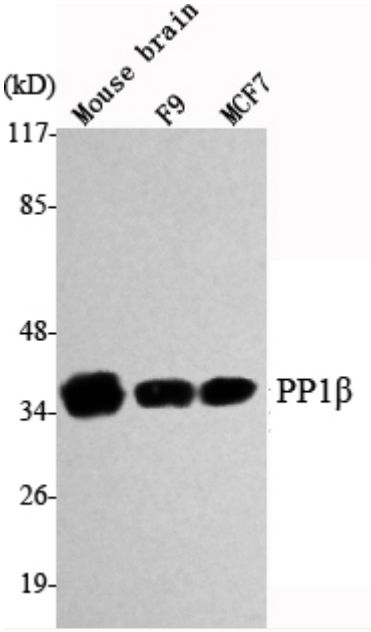
PP1β Monoclonal Antibody

Catalog No	YP-Ab-14201
Isotype	IgG
Reactivity	Human;Mouse;Rat;Chicken;Dog;Pig
Applications	WB
Gene Name	PPP1CB
Protein Name	Serine/threonine-protein phosphatase PP1-beta catalytic subunit
Immunogen	Purified recombinant human PP1β protein fragments expressed in E.coli.
Specificity	PP1β Monoclonal Antibody detects endogenous levels of PP1β protein.
Formulation	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/1000 - 1/2000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PPP1CB; Serine/threonine-protein phosphatase PP1-beta catalytic subunit; PP-1B; PPP1CD
Observed Band	
Cell Pathway	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. .
Tissue Specificity	Epithelium,Platelet,Testis,Umbilical vein,Uterus,
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

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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



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