Terhorst, Fabio Malavasi, and Jaime Sancho
Expression and Role in Apoptosis of the α- and β-Chains of the IFN-γ Receptor on Human Th1 and Th2 Clones
Francesco Novelli, Mario M. D’Elios, Paola Bernabei, Laurence Ozmen, Laura Rigamonti, Fabio Almerigogna, Guido Forni, and Gianfranco Del Prete

Antigen Specificity of Dual Reactive T Hybridomas Determines the Requirement for CD40 Ligand-CD40 Interactions
Minette E. Ozaki, Lars Karlsson, Per A. Peterson, and Susan R. Webb

FceRIγ Can Support T Cell Development and Function in Mice Lacking Endogenous TCR γ-Chain
Elizabeth Shores, Véronique Flamand, Tom Tran, Alexander Grinberg, Jean-Pierre Kinet, and Paul E. Love

B Cell Antigen Receptor Desensitization: Disruption of Receptor Coupling to Tyrosine Kinase Activation
Barbara J. Vilen, Sara J. Famiglietti, Amy M. Carbone, Brian K. Kay, and John C. Cambier

Molecular and Structural Immunology

Structural Requirements for Assembly of Dimeric IgA Probed by Site-Directed Mutagenesis of J Chain and a Cysteine Residue of the α-Chain CH2 Domain
Sonja Krugmann, Richard J. Pleass, Julie D. Atkin, and Jenny M. Woof

Structure and Genomic Organization of a Second Class of Immunoglobulin Light Chain Genes in the Channel Catfish
Seyed H. Ghafrari and Craig J. Lobb

Isolation and Characterization of 2'-Fluoro-, 2'-Amino-, and 2'-Fluoro-/Amino-Modified RNA Ligands to Human IFN-γ That Inhibit Receptor Binding
Mark F. Kubik, Carol Bell, Tim Fitzwater, Susan R. Watson, and Diane M. Tasset

The α Subunit Cytoplasmic Domain Regulates the Assembly and Adhesiveness of Integrin Lymphocyte Function-Associated Antigen-1
Cha-Fen Lu and Timothy A. Springer

Host Defense

Refocusing Neutralizing Antibody Response by Targeted Dampening of an Immunodominant Epitope
Robert R. Garrity, Guus Rimmelzwaan, Anton Minassian, Wen-Po Tsai, George Lin, Jean-Jacques de Jong, Jaap Goudsmit, and Peter L. Nara

Human Alveolar T Lymphocyte Responses to Mycobacterium tuberculosis Antigens: Role for CD4+ and CD8+ Cytotoxic T Cells and Relative Resistance of Alveolar Macrophages to Lysis

Production of IL-18 (IFN-γ-Inducing Factor) Messenger RNA and Functional Protein by Murine Keratinocytes
Sabine Stoll, Gabriele Müller, Masashi Kurimoto, Joachim Saloga, Tadao Tanimoto, Hiroshi Yamauchi, Haruki Okamura, Jürgen Knop, and Alexander H. Enk
The Intrinsic Region of an Incompletely Spliced gp100 Gene Transcript Encodes an Epitope Recognized by Melanoma-Reactive Tumor-Infiltrating Lymphocytes
Paul F. Robbins, Mona El-Gamil, Yong F. Li, Ellen B. Fitzgerald, Yutaka Kawakami, and Steven A. Rosenberg

NKR-P1A Stimulation of Arachidonate-Generating Enzymes in Rat NK Cells Is Associated with Granule Release and Cytotoxic Activity
M. Grazia Cifone, Paola Roncaioli, Luisa Cironi, Claudio Festuccia, Antonietta Meccia, Simona D'Alò, Dario Botti, and Angela Santoni

Macrophage Inflammatory Protein-1α (MIP-1α) Is Required for the Efferent Phase of Pulmonary Cell-Mediated Immunity to a Cryptococcus neoformans Infection
Gary B. Huffnagle, Robert M. Strieter, Lisa K. McNeil, Roderick A. McDonald, Marie D. Burdick, Steven L. Kunkel, and Galen B. Toews

IL-12 Treatment Attenuates T Helper Cell Type 2 and B Cell Responses but Does Not Improve Vaccine-Enhanced Lung Illness
Tracy Hussell, Usman Khan, and Peter Openshaw

Determinants of T Cell Reactivity to the Mycobacterium leprae GroES Homologue
Jenny Kim, Alessandro Sette, Stuart Rodda, Scott Southwood, Peter A. Sieting, Vijay Mehra, Jeffrey D. Ohmen, Jennifer Oliveros, Ettore Appella, Yuichiro Higashimoto, Thomas H. Rea, Barry R. Bloom, and Robert L. Modlin

Eradication of Murine Bladder Carcinoma by Intratumor Injection of a Bicistronic Adenoviral Vector Carrying cDNAs for the IL-12 Heterodimer and Its Inhibition by the IL-12 p40 Subunit Homodimer
Ling Chen, Dongshu Chen, Ellen Block, Michael O'Donnell, Donald W. Kufe, and Steven K. Clinton

A Mechanism for Selective Recruitment of CD8 T Cells into B7-1-Transfected Plasmacytoma: Role of Macrophage-Inflammatory Protein 1α
Maja Maric, Lieping Chen, Barbara Sherry, and Yang Liu

Expression of a Biologically Active Recombinant Mouse IL-1 Receptor Antagonist and Its Use In Vivo to Modulate Aspects of the Acute Phase Response
Sharon Grehan, Clarissa M. Uhlar, Robert B. Sim, Jeff Herbert, and Alexander S. Whitehead

IL-13 Inhibits TNF Production but Potentiates That of IL-6 In Vivo and Ex Vivo in Mice
Elena Di Santo, Cristina Meazza, Marina Sironi, Paolo Fruscella, Alberto Mantovani, Jean D. Sipe, and Pietro Ghezzi

Effect of the Inducible Nitric Oxide Synthase Inhibitors Aminoguanidine and L-Nω-(1-Iminoethyl)lysine on Zymosan-Induced Plasma Extravasation in Rat Skin
Victoria C. Ridger, E. Roy Pettipher, Clare E. Bryant, and Susan D. Brain
Endotoxin Induces Expression of Type II Phospholipase A2 in Macrophages During Acute Lung Injury in Guinea Pigs: Involvement of TNF-α in Lipopolysaccharide-Induced Type II Phospholipase A2 Synthesis
Laurence Arbibe, Daniel Vial, Isabelle Rostinski-Chupin, Nathalie Havet, Michel Huere, B. Boris Vargaftig, and L housseine Touqui

Transgenic Monocyte Chemoattractant Protein-1 (MCP-1) in Pancreatic Islets Produces Monocyte-Rich Insulitis Without Diabetes: Abrogation by a Second Transgene Expressing Systemic MCP-1

Fc Receptor-Triggered Insertion of Secretory Granules into the Plasma Membrane of Human Neutrophils: Selective Retrieval During Phagocytosis
Hans Tapper and Sergio Grinstein

Differential Regulation of Indoleamine 2,3-Dioxygenase Expression by Nitric Oxide and Inflammatory Mediators in IFN-γ-Activated Murine Macrophages and Microglial Cells
Daniela Alberati-Giani, Pari Malherbe, Paola Ricciardi-Castagnoli, Christer Köhler, Suzanne Denis-Donini, and Andrea M. Cesura

Shared TCR Vβ Gene Expression by the Pancreas and Salivary Gland in Immunodeficient Alikeplasric Mice
Masahiro Yamamichi, Naoki Matsuoka, Tsutomu Tamioka, Katsumi Eguchi, Shigenobu Nagataki, and Takashi Kanematsu

Outside-In Signaling by Lipopolysaccharide Through a Tailless Integrin
Robin R. Ingalls, M. Amin Arnaout, and Douglas T. Golenbock

Cyclooxygenase-2-Dependent Delayed Prostaglandin D2 Generation Is Initiated by Nerve Growth Factor in Rat Peritoneal Mast Cells: Its Augmentation by Extracellular Type II Secretory Phospholipase A2
Makoto Murakami, Kinji Tada, Ko-ichi Nakajima, and Ichiro Kudo

Recombinant Histamine-Releasing Factor Enhances IgE-dependent IL-4 and IL-13 Secretion by Human Basophils
John T. Schroeder, Lawrence M. Lichtenstein, and Susan M. MacDonald

**Clinical Immunology**

Genetic Dissection of Systemic Lupus Erythematosus Pathogenesis: Sle2 on Murine Chromosome 4 Leads to B Cell Hyperactivity
Chandra Mokan, Laurence Morel, Ping Yang, and Edward K. Wakeland

Role of Macrophages and Macrophage-Derived Cytokines in the Pathogenesis of Kilham Rat Virus-Induced Autoimmune Diabetes in Diabetes-Resistant BioBreeding Rats
Young-Hwa Chung, Hee-Sook Jun, Yup Kang, Kensuke Hirasawa, Byoung-Rai Lee, Nico Van Rooijen, and Ji-Won Yoon

Identification of Rat Prostatic Steroid-Binding Protein as a Target Antigen of Experimental Autoimmune Prostatitis: Implications for Prostate Cancer Therapy
Ko-Jiunn Liu, Gurkamal S. Chatta, Daniel R. Twardzik, Thomas S. Vedvick, Lawrence D. True, A. Gregory Spies, and Martin A. Cheever
Clonal Expansion of CD8\(^+\) T Cells in Kawasaki Disease
In-Hong Choi, Yong-Jun Chwae, Woo-Sup Shim, Dong-Soo Kim, Dae-Ho Kwon, Joo-Deuk Kim, and Se-Jong Kim

A Role for Insulin-Like Growth Factor in the Regulation of IL-6-Responsive Human Myeloma Cell Line Growth
Diane F. Jelinek, Thomas E. Witzig, and Bonnie K. Arendt

Triggers of Autoimmune Disease in a Murine TCR-Transgenic Model for Multiple Sclerosis
Thea Brabb, Ananda W. Goldrath, Peter von Dassow, Angela Paez, H. Denny Liggitt, and Joan Goverman

Author Index

Information for Authors

Editorial Policies and Practices

Submission Form: Full Length Articles

AAI Membership Application

Submission Form: Cutting Edge

AAI Trainee Membership Application

CIS Membership Application