

CURRICULUM VITAE

Name ERNEUX Christophe
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STUDIES AND DIPLOMAS OBTAINED

- 1971-1975 Licence en Sciences Chimiques (section biochimie) (BSc Biochemistry) Université Libre de Bruxelles, Belgium
Graduated with "grande distinction" (magna cum laude)
Undergraduate project: "Contribution à l'étude de l'hydrolyse des nucléotides cycliques dans la glande thyroïde" (Contribution to the study of the hydrolysis of cyclic nucleotides in the thyroid gland).
- March 1981 Docteur en Sciences Chimiques (section biochimie) (PhD Biochemistry) Université Libre de Bruxelles, Belgium
Graduated with "la plus grande distinction" (summa cum laude)
Doctoral thesis: "Contribution à l'étude des phosphodiesterases dans la glande thyroïde" (Contribution to the study of phosphodiesterases in the thyroid gland).
- July 1985 Agrégé de l'Enseignement Supérieur en Biochimie et Pharmacologie (Qualification as teacher at university level of biochemistry and pharmacology) Université Libre de Bruxelles
Project for certification: "Le système des phosphodiesterases des nucléotides cycliques: enzymologie et rôle physiologique" (Cyclic nucleotide phosphodiesterases: their enzymology and physiological role).

MILITARY SERVICE

- 1982-1983 Temporary Professor in Basic Sciences, Ecole Royale des Cadets.

ACADEMIC CAREER

- 1986-1991 "Premier Assistant", Université Libre de Bruxelles
- 1991-1993 "Chef de Travaux", Université Libre de Bruxelles
- 1993-2002 "Chargé de cours associé temps plein".
- 2002 -2009 "Chargé de cours à l'ULB".
- 1-10-2009 "Professeur à l'ULB".

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SCIENTIFIC AWARD

Prix Auguste Slosse 1990

Prix Glaxo-SmithKline (1998-2000) together with Stéphane Schurmans

UNIVERSITY EXPERIENCE IN RESEARCH

- Purification and characterization of multiple forms of phosphodiesterases in the thyroid - study of the metabolism and the role of cyclic nucleotides in this tissue (1975-1985). Purification and characterization of the enzymes involved in the catabolism and metabolism of inositol phosphates and phosphoinositides. Study of the metabolism of inositol 1,4,5-trisphosphate in the brain, the thyroid and in endothelial cells in culture (from 1985). Assay of the various inositol phosphates and phosphoinositides in intact cells following cell labelling and HPLC techniques. Study of the biochemical roles of various enzymes derived from the inositol 1,4,5-trisphosphate metabolism.
- Phosphorylation of purified enzymes by cAMP dependent protein kinase, protein kinase C and calmodulin kinase II.
- First reported molecular cloning of:
 - rat and human inositol 1,4,5-trisphosphate 3-kinase in brain, thyroid and placenta (isoenzymes A , B and C),
 - human inositol/phosphatidylinositol 5-phosphatases (the inositol 1,4,5-trisphosphate 5-phosphatase type I, the SH2 domain containing inositol phosphatase referred to as SHIP1 and a new SH2-domain-containing protein closely related to SHIP referred to as SHIP2).
- Experimentation using genetic engineering to obtain recombinant isoenzymes expressed in bacteria or mammalian cells (from 1985).
- Responsible for undergraduate, doctoral and post-doctoral projects in Biochemistry: Dominique Couchie, Françoise Miot, Isabelle Foucart, Hémoisa Passareiro, Anne Delvaux, Kazunaga Takazawa, Christian Marschal, Benoît Verjans, Manuela Lemos, David Communi, Valérie Vanweyenbergh, Frédérick Hollande, Clive D'Santos, Florence De Smedt, Hafida Hazouri, Xavier Pesesse, S. Bendahmane, Lyndsay A Drayer, Daniel Blero, Valérie Dewaste, Eric Muraille, Alex Orduz Serrano, Nathalie Paternotte, Katrien Backers, Jing Zhang, Fabrice Vandeput, Alexandre Leyman, Alionka Bostan, Laurence Deneubourg, Williams Elong Edimo, Asli Ergun (Erasmus student), Xiao-Jun Choi.
- Supervision of doctoral theses presented at Université Libre de Bruxelles:
Faculty of Sciences:
D. Couchie (1983), "Contribution à la caractérisation d'un système de plusieurs formes enzymatiques: les phosphodiesterases".
F. Miot (1986), "Contribution à l'étude des mécanismes de contrôle négatif de l'accumulation d'AMPC par stimulation de l'activité phosphodiesterase".
H. Passareiro (1990), "Contribution à la caractérisation biochimique des protéines du cytosquelette".

B. Verjans (1993), "Etude du métabolisme des inositols phosphates sur cellule intacte et enzymes purifiées".

D. Communi (1995), "Etude de la relation structure/fonction de l'enzyme de synthèse de l'inositol 1,3,4,5-tetrakisphosphate: l'inositol 1,4,5-trisphosphate 3-kinase".

V. Vanweyenberg (1996). "Mise en évidence d'une hétérogénéité biochimique et moléculaire de l'inositol 1,4,5-trisphosphate 3-kinase".

X. Pesesse (2000). "Clonage moléculaire et caractérisation de SHIP2, une nouvelle inositol et phosphatidylinositol polyphosphate 5-phosphatase qui contrôle la voie de signalisation de la PI 3-kinase".

V. Dewaste (2002) "Clonage moléculaire des isoformes B et C de l'inositol 1,4,5-trisphosphate 3-kinase et influence de leur surexpression sur la réponse calcique".

N. Paternotte (2005) « Contribution à l'étude biochimique de SHIP2 dans la signalisation intracellulaire : son interaction avec la Vinexine et son rôle dans l'adhérence cellulaire ».

Faculty of Medicine:

A. Delvaux (1990), "Contribution à la caractérisation biochimique du métabolisme de l'inositol 1,4,5-trisphosphate".

F. De Smedt (1997), "Etude du rôle fonctionnel de l'inositol 1,4,5-trisphosphate 5-phosphatase de type I".

N. Markadiou (as co promotor with Prof Renaud Beauwens, 2005), "Etude du rôle de la phosphatidylinositol 3-kinase dans la réabsorption du sodium par un modèle de tubule distal et collecteur du rein".

D. Blero (2006), "Contribution à la caractérisation d'une nouvelle phosphatidylinositol 3,4,5 trisphosphate 5-phosphatase appelée SHIP2".

J. Zhang (2007), "The role of SHIP2 in response to serum and oxydative stress".

- Member of the Biochemical Journal's Editorial Advisory Panel from 1997.

Regular referee of:

Science,
PNAS,
Biochem J,
Oncogene,
J. Biol. Chem.,
J. Cell. Science,
J. Cellular Physiology,
FEBS letters,
FEBS J.,
Biochem. Biophys. Res. Commun.,
Biochemistry,
BMC Biochemistry,
ChemBioChem.
Biochem Pharmacology,
J. Cellular and Molecular Medicine.

- Member of the FWO commission Medical Biochemistry from 10/10/2006 to 30/09/2009.

- Member of Jury of thesis of PhD students :

ULB faculty of Sciences and Medicine, several times
UCL faculty of Medicine, two times (Drs Johan Deprez and Véronique Mouton).
KUL faculty of Medicine (Drs Kasri, Benoit Devogelaere and Karen Swarenpoel)
Université de Groningen, faculty of Biochemistry (Holland),
Université d'Amiens, faculty of Biochemistry (France),
Institut Curie à Paris (France),
Université de Toulouse, faculty of Medicine (France), three times (Drs Sylvie Giuriato,
Carole Pendaries, Sonia Severin),
Université de Marseille (France),
Université de Dundee, faculty of Biochemistry (UK).

- Member and President of the "collège de chimie biochimie" from 2008 Faculty of Medicine, Free University of Brussels (ULB).

UNIVERSITY TEACHING

- General Biochemistry course given to second year Dentistry students (from 1991 together with Prof. Dumont and from 1996 responsible for this teaching at the faculty of Medicine ULB). BMOL-G-201 – Biochimie – TH 6 ECTS – TP 2 ECTS – BA2 en sciences dentaires.
- Intracellular signalling course given to last year Medical Biochemistry students from 2000 at the faculty of Medicine ULB. From 2007, this course is given together with with Isabelle Pirson and Bernard Robaye BMOL-G-401 – TH 5 ECTS.
- Invited to participate in a signaling course as "educational special lecturer" in The 4th Japan-Korea Conference on Cellular Signaling for Young Scientists » 12-14 July 2005 Kyushu University in Kukuoka Japan.
- Invited to present seminars in both Belgium and foreign universities (UCL, University of Gent, University of Toulouse, Marseille, London, Groningen, Bremem, NIH, Vanderbilt University, etc).

PATENT

Screening methods using Src-Homology Inositol Phosphatase-2 (SHIP2)

US patent 6,703,215 (together with Stéphane Schurmans) 9/3/04.

NATIONAL COLLABORATIONS

- Collaborations within IRIBHM: Drs. G. Vassart, JE Dumont, J Van Sande, F. Miot, D. Communi, S. Schurmans, Pierre Vanderhaeghen, I. Pirson, F. Libert, A. Lefort.
- Microsequencing of rat brain inositol 1,4,5-trisphosphate 3-kinase, type I inositol 5-phosphatase and the SH2 containing inositol 5-phosphatase (Prof J. Vanderkerckhove, University of Gent).
- Protein phosphorylation and insulin signalling (Profs Louis Hue and Mark Rider, Université Catholique de Louvain).
- Ca²⁺ measurements in inositol phosphate kinase and phosphatase transfected cells (Prof L. Missiaen, Katholieke Universiteit Leuven).
- Inositol phosphate metabolism in yeast *S. cerevisiae* (Profs E. Dubois and F. Messenguy, Université Libre de Bruxelles).
- Simulations of the inositol phosphate/Ca²⁺ metabolism (Dr Geneviève Dupont, Université Libre de Bruxelles).
- Signalling of the proto oncogene cKIT (Dr Jean-Marie Vanderwinden, Université Libre de Bruxelles).
- Signalling of the Na⁺ current in insulin stimulated renal cells (Prof Renaud Beauwens, Université Libre de Bruxelles).
- Signalling of the oxidative stress in human T lymphocytes (Prof Jacques Piette, Université of Liège).
- Phosphorylation studies on SHIP2 (Prof Etienne Waelkens, Joseph Goris Katholieke Universiteit Leuven).
- Signalling via PDK/PKB axis in heart (Dr. Luc Bertrand, Université Catholique de Louvain).
- Role of connexin channels in the propagation of cell death (Prof Luc Leybaert, University of Gent).

INTERNATIONAL COLLABORATIONS

- Pharmacology of phosphodiesterases (Profs J.G. Hardman et J. Wells, Vanderbilt University, USA). Invited for 2 months in 1978 (FNRS grant).
- Physiological regulation of phosphodiesterases (1978, Prof. W. Butcher, Houston University, USA).
- Work carried out with cyclic nucleotide analogs (1981-1988, Prof. B. Jastorff, Bremen University, Germany).
- Work on the purified EGF receptor (Profs S. Cohen and D. Garbers, Vanderbilt University, USA). Invited for 6 months in 1982 ("Chargé de Recherches FNRS").
- Study of the interaction between calmodulin and microtubules (Prof. J. Nunez, Université de Paris, France).

- Metabolism of inositol trisphosphate and phosphoinositides in *Dictyostelium discoideum* (Prof. P. van Haastert, Groningen University, The Netherlands).
- Study of the role of inositol 1,4,5-trisphosphate 3-kinase by microinjection of antisense RNA in neuronal cells and localisation of the A-isoform in spines (Prof. R. Irvine, Cambridge, U.K.).
- Metabolism of highly phosphorylated inositol polyphosphates leading to the first report describing an inositol 1,4,5,6-tetrakisphosphate 3-kinase activity (Dr. S. Shears, USA).
- Pharmacology of the inositol 1,4,5-trisphosphate receptor (Prof. Nahorski, University of Leicester, U.K)
- Pharmacology of the inositol 1,4,5-trisphosphate 3-kinase, 5-phosphatase and SHIP using inositol phosphate analogs (Prof. Hirata, Kyushu University, Japan and Prof. Barry Potter, University of Bath, UK). Role of PRIP-1, a novel $\text{Ins}(1,4,5)\text{P}_3$ binding protein in $\text{Ins}(1,4,5)\text{P}_3$ - mediated Ca^{2+} signaling.
- Study of the metabolism of phosphatidylinositol 3,4,5-trisphosphate by recombinant 5-phosphatases (Prof. Parker Imperial Cancer Research Fund, London, U.K.).
- Study of the metabolism of phosphatidylinositol 3,4,5-trisphosphate in human platelets stimulated by thrombin, dependence of SHIP phosphatases (Prof Hugues Chap. and Dr. Bernard Payrastre INSERM U. 326 University of Toulouse, France).
- Structural Studies by X ray cristallography (Dr Vincent Villeret, director of research CNRS, Lille, France).
- Study of the Ca^{2+} oscillations between connected hepatocytes (Dr. Laurent Combettes. INSERM U442, UPS, bât 443, 91405 Orsay).
- Study of inositol(1,4,5) P_3 3-kinase B distribution (Dr. George Banting, University of Bristol, UK).
- Study of the inositol phosphate metabolism in the nucleus (Dr. Lucio Cocco, University of Bologna, Italy).
- Pharmacology of inositol 1,4,5-trisphosphate 3-kinase, 5-phosphatase type I and SHIP2 by means of phosphorylated benzene molecules (Prof Barry Potter, University of Bath, UK).
- Effect of Analogues of phosphatidylinositol 3,4,5-trisphosphate (Prof Glenn D. Prestwich, University of Utah, USA).
- Study of PTEN inhibitors (Dr. Rüdiger Woscholski Division of Cell and Molecular Biology, Imperial College London, Exhibition Road, London SW7 2AZ, UK).
- Protein partners of ARAP3-SHIP2 (Dr. Johannes L. Bos, University of Utrecht, Holland).
- Study of transgenic mice with Type I 5-phosphatase Prof Phil Haydon, Director, Center for Dynamic Imaging of Nervous System Function, Department of Neuroscience University of Pennsylvania School of Medicine (USA).
- Study of inositol phosphate multikinase in ES cells John D. York, Investigator, Howard Hughes Medical Institute. Department of Pharmacology and Cancer Biology Duke University Medical Center, USA
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PRESENTATIONS GIVEN AT INTERNATIONAL SCIENTIFIC MEETINGS (BY INVITATION)

- First Symposium on Cyclic Nucleotide Phosphodiesterases, Houston, USA March 1982. "Cyclic nucleotide derivatives as probes of phosphodiesterase catalytic and regulatory sites".
- 15th FEBS Meeting, Brussels, Belgium June 1983. "Multiple forms of cyclic nucleotide phosphodiesterase".
- Hormones and Cell regulation, Saint Odile, France October 1984. "The control mechanisms of cyclic nucleotide phosphodiesterase activities: regulation potential of cAMP catabolism".
- cGMP Action Workshop, Miami, USA November 1987. "Effect of cGMP analogs of cGMP-binding phosphodiesterase".
- Regional Meeting of the International Union of Physiological Sciences, Prague, Czechoslovakia July 1991. "Intracellular control of inositol phosphates by their metabolizing enzymes".
- Calcium signalling Limburgs Universitair Centrum, LUC Diepenbeek, Belgium "inositol phosphates kinase and phosphatases in brain", May 1993.
- 4th "International Union of Biochemistry and Molecular Biology" (IUBMB) Conference in Edinburgh "The Life and Death of the Cell" 14-17 July 1996 "inositol 1,4,5-trisphosphate metabolism"
- First meeting of the Belgium Society for Neuroscience May 1996 "inositol 1,4,5-trisphosphate metabolism".
- Hormones and Cell Regulation, Saint Odile, France September 1996. "The metabolism of inositol 1,4,5-trisphosphate in brain".
- Second meeting of the Belgium Society for Neuroscience May 1997 "cloning and expression of an SH2 containing inositol phosphate phosphatase SHIP".
- Spring meeting 1998 of the Belgian Society for Cell Biology "The control mechanisms of inositol 1,4,5-trisphosphate by its own metabolism"
- Annual Meeting of the German Society of Biochemistry and Molecular Biology September 1999 in Hamburg "The diversity and possible functions of the inositol polyphosphate 5-phosphatases"
- Haria International Forum 2000 (HIF 2000) November 1-5 2000 in Harima Science Garden City, Hyogo, Japan "The diversity and possible functions of the inositol polyphosphate 5-phosphatases"
- Kyushu University for Collaborative Research International Conference November 6 2000 Japan "The diversity and possible functions of the inositol polyphosphate 5-phosphatases"
- American Diabetes Association ADA 61st Scientific Session June 22-26 2001 Philadelphia USA « SHIP2 : molecular cloning, tissue distribution and potential role in

insulin sensitivity »

- Keystone Symposium « Regulation of Cellular responses by lipid mediators » February 1-6, 2002 Taos, New Mexico « The lipid phosphatase SHIP2 controls insulin sensitivity »
- 43 International Symposium on Regulation of Enzyme Activity and Synthesis in Normal and Neoplastic Tissues « The lipid phosphatase SHIP2 controls insulin sensitivity » Chairman of the Symposium George Weber. September 23-24, 2002.
- FEBS meeting Brussels, Belgium: Chairman and Lecturer workshop phosphatidylinositol/inositol phosphate July 3-8, 2003.
- 60th Harden Conference – Inositol Phosphates and Lipids – Regulation and Functions. St Martin's College, Ambleside, Lake District, UK 13-18 August 2005 « PtdIns(3,4,5)P₃ modulation in SHIP2 deficient MEF cells ».
- 46 International Symposium on Regulation of Enzyme Activity and Synthesis in Normal and Neoplastic Tissues « PtdIns(3,4,5)P₃ modulation in SHIP2 deficient MEF cells » Chairman of the Symposium Lucio Cocco. October 3-4, 2005.
- Abruzzo Symposia meeting "Phosphoinositides on the slopes" 17th 20th March 2007. "The control of inositol phosphates and phosphoinositides by phosphatases".
- Inositide Signaling Symposia, November 4-7, 2007, at Janelia Farm organized by John York. "The deactivation of I(1,4,5)P₃ and phosphoinositides by I(1,4,5)P₃ 3-kinases and phosphatases".
- Hormones and Cell Regulation, Obernai, France 15-18 September 2009 "the control mechanisms of SHIP phosphatases".
- 50 International Symposium on Regulation of Enzyme Activity and Synthesis in Normal and Neoplastic Tissues Chairman of the Symposium Lucio Cocco. October 3-4, 2009.

LIST OF PUBLICATIONS

Scientific work published in international journals

PubMed reveals 175 publications Feb 2010

I. With selection comitee

1) First or last author

1977-1980

1. **Erneux C.**, Van Sande J., Dumont J.E. and Boeynaems J.M. Cyclic nucleotides hydrolysis in the thyroid gland. Eur.J.Biochem. 1977 72: 137-147.
IF 3.5
2. **Erneux C.**, Couchie D. and Dumont J.E. Characterization of horse thyroid cyclic nucleotide phosphodiesterases. Eur.J.Biochem. 1980 104: 297-304.
IF 3.5
3. **Erneux C.**, Boeynaems J.M. and Dumont J.E. Theoretical analysis of the consequences of cyclic nucleotide phosphodiesterase negative cooperativity. Biochem.J. 1980 192: 241-246.
IF 4.2

1981-1985

4. **Erneux C.**, Couchie D., Dumont J.E., Stec W.J., Garcia Abbad E., Petridis G. and Jastorff B. Specificity of cyclic GMP activation of a multi-substrate cyclic nucleotide phosphodiesterase from rat liver. Eur.J.Biochem. 1981 115: 503-510.
IF 3.5
5. Miot F. and **Erneux C.** Characterization of the soluble cyclic nucleotide phosphodiesterases in *Xenopus laevis* oocytes: evidence for a calmodulin-dependent enzyme. Biochim.Biophys.Acta 1982 701: 253-259.
IF 2.5
6. **Erneux C.**, Miot F., Boeynaems J.M. and Dumont J.E. Paradoxical stimulation by 1-methyl-3-isobutylxanthine of rat liver cyclic AMP phosphodiesterase activity. FEBS Lett. 1982 142: 251-254.
IF 3.8
7. Miot F., Dumont J.E. and **Erneux C.** The involvement of a calmodulin-dependent phosphodiesterase in the negative control of carbamylcholine on cyclic AMP levels in dog thyroid. FEBS Lett. 1983 151: 273-276.
IF 3.8
8. **Erneux C.**, Cohen S. and Garbers D.L. The kinetics of tyrosine phosphorylation by the purified epidermal growth factor kinase of A-431 cells. J.Biol.Chem. 1983 258: 4137-4142.
IF 7.4
9. Couchie D., Petridis C., Jastorff B. and **Erneux C.** Characterization of phosphodiesterase catalytic sites by means of cyclic nucleotide derivatives. Eur.J.Biochem. 1983 136: 571-575.
IF 3.5

10. **Erneux C.**, Passareiro H. and Nunez J. Interaction between calmodulin and microtubule-associated proteins prepared at different stages of brain development. *FEBS Lett.* 1984 172: 315-320.
IF 3.8
11. Miot F., Van Haastert P. and **Erneux C.** Specificity of cGMP binding to a purified cGMP-stimulated phosphodiesterase from bovine adrenal tissue. *Eur.J.Biochem.* 1985 149: 59-65.
IF 3.5
12. **Erneux C.**, Miot F., Van Haastert P. and Jastorff B. The binding of cyclic nucleotide analogs to a purified cGMP-stimulated phosphodiesterase in bovine adrenal tissue. *J. Cycl. Nucl. Prot. Phosphoryl. Res.* 1985 10: 463-472.
13. **Erneux C.**, Van Sande J., Miot F., Cochaux P., Decoster C. and Dumont J.E. A mechanism in the control of intracellular cAMP level: the activation of a calmodulin-sensitive phosphodiesterase by a rise of intracellular free calcium. *Mol.Cell Endocrinol.* 1985 43: 123-143.
IF 2.6

1986-1990

14. **Erneux C.**, Van Sande J., Jastorff B. and Dumont J.E. Modulation of cyclic AMP action in the dog thyroid by its agonist and antagonist Sp- and Rp-adenosine 3',5'-monophosphorothioate. *Biochem.J.* 1986 243: 193-197.
IF 4.2
15. **Erneux C.**, Delvaux A., Moreau C. and Dumont J.E. Characterization of D-myo-inositol 1,4,5-trisphosphate phosphatase in rat brain tissue. *Biochem.Biophys.Res.Comm.* 1986 194: 351-358.
IF 3.2
16. Delvaux A., Dumont J.E. and **Erneux C.** The metabolism of inositol 4-monophosphate in rat mammalian tissues. *Biochem.Biophys.Res.Comm.* 1987 145: 59-65.
IF 3.2
17. **Erneux C.**, Delvaux A., Moreau C. and Dumont J.E. The dephosphorylation pathway of D-myo-inositol 1,3,4,5-tetra-kisphosphate in rat brain. *Biochem.J.* 1987 247: 635-639.
IF 4.2
18. Boeynaems J.M., Piroton S., Van Coevorden A., Raspé E., Demolle D. and **Erneux C.** P2-purinergic receptors in vascular endothelial cells: from concept to reality. *J.Receptor Res* 1988 8: 121-132.
IF 1.5
19. Takazawa K., Passareiro H., Dumont J.E. and **Erneux C.** Ca⁺⁺/calmodulin-sensitive inositol 1,4,5-trisphosphate 3-kinase in rat and bovine brain tissue. *Biochem.Biophys.Res.Comm.* 1988 153: 632-641.
IF 3.2
20. **Erneux C.**, Lemos M., Verjans B., Vanderhaeghen P., Delvaux A. and Dumont J.E. Soluble and particulate InsP3/InsP4 5-phosphate in bovine brain. *Eur.J.Biochem.* 1989 181: 317-322.
IF 3.5

21. Lemos M., Dumont J.E. and **Erneux C.** Identification of the bovine brain Ins(1,4,5)P₃ 5-phosphatase after SDS-polyacrylamide gel electrophoresis. FEBS Lett. 1989 249: 321-323.
IF 3.8
 22. Takazawa K., Passareiro H., Dumont J.E. and **Erneux C.** Purification of bovine brain inositol 1,4,5-trisphosphate 3-kinase. Biochem.J. 1989 261: 485-488.
IF 4.2
 23. Takazawa K. and **Erneux C.** Inhibition of inositol 1,4,5-trisphosphate 3-kinase by heparin. Basal and Ca²⁺/calmodulin assay conditions. Biochem.J. 1989 261: 1059.
IF 4.2
 24. Delvaux A., Dumont J.E. and **Erneux C.** The kinetics of inositol 1,4-bisphosphate 1-phosphatase in bovine brain. Second Messengers Phosphoproteins 1989 12: 281-288.
 25. Takazawa K., Lemos M., Delvaux A., Lejeune C., Dumont J.E. and **Erneux C.** Rat brain InsP₃ 3-kinase: purification, calcium sensitivity and antibody production. Biochem.J. 1990 268: 213-217.
IF 4.2
 26. Delvaux A., Lemos M., Moreau C. and **Erneux C.** Regeneration of enzymatic activity after sodium dodecyl sulfate/polyacrylamide gel electrophoresis and zinc acetate staining: the example of inositol 1,4,5-trisphosphate 5-phosphatase. Anal.Biochem. 1990 188: 219-221.
IF 2
 27. Takazawa K., Vandekerckhove J., Dumont J.E. and **Erneux C.** Cloning and expression in Escherichia coli of a rat brain cDNA encoding a Ca²⁺/calmodulin-sensitive inositol 1,4,5-trisphosphate 3-kinase. Biochem.J. 1990 272: 107-112.
IF 4.2
 28. Verjans B., Hollande F., Moreau C., Lejeune C. and **Erneux C.** Soluble and particulate inositol 1,4,5-trisphosphate 5-phosphatases show common antigenic determinants. Cell Signal. 1990 2: 595-599.
IF 2.1
 29. Takazawa K., Perret J., Dumont J.E. and **Erneux C.** Human brain inositol 1,4,5-trisphosphate 3-kinase cDNA sequence. Nucleic.Acids.Res. 1990 18: 7141.
IF 4.2
- 1991-1995
30. Van Haastert P., Janssens P., and **Erneux C.** Sensory transduction in eukaryotes. A comparison between Dictyostelium and vertebrate cells. Eur.J.Biochem. 1991 195: 289-303.
IF 3.5
 31. Takazawa K., Perret J., Dumont J.E. and **Erneux C.** Molecular cloning and expression of a human brain inositol 1,4,5-trisphosphate 3-kinase. Biochem.Biophys.Res.Commun. 1991 174: 529-535.
IF 3.2
 32. **Erneux C.** and Takazawa K. Intracellular control of inositol

- phosphates by their metabolizing enzymes. *Trends.Pharmacol.Sci.* 1991 12: 174-176.
IF 17.6
33. Piroton S., Verjans B., Boeynaems J.M. and **Erneux C.** Metabolism of inositol phosphates in ATP-stimulated vascular endothelial cells. *Biochem.J.* 1991 277: 103-110.
IF 4.2
 34. Takazawa K., Perret J., Dumont J.E. and **Erneux C.** Molecular cloning and expression of a new putative inositol 1,4, 5-trisphosphate 3-kinase isoenzyme. *Biochem.J.* 1991 278: 883-886.
IF 4.2
 35. Hollande F., Verjans B. and **Erneux C.** Regeneration of soluble and particulate inositol 1,4,5-trisphosphate 5-phosphatase after SDS/PAGE. *Biochem.J.* 1991 277: 293-294.
IF 4.2
 36. Takazawa K. and **Erneux C.** Identification of residues essential for catalysis and binding of calmodulin in rat brain inositol 1,4,5-trisphosphate 3-kinase. *Biochem.J.* 1991 280: 125-129.
IF 4.2
 37. Verjans B., Lecocq R., Moreau C. and **Erneux C.** Purification of bovine brain inositol-1,4,5-trisphosphate 5-phosphatase. *Eur.J.Biochem.* 1992 204: 1083-1087.
IF 3.5
 38. **Erneux C.**, Roeckel N., Takazawa K., Mailleux P., Vassart G. and Mattei A. Localization of the genes for human inositol 1,4,5-trisphosphate 3-kinase A (8TPKA) and B (8TPKB) to chromosome regions 15q14-15q21 and 1q41-q43, respectively by in situ hybridization. *Genomics* 1992 14: 546-547.
IF 4.0
 39. Mailleux P., Mitchell F., Vanderhaeghen J.J., Milligan G. and **Erneux C.** Immunohistochemical distribution of neurons containing the G-proteins Gq α /G11 in the adult rat brain. *Neuroscience* 1992 51: 311-316.
IF 4.3
 40. Communi D., Takazawa K. and **Erneux C.** Lys-197 and Asp-414 are critical residues for binding of ATP/Mg²⁺ by rat brain inositol 1,4,5-trisphosphate 3-kinase. *Biochem.J.* 1993 291: 811-816.
IF 4.2
 41. **Erneux C.**, Moreau C., Vandermeers A. and Takazawa K. Interaction of calmodulin with a putative calmodulin-binding domain of inositol 1,4,5-trisphosphate 3-kinase. Effects of synthetic peptides and site-directed mutagenesis of Trp165. *Eur.J.Biochem.* 1993 214: 497-501.
IF 3.5
 42. Communi D., Vanweyenberg V., **Erneux C.** Purification and biochemical properties of a high molecular weight inositol 1,4,5-trisphosphate 3-kinase isoenzyme in human platelets. *Biochem. J.* 1994 298: 669-673.
IF 4.2
 43. D'Santos C., Communi D., Ludgate M., Vanweyenberg V., Takazawa K., **Erneux C.** Identification of high molecular weight forms of inositol 1,4,5-trisphosphate 3-kinase in

- rat thymus and human lymphocytes. *Cell. Signalling* 1994 6: 335-344.
IF 2.1
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