

## Review

- Catalytic properties of class A  $\beta$ -lactamases: efficiency and diversity** **581–598**  
 by A. Matagne, J. Lamotte-Brasseur and J.-M. Frère

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- Double-stranded-RNA-activated protein kinase (PKR) regulates  $\text{Ca}^{2+}$  stores in *Xenopus* oocytes **599–603**  
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- Sphingosine 1-phosphate signalling through the G-protein-coupled receptor Edg-1 **605–609**  
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- Identification of a *Caenorhabditis elegans*  $\Delta^6$ -fatty acid-desaturase by heterologous expression in *Saccharomyces cerevisiae* **611–614**  
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- Ubiquitin-like polypeptide conjugates to acceptor proteins in concanavalin A- and interferon  $\gamma$ -stimulated T-cells **683–688**  
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- Lysosomal sulphate transport is dependent upon sulphhydryl groups **713–717**  
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- Identification of a heparin-releasable hepatic lipase binding protein from rat liver **785–789**  
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- Cleavage of native type I collagen by human neutrophil elastase **897–902**  
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| Active sites residues of beef liver carnitine octanoyltransferase (COT) and carnitine palmitoyltransferase (CPT-II)  | N. Nic a'Bháird, V. Yankovskaya and R.R. Ramsay   | 1029–1036 |
| <b>Carbohydrates and lipids</b>  |   |           |
| Mildly oxidized low-density lipoproteins suppress the proliferation of activated CD4 <sup>+</sup> T-lymphocytes and their interleukin 2 receptor expression <i>in vitro</i>  | S. Caspar-Bauguil, M. Saadawi, A. Negre-Salvayre, M. Thomsen, R. Salvayre and H. Benoist                            | 659–666   |
| Sialomucin complex in the rat respiratory tract: a model for its role in epithelial protection   | R.R. McNeer, D. Huang, N.L. Fregien and K.L. Carraway   | 737–744   |
| Age-related changes in the structure of the keratan sulphate chains attached to fibromodulin isolated from articular cartilage   | R.M. Lauder, T.N. Huckerby, I.A. Nieduszynski and A.H.K. Plaas  | 753–757   |
| Identification of a new endogenous platelet-activating factor-like molecule in gingival crevicular fluid   | S. Antonopoulou, C.A. Demopoulos, D. Argyropoulos, G. Baltas, H. Kotsifaki and A. Diamanti-Kipiotti                 | 791–794   |
| The distribution and metabolism of arachidonate-containing phospholipids in cellular nuclei  | M.E. Surette and F.H. Chilton   | 915–921   |
| <b>Gene structure and expression</b>   |   |           |
| Identification of a novel murine glutathione S-transferase class mu gene   | W.C.C. de Bruin, R.H.M. te Morsche, M.J.M. Wagenmans, J.C. Alferink, A.J. Townsend, B. Wieringa and W.H.M. Peters   | 623–626   |
| Cloning and functional expression of a cDNA from rat jejunal epithelium encoding a protein (4F2hc) with system y <sup>+</sup> L amino acid transport activity  | S.Y.M. Yao, W.R. Muzyka, J.F. Elliott, C.I. Cheeseman and J.D. Young  | 745–752   |
| Stimulation of adipose differentiation related protein (ADRP) expression by ibuprofen and indomethacin in adipocyte precursors and in adipocytes   | H. Ye and G. Serrero  | 803–809   |
| Chromatin remodelling of the cardiac $\beta$ -myosin heavy chain gene  | W.-Y. Huang and C.-C. Liew  | 871–876   |
| Protein serine/threonine phosphatase inhibitors suppress phenobarbital-induced <i>Cyp2b10</i> gene transcription in mouse primary hepatocytes  | P. Honkakoski and M. Negishi  | 889–895   |
| The NADP <sup>+</sup> -linked glutamate dehydrogenase from <i>Trypanosoma cruzi</i> : sequence, genomic organization and expression  | P. Barderi, O. Campetella, A.C.C. Frasch, J.A. Santomé, U. Hellman, U. Pettersson and J.J. Cazzulo                  | 951–958   |
| Na <sup>+</sup> -dependent nucleoside transport in liver: two different isoforms from the same gene family are expressed in liver cells  | A. Felipe, R. Valdes, B. del Santo, J. Lloberas, J. Casado and M. Pastor-Anglada                                    | 997–1001  |
| <b>Regulation of metabolism</b>  |   |           |
| Hepatic zonation of the catabolism of arginine and ornithine in the perfused rat liver   | D. O'Sullivan, J.T. Brosnan and M.E. Brosnan  | 627–632   |
| Molecular mechanism of lysosomal sialidase deficiency in galactosialidosis involves its rapid degradation  | M.V. Vinogradova, L. Michaud, A.V. Mezentsev, K.E. Lukong, M. El-Alfy, C.R. Morales, M. Potier and A.V. Pshezhetsky | 641–650   |
| Permeable analogues of cGMP promote hepatic calcium inflow induced by the synergistic action of glucagon and vasopressin but inhibit that induced by vasopressin alone   | L. Nguyen, A. Karjalainen, E.A. Milbourne and F.L. Bygrave  | 877–880   |
| Nitric oxide inhibits glycogen synthesis in isolated rat hepatocytes   | F. Sprangers, H.P. Sauerwein, J.A. Romijn, G.M. van Woerkom and A.J. Meijer   | 1045–1049 |
| <b>Membranes and bioenergetics</b>   |   |           |
| Selective detergent-extraction from mixed detergent/lipid/protein micelles, using cyclodextrin inclusion compounds: a novel generic approach for the preparation of proteoliposomes  | W.J. DeGrip, J. VanOostrum and P.H.M. Bovee-Geurts  | 667–674   |
| Intergenic suppression of the $\gamma$ M23K uncoupling mutation in F <sub>0</sub> F <sub>1</sub> ATP synthase by $\beta$ Glu-381 substitutions: the role of the $\beta$ <sup>380</sup> DELSEED <sup>386</sup> segment in energy coupling | C.J. Ketchum, M.K. Al-Shawi and R.K. Nakamoto   | 707–712   |

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| Effect of cross-linkers on the structure and function of pig-renal sodium–glucose cotransporters after papain treatment   | J. Giudicelli, M.-F. Bertrand, S. Bilski, T.T. Tran and J.-C. Poiree                                    | <b>733–736</b>   |
| Functional sensitivity of polar surfaces on transmembrane helix 8 and cytoplasmic loop 8–9 of the <i>Escherichia coli</i> GABA (4-aminobutyrate) transporter encoded by <i>gabP</i> : mutagenic analysis of a consensus amphipathic region found in transporters from bacteria to mammals | L.A. Hu and S.C. King   | <b>771–776</b>   |
| Evidence for the intracellular location of chloride channel (ClC)-type proteins: co-localization of ClC-6a and ClC-6c with the sarco/endoplasmic-reticulum Ca <sup>2+</sup> pump SERCA2b  | G. Buyse, D. Trouet, T. Voets, L. Missiaen, G. Droogmans, B. Nilius and J. Eggermont                    | <b>1015–1021</b> |
| Bi-site activation occurs with the native and nucleotide-depleted mitochondrial F <sub>1</sub> -ATPase  | Y.M. Milgrom, M.B. Murataliev and P.D. Boyer  | <b>1037–1043</b> |
| <b>Receptors and signal transduction</b>  |   |                  |
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| Activated protein kinase C $\alpha$ associates with annexin VI from skeletal muscle   | C. Schmitz-Peiffer, C.L. Browne, J.H. Walker and T.J. Biden   | <b>675–681</b>   |
| Characterization and properties of protein kinase C from the filamentous fungus <i>Trichoderma reesei</i>   | T. Lendenfeld and C.P. Kubicek  | <b>689–694</b>   |
| Nitric oxide production in human endothelial cells stimulated by histamine requires Ca <sup>2+</sup> influx   | F. Lantoine, L. Iouzaen, M.-A. Devynck, E. Millanvoye-Van Brussel and M. David-Duflho                   | <b>695–699</b>   |
| Maturation and secretion of rat hepatic lipase is inhibited by $\alpha_{1B}$ -adrenergic stimulation through changes in Ca <sup>2+</sup> homeostasis: thapsigargin and EGTA both mimic the effect of adrenaline   | B.P. Neve, A.J.M. Verhoeven, I. Kalkman and H. Jansen   | <b>701–706</b>   |
| Intracellular but not extracellular conversion of nitroxyl anion into nitric oxide leads to stimulation of human neutrophil migration   | B.E. VanUffelen, J. Van der Zee, B.M. de Koster, J. VanSteveninck and J.G.R. Elferink                   | <b>719–722</b>   |
| Pseudo-enzymatic S-acylation of a myristoylated Yes protein tyrosine kinase peptide <i>in vitro</i> may reflect non-enzymatic S-acylation <i>in vivo</i>  | M.C. Baño, C.S. Jackson and A.I. Magee  | <b>723–731</b>   |
| Cell signalling and the hormonal stimulation of the hepatic glycine cleavage enzyme system by glucagon  | G.M. Mabrouk, M. Jois and J.T. Brosnan  | <b>759–763</b>   |
| Intracellular calcium signalling in rat parotid acinar cells that lack secretory vesicles   | P. Liu, J. Scott and P.M. Smith   | <b>847–852</b>   |
| Transmembrane-truncated $\alpha v\beta 3$ integrin retains high affinity for ligand binding: evidence for an 'inside-out' suppressor?   | R.J. Mehta, B. Diefenbach, A. Brown, E. Cullen, A. Jonczyk, D. Güssow, G.A. Luckenbach and S.L. Goodman | <b>861–869</b>   |
| Interaction <i>in vitro</i> of the product of the <i>c-Crk-II</i> proto-oncogene with the insulin-like growth factor I receptor   | A.P. Koval, V.A. Blakesley, C.T. Roberts, Jr., Y. Zick and D. LeRoith                                   | <b>923–932</b>   |
| High-efficiency expression and characterization of the synaptic-vesicle monoamine transporter from baculovirus-infected insect cells  | M.K. Sievert, D.S. Thiriot, R.H. Edwards and A.E. Ruoho   | <b>959–966</b>   |
| Regulation of interleukin 1 signalling through integrin binding and actin reorganization: disparate effects on NF- $\kappa$ B and stress kinase pathways  | P. Zhu, W. Xiong, G. Rodgers and E.E. Qwarnstrom  | <b>975–981</b>   |
| Exogenous C2-ceramide activates <i>c-fos</i> serum response element via Rac-dependent signalling pathway  | B.-C. Kim and J.-H. Kim   | <b>1009–1014</b> |
| Potential of receptor-mediated cAMP production: role in the cross-talk between vasopressin V <sub>1a</sub> and V <sub>2</sub> receptor transduction pathways  | C. Klingler, N. Ancellin, M.-B. Barrault, A. Morel and B. Corman  | <b>1023–1028</b> |
| Soluble FasR ligand-binding domain: high-yield production of active fusion and non-fusion recombinant proteins using the baculovirus/insect cell system   | J. Mahiou, J.-P. Abastado, L. Cabanie and F. Godeau   | <b>1051–1058</b> |
| <b>Cell biology and development</b>   |   |                  |
| A dehydrogenase-mediated recycling system of NADPH in plant peroxisomes   | F.J. Corpas, J.B. Barroso, L.M. Sandalio, S. Distefano, J.M. Palma, J.A. Lupiáñez and L.A. del Río      | <b>777–784</b>   |
| Importance of glucose-6-phosphate dehydrogenase in the adaptive response to hydrogen peroxide in <i>Saccharomyces cerevisiae</i>  | S. Izawa, K. Maeda, T. Miki, J. Mano, Y. Inoue and A. Kimura  | <b>811–817</b>   |

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| Ethanol potentiates the stimulatory effects of insulin and phosphocholine on mitogenesis by a zinc-dependent and rapamycin-sensitive mechanism in fibroblasts and JB6 cells   | Z. Kiss, W.H. Anderson and J.J. Mukherjee  | <b>819–826</b>   |
| The polypeptide backbone of recombinant human zona pellucida glycoprotein-3 initiates acrosomal exocytosis in human spermatozoa <i>in vitro</i>   | N.R. Chapman, E. Kessopoulou, P.D. Andrews, D.P. Hornby and C.L.R. Barratt       | <b>839–845</b>   |
| Vacuolar-type H <sup>+</sup> -ATPase regulates cytoplasmic pH in <i>Toxoplasma gondii</i> tachyzoites   | S.N.J. Moreno, L. Zhong, H.-G. Lu, W. de Souza and M. Benchimol                  | <b>853–860</b>   |
| Mouse mutants lacking the cation-independent mannose 6-phosphate/insulin-like growth factor II receptor are impaired in lysosomal enzyme transport: comparison of cation-independent and cation-dependent mannose 6-phosphate receptor-deficient mice | I. Sohar, D. Sleat, C.-G. Liu, T. Ludwig and P. Lobel                            | <b>903–908</b>   |
| A variant of the bovine noradrenaline transporter reveals the importance of the C-terminal region for correct targeting to the membrane and functional expression   | L.D. Burton, A.G. Kippenberger, B. Lingen, M. Brüß, H. Bönisch and D.L. Christie | <b>909–914</b>   |
| Increased intracellular sequestration of the insulin-regulated aminopeptidase upon differentiation of 3T3-L1 cells  | S.A. Ross, S.R. Keller and G.E. Lienhard   | <b>1003–1008</b> |