## Biochemical Journal Volume 338, part 3 15 March 1999

First published on the Internet 8 March 1999

Review Mitochondrial 3-hydroxy-3-methylglutaryl-CoA		569–582
synthase: a control enzyme in ketogenesis by F.G. Hegardt		
Research Papers		
Proteins		
Three distinct anti-allergic drugs, amlexanox, cromolyn and tranilast, bind to S100A12 and S100A13 of the S100 protein family	T. Shishibori, Y. Oyama, O. Matsushita, K. Yamashita, H. Furuichi, A. Okabe, H. Maeta, Y. Hata and R. Kobayashi	583–589
NMR structure and dynamics of monomeric neutrophil-activating peptide 2	H. Young, V. Roongta, T.J. Daly and K.H. Mayo	591–598
Ferroxidase activity of ferritin: effects of pH, buffer and Fe(II) and Fe(III) concentrations on Fe(II) autoxidation and ferroxidation	X. Yang and N.D. Chasteen	615–618
Crosslinking of DNA and proteins induced by protein hydroperoxides	S. Gebicki and J.M. Gebicki	629–636
Enzymes		
The role of Saccharomyces cerevisiae Met1p and Met8p in sirohaem and cobalamin biosynthesis	E. Raux, T. McVeigh, S.E. Peters, T. Leustek and M.J. Warren	701–708
Use of site-directed mutagenesis to probe the structure, function and isoniazid activation of the catalase/peroxidase, KatG, from <i>Mycobacterium tuberculosis</i>	B. Saint-Joanis, H. Souchon, M. Wilming, K. Johnsson, P.M. Alzari and S.T. Cole	753–760
Carbohydrates and lipids		
Phospholipid hydroperoxide cysteine peroxidase activity of human serum albumin	R. Hurst, Y. Bao, S. Ridley and G. Williamson	723–728
Plasmalogens as endogenous antioxidants: somatic cell mutants reveal the importance of the vinyl ether	R.A. Zoeller, A.C. Lake, N. Nagan, D.P. Gaposchkin, M.A. Legner and W. Lieberthal	769–776
Gene structure and expression		
Identification of an enhancer element of class Pi glutathione S-transferase gene required for expression by a co-planar polychlorinated biphenyl	M. Matsumoto, M. Imagawa and Y. Aoki	599–605
UV-A-induced decrease in nuclear factor-κB activity in human keratinocytes	M. Djavaheri-Mergny, MP. Gras, JL. Mergny and L. Dubertret	607–613
Pyrrolidine dithiocarbamate up-regulates the expression of the genes encoding the catalytic and regulatory subunits of $\gamma$ -glutamylcysteine synthetase and increases intracellular glutathione levels	A.C. Wild and R.T. Mulcahy	659–665
Roles of an Ets motif and a novel CACGAC direct repeat in transcription of the murine dihydrolipoamide dehydrogenase ( <i>Dld</i> ) gene	HS. Yang, M. Johnson and M.S. Patel	667–675
Regulation of inducible nitric oxide synthase expression in $\beta$ cells by environmental factors: heavy metals	W. Eckhardt, K. Bellmann and H. Kolb	695–700

Tumour necrosis factor- $\alpha$ regulates expression of the CCAAT-enhancer-binding proteins (C/EBPs) $\alpha$ and $\beta$ and determines the occupation of the C/EBP site in the promoter of the insulinresponsive glucose-transporter gene in 3T3-L1 adipocytes	R. Jain, S. Police, K. Phelps and P.H. Pekala	737–743
Amyloid precursor protein metabolism in fibroblasts from individuals with one, two or three copies of the amyloid precursor protein ( <i>APP</i> ) gene	M. Racchi, J.A. Johnston, F.M. Flood, R.F. Cowburn and S. Govoni	777–782
Dual role for transcription factor AP-2 in the regulation of the major fetal promoter P3 of the gene for human insulin-like growth factor II	L.E.G. Rietveld, A.M.C.B. Koonen-Reemst, J.S. Sussenbach and P.E. Holthuizen	799–806
Regulation of metabolism		
Subcellullar localization, developmental expression and characterization of a liver triacylglycerol hydrolase	R. Lehner, Z. Cui and D.E. Vance	761–768
AMP-activated kinase reciprocally regulates triacylglycerol synthesis and fatty acid oxidation in liver and muscle: evidence that <i>sn</i> -glycerol-3-phosphate acyltransferase is a novel target	D.M. Muoio, K. Seefeld, L.A. Witters and R.A. Coleman	783–791
Membranes and bioenergetics		
Phospholipid-subclass-specific partitioning of lipophilic ions in membrane-water systems	Y. Zeng, X. Han and R.W. Gross	651–658
Receptors and signal transduction		
Regulation of extracellular-signal regulated kinase and c-Jun N-terminal kinase by G-protein-linked muscarinic acetylcholine receptors	P.G. Wylie, R.A.J. Challiss and J.L. Blank	619–628
Sphingosine 1-phosphate stimulation of the p42/p44 mitogen-activated protein kinase pathway in airway smooth muscle. Role of endothelial differentiation gene 1, c-Src tyrosine kinase and phosphoinositide 3-kinase	S. Rakhit, AM. Conway, R. Tate, T. Bower, N.J. Pyne and S. Pyne	643-649
Activation of integrin- $eta_3$ -associated syk in platelets	S. Sarkar, M.M. Rooney and S.T. Lord	677-680
Stress- and cell type-dependent regulation of transfected c-Jun N-terminal kinase and mitogen-activated protein kinase kinase isoforms	L. Butterfield, E. Zentrich, A. Beekman and L.E. Heasley	681–686
AMP-activated protein kinase: an ultrasensitive system for monitoring cellular energy charge	D.G. Hardie, I.P. Salt, S.A. Hawley and S.P. Davies	717–722
Purification of $A_1$ adenosine receptor-G-protein complexes: effects of receptor down-regulation and phosphorylation on coupling	Z. Gao, A.S. Robeva and J. Linden	729–736
Cell biology and development		
Heparin and heparan sulphate protect basic fibroblast growth factor from non-enzymic glycosylation	N.N. Nissen, R. Shankar, R.L. Gamelli, A. Singh and L.A. DiPietro	637–642
Phagocytosis stimulates alternative glycosylation of macrosialin (mouse CD68), a macrophage-specific endosomal protein	R.P. da Silva and S. Gordon	687–694
SNAP-23 participates in SNARE complex assembly in rat adipose cells	JF. St-Denis, JP. Cabaniols, S.W. Cushman and P.A. Roche	709–715
Intestinal trefoil factor binds to intestinal epithelial cells and induces nitric oxide production: priming and enhancing effects of mucin	XD. Tan, QP. Liu, W. Hsueh, YH. Chen, H. Chang and F. Gonzalez-Crussi	745–751
Nuclear export of LIM-kinase 1, mediated by two leucine-rich nuclear-export signals within the PDZ domain	N. Yang and K. Mizuno	793–798

Corrections	
Bi-site activation occurs with the native and nucleotide-depleted mitochondrial F <sub>1</sub> -ATPase by Y.M. Milgrom, M.B. Murataliev and P.D. Boyer (volume 330, pages 1037–1043, 1998)	807
Cloning and characterization of a simian UDP-glucuronosyltransferase enzyme UGT2B20, a novel C <sub>19</sub> steroid-conjugating protein by O. Barbier, A. Bélanger and D.W. Hum (volume 337, pages 567–574, 1999)	807

**Contents** 

XIII