

Biochemical Journal
Volume 351, part 1
1 October 2000

First published on the Internet
26 September 2000
<http://www.BiochemJ.org>

Review

- Amino acid regulation of gene expression**
by P. Fafournoux, A. Bruhat and C. Jousse

1–12

Research Communications

Association of several small heat-shock proteins with reproductive tissues in the nematode *Caenorhabditis elegans*

L. Ding and E.P.M. Candido

13–17

Identification of pleckstrin-homology-domain-containing proteins with novel phosphoinositide-binding specificities

S. Dowler, R.A. Currie, D.G. Campbell, M. Deak, G. Kular, C.P. Downes

19–31

Research Papers

Is double C2 protein (DOC2) expressed in bovine adrenal medulla? A commercial anti-DOC2 monoclonal antibody recognizes a major bovine mitochondrial antigen

R.R. Duncan, D.K. Apps, M.P. Learmonth, M.J. Shipston and R.H. Chow

33–37

Effects of insulin-like growth factor I on basal and stimulated glucose fluxes in rat liver

R. Englisch, R. Wurzinger, C. Fürnsinn, B. Schneider, H. Frisch, W. Waldhäusl, J. Graf and M. Roden

39–45

Hydrogen peroxide attenuates store-operated calcium entry and enhances calcium extrusion in thyroid FRTL-5 cells

K. Törnquist, P.J. Vainio, S. Björklund, A. Titievsky, B. Dugué and R.K. Tuominen

47–56

Characterization of a calcium-regulation domain of the skeletal-muscle ryanodine receptor

S.M. Hayek, X. Zhu, M.B. Bhat, J. Zhao, H. Takeshima, H.H. Valdivia and J. Ma

57–65

Human 3 α -hydroxysteroid dehydrogenase isoforms (AKR1C1–AKR1C4) of the aldo-keto reductase superfamily: functional plasticity and tissue distribution reveals roles in the inactivation and formation of male and female sex hormones

T.M. Penning, M.E. Burczynski, J.M. Jez, C.-F. Hung, H.-K. Lin, H. Ma, M. Moore, N. Palackal and K. Ratnam

67–77

The second domain of intercellular adhesion molecule-1 (ICAM-1) maintains the structural integrity of the leucocyte function-associated antigen-1 (LFA-1) ligand-binding site in the first domain

P. Stanley, A. McDowall, P.A. Bates, J. Brashaw and N. Hogg

79–86

p53 protein oxidation in cultured cells in response to pyrrolidine dithiocarbamate: a novel method for relating the amount of p53 oxidation *in vivo* to the regulation of p53-responsive genes

H.-H. Wu, J.A. Thomas and J. Momand

87–93

Specificity and mechanism of action of some commonly used protein kinase inhibitors

S.P. Davies, H. Reddy, M. Caivano and P. Cohen

95–105

A novel peroxiredoxin of the plant *Sedum lineare* is a homologue of *Escherichia coli* bacterioferritin co-migratory protein (Bcp)

W. Kong, S. Shiota, Y. Shi, H. Nakayama and K. Nakayama

107–114

Cloning, expression and subcellular localization of two novel splice variants of mouse transient receptor potential channel 2

T. Hofmann, M. Schaefer, G. Schultz and T. Gudermann

115–122

The protein kinase A catalytic subunit C β 2: molecular characterization and distribution of the splice variant

S. Thullner, F. Gesellchen, S. Wiemann, W. Pyerin, V. Kinzel and D. Bossemeyer

123–132

Role of mRNA stability and translation in the expression of cytochrome c oxidase during mouse myoblast differentiation: instability of the mRNA for the liver isoform of subunit VIa	E.L. Thames, D.A. Newton, S.A. Black, Jr and L.H. Bowman	133–142
Phosphorylation of Cdc28 and regulation of cell size by the protein kinase CKII in <i>Saccharomyces cerevisiae</i>	G.L. Russo, C. van den Bos, A. Sutton, P. Coccetti, M.D. Baroni, L. Alberghina and D.R. Marshak	143–150
Regulation of the Raf-1 kinase domain by phosphorylation and 14-3-3 association	M.T. Yip-Schneider, W. Miao, A. Lin, D.S. Barnard, G. Tzivion and M.S. Marshall	151–159
The intermediates of aggrecanase-dependent cleavage of aggrecan in rat chondrosarcoma cells treated with interleukin-1	J.D. Sandy, V. Thompson, K. Doege and C. Verscharen	161–166
Novel ribofuranosylnucleoside lead compounds for potent and selective inhibitors of mitochondrial thymidine kinase-2	J. Balzarini, C. Zhu, E. De Clercq, M.-J. Pérez-Pérez, C. Chamorro, M.-J. Camarasa and A. Karlsson	167–171
Regulation of the Rac1-specific exchange factor Tiam1 involves both phosphoinositide 3-kinase-dependent and -independent components	I.N. Fleming, A. Gray and C.P. Downes	173–182
Mitochondrial phospholipid hydroperoxide glutathione peroxidase inhibits the release of cytochrome c from mitochondria by suppressing the peroxidation of cardiolipin in hypoglycaemia-induced apoptosis	K. Nomura, H. Imai, T. Koumura, T. Kobayashi and Y. Nakagawa	183–193
Phospholamban remains associated with the Ca ²⁺ - and Mg ²⁺ -dependent ATPase following phosphorylation by cAMP-dependent protein kinase	S. Negash, Q. Yao, H. Sun, J. Li, D.J. Bigelow and T.C. Squier	195–205
Stimulation of hormone-sensitive lipase activity by contractions in rat skeletal muscle	J. Langfort, T. Ploug, J. Ihlemann, C. Holm and H. Galbo	207–214
The catabolic function of the α -aminoacidic acid pathway in plants is associated with unidirectional activity of lysine–oxoglutarate reductase, but not saccharopine dehydrogenase	X. Zhu, G. Tang and G. Galili	215–220
Apoptotic signalling cascade in photosensitized human epidermal carcinoma A431 cells: involvement of singlet oxygen, c-Jun N-terminal kinase, caspase-3 and p21-activated kinase 2	W.-H. Chan, J.-S. Yu and S.-D. Yang	221–232
Effect of human neuronal tau on denaturation and reactivation of rabbit muscle D-glyceraldehyde-3-phosphate dehydrogenase	Y.-H. Chen, R.-Q. He, Y. Liu, Y. Liu and Z.-G. Xue	233–240
<i>Arabidopsis thaliana</i> and <i>Saccharomyces cerevisiae</i> <i>NHX1</i> genes encode amiloride sensitive electroneutral Na ⁺ /H ⁺ exchangers	C.P. Darley, O.C.M. van Wuytswinkel, K. van der Woude, W.H. Mäger and A.H. de Boer	241–249
Activity of the human cytochrome c ₁ promoter is modulated by E2F	K. Luciakova, P. Barath, R. Li, A. Zaid and B.D. Nelson	251–256
Bradykinin activates the Janus-activated kinase/signal transducers and activators of transcription (JAK/STAT) pathway in vascular endothelial cells: localization of JAK/STAT signalling proteins in plasmalemmal caveolae	H. Ju, V.J. Venema, H. Liang, M.B. Harris, R. Zou and R.C. Venema	257–264
Multiple isoforms of the ryanodine receptor are expressed in rat pancreatic acinar cells	T.J. Fitzsimmons, I. Gukovsky, J.A. McRoberts, E. Rodriguez, F.A. Lai and S.J. Pandol	265–271
The molecular interaction of 4'-iodo-4'-deoxydoxorubicin with Leu-55Pro transthyretin 'amyloid-like' oligomer leading to disaggregation	M.P. Sebastião, G. Merlini, M.J. Saraiva and A.M. Damas	273–279
Cloning and functional expression of a gene encoding a vacuolar-type proton-translocating pyrophosphatase from <i>Trypanosoma cruzi</i>	J.E. Hill, D.A. Scott, S. Luo and R. Docampo	281–288