This information is current as of April 13, 2017.
LETTERS TO THE EDITOR

2929 Comment on “Adenosinergic Regulation of the Expansion and Immunosuppressive Activity of CD11b+Gr1+ Cells”
Ivan Shevchenko, Alexandr V. Bazhin, and Viktor Umansky

2930 Response to Comment on “Adenosinergic Regulation of the Expansion and Immunosuppressive Activity of CD11b+Gr1+ Cells”
Sergey Ryzhov, Sergey V. Novitskiy, Italo Biaggioni, Mikhail M. Dikov, and Igor Feoktistov

2930 Comment on “Soluble BAFF Levels Inversely Correlate with Peripheral B Cell Numbers and the Expression of BAFF Receptors”
Gerardo Ferrer, Carol Moreno, and Emili Montserrat

2931 Response to Comment on “Soluble BAFF Levels Inversely Correlate with Peripheral B Cell Numbers and the Expression of BAFF Receptors”
Matthias Kreuzaler, Antonius G. Rolink, and Hermann Eibel

PILLARS OF IMMUNOLOGY

2933 Colonel Bruton’s Kinase Defined the Molecular Basis of X-Linked Agammaglobulinemia, the First Primary Immunodeficiency
Waif N. Khan

2936 Pillars Article: Deficient Expression of a B Cell Cytoplasmic Tyrosine Kinase in Human X-linked Agammaglobulinemia.
Satoshi Tsukada, Douglas C. Saffran, David J. Ranslins, Ornella Parolini, R.Cutler Allen, Ivana Klisak, Robert S. Sparkes, Hiromi Kubagawa, Thuluvancheri Mohandas, Shirley Quan, John W. Belmont, Max D. Cooper, Mary Ellen Conley, and Owen N. Witte

BRIEF REVIEWS

2957 Inhibitory Receptors on Lymphocytes: Insights from Infections
Pamela M. Odorizzi and E. John Wherry

CUTTING EDGE

2967 Cutting Edge: Independent Roles for IRF-3 and IRF-7 in Hematopoietic and Nonhematopoietic Cells during Host Response to Chikungunya Infection
Clémence Schilte, Matthew R. Buckwalter, Melissa E. Laird, Michael S. Diamond, Olivier Schwartz, and Matthew L. Albert

2972 Cutting Edge: Dendritic Epidermal γδ T Cell Ligands Are Rapidly and Locally Expressed by Keratinocytes following Cutaneous Wounding
H. Kiyoumi Komori, Deborah A. Witherden, Ryan Kelly, Kevin Sendaydiego, Julie M. Jameson, Luc Teyton, and Wendy L. Havran

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

2981 Two-Compartment Model of NK Cell Proliferation: Insights from Population Response to IL-15 Stimulation
Yun M. Zhao and Anthony R. French

2991 Redundant and Antagonistic Functions of Galectin-1, -3, and -8 in the Elicitation of T Cell Responses
María Virginia Tribulatti, María Gabriela Figini, Julieta Carabelli, Valentina Cattaneo, and Oscar Campetella

3000 Neutrophilic Granulocytes Modulate Invariant NKT Cell Function in Mice and Humans
Gerhard Wingender, Marcus Hsu, Isaac Engel, Konrad Peukert, Klaus Ley, Hermann Haller, Mitchell Kronenberg, and Sibylle von Viettinghoff

3009 Essential Role for CAML in Follicular B Cell Survival and Homeostasis
Nicholas A. Zane, Justin H. Gundelach, Lonn D. Lindquist, and Richard J. Bram

3019 MicroRNA-Deficient NK Cells Exhibit Decreased Survival but Enhanced Function
Ryan P. Sullivan, Jeffrey W. Leong, Stephanie E. Schneider, Catherine R. Keppel, Elizabeth Germino, Anthony R. French, and Todd A. Fehniger

3031 Characterization of Ly108 in the Thymus: Evidence for Distinct Properties of a Novel Form of Ly108
Mala Dutta and Pamela L. Schwartzberg

3042 Downregulation of Inflammatory MicroRNAs by Ig-like Transcript 3 Is Essential for the Differentiation of Human CD8+ T Suppressor Cells
Chih-Chao Chang, Qing-Yin Zhang, Zhuoru Liu, Raphael A. Clynes, Nicole Suciu-Foca, and George Vlad

3053 Distinct APCs Explain the Cytokine Bias of α-Galactosylceramide Variants In Vivo
Li Bai, Michael G. Constantinides, Seddon Y. Thomas, Rachel Reboulet, Fanyong Meng, Frank Koentgen, Luc Teyton, Paul B. Savage, and Albert Bendelac

3062 Stimulation of Dopamine Receptor D5 Expressed on Dendritic Cells Potentiates Th17-Mediated Immunity
Carolina Prado, Francisco Contreras, Hugo González, Pablo Díaz, Daniela Elgueta, Magaly Barrientos, Andrés A. Herrada, Álvaro Lladser, Sebastián Bernales, and Rodrigo Pacheco
MHC Class Ib-Restricted CD8 T Cells Differ in Dependence on CD4 T Cell Help and CD28 Costimulation over the Course of Mouse Polyomavirus Infection
Amelia R. Hofstetter, Mandy L. Ford, Lucy C. Sullivan, Jarad J. Wilson, Annette Hadley, Andrew G. Brooks, and Aron E. Lukacher

Regulating Mammalian Target of Rapamycin To Tune Vaccination-Induced CD8+ T Cell Responses for Tumor Immunity
Qingsheng Li, Rajesh Rao, Joseph Vazzana, Peter Goedegebuure, Kanle Odunsi, William Gillanders, and Protul A. Shrikant

MF59 and Pam3CSK4 Boost Adaptive Responses to Influenza Subunit Vaccine through an IFN Type I-Independent Mechanism of Action
Elena Caproni, Elaine Tristo, Mario Cortese, Alessandro Muzzi, Flaviana Musca, Elisabetta Monaci, Barbara Baudner, Anja Seubert, and Ennio De Gregorio

Increased Th17 and Regulatory T Cell Responses in EBV-Induced Gene 3-Deficient Mice Lead to Marginally Enhanced Development of Autoimmune Encephalomyelitis
Jin-Qing Liu, Zhenzhen Liu, Xuejun Zhang, Yun Shi, Fatemeh Talebian, Joseph W. Carl, Jr., Chuan Yu, Fu-Dong Shi, Caroline C. Whitacre, Joanne Trgovcich, and Xue-Feng Bai

Inflammasome-Derived IL-1β Regulates the Production of GM-CSF by CD4+ T Cells and γδ T Cells
John R. Lukens, Maggie J. Barr, David D. Chaplin, Hongbo Chi, and Thirumala-Devi Kanneganti

Type I IFN Drives a Distinctive Dendritic Cell Maturation Phenotype That Allows Continued Class II MHC Synthesis and Antigen Processing
Daimon P. Simmons, Pamela A. Wearsch, David H. Canaday, Howard J. Meyerson, Yi C. Liu, Ying Wang, W. Henry Boom, and Clifford V. Harding

Galectin-1 Triggers an Immunoregulatory Signature in Th Cells Functionally Defined by IL-10 Expression
Filiberto Cedeno-Laurent, Matthew Oppeerman, Steven R. Barthel, Vijay K. Kuchroo, and Charles J. Dimitroff

CD4+ Type II NKT Cells Mediate ICOS and Programmed Death-1–Dependent Regulation of Type 1 Diabetes
Nadir Kadri, Eva Korpos, Shashank Gupta, Claire Briet, Linda Lifshon, Hideo Yagita, Agnes Le nues, Christian Boitard, Dan Holmberg, Lydia Sorokin, and Susanna L. Cardell

T Lymphocyte Priming by Neutrophil Extracellular Traps Links Innate and Adaptive Immune Responses
Kati Tillack, Petra Breiden, Roland Martin, and Mireia Sospedra

CARMA1 Controls Th2 Cell-Specific Cytokine Expression through Regulating JunB and GATA3 Transcription Factors
Marzenna Blonska, Donghyun Joo, Patrick A. Zweidler-McKay, Qingyu Zhao, and Xin Lin

Differential Risk of Tuberculosis Reactivation among Anti-TNF Therapies Is Due to Drug Binding Kinetics and Permeability
Mohammad Fallahi-Sichani, JoAnne L. Flynn, Jennifer J. Linderman, and Denise E. Kirschner

Nuclear to Cytoplasmic Translocation of Heterogeneous Nuclear Ribonucleoprotein U Enhances TLR-Induced Proinflammatory Cytokine Production by Stabilizing mRNAs in Macrophages
Wei Zhao, Lijuan Wang, Meng Zhang, Peng Wang, Jianrun Qi, Lei Zhang, and Chengjiang Gao

A Novel IL-10–Independent Regulatory Role for B Cells in Suppressing Autoimmunity by Maintenance of Regulatory T Cells via GITR Ligand
Avijit Ray, Sreemanti Basu, Calvin B. Williams, Nita H. Salzman, and Bonnie N. Dittel

Soluble CD23 Controls IgE Synthesis and Homeostasis in Human B Cells
Alison M. Cooper, Philip S. Hobon, Mark R. Jutton, Michael W. Kao, Binia Drung, Boris Schmidt, David J. Fear, Andrew J. Beavil, James M. McDonnell, Brian J. Sutton, and Hannah J. Gould

Bone Marrow-Derived IL-13Rα1–Positive Thymic Progenitors Are Restricted to the Myeloid Lineage
Cara L. Haymaker, F. Betul Guloglu, Jason A. Cascio, John C. Hardaway, Mermagya Dhakal, Xiaoxiao Wan, Christine M. Hoeman, Sarah Zaghouan, Linda M. Rowland, Danielle M. Tartar, Amie M. VanMorlan, and Habib Zaghouani
Follicular Helper NKT Cells Induce Limited B Cell Responses and Germinal Center Formation in the Absence of CD4⁺ T Cell Help

Elena Tonti, Maya Fedeli, Anna Napolitano, Matteo Iannacone, Ulrich H. von Andrian, Luca G. Guidotti, Sergio Abrignani, Giulia Casorati, and Paolo Dellabona

Signaling through L-Selectin Mediates Enhanced Chemotaxis of Lymphocyte Subsets to Secondary Lymphoid Tissue Chemokine

Haribaran Subramanian, Jamison J. Grailer, Kimberley C. Oblrich, Amy L. Rymaszewski, Jessica J. Loppnow, Masanari Kodera, Rochelle M. Conway, and Douglas A. Steeber

Actin Reorganization Is Required for the Formation of Polarized B Cell Receptor Signosomes in Response to Both Soluble and Membrane-Associated Antigens

Chaohong Liu, Heather Miller, Gregory Orlowski, Haiyan Hang, Arpita Upadhyaya, and Wenzia Song

Spatial Alterations between CD4⁺ T Follicular Helper, B, and CD8⁺ T Cells during Simian Immunodeficiency Virus Infection: T/B Cell Homeostasis, Activation, and Potential Mechanism for Viral Escape

Jung Joo Hong, Praveen K. Amancha, Kenneth Rogers, Aftab A. Ansari, and Francois Villinger

MOLECULAR AND STRUCTURAL IMMUNOLOGY

Dynamic MicroRNA Gene Transcription and Processing during T Cell Development

Francis F. Kirigin, Kenneth Lindstedt, Maclean Sellers, Maria Ciofani, Siao Li Lou, Lachlan Jones, Fiona Bell, Florencia Pauli, Richard Bonneau, Richard M. Myers, Dan R. Littman, and Mark M. W. Chong

Murine Membranous Nephropathy: Immunization with α3(IV) Collagen Fragment Induces Subepithelial Immune Complexes and FcyR-Independent Nephrotic Syndrome

Jun-Jun Zhang, Mahdi Malekpour, Wentian Luo, Linna Ge, Florina Olaru, Xu-Ping Wang, Maimouna Bab, Yoshikazu Sado, Laurence Heidet, Sandra Kleinau, Agnes B. Fogo, and Dorin-Bogdan Borza

Tcra Enhancer Activation by Inducible Transcription Factors Downstream of Pre-TCR Signaling

Beatriz del Blanco, Alberto García-Mariscal, David L. Wiest, and Cristina Hernández-Munain

IMMUNOGENETICS

2,3,7,8-Tetrachlorodibenzo- p-Dioxin Induces Transcriptional Activity of the Human Polymorphic hs1,2 Enhancer of the 3'Igh Regulatory Region

Tharu M. Fernando, Sharon D. Ochs, Jing Liu, Ruth C. Chambers-Turner, and Courtney E. W. Sulentic

The Lbw2 Locus Promotes Autoimmune Hemolytic Anemia

John C. Scatizzi, Maria K. Haraldsson, K. Michael Pollard, Argyrios N. Theofilopoulos, and Dwight H. Kono

A 17q12 Allele Is Associated with Altered NK Cell Subsets and Function

Zongqi Xia, Qingquan Liu, Christoph T. Berger, Brendan T. Keenan, Anna Kaliszewska, Patrick C. Cheney, Gyan P. Srivastava, Irene Wood Castillo, Philip L. De Jager, and Galit Alter

TGF-β–Mediated Downregulation of MicroRNA-196a Contributes to the Constitutive Upregulated Type I Collagen Expression in Scleroderma Dermal Fibroblasts

Noritoshi Honda, Masatoshi Jinnin, Ikko Kajihara, Takamitsu Makino, Katsunari Makino, Shinichi Masuguchi, Satoshi Fukushima, Yoshinobu Okamoto, Minoru Hasegawa, Manabu Fujimoto, and Hironobu Ihn

Intrinsic Differences in the Initiation of B Cell Receptor Signaling Favor Responses of Human IgG⁺ Memory B Cells over IgM⁺ Naïve B Cells

Angel M. Davey and Susan K. Pierce

HOST DEFENSE

Extracellular Superoxide Dismutase Inhibits Innate Immune Responses and Clearance of an Intracellular Bacterial Infection

Timothy J. Break, Sujung Jun, Mohanalaxmi Indramohan, Karen D. Carr, Amy N. Sieve, Ladislav Dory, and Rance E. Berg
**Francisella tularensis** Inhibits the Intrinsic and Extrinsic Pathways To Delay Constitutive Apoptosis and Prolong Human Neutrophil Lifespan
Justin T. Schwartz, Jason H. Barker, Justin Kaufman, Drew C. Fayram, Jenna M. McCracken, and Lee-Ann H. Allen

Escape from CD8+ T Cell Responses in Mannu-B*00801+ Macaques Differentiates Progressors from Elite Controllers
Philip A. Mudd, Adam J. Ericsen, Benjamin J. Burwitz, Nancy A. Wilson, David H. O’Connor, Austin L. Hughes, and David I. Watkins

SHP-1 As a Critical Regulator of Mycoplasma pneumoniae-Induced Inflammation in Human Asthmatic Airway Epithelial Cells
Ying Wang, Zhou Zhu, Tony D. Church, Nyira L. Lugogo, Loretta G. Que, Dave Francisco, Jennifer L. Ingram, Molly Huggins, Denise M. Beaver, Jo Rae Wright, and Monica Kraft

SHP-1 As a Critical Regulator of Mycoplasma pneumoniae-Induced Inflammation in Human Asthmatic Airway Epithelial Cells
Ying Wang, Zhou Zhu, Tony D. Church, Nyira L. Lugogo, Loretta G. Que, Dave Francisco, Jennifer L. Ingram, Molly Huggins, Denise M. Beaver, Jo Rae Wright, and Monica Kraft

Pig Bone Marrow-Derived Macrophages Resemble Human Macrophages in Their Response to Bacterial Lipopolysaccharide
Ronan Kapetanovic, Lynsey Fairbairn, Dario Beraldi, David P. Sester, Alan L. Archibald, Christopher K. Tuggle, and David A. Hume

Obligate Symbionts Activate Immune System Development in the Tsetse Fly
Brian L. Weiss, Michele Maliz, and Serap Aksoy

Discovery of a Novel Toxoplasma gondii Conoid-Associated Protein Important for Parasite Resistance to Reactive Nitrogen Intermediates
Sini Skariah, Robert B. Bednarczyk, Matthew K. McIntyre, Gregory A. Taylor, and Dana G. Mordue

Properdin Is Critical for Antibody-Dependent Bactericidal Activity against Neisseria gonorrhoeae That Recruit C4b-Binding Protein
Sunita Gulati, Sarika Agarwal, Shreekant Vasudhev, Peter A. Rice, and Sanjay Ram

**INFLAMMATION**

Lymphotixin β Receptor Activation on Macrophages Induces Cross-Tolerance to TLR4 and TLR9 Ligands
Nadin Wimmer, Barbara Huber, Nicola Barabas, Johann Röhrl, Klaus Pfeffer, and Thomas Hehlgans

IL-17A Differentially Regulates Corneal Vascular Endothelial Growth Factor (VEGF)-A and Soluble VEGF Receptor 1 Expression and Promotes Corneal Angiogenesis after Herpetic Simplex Virus Infection
Amol Suryawanshi, Tamara Veiga-Parga, Pradeep B. J. Reddy, Naveen K. Rajaasagi, and Barry T. Rouse

ITAM-Coupled Receptors Inhibit IFNAR Signaling and Alter Macrophage Responses to TLR4 and Listeria monocytogenes
Linda Huyynb, Lu Wang, Chao Shi, Kyung-Hyun Park-Min, and Lionel B. Ivashkiv

Intrapulmonary Administration of Leukotriene B4 Augments Neutrophil Accumulation and Responses in the Lung to Klebsiella Infection in CXCL1 Knockout Mice
Sanjay Batra, Shanshan Cai, Gayathri Balamayooran, and Samithamby Jeyaseelan

Activation of the Pyrin Inflammasome by Intracellular Burkholderia cenocepacia
Mikhail A. Gavrilin, Dalia H. A. Abdelaziz, Mahmoud Mostafa, Basant A. Abdulrahman, Jaykumar Grandhi, Anwari Akhter, Arwa Abu Khweek, Daniel F. Aubert, Miguel A. Valvano, Mark D. Wewers, and Amal O. Amer

A Dissociated Glucocorticoid Receptor Modulator Reduces Airway Hyperresponsiveness and Inflammation in a Mouse Model of Asthma
Laurent L. Reber, François Daubeuf, Maud Plantinga, Lode De Cauwer, Sarah Gerlo, Wim Waelput, Serge Van Catenbergh, Jan Tavernier, Gey Haegeman, Bart N. Lambrecht, Nelly Frossard, and Karolien De Bouver

Endogenous IL-33 Is Highly Expressed in Mouse Epithelial Barrier Tissues, Lymphoid Organs, Brain, Embryos, and Inflamed Tissues: In Situ Analysis Using a Novel IL-33-LacZ Gene Trap Reporter Strain
Mélanie Pichery, Emilie Mirey, Pascale Mercier, Emma Lefrançais, Arnaud Dujardin, Nathalie Ortega, and Jean-Philippe Girard
3496 ERK2-Dependent Activation of c-Jun Is Required for Nontypeable Haemophilus influenzae-Induced CXCL2 Upregulation in Inner Ear Fibrocytes
Sejo Oh, Jeong-Im Woo, David J. Lim, and Sung K. Moon

3506 Upregulated Protein Arginine Methyltransferase 1 by IL-4 Increases Eotaxin-1 Expression in Airway Epithelial Cells and Participates in Antigen-Induced Pulmonary Inflammation in Rats
Qingzhu Sun, Xudong Yang, Bo Zhong, Fangfang Jiao, Chenyan Li, Dongmin Li, Xi Lan, Jian Sun, and Shemin Lu

CLINICAL IMMUNOLOGY

3513 Inhibition of Epidermal Growth Factor Receptor Tyrosine Kinase Ameliorates Collagen-Induced Arthritis
Christina D. Swanson, Elliot H. Akama-Garren, Emily A. Stein, Jacob D. Petralia, Pedro J. Ruiz, Abdolhosein Edalati, Tamzin M. Lindstrom, and William H. Robinson

3522 Neutrophil Extracellular Traps That Are Not Degraded in Systemic Lupus Erythematosus Activate Complement Exacerbating the Disease
Jonatan Leffler, Myriam Martin, Birgitta Gullstrand, Helena Tydén, Christian Lood, Lennart Truedsson, Anders A. Bengtsson, and Anna M. Blom

3532 Exhaustion of Cytotoxic Effector Systems May Limit Monoclonal Antibody-Based Immunotherapy in Cancer Patients
Frank J. Beurskens, Margaret A. Lindorfer, Mohammed Farooqui, Paul V. Beum, Patrick Engelberts, Wendy J. M. Mackus, Paul W. H. I. Parren, Adrian Wiestner, and Ronald P. Taylor

3542 Production of Autoantibodies against Citrullinated Antigens/Peptides by Human B Cells
Maria F. Bellatin, Mei Han, Margarita Fallena, Lin Fan, Donglan Xia, Nancy Olsen, Valerie Branch, David Karp, and Peter Stastny

CORRECTIONS

3551 Correction: Cutting Edge: A TLR9 Cytoplasmic Tyrosine Motif Is Selectively Required for Proinflammatory Cytokine Production
Annapoorani Chockalingam, William Alfred Rose, II, Maroof Hasan, Chia-Hsin Ju, and Cynthia Anne Leifer

3552 Correction: The Role of Gr1+ Cells after Anti-CD20 Treatment in Type 1 Diabetes in Nonobese Diabetic Mice
Changyun Hu, Wei Du, Xiaojun Zhang, F. Susan Wong, and Li Wen

3553 Correction: IL-10 Regulation by HIV-Tat in Primary Human Monocytic Cells: Involvement of Calmodulin/Calmodulin-Dependent Protein Kinase-Activated p38 MAPK and Sp-1 and CREB-1 Transcription Factors
Katrina Gee, Jonathan B. Angel, Sasmita Mishra, Maria A. Blahoianu, and Ashok Kumar

3554 AUTHOR INDEX