

174
980/cel



The Journal of Immunology

VOLUME 192, NUMBER 4 • FEBRUARY 15, 2014 • WWW.JIMMUNOL.ORG

Table of Contents

The Journal of
Immunology

VOL. 192 | NO. 4 | February 15, 2014 | Pages 1339–1994

EDITORIAL

- 1339 Introducing the *Novel Immunological Methods* Section
Pamela J. Fink

IN THIS ISSUE

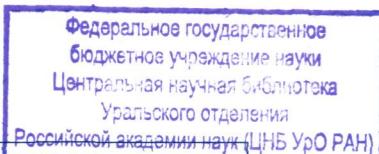
- 1341 **Vitiligo Poorly Primes Naive CD8s** *See article p. 1433*
DUSP14 Dampens T Cell Activation *See article p. 1547*
Insight into Ly49B Promiscuity *See article p. 1558*
Resisting Complement in Leukemia *See article p. 1620*
B Cell Ab Restrains Autoimmunity *See article p. 1641*
Nuclear Factor Keeps Colitis at Bay *See article p. 1918*

BRIEF REVIEWS

- 1343 Endogenous Retroviruses and the Development of Cancer
George Kassiotis

CUTTING EDGE

- 1351 Cutting Edge: Self-Antigen Controls the Balance between Effector and Regulatory T Cells in Peripheral Tissues
Iris K. Gratz, Michael D. Rosenblum, Megan M. Maurano, Jonathan S. Paw, Hong-An Truong, Ann Marshak-Rothstein, and Abul K. Abbas
- 1356 Cutting Edge: FYCO1 Recruitment to Dectin-1 Phagosomes Is Accelerated by Light Chain 3 Protein and Regulates Phagosome Maturation and Reactive Oxygen Production
Jun Ma, Courtney Becker, Christopher Reyes, and David M. Underhill



On the cover: Morphologically diverse natural microflora (*middle*) bound to the vaginal mucosa of 17 β -estradiol-treated female mice chronically colonized with group B streptococcus. The interlacing network of microridges and vaginal rugae, abundant during estrus, is shown (*right*). Fine filaments, of unknown origin, are shown between the microbial cells and the mucosal surface. Carey, A. J., C. K. Tan, S. Mirza, H. Irving-Rodgers, R. I. Webb, A. Lam, and G. C. Ulett. 2014. Infection and cellular defense dynamics in a novel 17 β -estradiol murine model of chronic human group B streptococcus genital tract colonization reveal a role for hemolysin in persistence and neutrophil accumulation. *J. Immunol.* 192: 1718–1731.

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 © 2014 by The American Association of Immunologists, Inc.

ALLERGY AND OTHER HYPERSENSITIVITIES

- 1361 Dectin-2 Regulates the Effector Phase of House Dust Mite–Elicited Pulmonary Inflammation Independently from Its Role in Sensitization
Matthew W. Parsons, Li Li, Aaron M. Wallace, Min Jung Lee, Howard R. Katz, James M. Fernandez, Shinobu Saijo, Yoichiro Iwakura, K. Frank Austen, Yoshihide Kanaoka, and Nora A. Barrett
- 1372 IL-17A Promotes the Exacerbation of IL-33–Induced Airway Hyperresponsiveness by Enhancing Neutrophilic Inflammation via CXCR2 Signaling in Mice
Nobuaki Mizutani, Takeshi Nabe, and Shin Yoshino
- 1385 Enforced Expression of Gata3 in T Cells and Group 2 Innate Lymphoid Cells Increases Susceptibility to Allergic Airway Inflammation in Mice
Alex KleinJan, Roel G. J. Klein Wolterink, Yelvi Levani, Marjolein J. W. de Brujin, Henk C. Hoogsteden, Menno van Nimwegen, and Rudi W. Hendriks

ANTIGEN RECOGNITION AND RESPONSES

- 1395 Second-Generation Langerhans Cells Originating from Epidermal Precursors Are Essential for CD8⁺ T Cell Priming
Mazal Elnekave, Karina Furmanov, Yaffa Shaul, Tal Capucha, Luba Eli-Berchoer, Katya Zelentsova, Björn E. Clausen, and Avi-Hai Hovav

AUTOIMMUNITY

- 1404 IL-21 Contributes to Fatal Inflammatory Disease in the Absence of Foxp3⁺ T Regulatory Cells
Alexis Vogelzang, Helen M. McGuire, Sue M. Liu, Brian Gloss, Karessa Mercado, Peter Earls, Marcel E. Dinger, Marcel Batten, Jonathan Sprent, and Cecile King
- 1415 PTPN22 Controls the Germinal Center by Influencing the Numbers and Activity of T Follicular Helper Cells
Christian J. Maine, Kristi Marquardt, Jocelyn Cheung, and Linda A. Sherman
- 1425 Islet Antigen-Specific Th17 Cells Can Induce TNF- α –Dependent Autoimmune Diabetes
Cheng-Rui Li, Erin E. Mueller, and Linda M. Bradley
- 1433 Autoimmune Vitiligo Does Not Require the Ongoing Priming of Naive CD8 T Cells for Disease Progression or Associated Protection against Melanoma
Katelyn T. Byrne, Peisheng Zhang, Shannon M. Steinberg, and Mary Jo Turk
- 1440 Transcriptional Regulator CTR9 Inhibits Th17 Differentiation via Repression of IL-17 Expression
Hyeon-Seok Yoo, Yongwook Choi, Narae Ahn, Saseong Lee, Wan-Uk Kim, Min Seong Jang, Myoung Ho Jang, Yon Su Kim, and Joo-Yeon Yoo
- 1449 Excess IL-1 Signaling Enhances the Development of Th17 Cells by Downregulating TGF- β –Induced Foxp3 Expression
Satoshi Ikeda, Shinobu Saijo, Masanori A. Murayama, Kenji Shimizu, Aoi Akitsu, and Yoichiro Iwakura
- 1459 Bruton's Tyrosine Kinase Promotes Persistence of Mature Anti-Insulin B Cells
Rachel H. Bonami, Allison M. Sullivan, James B. Case, Hannah E. Steinberg, Kristen L. Hoek, Wasif N. Khan, and Peggy L. Kendall

CLINICAL AND HUMAN IMMUNOLOGY

- 1471 Human Cytomegalovirus Infection Promotes Rapid Maturation of NK Cells Expressing Activating Killer Ig-like Receptor in Patients Transplanted with NKG2C^{-/-} Umbilical Cord Blood
Mariella Della Chiesa, Michela Falco, Alice Bertaina, Letizia Muccio, Claudia Alicata, Francesco Frassoni, Franco Locatelli, Lorenzo Moretta, and Alessandro Moretta
- 1480 CD19 and CD32b Differentially Regulate Human B Cell Responsiveness
Jodi L. Karnell, Nazzareno Dimasi, Fredrick G. Karnell, III, Ryan Fleming, Ellen Kuta, Mildred Wilson, Herren Wu, Changshou Gao, Ronald Herbst, and Rachel Ettinger

- 1491 IDO-Independent Suppression of T Cell Effector Function by IFN- γ -Licensed Human Mesenchymal Stromal Cells
Raghavan Chinnadurai, Ian B. Copland, Seema R. Patel, and Jacques Galipeau
- 1502 Embryonic Trophoblasts Induce Decidual Regulatory T Cell Differentiation and Maternal–Fetal Tolerance through Thymic Stromal Lymphopoietin Instructing Dendritic Cells
Mei-Rong Du, Pei-Fen Guo, Hai-Lan Piao, Song-Cun Wang, Chan Sun, Li-Ping Jin, Yu Tao, Yan-Hong Li, Di Zhang, Rui Zhu, Qiang Fu, and Da-Jin Li

IMMUNE REGULATION

- 1512 Posttranscriptional Modulation of Cytokine Production in T Cells for the Regulation of Excessive Inflammation by TFL
Kentaro Minagawa, Kanako Wakahashi, Hiroki Kawano, Shinichiro Nishikawa, Chie Fukui, Yuko Kawano, Noboru Asada, Mari Sato, Akiko Sada, Yoshio Katayama, and Toshimitsu Matsui
- 1525 *Mst1/Mst2* Regulate Development and Function of Regulatory T Cells through Modulation of Foxo1/Foxo3 Stability in Autoimmune Disease
Xingrong Du, Hao Shi, Jiang Li, Yongli Dong, JieLiang Liang, Jian Ye, Shanshan Kong, Shujing Zhang, Tao Zhong, Zengqiang Yuan, Tian Xu, Yuan Zhuang, Biao Zheng, Jian-Guo Geng, and Wufan Tao
- 1536 Binding of HLA-G to ITIM-Bearing Ig-like Transcript 2 Receptor Suppresses B Cell Responses
Abderrahim Naji, Catherine Menier, Fabio Morandi, Sophie Agaugué, Gitta Maki, Elisa Ferretti, Sylvie Bruel, Vito Pistoia, Edgardo D. Carosella, and Nathalie Rouas-Freiss
- 1547 Dual-Specificity Phosphatase 14 (DUSP14/MKP6) Negatively Regulates TCR Signaling by Inhibiting TAB1 Activation
Chia-Yu Yang, Ju-Pi Li, Li-Li Chiu, Joung-Liang Lan, Der-Yuan Chen, Huai-Chia Chuang, Ching-Yu Huang, and Tse-Hua Tan
- 1558 Mutagenesis of Ly49B Reveals Key Structural Elements Required for Promiscuous Binding to MHC Class I Molecules and New Insights into the Molecular Evolution of Ly49s
Katarzyna M. Mickiewicz, Frances Gays, Richard J. Lewis, and Colin G. Brooks
- 1570 Gr1⁺ Cells Suppress T-Dependent Antibody Responses in (NZB × NZW)F1 Male Mice through Inhibition of T Follicular Helper Cells and Germinal Center Formation
Evan Der, Joana Dimo, Abhishek Trigunaite, Justin Jones, and Trine N. Jørgensen
- 1577 A Genetic Defect in Mice That Impairs Missing Self Recognition Despite Evidence for Normal Maturation and MHC Class I-Dependent Education of NK Cells
Stina L. Wickström, Linda Öberg, Klas Kärre, and Maria H. Johansson
- 1587 Flagellin Induces Antibody Responses through a TLR5- and Inflammasome-Independent Pathway
Américo Harry López-Yglesias, Xiaodan Zhao, Ellen K. Quarles, Marvin A. Lai, Tim VandenBos, Roland K. Strong, and Kelly D. Smith
- 1597 B Cell Depletion Curtails CD4⁺ T Cell Memory and Reduces Protection against Disseminating Virus Infection
Ichiro Misumi and Jason K. Whitmire

IMMUNE SYSTEM DEVELOPMENT

- 1609 Noncore RAG1 Regions Promote V β Rearrangements and $\alpha\beta$ T Cell Development by Overcoming Inherent Inefficiency of V β Recombination Signal Sequences
Julie E. Horowitz and Craig H. Bassing

IMMUNOTHERAPY AND VACCINES

- 1620 Induced Resistance to Ofatumumab-Mediated Cell Clearance Mechanisms, Including Complement-Dependent Cytotoxicity, in Chronic Lymphocytic Leukemia
Nisar A. Baig, Ronald P. Taylor, Margaret A. Lindorfer, Amy K. Church, Betsy R. LaPlant, Adam M. Pettinger, Tait D. Shanafelt, Grzegorz S. Nowakowski, and Clive S. Zent

- 1630 Intradermal Delivery of *Shigella* IpaB and IpaD Type III Secretion Proteins: Kinetics of Cell Recruitment and Antigen Uptake, Mucosal and Systemic Immunity, and Protection across Serotypes
Shannon J. Heine, Jovita Diaz-McNair, Abhay U. Andar, Cinthia B. Drachenberg, Lillian van de Verg, Richard Walker, Wendy L. Picking, and Marcela F. Pasetti
- 1641 Anti-CD79 Antibody Induces B Cell Anergy That Protects against Autoimmunity
Ian R. Hardy, Nadia Añceriz, François Rousseau, Matt B. Seefeldt, Eric Hatterer, Magali Irla, Vanessa Buatois, Laurence E. Chatel, Andrew Getahun, Ashley Fletcher, Laura Cons, Guillemette Pontini, Nicole A. Hertzberg, Giovanni Magistrelli, Pauline Malinge, Mia J. Smith, Walter Reith, Marie H. Kosco-Vilbois, Walter G. Ferlin, and John C. Cambier

INFECTIOUS DISEASE AND HOST RESPONSE

- 1651 Pathogen-Related Differences in the Abundance of Presented Antigen Are Reflected in CD4⁺ T Cell Dynamic Behavior and Effector Function in the Lung
Parizad Torabi-Parizi, Nienke Vrisekoop, Wolfgang Kastenmuller, Michael Y. Gerner, Jackson G. Egen, and Ronald N. Germain
- 1661 The Aryl Hydrocarbon Receptor Promotes IL-10 Production by NK Cells
Sagie Wagage, Beena John, Bryan L. Krock, Aisling O'Hara Hall, Louise M. Randall, Christopher L. Karp, M. Celeste Simon, and Christopher A. Hunter
- 1671 Cleavage of the T Cell Protein Tyrosine Phosphatase by the Hepatitis C Virus Nonstructural 3/4A Protease Induces a Th1 to Th2 Shift Reversible by Ribavirin Therapy
Erwin Daniel Brenndörfer, Anette Brass, Juliane Karthe, Gustaf Ahlén, Johannes Georg Bode, and Matti Sällberg
- 1681 HIV Nef Expression Favors the Relative Preservation of CD4⁺ T Regulatory Cells That Retain Some Important Suppressive Functions
Pavel Chrobak, Soheila Afkhami, Elena Priceputu, Johanne Poudrier, Clémence Meunier, Zaher Hanna, Tim Sparwasser, and Paul Jolicoeur
- 1693 Modulation of Nonneutralizing HIV-1 gp41 Responses by an MHC-Restricted T_H Epitope Overlapping Those of Membrane Proximal External Region Broadly Neutralizing Antibodies
Jinsong Zhang, S. Munir Alam, Hilary Bouton-Verville, Yao Chen, Amanda Newman, Shelley Stewart, Frederick H. Jaeger, David C. Montefiori, S. Moses Dennison, Barton F. Haynes, and Laurent Verkoczy
- 1707 Role of Th1/Th17 Balance Regulated by T-bet in a Mouse Model of *Mycobacterium avium* Complex Disease
Masashi Matsuyama, Yukio Ishii, Yuichi Yageta, Shigeo Ohtsuka, Satoshi Ano, Yosuke Matsuno, Yuko Morishima, Keigyou Yoh, Satoru Takahashi, Kenji Ogawa, Cory M. Hogaboam, and Nobuyuki Hizawa
- 1718 Infection and Cellular Defense Dynamics in a Novel 17 β -Estradiol Murine Model of Chronic Human Group B Streptococcus Genital Tract Colonization Reveal a Role for Hemolysin in Persistence and Neutrophil Accumulation
Alison J. Carey, Chee Keong Tan, Shaper Mirza, Helen Irving-Rodgers, Richard I. Webb, Alfred Lam, and Glen C. Ulett
- 1732 CD8⁺ T Cells Are Activated in an Antigen-Independent Manner in HIV-Infected Individuals
Sonia Bastidas, Frederik Graw, Miranda Z. Smith, Herbert Kuster, Huldrych F. Günthard, and Annette Oxenius
- 1745 Role of Neutrophils in IL-17-Dependent Immunity to Mucosal Candidiasis
Anna R. Huppner, Heather R. Conti, Nydiaris Hernández-Santos, Toni Darville, Partha S. Biswas, and Sarah L. Gaffen
- 1753 CD4⁺ T Cell Responses to the *Plasmodium falciparum* Erythrocyte Membrane Protein 1 in Children with Mild Malaria
Evelyn N. Gitau, James Tuju, Henry Karanja, Liz Stevenson, Pilar Requena, Eva Kimani, Ally Olotu, Domtila Kimani, Kevin Marsh, Peter Bull, and Britta C. Urban
- 1762 CXCL1 but Not IL-6 Is Required for Recurrent Herpetic Stromal Keratitis
Devin M. West, Chelsea R. Del Rosso, Xiao-Tang Yin, and Patrick M. Stuart

- 1768 Induction of Endotoxin Tolerance by Pathogenic *Neisseria* Is Correlated with the Inflammatory Potential of Lipooligosaccharides and Regulated by MicroRNA-146a
Mingfeng Liu, Constance M. John, and Gary A. Jarvis

- 1778 Conventional NK Cells Can Produce IL-22 and Promote Host Defense in *Klebsiella pneumoniae* Pneumonia
Xin Xu, Ido D. Weiss, Hongwei H. Zhang, Satya P. Singh, Thomas A. Wynn, Mark S. Wilson, and Joshua M. Farber

INNATE IMMUNITY AND INFLAMMATION

- 1787 Mechanism of Neutrophil Dysfunction: Neutrophil Serine Proteases Cleave and Inactivate the C5a Receptor
Carmen W. van den Berg, Denise V. Tambourgi, Howard W. Clark, S. Julie Hoong, O. Brad Spiller, and Eamon P. McGreal

- 1796 Serum and Glucocorticoid–Regulated Kinase 1 Regulates Neutrophil Clearance during Inflammation Resolution
Joseph Burgon, Anne L. Robertson, Pranvera Sadiku, Xingang Wang, Edward Hooper-Greenhill, Lynne R. Prince, Paul Walker, Emily E. Hoggett, Jonathan R. Ward, Stuart N. Farrow, William J. Zuercher, Philip Jeffrey, Caroline O. Savage, Philip W. Ingham, Adam F. Hurlstone, Moira K. B. Whyte, and Stephen A. Renshaw

- 1806 H₂S Increases Survival during Sepsis: Protective Effect of CHOP Inhibition
Marcella Ferlito, Qihong Wang, William B. Fulton, Paul M. Colombani, Luigi Marchionni, Karen Fox-Talbot, Nazareno Paolocci, and Charles Steenbergen

- 1815 IL-37 Ameliorates the Inflammatory Process in Psoriasis by Suppressing Proinflammatory Cytokine Production
Xiu Teng, Zhonglan Hu, Xiaoqiong Wei, Zhen Wang, Ting Guan, Ning Liu, Xiao Liu, Ning Ye, Guohua Deng, Can Luo, Nongyu Huang, Changyan Sun, Minyan Xu, Xikun Zhou, Hongxin Deng, Carl Keith Edwards, III, Xiancheng Chen, Xiaoxia Wang, Kaijun Cui, Yuquan Wei, and Jiong Li

- 1824 Computational Approach To Characterize Causative Factors and Molecular Indicators of Chronic Wound Inflammation
Sridevi Nagaraja, Anders Wallqvist, Jaques Reifman, and Alexander Y. Mitrophanov

- 1835 FADD and Caspase-8 Mediate Priming and Activation of the Canonical and Noncanonical Nlrp3 Inflammasomes
Prajwal Gurung, Paras K. Anand, R. K. Subbarao Malireddi, Lieselotte Vande Walle, Nina Van Opdenbosch, Christopher P. Dillon, Ricardo Weinlich, Douglas R. Green, Mohamed Lamkanfi, and Thirumala-Devi Kanneganti

- 1847 Mast Cells Contribute to Bleomycin-Induced Lung Inflammation and Injury in Mice through a Chymase/Mast Cell Protease 4–Dependent Mechanism
Laurent L. Reber, François Daubeuf, Gunnar Pejler, Magnus Abrink, and Nelly Frossard

- 1855 Casein Kinase 1 γ 1 Inhibits the RIG-I/TLR Signaling Pathway through Phosphorylating p65 and Promoting Its Degradation
Yetao Wang, Lei Hu, Xiaomei Tong, and Xin Ye

- 1862 Heterotropic Modulation of Selectin Affinity by Allosteric Antibodies Affects Leukocyte Rolling
Sebastian B. Riese, Christian Kuehne, Thomas F. Tedder, Rupert Hallmann, Erhard Hohenester, and Konrad Buscher

- 1870 Probiotic *Lactobacillus rhamnosus* Inhibits the Formation of Neutrophil Extracellular Traps
Linda Vong, Robert J. Lorentz, Amit Assa, Michael Glogauer, and Philip M. Sherman

MOLECULAR AND STRUCTURAL IMMUNOLOGY

- 1878 PC3-Secreted Microprotein Is a Novel Chemoattractant Protein and Functions as a High-Affinity Ligand for CC Chemokine Receptor 2
Xiaolei Pei, Qianying Sun, Yan Zhang, Pingzhang Wang, Xinjian Peng, Changyuan Guo, Enquan Xu, Yi Zheng, Xiaoning Mo, Jing Ma, Dixin Chen, Yang Zhang, Yingmei Zhang, Quansheng Song, Shuai Guo, Taiping Shi, Zhixin Zhang, Dalong Ma, and Ying Wang

- 1887 Tetraacylated Lipid A and Paclitaxel-Selective Activation of TLR4/MD-2 Conferred through Hydrophobic Interactions
Nuša Resman, Alja Oblak, Theresa L. Gioannini, Jerrold P. Weiss, and Roman Jerala
- 1896 MMTV Superantigens Coerce an Unconventional Topology between the TCR and MHC Class II
Jean-Simon Fortin, Laetitia Genève, Catherine Gauthier, Naglaa H. Shoukry, Georges A. Azar, Souheil Younes, Bader Yassine-Diab, Rafick-Pierre Sékaly, Daved H. Fremont, and Jacques Thibodeau

- 1907 KIR3DL01 Recognition of Bw4 Ligands in the Rhesus Macaque: Maintenance of Bw4 Specificity since the Divergence of Apes and Old World Monkeys
Jamie L. Schafer, Arnaud D. Colantonio, William J. Neidermyer, Dawn M. Dudley, Michelle Connole, David H. O'Connor, and David T. Evans

MUCOSAL IMMUNOLOGY

- 1918 Nfil3-Deficient Mice Develop Microbiota-Dependent, IL-12/23-Driven Spontaneous Colitis
Taku Kobayashi, Erin C. Steinbach, Steven M. Russo, Katsuyoshi Matsuoka, Tomonori Nochi, Nitsan Maharshak, Luke B. Borst, Bruce Hostager, J. Victor Garcia-Martinez, Paul B. Rothman, Masaki Kashiwada, Shehzad Z. Sheikh, Peter J. Murray, and Scott E. Plevy

TRANSPLANTATION

- 1928 Oral Combined Therapy with Probiotics and Alloantigen Induces B Cell-Dependent Long-Lasting Specific Tolerance
Ana C. T. Mercadante, Suelen M. Perobelli, Ana P. G. Alves, Triciiana Gonçalves-Silva, Wallace Mello, Ana C. Gomes-Santos, Anderson Miyoshi, Ana M. C. Faria, and Adriana Bonomo

- 1938 Fetal Intervention Increases Maternal T Cell Awareness of the Foreign Conceptus and Can Lead to Immune-Mediated Fetal Demise
Marta Węgorzewska, Amar Nijagal, Charissa M. Wong, Tom Le, Ninnia Lescano, Qizhi Tang, and Tippi C. MacKenzie

TUMOR IMMUNOLOGY

- 1946 TNF- α -Dependent Hematopoiesis following Bcl11b Deletion in T Cells Restricts Metastatic Melanoma
Mohammad N. Uddin, Yubin Zhang, Jonathan A. Harton, Katherine C. MacNamara, and Dorina Avram

- 1954 KLRG1 $^{+}$ NK Cells Protect T-bet-Deficient Mice from Pulmonary Metastatic Colorectal Carcinoma
Muriel Malaisé, Jordi Rovira, Philipp Renner, Elke Eggenhofer, Manije Sabet-Baktach, Margareta Lantow, Sven A. Lang, Gudrun E. Koehl, Stefan A. Farkas, Martin Loss, Ayman Agha, Josep M. Campistol, Hans J. Schlitt, Edward K. Geissler, and Alexander Kroemer

- 1962 A Spliced Antigenic Peptide Comprising a Single Spliced Amino Acid Is Produced in the Proteasome by Reverse Splicing of a Longer Peptide Fragment followed by Trimming
Alexandre Michaux, Pierre Larrieu, Vincent Stroobant, Jean-François Fonteneau, Francine Jotereau, Benoît J. Van den Eynde, Agnès Moreau-Aubry, and Nathalie Vigneron

- 1972 α -Galactosylceramide but Not Phenyl-Glycolipids Induced NKT Cell Anergy and IL-33-Mediated Myeloid-Derived Suppressor Cell Accumulation via Upregulation of egr2/3
Jing-Rong Huang, Yi-Chien Tsai, Ya-Jen Chang, Jen-Chien Wu, Jung-Tung Hung, Kun-Hsien Lin, Chi-Huey Wong, and Alice L. Yu

NOVEL IMMUNOLOGICAL METHODS

- 1982 FLT3-Ligand Treatment of Humanized Mice Results in the Generation of Large Numbers of CD141 $^{+}$ and CD1c $^{+}$ Dendritic Cells In Vivo
Yitian Ding, Andrew Wilkinson, Adi Idris, Ben Fancke, Meredith O'Keefe, Dalia Khalil, Xinsheng Ju, Mireille H. Lahoud, Irina Caminschi, Ken Shortman, Robyn Rodwell, Slavica Vuckovic, and Kristen J. Radford

CORRECTIONS

- 1990 Correction: Complement Activation Associated with ADAMTS13 Deficiency in Human and Murine Thrombotic Microangiopathy
Ramesh Tati, Ann-Charlotte Kristoffersson, Anne-lie Ståhl, Johan Rebetz, Li Wang, Christoph Licht, David Motto, and Diana Karpman

1991 AUTHOR INDEX