

Calpain

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Calpains are a family of calcium-dependent, non-lysosomal cysteine proteases expressed ubiquitously in mammals and many lower organisms. Calpains constitute the C2 family of protease clan CA in the MEROPS database. The calpain proteolytic system includes the calpain proteases, the small regulatory subunit), and the endogenous calpain-specific inhibitor, calpastatin.

Recent Publications on Calpain:



- [Effects of calpain inhibition on dopaminergic markers and motor function following intrastriatal 6-hydroxydopamine administration in rats.](#)
*The neurotoxin 6-hydroxydopamine has been widely used to model aspects of...*15th November, 2008
Department of Pharmacology and Therapeutics, McGill University, 3655- Neuroscience. 2008 Nov 1. ([DOI Direct Link](#))
- [Calpain-mediated truncation of GSK-3 in post-mortem brain samples.](#)
*GSK-3 activity can be regulated by phosphorylation and through interaction...*14th November, 2008
Centro de Biología Molecular "Severo Ochoa," CSIC/UAM, Fac. Ciencias,- J Neurosci Res. 2008 Nov 11. ([DOI Direct Link](#))
- [Constant expression of mouse calpastatin isoforms during differentiation in myoblast cell line, C2C12.](#)
*C2C12 is a myoblast cell line which is used to study differentiation into...*13th November, 2008
Lab of Molecular and Cellular Regulation, Department of Applied Molecular- Cytotechnology. 2000 Jul;33(1-3):63-70. ([DOI Direct Link](#))
- [Platelet microparticle suppressing antibody against GP Ibalpha acts independently of the filamin cleavage and increases protein tyrosine phosphorylation.](#)
*Our aim was to investigate the role of filamin cleavage and protein...*13th November, 2008
Department of Medicine, University Hospital of Bern, Switzerland.- Blood Coagul Fibrinolysis. 2008 Dec;19(8):801-6. ([DOI Direct Link](#))
- [TRPC1 regulates skeletal myoblast migration and differentiation.](#)
*Myoblast migration is a key step in myogenesis and regeneration. It allows...*13th November, 2008
- J Cell Sci. 2008 Nov 11. ([DOI Direct Link](#))
- [Reduced early hypoxic/ischemic brain damage is associated with increased GLT-1 levels in mice expressing mutant \(P301L\) human tau.](#)
*Mutations in tau proteins are associated with a group of neurodegenerative...*11th November, 2008
Department of Basic Medical Sciences, COMP, Western University of Health- Brain Res. 2008 Nov 1. ([DOI Direct Link](#))
- [Ischemic tolerance following low dose NMDA involves modulation of cellular stress proteins.](#)
*Mild NMDA receptor activation is correlated with neuroprotection in models...*11th November, 2008
Department of Biomedical Sciences, Atlantic Veterinary College, University- Brain Res. 2008 Nov 1. (

[DOI Direct Link](#))

- [Extranigral neurodegeneration in Parkinson's disease.](#)
*It is widely known that the pathophysiology of idiopathic Parkinson's...*11th November, 2008
Division of Neurology, Department of Neurosciences, Medical University of- Ann N Y Acad Sci. 2008
Oct;1139:331-6. ([DOI Direct Link](#))
- [Transient enhanced expression of Cdk5 activator p25 after acute and chronic d-amphetamine administration.](#)
*The cellular and molecular mechanisms of sensitization in the addictive...*11th November, 2008
Instituto de Investigacion Medica Mercedes y Martin Ferreyra,- Ann N Y Acad Sci. 2008
Oct;1139:89-102. ([DOI Direct Link](#))
- [Methotrexate induces intestinal mucositis and alters gut protein metabolism independently of reduced food intake.](#)
*One of the main secondary toxic side effects of antimetabolic agents used to...*6th November, 2008
ADEN - EA4311, Institute for Biomedical Research and European Institute- Am J Physiol Endocrinol
Metab. 2008 Nov 11. ([DOI Direct Link](#))
- [Mechanisms of clofibrate-induced apoptosis in Yoshida AH-130 hepatoma cells.](#)
*Peroxisome proliferators (PPs) are a class of compounds that exert their...*6th November, 2008
Department of Experimental Medicine and Oncology, University of Torino,- Biochem Pharmacol. 2008
Oct 15. ([DOI Direct Link](#))
- [Photoreceptor Cell Death Mechanisms in Inherited Retinal Degeneration.](#)
*Photoreceptor cell death is the major hallmark of a group of human...*5th November, 2008
Institute for Ophthalmic Research, University of Tübingen, Centre for- Mol Neurobiol. 2008 Nov 4. ([DOI Direct Link](#))
- [Expression of parathyroid hormone-related protein in the partially obstructed and reversed rabbit bladder.](#)
*OBJECTIVES: Parathyroid hormone-related protein (PTHrP), the main factor...*4th November, 2008
Departamento de Histologia, Facultad de Medicina, Universidad de- Int Urol Nephrol. 2008 Nov 1. ([DOI Direct Link](#))
- [Small molecule, non-peptide p75 ligands inhibit Abeta-induced neurodegeneration and synaptic impairment.](#)
*The p75 neurotrophin receptor (p75(NTR)) is expressed by neurons...*4th November, 2008
Department of Neurology and Neurological Science, Stanford University,- PLoS ONE.
2008;3(11):e3604. Epub 2008 Nov 3. ([DOI Direct Link](#))
- [A new epicatechin gallate and calpain inhibitory activity from Orostachys japonicus.](#)
*Calpains are calcium-dependent proteases that cleave a variety of...*4th November, 2008
Bioanalysis and Biotransformation Research Center, Life Sciences Research- Fitoterapia. 2008 Oct 18.
([DOI Direct Link](#))

BioNews Results for Calpain

- [New Drug Class To Combat Alzheimers Being Developed In Chicago](#)
EMax Health: Oct 29 2008 11:38AM Matching: calpain
- [Researchers Developing New Drug Class to Combat Alzheimer's](#)
Newswise: Oct 23 2008 2:20AM Matching: calpain
- [Researchers Developing New Drug Class to Combat Alzheimer's](#)
NewsBlaze: Oct 23 2008 1:07AM Matching: calpain
- [Researchers developing new drug class to combat Alzheimer's](#)
PhysOrg.com: Oct 22 2008 10:50PM Matching: calpain
- [Neuroprotection with delayed calpain inhibition after transient forebrain ischemia](#)
MDLinx: Oct 22 2008 1:02PM Matching: calpain

- [UIC researchers developing new drug class to combat Alzheimer's](#)
Genetic Engineering News: Oct 22 2008 9:36PM Matching: calpain
- [Abbott Reports Strong Sales and Earnings Growth in Third Quarter; Again Raises Full-Year Earnings Outlook](#)
SmartBrief: Oct 16 2008 6:12AM Matching: calpain
- [Abbott Reports Strong Sales and Earnings Growth in Third Quarter; Again Raises Full-Year Earnings Outlook](#)
KSLA: Oct 16 2008 4:54AM Matching: calpain
- [Abbott Reports Strong Sales and Earnings Growth in Third Quarter; Again Raises Full-Year Earnings Outlook](#)
Montana's News Station: Oct 16 2008 3:19AM Matching: calpain
- [Abbott Reports Strong Sales and Earnings Growth in Third Quarter; Again Raises Full-Year Earnings Outlook](#)
Clinical Lab Products: Oct 15 2008 2:33PM Matching: calpain
- [Abbott Reports Strong Sales and Earnings Growth in Third Quarter; Again Raises Full-Year Earnings Outlook](#)
PR Newswire: Oct 15 2008 12:21PM Matching: calpain
- [Abbott Reports Strong Sales and Earnings Growth in Third Quarter; Again Raises Full-Year Earnings Outlook](#)
The Business Journal Phoenix: Oct 15 2008 12:20PM Matching: calpain
- [Abbott Reports Strong Sales and Earnings Growth in Third Quarter; Again Raises Full-Year Earnings Outlook](#)
Atlanta Business Chronicle: Oct 15 2008 12:14PM Matching: calpain
- [Abbott Reports Strong Sales and Earnings Growth in Third Quarter; Again Raises Full-Year Earnings Outlook](#)
San Antonio Business Journal: Oct 15 2008 11:58AM Matching: calpain
- [Abbott Reports Strong Sales and Earnings Growth in Third Quarter; Again Raises Full-Year Earnings Outlook](#)
Nashville Business Journal: Oct 15 2008 11:52AM Matching: calpain

Calpain Clinical Trials:



- [Docetaxel and Capecitabine for First Line Treatment of Metastatic Squamous Cell Carcinoma of the Head & Neck](#)
Head and Neck Cancer

Calpain Patents:



- 7358042- [Triosephosphate isomerase directed diagnostics and therapeutics for multidrug resistant neoplastic disease](#)
- 7375186- [Ricin-like toxin variants for treatment of cancer, viral or parasitic infections](#)
- 7378078- [Compositions and methods for detecting proteolytic activity](#)
- 7378518- [Substituted azetidinone compounds, processes for preparing the same, formulations and uses thereof](#)
- 7384752- [DNA encoding a human imidazoline receptor and ligand binding assay employing same](#)
- 7384784- [Pax-encoding vector and use thereof](#)
- 7384933- [Derivatives of 2-hydroxytetrahydrofuran and their use as medicaments](#)
- 7385027- [Membrane-permeable peptide capable of calpain inhibition](#)
- 7385034- [Complementary DNAs encoding proteins with signal peptides](#)
- 7387614- [Drug delivery to the inner ear and methods of using same](#)
- 7390630- [Method of identifying a compound that selectively inhibits cytokine-stimulated T cell induced production of TNF-alpha by monocytes](#)
- 7371822- [Human G-protein coupled receptor variant of HM74, HGPRBMY74](#)
- 7371767- [Heteroaryl substituted pyrrole modulators of metabotropic glutamate receptor-5](#)
- 7371388- [Treatment of Sjogren's syndrome by administration of TR18 polypeptides](#)
- 7358074- [Human phosphatase RET31, and variants thereof](#)
- 7358331- [Truncated fragments of alpha-synuclein in Lewy body disease](#)
- 7358383- [Polyphenol proteasome inhibitors, synthesis, and methods of use](#)
- 7361493- [Production of urokinase in a three-dimensional cell culture](#)
- 7365162- [Stabilized bioactive peptides and methods of identification, synthesis, and use](#)
- 7365178- [Acyl-nucleotide probes and methods of their synthesis and use in proteomic analysis](#)
- 7368234- [Physical mapping method using molecular combing technique allowing positioning of a great number of clones within a genome](#)
- 7368562- [Substituted azetidinone compounds, processes for preparing the same, formulations and uses thereof](#)
- 7368563- [Substituted azetidinone compounds, processes for preparing the same, formulations and uses thereof](#)
- 7371207- [Estrogen receptor .alpha. regulated gene expression, related assays and therapeutics](#)
- 7390804- [N-containing five-membered ring compounds and pharmaceutical agents comprising the same as active ingredient](#)
- 7390822- [Substituted 4-phenyl-4-\[1H-imidazol-2-yl\]-piperidine derivatives for reducing ischaemic damage](#)
- 7425562- [Inhibitors of cruzipain and other cysteine proteases](#)
- 7425622- [Antibodies against C3a receptor](#)
- 7427591- [Suppression of immune response via inhibition of cathepsin S](#)
- 7429560- [Ketoamide inhibitors in chronic nerve disease](#)
- 7432070- [Homogenous assay for enzymatic activity](#)
- 7435808- [Polynucleotides encoding novel adiponectin receptor variant, AdipoR2v2](#)
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- 7449170- [Materials and methods for controlling isotope effects during fractionation of analytes](#)
- 7449306- [Systems and methods for screening pharmaceutical chemicals](#)
- 7449338- [Tests for the rapid evaluation of ischemic states and kits](#)
- 7420048- [Human skeletal muscle-specific ubiquitin-conjugating enzyme](#)
- 7419497- [Methods for treating ethmoid disease](#)
- 7417042- [Compounds for enzyme inhibition](#)
- 7392140- [Cellular fibronectin as a diagnostic marker in stroke and methods of use thereof](#)
- 7393652- [Methods for identifying a chemical compound that directly enhances binding of FKBP12.6 to PKA-phosphorylated type 2 ryanodine receptor \(RyR2\)](#)
- 7393959- [Di-aryl substituted pyrrole modulators of metabotropic glutamate receptor-5](#)
- 7396654- [Neural proteins as biomarkers for traumatic brain injury](#)
- 7402427- [Vectors with modified protease-dependent tropism](#)

- 7410480- [Devices and methods for delivering therapeutic substances for the treatment of sinusitis and other disorders](#)
- 7413851- [Nucleophosmin directed diagnostics and therapeutics for multidrug resistant neoplastic disease](#)
- 7416849- [HBM variants that modulate bone mass and lipid levels](#)
- 7416854- [Luminogenic and nonluminogenic multiplex assay](#)
- 7417039- [Use of substituted azetidinone compounds for the treatment of sitosterolemia](#)
- 7449568- [Alga-origin promoter, intron and terminator](#)

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Send comments and feedback to:

Peter Barfoot Managing Director, BioPortfolio Ltd.

UK Tel: (+44) 1300 321501

USA Voicemail and Fax: (+1) 415 680 2472

[Peter Barfoot peter.barfoot@bioportfolio.com](mailto:peter.barfoot@bioportfolio.com)

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