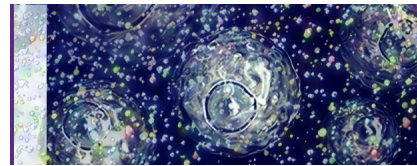


Focus on a Single Target or Measure Up to 13 at Once

With BioLegend Immunoassays

Learn More



The Journal of
Immunology

180 (7)

J Immunol 2008; 180:4349-5148; ;
<http://www.jimmunol.org/content/180/7>

This information is current as
of March 7, 2021.

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.





IMMUNOLOGY

THE JOURNAL OF

TABLE OF CONTENTS

4349 IN THIS ISSUE

PILLARS OF IMMUNOLOGY

4351 More Than Just Vanilla
Pamela J. Fink

4353 Pillars Article: Theta Isoantigen as a Marker of Thymus-Derived Lymphocytes in Mice. *Nature* 1969. 224: 378–379.
Martin C. Raff

BRIEF REVIEWS

4355 Modulation of Dendritic Cell Function by *Leishmania* Parasites
Lynn Soong

CUTTING EDGE

4361 Cutting Edge: Langerin⁺ Dendritic Cells in the Mesenteric Lymph Node Set the Stage for Skin and Gut Immune System Cross-Talk
Sun-Young Chang, Hye-Ran Cha, Osamu Igarashi, Paul D. Rennert, Adrien Kissenpfennig, Bernard Malissen, Masanobu Nanno, Hiroshi Kiyono, and Mi-Na Kweon

4366 Cutting Edge: Autoimmune Disease in Day 3 Thymectomized Mice Is Actively Controlled by Endogenous Disease-Specific Regulatory T Cells
Eileen T. Samy, Karen M. Wheeler, Randall J. Roper, Cory Teuscher, and Kenneth S. K. Tung

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

4371 Dendritic Cell Differentiation State and Their Interaction with NKT Cells Determine Th1/Th2 Differentiation in the Murine Model of *Leishmania major* Infection
Carsten Wiethé, Andrea Debus, Markus Mohrs, Alexander Steinkasserer, Manfred Lutz, and André Gessner

4382 CD40 on APCs Is Needed for Optimal Programming, Maintenance, and Recall of CD8⁺ T Cell Memory Even in the Absence of CD4⁺ T Cell Help
Maria Genevive H. Hernandez, Lianjun Shen, and Kenneth L. Rock

On the cover: Integrin $\alpha_1\beta_2$ mediates leukocyte adhesion and migration on cells expressing the intercellular adhesion molecules (ICAMs). Transition of $\alpha_1\beta_2$ from a bent conformation (illustrated) to an extended conformation is a hallmark of $\alpha_1\beta_2$ activation and the opening of the $\alpha_1\beta_2$ headpiece could fine regulate the binding of $\alpha_1\beta_2$ to different ICAMs. Tang, X.-Y., Y.-F. Li, and S.-M. Tan. 2008. Intercellular adhesion molecule-3 binding of integrin $\alpha_1\beta_2$ requires both extension and opening of the integrin headpiece. *J. Immunol.* 180: 4793–4804.

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 © 2008 by The American Association of Immunologists, Inc.

- 4391 IL-15 Transpresentation Augments CD8⁺ T Cell Activation and Is Required for Optimal Recall Responses by Central Memory CD8⁺ T Cells
Andy I. Kokaji, Deanna L. Hockley, and Kevin P. Kane
- 4402 AML1/Runx1 Negatively Regulates Quiescent Hematopoietic Stem Cells in Adult Hematopoiesis
Motoshi Ichikawa, Susumu Goyama, Takashi Asai, Masahito Kawazu, Masahiro Nakagawa, Masataka Takeshita, Shigeru Chiba, Seishi Ogawa, and Mineo Kurokawa
- 4409 Lack of TIM-3 Immunoregulation in Multiple Sclerosis
Li Yang, David E. Anderson, Juhi Kuchroo, and David A. Hafler
- 4415 Innate-Like Effector Differentiation of Human Invariant NKT Cells Driven by IL-7
Claudia de Lalla, Nicola Festuccia, Inka Albrecht, Hyun-Dong Chang, Grazia Andolfi, Ulrike Benninghoff, Ferdinando Bombelli, Giovanna Borsellino, Alessandro Aiuti, Andreas Radbruch, Paolo Dellabona, and Giulia Casorati
- 4425 Inhibition of TLR Activation and Up-Regulation of IL-1R-Associated Kinase-M Expression by Exogenous Gangliosides
Weiping Shen, Kelly Stone, Alessandra Jales, David Leitenberg, and Stephan Ladisch
- 4433 CD4⁺CD25⁺ Regulatory T Cells Specific for a Thymus-Expressed Antigen Prevent the Development of Anaphylaxis to Self
Stefano Scabeni, Marilena Lapilla, Silvia Musio, Barbara Gallo, Emilio Ciusani, Lawrence Steinman, Renato Mantegazza, and Rosetta Pedotti
- 4441 Gastrointestinal Dendritic Cells Promote Th2 Skewing via OX40L
Ana Belén Blázquez and M. Cecilia Berin
- 4451 Loss of IFN- γ Enables the Expansion of Autoreactive CD4⁺ T Cells to Induce Experimental Autoimmune Encephalomyelitis by a Nonencephalitogenic Myelin Variant Antigen
Joseph J. Sabatino, Jr., John Shires, John D. Altman, Mandy L. Ford, and Brian D. Evavold
- 4458 Autoimmunity to Both Proinsulin and IGRP Is Required for Diabetes in Nonobese Diabetic 8.3 TCR Transgenic Mice
Balasubramanian Krishnamurthy, Lina Mariana, Shane A. Gellert, Peter G. Colman, Leonard C. Harrison, Andrew M. Lew, Pere Santamaria, Helen E. Thomas, and Thomas W. H. Kay
- 4465 Impact of Post-Thymic Cellular Longevity on the Development of Age-Associated CD4⁺ T Cell Defects
Stephen C. Jones, Karen Clise-Dwyer, Gail Huston, John Dibble, Sheri Eaton, Laura Haynes, and Susan L. Swain
- 4476 Glucose Uptake Is Limiting in T Cell Activation and Requires CD28-Mediated Akt-Dependent and Independent Pathways
Sarah R. Jacobs, Catherine E. Herman, Nancie J. MacIver, Jessica A. Wofford, Heather L. Wieman, Jeremy J. Hammen, and Jeffrey C. Rathmell
- 4487 De Novo Production of K- α 1 Tubulin-Specific Antibodies: Role in Chronic Lung Allograft Rejection
Trudie A. Goers, Sabarinathan Ramachandran, Aviva Aloush, Elbert Trulock, G. Alexander Patterson, and Thalachallour Mohanakumar
- 4495 In Vivo Regulation of Experimental Autoimmune Encephalomyelitis by NK Cells: Alteration of Primary Adaptive Responses
Robin Winkler-Pickett, Howard A. Young, James M. Cherry, John Diehl, John Wine, Timothy Back, William E. Bere, Anna T. Mason, and John R. Ortaldo
- 4507 Brief Antigenic Stimulation Generates Effector CD8 T Cells with Low Cytotoxic Activity and High IL-2 Production
David Usbarauli and Tirumalai Kamala
- 4514 Assessment of Bet v 1-Specific CD4⁺ T Cell Responses in Allergic and Nonallergic Individuals Using MHC Class II Peptide Tetramers
Laurence Van Overtvelt, Erik Wambre, Bernard Maillère, Eric von Hofe, Anne Louise, Anne Marie Balazuc, Barbara Bohle, Didier Ebo, Christophe Leboulaire, Gilles Garcia, and Philippe Moingeon
- 4523 Selective Roles of MAPKs during the Macrophage Response to IFN- γ
Annabel F. Valledor, Ester Sánchez-Tilló, Luis Arpa, Jin Mo Park, Carme Caelles, Jorge Lloberas, and Antonio Celada

- 4530 Aberrant Genetic Control of Invariant TCR-Bearing NKT Cell Function in New Zealand Mouse Strains: Possible Involvement in Systemic Lupus Erythematosus Pathogenesis
Kazuyuki Tsukamoto, Mareki Ohtsuji, Wakana Shirowa, Qingshun Lin, Kazuhiro Nakamura, Hiromichi Tsurui, Yi Jiang, Katsuko Sudo, Hiroyuki Nishimura, Toshikazu Shirai, and Sachiko Hirose
- 4540 Inducing Antitumor T Cell Immunity: Comparative Functional Analysis of Interstitial Versus Langerhans Dendritic Cells in a Human Cell Line Model
Saskia J. A. M. Santegoets, Hetty J. Bontkes, Anita G. M. Stam, Farien Bhoelan, Janneke J. Ruizendaal, Alfons J. M. van den Eertwegh, Erik Hooijberg, Rik J. Scheper, and Tanja D. de Gruijl
- 4550 Human Cytomegalovirus Infection Induces a Rapid and Sustained Change in the Expression of NK Cell Receptors on CD8⁺ T Cells
Amber van Stijn, Ajda T. Rowshani, Sila L. Yong, Frank Baas, Eddy Roosnek, Ineke J. M. ten Berge, and René A. W. van Lier
- 4561 Dendritic Cell-Dependent Inhibition of B Cell Proliferation Requires CD22
Lorna Santos, Kevin E. Draves, Mark Boton, Prabhjit K. Grewal, Jamey D. Marth, and Edward A. Clark
- 4570 TRAIL Deficiency Does Not Rescue Impaired CD8⁺ T Cell Memory Generated in the Absence of CD4⁺ T Cell Help
Jilian A. Sacks and Michael J. Bevan
- 4577 Immunodominance in the TCR Repertoire of α TCR Peptide-Specific CD4⁺ Treg Population That Controls Experimental Autoimmune Encephalomyelitis
Loui Thomas Madakamutil, Igor Maricic, Eli E. Sercarz, and Vipin Kumar
- 4586 Activation and Function of the mTORC1 Pathway in Mast Cells
Mi-Sun Kim, Hye Sun Kuehn, Dean D. Metcalfe, and Alasdair M. Gilfillan
- 4596 Induction of Antitumor Immune Response by Homeostatic Proliferation and CD28 Signaling
Toshihiro Suzuki, Shubei Ogawa, Kazunari Tanabe, Hideaki Tahara, Ryo Abe, and Hidehiro Kishimoto
- 4606 Intracellular Retention of the NKG2D Ligand MHC Class I Chain-Related Gene A in Human Melanomas Confers Immune Privilege and Prevents NK Cell-Mediated Cytotoxicity
Mercedes B. Fuertes, María V. Girart, Luciana L. Molinero, Carolina I. Domaica, Lucas E. Rossi, María M. Barrio, José Mordoh, Gabriel A. Rabinovich, and Norberto W. Zwirner
- 4615 Invariant NKT Cells Promote CD8⁺ Cytotoxic T Cell Responses by Inducing CD70 Expression on Dendritic Cells
Vadim Y. Taraban, Sonya Martin, Kathrine E. Attfield, Martin J. Glennie, Tim Elliott, Dirk Elewaut, Serge Van Calenbergh, Bruno Linclau, and Aymen Al-Shamkhani
- 4621 NK Cells Contribute to Intracellular Bacterial Infection-Mediated Inhibition of Allergic Responses
Xiaobing Han, Yijun Fan, Shubei Wang, Lei Jiao, Hongyu Qiu, and Xi Yang
- 4629 Villous B Cells of the Small Intestine Are Specialized for Invariant NK T Cell Dependence
Peter Velázquez, Bo Wei, Michael McPherson, Lesley Marie A. Mendoza, Sandra L. Nguyen, Olga Turouskaya, Mitchell Kronenberg, Tiffany T. Huang, Matthew Schrage, Lynn N. Lobato, Daisuke Fujiwara, Sarah Brewer, Moshe Arditi, Genhong Cheng, R. Balfour Sartor, Rodney D. Newberry, and Jonathan Braun
- 4639 Multivectorial Abnormal Cell Migration in the NOD Mouse Thymus
Daniella A. Mendes-da-Cruz, Salete Smaniotto, Alexandre C. Keller, Mireille Dardenne, and Wilson Savino
- 4648 Mast Cell Migration from the Skin to the Draining Lymph Nodes upon Ultraviolet Irradiation Represents a Key Step in the Induction of Immune Suppression
Scott N. Byrne, Alberto Y. Limón-Flores, and Stephen E. Ullrich
- 4656 Developmental Control of Integrin Expression Regulates Th2 Effector Homing
Seung-Hyo Lee, Joseph E. Prince, Muhammad Rais, Farrah Kheradmand, Christie M. Ballantyne, Gabriele Weitz-Schmidt, C. Wayne Smith, and David B. Corry

- 4668 Protein Kinase C α and ζ Differentially Regulate Death-Inducing Signaling Complex Formation in Cigarette Smoke Extract-Induced Apoptosis
Jeong-Woong Park, Hong Pyo Kim, Seon-Jin Lee, Xue Wang, Yong Wang, Emeka Ifedigbo, Simon C. Watkins, Motoi Ohba, Stefan W. Ryter, Yatin M. Vyas, and Augustine M. K. Choi
- 4679 Regulatory T Cells Control Dendritic Cell/NK Cell Cross-Talk in Lymph Nodes at the Steady State by Inhibiting CD4⁺ Self-Reactive T Cells
Magali Terme, Nathalie Chaput, Behazine Combadiere, Averil Ma, Toshiaki Obteki, and Laurence Zitvogel
- 4687 Renal Cell Carcinoma Tumors Induce T Cell Apoptosis through Receptor-Dependent and Receptor-Independent Pathways
Tanya Das, Gaurisankar Sa, Ewa Paszkiewicz-Kozik, Cynthia Hilston, Luis Molto, Patricia Rayman, Daisuke Kudo, Kaushik Biswas, Ronald M. Bukowski, James H. Finke, and Charles S. Tannenbaum
- 4697 Hypoxia and Hypoxia-Inducible Factor-1 α Modulate Lipopolysaccharide-Induced Dendritic Cell Activation and Function
Jonathan Jantsch, Dipshikha Chakravorty, Nadine Turza, Alexander T. Prechtel, Björn Buchholz, Roman G. Gerlach, Melanie Volke, Joachim Gläsner, Christina Warnecke, Michael S. Wiesener, Kai-Uwe Eckardt, Alexander Steinkasserer, Michael Hensel, and Carsten Willam
- 4706 TIM-4 Expressed on APCs Induces T Cell Expansion and Survival
Roselynn Rodriguez-Manzanet, Jennifer Hartt Meyers, Savithri Balasubramanian, Jacqueline Slavik, Nasim Kassam, Valerie Dardalhon, Edward A. Greenfield, Ana C. Anderson, Raymond A. Sobel, David A. Hafler, Terry B. Strom, and Vijay K. Kuchroo
- 4714 Combined CXCR3/CCR5 Blockade Attenuates Acute and Chronic Rejection
Gabriel T. Schnickel, Sam Bastani, George R. Hsieh, Ali Shefizadeh, Rubina Bhatia, Michael C. Fishbein, John Belperio, and Abbas Ardehali
- 4722 Langerin Expressing Cells Promote Skin Immune Responses under Defined Conditions
Liangchun Wang, Laura S. Bursch, Adrien Kissenpfennig, Bernard Malissen, Stephen C. Jameson, and Kristin A. Hogquist
- 4728 B Cell Receptor Basal Signaling Regulates Antigen-Induced Ig Light Chain Rearrangements
Brian R. Schram, Lina E. Tze, Laura B. Ramsey, Jiabin Liu, Lydia Najera, Amanda L. Vegoe, Richard R. Hardy, Keli L. Hippen, Michael A. Farrar, and Timothy W. Behrens
- 4742 Homeostasis and Effector Function of Lymphopenia-Induced “Memory-Like” T Cells in Constitutively T Cell-Depleted Mice
David Voehringer, Hong-Erh Liang, and Richard M. Locksley
- 4754 CD4⁺ T Lymphocytes Are Not Necessary for the Acute Rejection of Vascularized Mouse Lung Transplants
Andrew E. Gelman, Mikiyo Okazaki, Jiaming Lai, Christopher G. Kornfeld, Friederike H. Kreisel, Steven B. Richardson, Seiichiro Sugimoto, Jeremy R. Tietjens, G. Alexander Patterson, Alexander S. Krupnick, and Daniel Kreisel
- 4763 TLR-Activated B Cells Suppress T Cell-Mediated Autoimmunity
Vicky Lampropoulou, Kai Hoehlig, Toralf Roch, Patricia Neves, Elisabeth Calderón Gómez, Claire H. Sweenie, Yi Hao, Antonio A. Freitas, Ulrich Steinhoff, Stephen M. Anderton, and Simon Fillatreau

MOLECULAR AND STRUCTURAL IMMUNOLOGY

- 4774 Doc2 α and Munc13-4 Regulate Ca²⁺-Dependent Secretory Lysosome Exocytosis in Mast Cells
Hironori Higashio, Noriyuki Nishimura, Hiroyoshi Ishizaki, Jun Miyoshi, Satoshi Orita, Ayuko Sakane, and Takuya Sasaki
- 4785 Isoform-Specific Inhibition of ROR α -Mediated Transcriptional Activation by Human FOXP3
Jianguang Du, Chunjian Huang, Baohua Zhou, and Steven F. Ziegler
- 4793 Intercellular Adhesion Molecule-3 Binding of Integrin $\alpha_1\beta_2$ Requires Both Extension and Opening of the Integrin Headpiece
Xiao-Yan Tang, Yan-Feng Li, and Suet-Mien Tan

4805 STAT3-Mediated Up-Regulation of BLIMP1 Is Coordinated with BCL6 Down-Regulation to Control Human Plasma Cell Differentiation
Sean A. Diehl, Heike Schmidlin, Maho Nagasawa, Simon D. van Haren, Mark J. Kwakkenbos, Etsuko Yasuda, Tim Beaumont, Ferenc A. Scheeren, and Hergen Spits

4816 Nonhuman Primate IgA: Genetic Heterogeneity and Interactions with CD89
Kenneth A. Rogers, Lakshmi Jayashankar, Franco Scinicariello, and Roberta Attanasio

HOST DEFENSE

4825 *Leishmania major*-Specific B Cells Are Necessary for Th2 Cell Development and Susceptibility to *L. major* LV39 in BALB/c Mice
Catherine Ronet, Heike Voigt, Hayo Himmelrich, Marie-Agnès Doucey, Yazmin Hauyon-La Torre, Mélanie Revaz-Breton, Fabienne Tacchini-Cottier, Claude Bron, Jacques Louis, and Pascal Launois

4836 Dendritic Cell Programming by Cytomegalovirus Stunts Naive T Cell Responses via the PD-L1/PD-1 Pathway
Chris A. Benedict, Andrea Loewendorf, Zacarias Garcia, Bruce R. Blazar, and Edith M. Janssen

4848 Age-Related Dysregulation of CD8⁺ T Cell Memory Specific for a Persistent Virus Is Independent of Viral Replication
Anna Lang, James D. Brien, Ilhem Messaoudi, and Janko Nikolich-Zugich

4858 Complement Factor H-Binding Protein, a Putative Virulence Determinant of *Borrelia hermsii*, Is an Antigenic Target for Protective B1b Lymphocytes
Matthew J. Colombo and Kishore R. Alugupalli

4865 TLR2-Dependent MyD88 Signaling Contributes to Early Host Defense in Murine *Enterococcus faecium* Peritonitis
Masja Leendertse, Rob J. L. Willems, Ida A. J. Giebelen, Petra S. van den Pangaart, W. Joost Wiersinga, Alex F. de Vos, Sandrine Florquin, Marc J. M. Bonten, and Tom van der Poll

4875 Blockade of PD-1/B7-H1 Interaction Restores Effector CD8⁺ T Cell Responses in a Hepatitis C Virus Core Murine Model
John R. Lukens, Michael W. Cruise, Matthew G. Lassen, and Young S. Hahn

4885 Mouse Mast Cell Trypsase mMCP-6 Is a Critical Link between Adaptive and Innate Immunity in the Chronic Phase of *Trichinella spiralis* Infection
Kichul Shin, Gerald F. M. Watts, Hans C. Oettgen, Daniel S. Friend, Alan D. Pemberton, Michael F. Gurish, and David M. Lee

4892 Relative Levels of M-CSF and GM-CSF Influence the Specific Generation of Macrophage Populations during Infection with *Mycobacterium tuberculosis*
David M. Higgins, Joaquin Sanchez-Campillo, Adrian G. Rosas-Taraco, Jonathan R. Higgins, Eric J. Lee, Ian M. Orme, and Mercedes Gonzalez-Juarrero

4901 Retargeting of Human T Cells to Tumor-Associated MUC1: The Evolution of a Chimeric Antigen Receptor
Scott Wilkie, Gianfranco Picco, Julie Foster, David M. Davies, Sylvain Julien, Lucienne Cooper, Sefina Arif, Stephen J. Mather, Joyce Taylor-Papadimitriou, Joy M. Burchell, and John Maher

4910 MDA5 Participates in the Detection of Paramyxovirus Infection and Is Essential for the Early Activation of Dendritic Cells in Response to Sendai Virus Defective Interfering Particles
Jacob S. Yount, Leonid Gitlin, Thomas M. Moran, and Carolina B. López

4919 CD209⁺ Macrophages Mediate Host Defense against *Propionibacterium acnes*
Philip T. Liu, Jenny Phan, Dominic Tang, Melissa Kanchanapoomi, Brian Hall, Stephan R. Krutzik, and Jenny Kim

4924 Maturation of Paneth Cells Induces the Refractory State of Newborn Mice to *Shigella* Infection
Maria-Isabel Fernandez, Béatrice Regnault, Céline Mulet, Myriam Tanguy, Philippe Jay, Philippe J. Sansonetti, and Thierry Pédrón

- 4931 Adenoviral Expression of Suppressor of Cytokine Signaling-1 Reduces Adenovirus Vector-Induced Innate Immune Responses
Haruna Sakurai, Katsuhisa Tashiro, Kenji Kawabata, Tomoko Yamaguchi, Fuminori Sakurai, Shinsaku Nakagawa, and Hiroyuki Mizuguchi
- 4939 IL-13 Attenuates Gastrointestinal Candidiasis in Normal and Immunodeficient RAG-2^{-/-} Mice via Peroxisome Proliferator-Activated Receptor- γ Activation
Agnès Coste, Céline Lagane, Cédric Filipe, Hélène Authier, Amandine Galès, José Bernad, Victorine Douin-Echinard, Jean-Claude Lepert, Patricia Balard, Marie-Denise Linas, Jean-François Arnal, Johan Auwerx, and Bernard Pipy
- 4948 IL-4R α Expression by Bone Marrow-Derived Cells Is Necessary and Sufficient for Host Protection against Acute Schistosomiasis
De'Broski R. Herbert, Tatyana Orekov, Charles Perkins, Marc E. Rothenberg, and Fred D. Finkelman
- 4956 Protection against Influenza A Virus by Memory CD8 T Cells Requires Reactivation by Bone Marrow-Derived Dendritic Cells
Paola Castiglioni, De Shon Hall, Erica L. Jacovetty, Elizabeth Ingulli, and Maurizio Zanetti
- 4965 Differential Initiation of Innate Immune Responses Induced by Human Cytomegalovirus Entry into Fibroblast Cells
Laura K. Juckem, Karl W. Boehme, Adam L. Feire, and Teresa Compton

INFLAMMATION

- 4978 Apoptotic Cells Protect Mice against Lipopolysaccharide-Induced Shock
Yi Ren, Yi Xie, Guoping Jiang, Jianqing Fan, Joseph Yeung, Wen Li, Paul K. H. Tam, and John Savill
- 4986 TLR2 Regulates Gap Junction Intercellular Communication in Airway Cells
Francis J. Martin and Alice S. Prince
- 4994 Suppression of Proteoglycan-Induced Arthritis by Anti-CD20 B Cell Depletion Therapy Is Mediated by Reduction in Autoantibodies and CD4⁺ T Cell Reactivity
Keith Hamel, Paul Doodes, Yanxia Cao, Yumei Wang, Jeffrey Martinson, Robert Dunn, Marilyn R. Kehry, Balint Farkas, and Alison Finnegan
- 5004 The Synthetic Peroxisome Proliferator-Activated Receptor- γ Agonist Ciglitazone Attenuates Neuroinflammation and Accelerates Encapsulation in Bacterial Brain Abscesses
Tammy Kielian, Mohsin Md. Syed, Shuliang Liu, Nirmal K. Phulwani, Napoleon Phillips, Gail Wagoner, Paul D. Drew, and Nilufer Esen
- 5017 Molecular Characterization of *Helicobacter pylori* VacA Induction of IL-8 in U937 Cells Reveals a Prominent Role for p38MAPK in Activating Transcription Factor-2, cAMP Response Element Binding Protein, and NF- κ B Activation
Junzo Hisatsune, Masaaki Nakayama, Hajime Isomoto, Hisao Kurazono, Naofumi Mukaida, Asish K. Mukhopadhyay, Takeshi Azuma, Yoshio Yamaoka, Jan Sap, Eiki Yamasaki, Kinnosuke Yahiro, Joel Moss, and Toshiya Hirayama
- 5028 Phosphatidylinositol 3-Kinase and Xanthine Oxidase Regulate Nitric Oxide and Reactive Oxygen Species Productions by Apoptotic Lymphocyte Microparticles in Endothelial Cells
H. Ahmed Mostefai, Abdelali Agouni, Nunzia Carusio, M. Letizia Mastronardi, Christophe Heymes, Daniel Henrion, Ramarosan Andriantsitohaina, and M. Carmen Martinez
- 5036 Macrophages Produce TGF- β -Induced (β -ig-h3) following Ingestion of Apoptotic Cells and Regulate MMP14 Levels and Collagen Turnover in Fibroblasts
Natalia Nacu, Irina G. Luzina, Kendrick Highsmith, Virginia Locketell, Kerill Pochetuben, Zachary A. Cooper, Michael P. Gillmeister, Nevins W. Todd, and Sergei P. Atamas
- 5045 *Salmonella* Secreted Factor L Deubiquitinase of *Salmonella typhimurium* Inhibits NF- κ B, Suppresses I κ B α Ubiquitination and Modulates Innate Immune Responses
Gaëlle Le Negrate, Benjamin Faustin, Kate Welsh, Markus Loeffler, Maryla Krajewska, Patty Hasegawa, Sohini Mukherjee, Kim Orth, Stan Krajewski, Adam Godzik, Donald G. Guiney, and John C. Reed
- 5057 Complement Receptors 1 and 2 Influence the Immune Environment in a B Cell Receptor-Independent Manner
Amanda C. Jacobson, Janis J. Weis, and John H. Weis

- 5067 High Mobility Group Box 1 Protein Binding to Lipopolysaccharide Facilitates Transfer of Lipopolysaccharide to CD14 and Enhances Lipopolysaccharide-Mediated TNF- α Production in Human Monocytes
Ju Ho Youn, Young Joo Oh, Eun Sook Kim, Ji Eun Choi, and Jeon-Soo Shin
- 5075 Macrophage Deletion of p38 α Partially Impairs Lipopolysaccharide-Induced Cellular Activation
Young Jun Kang, Jianming Chen, Motoyuki Otsuka, Johann Mols, Shuxun Ren, Yinbin Wang, and Jiabuai Han
- 5083 Destructive Arthritis in the Absence of Both Fc γ RI and Fc γ RIII
Peter Boross, Peter L. van Lent, Javier Martin-Ramirez, Jos van der Kaa, Melissa H. C. M. Mulder, Jill W. C. Claassens, Wim B. van den Berg, Victoria L. Arandhara, and J. Sjeff Verbeek

CLINICAL IMMUNOLOGY

- 5092 Broadly Immunogenic HLA Class I Supertype-Restricted Elite CTL Epitopes Recognized in a Diverse Population Infected with Different HIV-1 Subtypes
Carina L. Pérez, Mette V. Larsen, Rasmus Gustafsson, Melissa M. Norström, Ann Atlas, Douglas F. Nixon, Morten Nielsen, Ole Lund, and Annika C. Karlsson
- 5101 A Novel Type I IFN-Producing Cell Subset in Murine Lupus
Pui Y. Lee, Jason S. Weinstein, Dina C. Nacionales, Philip O. Scumpia, Yi Li, Edward Butfiloski, Nico van Rooijen, Lyle Moldawer, Minoru Satoh, and Westley H. Reeves
- 5109 Human CD4⁺ T Cells Recognize an Epitope within α -Fetoprotein Sequence and Develop into TGF- β -Producing CD4⁺ T Cells
Akeel Alisa, Sandra Boswell, Ansar A. Pathan, Lakshmana Ayaru, Roger Williams, and Shabriar Behboudi
- 5118 IL-2/Anti-IL-2 Antibody Complex Enhances Vaccine-Mediated Antigen-Specific CD8⁺ T Cell Responses and Increases the Ratio of Effector/Memory CD8⁺ T Cells to Regulatory T Cells
Sven Mostböck, M. E. Christine Lutsiak, Diane E. Milenic, Kwamena Baidoo, Jeffrey Schlom, and Helen Sabzevari
- 5130 CXCL13, CCL21, and CXCL12 Expression in Salivary Glands of Patients with Sjögren's Syndrome and MALT Lymphoma: Association with Reactive and Malignant Areas of Lymphoid Organization
Francesca Barone, Michele Bombardieri, Manuela Maria Rosado, Peter Roger Morgan, Stephen J. Challacombe, Salvatore De Vita, Rita Carsetti, Jo Spencer, Guido Valesini, and Costantino Pitzalis
- 5141 The Presence of Activated CD4⁺ T Cells Is Essential for the Formation of Colony-Forming Unit-Endothelial Cells by CD14⁺ Cells
Rachel T. van Beem, Willy A. Noort, Carlijn Voermans, Marion Kleijer, Anja ten Brinke, S. Marieke van Ham, C. Ellen van der Schoot, and Jaap Jan Zwaginga
- 5149 Author Index