

Luminex
complexity simplified.



Reimagine your discoveries
Amnis[®] ImageStream[®] Mk II and
FlowSight[®] Imaging Flow Cytometers

Learn more >



182 (11)

J Immunol 2009; 182:6631-7324; ;
<http://www.jimmunol.org/content/182/11>

This information is current as
of September 30, 2022.

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.



6631 IN THIS ISSUE

PILLARS OF IMMUNOLOGY

6633 Animal Antimicrobial Peptides: Ancient Players in Innate Immunity
Jack L. Strominger

6635 Pillars Article: Sequence and Specificity of Two Antibacterial Proteins Involved in Insect Immunity.
Nature 1981. 292: 246–248.
Håkan Steiner, Dan Hultmark, Åke Engström, Hans Bennich, and Hans G. Boman

CUTTING EDGE

6639 Cutting Edge: Highly Alloreactive Dual TCR T Cells Play a Dominant Role in Graft-versus-Host Disease
Gerald P. Morris and Paul M. Allen

6644 Cutting Edge: CD28 Engagement Releases Antigen-Activated Invariant NKT Cells from the Inhibitory Effects of PD-1
Jianxiong Wang, Lu Cheng, Zenebech Wondimu, Mark Swain, Pere Santamaria, and Yang Yang

6648 Cutting Edge: TCR Stimulation Is Sufficient for Induction of Foxp3 Expression in the Absence of DNA Methyltransferase 1
Steven Z. Josefowicz, Christopher B. Wilson, and Alexander Y. Rudensky

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

6653 Pollen-Derived E₁-Phytosteranes Signal via PPAR- γ and NF- κ B-Dependent Mechanisms
Stefanie Gilles, Valentina Mariani, Martina Bryce, Martin J. Mueller, Johannes Ring, Thilo Jakob, Saveria Pastore, Heidrun Behrendt, and Claudia Traidl-Hoffmann

6659 Functionally Distinct LAG-3 and PD-1 Subsets on Activated and Chronically Stimulated CD8 T Cells
Joseph F. Grosso, Monica V. Goldberg, Derese Gernet, Tullia C. Bruno, Hung-Rong Yen, Kristin J. Pyle, Edward Hipkiss, Dario A. A. Vignali, Drew M. Pardoll, and Charles G. Drake

On the cover: Human embryonic stem cells colonies generate hematopoietic zones upon transfer on OP9 feeder layers. These hematopoietic zones are endothelium-lined structures containing round CD34⁺CD43⁺ hematopoietic precursor cells. Transfer of such zones on Delta-ligand 1-expressing OP9 cells results in differentiation to mature T cells. Timmermans, F., I. Velghe, L. Vanwalleghem, M. De Smedt, S. Van Coppennolle, T. Taghon, H. D. Moore, G. Leclercq, A. W. Langerak, T. Kerre, J. Plum, and B. Vandekerckhove. 2009. Generation of T cells from human embryonic stem cell-derived hematopoietic zones. *J. Immunol.* 182: 6879–6888.

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 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>). 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 © 2009 by The American Association of Immunologists, Inc.

- 6670 Interaction of the Hepatitis B Core Antigen and the Innate Immune System
Byung O. Lee, Amy Tucker, Lars Frelin, Matti Sallberg, Joyce Jones, Cory Peters, Janice Hughes, David Whitacre, Bryan Darsow, Darrell L. Peterson, and David R. Milich
- 6682 PD-1-Mediated Suppression of IL-2 Production Induces CD8⁺ T Cell Anergy In Vivo
Shunsuke Chikuma, Seigo Terawaki, Tamon Hayashi, Ryusuke Nabeshima, Takao Yoshida, Shiro Shibayama, Taku Okazaki, and Tasuku Honjo
- 6690 Induction of Distinct TLR2-Mediated Proinflammatory and Proadhesive Signaling Pathways in Response to *Porphyromonas gingivalis* Fimbriae
George Hajishengallis, Min Wang, and Shuang Liang
- 6697 Chronic Antigen Stimulation Alone Is Sufficient to Drive CD8⁺ T Cell Exhaustion
Christine M. Bucks, Jillian A. Norton, Alina C. Boesteanu, Yvonne M. Mueller, and Peter D. Katsikis
- 6709 Langerhans Cell Maturation and Contact Hypersensitivity Are Impaired in Aryl Hydrocarbon Receptor-Null Mice
Bettina Jux, Stephanie Kadow, and Charlotte Esser
- 6718 Dominant Human CD8 T Cell Clonotypes Persist Simultaneously as Memory and Effector Cells in Memory Phase
Cédric Touvrey, Laurent Derré, Estelle Devevre, Patricia Corthesy, Pedro Romero, Nathalie Rufer, and Daniel E. Speiser
- 6727 Phenotypic and Functional Analyses of KIR3DL1⁺ and KIR3DS1⁺ NK Cell Subsets Demonstrate Differential Regulation by Bw4 Molecules and Induced KIR3DS1 Expression on Stimulated NK Cells
Maelig Morvan, Catherine Willem, Katia Gagne, Nolwenn Kerdudou, Gaelle David, Véronique Sébille, Gilles Folléa, Jean-Denis Bignon, and Christelle Retière
- 6736 CARMA1 Controls an Early Checkpoint in the Thymic Development of FoxP3⁺ Regulatory T Cells
Luciana L. Molinero, Jianying Yang, Thomas Gajewski, Clara Abraham, Michael A. Farrar, and Maria-Luisa Alegre
- 6744 Cooperation between Molecular Targets of Costimulation in Promoting T Cell Persistence and Tumor Regression
Baohua Zhao, Aihua Song, Rizwanul Haque, Fengyang Lei, Lauren Weiler, Xiaofang Xiong, Yuzhang Wu, Michael Croft, and Jianxun Song
- 6753 Hypercostimulation through 4-1BB Distorts Homeostasis of Immune Cells
Seung-Woo Lee, Shahram Salek-Ardakani, Robert S. Mittler, and Michael Croft
- 6763 IL-15 Renders Conventional Lymphocytes Resistant to Suppressive Functions of Regulatory T Cells through Activation of the Phosphatidylinositol 3-Kinase Pathway
Mélina Ben Ahmed, Nadia Belhadj Hmida, Nicolette Moes, Sophie Buyse, Maha Abdeladhim, Hechmi Louzir, and Nadine Cerf-Bensussan
- 6771 Tumoricidal Effects of Activated Macrophages in a Mouse Model of Chronic Lymphocytic Leukemia
Qing-Li Wu, Ilia N. Buhtoiarov, Paul M. Sondel, Alexander L. Rakhmilevich, and Erik A. Ranheim
- 6779 Control of Thymic T Cell Maturation, Deletion and Egress by the RNA-Binding Protein HuR
Olympia Papadaki, Stavros Milatos, Sofia Grammenoudi, Neelanjan Mukherjee, Jack D. Keene, and Dimitris L. Kontoyiannis
- 6789 The CysLT₁ Ligand Leukotriene D₄ Supports $\alpha_4\beta_1$ - and $\alpha_5\beta_1$ -Mediated Adhesion and Proliferation of CD34⁺ Hematopoietic Progenitor Cells
Andreas M. Boehmler, Adriana Drost, Lena Jaggy, Gabriele Seitz, Tina Wiesner, Claudio Denzlinger, Lothar Kanz, and Robert Möhle
- 6799 Teleost B7 Expressed on Monocytes Regulates T Cell Responses
Ryuichi Sugamata, Hiroaki Suetake, Kiyoshi Kikuchi, and Yuzuru Suzuki
- 6807 Impaired NFAT Transcriptional Activity in Antigen-Stimulated CD8 T Cells Linked to Defective Phosphorylation of NFAT Transactivation Domain
Stéphane Leung-Theung-Long, Isabelle Mondor, Martine Guiraud, Camille Lamare, Viswas Nageleekar, Pierre-Emmanuel Paulet, Mercedes Rincon, and Sylvie Guerder

- 6815 CD2 Distinguishes Two Subsets of Human Plasmacytoid Dendritic Cells with Distinct Phenotype and Functions
Toshimichi Matsui, John E. Connolly, Mark Michnevitz, Damien Chaussabel, Chun-I Yu, Casey Glaser, Sasha Tindle, Marc Pypaert, Heidi Freitas, Bernard Piqueras, Jacques Banchereau, and A. Karolina Palucka
- 6824 Selection of Molecular Structure and Delivery of RNA Oligonucleotides to Activate TLR7 versus TLR8 and to Induce High Amounts of IL-12p70 in Primary Human Monocytes
Andrea Ablasser, Hendrik Poeck, David Anz, Michael Berger, Martin Schlee, Sarah Kim, Carole Bourquin, Nadege Goutagny, Zhaozhao Jiang, Katherine A. Fitzgerald, Simon Rothenfusser, Stefan Endres, Gunther Hartmann, and Veit Hornung
- 6834 Costimulation Modulation Uncouples Protection from Immunopathology in Memory T Cell Responses to Influenza Virus
John R. Teijaro, Modesta N. Njau, David Verhoeven, Smita Chandran, Steven G. Nadler, Jeffrey Hasday, and Donna L. Farber
- 6844 CD40-Independent Engagement of Mammalian hsp70 by Antigen-Presenting Cells
Robert J. Binder
- 6851 CCR7-CCL19/CCL21-Regulated Dendritic Cells Are Responsible for Effectiveness of Sublingual Vaccination
Joo-Hye Song, Jung-Im Kim, Hyung-Joon Kwon, Doo-Hee Shim, Nirmala Parajuli, Nicolas Cuburu, Cecil Czerkinsky, and Mi-Na Kweon
- 6861 Chemokine Receptor CCR7 Contributes to a Rapid and Efficient Clearance of Lytic Murine γ -Herpes Virus 68 from the Lung, Whereas Bronchus-Associated Lymphoid Tissue Harbors Virus during Latency
Jessica R. Kocks, Heiko Adler, Heike Danzer, Katharina Hoffmann, Danny Jonigk, Ulrich Lehmann, and Reinhold Förster
- 6870 Vav1 Is Essential for Mechanotactic Crawling and Migration of Neutrophils out of the Inflamed Microvasculature
Mia Phillipson, Bryan Heit, Sean A. Parsons, Björn Petri, Sarah C. Mullaly, Pina Colarusso, R. Michael Gower, Gregory Neely, Scott I. Simon, and Paul Kubas
- 6879 Generation of T Cells from Human Embryonic Stem Cell-Derived Hematopoietic Zones
Frank Timmermans, Imke Velghe, Lieve Vanwallegghem, Magda De Smedt, Stefanie Van Coppennolle, Tom Taghon, Harry D. Moore, Georges Leclercq, Anton W. Langerak, Tessa Kerre, Jean Plum, and Bart Vandekerckhove
- 6889 TLR Activation Induces TNF- α Production from Adult Neural Stem/Progenitor Cells
Ruxandra Covacu, Lisa Arvidsson, Åsa Andersson, Mohsen Khademi, Helena Erlandsson-Harris, Robert A. Harris, Mikael A. Svensson, Tomas Olsson, and Lou Brundin
- 6896 The Golgi-Associated Protein p115 Mediates the Secretion of Macrophage Migration Inhibitory Factor
Melanie Merk, John Baugh, Swen Zierow, Lin Leng, Utpal Pal, Seung Joon Lee, Antje D. Ebert, Yuka Mizue, John O. Trent, Robert Mitchell, Walter Nickel, Paula B. Kavathas, Jürgen Bernhagen, and Richard Bucala
- 6907 Macrophage Migration Inhibitory Factor Homologs of *Anisakis simplex* Suppress Th2 Response in Allergic Airway Inflammation Model via CD4⁺CD25⁺Foxp3⁺ T Cell Recruitment
Sang Kyun Park, Min Kyoung Cho, Hye-Kyung Park, Keun Hee Lee, Sun Joo Lee, Seon Hee Choi, Mee Sun Ock, Hae Jin Jeong, Moo Hyung Lee, and Hak Sun Yu
- 6915 In Situ IL-12/23p40 Production during Mycobacterial Infection Is Sustained by CD11b^{high} Dendritic Cells Localized in Tissue Sites Distinct from Those Harboring Bacilli
Antonio Gigliotti Rothfuchs, Jackson G. Egen, Carl G. Feng, Lis R. V. Antonelli, Andre Bafica, Nathalie Winter, Richard M. Locksley, and Alan Sher
- 6926 Ig Synthesis and Class Switching Do Not Require the Presence of the hs4 Enhancer in the 3' IgH Regulatory Region
Christelle Vincent-Fabert, Véronique Truffinet, Remi Fiancette, Nadine Cogné, Michel Cogné, and Yves Denizot
- 6933 PI3K Links NKG2D Signaling to a CrkL Pathway Involved in Natural Killer Cell Adhesion, Polarity, and Granule Secretion
Colin M. Segovis, Renee A. Schoon, Christopher J. Dick, Lucas P. Nacusi, Paul J. Leibson, and Daniel D. Billadeau

- 6943 Osteopontin Enhances Phagocytosis through a Novel Osteopontin Receptor, the $\alpha_x\beta_2$ Integrin
Lotte Schack, Romualdas Stapulionis, Brian Christensen, Emil Kofod-Olsen, Uffe B. Skov Sørensen, Thomas Vorup-Jensen, Esben S. Sørensen, and Per Höllsberg
- 6951 IL-7 Promotes CXCR3 Ligand-Dependent T Cell Antitumor Reactivity in Lung Cancer
Åsa Andersson, Seok-Chul Yang, Min Huang, Li Zhu, Upendra K. Kar, Raj K. Batra, David Elashoff, Robert M. Strieter, Steven M. Dubinett, and Sherven Sharma
- 6959 Dendritic Cells Use Endocytic Pathway for Cross-Priming Class Ib MHC-Restricted CD8 $\alpha\alpha^+$ TCR $\alpha\beta^+$ T Cells with Regulatory Properties
Trevor R. F. Smith, Xiaolei Tang, Igor Maricic, Zacarias Garcia, Shaohsuan Fanchiang, and Vipin Kumar
- 6969 Myosin IIA Associates with NK Cell Lytic Granules to Enable Their Interaction with F-Actin and Function at the Immunological Synapse
Keri B. Sanborn, Gregory D. Rak, Saumya Y. Maru, Korey Demers, Analisa Difeo, John A. Martignetti, Michael R. Betts, Rémi Favier, Pinaki P. Banerjee, and Jordan S. Orange

MOLECULAR AND STRUCTURAL IMMUNOLOGY

- 6985 The Chicken Leukocyte Receptor Complex Encodes a Family of Different Affinity Fc γ Receptors
Birgit C. Viertlboeck, Sonja Schweinsberg, Ramona Schmitt, Friedrich W. Herberg, and Thomas W. Göbel
- 6993 Granulysin Induces Cathepsin B Release from Lysosomes of Target Tumor Cells to Attack Mitochondria through Processing of Bid Leading to Necroptosis
Honglian Zhang, Chao Zhong, Lei Shi, Yuming Guo, and Zusen Fan
- 7001 CD45-Mediated Fodrin Cleavage during Galectin-1 T Cell Death Promotes Phagocytic Clearance of Dying Cells
Mabel Pang, Jiale He, Pauline Johnson, and Linda G. Baum
- 7009 The Binding of Factor H to a Complex of Physiological Polyanions and C3b on Cells Is Impaired in Atypical Hemolytic Uremic Syndrome
Viviana P. Ferreira, Andrew P. Herbert, Claudio Cortés, Kristi A. McKee, Bärbel S. Blaum, Stefan T. Esswein, Dušan Uhrín, Paul N. Barlow, Michael K. Pangburn, and David Kavanagh
- 7019 Cloning, Expression, and Mapping of Allergenic Determinants of α S1-Casein, a Major Cow's Milk Allergen
Ulrike Schulmeister, Heidrun Hochwallner, Ines Swoboda, Margarete Focke-Tejkl, Beate Geller, Mats Nystrand, Annika Härlin, Josef Thalhamer, Sandra Scheiblhofer, Walter Keller, Bodo Niggemann, Santiago Quirce, Christoph Ebner, Adriano Mari, Gabrielle Pauli, Udo Herz, Rudolf Valenta, and Susanne Spitzauer
- 7030 Fatty Acyl Structures of *Mycobacterium tuberculosis* Sulfoglycolipid Govern T Cell Response
Julie Guiard, Anthony Collmann, Luis Fernando Garcia-Alles, Lionel Mourey, Thérèse Brando, Lucia Mori, Martine Gilleron, Jacques Prandi, Gennaro De Libero, and Germain Puzo
- 7038 De Novo Ceramide Synthesis Is Required for N-Linked Glycosylation in Plasma Cells
Meidan Goldfinger, Elad L. Laviad, Rivka Hadar, Miri Shmuel, Arie Dagan, Hyejung Park, Alfred H. Merrill, Jr., Israel Ringel, Anthony H. Futerman, and Boaz Tirosh
- 7048 Inhibition and Genetic Deficiency of p38 MAPK Up-Regulates Heme Oxygenase-1 Gene Expression via Nrf2
Srivatsava Naidu, Vijith Vijayan, Sentot Santoso, Thomas Kietzmann, and Stephan Immenschuh

HOST DEFENSE

- 7058 Antiviral Antibodies Target Adenovirus to Phagolysosomes and Amplify the Innate Immune Response
Anne K. Zaiss, Akosua Vilaysane, Matthew J. Cotter, Sharon A. Clark, H. Christopher Meijndert, Pina Colarusso, Robin M. Yates, Virginia Petrilli, Jurg Tschopp, and Daniel A. Muruve
- 7069 Identification of an IFN- γ -Producing Neutrophil Early in the Response to *Listeria monocytogenes*
Jiyi Yin and Thomas A. Ferguson

- 7074 The UDP-Glucose Receptor P2RY14 Triggers Innate Mucosal Immunity in the Female Reproductive Tract by Inducing IL-8
Toru Arase, Hiroshi Uchida, Takashi Kajitani, Masanori Ono, Kayoko Tamaki, Hideyuki Oda, Sayaka Nishikawa, Maki Kagami, Takashi Nagashima, Hirotaka Masuda, Hironori Asada, Yasunori Yoshimura, and Tetsuo Maruyama
- 7085 The CD4⁺ T Cell-Mediated IFN- γ Response to *Helicobacter* Infection Is Essential for Clearance and Determines Gastric Cancer Risk
Ayca Sayi, Esther Kohler, Iris Hitzler, Isabelle Arnold, Reto Schwendener, Hubert Rehrauer, and Anne Müller
- 7102 Airway Delivery of Silica Increases Susceptibility to Mycobacterial Infection in Mice: Potential Role of Repopulating Macrophages
Rajamouli Pasula, Bradley E. Britigan, Joanne Turner, and William J. Martin II
- 7110 Lipoproteins in *Staphylococcus aureus* Mediate Inflammation by TLR2 and Iron-Dependent Growth In Vivo
Mathias Schmalzer, Naja J. Jann, Fabrizia Ferracin, Lea Z. Landolt, Lalitha Biswas, Friedrich Götz, and Regine Landmann
- 7119 TLR2 Deficiency Leads to Increased Th17 Infiltrates in Experimental Brain Abscesses
Jessica R. Nichols, Amy L. Aldrich, Monica M. Mariani, Debbie Vidlak, Nilufer Esen, and Tammy Kielian
- 7131 Kinetics of Expansion of Epitope-Specific T Cell Responses during Primary HIV-1 Infection
Emma L. Turnbull, MaiLee Wong, Shuyi Wang, Xiping Wei, Nicola A. Jones, Karen E. Conrod, Diana Aldam, Jo Turner, Pierre Pellegrino, Brandon F. Keele, Ian Williams, George M. Shaw, and Persephone Borrow
- 7146 Miltefosine Promotes IFN- γ -Dominated Anti-Leishmanial Immune Response
Pallavi Wadhone, Moitrayee Maiti, Reena Agarwal, Vanita Kamat, Sunil Martin, and Bhaskar Saha
- 7155 Human Milk-Derived B Cells: A Highly Activated Switched Memory Cell Population Primed to Secrete Antibodies
Edouard Tuaille, Diane Valea, Pierre Becquart, Yassine Al Tabaa, Nicolas Meda, Karine Bollere, Philippe Van de Perre, and Jean-Pierre Vendrell
- 7163 MHC Class I D^k Locus and Ly49G2⁺ NK Cells Confer H-2^k Resistance to Murine Cytomegalovirus
Xuefang Xie, Michael D. Stadnisky, and Michael G. Brown
- 7172 Antigen Load Governs the Differential Priming of CD8 T Cells in Response to the Bacille Calmette Guérin Vaccine or *Mycobacterium tuberculosis* Infection
Anthony A. Ryan, Jonathan K. Nambiar, Teresa M. Wozniak, Ben Roediger, Elena Shklovskaya, Warwick J. Britton, Barbara Fazekas de St. Groth, and James A. Triccas
- 7178 Multiple Mechanisms Contribute to Impairment of Type 1 Interferon Production during Chronic Lymphocytic Choriomeningitis Virus Infection of Mice
Lian Ni Lee, Shannon Burke, Maria Montoya, and Persephone Borrow

INFLAMMATION

- 7190 Myeloid-Specific Deletion of Tumor Suppressor PTEN Augments Neutrophil Transendothelial Migration during Inflammation
Bara Sarraj, Steffen Massberg, Yitang Li, Anongnard Kasorn, Kulandayan Subramanian, Fabien Loison, Leslie E. Silberstein, Ulrich von Andrian, and Hongbo R. Luo
- 7201 Suppression of NF- κ B by Cyclosporin A and Tacrolimus (FK506) via Induction of the C/EBP Family: Implication for Unfolded Protein Response
Shuqi Du, Nobuhiko Hiramatsu, Kunihiro Hayakawa, Ayumi Kasai, Maro Okamura, Tao Huang, Jian Yao, Masayuki Takeda, Isao Araki, Norifumi Sawada, Adrienne W. Paton, James C. Paton, and Masanori Kitamura
- 7212 Differential Role for c-Rel and C/EBP β/δ in TLR-Mediated Induction of Proinflammatory Cytokines
Yong-Chen Lu, Ira Kim, Elizabeth Lye, Fang Shen, Nobutaka Suzuki, Shinobu Suzuki, Steve Gerondakis, Shizuo Akira, Sarah L. Gaffen, Wen-Chen Yeh, and Pamela S. Ohashi

- 7222 MFG-E8 Attenuates Intestinal Inflammation in Murine Experimental Colitis by Modulating Osteopontin-Dependent $\alpha_v\beta_3$ Integrin Signaling
Md. Monowar Aziz, Shunji Ishihara, Yoshiyuki Mishima, Naoki Oshima, Ichiro Moriyama, Takafumi Yuki, Yasunori Kadowaki, Mohammad Azharul Karim Rumi, Yuji Amano, and Yoshikazu Kinoshita
- 7233 Dexamethasone and FK506 Inhibit Expression of Distinct Subsets of Chemokines in Human Mast Cells
Atsushi Kato, Regina T. Chustz, Takahisa Ogasawara, Marianna Kulka, Hirohisa Saito, Robert P. Schleimer, and Kenji Matsumoto
- 7244 Soluble TLR2 Is Present in Human Amniotic Fluid and Modulates the Intraamniotic Inflammatory Response to Infection
Antonette T. Dulay, Catalin S. Buhimschi, Guomao Zhao, Emily A. Oliver, Ayanda Mbele, Shichu Jing, and Irina A. Buhimschi
- 7254 Coronin-1 Is Associated with Neutrophil Survival and Is Cleaved during Apoptosis: Potential Implication in Neutrophils from Cystic Fibrosis Patients
Sandra Moriceau, Chahrazade Kantari, Julie Mocek, Noélie Davezac, Julie Gabillet, Ida Chiara Guerrero, Frank Brouillard, Danielle Tondelier, Isabelle Sermet-Gaudelus, Claire Danel, Gérard Lenoir, Soizic Daniel, Aleksander Edelman, and Véronique Witko-Sarsat
- 7264 Disruption of Nrf2 Impairs the Resolution of Hyperoxia-Induced Acute Lung Injury and Inflammation in Mice
Narsa M. Reddy, Steven R. Kleeberger, Thomas W. Kensler, Masayuki Yamamoto, Paul M. Hassoun, and Sekhar P. Reddy
- 7272 Recombinant Soluble Human Fc γ R1A (CD64A) Reduces Inflammation in Murine Collagen-Induced Arthritis
Jeff L. Ellsworth, Nels Hamacher, Brandon Harder, Ken Bannink, Thomas R. Bukowski, Kelly Byrnes-Blake, Sara Underwood, Colleen Oliver, Kimberly S. Waggle, Claire Noriega, LuAnne Hebb, Mark W. Rixon, and Katherine E. Lewis
- 7280 Lipopolysaccharide-Induced Apoptosis in Transformed Bovine Brain Endothelial Cells and Human Dermal Microvessel Endothelial Cells: The Role of JNK
Hisae Karahashi, Kathrin S. Michelsen, and Moshe Arditi

CLINICAL IMMUNOLOGY

- 7287 Efficient Killing of Human Colon Cancer Stem Cells by $\gamma\delta$ T Lymphocytes
Matilde Todaro, Matilde D'Asaro, Nadia Caccamo, Flora Iovino, Maria Giovanna Francipane, Serena Meraviglia, Valentina Orlando, Carmela La Mendola, Gaspare Gulotta, Alfredo Salerno, Francesco Dieli, and Giorgio Stassi
- 7297 Poly(ADP-Ribose) Polymerase-1 Regulates the Progression of Autoimmune Nephritis in Males by Inducing Necrotic Cell Death and Modulating Inflammation
Neelakshi R. Jog, Joudy-Ann Dinnall, Stefania Gallucci, Michael P. Madaio, and Roberto Caricchio
- 7307 The Role of Intrapulmonary De Novo Lymphoid Tissue in Obliterative Bronchiolitis after Lung Transplantation
Masaaki Sato, Shin Hirayama, David M. Hwang, Humberto Lara-Guerra, Dirk Wagnetz, Thomas K. Waddell, Mingyao Liu, and Shaf Keshavjee
- 7317 CD27 Expression on CD4⁺ T Cells Differentiates Effector from Regulatory T Cell Subsets in the Lung
Douglas G. Mack, Allison M. Lanham, Brent E. Palmer, Lisa A. Maier, and Andrew P. Fontenot
- 7325 AUTHOR INDEX