

Leading Edge

Cell Volume 146 Number 5, September 2, 2011

IN THIS ISSUE

SELECT

665 Doing More with Fluorophores

PREVIEWS

669 A New FOXO Pathway
Required for Leukemogenesis

J.R. Downing

671 Signaling through Chromatin:
Setting the Scene at Kinetochores

M. Smolle and J.L. Workman

673 When T Cells Run Out of Breath:
The HIF-1 α Story

K. Nutsch and C. Hsieh

675 Basal Synaptic Transmission:
Astrocytes Rule!

M. Navarrete and A. Araque

MINIREVIEW

678 Niche Crosstalk: Intercellular
Signals at the Hair Follicle

C.A.B. Jahoda and A.M. Christiano

REVIEW

682 Autophagy and Aging

D.C. Rubinsztein, G. Mariño, and G. Kroemer

SNAPSHOT

842 Histone Readers

T.G. Kutateladze

Articles

Cell Volume 146 Number 5, September 2, 2011

- 697 AKT/FOXO Signaling Enforces Reversible Differentiation Blockade in Myeloid Leukemias
S.M. Sykes, S.W. Lane, L. Bullinger, D. Kalaitzidis, R. Yusuf, B. Saez, F. Ferraro, F. Mercier, H. Singh, K.M. Brumme, S.S. Acharya, C. Schöll, Z. Tothova, E.C. Attar, S. Fröhling, R.A. DePinho, S.A. Armstrong, D.G. Gilliland, and D.T. Scadden
- 709 Chromatin Signaling to Kinetochores: Transregulation of Dam1 Methylation by Histone H2B Ubiquitination
J.A. Latham, R.J. Chosed, S. Wang, and S.Y.R. Dent
- 720 Control of Embryonic Stem Cell Lineage Commitment by Core Promoter Factor, TAF3
Z. Liu, D.R. Scannell, M.B. Eisen, and R. Tjian
- 732 A Mechanism for Tunable Autoinhibition in the Structure of a Human Ca²⁺/Calmodulin-Dependent Kinase II Holoenzyme
L.H. Chao, M.M. Stratton, I.H. Lee, O.S. Rosenberg, J. Levitz, D.J. Mandell, T. Kortemme, J.T. Groves, H. Schulman, and J. Kuriyan
- 746 Rescue of ΔF508-CFTR Trafficking via a GRASP-Dependent Unconventional Secretion Pathway
H.Y. Gee, S.H. Noh, B.L. Tang, K.H. Kim, and M.G. Lee
- 761 Adipocyte Lineage Cells Contribute to the Skin Stem Cell Niche to Drive Hair Cycling
E. Festa, J. Fretz, R. Berry, B. Schmidt, M. Rodeheffer, M. Horowitz, and V. Horsley
- 772 Control of T_H17/T_{reg} Balance by Hypoxia-Inducible Factor 1
E.V. Dang, J. Barbi, H.-Y. Yang, D. Jinasena, H. Yu, Y. Zheng, Z. Bordman, J. Fu, Y. Kim, H.-R. Yen, W. Luo, K. Zeller, L. Shimoda, S.L. Topalian, G.L. Semenza, C.V. Dang, D.M. Pardoll, and F. Pan
- 785 Astrocytes Are Endogenous Regulators of Basal Transmission at Central Synapses
A. Panatier, J. Vallée, M. Haber, K.K. Murai, J.-C. Lacaille, and R. Robitaille
- 799 Peptidoglycan Remodeling and Conversion of an Inner Membrane into an Outer Membrane during Sporulation
E.I. Tocheva, E.G. Matson, D.M. Morns, F. Moussavi, J.R. Leadbetter, and G.J. Jensen

THEORY

- 813 Photoconversion and Nuclear Trafficking Cycles Determine Phytochrome A's Response Profile to Far-Red Light
J. Rausenberger, A. Tscheuschler, W. Nordmeier, F. Wüst, J. Timmer, E. Schäfer, C. Fleck, and A. Hiltbrunner

(continued)

RESOURCE

826 Global Proteomic Assessment of the Classical Protein-Tyrosine Phosphatome and "Redoxome"

R. Karisch, M. Fernandez, P. Taylor, C. Virtanen, J.R. St-Germain, L.L. Jin, I.S. Harris, J. Mori, T.W. Mak, Y.A. Senis, A. Östman, M.F. Moran, and B.G. Neel

ERRATA

841 MAVS Forms Functional Prion-like Aggregates to Activate and Propagate Antiviral Innate Immune Response

F. Hou, L. Sun, H. Zheng, B. Skaug, Q.-X. Jiang, and Z.J. Chen

841 Role of the Clathrin Terminal Domain in Regulating Coated Pit Dynamics Revealed by Small Molecule Inhibition

L. von Kleist, W. Stahlschmidt, H. Bulut, K. Gromova, D. Puchkov, M.J. Robertson, K.A. MacGregor, N. Tomilin, A. Pechstein, N. Chau, M. Chircop, J. Sakoff, J.P. von Kries, W. Saenger, H.-G. Kräusslich, O. Shupliakov, P.J. Robinson, A. McCluskey, and V. Haucke

ANNOUNCEMENTS

POSITIONS AVAILABLE

On the cover: TAF3 is a basal transcription factor that associates with the TATA-binding protein at core promoters. In this issue, Liu et al. (720–731) now show that TAF3 also binds to promoter distal sites by interacting with CTCF. TAF3 and CTCF coregulate transcription by DNA looping to generate endoderm from embryonic stem cells. On the cover, a wild-type embryoid body (upper-left) is surrounded by bright green endoderm cells (i.e., GATA-4-positive cells). By contrast, this germ layer is missing in the TAF3-depleted embryoid body (lower-right). The confocal images were processed with filters in Photoshop CS3 to achieve the artificial glowing effect (DAPI stains DNA blue).

