TABLE OF CONTENTS

CUTTING EDGE

5761 Cutting Edge: Induction of IL-10 Synthesis by Human Keratinocytes Through CD23 Ligation: A Cyclic Adenosine 3',5'-Monophosphate-Dependent Mechanism
Pierre-André Bécherel, Liliane LeGoff, Camille Francès, Olivier Chosidow, Jean-Jacques Guillosson, Patrice Debré, M. Djavad Mossalayi, and Michel Arock

5766 Cutting Edge: Genetic Variation Among 129 Substrains: Practical Consequences
Joan M. G. Sechler, Jason C. Yip, and Amy S. Rosenberg

5769 Cutting Edge: Selective Involvement of Proteasomes and Cysteine Proteases in MHC Class I Antigen Presentation
Daniel López and Margarita Del Val

5773 Cutting Edge: A Role for Ras Signaling in Coreceptor Regulation During Differentiation of a Double-Positive Thymocyte Cell Line
Hui Shao, Elyssa M. Rubin, Ling-Yu Chen, and Jonathan Kaye

5777 Cutting Edge: Immunostimulatory Effects of a Plasmid Expressing CD40 Ligand (CD154) on Gene Immunization
Robert B. Mendoza, Mark J. Cantwell, and Thomas J. Kipps

5782 Cutting Edge: Engagement of CD40 Antigen with Soluble CD40 Ligand Up-Regulates Peptide Transporter Expression and Restores Endogenous Processing Function in Burkitt’s Lymphoma Cells
Rajiv Khanna, Leanne Cooper, Robert Kienzle, Denis J. Moss, Scott R. Burrows, and Kum Kum Khanna

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 (AHII12.2) 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.)
Evidence That the Same y6 T Cells Respond During Infection-Induced and Autoimmune Inflammation
Akiko Mukasa, Michael Lahn, Elizabeth K. Pflum, Willi Born, and Rebecca L. O'Brien

VH Gene Replacement in Hyperselected B Cells of the Quasimonoclonal Mouse
Marilia Cascalho, Jamie Wong, and Matthias Wabl

Distinct Biochemical Signals Characterize Agonist- and Altered Peptide Ligand-Induced Differentiation of Naive CD4+ T Cells into Th1 and Th2 Subsets
Yvan Boutin, David Leitenberg, Xiang Tao, and Kim Bottomly

Resting B Cells From Autoimmune Lupus-Prone New Zealand Black and (New Zealand Black × New Zealand White)F1 Mice Are Hyper-Responsive to T Cell-Derived Stimuli
Jenny Jongstra-Bilen, Brian Vukusic, Kata Boras, and Joan E. Wither

Anti-CD3 F(ab'')2 Fragments Inhibit T Cell Expansion in Vivo During Graft-Versus-Host Disease or the Primary Immune Response to Nominal Antigen
Bruce R. Blazar, Marc K. Jenkins, Patricia A. Taylor, Jennifer White, Angela Panoskaltsis-Mortari, Robert Kornfeld, and Daniel A. Vallera

In Vivo Effects of T Helper Cell Type 2 Cytokines on Macrophage Antigen-Presenting Cell Induction of T Helper Subsets
Daniel J. Cua and Stephen A. Stohlman

Immunohistochemical Analysis of In Vivo Patterns of TRAF-3 Expression, a Member of the TNF Receptor-Associated Factor Family
Stanislaw Krajewski, Juan M. Zapata, Maryla Krajewska, Todd VanArsdale, Ahmed Shabaik, Randy D. Gascoyne, and John C. Reed

Antigen Presentation by Epithelial Cells Induces Anergic Immunoregulatory CD45RO+ T Cells and Deletion of CD45RA+ T Cells
Federica M. Marelli-Berg, Anthony Weetman, Loredana Frasca, Sarah J. Deacock, Nesrina Imami, Giovanna Lombardi, and Robert I. Lechler

TCR Va24 and VB11 Coexpression Defines a Human NK1 T Cell Analog Containing a Unique Th0 Subpopulation
Calman Prussin and Barbara Foster

Cyclic-AMP Modulates Downstream Events in CD40-Mediated Signal Transduction, but Inhibition of Protein Kinase A Has no Direct Effect on CD40 Signaling
Marni D. Goldstein, Alan Cochrane, and Tania H. Watts

Early and Late Events in FceRI Signal Transduction in Human Cultured Mast Cells
Hidefumi Suzuki, Masao Takei, Makoto Yanagida, Tatsutoshi Nakahata, Toshiaki Kawakami, and Hiromi Fukamachi

Pharmacological Control of Antigen Responsiveness in Genetically Modified T Lymphocytes
Proteasome Activity Limits the Assembly of MHC Class I Molecules After IFN-γ Stimulation
Adam M. Benham and Jacques J. Neefjes

Mouse IL-1 Receptor Antagonist Isoforms: Complementary DNA Cloning and Protein Expression of Intracellular Isoform and Tissue Distribution of Secreted and Intracellular IL-1 Receptor Antagonist In Vivo
Cem Gabay, Brandon Porter, Giamila Fantuzzi, and William P. Arend

Single Amino Acid Mutations in the Murine MHC Class II Aβ Cytoplasmic Domain Abrogate Antigen Presentation

Effects of CD28 Costimulation on Long-Term Proliferation of CD4+ T Cells in the Absence of Exogenous Feeder Cells
Bruce L. Levine, Wendy B. Bernstein, Mark Connors, Nancy Craighead, Tullia Lindsten, Craig B. Thompson, and Carl H. June

Role for IL-15/IL-15 Receptor β-Chain in Natural Killer 1.1+ T Cell Receptor-αβ+ Cell Development
Toshiaki Ohteki, Shirley Ho, Haruhiko Suzuki, Tak W. Mak, and Pamela S. Ohashi

Maternal Immunization With a Soluble TCR-Ig Chimeric Protein: Long Term, Vβ-8 Family-Specific Suppression of T Cells by Maternally Transferred Antibodies
Una McKeever, Sanjay Khandekar, Michael Jesson, John Newcomb, Paul Gregory, Jerome Naylor, Kathryn Haskins, and Barry Jones

IgA Plasma Cells in Vascular Tissue of Patients with Kawasaki Syndrome

Strength of TCR Signal Determines the Costimulatory Requirements for Th1 and Th2 CD4+ T Cell Differentiation
Xiang Tao, Stephanie Constant, Patricia Jorritsma, and Kim Bottomly

IL-1β-CONVERTING Enzyme (ICE) Is Present and Functional in Human Alveolar Macrophages: Macrophage IL-1β Release Limitation Is ICE Independent
Mark D. Wewers, Heidi A. Dare, Alissa V. Winnard, Jennifer M. Parker, and Douglas K. Miller

Human Thymocytes Become Lineage Committed at an Early Postselection CD69+ Stage, Before the Onset of Functional Maturation
Dominique Vanhecke, Bruno Verhasselt, Magda De Smedt, Georges Leclercq, Jean Plum, and Bart Vandekerckhove

Exploiting the Difference Between Intrinsic and Extrinsic Kinases: Implications for Regulation of Signaling by Immunoreceptors
Carla Wofsy, Chikako Torigoe, Ute M. Kent, Henry Metzger, and Byron Goldstein

Activation-Related Differences in HLA Class I-Bound Peptides: Presentation of an IL-1 Receptor Antagonist-Derived Peptide by Activated, but Not Resting, CD4+ T Lymphocytes
Guido Frumento, Anna Corradi, Giovanni B. Ferrara, and Anna Rubartelli
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>6000</td>
<td>CD40 and IL-4 Regulate Murine CD27L Expression</td>
<td>Udo F. Hartwig, Lars Karlsson, Per A. Peterson, and Susan R. Webb</td>
</tr>
<tr>
<td>6009</td>
<td>CD94/NKG2 Inhibitory Receptor Complex Modulates Both Anti-Viral and</td>
<td>Fabrizio Poccia, Barbara Cipriani, Silvia Vendetti, Vittorio Colizzi,</td>
</tr>
<tr>
<td></td>
<td>Anti-Tumoral Responses of Polyclonal Phasphoantigen-Reactive Vγ9V82 T</td>
<td>Yannick Poquet, Luca Battistini, Miguel López-Botet, Jean-Jacques Fournié,</td>
</tr>
<tr>
<td></td>
<td>Lymphocytes</td>
<td>and Marie-Lise Gougeon</td>
</tr>
<tr>
<td>6018</td>
<td>Independent Regulation of Cutaneous Lymphocyte-Associated Antigen</td>
<td>Yuichi Teraki and Louis J. Picker</td>
</tr>
<tr>
<td></td>
<td>Expression and Cytokine Synthesis Phenotype During Human CD4⁺ Memory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T Cell Differentiation</td>
<td></td>
</tr>
<tr>
<td>6027</td>
<td>Identification of Shared Tumor-Associated Antigen Peptides Between</td>
<td>Ofir Mandelboim, Erez Bar-Haim, Ezra Vadai, Mati Fridkin, and Lea Eisenbach</td>
</tr>
<tr>
<td>6030</td>
<td>Two Spontaneous Lung Carcinomas</td>
<td></td>
</tr>
<tr>
<td>6037</td>
<td>Deoxyribonucleic Acid Vaccines Encoding Antigens With Rapid</td>
<td>Yunqi Wu and Thomas J. Kipps</td>
</tr>
<tr>
<td></td>
<td>Proteasome-Dependent Degradation Are Highly Efficient Inducers of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cytolytic T Lymphocytes</td>
<td></td>
</tr>
<tr>
<td>6044</td>
<td>Complex Origin of the HLA-DR10 Haplotype</td>
<td>Rafael Gongora, Felipe Figueroa, and Jan Klein</td>
</tr>
<tr>
<td>6052</td>
<td>Linkage of LMP, TAP, and RING3 with Mhc Class I Rather Than Class II</td>
<td>Kimitaka Takami, Zofia Zaleska-Rutczynska, Felipe Figueroa, and Jan Klein</td>
</tr>
<tr>
<td></td>
<td>Genes in the Zebrafish</td>
<td></td>
</tr>
<tr>
<td>6061</td>
<td>κ and λ Rearrangement Occur Simultaneously in Transformed Pre-B Cells</td>
<td>Dan Liu, Jenia Jenab, and Naomi Rosenberg</td>
</tr>
<tr>
<td>6070</td>
<td>Determination of Adenosine Deaminase Binding Domain on CD26 and Its</td>
<td>Rui-Ping Dong, Kouichi Tachibana, Martin Hegen, Yasuhiko Munakata,</td>
</tr>
<tr>
<td></td>
<td>Immunoregulatory Effect on T Cell Activation</td>
<td>Donny Cho, Stuart F. Schlossman, and Chikao Morimoto</td>
</tr>
<tr>
<td>6077</td>
<td>Comparison of the Roles of CD8αα and CD8αβ in Interaction With MHC</td>
<td>Jiaren Sun and Paula B. Kavathas</td>
</tr>
<tr>
<td></td>
<td>Class I</td>
<td></td>
</tr>
<tr>
<td>6083</td>
<td>Influence of VH CDR3 Arginine and Light Chain Pairing on DNA Reactivity</td>
<td>Mary Kopke Wloch, Stephen H. Clarke, and Gary S. Gilkeson</td>
</tr>
<tr>
<td></td>
<td>of a Bacterial DNA-Induced Anti-DNA Antibody from a BALB/c Mouse</td>
<td></td>
</tr>
<tr>
<td>6091</td>
<td>Characterization of the IFN-γ-Responsive Element in the 5' Flanking</td>
<td>Kamyar Zahedi, Anne E. Prada, Jorge A. Prada, and Alvin E. Davis III</td>
</tr>
<tr>
<td></td>
<td>Region of the C1 Inhibitor Gene</td>
<td></td>
</tr>
<tr>
<td>6097</td>
<td>Identification of Class I Genes in Cartilaginous Fish, the Most</td>
<td>Simona Bartl, Meredith A. Baish, Martin F. Flajnik, and Yuko Ohta</td>
</tr>
<tr>
<td></td>
<td>Ancient Group of Vertebrates Displaying an Adaptive Immune Response</td>
<td></td>
</tr>
</tbody>
</table>
Host Defense

6105 A Filarial Nematode Secreted Product Differentially Modulates Expression and Activation of Protein Kinase C Isoforms in B Lymphocytes
Maureen R. Deehan, Margaret M. Harnett, and William Harnett

6112 Immune Responses Induced by Intramuscular or Gene Gun Injection of Protective Deoxyribonucleic Acid Vaccines That Express the Circumsporozoite Protein from Plasmodium berghei Malaria Parasites
Wolfgang W. Leitner, Matthew C. Seguin, W. Ripley Ballou, John P. Seitz, Angela M. Schultz, Michael J. Sheehy, and Jeffrey A. Lyon

6120 Identification of Trypanosoma cruzi Trans-Sialidase Family Members as Targets of Protective CD8+ Tc1 Responses
Benjamin Wizel, Marise Nunes, and Rick L. Tarleton

6129 Glycoconjugates Isolated from Trypanosoma cruzi but Not from Leishmania Species Membranes Trigger Nitric Oxide Synthesis as well as Microbicidal Activity in IFN-γ-Primed Macrophages
Maristela M. Camargo, Ana Cristina Andrade, Igor C. Almeida, Luis R. Travassos, and Ricardo T. Gazzinelli

6138 A Secreted/Shed Product of Helicobacter pylori Activates Transcription Factor Nuclear Factor-κB
Anja Munxenmaier, Christina Lange, Erik Glocker, Antonello Covacci, Anthony Moran, Stefan Bereswill, Patrick A. Baeverle, Manfred Kist, and Heike L. Pahl

Inflammation

6148 Depressed Langerhans Cell Migration and Reduced Contact Hypersensitivity Response in Mice Lacking TNF Receptor p75
Binghe Wang, Hiroshi Fujisawa, Lihua Zhuang, Seiji Kondo, Gulnar M. Shivji, Catherine S. Kim, Tak W. Mak, and Daniel N. Sauder

6156 Regulation of IL-18 (IFN-γ-Inducing Factor) Gene Expression
Masahide Tone, Sara A. J. Thompson, Yukiko Tone, Paul J. Fairchild, and Herman Waldmann

6164 EBV Induces the Production and Release of IL-8 and Macrophage Inflammatory Protein-1α in Human Neutrophils
Shaun R. McColl, Charles J. Roberge, Bernard Larochelle, and Jean Gosselin

6169 Second-Hand Smoke Is an Adjuvant for T Helper-2 Responses in a Murine Model of Allergy
Brian W. P. Seymour, Kent E. Pinkerton, Kathleen E. Frieberghaser, Robert L. Coffman, and Laurel J. Gershwin

6176 Recognition of the E-C4 Element from the C4 Complement Gene Promoter by the Upstream Stimulatory Factor-1 Transcription Factor
Marie-Dominique Galibert, Laurent Boucontet, Colin R. Goding, and Tommaso Meo

6184 Cytokine Induction of the Ability of Human Monocyte CD44 to Bind Hyaluronan Is Mediated Primarily by TNF-α and Is Inhibited by IL-4 and IL-13
Marc C. Levesque and Barton F. Haynes
Calcium-Dependent Neutrophil Secretion: Characterization and Regulation by Annexins
Jesus L. Rosales and Joel D. Ernst

Induction of Biologically Active IL-1β-Converting Enzyme and Mature IL-1β in Human Keratinocytes by Inflammatory and Immunologic Stimuli
Karoline Zepter, Andreas Häfner, Lillian F. Soohoo, Dennis De Luca, Hai-Ping Tang, Paul Fisher, Jill Chavinson, and Craig A. Elmets

Extracellular ATP and UTP Control the Generation of Reactive Oxygen Intermediates in Human Macrophages Through the Opening of a Charybdotoxin-Sensitive Ca²⁺-Dependent K⁺ Channel
Heidy Schmid-Antomarchi, Annie Schmid-Alliana, Georges Romey, Marie-Angèle Ventura, Violette Breittmayer, Marie-Ange Millet, Hervé Husson, Baharia Moghrabi, Michel Lazdunski, and Bernard Rossi

Potent Induction of a Neutrophil and Eosinophil-Rich Infiltrate In Vivo by Human Mast Cell Tryptase: Selective Enhancement of Eosinophil Recruitment by Histamine
Shaoheng He, Qi Peng, and Andrew F. Walls

IFN-γ and IL-10 Inhibit Induction of IL-1 Receptor Type I and Type II Gene Expression by IL-4 and IL-13 in Human Monocytes
Harold L. Dickensheets and Raymond P. Donnelly

TNF and Lymphotoxin-α Polymorphisms Associated with Common Variable Immunodeficiency: Role in the Pathogenesis of Granulomatous Disease
Charles G. Mullighan, Gregory C. Fanning, Helen M. Chapel, and Kenneth I. Welsh

Identification and Characterization of Multiple HLA-A24-Restricted HIV-1 CTL Epitopes: Strong Epitopes Are Derived from V Regions of HIV-1
Yuki Ikeda-Moore, Hiroko Tomiyama, Kiyoshi Miwa, Shinichi Oka, Aikichi Iwamoto, Yutaro Kaneko, and Masafumi Takiguchi

Suppression of TNF-α Expression, Inhibition of TH1 Activity, and Amelioration of Collagen-Induced Arthritis by Rolipram
Susan E. Ross, Richard O. Williams, Lesley J. Mason, Claudia Mauri, Lilia Martinova-Mutafchieva, Anne-Marie Malfait, Ravinder N. Maini, and Marc Feldmann

Diminished Class II-Associated Ii Peptide Binding to the Juvenile Dermatomyositis HLA-DQA10501/DQB10301 Molecule
Ann M. Reed, Edward J. Collins, Lisa P. Shock, David G. Klapper, and Jeffrey A. Frelinger

Inhibition of Inducible Nitric Oxide Synthase Intensifies Injury and Functional Deterioration in Autoimmune Interstitial Nephritis
Francis B. Gabbai, Cesar Boggiano, Thomas Peter, Ser Khang, Clay Archer, Daniel P. Gold, and Carolyn J. Kelly

A Role for TNF-α and Mucosal TH Helper-1 Cytokines in the Pathogenesis of Crohn’s Disease
Scott E. Plevy, Carol J. Landers, John Prehn, Nelson M. Carramananzana, Richard L. Deem, David Shealy, and Stephan R. Targan
Association of CD4+ T Cell-Dependent Keratitis with Genetic Susceptibility to 
Pseudomonas aeruginosa Ocular Infection
Byungsuk Kwon and Linda D. Hazlett

Demonstration and Functional Analysis of IL-10 Receptors in Human 
Epidermal Cells: Decreased Expression in Psoriatic Skin, Down-Modulation 
by IL-8, and Up-Regulation by an Antipsoriatic Glucocorticosteroid in 
Normal Cultured Keratinocytes
Günter Michel, Alireza Mirmohammadsadegh, Edit Olasz, 
Beata Jarzewska-Deussen, Anke Mitschen, Lajos Kemény, Harry F. Abts, 
and Thomas Ruzicka

TNF-α Down-Regulates Type 1 Cytokines and Prolongs Survival of 
Syngeneic Islet Grafts in Nonobese Diabetic Mice
Alex Rabinovitch, Wilma L. Suarez-Pinzon, Ole Sorensen, Ray V. Rajotte, 
and Robert F. Power

Author Index

Ad Hoc Reviewers

Author Index to Volume 159

Subject Index to Volume 159