

Molecular Aspects

Contents of Volume 141, No. 1, 1974

	PAGE		PAGE
Proteins		Isolation and characterization of mitochondrial deoxyribonucleic acid of <i>Acanthamoeba castellanii</i> .	
Amino acid sequence of the <i>N</i> -terminal 139 residues of light chain derived from a homogeneous rabbit antibody.		By N. S. Hettiarachchy & I. G. Jones	159
By J.-C. Jaton	1	Specificity of anti-nucleoside antibodies (<i>Short Communication</i>).	
Comparison of the amino acid sequences of the variable regions of light chains derived from two homogeneous rabbit anti-pneumococcal antibodies.		By M. Z. Humayun & T. M. Jacob	313
By J.-C. Jaton	15	Lipids	
Chemical and immunochemical characteristics of tropomyosins from striated and smooth muscle.		Determination of volatile fatty acids in plasma after ethanolic extraction.	
By P. Cummins & S. V. Perry	43	By C. Remesy & C. Demigne	85
The utility of photo-affinity labels as 'mapping' reagents. A study of sub-populations of a specific rabbit antibody by using structurally related photo-affinity reagents.		The cell-envelope glycolipids of baker's yeast.	
By R. A. G. Smith & J. R. Knowles	51	By K. Työrinoja, T. Nurminen & H. Suomalainen	133
Calcium and the assays of human plasma clotting Factor XIII.		An electron-capture gas-liquid-chromatographic method for the determination of prostaglandin F _{2α} in biological fluids.	
By R. D. Cooke & J. J. Holbrook	71	By A. J. F. Wickramasinghe & R. S. Shaw	179
The calcium-induced dissociation of human plasma clotting Factor XIII.		Carbohydrates	
By R. D. Cooke & J. J. Holbrook	79	The alkali-labile linkage between keratan sulphate and protein.	
Molecular heterogeneity of mouse duodenal alkaline phosphatase. Association of lipids and peptides.		By J. J. Hopwood & H. C. Robinson	57
By P. R. V. Nayudu & F. B. Hercus	93	The glycoasparagines in urine of a patient with aspartylglycosaminuria.	
Isolation and characterization of a hydroxyproline-containing protein from soluble extracts of the leaves of sandal (<i>Santalum album</i> L.).		By R. J. Pollitt & K. M. Pretty	141
By U. V. Mani & A. N. Radhakrishnan	147	The synthesis of peptidoglycan in an autolysin-deficient mutant of <i>Bacillus licheniformis</i> N.C.T.C. 6346 and the effect of β -lactam antibiotics, bacitracin and vancomycin.	
A collagen-like amino acid sequence in a polypeptide chain of human C1q (a subcomponent of the first component of complement).		By J. B. Ward	227
By K. B. M. Reid	189	Enzymology	
Amino acid sequence of the smaller basic protein from rat brain myelin.		A new nicotinamide-adenine dinucleotide-dependent hydroaromatic dehydrogenase of <i>Lactobacillus plantarum</i> and its role in formation of (-)-3,4-dihydroxycyclohexane- <i>c</i> -1-carboxylate.	
By P. R. Dunkley & P. R. Carnegie	243	By G. C. Whiting & R. A. Coggins	35
Nucleic Acids		Purification of human placental alkaline phosphatase. Salt effects in affinity chromatography.	
Ribonuclease-sensitivity of covalently closed rat liver mitochondrial deoxyribonucleic acid.		By G. J. Doellgast & W. H. Fishman	103
By D. M. Lonsdale & I. G. Jones	155	Aminopeptidases of pea.	
		By T. C. Elleman	113

	PAGE		PAGE
Kinetics of the activation of rat liver pyruvate kinase by fructose 1,6-diphosphate and methods for characterizing hysteretic transitions. By H. O. Spivey, W. Flory, B. D. Peczon, J. P. Chandler & R. E. Koeppe	119	The kinetics of oxidation of ferroperoxidase by molecular oxygen. A model of a terminal oxidase. By C. F. Phelps, E. Antonini, G. Giacometti & M. Brunori	265
Kinetic properties of rat liver pyruvate kinase at cellular concentrations of enzyme, substrates and modifiers. By W. Flory, B. D. Peczon, R. E. Koeppe & H. O. Spivey	127	Alkaline phosphatase from pig kidney. Method of purification and molecular properties. By E. D. Wachsmuth & K. Hiwada	273
Kinetic properties of cerebral pyruvate kinase. By P. C. Nicholas & H. S. Bachelard	165	Catalytic properties of alkaline phosphatase from pig kidney. By K. Hiwada & E. D. Wachsmuth	283
Studies on the thiol group of lactose synthetase A protein from human milk and on the binding of uridine diphosphate galactose to the enzyme. By B. J. Kitchen & P. Andrews	173	Alkaline phosphatase from pig kidney. Microheterogeneity and the role of neuraminic acid. By K. Hiwada & E. D. Wachsmuth	293
The kinetics of coupled enzyme reactions. Applications to the assay of glucokinase, with glucose 6-phosphate dehydrogenase as coupling enzyme. By A. C. Storer & A. Cornish-Bowden	205	Kinetics of carbon monoxide binding and electron transfer by cytochrome <i>c</i> polymers. By S. Dupré, M. Brunori, M. T. Wilson & C. Greenwood	299
Deoxycytidylate deaminase. Properties of the enzyme from cultured kidney cells of baby hamster By H. A. Rolton & H. M. Keir	211	Specificity of glycerol kinase (<i>Short Communication</i>). By R. Eisinger, R. Harrison & W. J. Lloyd	305
Thermal inactivation studies of normal and variant human erythrocyte carbonic anhydrases by using a sulphonamide-binding assay. By W. R. A. Osborne & R. E. Tashian	219	Distribution of reducing equivalents on xanthine oxidase molecules and the rates of the intramolecular electron-transfer reactions (<i>Short Communication</i>). By R. C. Bray, D. J. Lowe & M. J. Barber	309
Kinetics of alkaline phosphatase from pig kidney. Mechanism of activation by magnesium ions. By J. Ahlers	257	Action of dimeric hybrids of native and selectively alkylated ribonuclease A on double-stranded ribonucleic acid (<i>Short Communication</i>). By G. D'Alessio, J. Doskočil & M. Libonati	317
		Intermolecular Organization	
		Changes in the number of binding sites for ribonucleic acid polymerase in chromatin of WI-38 fibroblasts stimulated to proliferate. By B. T. Hill & R. Baserga	27

The following papers appeared in the last issue of the Biochemical Journal

Cellular Aspects Contents of Volume 140, No. 3, 1974

	PAGE		PAGE
Biosynthesis and Degradation		Cellular Interactions and Control Processes	
The mechanism of intestinal absorption of phosphatidylcholine in rats. By S. Parthasarathy, P. V. Subbaiah & J. Ganguly	503	Effects of bicarbonate on intercompartmental reducing-equivalent translocation in isolated parenchymal cells from rat liver. By M. N. Berry, H. V. Werner & E. Kun	355
The metabolism of phenolic acids in the rat. By S. Ranganathan & T. Ramasarma	517	Hepatic drug hydroxylation and lipid peroxidation in riboflavin-deficient rats. By J. M. Patel, N. R. Galdhar & S. S. Pawar	363
Degradation of phosphoenolpyruvate carboxykinase (guanosine triphosphate) <i>in vivo</i> and <i>in vitro</i> . By F. J. Ballard, M. F. Hopgood, L. Reshet & R. W. Hanson	531	The concentration and control of cytoplasmic free inorganic pyrophosphate in rat liver <i>in vivo</i> . By R. W. Guynn, D. Veloso, J. W. R. Lawson & R. L. Veech	369
Bioenergetics		Long-term effects of glucose on insulin release and glucose oxidation by mouse pancreatic islets maintained in tissue culture. By A. Andersson	377
Ionophore-mediated coupling between ion fluxes and amino acid absorption in mouse ascites-tumour cells. Restoration of the physiological gradients of methionine by valinomycin in the absence of adenosine triphosphate. By M. Reid, L. E. Gibb & A. A. Eddy	383	Effect of nitrate on the synthesis and decay of nitrate reductase of <i>Neurospora</i> . By G. J. Sorger, M. T. Debanne & J. Davies	395
Inhibition by local anaesthetics of adenine nucleotide translocation in rat liver mitochondria. By T. L. Spencer & F. L. Bygrave	413	The biochemistry of virus-induced cell fusion. Changes in membrane integrity. By C. A. Pasternak & K. J. Micklem	405
Subcellular Structures		The effect of starvation on insulin secretion and glucose metabolism in mouse pancreatic islets. By C. J. Hedekov & K. Capito	423
Surface proteins of thymus-derived lymphocytes and bone-marrow-derived lymphocytes. Selective isolation of immunoglobulin and the θ -antigen by non-ionic detergents. By R. E. Cone & J. J. Marchalonis	345	Changes in phyloquinone epoxidase activity related to prothrombin synthesis and microsomal clotting activity in the rat. By A. K. Willingham & J. T. Matschiner	435
The role of ribonuclease II in the maturation of precursor 16S ribosomal ribonucleic acid in <i>Escherichia coli</i> . By J. R. Dean & J. Sykes	443	Treatment of immature mice with gonadotrophins. Effects on some enzymic activities of unfractionated ovarian homogenates. By T. A. Bramley	451
Studies on the lipid composition of the rat liver endoplasmic reticulum after induction with phenobarbitone and 20-methylcholanthrene. By S. C. Davison & E. D. Wills	461	Requirement for adenosine triphosphate for stimulation <i>in vivo</i> of ox growth-hormone release. By M. McPherson & J. G. Schofield	479
Solubilization and fractionation of glycoproteins and glycolipids of KB cell membranes. By T. D. Butters & R. C. Hughes	469	Cytotoxic effects of streptozotocin and <i>N</i> -nitrosomethylurea on the pancreatic B cells with special regard to the role of nicotinamide-adenine dinucleotide. By R. Gunnarsson, C. Berne & C. Hellerström	487
Membrane glycopeptides from old and young human erythrocytes (<i>Short Communication</i>). By C. Balduini, C. L. Balduini & E. Ascari	557		

(continued overleaf)

(continued from preceding page)

	PAGE		PAGE
High-affinity binding of oestradiol-17 β by cytosols from testis interstitial tissue, pituitary, adrenal, liver and accessory sex glands of the male rat.		Effects of α -amanitin on the stimulation of prostatic ribonucleic acid polymerase by prostatic steroid-protein receptor complexes (<i>Short Communication</i>).	
By W. M. O. van Beurden-Lamers, A. O. Brinkmann, E. Mulder & H. J. van der Molen	495	By P. Davies & K. Griffiths	565
Compartmentation of free amino acids for protein synthesis in rat liver.		Development	
By J. Airhart, A. Vidrich & E. A. Khairallah	539	Diurnal rhythms of hepatic carbohydrate metabolism during development of the rat.	
<i>Appendix:</i> Analysis of the specific radio-activity of valine isolated from aminoacyl-tRNA of rat liver.		By P. R. Walker, R. J. Bonney & V. R. Potter	523
By C. S. Wallyn, A. Vidrich, J. Airhart & E. A. Khairallah	545	Metabolism in Whole Organisms	
Biotin-mediated protein biosynthesis.		Involvement of binding lipoproteins in the absorption and transport of α -tocopherol in the rat.	
By R. L. Boeckx & K. Dakshinamurti	549	By O. V. Rajaram, P. Fatterpaker & A. Sreenivasan	509
Effects of fructose, sucrose and glucose feeding on plasma insulin concentrations and on adipose-tissue clearing-factor lipase activity in rat (<i>Short Communication</i>).			
By A. Cryer, S. E. Riley, E. R. Williams & D. S. Robinson	561		