7127 IN THIS ISSUE

LETTERS TO THE EDITOR

7129 Comment on “Expression of Helios, an Ikaros Transcription Factor Family Member, Differentiates Thymic-Derived from Peripherally Induced Foxp3+ T Regulatory Cells”
Johan Verhagen and David C. Wraith

7129 Response to Comment on “Expression of Helios, an Ikaros Transcription Factor Family Member, Differentiates Thymic-Derived from Peripherally Induced Foxp3+ T Regulatory Cells”
Angela M. Thornton and Ethan M. Shevach

7130 Comment on “Deoxyuridine Triphosphate Incorporation during Somatic Hypermutation of Mouse VkOx Genes after Immunization with Phenylazoxolone”
Ashok S. Bhagwat

7131 Response to Comment on “Deoxyuridine Triphosphate Incorporation during Somatic Hypermutation of Mouse VkOx Genes after Immunization with Phenylazoxolone”
François Rougeon

BRIEF REVIEWS

7133 Tumor-Induced Disruption of Proximal TCR-Mediated Signal Transduction in Tumor-Infiltrating CD8+ Lymphocytes Inactivates Antitumor Effector Phase
Edwin J. Vázquez-Cintrón, Ngozi R. Monu, and Alan B. Frey

CUTTING EDGE

7141 Cutting Edge: Virus-Specific CD8+ T Cell Clones and the Maintenance of Replicative Function during a Persistent Viral Infection
Oliver Bannard, Matthew Kraman, and Douglas T. Fearon

7146 Cutting Edge: Hierarchy of Maturity of Murine Memory B Cell Subsets
Mary M. Tomayko, Natalie C. Steinel, Shannon M. Anderson, and Mark J. Shlomchik
CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

7151 Cutting Edge: Lymphoproliferation Caused by Fas Deficiency Is Dependent on the Transcription Factor Eomesodermim
Ichiko Kinjyo, Scott M. Gordon, Andrew M. Intlekofer, Kennichi Dowdell, Erin C. Mooney, Roberto Cericchio, Stephan A. Grupp, David T. Teachey, V. Koneti Rao, Tullia Lindsten, and Steven L. Reiner

7156 Cutting Edge: Intrinsic Programming of Thymic γδT Cells for Specific Peripheral Tissue Localization
Yan Jin, Mingcan Xia, Christina M. Saylor, Kavitha Narayani, Joonsoo Kang, David L. Wiest, Yanming Wang, and Na Xiong

7161 Cutting Edge: The Transcription Factor Kruppel-Like Factor 4 Regulates the Differentiation of Th17 Cells Independently of RORγt
Lori Lebson, Anne Gocke, Jason Rosenzweig, Jonathan Alder, Curt Civan, Peter A. Calabresi, and Katharine A. Whartenby

7165 Inflammatory Blood Monocytes Contribute to Tumor Development and Represent a Privileged Target To Improve Host Immunosurveillance
Séverine Angier, Thomas Ciucci, Carmelo Luci, Georges F. Carle, Claudine Blin-Wakkach, and Abdelilah Wakkach

7174 M2b Monocytes Predominated in Peripheral Blood of Severely Burned Patients
Makiko Kobayashi, Marc G. Jechke, Kenji Shigematsu, Akira Asai, Shohei Yoshida, David N. Herndon, and Fujio Suzuki

7180 Basophils Support the Survival of Plasma Cells in Mice
Manuel Rodrigues Gomes, Yvonne Talkle, Nicole Goebel, Fabian Hermann, Barbara Reich, and Matthias Mack

7186 Peroxisome Proliferator-Activated Receptor α and γ Agonists Together with TGF-β Convert Human CD4+CD25– T Cells into Functional Foxp3+ Regulatory T Cells
Jin Lei, Hitoshi Hasegawa, Takuju Matsumoto, and Masaki Yasukawa

7199 Depletion of Regulatory T Cells Facilitates Growth of Established Tumors: A Mechanism Involving the Regulation of Myeloid-Derived Suppressor Cells by Lipoxin A4
Biao Zhang, Haibo Jia, Jing Liu, Zhuohun Yang, Tao Jiang, Ke Tang, Dapeng Li, Chunmei Huang, Jingwei Ma, Guan-Xin Shen, Duyun Ye, and Bo Huang

7207 Ultraviolet Irradiation of Mice Reduces the Competency of Bone Marrow-Derived CD11c+ Cells via an Indomethacin-Inhibitable Pathway
Royce L. X. Ng, Jacqueline L. Bailey, Shelley Gorman, Mary Norris, and Prue H. Hart

7216 Downstream of Tyrosine Kinase 1 and 2 Play Opposing Roles in CD200 Receptor Signaling
Robin Mihrshahi and Marion H. Brown

7223 CD8 T Cell-Intrinsic GITR Is Required for T Cell Clonal Expansion and Mouse Survival following Severe Influenza Infection
Laura M. Shell, Ann J. McPherson, Gloria H. Y. Lin, Shimon Sakaguchi, Pier Paolo Pandolfi, Carlo Riccardi, and Tania H. Watts

7235 Myelin-Reactive, TGF-β–Induced Regulatory T Cells Can Be Programmed To Develop Th1-Like Effector Function but Remain Less Proinflammatory Than Myelin-Reactive Th1 Effectors and Can Suppress Pathogenic T Cell Clonal Expansion In Vivo
Richard A. O’Connor, Melanie D. Leech, Janine Suffner, Günter J. Hämerling, and Stephen M. Anderton

7244 MicroRNA-148/152 Impair Innate Response and Antigen Presentation of TLR-Triggered Dendritic Cells by Targeting CaMKII
Xingguang Liu, Zhenzhen Zhan, Li Xu, Feng Ma, Dong Li, Zhenhong Guo, Nan Li, and Xuetao Cao

7252 A Nonredundant Role for Canonical NF-κB in Human Myeloid Dendritic Cell Development and Function
Lianne van de Laar, Aniek van den Bosch, Sandra W. van der Kooij, Harry L. A. Janssen, Paul J. Coffer, Cees van Kooten, and Andrea M. Woltman
Preexisting Vaccinia Virus Immunity Decreases SIV-Specific Cellular Immunity but Does Not Diminish Humoral Immunity and Efficacy of a DNA/MVA Vaccine

Endoplasmic Reticulum Stress-Mediated Apoptosis of EBV-Transformed B Cells by Cross-Linking of CD70 Is Dependent upon Generation of Reactive Oxygen Species and Activation of p38 MAPK and JNK Pathway

CD8+ T Cells Negatively Regulate IL-4-Dependent, IgG1-Dominant Posttransplant Alloantibody Production
Jason M. Zimmerer, Thomas A. Pham, Virginia M. Sanders, and Ginny L. Bungardner

TLR Ligation Triggers Somatic Hypermutation in Transitional B Cells Inducing the Generation of IgM Memory B Cells
Alaitz Aranburu, Sara Cecarelli, Ezio Giorda, Rosa Lasorella, Giovanna Ballatore, and Rita Carsetti

A Naturally Occurring, Soluble Antagonist of Human IL-23 Inhibits the Development and In Vitro Function of Human Th17 Cells
Raymond Y. Yu and Grant Gallagher

Inhibition of TLR4-Induced IκB Kinase Activity by the RON Receptor Tyrosine Kinase and Its Ligand, Macrophage-Stimulating Protein
Manujendra Ray, Shan Yu, Daniel R. Sharda, Caleph B. Wilson, QingPing Liu, Naveen Kaushal, K. Sandeep Prabhu, and Pamela A. Hankey

On/Off TLR Signaling Decides Proinflammatory or Tolerogenic Dendritic Cell Maturation upon CD1d-Mediated Interaction with Invariant NKT Cells
Simone Caielli, Cristina Conforti-Andreoni, Caterina Di Pietro, Vera Usuelli, Ester Badami, Maria Luisa Malosio, and Marika Falcone

The Role of the Basic Helix-Loop-Helix Transcription Factor Dec1 in the Regulatory T Cells
Kazuko Miyazaki, Masaki Miyazaki, Yun Guo, Norimasa Yamasaki, Masamoto Kanno, Zen-ichiro Honda, Hideaki Oda, Hiroshi Kawamoto, and Hiroaki Honda

Increased B7-H1 Expression on Dendritic Cells Correlates with Programmed Death 1 Expression on T Cells in Simian Immunodeficiency Virus-Infected Macaques and May Contribute to T Cell Dysfunction and Disease Progression
Huanbin Xu, Xiaolei Wang, Bapi Pahar, Terri Moroney-Rasmussen, Xavier Alvarez, Andrew A. Lackner, and Ronald S. Veazey

Macroautophagy Regulates Energy Metabolism during Effector T Cell Activation
Vanessa M. Hubbard, Rut Valdor, Bindi Patel, Rajat Singh, Ana Maria Cuervo, and Fernando Macian

A Dendritic Cell Population Generated by a Fusion of GM-CSF and IL-21 Induces Tumor-Antigen–Specific Immunity
Patrick Williams, Manaf Boussouf, Mouath Rafie, Raphaëlle Romieu-Mourez, Jeremy Hsieh, Marie-Noëlle Boivin, Shala Yuan, Kathy Ann Forner, Elena Birman, and Jacques Galipeau

Monocyte-Mediated Inhibition of TLR9-Dependent IFN-α Induction in Plasmacytoid Dendritic Cells Questions Bacterial DNA as the Active Ingredient of Bacterial Lysates
Jens M. Poth, Christoph Coch, Nicolas Busch, Olaf Boehm, Martin Schlee, Markus Janke, Thomas Zillinger, Oliver Schildgen, Winfried Barchet, and Gunther Hartmann

Regulation of Follicular B Cell Differentiation by the Related E26 Transformation-Specific Transcription Factors PU.1, Spi-B, and Spi-C
Rodney P. DeKoter, Marc Gradah, Sonam Khoosal, Li S. Xu, Gobi Thillainadesan, Joseph Torchia, Shu Shien Chin, and Lee Ann Garrett-Sinha
Aim2 Deficiency Stimulates the Expression of IFN-Inducible Ifi202, a Lupus Susceptibility Murine Gene within the Nba2 Autoimmune Susceptibility Locus
Ravichandran Panchanathan, Xin Duan, Hui Shen, Vijay A. K. Rathinam, Loren D. Erickson, Katherine A. Fitzgerald, and Divaker Choubey

Occupancy of Lymphocyte LFA-1 by Surface-Immolized ICAM-1 Is Critical for TCR- but Not for Chemokine-Triggered LFA-1 Conversion to an Open Headpiece High-Affinity State
Sara W. Feigelman, Ronit Pasvolsky, Saso Cemerski, Ziv Shulman, Valentin Grabovsky, Tal Ilani, Adi Sagiv, Fabrice Lemaître, Carlo Laudanna, Andrea S. Shaw, and Ronen Alon

FcR-Like 2 Inhibition of B Cell Receptor-Mediated Activation of B Cells
Tanisha A. Jackson, Christopher L. Haga, Götz R. A. Ehrhardt, Randall S. Davis, and Max D. Cooper

A Novel Mechanism of Rapid Nuclear Neutrophil Extracellular Trap Formation in Response to Staphylococcus aureus

Basophils Amplify Type 2 Immune Responses, but Do Not Serve a Protective Role, during Chronic Infection of Mice with the Filarial Nematode Litomosoides sigmodontis
Marina N. Torrero, Marc P. Hübner, David Larson, Hajime Karasuyama, and Edward Mitre

MicroRNA-101 Targets MAPK Phosphatase-1 To Regulate the Activation of MAPKs in Macrophages
Qing-Yuan Zhu, Qin Liu, Jian-Xia Chen, Ke Lan, and Bao-Xue Ge

HLA-E and HLA-G Expression in Classical HLA Class I-Negative Tumors Is Of Prognostic Value for Clinical Outcome of Early Breast Cancer Patients

Pim-1 Regulates RANKL-Induced Osteoclastogenesis via NF-κB Activation and NFATc1 Induction
Kabun Kim, Jung Ha Kim, Bang Ung Youn, Hye Mi Jin, and Nacksung Kim

IL-17- and IFN-γ-Secreting Foxp3+ T Cells Infiltrate the Target Tissue in Experimental Autoimmunity
Marianna Esposito, Francesca Ruffini, Alessandra Bergami, Livia Garzetti, Giovanna Borsellino, Luca Battistini, Gianvito Martino, and Roberto Furlan

Leptin Modulates the Survival of Autoreactive CD4+ T Cells through the Nutrient/Energy-Sensing Mammalian Target of Rapamycin Signaling Pathway
Mario Galgani, Claudio Procaccini, Veronica De Rosa, Fortunata Carbone, Paolo Chieffi, Antonio La Cava, and Giuseppe Matarese

NKG2D Is Required for NK Cell Activation and Function in Response to E1-Deleted Adenovirus
Jiangao Zhu, Xiaopei Huang, and Yiping Yang

Actin-Bundling Protein L-Plastin Regulates T Cell Activation
Chen Wang, Sharon Celeste Morley, David Donermeyer, Ivan Peng, Wyne P. Lee, Jason Devos, Dimitry M. Danilenko, Zhonghua Lin, Juan Zhang, Jie Zhou, Paul M. Allen, and Eric J. Brown

Efector Function-Deficient Memory CD8+ T Cells Clonally Expand in the Liver and Give Rise to Peripheral Memory CD8+ T Cells
Yu-Chia Su, Chen-Cheng Lee, and John T. Kung
Evolutional Conservation of Molecular Structure and Antiviral Function of a Viral RNA Receptor, LGP2, in Japanese Flounder, Paralichthys olivaceus
Maki Ohtani, Jun-ichi Hikima, Hidehiro Kondo, Ikuo Hirono, Tae-Sung Jung, and Takashi Aoki

Fine Tuning of the Threshold of T Cell Selection by the Nck Adapters
Edwige Roy, Dieudonné Togbe, Amy Holdorf, Dmitry Trubetskoy, Sabrina Naibi, Günter Kühlbeck, Sabine Schmitt, Annette Kopp-Schneider, Frank Leithäuser, Peter Müller, Friedhelm Bladi, Günter J. Hämerling, Bernd Arnold, Tony Pawson, and Anna Tafuri

Increased B Cell Proliferation and Reduced Ig Production in DREAM Transgenic Mice
Magali Savignac, Britt Mellström, Anne-Gaëlle Bébin, Juan C. Oliveros, Laurent Delpy, Éric Pinaud, and Jose R. Naranjo

A Conserved Enhancer Element Differentially Regulates Developmental Expression of CD5 in B and T Cells
Robert Berland, Steven Fiering, and Henry H. Wortis

The Igκ Gene Enhancers, E3’ and Ed, Are Essential for Triggering Transcription
Xiaorong Zhou, Yongui Xiang, and William T. Garrard

Chondroitin Sulfate A-Adhering Plasmodium falciparum-Infected Erythrocytes Express Functionally Important Antibody Epitopes Shared by Multiple Variants

Phosphatidylinositol 3-Kinase Activation Attenuates the TLR2-Mediated Macrophage Proinflammatory Cytokine Response to Francisella tularensis Live Vaccine Strain
Edward A. Medina, Ian R. Morris, and Michael T. Berton

Characterization of Fish IRF3 as an IFN-Inducible Protein Reveals Evolving Regulation of IFN Response in Vertebrates
Fan Sun, Yi-Bing Zhang, Ting-Kai Liu, Li Gan, Fei-Fei Yu, Ying Liu, and Jian-Fang Gui

Enhancing Blood-Stage Malaria Subunit Vaccine Immunogenicity in Rhesus Macaques by Combining Adenovirus, Poxvirus, and Protein-in-Adjuvant Vaccines
Simon J. Draper, Suniti Biswas, Alexandra J. Spencer, Edmond J. Remarque, Stefania Capone, Mariarosaria Naddeo, Matthew D. J. Dicks, Bart W. Faber, Simone C. de Causan, Antonella Folgori, Alfredo Nicoia, Sarah C. Gilbert, and Adrian V. S. Hill

Semen Protects CD4+ Target Cells from HIV Infection but Promotes the Preferential Transmission of R5 Tropic HIV
Emmanuel Balandya, Siddharth Sheth, Katherine Sanders, Wendy Wieland-Alter, and Timothy Lahey

Noncytotoxic Inhibition of Cytomegalovirus Replication through NK Cell Protease Granzyme M-Mediated Cleavage of Viral Phosphoprotein 71
Robert van Domselaar, Leonne E. Philippen, Razi Quadir, Emmanuel J. H. J. Wiertz, J. Alain Kummer, and Niels Bovenschen

TLR9 Is Actively Recruited to Aspergillus fumigatus Phagosomes and Requires the N-Terminal Proteolytic Cleavage Domain for Proper Intracellular Trafficking
Pia V. Kasperkovitz, Michael L. Cardenas, and Jatin M. Vyas

Antibodies and Lentiviruses That Specifically Recognize a T Cell Epitope Derived from HIV-1 Nef Protein and Presented by HLA-C
Alon Herschhorn, Wayne A. Marasco, and Amnon Hizi

Efficient Lung Recruitment of Respiratory Syncytial Virus-Specific Th1 Cells Induced by Recombinant Bacillus Calmette-Guérin Promotes Virus Clearance and Protects from Infection
Kelly M. Cautivo, Susan M. Bueno, Claudia M. Cortes, Aniela Wozniak, Claudia A. Riedel, and Alexis M. Kalergis
INFLAMMATION

7646 Oligodendrocyte-Specific FADD Deletion Protects Mice from Autoimmune-Mediated Demyelination
Conor Mc Guire, Thomas Volckaert, Uta Wolke, Mozee Sze, Riet de Rycke, Ari Waisman, Marco Prinz, Rudi Beyaert, Manolis Pasparakis, and Geert van Loo

7654 CD137-Mediated Pathogenesis from Chronic Hepatitis to Hepatocellular Carcinoma in Hepatitis B Virus-Transgenic Mice
Jun Wang, Wenting Zhao, Liang Cheng, Mingzhou Guo, Dongling Li, Xiaoqiu Li, Yi Tan, Suping Ma, Suyun Li, Yunsheng Yang, Leping Chen, and Shenglian Wang

7663 A Cell-Impermeable Cyclosporine A Derivative Reduces Pathology in a Mouse Model of Allergic Lung Inflammation
Molly A. Balsley, Miroslav Malesevic, Erik J. Stemmy, Jason Gigley, Rosalyn A. Jurjus, Dallen Herzog, Michael I. Bukrinsky, Gunter Fischer, and Stephanie L. Constant

7671 CD30 Ligand Is a Target for a Novel Biological Therapy against Colitis Associated with Th17 Responses
Xun Sun, Hisakata Yamada, Kensuke Shibata, Hiromi Muta, Kenzaburo Tani, Eckhard R. Podack, Yoichiro Iwakura, and Yasunobu Yoshikai

7681 The Inflammatory Response after an Epidermal Burn Depends on the Activities of Mouse Mast Cell Proteases 4 and 5
George Younan, Freeman Suber, Wei Xing, Tong Shi, Yuichi Kunori, Magnus Åbrink, Gunnar Pejler, Susan M. Schlenner, Hans-Reimer Rodewald, Francis D. Moore, Jr., Richard L. Stevens, Roberto Adachi, K. Frank Austen, and Michael F. Gurish

7691 The Chemorepellent Slt3 Promotes Monocyte Migration
Sacha B. Geutskens, Peter L. Hordijk, and Paula B. van Hennik

7699 Tripartite-Motif Protein 30 Negatively Regulates NLRP3 Inflammasome Activation by Modulating Reactive Oxygen Species Production
Yu Hu, Kairui Mao, Yan Zeng, Shuzhen Chen, Zhiyan Tao, Chen Yang, Shuhai Sun, Xiaodong Wu, Guangzun Meng, and Bing Sun

7706 Oxidized Phospholipids Are More Potent Antagonists of Lipopolysaccharide than Inducers of Inflammation
Olga V. Osolokova, Taras Afonyushkin, Beatrix Preinerstorfer, Wolfgang Bicker, Elena von Schlieffen, Eva Hainzl, Svitlana Demyanets, Gernot Schabbauer, Wolfgang Lindner, Alexandros D. Tselepis, Johann Wojta, Bernd R. Binder, and Valery N. Bochkov

CLINICAL IMMUNOLOGY

7713 The Different Extent of B and T Cell Immune Reconstitution after Hematopoietic Stem Cell Transplantation and Enzyme Replacement Therapies in SCID Patients with Adenosine Deaminase Deficiency
Federico Serana, Alessandra Sottini, Marco Chiarini, Cinzia Zanotti, Claudia Ghibdi, Arnalda Lanfranchi, Lucia Dora Notarangelo, Luigi Caimi, and Luisa Imberti

7723 Immunological Effects of Sublingual Immunotherapy: Clinical Efficacy Is Associated with Modulation of Programmed Cell Death Ligand 1, IL-10, and IgG4
Stefania Piconi, Daria Trabattoni, Veronica Rainone, Linda Borgonovo, Simone Passerini, Giuliano Rizzardini, Franco Frati, Enrico Iemoli, and Mario Clerici

7731 TLR5 as an Anti-Inflammatory Target and Modifier Gene in Cystic Fibrosis
Christoph J. Blohmke, Julie Park, Aaron F. Hirschfeld, Rachel E. Victor, Julia Schneiderman, Dorota Stefanowicz, Mark A. Chiofes, Peter R. Durie, Mary Corey, Julian Zielenzki, Ruslan Dorfman, Andrew J. Sandford, Denise Daley, and Stuart E. Turvey

7739 Prediction of Reactivity to Noninherited Maternal Antigen in MHC-Mismatched, Minor Histocompatibility Antigen-Matched Stem Cell Transplantation in a Mouse Model
Mariko Araki, Masahiro Hirayama, Eiichi Azuma, Tadashi Kumamoto, Shotaro Iwamoto, Hidemi Toyoda, Mitsue Ito, Keisihiro Amano, and Yoshihiro Komada
Human IgG1 Monoclonal Antibody against Human Collagen 17 Noncollagenous 16A Domain Induces Blisters via Complement Activation in Experimental Bullous Pemphigoid Model
Qiang Li, Hideyuki Ujiie, Akihiko Shibaki, Gang Wang, Reine Moriuchi, Hong-jiang Qiao, Hiroshi Morioka, Satoru Shinkuma, Ken Natsuga, Heather A. Long, Wataru Nishie, and Hiroshi Shimizu