

CONTENTS OF VOLUME 105, No. 3, 1967

	PAGE		PAGE
IUPAC-IUB Commission on Biochemical Nomenclature. The nomenclature of lipids	897	Synthesis of ribonucleic acid in baby-hamster kidney cells in the presence of actinomycin D. By S. J. Martin and F. Brown	979
Chromophores of allophycocyanin and R-phycocyanin. By D. J. Chapman , W. J. Cole and H. W. Siegelman	903	Effect of virus infection on the stability and synthesis of actinomycin-resistant ribonucleic acid in baby-hamster kidney cells. By S. J. Martin and F. Brown	987
Effectors of rat-heart hexokinases and the control of rates of glucose phosphorylation in the perfused rat heart. By P. J. England and P. J. Randle	907	Lactogenesis in the rat. Changes in metabolic parameters at parturition. By N. J. Kuhn and J. M. Lowenstein	995
The composition of crystalline complexes of neurophysin-M with [8-arginine]-vasopressin and oxytocin. By M. D. Hollenberg and D. B. Hope	921	The metabolism of dipotassium 2-hydroxy-5-nitrophenyl [³⁵ S]sulphate, a substrate for lysosomal arylsulphatases A and B. By T. G. Flynn , K. S. Dodgson , G. M. Powell and F. A. Rose	1003
Assimilation of glucose carbon in subcellular rat brain particles <i>in vivo</i> and the problems of axoplasmic flow. By R. Vrba	927	Influence of hormones on the nicotinamide nucleotide coenzymes of adipose tissue. By P. McLean , A. L. Greenbaum , J. Brown and K. R. Greenslade	1013
Metabolism of the reserve polysaccharide of <i>Streptococcus mitis</i> . Properties of α -(1→6)-glucosidase, its separation from transglucosylase, and the action of the two enzymes on branched oligosaccharides. By G. J. Walker and J. E. Builder	937	The C-terminal sequences of the heavy chains of human immunoglobulin G myeloma proteins of differing isotopes and allotypes. By J. W. Prahl	1019
The activity of uridine diphosphate glucose-D-fructose 6-phosphate 2-glucosyltransferase in leaves. By J. S. Hawker	943	The participation of phospholipids in the interaction of leucocidin and the cell membrane of the polymorphonuclear leucocyte. By A. M. Woodin and A. A. Wieneke	1029
The morphological site of synthesis of cytochrome <i>c</i> in mammalian cells (Krebs cells). By K. B. Freeman , D. Haldar and T. S. Work	947	The polyphosphoinositide content of the leucocyte, erythrocyte and macrophage. By A. A. Wieneke and A. M. Woodin	1039
Carnitine and derivatives in rat tissues. By D. J. Pearson and P. K. Tubbs	953	Separation of urinary oestrogen sulphates from oestrogen glucosiduronates on diethylaminoethyl-Sephadex columns. By R. Hähnel and M. Ghazali bin Abdul Rahman	1047
The effect of ultraviolet irradiation on acid-soluble collagen. By R. J. Davidson and D. R. Cooper	965	The effect of diet on carbon tetrachloride metabolism. By A. A. Seawright and A. E. M. McLean	1055
14 α -Hydroxyoestrone, a new oestrogen metabolite. By R. Knuppen , O. Haupt and H. Breuer	971		

	PAGE		PAGE
Amino acids in ram testicular fluid and semen and their metabolism by spermatozoa. By B. P. Setchell, N. T. Hinks, J. K. Voglmayr and T. W. Scott	1061	Influence of reagents reacting with metal, thiol and amino sites of catalytic activity and L-phenylalanine inhibition of rat intestinal alkaline phosphatase. By W. H. Fishman and N. K. Ghosh	1163
The kinetics and reaction mechanism of the nicotinamide-adenine dinucleotide phosphate-specific glycerol dehydrogenase of rat skeletal muscle. By C. J. Toews	1067	The binding of hydrogen ions to an acidic glycoprotein from bovine cortical bone. By A. R. Peacocke and P. A. Williams	1171
The preparation and immunological properties of ¹³¹ I-labelled adrenocorticotrophin. By J. Landon, T. Livanou and F. C. Greenwood	1075	The binding of calcium and yttrium ions to a glycoprotein from bovine cortical bone. By P. A. Williams and A. R. Peacocke	1177
Partition of porphyrins between cyclohexanone and aqueous sodium acetate as a function of pH. Determination of uroporphyrin and of hydrophilic porphyrin conjugates. By C. Rimington and A. Benson	1085	The conversion of cholest-7-en-3 β -ol into cholesterol. General comments on the mechanism of the introduction of double bonds in enzymic reactions. By S. M. Dewhurst and M. Akhtar	1187
Regulation of polyribosome formation and protein synthesis in the uterus. Isolation of cytoplasmic ribonucleoprotein particles and the principal properties of the cell-free protein-synthesizing system. By C.-S. Teng and T. H. Hamilton	1091	The development of polysomes in the seed of <i>Pisum arvense</i> . By G. R. Barker and M. Rieber	1195
Regulation of polyribosome formation and protein synthesis in the uterus. Effect of ovariectomy and administration of oestradiol-17 β on the amino acid-incorporation activity <i>in vitro</i> and the cytoplasmic concentration <i>in vivo</i> of polyribosomal preparation. By C.-S. Teng and T. H. Hamilton	1101	A diagonal paper-electrophoretic technique for studying amino acid sequences around the cysteine and cystine residues of proteins By R. N. Perham	1203
Messenger ribonucleic acid of cerebral nuclei. By S. C. Bondy and S. Roberts	1111	Formation of protoporphyrin from haemoglobin <i>in vitro</i> . By R. L. Veech, G. A. Rogeness and H. Weil-Malherbe	1209
Stimulation of rat testis microsomal 17 α -hydroxyprogesterone side-chain cleavage enzyme by luteinizing hormone added <i>in vitro</i> . By D. D. Hagerman	1119	Development of gluconeogenesis in neonatal rat liver. Effect of triamcinolone. By D. Yeung, R. S. Stanley and I. T. Oliver	1219
The disulphide bridges of bovine chymotrypsinogen B. By L. B. Smillie and B. S. Hartley	1125	Development of gluconeogenesis in neonatal rat liver. Effect of premature delivery. By D. Yeung and I. T. Oliver	1229
The macromolecular properties of blood-group substances. Sedimentation-velocity and viscosity measurements. By J. M. Creeth and C. G. Knight	1135	The effect of tropomyosin on the adenosine triphosphatase activity of desensitized actomyosin. By M. C. Schaub, S. V. Perry and D. J. Hartshorne	1235
Respiration-driven proton translocation in rat liver mitochondria. By P. Mitchell and J. Moyle	1147	An octadecatrienoic acid from <i>Lamium purpureum</i> L. seed oil containing 5,6-allenic and <i>trans</i> -16-olefinic unsaturation. By K. L. Mikolajczak, M. F. Rogers, C. R. Smith, jun. and I. A. Wolff	1245
		The identification of prostaglandins E ₂ , F _{2α} and A ₂ from rabbit kidney medulla. By J. B. Lee, K. Crowshaw, B. H. Takman, K. A. Attrep and J. Z. Gougoutas	1251

CONTENTS

iii

	PAGE		PAGE
The fate of ethyltin and diethyltin derivatives in the rat. By J. W. Bridges, D. S. Davies and R. T. Williams	1261	Effect of alloxan-diabetes on multiple forms of hexokinase in adipose tissue and lung. By P. McLean, J. Brown, E. Walters and K. Greenslade	1301
Biliary excretion of foreign compounds. Benzene and its derivatives in the rat. By M. M. Abou-El-Makarem, P. Millburn, R. L. Smith and R. T. Williams	1269	Organic pyrophosphates as substrates for human alkaline phosphatases. By R. H. Eaton and D. W. Moss	1307
SHORT COMMUNICATIONS			
Biliary excretion of foreign compounds. Biphenyl, stilboestrol and phenolphthalein in the rat: molecular weight, polarity and metabolism as factors in biliary excretion. By P. Millburn, R. L. Smith and R. T. Williams	1275	The metabolism of 3-deoxy-3-fluoro-D-glucose by <i>Saccharomyces cerevisiae</i> . By R. V. Brunt and N. F. Taylor	41 c
Biliary excretion in foreign compounds. Sulphonamide drugs in the rat. By P. Millburn, R. L. Smith and R. T. Williams	1283	Amino acid incorporation by mitochondria isolated, essentially free of micro-organisms, from <i>Saccharomyces carlsbergensis</i> . By L. A. Grivell	44 c
Biliary excretion in foreign compounds. Species difference in biliary excretion. By M. M. Abou-El-Makarem, P. Millburn, R. L. Smith and R. T. Williams	1289	The effect of reduced nicotinamide-adenine dinucleotide and preincubation in oxygen on the anaerobic glycolysis of liver and hepatoma. By G. Ragnotti, F. Cajone and G. Gaja	47 c
Biliary excretion of [¹⁴ C]succinylsulphathiazole in the rat and rabbit. By M. M. Abou-El-Makarem, P. Millburn and R. L. Smith	1295	Phosphorylated enzyme as an intermediate in the phosphoenolpyruvate synthase reaction. By R. A. Cooper and H. L. Kornberg	49 c
		Ultraviolet absorption and tyrosine ionization in insulin. By C. J. Garratt and P. Walson	51 c

Proceedings of The Biochemical Society

	PAGE
Mitochondrial deoxyribonucleic acid. By P. BORST	37 P
Informational role of mitochondrial deoxyribonucleic acid. By P. SLONIMSKI	38 P
The function of mitochondrial nucleic acids in protein synthesis. By T. S. WORK	38 P
Stable messenger and its function in embryogenesis. By H. DENIS	40 P
High-temperature catalytic reduction of steroids. By P. M. ADHIKARY and R. A. HARKNESS	40 P
Studies on the formation of androst-16-enes from C ₂₁ steroids in boar testicular tissue. By D. B. GOWER and N. AHMAD	41 P
On the application of the Hammett relationship to enzyme kinetics: the search for non-Hammett areas for the crystalline lenticular aminopeptidase. By E. A. ZELLER, P. F. PALMBERG and B. HARINATH BABU	41 P
Substrate analogue inactivation of <i>N</i> -acetylneuraminic acid aldolase by bromopyruvic acid. By J. E. G. BARNETT	42 P
The mechanism of glucose 6-phosphate: inositol 1-phosphate cyclase. By J. E. G. BARNETT and D. L. CORINA	42 P
Isoenzymes of soluble monoamine oxidase from human placental and rat-liver mitochondria. By M. B. H. YOUNDIM and M. SANDLER	43 P
Reversible inactivation of human alkaline phosphatase by acid. By P. B. SCUTT and D. W. MOSS	43 P
A rat-liver cell-sap exonuclease. By A. R. HUNTER	44 P

An incomplete tricarboxylic acid cycle in the blue-green alga <i>Anabaena variabilis</i> . By J. PEARCE and N. G. CARR	45 P
Enzyme adaptation in isolated muscle. By I. HAJEK and S. V. PERRY	45 P
The removal of histones from calf thymus deoxyribonucleoprotein and calf thymus tissue with acetic acid containing fixatives. By C. DICK and E. W. JOHNS	46 P
Thiol groups and the heterogeneity of the arginine-rich histone F3. By D. M. P. PHILLIPS	46 P
Membrane-associated ribonucleic acid in the cytoplasm and its turnover. By J. R. TATA	47 P
The removal of rapidly labelled ribonucleic acid from rat-liver ribosomes. By A. J. DUNN	47 P
Amino acid incorporation into ribosomes prepared from rabbit mammary glands during late pregnancy and lactation. By G. D. BAIRD and I. D. HERRIMAN	48 P
Induction of tyrosine transaminase and tryptophan pyrrolase by amino acids by a process requiring ribonucleic acid synthesis. By A. KORNER and F. LABRIE	49 P
The molecular mechanism of catabolite repression. By N. R. COHEN	49 P
Preferential inhibition of extranuclear deoxyribonucleic acid synthesis by the trypanocide berenil. By B. A. NEWTON and R. W. F. LE PAGE	50 P
Interaction of berenil with deoxyribonucleic acid and some characteristics of the berenil-deoxyribonucleic acid complex. By B. A. NEWTON	50 P
Effects on host-cell ribonucleic acid metabolism of encephalomyocarditis (EMC) virus exposed to ultraviolet irradiation. By R. NAFTALIN	51 P
Inactivation of T7 and ϕ X-174 bacteriophages by mono- and di-functional sulphur mustards: quantitative correlations with phage deoxyribonucleic acid alkylation. By P. D. LAWLEY, J. H. LETHBRIDGE, P. A. EDWARDS and K. V. SHOOTER	52 P
Stimulation of ribonucleic acid synthesis in serum-deprived cells following infection with Newcastle disease virus. By B. W. J. MAHY and D. P. DURAND	52 P
Study of deoxyribonucleic acid in the cytoplasm of <i>Amoeba proteus</i> . By Y. ŠKREB, M. EGER and D. HORVAT	53 P
A rapidly renaturing deoxyribonucleic acid component associated with chloroplast preparations. By R. WELLS and M. L. BIRNSTIEL	53 P
An apparatus for fractionating polyacrylamide gels. By J. L. COOTE	54 P
A fluorescence titrator. By N. M. GREEN	54 P

INDEX TO AUTHORS

	PAGE		PAGE
Abou-El-Makarem, M. M.	1269, 1289, 1295	Brunt, R. V.	41 C
Adhikary, P. M.	40 P	Builder, J. E.	937
Ahmad, N.	41 P	Carr, N. G.	45 P
Akhtar, M.	1187	Cajone, F.	47 C
Attrep, K. A.	1251	Chapman, D. J.	903
Baird, G. D.	48 P	Cohen, N. R.	49 P
Barker, G. R.	1195	Cole, W. J.	903
Barnett, J. E. G.	42 P	Cooper, D. R.	965
Benson, A.	1085	Cooper, R. A.	49 C
Birnstiel, M. L.	53 P	Coote, J. L.	54 P
Bondy, S. C.	1111	Corina, D. L.	42 P
Borst, P.	37 P	Creeth, J. M.	1135
Breuer, H.	971	Crowshaw, K.	1251
Bridges, J. W.	1261	Davidson, R. J.	965
Brown, F.	979, 987	Davies, D. S.	1261
Brown, J.	1013, 1301		