

Odyssey® Publications

RNA Interference

1/2007 – 6/2009

Summer 2009

Volume 1

TABLE OF CONTENTS

	Page
Western Blotting and RNAi	1-3
Western Blotting and siRNA	3-4
In-Cell Westerns and siRNA/RNAi/shRNA	4

RESEARCH AREAS

Western Blotting and RNAi

Two C-type Lectins Cooperate to Defend *Anopheles gambiae* against Gram-negative Bacteria

Anna K. D. Schnitger, Hassan Yassine, Fotis C. Kafatos, and Mike A. Osta
J. Biol. Chem., Jun 2009; 284: 17616 - 17624

IL-10 protects monocytes and macrophages from complement-mediated lysis

Nadine Koch, Mechthild Jung, Robert Sabat, Jörn Krätzschmar, Wolf-Dietrich Döcke, Khusru Asadullah, Hans-Dieter Volk, and Gerald Grütz
J. Leukoc. Biol., Apr 2009; 10.1189/jlb.0708443

Inducible expression of coding and inhibitory RNAs from retargetable genomic loci

Ina Weidenfeld, Manfred Gossen, Rainer Löw, David Kentner, Stefan Berger, Dirk Görlich, Dusan Bartsch, Hermann Bujard, and Kai Schönig
Nucleic Acids Res., Apr 2009; 37: e50

Essential Role of hIST1 in Cytokinesis

Monica Agromayor, Jez G. Carlton, John P. Phelan, Daniel R. Matthews, Leo M. Carlin, Simon Ameer-Beg, Katherine Bowers, and Juan Martin-Serrano
Mol. Biol. Cell, Mar 2009; 20: 1374 - 1387

Alternative Requirements for Vestigial, Scalloped, and Dmef2 during Muscle Differentiation in *Drosophila melanogaster*

Hua Deng, Sarah C. Hughes, John B. Bell, and Andrew J. Simmonds
Mol. Biol. Cell, Jan 2009; 20: 256 - 269

Ceramide starves cells to death by downregulating nutrient transporter proteins

Garret G. Guenther, Eigen R. Peralta, Kimberly Romero Rosales, Susan Y. Wong, Leah J. Siskind, and Aimee L. Edinger
PNAS, Nov 2008; 105: 17402 - 17407

Dicer-dependent endothelial microRNAs are necessary for postnatal angiogenesis

Yajaira Suárez, Carlos Fernández-Hernando, Jun Yu, Scott A. Gerber, Kenneth D. Harrison, Jordan S. Pober, M. Luisa Iruela-Arispe, Matthias Merkenschlager, and William C. Sessa
PNAS, Sep 2008; 105: 14082 - 14087

Caprin-2 enhances canonical Wnt signaling through regulating LRP5/6 phosphorylation

Yu Ding, Ying Xi, Ting Chen, Ji-yong Wang, Dong-lei Tao, Zhi-Li Wu, Yi-ping Li, Chen Li, Rong Zeng, and Lin Li
J. Cell Biol., Sep 2008; 182: 865 - 872

Therapeutic RNAi targeting PCSK9 acutely lowers plasma cholesterol in rodents and LDL cholesterol in nonhuman primates

Maria Frank-Kamenetsky, Aldo Grefhorst, Norma N. Anderson, Timothy S. Racie, Birgit Bramlage, Akin Akinc, David Butler, Klaus Charisse, Robert Dorkin, Yupeng Fan, Christina Gamba-Vitalo, Philipp Hadwiger, Muthusamy Jayaraman, Matthias John, K. Narayanannair Jayaprakash, Martin Maier, Lubomir Nechev, Kallanthottathil G. Rajeev, Timothy Read, Ingo Röhl, Jürgen Soutschek, Pamela Tan, Jamie Wong, Gang Wang, Tracy Zimmermann, Antonin de Fougerolles, Hans-Peter Vornlocher, Robert Langer, Daniel G. Anderson, Muthiah Manoharan, Victor Koteliansky, Jay D. Horton, and Kevin Fitzgerald
PNAS, Aug 2008; 105: 11915 - 11920

GDPD5 is a glycerophosphocholine phosphodiesterase that osmotically regulates the osmoprotective organic osmolyte GPC

Morgan Gallazzini, Joan D. Ferraris, and Maurice B. Burg
PNAS, Aug 2008; 105: 11026 - 11031

uPAR promotes formation of the p130Cas–Crk complex to activate Rac through DOCK180

Harvey W. Smith, Pierfrancesco Marra, and Christopher J. Marshall
J. Cell Biol., Aug 2008; 182: 777 - 790

SCLIP Is Crucial for the Formation and Development of the Purkinje Cell Dendritic Arbor

Fabienne E. Poulain, Stéphanie Chauvin, Rosine Wehrli, Mathieu Desclaux, Jacques Mallet, Guilan Vodjdani, Isabelle Dusart, and André Sobel
J. Neurosci., Jul 2008; 28: 7387 - 7398

Essential Role of Cyclin-G–associated Kinase (Auxilin-2) in Developing and Mature Mice

Dong-won Lee, Xiaohong Zhao, Yang-In Yim, Evan Eisenberg, and Lois E. Greene
Mol. Biol. Cell, Jul 2008; 19: 2766 - 2776

EGF Transregulates Opioid Receptors through EGFR-mediated GRK2 Phosphorylation and Activation

Yuejun Chen, Hui Long, Ziyang Wu, Xi Jiang, and Lan Ma
Mol. Biol. Cell, Jul 2008; 19: 2973 - 2983

Kaposi's Sarcoma-Associated Herpesvirus-Encoded LANA Can Interact with the Nuclear Mitotic Apparatus Protein To Regulate Genome Maintenance and Segregation

Huaxin Si, Subhash C. Verma, Michael A. Lampson, Qiliang Cai, and Erle S. Robertson
J. Virol., Jul 2008; 82: 6734 - 6746

Muscarinic Receptor Activation of AMP-activated Protein Kinase Inhibits Orexigenic Neuropeptide mRNA Expression

Claire Thornton, Alessandro Sardini, and David Carling
J. Biol. Chem., Jun 2008; 283: 17116 - 17122

Retromer deficiency observed in Alzheimer's disease causes hippocampal dysfunction, neurodegeneration, and A β accumulation

Alim Muhammad, Ingrid Flores, Hong Zhang, Rui Yu, Agnieszka Staniszewski, Emmanuel Planel, Mathieu Herman, Lingling Ho, Robert Kreber, Lawrence S. Honig, Barry Ganetzky, Karen Duff, Ottavio Arancio, and Scott A. Small
PNAS, May 2008; 105: 7327 - 7332

Caveolin-1 and -2 Interact with Connexin43 and Regulate Gap Junctional Intercellular Communication in Keratinocytes

Stéphanie Langlois, Kyle N. Cowan, Qing Shao, Bryce J. Cowan, and Dale W. Laird
Mol. Biol. Cell, Mar 2008; 19: 912 - 928

Prohibitin-1 maintains the angiogenic capacity of endothelial cells by regulating mitochondrial function and senescence

Michael Schleicher, Benjamin R. Shepherd, Yajaira Suarez, Carlos Fernandez-Hernando, Jun Yu, Yong Pan, Lisette M. Acevedo, Gerald S. Shadel, and William C. Sessa
J. Cell Biol., Jan 2008; 180: 101 - 112.

Overexpression of CLC-3 in HEK293T cells yields novel currents that are pH dependent

James J. Matsuda, Mohammed S. Filali, Kenneth A. Volk, Malia M. Collins, Jessica G. Moreland, and Fred S. Lamb
Am J Physiol Cell Physiol, Jan 2008; 294: C251 - C262

Serum Withdrawal-Induced Accumulation of Phosphoinositide 3-Kinase Lipids in Differentiating 3T3-L6 Myoblasts: Distinct Roles for Ship2 and PTEN

Adel Mandl, Deborah Sarkes, Valerie Carricaburu, Vanessa Jung, and Lucia Rameh
Mol. Cell Biol., Dec 2007; 27: 8098 - 8112

DIAP2 functions as a mechanism-based regulator of drICE that contributes to the caspase activity threshold in living cells

Paulo S. Ribeiro, Erina Kuranaga, Tencho Tenev, François Leulier, Masayuki Miura, and Pascal Meier
J. Cell Biol., Dec 2007; 179: 1467 - 1480

Species Selectivity of Mixed-Lineage Leukemia/Trithorax and HCF Proteolytic Maturation Pathways

Francesca Capotosti, James J.-D. Hsieh, and Winship Herr

Mol. Cell. Biol., Oct 2007; 27: 7063 - 7072**Surveillance mechanism linking Bub1 loss to the p53 pathway**

Ole V. Gjoerup, Jiaping Wu, Devin Chandler-Militello, Grace L. Williams, Jean Zhao, Brian Schaffhausen, Parmjit S. Jat, and Thomas M. Roberts

PNAS, May 2007; 104: 8334 - 8339**Down-Regulation of Phosphoglucose Isomerase/Autocrine Motility Factor Results in Mesenchymal-to-Epithelial Transition of Human Lung Fibrosarcoma Cells**

Tatsuyoshi Funasaka, Huankai Hu, Takashi Yanagawa, Victor Hogan, and Avraham Raz

Cancer Res., May 2007; 67: 4236 - 4243**Zap70 Signaling Pathway Mediates Glucocorticoid Receptor-Dependent Transcriptional Activation: Role in the Regulation of Annexin 1 Expression in T Cells**

Mohammad Ishaq, Gerald DeGray, Kathy Mou, Angelica Aguilera, Jun Yang, Richard A. Lempicki, Allison Hazen, and Ven Natarajan

J. Immunol., Sep 2007; 179: 3851 - 3858**PDCD10 Interacts with Ste20-related Kinase MST4 to Promote Cell Growth and Transformation via Modulation of the ERK Pathway**

Xi Ma, Hongshan Zhao, Jingxuan Shan, Feng Long, Yaoyao Chen, Yingyu Chen, Yingmei Zhang, Xiao Han, and Dalong Ma

Mol. Biol. Cell, Jun 2007; 18: 1965 - 1978**Role of calcitonin receptor-like receptor in colonic motility and inflammation**

Matthew S. Clifton, Julia J. Hoy, Jen Chang, Prema S. Idumalla, Humera Fakhruddin, Eileen F. Grady, Stephen Dada, Carlos U. Corvera, and Aditi Bhargava

Am J Physiol Gastrointest Liver Physiol, Jul 2007; 293: G36 - G44**Depletion of E-Cadherin Disrupts Establishment but Not Maintenance of Cell Junctions in Madin-Darby Canine Kidney Epithelial Cells**

Christopher T. Capaldo and Ian G. Macara

Mol. Biol. Cell, Jan 2007; 18: 189 - 200**Western Blotting and siRNA****JAMP Optimizes ERAD to Protect Cells from Unfolded Proteins**

Marianna Tcherpakov, Limor Broday, Agnes Delaunay, Takayuki Kadoya, Ashwani Khurana, Hediye Erdjument-Bromage, Paul Tempst, Xiao-Bo Qiu, George N. DeMartino, and Ze'ev Ronai

Mol. Biol. Cell, Nov 2008; 19: 5019 - 5028**The role of human ribosomal proteins in the maturation of rRNA and ribosome production**

Sara Robledo, Rachel A. Idol, Dan L. Crimmins, Jack H. Ladenson, Philip J. Mason, and Monica Bessler

RNA, Sep 2008; 14: 1918 - 1929**The DHR1 Domain of DOCK180 Binds to SNX5 and Regulates Cation-independent Mannose 6-phosphate Receptor Transport**

Shigeo Hara, Etsuko Kiyokawa, Shun-ichiro Iemura, Tohru Natsume, Thomas Wassmer, Peter J. Cullen, Hiroshi Hiai, Michiyuki Matsuda

Mol. Biol. Cell, Sep 2008; 19: 3823 - 3835.**Stable hZW10 kinetochore residency, mediated by hZwint-1 interaction, is essential for the mitotic checkpoint**

Jakub K. Famulski, Larissa Vos, Xuejun Sun, and Gordon Chan

J. Cell Biol., Feb 2008; 180: 507 - 520**Repair of 2'-C-Cyano-2'-Deoxy-1-β-D-arabino-Pentofuranosylcytosine-Induced DNA Single-Strand Breaks by Transcription-Coupled Nucleotide Excision Repair**

Yaqing Wang, Xiaojun Liu, Akira Matsuda, and William Plunkett

Cancer Res., May 2008; 68: 3881 - 3889**Dephosphorylation of survival motor neurons (SMN) by PPM1G/PP2C governs Cajal body localization and stability of the SMN complex**

Sebastian Petri, Matthias Grimmler, Sabine Over, Utz Fischer, and Oliver J. Gruss

J. Cell Biol., Nov 2007; 179: 451 - 465**A specific role of AGS3 in the surface expression of plasma membrane proteins**

B. Groves, Q. Gong, Z. Xu, C. Huntsman, C. Nguyen, D. Li, and D. Ma

PNAS, Nov 2007; 104: 18103 - 18108

The Ubiquitin Ligase SCF(TrCP) Regulates the Degradation of the Growth Hormone Receptor

Peter van Kerkhof, Joyce Putters, and Ger J. Strous

J. Biol. Chem., Jul 2007; 282: 20475 - 20483

Cytokine Activation of p38 Mitogen-Activated Protein Kinase and Apoptosis Is Opposed by alpha-4 Targeting of Protein Phosphatase 2A for Site-Specific Dephosphorylation of MEK3

Todd D. Prickett and David L. Brautigan

Mol. Cell. Biol., Jun 2007; 27: 4217 - 4227

Proline-rich tyrosine kinase 2 regulates osteoprogenitor cells and bone formation, and offers an anabolic treatment approach for osteoporosis

Leonard Buckbinder, David T. Crawford, Hong Qi, Hua Zhu Ke, Lisa M. Olson, Kelly R. Long, Peter C. Bonnette, Amy P. Baumann, John E. Hambor, William A. Grasser, III, Lydia C. Pan, Thomas A. Owen, Michael J. Luzzio, Catherine A. Hulford, David F. Gebhard, Vishwas M. Paralkar, Hollis A. Simmons, John C. Kath, W. Gregory Roberts, Steven L. Smock, Angel Guzman-Perez, Thomas A. Brown, and Mei Li

PNAS, Jun 2007; 104: 10619 - 10624

Combinatorial RNAi for quantitative protein network analysis

Özgür Sahin, Christian Løbke, Ulrike Korf, Heribert Appelhans, Holger Sülmann, Annemarie Poustka, Stefan Wiemann, Dorit Arlt

PNAS, Apr 2007; 104: 6579 - 6584

In-Cell Westerns and siRNA/RNAi/shRNA

Activation of Src by Protein Tyrosine Phosphatase 1B Is Required for ErbB2 Transformation of Human Breast Epithelial Cells

Luis E. Arias-Romero, Sayanti Saha, Olga Villamar-Cruz, Shu-Chin Yip, Stephen P. Ethier, Zhong-Yin Zhang, and Jonathan Chernoff

Cancer Res., Jun 2009; 69: 4582 - 4588

Fibroblast growth factor receptor 1 is a key regulator of early adipogenic events in human preadipocytes

C. H. Widberg, F. S. Newell, A. W. Bachmann, S. N. Ramnoruth, M. C. Spelta, J. P. Whitehead, L. J. Hutley, and J. B. Prins

Am J Physiol Endocrinol Metab, Jan 2009; 296: E121 - E131

Receptor-mediated tobacco toxicity: acceleration of sequential expression of 5 and 7 nicotinic receptor subunits in oral keratinocytes exposed to cigarette smoke

Juan Arredondo, Alexander I. Chernyavsky, David L. Jolkovsky, Kent E. Pinkerton, and Sergei A. Grando

FASEB J, May 2008; 22: 1356 - 1368

Receptor-mediated tobacco toxicity: acceleration of sequential expression of 5 and 7 nicotinic receptor subunits in oral keratinocytes exposed to cigarette smoke

Juan Arredondo, Alexander I. Chernyavsky, David L. Jolkovsky, Kent E. Pinkerton, and Sergei A. Grando

FASEB J, Nov 2007; 10.1096/fj.07-9965com

A Rab-GAPTBC Domain Protein Binds Hepatitis C Virus NS5A and Mediates Viral Replication

Ella H. Sklan, Kirk Staschke, Tina M. Oakes, Menashe Elazar, Mark Winters, Benjamin Aroeti, Tsafi Danieli, and Jeffrey S. Glenn

J. Virol., Oct 2007; 81: 11096 - 11105.

MAGE-A, mMage-b, and MAGE-C Proteins Form Complexes with KAP1 and Suppress p53-Dependent Apoptosis in MAGE-Positive Cell Lines

Bing Yang, Sean M. O'Herrin, Jianqiang Wu, Shannon Reagan-Shaw, Yongsheng Ma, Kumar M.R. Bhat, Claudia Gravekamp, Vijayasradhi Setaluri, Noel Peters, F. Michael Hoffmann, Hongzhuang Peng, Alexey V. Ivanov, Andrew J.G. Simpson, and B. Jack Longley

Cancer Res., Oct 2007; 67: 9954 - 9962.

The ATM/ATR Signaling Effector Chk2 Is Targeted by Epstein-Barr Virus Nuclear Antigen 3C To Release the G2/M Cell Cycle Block

Tathagata Choudhuri, Subhash C. Verma, Ke Lan, Masanao Murakami, and Erle S. Robertson

J. Virol., Jun 2007; 81: 6718 - 6730.

LI-COR and Odyssey are registered trademarks of LI-COR, Inc.
All other trademarks belong to their respective owners.



Biosciences

4647 Superior Street • P.O. Box 4000 • Lincoln, Nebraska 68504 USA
North America: 800-645-4267 • International: 402-467-0700 • FAX: 402-467-0819
LI-COR GmbH Germany, Serving Europe and Africa: +49 (0) 6172 17 17 771
LI-COR UK Ltd. UK, Serving UK, Ireland, Scandinavia: +44 (0) 1223 422104
www.licor.com

Doc #979-10430
0709