

M
M79/c



Published Twice Monthly
December 2014, Volume 34, Number 23



AMERICAN
SOCIETY FOR
MICROBIOLOGY

MCB

Molecular and Cellular Biology

TABLE OF CONTENTS

SPOTLIGHT

Articles of Significant Interest Selected from This Issue by the Editors	4215
--	------

ARTICLES

The MicroRNA 424/503 Cluster Reduces CDC25A Expression during Cell Cycle Arrest Imposed by Transforming Growth Factor β in Mammary Epithelial Cells	David Llobet-Navas, Ruth Rodriguez-Barrueco, Janis de la Iglesia-Vicente, Mireia Olivan, Veronica Castro, Laura Saucedo-Cuevas, Netonia Marshall, Preeti Putcha, Mireia Castillo-Martin, Evan Bardot, Elena Ezhkova, Antonio Iavarone, Carlos Cordon-Cardo, Jose M. Silva	4216–4231
ERBB2 Deficiency Alters an E2F-1-Dependent Adaptive Stress Response and Leads to Cardiac Dysfunction	Marie-Claude Perry, Catherine R. Dufour, Lillian J. Eichner, David W. K. Tsang, Geneviève Deblois, William J. Muller, Vincent Giguère	4232–4243
Plakophilins 1 and 3 Bind to FXR1 and Thereby Influence the mRNA Stability of Desmosomal Proteins	Regina Fischer-Kešo, Sonja Breuninger, Sarah Hofmann, Manuela Henn, Theresa Röhrig, Philipp Ströbel, Georg Stoecklin, Ilse Hofmann	4244–4256
A Cell-Autonomous Molecular Cascade Initiated by AMP-Activated Protein Kinase Represses Steroidogenesis	Houssein S. Abdou, Francis Bergeron, Jacques J. Tremblay	4257–4271
CstF64: Cell Cycle Regulation and Functional Role in 3' End Processing of Replication-Dependent Histone mRNAs	Valentina Romeo, Esther Griesbach, Daniel Schümperli	4272–4284
Transmembrane Adaptor Protein PAG/CBP Is Involved in both Positive and Negative Regulation of Mast Cell Signaling	Lubica Draberova, Viktor Bugajev, Lucie Potuckova, Ivana Halova, Monika Bambouskova, Iva Polakovicova, Ramnik J. Xavier, Brian Seed, Petr Draber	4285–4300
The WNT Signaling Pathway Contributes to Dectin-1-Dependent Inhibition of Toll-Like Receptor-Induced Inflammatory Signature	Jamma Trinath, Sahana Holla, Kasturi Mahadik, Praveen Prakhar, Vikas Singh, Kithiganahalli Narayanaswamy Balaji	4301–4314
Rapid Proteasomal Degradation of Posttranscriptional Regulators of the TIS11/Tristetraprolin Family Is Induced by an Intrinsically Unstructured Region Independently of Ubiquitination	Long Vo Ngoc, Corinne Wauquier, Romuald Soim, Sabrina Bousbata, Laure Twyffels, Véronique Kruys, Cyril Gueydan	4315–4328
RNA Binding and Core Complexes Constitute the U-Insertion/Deletion Editosome	Inna Aphasizheva, Liye Zhang, Xiaorong Wang, Robyn M. Kaake, Lan Huang, Stefano Monti, Ruslan Aphasizhev	4329–4342
Binding of WIP to Actin Is Essential for T Cell Actin Cytoskeleton Integrity and Tissue Homing	Michel J. Massaad, Michiko K. Oyoshi, Jennifer Kane, Suresh Koduru, Pilar Alcaide, Fumihiko Nakamura, Narayanaswamy Ramesh, Francis W. Lusinskas, John Hartwig, Raif S. Geha	4343–4354

The Ubiquitin Ligase RNF220 Enhances Canonical Wnt Signaling through USP7-Mediated Deubiquitination of β -Catenin

Pengcheng Ma, Xiangcai Yang,
Qinghua Kong, Chaocui Li,
Shuangjuan Yang, Yan Li, Bingyu Mao

4355–4366

Cover photograph (Copyright © 2014. American Society for Microbiology. All rights reserved.) (Left) Stimulation of dectin-1 (yellow at the cell surface) by fungi activates Syk kinase (dark green at the base of dectin-1 receptors) and subsequently leads to generation of reactive oxygen species (pink flowers) and stabilization of β -catenin (blue), the payoff of which is the secreted WNT5A. (Middle) WNT5A (red circles) induces cellular modifiers such as PIAS-1 (red) and SOCS-1 (blue) that function to downregulate conventional Toll-like receptor (TLR) adaptors. (Right) Compensated TLR (red at the cell surface) responses enhance survival of bacteria (black circles), otherwise kept in check by the proinflammatory responses mounted by the host. (See related article on p. 4301.)