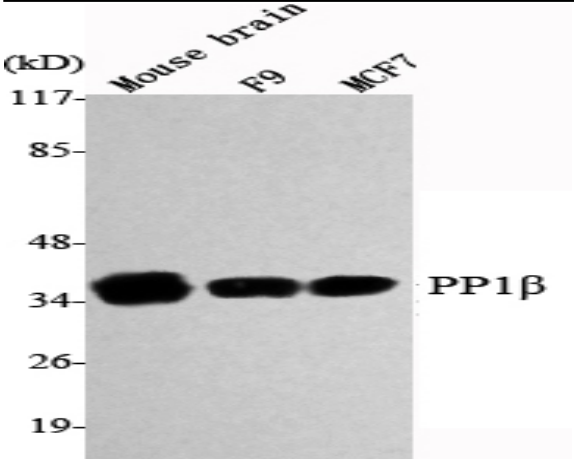
Best Tools for immunology Research

PP1β Monoclonal Antibody

Catalog No :	YM1078
Reactivity :	Human;Mouse;Rat;Chicken;Dog;Pig
Applications :	WB
Target :	PP1β
Fields :	>>mRNA surveillance pathway;>>cGMP-PKG signaling pathway;>>cAMP signaling pathway;>>Oocyte meiosis;>>Cellular senescence;>>Adrenergic signaling in cardiomyocytes;>>Vascular smooth muscle contraction;>>Hippo signaling pathway;>>Focal adhesion;>>Platelet activation;>>Long-term potentiation;>>Dopaminergic synapse;>>Inflammatory mediator regulation of TRP channels;>>Regulation of actin cytoskeleton;>>Insulin signaling pathway;>>Oxytocin signaling pathway;>>Insulin resistance;>>Amphetamine addiction;>>Alcoholism;>>Herpes simplex virus 1 infection;>>Proteoglycans in cancer;>>Diabetic cardiomyopathy
Gene Name :	PPP1CB
Protein Name :	Serine/threonine-protein phosphatase PP1-beta catalytic subunit
Human Gene Id :	5500
Human Swiss Prot No :	P62140
Mouse Gene Id :	19046
Mouse Swiss Prot No :	P62141
Rat Gene Id :	25594
Rat Swiss Prot No :	P62142
Immunogen :	Purified recombinant human PP1β protein fragments expressed in E.coli.
Specificity :	PP1β Monoclonal Antibody detects endogenous levels of PP1β protein.
	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source/Isotype :	Monoclonal, Mouse
Dilution :	WB 1:1000 - 1:2000. Not yet tested in other applications.
Purification :	Affinity purification
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	37kD
Cell Pathway :	Oocyte meiosis;Vascular smooth muscle contraction;Focal adhesion;Long-term potentiation;Regulates Actin and Cytoskeleton;Insulin_Receptor;Progesterone-mediated oocyte maturation;
Background :	The protein encoded by this gene is one of the three catalytic subunits of protein phosphatase 1 (PP1). PP1 is a serine/threonine specific protein phosphatase known to be involved in the regulation of a variety of cellular processes, such as cell division, glycogen metabolism, muscle contractility, protein synthesis, and HIV-1 viral transcription. Mouse studies suggest that PP1 functions as a suppressor of learning and memory. Two alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008],
Function :	catalytic activity:A phosphoprotein + H(2)O = a protein + phosphate.,cofactor:Binds 1 iron ion per subunit.,cofactor:Binds 1 manganese ion per subunit.,domain:The C-terminus is required for CDK2-activation, but not CDK2-binding.,enzyme regulation:The phosphatase activity of the PPP1R15A-PP1 complex toward EIF2S1 is specifically inhibited by Salubrinal, a drug that protects cells from endoplasmic reticulum stress.,function:Protein phosphatase (PP1) is essential for cell division, it participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. Involved in regulation of ionic conductances and long-term synaptic plasticity.,function:Regulates the G1/S phase transition of the cell cycle by binding and activating CDC2, CDK2 and CDKN1B/KIP1. Can activate CDK2 without promoting CDK2 phosphorylation. Mediates cell survival during the DNA damage process throug
Subcellular Location :	Cytoplasm . Nucleus . Nucleus, nucleoplasm . Nucleus, nucleolus . Highly mobile in cells and can be relocalized through interaction with targeting subunits. In the presence of PPP1R8 relocalizes from the nucleus to nuclear speckles. .
Expression :	Epithelium,Platelet,Testis,Umbilical vein,Uterus,

Products Images



Western Blot analysis using PP1β Monoclonal Antibody against Mouse brain, F9, MCF7 cell lysate.