

# *Table of Contents*

## ***Peptide Growth Factors***

Growth Factor Receptors: The Epidermal Growth Factor Receptor as a Model <i>K. C. Oberg, A. Brown, and G. Carpenter</i>	3
Epidermal Growth Factor: Biology and Properties of its Gene and Protein Precursor <i>B. Mroczkowski, and R. Ball</i>	18
Platelet-Derived Growth Factor: Formation and Biological Activities <i>A. J. R. Habenicht, P. Salbach, C. Blattner, and U. Janßen-Timmen</i>	31
Basic Fibroblast Growth Factor: Properties and Clinical Implications <i>L. Schweigerer</i>	42
Transforming Growth Factor- $\beta$ <i>J. Pfeilschifter</i>	56
Distinctive Features of Nerve Growth Factor: Structure, and Function <i>M. V. Chao</i>	65

## ***Hematopoietic Growth and Differentiation Factors***

Interleukin 1 <i>R. Schindler, and C. A. Dinarello</i>	85
Interleukin 2 <i>B. Schwinzer, and K. Resch</i>	103
Interleukin 3: A Multilineage Hematopoietic Growth Factor <i>C. Stocking, and W. Ostertag</i>	115
Multiple Functions of Interleukin 4 and its Role in Immune Regulation <i>T. R. Mosmann, and A. Zlotnik</i>	129

Interleukin 5 as a Hematopoietic Cell Growth and Differentiation Factor <i>K. Takatsu, and A. Tominaga</i>	147
Interleukin 6 <i>J. Van Snick, and R. P. Nordan</i>	163
The Hemopoietic Growth Factor, Granulocyte-Macrophage Colony Stimulating Factor <i>N. M. Gough</i>	177
Colony Stimulating Factor-1 <i>M. Baccarini, and E. R. Stanley</i>	188
Granulocyte Colony-Stimulating Factor <i>K. Welte, and E. Platzer</i>	201
Chicken Myelomonocytic Growth Factor <i>A. Leutz, and T. Graf</i>	215
Experimental and Clinical Evaluation of Erythropoietin <i>W. Oster, F. Herrmann, A. Lindemann, and R. Mertelsmann</i>	232
Interferons <i>H. Hauser</i>	243
Interactions of $1\alpha,25$ -Dihydroxyvitamin D <sub>3</sub> and Hematopoietic Cells <i>H. Reichel</i>	254
<b>Oncogenes, Growth Factors, and Disease</b>	
Autocrine Stimulation of Growth of Normal and Transformed Cells <i>C.-H. Heldin, and B. Westermark</i>	267
Growth Factors, Inflammation, and Atherosclerosis <i>R. G. K. Gronwald, M. W. Majewsky, W. L. Ran, and R. Ross</i>	279
Autocrine and Paracrine Stimulation of Growth in Human Acute Myeloid Leukemia <i>F. Herrmann, W. Oster, N. A. Cicco, A. Lindemann, and R. Mertelsmann</i>	292
Local Production of Platelet-Derived Growth Factor in the Human Atherosclerotic Plaque <i>J. N. Wilcox, S. M. Schwartz, and D. Gordon</i>	305
Growth Factor Inducible Genes in Fibroblasts <i>R. Bravo</i>	324

The Role of Gene Dosage in Progression of Tumors <i>M. Schwab</i>	344
The Biology of Cachectin/Tumor Necrosis Factor <i>K. J. Tracey, and A. Cerami</i>	356
Oncogenes and Transgenic Mice <i>E. F. Wagner</i>	366
 <b><i>Mechanisms of Signal Transduction</i></b>	
Growth Factors and Polyphosphoinositide Metabolism <i>C. W. Taylor</i>	383
Structure and Function of Signal-Transducing, Heterotrimeric Guanosine Triphosphate Binding Proteins <i>P. Gierschik, D. Sidiropoulos, K. Dieterich, and K. H. Jakobs</i>	395
The Protein Kinase C Family <i>S. Stabel</i>	414
Signal Transduction and Ion Channel Activity <i>W. Rosenthal</i>	427
NA <sup>+</sup> /H <sup>+</sup> Exchange <i>W. H. Moolenaar</i>	441
Adenylyl Cyclases <i>R. Strasser</i>	448
Subject Index	467