This information is current as of July 26, 2017.

175 (3)

J Immunol 2005; 175:1359-2026; ;
http://www.jimmunol.org/content/175/3

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
1359 **IN THIS ISSUE**

**PILLARS OF IMMUNOLOGY**

1361 Peyer’s Patch Germinal Centers: The Elusive Switch Site for IgA  
*Jerry R. McGhee*

*Eugene C. Butcher, Robert V. Reese, Robert L. Coffman, Carol N. Nottenburg, Richard R. Hardy, and Irving L. Weissman*

**BRIEF REVIEWS**

1373 Human Dendritic Cells: Potent Antigen-Presenting Cells at the Crossroads of Innate and Adaptive Immunity  
*Marco Rosi and James W. Young*

**CUTTING EDGE**

1383 Cutting Edge: HLA-E Binds a Peptide Derived from the ATP-Binding Cassette Transporter Multidrug Resistance-Associated Protein 7 and Inhibits NK Cell-Mediated Lysis  
*Stacey L. Wooden, Suzanne R. Kalb, Robert J. Cotter, and Mark J. Soloski*

**CELLULAR IMMUNOLOGY AND IMMUNE REGULATION**

1389 Physiological Role of Macrophage Inflammatory Protein-3α Induction during Maturation of Intestinal Macrophages  
*Martin Hausmann, Frauke Bataille, Tanja Spoettl, Katja Schreiter, Werner Falk, Juergen Schoelmerich, Hans Herfarth, and Gerhard Rogler*

1399 The Colony-Stimulating Factor 1 Receptor Is Expressed on Dendritic Cells during Differentiation and Regulates Their Expansion  
*Kelli P. A. MacDonald, Vanesa Rowe, Helen M. Bofinger, Ranjeny Thomas, Tedjo Saimono, David A. Hume, and Geoffrey R. Hill*

---

1406 The Lymphocyte Receptor CD6 Interacts with Syntenin-1, a Scaffolding Protein Containing PDZ Domains
Idoia Gimferrer, Anna Ibáñez, Montse Farnós, Maria-Rosa Sarrias, Rafael Fenutriá, Sandra Roselló, Pascale Zimmermann, Guido David, Jordi Vives, Carles Serra-Pagès, and Francisco Lozano

1415 Tamoxifen Blocks Estrogen-Induced B Cell Maturation but Not Survival
Elena Peeva, Jeganathan Venkataram, and Betty Diamond

1424 Simultaneous Targeting of CD3 on T Cells and CD40 on B or Dendritic Cells Augments the Antitumor Reactivity of Tumor-Primed Lymph Node Cells
Qiao Li, Amelia C. Grover, Elizabeth J. Donald, Abbey Carr, Jiyan Yu, Joel Whitfield, Mark Nelson, Nobuhiro Takeshita, and Alfred E. Chang

1433 Dynamic Differentiation of Activated Human Peripheral Blood CD8+ and CD4+ Effector Memory T Cells
Jochen Schwendemann, Carmen Choi, Volker Schirrmacher, and Philipp Beckhove

1440 Failed Up-Regulation of the Inhibitory IgG Fc Receptor FcγRIIB on Germinal Center B Cells in Autoimmune-Prone Mice Is Not Associated with Deletion Polymorphisms in the Promoter Region of the FcγRIIB Gene
Ziaur S. M. Rahman and Tim Manser

1450 Immunological Trigger of Mast Cells by Monomeric IgE: Effect on Microphthalmia Transcription Factor, STAT3 Network of Interactions
Amir Sonnenblick, Carmit Levy, and Ehud Razin

1456 Provision of Granulocyte-Macrophage Colony-Stimulating Factor Converts an Autoimmune Response to a Self-Antigen into an Antitumor Response
Qingyong Ji, David Gordek, and Arthur A. Harwitz

1464 Multiple Members of the TNF Superfamily Contribute to IFN-γ-Mediated Inhibition of Erythropoiesis
Nadia Felli, Francesca Pedoni, Ann Zeuner, Eleonora Petrucci, Ugo Testa, Concetta Conticello, Mauro Biffoni, Andrea Di Ciaudo, Jeffrey A. Winkles, Cesare Pecchle, and Ruggero De Maria

1473 IgE Enhances Antibody and T Cell Responses In Vivo via CD23+ B Cells
Andrew Getahun, Fredrik Hjelm, and Birgitta Heyman

1483 Prostaglandin E2 Induces FOXP3 Gene Expression and T Regulatory Cell Function in Human CD4+ T Cells
Felicita Baratelli, Ying Lin, Li Zhu, Seok-Chul Yang, Nathalie Henzo-Vourch, Gang Zeng, Karen Reckamp, Mariam Dohadwala, Shervin Sharma, and Steven M. Dubinett

1491 T Cell Tolerance Induced by Cross-Reactive TCR Ligands Can Be Broken by Superagonist Resulting in Anti-Inflammatory T Cell Cytokine Production
Zsolt Illés, Hanspeter Waldner, Jayagopala Reddy, Estelle Bettelli, Lindsay B. Nicholson, and Vijay K. Kuchroo

1498 Adenovirus Infection Dramatically Augments Lipopolysaccharide-Induced TNF Production and Sensitizes to Lethal Shock
György Fejér, Katalin Szalay, Ildikó György, Mária Fejes, Erzsébet Kázi, Saviana Nedicanu, Tibor Páli, Tibor Schmidt, Botond Siklodi, György Lázár, Jr., György Lázár, Sr., and Ernő Duda

1507 Transient Loss of MHC Class I Tetramer Binding after CD8+ T Cell Activation Reflects Altered T Cell Effector Function
Donald R. Drake, III, Rebecca M. Ream, Christopher W. Lawrence, and Thomas J. Braciale

1516 CD8α+, but Not CD8α−, Dendritic Cells Tolerize Th2 Responses via Contact-Dependent and -Independent Mechanisms, and Reverse Airway Hyperresponsiveness, Th2, and Eosinophil Responses in a Mouse Model of Asthma
John R. Gordon, Fang Li, Aarti Nayyar, Jim Xiang, and Xiaobei Zhang

1523 Specific Role of Phosphodiesterase 4B in Lipopolysaccharide-Induced Signaling in Mouse Macrophages
S.-L. Catherine Jin, Linda Lan, Maria Zoudilova, and Marco Conti
Regulation of Bim by TCR Signals in CD4/CD8 Double-Positive Thymocytes
Anna Bunin, Fatima W. Khwaja, and Gilbert J. Kersh

α-Galactosylceramide-Induced Liver Injury in Mice Is Mediated by TNF-α but Independent of Kupffer Cells
Markus Biburger and Gisa Tiegs

Direct Stimulation of Human T Cells via TLR5 and TLR7/8: Flagellin and R-848 Up-Regulate Proliferation and IFN-γ Production by Memory CD8+ T Cells
Gersende Caron, Dorothée Duluc, Isabelle Frémaux, Pascale Jeannin, Catherine David, Hugues Gascan, and Yves Deleste

CD226 Is Specifically Expressed on the Surface of Th1 Cells and Regulates Their Expansion and Effector Functions
Valerie Dardalhon, Anna S. Schubart, Jayagopala Reddy, Jennifer Hartt Meyers, Laurent Monney, Catherine A. Sabatos, Rakesh Abuja, Khuong Nguyen, Gordon J. Freeman, Edward A. Greenfield, Raymond A. Sobel, and Vijay K. Kuchroo

CD25-Expressing CD8+ T Cells Are Potent Memory Cells in Old Age
Dietmar Herndler-Brandstetter, Susanne Schweiger, Ellen Veel, Christine Fehr, Daniel P. Cioca, Giovanni Almanzar, Michael Keller, Gerald Pfister, Walther Parson, Reinhard Würzner, Diether Schönitzer, Sian M. Henson, Richard Aspinall, Günter Lepperdinger, and Beatrix Grubeck-Loebenstein

A Theoretical Framework for Quantitative Analysis of the Molecular Basis of Costimulation
Andreas Jansson, Eleanor Barnes, Paul Kleneman, Mikael Harlén, Poul Sørensen, Simon J. Davis, and Patric Nilsson

Blockade of B7-H1 on Macrophages Suppresses CD4+ T Cell Proliferation by Augmenting IFN-γ-Induced Nitric Oxide Production
Tomohide Yamazaki, Hisaya Akiha, Akemi Koyanagi, Miyuki Azuma, Hideo Yagita, and Ko Okumura

Drug-Induced Expansion and Differentiation of Vγ9Vδ2 T Cells In Vivo: The Role of Exogenous IL-2
Rita Casetti, Gemma Perretta, Alessandra Tagliani, Maurizio Mattei, Vittorio Colizzi, Francesco Dieli, Gianpiero D’Offizi, Miroslav Malkovsky, and Fabrizio Poccia

Quantum Proteolytic Activation of Chemokine CCL15 by Neutrophil Granulocytes Modulates Mononuclear Cell Adhesiveness
Rudolf Richter, Roxana Biztrian, Sylvia Escher, Wolf-Georg Forssmann, Jalal Vakili, Reinhard Henschler, Nikolaj Spodsborg, Adjua Frimpong-Boateng, and Ulf Forssmann

Anatomical Location Determines the Distribution and Function of Dendritic Cells and Other APCs in the Respiratory Tract
Christophe von Garnier, Luis Filgueira, Matthew Wikstrom, Miranda Smith, Jennifer A. Thomas, Deborah H. Strickland, Patrick G. Holt, and Philip A. Stumbles

CpG-Containing Oligodeoxynucleotides Act through TLR9 to Enhance the NK Cell Cytokine Response to Antibody-Coated Tumor Cells
Julie M. Rada, Robin Parihar, and William E. Carson, III

Human Tumor Antigen MUC1 Is Chemotactic for Immature Dendritic Cells and Elicits Maturation but Does Not Promote Th1 Type Immunity
Casey A. Carlos, Hui Fang Dong, O. M. Zack Howard, Joost J. Oppenheim, Franz-Georg Hanisch, and Olivia J. Finn

TLR7/8-Mediated Activation of Human NK Cells Results in Accessory Cell-Dependent IFN-γ Production
Orla M. Hart, Veronica Athie-Morales, Geraldine M. O’Connor, and Clair M. Gardiner

TLR-4 Regulates CD8+ T Cell Trapping in the Liver
Beena John and Ian Nicholas Crispe

NFκB-Inducing Kinase Deficiency Results in the Development of a Subset of Regulatory T Cells, which Shows a Hyperproliferative Activity upon Glucocorticoid-Induced TNF Receptor Family-Related Gene Stimulation
Li-Fan Lu, David C. Gondek, Zachary A. Scott, and Randolph J. Noelle
Human Follicular Dendritic Cells Express Prostacyclin Synthase: A Novel Mechanism to Control T Cell Numbers in the Germinal Center
In Yong Lee, Eun-Mi Ko, Sang-Hyun Kim, Dow-Il Jeoung, and Jongseon Choe

During Viral Infection of the Respiratory Tract, CD27, 4-1BB, and OX40 Collectively Determine Formation of CD8+ Memory T Cells and Their Capacity for Secondary Expansion
Jenny Hendriks, Yanling Xiao, John W. A. Rosen, Koenraad F. van der Sluijs, Kazuo Sugamura, Naoto Ishii, and Jannie Borst

CD8+ T Cell Tolerance in Nonobese Diabetic Mice Is Restored by Insulin-Dependent Diabetes Resistance Alleles
Xavier Martinez, Haub T. C. Kreuwel, William L. Redmond, Rebecca Trenney, Kara Hunter, Hugh Rosen, Nora Sarvatinick, Linda S. Wicker, and Linda A. Sherman

Augmentation of Effector CD8+ T Cell Generation with Enhanced Granzyme B Expression by IL-27 Noriko Morishima, Toshiyuki Ouaki, Masayuki Asakawa, Sadahiro Kamiya, Junichiro Mizuguchi, and Takayuki Yoshimoto

Molecular and Structural Immunology

Runx3 Regulates Integrin α6/CD103 and CD4 Expression during Development of CD4-/CD8+ T Cells
Baerbel Grueter, Michaela Petter, Takeshi Egawa, Kirsten Laule-Kilian, Christine J. Aldrian, Andreas Wuerch, Yvonne Ludwig, Hidehiro Fukuyama, Hedda Wardemann, Ralph Waldschuetz, Tarik Moroil, Ichiro Tanisch, Viktor Steimle, Dan R. Littman, and Marc Ehlers

Investigation of Peptide Involvement in T Cell Allorecognition Using Recombinant HLA Class I Multimers

Molecular Basis of Peptide Recognition by the TCR: Affinity Differences Calculated Using Large Scale Computing
Shunzhou Wan, Peter V. Coveney, and Darren R. Flower

Immunogenetics

Regulator of Complement Activation (RCA) Locus in Chicken: Identification of Chicken RCA Gene Cluster and Functional RCA Proteins
Hiroyuki Oshiumi, Kyoko Shida, Ryo Goitsuka, Yuko Kimura, Jun Katoh, Shinya Obha, Yuichiroh Tamaki, Takashi Hattori, Nozomi Yamada, Norimitsu Inoue, Mieko Matsumoto, Shigeki Mizuno, and Tsukasa Seya

Host Defense

Roles for T and NK Cells in the Innate Immune Response to Shigella flexneri
Karine Le-Barillec, Joao Gamelas Magalhaes, Erwan Corcuff, Audrey Thuizat, Philippe J. Sansonetti, Armelle Phalipon, and James P. Di Santo

Delineation of the Function of a Major γδ T Cell Subset during Infection
Elizabeth M. Andrew, Darren J. Newton, Jane E. Dalton, Charlotte E. Egan, Stewart J. Goodwin, Daniela Tramonti, Philip Scott, and Simon R. Carding

Relative Contributions of NK and CD8 T Cells to IFN-γ Mediated Innate Immune Protection against Listeria monocytogenes
Rance E. Berg, Emily Crosseley, Sean Murray, and James Forman

Mycobacterium tuberculosis Regulates CD1 Antigen Presentation Pathways through TLR-2

Opposing Effects of CXCR3 and CCR5 Deficiency on CD8+ T Cell-Mediated Inflammation in the Central Nervous System of Virus-Infected Mice
Carina de Lemos, Jeanette Erbo Christensen, Anneline Nansen, Torben Moos, Bao Lu, Craig Gerard, Jan Pravsgaard Christensen, and Allan Randrup Thomsen
The Human β-Defensins (-1, -2, -3, -4) and Cathelicidin LL-37 Induce IL-18 Secretion through p38 and ERK MAPK Activation in Primary Human Keratinocytes
François Niyonsaba, Hiroko Ushio, Iuou Nagaoka, Ko Okumura, and Hideoki Ogawa

Mannose-Binding Lectin Recognizes Peptidoglycan via the N-Acetyl Glucosamine Moiety, and Inhibits Ligand-Induced Proinflammatory Effect and Promotes Chemokine Production by Macrophages
Joya Nadesalingam, Alister W. Dodds, Kenneth B. M. Reid, and Nades Palaniyar

Polarized Uterine Epithelial Cells Preferentially Present Antigen at the Basolateral Surface: Role of Stromal Cells in Regulating Class II-Mediated Epithelial Cell Antigen Presentation
Charles R. Wira, Richard M. Rossoll, and Roger C. Young

CD43 Is Required for Optimal Growth Inhibition of Mycobacterium tuberculosis in Macrophages and in Mice
April K. Randhawa, Hermann J. Ziltener, Jasmeen S. Merzaban, and Richard W. Stokes

Additive Inhibition of Complement Deposition by Pneumolysin and PspA Facilitates Streptococcus pneumoniae Septicemia
Jose Yuste, Marina Botto, James C. Paton, David W. Holden, and Jeremy S. Brown

Depletion of T Cells by Type I Interferon: Differences between Young and Aged Mice
Jiu Jiang, Diara Gross, Shoko Nagusa, Philip Elbaum, and Donna M. Murasko

Critical Role for IgM in Host Protection in Experimental Filarial Infection
Bhargavi Rajan, Thirumalai Ramalingam, and Thiruchanduravai V. Rajan

Constitutive Nuclear Expression of the IκB Kinase Complex and Its Activation in Human Neutrophils
Thornin Ear, Alexandre Cloutier, and Patrick P. McDonald

INFLAMMATION

Involvement of the Rho-Kinase/Myosin Light Chain Kinase Pathway on Human Monocyte Chemotaxis Induced by ATL-1, an Aspirin-Triggered Lipoxin A4 Synthetic Analog
Rafael L. Simões and Iolanda M. Fierro

A Shared Epitope of the Interphotoreceptor Retinoid-Binding Protein Recognized by the CD4+ and CD8+ Autoreactive T Cells
Hui Shao, Yong Peng, Tianjiang Liao, Meiqin Wang, Ming Song, Henry J. Kaplan, and Deming Sun

The Cathepsin B Death Pathway Contributes to TNF Plus IFN-γ-Mediated Human Endothelial Injury
Jie Hui Li and Jordan S. Pober

Lyn-Deficient Mice Develop Severe, Persistent Asthma: Lyn Is a Critical Negative Regulator of Th2 Immunity
Sarah-Jane E. Beavitt, Kenneth W. Harder, Joanna M. Kemp, Jessica Jones, Cathy Quilici, Franca Casagranda, Ellen Lam, Debra Turner, Siobhain Brennan, Peter D. Sly, David M. Tarlinton, Gary P. Anderson, and Margaret L. Hibbs

The Enhancement or Prevention of Airway Hyperresponsiveness during Reinfection with Respiratory Syncytial Virus Is Critically Dependent on the Age at First Infection and IL-13 Production
Azzeddine Dakhamna, Jung-Won Park, Christian Taube, Anthony Joetham, Annette Balhorn, Nobuaki Miyahara, Katsuyuki Takeda, and Erwin W. Gelfand

The Inflammatory versus Constitutive Trafficking of Mononuclear Phagocytes into the Alveolar Space of Mice Is Associated with Dramatic Changes in Their Gene Expression Profiles
Mrigank Srivastava, Steffen Jung, Jochen Wilhelm, Ludger Fink, Frank Bühling, Tobias Welte, Rainer M. Bohle, Werner Seeger, Jürgen Lohmeyer, and Ulrich A. Maus

Opposing Regulatory Roles of Complement Factor 5 in the Development of Bleomycin-Induced Pulmonary Fibrosis
Erin Addis-Lieser, Jürg Köhl, and Mónica G. Chiaramonte
1903 IL-4 and IL-13 Induce Protection of Porcine Endothelial Cells from Killing by Human Complement and from Apoptosis through Activation of a Phosphatidylinositide-3-Kinase/Akt Pathway
John F. Grehan, Brett K. Lewey-Young, Jeremy L. Fogelson, Vanessa François-Bongarbon, Barbara A. Benson, and Agustin P. Dalmasso

1911 Heparin-Binding Epidermal Growth Factor-Like Growth Factor Inhibits Cytokine-Induced NF-κB Activation and Nitric Oxide Production via Activation of the Phosphatidylinositol 3-Kinase Pathway
Veela B. Mehta and Gail E. Besner

1919 Neutrophil Dysfunction in Guanosine 3',5'-Cyclic Monophosphate-Dependent Protein Kinase I-Deficient Mice
Claudia G. Werner, Virginia Godfrey, Roland R. Arnold, Gerald L. Featherstone, Diane Bender, Jens Schlasmann, Matthias Schiemann, Franz Hofmann, and Katherine B. Pryzwansky

1930 Bacterial Induction of TNF-α Converting Enzyme Expression and IL-6 Receptor α Shedding Regulates Airway Inflammatory Signaling
Marisa I. Gómez, Sach H. Sokol, Amanda B. Muir, Grace Soong, Jayson Bastien, and Alice S. Prince

1937 Adenosine-Dependent Pulmonary Fibrosis in Adenosine Deaminase-Deficient Mice
Janci L. Chunn, Jose G. Molina, Tiejuaun Ti, Yang Xia, Rodney E. Kellem, and Michael R. Blackburn

1947 Signaling through Up-Regulated C3a Receptor Is Key to the Development of Experimental Lupus Nephritis
Lihua Bao, Iyabo Oouwe, Mark Haas, and Richard J. Quigg

1956 Muramyl Dipeptide Enhances Osteoclast Formation Induced by Lipopolysaccharide, IL-1α, and TNF-α through Nucleotide-Binding Oligomerization Domain 2-Mediated Signaling in Osteoblasts
Shuhua Yang, Naoiuki Takahashi, Teruhito Yamashita, Nobuaki Sato, Masahiro Takahashi, Makio Mogi, Takashi Uenatsu, Yasuhiro Kobayashi, Yuka Nakamichi, Kiyoshi Takeda, Shizuo Akira, Haruhiko Takada, Nobuyauki Udagawa, and Kyofumi Furusawa

CLINICAL IMMUNOLOGY

1965 The Role of Fas in the Immune System Biology of IL-2Rα Knockout Mice: Interplay among Regulatory T Cells, Inflammation, Hemopoiesis, and Apoptosis
Rahul Sharma, Harini Bagavant, Wael N. Jarjour, Sun-Sang J. Sung, and Shyr-Te Ju

1974 Antibodies from Inflamed Central Nervous System Tissue Recognize Myelin Oligodendrocyte Glycoprotein

1983 The TLR7 Agonist Imiquimod Enhances the Anti-Melanoma Effects of a Recombinant Listeria monocytogenes Vaccine
Noah Craft, Kevin W. Bruhn, Bidong D. Nguyen, Robert Prins, Jia Wei Liu, Linda M. Lian, and Jeffery F. Miller

1991 Antigen-Based Therapies Using Ignored Determinants of β Cell Antigens Can More Effectively Inhibit Late-Stage Autoimmune Disease in Diabetes-Prone Mice
Angelica P. Olotu, Jide Tian, Valerie Walker, Hoa Dang, Blake Middleton, Luciano Adorini, Lorraine Washburn, and Daniel L. Kaufman

2000 Intestinal Fibroblast-Derived IL-10 Increases Survival of Mucosal T Cells by Inhibiting Growth Factor Deprivation- and Fas-Mediated Apoptosis
Kenji Ina, Kazuo Kungami, Yasushi Kawano, Tsuyoshi Nishiwaki, Zhonghui Wen, Alessandro Musso, Gail A. West, Michio Ohta, Hidenori Goto, and Claudio Fiocchi

2010 Reconstitution of EBV Latent but Not Lytic Antigen-Specific CD4+ and CD8+ T Cells after HIV Treatment with Highly Active Antiretroviral Therapy
Erwan Piriou, Christine A. Jansen, Karel van Dort, Iris De Casper, Nening M. Nanlohy, Joep M. A. Lange, Marinus H. J. van Oers, Frank Miedema, and Debbie van Baarle