

Review

Steroid hormone receptors and their regulation by phosphorylation
by N.L. Weigel

657–667

Research Papers**Proteins**

Fourier transform IR spectroscopic study of hydration-induced structure changes in the solid state of ω -gliadins

N. Wellner, P.S. Belton and A.S. Tatham **741–747**

Amino acid sequence and molecular modelling of glycoprotein IIb-IIIa and fibronectin receptor iso-antagonists from *Trimeresurus elegans* venom

A. Scaloni, E. Di Martino, N. Miraglia, A. Pelagalli, R. Della Morte, N. Staiano and P. Pucci **775–782**

Type VIII collagen is a product of vascular smooth-muscle cells in development and disease

J.R.E. MacBeath, C.M. Kielty and C.A. Shuttleworth **993–998**

Primary structures of decapod crustacean metallothioneins with special emphasis on freshwater and semi-terrestrial species

S.N. Pedersen, K.L. Pedersen, P. Højrup, M.H. Depledge and J. Knudsen **999–1003**

Enzymes

Pectin methyl esterase from *Aspergillus aculeatus*: expression cloning in yeast and characterization of the recombinant enzyme

S. Christgau, L.V. Kofod, T. Halkier, L.N. Andersen, M. Hockauf, K. Dörreich, H. Dalbøge and S. Kauppinen **705–712**

Expression of recombinant rat *myo*-inositol 1,4,5-trisphosphate 3-kinase B suggests a regulatory role for its N-terminus

S. Thomas, S. Soriano, C. d'Santos and G. Banting **713–716**

Glutathione S-transferase class Kappa: characterization by the cloning of rat mitochondrial GST and identification of a human homologue

S.E. Pemble, A.F. Wardle and J.B. Taylor **749–754**

Induction of the membrane alanyl aminopeptidase gene and surface expression in human T-cells by mitogenic activation

U. Lendeckel, Th. Wex, D. Reinhold, Th. Kähne, K. Frank, J. Faust, K. Neubert and S. Ansorge **817–821**

The biochemical characterization of a novel non-haem-iron hydroxylamine oxidase from *Paracoccus denitrificans* GB17

J.W.B. Moir, J.-M. Wehrfritz, S. Spiro and D.J. Richardson **823–827**

Primary structure of the cytosolic β -glucosidase of guinea pig liver

W.S. Hays, S.A. Jenison, T. Yamada, A. Pastuszyn and R.H. Glew **829–837**

Reconstitution of the quinoprotein methanol dehydrogenase from inactive Ca^{2+} -free enzyme with Ca^{2+} , Sr^{2+} or Ba^{2+}

M.G. Goodwin, A. Avezoux, S.L. Dales and C. Anthony **839–842**

Purification and characterization of an acetyl xylan esterase produced by *Streptomyces lividans*

C. Dupont, N. Daigneault, F. Shareck, R. Morosoli and D. Kluepfel **881–886**

Recombinant human phenylalanine hydroxylase is a substrate for the ubiquitin-conjugating enzyme system

A.P. Døskeland and T. Flatmark **941–945**

Characterization of a novel pterin intermediate formed in the catalytic cycle of tyrosine hydroxylase

B. Almås, J. Haavik and T. Flatmark **947–951**

Inhibition patterns of a model complex mimicking the reductive half-reaction of sulphite oxidase

P.K. Chaudhury, S.K. Das and S. Sarkar **953–959**

Asp-49 is not an absolute prerequisite for the enzymic activity of low- M_r phospholipases A_2 : purification, characterization and computer modelling of an enzymically active Ser-49 phospholipase A_2 , ecarpholin S, from the venom of *Echis carinatus sochureki* (saw-scaled viper)

J. Polgár, E.M. Magnenat, M.C. Peitsch, T.N.C. Wells and K.J. Clemetson **961–968**

Purification and characterization of a thermostable ADP-glucose pyrophosphorylase from *Thermus caldophilus* GK-24

J.H. Ko, C.H. Kim, D.-S. Lee and Y.S. Kim **977–983**

Partial purification and characterization of a type 1 protein phosphatase in purified nuclei of pea plumules

Y.-L. Guo and S.J. Roux **985–991**

Carbohydrates and lipids

Biochemical alterations in collagen IV induced by *in vitro* glycation

H.-M. Raabe, H. Molsen, S.-M. Mlinaric, Y. Açı, G.H.G. Sinnecker, H. Notbohm, K. Kruse and P.K. Müller **699–704**

Gene structure and expression

Oct-1 interacts with conserved motifs in the human thyroid transcription factor 1 gene minimal promoter	C.D. Bingle and S. Gowan	669–674
Folate binding protein: molecular characterization and transcript distribution in pig liver, kidney and jejunum	C.M. van Hoozen, E.-h. Ling and C.H. Halsted	725–729
Circadian regulation of hydroxyindole- <i>O</i> -methyltransferase mRNA in the chicken pineal gland <i>in vivo</i> and <i>in vitro</i>	P. Grève, P. Voisin, A. Grechez-Cassiau, M. Bernard, J.-P. Collin and J. Guerlott	761–766
Multiple factors regulating the expression of human thromboxane synthase gene	K.-D. Lee, S.J. Baek and R.-F. Shen	783–791
Expression of functional recombinant human procathepsin B in mammalian cells	W.-P. Ren, R. Fridman, J.R. Zabrecky, L.D. Morris, N.A. Day and B.F. Sloane	793–800
Expression of xanthine oxidoreductase in mouse mammary epithelium during pregnancy and lactation: regulation of gene expression by glucocorticoids and prolactin	M. Kurosaki, S. Zanotta, M. Li Calzi, E. Garattini and M. Terao	801–810
The transcription of human $\alpha 1(I)$ procollagen gene (COL1A1) is suppressed by tumour necrosis factor- α through proximal short promoter elements: evidence for suppression mechanisms mediated by two nuclear-factor-binding sites	K. Mori, A. Hatamochi, H. Ueki, A. Olsen and S.A. Jimenez	811–816
cDNA and genomic cloning and expression of the P48 monocytic differentiation/activation factor, a <i>Mycoplasma fermentans</i> gene product	R.E. Hall, S. Agarwal, D. P. Kestler, J.A. Cobb, K.M. Goldstein and N.-S. Chang	919–927
Interleukin-2 induces γ -S-adenosyl-L-methionine synthetase gene expression during T-lymphocyte activation	R. Tobeña, S. Horikawa, V. Calvo and S. Alemany	929–933
Species-specific alternative splicing of the epidermal growth factor-like domain 1 of cartilage aggrecan	C. Fülöp, G. Cs-Szabó and T.T. Glant	935–940
Chloroplastic aspartate aminotransferase from <i>Arabidopsis thaliana</i> : an examination of the relationship between the structure of the gene and the spatial structure of the protein	S.E. Wilkie, R. Lambert and M.J. Warren	969–976

Regulation of metabolism

Microinjection of ADP-ribosylated actin inhibits actin synthesis in hepatocyte–hepatoma hybrid cells	K.H. Reuner, A. van der Does, P. Dunker, I. Just, K. Aktories and N. Katz	843–849
D-3 phosphoinositide metabolism in cells treated with platelet-derived growth factor	C.C. Whiteford, C. Best, A. Kazlauskas and E.T. Ulug	851–860
Divergent effects of $\alpha 1$ -antitrypsin on the regulation of iron metabolism in human erythroleukaemic (K562) and myelomonocytic (THP-1) cells	G. Weiss, I. Graziadei, M. Urbanek, K. Grünewald and W. Vogel	897–902

Membranes and bioenergetics

Thermodynamic studies of substrate binding and spin transitions in human cytochrome <i>P</i> -450 3A4 expressed in yeast microsomes	J.-P. Renaud, D.R. Davydov, K.P.M. Heirwegh, D. Mansuy and G. Hui Bon Hoa	675–681
An amino acid channel activated by hypotonically induced swelling of <i>Leishmania major</i> promastigotes	L.L. Vieira, E. Lafuente, F. Gamarro and Z.I. Cabantchik	691–697
Reconstitution of the hexose phosphate translocator from the envelope membranes of wheat endosperm amyloplasts	I.J. Tetlow, C.G. Bowsher and M.J. Emes	717–723
Isolation and characterization of two distinct low-density, Triton-insoluble, complexes from porcine lung membranes	E.T. Parkin, A.J. Turner and N.M. Hooper	887–896

Receptors and signal transduction

A study of the oligomeric state of the α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid-preferring glutamate receptors in the synaptic junctions of porcine brain	T.-Y. Wu, C.-I. Liu and Y.-C. Chang	731–739
Store-activated Ca^{2+} inflow in <i>Xenopus laevis</i> oocytes: inhibition by primaquine and evaluation of the role of membrane fusion	R.B. Gregory and G.J. Barritt	755–760
Didecanoyl phosphatidylcholine is a superior substrate for assaying mammalian phospholipase D	A.M. Vinggaard, T. Jensen, C.P. Morgan, S. Cockcroft and H.S. Hansen	861–864

Interleukin-13 is a potent activator of JAK3 and STAT6 in cells expressing interleukin-2 receptor- γ and interleukin-4 receptor- α	M.G. Malabarba, H. Rui, H.H.J. Deutsch, J. Chung, F.S. Kalthoff, W.L. Farrar and R.A. Kirken	865–872
Activation of Mac-1 (CD11b/CD18)-bound factor X by released cathepsin G defines an alternative pathway of leucocyte initiation of coagulation	J. Plescia and D.C. Altieri	873–879
Identification of a novel opioid peptide (Tyr-Val-Pro-Phe-Pro) derived from human α_{S1} casein (α_{S1} -casomorphin, and α_{S1} -casomorphin amide)	M. Kampa, S. Loukas, A. Hatzoglou, P. Martin, P.-M. Martin and E. Castanas	903–908
The lysosomal Ca^{2+} pool in MDCK cells can be released by Ins(1,4,5) P_3 -dependent hormones or thapsigargin but does not activate store-operated Ca^{2+} entry	T. Haller, H. Völkl, P. Deetjen and P. Dietl	909–912
Ins(1,3,4,5) P_4 is effective in mobilizing Ca^{2+} in mouse exocrine pancreatic acinar cells if phospholipase A_2 is inhibited	S.-J. Rowles and D.V. Gallacher	913–918
Cell biology and development		
Non-erythroid α -spectrin breakdown by calpain and interleukin 1 β -converting-enzyme-like protease(s) in apoptotic cells: contributory roles of both protease families in neuronal apoptosis	R. Nath, K.J. Raser, D. Stafford, I. Hajimohammadreza, A. Posner, H. Allen, R.V. Talanian, P.-w. Yuen, R.B. Gilbertsen and K.K.W. Wang	683–690
Increased sensitivity to oxidative injury in Chinese hamster ovary cells stably transfected with rat liver S-adenosylmethionine synthetase cDNA	E. Sánchez-Góngora, J.G. Pastorino, L. Alvarez, M.A. Pajares, C. García, J.R. Viña, J.M. Mato and J.L. Farber	767–773
BJ Letters		
The tentative (α/β) $_8$ -barrel in the pathway of β -carotene biosynthesis: lycopene cyclase has an amino acid sequence similar to that of xylose isomerase	Š. Janeček	1005–1006
Corrections		
Affinity purification of 5-methylthioadenosine kinase and 5-methylthioribose/S-adenosylhomocysteine nucleosidase from <i>Klebsiella pneumoniae</i> by K.A. Cornell, R.W. Winter, P.A. Tower and M.K. Riscoe (volume 317, pages 285–290, 1996)		1007
The role of a H^+ -ATPase in the regulation of cytoplasmic pH in <i>Trypanosoma cruzi</i> epimastigotes by N. Vanderheyden, G. Benaim and R. Docampo (volume 318, pages 103–109, 1996)		1007
cDNA cloning, expression and chromosomal localization of the human sarco/endoplasmic reticulum Ca^{2+} -ATPase 3 gene by L. Dode, F. Wuytack, P.F.J. Kools, F. Baba-Aissa, L. Raeymaekers, F. Brik, W.J.M. Van De Ven and R. Casteels (volume 318, pages 689–699, 1996)		1008