
Contents

<i>Preface</i>	<i>v</i>
<i>Contributors</i>	<i>ix</i>
1 Basic Immunocytochemistry for Light Microscopy <i>Susan A. Brooks</i>	1
2 Lectin Histochemistry to Detect Altered Glycosylation in Cells and Tissues. <i>Susan A. Brooks and Debbie M.S. Hall</i>	31
3 Histopathological Assessment of Metastasis. <i>Derek E. Roskell and Ian D. Buley</i>	51
4 Immunocytochemical Detection and Characterisation of Individual Micrometastatic Tumour Cells <i>Stephan Braun and Klaus Pantel</i>	63
5 The Polymerase Chain Reaction <i>Hazel M. Welch</i>	71
6 Sodium Dodecyl Sulphate–Polyacrylamide Denaturing Gel Electrophoresis and Western Blotting Techniques <i>Christine Blancher and Rob Mc Cormick</i>	89
7 2-DE-Based Proteomics for the Analysis of Metastasis-Associated Proteins <i>Miriam Dwek and Diluka Peiris</i>	111
8 Assessment of Gelatinases (MMP-2 and MMP-9) by Gelatin Zymography <i>Marta Toth, Anjum Sohail, and Rafael Fridman</i>	121
9 Determination of Cell-Specific Receptor Binding using a Combination of Immunohistochemistry and in vitro Autoradiography: Relevance to Therapeutic Receptor Targeting in Cancer <i>Michael R. Dashwood and Marilena Loizidou</i>	137
10 Fluorescence <i>In Situ</i> Hybridization for Cancer-Related Studies <i>Lyndal Kearney and Janet Shipley</i>	149
11 Using a Quartz Crystal Microbalance Biosensor for the Study of Metastasis Markers on Intact Cells <i>Julien Saint-Guirons and Björn Ingemarsson</i>	175
12 Cell Separations by Flow Cytometry <i>Derek Davies</i>	185
13 Detection of Putative Cancer Stem Cells of the Side Population Phenotype in Human Tumor Cell Cultures. <i>Matthias Christgen, Matthias Ballmaier, Ulrich Lehmann, and Hans Kreipe</i>	201
14 Genes Involved in the Metastatic Cascade of Medullary Thyroid Tumours <i>Caroline Schreiber, Kirsten Vormbrock and Ulrike Ziebold</i>	217
15 High-resolution Quantitative Methylation Analysis of microRNA Genes using Pyrosequencing™ <i>Ulrich Lehmann, Cord Albat, and Hans Kreipe</i>	229

16	RNAi Technology to Block the Expression of Molecules Relevant to Metastasis: The Cell Adhesion Molecule CEACAM1 as an Instructive Example	241
	<i>Daniel Wicklein</i>	
17	Galectin-3 Binding and Metastasis	251
	<i>Pratima Nangia-Makker, Vitaly Balan, and Avraham Raz</i>	
18	Lectin Array-Based Strategies for Identifying Metastasis-Associated Changes in Glycosylation	267
	<i>Simon Fry, Babak Afrough, Anthony Leatham, and Miriam Dwek</i>	
	<i>Index</i>	273

Metastasis Research Protocols

Dwek, M.; Brooks, S.A.; Schumacher, U. (Eds.)

2012, XII, 274 p. 27 illus., 7 illus. in color., Hardcover

ISBN: 978-1-61779-853-5

A product of Humana Press