

CONTENTS

Volume 241, No. 2, 1987

REVIEW ARTICLE

Molecular biology and immunology of cytomegalovirus

P. D. GRIFFITHS & J. E. GRUNDY 313–324

FULL AND RAPID PAPERS

Proteins

Detection and localization of antigens on the surface of mouse spermatozoa. Antigen synthesis in the epididymis

G. J. P. MURPHY & J. CARROLL 379–387

Two globin strains in the giant annelid extracellular haemoglobins

T. GOTOH, F. SHISHIKURA, J. W. SNOW, K. I. EREIFEJ, S. N. VINOGRADOV & D. A. WALZ 441–445

Structural and functional effects of selective chemical modifications of *Scapharca inaequalvis* haemoglobins in relation to their unique assembly

A. BOFFI, M. GATTONI, R. SANTUCCI, P. VECCHINI, F. ASCOLI & E. CHIANCONE 499–504

Procollagenase activator produced by rabbit uterine cervical fibroblasts

M. ISHIBASHI, A. ITO, K. SAKYO & Y. MORI 527–534

Enzymes

Co-operativity in seminal ribonuclease function: binding studies

A. DI DONATO, R. PICCOLI & G. D'ALESSIO 435–440

The mechanism of action of β -glucosidase from *Botryodiplodia theobromae* Pat.

G. M. UMEZURIKE 455–462

Characterization of a low-relative-molecular-mass prolyl 4-hydroxylase from the green alga *Chlamydomonas reinhardtii*

D. D. KASKA, V. GÜNZLER, K. I. KIVIRIKKO & R. MYLLYLÄ 483–490

The identification of a new cyclic nucleotide phosphodiesterase activity in human and guinea-pig cardiac ventricle. Implications for the mechanism of action of selective phosphodiesterase inhibitors

M. L. REEVES, B. K. LEIGH & P. J. ENGLAND 535–541

Physicochemical characterization of human intestinal lactase

H. K. F. LAU 567–572

Purification and kinetic properties of pyruvate kinase isoenzymes of *Salmonella typhimurium*

C. GARCIA-OLALLA & A. GARRIDO-PERTIERRA 573–581

The organic cofactor in plasma amine oxidase: evidence for pyrroloquinoline quinone and against pyridoxal phosphate

P. F. KNOWLES, K. B. PANDEYA, F. X. RIUS, C. M. SPENCER, R. S. MOOG, M. A. MCGUIRL & D. M. DOOLEY 603–608

Yeast phosphoglycerate kinase: investigation of catalytic function by site-directed mutagenesis

C. A. B. WILSON, N. HARDMAN, L. A. FOTHERGILL-GILMORE, S. J. GAMBLIN & H. C. WATSON 609–614

Carbohydrates

Low-density-lipoprotein binding by mast-cell granules. Demonstration of binding of apolipoprotein B to heparin proteoglycan of exocytosed granules

J. O. KOKKONEN & P. T. KOVANEN 583–589

β -D-Xylosides and their analogues as artificial initiators of glycosaminoglycan chain synthesis. Aglycone-related variation in their effectiveness *in vitro* and *in ovo*

M. SOBUE, H. HABUCHI, K. ITO, H. YONEKURA, K. OGURI, K. SAKURAI, S. KAMOHARA, Y. UENO, R. NOYORI & S. SUZUKI 591–601

Lipids

The stimulatory effects of asbestos on NADPH-dependent lipid peroxidation in rat liver microsomes

M. FONTECAVE, D. MANSUY, M. JAOUEN & H. PEZERAT 561–565

Nucleic acids and molecular genetics

Pitfalls in the use of carboxylic acid anhydrides for structural studies of nucleoprotein particles

M. A. NIETO & E. PALACIÁN 621–623

Synthesis and degradation of macromolecules

Biosynthesis and maturation of lactase-phlorizin hydrolase in the human small intestinal epithelial cells

H. Y. NAIM, E. E. STERCHI & M. J. LENTZE 427–434

Key role of L-alanine in the control of hepatic protein synthesis

D. PÉREZ-SALA, R. PARRILLA & M. S. AYUSO 491–498

CONTENTS (continued)

Intermediary metabolism and metabolic control

Regulation of 3-hydroxy-3-methylglutaryl-coenzyme A reductase in human hepatoma cell line Hep G2. Effects of inhibitors of cholesterol synthesis on enzyme activity	A. BOOGAARD, M. GRIFFIOEN & L. H. COHEN	345-351
Metabolic fate of glutamate carbon in rat renal tubules. Studies with ¹³ C nuclear magnetic resonance and gas chromatography-mass spectrometry	I. NISSIM, M. YUDKOFF & S. SEGAL	361-370
Effects of Ca ²⁺ and Mg ²⁺ on the activity of pyruvate dehydrogenase phosphate phosphatase within toluene-permeabilized mitochondria	P. J. W. MIDGLEY, G. A. RUTTER, A. P. THOMAS & R. M. DENTON	371-377
Warfarin poisoning and vitamin K antagonism in rat and human liver. Design of a system <i>in vitro</i> that mimics the situation <i>in vivo</i>	R. WALLIN & L. F. MARTIN	389-396
Steroid inhibition of calcitriol-induced prolactin production in GH ₄ C ₁ cells. Specificity and sensitivity	J. D. WARK & V. GURTNER	397-401
Effect of inhibitors of arachidonic acid metabolism on efflux of intracellular enzymes from skeletal muscle following experimental damage	M. J. JACKSON, A. J. M. WAGENMAKERS & R. H. T. EDWARDS	403-407
Catecholamine activation of pyruvate dehydrogenase in white adipose tissue of the rat <i>in vivo</i>	E. KILGOUR & R. G. VERNON	415-419
Regulation of renal and hepatic pyruvate dehydrogenase complex on carbohydrate re-feeding after starvation. Possible mechanisms and regulatory role for thyroid hormone	M. J. HOLNESS & M. C. SUGDEN	421-425
Protein phosphorylation in rat mammary acini and in cytosol preparations <i>in vitro</i> . Phosphorylation of acetyl-CoA carboxylase is unaffected by cyclic AMP	R. A. CLEGG, D. W. WEST & R. E. D. AITCHISON	447-454
Forskolin refractoriness. Exposure to the diterpene alters guanine nucleotide-dependent adenylate cyclase and calcium-uptake activity of cells cultured from the rat aorta	J. F. KRALL & N. JAMGOTCHIAN	463-467
Altered interactions between lipogenesis and fatty acid oxidation in regenerating rat liver	P. S. SCHOFIELD, M. C. SUGDEN, C. G. CORSTORPHINE & V. A. ZAMMIT	469-474
Ketone-body metabolism after surgical stress or partial hepatectomy. Evidence for decreased ketogenesis and a site of control distal to carnitine palmitoyltransferase I	P. S. SCHOFIELD, T. J. FRENCH & M. C. SUGDEN	475-481
Interaction of acetyl phosphate and carbamyl phosphate with plant phosphoenolpyruvate carboxylase	D. H. GONZALEZ, A. A. IGLESIAS & C. S. ANDREO	543-548
Stimulation of hepatic glycogenolysis by phorbol 12-myristate 13-acetate	T. B. PATEL	549-554
The role of Ca ²⁺ in regulating the catabolism of PAF-acether (1-O-alkyl-2-acetyl- <i>sn</i> -glycero-3-phosphocholine) in rabbit platelets	L. TOUQUI, A. M. SHAW, C. DUMAREY, C. JACQUEMIN & B. B. VARGAFTIG	555-560
Membranes and receptors		
The stimulatory guanine-nucleotide regulatory unit of adenylate cyclase from bovine cerebral cortex. ADP-ribosylation and purification	E. J. NEER, L. G. WOLF & D. M. GILL	325-336
Regulation of inositol trisphosphate accumulation by muscarinic cholinergic and H ₁ -histamine receptors on human astrocytoma cells. Differential induction of desensitization by agonists	N. NAKAHATA & T. K. HARDEN	337-344
Identification and characterization of the 2D6 and M _r 23000 antigens on the plasma membrane of rat spermatozoa	R. JONES & C. R. BROWN	353-360
Fluoroaluminates mimic guanosine 5'-[γ-thio]triphosphate in activating the polyphosphoinositide phosphodiesterase of hepatocyte membranes. Role for the guanine nucleotide regulatory protein G _p in signal transduction	S. COCKCROFT & J. A. TAYLOR	409-414
Glycophorin A interferes in the agglutination of human erythrocytes by concanavalin A. Explanation of the requirement for enzymic predigestion	S. M. GOKHALE & N. G. MEHTA	505-511
Concanavalin A-agglutinability of membrane-skeleton-free vesicles and aged cellular remnants derived from human erythrocytes. Is the membrane skeleton required for agglutination?	S. M. GOKHALE & N. G. MEHTA	513-520
Concanavalin A binding to human erythrocytes leads to alterations in properties of the membrane skeleton	S. M. GOKHALE & N. G. MEHTA	521-525
Removal of covalently bound inositol from <i>Torpedo</i> acetylcholinesterase and mammalian alkaline phosphatases by deamination with nitrous acid. Evidence for a common membrane-anchoring structure	M. G. LOW, A. H. FUTERMAN, K. E. ACKERMANN, W. R. SHERMAN & I. SILMAN	615-619