
This information is current as of June 28, 2021.
TABLE OF CONTENTS

CUTTING EDGE

529 Concurrent or Sequential δ and β TCR Gene Rearrangement During Thymocyte Development: Individual Thymi Follow Distinct Pathways
David Margolis, Maryam Yassai, Anne Hletko, Laura McOlash, and Jack Gorski

534 Dexamethasone Potently Enhances Phorbol Ester-Induced IL-1β Gene Expression and Nuclear Factor NF-κB Activation
Yisheng Wang, J. J. Zhang, Wei Dai, K. Y. Lei, and J. Wesley Pike

538 Reconstitution of the Extrathymic Intestinal T Cell Compartment in the Absence of Irradiation
Leo Lefrangois and Sara Olson

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

543 Characterization of Transport of Newly Assembled, T Cell-Stimulatory MHC Class II-Peptide Complexes from MHC Class II Compartments to the Cell Surface
Leslie Pond and Colin Watts

554 The Generation of MHC Class I-Associated Peptides Is Only Partially Inhibited by Proteasome Inhibitors: Involvement of Nonproteasomal Cytosolic Proteases in Antigen Processing?
Alexander Vinitsky, Luis C. Antón, Heidi Link Snyder, Marian Orłowski, Jack R. Bennink, and Jonathan W. Yewdell

565 Dendritic Cell Subtypes in Mouse Lymphoid Organs: Cross-Correlation of Surface Markers, Changes with Incubation, and Differences Among Thymus, Spleen, and Lymph Nodes
David Vremec and Ken Shortman

On the cover: Graphical representations of MHC class I molecules H-2Db 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 Loftus, 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.)
Melatonin Enhances IL-2, IL-6, and IFN-γ Production by Human Circulating CD4+ Cells: A Possible Nuclear Receptor-Mediated Mechanism Involving T Helper Type 1 Lymphocytes and Monocytes
Sofía García-Mauriño, María G. González-Haba, Juan R. Calvo, Mohammed Rafi-El-Idrissi, Victor Sanchez-Margalet, Raimundo Goberna, and Juan M. Guerrero

The Role of Protein Kinase C in CD8+ T Lymphocyte Effector Responses
Dragana Nešić, Kanchan G. Jhaver, and Stanislav Vukmanović

Inflammatory Cytokines Enhance the In Vivo Clonal Expansion and Differentiation of Antigen-Activated CD4+ T Cells
Kathryn A. Pape, Alexander Khoruts, Anna Mondino, and Marc K. Jenkins

Targeting of Natural Killer Cells to Mammary Carcinoma via Naturally Occurring Tumor Cell-Bound iC3b and β-Glucan-Primed CR3 (CD11b/CD18)
Václav Vetvicka, Brian P. Thornton, T. Jeffery Wieman, and Gordon D. Ross

Cytokine-Deficient CD8+ Tc1 Cells Induced by IL-4: Retained Inflammation and Perforin and Fas Cytotoxicity but Compromised Long Term Killing of Tumor Cells
Subash Sad, Li Li, and Tim R. Mosmann

The 25-kDa Soluble CD23 Activates Type III Constitutive Nitric Oxide-Synthase Activity Via CD11b and CD11c Expressed by Human Monocytes
Jean-Pierre Aubry, Nathalie Dugas, Sybille Lecoanet-Henchoz, Fateh Ouaz, Haixia Zhao, Jean-François Delfraissy, Pierre Graber, Jean-Pierre Kolb, Bernard Dugas, and Jean-Yves Bonnefoy

Compromised Allograft Rejection Response in Transgenic Mice Expressing Antisense Sequences to Retinoic Acid Receptor β2
Huifang Chen, Jacques Bérard, Hongyu Luo, Miguel Landers, Bernard Vinet, W. Edward C. Bradley, and Jiangping Wu

Activation of Human Dendritic Cells Following Infection with Mycobacterium tuberculosis
Robert A. Henderson, Simon C. Watkins, and JoAnne L. Flynn

Induction of Tolerance to Human γ-Globulin in FcRγ- and FcγRII-Deficient Mice
Karen J. Whitmer, Carole G. Romball, and William O. Weigle

Migration and Activation of Antigen-Specific CD8+ T Cells Upon In Vivo Stimulation with Allogeneic Tumor
Ross M. Kedl and Matthew F. Mescher

Type 1 Versus Type 2 Cytokine Release by Vβ T Cell Subpopulations Determines In Vivo Antitumor Reactivity: IL-10 Mediates aSuppressive Role
Atsushi Aruga, Etsuko Aruga, Keishi Tanigawa, D. Keith Bishop, Vernon K. Sondak, and Alfred E. Chang

Increased Lymphocyte Apoptosis in Fas Ligand Transgenic Mice
Jianhua Cheng, Changdan Liu, PingAr Yang, Tong Zhou, and John D. Mountz

Adenoviral Gene Delivery Elicits Distinct Pulmonary-Associated T Helper Cell Responses to the Vector and to Its Transgene
Frederik W. van Ginkel, Jerry R. McGhee, Chongguang Liu, Jerry W. Simecka, Masafumi Yamamoto, Raymond A. Frizzell, Eric J. Sorscher, Hiroshi Kiyono, and David W. Pascual
Fetal Liver Contains Committed NK Progenitors, but Is Not a Site for Development of CD34+ Cells into T Cells

Molecular and Structural Immunology

Different Modes of Peptide Interaction Enable HLA-DQ and HLA-DR Molecules to Bind Diverse Peptide Repertoires
Laura Raddrizzani, Tiziana Sturniolo, Jeanmarie Guenot, Elisa Bono, Fabio Gallazzi, Zoltan A. Nagy, Francesco Sinigaglia, and Juergen Hammer

Structural Analysis of Human Antibodies to Proteinase 3 from Patients with Wegener Granulomatosis
Jean Sibilia, Kamel Benlagha, Philippe Vanhille, Pierre Ronco, Jean-Claude Brouet, and Xavier Mariette

A Cloned Chicken Lymphokine Homologous to Both Mammalian IL-2 and IL-15
Roy S. Sundick and Carla Gill-Dixon

Transgenic Expression of a Novel Thymic Epithelial Cell Antigen Stimulates Aberrant Development of Thymocytes
Tamotsu Takeuchi, Makoto Kuro-o, Hitoshi Miyazawa, Yuji Ohtsuki, and Hiroshi Yamamoto

Evolution of Proteasome Subunits δ and LMP2: Complementary DNA Cloning and Linkage Analysis with MHC in Lower Vertebrates
Masaru Nonaka, Chisato Namikawa-Yamada, Makoto Sasaki, Luisa Salter-Cid, and Martin F. Flajnik

A New 12-Kilodalton Dimer Associated with Pre-TCR Complex and Clonotype-Independent CD3 Complex on Immature Thymocytes
Kan Takase, Keisuke Wakizaka, Harald von Boehmer, Ikuo Wada, Hideshige Moriya, and Takashi Saito

Deviated Overexpression of TCR-β, TCR-γ, CD4, and CD8 on Thymic Lymphomas Induced by 1-Propyl-1-Nitrosourea: Destruction of the Allelic Exclusion of TCR-β and Expression of Functional TCR-βγ Heterodimer on a Lymphoma, cFTL53
Miyuki Kinebuchi, Akihiro Matsuura, Toshiaki Ogiu, and Kokichi Kikuchi

Normal Junctional Diversification of Immune Receptors in p53-Deficient Mice
Chiyu Wang, Molly A. Bogue, David B. Roth, and Katheryn Meek

Host Defense

Human Colorectal Cancer (CRC) Antigen CO17-1A/GA733 Encoded by Adenovirus Inhibits Growth of Established CRC Cells in Mice
Weiping Li, Klara Berencsi, Saroj Basak, Rajasekharan Somasundaram, Robert P. Ricciardi, Eva Gönçöl, Jan Zaloudík, Alban Linnenbach, Haruhiko Maruyama, Pierre Miniou, and Dorothee Herlyn

Interleukin-10 Prevents Dendritic Cell Accumulation and Vaccination with Granulocyte-Macrophage Colony-Stimulating Factor Gene-Modified Tumor Cells
Zhihai Qin, Gabriele Noffz, Mariette Mohaupt, and Thomas Blankenstein
IL-4 Protects Against TNF-α-Mediated Cachexia and Death During Acute Schistosomiasis
Laura Rosa Brunet, Fred D. Finkelman, Allen W. Cheever, Manfred A. Kopf, and Edward J. Pearce

IL-2 and IL-12 Act in Synergy to Overcome Antigen-Specific T Cell Unresponsiveness in Mycobacterial Disease
Rolien de Jong, Anneke A. M. Janson, William R. Faber, Ben Naafs, and Tom H. M. Ottenhoff

Interferons Up-Regulate STAT1, STAT2, and IRF Family Transcription Factor Gene Expression in Human Peripheral Blood Mononuclear Cells and Macrophages
Anne Lehtonen, Sampsa Matikainen, and Ilkka Julkunen

Role of Adhesion Molecules of the Selectin-Carbohydrate Families in Antibody-Dependent Cell-Mediated Cytoxicity to Schistosome Targets
François Trottein, Sophie Nutten, Jean-Paul Pupin, Christelle Leportier, Odile Poulain-Godefroy, André Capron, and Monique Capron

The CDK Inhibitor, p27Kip1, Is Required for IL-4 Regulation of Astrocyte Proliferation
Jinbo Liu, W. Michael Flanagan, Judith A. Drazba, Melinda L. Estes, Gene H. Barnett, Talat Haqqi, Seiji Kondo, and Barbara P. Barna

INFLAMMATION

CD50 Monoclonal Antibodies Inhibit Neutrophil Activation
Keith M. Skubitz, Kenneth D. Campbell, and Amy P. N. Skubitz

Activation of Phosphatidylinositol 3'-Kinase by Insulin-Like Growth Factor-I Rescues Promyeloid Cells from Apoptosis and Permits Their Differentiation into Granulocytes
Qiang Liu, Dan Schacher, Charlotte Hurth, Gregory G. Freund, Robert Dantzler, and Keith W. Kelley

Recombinant Human Granulocyte-Macrophage Colony-Stimulating Factor (CSF), but Not Recombinant Human Granulocyte CSF, Down-Regulates the Recombinant Human Stem Cell Factor-Dependent Differentiation of Human Fetal Liver-Derived Mast Cells
Zhongmin Du, Yongli Li, Hanzhang Xia, Anne-Marie Irani, and Lawrence B. Schwartz

IL-4 and IL-10 Modulation of CD40-Mediated Signaling of Monocyte IL-1β Synthesis and Rescue from Apoptosis
Jonathan C. Poe, David H. Wagner, Jr., Robert W. Miller, Robert D. Stout, and Jill Suttles

The Role of γδ T Lymphocytes in Lipopolysaccharide-Induced Eosinophil Accumulation into the Mouse Pleural Cavity
Carmen Penido, Hugo C. Castro-Faria-Neto, Andrea P. Larangeira, Elaine C. Rosas, Ricardo Ribeiro-dos-Santos, Patrícia T. Bozza, and Maria das Graças M. O. Henriques

TNF-α-Mediated Expression of the Receptor for Anaphylatoxin C5a on Neurons in Experimental Listeria Meningoencephalitis
Chemokine Expression in Experimental Tubulointerstitial Nephritis
Winson W. Tang, Meiying Qi, Jeffrey S. Warren, and Gwyneth Y. Van

STAT5 Involvement in the Differentiation Response of Primary Chicken Myeloid Progenitor Cells to Chicken Myelomonocytic Growth Factor
Irina Woldman, Georg Mellitzer, Matthias Kiestinger, Dieter Buchhart, Andreas Meinke, Hartmut Beug, and Thomas Decker

Stimulation of Fcγ Receptors in Rat Peritoneal Macrophages Induces the Expression of Nitric Oxide Synthase and Chemokines by Mechanisms Showing Different Sensitivities to Antioxidants and Nitric Oxide Donors
Yolanda Bayón, Andrés Alonso, and Mariano Sánchez Crespo

Suppressive Effects of Recombinant Human Monokine Induced by IFN-γ (rHuMig) Chemokine on the Number of Committed and Primitive Hemopoietic Progenitors in Liquid Cultures of CD34+ Human Bone Marrow Cells
Gretchen N. Schwartz, Fang Liao, Ronald E. Gress, and Joshua M. Farber

Functional Expression of the CXC-Chemokine Receptor-4/Fusin on Mouse Microglial Cells and Astrocytes

Cytokine-Induced Neutrophil-Mediated Injury of Human Endothelial Cells
Johan Bratt and Jan Palmblad

CD44 Regulates Phagocytosis of Apoptotic Neutrophil Granulocytes, but Not Apoptotic Lymphocytes, by Human Macrophages
Simon P. Hart, Graeme J. Dougherty, Christopher Haslett, and Ian Dransfield

Roles of CD9 Molecules in Survival and Activation of Human Eosinophils
Jin-Tack Kim, Gerald J. Gleich, and Hirohito Kita

CD7-Mediated Regulation of Integrin Adhesiveness on Human T Cells Involves Tyrosine Phosphorylation-Dependent Activation of Phosphatidylinositol 3-Kinase
Anissa S. H. Chan, James L. Mобley, Gregg B. Fields, and Yoji Shimizu

Binding of Human Peripheral Blood Polymorphonuclear Leukocytes to E-Selectin (CD62E) Does Not Promote Their Activation
Heikki Repo, Yoan P. Rochon, Barbara R. Schwartz, Sam R. Sharar, Robert K. Winn, and John M. Harlan

Ligation of L-Selectin Through Conserved Regions Within the Lectin Domain Activates Signal Transduction Pathways and Integrin Function in Human, Mouse, and Rat Leukocytes
Douglas A. Steeber, Pablo Engel, Ann S. Miller, Michael P. Sheetz, and Thomas F. Tedder

Effect of an Ectokinase Inhibitor, K252b, on Degranulation and Ca2+ Signals of RBL-2H3 Cells and Human Basophils
Reiko Teshima, Yoshiro Saito, Hideharu Ikebuchi, Nilhan Rajiva De Silva, Yutaka Morita, Mamoru Nakanishi, Jun-ichi Sawada, and Seiichi Kitani
Endotoxin Shock in Antibody-Deficient Mice: Unraveling the Role of Natural Antibody and Complement in the Clearance of Lipopolysaccharide
Russell R. Reid, Andrey P. Prodeus, Wasif Khan, Tom Hsu, Fred S. Rosen, and Michael C. Carroll

Increased Susceptibility to Endotoxin Shock in Complement C3- and C4-Deficient Mice Is Corrected by C1 Inhibitor Replacement

Role of the P2 Residue of Complement 1 Inhibitor (Ala \(^{449}\)) in Determination of Target Protease Specificity: Inhibition of Complement and Contact System Proteases
Rana Zahedi, Jeffrey Wisnieski, and Alvin E. Davis III

CLINICAL IMMUNOLOGY

Myeloid Differentiation Treatment to Diminish the Presence of Immune-Suppressive CD34\(^+\) Cells Within Human Head and Neck Squamous Cell Carcinomas
M. Rita I. Young, Mark A. Wright, and Rajiv Pandit

Involvement of Laminin and Its Receptor in Abrogation of Heart Graft Rejection by Autoreactive T Cells from Trypanosoma cruzi-Infected Mice
Suse Dayse Silva-Barbosa, Vinicius Cotta-de-Almeida, Ingo Riederer, Juliana De Meis, Mireille Dardenne, Adriana Bonomo, and Wilson Savino

Genetic Susceptibility to Experimental Autoimmune Uveitis Involves More than a Predisposition to Generate a T Helper-1-Like or a T Helper-2-Like Response
Bing Sun, Luiz V. Rizzo, Shu-Hui Sun, Chi-Chao Chan, Barbara Wiggert, Ronald L. Wilder, and Rachel R. Caspi

CD30 Induction and Cytokine Profiles in Hepatitis C Virus Core-Specific Peripheral Blood T Lymphocytes
Rainer P. Woitas, Martin Lechmann, Günther Jung, Rolf Kaiser, Tilman Sauerbruch, and Ulrich Spengler

Molecular Bases of C7 Deficiency: Three Different Defects
Barbara A. Fernie, Ann Orren, Gerard Sheehan, Menachem Schlesinger, and Michael J. Hobart

B Cell Genotype Determines the Fine Specificity of Autoantibody in \(lpr\) Mice
Vellalore N. Kakkanaih, Eric S. Sobel, Glen C. MacDonald, Robert L. Cheek, Philip L. Cohen, and Robert A. Eisenberg

Induction of Antigen-Specific Tolerance for the Treatment of Ongoing, Relapsing Autoimmune Encephalomyelitis: A Comparison Between Oral and Peripheral Tolerance
Kevin J. Kennedy, Wendy S. Smith, Stephen D. Miller, and William J. Karpus

Author Index