



## Inflammasome Reporter Cells

All you have to do is ASC

InvivoGen



200 (10)

*J Immunol* 2018; 200:3315-3661; ;  
<http://www.jimmunol.org/content/200/10>

This information is current as  
of May 24, 2018.

Why *The JI*? [Submit online.](#)

- **Rapid Reviews! 30 days\*** from submission to initial decision
- **No Triage!** Every submission reviewed by practicing scientists
- **Fast Publication!** 4 weeks from acceptance to publication

*\*average*

**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>

*The Journal of Immunology* is published twice each month by  
The American Association of Immunologists, Inc.,  
1451 Rockville Pike, Suite 650, Rockville, MD 20852  
All rights reserved.  
Print ISSN: 0022-1767 Online ISSN: 1550-6606.



## IN THIS ISSUE

- 3315 **Tonic TCR Signaling and Immune Responses** *See article p. 3429*  
**IL-2 Mutein Can Selectively Inhibit Regulatory T Cells** *See article p. 3475*  
**Early Intervention in HIV Preserves Mucosal B Cells** *See article p. 3519*  
**Role of IL-6 in Granulocytes** *See article p. 3547*

## LETTERS TO THE EDITOR

- 3317 Comment on “Development of Asthma in Inner-City Children: Possible Roles of MAIT Cells and Variation in the Home Environment”  
*Guillaume Lezmi and Maria C. Leite-de-Moraes*
- 3317 Response to Comment on “Development of Asthma in Inner-City Children: Possible Roles of MAIT Cells and Variation in the Home Environment”  
*Shilpi Chandra, Gerhard Wingender, Jason A. Greenbaum, and Mitchell Kronenberg*

## IMMUNOLOGY NOTES AND RESOURCES

- 3319 Flow Cytometry Data Preparation Guidelines for Improved Automated Phenotypic Analysis  
*Daniel Jimenez-Carretero, José M. Ligos, María Martínez-López, David Sancho, and María C. Montoya*

## BRIEF REVIEWS

- 3333 Invariant NKT Cells and Control of the Thymus Medulla  
*Andrea J. White, Beth Lucas, William E. Jenkinson, and Graham Anderson*

## CUTTING EDGE

- 3341 Cutting Edge: Blockade of Inhibitor of Apoptosis Proteins Sensitizes Neutrophils to TNF- but Not Lipopolysaccharide-Mediated Cell Death and IL-1 $\beta$  Secretion  
*Kaiwen W. Chen, Kate E. Lawlor, Jessica B. von Pein, Dave Boucher, Motti Gerlic, Ben A. Croker, Jelena S. Bezbradica, James E. Vince, and Kate Schroder*

On the cover: In HIV-infected patients treated during the early phase, tertiary lymphoid structure is observed in the gut as shown by Pax5 staining. Planchais, C., L. Hocqueloux, C. Ibanez, S. Gallien, C. Copie, M. Surenaud, A. Kök, V. Lorin, M. Fusaro, M.-H. Delfau-Larue, L. Lefrou, T. Prazuck, M. Lévy, N. Seddiki, J.-D. Lelièvre, H. Mouquet, Y. Lévy, and S. Hüe. 2018. Early antiretroviral therapy preserves functional follicular helper T and HIV-specific B cells in the gut mucosa of HIV-1-infected individuals. *J. Immunol.* 200: 3519–3529.

*The Journal of Immunology* (ISSN 0022-1767) is published twice each month by The American Association of Immunologists, Inc., 1451 Rockville Pike, Suite 650, Rockville, MD 20852, Phone: 301-634-7197, Fax: 301-634-7829. Subscription terms: New subscriptions and renewals begin January 1 and expire one year later (see <http://www.jimmunol.org/subscription> for prices and details). A special rate is available to members of The American Association of Immunologists, Inc. (see <http://www.aai.org/membership>). The American Association of Immunologists, Inc., is not responsible for undeliverable issues. Replacement issues can be obtained, if available, at the regular price of single issues (see <http://www.jimmunol.org/Subscription/Claims>). Reprints of individual articles are available only from authors. Periodicals postage paid at Rockville, MD 20852, and at additional mailing offices. Country of origin U.S.A. Printed on acid-free recyclable paper. Postmaster: Send address changes 60 days in advance to *The Journal of Immunology*, Subscription Department, 1451 Rockville Pike, Suite 650, Rockville, MD 20852. Copyright © 2018 by The American Association of Immunologists, Inc.

- 3347 Cutting Edge: Protection by Antiviral Memory CD8 T Cells Requires Rapidly Produced Antigen in Large Amounts  
*Sanda Remakus, Xueying Ma, Lingjuan Tang, Ren-Huan Xu, Cory Knudson, Carolina R. Melo-Silva, Daniel Rubio, Yin-Ming Kuo, Andrew Andrews, and Luis J. Sigal*

## AUTOIMMUNITY

- 3353 HLA-B\*39:06 Efficiently Mediates Type 1 Diabetes in a Mouse Model Incorporating Reduced Thymic Insulin Expression  
*Jennifer Schloss, Riyasat Ali, Jeremy J. Racine, Harold D. Chapman, David V. Serreze, and Teresa P. DiLorenzo*
- 3364 Netting Neutrophils Activate Autoreactive B Cells in Lupus  
*Nicolas Gestermann, Jeremy Di Domizio, Roberto Lande, Olivier Demaria, Loredana Frasca, Laurence Feldmeyer, Julie Di Lucca, and Michel Gilliet*

## CLINICAL AND HUMAN IMMUNOLOGY

- 3372 Multiple Homozygous Variants in the STING-Encoding *TMEM173* Gene in HIV Long-Term Nonprogressors  
*Sara K. Nissen, Jesper G. Pedersen, Marie Helleberg, Kathrine Kjær, Karthiga Thavachelvam, Niels Obel, Martin Tolstrup, Martin R. Jakobsen, and Trine H. Mogensen*
- 3383 CD83 Antibody Inhibits Human B Cell Responses to Antigen as well as Dendritic Cell–Mediated CD4 T Cell Responses  
*Kuan Y. Wong, Rebecca Baron, Therese A. Seldon, Martina L. Jones, Alison M. Rice, and David J. Munster*

## IMMUNE REGULATION

- 3397 TCF-1 Inhibits IL-17 Gene Expression To Restrain Th17 Immunity in a Stage-Specific Manner  
*Jing Zhang, Zhibeng He, Subha Sen, Fei Wang, Qiang Zhang, and Zuoming Sun*
- 3407 Stearic Acid Induces CD11c Expression in Proinflammatory Macrophages via Epidermal Fatty Acid Binding Protein  
*Jun Zeng, Yuwen Zhang, Jiaqing Hao, Yanwen Sun, Shujun Liu, David A. Bernlohr, Edward R. Sauter, Margot P. Cleary, Jill Suttles, and Bing Li*
- 3420 Crk Adaptor Proteins Regulate NK Cell Expansion and Differentiation during Mouse Cytomegalovirus Infection  
*Tsukasa Nabekura, Zhiying Chen, Casey Schroeder, Taeju Park, Eric Vivier, Lewis L. Lanier, and Dongfang Liu*
- 3429 Tuning T Cell Signaling Sensitivity Alters the Behavior of CD4<sup>+</sup> T Cells during an Immune Response  
*Ashley A. Viehmann Milam, Juliet M. Bartleson, David L. Donermeyer, Stephen Horvath, Vivek Durai, Saravanan Raju, Haiyang Yu, Veronika Redmann, Bernd Zinselmeyer, J. Michael White, Kenneth M. Murphy, and Paul M. Allen*
- 3438 Crucial Role of Linear Ubiquitin Chain Assembly Complex–Mediated Inhibition of Programmed Cell Death in TLR4-Mediated B Cell Responses and B1b Cell Development  
*Yoshiteru Sasaki and Kazuhiro Iwai*

## IMMUNE SYSTEM DEVELOPMENT

- 3450 c-Myb Coordinates Survival and the Expression of Genes That Are Critical for the Pre-BCR Checkpoint  
*Shawn P. Fehl, Andrea R. Daamen, Rowena B. Crittenden, and Timothy P. Bender*

## IMMUNOTHERAPY AND VACCINES

- 3464 Peptide Vaccine Formulation Controls the Duration of Antigen Presentation and Magnitude of Tumor-Specific CD8<sup>+</sup> T Cell Response  
*Hiep Khong, Annika Volmari, Meenu Sharma, Zhimin Dai, Chinonye S. Imo, Yared Hailemichael, Manisha Singh, Derek T. Moore, Zhilan Xiao, Xue-fei Huang, Thomas D. Horvath, David H. Hawke, and Willem W. Overwijk*

- 3475 Blocking IL-2 Signal In Vivo with an IL-2 Antagonist Reduces Tumor Growth through the Control of Regulatory T Cells  
*Tania Carmenate, Yaquelin Ortiz, Michel Enamorado, Karina García-Martínez, Janet Avellanet, Ernesto Moreno, Luis Graça, and Kalet León*
- 3485 Efficacy and Mechanism of Antitumor Activity of an Antibody Targeting Transferrin Receptor 1 in Mouse Models of Human Multiple Myeloma  
*Lai Sum Leoh, Yoon Kyung Kim, Pierre V. Candelaria, Otoniel Martínez-Maza, Tracy R. Daniels-Wells, and Manuel L. Penichet*

## INFECTIOUS DISEASE AND HOST RESPONSE

- 3495 Human IgG Increases Virulence of *Streptococcus pyogenes* through Complement Evasion  
*David Ermert, Antonin Weckel, Michal Magda, Matthias Mörgelin, Jutamas Shaughnessy, Peter A. Rice, Lars Björck, Sanjay Ram, and Anna M. Blom*
- 3506 MicroRNA-27b Modulates Inflammatory Response and Apoptosis during *Mycobacterium tuberculosis* Infection  
*Shuxin Liang, Zhigang Song, Yongyan Wu, Yuanpeng Gao, Mingqing Gao, Fayang Liu, Fengyu Wang, and Yong Zhang*
- 3519 Early Antiretroviral Therapy Preserves Functional Follicular Helper T and HIV-Specific B Cells in the Gut Mucosa of HIV-1–Infected Individuals  
*Cyril Planchais, Laurent Hocqueloux, Clara Ibanez, Sébastien Gallien, Christiane Copie, Mathieu Surenaud, Ayryn Kök, Valérie Lorin, Mathieu Fusaro, Marie-Hélène Delfau-Larue, Laurent Lefrou, Thierry Prazuck, Michael Lévy, Nabila Seddiki, Jean-Daniel Lelièvre, Hugo Mouquet, Yves Lévy, and Sophie Hüe*
- 3530 Elevated Hepatic CD1d Levels Coincide with Invariant NKT Cell Defects in Chronic Hepatitis B Virus Infection  
*Xiaosheng Tan, Yajie Ding, Peng Zhu, Rui Dou, Zhibui Liang, Daofeng Yang, Zhiyong Huang, Wei Wang, Xiongwen Wu, and Xiufang Weng*
- 3539 Characterizing the Mechanisms of Nonopsonic Uptake of Cryptococci by Macrophages  
*Jenson Lim, Christopher J. Coates, Paula I. Seoane, Mariam Garelnabi, Leanne M. Taylor-Smith, Pauline Monteith, Camille L. Macleod, Claire J. Escaron, Gordon D. Brown, Rebecca A. Hall, and Robin C. May*

## INNATE IMMUNITY AND INFLAMMATION

- 3547 Granulocytes Are Unresponsive to IL-6 Due to an Absence of gp130  
*Andrew N. Wilkinson, Kate H. Gartlan, Greg Kelly, Luke D. Samson, Stuart D. Olver, Judy Avery, Nienke Zomerdijk, Siok-Keen Tey, Jason S. Lee, Slavica Vuckovic, and Geoffrey R. Hill*
- 3556 Inflammasome-Independent Leukotriene B<sub>4</sub> Production Drives Crystalline Silica–Induced Sterile Inflammation  
*Bindu Hegde, Sobha R. Bodduluri, Shuchismita R. Satpathy, Ruqaih S. Alghsham, Venkatakrishna R. Jala, Silvia M. Uriarte, Dong-Hoon Chung, Matthew B. Lawrenz, and Bodduluri Haribabu*
- 3568 Oral NaHCO<sub>3</sub> Activates a Splenic Anti-Inflammatory Pathway: Evidence That Cholinergic Signals Are Transmitted via Mesothelial Cells  
*Sarah C. Ray, Babak Baban, Matthew A. Tucker, Alec J. Seaton, Kyu Chul Chang, Elinor C. Mannon, Jingping Sun, Bansari Patel, Katie Wilson, Jacqueline B. Musall, Hiram Ocasio, Debra Irsik, Jessica A. Filosa, Jennifer C. Sullivan, Brendan Marshall, Ryan A. Harris, and Paul M. O'Connor*
- 3587 *Mycobacterium tuberculosis* PPE18 Protein Reduces Inflammation and Increases Survival in Animal Model of Sepsis  
*Asma Ahmed, Komal Dolasia, and Sangita Mukhopadhyay*
- 3599 The Synergy between Palmitate and TNF- $\alpha$  for CCL2 Production Is Dependent on the TRIF/IRF3 Pathway: Implications for Metabolic Inflammation  
*Rasheed Ahmad, Areej Al-Roub, Shibab Kochumon, Nadeem Akther, Reeby Thomas, Manju Kumari, Merin S. Koshy, Ali Tiss, Yusuf A. Hannun, Jaakko Tuomilehto, Sardar Sindhu, and Evan D. Rosen*

3612 Inflammatory Macrophage Expansion in Pulmonary Hypertension Depends upon Mobilization of Blood-Borne Monocytes

*Jonathan Florentin, Emilie Coppin, Sathish Babu Vasamsetti, Jingsi Zhao, Yi-Yin Tai, Ying Tang, Yingze Zhang, Annie Watson, John Sembrat, Mauricio Rojas, Sara O. Vargas, Stephen Y. Chan, and Partha Dutta*

3626 A Nonpyroptotic IFN- $\gamma$ -Triggered Cell Death Mechanism in Nonphagocytic Cells Promotes *Salmonella* Clearance In Vivo

*Justin P. Ingram, Sarah Tursi, Ting Zhang, Wei Guo, Chaoran Yin, Meghan A. Wynosky-Dolfi, Joris van der Heijden, Kathy Q. Cai, Masahiro Yamamoto, B. Brett Finlay, Igor E. Brodsky, Sergei I. Grivennikov, Çağla Tükel, and Siddharth Balachandran*

## SYSTEMS IMMUNOLOGY

3635 Antigen-Induced but Not Innate Memory CD8 T Cells Express NKG2D and Are Recruited to the Lung Parenchyma upon Viral Infection

*Morgan Grau, Séverine Valesia, Julien Mafille, Sophia Djebali, Martine Tomkowiak, Anne-Laure Mathieu, Daphné Laubretton, Simon de Bernard, Pierre-Emmanuel Jouve, Erwan Ventre, Laurent Buffat, Thierry Walzer, Yann Leverrier, and Jacqueline Marvel*

## TUMOR IMMUNOLOGY

3647 Tumor Tolerance-Promoting Function of Regulatory T Cells Is Optimized by CD28, but Strictly Dependent on Calcineurin

*Francesco Marangoni, Ruan Zhang, Vinidbra Mani, Martin Thelen, Noor J. Ali Akbar, Ross D. Warner, Tarmo Äijö, Valentina Zappulli, Gustavo J. Martinez, Laurence A. Turka, and Thorsten R. Mempel*

3662 AUTHOR INDEX