

Review Article

- Mechanism and regulation of Mg-chelatase** **321–333**
 by C.J. Walker and R.D. Willows

Research Papers

Proteins

- Troponin I and troponin T interact with triponin C to produce different Ca²⁺-dependent effects on actin–tropomyosin filament motility **335–340**
 W. Bing, I.D.C. Fraser and S.B. Marston
- Biochemical characterization of *Caenorhabditis elegans* UBC-1: self-association and auto-ubiquitination of a RAD6-like ubiquitin-conjugating enzyme *in vitro* **357–361**
 D.S. Leggett and E.P.M. Candido
- Glypican-3 is a binding protein on the HepG2 cell surface for tissue factor pathway inhibitor **577–583**
 A.E. Mast, D.A. Higuchi, Z.-F. Huang, I. Warshawsky, A.L. Schwartz and G.J. Broze, Jr.

Enzymes

- Site-directed mutagenesis of the *Actinomadura* R39 DD-peptidase **377–381**
 G.-H. Zhao, C. Duez, S. Lepage, C. Forceille, N. Rhazi, D. Klein, J.-M. Ghuyssen and J.-M. Frère
- Characterization of endoproteases from plant peroxisomes **399–405**
 S. Distefano, J.M. Palma, M. Gómez and L.A. del Río
- Recombinant expression of rat glycine N-methyltransferase and evidence for contribution of N-terminal acetylation to co-operative binding of S-adenosylmethionine **407–412**
 H. Ogawa, T. Gomi, Y. Takata, T. Date and M. Fujioka
- Gender difference in regulation of branched-chain amino acid catabolism **449–453**
 R. Kobayashi, Y. Shimomura, T. Murakami, N. Nakai, N. Fujitsuka, M. Otsuka, N. Arakawa, K.M. Popov and R.A. Harris
- Bovine retinal pigment epithelium contains novel types of phospholipase A₂ **455–460**
 M. Jacob, P.K. Weech and C. Salesse
- Thiocyanate and chloride as competing substrates for myeloperoxidase **487–492**
 C.J. van Dalen, M.W. Whitehouse, C.C. Winterbourn and A.J. Kettle
- Association of bile-salt-dependent lipase with membranes of human pancreatic microsomes is under the control of ATP and phosphorylation **527–535**
 E. Pasqualini, N. Caillol, E. Mas, N. Bruneau, D. Lexa and D. Lombardo
- Engineering the substrate specificity of *Bacillus megaterium* cytochrome P-450 BM3: hydroxylation of alkyl trimethylammonium compounds **537–544**
 C.F. Oliver, S. Modi, W.U. Primrose, L.-Y. Lian and G.C.K. Roberts
- Characterization of chicken-liver glutathione S-transferase (GST) A1-1 and A2-2 isoenzymes and their site-directed mutants heterologously expressed in *Escherichia coli*: identification of Lys-15 and Ser-208 on cGSTA1-1 as residues interacting with ethacrynic acid **593–600**
 L.-F. Liu, Y.-C. Liaw and M.F. Tam
- Aging of di-isopropyl-phosphorylated human butyrylcholinesterase **601–607**
 P. Masson, P.-L. Fortier, C. Albaret, M.-T. Froment, C.F. Bartels and O. Lockridge

Carbohydrates and lipids

- Chondroitin sulphate composition and structure in alternatively spliced CD44 fusion proteins **499–506**
 M. Piepkorn, P. Hovingh, K.L. Bennett, A. Aruffo and A. Linker
- Galactosamine in walls of slow-growing mycobacteria **519–525**
 P. Draper, K.-H. Khoo, D. Chatterjee, A. Dell and H.R. Morris

Gene structure and expression

- The heat-shock transcription factor HSF1 is rapidly activated by either hyper- or hypo-osmotic stress in mammalian cells **341–347**
 L. Caruccio, S. Bae, A.Y.-C. Liu and K.Y. Chen

Activator-protein-1 binding potentiates the hypoxia-inducible factor-1-mediated hypoxia-induced transcriptional activation of vascular-endothelial growth factor expression in C6 glioma cells	A. Damert, E. Ikeda and W. Risau	419–423
Interleukin-6-dependent and -independent regulation of the human C-reactive protein gene	B. Weinhold and U. Rütther	425–429
Multiple muscle-specific regulatory elements are associated with a DNase I hypersensitive site of the cardiac β -myosin heavy-chain gene	W.-Y. Huang, J.-J. Chen, N.-L. Shih and C.-C. Liew	507–512
Evidence for redox regulation of the transcription factor NtcA, acting both as an activator and a repressor, in the cyanobacterium <i>Anabaena</i> PCC 7120	F. Jiang, B. Mannervik and B. Bergman	513–517
Cloning and characterization of a complementary DNA for a thyroid hormone-responsive protein in mature rat cerebral tissue	G.N. Shah, J. Li, P. Schneiderjohn and A.D. Mooradian	617–623
Regulation of metabolism		
Fatty acid signals in <i>Bacillus megaterium</i> are attenuated by cytochrome <i>P</i> -450-mediated hydroxylation	N. English, C.N.A. Palmer, W.L. Alworth, L. Kang, V. Hughes and C.R. Wolf	363–368
Acute regulation of glucose transport in a monocyte–macrophage cell line: Glut-3 affinity for glucose is enhanced during the respiratory burst	N. Ahmed, M. Kansara and M.V. Berridge	369–375
Lipoprotein lipase activity in rat cardiomyocytes is stimulated by insulin and dexamethasone	H.S. Ewart, R. Carroll and D.L. Severson	439–442
Transient times in linear metabolic pathways under constant affinity constraints	M. Lloréns, J.C. Nuño and F. Montero	493–498
Membranes and bioenergetics		
The purified and reconstituted ornithine/citrulline carrier from rat liver mitochondria: electrical nature and coupling of the exchange reaction with H ⁺ translocation	C. Indiveri, A. Tonazzi, I. Stipani and F. Palmieri	349–356
Metabolism of exogenous <i>S</i> -adenosylmethionine in isolated rat hepatocyte suspensions: methylation of plasma-membrane phospholipids without intracellular uptake	F. Bontemps and G. van den Berghe	383–389
Modification of the mitochondrial F ₁ -ATPase ϵ subunit, enhancement of the ATPase activity of the IF ₁ -F ₁ complex and IF ₁ -binding dependence of the conformation of the ϵ subunit	G. Solaini, A. Baracca, E. Gabellieri and G. Lenaz	443–445
Receptors and signal transduction		
Phosphorylation of erythropoietin receptors in the endoplasmic reticulum by pervanadate-mediated inhibition of tyrosine phosphatases	J. Cohen, H. Altaratz, Y. Zick, U. Klingmüller and D. Neumann	391–397
Membrane-binding properties of phospholipase C- β_1 and phospholipase C- β_2 : role of the C-terminus and effects of polyphosphoinositides, G-proteins and Ca ²⁺	J.M. Jenco, K.P. Becker and A.J. Morris	431–437
Cholecystokinin-stimulated tyrosine phosphorylation of p125 ^{FAK} and paxillin is mediated by phospholipase C-dependent and -independent mechanisms and requires the integrity of the actin cytoskeleton and participation of p21 ^{tho}	L.J. García, J.A. Rosado, A. González and R.T. Jensen	461–472
Carboxymethylation of nuclear protein serine/threonine phosphatase X	S. Kloeker, J.C. Bryant, S. Strack, R.J. Colbran and B.E. Wadzinski	481–486
Regulation of inositol lipid-specific phospholipase C δ by changes in Ca ²⁺ ion concentrations	V. Allen, P. Swigart, R. Cheung, S. Cockcroft and M. Katan	545–552
Biological variability in the structures of diphosphoinositol polyphosphates in <i>Dictyostelium discoideum</i> and mammalian cells	C. Albert, S.T. Safrany, M.E. Bembenek, K.M. Reddy, K.K. Reddy, J.R. Falck, M. Bröcker, S.B. Shears and G.W. Mayr	553–560
Functional conformations of the nuclear 1 α ,25-dihydroxyvitamin D ₃ receptor	S. Nayeri and C. Carlberg	561–568

Metabolism and possible compartmentalization of inositol lipids in isolated rat-liver nuclei	L.R. Vann, F.B.P. Wooding, R.F. Irvine and N. Divecha	569–576
Cell biology and development		
An additional mechanism of ribosome-inactivating protein cytotoxicity: degradation of extrachromosomal DNA	E. Nicolas, I.D. Goodyer and T.F. Taraschi	413–417
Proteoglycan synthesis in haematopoietic cells: isolation and characterization of heparan sulphate proteoglycans expressed by the bone-marrow stromal cell line MS-5	Z. Drzeniek, B. Siebertz, G. Stöcker, U. Just, W. Ostertag, H. Greiling and H.-D. Haubeck	473–480
Expression of placental alkaline phosphatase does not correlate with IgG binding, internalization and transcytosis	I. Stefaner, A. Stefanescu, W. Hunziker and R. Fuchs	585–592
Molecular cloning and expression of a chloride channel-associated protein (human reticulocyte p_{Clin}) in human young red blood cells: association with actin	R.S. Schwartz, A.C. Rybicki and R.L. Nagel	609–616