ARTICLES

Evidence for an Additional Base-Pairing Element between the Telomeric Repeat and the Telomerase RNA Template in *Kluyveromyces lactis* and Other Yeasts

Zhi-Ru Wang, Leilei Guo, Lizhen Chen, and Michael J. McEachern

Chromatin Architecture and Transcription Factor Binding Regulate Expression of Erythrocyte Membrane Protein Genes

Laurie A. Steiner, Yelena Maksimova, Vincent Schulz, Clara Wong, Debasis Raha, Milind C. Mahajan, Sherman M. Weissman, and Patrick G. Gallagher

FoxA1 Binding Directs Chromatin Structure and the Functional Response of a Glucocorticoid Receptor-Regulated Promoter

Sergey Belikov, Carolina Åstrand, and Örjan Wrangé

HMGA1 Levels Influence Mitochondrial Function and Mitochondrial DNA Repair Efficiency

Li Mao, Kelsey J. Wertzler, Scott C. Maloney, Zeping Wang, Nancy S. Magnuson, and Raymond Reeves

Chromosomal Translocations Caused by Either Pol32-Dependent or Pol32-Independent Triparental Break-Induced Replication

José F. Ruiz, Belén Gómez-González, and Andrés Aguilera

TFIHH-Associated Cdk7 Kinase Functions in Phosphorylation of C-Terminal Domain Ser7 Residues, Promoter-Proximal Pausing, and Termination by RNA Polymerase II

TAK1-Mediated Serine/Threonine Phosphorylation of Epidermal Growth Factor Receptor via p38/Extracellular Signal-Regulated Kinase: NF-κB-Independent Survival Pathways in Tumor Necrosis Factor Alpha Signaling

Yanan Cao, Ruixin Liu, Xiuli Jiang, Jieli Lu, Jingjing Jiang, Changxian Zhang, Xiaoying Li, and Guang Ning

Hyperactivated NF-κB and AP-1 Transcription Factors Promote Highly Accessible Chromatin and Constitutive Transcription across the Interleukin-6 Gene Promoter in Metastatic Breast Cancer Cells

Ellena V. McCarthy, Julie E. Baggs, Jeanne M. Geskes, John B. Hogenesch, and Carla B. Green

Generation of a Novel Allelic Series of Cryptochrome Mutants via Mutagenesis Reveals Residues Involved in Protein-Protein Interaction and CRY2-Specific Repression

Miki Nishimura, Myoung-Sook Shin, Pattama Singhirunnusorn, Shunsuke Suzuki, Miho Kawanishi, Keiichi Koizumi, Ikuo Saiki, and Hiroaki Sakurai

Pex2 and Pex12 Function as Protein-Ubiquitin Ligases in Peroxisomal Protein Import

Harald W. Platta, Fouzi El Magraoui, Bastian E. Bäumer, Daniel Schlee, Wolfgang Gierzalsy, and Ralf Erdmann

Dermatan Sulfate Epimerase 1-Deficient Mice Have Reduced Content and Changed Distribution of Iduronic Acids in Dermatan Sulfate and an Altered Collagen Structure in Skin

Marco Maccarana, Sebastian Kalamatski, Mads Kongsgaard, S. Peter Magnusson, Åke Oldberg, and Anders Malmstrøm

The Mre11 Complex and the Response to Dysfunctional Telomeres

Claire L. Attwooll, Müge Akpınar, and John H. J. Petriń

Continued on following page
Cell Cycle-Dependent Role of MRN at Dysfunctional Telomeres: ATM Signaling-Dependent Induction of Nonhomologous End Joining (NHEJ) in G₁ and Resection-Mediated Inhibition of NHEJ in G₂

Nadya Dimitrova and Titia de Lange

5552–5563

A Role for Polypyrimidine Tract Binding Protein in the Establishment of Focal Adhesions

Ivan Babic, Shalini Sharma, and Douglas L. Black

5564–5577

The Adapter Protein SLP-76 Mediates “Outside-In” Integrin Signaling and Function in T Cells


5578–5589

Drosophila Suppressor of Sable Protein [Su(s)] Promotes Degradation of Aberrant and Transposon-Derived RNAs

Yung-Shu Kuan, Paul Brewer-Jensen, Wen-Li Bai, Cedric Hunter, Carrie B. Wilson, Sarah Bass, John Abernethy, James S. Wing, and Lillie L. Searles

5590–5603

Gene Activation by Dissociation of an Inhibitor from a Transcriptional Activation Domain

Fenglei Jiang, Benjamin R. Frey, Margery L. Evans, Jordan C. Friel, and James E. Hopper

5604–5610

POT1 Association with TRF2 Regulates Telomere Length

Megan F. Kendellen, Katharine S. Barrientos, and Christopher M. Counter

5611–5619

Cooperative-Binding and Splicing-Repressive Properties of hnRNP A1

Hazeem L. Okunola and Adrian R. Krainer

5620–5631

Coupled RNA Processing and Transcription of Intergenic Primary MicroRNAs

Monica Ballarino, Francesca Pagano, Erika Girardi, Mariangela Morlando, Davide Cacchiarelli, Marcella Marchioni, Nicholas J. Proudfoot, and Irene Bozzoni

5632–5638

Cover photograph (Copyright © 2009, American Society for Microbiology. All Rights Reserved.): TRF2 and NBS1 function in redundant pathways to suppress nonhomologous end joining by promoting the generation of a 3’ overhang after completion of leading-strand DNA synthesis. By using chromosome orientation-fluorescence in situ hybridization to distinguish between leading- and lagging-strand telomeres, we observed that, when TRF2 and NBS1 are simultaneously removed in TRF2<sup>F/F</sup> NBS1<sup>F/−</sup> mouse embryonic fibroblasts by the introduction of Cre recombinase, leading-strand (red) but not lagging-strand (green) telomeres become deprotected and fuse to one another. (See related article on p. 5552.)