

Research Communications

- Prothymosin α is a chromatin-remodelling protein in mammalian cells
 J. Gómez-Márquez and P. Rodríguez 1–3
- The majority of human glutathione peroxidase type 5 (GPX5) transcripts are incorrectly spliced: implications for the role of GPX5 in the male reproductive tract
 L. Hall, K. Williams, A.C.F. Perry, J. Frayne and J.A. Jury 5–9
- Differential activation of stress-activated protein kinase kinases SKK4/MKK7 and SKK1/MKK4 by the mixed-lineage kinase-2 and mitogen-activated protein kinase kinase (MKK) kinase-1
 A. Cuenda and D.S. Dorow 11–15

Research Papers

Proteins

- Functional characterization of a recombinant form of the C-terminal, globular head region of the B-chain of human serum complement protein, C1q
 U. Kishore, L.E.A. Leigh, P. Eggleton, P. Strong, M.V. Perdikoulis, A.C. Willis and K.B.M. Reid 27–32
- Alteration of zif268 zinc-finger motifs gives rise to non-native zinc-co-ordination sites but preserves wild-type DNA recognition
 A. Green and B. Sarkar 85–90
- Evidence that the conformation of unliganded human plasminogen is maintained via an intramolecular interaction between the lysine-binding site of kringle 5 and the N-terminal peptide
 C.S. Cockell, J.M. Marshall, K.M. Dawson, S.A. Cederholm-Williams and C.P. Ponting 99–105
- A structural comparison of the colicin immunity proteins Im7 and Im9 gives new insights into the molecular determinants of immunity-protein specificity
 C.A. Dennis, H. Videler, R.A. Pauptit, R. Wallis, R. James, G.R. Moore and C. Kleanthous 183–191

Enzymes

- Characterization of authentic recombinant pea-seed lipoxygenases with distinct properties and reaction mechanisms
 R.K. Hughes, Z. Wu, D.S. Robinson, D. Hardy, S.I. West, S.A. Fairhurst and R. Casey 33–43
- Structural and functional effect of Trp-62 \rightarrow Gly and Asp-101 \rightarrow Gly substitutions on substrate-binding modes of mutant hen egg-white lysozymes
 K. Maenaka, M. Matsushima, G. Kawai, A. Kidera, K. Watanabe, R. Kuroki and I. Kumagai 71–76
- L-Mandelate dehydrogenase from *Rhodotorula graminis*: cloning, sequencing and kinetic characterization of the recombinant enzyme and its independently expressed flavin domain
 R.M. Illias, R. Sinclair, D. Robertson, A. Neu, S.K. Chapman and G.A. Reid 107–115
- Re-design of *Saccharomyces cerevisiae* flavocytochrome b_2 : introduction of L-mandelate dehydrogenase activity
 R. Sinclair, G.A. Reid and S.K. Chapman 117–120
- Membrane type 1 matrix metalloproteinase (MT1-MMP) cleaves the recombinant aggrecan substrate rAgg1_{mut} at the 'aggrecanase' and the MMP sites. Characterization of MT1-MMP catabolic activities on the interglobular domain of aggrecan
 F.H. Büttner, C.E. Hughes, D. Margerie, A. Lichte, H. Tschesche, B. Caterson and E. Bartnik 159–165
- Alteration of the isoform composition of plasma-membrane-associated rat sperm α -L-fucosidase during late epididymal maturation: comparative characterization of the acidic and neutral isoforms
 I. Abascal, S.R. Skalaban, K.M. Grimm, M. Avilés, J.A. Martínez-Menárguez, M.T. Castells, J. Ballesta and J.A. Alhadeff 201–207

Carbohydrates and lipids

- The tumour necrosis factor-sensitive pool of sphingomyelin is resynthesized in a distinct compartment of the plasma membrane
 N. Andrieu-Abadie, S. Carpentier, R. Salvayre and T. Levade 91–97

Gene structure and expression

- Elucidation of a promoter activity that directs the expression of acetyl-CoA carboxylase α with an alternative N-terminus in a tissue-restricted fashion
 M.C. Barber and M.T. Travers 17–25

The first high-mobility-group box of upstream binding factor assembles a crossover DNA junction by basic residues	C.-H. Hu, J.-M. Wang and H.-B. Tseng	51–56
Changing nucleosome positions <i>in vivo</i> through modification of the DNA rotational information	L. Di Marcotullio, M. Buttinelli, G. Costanzo, E. Di Mauro and R. Negri	65–69
Nuclear factor 1 regulates the distal silencer of the human <i>PIT1/GHF1</i> gene	F. Rajas, M. Delhase, M. de la Hoya, P. Verdood, J.-L. Castrillo and E.L Hooghe-Peters	77–84
Sp3 regulates Fas expression in lung epithelial cells	H. Pang, K. Miranda and A. Fine	209–213
Regulation of metabolism		
Identification of skatolyl hydroperoxide and its role in the peroxidase-catalysed oxidation of indol-3-yl acetic acid	I.G. Gazarian, L.M. Lagrimini, F.A. Mellon, M.J. Naldrett, G.A. Ashby and R.N.F. Thorneley	223–232
Membranes and bioenergetics		
Assembly of flammutoxin, a cytolytic protein from the edible mushroom <i>Flammulina velutipes</i> , into a pore-forming ring-shaped oligomer on the target cell	T. Tomita, D. Ishikawa, T. Noguchi, E. Katayama and Y. Hashimoto	129–137
Targeting and assembly of the oxoglutarate carrier: general principles for biogenesis of carrier proteins of the mitochondrial inner membrane	A. Palmisano, V. Zara, A. Hönlinger, A. Vozza, P.J.T. Dekker, N. Pfanner and F. Palmieri	151–158
Characterization of the monocarboxylate transporter 1 expressed in <i>Xenopus laevis</i> oocytes by changes in cytosolic pH	S. Bröer, H.-P. Schneider, A. Bröer, B. Rahman, B. Hamprecht and J.W. Deitmer	167–174
Effects of dietary P_i on the renal Na^+ -dependent P_i transporter NaPi-2 in thyroparathyroidectomized rats	F. Takahashi, K. Morita, K. Katai, H. Segawa, A. Fujioka, T. Kouda, S. Tatsumi, T. Nii, Y. Taketani, H. Haga, S. Hisano, Y. Fukui, K.-i. Miyamoto and E. Takeda	175–181
Receptors and signal transduction		
cAMP-specific phosphodiesterase HSPDE4D3 mutants which mimic activation and changes in rolipram inhibition triggered by protein kinase A phosphorylation of Ser-54: generation of a molecular model	R. Hoffmann, I.R. Wilkinson, J.F. McCallum, P. Engels and M.D. Houslay	139–149
Ca^{2+} modulation of <i>cis</i> -unsaturated fatty acid-induced mutant protein kinase C activity: indication of inhibitory Ca^{2+} -binding site in protein kinase C- α	F. Eshete, H. Chung, L. Gannon-Murakami and K. Murakami	215–221
Cell biology and development		
Cytotoxic effect of HIV-1 coat glycoprotein gp120 on human neuroblastoma CHP100 cells involves activation of the arachidonate cascade	M. Maccarrone, M. Navarra, M.T. Corasaniti, G. Nisticò and A. Finazzi Agrò	45–49
Differential effects of phorbol ester on growth and protein kinase C isoenzyme regulation in human hepatoma Hep3B cells	S.-L. Hsu, Y.-H. Chou, S.-C. Yin and J.-Y. Liu	57–64
Thrombin stimulates fibroblast procollagen production via proteolytic activation of protease-activated receptor 1	R.C. Chambers, K. Dabbagh, R.J. McAnulty, A.J. Gray, O.P. Blanc-Brude and G.J. Laurent	121–127
Secretory-granule dynamics visualized <i>in vivo</i> with a phogrin–green fluorescent protein chimera	A.E. Pouli, E. Emmanouilidou, C. Zhao, C. Wasmeier, J.C. Hutton and G.A. Rutter	193–199