

ON THE COVER
Articles from the teams of Matsushima and Woodland demonstrate the importance of the chemokine receptor CXCR3 in the recruitment and localization of CD8⁺ T cells to the splenic marginal zone of infected mice. At that site, T cells receive strong inflammatory stimulation that promotes appropriate effector versus memory responses to antigen. Image shows an abstraction of effective clustering of CXCR3⁺ T cells (orange) and impaired localization of CXCR3⁻ T cells (purple). Artwork by Rachel Urkowitz (rach-elurk@earthlink.net)

See pages 1605 and 1621

Brief Definitive Reports

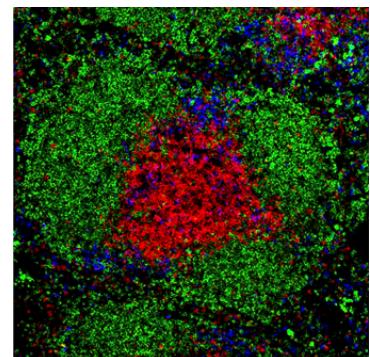
- 1563 Tumor necrosis factor restricts hematopoietic stem cell activity in mice: involvement of two distinct receptors
Cornelis J.H. Pronk, Ole Petter Veiby, David Bryder, and Sten Eirik W. Jacobsen
- 1571 IFN- γ - and IL-10-expressing virus epitope-specific Foxp3⁺ T reg cells in the central nervous system during encephalomyelitis
Jingxian Zhao, Jincun Zhao, Craig Fett, Kathryn Trandem, Erica Fleming, and Stanley Perlman
- 1579 Abrogation of CD30 and OX40 signals prevents autoimmune disease in FoxP3-deficient mice
Fabrina M. Gaspal, David Withers, Manoj Saini, Vasileios Bekiaris, Fiona M. McConnell, Andrea White, Mahmood Khan, Hideo Yagita, Lucy S.K. Walker, Graham Anderson, and Peter J.L. Lane

- 1585 Genomic loss of the putative tumor suppressor gene *E2A* in human lymphoma
Anne Steininger, Markus Möbs, Reinhard Ullmann, Karl Köchert, Stephan Kreher, Björn Lamprecht, Ioannis Anagnostopoulos, Michael Hummel, Julia Richter, Marc Beyer, Martin Janz, Claus-Detlev Klemke, Harald Stein, Bernd Dörken, Wolfram Sterry, Evelin Schrock, Stephan Mathas, and Chalid Assaf

Articles

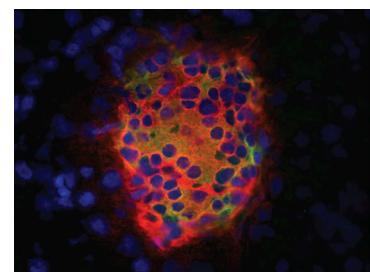
- 1595 Pten mediates Myc oncogene dependence in a conditional zebrafish model of T cell acute lymphoblastic leukemia
Alejandro Gutierrez, Ruta Greblunaite, Hui Feng, Elena Kozakewich, Shizhen Zhu, Feng Guo, Elspeth Payne, Marc Mansour, Suzanne E. Dahlberg, Donna S. Neuberg, Jeroen den Hertog, Edward V. Prochownik, Joseph R. Testa, Marian Harris, John P. Kanki, and A. Thomas Look
- 1605 Chemokine receptor CXCR3 facilitates CD8⁺ T cell differentiation into short-lived effector cells leading to memory degeneration
Makoto Kurachi, Junko Kurachi, Fumiko Suenaga, Tatsuya Tsukui, Jun Abe, Satoshi Ueha, Michio Tomura, Kei Sugihara, Shiki Takamura, Kazuhiro Kakimi, and Kouji Matsushima
- 1621 Inflammatory chemokine receptors regulate CD8⁺ T cell contraction and memory generation following infection
Jacob E. Kohlmeier, William W. Reiley, Georgia Perona-Wright, Michael L. Freeman, Eric J. Yager, Lisa M. Connor, Erik L. Brincks, Tres Cookenham, Alan D. Roberts, Claire E. Burkum, Stewart Sell, Gary M. Winslow, Marcia A. Blackman, Markus Mohrs, and David L. Woodland

- 1635 Gain-of-function human *STAT1* mutations impair IL-17 immunity and underlie chronic mucocutaneous candidiasis**
Luyan Liu, Satoshi Okada, Xiao-Fei Kong, Alexandra Y. Kreins, Sophie Cypowyj, Avinash Abhyankar, Julie Toubiana, Yuval Itan, Magali Audry, Patrick Nitschke, Cécile Masson, Beata Toth, Jérôme Flatot, Mélanie Migaud, Maya Chrabieh, Tatiana Kochetkov, Alexandre Bolze, Alessandro Borghesi, Antoine Toulon, Julia Hiller, Stefanie Eyerich, Kilian Eyerich, Vera Gulácsy, Ludmyla Chernyshova, Viktor Chernyshov, Anastasia Bondarenko, Rosa María Cortés Grimaldo, Lizbeth Blancas-Galicia, Ileana Maria Madrigal Beas, Joachim Roesler, Klaus Magdorf, Dan Engelhard, Caroline Thumerelle, Pierre-Régis Burgel, Miriam Hoernes, Barbara Drexel, Reinhard Seger, Theresia Kusuma, Annette F. Jansson, Julie Sawalle-Belohradsky, Bernd Belohradsky, Emmanuelle Jouanguy, Jacinta Bustamante, Mélanie Bué, Nathan Karin, Gizi Wildbaum, Christine Bodemer, Olivier Lortholary, Alain Fischer, Stéphane Blanche, Saleh Al-Muhsen, Janine Reichenbach, Masao Kobayashi, Francisco Espinosa Rosales, Carlos Torres Lozano, Sara Sebnem Kilic, Matias Oleastro, Amos Etzioni, Claudia Traidl-Hoffmann, Ellen D. Renner, Laurent Abel, Capucine Picard, László Maródi, Stéphanie Boisson-Dupuis, Anne Puel, and Jean-Laurent Casanova
- 1649 Epigenetic tethering of AID to the donor switch region during immunoglobulin class switch recombination**
Beena Patricia Jeevan-Raj, Isabelle Robert, Vincent Heyer, Adeline Page, Jing H. Wang, Florence Cammas, Frederick W. Alt, Régine Losson, and Bernardo Reina-San-Martin
- 1661 The immunoreceptor adapter protein DAP12 suppresses B lymphocyte–driven adaptive immune responses**
Takako Nakano-Yokomizo, Satoko Tahara-Hanaoka, Chigusa Nakahashi-Oda, Tsukasa Nabekura, Nadia K. Tchao, Momoko Kadosaki, Naoya Totsuka, Naoki Kurita, Kiyotaka Nakamagoe, Akira Tamaoka, Toshiyuki Takai, Teruhito Yasui, Hitoshi Kikutani, Shin-ichiro Honda, Kazuko Shibuya, Lewis L. Lanier, and Akira Shibuya
- 1673 B cells enhance early innate immune responses during bacterial sepsis**
Kindra M. Kelly-Scumpia, Philip O. Scumpia, Jason S. Weinstein, Matthew J. Delano, Alex G. Cuenca, Dina C. Nacionales, James L. Wynn, Pui Y. Lee, Yutaro Kumagai, Philip A. Efron, Shizuo Akira, Clive Wasserfall, Mark A. Atkinson, and Lyle L. Moldawer
- 1683 Tissue-specific expression of B7x protects from CD4 T cell–mediated autoimmunity**
Joyce Wei, P'ng Loke, Xingxing Zang, and James P. Allison
- 1695 Flt3L controls the development of radiosensitive dendritic cells in the meninges and choroid plexus of the steady-state mouse brain**
Niroshana Anandasabapathy, Gabriel D. Victora, Matthew Meredith, Rachel Feder, Baojun Dong, Courtney Kluger, Kaihui Yao, Michael L. Dustin, Michel C. Nussenzweig, Ralph M. Steinman, and Kang Liu



CD30 and OX40 drive autoimmunity in FoxP3KO mice.

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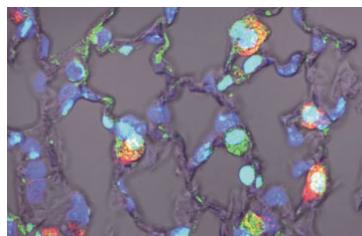


B7x protects from T cell–mediated autoimmunity.

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- 1707 Epithelial transglutaminase 2 is needed for T cell interleukin-17 production and subsequent pulmonary inflammation and fibrosis in bleomycin-treated mice

Keunhee Oh, Hyung-Bae Park, Ok-Jin Byoun, Dong-Myung Shin, Eui Man Jeong, Young Whan Kim, Yon Su Kim, Gerry Melino, In-Gyu Kim, and Dong-Sup Lee



- 1721 Cortactin deficiency is associated with reduced neutrophil recruitment but increased vascular permeability *in vivo*

Michael Schnoor, Frank P.L. Lai, Alexander Zarbock, Ruth Kläver, Christian Polaschegg, Dörte Schulte, Herbert A. Weich, J. Margit Oelkers, Clemens Rottner, and Dietmar Vestweber

TG2 triggers Th17 responses in pulmonary fibrosis.
See page 1707

Corrections

- 1737 *Anaplasma phagocytophilum* induces actin phosphorylation to selectively regulate gene transcription in *Ixodes scapularis* ticks

Hameeda Sultana, Girish Neelakanta, Fred S. Kantor, Stephen E. Malawista, Durland Fish, Ruth R. Montgomery, and Erol Fikrig