

Review

Signal-transducing protein phosphorylation cascades mediated by Ras/Rho proteins in the mammalian cell: the potential for multiplex signalling
by D.T. Denhardt **729–747**

Research Communications

Chromatin condensation during apoptosis requires ATP

G.E.N. Kass, J.E. Eriksson, M. Weis, S. Orrenius and S.C. Chow **749–752**

The focal-adhesion vasodilator-stimulated phosphoprotein (VASP) binds to the proline-rich domain in vinculin

N.P.J. Brindle, M.R. Holt, J.E. Davies, C.J. Price and D.R. Critchley **753–757**

Research Papers**Proteins**

Presence of pro-forms of decorin and biglycan in human articular cartilage

P.J. Roughley, R.J. White and J.S. Mort **779–784**

Ornithine decarboxylase stability in HMOA and DH23b cells is not due to post-translational truncation of a C-terminal recognition site

J.L.A. Mitchell, C.-y. Choe and G.D. Judd **879–882**

Intracellular retention of a factor VIII protein with an Arg²³⁰⁷ → Gln mutation as a cause of haemophilia A

J. Voorberg, R.T.M. de Laaf, P.M. Koster and J.A. van Mourik **931–937**

cDNA cloning of rat pS2 peptide and expression of trefoil peptides in acetic acid-induced colitis

H. Itoh, M. Tomita, H. Uchino, T. Kobayashi, H. Kataoka, R. Sekiya and Y. Nawa **939–944**

Prenylation of a Rab1B mutant with altered GTPase activity is impaired in cell-free systems but not in intact mammalian cells

A.L. Wilson, K.M. Sheridan, R.A. Erdman and W.A. Maltese **1007–1014**

Identification of a novel proteinase (ameloprotease-I) responsible for the complete degradation of amelogenin during enamel maturation

J. Moradian-Oldak, W. Leung, J.P. Simmer, M. Zeichner-David and A.G. Fincham **1015–1021**

Expression of recombinant human serum amyloid A in mammalian cells and demonstration of the region necessary for high-density lipoprotein binding and amyloid fibril formation by site-directed mutagenesis

H. Patel, J. Bramall, H. Waters, M.C. De Beer and P. Woo **1041–1049**

Enzymes

Immunocytochemical localization and biochemical characterization of a novel plasma membrane-associated, neutral pH optimum α -L-fucosidase from rat testis and epididymal spermatozoa

M. Avilés, I. Abascal, J.A. Martínez-Menárguez, M.T. Castells, S.R. Skalaban, J. Ballesta and J.A. Alhadeff **821–831**

Aging of phosphorylated human acetylcholinesterase: catalytic processes mediated by aromatic and polar residues of the active centre

A. Shafferman, A. Ordentlich, D. Barak, D. Stein, N. Ariel and B. Velan **833–840**

Histidine residues in rabbit liver microsomal cytochrome *P*-450 2B4 control electron transfer from NADPH-cytochrome *P*-450 reductase and cytochrome B5

P. Hlavica, M. Lehnerer and M. Eulitz **857–862**

A novel nickel-containing superoxide dismutase from *Streptomyces* spp.

H.-D. Youn, E.-J. Kim, J.-H. Roe, Y.C. Hah and S.-O. Kang **889–896**

Autolysis parallels activation of μ -calpain

A. Baki, P. Tompa, A. Alexa, O. Molnár and P. Friedrich **897–901**

Regulation of NAD⁺ glycohydrolase activity by NAD⁺-dependent auto-ADP-ribosylation

M.-K. Han, J.-Y. Lee, Y.-S. Cho, Y.M. Song, N.-H. An, H.-R. Kim and U.-H. Kim **903–908**

Binding of ATP and ATP analogues to the uncoating ATPase Hsc70 (70 kDa heat-shock cognate protein)

E. Buxbaum and P.G. Woodman **923–929**

Raw-starch-digesting and thermostable α -amylase from the yeast *Cryptococcus* sp. S-2: purification, characterization, cloning and sequencing

H. Iefuji, M. Chino, M. Kato and Y. Iimura **989–996**

Kinetic studies on two isoforms of acetyl-CoA carboxylase from maize leaves	D. Herbert, L.J. Price, C. Alban, L. Dehaye, D. Job, D.J. Cole, K.E. Pallett and J.L. Harwood	997–1006
Carbohydrates and lipids		
Selective uptake of cholesteryl esters of low-density lipoproteins is mediated by the lipoprotein-binding site in HepG2 cells and is followed by the hydrolysis of cholesteryl esters	L. Brissette, M.-C. Charest and L. Falstraucht	841–847
Interferon γ differentially affects the synthesis of chondroitin/dermatan sulphate and heparan sulphate by human skin fibroblasts	C. Praillet, H. Lortat-Jacob and J.-A. Grimaud	863–870
Occurrence of PG-Lb, a leucine-rich small chondroitin/dermatan sulphate proteoglycan in mammalian epiphyseal cartilage: molecular cloning and sequence analysis of the mouse cDNA	K. Kurita, T. Shinomura, M. Ujita, M. Zako, D. Kida, H. Iwata and K. Kimata	909–914
A novel keratan sulphate domain preferentially expressed on the large aggregating proteoglycan from human articular cartilage is recognized by the monoclonal antibody 3D12/H7	D.-C. Fischer, H.-D. Haubeck, K. Eich, S. Kolbe-Busch, G. Stöcker, H.W. Stuhlsatz and H. Greiling	1051–1056
Gene structure and expression		
Alternative splicing of the human IgA Fc receptor CD89 in neutrophils and eosinophils	R.J. Pleass, P.D. Andrews, M.A. Kerr and J.M. Woof	771–777
Organization, transcription and regulation of the <i>Leishmania infantum</i> histone H3 genes	M. Soto, J.M. Requena, L. Quijada and C. Alonso	813–819
Melanotransferrin gene expression in melanoma cells is correlated with high levels of Jun/Fos family transcripts and with the presence of a specific AP1-dependent ternary complex	A. Rozé-Heusse, M.-L. Houbiguan, C. Debacker, M.M. Zakin and N. Duchange	883–888
Inhibition of hormone-sensitive lipase gene expression by cAMP and phorbol esters in 3T3-F442A and BFC-1 adipocytes	E. Plée-Gautier, J. Grober, E. Duplus, D. Langin and C. Forest	1057–1063
The unusual structures of the hot-regions flanking large-scale deletions in human mitochondrial DNA	J.-H. Hou and Y.-H. Wei	1065–1070
Regulation of metabolism		
The role of changes in the sensitivity of hepatic mitochondrial overt carnitine palmitoyltransferase in determining the onset of the ketosis of starvation in the rat	L. Drynan, P.A. Quant and V.A. Zammit	767–770
Translocation of cytosolic phospholipase A_2 to the nuclear envelope elicits topographically localized phospholipid hydrolysis	M. Peters-Golden, K. Song, T. Marshall and T. Brock	797–803
Starch degradation in chloroplasts isolated from C_3 or CAM (crassulacean acid metabolism)-induced <i>Mesembryanthemum crystallinum</i> L.	H.E. Neuhaus and N. Schulte	945–953
Induction of cell surface blebbing by increased cellular P_i concentration	M. Marcussen	955–958
Membranes and bioenergetics		
Separate effects of long-chain phosphatidylcholines on dephosphorylation of the Ca^{2+} -ATPase and on Ca^{2+} binding	A.P. Starling, J.M. East and A.G. Lee	785–788
High rates of extracellular superoxide generation by cultured human fibroblasts: involvement of a lipid-metabolizing enzyme	V.B. O'Donnell and A. Azzi	805–812
Multiple components of arginine and phenylalanine transport induced in neutral and basic amino acid transporter-cRNA-injected <i>Xenopus</i> oocytes	G.J. Peter, I.G. Davidson, A. Ahmed, L. McIlroy, A.R. Forrester and P.M. Taylor	915–922
An investigation of the mechanism of inhibition of the Ca^{2+} -ATPase by phospholamban	G. Hughes, A.P. Starling, R.P. Sharma, J.M. East and A.G. Lee	973–979
Ca^{2+} -independent fusion of synaptic vesicles with phospholipase A_2 -treated presynaptic membranes <i>in vitro</i>	H. Nishio, T. Takeuchi, F. Hata and O. Yagasaki	981–987
Receptors and signal transduction		
The synergism of hydrogen peroxide with plasma S-nitrosothiols in the inhibition of platelet activation	K.M. Naseem, S. Chirico, B. Mohammadi and K.R. Bruckdorfer	759–766

3':5'-Cyclic guanosine monophosphate (cGMP) potentiates the inositol 1,4,5-trisphosphate-evoked Ca^{2+} release in guinea-pig hepatocytes	G. Guihard, L. Combettes and T. Capiod	849–855
Stable overexpression of the type-1 inositol 1,4,5-trisphosphate receptor in L fibroblasts: subcellular distribution and functional consequences	J.J. Mackrill, R.A. Wilcox, A. Miyawaki, K. Mikoshiba, S.R. Nahorski and R.A.J. Challiss	871–878
Binding and degradation of thrombospondin-1 mediated through heparan sulphate proteoglycans and low-density-lipoprotein receptor-related protein: localization of the functional activity to the trimeric N-terminal heparin-binding region of thrombospondin-1	H. Chen, J. Sottile, D.K. Strickland and D.F. Mosher	959–963
A regulatory role for cAMP in phosphatidylinositol 3-kinase/p70 ribosomal S6 kinase-mediated DNA synthesis in platelet-derived-growth-factor-stimulated bovine airway smooth-muscle cells	P.H. Scott, C.M. Belham, J. Al-Hafidh, E.R. Chilvers, A.J. Peacock, G.W. Gould and R. Plevin	965–971
Specificity of $\text{G}\alpha_q$ and $\text{G}\alpha_{11}$ gene expression in platelets and erythrocytes. Expressions of cellular differentiation and species differences	G.J. Johnson, L.A. Leis and P.C. Dunlop	1023–1031
Agonist regulation of adenylate cyclase activity in neuroblastoma x glioma hybrid NG108-15 cells transfected to co-express adenylate cyclase type II and the β_2 -adrenoceptor. Evidence that adenylate cyclase is the limiting component for receptor-mediated stimulation of adenylate cyclase activity	D.J. MacEwan, G.-D. Kim and G. Milligan	1033–1039
Maintenance of cellular levels of G-proteins: different efficiencies of α_s and α_o synthesis in GH_3 cells	Y. Li, U. Mende, C. Lewis and E.J. Neer	1071–1077
Cell biology and development		
Enhanced release of nitric oxide causes increased cytotoxicity of S-nitroso-N-acetyl-DL-penicillamine and sodium nitroprusside under hypoxic conditions	I. Ioannidis, M. Bätz, T. Paul, H.-G. Korth, R. Sustmann and H. de Groot	789–795
Corrections		
Genomic mechanisms involved in the pleiotropic actions of 1,25-dihydroxyvitamin D_3 by S. Christakos, M. Raval-Pandya, R.P. Wernj and W. Yang (volume 316, pages 361–371)		1079
Methylamine decreases trafficking and packaging of newly synthesized phosphatidylcholine in lamellar bodies in alveolar type II cells by A. Chander, N. Sen, A.-M. Wu, S. Higgins, S. Wadsworth and A.R. Spitzer (volume 318, pages 271–278)		1079