

# CONTENTS

Volume 264, No. 1, 1989

## REVIEW ARTICLE

Complement membrane attack on nucleated cells: resistance, recovery and non-lethal effects

B. P. MORGAN 1-14

## FULL AND RAPID PAPERS

### Proteins

Characterization of two proteolytically derived soluble polypeptides from the neurofilament triplet components NFM and NFH

T. K. CHIN, S. E. HARDING & P. A. M. EAGLES 53-60

The Ca<sup>2+</sup>-binding sequence in bovine brain S100b protein  $\beta$ -subunit. A spectroscopic study

J. BAUDIER & R. D. COLE 79-85

Electrochemical and spectroscopic characterization of the 7Fe form of ferredoxin III from *Desulfovibrio africanus*

F. A. ARMSTRONG, S. J. GEORGE, R. CAMMACK, E. C. HATCHIKIAN & A. J. THOMSON 265-273

Electrochemical and spectroscopic characterization of the conversion of the 7Fe into the 8Fe form of ferredoxin III from *Desulfovibrio africanus*. Identification of a [4Fe-4S] cluster with one non-cysteine ligand

S. J. GEORGE, F. A. ARMSTRONG, E. C. HATCHIKAN & A. J. THOMSON 275-284

The non-fluorescence of 4-fluorotryptophan

J. L. HOTT & R. F. BORKMAN 297-299

Membrane-entrapped microperoxidase as a 'solid-state' promoter in the electrochemistry of soluble metalloproteins

M. BRUNORI, R. SANTUCCI, L. CAMPANELLA & G. TRANCHIDA 301-304

### Enzymes

Purification and immunological quantification of rat liver lysosomal glycosidases

P. C. DE GROEN, G. LESAGE, P. S. TIETZ & N. F. LARUSSO 115-123

An artificial-intelligence technique for qualitatively deriving enzyme kinetic mechanisms from initial-velocity measurements and its applications to hexokinase

L. GARFINKEL, D. M. COHEN, V.-W. SOO, D. GARFINKEL & C. A. KULIKOWSKI 175-184

Site-directed mutagenesis of the *Klebsiella pneumoniae* nitrogenase. Effects of modifying conserved cysteine residues in the  $\alpha$ - and  $\beta$ -subunits

H. M. KENT, I. IOANNIDIS, C. GORMAL, B. E. SMITH & M. BUCK 257-264

### Gene structure and expression

Kallikrein-gene expression in the rat gastrointestinal tract

P. J. FULLER, K. VERITY, B. A. MATHESON & J. A. CLEMENTS 133-136

Cloning and expression in *Escherichia coli* of a rat hepatoma cell cDNA coding for 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase

K. M. CREPIN, M. I. DARVILLE, A. MICHEL, L. HUE & G. G. ROUSSEAU 151-160

A tissue-specific nuclear factor binds to multiple sites in the human insulin-gene enhancer

D. S. W. BOAM & K. DOCHERTY 233-239

### Synthesis and degradation of macromolecules

The cyclo-oxygenase inhibitors indomethacin and ibuprofen inhibit the insulin-induced stimulation of ribosomal RNA synthesis in L6 myoblasts

R. M. PALMER, G. P. CAMPBELL, P. F. WHITELAW, D. S. BROWN, P. A. BAIN & J. E. HESKETH 101-106

Protein synthesis, myosin ATPase activity and myofibrillar protein composition in hearts from tumour-bearing rats and mice

C. DROTT, C. LÖNNROTH & K. LUNDHOLM 191-198

### Intermediary metabolism and metabolic control

Cyclosporin A inhibits phorbol ester-induced activation of superoxide production in resident mouse peritoneal macrophages

M. D. CHIARA, F. BEDOYA & F. SOBRINO 21-26

Comparison of effects of phorbol esters and glucose on protein kinase C activation and insulin secretion in pancreatic islets

R. A. EASOM, J. H. HUGHES, M. LANDT, B. A. WOLF, J. TURK & M. L. MCDANIEL 27-33

$\beta$ -Oxidation of polyunsaturated fatty acids with conjugated double bonds. Mitochondrial metabolism of octa-2,4,6-trienoic acid

H.-Y. WANG & H. SCHULZ 47-52

## CONTENTS (continued)

Induction of ketogenesis and fatty acid oxidation by glucagon and cyclic AMP in cultured hepatocytes from rabbit fetuses. Evidence for a decreased sensitivity of carnitine palmitoyltransferase I to malonyl-CoA inhibition after glucagon or cyclic AMP treatment	J.-P. PÉGORIER, M.-V. GARCIA-GARCIA, C. PRIP-BUUS, P.-H. DUÉE, C. KOHL & J. GIRARD	93-100
Zonation of fatty acid metabolism in rat liver	M. GUZMÁN & J. CASTRO	107-113
Comparison of albumin-mediated release of lysophosphatidylcholine and lysophosphatidylethanolamine from cultured rat hepatocytes	B. S. ROBINSON, D. J. BAISTED & D. E. VANCE	125-131
Regulation of proteinase levels in the nematode <i>Caenorhabditis elegans</i> . Preferential depression by acute or chronic starvation	J. M. HAWDON, S. W. EMMONS & L. A. JACOBSON	161-165
Effects of spermine on mitochondrial Ca <sup>2+</sup> transport and the ranges of extramitochondrial Ca <sup>2+</sup> to which the matrix Ca <sup>2+</sup> -sensitive dehydrogenases respond	J. G. MCCORMACK	167-174
The effect of streptozotocin-induced diabetes on phenylalanine hydroxylase expression in rat liver	D. S. TAYLOR, H.-H. M. DAHL, J. F. B. MERCER, A. K. GREEN & M. J. FISHER	185-190
Development of insulin sensitivity in white adipose tissue during the suckling-weaning transition in the rat. Involvement of glucose transport and lipogenesis	T. ISSAD, P. FERRÉ, M. PASTOR-ANGLADA, M.-A. BAUDON & J. GIRARD	217-222
Effect of 25-hydroxycholesterol and bile acids on the regulation of cholesterol metabolism in Hep G2 cells	T. L. CARLSON & B. A. KOTTKE	241-247
Identification of <i>meso</i> -hydroxyuroporphyrin I in the urine of a patient with congenital erythropoietic porphyria	R. GUO, J. M. RIDEOUT & C. K. LIM	293-295
Regulation of cyclic AMP-dependent protein kinase levels during skeletal myogenesis	I. A. J. LORIMER & B. D. SANWAL	305-308
<b>Bioenergetics and transport</b>		
Characterization of sodium-dependent and sodium-independent nucleoside transport systems in rabbit brush-border and basolateral plasma-membrane vesicles from the renal outer cortex	T. C. WILLIAMS, A. J. DOHERTY, D. A. GRIFFITH & S. M. JARVIS	223-231
<b>Membranes and receptors</b>		
The A-type receptor for platelet-derived growth factor mediates protein tyrosine phosphorylation, receptor transmodulation and a mitogenic response	A. HAMMACHER, M. NISTÉR & C.-H. HELDIN	15-20
Comparison of the kinetics of cycling of the transferrin receptor in the presence or absence of bound diferric transferrin	N. GIRONÈS & R. J. DAVIS	35-46
The measurement of Ca <sup>2+</sup> inflow across the liver cell plasma membrane by using quin2 and studies of the roles of Na <sup>+</sup> and extracellular Ca <sup>2+</sup> in the mechanism of Ca <sup>2+</sup> inflow	J. N. CROFTS & G. J. BARRITT	61-70
Inhibition of the purified human red-cell Ca <sup>2+</sup> pump by a monoclonal antibody	A. J. CARIDE, A. ENYEDI & J. T. PENNISTON	87-92
High-yield isolation of functionally competent endosomes from mouse lymphocytes	B. D. BEAUMELLE & C. R. HOPKINS	137-149
Mapping the benzodiazepine photoaffinity-labelling site with sequence-specific $\gamma$ -aminobutyric acid <sub>A</sub> -receptor antibodies	F. A. STEPHENSON & M. J. DUGGAN	199-206
Superoxide generation is inhibited by phospholipase A <sub>2</sub> inhibitors. Role for phospholipase A <sub>2</sub> in the activation of the NADPH oxidase	L. M. HENDERSON, J. B. CHAPPELL & O. T. G. JONES	249-255
Relationship between isoelectric point of native and chemically modified insulin and liposomal fusion	R. N. FARIÁS, A. E. LÓPEZ VIÑALS, E. POSSE & R. D. MORERO	285-287
Adipocyte plasma-membrane G <sub>i</sub> and G <sub>s</sub> in insulinopenic diabetic patients	J. J. OHISALO, H.-L. VIKMAN, S. RANTA, M. D. HOUSLAY & G. MILLIGAN	289-292
<b>Cell structure and function</b>		
Thrombin causes increased monocytic-cell adhesion to endothelial cells through a protein kinase C-dependent pathway	P. E. DICORLETO & C. A. DE LA MOTTE	71-77
Effects of protein kinase C activation on the regulation of the stimulus-secretion coupling in pancreatic $\beta$ -cells	P. ARKHAMMAR, T. NILSSON, M. WELSH, N. WELSH & P.-O. BERGGREN	207-215
<b>BJ LETTERS</b>		
Sequence homology between putative raw-starch binding domains from different starch-degrading enzymes	B. SVENSSON, H. JESPERSEN, M. R. SIERKS & E. A. MACGREGOR	309-311