

Models/Materials	Transgenic animals	
	Cell lines	Human and rat astrocytoma cell lines
	Other	Murine model of experimental autoimmune encephalomyelitis (EAE)
		Rat model of trigeminal sensitization: Complete Freund's Adjuvant injection in the temporomandibular joint
		Murine model of neuropathic pain: chronic constriction injury of the infra-orbital nerve (CCI-ION)
Protocols and Methods	Cell culture	Neurosphere cultures from the subventricular zone of adult mice brain
		Primary mixed neuron/satellite glial cells and purified satellite glial cells cultures from mouse trigeminal ganglion
		Primary cultures of brain microvascular endothelial cells and pericytes from rat
		Primary cultures of cortical astrocytes from rat and mouse brain
		Primary cultures of oligodendrocyte precursor cells from rat and mouse brain
		Primary cultures of microglial cells from rat brain
		Triple co-cultures of brain astrocytes, endothelial cells and pericytes as a model of the blood-brain barrier
		Dorsal root ganglia cultures
	Biochemistry	ELISA kits for CGRP, prostaglandin, and cytokine release
		In vitro hypoxia/ischemia and cytotoxicity assays
		Caspase activation, evaluation of cell death (LDH release, MTT assay), evaluation of ectonucleotidase activity
		Dual Luciferase Reporter assay
		Subcellular fractionation
	Gene expression	RT-PCR (miRNA and mRNA), PCR, real-time PCR (TaqMan and SYBR-Green)
	Immunohistochemistry	Histology sample preparation and processing (Paraffin embedded and frozen tissues)
		Neuronal and glial markers, P2Y receptors
		Light and fluorescence microscopy, time-lapse videomicroscopy and confocal microscopy
	Molecular Biology	Cloning, E.coli transformation, growing and bacteria selection, extraction and purification of plasmidic DNA, enzymatic digestion
		Synthesis of dsRNAs
		Transfection with calcium phosphate, liposomes, cationic polymers, Amaxa Nucleofector
		RNA interference (siRNA and miRNA)

		RNA and DNA extraction from cell lines, primary cultures, tissues and biofluids samples
		Site-directed mutagenesis
		in vivo delivery of oligonucleotides
	Receptor binding	GTPgammaS binding assay, adenylyl cyclase assay
	Western blotting	Neuronal and glial markers, caspase activation, markers of cell death, mitochondrial proteins
	Electrophysiology	
	Behaviour	Von Frey filaments test for mechanical allodynia on adult rats
Other		Flow cytometry (protein expression, cell death, mitochondrial depolarization).
		Molecular modeling & drug design techniques: homology modeling, molecular mechanics, molecular dynamics, docking, virtual high throughput screening, combinatorial chemistry.
		Evaluation of neurological score in mice
Non commercial antibodies	P1 receptors	
	P2 receptors	
Non commercial drugs		
Fluorescent probes		
Investigational diagnostic test		
Biosamples	Human origin	Evaluation of miRNA expression in cerebrospinal fluid samples
	Animal origin	Evaluation of miRNA expression in cerebrospinal fluid samples