Contents


8  Ligandin, the Glutathione S-Transferases, and Chemically Induced Hepatocarcinogenesis: A Review. Garry John Smith, Virginia Sapico Ohl, and Gerald Litwack.

15 Increased Guanylate Cyclase Activity and Guanosine 3',5'-Monophosphate Content in Ethionine-induced Hepatomas. Frederick R. DeRubertis and Patricia Craven.


32 Differences in the Acute Response of the Various Segments of Rat Intestine to Treatment with the Intestinal Carcinogen, Methylazoxymethanol Acetate. Morris S. Zedeck, Dennis J. Grab, and Stephen S. Sternberg.

37 Common Tumor Rejection Antigens in Methylcholanthrene-induced Squamous Cell Carcinomas of Mice Detected by Tumor Protection and a Radioisotopic Footpad Assay. George C. Economou, Noritoshi Takeichi, and Charles W. Boone.

42 Inhibition of Herpesvirus saimiri Replication by Phosphonoacetic Acid, Benzo(a)pyrene, and Methylcholanthrene. Gary R. Pearson and Janet S. Beneke.

47 Conjugation of Radiolabeled Polyamines in the Rat. Michael G. Rosenblum and Diane H. Russell.


67 Long-Term Effects of Neonatal Treatment with Progesterone, Alone and in Combination with Estrogen, on the Mammary Gland and Reproductive Tract of Female BALB/cfC3H Mice. Lovell A. Jones and Howard A. Bern.


82 Hormonal Control of Growth and Progression in Tumors of Nb Rats and a Theory of Action. Robert L. Noble.

95 Effectiveness of Neuraminidase in Experimental Immunotherapy of Two Murine Pulmonary Carcinomas. Charles D. Alley and Michael J. Snodgrass.

102 Induction of Acute Necrosis in Walker 256 Tumors in Rats. Robert H. Orvoine and Jeffrey M. Seldman.


118 Analysis of Gene Expression in Regenerating Rat Liver by Hybridization of Nuclear and Cytoplasmic RNA with DNA. Roland F. Greene and Nelson Fausto.
128 Inhibition of the Tumor-initiating Ability of the Potent Carcinogen 7,12-Dimethylbenz(a)anthracene by the Weak Tumor Initiator 1,2,3,4-Dibenzanthracene. T. J. Slaga and R. K. Boutwell.

134 Genetics of Colon Carcinogenesis in Mice Treated with 1,2-Dimethylhydrazine. James T. Evans, Thomas B. Shows, Edith E. Sproul, Norman S. Paolini, Arnold Mittelman, and Theodore S. Hauschka.


152 The Effect of Hyperthermia and Melphalan on Survival of Human Fibroblast Strains and Melanoma Cell Lines. Patricia Goss and Peter G. Parsons.


166 Two-Stage Control of Cell Proliferation Induced in Rat Liver by α-Hexachlorocyclohexane. Rolf Schulte-Hermann.

172 Aflatoxin B₁,2,3-oxide as a Probable Intermediate in the Covalent Binding of Aflatoxins B₁ and B₂ to Rat Liver DNA and Ribosomal RNA in Vivo. David H. Swenson, Jen-Kun Lin, Elizabeth C. Miller, and James A. Miller.


194 Reduction of N-Nitrosodimethylamine Carcinogenesis in Rats by Lipotrope or Amino Acid Supplementation of a Marginally Deficient Diet. Adrienne E. Rogers.


*214 Polymamines as Markers of Response and Disease Activity in Cancer Chemotherapy. Brian G. M. Durie, Sydney E. Salmon, and Diane H. Russell.

222 Inhibition of DNA Methylation by S-Adenosylmethionine with the Production of Methyl-deficient DNA in Regenerating Rat Liver. Ray Cox and Charles C. Irving.


231 The Effect of Lymphoma and Other Neoplasms on Hepatic and Plasma Enzymes of the Host Rat. Anne-marie Herzfeld and Olga Greengard.


244 High-Pressure Liquid Chromatography Analysis of Benzo(a)pyrene Metabolism by Microsomal Enzymes from Rhesus Liver and Lung. Stephen G. Hundley and Ralph I. Freudenthal.


*258 Specific Binding of Estradiol and Dihydrotestosterone in Human Mammary Cancers. Günther Trams and Heinrich Maass.

262 Surface Changes in the Descending Colon of Rats Treated with Dimethylhydrazine. David H. Barkla and Peter J. M. Tutton.

272 Blood Coagulation Changes in Mice Bearing Lewis Lung Carcinoma, a Metastasizing Tumor. Andrea Poggi, Nadia Polentarutti, Maria Benedetta Donati, Giovanni de Gaetano, and Silvio Garattini.

*278 Dehydroepiandrosterone Sulfotransferase as a Possible Shunt for the Control of Steroid Metabolism in Human Mammary Carcinoma. J. B. Adams and D. P. Chandra.


*293 Changes in Distribution of Human Malignant Mela-

299 The Influence of Folate Antagonists on the Metabolism of Folic Acid and Its Reduced Derivatives in Rat Liver and Kidney. Ulrich Bühring, Yoon Sook Shin, and Eckard Folsch.

305 Murine Pulmonary Adenoma Bioassay of Potentially Effective Agents against Slow-growing Solid Tumors. Jeffrey C. Theiss, Gary D. Stoner, and Michael B. Shimkin.

310 Legislation Concerning Chemical Carcinogens in Several Industrialized Countries. Ruggero Montesano and Lorenzo Tomatis.

317 Brief Communications:


320 Differences in the Responsiveness of Splenic, Lymph Node, and Peripheral Blood Lymphoid Cells to Tumor Membrane Extracts. James G. Krueger, Rosalind A. Segal, and Rex C. Moyer.


329 Letter to the Editor:


331 Announcements.

332 Errata.

333 Instructions for Authors.