IN THIS ISSUE

LETTERS TO THE EDITOR

595 Comment on “Dermatitis Herpetiformis Sera or Goat Anti–Transglutaminase-3 Transferred to Human Skin-Grafted Mice Mimics Dermatitis Herpetiformis Immunopathology”
Emiliano Antiga, Marzia Caproni, and Paolo Fabbri

595 Response to Comment on “Dermatitis Herpetiformis Sera or Goat Anti–Transglutaminase-3 Transferred to Human Skin-Grafted Mice Mimics Dermatitis Herpetiformis Immunopathology”
Laurence J. Meyer

BRIEF REVIEWS

597 Modulation of Inflammasome Pathways by Bacterial and Viral Pathogens
Mohamed Lamkanfi and Vishva M. Dixit

CUTTING EDGE

603 Cutting Edge: JAM-C Controls Homeostatic Chemokine Secretion in Lymph Node Fibroblastic Reticular Cells Expressing Thrombomodulin
Vincent Frontera, Marie-Laure Arcangeli, Claudia Zimmerli, Florence Bardin, Elodie Obrados, Stéphane Audebert, Marc Bajenoff, Jean-Paul Borg, and Michel Aurrand-Lions

608 Cutting Edge: T Cells Monitor N-Myristoylation of the Nef Protein in Simian Immunodeficiency Virus-Infected Monkeys
Daisuke Morita, Tatsuhiko Igarashi, Mariko Horiike, Naoki Mori, and Masahiko Sugita

613 Cutting Edge: Reactive Oxygen Species Inhibitors Block Priming, but Not Activation, of the NLRP3 Inflammasome
Franz Bauernfeind, Eva Bartok, Anna Rieger, Luigi Franchi, Gabriel Núñez, and Veit Hornung

A Requirement for the p85 PI3K Adapter Protein BCAP in the Protection of Macrophages from Apoptosis Induced by Endoplasmic Reticulum Stress
SungWon Song, Claude Chew, Benjamin M. Dale, Daniel Traum, James Peacock, Tetsum Yamazaki, Raphael Clynes, Tomohiro Kurosaki, and Steven Greenberg

Cyclosporine-Resistant, Rab27a-Independent Mobilization of Intracellular Preformed CD40 Ligand Mediates Antigen-Specific T Cell Help In Vitro
Yoshinobu Koguchi, Jennifer L. Gardell, Timothy J. Thauland, and David C. Parker

Akt-Mediated Proinflammatory Response of Mononuclear Phagocytes Infected with Burkholderia cenocepacia Occurs by a Novel GSK3β-Dependent, IkB Kinase-Independent Mechanism
Thomas J. Cremer, Presy Shah, Estelle Cornet-Boyaka, Miguel A. Valvano, Jonathan P. Butchar, and Subheela Tridandapani

NTPDase1 Controls IL-8 Production by Human Neutrophils
Filip Kukulski, Fariborz Bahrami, Fethia Ben Yehdra, Joanna Lecka, Mireia Martin-Satué, Sébastien A. Levesque, and Jean Sévigny

Anti-CD8 Antibodies Can Trigger CD8+ T Cell Effector Function in the Absence of TCR Engagement and Improve Peptide–MHCI Tetramer Staining

Developmental Arrest of T Cells in Rpl22-Deficient Mice Is Dependent upon Multiple p53 Effectors

Cancer Exosomes Express CD39 and CD73, Which Suppress T Cells through Adenosine Production
Aled Clayton, Saly Al-Taie, Jason Webber, Malcolm D. Mason, and Zsuzsanna Tabi

Multilayered Defense in HLA-B51–Associated HIV Viral Control
YongHong Zhang, YanChun Peng, HuiPing Yan, Keyi Xu, Masumichi Saito, Hao Wu, XinYue Chen, Srinika Ranasinghe, Nozomi Kase, Tim Powell, Yan Zhao, WeiHua Li, Xin Zhang, Xia Feng, Ning Li, Aleksandra Leigdowicz, XiaoNing Xu, Mina John, Masaumi Takiguchi, Andrew McMichael, Sarah Rowland-Jones, and Tao Dong

Notch Signaling Regulates Mouse and Human Th17 Differentiation
Shilpa Keerthivasan, Reem Saleiman, Rebecca Lavalor, Justine Roderick, Tonya Bates, Lisa Minter, Juan Anguita, Ignacio Juncadella, Brian J. Nickoloff, I. Caroline Le Poole, Lucia Miets, and Barbara A. Osborne

TNF Mediates the Sustained Activation of Nrf2 in Human Monocytes
Stuart A. Rushworth, Subash Shah, and David J. MacEwan

Activated NK T Cells and NK Cells Render T Cells Resistant to Myeloid-Derived Suppressor Cells and Result in an Effective Adoptive Cellular Therapy against Breast Cancer in the FVBN202 Transgenic Mouse

Cholinergic Regulatory Lymphocytes Re-Establish Neuromodulation of Innate Immune Responses in Sepsis
Geben Peña, Bolin Cai, Laura Ramos, Gergely Vida, Edwin A. Deitch, and Luis Ulloa

Targeting FcγRI on Polymorphonuclear Cells Induces Tumor Cell Killing through Autophagy
Jantine E. Bakema, Sonja H. Gansbeke, Donna M. Filitsma, Marco W. Schilham, Robert H. J. Beelen, Thomas Valerius, Stefan Lohe, Martin J. Glennie, Jan Paul Medema, and Marjolein van Egmond

Functional Specializations of Intestinal Dendritic Cell and Macrophage Subsets That Control Th17 and Regulatory T Cell Responses Are Dependent on the T Cell/APC Ratio, Source of Mouse Strain, and Regional Localization
Timothy L. Denning, Brian A. Norris, Oscar Medina-Contreras, Santhakumar Manicasamy, Duke Geem, Rajat Madan, Christopher L. Karp, and Bali Pulendran
Protein Kinase C and NF-κB–Dependent CD4 Downregulation in Macrophages Induced by T Cell-Derived Soluble Factors: Consequences for HIV-1 Infection
Rui André Saraiva Raposo, David C. Trudgian, Benjamin Thomas, Bonnie van Wilgenburg, Sally A. Cowley, and William James

Simulations of the NK Cell Immune Synapse Reveal that Activation Thresholds Can Be Established by Inhibitory Receptors Acting Locally
Asya Kaplan, Shulumit Kotzer, Catarina R. Almeida, Rafael Cohen, Gilad Halpern, Mali Salmon-Divon, Karsten Köhler, Petter Higlind, Daniel M. Davis, and Ramit Mehr

Regulation of the Estrous Cycle by Neutrophils via Opioid Peptides
Soichiro Sasaki, Yutaka Tamaki, Kisaburo Nagata, and Yoshiro Kobayashi

Unexpected Role for Granzyme K in CD56^{bright} NK Cell-Mediated Immunoregulation of Multiple Sclerosis
Wenzheng Jiang, Noo Ri Chai, Dragan Maric, and Bibiana Bielekova

Role for MyD88, TLR2 and TLR9 but Not TLR1, TLR4 or TLR6 in Experimental Autoimmune Encephalomyelitis
Socorro Miranda-Hernandez, Nicole Gerlach, Julie M. Fletcher, Erik Biro, Matthias Mack, Heinrich Körner, and Alan G. Baxter

Impairment of Immunological Synapse Formation in Adaptively Tolerant T Cells
Seeyoung Choi and Ronald H. Schwartz

Bruton’s Tyrosine Kinase Is Required for TLR-Dependent Heme Oxygenase-1 Gene Activation via Nrf2 in Macrophages
Vijith Vijayan, Eveline Baumgart-Vogt, Srivatsava Naidu, Guofeng Qian, and Stephan Immenschuh

A Critical Role for Dendritic Cells in the Formation of Lymphatic Vessels within Tertiary Lymphoid Structures
Luciana R. Muniz, Michelle E. Pacer, Sergio A. Lira, and Glaucia C. Furtado

Clonally Related CD8^+ T Cells Responsible for Rapid Population of Both Diffuse Nasal-Associated Lymphoid Tissue and Lung After Respiratory Virus Infection
Sherri L. Surman, Rajeev Rudraraju, David L. Woodland, Pradyot Dash, Paul G. Thomas, and Julia L. Hurwitz

Targeting Antigen to Mouse Dendritic Cells via Clec9A Induces Potent CD4 T Cell Responses Biased toward a Follicular Helper Phenotype

Loss of T Cell CD98 H Chain Specifically Ablates T Cell Clonal Expansion and Protects from Autoimmunity
Joseph Cantor, Marina Slepak, Nil Ege, John T. Chang, and Mark H. Ginsberg

A Self-Reactive TCR Drives the Development of Foxp3^+ Regulatory T Cells That Prevent Autoimmune Disease
Justin R. Killebrew, Nikole Perdue, Alan Kwan, Angela M. Thornton, Ethan M. Shevach, and Daniel J. Campbell

MOLECULAR AND STRUCTURAL IMMUNOLOGY

Physical and Functional Bivalency Observed Among TCR/CD3 Complexes Isolated from Primary T Cells
Adam G. Schrum, Diana Gil, Laurence A. Turka, and Ed Palmer

Limiting CDR-H3 Diversity Abrogates the Antibody Response to the Bacterial Polysaccharide α 1→3 Dextran
Tamer I. Mahmoud, Harry W. Schroeder, Jr., and John F. Kearney
HOST DEFENSE
887 Suppression of TLR9 Immunostimulatory Motifs in the Genome of a Gammaherpesvirus
Andrea C. Pezda, Alex Penn, Gregory M. Barton, and Laurent Coscoy

Yersinia pestis YopE Contains a Dominant CD8 T Cell Epitope that Confers Protection in a Mouse Model of Pneumonic Plague
Jr-Shiuan Lin, Frank M. Szaba, Lawrence W. Kummer, Brett A. Chromy, and Stephen T. Smiley

Cecal Ligation and Puncture-Induced Impairment of Innate Immune Function Does Not Occur in the Absence of Caspase-1
E. D. Murphey

INFLAMMATION
911 Neutrophil Mobilization from the Bone Marrow during Polymicrobial Sepsis Is Dependent on CXCL12 Signaling

919 Endoplasmic Reticulum Calcium Depletion Impacts Chaperone Secretion, Innate Immunity, and Phagocytic Uptake of Cells
Larry Robert Peters and Malini Raghavan

922 Gab2, via PI-3K, Regulates ARF1 in FcεRI-Mediated Granule Translocation and Mast Cell Degranulation
Keigo Nishida, Satoru Yamasaki, Aiko Hasegawa, Akihiro Iwamatsu, Haruhiko Koseki, and Toshio Hirano

942 Ginsenoside Rg1, a Novel Glucocorticoid Receptor Agonist of Plant Origin, Maintains Glucocorticoid Efficacy with Reduced Side Effects
Juan Du, Binbin Cheng, Xiaoyan Zhu, and Changqian Ling

951 IL-23 Is Critical for Induction of Arthritis, Osteoclast Formation, and Maintenance of Bone Mass
Iannis E. Adamopoulos, Marlowe Tessmer, Cheng-Chi Chao, Sarvesh Adda, Dan Gorman, Mary Petro, Chuan-Chu Chou, Robert H. Pierce, Wei Yao, Nancy E. Lane, Drake Laface, and Edward P. Bowman

960 Ethyl Pyruvate Rescues Nigrostriatal Dopaminergic Neurons by Regulating Glial Activation in a Mouse Model of Parkinson’s Disease
Sue H. Huh, Young C. Chung, Ying Piao, Min Y. Jin, Hyo J. Son, Nam S. Yoon, Joo Y. Hong, Youngmi K. Pak, Yoon S. Kim, Jong K. Hong, Onyou Huang, and Byung K. Jin

970 Early and Transient Release of Leukocyte Pentraxin 3 during Acute Myocardial Infarction
Norma Mauferi, Patrizia Rovere-Querini, Massimo Slavich, Giovanni Coppi, Andrea Doni, Barbara Bottazzi, Cecilia Garlanda, Domenico Gianfrate, Attilio Maseri, Alberto Mantovani, and Angelo A. Manfredi

987 FOXO3 Deficiency Leads to Increased Susceptibility to Cigarette Smoke-Induced Inflammation, Airspace Enlargement, and Chronic Obstructive Pulmonary Disease
Jae-woong Hwang, Saravanan Rajendrasozhan, Hongwei Yao, Sangwoon Chung, Isaac K. Sundar, Heidie L. Huyek, Gloria S. Pyhuber, Vuokko L. Kinnula, and Irfan Rahman

999 Induction of Mucin and MUC5AC Expression by the Protease Activity of Aspergillus fumigatus in Airway Epithelial Cells
Tsuyoshi Oguma, Koichiro Asano, Katsuyoshi Tomomatsu, Motohiro Kodama, Koichi Fukunaga, Tetsuya Shiomı, Nao Ohmori, Soichiro Ueda, Takahisa Takihara, Yoshihiko Shiraishi, Koichi Sayama, Shizuko Kagaawa, Yukikazu Natori, Craig M. Lilly, Kazuo Satoh, Koichi Makimura, and Akitsu Ishizaka
Circulating Activated and Effector Memory T Cells Are Associated with Calcification and Clonal Expansions in Bicuspid and Tricuspid Valves of Calcific Aortic Stenosis
Robert Winchester, Margrit Wiesendanger, Will O’Brien, Hui-Zhu Zhang, Mathew S. Maurer, Linda D. Gillam, Allan Schwartz, Charles Marboe, and Allan S. Stewart

Neonatal Fc Receptor Blockade by Fc Engineering Ameliorates Arthritis in a Murine Model
Dipesh A. Patel, Alberto Puig-Canto, Dilip Kumar Challa, Héctor Perez Montoyo, Raimund J. Ober, and E. Sally Ward

Anticardiac Myosin Immunity and Chronic Allograft Vasculopathy in Heart Transplant Recipients
Safa Kalache, Rajani Dinavahi, Sean Pinney, Anita Mehrotra, Madeleine W. Cunningham, and Peter S. Heeger

Stimulated γδ T Cells Increase the In Vivo Efficacy of Trastuzumab in HER-2⁺ Breast Cancer
Aude-Hélène Capietto, Ludovic Martinet, and Jean-Jacques Fournié

Increased Frequencies of Myelin Oligodendrocyte Glycoprotein/MHC Class II-Binding CD4 Cells in Patients with Multiple Sclerosis
Khadir Raddassi, Sally C. Kent, Junhao Yang, Kasia Bourcier, Elizabeth M. Bradshaw, Vicki Seyfert-Margolis, Gerald T. Nepom, William W. Kwok, and David A. Hafler

Lenalidomide Enhances Antigen-Specific Activity and Decreases CD45RA Expression of T Cells from Patients with Multiple Myeloma
Brigitte Neuber, Isabelle Herth, Claudia Tolliver, Stefan Schoenland, Ute Hegenbart, Dirk Hose, Mathias Witzens-Harig, Anthony D. Ho, Hartmut Goldschmidt, Bernard Klein, and Michael Hundemer

Absence of Vasoactive Intestinal Peptide Expression in Hematopoietic Cells Enhances Th1 Polarization and Antiviral Immunity in Mice
Jian-Ming Li, Lauren Southerland, Mohammad S. Hosain, Cynthia R. Giver, Ying Wang, Kasia Darlak, Wayne Harris, James Waschek, and Edmund K. Waller

AUTHOR INDEX