

Policy of the journal and instructions to authors for 1992

1-19

REVIEW ARTICLE

Intracellular compartmentation, structure and function of creatine kinase isoenzymes in tissues with high and fluctuating energy demands: the 'phosphocreatine circuit' for cellular energy homeostasis

T. WALLIMAN, M. WYSS, D. BRDICZKA,
K. NICOLAY & H. M. EPPENBERGER

21-40

RESEARCH COMMUNICATIONS

Induction of peroxisomal β -oxidation genes by retinoic acid in cultured rat hepatocytes

R. HERTZ & J. BAR-TANA

41-43

Macrophages can convert citrulline into arginine

G. WU & J. T. BROSNAN

45-48

RESEARCH PAPERS

Proteins

Purification and analysis of proteinase-resistant mutants of recombinant platelet-derived growth factor-BB exhibiting improved biological activity

A. L. COOK, P. M. KIRWIN, S. CRAIG,
L. J. BAWDEN, D. R. GREEN, M. J. PRICE,
S. J. RICHARDSON, A. FALLON,
A. H. DRUMMOND, R. M. EDWARDS &
J. M. CLEMENTS

57-65

Characterization of the structure and conformation of platelet-derived growth factor-BB (PDGF-BB) and proteinase-resistant mutants of PDGF-BB expressed in *Saccharomyces cerevisiae*

S. CRAIG, J. M. CLEMENTS, A. L. COOK,
D. T. F. DRYDEN, D. R. GREEN,
K. HEREMANS, P. M. KIRWIN, M. J. PRICE
& A. FALLON

67-72

Direct detection of a globin-derived radical in leghaemoglobin treated with peroxides

M. J. DAVIES & A. PUPPO

197-201

Enzymes

Interaction of recombinant human cystatin C with the cysteine proteinases papain and actinin

P. LINDAHL, M. ABRAHAMSON & I. BJÖRK

49-55

Identification of the site of covalent attachment of nafcillin, a reversible suicide inhibitor of β -lactamase

A. K. TAN & A. L. FINK

191-196

Mechanistic and active-site studies on D(-)-mandelate dehydrogenase from *Rhodotorula graminis*

D. P. BAKER, C. KLEANTHOUS, J. N. KEEN,
E. WEINHOLD & C. A. FEWSON

211-218

Increased levels of glutathione S -transferase π transcript as a mechanism of resistance to ethacrynic acid

S. KUZMICH, L. A. VANDERVEER,
E. S. WALSH, F. P. LACRETA & K. D. TEW

219-224

Purification and characterization of a nutritionally controlled endodeoxyribonuclease from *Streptomyces glaucescens*

J. F. APARICIO, C. HARDISSON &
J. SÁNCHEZ

231-237

Stimulation of the dithiol-dependent reductases in the vitamin K cycle by the thioredoxin system. Strong synergistic effects with protein disulphide-isomerase

B. A. M. SOUTE, M. M. C. L. GROENEN-
VAN DOOREN, A. HOLMGREN,
J. LUNDSTRÖM & C. VERMEER

255-259

Monomerization of tetrameric bovine caudate nucleus acetylcholinesterase. Implications for hydrophobic assembly and membrane anchor attachment site

H. HEIDER & U. BRODHECK

279-284

Kinetics of the course of inactivation of aminoacylase by 1,10-phenanthroline

Z.-X. WANG, H.-B. WU, X.-C. WANG,
H.-M. ZHOU & C.-L. TSOU

285-290

Gene structure and expression

Expression of c-myc and c-fos in rat skeletal muscle. Evidence for increased levels of c-myc mRNA during hypertrophy

P. F. WHITELAW & J. E. HESKETH

143-147

Structure and expression of the rat epididymal secretory protein I gene. An androgen-regulated member of the lipocalin superfamily with a rare splice donor site

M. GIROTTI, R. JONES, D. C. EMERY,
W. CHIA & L. HALL

203-210

Regulation of metabolism

Thyroid hormone concentrative uptake in rat erythrocytes. Involvement of the tryptophan transport system T in countertransport of tri-iodothyronine and aromatic amino acids

Y. ZHOU, M. SAMSON, J. FRANCON &
J.-P. BLONDEAU

81-86

The effects of the exogenous provision of lactate and the endogenous production of lactate on protein synthesis in the heart

S. J. FULLER & P. H. SUGDEN

121-127

CONTENTS (continued)

Cytosolic pH regulation in mouse macrophages. Characteristics of HCO_3^- -dependent mechanisms	H. TAPPER & R. SUNDLER	239–244
Cytosolic pH regulation in mouse macrophages. Proton extrusion by plasma-membrane-localized H^+ -ATPase	H. TAPPER & R. SUNDLER	245–250
Inhibition of glycolysis by 5-amino-4-imidazolecarboxamide riboside in isolated rat hepatocytes	M. F. VINCENT, F. BONTEMPS & G. VAN DEN BERGHE	267–272
Chain-length dependency of interactions of medium-chain fatty acids with glucose metabolism in acini isolated from lactating rat mammary glands. A putative feed-back to control milk lipid synthesis from glucose	K. J. HEESOM, P. F. A. SOUZA, V. ILC & D. H. WILLIAMSON	273–278
Calmidazolium is a potent stimulator of steroidogenesis via mechanisms not involving cyclic AMP, calcium or protein synthesis	M. S. K. CHOI & B. A. COOKE	291–296
Membranes and bioenergetics		
Reconstitution and identification of the major Na^+ -dependent neutral amino acid-transport protein from bovine renal brush-border membrane vesicles	F. A. DOYLE & J. D. MCGIVAN	95–102
Monoclonal antibodies possibly recognize conformational changes in the human erythrocyte glucose transporter	H. NISHIMURA, H. KUZUYA, A. KOSAKI, M. OKAMOTO, M. OKAMOTO, S. KONO, G. INOUE, I. MAEDA & H. IMURA	103–106
Purification of an Arg-Gly-Asp selective matrix receptor from brain synaptic plasma membranes	B. A. BAHR & G. LYNCH	137–142
Mitochondrial metabolism in different thyroid states	S. SOBOLL, C. HORST, H. HUMMERICH, J. P. SCHUMACHER & H. J. SEITZ	171–173
Receptors and signal transduction		
Dual regulation of cyclic AMP formation by thrombin in HEL cells, a leukaemic cell line with megakaryocytic properties	L. F. BRASS & M. J. WOOLKALIS	73–80
Alteration of the kinetic properties of the epidermal growth factor receptor tyrosine kinase by basic proteins	L. HUBLER, P. S. LEVENTHAL & P. J. BERTICS	107–114
Characterization of ligand binding and processing by gastrin-releasing peptide receptors in a small-cell lung cancer cell line	C. CARDONA, N. M. BLEEHEN & J. G. REEVE	115–120
Synthesis and characterization of a high-affinity photoactivatable analogue of thyrotropin-releasing hormone	K. D. BRADY & A. H. TASHJIAN, JR.	179–184
Epoxyeicosatrienoic acid stimulates ADP-ribosylation of a 52 kDa protein in rat liver cytosol	K. SEKI, A. HIRAI, M. NODA, Y. TAMURA, I. KATO & S. YOSHIDA	185–190
Simultaneous redistribution of mannose 6-phosphate and transferrin receptors by insulin-like growth factors and phorbol ester	H. DAMKE, K. VON FIGURA & T. BRAULKE	225–229
Inositol polyphosphate metabolism and inositol lipids in a green alga, <i>Chlamydomonas eugametos</i>	R. F. IRVINE, A. J. LETCHER, L. R. STEPHENS & A. MUSGRAVE	261–266
Cell biology and development		
Deficiencies in DNA replication and cell-cycle progression in polyamine-depleted HeLa cells	R. A. KOZA & E. J. HERBST	87–93
A cDNA construct of tissue inhibitor of metalloproteinases (TIMP) linked to the last exon of Thy-1 confers glycoprophospholipid anchorage on this naturally secreted protein	P. M. CLISSOLD	129–136
Retinoic acid stimulates expression of thrombomodulin, a cell surface anticoagulant glycoprotein, on human endothelial cells. Differences between up-regulation of thrombomodulin by retinoic acid and cyclic AMP	S. HORIE, K. KIZAKI, H. ISHII & M. KAZAMA	149–154
Chlorine-containing compounds produced during <i>Dictyostelium</i> development. Detection by labelling with ^{36}Cl	R. R. KAY, G. W. TAYLOR, K. A. JERMYN & D. TRAYNOR	155–161
Mitogenic action of lysophosphatidic acid and phosphatidic acid on fibroblasts. Dependence on acyl-chain length and inhibition by suramin	E. J. VAN CORVEN, A. VAN RIJSWIJK, K. JALINK, R. L. VAN DER BEND, W. J. VAN BLITTERSWIJK & W. H. MOOLENAAR	163–169
Inhibition of interleukin 1-stimulated cartilage proteoglycan degradation by a lipophilic inactivator of cysteine endopeptidases	D. J. BUTTLE, J. SAKLATVALA, M. TAMAI & A. J. BARRETT	175–177
Immunosuppressive activity of corticotrophin-releasing factor. Inhibition of interleukin-1 and interleukin-6 production by human mononuclear cells	P. HAGAN, S. POOLE & A. F. BRISTOW	251–254