



Reporter Cell Lines

The family keeps growing

[Learn more >](#)

InvivoGen



The Journal of
Immunology

186 (4)

J Immunol 2011; 186:1883-2685; ;
<http://www.jimmunol.org/content/186/4>

This information is current as
of February 19, 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.



1883 IN THIS ISSUE

LETTERS TO THE EDITOR

1885 Comment on “Therapeutic Targeting of Syk in Autoimmune Diabetes”
Shailendra Kapoor

1885 Response to Comment on “Therapeutic Targeting of Syk in Autoimmune Diabetes”
Lucrezia Colonna and Raphael Clynes

TRANSLATING IMMUNOLOGY

1887 Glatiramer Acetate Treatment of Multiple Sclerosis: An Immunological Perspective
Michael K. Racke and Amy E. Lovett-Racke

BRIEF REVIEWS

1891 NK Cells and Immune “Memory”
Joseph C. Sun, Sandra Lopez-Verges, Charles C. Kim, Joseph L. DeRisi, and Lewis L. Lanier

CUTTING EDGE

1899 Cutting Edge: The Murine High-Affinity IgG Receptor FcγRIV Is Sufficient for Autoantibody-Induced Arthritis
David A. Mancardi, Friederike Jönsson, Bruno Iannascoli, Huot Khun, Nico Van Rooijen, Michel Huerre, Marc Daëron, and Pierre Bruhns

1904 Cutting Edge: Selective Role of Ubiquitin in MHC Class I Antigen Presentation
Lan Huang, Julie M. Marvin, Nia Tatsis, and Laurence C. Eisenlohr

1909 Cutting Edge: Coding Single Nucleotide Polymorphisms of Endoplasmic Reticulum Aminopeptidase 1 Can Affect Antigenic Peptide Generation In Vitro by Influencing Basic Enzymatic Properties of the Enzyme
Irini Evnouchidou, Ram P. Kamal, Sergey S. Seregin, Yoshikuni Goto, Masafumi Tsujimoto, Akira Hattori, Paraskevi V. Voulgari, Alexandros A. Drosos, Andrea Amalfitano, Ian A. York, and Efstratios Stratikos

On the cover: This correlation of coefficients plot compares the CD11c^{LO} human decidual macrophage population unique gene signature to that of other immune cell signatures in the ImmGen database. Genes that are regulated in concert appear as a red box, and genes that have no correlation appear as a blue/black box. Houser, B. L., T. Tilburgs, J. Hill, M. L. Nicotra, and J. L. Strominger. 2011. Two unique human decidual macrophage populations. *J. Immunol.* 186: 2633–2642.

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 © 2011 by The American Association of Immunologists, Inc.

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

- 1915 In Vivo Administration of the Recombinant IL-7/Hepatocyte Growth Factor β Hybrid Cytokine Efficiently Restores Thymopoiesis and Naive T Cell Generation in Lethally Irradiated Mice after Syngeneic Bone Marrow Transplantation
Jingjun Jin, Irving Goldschneider, and Laijun Lai
- 1923 The Src-Like Adaptor Protein Regulates GM-CSFR Signaling and Monocytic Dendritic Cell Maturation
Larissa M. Liontos, Dilan Dissanayake, Pamela S. Ohashi, Arthur Weiss, Leonard L. Dragone, and C. Jane McGlade
- 1934 Expression of Retinaldehyde Dehydrogenase Enzymes in Mucosal Dendritic Cells and Gut-Draining Lymph Node Stromal Cells Is Controlled by Dietary Vitamin A
Rosalie Molenaar, Marlene Knippenberg, Gera Goverse, Brenda J. Olivier, Alex F. de Vos, Tom O'Toole, and Reina E. Mebius
- 1943 Apurinic/Apyrimidinic Endonuclease 2 Is Necessary for Normal B Cell Development and Recovery of Lymphoid Progenitors after Chemotherapeutic Challenge
Jeroen E. J. Guikema, Rachel M. Gerstein, Erin K. Linehan, Erin K. Cloherty, Eric Evan-Browning, Daisuke Tsuchimoto, Yusaku Nakabeppu, and Carol E. Schrader
- 1951 Critical Role of IRF-8 in Negative Regulation of TLR3 Expression by Src Homology 2 Domain-Containing Protein Tyrosine Phosphatase-2 Activity in Human Myeloid Dendritic Cells
Alessandra Fragale, Emilia Stellacci, Ramona Ilari, Anna Lisa Remoli, Angela Lanciotti, Edvige Perrotti, Iart Shytaj, Roberto Orsatti, Harshani R. Lawrence, Nicholas J. Lawrence, Jerry Wu, Michael Rebli, Keiko Ozato, and Angela Battistini
- 1963 TLR1/TLR2 Agonist Induces Tumor Regression by Reciprocal Modulation of Effector and Regulatory T Cells
Yi Zhang, Feifei Luo, Yuchan Cai, Nan Liu, Luman Wang, Damo Xu, and Yiwei Chu
- 1970 DAP12 Promotes IRAK-M Expression and IL-10 Production by Liver Myeloid Dendritic Cells and Restrains Their T Cell Allostimulatory Ability
Tina L. Sumpter, Vignesh Packiam, H eth R. Turnquist, Antonino Castellaneta, Osamu Yoshida, and Angus W. Thomson
- 1981 Elevated IL-7 Availability Does Not Account for T Cell Proliferation in Moderate Lymphopenia
Lisa Colleen Osborne, Daniel Timothy Patton, Jung Hee Seo, and Ninan Abraham
- 1989 NF- κ B1 Inhibits TLR-Induced IFN- β Production in Macrophages through TPL-2-Dependent ERK Activation
Huei-Ting Yang, Yanyan Wang, Xixing Zhao, Ezana Demissie, Stamatia Papoutsopoulou, Agnes Mambole, Anne O'Garra, Michal F. Tomczak, Susan E. Erdman, James G. Fox, Steven C. Ley, and Bruce H. Horwitz
- 1997 Regulatory T Cell Properties of Chicken CD4⁺CD25⁺ Cells
Revathi Shanmugasundaram and Ramesh K. Selvaraj
- 2003 Involvement of CD56^{bright}CD11c⁺ Cells in IL-18-Mediated Expansion of Human $\gamma\delta$ T Cells
Junko Tsuda, Wen Li, Hiromichi Yamanishi, Hideyuki Yamamoto, Akiko Okuda, Shuji Kubo, Zhifeng Ma, Nobuyuki Terada, Yoshimasa Tanaka, and Haruki Okamura
- 2013 Mice Lacking Ly49E Show Normal NK Cell Development and Provide Evidence for Probabilistic Expression of Ly49E in NK Cells and T Cells
Jonathan G. Aust, Frances Gays, Farhana Hussain, Geoffrey W. Butcher, Ralf Kist, Heiko Peters, and Colin G. Brooks
- 2024 Visualizing the Role of Cbl-b in Control of Islet-Reactive CD4 T Cells and Susceptibility to Type 1 Diabetes
Gerard F. Hoyne, Eleanor Flening, Mehmet Yabas, Charis Teh, John A. Altin, Katrina Randall, Christine B. F. Thien, Wallace Y. Langdon, and Christopher C. Goodnow
- 2033 Limiting the Amount and Duration of Antigen Exposure during Priming Increases Memory T Cell Requirement for Costimulation during Recall
Tamara L. Floyd, Brent H. Koehn, William H. Kitchens, Jennifer M. Robertson, Jennifer A. Cheeseman, Linda Stempora, Christian P. Larsen, and Mandy L. Ford

- 2042 The Evolution and Regulation of the Mucosal Immune Complexity in the Basal Chordate *Amphioxus*
Shengfeng Huang, Xin Wang, Qingyu Yan, Lei Guo, Shaochun Yuan, Guangrui Huang, Huiqing Huang, Jun Li, Meiling Dong, Shangwu Chen, and Anlong Xu
- 2056 Evolution of the Antigen-Specific CD8⁺ TCR Repertoire across the Life Span: Evidence for Clonal Homogenization of the Old TCR Repertoire
Brian D. Rudd, Vanessa Venturi, Miles P. Davenport, and Janko Nikolich-Zugich
- 2065 Distinct Pathways Generate Peptides from Defective Ribosomal Products for CD8⁺ T Cell Immunosurveillance
Brian P. Dolan, Lily Li, Charles A. Veltri, Chris M. Ireland, Jack R. Bennink, and Jonathan W. Yewdell
- 2073 Invertebrate Hematopoiesis: An Astakine-Dependent Novel Hematopoietic Factor
Xionghui Lin, Kenneth Söderhäll, and Irene Söderhäll
- 2080 Presentation of Soluble Antigens to CD8⁺ T Cells by CpG Oligodeoxynucleotide-Primed Human Naive B Cells
Wei Jiang, Michael M. Lederman, Clifford V. Harding, and Scott F. Sieg
- 2087 HCV Peptide (C5A), an Amphipathic α -Helical Peptide of Hepatitis Virus C, Is an Activator of N-Formyl Peptide Receptor in Human Phagocytes
Qing Lin, Dan Fang, Xinwei Hou, Yingying Le, Jiazhu Fang, Feng Wen, Wanghua Gong, Keqiang Chen, Ji Ming Wang, and Shao Bo Su
- 2095 Bronchial Epithelial Cell-Derived Prostaglandin E₂ Dampens the Reactivity of Dendritic Cells
Lotte M. Schmidt, Maria G. Belvisi, Konrad A. Bode, Judith Bauer, Claudia Schmidt, Maria-Theresia Suchy, Dimitrios Tsikas, Jutta Scheuerer, Felix Lasitschka, Herman-Josef Gröne, and Alexander H. Dalpke
- 2106 CD4 and CD8 T Cell Immune Activation during Chronic HIV Infection: Roles of Homeostasis, HIV, Type I IFN, and IL-7
Marta Catalfamo, Christopher Wilhelm, Lueng Tcheung, Michael Proschan, Travis Friesen, Jung-Hyun Park, Joseph Adelsberger, Michael Baseler, Frank Maldarelli, Richard Davey, Gregg Roby, Catherine Rehm, and Clifford Lane
- 2117 Hapten Application to the Skin Induces an Inflammatory Program Directing Hapten-Primed Effector CD8 T Cell Interaction with Hapten-Presenting Endothelial Cells
Danielle D. Kish, Nina Volokh, William M. Baldwin, III, and Robert L. Fairchild
- 2127 Selenoprotein K Knockout Mice Exhibit Deficient Calcium Flux in Immune Cells and Impaired Immune Responses
Saguna Verma, FuKun W. Hoffmann, Mukesh Kumar, Zhi Huang, Kelsey Roe, Elizabeth Nguyen-Wu, Ann S. Hashimoto, and Peter R. Hoffmann
- 2138 Essential Role of E3 Ubiquitin Ligase Activity in *Cbl-b*-Regulated T Cell Functions
Magdalena Paolino, Christine B. F. Thien, Thomas Gruber, Reinhard Hinterleitner, Gottfried Baier, Wallace Y. Langdon, and Josef M. Penninger
- 2148 Presentation of Acquired Peptide-MHC Class II Ligands by CD4⁺ Regulatory T Cells or Helper Cells Differentially Regulates Antigen-Specific CD4⁺ T Cell Response
Gang Zhou, Zhi-Chun Ding, Jie Fu, and Hyam I. Levitsky
- 2156 Rhesus Macaque Inhibitory and Activating KIR3D Interact with Mamu-A-Encoded Ligands
Cornelia Rosner, Philip H. Kruse, Meike Hermes, Nicole Otto, and Lutz Walter
- 2164 Polypyrimidine Tract-Binding Protein Is Critical for the Turnover and Subcellular Distribution of CD40 Ligand mRNA in CD4⁺ T Cells
Rodrigo Matus-Nicodemos, Stefano Vavassori, Moraima Castro-Faix, Anibal Valentin-Acevedo, Karnail Singh, Valentina Marcelli, and Lori R. Covey
- 2172 Marginal Zone B Cells Regulate Antigen Capture by Marginal Zone Macrophages
Yuying You, Riley C. Myers, Larry Freeberg, Jeremy Foote, John F. Kearney, Louis B. Justement, and Robert H. Carter

- 2182 An Essential Role of STIM1, Orai1, and S100A8–A9 Proteins for Ca²⁺ Signaling and FcγR-Mediated Phagosomal Oxidative Activity
Natacha Steinckwich, Véronique Schenten, Chantal Melchior, Sabrina Bréchar, and Eric J. Tschirhart
- 2192 Dendritic Cell-Specific ICAM-3–Grabbing Nonintegrin Expression on M2-Polarized and Tumor-Associated Macrophages Is Macrophage-CSF Dependent and Enhanced by Tumor-Derived IL-6 and IL-10
Angeles Domínguez-Soto, Elena Sierra-Filardi, Amaya Puig-Kröger, Blanca Pérez-Maceda, Fernando Gómez-Aguado, María Teresa Corcuera, Paloma Sánchez-Mateos, and Angel L. Corbí
- 2201 A Role for Autophagic Protein Beclin 1 Early in Lymphocyte Development
Ivica Arsov, Adeola Adebayo, Martina Kucerova-Levisohn, Joanna Haye, Margaret MacNeil, F. Nina Papavasiliou, Zhenyu Yue, and Benjamin D. Ortiz
- 2210 Proper Regrafting of Ig-Like Transcript 2 after Trogocytosis Allows a Functional Cell–Cell Transfer of Sensitivity
Kiave-Yune HoWangYin, Julien Caumartin, Benoit Favier, Marina Daouya, Layale Yaghi, Edgardo D. Carosella, and Joel LeMaoult
- 2219 Chemokine-Containing Exosomes Are Released from Heat-Stressed Tumor Cells via Lipid Raft-Dependent Pathway and Act as Efficient Tumor Vaccine
Taoyong Chen, Jun Guo, Mingjin Yang, Xuhui Zhu, and Xuetao Cao
- 2229 CSF-1–Dependent Red Pulp Macrophages Regulate CD4 T Cell Responses
Daisuke Kurotaki, Shige-yuki Kon, Kyeonghwa Bae, Koyu Ito, Yutaka Matsui, Yosuke Nakayama, Masashi Kanayama, Chiemi Kimura, Yoshinori Narita, Takashi Nishimura, Kazuya Iwabuchi, Matthias Mack, Nico van Rooijen, Shimon Sakaguchi, Toshimitsu Uede, and Junko Morimoto
- 2238 Regulatory T Cells More Effectively Suppress Th1-Induced Airway Inflammation Compared with Th2
Nina Dehzad, Tobias Bopp, Sebastian Reuter, Matthias Klein, Helen Martin, Alexander Ulges, Michael Stassen, Hansjörg Schild, Roland Buhl, Edgar Schmitt, and Christian Taube
- 2245 Metabolic Stress Boosts Humoral Responses In Vivo Independently of Inflammasome and Inflammatory Reaction
Fabienne Andris, Sébastien Denanglaire, Erika Baus, Anthony Rongvaux, Jonathan Steuve, Richard A. Flavell, and Oberdan Leo
- 2254 Thymic Stromal Lymphopoietin Interferes with Airway Tolerance by Suppressing the Generation of Antigen-Specific Regulatory T Cells
Liyang Lei, Yanlu Zhang, Weiguo Yao, Mark H. Kaplan, and Baohua Zhou
- 2262 IL-3 Attenuates Collagen-Induced Arthritis by Modulating the Development of Foxp3⁺ Regulatory T Cells
Rupesh K. Srivastava, Geetanjali B. Tomar, Amruta P. Barhanpurkar, Navita Gupta, Satish T. Pote, Gyan C. Mishra, and Mohan R. Wani
- 2273 SLAP Deficiency Enhances Number and Function of Regulatory T Cells Preventing Chronic Autoimmune Arthritis in SKG Mice
Lisa K. Peterson, Laura A. Shaw, Anthony Joetham, Shimon Sakaguchi, Erwin W. Gelfand, and Leonard L. Dragone

MOLECULAR AND STRUCTURAL IMMUNOLOGY

- 2282 Basal and Antigen-Induced Exposure of the Proline-Rich Sequence in CD3ε
Javier de la Cruz, Travis Kruger, Christopher A. Parks, Robert L. Silge, Nicolai S. C. van Oers, Immanuel F. Luescher, Adam G. Schrum, and Diana Gil
- 2291 Somatic Diversity in CDR3 Loops Allows Single V-Genes To Encode Innate Immunological Memories for Multiple Pathogens
Christy A. Thomson, Ken Q. Little, Donald C. Reason, and John W. Schrader
- 2299 Characterization of *Trex1* Induction by IFN-γ in Murine Macrophages
Maria Serra, Sonia-Vanina Forcales, Selma Pereira-Lopes, Jorge Lloberas, and Antonio Celada

- 2309 Distinct Functions for the Glycans of Tapasin and Heavy Chains in the Assembly of MHC Class I Molecules
Syed Monem Rizvi, Natasha Del Cid, Lonnie Lybarger, and Malini Raghavan

IMMUNOGENETICS

- 2321 A Single Nucleotide Polymorphism in NF- κ B Inducing Kinase Is Associated with Mortality in Septic Shock
Simone A. Thair, Keith R. Walley, Taka-aki Nakada, Melissa K. McConechy, John H. Boyd, Hugh Wellman, and James A. Russell
- 2329 The IL1RN Promoter rs4251961 Correlates with IL-1 Receptor Antagonist Concentrations in Human Infection and Is Differentially Regulated by GATA-1
Enitan D. Carrol, Antony Payton, Deborah Payne, Fabio Miyajima, Mas Chaponda, Limangeni A. Mankhambo, Daniel L. Banda, Elizabeth M. Molyneux, Helen Cox, Greg Jacobson, Daniel F. Carr, Malcolm E. Molyneux, James P. Stewart, John P. Quinn, C. Anthony Hart, and William E. Ollier
- 2336 Mismatch Repair Proteins MSH2, MLH1, and EXO1 Are Important for Class-Switch Recombination Events Occurring in B Cells That Lack Nonhomologous End Joining
Jennifer Eccleston, Catherine Yan, Karen Yuan, Frederick W. Alt, and Erik Selsing

HOST DEFENSE

- 2344 Molecular and Functional Characterization of Mouse S5D-SRCRB: A New Group B Member of the Scavenger Receptor Cysteine-Rich Superfamily
Cristina Miró-Julà, Sandra Roselló, Vanesa G. Martínez, Dorte R. Fink, Cristina Escoda-Ferran, Olga Padilla, Citlali Vázquez-Echeverría, Paula Espinal-Marin, Cristina Pujades, Angeles García-Pardo, Jordi Vila, Carles Serra-Pagès, Uffe Holmskov, José Yélamos, and Francisco Lozano
- 2355 Enhanced and Sustained CD8⁺ T Cell Responses with an Adenoviral Vector-Based Hepatitis C Virus Vaccine Encoding NS3 Linked to the MHC Class II Chaperone Protein Invariant Chain
Marianne Mikkelsen, Peter Johannes Holst, Jens Bukh, Allan Randrup Thomsen, and Jan Pravsgaard Christensen
- 2365 Absent Bactericidal Activity of Mouse Serum against Invasive African Nontyphoidal *Salmonella* Results from Impaired Complement Function but Not a Lack of Antibody
Matthew K. Siggins, Adam F. Cunningham, Jennifer L. Marshall, Jayne L. Chamberlain, Ian R. Henderson, and Calman A. MacLennan
- 2372 IL-33 and M2a Alveolar Macrophages Promote Lung Defense against the Atypical Fungal Pathogen *Pneumocystis murina*
Michael P. Nelson, Benjamin S. Christmann, Jessica L. Werner, Allison E. Metz, Jennifer L. Trevor, Clifford A. Lowell, and Chad Steele
- 2382 Accelerated Dendritic Cell Differentiation from Migrating Ly6C^{lo} Bone Marrow Monocytes in Early Dermal West Nile Virus Infection
Ariane M. Davison and Nicholas J. C. King
- 2397 Pulmonary Surfactant Protein A Enhances Endolysosomal Trafficking in Alveolar Macrophages through Regulation of Rab7
Vicky Sender, Christina Moulakakis, and Cordula Stamme
- 2412 The I κ B Family Member Bcl-3 Coordinates the Pulmonary Defense against *Klebsiella pneumoniae* Infection
Frédéric Pène, Andrea Paun, Søren Ulrik Sønder, Nimisha Rikhi, Hongshan Wang, Estefania Claudio, and Ulrich Siebenlist
- 2422 TLR3-Specific Double-Stranded RNA Oligonucleotide Adjuvants Induce Dendritic Cell Cross-Presentation, CTL Responses, and Antiviral Protection
Ivett Jelínek, Joshua N. Leonard, Graeme E. Price, Kevin N. Brown, Anna Meyer-Manlapat, Paul K. Goldsmith, Yan Wang, David Venzon, Suzanne L. Epstein, and David M. Segal

- 2430 **Suppressive Effect of Bacterial Polysaccharides on BAFF System Is Responsible for Their Poor Immunogenicity**
Sunita Kanswal, Nora Katsenelson, Windy Allman, Kadriye Uslu, Milan S. Blake, and Mustafa Akkoyunlu
- 2444 **A2B Adenosine Receptor Blockade Enhances Macrophage-Mediated Bacterial Phagocytosis and Improves Polymicrobial Sepsis Survival in Mice**
Bryan G. Belikoff, Stephen Hatfield, Peter Georgiev, Akio Ohta, Dmitriy Lukashev, Jon A. Buras, Daniel G. Remick, and Michail Sitkovsky
- 2454 **A Combination of Flt3 Ligand cDNA and CpG Oligodeoxynucleotide as Nasal Adjuvant Elicits Protective Secretory-IgA Immunity to *Streptococcus pneumoniae* in Aged Mice**
Yoshiko Fukuyama, Janice D. King, Kosuke Kataoka, Ryoki Kobayashi, Rebekah S. Gilbert, Susan K. Hollingshead, David E. Briles, and Kohtaro Fujihashi
- 2462 **Tribbles 3: A Novel Regulator of TLR2-Mediated Signaling in Response to *Helicobacter pylori* Lipopolysaccharide**
Sinéad M. Smith, Anthony P. Moran, Shane P. Duggan, Salah E. Ahmed, Abdelhafeez S. Mohamed, Henry J. Windle, Luke A. O'Neill, and Dermot P. Kelleher
- 2472 **A Novel and Divergent Role of Granzyme A and B in Resistance to Helminth Infection**
Wiebke Hartmann, Benjamin J. Marsland, Benjamin Otto, Jens Urny, Bernhard Fleischer, and Simone Kortzen

INFLAMMATION

- 2482 **Chemokine Transcripts as Targets of the RNA-Binding Protein HuR in Human Airway Epithelium**
Jinshui Fan, Faoud T. Ishmael, Xi Fang, Allen Myers, Chris Cheadle, Shau-Ku Huang, Ulus Atasoy, Myriam Gorospe, and Cristiana Stellato
- 2495 **Basic Calcium Phosphate Crystals Induce Monocyte/Macrophage IL-1 β Secretion through the NLRP3 Inflammasome In Vitro**
Borbála Pazár, Hang-Korng Ea, Sharmal Narayan, Laeticia Kolly, Nathalie Bagnoud, Véronique Chobaz, Thierry Roger, Frédéric Lioté, Alexander So, and Nathalie Busso
- 2503 **Proteasome Inhibition with Bortezomib Depletes Plasma Cells and Autoantibodies in Experimental Autoimmune Myasthenia Gravis**
Alejandro M. Gomez, Kathleen Vrolix, Pilar Martínez-Martínez, Peter C. Molenaar, Marko Phernambucq, Eline van der Esch, Hans Duimel, Fons Verheyen, Reinhard E. Voll, Rudolf A. Manz, Marc H. De Baets, and Mario Losen
- 2514 **Absence of MyD88 Results in Enhanced TLR3-Dependent Phosphorylation of IRF3 and Increased IFN- β and RANTES Production**
Jakub Siednienko, Thusitha Gajanayake, Katherine A. Fitzgerald, Paul Moynagh, and Sinéad M. Migglin
- 2523 **Mast Cells as Sensors of Cell Injury through IL-33 Recognition**
Mattias Enoksson, Katarina Lyberg, Christine Möller-Westerberg, Pdraic G. Fallon, Gunnar Nilsson, and Carolina Lunderius-Andersson
- 2529 **Differential Expression of NLRP3 among Hematopoietic Cells**
Greta Guarda, Manuel Zenger, Amir S. Yazdi, Kate Schroder, Isabel Ferrero, Philippe Menu, Aubry Tardivel, Chantal Mattmann, and Jürg Tschopp
- 2535 **Apolipoprotein E and Peptide Mimetics Modulate Inflammation by Binding the SET Protein and Activating Protein Phosphatase 2A**
Dale J. Christensen, Nobutaka Obkubo, Jessica Oddo, Michael J. Van Kanegan, Jessica Neil, Fengqiao Li, Carol A. Colton, and Michael P. Vitek
- 2543 **An Islet-Specific Pulse of TGF- β Abrogates CTL Function and Promotes β Cell Survival Independent of Foxp3⁺ T Cells**
Maja Wällberg, F. Susan Wong, and E. Allison Green

- 2552 Role of MicroRNA-214–Targeting Phosphatase and Tensin Homolog in Advanced Glycation End Product-Induced Apoptosis Delay in Monocytes
Li-Min Li, Dong-Xia Hou, Ya-Lan Guo, Jun-Wei Yang, Yuan Liu, Chen-Yu Zhang, and Ke Zen
- 2561 TRIF Is a Critical Survival Factor in Viral Cardiomyopathy
Alexander Riad, Dirk Westermann, Christin Zietsch, Konstantinos Savvatis, Peter M. Becher, Stefan Bereswill, Markus M. Heimesaat, Olga Lettau, Dirk Lassner, Andrea Dörner, Wolfgang Poller, Matthias Busch, Stephan B. Felix, Heinz P. Schultheiss, and Carsten Tschöpe
- 2571 STAT6 Expression in Multiple Cell Types Mediates the Cooperative Development of Allergic Airway Disease
Svetlana P. Chapoval, Preeta Dasgupta, Elizabeth P. Smith, Louis J. DeTolla, Michael M. Lipsky, Ann E. Kelly-Welch, and Achsah D. Keegan
- 2584 IL-33 Activates B1 Cells and Exacerbates Contact Sensitivity
Mousa Komai-Koma, Derek S. Gilchrist, Andrew N. J. McKenzie, Carl S. Goodyear, Damo Xu, and Foo Y. Liew
- 2592 The Role of CD14 in Neutrophil Recruitment within the Liver Microcirculation during Endotoxemia
Erin F. McAvoy, Braedon McDonald, Sean A. Parsons, Connie H. Wong, Regine Landmann, and Paul Kubes
- 2602 Th17 Cells, Not IL-17⁺ $\gamma\delta$ T Cells, Drive Arthritic Bone Destruction in Mice and Humans
Bernadette Pöllinger, Tobias Junt, Barbara Metzler, Ulrich A. Walker, Alan Tyndall, Cyril Allard, Serkan Bay, Roland Keller, Friedrich Raulf, Franco Di Padova, Terrence O'Reilly, Nicole J. Horwood, Dhavalkumar D. Patel, and Amanda Littlewood-Evans
- 2613 IL-1F5, -F6, -F8, and -F9: A Novel IL-1 Family Signaling System That Is Active in Psoriasis and Promotes Keratinocyte Antimicrobial Peptide Expression
Andrew Johnston, Xianying Xing, Andrew M. Guzman, MaryBeth Riblett, Candace M. Loyd, Nicole L. Ward, Christian Wohn, Errol P. Prens, Frank Wang, Lisa E. Maier, Sewon Kang, John J. Voorhees, James T. Elder, and Johann E. Gudjonsson
- 2623 Upregulated IL-7 Receptor α Expression on Colitogenic Memory CD4⁺ T Cells May Participate in the Development and Persistence of Chronic Colitis
Tamako Shinohara, Yasuhiro Nemoto, Takanori Kanai, Kaori Kameyama, Ryuichi Okamoto, Kiichiro Tsuchiya, Tetsuya Nakamura, Teruji Totsuka, Koichi Ikuta, and Mamoru Watanabe

CLINICAL IMMUNOLOGY

- 2633 Two Unique Human Decidual Macrophage Populations
Brandy L. Houser, Tamara Tilburgs, Jonathan Hill, Matthew L. Nicotra, and Jack L. Strominger
- 2643 B Lymphocytes Differentially Influence Acute and Chronic Allograft Rejection in Mice
David J. DiLillo, Robert Griffiths, Surya V. Seshan, Cynthia M. Magro, Phillip Ruiz, Thomas M. Coffman, and Thomas F. Tedder
- 2655 CD8⁺ T Cells Induce Thyroid Epithelial Cell Hyperplasia and Fibrosis
Shiguang Yu, Yujiang Fang, Tumenjargal Sharav, Gordon C. Sharp, and Helen Braley-Mullen
- 2663 HLA-G Expression in Human Embryonic Stem Cells and Preimplantation Embryos
An Verloes, Hilde Van de Velde, Joel LeMaout, Ileana Mateizel, Greet Cauffman, Peter A. Horn, Edgardo D. Carosella, Paul Devroey, Marc De Waele, Vera Rebmann, and Martine Vercammen
- 2672 Th17 Cells Expressing KIR3DL2⁺ and Responsive to HLA-B27 Homodimers Are Increased in Ankylosing Spondylitis
Paul Bowness, Anna Ridley, Jacqueline Shaw, Antoni T. Chan, Isabel Wong-Baeza, Myles Fleming, Fraser Cummings, Andrew McMichael, and Simon Kollnberger

LETTERS OF RETRACTION

- 2681 Retraction: The IL-15R α Chain Signals Through Association with Syk in Human B Cells
Thomas Pohl, Hans Krause, Horst Dürkop, Ralf Paus, and Silvia Bulfone-Paus

2682 Retraction: Mast Cells Express Novel Functional IL-15 Receptor α Isoforms
Hans Krause, Ralf Paus, Zane Orinska, and Silvia Bulfone-Paus

2683 Retraction: Extracellular ATP Induces Cytokine Expression and Apoptosis through P2X₇ Receptor in Murine Mast Cells
Zane Orinska, Martina Hein, Frank Petersen, Silvia Bulfone-Paus, Lutz Thon, and Dieter Adam

CORRECTIONS

2684 Correction: Anti-Inflammatory Role of the Murine Formyl-Peptide Receptor 2: Ligand-Specific Effects on Leukocyte Responses and Experimental Inflammation.
Neil Dufton, Robert Hannon, Vincenzo Brancaleone, Jesmond Dalli, Hetal B. Patel, Mohini Gray, Fulvio D'Acquisto, Julia C. Buckingham, Mauro Perretti, and Roderick J. Flower

2686 AUTHOR INDEX