

# CONTENTS

Volume 268, No. 1, 1990

## REVIEW ARTICLE

Assembly and secretion of hepatic very-low-density lipoprotein

G. F. GIBBONS 1-13

## RESEARCH PAPERS

### Proteins

Neoantigens in complement component C3 as detected by monoclonal antibodies. Mapping of the recognized epitopes by synthetic peptides

B. NILSSON, K. NILSSON EKDAHL,  
D. AVILA, U. R. NILSSON &  
J. D. LAMBRIS 55-61

Myelin basic protein is affected by reduced synthesis of myelin proteolipid protein in the *jimpy* mouse

A. M. FANNON & M. A. MOSCARELLO 105-110

Botulinum type F neurotoxin. Large-scale purification and characterization of its binding to rat cerebrocortical synaptosomes

J. D. F. WADSWORTH, M. DESAI,  
H. S. TRANTER, H. J. KING, P. HAMBLETON,  
J. MELLING, J. O. DOLLY & C. C. SHONE 123-128

### Enzymes

Purification and characterization of protein disulphide-isomerase from the unicellular green alga *Chlamydomonas reinhardtii*. A 120 kDa dimer antigenically distinct from the vertebrate enzyme

D. D. KASKA, K. KIVIRIKKO &  
R. MYLLYLÄ 63-68

Inhibition of pyruvate: ferredoxin oxidoreductase from *Trichomonas vaginalis* by pyruvate and its analogues. Comparison with the pyruvate decarboxylase component of the pyruvate dehydrogenase complex

K. P. WILLIAMS, P. F. LEADLAY &  
P. N. LOWE 69-75

Specific expression of lactase in the jejunum and colon during postnatal development and hormone treatments in the rat

J.-N. FREUND, I. DULUC,  
C. FOLTZER-JOURDAINNE, P. GOSSE &  
F. RAUL 99-103

Partial purification and properties of an AMP-specific soluble 5'-nucleotidase from pigeon heart

A. C. SKLADANOWSKI & A. C. NEWBY 117-122

Combined regulation of ornithine and S-adenosylmethionine decarboxylases by spermine and the spermine analogue *N*<sup>1</sup>*N*<sup>12</sup>-bis(ethyl)spermine

C. W. PORTER, A. E. PEGG,  
B. GANIS, R. MADHABALA &  
R. J. BERGERON 207-212

Rat brain inositol 1,4,5-trisphosphate 3-kinase. Ca<sup>2+</sup>-sensitivity, purification and antibody production

K. TAKAZAWA, M. LEMOS, A. DELVAUX,  
C. LEJEUNE, J. E. DUMONT &  
C. ERNEUX 213-217

Mechanism-based inactivation of monoamine oxidases A and B by tetrahydropyridines and dihydropyridines

M. J. KRUEGER, K. MCKEOWN,  
R. R. RAMSAY, S. K. YOUNGSTER &  
T. P. SINGER 219-224

A novel metalloproteinase originally isolated from brain myelin membranes is present in many tissues

A. CHANTRY & P. GLYNN 245-248

### Lipids

Effect of hypoxia on phosphatidylcholine biosynthesis in the isolated hamster heart

G. M. HATCH & P. C. CHOY 47-54

Synthesis of retinoids by human retinal epithelium and transfer to rod outer segments

S. R. DAS, N. BHARDWAJ & P. GOURAS 201-206

### Gene structure and expression

Nucleotide sequences and three-dimensional modelling of the V<sub>H</sub> and V<sub>L</sub> domains of two human monoclonal antibodies specific for the D antigen of the human Rh-blood-group system

N. C. HUGHES-JONES, J. M. BYE,  
D. BEALE & J. COADWELL 135-140

Characterization of the human N-CAM promoter

C. H. BARTON, D. A. MANN &  
F. S. WALSH 161-168

The pyrimidine/purine-biased region of the epidermal growth factor receptor gene is sensitive to S1 nuclease and may form an intramolecular triplex

M. KATO, J. KUDOH & N. SHIMIZU 175-180

Heterogeneity of human serum amyloid A protein. Five different variants from one individual demonstrated by cDNA sequence

A. STEINKASSERER, E. H. WEISS,  
W. SCHWAEBLE & R. P. LINKE 187-193

Thrombospondin gene expression by endothelial cells in culture is modulated by cell proliferation, cell shape and the substratum

A. E. CANFIELD, R. P. BOOT-HANDFORD &  
A. M. SCHOR 225-230

Characterization of metallothionein cDNAs induced by cadmium in the nematode *Caenorhabditis elegans*

M. IMAGAWA, T. ONOZAWA, K. OKUMURA,  
S. OSADA, T. NISHIHARA & M. KONDO 237-240

## CONTENTS (continued)

### Intermediary metabolism

Pyruvate dehydrogenase activities and rates of lipogenesis during the fed-to-starved transition in liver and brown adipose tissue of the rat	M. J. HOLNESS & M. C. SUGDEN	77-81
Biosynthesis of platelet-activating factor (PAF) in human polymorphonuclear leucocytes. The role of lyso-PAF disposal and free arachidonic acid	M. DEL C. GARCIA, S. FERNANDEZ-GALLARDO, M. A. GIJON, C. GARCIA, M. L. NIETO & M. SANCHEZ CRESPO	91-98
Spatially resolved changes in diabetic rat skeletal muscle metabolism <i>in vivo</i> studied by <sup>31</sup> P-n.m.r. spectroscopy	R. A. J. CHALLISS, M. J. BLACKLEDGE & G. K. RADDA	111-115
Metabolism of the biologically active inositol phosphates Ins(1,4,5)P <sub>3</sub> and Ins(1,3,4,5)P <sub>4</sub> by ovarian follicles of <i>Xenopus laevis</i>	R. P. MCINTOSH & J. E. A. MCINTOSH	141-145
Urobilinogen-i is a major derivative of bilirubin in bile of homozygous Gunn rats	P. KOTAL & J. FEVERY	181-185
The oxidation of leucine in tumour-bearing rats	J. M. ARGILÉS & F. J. LÓPEZ-SORIANO	241-244

### Bioenergetics and transport

Evidence for tripeptide/H <sup>+</sup> co-transport in rabbit renal brush-border membrane vesicles	C. TIRUPPATHI, P. KULANTHAIVEL, V. GANAPATHY & F. H. LEIBACH	27-33
<i>N</i> -Acetyl-D-glucosamine countertransport in lysosomal membrane vesicles	A. J. JONAS & H. JOBE	41-45
Partial inhibition by cyclosporin A of the swelling of liver mitochondria <i>in vivo</i> and <i>in vitro</i> induced by sub-micromolar [Ca <sup>2+</sup> ], but not by butyrate. Evidence for two distinct swelling mechanisms	A. M. DAVIDSON & A. P. HALESTRAP	147-152
Inhibition of Ca <sup>2+</sup> -induced large-amplitude swelling of liver and heart mitochondria by cyclosporin is probably caused by the inhibitor binding to mitochondrial-matrix peptidyl-prolyl <i>cis-trans</i> isomerase and preventing it interacting with the adenine nucleotide translocase	A. P. HALESTRAP & A. M. DAVIDSON	153-160
Molecular sizes of amino acid transporters in the luminal membrane from the kidney cortex, estimated by the radiation-inactivation method	R. BÉLIVEAU, M. DEMEULE, M. JETTÉ & M. POTIER	195-200

### Membranes and receptors

Flow cytometry resonance energy transfer suggests an association between low-affinity interleukin 2 binding sites and HLA class I molecules	A. HAREL-BELLAN, P. KRIEF, L. RIMSKY, W. L. FARRAR & Z. MISHAL	35-40
Quantification of the $\alpha$ and $\beta$ subunits of the transducing elements (G <sub>s</sub> and G <sub>i</sub> ) of adenylate cyclase in adipocyte membranes from lean and obese ( <i>ob/ob</i> ) mice	N. BÉGIN-HEICK	83-89
Comparative study of the glycosylation of platelet glycoprotein GPIIb/IIIa and the vitronectin receptor. Differential processing of their $\beta$ -subunit	A. TROESCH, A. DUPERRAY, B. POLACK & G. MARGUERIE	129-133
Modulation of phospholipase A <sub>2</sub> activity by the tumour promoters phorbol esters and teleocidin	K.-Y. NAM, A. MORINO, S. KIMURA, H. FUJIKI & Y. IMANISHI	169-173

### Cell structure and function

Evidence that the inositol phospholipids are necessary for exocytosis. Loss of inositol phospholipids and inhibition of secretion in permeabilized cells caused by a bacterial phospholipase C and removal of ATP	D. A. EBERHARD, C. L. COOPER, M. G. LOW & R. W. HOLZ	15-25
Immunological localization of ribosomes in striated rat muscle. Evidence for myofibrillar association and ontological changes in the subsarcolemmal:myofibrillar distribution	Z. HORNE & J. HESKETH	231-236