This information is current as of April 15, 2017.
IN THIS ISSUE

LETTERS TO THE EDITOR

1991 Comment on “Essential Role of IL-17A in the Formation of a Mycobacterial Infection-Induced Granuloma in the Lung”
Ralph Budd, Sally Huber, and Mark A. Exley

1991 Response to Comment on “Essential Role of IL-17A in the Formation of a Mycobacterial Infection-Induced Granuloma in the Lung”
Masayuki Umemura

BRIEF REVIEWS

1993 Much Ado about Adenosine: Adenosine Synthesis and Function in Regulatory T Cell Biology
Peter B. Ernst, James C. Garrison, and Linda F. Thompson

CUTTING EDGE

1999 Cutting Edge: Merocytic Dendritic Cells Break T Cell Tolerance to β Cell Antigens in Nonobese Diabetic Mouse Diabetes
Jonathan D. Katz, Jennifer K. Ondr, Robert J. Opoka, Zacharias Garcia, and Edith M. Janssen

2004 Cutting Edge: Rapamycin Augments Pathogen-Specific but Not Graft-Reactive CD8+ T Cell Responses

2009 Cutting Edge: KIR Antisense Transcripts Are Processed into a 28-Base PIWI-Like RNA in Human NK Cells
Frank Cichocki, Todd Leneik, Neeraj Sharma, Gong Yun, Stephen K. Anderson, and Jeffrey S. Miller

β-Catenin Signaling Mediates CD4 Expression on Mature CD8+ T Cells
Jason M. Schenkel, Andrew Zloza, Wei Li, Srinivas D. Narasipura, and Lena Al-Harthi

2020 c-Met and Its Ligand Hepatocyte Growth Factor/Scatter Factor Regulate Mature B Cell Survival in a Pathway Induced by CD74
Maya Gordin, Melanie Tseio, Sivan Cohen, Yael Gore, Frida Lantner, Lin Leng, Richard Bucala, and Idit Shachar

2032 Thymocyte-Specific Truncation of the Deubiquitinating Domain of CYLD Impairs Positive Selection in a NF-κB Essential Modulator-Dependent Manner
Ageliki Tsagaratou, Eirini Trompouki, Sofia Grammenoudi, Dimitris L. Kontoyiannis, and George Mosialos

2044 Proinflammatory Clearance of Apoptotic Neutrophils Induces an IL-12lowIL-10high Regulatory Phenotype in Macrophages
Alessandra A. Filardy, Dayana R. Pires, Marise P. Nunes, Christina M. Takiya, Celio G. Freire-de-Lima, Flavia L. Ribeiro-Gomes, and George A. dos Reis

2051 Cbl-b−/− T Cells Demonstrate In Vivo Resistance to Regulatory T Cells but a Context-Dependent Resistance to TGF-β
Catherine O. Adams, William J. Housley, Sourojit Bhowmick, Robert E. Cone, Thiruchandruvai V. Rajan, Faripour Forouhar, and Robert B. Clark

2059 CD45 Regulates Migration, Proliferation, and Progression of Double Negative 1 Thymocytes
Jacqueline C. Y. Lai, Marta Wlodarska, David J. Liu, Ninan Abraham, and Pauline Johnson

2071 CD30 Discriminates Heat Shock Protein 60-Induced FOXP3+CD4+ T Cells with a Regulatory Phenotype
Ismé de Kleer, Yvonne Vercoulen, Mark Klein, Jenny Meerdink, Salvatore Albani, Ruurd van der Zee, Birgit Sawitzki, Alf Hamann, Wietse Kuij, and Berent Prakken

2080 TLR3 and Rig-Like Receptor on Myeloid Dendritic Cells and Rig-Like Receptor on Human NK Cells Are Both Mandatory for Production of IFN-γ in Response to Double-Stranded RNA
Ivan Perrot, Florence Deauvieau, Catherine Mascascici, Nicola Hughes, Pierre Garrone, Isabelle Durand, Olivier Demaria, Nicolas Vlaud, Laurent Gauthier, Mathieu Bley, Nathalie Bonnefoy-Berard, Yannis Morel, Jurg Tschopp, Lena Alexander, Giorgio Trinchieri, Catrine Patte, and Christophe Caux

2089 Tc17 Cells Are Capable of Mediating Immunity to Vaccinia Virus by Acquisition of a Cytotoxic Phenotype
Norman Yeh, Nicole L. Glosson, Nan Wang, Lynette Guindon, Carl McKinley, Hiromasa Hamada, Qingsheng Li, Richard W. Dutton, Protul Shrikant, Baohua Zhou, Randy R. Brinkiewicz, Janice S. Blum, and Mark H. Kaplan

2099 Invariant NKT Cells Are Required for Antitumor Responses Induced by Host-Versus-Graft Responses
Toshiki I. Saito, Hao Wei Li, and Megan Sykes

2106 Comparison of OX40 Ligand and CD70 in the Promotion of CD4+ T Cell Responses
Jonathan S. Kurche, Matthew A. Burchill, Phillip J. Sanchez, Catherine Haluszczak, and Ross M. Kedl

2116 STAT5 Is Critical To Maintain Effector CD8+ T Cell Responses
Pulak Tripathi, Sema Kurtulus, Sara Wojciechowski, Allyson Sholl, Kasper Hoebe, Suzanne C. Morris, Fred D. Finkelstein, H. Leighton Grimes, and David A. Hildeman

2125 Resident and Monocyte-Derived Dendritic Cells Become Dominant IL-12 Producers under Different Conditions and Signaling Pathways
Yifan Zhan, Yuehang Xu, Shirley Seab, Jamie L. Brady, Emma M. Carrington, Christina Cheers, Ben A. Croker, Li Wu, Jose A. Villadangos, and Andrew M. Lew

2134 Carbon Monoxide Suppresses Membrane Expression of TLR4 via Myeloid Differentiation Factor-2 in βTC3 Cells
Fredy Rocuts, Yinghuo Ma, Xinyu Zhang, Wenda Gao, Yinan Yue, Timothy Vartanian, and Hongjun Wang

2140 Dendritic Cells Continue To Capture and Present Antigens after Maturation In Vivo
Scott B. Drutman and E. Sergio Trombetta
2147 Altered B Cell Development and Anergy in the Absence of Foxp3
Steven M. Leonardo, Jennifer A. Josephson, Nicholas L. Hartog, and Stephen B. Gauld

2157 Identification of Regulatory Foxp3+ Invariant NKT Cells Induced by TGF-β
Marta Monteiro, Catarina F. Almeida, Marta Caridade, Julie C. Ribot, Joana Duarte, Ana Aguia-Doce, Ivonne Wollenberg, Bruno Silva-Santos, and Luis Graca

2164 Secreted pH-Regulated Antigen 1 of Candida albicans Blocks Activation and Conversion of Complement C3
Shanban Luo, Andrea Hartmann, Hans-Martin Dabe, Christine Skerka, and Peter F. Zipfel

2174 Primed Antigen-Specific CD4+ T Cells Are Required for NK Cell Activation In Vivo upon Leishmania major Infection
Franck Bihl, Julien Pecqueur, Béatrice Bréart, Gwenael Poupon, Julie Cassareth, Valérie Julia, Nicolas Glaichenhaus, and Véronique M. Braun

2182 Qualitatively Different Memory CD8+ T Cells Are Generated after Lymphocytic Choriomeningitis Virus and Influenza Virus Infections
Scott N. Mueller, William A. Langley, Guimei Li, Adolfo Garcia-Sastre, Richard J. Webby, and Rafi Ahmed

2191 Clonal Repertoires of Virus-Specific CD8+ T Lymphocytes Are Shared in Mucosal and Systemic Compartments during Chronic Simian Immunodeficiency Virus Infection in Rhesus Monkeys
Piya Sircar, Kathryn L. Furr, Lauren A. Dorosh, and Norman L. Letvin

2200 In Hepatic Fibrosis, Liver Sinusoidal Endothelial Cells Acquire Enhanced Immunogenicity

2209 MHC Class I Presentation and Regulation by IFN in Bony Fish Determined by Molecular Analysis of the Class I Locus in Grass Carp
Weihong Chen, Zhenghu Jia, Ting Zhang, Nianzhi Zhang, Chuangyou Lin, Feng Gao, Li Wang, Xiaoying Li, Yinan Jiang, Xin Li, George F. Guo, and Chun Xia

2217 CD30 Ligand/CD30 Plays a Critical Role in Th17 Differentiation in Mice
Xun Sun, Hisakata Yamada, Kenseke Shibata, Hiromi Muta, Kenzaburo Tani, Eckhard R. Podack, and Yasunobu Yoshikai

2231 Respiratory Virus-Induced TLR7 Activation Controls IL-17–Associated Increased Mucus via IL-23 Regulation
Nicholas W. Lukacs, Joost J. Smits, Sumanta Mukherjee, Susan B. Morris, Gabriel Nunez, and Dennis M. Lindell

2240 Regulatory B Cells (B10 Cells) and Regulatory T Cells Have Independent Roles in Controlling Experimental Autoimmune Encephalomyelitis Initiation and Late-Phase Immunopathogenesis
Takahisa Matsushita, Mayuka Horikawa, Yohi Iwata, and Thomas F. Tedder

2253 IgE Transcripts in the Circulation of Allergic Children Reflect a Classical Antigen-Driven B Cell Response and Not a Superantigen-Like Activation
Sebastian Kerzel, Tobias Rogusch, Benjamin Straecker, Rolf F. Maier, and Michael Zemlin

2261 IL-3 Inhibits Human Osteoclastogenesis and Bone Resorption through Downregulation of c-Fms and Diverts the Cells to Dendritic Cell Lineage

2273 Characterization of Cytokine-Induced Myeloid-Derived Suppressor Cells from Normal Human Peripheral Blood Mononuclear Cells
Melissa G. Lechner, Daniel J. Liebertz, and Alan L. Epstein

2285 Type 1 Diabetes in BioBreeding Rats Is Critically Linked to an Imbalance between Th17 and Regulatory T Cells and an Altered TCR Repertoire
Jens van den Brande, Henrik J. Fischer, Lutz Walter, Thomas Hüning, Ingrid Klötzing, and Holger M. Reichardt
Graded Attenuation of TCR Signaling Elicits Distinct Autoimmune Diseases by Altering Thymic T Cell Selection and Regulatory T Cell Function
Satoshi Tanaka, Shinji Maeda, Motomi Hashimoto, Chihiro Fujimori, Yoshinaga Ito, Shin Teradaira, Keiji Hirota, Hiroyuki Yoshitomi, Tomoya Katakai, Akira Shimizu, Takashi Nomura, Noriko Sakaguchi, and Shimon Sakaguchi

MOLECULAR AND STRUCTURAL IMMUNOLOGY
Lectin-Like Oxidized Low-Density Lipoprotein Receptor-1 Delivers Heat Shock Protein 60-Fused Antigen into the MHC Class I Presentation Pathway
Jianhui Xie, Haiyan Zhu, Liang Guo, Yuanyuan Ruan, Lan Wang, Lingling Sun, Lei Zhou, Weibin Wu, Xiaoqin Yang, Aiguo Shen, and Jianxin Gu

MOLECULAR AND STRUCTURAL IMMUNOLOGY
A 5’ Extended IFN-Stimulating Response Element Is Crucial for IFN-γ–Induced Tripartite Motif 22 Expression via Interaction with IFN Regulatory Factor-1
Bo Gao, Yaxin Wang, Wei Xu, Zhijian Duan, and Sidong Xiong

IMMUNOGENETICS
An Allelic Variant of Crry in the Murine SLE1c Lupus Susceptibility Interval Is Not Impaired in Its Ability To Regulate Complement Activation
Svetlana N. Tchepeleva, Joshua M. Thurman, Katherine Ruff, Stephen J. Perkins, Laurence Morel, and Susan A. Boackle

IMMUNOGENETICS
An Atopic Dermatitis-Like Skin Disease with Hyper-IgE-emia Develops in Mice Carrying a Spontaneous Recessive Point Mutation in the Traf3ip2 (Act1/CIKS) Gene
Yoshbumi Matsushima, Yoshiaki Kikkawa, Toyoyuki Takada, Kunie Matsuoka, Yuta Seki, Hisahiro Yoshida, Yoshiyuki Minegishi, Hajime Karasuyama, and Hiromichi Yonekawa

IMMUNOGENETICS
Regulation of the IL-21 Gene by the NF-κB Transcription Factor c-Rel
Guobing Chen, Kristine Hardy, Karen Bunting, Stephen Daley, Lina Ma, and M. Frances Shannon

HOST DEFENSE
Stromal Cell-Derived CXCL12 and CCL8 Cooperate To Support Increased Development of Regulatory Dendritic Cells Following Leishmania Infection
Anh Thu Nguyen Hoang, Hao Liu, Julias Juarez, Naveed Aziz, Paul M. Kaye, and Mattias Svensson

HOST DEFENSE
Inducible Cyclooxygenase Released Prostaglandin E2 Modulates the Severity of Infection Caused by Streptococcus pyogenes
Oliver Goldmann, Erika Hertza, Alexander Hecht, Heike Schmidt, Sabine Lehne, Anna Norrby-Teglund, and Eva Medina

HOST DEFENSE
Foxp3+ CD4 Regulatory T Cells Limit Pulmonary Immunopathology by Modulating the CD8 T Cell Response during Respiratory Syncytial Virus Infection
Ross B. Fulton, David K. Meyerholz, and Steven M. Varga

HOST DEFENSE
Suppressor of Cytokine Signaling 3 Inhibits Antiviral IFN-β Signaling To Enhance HIV-1 Replication in Macrophages
Lisa Nowoslawski Akhtar, Hongwei Qin, Michelle T. Muldowney, Lora L. Yanagisawa, Olaf Kutsch, Janice E. Clements, and Etty N. Benveniste

HOST DEFENSE
Mycobacterium tuberculosis and TLR2 Agonists Inhibit Induction of Type I IFN and Class I MHC Antigen Cross Processing by TLR9
Daimon P. Simmons, David H. Canaday, Yi Liu, Qing Li, Alex Huang, W. Henry Boom, and Clifford V. Harding

HOST DEFENSE
The Early Generation of a Heterogeneous CD4+ T Cell Response to Leishmania major
Sara L. Colpitts and Phillip Scott
Inhibitory Role for D-Alanylation of Wall Teichoic Acid in Activation of Insect Toll Pathway by Peptidoglycan of *Staphylococcus aureus*

Yukichika Tabuchi, Akiko Shiratsuchi, Kenji Kurokawa, Ji Hee Gong, Kazuhisa Sekimizu, Bok Luel Lee, and Yoshinobu Nakanishi

Severe *Listeria monocytogenes* Infection Induces Development of Monocytes with Distinct Phenotypic and Functional Features


B7-H1 (Programmed Cell Death Ligand 1) Is Required for the Development of Multifunctional Th1 Cells and Immunity to Primary, but Not Secondary, *Salmonella* Infection

Seung-Joo Lee, Hope O'Donnell, and Stephen J. McSorley

*Candida albicans* Dampens Host Defense by Downregulating IL-17 Production

Shih-Chin Cheng, Frank van de Veerdonk, Sanne Smeekens, Leo A. B. Joosten, Jos W. M. van der Meer, Bart-Jan Kullberg, and Mihai G. Netea

**INFLAMMATION**

Inflammation in the Central Nervous System and Th17 Responses Are Inhibited by IFN-γ–Induced IL-18 Binding Protein

Jason M. Millward, Morten Løbner, Rachel D. Wheeler, and Trevor Owens

The IFN-γ–Dependent Suppressor of Cytokine Signaling 1 Promoter Activity Is Positively Regulated by IFN Regulatory Factor-1 and Sp1 but Repressed by Growth Factor Independence-1b and Krüppel-Like Factor-4, and It Is Dysregulated in Psoriatic Keratinocytes

Stefania Madonna, Claudia Scarponi, Rosanna Sestito, Sabatino Pallotta, Andrea Cavani, and Cristina Albanesi

Essential Role for IL-27 Receptor Signaling in Prevention of Th1-Mediated Immunopathology during Malaria Infection

Emily Gwyer Findlay, Rachel Greig, Jason S. Stumhofer, Julius C. R. Hafalla, J. Brian de Souza, Christiana J. Saris, Christopher A. Hunter, Eleanor M. Riley, and Kevin N. Couper

CD4+CD25* Regulatory T Cells Prevent Type 1 Diabetes Preceded by Dendritic Cell-Dominant Invasive Insulitis by Affecting Chemotaxis and Local Invasiveness of Dendritic Cells

Mi-Heon Lee, Wen-Hui Lee, Ivan Todorov, and Chih-Pin Liu

Cell Adhesion Molecules Regulate Fibrotic Process via Th1/Th2/Th17 Cell Balance in a Bleomycin-Induced Scleroderma Model

Ayumi Yoshizaki, Koichi Yanaba, Yohesi Iwata, Kazuhiro Komura, Asako Ogawa, Yuichiro Akiyama, Eiji Muroi, Toshibide Hara, Fumihide Ogawa, Motoi Takenaka, Kazuhiro Shimizu, Masao Hasegawa, Manabu Fujimoto, Thomas F. Tedder, and Shinichi Sato

Distinct Roles of Hepatocyte- and Myeloid Cell-Derived IL-1 Receptor Antagonist during Endotoxemia and Sterile Inflammation in Mice

Céline Lamacchia, Gabby Palmer, Loraine Bischoff, Emiliana Rodriguez, Dominique Talabot-Ayer, and Cem Gabay

Rhinovirus Infection of Allergen-Sensitized and -Challenged Mice Induces Eotaxin Release from Functionally Polarized Macrophages

Deepri R. Nagarkar, Emily R. Bouman, Dina Schneider, Qiong Wang, Jee Shim, Ying Zhao, Marisa J. Linn, Christina L. McHenry, Babina Gosangi, J. Kelley Bentley, Wan C. Tsai, Umadevi S. Sajjan, Nicholas W. Lukacs, and Marc B. Hershenson

A Critical Role for IFN Regulatory Factor 1 in NKT Cell-Mediated Liver Injury Induced by α-Galactosylceramide

Zongxian Cao, Rajeev Dhupar, Changshun Cai, Peiyuan Li, Timothy R. Billiar, and David A. Geller

Pan–CC Chemokine Neutralization Restricts Splenocyte Egress and Reduces Inflammation in a Model of Arthritis

Vanessa Buatois, Séverine Fagète, Giovanni Magistrelli, Laurence Chatel, Nicolas Fischer, Marie H. Kosco-Vilbois, and Walter G. Ferlin
2555 The BH3-Mimetic ABT-737 Induces Mast Cell Apoptosis In Vitro and In Vivo: Potential for Therapeutics
Mats Karlberg, Maria Ekoff, David C. S. Huang, Paula Mustonen, Ilkka T. Harvima, and Gunnar Nilsson

2563 TLR4 Activation Is Required for IL-17–Induced Multiple Tissue Inflammation and Wasting in Mice
Haiqing Tang, Shanshan Pang, Min Wang, Xiuying Xiao, Yefei Rong, Hui Wang, and Ying Qin Zang

2570 Genetic Sphingosine Kinase 1 Deficiency Significantly Decreases Synovial Inflammation and Joint Erosions
in Murine TNF-α–Induced Arthritis
DeAnna A. Baker, Jeremy Barth, Raymond Chang, Lina M. Obeid, and Gary S. Gilkeson

CLINICAL IMMUNOLOGY
2580 Efficient Eradication of Subcutaneous but Not of Autochthonous Gastric Tumors by Adoptive T Cell Transfer in an SV40 T Antigen Mouse Model
Carole Bourquin, Philip von der Borch, Christine Zogemeier, David Anz, Nadja Sandholzer, Nina Subartha, Cornelia Wurzenberger, Angela Denzel, Robert Kammerer, Wolfgang Zimmermann, and Stefan Endres

2589 A Fusion Protein Encoding the Second Extracellular Domain of CCR5 Arrests Chemokine-Induced Cosignaling and Effectively Suppresses Ongoing Experimental Autoimmune Encephalomyelitis
Yair Sapir, Alon Vitsenstei, Yiftah Barshebet, Yaniv Zohar, Gizi Wildbaum, and Nathan Karin

2600 Modification of MHC Anchor Residues Generates Heteroclitic Peptides That Alter TCR Binding and T Cell Recognition

2611 P2X7 Receptor-Mediated Release of Cathepsins from Macrophages Is a Cytokine-Independent Mechanism Potentially Involved in Joint Diseases
Gloria Lopez-Castejon, Jill Theaker, Pablo Pelegrin, Andrew D. Clifton, Martin Braddock, and Annmarie Surprenant

2620 Delaying Bacillus Calmette-Guerin Vaccination from Birth to 4 1/2 Months of Age Reduces Postvaccination Th1 and IL-17 Responses but Leads to Comparable Mycobacterial Responses at 9 Months of Age
Sarah Burl, Uche J. Adetifi, Momodou Cox, Ebrima Touway, Martin O. Ota, Arnaud Marchant, Hilton Whittle, Helen McShane, Sarah L. Rowland-Jones, and Katie L. Flanagan

CORRECTIONS
2629 Correction: Increase in ALK1/ALK5 Ratio as a Cause for Elevated MMP-13 Expression in Osteoarthritis in Humans and Mice
Esmeralda N. Blaney Davidson, Dennis F. G. Remst, Elly L. Vitters, Henk M. van Beuningen, Arjen B. Blom, Marie-Jose Gooram, Wim B. van den Berg, and Peter M. van der Kraan

2630 Correction: Expression of Soluble Vascular Endothelial Growth Factor Receptor-1 in Human Monocyte-Derived Mature Dendritic Cells Contributes to Their Antiangiogenic Property
Masatoishi Kishuku, Yasuhiro Nishioka, Shinji Abe, Jun Kishi, Hirokazu Ogino, Yoshinori Aono, Momoyo Azuma, Katsuhito Kinoshita, Battmung Rentsenhand, Hideki Makino, Priya Ranjan, Kazuo Minakuchi, and Saburo Sone

2631 Correction: Constitutive CD40L Expression on B Cells Prematurely Terminates Germinal Center Response and Leads to Augmented Plasma Cell Production in T Cell Areas
Anna Bolduc, Eugene Long, Dale Stapler, Marilia Cascalho, Takeshi Tiubata, Pandelakis A. Koni, and Michiko Shimoda

2632 Correction: HIV-Specific IL-21 Producing CD4+ T Cells Are Induced in Acute and Chronic Progressive HIV Infection and Are Associated with Relative Viral Control
Feng Yun Yue, Calvin Lo, Ali Sakhdari, Erika Yue Lee, Colin M. Kovacs, Erika Benko, Jun Liu, Haihan Song, R. Brad Jones, Prameet Sheth, Duncan Chege, Rupert Kaul, and Mario A. Ostrowski

2634 AUTHOR INDEX