REVIEW ARTICLE
Targeting proteins to mitochondria: a current overview
L. A. Glover & J. G. Lindsay 609–620

RESEARCH COMMUNICATIONS
Soluble low-K_m 5'-nucleotidase from electric-ray (Torpedo marmorata) electric organ and bovine cerebral cortex is derived from the glycosyl-phosphatidylinositol-anchored ectoenzyme by phospholipase C cleavage
M. Vogel, H. Kowalewski, H. Zimmerman, N. M. Hooper & A. J. Turner 621–624

Stimulation of NADH oxidase activity from rat liver plasma membranes by growth factors and hormones is decreased or absent with hepatoma plasma membranes
M. Bruno, A. O. Brightman, J. Lawrence, D. Werderith, D. M. Morré & D. J. Morré 625–628

Leukoregulin down-regulates type I collagen mRNA levels and promotes activity in human dermal fibroblasts, and counteracts the up-regulation elicited by transforming growth factor-β
A. Mauvel, C. H. Evans & J. Utito 629–632

Protein kinase-dependent effects of okadaic acid on hepatocyte autophagy and cytoskeletal integrity
I. Holen, P. B. Gordon & P. O. Seglen 633–636

Limited accumulation of cyclic AMP underlies a modest vasoactive-intestinal-peptide-mediated increase in cytosolic [Ca^{2+}] transients in GH3 pituitary cells
P. Mollard, Y. Zhang, D. Rodman & D. M. F. Cooper 637–640

Selective inhibition of Zn^{2+}-glycerophosphocholine cholinephosphodiesterase by tellurium tetrachloride
D.-E. Sok & M. R. Kim 641–643

Okadaic acid, an inhibitor of protein phosphatases 1 and 2A, inhibits induction of acute-phase proteins by interleukin-6 alone or in combination with interleukin-1 in human hepatoma cell lines
M. K. Ganapathi 645–648

Growth hormone activates mitogen-activated protein kinase and S6 kinase and promotes intracellular tyrosine phosphorylation in 3T3-F442A preadipocytes
N. G. Anderson 649–652

RESEARCH PAPERS
Proteins
Polyclonal antibody-catalysed amide hydrolysis

Identification of a protein transiently phosphorylated by activators of endothelial cell function as the heat-shock protein HSP27. A possible role for protein kinase C
L. Santell, N. S. Bartfeld & E. G. Levin 705–710

Epitope mapping by cDNA expression of a monoclonal antibody which inhibits the binding of von Willebrand Factor to platelet glycoprotein IIb/IIIa
G. Piétu, A.-S. Ribba, G. Chérel & D. Meyer 711–715

Purification, characterization and cDNA cloning of human lung surfactant protein D
J. Lu, A. C. Willis & K. B. M. Reid 795–802

Effects of calmodulin antagonists on antibody binding to calmodulin. Distinct conformers of calmodulin induced by the binding of drugs
F. Orosz, K. Liljom, N. A. Barkhudaryan, L. Horváth & J. Ővádi 803–808

Purification and characterization of variants of acyl-CoA-binding protein in the bovine liver
M. S. Jensen, P. Hojrup, J. T. Rasmussen & J. Knudsen 809–812

Epitope mapping reveals conserved regions of an auxin-binding protein
R. M. Napier & M. A. Venis 841–845

Oligomeric tumour necrosis factor α slowly converts into inactive forms at bioactive levels
A. Corti, G. Fassina, F. Maruccio, E. Barbanti & G. Cassani 905–910

Caldesmon–phospholipid interaction. Effect of protein kinase C phosphorylation and sequence similarity with other phospholipid-binding proteins
A. V. Vorotnikov, N. V. Bogatcheva & N. B. Gusev 911–916

Enzymes
Identification of cytosolic protein tyrosine kinases of human prostate by renaturation after SDS/PAGE
Y. Duchocher, A. Chapdelaine & S. Chevalier 653–658

Anaerobic reactions of Rhus vernicifera laccase and its type-2 copper-depleted derivatives with hexacyanoferrocene(IIC)
T. Sakurai 681–685

Purification and characterization of the blue–green rat phaeochromocytoma (PC12) tyrosine hydroxylase with a dopamine–Fe(III) complex. Reversal of the endogenous feedback inhibition by phosphorylation of serine-40
CONTENTS (continued)

Correction of human mucopolysaccharidosis type-VI fibroblasts with recombinant N-acetylgalactosamine-4-sulphatase

Some properties of murine selenocysteine synthase

Prenylated protein methyltransferases do not distinguish between farnesylated and geranylgeranylated substrates

Expression of rat liver NAD(P)H:quinone-acceptor oxidoreductase in Escherichia coli and mutagenesis in vitro at Arg-177

Characterization of two dipeptidases purified from hepatic schistosome egg granulomas in mice. Leukotriene D₄ hydrolases of granulomatos tissue

Gene structure and expression

The herpes simplex virus immediate-early protein ICP27 stimulates the transcription of cellular Alu repeated sequences by increasing the activity of transcription factor TFIIIC

Expression of phosphoenolpyruvate carboxykinase (PEPCK) chimeras in renal epithelial cells. Retention of appropriate physiological responsiveness using enhancerless retroviral vectors

cDNA cloning of human and rat brain myo-inositol monophosphatase. Expression and characterization of the human recombinant enzyme

Overproduction in Escherichia coli of the dehydroquinase synthase domain of the Aspergillus nidulans pentafunctional AROM protein

Duck liver ‘malic’ enzyme. Expression in Escherichia coli and characterization of the wild-type enzyme and site-directed mutants

Interaction of bleomycin with a bent DNA fragment

Regulation of metabolism

Glycogenolytic effect of pancreastatin in isolated rat hepatocytes is mediated by a cyclic-AMP-independent Ca²⁺-dependent mechanism

Release and fixation of CO₂ by guinea-pig kidney tubules metabolizing aspartate

Mammary development and milk secretion in transgenic mice expressing the sheep β-lactoglobulin gene

Variations in hepatic carbon flux during unrestricted feeding

Novel linear and branched polyamines in the extremely thermophilic eubacteria Thermoleophilum, Bacillus and Hydrogenobacter

Effect of treatment in vivo of rats with bacterial endotoxin on fructose 2,6-bisphosphate metabolism and L-pyruvate kinase activity and flux in isolated liver cells

Mechanism linking glycogen concentration and glycogenolytic rate in perfused contracting rat skeletal muscle

Differential polypeptide expression in adipose tissue of lean and obese Zucker rats. Evidence of specifically repressed peptides in 7-day-old pre-obese rats

Differences in 2-oxoglutarate dehydrogenase regulation in liver and kidney

Alterations in the mucosal processing of iron in response to very-short-term dietary iron depletion and repletion

Direct demonstration that increased phosphorylation of 3-hydroxy-3-methylglutaryl-CoA reductase does not increase its rate of degradation in isolated rat hepatocytes

D. S. ANSON, J. A. TAYLOR, J. BIELICKI, G. S. HARPER, C. PETERS, G. J. GIBSON & J. J. HOPWOOD

T. MIZUTANI, H. KURATA, K. YAMADA & T. TOTSKA

D. PÉREZ-SALA, B. A. GILBERT, E. W. TAN & R. R. RANDO


N. SATO, Y. ITO, T. IDA, K. FUKUYAMA & W. L. EPSTEIN

K. L. JANG & D. S. LATCHMAN

A. S. POLLOCK & D. H. LOVETT


J. P. T. W. VAN DEN HOMBERGH, J. D. MOORE, I. G. CHARLES & A. R. HAWKINS


K. P. NIGHTINGALE & K. R. FOX

V. SÁNCHEZ, M. LUCAS, J. R. CALVO & R. GOBERNA

G. MARTIN, C. MICHOUDET, N. VINCENT & G. BVERAGE


M. C. SUGDEN, R. M. HOWARD & M. J. HOLNESS

K. HAMANA, M. NIITSU, S. MATSUZAKI, K. SAMEJIMA, Y. IGARASHI & T. KODAMA

E. D. CEPP, R. G. KNOWLES, K. M. CARPENTER & M. A. TITHERIDGE

P. HESPEL & E. A. RICHTER

C. LAURENT-WINTER, I. DUGAIL, A. QUIGNARD-BOULANGE, X. LE LIEPvre & M. LAVAU

B. C. SMITH, L. A. CLOTTELTER, J. Y. CHEUNG & K. F. LANOUe

R. W. TOPHAM, C. E. EADS & B. F. BUTLER

V. A. ZAMMIT & A. M. CALDWELL

789–794

827–834

835–840

855–860

885–890

667–673

725–732

749–754

861–867

869–876

929–934

659–662

697–703

717–720

721–724

741–747

761–766

777–780

813–817

819–826

877–884

901–904
Membranes and bioenergetics
Effect of permethylation on the haemolytic activity of melittin
Cytochrome b_{sub}-245 is a flavocytochrome containing FAD and the NADPH-binding site on the microbicidal oxidase of phagocytes

Receptors and signal transduction
A nucleotide receptor in vascular endothelial cells is specifically activated by the fully ionized forms of ATP and UTP
Activation of calpain I in thrombin-stimulated platelets is regulated by the initial elevation of the cytosolic Ca^{2+} concentration
Cloning and expression of the thyrotropin-releasing hormone receptor from GH_{sub} rat anterior pituitary cells
G-protein-mediated activation of turkey erythrocyte phospholipase C by β-adrenergic and P_{2y}-purinergic receptors
Functional implications of tyrosine protein phosphorylation in platelets. Simultaneous studies with different agonists and inhibitors

Cell biology and development
A novel mechanism for isoprenaline-stimulated proliferation of rat parotid acinar cells involving the epidermal growth factor receptor and cell surface galactosyltransferase
Purification and partial identification of bone-inducing protein from a murine osteosarcoma

CORRECTIONS
Mechanism of action of purpuromycin
by P. Landini, E. Corti, B. P. Goldstein & M. Denaro (volume 284, pages 47–52, 1992)
The C-terminal domain of 72 kDa gelatinase A is not required for catalysis, but is essential for membrane activation and modulates interactions with tissue inhibitors of metalloproteinases