

# Contents to volume 293

## Hypothesis

Co-operative binding of hsp60 may promote transfer hsp70 and correct folding of imported proteins in mitochondria (FEBS 10389) *T. Endo*

## Minireview

Molecular mechanisms for mammalian melanogenesis: Comparison with insect cuticular sclerotization (FEBS 10390) *M. Sugunan*

Interactions between the antimicrobial peptide, magainin 2, and *Salmonella typhimurium* lipopolysaccharides (FEBS 10370) *F.R. Rana, J. Blazek*

Effect of heat shock on acetylcholinesterase activity in chick muscle cultures (FEBS 10371) *J. Eichler, L. Toker, I. Silman*  
P26 – calcium binding protein from bovine retinal photoreceptor cells (FEBS 10373) *M.A. Kutuzov, B.E. Shmukler, O.N. Suslov, A.E. Dergachev, A.A. Zargarov, N.G. Abdulaev*

Nucleotide sequence of a novel  $\delta$ -endotoxin gene *cryIg* of *Bacillus thuringiensis* ssp. *galleriae* (FEBS 10374) *S.V. Smulevitch, A.L. Osterman, A.B. Shevelev, S.V. Kaluger, A.I. Karasin, R.M. Kadyrov, O.P. Zagnitko, G.G. Chestukhina, V.M. Stepanov*

Identification of different receptor types for toxic phospholipases A<sub>2</sub> in rabbit skeletal muscle (FEBS 10376) *G. Lambeau, J. Barhanin, M. Lazdunski*

Mutational analysis of the putative PLA<sub>2</sub>-inhibiting sequence of annexin I (FEBS 10377) *G. Travé, D. Lees, J.-P. Liautard, J.S. Widada*

The nucleotide and deduced amino acid sequences of porcine liver proline- $\beta$ -naphthylamidase: Evidence for the identity with carboxylesterase (FEBS 10378) *M. Matsushima, H. Inoue, M. Ichinose, S. Tsukada, K. Miki, K. Kurokawa, T. Takahashi, K. Takahashi*

Role of metal ions in the assembly and decay of the transcription initiation complex on tRNA gene in yeast extracts (FEBS 10384) *P. Szafrański, W.J. Smagowicz*

Phosphoramidon inhibits the generation of endothelin-1 from exogenously applied big endothelin-1 in cultured vascular endothelial cells and smooth muscle cells (FEBS 10379) *R. Ikegawa, Y. Matsumura, Y. Tsukahara, M. Takaoka, S. Morimoto*

Identification of 11-cis and all-trans-retinal in the photoreceptive organelle of a flagellate green alga (FEBS 10380) *G. Kreimer, F.-J. Marner, U. Brohmann, M. Melkonian*

Photooxidation of high-potential (*c*<sub>559</sub>, *c*<sub>556</sub>) and low-potential (*c*<sub>552</sub>) hemes in the cytochrome subunit of *Rhodopseudomonas viridis* reaction center: Characterization by FTIR spectroscopy (FEBS 10381) *E. Nabedryk, C. Berthomieu, A. Verméglio, J. Breton*

The 65-kDa protein from pig heart: A new substrate for *Clostridium botulinum* ADP-ribosyltransferase (exoenzyme C<sub>X</sub>) (FEBS 10385) *S.I. Hoffenberg, V.O. Rybin, A.N. Efimenko, I.N. Kurochkin, V.A. Tkachuk*

Biogenesis of the yeast vacuole (lysosome): Active site mutation in the vacuolar aspartate proteinase *yscA* blocks maturation of vacuolar proteinases (FEBS 10386) *S. Rupp, H.H. Hirsch, D.H. Wolf*

Phosphorylation of the catalytic subunit of type-1 protein phosphatase by the v-abl tyrosine kinase (FEBS 10387) *E. Villa-Moruzzi, P.D. Zonca, J.W. Crabb*

Simple techniques for the quantification of protein secondary structure by <sup>1</sup>H NMR spectroscopy (FEBS 10388) *D.S. Wishart, B.D. Sykes, F.M. Richards*

1	Band 3-hemoglobin associations: The band 3 tetramer is the oxyhemoglobin binding site (FEBS 10391) <i>P. Schuck, D. Schubert</i>	81
4	Mitochondrial preproteins en route from the outer membrane to the inner membrane are exposed to the intermembrane space (FEBS 10393) <i>J. Rassow, N. Pfanner</i>	85
11	Structure and expression of subunit A from the bovine chymaffin cell vacuolar ATPase (FEBS 10394) <i>Y.-X. Pan, J. Xu, J.E. Strasser, M. Howell, G.E. Dean</i>	89
16	Mapping the site of block by tetrodotoxin and saxitoxin of sodium channel II (FEBS 10413) <i>H. Terlau, S.H. Heinemann, W. Stühmer, M. Pusch, F. Conti, K. Imoto, S. Numa</i>	93
21	The promoter of <i>Saccharomyces cerevisiae</i> FBA1 gene contains a single positive upstream regulatory element (FEBS 10415) <i>C. Compagno, B.M. Ranz, E. Martegani</i>	97
25	Single electron reduction of 'slow' and 'fast' cytochrome-c oxidase (FEBS 10392) <i>A.J. Moody, U. Brandt, P.R. Rich</i>	101
29	Purification and characterization of human T-cell leukemia virus type I protease produced in <i>Escherichia coli</i> (FEBS 10397) <i>M. Kobayashi, Y. Ohi, T. Asano, T. Hayakawa, K. Kato, A. Kakinuma, M. Hatanaka</i>	106
34	Between the ground- and M-state of bacteriorhodopsin the retinal transition dipole moment tilts out of the plane of the membrane by only 3° (FEBS 10375) <i>H. Otto, M.P. Heyn</i>	111
37	Lipoylation of H-protein of the glycine cleavage system: The effect of site-directed mutagenesis of amino acid residues around the lipoyllysine residue on the lipoate attachment (FEBS 10396) <i>K. Fujiwara, K. Okamura-Ikeda, Y. Motokawa</i>	115
42	Inhibition of nerve growth factor-induced neurite outgrowth of PC12 cells by a protein kinase inhibitor which does not permeate the cell membrane (FEBS 10398) <i>K. Nagashima, S. Nakanishi, Y. Matsuda</i>	119
45	Detection of small GTP-binding proteins in the outer envelope membrane of pea chloroplasts (FEBS 10400) <i>Y. Sasaki, K. Sekiguchi, Y. Nagano, R. Matsuno</i>	124
49	Modified low density lipoproteins activate human macrophages to secrete immunoreactive endothelin (FEBS 10399) <i>F. Martin-Nizard, H.S. Houssaint, S. Lestavel-Delattre, P. Duriez, J.-C. Fruchart</i>	127
53	Chlorophyll catabolism in <i>Chlorella protothecoides</i> : Isolation and structure elucidation of a red bilin derivative (FEBS 10401) <i>N. Engel, T.A. Jenny, V. Mooser, A. Gossauer</i>	131
59	Targeting of ricin A chain into pea chloroplasts (FEBS 10402) <i>L.M. Roberts, J.W. Meadows, C. Robinson</i>	134
62	Electrophysiological activity of the C-peptide of the <i>Locusta</i> insulin-related peptide: Effect on the membrane conductance of <i>Locusta</i> neurones in vitro (FEBS 10403) <i>I. Bermudez, D.J. Beadle, E. Trifiliess, B. Luu, H. Hietter</i>	137
67	The presence of two types of prorenin converting enzymes in the mouse submandibular gland (FEBS 10405) <i>W.-S. Kim, K. Nakayama, K. Murakami</i>	142
72	Phorbol 12-myristate-13-acetate (PMA) stimulates a differential expression of cholecystokinin (CCK) and c-fos mRNA in a human neuroblastoma cell line (FEBS 10404) <i>H.-J. Monstein, R. Folkesson</i>	145
	Relative-residue surface-accessibility patterns reveal myoglobin and catalase similarity (FEBS 10360) <i>V.B. Cockcroft, D.J. Osguthorpe</i>	149
	Mutation of an evolutionarily conserved tyrosine residue in the active site of a human class Alpha glutathione transferase (FEBS 10409) <i>G. Stenberg, P.G. Board, B. Mannervik</i>	153
	Cysteine residues are not essential for the catalytic activity of human class Mu glutathione transferase M1a-1a (FEBS 10410) <i>M. Widersten, E. Holmström, B. Mannervik</i>	156

Impaired affinity for phenylalanine in <i>Escherichia coli</i> phenylalanyl-tRNA synthetase mutant caused by Gly-to-Asp exchange in motif 2 of class II tRNA synthetases (FEBS 10412) <i>P. Kast, C. Wehrli, H. Hennecke</i>	160	The DNA sequence specificity of cyanomorpholinoadriamycin (FEBS 10420) <i>C. Cullinane, D.R. Phillips</i>	195
Bacterioferritins and ferritins are distantly related in evolution: Conservation of ferroxidase-centre residues (FEBS 10417) <i>S.C. Andrews, J.M.A. Smith, S.J. Yewdall, J.R. Guest, P.M. Harrison</i>	164	Overproduction of human Mn-superoxide dismutase modulates paraquat-mediated toxicity in mammalian cells (FEBS 10425) <i>D.K. St. Clair, T.D. Oberley, Y.-S. Ho</i>	199
A novel conformationally restricted protein kinase C inhibitor, Ro 31-8425, inhibits human neutrophil superoxide generation by soluble, particulate and post-receptor stimuli (FEBS 10406) <i>R.E. Muid, M.M. Dale, P.D. Davis, L.H. Elliott, C.H. Hill, H. Kumar, G. Lawton, B.M. Twomey, J. Wadsworth, S.E. Wilkinson, J.S. Nixon</i>	169	Cleavage reaction of a synthetic oligoribonucleotide corresponding to the autocleavage site of a precursor RNA from bacteriophage T4 (FEBS 10423) <i>H. Hosaka, T. Ogawa, K. Sakamoto, S. Yokoyama, H. Takaku</i>	204
Uncoupling protein is expressed in liver mitochondria of cold-exposed and newborn rats (FEBS 10407) <i>Y. Shinohara, A. Shima, M. Kamida, H. Terada</i>	173	Fast cell membrane displacements in B lymphocytes: Modulation by dihydrocytochalasin B and colchicine (FEBS 10422) <i>L. Mittelman, S. Levin, R. Korenstein</i>	207
Repression of the CaMV 3SS promoter by the octopine synthase enhancer element (FEBS 10408) <i>C. Gatz, J. Katzen, S. Prat, A. Heyer</i>	175	Decline of signal transduction by phospholipase C $\gamma$ 1 in IMR 90 human diploid fibroblasts at high population doubling levels (FEBS 10424) <i>G.G. Choudhury, V.L. Sylvia, A.Y. Sakaguchi</i>	211
Inositol triphosphate produces different patterns of cytoplasmic Ca <sup>2+</sup> spiking depending on its concentration (FEBS 10411) <i>C.C.H. Petersen, E.C. Toescu, B.V.L. Potter, O.H. Petersen</i>	179	Ethanol and lipid metabolism: Differential effects on liver and brain microsomes (FEBS 10426) <i>M.C. Sanchez-Amate, J.M. Zurera, M.P. Carrasco, J.L. Segovia, C. Marco</i>	215
Correlation of apoproteins with the genes of the major chlorophyll a/b binding protein of photosystem II in <i>Arabidopsis thaliana</i> : Confirmation for the presence of a third member of the LHC IIb gene family (FEBS 10414) <i>D.T. Morishige, J.P. Thornber</i>	183	Magainins affect respiratory control, membrane potential and motility of hamster spermatozoa (FEBS 10427) <i>A. de Waal, A.V. Gomes, A. Mensink, J.A. Grootegoed, H.V. Westerhoff</i>	219
Protein phosphorylation stimulates the rate of malate uptake across the peribacteroid membrane of soybean nodules (FEBS 10418) <i>L.-J. Ouyang, J. Whelan, C.D. Weaver, D.M. Roberts, D.A. Day</i>	188	Book Reviews & Booklist 104	224
The $\gamma$ 3-subunit of the GABA <sub>A</sub> -receptor confers sensitivity to benzodiazepine receptor ligands (FEBS 10419) <i>F. Knoflach, T. Rhynier, M. Villa, S. Kellenberger, U. Drescher, P. Malherbe, E. Sigel, H. Möhler</i>	191	FEBS News	234
		Errata & Corrigenda	236
		Author Index to volume 293	237
		Contents to volume 293	240