

Contents

Contributors	ix
Contents of Volumes 1, 2, and 4.	xiii
Preface	xix

SERUM-FREE CULTURE OF EPITHELIAL CELLS

1	Growth of Primary and Established Kidney Cell Cultures in Serum-Free Media Mary Taub	3
2	Hormonally Defined, Serum-Free Medium for a Proximal Tubular Kidney Epithelial Cell Line, LLC-PK ₁ Milton H. Saier, Jr.	25
3	Serum-Free Organ Culture of Embryonic Mouse Metanephros Ellis D. Avner, William E. Sweeney, Jr., and Demetrius Ellis	33
4	Primary Culture of Hepatocytes H.L. Leffert, K.S. Koch, and H. Skelly	43
5	Selective Growth of Human Small Cell Lung Cancer Cell Lines and Clinical Specimens in Serum-Free Medium Desmond N. Carney, Martin Brower, Virginia Bertness, and Herbert K. Oie	57

6	Primary Tissue Cultures of Human Colon Carcinomas in Serum-Free Medium: An In Vitro System for Tumor Analysis and Therapy Experiments Jürgen van der Bosch	73
7	Growth and Differentiation of Human Bronchogenic Epidermoid Carcinoma Cells in Serum-Free Media Kaoru Miyazaki, Hideo Masui, and Gordon H. Sato	83
8	Serum-Free Cell Culture of A431 Human Epidermoid Carcinoma David W. Barnes	95
9	Growth and Differentiation of Embryonal Carcinoma Cells in Defined and Serum-Free Media Angie Rizzino	107
10	α_2 -Macroglobulin, a Contaminant of Commercially Prepared Pedersen Fetuin: Isolation, Characterization, and Biological Activity David S. Salomon, Kathryn B. Smith, Ilona Losonczy, Mozeena Bano, William R. Kidwell, Giulio Alessandri, and Pietro M. Gullino	125

SERUM-FREE CULTURE OF FIBROBLASTIC CELLS

11	On Deciding Which Factors Regulate Cell Growth Arthur B. Pardee, Paul V. Cherington, and Estela E. Medrano	157
12	Purification of Pituitary and Brain Fibroblast Growth Factors and Their Use in Cell Culture Denis Gospodarowicz	167
13	Preparation of Bovine Pituitary Fibroblast Growth Factor Sandra K. Lemmon and Ralph A. Bradshaw	199
14	Preparation of Pituitary Acidic FGF Angelo A. Gambarini, Mari C.S. Armelin, and Hugo A. Armelin	209
15	Growth of SV40 Balb/c-3T3 Cells in Serum-Free Culture Medium G.A. Rockwell	221
16	Use of Hormone-Toxin Conjugates and Serum-Free Media for the Isolation and Study of Cell Variants in Hormone Responses Nobuyoshi Shimizu	233

17	Growth of Human Fibroblast Cultures in Serum-Free Media Richard G. Ham	249
18	Serum-Free Cell Culture for Growth of NIH 3T3 and 10T1/2 Mouse Embryo Fibroblast Cell Lines, SV40 Virus Propagation, and Selection of SV40-Transformed Cells Lin-Chang Chiang, Janet Silnutzer, James M. Pipas, and David W. Barnes	265
	Index	277