

RESEARCH PAPERS

Proteins

- Characterization of isoforms of protein 4.1 present in the nucleus I. CORREAS 581-585

Enzymes

- Pectin methylesterase, metal ions and plant cell-wall extension. Hydrolysis of pectin by plant cell-wall pectin methylesterase J. NARI, G. NOAT & J. RICARD 343-350
- Pectin methylesterase, metal ions and plant cell-wall extension. The role of metal ions in plant cell-wall extension A.-M. MOUSTACAS, J. NARI, M. BOREL, G. NOAT & J. RICARD 351-354
- Photochemical and ligand-exchange properties of the cyanide complex of fully reduced cytochrome *c* oxidase B. C. HILL & S. MARMOR 355-360
- Aluminofluorides and berylliofluorides as inhibitors of sulphatases. Analogues of hydrogen sulphate? A. B. ROY 361-365
- Glucuronate-2-sulphatase activity in cultured human skin fibroblast homogenates C. FREEMAN & J. J. HOPWOOD 399-405
- Kinetic and regulatory properties of cytosolic pyruvate kinase from germinating castor oil seeds F. E. PODESTÁ & W. C. PLAXTON 495-501
- Enzymic synthesis of 1-*O*-(indol-3-ylacetyl)- β -D-glucose. Purification of the enzyme from *Zea mays*, and preparation of antibodies to the enzyme S. KOWALCZYK & R. S. BANDURSKI 509-514
- Human liver *N*-acetylgalactosamine 6-sulphatase. Purification and characterization J. BIELICKI & J. J. HOPWOOD 515-520
- Partial purification and characterization of the *lck* protein-tyrosine kinase from bovine thymus Q. WANG, P. R. SRINIVAS, M. L. HARRISON & R. L. GEAHLEN 567-574
- The interaction of 1-fluoro-D-glucopyranosyl fluoride with glucosidases A. KONSTANTINIDIS & M. L. SINNOTT 587-593
- Purification and properties of kynurenine aminotransferase from rat kidney M. R. MAWAL, A. MUKHOPADHYAY & D. R. DESHMUKH 595-599
- Acytransferase activities of the high-molecular-mass essential penicillin-binding proteins M. ADAM, C. DAMBLON, M. JAMIN, W. ZORZI, V. DUSART, M. GALLEN, A. EL KHARROUBI, G. PIRAS, B. G. SPRATT, W. KECK, J. COYETTE, J.-M. GHUYSEN, M. NGUYEN-DISTÈCHE & J.-M. FRÈRE 601-604

Carbohydrates and lipids

- Endotransglycosylation of xyloglucans in plant cell suspension cultures R. C. SMITH & S. C. FRY 529-535
- Structural characterization of a novel glycosyl-phosphatidylinositol from the protozoan *Tetrahymena mimbres* U. WEINHART, J. R. THOMAS, Y. PAK, G. A. THOMPSON, JR. & M. A. J. FERGUSON 605-608

Gene structure and expression

- Ethoxyquin-induced resistance to aflatoxin B₁ in the rat is associated with the expression of a novel Alpha-class glutathione *S*-transferase subunit, Yc₂, which possesses high catalytic activity for aflatoxin B₁-8,9-epoxide J. D. HAYES, D. J. JUDAH, L. I. McLELLAN, L. A. KERR, S. D. PEACOCK & G. E. NEAL 385-398
- Polymorphism of apolipoprotein A-II (apoA-II) among inbred strains of mice. Relationship between the molecular type of apoA-II and mouse senile amyloidosis K. HIGUCHI, K. KITAGAWA, H. NAIKI, K. HANADA, M. HOSOKAWA & T. TAKEDA 427-433
- Certain changes in ornithine decarboxylase gene methylation accompany gene amplification J. WAHLFORS 435-440

Regulation of metabolism

- Rapid decrease in the expression of 3-hydroxy-3-methylglutaryl-CoA reductase protein owing to inhibition of its rate of synthesis after Ca²⁺ mobilization in rat hepatocytes. Inability of tauroolithocholate to mimic the effect V. A. ZAMMIT, A. M. CALDWELL & M. P. KOLODZIEJ 377-383
- Reverse cholesterol transport in the rat. Studies using the isolated perfused spleen in conjunction with the perfused liver M. A. MINDHAM & P. A. MAYES 503-508

CONTENTS (continued)

Stimulation of synthesis <i>de novo</i> of NAD ⁺ -dependent 15-hydroxy-prostaglandin dehydrogenase in human promyelocytic leukaemia (HL-60) cells by phorbol ester	C.-Q. XUN, Z.-G. TIAN & H.-H. TAI	553-558
Evidence for masking of brown adipose tissue mitochondrial GDP-binding sites in response to fasting in rats made obese by dietary manipulation. Effects of reversion to standard diet	P. PUIGSERVER, I. LLADÓ, A. PALOU & M. GIANOTTI	575-579
Membranes and bioenergetics		
Up-regulation of sodium pump activity in <i>Xenopus laevis</i> oocytes by expression of heterologous β 1 subunits of the sodium pump	G. SCHMALZING, S. GLOOR, H. OMAY, S. KRÖNER, H. APPELHANS & W. SCHWARZ	329-336
Verapamil prevents the effects of daunomycin on the thermotropic phase transition of model lipid bilayers	J. M. CANAVES, J. A. FERRAGUT & J. M. GONZALEZ-ROS	413-418
Separation of important new platelet glycoproteins (GPIa, GPIc, GPIc*, GPIIa and GMP-140) by f.p.l.c. Characterization by monoclonal antibodies and gas-phase sequencing	B. CATIMEL, S. PARMENTIER, L. L. K. LEUNG & J. L. MCGREGOR	419-425
Factors affecting the ability of glycosylphosphatidylinositol-specific phospholipase D to degrade the membrane anchors of cell surface proteins	M. G. LOW & K.-S. HUANG	483-493
Structure-function relationship of the human erythrocyte plasma membrane Ca ²⁺ -ATPase revealed by V8 protease treatment	K. K. W. WANG, B. D. ROUFOGALIS & T. H. KUO	537-544
Receptors and signal transduction		
Evidence for coupling of resynthesis to hydrolysis in the phosphoinositide cycle	M. E. MONACO & J. R. ADELSON	337-341
Agonist-sensitive and -insensitive intracellular Ca ²⁺ pools. Separate Ca ²⁺ -releasing mechanisms revealed by manoalide and benzo-hydroquinone	S. MUALLEM, P. LOESSBERG, G. SACHS & L. A. WHEELER	367-375
Possible regulatory functions of protein kinase C- α and - ϵ isoenzymes in rat renal mesangial cells. Stimulation of prostaglandin synthesis and feedback inhibition of angiotensin II-stimulated phosphoinositide hydrolysis	A. HUWILER, D. FABBRO & J. PFEILSCHIFTER	441-445
Regulation of the formation of inositol phosphates by calcium, guanine nucleotides and ATP in digitonin-permeabilized bovine adrenal chromaffin cells	D. A. EBERHARD & R. W. HOLZ	447-453
Modulation of transmembrane signalling in HL-60 granulocytes by tumour necrosis factor- α	K. R. MCLEISH, J. B. KLEIN, T. SCHEPERS & G. SONNENFELD	455-460
Effect of hormones on dissociation of prolactin from the rabbit mammary gland prolactin receptor	S. SAKAI	461-465
Characterization of Sp-5,6-dichloro-1- β -D-ribofuranosylbenzimidazole-3',5'-monophosphorothioate (Sp-5,6-DCI-cBiMPS) as a potent and specific activator of cyclic-AMP-dependent protein kinase in cell extracts and intact cells	M. SANDBERG, E. BUTT, C. NOLTE, L. FISCHER, M. HALBRÜGGE, J. BELTMAN, T. JAHNSEN, H.-G. GENIESER, B. JASTORFF & U. WALTER	521-527
Multiple sources of <i>sn</i> -1,2-diacylglycerol in platelet-derived-growth-factor-stimulated Swiss 3T3 fibroblasts. Evidence for activation of phosphoinositidase C and phosphatidylcholine-specific phospholipase D	R. PLEVIN, S. J. COOK, S. PALMER & M. J. O. WAKELAM	559-565
Cell biology and development		
Pre-translational control of hepatic malic enzyme expression during the development of the rat	D. J. MANN & E. BAILEY	407-412
Phosphorylation of a cell surface 112 kDa protein by an ecto-protein kinase in rat L6 myoblasts	X. Y. CHEN & T. C. Y. LO	467-474
Involvement of a cell surface protein and an ecto-protein kinase in myogenesis	X. Y. CHEN & T. C. Y. LO	475-482
Evidence that insulin activates casein kinase 2 in rat epididymal fat-cells and that this may result in the increased phosphorylation of an acid-soluble 22 kDa protein	T. A. DIGGLE, C. SCHMITZ-PEIFFER, A. C. BORTHWICK, G. I. WELSH & R. M. DENTON	545-551