This information is current as of April 15, 2017.

188 (7)

J Immunol 2012; 188:2927-3553; ;
http://www.jimmunol.org/content/188/7

Subscription  Information about subscribing to The Journal of Immunology is online at:
http://jimmunol.org/subscription

Permissions  Submit copyright permission requests at:
http://www.aai.org/About/Publications/JI/copyright.html

Email Alerts  Receive free email-alerts when new articles cite this article. Sign up at:
http://jimmunol.org/alerts
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 Kreutzaler, 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. Rawlings, 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
David Vertie, Igor Vorechovskyi, Patchalai Sideras, Jill Holland, Angela Davies, Frances Flinter, Lennart Hammarström, Christine Kinnon, Roland Levinsky, Martin Bobrow, C. I. Edward Smith, and David R. Bentley

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
Clémentine 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

2977 Cutting Edge: Nitrogen Bisphosphonate-Induced Inflammation Is Dependent upon Mast Cells and IL-1
John T. Norton, Tomoko Hayashi, Brian Crain, John S. Cho, Lloyd S. Miller, Maripat Corr, and Dennis A. Carson

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 Fígini, Julieta Carabelli, Valentina Cattaneo, and Oscar Campetella

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

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, Zhong 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. Constantineides, 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
3071 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

3080 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

3088 MF59 and Pam3CSK4 Boost Adaptive Responses to Influenza Subunit Vaccine through an IFN Type I-Independent Mechanism of Action
Elena Caproni, Elaine Trito, Mario Cortese, Alessandro Muzzi, Flaviana Mosca, Elisabetta Monaci, Barbara Baudner, Anja Seubert, and Ennio De Gregorio

3099 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

3107 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

3116 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

3127 Galectin-1 Triggers an Immunoregulatory Signature in Th Cells Functionally Defined by IL-10 Expression
Filiberto Cedeno-Laurent, Matthew Opperman, Steven R. Barthel, Vijay K. Kuchroo, and Charles J. Dimitroff

3138 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 Lüfholm, Hideo Yagita, Agnes Lehusen, Christian Boitard, Dan Holmberg, Lydia Sorokin, and Susanna L. Cardell

3150 T Lymphocyte Priming by Neutrophil Extracellular Traps Links Innate and Adaptive Immune Responses
Kati Tillack, Petra Breiden, Roland Martin, and Mireia Sospedra

3160 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

3169 Differential Risk of Tuberculosis Reactivation among Anti-TNF Therapies Is Due to Drug Binding Kinetics and Permeability
Mohammad Fallahi-Sichani, JuAnne L. Flynn, Jennifer J. Linderman, and Denise E. Kirschner

3179 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, Jiunn Qi, Lei Zhang, and Chengjiang Gao

3188 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

3199 Soluble CD23 Controls IgE Synthesis and Homeostasis in Human B Cells
Alison M. Cooper, Philip S. Hobson, Mark R. Jutton, Michael W. Kao, Binia Drung, Boris Schmied, David J. Fear, Andrew J. Beavil, James M. McDonnell, Brian J. Sutton, and Hannah J. Gould

3208 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, Mermangya Dhakal, Xiaoxiao Wan, Christine M. Hoeman, Sarah Zaghouani, Linda M. Rowland, Danielle M. Tartar, Anie 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, Kimberly C. Oblrich, Amy L. Rymaszewski, Jessica J. Lopponow, Masanari Kodera, Rochelle M. Conway, and Douglas A. Steeber

Actin Reorganization Is Required for the Formation of Polarized B Cell Receptor Signalosomes in Response to Both Soluble and Membrane-Associated Antigens
Chaohong Liu, Heather Miller, Gregory Orlowski, Haijin 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 Sellaros, Maria Ciofani, Xiao Li Lou, Lachlan Jones, Fiona Bell, Florecia Pauli, Richard Bonneau, Richard M. Myers, Dan R. Litman, 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 Bah, 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 Garcia-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, Katsuari 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⁺ Naive 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, Mohanalaksmi 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 Mamu-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. Luguogo, 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 Fairhaim, 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 Malts, 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 Hehlgens

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

ITAM-Coupled Receptors Inhibit IFNAR Signaling and Alter Macrophage Responses to TLR4 and Listeria monocytogenes
Linda Huynh, 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, Gayathriy Balamayooran, and Samithamby Jeyaseelan

Activation of the Pyrin Inflammasome by Intracellular Burkholderia cenocepacia
Mikhail A. Gavrilin, Dalia H. A. Abdelaziz, Mahmoud Mosaffa, 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 Calenbergh, Jan Tavernier, Guyl Haegeman, Bart N. Lambrecht, Nelly Frossard, and Karolien De Bosscher

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 Dujaud, Nathalie Oriiga, 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, Tamsin 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

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