This information is current as of April 20, 2017.

179 (12)

*J Immunol* 2007; 179:7991-8570; ;
http://www.jimmunol.org/content/179/12

**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
IN THIS ISSUE

BRIEF REVIEWS

7993 COPs and POPs: Modulators of Inflammasome Activity
Christian Stehlik and Andrea Dorfleutner

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

7999 TLR Ligands Differentially Modulate T Cell Responses to Acute and Chronic Antigen Presentation
Nevil J. Singh, Maureen Cox, and Ronald H. Schwartz

8009 Inappropriate Recruitment and Activity by the Src Homology Region 2 Domain-Containing Phosphatase 1 (SHP1) Is Responsible for Receptor Dominance in the SHIP-Deficient NK Cell
Joseph A. Woble, Kim H. T. Paraizo, Robert D. Kendig, Harshani R. Lawrence, Liwei Chen, Jerry Wu, and William G. Kerr

8016 Altered Distribution of H60 Minor H Antigen-Specific CD8 T Cells and Attenuated Chronic Vasculopathy in Minor Histocompatibility Antigen Mismatched Heart Transplantation in Cxcr3−/− Mouse Recipients
Jean Kwon, Huaizhong Hu, Erik Schadde, Drew Ronneburg, Kathleen A. Sullivan, Julie DeMartino, William J. Burlingham, and Stuart J. Knechtle

8026 Inverse Rap1 and Phospho-ERK Expression Discriminate the Maintenance Phase of Tolerance and Priming of Antigen-Specific CD4+ T Cells In Vitro and In Vivo
Angela M. Morton, Barbara McManus, Paul Garside, Allan Mcl. Mowat, and Margaret M. Harnett

8035 A Novel Role of IL-2 in Organ-Specific Autoimmune Inflammation beyond Regulatory T Cell Checkpoint: Both IL-2 Knockout and Fas Mutation Prolong Lifespan of Scufy Mice but by Different Mechanisms
Lingjie Zheng, Rahul Sharma, Felicia Gaskin, Shu Man Fu, and Shyr-Te Ju

8042 Passive Immunization against the MHC Class I Molecule Mamu-AG Disrupts Rhesus Placental Development and Endometrial Responses


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. Subscription term: 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). Periodicals postage paid at Bethesda, MD 20814-3998, and at additional mailing offices. Country of origin U.S.A. Printed on acid-free recyclable paper. Postmaster: Send address changes to The Journal of Immunology, Subscription Department, Room L-3407A, 9650 Rockville Pike, Bethesda, MD 20814-3998. Copyright © 2007 by The American Association of Immunologists, Inc.
Receptor for Advanced Glycation End Products Expression on T Cells Contributes to Antigen-Specific Cellular Expansion In Vivo
Bernhard Moser, Dharmesh D. Desai, Matthew P. Downie, Yali Chen, Shi Fang Yan, Kevan Herold, Ann Marie Schmidt, and Raphael Clynes

Chronic Antigen Stimulation In Vivo Induces a Distinct Population of Antigen-Specific Foxp3−CD25− Regulatory T Cells
Wiebke Hansen, Astrid M. Westendorf, Simone Reinwald, Dunja Bruder, Stefanie Deppenmeier, Lothar Groebe, Michael Probst-Kepper, Achim D. Gruber, Robert Geffers, and Jan Buer

Lymphotxin β Receptor Is Required for the Migration and Selection of Autoreactive T Cells in Thymic Medulla
Mingzhao Zhu, Robert K. Chin, Alexei V. Tumanov, Xiaojuan Liu, and Yang-Xin Fu

CD28 Deficiency Exacerbates Joint Inflammation upon Borrelia burgdorferi Infection, Resulting in the Development of Chronic Lyme Arthritis
Bettina P. Iliopoulou, Joseph Alroy, and Brigitte T. Huber

Enhancement of NF-κB Activation in Lymphocytes Prevents T Cell Apoptosis and Improves Survival in Murine Sepsis
Heinrich V. Groesdonk, Florian Wagner, Beatrix Hoffarth, Michael Georgieff, and Uwe Senfleben

Selective Inhibition of Inducible NO Synthase Activity In Vivo Reverses Inflammatory Abnormalities in Surfactant Protein D-Deficient Mice
Elena N. Atochina-Vlaserman, Michael F. Beers, Helchom Kadire, Yaniv Tomer, Adam Inch, Pamela Scott, Chang J. Guo, and Andrew J. Gow

IL-22 Is Expressed by Th17 Cells in an IL-23-Dependent Fashion but Not Required for the Development of Autoimmune Encephalomyelitis
Katharina Kreynborg, Ruth Eizenesperger, Laure Dumoutier, Stefan Haak, Angelita Rebollo, Thorsten Buch, Frank L. Heppner, Jean-Christophe Renaud, and Burkhard Becher

Transduction of Phosphatase and Tensin Homolog Deleted on Chromosome 10 into Eosinophils Attenuates Survival, Chemotaxis, and Airway Inflammation
Tetsuya Adachi, Satoko Hanaka, Tomoko Masuda, Hisanao Yoshibara, Hiroyuki Nagase, and Ken Ohba

Formyl Peptide Receptor-1 Activation Enhances Intestinal Epithelial Cell Restitution through Phosphatidylinositol 3-Kinase-Dependent Activation of Rac1 and Cdc42
Brian A. Babbin, Algirdas J. Jesaitis, Andrei I. Ivanov, Daina Kelly, Mike Laukoetter, Porfirio Nava, Charles A. Parkos, and Asma Nusrat

Systemic and Mucosal Infection Program Protective Memory CD8 T Cells in the Vaginal Mucosa
Pratima Krishna Suvas, Heather M. Dech, Fleurette Sambira, Junwei Zeng, and Thandi M. Onami

LILRA2 Activation Inhibits Dendritic Cell Differentiation and Antigen Presentation to T Cells
Delphine J. Lee, Peter A. Sieling, Maria Teresa Ochoa, Stephan R. Krutzik, Beichu Guo, Maristela Hernandez, Thomas H. Rea, Genhong Cheng, Marco Colonna, and Robert L. Modlin

Analysis of Direct and Cross-Presentation of Antigens in TPPII Knockout Mice
Elke Firat, Jisen Huai, Loredana Saveanu, Simone Gaedicke, Peter Aichele, Klaus Eichmann, Peter van Endert, and Gabriele Niedermann

Pregnancy Suppresses Experimental Autoimmune Encephalomyelitis through Immunoregulatory Cytokine Production
Melanie A. McClain, NaToShá N. Gatsion, Nicole D. Powell, Tracey L. Papenfuss, Ingrid E. Gienapp, Fei Song, Todd M. Shailer, Aaron Kithcart, and Caroline C. Whitacre

Atypical Memory Phenotype T Cells with Low Homeostatic Potential and Impaired TCR Signaling and Regulatory T Cell Function in Foxn1Δ/Δ Mutant Mice
Shiyun Xiao, Dong-ning Su, and Nancy R. Manley
Anti-CD28 Antibodies Modify Regulatory Mechanisms and Reinforce Tolerance in CD40Ig-Treated Heart Allograft Recipients

Carole Guillonneau, Céline Séveno, Anne-Sophie Dugast, Xian-Liang Li, Karine Renaudin, Fabienne Haspot, Claire Usal, Joëlle Veziers, Ignacio Anegon, and Bernard Vanhove

Critical Role for CXC Chemokine Ligand 16 (SR-PSOX) in Th1 Response Mediated by NKT Cells

Takeshi Shimaoka, Ken-ichiro Seino, Noriaki Kume, Manabu Minami, Chiyoko Nishime, Makoto Suematsu, Toru Kita, Masaru Taniguchi, Kouji Matsushima, and Shin Yonehara

Cytokine-Mediated Regulation of Human B Cell Differentiation into Ig-Secreting Cells: Predominant Role of IL-21 Produced by CXCR5⁺ T Follicular Helper Cells

Vanessa L. Bryant, Cindy S. Ma, Danielle T. Avery, Ying Li, Kim L. Good, Lynn M. Corcoran, Rene de Waal Malefyt, and Stuart G. Tangye

Hyaluronan Synthesis Is Required for IL-2-Mediated T Cell Proliferation

Christie L. Mahaffey and Mark E. Mummert

Leishmania mexicana Infection Induces Impaired Lymph Node Expansion and Th1 Cell Differentiation Despite Normal T Cell Proliferation

Alice C. Hsu and Phillip Scott

Introduction of Zwitterionic Motifs into Bacterial Polysaccharides Generates TLR2 Agonists Able to Activate APCs

Simona Gallorini, Francesco Berti, Pierino Parente, Roberta Baronio, Susanna Aprea, Ugo D’Oro, Mariagrazia Pizza, John L. Telford, and Andreas Wack

Dendritic Cell Maturation Results in Pronounced Changes in Glycan Expression Affecting Recognition by Siglec and Galectins

Marike Bax, Juan J. García-Vallejo, Jibye Jang-Lee, Simon J. North, Tim J. Gilmartin, Gilberto Hernández, Paul R. Crocker, Hakon Leffler, Steven R. Head, Stuart M. Haslam, Anne Dell, and Yvette van Kooyk

Latent Membrane Protein 1 of EBV Activates Phosphatidylinositol 3-Kinase to Induce Production of IL-10

Stacie L. Lambert and Olivia M. Martinez

Molecular Regulation of MHC Class I Chain-Related Protein A Expression after HDAC-Inhibitor Treatment of Jurkat T Cells

Lars Andresen, Helle Jensen, Marianne T. Pedersen, Karen A. Hansen, and Søren Skov

CD4⁺ T Cells Are Required for CD8⁺ T Cell Survival during Both Primary and Memory Recall Responses

Patricia Navy, Michael Quigley, Xiaopei Huang, and Yiping Yang

4-1BBL Induces TNF Receptor-Associated Factor 1-Dependent Bim Modulation in Human T Cells and Is a Critical Component in the Costimulation-Dependent Rescue of Functionally Impaired HIV-Specific CD8⁺ T Cells

Chao Wang, Tao Wen, Jean-Pierre Routy, Nicole F. Bernard, Rafick P. Sekaly, and Tania H. Watts

Influence of a Single Viral Epitope on T Cell Response and Disease After Infection of Mice with Respiratory Syncytial Virus

Simone Vallbracht, Birthe Jensen, Sonja Mrusek, Anselm Enders, Peter L. Collins, Stephan Ehl, and Christine D. Krempl

IL-23 Is Required for Neutrophil Homeostasis in Normal and Neutrophilic Mice

Emily Smith, Alexander Zarbock, Matthew A. Stark, Tracy L. Burcin, Anthony C. Bruce, Patricia Foley, and Klaus Ley

N-Terminal Trimer Extension of Nominal CD8⁺ T Cell Epitopes Is Sufficient to Promote Cross-Presentation to Cognate CD8⁺ T Cells In Vivo

Cheng-Hong Wei and Linda A. Sherman

Prolonged (E)-4-Hydroxy-3-Methyl-But-2-Enyl Pyrophosphate-Driven Antimicrobial and Cytotoxic Responses of Pulmonary and Systemic Vγ2Vδ2 T Cells in Macaques

Zahida Ali, Lingyun Shao, Lisa Halliday, Armin Reichenberg, Martin Hintz, Hassan Jomaa, and Zheng W. Chen
Interaction between GATA-3 and the Transcriptional Coregulator Pias1 Is Important for the Regulation of Th2 Immune Responses
Xinyan Zhao, Bo Zheng, Yanfang Huang, Dan Yang, Shoshana Katzman, Chaowshang Chang, Deborah Fowell, and Wei-ping Zeng

Physiological Fever Temperature Induces a Protective Stress Response in T Lymphocytes Mediated by Heat Shock Factor-1 (HSF1)
Patience Murapa, Sita Gandhapudi, Hollie S. Skaggs, Kevin D. Sarge, and Jerold G. Woodward

Prolonged Antigen Expression following DNA Vaccination Impairs Effector CD8\(^+\) T Cell Function and Memory Development
Joanna N. Radcliffe, Joanne S. Roddick, Freda K. Stevenson, and Stephen M. Thirdborough

**MOLECULAR AND STRUCTURAL IMMUNOLOGY**

Rap1a Null Mice Have Altered Myeloid Cell Functions Suggesting Distinct Roles for the Closely Related Rap1a and 1b Proteins
Yu Li, Jingliang Yan, Pradip De, Hua-Chen Chang, Akira Yamauchi, Kent W. Christopherson II, Nivanka C. Paranavitana, Xiaodong Peng, Chaekyun Kim, Veerendra Munugulavadla, Reuben Kapur, Hanying Chen, Weinian Shou, James C. Stone, Mark H. Kaplan, Mary C. Dinauer, Donald L. Darden, and Lawrence A. Quilliam

Biochemical and Folding Defects in a RAG1 Variant Associated with Omenn Syndrome
Carrie Simkus, Priyanka Anand, Anamika Bhattacharyya, and Jessica M. Jones

**IMMUNOGENETICS**

Interactions between Idd5.1/Ctl4 and Other Type 1 Diabetes Genes
Kara Hunter, Dan Rainbow, Vincent Plagnol, John A. Todd, Laurence B. Peterson, and Linda S. Wicker

**HOST DEFENSE**

Activation of Phosphatase and Tensin Homolog on Chromosome 10 Mediates the Inhibition of Fc\(\gamma\)R Phagocytosis by Prostaglandin E\(_2\) in Alveolar Macrophages
Claudio Canetti, Carlos H. Serezani, Rachelle G. Atrasz, Eric S. White, David M. Aronoff, and Marc Peters-Golden

Death Receptor Ligation or Exposure to Perforin Trigger Rapid Egress of the Intracellular Parasite Toxoplasma gondii

Analysis of the 5q31–33 Locus Shows an Association between Single Nucleotide Polymorphism Variants in the IL-5 Gene and Symptomatic Infection with the Human Blood Fluke, Schistosoma japonicum
Magda K. Ellis, Zhen Zhen Zhao, Hong-Gen Chen, Grant W. Montgomery, Yue-Sheng Li, and Donald P. McManus

Mechanisms of Vaccine-Induced Protective Immunity against Coxiella burnetii Infection in BALB/c Mice
Guoquan Zhang, Kasi E. Russell-Lodrigue, Maiako Andoh, Yan Zhang, Laura R. Hendrix, and James E. Samuel

Mycobacterium tuberculosis Antigens Specifically Modulate CCR2 and MCP-1/CCL2 on Lymphoid Cells from Human Pulmonary Hilar Lymph Nodes
Mauricio A. Arias, Gabriela Jaramillo, Yorika P. López, Natalia Mejía, Camila Mejía, Adelis E. Pantoja, Robin J. Shattock, Luis F. García, and George E. Griffin

A Replication-Deficient Murine \(\gamma\)-Herpesvirus Blocked in Late Viral Gene Expression Can Establish Latency and Elicit Protective Cellular Immunity
Basak Kayhan, Eric J. Yager, Kathleen Lanzer, Tres Cookenham, Qingmei Jia, Ting-Ting Wu, David L. Woodland, Ren Sun, and Marcia A. Blackman

West Nile Virus Envelope Protein Inhibits dsRNA-Induced Innate Immune Responses
Alvaro Arjona, Michel Ledizet, Karen Anthony, Nathalie Bonafé, Torgo Modis, Terrence Town, and Erol Fikrig
CD8$^+$ T Cell Responses in Bronchoalveolar Lavage Fluid and Peripheral Blood Mononuclear Cells of Infants with Severe Primary Respiratory Syncytial Virus Infections

Improved Protection against Disseminated Tuberculosis by Mycobacterium bovis Bacillus Calmette-Guérin Secreting Murine GM-CSF Is Associated with Expansion and Activation of APCs
Anthony A. Ryan, Teresa M. Wozniak, Elena Shkolovskaya, Michael A. O’Donnell, Barbara Fazezka de St. Groth, Warwick J. Britton, and James A. Triccas

A Short-Form C-Type Lectin from Amphioxus Acts as a Direct Microbial Killing Protein via Interaction with Peptidoglycan and Glucan
Yanhong Yu, Yingcai Yu, Huqing Huang, Kaixia Feng, Minming Pan, Shaochun Yuan, Shengfeng Huang, Tao Wu, Lei Guo, Meiling Dong, Shangwu Chen, and Anlong Xu

Candida albicans Triggers Activation of Distinct Signaling Pathways to Establish a Proinflammatory Gene Expression Program in Primary Human Endothelial Cells
Verena Müller, Dorothee Viemann, Marc Schmidt, Nicole Endres, Stephan Ludwig, Martin Leverkus, Johannes Roth, and Matthias Goebeler

An Effect of Parasite-Encoded Arginase on the Outcome of Murine Cutaneous Leishmaniasis
Upasina Gaur, Sigrid C. Roberts, Rahul P. Dalvi, Inês Corraliza, Buddy Ullman, and Mary E. Wilson

INFLAMMATION

CD66b Regulates Adhesion and Activation of Human Eosinophils
Juhan Yoon, Akishiko Terada, and Hirohito Kita

Blockade of Chemokine Receptor CXCR3 Inhibits T Cell Recruitment to Inflamed Joints and Decreases theSeverity of Adjuvant Arthritis
Karkada Mohan and Thomas B. Issekutz

E- and P-Selectin Are Not Required for the Development of Experimental Autoimmune Encephalomyelitis in C57BL/6 and SJL Mice
Axinia Döring, Martin Wild, Dietmar Vestweber, Urban Deutsch, and Britta Engelhardt

Caspase-4 Interacts with TNF Receptor-Associated Factor 6 and Mediates Lipopolysaccharide-Induced NF-κB-Dependent Production of IL-8 and CC Chemokine Ligand 4 (Macrophage-Inflammatory Protein-1β)
Umayal Lakshmanan and Alan G. Porter

Pulmonary and Systemic Endotoxin Tolerance in Preterm Fetal Sheep Exposed to Chorioamnionitis
Subas G. Kallapur, Alan H. Jobe, Molly K. Ball, Ilia Nitsos, Timothy J. M. Moss, Noah H. Hillman, John P. Neunham, and Boris W. Kramer

Monocyte Chemoattractant Protein-1/CC Chemokine Ligand 2 Controls Microtubule-Driven Biogenesis and Leukotriene B4 Synthesizing Function of Macrophage Lipid Bodies Elicited by Innate Immune Response
Patricia Bandeira-Melo, Adriana R. Silva, Marcelo T. Bozza, Hugo C. Castro-Faria-Neto, Christianne Bandeira-Melo, and Patricia T. Bozza

Skin-Homing Receptors on Effector Leukocytes Are Differentially Sensitive to Glyco-Metabolic Antagonism in Allergic Contact Dermatitis
Madelene E. Gainers, Leyla Descheny, Steven R. Barthel, Luzheng Liu, Marc-André Wurbel, and Charles J. Dimitroff

NLRP2, an Inhibitor of the NF-κB Pathway, Is Transcriptionally Activated by NF-κB and Exhibits a Nonfunctional Allelic Variant
Ana Fontalba, Olga Gutierrez, and Jose L. Fernandez-Luna

Selective Proinflammatory Activation of Astrocytes by High-Mobility Group Box 1 Protein Signaling
Marco Pedrazzi, Mauro Patrone, Mario Passalacqua, Elia Ranzato, Diego Colamassaro, Bianca Sparatore, Sandro Pontremoli, and Edon Melliotti