

---

# Contents

Preface .....	v
Contributors .....	ix

## PART I. IMMUNOTOXIN CONSTRUCTION AND DEVELOPMENT

1 Development and Activities of the BR96-Doxorubicin Immunoconjugate <i>Ingegerd Hellström, Karl Erik Hellström, and Peter D. Senter</i> .....	3
2 CD7-Specific Single Chain Fv Immunotoxins: <i>Design and Expression</i> <i>Christopher A. Pennell and Mary E. Pauza</i> ..	17
3 Recombinant Fusion Toxins Directed Against the Human Granulocyte- Macrophage Colony Stimulating Factor (GM-CSF) Receptor <i>Yu Shao, Berta E. Warman, and John P. Perentes</i> .....	31
4 Synthesis of Monensin Derivatives and Their Effect on the Activity of Ricin A-Chain Immunotoxins <i>Marco Colombatti and Franco Dosio</i> .....	55
5 Purification and Conjugation of Type 1 Ribosome-Inactivating Proteins <i>Luigi Barbieri, Andrea Bolognesi, and Fiorenzo Stirpe</i> .....	71
6 Comparison of Immunotoxins Bearing a Single Saporin Molecule with Multiple Toxin Conjugates <i>David J. Flavell and Sopsamorn U. Flavell</i> .....	87
7 Modulation of Growth Factor Receptor Expression by Irradiation for Immunotoxin Targeting <i>Ki-Uk Kim, Hsaio-Tzu Ni, Stephen R. Spellman, Kwan H. Cho, Walter C. Low, and Walter A. Hall</i> .....	101
8 Quantification of Immunotoxin Number for Complete Therapeutic Response <i>Robert J. Kreitman</i> .....	111
9 In Vitro Studies of Ricin A-Chain-Induced Vascular Leak Syndrome <i>Alan L. Lindstrom and Christopher A. Pennell</i> .....	125

## PART II. ONCOLOGIC APPLICATIONS OF IMMUNOTOXINS

10 Immunotoxin Treatment of Brain Tumors <b>Walter A. Hall</b> .....	139
11 Cytotoxins Directed at Interleukin-4 Receptors as Therapy for Human Brain Tumors <b>Raj K. Puri</b> .....	155
12 Bispecific Monoclonal Antibodies for the Targeting of Type I Ribosome-Inactivating Proteins Against Hematological Malignancies <b>Silvano Ferrini, Sabrina Sforzini, and Silvana Canevari</b> ... ..	177
13 Tyrosine Kinase Inhibitors Against EGF Receptor-Positive Malignancies <b>Elise A. Sudbeck, Sutapa Ghosh, Xing-Ping Liu, Yaguo Zheng, Dorothea E. Myers, and Fatih M. Uckun</b> .....	193
14 Targeting Tumor Vasculature Using VEGF-Toxin Conjugates <b>S. Ramakrishnan, Robert Wild, and Dana Nojima</b> .....	219
15 Gene Therapy with Immunotoxins <b>Daniel A. Vallera</b> .....	235

## PART III. ALTERNATIVE APPLICATIONS OF IMMUNOTOXINS

16 Effects of Selective Immunotoxic Lesions on Learning and Memory <b>Mark G. Baxter</b> .....	249
17 Targeting Toxins to Neural Antigens and Receptors <b>Ronald G. Wiley</b> .....	267
18 In Vivo Testing of Anti-HIV Immunotoxins <b>Seth H. Pincus, Tamera K. Marcotte, Brent M. Forsyth, and Hua Fang</b> .....	277
Index .....	295



<http://www.springer.com/978-0-89603-775-5>

Immunotoxin Methods and Protocols

Hall, W.A. (Ed.)

2001, XI, 297 p., Hardcover

ISBN: 978-0-89603-775-5

A product of Humana Press