185 (8)

J Immunol 2010; 185:4913-4959; ;
http://www.jimmunol.org/content/185/8

This information is current as of April 14, 2017.

---

**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
4513 IN THIS ISSUE

**CUTTING EDGE**

4515 Cutting Edge: NLRP12 Controls Dendritic and Myeloid Cell Migration To Affect Contact Hypersensitivity
   Janelle C. Arthur, John D. Lich, Zhengmao Ye, Irving C. Allen, Denis Gris, Justin E. Wilson, Monika Schneider,
   Kelly E. Roney, Brian P. O'Connor, Chris B. Moore, Amy Morrison, Fayah S. Satterwala, John Bertin, Beverly H. Koller,
   Zhi Liu, and Jenny P-Y. Ting

4520 Cutting Edge: TCR Ligation Triggers Digital Activation of NF-κB
   Lara M. Kingeter, Suman Paul, Sean K. Maynard, Natalia G. Cartwright, and Brian C. Schaefer

**CELLULAR IMMUNOLOGY AND IMMUNE REGULATION**

4525 Differential Modulation of TLR3- and TLR4-Mediated Dendritic Cell Maturation and Function by Progesterone
   Leigh A. Jones, Shrook Kreem, Muhammad Shweash, Andrew Paul, James Alexander, and Craig W. Roberts

4535 Bim Dictates Naive CD4 T Cell Lifespan and the Development of Age-Associated Functional Defects
   Hirotake Tsukamoto, Gail E. Huston, John Dibble, Debra K. Duso, and Susan L. Swain

4545 TLR Agonists That Induce IFN-β Abrogate Resident Macrophage Suppression of T Cells
   Melisa J. Hamilton, Frann Antignano, Anna von Rossum, Jean-Luc Boucher, Kevin L. Bennewith, and Gerald Krystal

4554 Ability of IDO To Attenuate Liver Injury in α-Galactosylceramide–Induced Hepatitis Model
   Hiroya Ino, Masato Hashi, Hirofumi Ohbuki, Ayako Tajuchi, Kazuki Ando, Tetsuya Ishikawa, Yusuke Otsuka, Akira Hara,
   Hiatake Moriwaki, Kuniaki Saito, and Mitsuru Seishima

4561 Functional Analysis of Recombinant Calreticulin Fragment 39–272: Implications for Immunobiological Activities of Calreticulin in Health and Disease
   Chao Hong, Xiang Qin, Yue Li, Qianrong Huang, Zhuyuan Zhong, Yan Zhang, Xiangyan Liu, Lin Sun, Ping Lv,
   and Xiao-Ming Gao

On the cover: Confocal image of a human U251 glioma cell stained with wheat germ agglutinin (green) and her2/neu (red);
yellow staining indicates colocalization. The complex surface reveals microvilli, microridges, and filopodia. This topography
suggests a novel way that glioma cells can invade surrounding tissue, while resisting the actions of various killer lymphocytes.

*The Journal of Immunology* (ISSN 0022-1767) is published twice each month by The American Association of Immunologists,
Inc., 9650 Rockville Pike, Bethesda, MD 20814-3994, 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/subscriptions 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/pdf/single_issue_purchase.pdf).
Reprints of individual articles are available only from authors. Periodicals postage paid at Bethesda, MD 20814-3994, 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, 9650 Rockville Pike, Bethesda, MD 20814-3994.
Copyright © 2010 by The American Association of Immunologists, Inc.
BAFF Receptor Signaling Aids the Differentiation of Immature B Cells into Transitional B Cells following Tonic BCR Signaling
Sarah L. Rowland, Katelyn F. Leahy, Regina Halverson, Raul M. Torres, and Roberta Pelanda

Peptide Length Extension Skews the Minor HA-1 Antigen Presentation toward Activated Dendritic Cells but Reduces Its Presentation Efficiency
Lothar Hambach, Zohara Aghai, Jori Pool, Nicolas Krüger, and Eli Goulmy

Induction of Homologous Rather than Heterologous Antigen-Specific CD4 T Cell Responses Is Critical for Functional CD8 T Cell Responses in Mice Transgenic for a Foreign Antigen
Nicolas Sabarth, Louise Chamberlain, Sara Brett, John Tite, and Jenny Craigen

The Capacity To Induce Cross-Presentation Dictates the Success of a TLR7 Agonist-Conjugate Vaccine for Eliciting Cellular Immunity
Jason Z. Oh and Ros M. Kedl

Lunatic Fringe Enhances Competition for Delta-Like Notch Ligands but Does Not Overcome Defective Pre-TCR Signaling during Thymocyte β-Selection In Vivo
Ioana Visan, Julie S. Yuan, Ying Liu, Pamela Stanley, and Cynthia J. Guidos

Hallmark Features of Immunosenescence Are Absent in Familial Longevity
Evelyna Derhovanessian, Andrea B. Maier, Robert Beck, Gerhard Jahn, Karin Hähnel, P. Eline Slagboom, Anton J. M. de Craen, Rudi G. J. Westendorp, and Graham Pawelec

CD8 Controls T Cell Cross-Reactivity
Linda Wooldridge, Bruno Laugel, Julia Ekeruche, Mathew Clement, Hugo A. van den Berg, David A. Price, and Andrew K. Sewell

Langerhans Cells Serve as Immunoregulatory Cells by Activating NKT Cells
Atsushi Fukunaga, Noor M. Khaskhely, Ying Ma, Coimbatore S. Sreevidya, Kumiko Taguchi, Chikako Nishigori, and Stephen E. Ullrich

Plasmacytoid Dendritic Cells Alter the Antitumor Activity of CpG-Oligodeoxynucleotides in a Mouse Model of Lung Carcinoma
Rosalinda Sorrentino, Silvana Morello, Antonio Luciano, Timothy R. Crother, Piera Maiolino, Eduardo Bonavita, Claudio Arra, Ian M. Adcock, Moshe Arditi, and Aldo Pinto

IL-17 Promotes Immune Privilege of Corneal Allografts
Khrishen Cunnusamy, Peter W. Chen, and Jerry Y. Niederkorn

Development of a Nascent Galectin-1 Chimeric Molecule for Studying the Role of Leukocyte Galectin-1 Ligands and Immune Disease Modulation
Filiberto Cedeno-Laurent, Steven R. Barthel, Matthew J. Opperman, David M. Lee, Rachael A. Clark, and Charles J. Dimitroff

Responses against a Subdominant CD8+ T Cell Epitope Protect against Immunopathology Caused by a Dominant Epitope
Tracy J. Ruckwardt, Cindy Luongo, Allison M. W. Malloy, Jie Liu, Man Chen, Peter L. Collins, and Barney S. Graham

NK Cell Deficiency Predisposes to Viral-Induced Th2-Type Allergic Inflammation via Epithelial-Derived IL-25
Gerard E. Kaiko, Simon Phipps, Pornpimon Angkasekwinai, Chen Dong, and Paul S. Foster

Thrombospordin-1 Derived from APCs Regulates Their Capacity for Allosensitization
Daniel R. Saharan, Felix Bock, Sunil K. Chauban, Sharmila Masli, and Reza Dana

Lytic Granule Polarization, Rather than Degranulation, Is the Preferred Target of Inhibitory Receptors in NK Cells
Amita Das and Eric O. Long
Negative Selection and Peptide Chemistry Determine the Size of Naive Foreign Peptide–MHC Class II-Specific CD4+ T Cell Populations
H. Hamlet Chu, James J. Moon, Andrew C. Kruse, Marion Pepper, and Marc K. Jenkins

PIPKIγ90 Negatively Regulates LFA-1–Mediated Adhesion and Activation in Antigen-Induced CD4+ T Cells
Sarah A. Wernimont, Kyle R. Legate, William T. N. Simonson, Reinhard Fasler, and Anna Huttenlocher

Acute Ablation of Langerhans Cells Enhances Skin Immune Responses
Aleh Bobr, Irlauda Olvera-Gomez, Botond Z. Igarto, Krystal M. Haley, Kristin A. Hogquist, and Daniel H. Kaplan

TGF-β–Activated Kinase 1 Signaling Maintains Intestinal Integrity by Preventing Accumulation of Reactive Oxygen Species in the Intestinal Epithelium
Rie Kaijho-Sakamoto, Emily Omori, Prashant K. Nighty, Anthony T. Blikslager, Kunihiro Matsumoto, and Jun Ninomiya-Tsuji

C1q Deficiency Leads to the Defective Suppression of IFN-α in Response to Nucleoprotein Containing Immune Complexes
Deanna M. Santer, Brian E. Hall, Thaddeus C. George, Stephanie Tangombatvisit, Chih Long Liu, Peter D. Arkwright, and Keith B. Elkon

Combined Administration of a Mutant TGF-β1/Fc and Rapamycin Promotes Induction of Regulatory T Cells and Islet Allograft Tolerance
Wensheng Zhang, Dong Zhang, Miaoda Shen, Yun Liu, Yan Tian, Angus W. Thomson, W. P. Andrew Lee, and Xin Xiao Zheng

Cellular Requirements for Diabetes Induction in DO11.10xRIPmOVA Mice
Johnna D. Wesley, Blythe D. Sather, Nikolai R. Perdue, Steven F. Ziegler, and Daniel J. Campbell

Lymphotoxin Signals from Positively Selected Thymocytes Regulate the Terminal Differentiation of Medullary Thymic Epithelial Cells
Andrea J. White, Kyoko Nakamura, William E. Jenkinson, Manoj Saini, Charles Sinclair, Benedict Seddon, Parth Narendran, Klaus Peffer, Takeshi Nitta, Yousuke Takahama, Jorge H. Caamano, Peter J. L. Lane, Eric J. Jenkinson, and Graham Anderson

Deoxyuridine Triphosphate Incorporation during Somatic Hypermutation of Mouse VkOx Genes after Immunization with Phenylloxazolone
Benjamin Roche, Aurélie Claës, and François Rougeon

Effect of Ly49 Haplotype Variance on NK Cell Function and Education
Rajen Patel, Simon Bélanger, Lee-Hua Tai, Angela D. Troke, and Andrew P. Makrigiannis

Glioma Cells Display Complex Cell Surface Topographies That Resist the Actions of Cytolytic Effector Lymphocytes
Neil Hua, Lisheng Ge, Yuriy Kaznetsov, Alex McPherson, Andrew N. Cornforth, Jimmy T. H. Pham, Michael P. Myers, Nabil Ahmed, Vita S. Salzman, Lawrence S. Lamb, Jr., Joselyn E. Bowersock, Yuanjie Hu, Yi-Hong Zhou, and Martin R. Jadus

Immunomodulation with IL-4Rα Antisense Oligonucleotide Prevents Respiratory Syncytial Virus-Mediated Pulmonary Disease
Michael J. Ripple, Dahui You, Srinivasa Honnegowda, Joseph D. Giaimo, Andrew B. Sewell, David M. Becuel, and Stephanie A. Cormier

Influenza A Virus Protein PB1-F2 Exacerbates IFN-β Expression of Human Respiratory Epithelial Cells
Ronan Le Goffic, Edwige Baguyon, Christophe Chevalier, Jasmina Vidic, Bruno Da Costa, Olivier Leymarie, Christiane Bourdieu, Laure Decamps, Sophie Dhorne-Pollet, and Bernard Delmas
Highly Pathogenic Influenza Virus Infection of the Thymus Interferes with T Lymphocyte Development
Annette B. Vogel, Emanuel Haasbach, Sarah J. Reiling, Karoline Droebner, Karin Klingel, and Oliver Planz

IL-21 Deficiency Influences CD8 T Cell Quality and Recall Responses following an Acute Viral Infection
John S. Yi, Jennifer T. Ingram, and Allan J. Zajac

INFLAMMATION

Differential Roles for Endothelial ICAM-1, ICAM-2, and VCAM-1 in Shear-Resistant T Cell Arrest, Polarization, and Directed Crawling on Blood–Brain Barrier Endothelium
Oliver Steiner, Caroline Coisne, Roméo Cecchelli, Rémy Bosacci, Urban Deutsch, Britta Engelhardt, and Ruth Lyck

OX40 Ligand Regulates Inflammation and Mortality in the Innate Immune Response to Sepsis
Matthew Karulf, Ann Kelly, Andrew D. Weinberg, and Jeffrey A. Gold

Lysophosphatidic Acid Inhibits CC Chemokine Ligand 5/RANTES Production by Blocking IRF-1-Mediated Gene Transcription in Human Bronchial Epithelial Cells
Shinichi Matsuzaki, Tamotsu Ishizuka, Takeshi Hidaka, Haruka Aoki, Mayumi Komachi, Isao Ichimonji, Mitsuishi Utsugi, Akihiro Ono, Yasuhiko Koga, Kunio Dobashi, Hitoshi Kurose, Hideaki Tomura, Masatomo Mori, and Fumikazu Okajima

Chemoattractant Receptors and Lymphocyte Egress from Extralymphoid Tissue: Changing Requirements during the Course of Inflammation
Meghan N. Brown, Sarah R. Fintushel, Michael H. Lee, Silke Jennrich, Skye A. Geherin, John B. Hay, Eugene C. Butcher, and Gudrun F. Debes

Activation of p38 MAPK Is Required in Monocytic and Neuronal Cells for HIV Glycoprotein 120-Induced Neurotoxicity
Kathryn E. Medders, Natalia E. Sejbuk, Ricky Maung, Maya K. Desai, and Marcus Kaul

NF-κB Activation Limits Airway Branching through Inhibition of Sp1-Mediated Fibroblast Growth Factor-10 Expression
John T. Benjamin, Billy J. Carver, Erin J. Plosa, Yasutoshi Yamamoto, J. Davin Miller, Jin-Hua Liu, Riet van der Meer, Timothy S. Blackwell, and Lawrence S. Prince

Endogenous IL-10 Attenuates Cisplatin Nephrotoxicity: Role of Dendritic Cells
Raghu Kempegowda Tadagavadi and William Brian Reeves

IL-18 Production Downstream of the Nlrp3 Inflammasome Confers Protection against Colorectal Tumor Formation
Mohammad Hasun Zaki, Peter Vogel, Mathilde Body-Malapel, Mohamed Lemanufi, and Thirumala-Devi Kanneganti

Soluble CD93 Induces Differentiation of Monocytes and Enhances TLR Responses
Jae-Won Jeon, Joon-Goo Jung, Eui- Cheol Shin, Hye In Choi, Ho Young Kim, Mi-La Cho, Sun-Wha Kim, Young-Soon Jang, Myung-Ho Sohn, Ji-Hyun Moon, Young-Hoon Cho, Kwang-Lae Hoe, Yeon-Soo Seo, and Young Woo Park

Adiponectin and Heme Oxygenase-1 Suppress TLR4/MyD88-Independent Signaling in Rat Kupffer Cells and in Mice after Chronic Ethanol Exposure
Palash Mandal, Sanjoy Roychowdhury, Pil-Hoon Park, Brian T. Pratt, Thierry Roger, and Laura E. Nagy

CLINICAL IMMUNOLOGY

Ectodomain Shedding Generates Neoepitopes on Collagen XVII, the Major Autoantigen for Bullous Pemphigoid
Wataru Nishie, Stephanie Lamer, Andreas Schlosser, Emilja Licaret, Claus-Werner Franzke, Silke C. Hofmann, Joanna Jackow, Casian Sitaru, and Leena Bruckner-Tuderman

Gender Differences in 1,25 Dihydroxyvitamin D3 Immunomodulatory Effects in Multiple Sclerosis Patients and Healthy Subjects
Jorge Correale, Maria C. Ysraels, and Maria I. Gaitán
Correction: Macrophage Migration Inhibitory Factor Increases Leukocyte–Endothelial Interactions in Human Endothelial Cells via Promotion of Expression of Adhesion Molecules
Qiang Cheng, Sonja J. McKeown, Leilani Santos, Fernando S. Santiago, Levon M. Khachigian, Eric F. Morand, and Michael J. Hickey