

CONTENTS OF VOLUME 123, No. 4, 1971

	PAGE		PAGE
Evidence for the presence of a pool of glycerides with a rapid rate of turnover in brown fat from newborn rabbits. By B. L. Knight	485	The limitation of glycolysis in adenine-deficient <i>Escherichia coli</i> . By K. Burton	585
The purification and properties of the β -lactamase specified by the resistance factor R-1818 in <i>Escherichia coli</i> and <i>Proteus mirabilis</i> . By J. W. Dale and J. T. Smith	493	The amino acid sequence around four cysteine residues in trout actin. By J. Bridgen	591
Characterization of the β -lactamase specified by the resistance factor R-1818 in <i>Escherichia coli</i> K12 and other Gram-negative bacteria. By J. W. Dale	501	Sporulation in <i>Bacillus subtilis</i> . The appearance of sulpholactic acid as a marker event for sporulation. By D. A. Wood	601
Some relationships between R-factor and chromosomal β -lactamase in Gram-negative bacteria. By J. W. Dale and J. T. Smith	507	The hydrolysis of glycosyl fluorides by glycosidases. Determination of the anomeric configuration of the products of glycosidase action. By J. E. G. Barnett	607
Effects of glucose and other modifiers of insulin release on the oxidative metabolism of amino acids in micro-dissected pancreatic islets. By B. Hellman , J. Sehlin and I.-B. Täljedal	513	Chromatography of nucleic acid digests on thin layers of cellulose impregnated with polyethyleneimine. By E. M. Southern and A. R. Mitchell	613
The lysosomal membrane complex. Focal point of primary steroid hormone action. By C. M. Szego , B. J. Seeler , R. A. Steadman , D. F. Hill , A. K. Kimura and J. A. Roberts	523	Studies on the solubilized ribonucleic acid polymerase from rat ventral prostate gland. By W. I. P. Mainwaring , F. R. Mangan and B. M. Peterken	619
A role for phospholipids in the binding and metabolism of drugs by hepatic microsomes. Use of the fluorescent hydrophobic probe 1-anilidonaphthalene-8-sulphonate. By T. E. Eling and R. P. DiAugustine	539	Assembly of immunoglobulin M. Blocked thiol groups of intracellular 7S subunits. By B. A. Askonas and R. M. E. Parkhouse	629
Changes in the transcription pattern of flax cotyledons after inoculation with flax rust. By A. K. Chakravorty and M. Shaw	551	Immunoglobulin M biosynthesis. Production of intermediates and excess of light chain in mouse myeloma MOPC 104E. By R. M. E. Parkhouse	635
Characterization of a neutral protease from lysosomes of rabbit polymorphonuclear leucocytes. By P. Davies , G. A. Rita , K. Krakauer and G. Weissmann	559	The separation of intracellular serum albumin from rat liver. By J. D. Judah and M. R. Nicholls	643
The transport of citrate and other tricarboxylic acids in two species of <i>Pseudomonas</i> . By H. G. Lawford and G. R. Williams	571	Biosynthesis of Rat serum albumin. By J. D. Judah and M. R. Nicholls	649
Effect of point mutations in the <i>lac</i> promoter on transient and severe catabolite repression of the <i>lac</i> operon of <i>Escherichia coli</i> . By M. D. Yudkin	579	SHORT COMMUNICATIONS	
		The regulation of rat liver L-alanine-glyoxylate aminotransferase by glucagon <i>in vivo</i> . By K. Snell	657
		Optical rotatory dispersion and circular dichroism of superhelical deoxyribonucleic acid. By A. M. Campbell and D. S. Lochhead	661
		The interaction of concanavalin A with teichoic acids and bacterial walls. By A. R. Archibald and H. E. Coapes	665

	PAGE		PAGE
Studies on the metabolism of vitamin A: the effect of vitamin A status on the content of some steroids in the ovaries of pregnant rats.		Sterol biosynthesis in the starfish <i>Asterias rubens</i> and <i>Henricia sanguinolenta</i> .	
By J. Ganguly, G. S. Pope, S. Y. Thompson, J. Toothill, J. D. Edwards-Webb and H. B. Waynforth	669	By A. G. Smith and L. J. Goad	671
		Ribonucleic acid polymerase activity in cardiomyopathic hamster heart nuclei.	
		By A. J. Bester	675

Proceedings of The Biochemical Society

	PAGE
Very-low-density lipoproteins and chylomicrons. By R. I. LEVY	15P
Low-density lipoproteins. By B. LEWIS	15P
Human plasma high-density lipoproteins: past, present and future. By A. SCANU	17P
Some physical approaches to the structure of serum high-density lipoproteins. By R. B. LESLIE	17P
Biosynthesis of plasma lipoproteins. By J. B. MARSH	18P
Turnover of plasma lipoprotein cholesterol. By N. B. MYANT	19P
The mechanism of removal of lipoprotein triglyceride from the plasma. By D. S. ROBINSON	20P
Clinical disorders of the plasma lipoproteins. By B. M. RIFKIND	21P
Phenol oxidase activity in the larva of the blowfly <i>Calliphora erythrocephala</i> . By G. M. PRICE and L. HUGHES	21P
Enzyme insolubilization with cross-linked polyacryloylaminoacetaldehyde dimethylacetal. By R. EPTON, J. V. McLAREN and T. H. THOMAS	21P
Heterotropic co-operative effects between amino acid substrates of phenylalanine hydroxylase. By W. F. COULSON and C. M. HUGHES	22P
The purification and properties of shikimate dehydrogenase. By J. R. DOWSETT, J. R. CORBETT, B. MIDDLETON and P. K. TUBBS	23P
A latent collagenase released by bone and skin explants in culture. By G. VAES	23P
An altered erythrocyte acetylcholinesterase associated with hereditary muscular dystrophy in mice. By P. K. DAS, R. L. WATTS and D. C. WATTS	24P
Identification in urine of a low-molecular-weight highly polar glycopeptide containing cysteinyl-galactose. By C. J. LOTE and J. B. WEISS	25P
A sensitive method for the detection of metabolites of Dianabol in urine in man. By A. M. LAWSON and C. J. W. BROOKS	25P
The conversion of cyclamate into cyclohexylamine by gut bacteria. By B. S. DRASAR, A. G. RENWICK and R. T. WILLIAMS	26P
The metabolism of methamphetamine in the rat and guinea pig. By J. CALDWELL, L. G. DRING and R. T. WILLIAMS	27P
The effect of linoleic acid, peroxidation and antioxidants on induction of cytochrome <i>P</i> -450 in rat liver. By A. E. M. McLEAN and W. J. MARSHALL	28P
Isolation of dense bodies containing acid hydrolases and iron from rat spleen. By P. B. HOUGHTON, W. JONES-WILLIAMS and M. DAVIES	28P
The role and regulation of poly- β -hydroxybutyrate synthesis in <i>Azotobacter beijerinckii</i> . By P. J. SENIOR and E. A. DAWES	29P
The preparation and culture of spontaneously fused tobacco leaf spongy-mesophyll protoplasts. By J. B. POWER, E. M. FREARSON and E. C. COCKING	29P
Fluorescent derivatives of 3-hydroxy-L-kynurenine in the lens of man, the baboon and the grey squirrel. By R. VAN HEYNINGEN	30P
Nature and properties of retinol-binding proteins. By W. KIRBY, G. WHITE and J. GLOVER	31P
Studies on olfactory receptor mechanisms. By G. H. DODD	31P
Trans-synaptic induction of dopamine (3,4-dihydroxyphenethylamine) β -hydroxylase in adrenergic tissues of the rat. By P. B. MOLINOFF, S. BRIMJOIN and J. AXELROD	32P
Oestradiol-17 β stimulation of ribonucleic acid synthesis in immature rat uterus: the effects of injection route and rat weight. By J. T. KNOWLER and R. M. S. SMELLIE	33P

CONTENTS

iii

	PAGE
Separation of ribonucleic acid from immature rat uterus on polyacrylamide gels and the effects of oestradiol-17 β . By J. T. KNOWLER and R. M. S. SMELLIE	33P
Alkylated components in rat liver ribonucleic acid: a possible index of true biological turnover. By A. W. CRAIG and P. J. O'CONNOR	34P
Studies on the methylated regions of HeLa-cell ribosomal and nucleolar ribonucleic acids. By M. SALIM, R. WILLIAMSON and B. E. H. MADEN	34P
'Fingerprinting' studies on ³⁵ S-labelled mammalian-cell ribosomal proteins. By J. SHEPHERD and B. E. H. MADEN	35P
Effects of amino acid starvation on ribosome formation in HeLa cells. By B. E. H. MADEN.	36P
Methylation of newly synthesized ribonucleic acid by isolated rat liver nuclei: a means of characterizing ribonucleic acid synthesized <i>in vitro</i> . By D. RICKWOOD	36P
Control of histone modification within chromatin by adenine nucleotides and steroid hormones. By R. H. BURDON and C. A. PEARCE	37P
Methylation of newly synthesized and older deoxyribonucleic acid. By R. L. P. ADAMS	38P
Effects of insulin and adrenaline on rat epididymal-fat-pad pyruvate dehydrogenase. By H. G. COORE, R. M. DENTON, B. R. MARTIN and P. J. RANDLE	38P
Properties of pyruvate dehydrogenase from fat-cell mitochondria and its hormonal control. By R. M. DENTON, B. R. MARTIN, H. G. COORE and P. J. RANDLE.	39P
An immuno-electrophoretic assay of β -lipoprotein and albumin in human aortic intima by direct electrophoresis from the tissue sample into an antibody-containing gel. By E. B. SMITH and R. S. SLATER	39P
The action of fructose on ethanol metabolism by intact isolated liver cells. By M. N. BERRY	40P
The action of pyruvate on ethanol oxidation by intact isolated liver cells. By M. N. BERRY.	41P
Determination of the operational molarity of solutions of bovine α -chymotrypsin, trypsin, thrombin and Factor Xa by spectrofluorometric titration. By D. V. ROBERTS, R. W. ADAMS, D. T. ELMORE, G. W. JAMESON and W. S. A. KYLE	41P
Observations on rat mast-cell-granule protease. By A. G. LLOYD, T. MORRISON and D. T. ELMORE	42P
Comparative studies on rat mast-cell-granule protease and a bovine liver-capsule protease. By A. G. LLOYD, T. MORRISON and D. T. ELMORE	43P
Effect of a high-ethanol and choline-deficient diet on the metabolism of [³ H]oestradiol <i>in vitro</i> by subcellular fractions of male rat livers. By M. E. BEARY and S. FRENCH	43P
Metabolism <i>in vitro</i> of [4- ¹⁴ C]4-androstene-3,17-dione by livers from normal and carbon tetrachloride-poisoned rats. By F. M. MARTIN and M. E. BEARY	44P
An intact muscle preparation suitable for studies of the metabolic effects of electrical stimulation. By E. B. FERN, V. M. PAIN and K. L. MANCHESTER	45P
The physiological role of taurine. By L. K. KACZMAREK and A. N. DAVISON	45P
Rapid oxidation of chondroitin sulphates and other glycols by periodic acid in organic solvents. By J. E. SCOTT and M. J. TIGWELL	46P

INDEX TO AUTHORS

	PAGE		PAGE
Adams, R. L. P.	38P	Burdon, R. H.	37P
Adams, R. W.	41P	Burton, K.	585
Archibald, A. R.	665		
Askonas, B. A.	629		
Axelrod, J.	32P	Caldwell, J.	27P
		Campbell, A. M.	661
Barnett, J. E. G.	607	Chakravorty, A. K.	551
Beary, M. E.	43P, 44P	Coapes, H. E.	665
Berry, M. N.	40P, 41P	Cocking, E. C.	29P
Bester, A. J.	675	Coore, H. G.	38P, 39P
Bridgen, J.	591	Corbett, J. R.	23P
Brimjoin, S.	32P	Coulson, W. F.	22P
Brooks, C. J. W.	25P	Craig, A. W.	34P