

Contents

Macrolide-Based Microtubule-Stabilizing Agents – Chemistry and Structure–Activity Relationships.....	1
B. Pfeiffer, C.N. Kuzniewski, C. Wullschleger, and K.-H. Altmann	
The Chemical Synthesis of Discodermolide	73
I. Paterson and G.J. Florence	
The Interaction of Microtubules with Stabilizers Characterized at Biochemical and Structural Levels.....	121
J.F. Díaz, J.M. Andreu, and J. Jiménez-Barbero	
The Tubulin Binding Mode of MT Stabilizing and Destabilizing Agents Studied by NMR.....	151
V́ctor M. Sánchez-Pedregal and Christian Griesinger	
The Tubulin Binding Mode of Microtubule Stabilizing Agents Studied by Electron Crystallography	209
James H. Nettles and Kenneth H. Downing	
Microtubule-Destabilizing Agents: Structural and Mechanistic Insights from the Interaction of Colchicine and Vinblastine with Tubulin.....	259
B. Gigant, A. Cormier, A. Dorléans, R.B.G. Ravelli, and M. Knossow	
Molecular Modeling Approaches to Study the Binding Mode on Tubulin of Microtubule Destabilizing and Stabilizing Agents	279
Maurizio Botta, Stefano Forli, Matteo Magnani, and Fabrizio Manetti	
Index.....	329

Tubulin-Binding Agents

Synthetic, Structural and Mechanistic Insights

Carlomagno, T. (Ed.)

2009, XI, 331 p., Hardcover

ISBN: 978-3-540-69036-8