

Research Papers

Proteins

- The protein oxidation product 3,4-dihydroxyphenylalanine (DOPA) mediates oxidative DNA damage
 B. Morin, M.J. Davies and R.T. Dean **1059–1067**
- Oestrogen and progesterone inhibit the stimulated production of endothelin-1
 A.K. Morey, M. Razandi, A. Pedram, R.-M. Hu, B.A. Prins and E.R. Levin **1097–1105**
- Identification of the major allergens in wheat flour responsible for baker's asthma
 M. Amano, H. Ogawa, K. Kojima, T. Kamidaira, S. Suetsugu, M. Yoshihama, T. Satoh, T. Samejima and I. Matsumoto **1229–1234**
- Isolation and characterization of advanced glycation end products derived from the *in vitro* reaction of ribose and collagen
 R.G. Paul, N.C. Avery, D.A. Slatter, T.J. Sims and A.J. Bailey **1241–1248**
- Identification of β 1C-2, a novel variant of the integrin β 1 subunit generated by utilization of an alternative splice acceptor site in exon C
 G. Svineng, R. Fässler and S. Johansson **1255–1263**
- Site-specific spin trapping of tyrosine radicals in the oxidation of metmyoglobin by hydrogen peroxide
 M.R. Gunther, R.A. Tschirret-Guth, H.E. Witkowska, Y.C. Fann, D.P. Barr, P.R. Ortiz de Montellano and R.P. Mason **1293–1299**
- Expression, processing and secretion of a proteolytically-sensitive insect diuretic hormone by *Saccharomyces cerevisiae* requires the use of a yeast strain lacking genes encoding the Yap3 and Mkc7 endoproteases found in the secretory pathway
 K.S. Copley, S.M. Alm, D.A. Schooley and W.E. Courchesne **1333–1340**
- Isolation of a novel bone glycosylated phosphoprotein with disulphide cross-links to osteonectin
 H.-Y. Zhou, E. Salih and M.J. Glimcher **1423–1431**

Enzymes

- Biotin synthase from *Escherichia coli*: isolation of an enzyme-generated intermediate and stoichiometry of S-adenosylmethionine use
 N.M. Shaw, O.M. Birch, A. Tinschert, V. Venetz, R. Dietrich and L.-A. Savoy **1079–1085**
- The effects of temperature on the kinetics and stability of mesophilic and thermophilic 3-phosphoglycerate kinases
 T.M. Thomas and R.K. Scopes **1087–1095**
- Identification of reaction products and intermediates of aromatic amine dehydrogenase by ^{15}N and ^{13}C NMR
 G.R. Bishop, Z. Zhu, T.L. Whitehead, R.P. Hicks and V.L. Davidson **1159–1163**
- Recombinant expression and biochemical characterization of an NADPH:flavin oxidoreductase from *Entamoeba histolytica*
 I. Bruchhaus, S. Richter and E. Tannich **1217–1221**
- Purification and kinetic analysis of a baculovirus ecdysteroid UDP-glucosyltransferase
 O.P. Evans and D.R. O'Reilly **1265–1270**
- Annexin V inhibits protein kinase C activity via a mechanism of phospholipid sequestration
 T. Dubois, J.-P. Mira, D. Feliars, E. Solito, F. Russo-Marie and J.-P. Oudinet **1277–1282**
- Expression, purification and characterization of a human serine-dependent phospholipase A_2 with high specificity for oxidized phospholipids and platelet activating factor
 S.Q.J. Rice, C. Southan, H.F. Boyd, J.A. Terrett, C.H. Macphee, K. Moores, I.S. Gloger and D.G. Tew **1309–1315**
- The inhibitory effect of novel triterpenoid compounds, fomitelic acids, on DNA polymerase β
 Y. Mizushima, N. Tanaka, A. Kitamura, K. Tamai, M. Ikeda, M. Takemura, F. Sugawara, T. Arai, A. Matsukage, S. Yoshida and K. Sakaguchi **1325–1332**
- Human platelet heparanase: purification, characterization and catalytic activity
 C. Freeman and C.R. Parish **1341–1350**
- Heparin accelerates the inhibition of cathepsin G by mucus proteinase inhibitor: potent effect of *O*-butyrylated heparin
 J. Ermolieff, J. Duranton, M. Petitou and J.G. Bieth **1369–1374**
- Molecular characterization of benzyl alcohol dehydrogenase and benzaldehyde dehydrogenase II of *Acinetobacter calcoaceticus*
 D.J. Gillooly, A.G.S. Robertson and C.A. Fewson **1375–1381**
- Human CD38 is an authentic NAD(P)⁺ glycohydrolase
 V. Berthelie, J.-M. Tixier, H. Muller-Steffner, F. Schuber and P. Deterre **1383–1390**

Influence of lipid on the structure and phosphorylation of protein kinase C α substrate peptides	B.B. Vinton, S.L. Wertz, J. Jacob, J. Steere, C.M. Grisham, D.S. Cafiso and J.J. Sando	1433–1442
Role of residues 104, 164, 166, 238 and 240 in the substrate profile of PER-1 β -lactamase hydrolysing third-generation cephalosporins	A.-T. Bouthors, N. Dagoneau-Blanchard, T. Naas, P. Nordmann, V. Jarlier and W. Sougakoff	1443–1449
Carbohydrates and lipids		
Structural dependence of flavonoid interactions with Cu ²⁺ ions: implications for their antioxidant properties	J.E. Brown, H. Khodr, R.C. Hider and C.A. Rice-Evans	1173–1178
The gene structure and promoter sequence of mouse hyaluronan synthase 1 (<i>mHAS1</i>)	Y. Yamada, N. Itano, M. Zako, M. Yoshida, P. Lenas, A. Niimi, M. Ueda and K. Simata	1223–1227
Mechanism of reaction of myoglobin with the lipid hydroperoxide hydroperoxyoctadecadienoic acid	B.J. Reeder and M.T. Wilson	1317–1323
Xyloglucan endotransglycosylase: evidence for the existence of a relatively stable glycosyl–enzyme intermediate	Z. Sulová, M. Takáčová, N.M. Steele, S.C. Fry and V. Farkaš	1475–1480
Gene structure and expression		
Characterization of the gene for the mouse prostaglandin E receptor subtype EP ₂ : tissue-specific initiation of transcription in the macrophage and the uterus	M. Katsuyama, Y. Sugimoto, K. Okano, E. Segi, R. Ikegami, M. Negishi and A. Ichikawa	1115–1121
Intestinal maturation in mice lacking CCAAT/enhancer-binding protein α (C/EPB α)	T.J. Oesterreicher, L.L. Leeper, M.J. Finegold, G.J. Darlington and S.J. Henning	1165–1171
Cloning and characterization of mouse intestinal MUC3 mucin: 3' sequence contains epidermal-growth-factor-like domains	L.L. Shekels, D.A. Hunninghake, A.S. Tisdale, I.K. Gipson, M. Kieliszewski, C.A. Kozak and S.B. Ho	1301–1308
Differential regulation by a peroxisome proliferator of the different multifunctional proteins in guinea pig: cDNA cloning of the guinea pig D-specific multifunctional protein 2	F. Caira, M.-C. Clémencet, M. Cherkaoui-Malki, M. Dieuaide-Noubhani, C. Pacot, P.P. Van Veldhoven and N. Latruffe	1361–1368
Differential transcriptional regulation of the <i>human thrombin receptor</i> gene by the Sp family of transcription factors in human endothelial cells	Y. Wu, J. Ruef, G.N. Rao, C. Patterson and M.S. Runge	1469–1474
Regulation of metabolism		
Regulation of ATP supply during muscle contraction: theoretical studies	B. Korzeniewski	1189–1195
Metabolism of agmatine in macrophages: modulation by lipopolysaccharide and inhibitory cytokines	M. Sastre, E. Galea, D. Feinstein, D.J. Reis and S. Regunathan	1405–1409
Membranes and bioenergetics		
Effects of mutation of residue 167 on redox-linked protonation processes in yeast cytochrome c oxidase	B. Meunier, C. Ortwein, U. Brandt and P.R. Rich	1197–1200
Cell-surface biotinylation of GLUT4 using bis-mannose photolabels	F. Koumanov, J. Yang, A.E. Jones, Y. Hatanaka and G.D. Holman	1209–1215
Dependence of mammalian putrescine and spermidine transport on plasma-membrane potential: identification of an amiloride binding site on the putrescine carrier	R. Poulin, C. Zhao, S. Verma, R. Charest-Gaudreault and M. Audette	1283–1291
Receptors and signal transduction		
Evidence for a model of integrated inositol phospholipid pools implies an essential role for lipid transport in the maintenance of receptor-mediated phospholipase C activity in 1321N1 cells	I.H. Batty, R.A. Currie and C.P. Downes	1069–1077
Lysophosphatidic acid-mediated signal-transduction pathways involved in the induction of the early-response genes prostaglandin G/H synthase-2 and Egr-1: a critical role for the mitogen-activated protein kinase p38 and for Rho proteins	C.O.A. Reiser, T. Lanz, F. Hofmann, G. Hofer, H.D. Rupperecht and M. Goppelt-Struebe	1107–1114
Efficient CD28 signalling leads to increases in the kinase activities of the TEC family tyrosine kinase EMT/ITK/TSK and the SRC family tyrosine kinase LCK	S. Gibson, K. Truitt, Y. Lu, R. Lapushin, H. Khan, J.B. Imboden and G.B. Mills	1123–1128
CD38 binding to human myeloid cells is mediated by mouse and human CD31	A.L. Horenstein, H. Stockinger, B.A. Imhof and F. Malavasi	1129–1135

Comparative biochemical and pharmacological characterization of the mouse 5HT _{5A} 5-hydroxytryptamine receptor and the human β_2 -adrenergic receptor produced in the methylotrophic yeast <i>Pichia pastoris</i>	H.M. Weiss, W. Hasse, H. Michel and H. Reiländer	1137–1147
The role of calmodulin-binding sites in the regulation of the <i>Drosophila</i> TRPL cation channel expressed in <i>Xenopus laevis</i> oocytes by Ca ²⁺ , inositol 1,4,5-trisphosphate and GTP-binding proteins	L. Lan, H. Brereton and G.J. Barritt	1149–1158
Protein kinase A regulates the disposition of Ca ²⁺ which enters the cytoplasmic space through store-activated Ca ²⁺ channels in rat hepatocytes by diverting inflowing Ca ²⁺ to mitochondria	K.C. Fernando, R.B. Gregory and G.J. Barritt	1179–1187
Large-scale production and purification of the human green cone pigment: characterization of late photo-intermediates	P.M.A.M. Vissers, P.H.M. Bovee-Geurts, M.D. Portier, C.H.W. Klaassen and W.J. DeGrip	1201–1208
Interaction of two proline-rich sequences of cell adhesion kinase β with SH3 domains of p130 ^{Cas} -related proteins and a GTPase-activating protein, Graf	T. Ohba, M. Ishino, H. Aoto and T. Sasaki	1249–1254
Bradykinin-induced amyloid precursor protein secretion: a protein kinase C-independent mechanism that is not altered in fibroblasts from patients with sporadic Alzheimer's disease	M. Racchi, P. Ianna, G. Binetti, M. Trabucchi and S. Govoni	1271–1275
Molecular cloning of membrane cofactor protein (MCP; CD46) on B95a cell, an Epstein–Barr virus-transformed marmoset B cell line: B95a-MCP is susceptible to infection by the CAM, but not the Nagahata strain of the measles virus	Y. Murakami, T. Seya, M. Kurita, A. Fukui, S. Ueda and S. Nagasawa	1351–1359
Guanine nucleotide-dependent translocation of RhoA from cytosol to high affinity membrane binding sites in human erythrocytes	A.A. Boukharov and C.M. Cohen	1391–1398
A phogrin–aequorin chimaera to image free Ca ²⁺ in the vicinity of secretory granules	A.E. Pouli, N. Karagenc, C. Wasmeier, J.C. Hutton, N. Bright, S. Arden, J.G. Schofield and G.A. Rutter	1399–1404
Permissive role of cAMP in the oscillatory Ca ²⁺ response to inositol 1,4,5-trisphosphate in rat hepatocytes	J.-Y. Chatton, Y. Cao, H. Liu and J.W. Stucki	1411–1416
Unique repetitive sequence and unexpected regulation of expression of rat endothelial receptor for oxidized low-density lipoprotein (LOX-1)	M. Nagase, S. Hirose and T. Fujita	1417–1422
The mitogen-activated protein (MAP) kinase cascade can either stimulate or inhibit DNA synthesis in primary cultures of rat hepatocytes depending upon whether its activation is acute/phasic or chronic	R.M. Tombes, K.L. Auer, R. Mikkelsen, K. Valerie, M.P. Wymann, C.J. Marshall, M. McMahon and P. Dent	1451–1460
Characterization of the kainate-binding domain of the glutamate receptor GluR-6 subunit	K. Keinänen, A. Jouppila and A. Kuusinen	1461–1467
Cell biology and development		
Biological characterization of human fibroblast-derived mitogenic factors for human melanocytes	G. Imokawa, Y. Yada, N. Morisaki and M. Kimura	1235–1239

Corrections

Characterization of the promoter of human adipocyte hormone-sensitive lipase by J. Grober, H. Laurell, R. Blaise, B. Fabry, S. Schaak, C. Holm and D. Langin (volume 328, pages 453–461, 1997)		1481
Expression of a variant surface glycoprotein of <i>Trypanosoma gambiense</i> in procyclic forms of <i>Trypanosoma brucei</i> shows that the cell type dictates the nature of the glycosylphosphatidylinositol membrane anchor attached to the glycoprotein by F. Paturiaux-Hanocq, N. Zitzmann, J. Hanocq-Quertier, L. Vanhamme, S. Rolin, M. Geuskens, M.A.J. Ferguson and E. Pays (volume 324, pages 885–895, 1997)		1481