Cellular Aspects

Contents of Volume 140, No. 2, 1974

	PAGE		PAGE
Biosynthesis and Degradation		The isolation and subfractionation of plasma	
Microbial degradation of alkylbenzenesulphonates. Metabolism of homologues of short alkyl-chain length by an <i>Alcaligenes</i> sp. By J. A. Bird & R. B. Cain	121	membrane from the cellular slime mould Dictyostelium discoideum. By A. A. Green & P. C. Newell	313
Role of membrane-bound and free polyribosomes in the synthesis of cytochrome c in rat liver. By N. F. González-Cadavid & C. S. de Córdova	157	Cellular Interactions and Control Processes The effect of nickel on secretory systems. Studies on the release of amylase, insulin and growth hormone. By R. L. Dormer, A. L. Kerbey, M. McPher-	
Lipogenesis in rat and guinea-pig isolated epididymal fat-cells. By E. D. Saggerson	211	son, S. Manley, S. J. H. Ashcroft, G. Schofield & P. J. Randle	135
Pathways of glyceride glycerol synthesis. By R. Rognstad, D. G. Clark & J. Katz	249	The uptake and metabolism of [32P]pyrophosphate by mouse calvaria <i>in vitro</i> . By A. Jung, S. Bisaz, U. Gebauer, R. G. G.	
Microbial oxidation of amines. Partial purifica- tion of a trimethylamine mono-oxygenase from Pseudomonas aminovorans and its role in growth on trimethylamine. By C. A. Boulton, M. J. C. Crabbe & P. J. Large	253	Russell, D. B. Morgan & H. Fleisch Effects of cytochalasin B, colchicine and vincristine on the metabolism of isolated fatcells. By E. G. Loten & B. Jeanrenaud	175 185
Microbial metabolism of the pyridine ring. The hydroxylation of 4-hydroxypyridine to pyridine-3,4-diol (3,4-dihydroxypyridine) by 4-hydroxypyridine 3-hydroxylase. By G. K. Watson, C. Houghton & R. B. Cain	265	Utilization of gluconate by <i>Escherichia coli</i> . Uptake of D-gluconate by a mutant impaired in gluconate kinase activity and by membrane vesicles derived therefrom. By J. M. Pouysségur, P. Faik & H. L.	
Microbial metabolism of the pyridine ring. The metabolism of pyridine-3,4-diol(3,4-dihydroxypyridine) by <i>Agrobacterium</i> sp. By G. K. Watson, C. Houghton & R. B. Cain Microbial metabolism of the pyridine ring.	277	Kornberg Calcium and magnesium ions as effectors of adipose-tissue pyruvate dehydrogenase phosphate phosphatase. By D. L. Severson, R. M. Denton, H. T. Pask	193
Metabolism of 2- and 3-hydroxypyridines by the maleamate pathway in <i>Achromobacter</i> sp. <i>By</i> R. B. Cain, C. Houghton & K. A. Wright Glycogen metabolism in the liver of the foetal	293	& P. J. Randle The response of the small intestine to vitamin D. Isolation and properties of chick intestinal polyribosomes.	225
rat. By P. Devos & HG. Hers	331	By J. S. Emtage, D. E. M. Lawson & E. Kodicek	239
Bioenergetics The inhibition of mitochondrial calcium transport by lanthanides and Ruthenium Red. By K. C. Reed & F. L. Bygrave	143	Properties of a prolactin receptor from the rabbit mammary gland. By R. P. C. Shiu & H. G. Friesen	301
Subcellular Structures		Comparative effect and fate of non-entrapped	
Glutamate and aspartate transport in rat brain mitochondria. By M. D. Brand & J. B. Chappell	205	and liposome-entrapped neuraminidase injected into rats. By G. Gregoriadis, D. Putman, L. Louis & D. Neerunjun	323

vi

	1
E	er aldolase of rabbits 34

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

Molecular Aspects Contents of Volume 139, No. 2, 1974

	PAGE		PAGE
Proteins		Isolation and structure of nocobactin NA, a lipid-soluble iron-binding compound from	
The specificity of chain interactions among immunoglobulins. Combinations of γ chains with κ chains of the same subgroup as in the parent immunoglobulin G.		Nocardia asteroides. By C. Ratledge & G. A. Snow Enzymology	407
By G. T. Stevenson & L. E. Mole	369	Enzymology	
An investigation by dielectric methods of hydration in myoglobin solutions. By E. H. Grant, B. G. R. Mitton, G. P. South & R. J. Sheppard	375	Pig liver pyruvate carboxylase. Purification, properties and cation specificity. By G. B. Warren & K. F. Tipton Pig liver pyruvate carboxylase. The reaction	297
Navy (haricot)-bean (<i>Phaseolus vulgaris</i>) lectin. Isolation and characterization of two components from a toxic agglutinating extract.		pathway for the carboxylation of pyruvate. By G. B. Warren & K. F. Tipton	311
By A. T. Andrews	421	Pig liver pyruvate carboxylase. The reaction pathway for the decarboxylation of oxalo-	
Carcinoembryonic antigen-like substances of human urothelial carcinomas. Isolation of components from pathological urine and com-		acetate. By G. B. Warren & K. F. Tipton	321
parison with colorectal carcinoma antigens. By R. Nery, A. L. Barsoum, H. Bullman & A. M. Neville	431	Kinetic and molecular properties of citraconyl- aldolase. The reversible denaturation and hybridization of the native and modified	
The purification and amino acid sequence of cytochrome c-552 from Euglena gracilis.	449	enzymes. By I. Gibbons & R. N. Perham	331
By G. W. Pettigrew Age-related variations in hydroxylation of lysine and proline in collagen. By M. J. Barnes, B. J. Constable, L. F. Morton & P. M. Royce	461	Subunit interactions in hybrids of native, carboxypeptidase-treated and citraconylated rabbit muscle aldolase. By I. Gibbons Specific inhibition of the enzymic decarboxyla-	343
Lipids		tion of S-adenosylmethionine by methylglyoxal	
Endogenous steroid concentrations in human breast tumours determined by high-resolution mass fragmentography (Short Communication). By D. Millington, D. Jenner, T. Jones & K. Griffiths	473	 bis(guanylhydrazone) and related substances. By A. Corti, C. Dave, H. G. Williams-Ashman, E. Mihich & A. Schenone The interaction of α₂-macroglobulin with proteinases. Binding and inhibition of mamma- 	351
Carbohydrates		lian collagenases and other metal proteinases. By Z. Werb, M. C. Burleigh, A. J. Barrett &	
Identification of N-acetyl-4-O-acetylneur-aminyl-lactose in echidna milk. By M. Messer	415	P. M. Starkey Inhibitors of rabbit plasma prostaglandin A	359
Small Molecules		isomerase. By R. L. Jones	381
Useful agents for the study of glutathione metabolism in erythrocytes. Organic hydroperoxides. By S. K. Srivastava, Y. C. Awasthi & E.		A comparison of purified valyl-transfer ribo- nucleic acid synthetase from <i>Bacillus stearo-</i> thermophilus and from <i>Escherichia coli</i> . By S. Wilkinson & J. R. Knowles	391
Beutler	289	(continued over	rleaf)

CONTENTS

(continued from preceding page)

	PAGE		PAGE
Purification and properties of malyl-coenzyme A lyase from <i>Pseudomonas</i> AM1. By A. J. Hacking & J. R. Quayle	399	Purification of α-mannosidase from jack-bean meal suitable for use as reagent (Short Communication).	
Biospecific affinity chromatography of an adenosine 3':5'-cyclic monophosphate-stimulated protein kinase (protamine kinase from trout testis) by using immobilized adenine nucleotides.		By C. Y. T. Chu & M. D. Turner Studies on glucarate catabolism: the oxodeoxy- glucarate aldolase activity of glucarate hydro- lyase from Pseudomonas acidovorans (Short Communication).	102
By B. Jergil, H. Guilford & K. Mosbach	441	By R. Jeffcoat	477