

Guava[®] and Amnis[®]
Flow Cytometers
are Now Part of Luminex.



Luminex[®]
complexity simplified.



185 (1)

J Immunol 2010; 185:1-771; ;
<http://www.jimmunol.org/content/185/1>

This information is current as
of March 26, 2019.

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.



1 IN THIS ISSUE

PILLARS OF IMMUNOLOGY

- 3 Blimp-1's Maiden Flight
Kathryn Calame

- 5 Pillars Article: Blimp-1, a Novel Zinc Finger-Containing Protein That Can Drive the Maturation of B Lymphocytes into Immunoglobulin-Secreting Cells. *Cell*. 1994. 77: 297–306
C. Alexander Turner, Jr., David H. Mack, and Mark M. Davis

BRIEF REVIEWS

- 15 Understanding Latent Tuberculosis: A Moving Target
Philana Ling Lin and JoAnne L. Flynn

CUTTING EDGE

- 23 Cutting Edge: FcR-Like 6 Is an MHC Class II Receptor
Daniel M. Schreeder, John P. Cannon, Jiongru Wu, Ran Li, Mikhail A. Shakhmatov, and Randall S. Davis
- 28 Cutting Edge: FcR-Like 5 on Innate B Cells Is Targeted by a Poxvirus MHC Class I-Like Immuno-evasin
Jessica A. Campbell, Randall S. Davis, Lauren M. Lilly, Daved H. Fremont, Anthony R. French, and Leonidas N. Carayannopoulos

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

- 33 TLR4 Signaling Inhibitory Pathway Induced by Green Tea Polyphenol Epigallocatechin-3-Gallate through 67-kDa Laminin Receptor
Eui Hong Byun, Yoshinori Fujimura, Koji Yamada, and Hirofumi Tachibana
- 46 TGF- β Induces IL-9 Production from Human Th17 Cells
Gaëlle Beriou, Elizabeth M. Bradshaw, Ester Lozano, Cristina M. Costantino, William D. Hastings, Tihamer Orban, Wassim Elyaman, Samia J. Khoury, Vijay K. Kuchroo, Clare Baecher-Allan, and David A. Hafler

On the cover: Side view of the Ag-binding groove of bovine CD1b3 (in gray) and human CD1b (in cyan). The bound bovine CD1b3 ligands phosphatidylcholine and phosphatidylethanolamine (in yellow and orange, respectively) are shown in comparison with the human CD1b ligands phosphatidylcholine and a spacer molecule (both in cyan). Girardi, E., J. Wang, T.-T. Mac, C. Versluis, V. Bhowruth, G. Besra, A. J. R. Heck, I. Van Rhijn, and D. M. Zajonc. 2010. Crystal structure of bovine CD1b3 with endogenously bound ligands. *J. Immunol.* 185: 376–386.

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.

- 55 NKG2D Costimulates Human V γ 9V δ 2 T Cell Antitumor Cytotoxicity through Protein Kinase C θ -Dependent Modulation of Early TCR-Induced Calcium and Transduction Signals
Steven Nedellec, Caroline Sabourin, Marc Bonneville, and Emmanuel Scotet
- 64 Live Cell Imaging Reveals Continuous STAT6 Nuclear Trafficking
Hui-Chen Chen and Nancy C. Reich
- 71 “Default” Generation of Neonatal Regulatory T Cells
Guohua Wang, Yoshihiro Miyahara, Zhiyong Guo, Mithun Khattar, Stanislaw M. Stepkowski, and Wenhao Chen
- 79 Phenotypic Alterations of Dendritic Cells Are Involved in Suppressive Activity of Trichosanthin-Induced CD8⁺CD28⁻ Regulatory T Cells
Baolong Wang, Zhijun Jiao, Xiaoyi Shao, Liming Lu, Neng Yang, Xiaorong Zhou, Lijun Xin, Yun Zhou, and Kuang-Yen Chou
- 89 Mechanisms of IL-12 Synthesis by Human Dendritic Cells Treated with the Chemical Sensitizer NiSO₄
Diane Antonios, Philippe Rousseau, Alexandre Larangé, Saadia Kerdine-Römer, and Marc Pallardy
- 99 The Adaptor Molecule Act1 Regulates BAFF Responsiveness and Self-Reactive B Cell Selection during Transitional B Cell Maturation
Natalia V. Giltiay, Yi Lu, David Allman, Trine N. Jørgensen, and Xiaoxia Li
- 110 An Autoantigen-Specific, Highly Restricted T Cell Repertoire Infiltrates the Arthritic Joints of Mice in an HLA-DR1 Humanized Mouse Model of Autoimmune Arthritis
Zhaohui Qian, Kary A. Latham, Karen B. Whittington, David C. Miller, David D. Brand, and Edward F. Rosloniec
- 119 Lipopolysaccharide-Mediated Mast Cell Activation Induces IFN- γ Secretion by NK Cells
Katja Vosskuhl, Tim F. Greten, Michael P. Manns, Firouzeh Korangy, and Jochen Wedemeyer
- 126 Naturally Activated V γ 4 γ δ T Cells Play a Protective Role in Tumor Immunity through Expression of Eomesodermin
Weifeng He, Jianlei Hao, Siyuan Dong, Yunfei Gao, Jian Tao, Hongbo Chi, Richard Flavell, Rebecca L. O'Brien, Willi K. Born, Joseph Craft, Jibong Han, Puyue Wang, Liqing Zhao, Jun Wu, and Zhinan Yin
- 134 High Expression of the Ectonucleotidase CD39 on T Cells from the Inflamed Site Identifies Two Distinct Populations, One Regulatory and One Memory T Cell Population
Halima Moncrieffe, Kiran Nistala, Yasmine Kamhieh, Jamie Evans, Ayad Eddaoudi, Simon Eaton, and Lucy R. Wedderburn
- 144 *Slam* Haplotypes Modulate the Response to Lipopolysaccharide In Vivo through Control of NKT Cell Number and Function
Idil Aktan, Alan Chant, Zachary D. Borg, David E. Damby, Paige C. Leenstra, Graham W. G. Lilley, Joseph Petty, Benjamin T. Suratt, Cory Teuscher, Edward K. Wakeland, Matthew E. Poynter, and Jonathan E. Boyson
- 157 Intact NKG2D-Independent Function of NK Cells Chronically Stimulated with the NKG2D Ligand Rae-1
Marine Champsaur, Joshua N. Beilke, Kouetsu Ogasawara, Ulrich H. Koszinowski, Stipan Jonjic, and Lewis L. Lanier
- 166 Increased Targeting of Donor Switch Region and IgE in S γ 1-Deficient B Cells
Shahram Misaghi, Christopher S. Garriss, Yonglian Sun, Allen Nguyen, Juan Zhang, Andrew Sebrell, Kate Senger, Donghong Yan, Maria N. Lorenzo, Sherry Heldens, Wylene P. Lee, Min Xu, Jiansheng Wu, Laura DeForge, Tao Sai, Vishva M. Dixit, and Ali A. Zarrin
- 174 Expression of Costimulatory TNFR2 Induces Resistance of CD4⁺FoxP3⁻ Conventional T Cells to Suppression by CD4⁺FoxP3⁺ Regulatory T Cells
Xin Chen, Ryoko Hamano, Jeffrey J. Subleski, Arthur A. Hurwitz, O. M. Zack Howard, and Joost J. Oppenheim
- 183 Human T-Lymphotropic Virus Type 1-Induced CC Chemokine Ligand 22 Maintains a High Frequency of Functional FoxP3⁺ Regulatory T Cells
Frederic Toulza, Kisato Nosaka, Yuetsu Tanaka, Tiziana Schioppa, Frances Balkwill, Graham P. Taylor, and Charles R. M. Bangham

- 190 Germinal Center T Follicular Helper Cell IL-4 Production Is Dependent on Signaling Lymphocytic Activation Molecule Receptor (CD150)
Isharat Yusuf, Robin Kageyama, Laurel Monticelli, Robert J. Johnston, Daniel DiToro, Kyle Hansen, Burton Barnett, and Shane Crotty
- 203 CD49d Is a New Marker for Distinct Myeloid-Derived Suppressor Cell Subpopulations in Mice
Lydia A. Haile, Jaba Gamrekelashvili, Michael P. Manns, Firouzeh Korangy, and Tim F. Greten
- 211 Augmented Antibody Response with Premature Germinal Center Regression in CD40L Transgenic Mice
Yusuke Kishi, Yuichi Aiba, Tetsuya Higuchi, Koji Furukawa, Takeshi Tokuhisa, Toshitada Takemori, and Takeshi Tsubata
- 220 Constitutive CD40L Expression on B Cells Prematurely Terminates Germinal Center Response and Leads to Augmented Plasma Cell Production in T Cell Areas
Anna Bolduc, Eugene Long, Dale Stapler, Marilia Cascalbo, Takeshi Tsubata, Pandelakis A. Koni, and Michiko Shimoda
- 231 Consequences of Increased CD45RA and RC Isoforms for TCR Signaling and Peripheral T Cell Deficiency Resulting from Heterogeneous Nuclear Ribonucleoprotein L-Like Mutation
Zuopeng Wu, Adele L. Yates, Gerard F. Hoyne, and Christopher C. Goodnow
- 239 T Cell and APC Dynamics In Situ Control the Outcome of Vaccination
Kamal M. Khanna, David A. Blair, Anthony T. Vella, Stephen J. McSorley, Sandip K. Datta, and Leo Lefrançois
- 253 Plasticity of Invariant NKT Cell Regulation of Allergic Airway Disease Is Dependent on IFN- γ Production
Hiroyuki Matsuda, Katsuyuki Takeda, Toshiyuki Koya, Masakazu Okamoto, Yoshiki Shiraishi, Nobuaki Miyahara, Azzeddine Dakhama, Jennifer L. Matsuda, Laurent Gapin, and Erwin W. Gelfand
- 263 Early Signals during CD8⁺ T Cell Priming Regulate the Generation of Central Memory Cells
Joshua J. Obar and Leo Lefrançois
- 273 Signaling Pathways in the Activation of Mast Cells Cocultured with Astrocytes and Colocalization of Both Cells in Experimental Allergic Encephalomyelitis
Dae Yong Kim, Dooil Jeoung, and Jai Youl Ro
- 284 Fine-Scale Staging of T Cell Lineage Commitment in Adult Mouse Thymus
Mary A. Yui, Ni Feng, and Ellen V. Rothenberg
- 294 A Role for Lysosomal-Associated Protein Transmembrane 5 in the Negative Regulation of Surface B Cell Receptor Levels and B Cell Activation
Rika Ouchida, Tomohiro Kurosaki, and Ji-Yang Wang
- 302 Mesenchymal Stem Cells Inhibit Human Th17 Cell Differentiation and Function and Induce a T Regulatory Cell Phenotype
Soufiane Ghannam, Jérôme Pène, Gabriel Torcy-Moquet, Christian Jorgensen, and Hans Yssel
- 313 In Vivo Regulation of Bcl6 and T Follicular Helper Cell Development
Amanda C. Poholek, Kyle Hansen, Sairy G. Hernandez, Danelle Eto, Anmol Chandele, Jason S. Weinstein, Xuemei Dong, Jared M. Odegard, Susan M. Kaeck, Alexander L. Dent, Shane Crotty, and Joe Craft
- 327 The Adaptor Protein Sh2d3c Is Critical for Marginal Zone B Cell Development and Function
Amin Al-Shami, Carrie Wilkins, Jeannette Crisostomo, Dhaya Seshasayee, Flavius Martin, Nianhua Xu, Adisak Suwanichkul, Stephen J. Anderson, and Tamas Oravecz
- 335 Distinct Roles of Adenylyl Cyclase VII in Regulating the Immune Responses in Mice
Biyan Duan, Richard Davis, Eva L. Sadat, Julie Collins, Paul C. Sternweis, Dorothy Yuan, and Lily I. Jiang
- 345 CD1d-Dependent NKT Cells Play a Protective Role in Acute and Chronic Arthritis Models by Ameliorating Antigen-Specific Th1 Responses
Anna Teige, Robert Bockermann, Maruf Hasan, Katarina E. Olofson, Yawei Liu, and Shohreh Issazadeh-Navikas

357 Regulation of Cytokine-Driven Functional Differentiation of CD8 T Cells by Suppressor of Cytokine Signaling 1 Controls Autoimmunity and Preserves Their Proliferative Capacity toward Foreign Antigens
Sheela Ramanathan, Stephanie Dubois, Julien Gagnon, Chantal Leblanc, Sanjeev Mariathasan, Gerardo Ferbeyre, Robert Rottapel, Pamela S. Ohashi, and Subburaj Ilangumaran

367 Asymmetric Cell Division of T Cells upon Antigen Presentation Uses Multiple Conserved Mechanisms
Jane Oliaro, Vanessa Van Ham, Faruk Sacirbegovic, Anupama Pasam, Ze'ev Bomzon, Kim Pham, Mandy J. Ludford-Menting, Nigel J. Waterhouse, Michael Bots, Edwin D. Hawkins, Sally V. Watt, Leonie A. Cluse, Chris J. P. Clarke, David J. Izon, John T. Chang, Natalie Thompson, Min Gu, Ricky W. Johnstone, Mark J. Smyth, Patrick O. Humbert, Steven L. Reiner, and Sarah M. Russell

MOLECULAR AND STRUCTURAL IMMUNOLOGY

376 Crystal Structure of Bovine CD1b3 with Endogenously Bound Ligands
Enrico Girardi, Jing Wang, Thien-Thi Mac, Cees Versluis, Veemal Bhowruth, Gurdyal Besra, Albert J. R. Heck, Ildiko Van Rbijn, and Dirk M. Zajonc

387 Mapping of Conformational Epitopes on Human Proteinase 3, the Autoantigen of Wegener's Granulomatosis
Angelika Kuhl, Brice Korkmaz, Bert Utecht, Andrea Kniepert, Ulf Schönemarck, Ulrich Specks, and Dieter E. Jenne

400 Dicer-Dependent MicroRNAs Control Maturation, Function, and Maintenance of Langerhans Cells In Vivo
Harmjan Kuipers, Frauke M. Schnorfeil, Hans-Jörg Fehling, Helmut Bartels, and Thomas Brocker

410 Notch Target Gene Derepression and Maintenance of the Leukemogenic Phenotype Do Not Require RBP-J κ in Ikaros Null Mice
Sheila Chari, Sarah E. Umetsu, and Susan Winandy

418 The Angiogenic Growth Factor and Biomarker Midkine Is a Tumor-Shared Antigen
Jerome Kerzerho, Olivier Adotevi, Florence A. Castelli, Magalie Dosset, Karine Bernardeau, Natacha Szely, Francois Lang, Eric Tartour, and Bernard Maillere

IMMUNOGENETICS

424 A Common Polymorphism in the Caspase Recruitment Domain of RIG-I Modifies the Innate Immune Response of Human Dendritic Cells
Jianzhong Hu, Estanislao Nistal-Villán, Anu Vobo, Arnold Ganee, Madhu Kumar, Yaomei Ding, Adolfo García-Sastre, and James G. Wetmur

433 Combined Genotypic and Phenotypic Killer Cell Ig-Like Receptor Analyses Reveal KIR2DL3 Alleles Displaying Unexpected Monoclonal Antibody Reactivity: Identification of the Amino Acid Residues Critical for Staining
Michela Falco, Elisa Romeo, Stefania Marcenaro, Stefania Martini, Massimo Vitale, Cristina Bottino, Maria Cristina Mingari, Lorenzo Moretta, Alessandro Moretta, and Daniela Pende

442 TNF Production in Macrophages Is Genetically Determined and Regulates Inflammatory Disease in Rats
Alan Gillett, Monica Marta, Tao Jin, Jonatan Tuncel, Patrick Leclerc, Rita Nohra, Stefan Lange, Rikard Holmdahl, Tomas Olsson, Robert A. Harris, and Maja Jagodic

HOST DEFENSE

451 Double-Stranded RNA Exacerbates Pulmonary Allergic Reaction through TLR3: Implication of Airway Epithelium and Dendritic Cells
David Torres, Audrey Dieudonné, Bernhard Ryffel, Eva Vilain, Mustapha Si-Tahar, Muriel Pichavant, Philippe Lassalle, François Trottein, and Philippe Gosset

460 Chicken TLR21 Is an Innate CpG DNA Receptor Distinct from Mammalian TLR9
A. Marijke Keesstra, Marcel R. de Zoete, Lieneke I. Bouwman, and Jos P. M. van Putten

468 Myeloid PTEN Promotes Inflammation but Impairs Bactericidal Activities during Murine Pneumococcal Pneumonia
Gernot Schabbauer, Ulrich Matt, Philipp Günzl, Joanna Warszawska, Tanja Furtner, Eva Hainzl, Immanuel Elbau, Ildiko Mesteri, Bianca Doninger, Bernd R. Binder, and Sylvia Knapp

- 477 Herpes Simplex Virus Infects Skin $\gamma\delta$ T Cells before Langerhans Cells and Impedes Migration of Infected Langerhans Cells by Inducing Apoptosis and Blocking E-Cadherin Downregulation
Franz K. Puttur, Marian A. Fernandez, Rose White, Ben Roediger, Anthony L. Cunningham, Wolfgang Weninger, and Cheryl A. Jones
- 488 Identification of an Important Immunological Difference between Virulent Varicella-Zoster Virus and Its Avirulent Vaccine: Viral Disruption of Dendritic Cell Instruction
Cindy Gutzeit, Martin J. Raftery, Matthias Peiser, Karsten B. Tischer, Martina Ulrich, Melanie Eberhardt, Eggert Stockfleth, Thomas Giese, Andreas Sauerbrei, Craig T. Morita, and Günther Schönrich
- 498 HIV-Specific IL-21 Producing CD4⁺ T Cells Are Induced in Acute and Chronic Progressive HIV Infection and Are Associated with Relative Viral Control
Feng Yun Yue, Calvin Lo, Ali Sakhdari, Erika Yue Lee, Colin M. Kovacs, Erika Benko, Jun Liu, Haihan Song, R. Brad Jones, Prameet Sheth, Duncan Chege, Rupert Kaul, and Mario A. Ostrowski
- 507 An Evaluation of the Role of Properdin in Alternative Pathway Activation on *Neisseria meningitidis* and *Neisseria gonorrhoeae*
Sarika Agarwal, Viviana P. Ferreira, Claudio Cortes, Michael K. Pangburn, Peter A. Rice, and Sanjay Ram
- 517 Leptin Exacerbates Sepsis-Mediated Morbidity and Mortality
Nathan I. Shapiro, Eliyahu V. Khankin, Matijs Van Meurs, Shou-Ching Shih, Shulin Lu, Midori Yano, Pedro R. Castro, Eleftheria Maratos-Flier, Samir M. Parikh, S. Ananth Karumanchi, and Kiichiro Yano
- 525 IL-7-Dependent B Lymphocytes Are Essential for the Anti-polysaccharide Response and Protective Immunity to *Streptococcus pneumoniae*
Anne K. Shriner, Hongqi Liu, Guizhi Sun, Martin Guimond, and Kishore R. Alugupalli
- 532 CD11c⁺ Dendritic Cells and B Cells Contribute to the Tumoricidal Activity of Anti-DR5 Antibody Therapy in Established Tumors
Nicole M. Haynes, Edwin D. Hawkins, Ming Li, Nicole M. McLaughlin, Günter J. Hämmerling, Reto Schwendener, Astar Winoto, Allen Wensky, Hideo Yagita, Kazuyoshi Takeda, Michael H. Kershaw, Phillip K. Darcy, and Mark J. Smyth
- 542 A_{2B} Adenosine Receptors Protect against Sepsis-Induced Mortality by Dampening Excessive Inflammation
Balázs Csóka, Zoltán H. Németh, Peter Rosenberger, Holger K. Eltzschig, Zoltán Spolarics, Pál Pacher, Zolt Selmeczy, Balázs Koscsó, Leonóra Himer, E. Sylvester Vizi, Michael R. Blackburn, Edwin A. Deitch, and György Haskó
- 551 CD40 Expression Levels Modulate Regulatory T Cells in *Leishmania donovani* Infection
Sunil Martin, Reena Agarwal, Gopal Murugaiyan, and Bhaskar Saha
- 560 CD8⁺ T Cells Specific for Immunodominant *Trans*-Sialidase Epitopes Contribute to Control of *Trypanosoma cruzi* Infection but Are Not Required for Resistance
Charles S. Rosenberg, Diana L. Martin, and Rick L. Tarleton

INFLAMMATION

- 569 NADPH Oxidase-Dependent Reactive Oxygen Species Mediate Amplified TLR4 Signaling and Sepsis-Induced Mortality in Nrf2-Deficient Mice
Xiaoni Kong, Rajesh Thimmulappa, Ponvijay Kombairaju, and Shyam Biswal
- 578 Protein Tyrosine Nitration of Aldolase in Mast Cells: A Plausible Pathway in Nitric Oxide-Mediated Regulation of Mast Cell Function
Yokanath Sekar, Tae Chul Moon, Carolyn M. Slupsky, and A. Dean Befus
- 588 Nicotine Inhibits Fc ϵ RI-Induced Cysteinyl Leukotrienes and Cytokine Production without Affecting Mast Cell Degranulation Through $\alpha 7/\alpha 9/\alpha 10$ -Nicotinic Receptors
Neerad C. Mishra, Jules Riv-sima-ab, R. Thomas Boyd, Shashi P. Singh, Sravanthi Gundavarapu, Raymond J. Langley, Seddigheh Razani-Boroujerdi, and Mohan L. Sopori

- 597 TLR2- and Nucleotide-Binding Oligomerization Domain 2-Dependent Krüppel-Like Factor 2 Expression Downregulates NF- κ B-Related Gene Expression
Janine Zahlten, Robert Steinicke, Bastian Opitz, Julia Eitel, Philippe Dje N'Guessan, Maya Vinzing, Martin Witzentrath, Bernd Schmeck, Sven Hammerschmidt, Norbert Suttorp, and Stefan Hippenstiel
- 605 Substrate Fate in Activated Macrophages: A Comparison between Innate, Classic, and Alternative Activation
Juan-Carlos Rodríguez-Prados, Paqui G. Través, Jimena Cuenca, Daniel Rico, Julián Aragonés, Paloma Martín-Sanz, Marta Cascante, and Lisardo Boscá
- 615 α -Synuclein Activates Microglia by Inducing the Expressions of Matrix Metalloproteinases and the Subsequent Activation of Protease-Activated Receptor-1
Eun-Jung Lee, Moon-Sook Woo, Pyong-Gon Moon, Moon-Chang Baek, In-Young Choi, Won-Ki Kim, Eunsung Junn, and Hee-Sun Kim
- 624 Mouse Mast Cell Protease-4 Deteriorates Renal Function by Contributing to Inflammation and Fibrosis in Immune Complex-Mediated Glomerulonephritis
Lisa Scandiuzzi, Walid Beghdadi, Eric Daugas, Magnus Åbrink, Neeraj Tiwari, Cristiana Brochetta, Julien Claver, Nassim Arouche, Xingxing Zang, Marina Pretolani, Renato C. Monteiro, Gunnar Pejler, and Ulrich Blank
- 634 Prevention of Experimental Colitis by a Selective Inhibitor of the Immunoproteasome
Michael Basler, Maya Dajee, Carlo Moll, Marcus Groettrup, and Christopher J. Kirk
- 642 Tumor-Conditioned Macrophages Secrete Migration-Stimulating Factor: A New Marker for M2-Polarization, Influencing Tumor Cell Motility
Graziella Solinas, Silvia Schiarea, Manuela Liguori, Marco Fabbri, Samantha Pesce, Luca Zammataro, Fabio Pasqualini, Manuela Nebuloni, Chiara Chiabrande, Alberto Mantovani, and Paola Allavena
- 653 Ig-Free Light Chains Play a Crucial Role in Murine Mast Cell-Dependent Colitis and Are Associated with Human Inflammatory Bowel Diseases
Anneke Rijnerse, Frank A. Redegeld, Bart R. Blokhuis, Maurice W. Van der Heijden, Anje A. Te Velde, Inge Pronk, Daniel W. Hommes, Frans P. Nijkamp, Andries S. Koster, and Aletta D. Kraneveld
- 660 IL-13 Induces Esophageal Remodeling and Gene Expression by an Eosinophil-Independent, IL-13R α 2-Inhibited Pathway
Li Zuo, Patricia C. Fulkerson, Fred D. Finkelman, Melissa Mingler, Christine A. Fischetti, Carine Blanchard, and Marc E. Rothenberg
- 670 Defective Regulation of CXCR2 Facilitates Neutrophil Release from Bone Marrow Causing Spontaneous Inflammation in Severely NF- κ B-Deficient Mice
Sibylle von Vietinghoff, Masataka Asagiri, David Azar, Alexander Hoffmann, and Klaus Ley
- 679 Human Th17 Cells Comprise Heterogeneous Subsets Including IFN- γ -Producing Cells with Distinct Properties from the Th1 Lineage
Katia Boniface, Wendy M. Blumenschein, Katherine Brovont-Porth, Mandy J. McGeachy, Beth Basham, Bela Desai, Robert Pierce, Terrill K. McClanahan, Svetlana Sadekova, and René de Waal Malefyt

CLINICAL IMMUNOLOGY

- 688 Purinergic Receptor Inhibition Prevents the Development of Smoke-Induced Lung Injury and Emphysema
Sanja Cicko, Monica Lucattelli, Tobias Müller, Marek Lommatzsch, Giovanna De Cunto, Silvia Cardini, William Sundas, Melanie Grimm, Robert Zeiser, Thorsten Dürk, Gernot Zissel, Jean-Marie Boeynaems, Stephan Sorichter, Davide Ferrari, Francesco Di Virgilio, J. Christian Virchow, Giuseppe Lungarella, and Marco Idzko
- 698 Intratumoral Neoadjuvant Immunotherapy Using IL-12 and Dendritic Cells Is an Effective Strategy To Control Recurrence of Murine Hepatocellular Carcinoma in Immunosuppressed Mice
Hiroto Kayashima, Takeo Toshima, Shinji Okano, Akinobu Taketomi, Noboru Harada, Yo-ichi Yamashita, Yukihiko Tomita, Ken Shirabe, and Yoshihiko Maehara
- 709 Mast Cell Stabilization Improves Survival by Preventing Apoptosis in Sepsis
Laura Ramos, Geber Peña, Bolin Cai, E. A. Deitch, and Luis Ulloa

- 717 Chronic Rejection Triggers the Development of an Aggressive Intra-graft Immune Response through Recapitulation of Lymphoid Organogenesis
Olivier Thauinat, Natacha Patey, Giuseppina Caligiuri, Chantal Gautreau, Maria Mamani-Matsuda, Yabia Mekki, Marie-Caroline Dieu-Nosjean, Gérard Eberl, René Ecochard, Jean-Baptiste Michel, Stéphanie Graff-Dubois, and Antonino Nicoletti
- 729 Conformation-Dependent High-Affinity Monoclonal Antibodies to Prion Proteins
Larry H. Stanker, Ana V. Serban, Elisa Cleveland, Robert Hnasko, Azucena Lemus, Jiri Safar, Stephen J. DeArmond, and Stanley B. Prusiner
- 738 Generation of Th1-Polarizing Dendritic Cells Using the TLR7/8 Agonist CL075
Stefani Spranger, Miran Javorovic, Maja Bürdek, Susanne Wilde, Barbara Mosetter, Stefanie Tippmer, Iris Bigalke, Christiane Geiger, Dolores J. Schendel, and Bernhard Frankenberger
- 748 TLR4-Mediated Sensing of *Campylobacter jejuni* by Dendritic Cells Is Determined by Sialylation
Mark L. Kuijff, Janneke N. Samsom, Wouter van Rijs, Marieke Bax, Ruth Huizinga, Astrid P. Heikema, Pieter A. van Doorn, Alex van Belkum, Yvette van Kooyk, Peter C. Burgers, Theo M. Luider, Hubert P. Endtz, Edward E. S. Nieuwenhuis, and Bart C. Jacobs
- 756 Fluctuation of Peripheral Blood T, B, and NK Cells during a Menstrual Cycle of Normal Healthy Women
Sungki Lee, Jeeyun Kim, Byungwoo Jang, Sungeun Hur, Unsuk Jung, Kihyun Kil, Baegju Na, Millina Lee, Youngmin Choi, Atsushi Fukui, Alice Gilman-Sachs, and Joanne Y. Kwak-Kim
- 763 A Novel Strategy To Reduce the Immunogenicity of Biological Therapies
Jennifer Somerfield, Grant A. Hill-Cawthorne, Andrew Lin, Michael S. Zandi, Claire McCarthy, Joanne L. Jones, Michael Willcox, David Shaw, Sara A. J. Thompson, Alastair S. Compston, Geoff Hale, Herman Waldmann, and Alasdair J. Coles

CORRECTIONS

- 769 Correction: Adaptor Proteins and Ras Synergistically Regulate IL-1-Induced ADAMTS-4 Expression in Human Chondrocytes
Rasheed Ahmad, Judith Sylvester, Mushtaq Ahmad, and Muhammad Zafarullah
- 770 Correction: Efficient Cross-Priming of Antiviral CD8+ T Cells by Antigen Donor Cells Is GRP94 Independent
Avital Lev, Peniel Dimberu, Suman R. Das, Jason C. Maynard, Christopher V. Nicchitta, Jack R. Bennink, and Jonathan W. Yewdell
- 771 Correction: Fas Apoptosis Inhibitory Molecule Enhances CD40 Signaling in B Cells and Augments the Plasma Cell Compartment
Hiroaki Kaku and Thomas L. Rothstein

772 AUTHOR INDEX

775 INFORMATION FOR AUTHORS