TABLE OF CONTENTS

2075 Commentary: Conservation of Structural Features Reveals the Existence of a Large Family of Inhibitory Cell Surface Receptors and Noninhibitory/Activatory Counterparts
  Frédéric Vély and Eric Vivier

2078 Induction of Thymocyte Deletion by Purified Single Peptide/Major Histocompatibility Complex Ligands
  Sylvie Lesage, Joseé Charron, Gary Winslow, and Patrice Hugo

2082 Protein Kinase Ca-Mediated Chronic Signal Transduction for Immunosenescence
  Kozo Ohkusu, Jun Du, Ken-Ichi Isobe, Hong Yi, Anwarul A. Akhand, Masashi Kato, Haruhiko Suzuki, Hiroyoshi Hidaka, and Izumi Nakashima

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

2085 Memory, but Not Naive, Peripheral Blood B Lymphocytes Differentiate into Ig-Secreting Cells After CD40 Ligation and Costimulation with IL-4 and the Differentiation Factors IL-2, IL-10, and IL-3
  Vincent Kindler and Rudolf H. Zubler

2091 Perforin-Dependent Cytotoxic Activity and Lymphokine Secretion by CD4\(^{+}\) T Cells Are Regulated by CD8\(^{+}\) T Cells
  Noelle Sevilir Williams and Victor H. Engeland
2100 Positive and Negative Selection of Functional Mouse CD4 Cells by Porcine MHC in Pig Thymus Grafts
Yong Zhao, Justin J. Sergio, Kirsten Swenson, J. Scott Arn, David H. Sachs, and Megan Sykes

2108 Human Autoreactive and Foreign Antigen-Specific T Cells Resist Apoptosis Induced by Soluble Recombinant CD95 Ligand
Frauke Zipp, Roland Martin, Rudolf Lichtenfels, Wilfried Roth, Johannes Ddhgans, Peter H. Krammer, and Michael Weller

2116 Amplified Follicular Immune Complex Deposition in Mice Lacking the Fc Receptor γ-Chain Does Not Alter Maturation of the B Cell Response
Kalpit A. Vora, Jeffrey V. Ruetch, and Tim Manser

2125 A Mechanism Underlying Synergy Between IL-12 and IFN-γ-Inducing Factor in Enhanced Production of IFN-γ
Hyun-Jong Ahn, Seiji Maruo, Michio Tomura, Jie Mu, Toshiyuki Hamaoka, Kenji Nakanishi, Steven Clark, Masashi Kurimoto, Haruki Okamura, and Hiromi Fujiwara

2132 CD4 T Cell Anergy in Murine AIDS: Costimulation via CD28 and the Addition of IL-12 Are Not Sufficient to Rescue Anergic CD4 T Cells
Catherine Andrews, Susan L. Swain, and Girija Muralidhar

2139 The Effect of the Proteasome Inhibitor Lactacystin on the Presentation of Transporter Associated with Antigen Processing (TAP)-Dependent and TAP-Independent Peptide Epitopes by Class I Molecules
Ailin Bai and James Forman

2147 Non-MHC-Linked Th2 Cell Development Induced by Soluble Protein Administration Predicts Susceptibility to Leishmania major Infection
Jean-Charles Guéry, Francesca Galbiati, Simona Smiroldo, and Luciano Adorini

2154 CD94 Ligation Induces Apoptosis in a Subset of IL-2-Stimulated NK Cells
Hiroaki Ida, Michael J. Robertison, Stephan Voss, Jerome Ritz, and Paul Anderson

2161 Interleukin-11 Inhibits Macrophage Interleukin-12 Production
Shawn X. Leng and Jack A. Elias

2169 CD28-Induced Cytokine Production and Proliferation by Thymocytes Are Differentially Regulated by the p59fyn Tyrosine Kinase
Christopher J. Ong, Andrew S.-P. Lim, and Hung-Sia Teh

2177 Impaired Class II Expression and Antigen Uptake in Monocytic Cells After HIV-1 Infection
Steven Polyak, Houchu Chen, David Hirsch, Italas George, Robert Hershberg, and Kirk Sperber

2189 T Cells Bearing V88 Are Preferentially Infected with Exogenous Mouse Mammary Tumor Virus
Narin Upagarin, Hitoshi Nishimura, Worawidh Wajjwalku, Yoshihiro Ando, Seiho Nagafuchi, Takeshi Watanabe, and Yasunobu Yoshikai

2196 Fas Ligand Expression Is Restricted to Nonlymphoid Thymic Components In Situ
Lars E. French, Anne Wilson, Michael Hahne, Isabelle Viard, Jürg Tschopp, and H. Robson MacDonald
Antibodies Against Sialophorin (CD43) Enhance the Capacity of Dendritic Cells to Cluster and Activate T Lymphocytes  
Emanuele Fanales-Belasio, Giovanna Zambruno, Andrea Cavani, and Giampiero Girolomoni

IL-6 Triggers Cell Growth via the Ras-Dependent Mitogen-Activated Protein Kinase Cascade  
Atsushi Ogata, Dharminder Chauhan, Gerrard Teoh, Steven P. Treon, Mitsuyoshi Urashima, Robert L. Schlossman, and Kenneth C. Anderson

Developmental Pathways of Dendritic Cells in Vivo: Distinct Function, Phenotype, and Localization of Dendritic Cell Subsets in FLT3 Ligand-Treated Mice  

Distinct Mechanisms for the Induction and Maintenance of Allograft Tolerance with CTLA4-Fc Treatment  
Hanh M. Tran, Peter W. Nickerson, Anthony C. Restifo, Maria A. Ivis-Woodward, Anita Patel, Richard D. Allen, Terry B. Strom, and Philip J. O’Connell

Cultured NK1.1+CD4+ T Cells Produce Large Amounts of IL-4 and IFN-γ Upon Activation by Anti-CD3 or CD1  
Hangjiong Chen and William E. Paul

CD99 (MIC2) Regulates the LFA-1/ICAM-1-Mediated Adhesion of Lymphocytes, and Its Gene Encodes Both Positive and Negative Regulators of Cellular Adhesion  
Jang-Hee Hahn, Min Kyung Kim, Eun Young Choi, Soon Ha Kim, Hae Won Sohn, Don Il Ham, Dooyun Chung, Tae Jin Kim, Wang Jae Lee, Cheol Keun Park, Howe J. Ree, and Seong Hoe Park

IL-7 Activates α4β7 Integrin in Murine Thymocytes  

The Proliferative In Vivo Activities of lpr Double-Negative T Cells and the Primary Role of p59fn in Their Activation and Expansion  
Dimitrios Balomenos, Robert Rumold, and Argyrios N. Theofilopoulos

Convergence of Schiff Base Costimulatory Signaling and TCR Signaling at the Level of Mitogen-Activated Protein Kinase ERK2  
Huaqing Chen, Simon Hall, Brian Heffernan, Neil T. Thompson, Mark V. Rogers, and John Rhodes

CD40 Ligand Induction on T Cell Subsets by Peptide-Presenting B Cells: Implications for Development of the Primary T and B Cell Response  
Archana I. Jaiswal and Michael Croft

The Lck SH2 Phosphotyrosine Binding Site Is Critical for Efficient TCR-Induced Processive Tyrosine Phosphorylation of the ζ-Chain and IL-2 Production  
Linda A. Lewis, Chan D. Chung, Jing-yi Chen, Jane R. Parnes, Miriana Moran, Viresh P. Patel, and M. Carrie Miceli
Expression of a bcl-2 Transgene Reduces Proliferation and Slows Turnover of Developing B Lymphocytes In Vivo
Lorraine A. O'Reilly, Alan W. Harris, David M. Tarlinton, Lynn M. Corcoran, and Andreas Strasser

Functional Mapping of the Orientation for TCR Recognition of an H2-Kb-Restricted Ovalbumin Peptide Suggests That the β-Chain Subunit Can Dominate the Determination of Peptide Side Chain Specificity
Stephen J. Turner, Stephen C. Jameson, and Francis R. Carbone

Molecular and Structural Immunology

Analysis of Polymorphism in Porcine MHC Class I Genes: Alterations in Signals Recognized by Human Cytotoxic Lymphocytes
Jennifer A. Sullivan, Henry F. Oettinger, David H. Sachs, and Albert S. B. Edge

The Glycosylation of IgA Produced by Murine B Cells Is Altered by Th2 Cytokines
Subba R. Chintalacharuvu and Steven N. Emancipator

T Cell-Independent Response to Brucella-Insulin Identifies a Preimmune Repertoire for Insulin
James W. Thomas, Patricia M. Kralick, and U. Kevin Ewulonu

Molecular Identification of a Novel Family of Human Ig Superfamily Members That Possess Immunoreceptor Tyrosine-Based Inhibition Motifs and Homology to the Mouse gp49B1 Inhibitory Receptor
Jonathan P. Arm, Chioma Nwankwo, and K. Frank Austen

Absence of Functional Relevance of Human Transporter Associated with Antigen Processing Polymorphism for Peptide Selection
Soizic Daniel, Sophie Caillat-Zucman, Jürgen Hammer, Jean-François Bach, and Peter M. van Endert

Assembly and Retention of CD1b Heavy Chains in the Endoplasmic Reticulum
Masahiko Sugita, Steven A. Porcelli, and Michael B. Brenner

Host Defense

Cytolytic T Lymphocyte Recognition of the Immunodominant HLA-A0201-Restricted Melan-A/MART-1 Antigenic Peptide in Melanoma
Pedro Romero, Nadine Gervois, Jürg Schneider, Patricia Escobar, Danila Valmori, Christophe Pannetier, Alexander Steinle, Thomas Wolfel, Danielle Liévard, Vincent Brichard, Aline van Pel, Francine Jotereau, and Jean-Charles Cerottini

Heat Shock Protein 65 Induced by γδ T Cells Prevents Apoptosis of Macrophages and Contributes to Host Defense in Mice Infected with Toxoplasma gondii
Hajime Hisaedo, Tohru Sakai, Hiroyuki Ishikawa, Yoichi Maekawa, Koji Yasutomo, Robert A. Good, and Kunisuke Himeno

Superantigen Activation of Immune Cells Evokes Epithelial (T84) Transport and Barrier Abnormalities via IFN-γ and TNFα: Inhibition of Increased Permeability, but Not Diminished Secretory Responses by TGF-β2
Derek M. McKay and Paramjit K. Singh
Chimeric Peptides: A New Approach to Enhancing the Immunogenicity of Peptides with Low MHC Class I Affinity: Application in Antiviral Vaccination
Sophie Tourdot, Mohamed Oukka, Jean Claude Manuguerra, Vassiliki Magafa, Isabelle Vergnon, Nicole Riché, Martine Bruley-Rosset, Pavlos Cordopatis, and Konstadinos Kosmatopoulos

Growth of P511 Mastocytoma Cells in BALB/c Mouse Brain Elicits CTL Response Without Tumor Elimination: A New Tumor Model for Regional Central Nervous System Immunity
Leslie B. Gordon, Scott C. Nolan, Helen F. Cserr, Paul M. Knopf, and Christine J. Harting-Berg

Adsorption to Aluminum Hydroxide Promotes the Activity of IL-12 as an Adjuvant for Antibody as Well as Type 1 Cytokine Responses to HIV-1 gp120
Dragana Jankovic, Patricia Caspar, Martin Zweig, Maria Garcia-Moll, Stephen D. Showalter, Frederick R. Vogel, and Alan Sher

Hydrogen Peroxide-Mediated Transcriptional Induction of Macrophage Colony-Stimulating Factor by TGF-β1
Yi-Hui Hong, Hai-Bing Peng, Vito La Fata, and James K. Liao

INFLAMMATION

Human Monocyte Binding to Fibronectin Enhances IFN-γ-Induced Early Signaling Events
James B. McCarthy, Bina V. Vachhani, Sharon M. Wahl, David S. Finbloom, and Gerald M. Feldman

Regulation of Tissue Inhibitor of Metalloproteinase-1 in Fibroblasts and Acute Phase Proteins in Hepatocytes In Vitro by Mouse Oncostatin M, Cardiotrophin-1, and IL-6
Carl D. Richards, Christine Kerr, Minoru Tanaka, Takahiko Hara, Atsushi Miyajima, Diane Pennica, Fernando Botelho, and Carrie M. Langdon

Characterization of C3-Binding Proteins on Mouse Neutrophils and Platelets
Richard J. Quigg, Jessy J. Alexander, C. Frederick Lo, Alice Lim, Chun He, and V. Michael Holers

Enhanced Expression of Inducible Cyclooxygenase with Age in Murine Macrophages
Michael G. Hayek, Casilda Mura, Dayong Wu, Alison A. Beharka, Sung Nim Han, K. Eric Paulson, Daniel Hwang, and Simin Nikbin Meydani

Absence of IL-1 Signaling and Reduced Inflammatory Response in IL-1 Type I Receptor-Deficient Mice
Mark Labow, David Shuster, Maria Zetterstrom, Perla Nunes, Robert Terry, Emily B. Cullinan, Tamas Bartfai, Carmen Solorzano, Lyle L. Moldawer, Richard Chizzonite, and Kim W. McIntyre

Chitin Particle-Induced Cell-Mediated Immunity Is Inhibited by Soluble Mannan: Mannose Receptor-Mediated Phagocytosis Initiates IL-12 Production
Yoshimi Shibata, W. James Metzger, and Quentin N. Myrvik
Bridging of Neutrophils to Target Cells by Opsonized Zymosan Enhances the Cytotoxicity of Neutrophil-Produced H₂O₂
Xiaoxia Jiang, Tsai-Hung Wu, and Robert L. Rubin

In Vivo Transfer of Engineered Macrophages into the Glomerulus: Endogenous TGF-β-Mediated Defense Against Macrophage-Induced Glomerular Cell Activation
Tamás S. Sütő, Leon G. Fine, Fujio Shimizu, and Masanori Kitamura

Repeated Elicitation of Contact Hypersensitivity Induces a Shift in Cutaneous Cytokine Milieu from a T Helper Cell Type 1 to a T Helper Cell Type 2 Profile
Hideki Kitagaki, Naoko Ono, Kazuhito Hayakawa, Toshiki Kitazawa, Kozo Watanabe, and Tetsuo Shiohara

Induction of IL-12 and Chemokines by Hyaluronan Requires Adhesion-Dependent Priming of Resident but Not Elicited Macrophages
Jennifer Hodge-Dufour, Paul W. Noble, Maureen R. Horton, Clare Bao, Maria Wysoka, Marie D. Burdick, Robert M. Strieter, Giorgio Trinchieri, and Ellen Puré

Clinical Immunology

Changes in Cytokine Secretion Induced by Altered Peptide Ligands of Myelin Basic Protein Peptide 85–99
Lara J. Ausubel, Jeffrey I. Krieger, and David A. Hafler

Functional Heterogeneity of HLA-A02 Subtypes Revealed by Presentation of a MAGE-3-Encoded Peptide to Cytotoxic T Cell Clones
Katharina Fleischhauer, Silvia Tanzarella, Vincenzo Russo, Maria Luisa Sensi, Pierre van der Bruggen, Claudio Boràignon, and Catia Traversari

Prevention by Anti-LFA-1 of Acute Myoblast Death Following Transplantation
Benoît Guérette, Daniel Skuk, Florence Céléstin, Christine Huard, François Tardif, Isabelle Asselin, Brigitte Roy, Martyné Goulet, Raynald Roy, Mark Entman, and Jacques P. Tremblay

Suppression of Autoimmune Disease and of Massive Lymphadenopathy in MRL/Mp-lpr/lpr Mice Lacking Tyrosine Kinase Fyn (p59Fyn)
Takeo Takanashi, Takeshi Yagü, Shizuko Kakinuma, Akira Kurokawa, Takao Okada, Kiyoshi Takatsu, Shin-ichi Aizawa, and Takuya Katagiri

Author Index