
Contents of Volume 1

Reviews and Model Systems

Preface	v
Contents of the Companion Volume	ix
Contributors	xi

PART I. REVIEWS OF CHECKPOINT CONTROLS, THEIR INVOLVEMENT IN THE DEVELOPMENT OF CANCER, AND APPROACHES TO THEIR INVESTIGATION

1 G1 and S-Phase Checkpoints, Chromosome Instability, and Cancer Hiroshi Nojima	3
2 Analyzing the G2/M Checkpoint George R. Stark and William R. Taylor	51
3 Analyzing the Spindle Checkpoint in Yeast and Frogs P. Todd Stukenberg and Daniel J. Burke	83
4 Cell Cycle Checkpoint Control Mechanisms That Can Be Disrupted in Cancer Bipin C. Dash and Wafik El-Deiry	99

PART II. ANALYZING CHECKPOINT CONTROLS IN DIVERSE MODEL SYSTEMS

5 Establishment of a Cell-Free System to Study the Activation of Chk2 Xingzhi Xu and David F. Stern	165
6 Analyzing Checkpoint Controls in Human Skin Sandra Pavey and Brian G. Gabrielli	175
7 Generation and Analysis of <i>Brca1</i> Conditional Knockout Mice Chu-Xia Deng and Xiaoling Xu	185
8 Analysis of Cell Cycle Progression and Genomic Integrity in Early Lethal Knockouts Eric J. Brown	201
9 <i>Xenopus</i> Cell-Free Extracts to Study the DNA Damage Response Vincenzo Costanzo, Kirsten Robertson, and Jean Gautier	213

10	A <i>Xenopus</i> Cell-Free System for Functional Analysis of the Chfr Ubiquitin Ligase Involved in Control of Mitotic Entry Dongmin Kang, Jim Wong, and Guowei Fang	229
11	Control of Mitotic Entry After DNA Damage in <i>Drosophila</i> Burnley Jaklevic, Amanda Purdy, and Tin Tin Su	245
12	Methods for Analyzing Checkpoint Responses in <i>Caenorhabditis elegans</i> Anton Gartner, Amy J. MacQueen, and Anne M. Villeneuve	257
13	Assaying the Spindle Checkpoint in the Budding Yeast <i>Saccharomyces cerevisiae</i> Christopher M. Yellman and Daniel J. Burke	275
14	Purification and Analysis of Checkpoint Protein Complexes From <i>Saccharomyces cerevisiae</i> Catherine M. Green and Noel F. Lowndes	291
Index		307



<http://www.springer.com/978-1-58829-214-8>

Checkpoint Controls and Cancer
Volume 1: Reviews and Model Systems
Schönthal, A.H. (Ed.)
2004, XVI, 318 p., Hardcover
ISBN: 978-1-58829-214-8
A product of Humana Press