This information is current as of April 11, 2017.

182 (8)

J Immunol 2009; 182:4493-5152; http://www.jimmunol.org/content/182/8

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
4493 IN THIS ISSUE

LETTERS TO THE EDITOR
4495 Comment on “Reassessment of the Role of Mut S Homolog 5 in Ig Class Switch Recombination Shows Lack of Involvement in cis- and trans-Switching”
Hideharu Sekine, Ricardo C. Ferreira, Qiang Pan-Hammarström, Lennart Hammarström, Gary S. Gilkeson, and Timothy W. Behrens

4496 Response to Comment on “Reassessment of the Role of Mut S Homolog 5 in Ig Class Switch Recombination Shows Lack of Involvement in cis- and trans-Switching”
Jeroen E. J. Guikema, Carol E. Schrader, Stephen P. Baker, Winfried Edelmann, and Janet Stavnezer

4497 Comment on “Experimental Extracorporeal Photopheresis Inhibits the Sensitization and Effector Phases of Contact Hypersensitivity via Two Mechanisms: Generation of IL-10 and Induction of Regulatory T Cells”
Roberta Rizzo, Marina Stignani, Loredana Melchiorri, and Olavio R. Baricordi

BRIEF REVIEWS
4499 Myeloid-Derived Suppressor Cells: Linking Inflammation and Cancer
Suzanne Ostrand-Rosenberg and Pratima Sinha

CUTTING EDGE
4507 Cutting Edge: Lung Mucosal Th17-Mediated Responses Induce Polymeric Ig Receptor Expression by the Airway Epithelium and Elevate Secretory IgA Levels
Zeina Jaffar, Maria E. Ferrini, Lou A. Herritt, and Kevan Roberts

4512 Cutting Edge: IL-2 Immune Complexes As a Therapy for Persistent Virus Infection
Michael J. Molloy, Weijun Zhang, and Edward J. Usherwood

4516 Cutting Edge: A Critical Role of B and T Lymphocyte Attenuator in Peripheral T Cell Tolerance Induction
Xikui Liu, Maria Alexiou, Natalia Martin-Orozco, Yeonseok Chung, Roza I. Nurieva, Li Ma, Qiang Tian, George Kollias, Sijie Lu, Daniel Graf, and Chen Dong

On the cover: Dendritic cells (DC) infected with Leishmania major are stained with Giemsa. The dark purple large mass in each DC is the host cell nucleus and smaller dots are the nuclei of intracellular L. major. DM-deficient BALB/c mice are resistant to L. major infections whereas the wild-type mice are susceptible even though the parasite can infect the wild-type and DM−/− DC in a comparable manner. Kamala, T., and N. Nanda. 2009. Protective response to Leishmania major in BALB/c mice requires antigen processing in the absence of DM. J. Immunol. 182: 4882–4890.
CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

4521  IL-22-Dependent Attenuation of T Cell-Dependent (ConA) Hepatitis in Herpes Virus Entry Mediator Deficiency
Christian Wahl, Ursula Maria Wegenka, Frank Leithäuser, Reinhold Schirmbeck, and Jörg Reimann

4529  Early Hematopoietic Zinc Finger Protein Prevents Tumor Cell Recognition by Natural Killer Cells
Rosanna La Rocca, Mariateresa Fulciniti, Tadeppally Lakshmikanth, Maria Mesuraca, Talib Hassan Ali, Valeria Mazzei, Nicola Amodio, Lucio Catalano, Bruno Rotoli, Ouashek Ouwerfelli, Michele Grieco, Elio Gulletta, Heather M. Bond, Giovanni Morrone, Soldano Ferrone, and Ennio Carbone

4538  Induction of Tumor Cell Apoptosis or Necrosis by Conditional Expression of Cell Death Proteins: Analysis of Cell Death Pathways and In Vitro Immune Stimulatory Potential
Christine Lohmann, Andreas Muschaweck, Susanne Kirschnek, Luise Jennen, Hermann Wagner, and Georg Häcker

4547  FcγRIIA and FcγRIIB Mediate Nuclear Factor Activation through Separate Signaling Pathways in Human Neutrophils
Erick García-García, Georgina Nieto-Castañeda, Melissa Ruiz-Saldaña, Nancy Mora, and Carlos Rouxel

4557  Costimulation of Dendritic Epidermal γδ T Cells by a New NKG2D Ligand Expressed Specifically in the Skin
Michael I. Whang, Nadia Giuerra, and David H. Raulet

4565  A Single-Chain H-2Db Molecule Presenting an Influenza Virus Nucleoprotein Epitope Shows Enhanced Ability at Stimulating CD8+ T Cell Responses In Vivo
Michael J. Palmowski, Mathew Parker, Kazuhiko Choudhuri, Christopher Chiu, Margaret F. C. Callan, P. Anton van der Merwe, Vincenzo Cerundolo, and Keith G. Gould

4572  NK Cell Responsiveness Is Tuned Commensurate with the Number of Inhibitory Receptors for Self-MHC Class I: The Rheostat Model
Nathalie T. Joncker, Nadine C. Fernandez, Emmanuel Treiner, Eric Vivier, and David H. Raulet

4581  Thymic OX40 Expression Discriminates Cells Undergoing Strong Responses to Selection Ligands
Mark Klinger, Joong Kyu Kim, Stephen A. Chimura, Andrea Barczak, David J. Erle, and Nigel Killeen

4590  Early Infection Termination Affects Number of CD8+ Memory T Cells and Protective Capacities in Listeria monocytogenes-Infected Mice upon Rechallenge
Kuo-En Tseng, Cheng-Yu Chung, Weng Siong H’ng, and Shih-Lien Wang

4601  The Amino Acid Sequences Flanking an Antigenic Determinant Can Strongly Affect MHC Class I Cross-Presentation without Altering Direct Presentation
Xueying Ma, Amparo Serna, Ren-Huan Xu, and Luis J. Sigal

4608  Rabbit Polyclonal Anti-Mouse Thymocyte Globulin Administration Alters Dendritic Cell Profile and Function in NOD Mice to Suppress Diabetogenic Responses
Yanfei Huang, Matthew Parker, Changqing Xia, Ruibua Peng, Clive Wasserfall, Tracy Clarke, Lizhen Wu, Tayseer Choudhury, Martha Campbell-Thompson, John Williams, Michael Clare-Salzler, Mark A. Askim, and Karl L. Womer

4616  The A3γ Adenosine Receptor Impairs the Maturation and Immunogenicity of Dendritic Cells
Jeffrey M. Wilson, William G. Ross, Oma N. Aghai, Renea Frazier, Robert A. Figler, Jayson Rieger, Joel Linden, and Peter B. Ernst

4624  Calcitriol Suppresses Antiretinal Autoimmunity through Inhibitory Effects on the Th17 Effector Response
Jun Tang, Ru Zhou, Dror Luger, Wei Zhu, Phyllis B. Silver, Rafael S. Grajewski, Shao-Bo Su, Chi-Chao Chan, Luciano Adorini, and Rachel R. Caspi

4633  Activin A Promotes the TGF-β-Induced Conversion of CD4+CD25+ T Cells into Foxp3+ Induced Regulatory T Cells
Samuel Huber, Felix R. Stahl, Jörg Schrader, Stefan Lüth, Katrin Presser, Antonella Carambia, Richard A. Flavell, Sabine Werner, Manfred Blessing, Johannes Herkel, and Christoph Schramm

4641  Selective Requirement for c-Myc at an Early Stage of Vα14i NKT Cell Development
Marvin P. Mycko, Isabel Ferrero, Anne Wilson, Wei Jiang, Teresa Bianchi, Andreas Trumpp, and H. Robson MacDonald
A Positive Feedback Loop of IL-21 Signaling Provoked by Homeostatic CD4+CD25+ T Cell Expansion Is Essential for the Development of Arthritis in Autoimmune K/BxN Mice
Eun Kyung Jang, Sin-Hye Cho, Hyunjoo Park, Doo-Jin Paik, Jung Mogg Kim, and Jeehee Youn

Langerhans Cells Are Not Required for the CD8 T Cell Response to Epidermal Self-Antigens
Laura S. Bursch, Benjamin E. Rich, and Kristin A. Hoggquist

Maintenance of Peripheral Tolerance through Controlled Tissue Homing of Antigen-Specific T Cells in K14-mOVA Mice
Teresa Bianchi, Laura B. Pincus, Marc-André Wurbel, Benjamin E. Rich, Thomas S. Kupper, Robert C. Fuhlbrigge, and Marianne Boes

Tumor Recognition and Self-Recognition Induce Distinct Transcriptional Profiles in Antigen-Specific CD4 T Cells
Derese Getnet, Charles H. Maris, Edward L. Hipkiss, Joseph F. Grosso, Timothy J. Harris, Hung-Rong Yen, Tulia C. Bruno, Satoshi Wada, Adam Adler, Robert W. Georgantas, Chunfa Jie, Monica V. Goldberg, Drew M. Pardoll, and Charles G. Drake

Inducible MHC Class II Expression by Mast Cells Supports Effector and Regulatory T Cell Activation

Inositol 1,4,5-Trisphosphate 3-Kinase B Is a Negative Regulator of BCR Signaling That Controls B Cell Selection and Tolerance Induction
Andrew T. Miller, Daniel R. Beiner, Daurong Liu, and Michael P. Cooke

Nerve Growth Factor and Neurotrophin-3 Mediate Survival of Pulmonary Plasma Cells during the Allergic Airway Inflammation
Melanie Abram, Michael Wegmann, Verena Fokuhl, Sanchita Sonar, Elke Olga Lugger, Sebastian Kerzel, Andreas Radbruch, Harald Renz, and Michael Zemlin

Superantigen- and TLR-Dependent Activation of Tonsillar B Cells after Receptor-Mediated Endocytosis
Johan Jendholm, Matthias Mörgelin, Maria Laura A. Perez Vidakovics, Michael Carlson, Hakon Leffler, Lars-Olaf Cardell, and Kristian Riesbeck

The Generation of Influenza-Specific Humoral Responses Is Impaired in ST6Gal I-Deficient Mice
Junwei Zeng, Hye Mee Joo, Bheemreddy Rajini, Jens P. Wrammert, Mark Y. Sangster, and Thandi M. Onami

Adaptive Immune Response in JAM-C-Deficient Mice: Normal Initiation but Reduced IgG Memory
Claudia Zimmerli, Boris P. L. Lee, Gaby Palmer, Cem Gabay, Ralf Adams, Michel Aurraud-Lious, and Beat A. Imhof

IL-9 Promotes IL-13-Dependent Paneth Cell Hyperplasia and Up-Regulation of Innate Immunity Mediators in Intestinal Mucosa
Valérie Steenwinckel, Jamila Louahed, Muriel M. Lemaire, Caroline Sannemeyens, Guy Warnier, Andrew McKenzie, Frank Brombacher, Jacques Van Snick, and Jean-Christophe Renaud

Statins Impair CD1d-Mediated Antigen Presentation through the Inhibition of Prenylation

Association of HIV-Specific and Total CD8+ T Memory Phenotypes in Subtype C HIV-1 Infection with Viral Set Point
Wendy A. Burgers, Catherine Riou, Mandla Mlotshwa, Pholo Maenetje, Debra de Assis Rosa, Jason Brenchley, Koleka Mlisana, Daniel C. Douck, Richard Koup, Mario Roederer, Guy de Bruyn, Salim Abdool Karim, Carolyn Williamson, Clive M. Gray, and the CAPRISA 002 Acute Infection Study Team

Drak2 Is Upstream of p70S6 Kinase: Its Implication in Cytokine-Induced Islet Apoptosis, Diabetes, and Islet Transplantation
Jianning Mao, Hongyu Luo, Bing Han, Richard Bertrand, and Jiangping Wu

CD30 Is Required for CCL21 Expression and CD4 T Cell Recruitment in the Absence of Lymphotoxin Signals
Vasileios Bekiaris, Fabrina Gaspal, Mi-Yeon Kim, David R. Withers, Fiona M. McConnell, Graham Anderson, and Peter J. L. Lane
Molecular and Structural Immunology

Interaction of Bap31 and MHC Class I Molecules and Their Traffic Out of the Endoplasmic Reticulum
Fumiyoshi Abe, Nancy Van Prooyen, John J. Ladasky, and Michael Edidin

Natural Lipid Ligands Associated with Human CD1d Targeted to Different Subcellular Compartments
Weiming Yuan, Suk-Jo Kang, James E. Evans, and Peter Cresswell

Liza B. John, Simon Yoong, and Alister C. Ward

Brief Residence at the Plasma Membrane of the MHC Class I-Related Chain B Is Due to Clathrin-Mediated Cholesterol-Dependent Endocytosis and Shedding
Sonia Aguera-González, Philippe Boutet, Hugh T. Reyburn, and Mar Valéu-Gómez

Steric Hindrance and Fast Dissociation Explain the Lack of Immunogenicity of the Minor Histocompatibility HA-1 Arg Null Allele
Eric Spierings, Stéphanie Gras, Jean-Baptiste Reiser, Bregje Mommaas, Mathilde Almekinders, Michel G. D. Kester, Anne Chouquet, Madalen Le Gorrec, Jan W. Drijffout, Ferry Osendorp, Dominique Housset, and Eli Goulmy

Trimeric Complex Formation of IgE, FcεRI, and a Recombinant Nonanaphylactic Single-Chain Antibody Fragment with High Affinity for IgE

N-Glycosylation Enhances Presentation of a MHC Class I-Restricted Epitope from Tyrosinase
Marina Ostankovitch, Michelle Altrich-VanLith, Valentina Robila, and Victor H. Engelhard

Thrombin Binding Predicts the Effects of Sequence Changes in a Human Monoclonal Antiphospholipid Antibody on Its In Vivo Biologic Actions
Ian Giles, Charis Pericles, Xiao Wei Liu, Jasmine Ehsanullah, Lindsey Clarke, Paul Brogan, Marvin Newton-West, Robert Suerlick, Anastasia Lambrianides, Poojen Chen, David Latchman, David Ienstag, Silvia Pierangeli, and Anisur Rahman

Critical and Multiple Roles for the CD3e Intracytoplasmic Tail in Double Negative to Double Positive Thymocyte Differentiation
Jean-Francois Brodeur, Samantha Li, Maria da Silva Martins, Louise Larose, and Vibhuti P. Dave

Host Defense

Selective Transcriptional Down-Regulation of Human Rhinovirus-Induced Production of CXCL10 from Airway Epithelial Cells via the MEK1 Pathway
Raza S. Zaheer, Rommy Koetzler, Neil S. Holden, Shahina Wiebler, and David Proud

A Protective Role for Dengue Virus-Specific CD8+ T Cells
Lauren E. Yauch, Raphael M. Zellweger, Maya F. Kotturi, Afrina Qutubuddin, John Sidney, Bjoern Peters, Tyler R. Prestwood, Alessandro Sette, and Sujan Shresta

Host-Derived Interleukin-1α Is Important in Determining the Immunogenicity of 3-Methylcholanthrene Tumor Cells
Moshe Elkahets, Yakov Krelin, Shabbar Datam, Adelheid Cerwenka, Angel Pargador, Rachel G. Lichtenstein, Malka R. White, Margot Zoller, Yoichizo Iwakura, Charles A. Dinarello, Elena Voronov, and Ron N. Apte

Protective Response to Leishmaniz major in BALB/c Mice Requires Antigen Processing in the Absence of DM
Tirumalai Kamala and Navreet K. Nanda

Group V Secretary Phospholipase A 2 Modulates Phagosome Maturation and Regulates the Innate Immune Response against Candida albicans
Barbara Balestrieri, Akiko Maekawa, Wei Xing, Michael H. Gelb, Howard R. Katz, and Jonathan P. Arm

Differential Requirements for Protection against Mucosal Challenge with Francisella tularensis in the Presence versus Absence of Cholera Toxin B and Inactivated F. tularensis
Constantine Bitsaktsis, Deepak B. Rawool, Ying Li, Nitin V. Karkure, Bibiana Iglesias, and Edmund J. Goueling
The NF-κB RelA Subunit Confers Resistance to *Leishmania major* by Inducing Nitric Oxide Synthase 2 and Fas Expression but Not Th1 Differentiation
Setsuko Mise-Omata, Etsushi Kuroda, Tsutomu Sugiura, Uki Yamashita, Yuichi Ohata, and Takahiro S. Doi

A Novel Hybrid Yeast-Human Network Analysis Reveals an Essential Role for FNB1L in Antioxidative Autophagy
Alan Huett, Aylin Ng, Zhifang Cao, Petric Kuballa, Masaaki Komatsu, Mark J. Daly, Daniel K. Podolsky, and Rannik J. Xavier

Important Role for CC Chemokine Ligand 2-Dependent Lung Mononuclear Phagocyte Recruitment to Inhibit Sepsis in Mice Infected with *Streptococcus pneumoniae*
Christine Winter, Wiebke Herbold, Regina Maus, Florian Langer, David E. Briles, James C. Paton, Tobias Welte, and Ulrich A. Maus

Requisite Role for the Dectin-1 β-Glucan Receptor in Pulmonary Defense against *Aspergillus fumigatus*
Jessica L. Werner, Allison E. Mets, Dawn Horn, Trenton R. Schoeh, Matthew M. Hewitt, Lisa M. Schiebert, Ines Faro-Trindade, Gordon D. Brown, and Chad Steele

Lipocalin 2 Is Required for Pulmonary Host Defense against *Klebsiella* Infection
Yvonne R. Chan, Jessica S. Liu, Derek A. Pociask, Mingquan Zheng, Timothy A. Mietzner, Thorsten Berger, Tak W. Mak, Matthew C. Clifton, Roland K. Strong, Prabir Ray, and Jay K. Kolls

INFLAMMATION

Contribution of Adenosine A2B Receptors to Inflammatory Parameters of Experimental Colitis
Julia-Stefanie Frick, Christopher F. MacManus, Melanie Scully, Louise E. Glover, Holger K. Eltzschig, and Sean P. Colgan

Heat Shock Protein 96 Is Elevated in Rheumatoid Arthritis and Activates Macrophages Primarily via TLR2 Signaling
Qi-Quan Huang, Rudina Sobkoviak, Angela R. Jackbeck-Clark, Bo Shi, Arthur M. Mandelin II, Paul Peter Tak, G. Kenneth Haines III, Christopher V. Nicchitta, and Richard M. Pope

Formyl Peptide Receptor-Like 2 Is Expressed and Functional in Plasmacytoid Dendritic Cells, Tissue-Specific Macrophage Subpopulations, and Eosinophils
Thalie Devosse, Aude Guillabert, Nicky D’Haene, Alix Berton, Patricia De Nadai, Sophie Noel, Maryse Brait, Jean-Denis Franssen, Silvano Sozzani, Isabelle Salmon, and Marc Parmentier

Role of the Heparan Sulfate Proteoglycan Syndecan-1 (CD138) in Delayed-Type Hypersensitivity
Behzad Kharabi Masouleh, Gerdy B. Ten Dam, Martin K. Wild, Ruth Seelege, Johan van der Vlag, Angelique L. Rops, Frank G. Eichertmeyer, Dietmar Vestweber, Tain H. van Kuppevelt, Ludwig Kiesel, and Martin Götze

MicroRNA-21 Is Up-Regulated in Allergic Airway Inflammation and Regulates IL-12p35 Expression
Thomas X. Lu, Ariel Munitz, and Marc E. Rothenberg

IL-20 Is Regulated by Hypoxia-Inducible Factor and Up-Regulated after Experimental Ischemic Stroke
Wei-Yu Chen and Ming-Shi Chang

Functional Blocking Monoclonal Antibodies against IL-12p40 Homodimer Inhibit Adoptive Transfer of Experimental Allergic Encephalomyelitis
Susanta Mondal, Avik Roy, and Kalipada Pahan

The Pattern Recognition Receptor CD36 Is a Chondrocyte Hypertrophy Marker Associated with Suppression of Catabolic Responses and Promotion of Repair Responses to Inflammatory Stimuli

The Atypical Chemokine Receptor D6 Contributes to the Development of Experimental Colitis
Yvonne Bordon, Chris A. H. Hansell, David P. Sester, Mairi Clarke, Allan Mcl. Mowat, and Robert J. B. Nibbs

A Novel and Critical Role for Tyrosine 663 in Platelet Endothelial Cell Adhesion Molecule-1 Trafficking and Transendothelial Migration
Bidisha Dasgupta, Eric Dufour, Zabha Mammadou, and William A. Muller
5052 P2X7 Receptor-Stimulated Secretion of MHC Class II-Containing Exosomes Requires the ASC/NLRP3 Inflammasome but Is Independent of Caspase-1
Yan Qu, Lakshmi Ramachandra, Suanne Mohr, Luigi Franchi, Clifford V. Harding, Gabriel Nunez, and George R. Dubyak

5063 p53 Attenuates Lipopolysaccharide-Induced NF-κB Activation and Acute Lung Injury
Gang Liu, Young-Jun Park, Yoko Tsuruta, Emmanuel Lorne, and Edward Abraham

5072 Mitocryptide-2: Purification, Identification, and Characterization of a Novel Cryptide That Activates Neutrophils
Hidehito Mukai, Tetuo Seki, Hiroko Nakano, Yoshinori Hokari, Toshifumi Takao, Maasani Kawanami, Hiroyuki Tsukagoshi, Hirokazu Kimura, Yoshiaki Kiso, Yasatsugu Shimomichi, Yoshiuke Nishi, and Eiseke Munekata

5081 Adaptor Proteins and Ras Synergistically Regulate IL-1-Induced ADAMTS-4 Expression in Human Chondrocytes
Rasheed Ahmad, Judith Sylvestre, Mubtaq Ahmad, and Muhammad Zafarullah

5088 Bruton’s Tyrosine Kinase Is Involved in miR-346-Related Regulation of IL-18 Release by Lipopolysaccharide-Activated Rheumatoid Fibroblast-Like Synovioctyes
Ghada Alsaleh, Guillaume Suffert, Noha Semaan, Tom Juncker, Laurent Frenzel, Jacques-Eric Gottenberg, Jean Sibilla, Sébastien Pfeffer, and Dominique Wachsmann

5097 Acidic Mammalian Chitinase Regulates Epithelial Cell Apoptosis via a Chitinolytic-Independent Mechanism
Dominik Hartl, Chuan Hua He, Babara Koller, Carla A. Da Silva, Yasushi Kobayashi, Chun Geun Lee, Richard A. Flavell, and Jack A. Elias

5107 Pathogenesis of Steroid-Resistant Airway Hyperresponsiveness: Interaction between IFN-γ and TLR4/MyD88 Pathways
Ming Yang, Rakesh K. Kumar, and Paul S. Foster

5115 Induction of Airway Hyperreactivity by IL-25 Is Dependent on a Subset of Invariant NKT Cells Expressing IL-17RB
Philippe Stock, Vincent Lombardi, Viola Kohlrautz, and Omid Akbari

5123 A Protective Role for C5a in the Development of Allergic Asthma Associated with Altered Levels of B7-H1 and B7-DC on Plasmacytoid Dendritic Cells
Xun Zhang, Ian P. Lewkowich, Gabriele Köhl, Jennifer R. Clark, Marsha Wills-Karp, and Jörg Köhl

CLINICAL IMMUNOLOGY

5131 HLA-DQ8 (DQB1*0302)-Restricted Th17 Cells Exacerbate Experimental Autoimmune Encephalomyelitis in HLA-DR3-Transgenic Mice
Ashutosh Mangalam, David Lucky, Eati Basal, Megan Jackson, Michele Smart, Moses Rodriguez, and Chella David

5140 Enrichment of Human CD4+ Vα24/Vβ11 Invariant NKT Cells in Intrahepatic Malignant Tumors
Gabriel Bricard, Valerie Casson, Estelle Devereux, Hanifa Bouzourene, Catherine Barbey, Nathalie Rafer, Jin S. Im, Pedro M. Alves, Olivier Martinet, Nermin Haltic, Jean-Charles Cerottini, Pedro Romero, Steven A. Porcelli, H. Robson MacDonald, and Daniel E. Speiser

5152 CORRECTIONS

5153 AUTHOR INDEX