This information is current as of July 2, 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
3729 IN THIS ISSUE

LETTERS TO THE EDITOR

3731 Comment on “Characterizing the N-Terminal Processing Motif of MHC Class I Ligands”
Camilo A. L. S. Colaco

3731 Response to Comment on “Characterizing the N-Terminal Processing Motif of MHC Class I Ligands”
Stefan Tenzer and Hansjörg Schild

BRIEF REVIEWS

3733 Macrophage Polarization in Bacterial Infections
Marie Benoit, Benoît Desnues, and Jean-Louis Mege

CUTTING EDGE

3741 Cutting Edge: Programmed Death-1 Up-Regulation Is Involved in the Attrition of Cytomegalovirus-Specific CD8+ T Cells in Acute Self-Limited Hepatitis B Virus Infection
Ji-Yuan Zhang, Zheng Zhang, Bo Jin, Shu-Ye Zhang, Chun-Bao Zhou, Jun-Liang Fu, and Fu-Sheng Wang

3745 Cutting Edge: Instructive Role of Peripheral Tissue Cells in the Imprinting of T Cell Homing Receptor Patterns
Fanny Edele, Rosalie Molenaar, Dominique Gütle, Jan C. Dudda, Thilo Jakob, Bernhard Homey, Reina Mebius, Mathias Hörnef, and Stefan F. Martin

3750 Cutting Edge: Th1 Cells Facilitate the Entry of Th17 Cells to the Central Nervous System during Experimental Autoimmune Encephalomyelitis
Richard A. O’Connor, Catriona T. Prendergast, Catherine A. Sabatos, Clement W. Z. Lau, Melanie D. Leech, David C. Wraith, and Stephen M. Anderton

3755 Cutting Edge: Alum Adjuvant Stimulates Inflammatory Dendritic Cells through Activation of the NALP3 Inflammasome
Mirjam Kool, Virginie Petrilli, Thibaut De Smedt, Aline Rolaz, Hamida Hammad, Menno van Nimwegen, Ingrid M. Bergen, Rosa Castillo, Bart N. Lambrecht, and Jürg Tschopp

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

3761 Resistin Inhibits Essential Functions of Polymorphonuclear Leukocytes
Gerald Cohen, Dalibor Illic, Jana Raupachova, and Walter H. Hörler

3769 Characterization of a Novel Nonclassical T Cell Clone with Broad Reactivity against Human Renal Cell Carcinomas
Qiong J. Wang, Ken-ichi Hanada, and James C. Yang

3777 Role of β-Catenin in B Cell Development and Function
Qing Ye, William J. Quinn III, Theresa Salay, Jenni E. Crowley, Michael P. Cancro, and Jong Misra Sen

3784 TGF-β Utilizes SMAD3 to Inhibit CD16-Mediated IFN-γ Production and Antibody-Dependent Cellular Cytotoxicity in Human NK Cells
Rossana Trotta, Jessica Dal Col, Jianhua Yu, David Ciarlariello, Britanny Thomas, Xiaoli Zhang, Jeffrey Allard II, Min Wei, Hsiaoyin Mao, John C. Byrd, Danilo Perrotti, and Michael A. Caligiuri

3793 Rab27a Regulates Exocytosis of Tertiary and Specific Granules in Human Neutrophils
M. Javier Herrero-Turrion, Jero Calafat, Hans Janssen, Mitsunori Fukuda, and Faustino Molinmedo

3804 MyD88 Plays a Critical T Cell-Intrinsic Role in Supporting CD8 T Cell Expansion during Acute Lymphocytic Choriomeningitis Virus Infection

3811 Plasmacytoid Dendritic Cells Take Up Opsonized Antigen Leading to CD4+ and CD8+ T Cell Activation In Vivo
Pia Björck, Andreas Belloch, Edward I. Herman, Robert S. Negrin, and Edgar G. Engleman

3818 Cell Cycle-Related Acquisition of Cytotoxic Mediators Defines the Progressive Differentiation to Effector Status for Virus-Specific CD8+ T Cells
Misty R. Jenkins, Justine Minern, Nicole L. La Gruta, Katherine Kedzierska, Peter C. Doherty, and Stephen J. Turner

3823 Staphylococcus aureus-Induced Plasmacytoid Dendritic Cell Activation Is Based on an IgG-Mediated Memory Response
Marijo Parcina, Constanze Wendt, Friedrich Götz, Rainer Zawatzky, Ulrich Zähringer, Klaus Heeg, and Isabelle Bekeredjian-Ding

3834 B Cell Receptor Affinity and B Cell Subset Identity Integrate to Define the Effectiveness, Affinity Threshold, and Mechanism of Anergy
Ramiro Dis, Suzanne K. McCray, and Stephen H. Clarke

3841 TLR2 Expression in Astrocytes Is Induced by TNF-α- and NF-κB-Dependent Pathways
Nirmal K. Phulwani, Nilsifer Esen, Mohsin Md. Syed, and Tammy Kielian

3850 IgE-Induced Mast Cell Survival Requires the Prolonged Generation of Reactive Oxygen Species
Laura M. Sy, Janet Kalesnikoff, Vivian Lam, Dana Wong, Christine Song, Stephanie Omeis, Karen Chan, Corinna W. K. Lee, Reuben P. Siragianian, Juan Rivera, and Gerald Krystal

3861 High Sensitivity of Intestinal CD8+ T Cells to Nucleotides Indicates P2X7 as a Regulator for Intestinal T Cell Responses
Kirsten Heiss, Nathalie Jänsen, Birgit Mäbß, Valda Schumacher, Friedrich Koch-Notte, Friedrich Haag, and Hans-Willi Mittrücker

3870 IL-12Rβ2 Promotes the Development of CD4+CD25+ Regulatory T Cells
Zhao Zhao, Shuo Yu, Denise C. Fitzgerald, Mohamed Elbehi, Bogoljub Ciric, A. M. Rostami, and Guang-Xian Zhang

3877 Cytokine-Mediated Inhibition of Fibrillar Amyloid-β Peptide Degradation by Human Mononuclear Phagocytes
Masaru Yamamoto, Tomomi Kiyota, Shannon M. Walsh, Jianuo Liu, Jonathan Kipnis, and Tsuneya Ikezu

3887 Fibroblast-Type Reticular Stromal Cells Regulate the Lymph Node Vasculature
Susan Ohyou, Eric H. Ekland, April C. Carpenter, Te-Chen Jenny Tseng, Sha Tian, Michael Michaud, Joseph A. Madri, and Theresa T. Lu
The Production of IL-10 by Human Regulatory T Cells Is Enhanced by IL-2 through a STAT5-Responsive Intronic Enhancer in the IL-10 Locus
Kazue Tsuji-Takayama, Motoyuki Suzuki, Mayuko Yamamoto, Akira Harashima, Ayumi Okochi, Takeshi Otani, Toshiya Inoue, Akira Suginoto, Terumasa Toraya, Makoto Takeuchi, Fumiyuki Yamasaki, Shuji Nakamura, and Masayoshi Kihata

CD8+ Th17 Mediate Costimulation Blockade-Resistant Allograft Rejection in T-bet-Deficient Mice
Bryna E. Burrell, Keri Gencsits, Guanyi Lu, Svetlana Grabauskiene, and D. Keith Bishop

Cathelicidin Antimicrobial Peptides Inhibit Hyaluronan-Induced Cytokine Release and Modulate Chronic Allergic Dermatitis
Yasuhide Morikawa, Kenshi Yamasaaki, Donald Leung, and Richard L. Gallo

CD137 Induces Proliferation of Murine Hematopoietic Progenitor Cells and Differentiation to Macrophages
Dongpang Jiang, Yifeung Chen, and Herbert Schwarz

Pretransplant Infusion of Mesenchymal Stem Cells Prolongs the Survival of a Semiallogeneic Heart Transplant through the Generation of Regulatory T Cells
Federica Casiraghi, Nadia Azzollini, Paola Casis, Barbara Inberti, Marina Morigi, Daniela Cugini, Regiane Aparecida Cavinato, Marta Todeschini, Samantha Solini, Aurelio Sonzogni, Norberto Perico, Giuseppe Remuzzi, and Marina Neri

Fibroblastic Reticular Cells Guide T Lymphocyte Entry into and Migration within the Splenic T Cell Zone
Marc Bajenoff, Nicolas Glachenau, and Ronald N. Germain

Contrasting Responses of Lymphoid Progenitors to Canonical and Noncanonical Wnt Signals
Sachin Malhotra, Yoshihiro Baba, Karla P. Garrett, Frank J. T. Staal, Rachel Gerstein, and Paul W. Kincade

Transfer of T Cell Surface Molecules to Dendritic Cells upon CD4+ T Cell Priming Involves Two Distinct Mechanisms
Annette Busch, Thomas Quast, Sascha Keller, Waldemar Kolanus, Percy Knolle, Peter Altevogt, and Andreas Limmer

Defects in Skin γδ T Cell Function Contribute to Delayed Wound Repair in Rapamycin-Treated Mice
Robyn E. Mills, Kristen R. Taylor, Katie Podshivalova, Dianne B. McKay, and Julie M. Jameson

Elevating Calcium in Th2 Cells Activates Multiple Pathways to Induce IL-4 Transcription and mRNA Stabilization
Liying Guo, Joseph F. Urban, Jinfang Zhu, and William E. Paul

SAP Enables T Cells to Help B Cells by a Mechanism Distinct from Th Cell Programming or CD40 Ligand Regulation
Cris Kamperschroer, Deborah M. Roberts, Yongqing Zhang, Nan-ping Weng, and Susan L. Swain

Functionally Competent Eosinophils Differentiated Ex Vivo in High Purity from Normal Mouse Bone Marrow
Kimberly D. Dyer, Jennifer M. Moser, Meggan Czapiga, Steven J. Siegel, Caroline M. Percopo, and Helene F. Rosenberg

A Human Dendritic Cell Subset Receptive to the Venezuelan Equine Encephalitis Virus-Derived Replicon Particle Constitutively Expresses IL-32
Kevin P. Nishimoto, Amanda K. Laust, and Edward L. Nelson

Cholera Toxin B Accelerates Disease Progression in Lupus-Prone Mice by Promoting Lipid Raft Aggregation
Guo-Min Deng and George C. Tsokos

Linked Suppression across an MHC-Mismatched Barrier in a Miniature Swine Kidney Transplantation Model
Adam D. Griesemer, John C. LaMattina, Masayoshi Okumi, Justin D. Eter, Akira Shimizu, David H. Sachs, and Kazuhiro Yamada

Involvement of LEK1 in Dendritic Cell Regulation of T Cell Immunity against Chlamydia
Qing He, Francis O. Eko, Deborah Lyn, Godwin A. Ananaba, Claudiu Bandea, Joseph Martinez, Kababiah Joseph, Kathy Kellar, Carolyn M. Black, and Joseph U. Igietseme
4043 Editing Antigen Presentation: Antigen Transfer between Human B Lymphocytes and Macrophages Mediated by Class A Scavenger Receptors
Bohdan P. Harvey, Timothy E. Quan, Benjamin J. Rudenga, Robert M. Roman, Joe Craft, and Mark J. Mamula

4052 αβ/β1/βaMAcadCAM-1 Interactions Play an Essential Role in Transitioning Cryptopatches into Isolated Lymphoid Follicles and a Nonessential Role in Cryptopatch Formation
Caihong Wang, Jacqueline S. McDonough, Keely G. McDonald, Conway Huang, and Rodney D. Newberry

4062 B7-H3 Contributes to the Development of Pathogenic Th2 Cells in a Murine Model of Asthma
Osamu Nagashima, Norihiro Harada, Yoshihiko Usui, Tomohide Yamazaki, Hideo Yagita, Ko Okumura, Kazuhisa Takahashi, and Hisaya Akiba

4072 Effector Mechanisms of the Autoimmune Syndrome in the Murine Model of Autoimmune Polyglandular Syndrome Type 1
Jason J. DeVos, Anthony K. Slum, Kelsey P. A. Johannes, Wen Lu, Anna K. Krawisz, Peter Wang, Ting Yang, Norbert P. LeClair, Cecilia Austin, Erich C. Strauss, and Mark S. Anderson

4080 Inside-Out Regulation of FcγRI (CD89) Depends on PP2A
Jantine E. Bakema, Annie Bakker, Simone de Haitj, Henk Honing, Madelon Bracke, Leo Koenderman, Gestur Vidarsson, Jan G. J. van de Winkel, and Jeanette H. W. Leusen

4089 TH17 Cells Mediate Steroid-Resistant Airway Inflammation and Airway Hyperresponsiveness in Mice
Laura McKinley, John F. Alcorn, Alanna Peterson, Rachel B. DuPont, Shernaaz Kapadia, Alison Logar, Adam Henry, Charles G. Irvin, Jon D. Piganelli, Anuradha Ray, and Jay K. Kolls

MOLecular and STRUCTuRAL IMMUNoloGY

4098 Multiple Levels of Selection Responsive to Immunoglobulin Light Chain and Heavy Chain Structures Impede the Development of Dμ-Expressing B Cells
F. Betul Guloglu, Brendan P. Smith, and Christopher A. J. Roman

4107 Impact of a Three Amino Acid Deletion in the CH2 Domain of Murine IgG1 on Fc-Associated Effector Functions

4113 An Atypical NF-κB-Regulated Pathway Mediates Phorbol Ester-Dependent Heme Oxygenase-1 Gene Activation in Monocytes
Srivatsava Naudu, Nastiti Wijayanti, Sentor Santoso, Thomas Kietzmann, and Stephan Immenschuh

immunogenetIcs

4124 A RAG1 Mutation Found in Omenn Syndrome Causes Coding Flank Hypersensitivity: A Novel Mechanism for Antigen Receptor Repertoire Restriction
Serre-Yu Wong, Catherine P. Lu, and David B. Roth

HOST DeFENSE

4131 Sulfhydryl-Based Tumor Antigen-Carrier Protein Conjugates Stimulate Superior Antitumor Immunity against B Cell Lymphomas
David J. Betting, Kamran Kafi, Alireza Abdollahi-Fard, Sara A. Hurwitz, and John M. Timmerman

4141 Importance of TLR2 in Early Innate Immune Response to Acute Pulmonary Infection with Porphyromonas gingivalis in Mice
George Hajishengallis, Min Wang, Gregory J. Bagby, and Steve Nelson

4150 Characterization of T Cell Responses to the RgpA-Kgp Proteinase-Adhesin Complexes of Porphyromonas gingivalis in BALB/c Mice

4159 Francisella tularensis Live Vaccine Strain Induces Macrophage Alternative Activation as a Survival Mechanism

4168 A Novel Role for Non-Neutralizing Antibodies against Nucleoprotein in Facilitating Resistance to Influenza Virus
Damian M. Carragher, Denise A. Kaminski, Amy Moquin, Louise Hartson, and Troy D. Randall
Lipids Including Cholesteryl Linoleate and Cholesteryl Arachidonate Contribute to the Inherent Antibacterial Activity of Human Nasal Fluid
Thai Q. Do, Safiekhbatoo Mohshani, Patricia Castillo, Suda Anunta, Adelina Pogosyan, Annie Cheung, Beth Marbois, Kym F. Faul, William Ernst, Su Ming Chiang, Gary Fujii, Catherine F. Clarke, Krishna Foster, and Edith Porter

 Trafficking of Antigen-Specific CD8+ T Lymphocytes to Mucosal Surfaces following Intramuscular Vaccination
David R. Kaufman, Jinyan Liu, Angela Carville, Keith G. Mansfield, Menzo J. E. Havenga, Jaap Goudsmidt, and Dan H. Barouch

Smallpox Inhibitor of Complement Enzymes (SPICE): Regulation of Complement Activation on Cells and Mechanism of Its Cellular Attachment
M. Kathryn Liszewski, Paula Bertram, Marilyn K. Leung, Richard Hashart, Lijuan Zhang, and John P. Atkinson

Essential Involvement of CX3CR1-Mediated Signals in the Bactericidal Host Defense during Septic Peritonitis
Yuko Ibida, Takahito Hayashi, Takatsugu Goto, Akishiko Kimura, Shigeru Akimoto, Naofumi Mukaida, and Toshikazu Kondo

Elevated Numbers of FcγRIIIA+ (CD16+) Effector CD8 T Cells with NK Cell-Like Function in Chronic Hepatitis C Virus Infection

PIR-B-Deficient Mice Are Susceptible to Salmonella Infection
Ikuo Torii, Satoshi Oka, Muneki Hotomi, William H. Benjamin, Jr., Toshiyuki Takai, John F. Kearney, David E. Briles, and Hiroki Kubagawa

High Mobility Group Protein-1 Inhibits Phagocytosis of Apoptotic Neutrophils through Binding to Phosphatidylserine
Gang Liu, Jing Wang, Young-Jun Park, Yuko Tsuruta, Emmanuel F. Lorne, Xia Zhao, and Edward Abraham

Acid Sphingomyelinase Amplifies Redox Signaling in Pseudomonas aeruginosa-Induced Macrophage Apoptosis
Yang Zhang, Xiang Li, Alexander Carpinteiro, and Erich Gultbins

INFLAMMATION

Inhibition of Arginase Activity Enhances Inflammation in Mice with Allergic Airway Disease, in Association with Increases in Protein S-Nitrosylation and Tyrosine Nitration

Liver X Receptor Agonists Increase Airway Reactivity in a Model of Asthma via Increasing Airway Smooth Muscle Growth
Mark A. Birrell, Jorge De Alba, Matthew C. Catley, Elizabeth Hardaker, Sissie Wong, Michael Collins, Deborah L. Clarke, Stuart N. Farroux, Timothy M. Willson, Jon L. Collins, and Maria G. Belvisi

RAGE Ligation Affects T Cell Activation and Controls T Cell Differentiation

TLR-2 and IL-17A in Chitin-Induced Macrophage Activation and Acute Inflammation
Carla A. Da Silva, Dominik Hartl, Wei Liu, Chun G. Lee, and Jack A. Elias

Hydrogen Sulfide Augments Neutrophil Migration through Enhancement of Adhesion Molecule Expression and Prevention of CXCR2 Internalization: Role of ATP-Sensitive Potassium Channels
CLINICAL IMMUNOLOGY

4363 Potent Tumor-Specific Protection Ignited by Adoptively Transferred CD4+ T Cells
Zuqiang Liu, Hae S. Noh, Janet Chen, Jin H. Kim, Louis D. Falo, Jr., and Zhuyang You

4371 Rapid Deletional Peripheral CD8 T Cell Tolerance Induced by Allogeneic Bone Marrow: Role of Donor Class II MHC and B Cells
Thomas Fehr, Sophia Wang, Fabienne Haspot, Josef Kurtz, Peter Blaha, Timothy Hogan, Meredith Chittenden, Thomas Wekerle, and Megan Sykes

4381 4-1BB Enhances Proliferation of Beryllium-Specific T Cells in the Lung of Subjects with Chronic Beryllium Disease
Douglas G. Mack, Allison K. Lanham, Brent E. Palmer, Lisa A. Maier, Tania H. Watts, and Andrew P. Fontenot

4389 Lung Resident Mesenchymal Stem Cells Isolated from Human Lung Allografts Inhibit T Cell Proliferation via a Soluble Mediator
Lamis Jarvinen, Linda Badri, Scott Wettlaufer, Takashi Ohtsuka, Theodore J. Standiford, Galen B. Toews, David J. Pinsky, Marc Peter-Golden, and Vibha N. Lama

4397 Evidence for an Association between Thyroid-Stimulating Hormone and Insulin-Like Growth Factor 1 Receptors: A Tale of Two Antigens Implicated in Graves’ Disease
Shanli Tsui, Vibha Naik, Neil Hooa, Catherine J. Huang, Nikoo F. Afsifyan, Amiya Sinha Hikim, Andrew G. Gianoukakis, Raymond S. Douglas, and Terry J. Smith

4406 CD8+ T Cells Targeting a Single Immunodominant Epitope Are Sufficient for Elimination of Established SV40 T Antigen-Induced Brain Tumors
Angela M. Tatum, Lawrence M. Mylin, Susan J. Bender, Matthew A. Fischer, Beth A. Vigliotti, M. Judith Tevethia, Satvir S. Tevethia, and Todd D. Schell

4418 Elevated Maternal IL-16 Levels, Enhanced IL-16 Expressions in Endothelium and Leukocytes, and Increased IL-16 Production by Placental Trophoblasts in Women with Preeclampsia
Yang Gu, David F. Lewis, Kelli Deere, Lynn J. Groome, and Yuping Wang

4423 Author Index