

**Biochemical Journal**  
**Volume 352, part 2**  
**1 December 2000**

First published on the Internet  
24 November 2000  
<http://www.BiochemJ.org>

**Review**

- Iron regulatory proteins in pathobiology**  
by G. Cairo and A. Pietrangolo

241–250

**Research Papers**

Charge reversal of ammodytoxin A, a phospholipase A<sub>2</sub>-toxin, does not abolish its neurotoxicity

Probing the NADPH-binding site of *Escherichia coli* flavodoxin oxidoreductase

Role for the microtubule cytoskeleton in GLUT4 vesicle trafficking and in the regulation of insulin-stimulated glucose uptake

Oxidized low-density lipoprotein impairs the anti-coagulant function of tissue-factor-pathway inhibitor through oxidative modification by its high association and accelerated degradation in cultured human endothelial cells

The ornithine decarboxylase domain of the bifunctional ornithine decarboxylase/S-adenosylmethionine decarboxylase of *Plasmodium falciparum*: recombinant expression and catalytic properties of two different constructs

Human T-lymphotrophic virus type I nucleocapsid protein NCp15: structural study and stability of the N-terminal zinc-finger

All natural DR3-type vitamin D response elements show a similar functionality *in vitro*

Role of cytosolic phospholipase A<sub>2</sub> in the production of lipid mediators and histamine release in mouse bone-marrow-derived mast cells

Identification and characterization of a novel Rho-specific guanine nucleotide exchange factor

Activation of human prolegumain by cleavage at a C-terminal asparagine residue

CREB (cAMP response element binding protein) and C/EBP $\alpha$  (CCAAT/enhancer binding protein) are required for the superstimulation of phosphoenolpyruvate carboxykinase gene transcription by adenoviral E1a and cAMP

Cloning and expression of a cDNA encoding human inositol 1,4,5-trisphosphate 3-kinase C

Changes in cytoplasmic calcium determine the secretory response to extracellular cations in human parathyroid cells: a confocal microscopy study using FM1-43 dye

Molecular cloning and functional characterization of inhibitor-sensitive (mENT1) and inhibitor-resistant (mENT2) equilibrative nucleoside transporters from mouse brain

P. Prijatelj, A. Čopič, I. Križaj, F. Gubenšek and J. Pungerčar

251–255

C. Leadbeater, L. McIver, D.J. Campopiano, S.P. Webster, R.L. Baxter, S.M. Kelly, N.C. Price, D.A. Lysek, M.A. Noble, S.K. Chapman and A.W. Munro

257–266

L.M. Fletcher, G.I. Welsh, P.B. Oatey and J.M. Tavaré

267–276



S. Horie, S. Hiraishi, Y. Hirata, M. Kazama and J. Matsuda

277–285

T. Krause, K. Lüersen, C. Wrenger, T.-W. Gilberger, S. Müller and R.D. Walter

287–292

F. Bertola, C. Manigand, P. Picard, M. Belghazi and G. Precigoux

293–300

A. Toell, P. Polly and C. Carlberg

301–309

N. Nakatani, N. Uozumi, K. Kume, M. Murakami, I. Kudo and T. Shimizu

311–317

A. Blomquist, G. Schwörer, H. Schablowski, A. Psoma, M. Lehnen, K.H. Jakobs and U. Rümenapp

319–325

J.-M. Chen, M. Fortunato and A.J. Barrett

327–334

J.M. Routes, L.A. Colton, S. Ryan and D.J. Klemm

335–342

V. Dewaste, V. Pouillon, C. Moreau, S. Shears, K. Takazawa and C. Erneux

343–351

R. Mihai, T. Lai, G.J. Schofield and J.R. Farndon

353–361

A. Kiss, K. Farah, J. Kim, R.J. Garriock, T.A. Drysdale and J.R. Hammond

363–372

---

Importance of lactate dehydrogenase for the regulation of glycolytic flux and insulin secretion in insulin-producing cells	O. Alcazar, M. Tiedge and Sigurd Lenzen	<b>373–380</b>
Skin fibroblasts from spermine synthase-deficient hemizygous gyro male ( <i>Gy/Y</i> ) mice overproduce spermidine and exhibit increased resistance to oxidative stress but decreased resistance to UV irradiation	J. Nilsson, A. Gritli-Linde and O. Heby	<b>381–387</b>
Contrasting effects of alloxan on islets and single mouse pancreatic $\beta$ -cells	G. Drews, C. Krämer, M. Düfer and P. Krippeit-Drews	<b>389–397</b>
A single amino acid substitution (N297A) in the conserved NPXXY sequence of the human <i>N</i> -formyl peptide receptor results in inhibition of desensitization and endocytosis, and a dose-dependent shift in p42/44 mitogen-activated protein kinase activation and chemotaxis	J.M. Gripenetrog, A.J. Jesaitis and H.M. Miettinen	<b>399–407</b>
The peroxisomal targeting sequence type 1 receptor, Pex5p, and the peroxisomal import efficiency of alanine:glyoxylate aminotransferase	T.G. Knott, G.M. Birdsey, K.E. Sinclair, I.M. Gallagher, P.E. Purdue and C.J. Danpure	<b>409–418</b>
Induction of prostaglandin endoperoxide synthase 2 by mitogen-activated protein kinase cascades	A. McGinty, M. Foschi, Y.-W.E. Chang, J. Han, M.J. Dunn and A. Sorokin	<b>419–424</b>
$\beta 1$ -Integrin and PTEN control the phosphorylation of protein kinase C	D.B. Parekh, R.M.T. Katso, N.R. Leslie, C.P. Downes, K.J. Procyk, M.D. Waterfield and P.J. Parker	<b>425–433</b>
Modification of cysteine residues in the ChII and ChIH subunits of magnesium chelatase results in enzyme inactivation	P.E. Jensen, J.D. Reid and C.N. Hunter	<b>435–441</b>
Association of <i>FHIT</i> (fragile histidine triad), a candidate tumour suppressor gene, with the ubiquitin-conjugating enzyme hUBC9	Y. Shi, M. Zou, N.R. Farid and M.C. Paterson	<b>443–448</b>
O-glycan variability of egg-jelly mucins from <i>Xenopus laevis</i> : characterization of four phenotypes that differ by the terminal glycosylation of their mucins	Y. Guerardel, O. Kol, E. Maes, T. Lefebvre, B. Boilly, M. Davril and G. Strecker	<b>449–463</b>
Mouse pseudouridine synthase 1: gene structure and alternative splicing of pre-mRNA	J. Chen and J.R. Patton	<b>465–473</b>
Inhibition of growth-factor-induced phosphorylation and activation of protein kinase B/Akt by atypical protein kinase C in breast cancer cells	M. Mao, X. Fang, Y. Lu, R. LaPushin, R.C. Bast, Jr and G.B. Mills	<b>475–482</b>
Adrenocorticotropic hormone stimulates phosphotyrosine phosphatase SHP2 in bovine adrenocortical cells: phosphorylation and activation by cAMP-dependent protein kinase	S. Rocchi, I. Gaillard, E. Van Obberghen, E.M. Chambaz, I. Vilgrain	<b>483–490</b>
Phospholipase D in rat myometrium: occurrence of a membrane-bound ARF6 (ADP-ribosylation factor 6)-regulated activity controlled by $\beta\gamma$ subunits of heterotrimeric G-proteins	H. Le Stunff, L. Dokhac, S. Bourgois, M.-F. Bader and S. Harbon	<b>491–499</b>
The lipoxygenase pathway in tulip ( <i>Tulipa gesneriana</i> ): detection of the ketol route	A.N. Grechkin, L.S. Mukhtarova and M. Hamberg	<b>501–509</b>
PrP <sup>Sc</sup> -like prion protein peptide inhibits the function of cellular prion protein	D.R. Brown	<b>511–518</b>
<i>In vivo</i> mapping of the human adenine nucleotide translocator-2 (ANT2) promoter provides support for regulation by a pair of proximal Sp1-activating sites and an upstream silencer element	K. Luciakova, Z. Hodny, P. Barath and B.D. Nelson	<b>519–523</b>
Inhibition of the glucose-6-phosphate transporter in oilseed rape ( <i>Brassica napus</i> L.) plastids by acyl-CoA thioesters reduces fatty acid synthesis	S.R. Fox, L.M. Hill, S. Rawsthorne and M.J. Hills	<b>525–532</b>
Reaction of dopa decarboxylase with L-aromatic amino acids under aerobic and anaerobic conditions	M. Bertoldi and C. Borri Voltattorni	<b>533–538</b>
Interaction of sigma factor $\sigma^N$ with <i>Escherichia coli</i> RNA polymerase core enzyme	D.J. Scott, A.L. Ferguson, M.-T. Gallegos, M. Pitt, M. Buck and J.G. Hoggett	<b>539–547</b>

---

Prosaposin: promoter analysis and central-nervous-system-preferential elements for expression <i>in vivo</i>	Y. Sun, P. Jin, D.P. Witte and G.A. Grabowski	<b>549–556</b>
Synergistic activation of the Atlantic salmon hepatocyte nuclear factor (HNF) 1 promoter by the orphan nuclear receptors HNF4 and chicken ovalbumin upstream promoter transcription factor I (COUP-TFI)	A. McNair, S. Cereghini, H. Brand, T. Smith, C. Breillat and F. Gannon	<b>557–564</b>
Defective localization of the Wilson disease protein (ATP7B) in the mammary gland of the toxic milk mouse and the effects of copper supplementation	A.A. Michalczyk, J. Rieger, K.J. Allen, J.F.B. Mercer and M. L. Ackland	<b>565–571</b>
The involvement of protein kinase C in myosin phosphorylation and force development in rat tail arterial smooth muscle	L.P. Weber, M. Seto, Y. Sasaki, K. Swärd and M.P. Walsh	<b>573–582</b>
The conserved redox-sensitive cysteine residue of the DNA-binding region in the c-Rel protein is involved in the regulation of the phosphorylation of the protein	C. Glineur, E. Davioud-Charvet and B. Vandenbunder	<b>583–591</b>
Glucose and the ATP paradox in yeast	O.J.G. Somsen, M.A. Hoeben, E. Esgalhado, J.L. Snoep, D. Visser, R.T.J.M. van der Heijden J.J. Heijnen and H.V. Westerhoff	<b>593–599</b>