



Antibody Isotype Families

Switch natural isotype

InvivoGen



201 (1)

J Immunol 2018; 201:1-306; ;
<http://www.jimmunol.org/content/201/1>

This information is current as
of November 14, 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.



EDITORIAL

- 1 A New *JJ*: The Home for All Immunology
Eugene M. Oltz

IN THIS ISSUE

- 3 **TCR Affinity Landscapes during Acute and Chronic Infections** *See article p. 19*
Role of CD8⁺ Follicular T Cells in Autoimmunity *See article p. 31*
Immune Complexes Boost Peptide Vaccines *See article p. 87*
Microbiota Sensing by TLR1 *See article p. 230*
Perinodal Adipose Tissue in Immune Protection *See article p. 296*

PILLARS OF IMMUNOLOGY

- 5 Where Have All the Flowers Gone?
Philippa Marrack
- 7 Pillars Article: T-Cell Apoptosis Detected In Situ during Positive and Negative Selection in the Thymus.
Nature. 1994. 372: 100–103
Charles D. Surh and Jonathan Sprent

BRIEF REVIEWS

- 11 Innate Nutritional Immunity
Gabriel Núñez, Kei Sakamoto, and Miguel P. Soares

ANTIGEN RECOGNITION AND RESPONSES

- 19 CD4 T Cell Affinity Diversity Is Equally Maintained during Acute and Chronic Infection
Rakieb Andargachew, Ryan J. Martinez, Elizabeth M. Kolawole, and Brian D. Evavold

On the cover: Perinodal adipose tissue and the inguinal lymph node were collected 2 h after FITC skin sensitization on the flanks. FITC indicates fluid can travel through perinodal adipose tissue–lymph node conduits to the lymph node. Green, FITC; red, CD31; blue, collagen I. Lin, Y., G. Leung, D. Louie, A. Bogoslawski, J. Ross, P. Kubes, P.-Y. von der Weid, and S. Liao. 2018. Perinodal adipose tissue participates in immune protection through a lymphatic vessel-independent route. *J. Immunol.* 201: 296–305.

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.

AUTOIMMUNITY

- 31 CD8 Follicular T Cells Promote B Cell Antibody Class Switch in Autoimmune Disease
Kristen M. Valentine, Dan Davini, Travis J. Lawrence, Genevieve N. Mullins, Miguel Manansala, Mufadhal Al-Kuhlani, James M. Pinney, Jason K. Davis, Anna E. Beaudin, Suzanne S. Sindi, David M. Gravano, and Katrina K. Hoyer

CLINICAL AND HUMAN IMMUNOLOGY

- 41 IVIg Promote Cross-Tolerance against Inflammatory Stimuli In Vitro and In Vivo
Ángeles Domínguez-Soto, Miriam Simón-Fuentes, Mateo de las Casas-Engel, Víctor D. Cuevas, María López-Bravo, Jorge Domínguez-Andrés, Paula Saz-Leal, David Sancho, Carlos Ardavín, Juliana Ochoa-Grullón, Silvia Sánchez-Ramón, Miguel A. Vega, and Angel L. Corbí

IMMUNE REGULATION

- 53 Tick-Borne Encephalitis Virus Nonstructural Protein NS5 Induces RANTES Expression Dependent on the RNA-Dependent RNA Polymerase Activity
Zifeng Zheng, Jieyu Yang, Xuan Jiang, Yalan Liu, Xiaowei Zhang, Mei Li, Mudan Zhang, Ming Fu, Kai Hu, Hanzhong Wang, Min-Hua Luo, Peng Gong, and Qinxue Hu

IMMUNE SYSTEM DEVELOPMENT

- 69 Differential Roles of LT β R in Endothelial Cell Subsets for Lymph Node Organogenesis and Maturation
Zhongnan Wang, Qian Chai, and Mingzhao Zhu

IMMUNOTHERAPY AND VACCINES

- 77 Survival of Mice with Gastrointestinal Acute Radiation Syndrome through Control of Bacterial Translocation
Fujio Suzuki, Bradford D. Loucas, Ichiaki Ito, Akira Asai, Sumihiro Suzuki, and Makiko Kobayashi
- 87 Formation of Immune Complexes with a Tetanus-Derived B Cell Epitope Boosts Human T Cell Responses to Covalently Linked Peptides in an Ex Vivo Blood Loop System
Erika A. K. Fletcher, Wendy van Maren, Robert Cordfunke, Jasper Dinkelaar, Jeroen D. C. Codee, Gijs van der Marel, Cornelis J. M. Melief, Ferry Ossendorp, Jan Wouter Drijfhout, and Sara M. Mangsbo
- 98 Effective Combination Adjuvants Engage Both TLR and Inflammasome Pathways To Promote Potent Adaptive Immune Responses
Emilie Seydoux, Hong Liang, Natasha Dubois Cauwelaert, Michelle Archer, Nicholas D. Rintala, Ryan Kramer, Darrick Carter, Christopher B. Fox, and Mark T. Orr

INFECTIOUS DISEASE AND HOST RESPONSE

- 113 HLA-F on HLA-Null 721.221 Cells Activates Primary NK Cells Expressing the Activating Killer Ig-like Receptor KIR3DS1
Zabra Kiani, Franck P. Dupuy, Julie Bruneau, Bertrand Lebouché, Cindy X. Zhang, Elise Jackson, Irene Lisovsky, Sandrina da Fonseca, Daniel E. Geraghty, and Nicole F. Bernard
- 124 Schistosomiasis Induces Persistent DNA Methylation and Tuberculosis-Specific Immune Changes
Andrew R. DiNardo, Tomoki Nishiguchi, Emily M. Mace, Kimal Rajapakse, Godwin Mtetwa, Alexander Kay, Gugu Maphalala, W. Evan Secor, Rojelio Mejia, Jordan S. Orange, Cristian Coarfa, Kapil N. Bhalla, Edward A. Graviss, Anna M. Mandalakas, and George Makedonas
- 134 Effects of Influenza on Alveolar Macrophage Viability Are Dependent on Mouse Genetic Strain
Danielle Califano, Yoichi Furuya, and Dennis W. Metzger

INNATE IMMUNITY AND INFLAMMATION

- 145 MicroRNA-302 Cluster Downregulates Enterovirus 71-Induced Innate Immune Response by Targeting KPNA2
Nanfang Peng, Xuecheng Yang, Chengliang Zhu, Li Zhou, Haisheng Yu, Mengqi Li, Yong Lin, Xueyu Wang, Qian Li, Yinglong She, Jun Wang, Qian Zhao, Mengji Lu, Ying Zhu, and Shi Liu

- 157 Neuron-Specific HuR-Deficient Mice Spontaneously Develop Motor Neuron Disease
Kevin Sun, Xiao Li, Xing Chen, Ying Bai, Gao Zhou, Olga N. Kokiko-Cochran, Bruce Lamb, Thomas A. Hamilton, Ching-Yi Lin, Yu-Shang Lee, and Tomasz Herjan
- 167 IL-36 α from Skin-Resident Cells Plays an Important Role in the Pathogenesis of Imiquimod-Induced Psoriasiform Dermatitis by Forming a Local Autoamplification Loop
Yuriko Hashiguchi, Rikio Yabe, Soo-Hyun Chung, Masanori A. Murayama, Kaori Yoshida, Kenzo Matsuo, Sachiko Kubo, Shinobu Saijo, Yuumi Nakamura, Hiroyuki Matsue, and Yoichiro Iwakura
- 183 TRIM29 Negatively Regulates the Type I IFN Production in Response to RNA Virus
Junji Xing, Ao Zhang, Laurie J. Minze, Xian Chang Li, and Zhiqiang Zhang
- 193 Circadian Rhythms Influence the Severity of Sepsis in Mice via a TLR2-Dependent, Leukocyte-Intrinsic Mechanism
Erica L. Heipertz, Jourdan Harper, Charlie A. Lopez, Erol Fikrig, Michael E. Hughes, and Wendy E. Walker

MOLECULAR AND STRUCTURAL IMMUNOLOGY

- 202 Original Ligand for LT β R Is LIGHT: Insight into Evolution of the LT/LT β R System
Tomoki Maeda, Hiroaki Suetake, Tomoyuki Odaka, and Toshiaki Miyadai

MUCOSAL IMMUNOLOGY

- 215 Expression of the Atypical Chemokine Receptor ACKR4 Identifies a Novel Population of Intestinal Submucosal Fibroblasts That Preferentially Expresses Endothelial Cell Regulators
Carolyn A. Thomson, Serge A. van de Pavert, Michelle Stakenborg, Evelien Labeeuw, Gianluca Matteoli, Allan McI Mowat, and Robert J. B. Nibbs
- 230 Innate Recognition of the Microbiota by TLR1 Promotes Epithelial Homeostasis and Prevents Chronic Inflammation
Karishma Kamdar, Andrew M. F. Johnson, Denise Chac, Kalisa Myers, Vrshika Kulur, Kyle Truevillian, and R. William DePaolo
- 243 T Cell Proliferation and Colitis Are Initiated by Defined Intestinal Microbes
Pailin Chiaranunt, Justin T. Tometich, Junyi Ji, and Timothy W. Hand

SYSTEMS IMMUNOLOGY

- 251 Genome-Wide Posttranscriptional Dysregulation by MicroRNAs in Human Asthma as Revealed by Frac-seq
Rocio T. Martinez-Nunez, Hitasha Rupani, Manuela Platé, Mahesan Niranjana, Rachel C. Chambers, Peter H. Howarth, and Tilman Sanchez-Elsner

TUMOR IMMUNOLOGY

- 264 IFNAR1 Controls Autocrine Type I IFN Regulation of PD-L1 Expression in Myeloid-Derived Suppressor Cells
Wei Xiao, John D. Klement, Chunwan Lu, Mohammed L. Ibrahim, and Kebin Liu
- 278 Myeloid-Derived Suppressor Cells Impair B Cell Responses in Lung Cancer through IL-7 and STAT5
Yong Wang, Cara C. Schafer, Kenneth P. Hough, Sultan Tousif, Steven R. Duncan, John F. Kearney, Selvarangan Ponnazhagan, Hui-Chen Hsu, and Jessy S. Deshane

NOVEL IMMUNOLOGICAL METHODS

- 296 Perinodal Adipose Tissue Participates in Immune Protection through a Lymphatic Vessel-Independent Route
Yujia Lin, Glory Leung, Dante Louie, Ania Bogoslowski, James Ross, Paul Kubes, Pierre-Yves von der Weid, and Shan Liao

CORRECTIONS

- 306 Correction: NK Cells Influence Both Innate and Adaptive Immune Responses after Mucosal Immunization with Antigen and Mucosal Adjuvant
Lindsay J. Hall, Simon Clare, and Gordon Dougan

307 AUTHOR INDEX

309 INFORMATION FOR AUTHORS