

## REVIEW ARTICLE

The biochemistry of *ras* p21

R. J. A. GRAND &amp; D. OWEN 609-631

## RESEARCH PAPERS

## Proteins

Glycosylation and transmembrane topography of bovine chromaffin granule p65

H. B. TUGAL, F. VAN LEEUWEN, 699-703

D. K. APPS, J. HAYWOOD &amp; J. H. PHILLIPS

Regulation of the acto·myosin subfragment 1 interaction by tropomyosin/tropomyosin. Evidence for control of a specific isomerization between two acto·myosin subfragment 1 states

D. F. A. MCKILLOP &amp; M. A. GEEVES 711-718

Substitution of cysteine for glycine- $\alpha$ 1-691 in the pro $\alpha$ 1(I) chain of type I procollagen in a proband with lethal osteogenesis imperfecta destabilizes the triple helix at a site C-terminal to the substitution

B. STEINMANN, A. WESTERHAUSEN, 747-752

C. D. CONSTANTINOU, A. SUPERTI-FURGA &amp; D. J. PROCKOP

The specificity and  $K_d$  at physiological ionic strength of an ATP-binding site on cytochrome *c* suit it to a regulatory role

D. B. CRAIG &amp; C. J. A. WALLACE 781-786

Role of polyamines in the transport *in vitro* of the precursor of ornithine transcarbamylase

C. GONZÁLEZ-BOSCH, M. J. MARCOTE &amp; 815-820

J. HERNÁNDEZ-YAGO

A68 proteins in Alzheimer's disease are composed of several tau isoforms in a phosphorylated state which affects their electrophoretic mobilities

J.-P. BRION, D. P. HANGER, A.-M. COUCK 831-836

&amp; B. H. ANDERTON

Primary structure and origin of schistosomin, an anti-gonadotropic neuropeptide of the pond snail *Lymnaea stagnalis*

P. L. HORDIJK, H. D. F. H. SCHALLIG, 837-842

R. H. M. EBBERINK, M. DE JONG-BRINK &amp; J. JOOSSE

A polyclonal antibody preparation with Michaelian catalytic properties

G. GALLACHER, C. S. JACKSON, 871-881

M. SEARCEY, G. T. BADMAN, R. GOEL, C. M. TOPHAM, G. W. MELLOR &amp; K. BROCKLEHURST

## Enzymes

Purification and characterization of methionine  $\gamma$ -lyase from *Trichomonas vaginalis*

B. C. LOCKWOOD &amp; G. H. COOMBS 675-682

Isolation and identification of a novel cellular protein that potentially activates  $Ca^{2+}$ /phospholipid-dependent protein kinase (protein kinase C)

S. A. GOUELI 695-698

Heterogeneity of pig lysosomal acid  $\alpha$ -glucosidase. Affinity to Sephacryl S-200 gel and tissue distribution

S. NAKASONE, T. OHSHITA &amp; T. IWAMASA 719-726

Metalloproteinase digestion of cartilage proteoglycan. Pattern of cleavage by stromelysin and susceptibility to collagenase

C. HUGHES, G. MURPHY &amp; 733-739

T. E. HARDINGHAM

Purification and partial characterization of rat factor D

B. C. BAKER, C. J. CAMPBELL, 775-779

C. J. GRINHAM &amp; G. TURCATTI

Characterization of hybrid proteins consisting of the catalytic domains of *Clostridium* and *Ruminococcus* endoglucanases, fused to *Pseudomonas* non-catalytic cellulose-binding domains

D. M. POOLE, A. J. DURRANT, 787-792

G. P. HAZLEWOOD &amp; H. J. GILBERT

The cellodextrinase from *Pseudomonas fluorescens* subsp. *cellulosa* consists of multiple functional domains

L. M. A. FERREIRA, G. P. HAZLEWOOD, 793-799

P. J. BARKER &amp; H. J. GILBERT

Immunochemical studies of haem oxygenase. Preparation and characterization of antibodies to chick liver haem oxygenase and their use in detecting and quantifying amounts of haem oxygenase protein

Y. J. GREENE, J. F. HEALEY &amp; 849-854

H. L. BONKOVSKY

Enzyme catalysis as a chain reaction

S. E. SZEDLACSEK, R. G. DUGGLEBY &amp; 855-861

M. O. VLAD

Interleukin-1 and tumour necrosis factor induce hepatic haem oxygenase. Feedback regulation by glucocorticoids

L. CANTONI, C. ROSSI, M. RIZZARDINI, 891-894

M. GADINA &amp; P. GHEZZI

Effect of carboxylic acid xenobiotics and their metabolites on the activity of carnitine acyltransferases

D. A. VESSEY, W. CHEN &amp; R. R. RAMSAY 895-897

Aldehyde reductase is a major protein associated with 3-deoxyglucosone reductase activity in rat, pig and human livers

T. KANAZU, M. SHINODA, T. NAKAYAMA, 903-906

Y. DEYASHIKI, A. HARA &amp; H. SAWADA

## Carbohydrates and lipids

The role of selenium in the secretion of very-low-density lipoprotein in the isolated perfused rat liver

R. L. SCOTT, A. KHESHTI, M. HEIMBERG, 741-745

H. G. WILCOX &amp; W. L. STONE

## CONTENTS (continued)

Domain structure of endothelial heparan sulphate	A. LINDBLOM, G. BENGTSSON-OLIVECRONA & L.-Å. FRANSSON	821-829
<b>Gene structure and expression</b>		
p52(PAI-1) and actin expression in butyrate-induced flat revertants of v-ras-transformed rat kidney cells	P. J. HIGGINS & M. P. RYAN	883-890
Regulation of glucokinase and GLUT-2 glucose-transporter gene expression in pancreatic B-cells	M. TIEDGE & S. LENZEN	899-901
<b>Regulation of metabolism</b>		
Effects of human recombinant interleukin-1 $\beta$ on protein synthesis in rat tissues compared with a classical acute-phase reaction induced by turpentine. Rapid response of muscle to interleukin-1 $\beta$	P. E. BALLMER, M. A. MCNURLAN, B. G. SOUTHORN, I. GRANT & P. J. GARLICK	683-688
Biphasic effects of glucagon and cyclic AMP on the synthesis and secretion of lipids by rat hepatocytes	D. HERMIER, P. HALES & D. N. BRINDLEY	705-709
Engineering a bioluminescent indicator for cyclic AMP-dependent protein kinase	G. B. SALA-NEWBY & A. K. CAMPBELL	727-732
Analyses of the effect of monensin on glycosphingolipid metabolism	B. GUNDLACH, R. HELLAND, K. RADSAK & H. WIEGANDT	753-757
Spectroscopic study of the Schiff bases of dodecylamine with pyridoxal 5'-phosphate and 5'-deoxypyridoxal. A model for the Schiff bases of pyridoxal 5'-phosphate in biological systems	M. A. VÁZQUEZ, F. MUÑOZ, J. DONOSO & F. GARCÍA BLANCO	759-767
Apoprotein-independent binding of chylomicron remnants to rat liver membranes	J. BORENSZTAJN, T. J. KOTLAR & S. CHANG	769-773
Participation of an endogenous inhibitor of fucosyltransferase activities in the developmental regulation of intestinal fucosylation processes	D. RUGGIERO-LOPEZ, M. C. BIOL, P. LOUISOT & A. MARTIN	801-806
<b>Membranes and bioenergetics</b>		
Movement of biotin across the rat intestinal basolateral membrane. Studies with membrane vesicles	H. M. SAID	671-674
Preparation and characterization of basolateral plasma-membrane vesicles from sheep parotid glands. Mechanisms of phosphate and D-glucose transport	S. VAYRO, R. KEMP, R. B. BEECHEY & S. SHIRAZI-BEECHEY	843-848
<b>Receptors and signal transduction</b>		
Characterization and purification of proteins which bind high-density lipoprotein. A putative cell-surface receptor	H. M. BOND, G. MORRONE, S. VENUTA & K. E. HOWELL	633-641
Thrombin inhibits the pertussis-toxin-dependent ADP-ribosylation of a novel soluble G <sub>i</sub> -protein in human platelets	J. M. GENNITY & W. SIESS	643-650
Effects of phorbol esters and secretagogues on nitrobenzylthioinosine binding to nucleoside transporters and nucleoside uptake in cultured chromaffin cells	E. G. DELICADO, R. P. SEN & M. T. MIRAS-PORTUGAL	651-655
Dual effects of guanosine 5'-[ $\gamma$ -thio]triphosphate on secretion by electroporated human neutrophils	J. E. SMOLEN, S. J. STOEHR, B. KUCZYNSKI, E. K. KOH & G. M. OMANN	657-664
Ganglioside G <sub>Q1b</sub> -induced terminal differentiation in cultured mouse keratinocytes. Phosphoinositide turnover forms the onset signal	Y. YADA, Y. OKANO & Y. NOZAWA	665-670
Ribonuclease inhibits Ah receptor transformation <i>in vitro</i>	E. C. HENRY, K. A. HAYDEN, P. A. BAUMAN & T. A. GASIEWICZ	689-694
Influence of staurosporine on glucose-mediated and glucose-conditioned insulin secretion	W. S. ZAWALICH, K. C. ZAWALICH, S. GANESAN, R. CALLE & H. RASMUSSEN	807-813
Recognition of chylomicron remnants and $\beta$ -migrating very-low-density lipoproteins by the remnant receptor of parenchymal liver cells is distinct from the liver $\alpha_2$ -macroglobulin-recognition site	M. C. M. VAN DIJK, G. J. ZIERE, W. BOERS, C. LINTHORST, M. K. BUSTERBOSCH & T. J. C. VAN BERKEL	863-870
<b>BJ LETTERS</b>		
A new family of serine-type peptidases related to prolyl oligopeptidase	N. D. RAWLINGS, L. POLGAR & A. J. BARRETT	907-908
More von Willebrand factor type A domains? Sequence similarities with malaria thrombospondin-related anonymous protein, dihydropyridine-sensitive calcium channel and inter- $\alpha$ -trypsin inhibitor	P. BORK & K. ROHDE	908-910
Estimation of gluconeogenesis and glycogenolysis <i>in vivo</i> using tritiated water	R. ROGNSTAD	911