3769 Tyrosines 113, 128, and 145 of SLP-76 Are Required for Optimal Augmentation of NFAT Promoter Activity
Nan Fang, David G. Motto, Susan E. Ross, and Gary A. Koretzky

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

3775 The Catalytic Domain of pp56Fck, But Not Its Regulatory Domain, Is Sufficient for Inducing IL-2 Production

3783 Response of a Human T Cell Clone to a Large Panel of Altered Peptide Ligands Carrying Single Residue Substitutions in an Antigenic Peptide: Characterization and Frequencies of TCR Agonism and TCR Antagonism With or Without Partial Activation
Yu-Zhen Chen, Sho Matsushita, and Yasuharu Nishimura

3791 Evidence That the Wiskott-Aldrich Syndrome Protein May Be Involved in Lymphoid Cell Signaling Pathways
Giles O. C. Cory, Lucy MacCarthy-Morrogh, Sharon Banin, Ivan Gout, Paul M. Brickell, Roland J. Levisky, Christine Kinnon, and Ruth C. Levering

3796 Mechanisms of Tolerance Induction: Splenocytes from Total Lymphoid Irradiated Mice Inhibit the IL-2 Pathway in TCR-Activated CD4 Cells
Elizabeth H. Field, Zhong-Xiang Ye, and Todd M. Rouse

3804 Overexpression of c-Fos Induces Apoptosis of CD43+ Pro-B Cells
Lina Hu, Masahiko Hatano, Ulrich Ruther, and Takeshi Tokuhisa

3812 Isolation and Characterization of Murine fra-I: Induction Mediated by CD40 and Surface Ig Is Protein Kinase C Dependent
Li Huo and Thomas L. Rothstein

3819 A Subclass of Dendritic Cells Regulates the Response of Naive CD8 T Cells by Limiting Their IL-2 Production
Vadim Kronin, Ken Winkel, Gabriele Süss, Anne Kelso, William Heath, Jörg Kirchner, Harald von Boehmer, and Ken Shortman
A Novel Complex, p40/42, Is Constitutively Associated with the B Cell Antigen Receptor and Phosphorylated Upon Receptor Stimulation
Young J. Lee, Phot Luisiri, and Marcus R. Clark

Porcine Endothelial CD86 Is a Major Costimulator of Xenogeneic Human T Cells: Cloning, Sequencing, and Functional Expression in Human Endothelial Cells
Stephen E. Maher, Karin Karmann, Wang Min, Christopher C. W. Hughes, Jordan S. Pober, and Alfred L. M. Bothwell

Apoptosis Signaling Pathways in Normal T Cells: Differential Activity of Bcl-2 and IL-1β-Converting Enzyme Family Protease Inhibitors on Glucocorticoid- and Fas-Mediated Cytotoxicity
M. Belen Moreno, Sarfraz A. Memon, and Charles M. Zacharchuk

β1 Integrin-Mediated Activation of Focal Adhesion Kinase and Its Association with Fyn and Zap-70 in Human NK Cells
Hannah Rabinovich, Mioara Manciulea, Ronald B. Herberman, and Theresa L. Whiteside

Toxic Shock Syndrome Toxin-1-Induced Death Is Prevented by CTLA4Ig
Bhaskar Saha, Beth Jaklic, David M. Harlan, Gary S. Gray, Carl H. June, and Ryo Abe

Herpesvirus saimiri-Transformed Human CD4+ T Cells Can Provide Polyclonal B Cell Help via the CD40 Ligand As Well As the TNF-α Pathway and Through Release of Lymphokines
Kunal Schau, Randall Ware, Michael J. Yellin, Leonard Chess, and Israel Lowy

Cytotoxic γδ or αβ T Cells with a Natural Killer Cell Marker, CD56, Induced from Human Peripheral Blood Lymphocytes by a Combination of IL-12 and IL-2
Masayuki Satoh, Shuhji Seki, Wataru Hashimoto, Kouetsu Ogasawara, Terutada Kobayashi, Katsuo Kumagai, Seiki Matsuno, and Kazuyoshi Takeda

MHC Genotype Controls the Capacity of Ligand Density to Switch T Helper (Th)-1/Th-2 Priming In Vivo
Tony Schountz, Joel P. Kasselman, Fred A. Martinson, Leasa Brown, and Joseph S. Murray

Hyperoxia Activates NF-κB and Increases TNF-α and IFN-γ Gene Expression in Mouse Pulmonary Lymphocytes
Lytitia M. Shea, Connie Beehler, Michael Schwartz, Robert Shenkar, Rubin Tuder, and Edward Abraham

CD28/B7 Interactions Deliver a Unique Signal to Naive T Cells That Regulates Cell Survival but Not Early Proliferation
Anne I. Sperling, Julie A. Auger, Benjamin D. Ehst, Ingrid C. Rulifson, Craig B. Thompson, and Jeffrey A. Bluestone

Apoptosis of Mouse Naive T Cells Induced by Recombinant Soluble Fas Ligand and Activation-Induced Resistance to Fas Ligand
Takashi Suda, Masato Tanaka, Keiko Miwa, and Shigekazu Nagata
NK 1⁺ CD4⁻ CD8⁻ αβ T Cells in the Peritoneal Cavity: Specific T Cell Receptor-Mediated Cytotoxicity and Selective IFN-γ Production Against B Cell Leukemia and Myeloma Cells
Tomoharu Sugie, Hiroshi Kubota, Masaki Sato, Eijiro Nakamura, Masayuki Imamura, and Nagahiro Minato

Cloning of Minimally Divergent Allelic Forms of the Natural Killer (NK) Receptor Ly-49C, Differentially Controlled by Host Genes in the MHC and NK Gene Complexes
Jonas Sundbäck, Klas Körre, and Charles L. Sentman

Lack of Requirement for SHP-1 in Both Fas-Mediated and Perforin-Mediated Cell Death Induced by CTL
Hajime Takayama, Mi-Heon Lee, and Yoshiko Shirota-Someya

Intracellular IL-1β Is an Inhibitor of Fas-Mediated Apoptosis
Toru Tatsuta, Jianhua Cheng, and John D. Mountz

Cross-Linking of MHC Class II Molecules by Staphylococcal Enterotoxin A Is Essential for Antigen-Presenting Cell and T Cell Activation
Rodger E. Tiedemann and John D. Fraser

IFN-γ-Inducing Factor Up-Regulates Fas Ligand-Mediated Cytotoxic Activity of Murine Natural Killer Cell Clones
Hiroko Tsutsui, Kenji Nakanishi, Kiyoshi Matsui, Kazuya Higashino, Haruki Okamura, Yuhko Miyazawa, and Kenji Kaneda

Both Multiorgan Inflammation and Myeloid Hyperplasia in RelB-Deficient Mice Are T Cell Dependent
Falk Weih, Stephen K. Durham, Debra S. Barton, William C. Sha, David Baltimore, and Rodrigo Bravo

A Mitochondrial Membrane Protein Defined by a Novel Monoclonal Antibody Is Preferentially Detected in Apoptotic Cells
Chonghui Zhang, Zhaohui Ao, Aruna Seth, and Stuart F. Schlossman

Mutations in the MHC Class II Binding Domains of Staphylococcal Enterotoxin A Differentially Affect T Cell Receptor Vβ Specificity
Duane W. Newton, Mikael Dohlsten, Christina Olsson, Sverker Segrén, Knut E. A. Lundin, Peter A. Lando, Terje Kolland, and Malak Koib

L-Selectin Binds to P-Selectin Glycoprotein Ligand-1 on Leukocytes: Interactions Between the Lectin, Epidermal Growth Factor, and Consensus Repeat Domains of the Selectins Determine Ligand Binding Specificity
Lili Tu, Anjun Chen, Martha D. Delahunty, Kevin L. Moore, Susan R. Watson, Rodger P. McEver, and Thomas F. Tedder

Immunoglobulin Dₜ Recombination Signal Sequence Targeting: Effect of Dₜ Coding and Flanking Regions and Recombination Partner
Linda F. VanDyk, Teresa W. Wise, Bethany B. Moore, and Katheryn Meek

The Progeny of a Single Virgin B Cell Predominates the Human Recall B Cell Response to the Capsular Polysaccharide of Haemophilus influenzae Type b
Torben Barington, Lotte Hougs, Lars Juul, Hans O. Madsen, Lars P. Ryder, Carsten Heilmann, and Arne Svejgaard
Cytokine Expression by Human Peripheral Blood Dendritic Cells Stimulated In Vitro with HIV-1 and Herpes Simplex Virus
Smita Ghanekar, Lian Zheng, Alison Logar, Jeannine Navratil, LuAnn Borowski, Phalguni Gupta, and Charles Rinaldo

Intestinal Transport and Catabolism of IgE: A Major Blood-Independent Pathway of IgE Dissemination During a Trichinella spiralis Infection of Rats
Deborah Negrão-Corrêa, Lincoln S. Adams, and Robin G. Bell

In the Absence of Endogenous IFN-γ, Mice Develop Unimpaired IL-12 Responses to Toxoplasma gondii While Failing to Control Acute Infection
Tanya M. Scharton-Kersten, Thomas A. Wynn, Eric Y. Denkers, Shukal Bala, Eduardo Grunvald, Sara Hiency, Ricardo T. Gazzinelli, and Alan Sher

The Listerial Exotoxins Listeriolysin and Phosphatidylinositol-Specific Phospholipase C Synergize to Elicit Endothelial Cell Phosphoinositide Metabolism
Ulf Sibelius, Trinad Chakraborty, Bettina Krögel, Joachim Wolf, Frank Rose, Reinhold Schmidt, Jürgen Wepland, Werner Seeger, and Friedrich Grimminger

Protection Against Malaria by Plasmodium yoelii Sporozoite Surface Protein 2 Linear Peptide Induction of CD4+ T Cell- and IFN-γ-Dependent Elimination of Infected Hepatocytes
Ruobing Wang, Yupin Charoenvit, Gianpietro Corradin, Patricia De La Vega, Eileen D. Franke, and Stephen L. Hoffman

IL-12 Enhances Vaccine-Induced Immunity to Schistosomes by Augmenting Both Humoral and Cell-Mediated Immune Responses Against the Parasite
Thomas A. Wynn, Alicia Reynolds, Stephanie James, Allen W. Cheever, Pat Caspar, Sara Hiency, Dragana Jankovic, Mette Strand, and Alan Sher

Isolation of Tyrosinase-Specific CD8+ and CD4+ T Cell Clones from the Peripheral Blood of Melanoma Patients Following In Vitro Stimulation with Recombinant Vaccinia Virus
Cassian Yee, Mark J. Gilbert, Stanley R. Riddell, Vincent G. Brichard, Alexander Fefer, John A. Thompson, Thierry Boon, and Philip D. Greenberg

INFLAMMATION

Constitutive and Inducible Mechanisms for Synthesis and Release of Cytokines in Immune Cell Lines
Rudolf A. Baumgartner, Vincent A. Deramo, and Michael A. Beaven

The Role of E-Selectin in Lymphocyte and Polymorphonuclear Cell Recruitment into Cutaneous Delayed Hypersensitivity Reactions in Sensitized Pigs
Richard M. Bivas, Anthony Whyte, Stephen T. Licence, Andrew A. Harrison, Yvonne T. M. Tsang, Dorian O. Haskard, and Martyn K. Robinson

In Vitro and In Vivo Secretion of Human ISG15, an IFN-Induced Immunomodulatory Cytokine
Jonathan D'Cunha, Sujatha Ramanujam, Randall J. Wagner, Patricia L. Witt, Ernest Knight, Jr., and Ernest C. Borden

Increased Heat Shock Protein 90 (hsp90) Expression Leads to Increased Apoptosis in the Monoblastoid Cell Line U937 Following Induction with TNF-α and Cycloheximide: A Possible Role in Immunopathology
Joanna Galea-Lauri, Andrew J. Richardson, David S. Latchman, and David R. Katz
Monocytes Can Phagocytose Gram-Negative Bacteria by a CD14-Dependent Mechanism
Uwe Granewald, Xiaolong Fan, Robert S. Jack, Grefachew Workalemahu, Axel Kallies, Felix Stelter, and Christine Schütt

Regulation by IL-5 of Expression of Functional Platelet-Activating Factor Receptors on Human Eosinophils
Seishi Kishimoto, Wataru Shimadzu, Takashi Izumi, Takao Shimizu, Takeshi Fukuda, Sohei Makino, Takayuki Sugiura, and Keizo Waku

Escherichia coli Hemolysin and Staphylococcus aureus α-Toxin Potently Induce Neutrophil Adhesion to Cultured Human Endothelial Cells
Matthias Krüll, Christina Dold, Stefan Hippenstiel, Simone Rosseau, Jürgen Lohmeyer, and Norbert Suttorp

Human RANTES Acts as a Receptor Antagonist for Guinea Pig Eotaxin In Vitro and In Vivo
Sylvie Morleau, David A. Griffiths-Johnson, Paul D. Collins, Yeshwant S. Bakhle, Timothy J. Williams, and Peter J. Jose

The Loss of Recombinant Human Granulocyte Colony-Stimulating Factor and Recombinant Human TNF-α Priming Effects on the Superoxide-Generating Response in Exudated Neutrophils Is Associated with a Decrease in Their Receptor Affinities
Masayuki Niwa, Al-Essa Luay Yousif, Ken-ichi Kohno, Yutaka Kanamori, Mitsuhiro Matsumo, Akira Abe, and Toshihiko Uematsu

Human Umbilical Vein Endothelial Cells Possess Binding Sites for the Globular Domain of C1q
Ellinor I. B. Peerschke, Susan S. Smyth, Edna I. Teng, Melissa Dalzell, and Berhane Gebrehiwet

TNF-α and IL-1β Selectively Induce Expression of 92-kDa Gelatinase by Human Macrophages
Pirjo Sarén, Howard G. Welgus, and Petri T. Kovanen,

Mouse Decay-Accelerating Factor: Selective and Tissue-Specific Induction by Estrogen of the Gene Encoding the Glycosylphosphatidylinositol-Anchored Form
Wen-Chao Song, Chengjun Deng, Kimberly Raszmann, Rick Moore, Retha Newbold, John A. McLachlan, and Masahiko Negishi

Immunomodulatory Effects of IL-12 on Allergic Lung Inflammation Depend on Timing of Doses
Sanjiv Sur, Johnsimon Lam, Page Bouchard, Anastasia Sigounas, Donald Holbert, and W. James Metzger

Clinical Immunology

IL-2 Rescues In Vitro Lymphocyte Apoptosis in Patients with HIV Infection: Correlation with Its Ability to Block Culture-Induced Down-Modulation of Bcl-2
Yasushi Adachi, Naoki Oyaizu, Soe Than, Thomas W. McCloskey, and Savita Pahwa
Bronchoalveolar Lavage Neutrophilia Is Associated with Obliterative Bronchiolitis After Lung Transplantation: Role of IL-8
Bruno DiGiovine, Joseph P. Lynch III, Fernando J. Martinez, Andrew Flint, Richard I. Whyte, Mark D. Iannettoni, Douglas A. Arenberg, Marie D. Burdick, Mary C. Glass, Carol A. Wilke, Susan B. Morris, Steven L. Kunkel, and Robert M. Strieter

Structural and Functional Analysis of the B Cell Epitopes Recognized by Anti-Receptor Autoantibodies in Patients with Chagas' Disease
Roxenn Elies, Ines Ferrari, Gerd Wallukat, Diane Lebesque, Pablo Chiale, Marcelo Elizari, Mauricio Rosenbaum, Johan Hoebeke, and Mariano J. Levin

Dynamics of Viral Variants in HIV-1 Nef and Specific Cytotoxic T Lymphocytes In Vivo
Gaby Haas, Uwe Plikat, Patrice Debré, Maria Lucchiari, Christine Katlama, Yasmine Dudoit, Olivia Bonduelle, Monika Bauer, Hans-Georg Ihlenfeldt, Günther Jung, Bernhard Maier, Andreas Meyerhans, and Brigitte Autran

Disease-Specific Changes in γδ T Cell Repertoire and Function in Patients with Pulmonary Tuberculosis
Baiqing Li, Milton D. Rossman, Turgut Imir, A. Fusun Oner-Eyuboglu, Chung Wa Lee, Renée Biancanielo, and Simon R. Carding

Suppression of Murine Chronic Relapsing Experimental Autoimmune Encephalomyelitis by the Oral Administration of Myelin Basic Protein
Abbie L. Meyer, Jacqueline M. Benson, Ingrid E. Gienapp, Karen L. Cox, and Caroline C. Whitacre

Genetic Bases of Human Complement C7 Deficiency
Hiroaki Nishizaka, Takahiko Horiuchi, Zeng-Bian Zhu, Yasuo Fukumori, and John E. Volanakis

Enhanced HIV-1 Activity in Bone Marrow Can Lead to Myelopoietic Suppression Partially Contributed by gag p24
Pranela Rameshwar, Thomas N. Denny, and Pedro Gascón

A Natural IgA-Anti-F(ab')2γ Autoantibody Occurring in Healthy Individuals and Kidney Graft Recipients Recognizes an IgG1 Hinge Region Epitope
Peter Terness, Dan Navolant, Luis Moroder, Frank Siedler, Elisabeth Weyher, Ingrid Kohl, Christoph Dufler, Martin Welschof, Doina Drugarina, Francisc Schneider, and Gerhard Opelz

Differential Effect of CTLA4Ig on Murine Graft-Versus-Host Disease (GVHD) Development: CTLA4Ig Prevents Both Acute and Chronic GVHD Development but Reverses Only Chronic GVHD
Charles S. Via, Violetta Rus, Phuong Nguyen, Peter Linsley, and William C. Gause

Author Index