

**ON THE COVER**  
Horiuchi et al. show that elevated MYC expression sensitizes human triple-negative breast cancers to CDK inhibitors. The original image is a heat map depicting gene expression across a variety of breast cancer subtypes. Artwork by Sylvia Cuadrado.  
[See page 679](#)

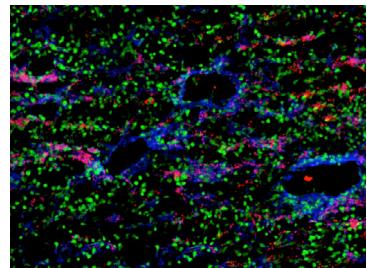
## Brief Definitive Reports

- 641 Naive T cells are dispensable for memory CD4<sup>+</sup> T cell homeostasis in progressive simian immunodeficiency virus infection  
Afam A. Okoye, Mukta Rohankhedkar, Chike Abana, Audrie Pattenn, Matthew Reyes, Christopher Pexton, Richard Lum, Andrew Sylvester, Shannon L. Planer, Alfred Legasse, Byung S. Park, Michael Piatak Jr., Jeffrey D. Lifson, Michael K. Axthelm, and Louis J. Picker
- 653 Characterization of resident and migratory dendritic cells in human lymph nodes  
Elodie Segura, Jenny Valladeau-Guilemond, Marie-Hélène Donnadieu, Xavier Sastre-Garau, Vassili Soumelis, and Sebastian Amigorena
- 661 Histone H3 lysine 9 di-methylation as an epigenetic signature of the interferon response  
Terry C. Fang, Uwe Schaefer, Ingrid Mecklenbrauker, Astrid Stienen, Scott Dewell, Marie S. Chen, Inmaculada Rioja, Valentino Parravicini, Rab K. Prinjha, Rohit Chandwani, Margaret R. MacDonald, Kevin Lee, Charles M. Rice, and Alexander Tarakhovsky
- 671 The ATPase activity of MLH1 is required to orchestrate DNA double-strand breaks and end processing during class switch recombination  
Richard Chahwan, Johanna M.M. van Oers, Elena Avdievich, Chunfang Zhao, Winfried Edelmann, Matthew D. Scharff, and Sergio Roa

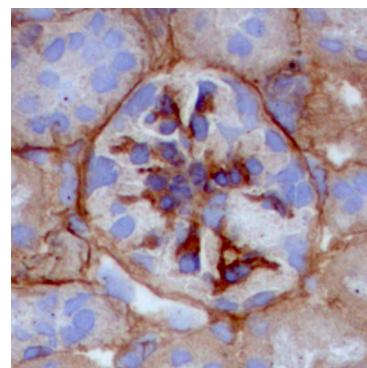
## Articles

- 679 MYC pathway activation in triple-negative breast cancer is synthetic lethal with CDK inhibition  
Dai Horiuchi, Leonard Kusdra, Noelle E. Huskey, Sanjay Chandriani, Marc E. Lenburg, Ana Maria Gonzalez-Angulo, Katelyn J. Creasman, Alexey V. Bazarov, James W. Smyth, Sarah E. Davis, Paul Yaswen, Gordon B. Mills, Laura J. Esserman, and Andrei Goga
- 697 Targeting of KRAS mutant tumors by HSP90 inhibitors involves degradation of STK33  
Ninel Azoitei, Christopher M. Hoffmann, Jana M. Ellegast, Claudia R. Ball, Kerstin Obermayer, Ulrike Gößebe, Britta Koch, Katrin Faber, Felicitas Genze, Mark Schrader, Hans A. Kestler, Hartmut Döhner, Gabriela Chiosis, Hanno Glimm, Stefan Fröhling, and Claudia Scholl
- 713 Vital roles of mTOR complex 2 in Notch-driven thymocyte differentiation and leukemia  
Keunwook Lee, Ki Taek Nam, Sung Hoon Cho, Prathyusha Gudapati, Yoonha Hwang, Do-Sim Park, Ross Potter, Jin Chen, Emmanuel Volanakis, and Mark Boothby

- 729** Notch, Id2, and ROR $\gamma$ t sequentially orchestrate the fetal development of lymphoid tissue inducer cells  
Marie Cherrier, Shinichiro Sawa, and Gérard Eberl
- 741** The Mst1 and Mst2 kinases control activation of rho family GTPases and thymic egress of mature thymocytes  
Fan Mou, Maria Praskova, Fan Xia, Denille Van Buren, Hanno Hock, Joseph Avruch, and Dawang Zhou
- 761** Structural insight into MR1-mediated recognition of the mucosal associated invariant T cell receptor  
Rangsima Reantragoon, Lars Kjer-Nielsen, Onisha Patel, Zhenjun Chen, Patricia T. Illing, Mugdha Bhati, Lyudmila Kostenko, Mandvi Bharadwaj, Bronwyn Meehan, Ted H. Hansen, Dale I. Godfrey, Jamie Rossjohn, and James McCluskey
- 775** Essential role of EBF1 in the generation and function of distinct mature B cell types  
Bojan Vilagos, Mareike Hoffmann, Abdallah Souabni, Qiong Sun, Barbara Werner, Jasna Medvedovic, Ivan Bilic, Martina Minnich, Elin Axelsson, Markus Jaritz, and Meinrad Busslinger
- 793** Transglutaminase is essential for IgA nephropathy development acting through IgA receptors  
Laureline Berthelot, Christina Papista, Thiago T. Maciel, Martine Biarnes-Pelicot, Emilie Tissandie, Pamela H.M. Wang, Houda Tamouza, Agnès Jamin, Julie Bex-Coudrat, Aurelie Gestin, Ahmed Boumediene, Michelle Arcos-Fajardo, Patrick England, Evangéline Pillebout, Francine Walker, Eric Daugas, François Vrtovsnik, Martin Flamant, Marc Benhamou, Michel Cogné, Ivan C. Moura, and Renato C. Monteiro
- 807** ATF3 protects against atherosclerosis by suppressing 25-hydroxycholesterol-induced lipid body formation  
Elizabeth S. Gold, Stephen A. Ramsey, Mark J. Sartain, Jyrki Selinummi, Irina Podolsky, David J. Rodriguez, Robert L. Moritz, and Alan Aderem
- 819** Monocytes, neutrophils, and platelets cooperate to initiate and propagate venous thrombosis in mice *in vivo*  
Marie-Luise von Brühl, Konstantin Stark, Alexander Steinhart, Sue Chandraratne, Ildiko Konrad, Michael Lorenz, Alexander Khandoga, Anca Tîrnicieriu, Raffaele Coletti, Maria Köllnberger, Robert A. Byrne, Iina Laitinen, Axel Walch, Alexander Brill, Susanne Pfeiler, Davit Manukyan, Siegmund Braun, Philipp Lange, Julia Riegger, Jerry Ware, Annekathrin Eckart, Selgai Haidari, Martina Rudelius, Christian Schulz, Katrin Echtler, Volker Brinkmann, Markus Schwaiger, Klaus T. Preissner, Denisa D. Wagner, Nigel Mackman, Bernd Engelmann, and Steffen Massberg



Notch signaling regulates ROR $\gamma$ t expression and LTI cell maturation.  
[See page 729](#)



Transglutaminase is crucial for IgA nephropathy.  
[See page 793](#)

- 837 The hypoxia imaging agent Cu<sup>II</sup>(atsm) is neuroprotective and improves motor and cognitive functions in multiple animal models of Parkinson's disease

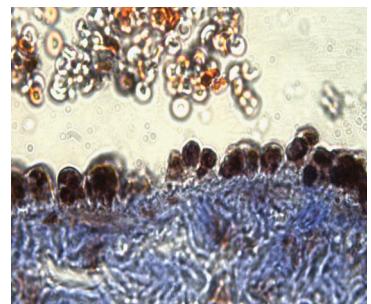
Lin W. Hung, Victor L. Villemagne, Lesley Cheng, Nicki A. Sherratt, Scott Ayton, Anthony R. White, Peter J. Crouch, SinChun Lim, Su Ling Leong, Simon Wilkins, Jessica George, Blaine R. Roberts, Chi L.L. Pham, Xiang Liu, Francis C.K. Chiu, David M. Shackleford, Andrew K. Powell, Colin L. Masters, Ashley I. Bush, Graeme O'Keefe, Janetta G. Culvenor, Roberto Cappai, Robert A. Cherny, Paul S. Donnelly, Andrew F. Hill, David I. Finkelstein, and Kevin J. Barnham

- 855 Cockayne syndrome group B protein prevents the accumulation of damaged mitochondria by promoting mitochondrial autophagy

Morten Scheibye-Knudsen, Mahesh Ramamoorthy, Peter Sykora, Scott Maynard, Ping-Chang Lin, Robin K. Minor, David M. Wilson III, Marcus Cooper, Richard Spencer, Rafael de Cabo, Deborah L. Croteau, and Vilhelm A. Bohr

- 871 A novel pathogenic role of the ER chaperone GRP78/BiP in rheumatoid arthritis

Seung-Ah Yoo, Sungyong You, Hyung-Ju Yoon, Dong-Ho Kim, Hyun-Sook Kim, Kyungho Lee, Jin Hee Ahn, Daehee Hwang, Amy S. Lee, Ki-Jo Kim, Yune-Jung Park, Chul-Soo Cho, and Wan-Uk Kim



Innate immune cells and platelets initiate deep vein thrombosis.  
[See page 819](#)